MACH TYPE	M C	SERIAL NUMBER	SYST TYPE	SYSTEM NUMBER	F/E B/O	W/T CTY	CUST NUMBER	MD CD	MICRO TPC-CD	BOX SHIP	MACHINE SHIP	PLT MFG	PLT CTL	MACHINE STATUS
5340		0029238	5340	0034204	0G61		0488749			80/02/29		ROCH	ROCH	CLAIMED

BASIC ECA.EC	FACTORY EC	SALES MOD	MFG MOD	PLANT ORDER	HARD CARD
000.		E35	000	4504XX	002

STANDARD FEATURE SECTION

ECA	FIELD	FACTORY	FEATURE	BM	DEVICE	FTR-ASN	FEATURE NAME	STATUS	MES-NO	STAT	DATE
000	123456		0005811		5811		5211 MOD 2	FACT INST			
000	829301		0009904				230 VOLTS 60 HZ REQ	FACT INST			
015	832949	833129	4236100				FINAL ASM MECHANICAL	FACT INST			
066	834874	834763	4236101				FINAL ASM - CPU	FACT INST			
000	829364	829346	4236104				COVER GRP	FACT INST			
000	829237	834871	4236107				WORK STAT 1-4 PORTS	FACT INST			
048	834754	833113	4236109				I/O BOARD NO. 1	FACT INST			
014	832789	833026	4236122		9904		200/208/230V-60 HZ	FACT INST			
059	834825	832923	4236125		9302		5211 PRT ATT 300	FACT INST			
071	833068	832981	4236132				FINAL ASM ELECTRICAL	FACT INST			
061	834833	834828	4236145				DISKETTE ST ATT 60HZ	FACT INST			
059	834825	834916	4236164				MICROCODE-BASIC	FACT INST			
059	834825	834916	4236172				128MB FIXED FILE	FACT INST			
050	834810	833002	4236198				ROS STORAGE	FACT INST			
014	832789	829301	4236231				PROC UNIT B-60 HZ	FACT INST			
000	829352	829352	4236251				128K MAIN STORAGE	FACT INST			
000	833114	833116	4238000				ENGLISH-USA,UK	FACT INST			
000	832992		4238036				LABELS-SAFETY ENGLSH	FACT INST			
000	833173	833173	4238167				W/O SECURITY KEYLOCK	FACT INST			
050	834810	833178	4238168				FINAL ASM BASE ST 2	FACT INST			
046	833047		4238170		1110		BASE PRINTER ATCH	FACT INST			

CABLE AND SHIP GROUP SECTION

ECA	FIELD	FACTORY	B/M #	DC-RPQ	LENGTH	DESCRIPTION	STATUS	MES-NO	STAT	DATE
000	829357	832944	4236127			ATTCH CRD 208/230 60	FACT INST			
066	834874	834926	4236131			SHP GRP W/5211/3262	FACT INST			

FACTORY EC SECTION

EC NO	STATUS
829326	INSTALLED
832795	INSTALLED
832803	INSTALLED
832829	INSTALLED
832836	INSTALLED
832838	INSTALLED
832863	INSTALLED
832866	INSTALLED
832871	INSTALLED
832872	INSTALLED
832877	INSTALLED
832878	INSTALLED
832882	INSTALLED
832882A	INSTALLED
832885	INSTALLED
832887	INSTALLED
832891	INSTALLED
832894	INSTALLED
832898	INSTALLED
832902	INSTALLED
832903	INSTALLED
832914	INSTALLED
832918	INSTALLED
832923	INSTALLED
832926	INSTALLED
832937	INSTALLED
832944	INSTALLED
832964	INSTALLED
832974	INSTALLED
832976	INSTALLED
832979	INSTALLED
832981	INSTALLED
832984	INSTALLED
832989	INSTALLED
833002	INSTALLED
833009	INSTALLED
833014	INSTALLED
833015	INSTALLED
833022	INSTALLED
833023	INSTALLED
833023A	INSTALLED
833024	INSTALLED
833024A	INSTALLED
833026	INSTALLED
833027	INSTALLED
833054	INSTALLED

MACH TYPE	M C	SERIAL NUMBER	SYST TYPE	SYSTEM NUMBER	F/E B/O	W/T CTY	CUST NUMBER	MD CD	MICRO TPC-CD	BOX SHIP	MACHINE SHIP	PLT MFG	PLT CTL	MACHINE STATUS
5340		0029238	5340	0034204	0G61		0488749			80/02/29		ROCH	ROCH	CLAIMED

FACTORY EC SECTION

EC NO	STATUS
833086	INSTALLED
833098	INSTALLED
833104	INSTALLED
833107	INSTALLED
833113	INSTALLED
833115	INSTALLED
833116	INSTALLED
833129	INSTALLED
833133	INSTALLED
833137	INSTALLED
833138	INSTALLED
833140	INSTALLED
833153	INSTALLED
833165	INSTALLED
833173	INSTALLED
833174	INSTALLED
833175	INSTALLED
833178	INSTALLED
833180	INSTALLED
833185	INSTALLED
834745	INSTALLED
834763	INSTALLED
834764	INSTALLED
834769	INSTALLED
834775	INSTALLED
834778	INSTALLED
834779	INSTALLED
834780	INSTALLED
834782	INSTALLED
834788	INSTALLED
834807	INSTALLED
834817	NOT INST
834828	INSTALLED
834830	INSTALLED
834871	INSTALLED
834877	INSTALLED
834899	INSTALLED
834912	INSTALLED
834916	INSTALLED
834926	INSTALLED
834928	INSTALLED
834943	NOT INST
834954	NOT INST

ECA HISTORY SECTION N/A = ECA NOT ASSIGNED EC PROD PRAC LEVEL = 0117 (MRS)

ECA	EC NO	ECA STATUS	FLD B/M	EIT	QTY	FCSI	DATE
008	832822	INSTALLED					
009	832876	OPTIONAL CHG NOT INST					
010	832912	OPTIONAL CHG NOT INST					
011	832955	INSTALLED					
012	832850	INSTALLED					
013	832855	OPTIONAL CHG NOT INST					
014	832789	INSTALLED					
015	832949	INSTALLED					
016	833011	NOT REQUIRED					
017	832925	INSTALLED					
019	833073	NOT REQUIRED					
020	832999	INSTALLED					
021	833084	INSTALLED					
022	833118	OPTIONAL CHG NOT INST					
023	833095	INSTALLED					
024	833152	INSTALLED					
025	833147	NOT REQUIRED					
026	833159	NOT REQUIRED					
027	833032	NOT REQUIRED					
028	833040	NOT REQUIRED					
029	832865	INSTALLED					
030	833014A	INSTALLED					
031	832766	NOT REQUIRED					
032	833169	INSTALLED					
033	834751	INSTALLED					
035	833146	NOT REQUIRED					
036	833078	OPTIONAL CHG NOT INST					
037	833041	NOT REQUIRED					
038	834742	OPTIONAL CHG NOT INST					
039	833172	INSTALLED					

MACH TYPE	M C	SERIAL NUMBER	SYST TYPE	SYSTEM NUMBER	F/E B/O	W/T CTY	CUST NUMBER	MD CD	MICRO TPC-CD	BOX SHIP	MACHINE SHIP	PLT MFG	PLT CTL	MACHINE STATUS
5340		0029238	5340	0034204	0G61		0488749			80/02/29		ROCH	ROCH	CLAIMED

ECA HISTORY SECTION N/A = ECA NOT ASSIGNED EC PROD PRAC LEVEL = 0117 (MRS)

ECA	EC NO	ECA STATUS	FLD B/M	EIT	QTY	FCSI	DATE
040	833179	NOT REQUIRED					
041	833188	INSTALLED					
042	834777	INSTALLED					
043	833120	INSTALLED					
044	833190	NOT REQUIRED					
045	833020	INSTALLED					
046	833047	INSTALLED					
047	833158	NOT REQUIRED					
048	834754	INSTALLED					
049	834776	OPTIONAL CHG NOT INST					
050	834810	INSTALLED					
051	834820	TO BE ADDED					
052	833176	INSTALLED					
053	833072	INSTALLED					
054	834766	INSTALLED					
055	834811	TO BE ADDED					
056	834801	TO BE ADDED					
057	834866	OPTIONAL CHG NOT INST					
058	834849	TO BE ADDED					
059	834825	INSTALLED					
061	834833	INSTALLED					
062	834824	INSTALLED					
063	834859	TO BE ADDED					
065	833112	NOT REQUIRED					
066	834874	INSTALLED					
068	834868	TO BE ADDED					
070	834919	OPTIONAL CHG NOT INST					
071	833068	INSTALLED					
N/A	832931	OPTIONAL CHG NOT INST					
N/A	833066	NOT REQUIRED					
N/A	834963	NOT REQUIRED					

INSTALLED REA'S

ECA	EC NO	REA#	AFFECTS BASIC	AFFECTS BM NO
		1026986	NO	4236172
N/A	834817	1026987	NO	4236172
N/A	834817	1026980	NO	4236172
		1026964	NO	4236172
		1029958	NO	4236172

VOLUME # MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -6- BOARDS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
01A-A1		CSTMZ BD A	0004236400	829390	.W. 0004236101
01A-A2		CSTMZ BD A	0004236406	834754	.W. 0004236109
01C-A1		CSTMZ BD A	0004176722	833068	.W. 0004236132

TOTAL PART NUMBERS THIS VOLUME 3

VOLUME A MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
5		VOLA 10F2 MLM OVERVW	0004237995	834824	.W. 0004236131
6		VOLA 20F2 MLM OVERVW	0004237996	834824	.W. 0004236131
MAP0000			0004237434	834926	.W. 0004236131
MAP0011			0004237435	834926	.W. 0004236131
MAP0101			0004237436	834824	.W. 0004236131
MAP0105			0004237437	832850	.W. 0004236131
MAP0107			0004237438	832850	.W. 0004236131
MAP0109			0004237439	834777	.W. 0004236131
MAP0149			0004237440	834824	.W. 0004236131
MAP0153			0004237441	832850	.W. 0004236131
MAP0159			0004237442	834824	.W. 0004236131
MAP0173			0004237443	834777	.W. 0004236131
MAP0175			0004237444	832999	.W. 0004236131
MAP0179			0004237446	832850	.W. 0004236131
MAP0181			0004237447	834824	.W. 0004236131
MAP0183			0004237448	834777	.W. 0004236131
MAP0190			0004237449	832850	.W. 0004236131
MAP0199			0004237450	834777	.W. 0004236131
MAP0303			0004237451	834824	.W. 0004236131
MAP0305			0004237452	834824	.W. 0004236131
MAP0311			0004237453	832850	.W. 0004236131
MAP0313			0004237454	832850	.W. 0004236131
MAP0315			0004237455	832999	.W. 0004236131
MAP0321			0004237456	834777	.W. 0004236131
MAP0323			0004237457	834824	.W. 0004236131
MAP0331			0004237458	832999	.W. 0004236131
MAP0341			0004237459	832850	.W. 0004236131
MAP0351			0004237460	832999	.W. 0004236131
MAP0500			0004237461	834777	.W. 0004236131
MAP0501			0004237462	832850	.W. 0004236131
MAP0502			0004237463	834777	.W. 0004236131
MAP0510			0004237464	832850	.W. 0004236131
MAP0511			0004237465	832850	.W. 0004236131
MAP0512			0004237466	832850	.W. 0004236131
MAP0513			0004237467	834824	.W. 0004236131
MAP0514			0004237468	832850	.W. 0004236131
MAP0515			0004237469	832850	.W. 0004236131
MAP0516			0004237832	832850	.W. 0004236131
MAP0517			0004237833	832850	.W. 0004236131
MAP0518			0004237470	832999	.W. 0004236131
MAP0519			0004237471	834777	.W. 0004236131
MAP0520			0004237472	834777	.W. 0004236131
MAP0521			0004237473	832850	.W. 0004236131
MAP0522			0004237474	832850	.W. 0004236131
MAP0523			0004237475	834777	.W. 0004236131
MAP0524			0004237476	832850	.W. 0004236131
MAP0525			0004237477	832850	.W. 0004236131
MAP0526			0004237478	832850	.W. 0004236131
MAP0527			0004237479	832850	.W. 0004236131
MAP0528			0004237834	832850	.W. 0004236131
MAP0531			0004237480	832850	.W. 0004236131
MAP0532			0004237481	832850	.W. 0004236131
MAP0533			0004237482	834777	.W. 0004236131
MAP0534			0004237483	832850	.W. 0004236131
MAP0535			0004237484	832850	.W. 0004236131
MAP0536			0004237485	832850	.W. 0004236131
MAP0540			0004237486	832850	.W. 0004236131
MAP0541			0004237487	832850	.W. 0004236131
MAP0542			0004237488	832850	.W. 0004236131
MAP0543			0004237489	832850	.W. 0004236131
MAP0544			0004237490	834777	.W. 0004236131
MAP0545			0004237491	832850	.W. 0004236131
MAP0546			0004237492	832850	.W. 0004236131
MAP0547			0004237493	832850	.W. 0004236131
MAP0548			0004237494	832850	.W. 0004236131
MAP0549			0004237495	832850	.W. 0004236131
MAP0550			0004237496	832850	.W. 0004236131
MAP0551			0004237497	832850	.W. 0004236131
MAP0552			0004237498	832850	.W. 0004236131
MAP0553			0004237499	832850	.W. 0004236131
MAP0554			0004237500	832850	.W. 0004236131
MAP0562			0004237966	832850	.W. 0004236131
MAP0563			0004237501	832850	.W. 0004236131
MAP0564			0004237502	832850	.W. 0004236131
MAP0565			0004237503	832850	.W. 0004236131
MAP0566			0004237504	832850	.W. 0004236131
MAP0567			0004237505	832850	.W. 0004236131
MAP0568			0004237506	832850	.W. 0004236131
MAP0569			0004237507	834777	.W. 0004236131
MAP0570			0004237842	834777	.W. 0004236131
MAP0571			0004237508	834777	.W. 0004236131
MAP0572			0004237509	834777	.W. 0004236131
MAP0573			0004237510	832850	.W. 0004236131
MAP0574			0004237511	834777	.W. 0004236131
MAP0575			0004237512	832850	.W. 0004236131
MAP0576			0004237513	834777	.W. 0004236131

VOLUME A MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
MAP0577			0004237514	834777	.W. 0004236131
MAP0578			0004237515	834777	.W. 0004236131
MAP0579			0004237516	834777	.W. 0004236131
MAP0580			0004237517	832850	.W. 0004236131
MAP0582			0004237518	834777	.W. 0004236131
MAP0583			0004237519	834926	.W. 0004236131
MAP0584			0004237520	834824	.W. 0004236131
MAP0700			0004237521	832850	.W. 0004236125
MAP0701			0004237522	832999	.W. 0004236125
MAP0705			0004237523	832850	.W. 0004236125
MAP0707			0004237524	832999	.W. 0004236125
MAP0709			0004237525	832999	.W. 0004236125
MAP0740			0004237526	832850	.W. 0004236125
MAP0742			0004237527	832850	.W. 0004236125
MAP0744			0004237528	832999	.W. 0004236125
MAP0746			0004237632	832850	.W. 0004236125
MAP0748			0004237634	832850	.W. 0004236125
MAP0750			0004237636	833047	.W. 0004236125
MAP0760			0004237993	833047	.W. 0004236125
MAP0762			0004237633	833047	.W. 0004236125
MAP0764			0004237635	832850	.W. 0004236125
MAP0770			0004237637	833047	.W. 0004236125
MAP0772			0004237638	832850	.W. 0004236125
MAP0774			0004237639	832999	.W. 0004236125
MAP0776			0004237707	832999	.W. 0004236125
MAP0778			0004237708	832999	.W. 0004236125
MAP0780			0004237709	832999	.W. 0004236125
MAP0782			0004237994	832999	.W. 0004236125
MAP1000			0008265700	834824	.W. 0004236172
MAP1003			0008265701	834824	.W. 0004236172
MAP1009			0008265702	834926	.W. 0004236172
MAP1011			0008265703	834824	.W. 0004236172
MAP1013			0008265704	834824	.W. 0004236172
MAP1076			0008265707	834824	.W. 0004236172
MAP1077			0008265708	834824	.W. 0004236172
MAP1080			0008265711	834824	.W. 0004236172
MAP1081			0008265712	834824	.W. 0004236172
MAP1082			0008265713	834926	.W. 0004236172
MAP1083			0008265714	834926	.W. 0004236172
MAP1084			0008265715	834824	.W. 0004236172
MAP1085			0008265716	834824	.W. 0004236172
MAP1086			0008265717	834926	.W. 0004236172
MAP1087			0008265718	834926	.W. 0004236172
MAP1088			0008265719	834824	.W. 0004236172
MAP1089			0008265720	834824	.W. 0004236172
MAP1090			0008265721	834824	.W. 0004236172
MAP1091			0008265722	834824	.W. 0004236172
MAP1092			0008265723	834926	.W. 0004236172
MAP1094			0008265724	834824	.W. 0004236172
MAP1095			0008265725	834824	.W. 0004236172
MAP1096			0008265726	834926	.W. 0004236172
MAP1097			0008265727	834926	.W. 0004236172
MAP1098			0008265728	834824	.W. 0004236172
MAP1099			0008265729	834824	.W. 0004236172
MAP1101			0004237537	832999	.W. 0004236131
MAP1103			0004237538	834777	.W. 0004236131
MAP1105			0004237539	832999	.W. 0004236131
MAP1107			0004237540	832999	.W. 0004236131
MAP1109			0004237541	834777	.W. 0004236131
MAP1111			0004237542	832999	.W. 0004236131
MAP1113			0004237543	832999	.W. 0004236131
MAP1115			0004237544	832999	.W. 0004236131
MAP1116			0004237545	832999	.W. 0004236131
MAP1117			0004237546	832999	.W. 0004236131
MAP1121			0004237547	832999	.W. 0004236131
MAP1122			0004237548	832850	.W. 0004236131
MAP1125			0004237549	832999	.W. 0004236131
MAP1127			0004237550	832999	.W. 0004236131
MAP1129			0004237551	832999	.W. 0004236131
MAP1130			0004237552	832999	.W. 0004236131
MAP1131			0004237553	832999	.W. 0004236131
MAP1132			0004237554	834777	.W. 0004236131
MAP1133			0004237555	834777	.W. 0004236131
MAP1134			0004237556	834777	.W. 0004236131
MAP1135			0004237557	834777	.W. 0004236131
MAP1136			0004237558	834777	.W. 0004236131
MAP1137			0004237559	834777	.W. 0004236131
MAP1138			0004237560	834777	.W. 0004236131
MAP1139			0004237561	834777	.W. 0004236131
MAP1140			0004237562	834777	.W. 0004236131
MAP1141			0004237563	834777	.W. 0004236131
MAP1143			0004237564	832850	.W. 0004236131
MAP1145			0004237565	834777	.W. 0004236131
MAP1147			0004237566	834824	.W. 0004236131
MAP1149			0004237567	832999	.W. 0004236131
MAP1160			0004237569	832999	.W. 0004236131

VOLUME A MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS		
MAP1161			0004237570	832999	.W. 0004236131		
MAP1162			0004237571	832999	.W. 0004236131		
MAP1163			0004237572	832850	.W. 0004236131		
MAP1164			0004237573	832850	.W. 0004236131		
MAP1180			0004237574	832999	.W. 0004236131		
MAP1181			0004237575	834777	.W. 0004236131		
MAP1182			0004237576	834777	.W. 0004236131		
MAP1183			0004237577	834777	.W. 0004236131		
MAP1184			0004237578	834777	.W. 0004236131		
MAP1193			0004237579	832999	.W. 0004236131		
MAP1194			0004237580	832999	.W. 0004236131		
MAP1195			0004237581	832999	.W. 0004236131		
MAP1197			0004237582	834777	.W. 0004236131		
MAP1198			0004237583	834777	.W. 0004236131		
MAP1199			0004237584	832999	.W. 0004236131		
MAP1301			0004237585	834777	.W. 0004236131		
MAP1303			0004237586	834777	.W. 0004236131		
MAP1305			0004237587	832850	.W. 0004236131		
MAP1307			0004237588	832850	.W. 0004236131		
MAP1309			0004237589	832850	.W. 0004236131		
MAP1501			0004237590	832999	.W. 0004236131		
MAP1505			0004237591	834824	.W. 0004236131		
MAP1507			0004237592	834824	.W. 0004236131		
MAP1511			0004237594	832999	.W. 0004236131		
MAP1513			0004237595	832850	.W. 0004236131		
MAP1515			0004237880	834824	.W. 0004236131	.W.	0004236125
MAP1550			0004237596	832850	.W. 0004236131		
MAP1551			0004237597	832850	.W. 0004236131		
MAP1552			0004237598	832850	.W. 0004236131		
MAP1555			0004237599	832871	.W. 0004236131		
MAP1557			0004237601	832850	.W. 0004236131		
MAP1558			0004237602	832850	.W. 0004236131		
MAP1560			0004237604	832871	.W. 0004236131		
MAP1562			0004237606	832871	.W. 0004236131		
MAP1569			0004237610	832871	.W. 0004236131		
MAP1571			0004237612	832850	.W. 0004236131		
MAP1572			0004237613	832999	.W. 0004236131		
MAP1573			0004237614	832850	.W. 0004236131		
MAP1574			0004237615	832999	.W. 0004236131		
MAP1575			0004237616	832850	.W. 0004236131		
MAP1576			0004237617	832850	.W. 0004236131		
MAP1579			0004237619	832999	.W. 0004236131		
MAP1581			0004237620	832850	.W. 0004236131		
MAP1582			0004237621	832850	.W. 0004236131		
MAP1584			0004237622	832850	.W. 0004236131		
MAP1585			0004237881	832850	.W. 0004236131	.W.	0004236125
MAP1586			0004237624	832871	.W. 0004236131		
MAP1587			0004237625	832999	.W. 0004236131		
MAP1588			0004237626	832850	.W. 0004236131		
MAP1589			0004237627	832871	.W. 0004236131		
MAP2101			0004237629	832999	.W. 0004236131		
MAP2103			0004237630	832850	.W. 0004236131		
MAP2105			0004237631	832850	.W. 0004236131		
MAP2718			0004238258	833174	.W. 0004236145		
MAP2719			0004238259	833174	.W. 0004236145		
MAP5001			0004237670	834824	.W. 0004236131		
MAP5002			0004237671	834777	.W. 0004236131		
MAP5003			0004237672	832999	.W. 0004236131		
MAP5004			0004237673	832999	.W. 0004236131		
MAP5005			0004237674	834777	.W. 0004236131		
MAP5006			0004237675	832999	.W. 0004236131		
MAP5007			0004237676	832999	.W. 0004236131		
MAP5008			0004237677	832999	.W. 0004236131		
MAP5009			0004238214	833180	.W. 0004236172		
MAP8101			0004237678	834824	.W. 0004236131		
MAP8201			0004237679	834777	.W. 0004236131		
MAP8300			0004237992	832999	.W. 0004236131		
MAP8301			0004238215	833180	.W. 0004236172		
MAP8401			0004237680	832999	.W. 0004236131		
MAP8402			0004237681	834824	.W. 0004236131		
MAP8403			0004237682	834824	.W. 0004236131		
MAP8450			0004238260	834824	.W. 0004236145		
MAP8451			0004238261	834824	.W. 0004236145		
MAP8452			0004238262	833174	.W. 0004236145		
MAP8453			0004238263	833174	.W. 0004236145		
MAP8501			0004237683	832999	.W. 0004236125		
MAP8503			0004237684	832999	.W. 0004236125		
MAP8505			0004237685	832999	.W. 0004236125		
MAP8507			0004237686	832999	.W. 0004236125		
MAP8509			0004237687	832999	.W. 0004236125		
MAP8511			0004237688	832999	.W. 0004236125		
MAP8600			0004237689	832999	.W. 0004236131		
MAP8700			0004237690	832999	.W. 0004236131		
MAP8800			0004237691	832999	.W. 0004236131		

TOTAL PART NUMBERS THIS VOLUME 256

VOLUME B MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
7		VOLB MLM OVERVIEW	0004237997	834824	.W. 0004236131
S131-0632		PARTS CATALOG	0004238210	834824	.W. 0004236131
SY31-0457		MAINTENANCE	0004237865	834824	.W. 0004236131

TOTAL PART NUMBERS THIS VOLUME 3

VOLUME C MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
8		VOLC MLM OVERVIEW	0004237998	834824	.W. 0004236131
SY31-0458		THEORY	0004237866	834824	.W. 0004236131

TOTAL PART NUMBERS THIS VOLUME 2

VOLUME D MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
9		VOLD MLM OVERVIEW	0004237999	834824	.W. 0004236131
AA000		TABLE OF CONTENTS	0004237700	834824	.W. 0004236131
AA100		INTRODUCTION	0004237701	834777	.W. 0004236131
AB110		CABLE DIAGRAM	0008265699	833180	.W. 0004236172
AB200		D GATE (CABLE TOWER)	0004237703	832850	.W. 0004236131
AB300		PIN CONNOTATION	0004237704	832999	.W. 0004236131
AC100		PLUG CHART 01A-A1	0004237276	834874	.W. 0004236131
AC120		PLUG CHART BOARD A2	0008265698	834824	.W. 0004236172
AC170		PLUG CHART 01C-A1	0004237705	834777	.W. 0004236131
AC300		PLG CHART 33/53FD DR	0004236639	834828	.W. 0004236145
AC310		PLUG CHART WS ATTACH	0004236658	834877	.W. 0004236131
AC320		PLUG CHART PRINTER	0004237795	833047	.W. 0004236125
AC351		PLUG CHART 62PC ATT	0004238225	834912	.W. 0004236172
AC352		A2 BRD & CARD JUMPER	0004238226	833180	.W. 0004236172
AC353		PLUG CHRT E-A1 OR B1	0004238267	833180	.W. 0004236172
REAS					1026987 1026980
AC354		CARD JUMPER LOCATION	0004238361	834824	.W. 0004236172
AC500		CARD SWAPPING LIST	0004237706	834824	.W. 0004236131
AD000		PIN LISTS & NET LIST	0004237840	834824	.W. 0004236131
AD100		NET LIST	0004237967	834824	.W. 0004236131
AD150		PIN LIST	0004237971	834824	.W. 0004236131
AD200		NET LIST	0004237968	834824	.W. 0004236131
AD250		PIN LIST	0004237972	834824	.W. 0004236131
AD300		NET LIST	0004237969	834824	.W. 0004236131
AD350		PIN LIST	0004237973	834824	.W. 0004236131
AD400		NET LIST	0004237970	834824	.W. 0004236131
AD450		PIN LIST	0004237974	834824	.W. 0004236131
AD500		NET LIST 1C-A1	0004238370	834824	.W. 0004236131
AD550		PIN LIST 1C-A1	0004238371	834824	.W. 0004236131
AD600		NET LIST 1E-A1,B1	0008265775	834824	.W. 0004236131
AD650		PIN LIST 1E-A1,B1	0008265776	834824	.W. 0004236131
AE000		2ND LEVEL LOGIC DIAG	0004237841	832850	.W. 0004236131
AE010		STORAGE CARDS	0004237980	832999	.W. 0004236131
AE020		CP STORAGE CONTL CDS	0004237981	832999	.W. 0004236131
AE030		CP SYSTEM CNTRL CRDS	0004237982	832999	.W. 0004236131
AE040		CP DATA FLOW CARD	0004237983	832999	.W. 0004236131
AE050		CP STATUS 1 CARD	0004237984	832999	.W. 0004236131
AE060		CP STATUS 2 CARD	0004237985	832999	.W. 0004236131
AE070		CP PORT CARD	0004237986	834777	.W. 0004236131
AE080		MSP CONTROL CARD	0004237987	832999	.W. 0004236131
AE090		MSP DATA FLOW CARD	0004237988	832850	.W. 0004236131
AE100		MSP STORAGE CNTL CRD	0004237989	832850	.W. 0004236131
AF000		A-A1 BRD VOLTAGE DIS	0004237975	834777	.W. 0004236131
AF010		A-A2 BRD VOLTAGE DIS	0004237976	834778	.W. 0004236131
AF015		A-A2 BOARD VOLTAGE	0008265697	834778	.W. 0004236172
AF020		A-A3 BRD VOLTAGE DIS	0004237977	834777	.W. 0004236131
AF030		B-A1 BRD VOLT DISTR	0004237990	834824	.W. 0004236131
AF040		C-A1 BRD VOLT DISTR	0004237991	832850	.W. 0004236131
AF050		E-A1 BOARD VOLTAGE	0008265696	834926	.W. 0004236172
AY003		LOGIC BLOCK SYMBOLOG	0004237827	832850	.W. 0004236125
AY004		LOGIC BLOCK SYMBOLOG	0004237828	832850	.W. 0004236125
AY005		LOGIC BLOCK SYMBOLOG	0004237829	832850	.W. 0004236125
AY006		LOGIC BLOCK SYMBOLOG	0004237830	832850	.W. 0004236125
AY007		LOGIC BLOCK SYMBOLOG	0004237831	832850	.W. 0004236125
CE110		CE PANEL ADDR SWTCHS	0004237277	832850	.W. 0004236131
CE120		CE PANEL ADDR SWTCHS	0004237278	832850	.W. 0004236131
CE130		CE PANEL MODE SELECT	0004237279	832850	.W. 0004236131
CE140		CE PANEL SWTCH CONN	0004237280	834824	.W. 0004236131
CE150		CE PANEL LIGHTS	0004237281	832984	.W. 0004236131
CE160		CE PANEL	0004237282	834777	.W. 0004236131
CH001		CHIP ENTER BLOCKS	0004237402	834824	.W. 0004236131
CH002		CHIP ENTER BLOCKS	0004237403	834926	.W. 0004236131
CH003		CHIP ENTER BLOCKS	0004237404	834824	.W. 0004236131
CH005		I/O BOARD EXIT TO CP	0004237405	834824	.W. 0004236131
CH006		I/O BOARD EXIT TO CP	0004237406	834824	.W. 0004236131
CH007		I/O BOARD EXIT TO CP	0004237407	834824	.W. 0004236131
CH008		I/O BOARD EXIT TO CP	0004237408	834824	.W. 0004236131
CH009		I/O BOARD EXIT TO CP	0004237409	834777	.W. 0004236131
CH011		I/O BOARD EXIT TO CP	0004237410	834824	.W. 0004236131
CS110		STORAGE CARD CS HI	0004237283	834777	.W. 0004236131
CS112		STORAGE CARD CS LO	0004237284	834777	.W. 0004236131
FL010		U-CODE CMND ACCEPT	0004238277	834824	.W. 0004236145
FL020		CHANNEL TIMING LATCH	0004238278	834824	.W. 0004236145
FL030		STROBE CNTR & CCB 36	0004238279	833174	.W. 0004236145
FL050		CCB DECODE	0004238280	833174	.W. 0004236145
FL061		DECODES	0004238281	834824	.W. 0004236145
FL062		DATA XFER OPERATION	0004238282	834824	.W. 0004236145
FL063		CE DIAG DECODES	0004238283	834824	.W. 0004236145
FL071		INTERRUPT LVL 4 REQ	0004238284	834824	.W. 0004236145
FL110		EXIT FROM DSKT - CPU	0004238285	834824	.W. 0004236145
FL115		EXIT FROM DSKT - CPU	0004238286	833174	.W. 0004236145
FL120		DBI REG & J10 TR REG	0004238287	833174	.W. 0004236145
FL130		DBI SELECT CONTROL S	0004238288	834824	.W. 0004236145
FL131		DBI SELECT SENSE	0004238289	834824	.W. 0004236145
FL210		READ DATA READ CLKS	0004238290	834824	.W. 0004236145
FL220		A.M.RECOGNITION	0004238291	834824	.W. 0004236145

VOLUME D MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
FL225		CONTROL FIELD DECODE	0004238292	833174	.W. 0004236145
FL230		CLOCK RING & BIT RNG	0004238293	834824	.W. 0004236145
FL250		ID BUFFERS-CONTROLS	0004238294	833174	.W. 0004236145
FL251		ID BUFFERS-CHRNX REG	0004238295	834824	.W. 0004236145
FL310		SERIAL WRITE DATA	0004238296	834824	.W. 0004236145
FL320		CLOCKED WRITE DATA	0004238297	834824	.W. 0004236145
FL330		GATES-WRT CLK WR &ER	0004238298	834824	.W. 0004236145
FL350		DATA BUFFER 4 REG-ST	0004238299	833174	.W. 0004236145
FL351		DATA BUFFER RIPPLE C	0004238300	833174	.W. 0004236145
FL352		DATA BUFFER DESERIAL	0004238301	833174	.W. 0004236145
FL410		CRC CONTROL & CHECK	0004238302	834824	.W. 0004236145
FL420		CRC SHIFT REG	0004238303	833174	.W. 0004236145
FL540		IMP/POR SEQUENCE	0004238304	833174	.W. 0004236145
FL550		AUTOLOADER CNTRL LNS	0004238305	834824	.W. 0004236145
FL560		SPEED CK & IMP RECAL	0004238306	833174	.W. 0004236145
FL610		ERROR CK CIRCUITS	0004238307	833174	.W. 0004236145
FL710		SEQUENCER FLD BYTE	0004238308	834824	.W. 0004236145
FL720		SEQUENCER BYTE CTR	0004238309	834824	.W. 0004236145
FL730		SEQUENCER SECTOR & T	0004238310	834824	.W. 0004236145
FL810		ENTRY/EXIT PAGE DD	0004238311	834824	.W. 0004236145
FM110		DATA CONTROL DATA SE	0004238312	834824	.W. 0004236145
FM120		OSC CONTROL	0004238313	834824	.W. 0004236145
FX110		AMPLIFIERS & DRIVERS	0004238314	834824	.W. 0004236145
FX120		AMPLIFIERS & DRIVERS	0004238315	834824	.W. 0004236145
FX130		72MD DRIVE CIRCUITS	0004238316	834824	.W. 0004236145
FX140		72MD DRIVE SWTCH & S	0004238317	834824	.W. 0004236145
FX142		72MD DRIVE INDEX & D	0004238318	834824	.W. 0004236145
FX150		72MD DRIVE HEAT SINK	0004238319	834824	.W. 0004236145
FX206		72MDAUTOLOADER CL/CM	0004238320	834824	.W. 0004236145
FX210		72MD COMMAND DECODES	0004238321	833174	.W. 0004236145
FX220		72MD AUTOLOADER MISC	0004238322	833174	.W. 0004236145
FX222		72MD AUTOLOADER PCKR	0004238323	833174	.W. 0004236145
FX230		72MD AUTOLOADER TIME	0004238324	834824	.W. 0004236145
FX232		72MD AUTOLOADER RDTA	0004238325	833174	.W. 0004236145
FX240		72MD AUTOLOADER PCKR	0004238326	833174	.W. 0004236145
FX250		72MD AUTOLOADER GO/E	0004238327	833174	.W. 0004236145
FX255		72MD AUTOLOADER E/CK	0004238328	833174	.W. 0004236145
FX260		72MD AUTOLOADER ORIE	0004238329	834824	.W. 0004236145
FX270		72MD AUTOLOADER STAT	0004238330	834824	.W. 0004236145
FX271		72MD AUTOLOADER STAT	0004238331	834824	.W. 0004236145
FX280		72MD AUTOLOADER MOTR	0004238332	834824	.W. 0004236145
HA001		VTL	0008265600	834824	.W. 0004236172
HA005		VOLTAGE & GRND TAB P	0008265601	834824	.W. 0004236172
HA010		INTRFCE CHNNL TO ADP	0008265602	834824	.W. 0004236172
HA020		CHIP 08 CYCLE STEAL	0008265603	834824	.W. 0004236172
HA025		CHIP 08 CYCLE STEAL	0008265604	834824	.W. 0004236172
HA030		CHIP 03 CMMD DECODE	0008265605	834824	.W. 0004236172
HA035		CHIP 03 CMMD DECODE	0008265606	834824	.W. 0004236172
HA040		CHIP 07 DATA PATH	0008265607	834824	.W. 0004236172
HA050		CHIP 06 INTERFACE:AD	0008265608	834824	.W. 0004236172
HA060		CHIP 09 SENSE BIT	0008265609	834824	.W. 0004236172
HA070		SELBP SELECT DATA	0008265610	834824	.W. 0004236172
HB010		COMMON ADAPTER ENTR	0008265683	834824	.W. 0004236172
HB100		CHANNEL INTERFACE CD	0004238362	833180	.W. 0004236172
HB101		CHANNEL INTERFACE CD	0004238363	833180	.W. 0004236172
HB200		FILE INTERFACE CRD	0004238364	833180	.W. 0004236172
HB201		FILE INTERFACE CRD	0004238365	833180	.W. 0004236172
HB300		CHANNEL/FILE INTRFC	0004238366	834824	.W. 0004236172
HC005		VOLTAGE & GRD TAB PN	0008265676	833180	.W. 0004236172
HC010		READ/WRITE GATING	0008265634	834824	.W. 0004236172
HC020		FILE SELECTION	0008265635	834824	.W. 0004236172
HC030		SECTOR & INDEX GATIN	0008265636	833180	.W. 0004236172
HC040		RAM BI-DIRECTIONAL	0008265637	833180	.W. 0004236172
HC100		DATA FLOW CONTROL	0008265638	834824	.W. 0004236172
HC125		SERDES BUFFER	0008265639	833180	.W. 0004236172
HC130		PLA & CHANNEL BFR	0008265640	833180	.W. 0004236172
HC135		RAM BI-DI BITS 4-15	0008265641	833180	.W. 0004236172
HC150		BI-DI INVERTERS	0008265642	834824	.W. 0004236172
HC200		RAM GATING	0008265643	834824	.W. 0004236172
HC225		FILE-CHANNEL-PROCESS	0008265644	834824	.W. 0004236172
HC250		SCAN INITIALIZE	0008265645	834824	.W. 0004236172
HC275		RAM ADDRESS INCREMEN	0008265646	834824	.W. 0004236172
HC280		RAM ADDRESS BITS	0008265647	834824	.W. 0004236172
HC300		RAM CONTROL 1 MODULE	0008265648	834824	.W. 0004236172
HC305		RAM CONTROL 1 MODULE	0008265649	833180	.W. 0004236172
HC310		RAM CONTROL 1 MODULE	0008265650	834824	.W. 0004236172
HC320		RAM CONTROL 1 MODULE	0008265651	833180	.W. 0004236172
HC325		RAM CONTROL 1 MODULE	0008265652	834824	.W. 0004236172
HC350		RAM CONTROL 1 MODULE	0008265653	834824	.W. 0004236172
HC375		RAM CONTROL 1 MODULE	0008265654	834824	.W. 0004236172
HC400		SERDES & BIT RING MD	0008265655	833180	.W. 0004236172
HC425		SERDES & BIT RING MD	0008265656	834824	.W. 0004236172
HC450		SERDES & BIT RING MD	0008265657	834824	.W. 0004236172
HC500		FILE INTF CNTRL MOD	0008265658	834824	.W. 0004236172
HC510		FILE INTF CNTRL MOD	0008265659	833180	.W. 0004236172
HC525		FILE INTF CNTRL MOD	0008265660	834824	.W. 0004236172

VOLUME D MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
HC550		FILE INTF CNTRL MOD	0008265661	834824	.W. 0004236172
HC575		FILE INTF CNTRL MOD	0008265662	833180	.W. 0004236172
HC600		MISC CNTL MOD	0008265663	833180	.W. 0004236172
HC625		MISC CNTL MOD	0008265664	834824	.W. 0004236172
HC650		MISC CNTL MOD	0008265665	834824	.W. 0004236172
HC675		MISC CNTL MOD	0008265666	834824	.W. 0004236172
HC680		MISC CNTL MOD	0008265667	834824	.W. 0004236172
HC685		MISC CNTL MOD	0008265668	834824	.W. 0004236172
HC700		FILE CNT PLA	0008265669	834824	.W. 0004236172
HC800		DATA STORE RAM	0008265670	833180	.W. 0004236172
HC900		DATA FLOW CONTROL	0008265671	834824	.W. 0004236172
HC925		DATA FLOW MOD	0008265672	833180	.W. 0004236172
HC930		DATA FLOW MOD	0008265673	833180	.W. 0004236172
HC935		DATA FLOW MOD	0008265674	833180	.W. 0004236172
HC950		DATA FLOW MOD	0008265675	834824	.W. 0004236172
HD010		SPECIAL BLOCK	0008265611	833180	.W. 0004236172
HD015		VOLTAGE & GRD TAB PN	0008265677	833180	.W. 0004236172
HD100		RESET CHIP	0008265612	834824	.W. 0004236172
HD125		RESET CHIP	0008265613	834824	.W. 0004236172
HD200		DATA FLOW CHIP	0008265614	834824	.W. 0004236172
HD225		DATA FLOW CHIP	0008265615	834824	.W. 0004236172
HD300		RAM CONTROL 1 MODULE	0008265616	834824	.W. 0004236172
HD325		RAM CONTROL 1 MODULE	0008265617	834824	.W. 0004236172
HD330		M.P. CNTRL CHIP	0008265678	833180	.W. 0004236172
HD335		M.P. CNTRL CHIP	0008265679	833180	.W. 0004236172
HD400		MISC CONTROL CHIP	0008265618	834824	.W. 0004236172
HD425		MISC CONTROL CHIP	0008265619	834824	.W. 0004236172
HD500		DATA BUFF REPOWER	0008265620	834824	.W. 0004236172
HD525		DATA BUFF REPOWER	0008265621	834824	.W. 0004236172
HD600		2KU8 ROS	0008265622	834824	.W. 0004236172
HD630		PLA DATA BUS DOT	0008265680	833180	.W. 0004236172
HD650		CNTRL STORE DATA ASM	0008265681	833180	.W. 0004236172
HD670		CNTRL STORE DATA ASM	0008265682	833180	.W. 0004236172
HD700		TAGHI CHIP	0008265623	834824	.W. 0004236172
HD725		TAGHI CHIP	0008265624	834824	.W. 0004236172
HD730		TAGHI CHIP	0008265625	833180	.W. 0004236172
HD800		CHAN CNTRL CHIP	0008265626	834824	.W. 0004236172
HD825		CHAN CNTRL CHIP	0008265627	834824	.W. 0004236172
HD850		CHAN CNTRL CHIP	0008265628	834824	.W. 0004236172
HD900		TAGLO CHIP	0008265629	834824	.W. 0004236172
HD925		TAGLO CHIP	0008265630	833180	.W. 0004236172
HE100		2K X 18 ROS	0008265631	833180	.W. 0004236172
HE200		DATAFLO CHIP	0008265632	834824	.W. 0004236172
HE225		DATAFLO CHIP	0008265633	834824	.W. 0004236172
HH000		DSD-CONTROLLER INTFC	0008265684	834824	.W. 0004236172
HH001		DSD-CONTROLLER INTFC	0008265685	834824	.W. 0004236172
HH003		AC SERVICE	0008265695	834824	.W. 0004236172
HH005		FILE BRD MINI-BUSSES	0004238360	833180	.W. 0004236172
HH010		SERVO 1 CARD	0008265686	834824	.W. 0004236172
HH020		SERVO 2 CARD	0008265687	834824	.W. 0004236172
HH030		LOGIC 1 CARD	0008265688	834824	.W. 0004236172
HH032		LOGIC 1 CARD	0004238367	834824	.W. 0004236172
HH035		LOGIC 1 CARD	0008265689	834824	.W. 0004236172
HH040		LOGIC 2 CARD	0008265690	834824	.W. 0004236172
HH044		LOGIC 2 CARD	0008265691	834824	.W. 0004236172
HH045		LOGIC 2 CARD	0004238368	834824	.W. 0004236172
HH046		LOGIC 2 CARD	0004238369	834824	.W. 0004236172
HH048		LOGIC 2 CARD	0008265692	834824	.W. 0004236172
HH050		DATA CHANNEL	0008265693	834824	.W. 0004236172
HH070		GATE A1 BOARD & CONN	0008265694	834824	.W. 0004236172
HH075		LOGIC DE INTERFACE	0004238357	834824	.W. 0004236172
HH076		DE CONTROLLER INTER	0004238358	834824	.W. 0004236172
HH080		50 & 60 HZ AC WIRING	0004238359	833180	.W. 0004236172
MS110		STORAGE CARDS MS	0004237285	832850	.W. 0004236131
MS120		STORAGE CARDS MS	0004237286	832850	.W. 0004236131
MS130		STORAGE CARDS MS	0004237287	832850	.W. 0004236131
MS140		STORAGE CARDS MS	0004237288	832850	.W. 0004236131
MS150		STORAGE CARD MS	0004238219	832999	.W. 0004236131
MS160		STORAGE CARD MS	0004238220	832999	.W. 0004236131
MS170		STORAGE CARD MS	0004238221	832999	.W. 0004236131
MS180		STORAGE CARD MS	0004238222	832999	.W. 0004236131
OP015		OP PANEL	0004237290	832999	.W. 0004236131
OP110		OP PANEL	0004237289	834777	.W. 0004236131
PA110		SYS BUS IN 8-15	0004237291	832850	.W. 0004236131
PA120		DISPLAY HI DOTS	0004237292	834777	.W. 0004236131
PA130		STORAGE BUS BITS	0004237293	832999	.W. 0004236131
PA140		MAIN STG BUS DOTS	0004237294	832850	.W. 0004236131
PC002		SAR & DISPLAY BITS	0004237295	832999	.W. 0004236131
PC012		STORAGE CLOCK	0004237296	832999	.W. 0004236131
PC020		CARD SELECT	0004237297	832999	.W. 0004236131
PC022		100 NS OSC & SYS RST	0004237298	832999	.W. 0004236131
PC024		CTL STG ADDR CHK	0004237299	832999	.W. 0004236131
PC030		CSY TGR	0004237300	832999	.W. 0004236131
PC100		MICRO OPERATION REG	0004237301	832999	.W. 0004236131
PC110		T TIMES	0004237302	834777	.W. 0004236131
PC120		STG GATE BITS	0004237303	832999	.W. 0004236131

VOLUME D MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
PC122		STG GATE BITS	0004237304	832850	.W. 0004236131
PC130		CONTROL STORE ACCESS	0004237305	834777	.W. 0004236131
PC132		ALTER & DISPLAY	0004237306	832999	.W. 0004236131
PC134		WRITE STG HIGH/LOW	0004237307	832999	.W. 0004236131
PC136		ALU FUNCTION BITS	0004237308	832999	.W. 0004236131
PC138		ALU GATE HIGH/LOW	0004237309	834777	.W. 0004236131
PC140		CARRY IN	0004237310	832850	.W. 0004236131
PC142		CLOCK SAR RESET SDR	0004237311	832999	.W. 0004236131
PC144		CLOCK CS/INTR	0004237312	832999	.W. 0004236131
PC146		CLK STG GT CHK	0004237313	832999	.W. 0004236131
PC150		LSR ADDR BIT 0-2	0004237314	832850	.W. 0004236131
PC152		LSR A	0004237315	832850	.W. 0004236131
PC160		WRITE LSR HIGH/LOW	0004237316	832850	.W. 0004236131
PC162		STATUS SELECT	0004237317	832999	.W. 0004236131
PC164		STATUS SELECT	0004237318	832850	.W. 0004236131
PC210		X-Y REGISTERS	0004237319	832999	.W. 0004236131
PC220		STORAGE DATA REGIST	0004237320	832999	.W. 0004236131
PC230		STORAGE GATE H/L	0004237321	832999	.W. 0004236131
PC250		ALU GATE HIGH/LOW	0004237322	832850	.W. 0004236131
PC260		ALU HIGH/LOW	0004237323	832850	.W. 0004236131
PC300		PROC COND REG 0-3	0004237324	832999	.W. 0004236131
PC302		PROC COND REG 4-7	0004237325	832999	.W. 0004236131
PC304		PCU BR COND MET	0004237326	832850	.W. 0004236131
PC310		EVENT IND 0-7	0004237327	832999	.W. 0004236131
PC314		CONTROL DECODES	0004237328	832999	.W. 0004236131
PC320		4 WAY SEL & DISP	0004237329	832999	.W. 0004236131
PC330		ADDRESS COMPARE HI B	0004237330	832999	.W. 0004236131
PC340		CPU CHECK LATCHES	0004237331	832999	.W. 0004236131
PC400		RUN LTH,ADD COMP LTH	0004237332	832999	.W. 0004236131
PC402		IMMEDIATE DECODE	0004237333	832999	.W. 0004236131
PC404		DECODES	0004237334	832999	.W. 0004236131
PC406		CHECK INTERRUPT	0004237335	832999	.W. 0004236131
PC420		I/O CLOCKS	0004237336	832850	.W. 0004236131
PC422		MACH CHK,PROC CHK	0004237337	832999	.W. 0004236131
PC430		STATUS 2 CARD	0004237338	834777	.W. 0004236131
PC440		SERVICE REQUEST C/P	0004237339	834777	.W. 0004236131
PC502		DATA BUFFER/PORT REG	0004237340	832999	.W. 0004236131
PC504		PORT CHECKS	0004237341	832999	.W. 0004236131
PC506		PORT DATA OUT	0004237342	832999	.W. 0004236131
PC508		CYCLE STEAL	0004237343	834777	.W. 0004236131
PC510		CYCLE STEAL CHKS/PT	0004237344	832999	.W. 0004236131
PC516		PORT STATUS	0004237345	832999	.W. 0004236131
PC518		PORT CLOCKS CONTROL	0004237346	832999	.W. 0004236131
PC522		CLOCKS CTRL/PORT	0004237347	832999	.W. 0004236131
PC526		CLOCKS DECODES	0004237348	832999	.W. 0004236131
PC532		INTERRUPT NSII PORT	0004237349	832999	.W. 0004236131
PC534		PORT CONTROLS CLOCKS	0004237350	832999	.W. 0004236131
PC542		CBO BITS 0-2	0004237351	832850	.W. 0004236131
PC552		MODIFIER BITS	0004237352	832850	.W. 0004236131
PC554		LEVEL 4-5 INTERRUPT	0004237353	832999	.W. 0004236131
PM002		TRIGGERS 0-5	0004237354	832999	.W. 0004236131
PM004		TRIGGERS 6-8	0004237355	834874	.W. 0004236131
PM008		MAJOR CYCLE DECODES	0004237356	832999	.W. 0004236131
PM022		OP DECODES	0004237357	832999	.W. 0004236131
PM024		I TIME SET EQUATIONS	0004237358	832999	.W. 0004236131
PM026		E TIME SET EQUATIONS	0004237359	832999	.W. 0004236131
PM028		CLOCK TRIGGER EQUAT	0004237360	832999	.W. 0004236131
PM040		NON EXECUTABLE OP CD	0004237361	833020	.W. 0004236131
PM042		MS GT SEL BITS	0004237362	832999	.W. 0004236131
PM044		MSP CTR GT BITS	0004237363	832999	.W. 0004236131
PM060		Q=0 MSP SYS CTRL CD	0004237364	832999	.W. 0004236131
PM082		DECODER	0004237365	832999	.W. 0004236131
PM084		SET I/O TERMS	0004237366	832999	.W. 0004236131
PM086		DECODER	0004237367	832850	.W. 0004236131
PM088		SET E3-SET IO E8 TRM	0004237368	832999	.W. 0004236131
PM104		LSR SELECT BIT 1	0004237373	832999	.W. 0004236131
PM106		LSR SELECT BIT 2	0004237369	832999	.W. 0004236131
PM122		ALU FUNC SEL BITS	0004237370	832999	.W. 0004236131
PM124		DECODE ALU FUNC SEL	0004238223	832999	.W. 0004236131
PM126		CARRY BIT TO ALU	0004237371	832999	.W. 0004236131
PM130		MSGT CHK	0004237372	832999	.W. 0004236131
PM140		WRITE LSR TERMS	0004237374	832999	.W. 0004236131
PM142		CLOCK MSAR,Y AND LSR	0004237375	832999	.W. 0004236131
PM144		CLK X,RST X&Y	0004237376	832999	.W. 0004236131
PM164		PSR BIT 5 & 6	0004237377	833020	.W. 0004236131
PM166		RCMPL,INITIALIZE	0004237378	833020	.W. 0004236131
PM168		MSP WRT MAIN STG	0004237379	832999	.W. 0004236131
PM200		PSR BIT 2	0004237380	832999	.W. 0004236131
PM202		PSR BIT 3 AND 4	0004237381	834777	.W. 0004236131
PM204		PSR BIT 7 CONTROL GT	0004237382	833020	.W. 0004236131
PM220		INHIBIT TRIGGERS	0004237383	834874	.W. 0004236131
PM222		STATUS BTYE DECODES	0004237384	832999	.W. 0004236131
PM240		STATUS GATE	0004237385	832999	.W. 0004236131
PM300		LSR GT & MSAR LOW	0004237386	832999	.W. 0004236131
PM340		MSP X REGISTER	0004237387	832999	.W. 0004236131
PM380		DECIMAL CORRECT	0004237388	832999	.W. 0004236131

VOLUME D MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
PM420		MS GATE	0004237389	832999	.W. 0004236131
PM440		MS GT	0004237390	832863	.W. 0004236131
PM704		MSAR AND P CHK	0004237391	832999	.W. 0004236131
PM720		MEMORY CARD SELECTN	0004237392	832999	.W. 0004236131
PM722		MAIN STORAGE CONTROL	0004237393	832999	.W. 0004236131
PM740		MS ADDRESS CHECKS	0004237394	832999	.W. 0004236131
PM742		MS INVALID TRANS ADD	0004237395	832999	.W. 0004236131
PM762		ADDRESS COMPARE	0004237396	832999	.W. 0004236131
PM764		CONTROL REGS	0004237397	832999	.W. 0004236131
PM766		SENSE REGS MAIN STOR	0004237398	832999	.W. 0004236131
PM768		MAIN STORAGE CNTL CD	0004237399	832999	.W. 0004236131
PM780		MAIN STORAGE CNTL CD	0004237400	832999	.W. 0004236131
PM820		MAIN STORAGE CNTL CD	0004237401	832999	.W. 0004236131
PR003		LINE PRINTER ATTACH	0004237796	833047	.W. 0004236125
PR005		PRTR INTERFACE CABLE	0004237797	832850	.W. 0004236125
PR007		PRINTER INTERFACE CB	0004237798	832850	.W. 0004236125
PR009		LINE PRINTER ATTACH	0004237876	832850	.W. 0004236125
PR011		LINE PRINTER ATTACH	0004237799	832850	.W. 0004236125
PR021		LINE PRINTER ATTACH	0004237800	832850	.W. 0004236125
PR023		LINE PRINTER ATTACH	0004237801	832850	.W. 0004236125
PR025		LINE PRINTER ATTACH	0004237802	832850	.W. 0004236125
PR031		LINE PRINTER ATTACH	0004237803	832850	.W. 0004236125
PR033		LINE PRINTER ATTACH	0004237804	832850	.W. 0004236125
PR041		LINE PRINTER ATTACH	0004237805	832850	.W. 0004236125
PR043		LINE PRINTER ATTACH	0004237806	832923	.W. 0004236125
PR045		LINE PRINTER ATTACH	0004237807	832850	.W. 0004236125
PR047		LINE PRINTER ATTACH	0004237808	832850	.W. 0004236125
PR061		LINE PRINTER ATTACH	0004237809	832850	.W. 0004236125
PR063		LINE PRINTER ATTACH	0004237810	832850	.W. 0004236125
PR065		LINE PRINTER ATTACH	0004237811	832923	.W. 0004236125
PR101		LINE PRINTER ATTACH	0004237812	832850	.W. 0004236125
PR102		LINE PRINTER ATTACH	0004237813	832850	.W. 0004236125
PR103		LINE PRINTER ATTACH	0004237814	832850	.W. 0004236125
PR105		LINE PRINTER ATTACH	0004237815	832850	.W. 0004236125
PR106		LINE PRINTER ATTACH	0004237877	832850	.W. 0004236125
PR107		LINE PRINTER ATTACH	0004237816	832850	.W. 0004236125
PR108		LINE PRINTER ATTACH	0004237878	832850	.W. 0004236125
PR109		LINE PRINTER ATTACH	0004237817	832850	.W. 0004236125
PR111		LINE PRINTER ATTACH	0004237818	832923	.W. 0004236125
PR121		LINE PRINTER ATTACH	0004237819	832850	.W. 0004236125
PR161		LINE PRINTER ATTACH	0004237820	832923	.W. 0004236125
PR163		LINE PRINTER ATTACH	0004237821	832850	.W. 0004236125
PR201		LINE PRINTER ATTACH	0004237822	832850	.W. 0004236125
PR810		LINE PRINTER ATTACH	0004237823	832850	.W. 0004236125
PR820		LINE PRINTER ATTACH	0004237824	832923	.W. 0004236125
PR830		LINE PRINTER ATTACH	0004237825	832850	.W. 0004236125
PR990		LINE PRINTER ATTACH	0004237826	833047	.W. 0004236125
PS001		PRNTR CONTROL MEMORY	0004237867	832850	.W. 0004236125
PS003		PRNTR CONTROL DATA F	0004237868	833047	.W. 0004236125
PS005		PRNTR CONTROL ALU	0004237869	833047	.W. 0004236125
PS007		PRNTR CONTROL LSR	0004237870	832850	.W. 0004236125
PS009		PRNTR CNTRL T TIME G	0004237871	833047	.W. 0004236125
PS011		PRNTR CNTRL CNTRL SG	0004237872	833047	.W. 0004236125
PS013		PRNTR CNTRL MEM CNTL	0004237873	833047	.W. 0004236125
PS015		PRNTR CNTRL A-B REG	0004237874	832850	.W. 0004236125
PS017		PRNTR CNTRL I/O STRO	0004237875	833047	.W. 0004236125
WS001		WS CNTRLD MEMORY	0004237411	832850	.W. 0004236131
WS003		WS CNTRLD DATA FLOW	0004237412	834777	.W. 0004236131
WS005		WS CNTRLD ALU	0004237413	834777	.W. 0004236131
WS007		W S CNTRLLD LSR	0004237414	832850	.W. 0004236131
WS009		W S CNTRLLDT TIMED G	0004237415	834777	.W. 0004236131
WS011		W S CNTRLLDCNTRL SIG	0004237416	834777	.W. 0004236131
WS013		W S CNTRLLDMEM CNTRL	0004237417	834777	.W. 0004236131
WS015		W S CNTRLLDA-B REG C	0004237418	832850	.W. 0004236131
WS017		W S CNTRLLDI/O STROB	0004237419	834777	.W. 0004236131
WS101		WS ADAPTER INTRF CTL	0004237420	832850	.W. 0004236131
WS111		WORKSTATION ADAPTER	0004237421	832999	.W. 0004236131
WS121		WORKSTATION ADAPTER	0004237422	832850	.W. 0004236131
WS131		WORKSTATION ADAPTER	0004237423	832850	.W. 0004236131
WS141		WORKSTATION ADAPTER	0004237424	832850	.W. 0004236131
WS143		WORKSTATION ADAPTER	0004237425	832850	.W. 0004236131
WS151		WORKSTATION ADAPTER	0004237426	834777	.W. 0004236131
WS161		WORKSTATION ADAPTER	0004237427	832850	.W. 0004236131
WS171		WORKSTATION ADAPTER	0004237428	832850	.W. 0004236131
WS173		WORKSTATION ADAPTER	0004237429	832850	.W. 0004236131
WS181		WORKSTATION ADAPTER	0004237430	834777	.W. 0004236131
WS200		STG CARD 1	0004237431	832850	.W. 0004236131
WS300		STG CARD 2	0004237432	834824	.W. 0004236131
WS400		FEATURE STORAGE	0004238227	834926	.W. 0004236131
WS500		WORKSTATION DR/REC	0004237843	834777	.W. 0004236131
WS501		WORKSTATION CABLE	0004237844	834777	.W. 0004236131
YA000		AC BOX WIRING DIA	0004237845	834824	.W. 0004236131
YA020		CONTROL SUPPLY	0004237846	834824	.W. 0004236131
YA040		BASE DC POWER	0004237847	834824	.W. 0004236131
YA080		BASE DC POWER	0004237848	834926	.W. 0004236131
YA100		FEAT POWER SUPPLY A	0004237849	834824	.W. 0004236131

VOLUME D MACHINE 5340- -0029238 MODEL 000 SYSTEM 0034204 MODE BOX SHIP 80/02/29

LOGIC TYPE -0- SYSTEMS DIAGRAMS

PAGE NUM	SH	TITLE	PART NUM	EC NUM	FEATURE B/M OR B/MS
YA120		FEATURE POWER SUPPLY	0004238217	834824	.W. 0004236131
YA200		BASE SENSE	0004237850	834777	.W. 0004236131
YA220		FEAT A SENSE CARD	0004237851	834777	.W. 0004236131
YA230		FEAT REG CD	0004237852	834777	.W. 0004236131
YA240		FEAT B CD	0004238218	834777	.W. 0004236131
YA301		PROTECT CARD	0004238264	834926	.W. 0004236131
YA302		PROTECT CARD	0004238265	834824	.W. 0004236131
YA303		PROTECT CARD	0004238266	834824	.W. 0004236131
YA320		POWER LOGIC BOARD	0004237854	834824	.W. 0004236131
YA410		MINI BUSS CONNECTORS	0004237855	834777	.W. 0004236131
YA420		MINI BUSS CONNECTORS	0004237856	834777	.W. 0004236131
YA430		MINI BUSS CONNECTORS	0004237857	834777	.W. 0004236131
YA510		POWER CABLE CONN	0004237858	834777	.W. 0004236131
YA610		MINI BUSS CONN	0004238268	834824	.W. 0004236131
YA620		MINI BUSS CONN	0004238269	834824	.W. 0004236131
YA700		AC FAN CONNECTIONS	0004238272	834777	.W. 0004236131

TOTAL PART NUMBERS THIS MACHINE 709 TOTAL PART NUMBERS THIS VOLUME 445

5340
VOLUME
A
MAINTENANCE
ANALYSIS
PROCEDURES
S/N_____
MAP'S 0000-1149
BOOK 1 OF 2

0000-0011	MAP TABLE OF CONTENTS AND DESCRIPTION
0101-0199	SYSTEM ENTRY
0303-0351	INITIAL PROGRAM LOAD
0500-0584	POWER
0700-0782	5211 PRINTER CONTROLLER
0800-0842	3262 PRINTER CONTROLLER
0900-0999	62EH DISK ATTACHMENT
1000-1099	62PC DISK ATTACHMENT
1101-1149	WORK STATION CONTROLLER (PART 1)

5340
VOLUME
A
MAINTENANCE
ANALYSIS
PROCEDURES
S/N_____
MAP'S 1160-89XX
BOOK 2 OF 2

1160-1199	WORK STATION CONTROLLER (PART 2)
1301-1309	CE PANEL
1501-1589	CONTROL PROCESSOR
2101-2105	OPERATOR PANEL
2718-2719	72MD DISKETTE DRIVE
31XX-39XX	DATA COMMUNICATIONS ATTACHMENT
41XX-4171	1255 ATTACHMENT
5001-5010	INTERMITTENT FAILURE REPLACEMENT LIST
81XX-89XX	ERROR LOG

5340
VOLUME
B
MAINTENANCE
S/N_____
BOOK 1 OF 1

01-000	INTRODUCTION TO MAINTENANCE
02-000	REFERENCE INFORMATION
05-000	POWER
07-000	5211 PRINTER ATTACHMENT
09-000	62EH DISK DRIVE
10-000	62PC DISK DRIVE
11-000	WORK STATION ATTACHMENT
13-000	CE PANEL
15-000	PROCESSING UNIT
21-000	OPERATOR PANEL
23-000	33FD DISKETTE DRIVE
25-000	53FD DISKETTE DRIVE
27-000	72MD DISKETTE DRIVE
31-000	DATA COMMUNICATIONS
40-000	1255 MICR ATTACHMENT
45-000	INSTALLATION INSTRUCTIONS
80-000	ERROR INFORMATION INTRODUCTION
81-000	MAIN STORAGE PROCESSOR
82-000	CONTROL PROCESSOR
83-000	DISK
84-000	DISKETTE
85-000	LINE PRINTER
86-000	WORK STATION CONTROLLER
87-000	5251 DISPLAY STATION
88-000	5256 PRINTER
89-000	DATA COMMUNICATIONS
99-000	DIAGNOSTIC SERVICE GUIDE PARTS CATALOG

5340
VOLUME
C
THEORY -
DIAGRAMS
S/N_____
BOOK 1 OF 1

	INTRODUCTION
	CONTROL PROCESSOR
	MAIN STORAGE PROCESSOR
	INTERRUPTS AND CYCLE STEAL REQUESTS
	CHANNEL
	CONTROL PANELS
	62EH DISK DRIVE AND ATTACHMENT
	62PC DISK DRIVE AND ATTACHMENT
	DISKETTE DRIVE AND ATTACHMENT(LEVEL 1)
	DISKETTE DRIVE AND ATTACHMENT(LEVEL 2)
	5211 PRINTER ATTACHMENT
	ATTACHMENT CONTROLLERS
	WORK STATION ATTACHMENT
	DATA COMMUNICATIONS
	3262 PRINTER ATTACHMENT

5340
VOLUME
D
FIELD
SERVICE
LOGICS
S/N_____
BOOK 1 OF 1

AA000	TABLE OF CONTENTS
AA100	INTRODUCTION
ABXXX	CABLE AND PIN INFORMATION
ACXXX	PLUGCHARTS
ADXXX	NET LISTS AND PIN LISTS
AEXXX	SECOND LEVEL LOGIC DIAGRAMS
AFXXX	VOLTAGE DISTRIBUTION
AYXXX	LOGIC BLOCK SYMBOLOGY
CEXXX	CE PANEL
CHXXX	CHANNEL
CSXXX	CONTROL STORAGE
DXXXX	DISKETTE ATTACHMENT LEVEL 1 (DL, DM, AND DX PAGES)
FAXXX	DATA COMMUNICATIONS ATTACHMENT
FLXXX	72MD DSKT
FMXXX	72MD D.S.
FXXXX	72MD DRIVE
GXXXX	62EH DISK ATTACHMENT (GE, GF, AND GV PAGES)
HXXXX	62PC DISK ATTACHMENT (HA, HB, HC, HD, HE, AND HH PAGES)
MRXXX	1255 ATTACHMENT
MSXXX	MSP STORAGE
OPXXX	OPERATOR PANEL
PAXXX	DEVICE ATTACHMENTS FOR CHANNEL
PCXXX	CONTROL PROCESSOR
PMXXX	MAIN STORAGE PROCESSOR
PRXXX	5211 PRINTER ATTACHMENT
PSXXX	PRINTER CONTROLLER
PTXXX	3262 PRINTER ATTACHMENT
POXXX	3262 PRINTER ATTACHMENT
WSXXX	WORK STATION CONTROLLER
YAXXX	POWER

EC HISTORY		DRAWING TITLE
21DEC77	832902	VOL D MLM OVERVIEW
29JUN78	832999	MACH 5340
13DEC78	834777	PART NO. 4237999
25JUL79	834824	CLASSIFICATION
		JLC 01DEC77

C

IBM CORP

TABLE OF CONTENTS

* CONTAINING ONLY DISK DRIVE A LOGICS
LOGICS FOR DRIVE B ARE SAME EXCEPT
FOR BOARD LOCATION (A-A3 INSTEAD OF A-A2)

AA000

TABLE OF CONTENTS (CONTINUED)

EC HISTORY		DRAWING TITLE		
02MAY77	832742G	TABLE OF CONTENTS		
02DEC77	832850	MACH 5340		
29JUN78	832999	PART NO 4237700		
13DEC78	834777	CLASSIFICATION		IBM CORP
25JUL79	834824	4/18/77	J.C.	

C

AA000

620-0131-0 MRO# 780522201 ALD DRAWING FORMAT ASTROCLOTH N660T 8-78

DRAFTING MEDIA GRAPHIC CONTROLS CORPORATION Buffalo, New York Printed in U.S.A.

INTRODUCTION

THIS VOLUME CONTAINS CABLE, CARD, PIN, NET, VOLTAGE, SWAPPING, AND LOGIC INFORMATION. THIS INFORMATION MAY BE REFERENCED BY THE MAP'S OR USED AS STAND ALONE INFORMATION. SEE THE TABLE OF CONTENTS FOR ADDITIONAL DETAILS.

EC HISTORY		DRAWING TITLE
02MAY77	832742G	INTRODUCTION
02DEC77	832850	MACH 5340
13 DEC 78	834777	PART NO 4237701
		CLASSIFICATION
		4/18/77 J.C

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IBM CORP

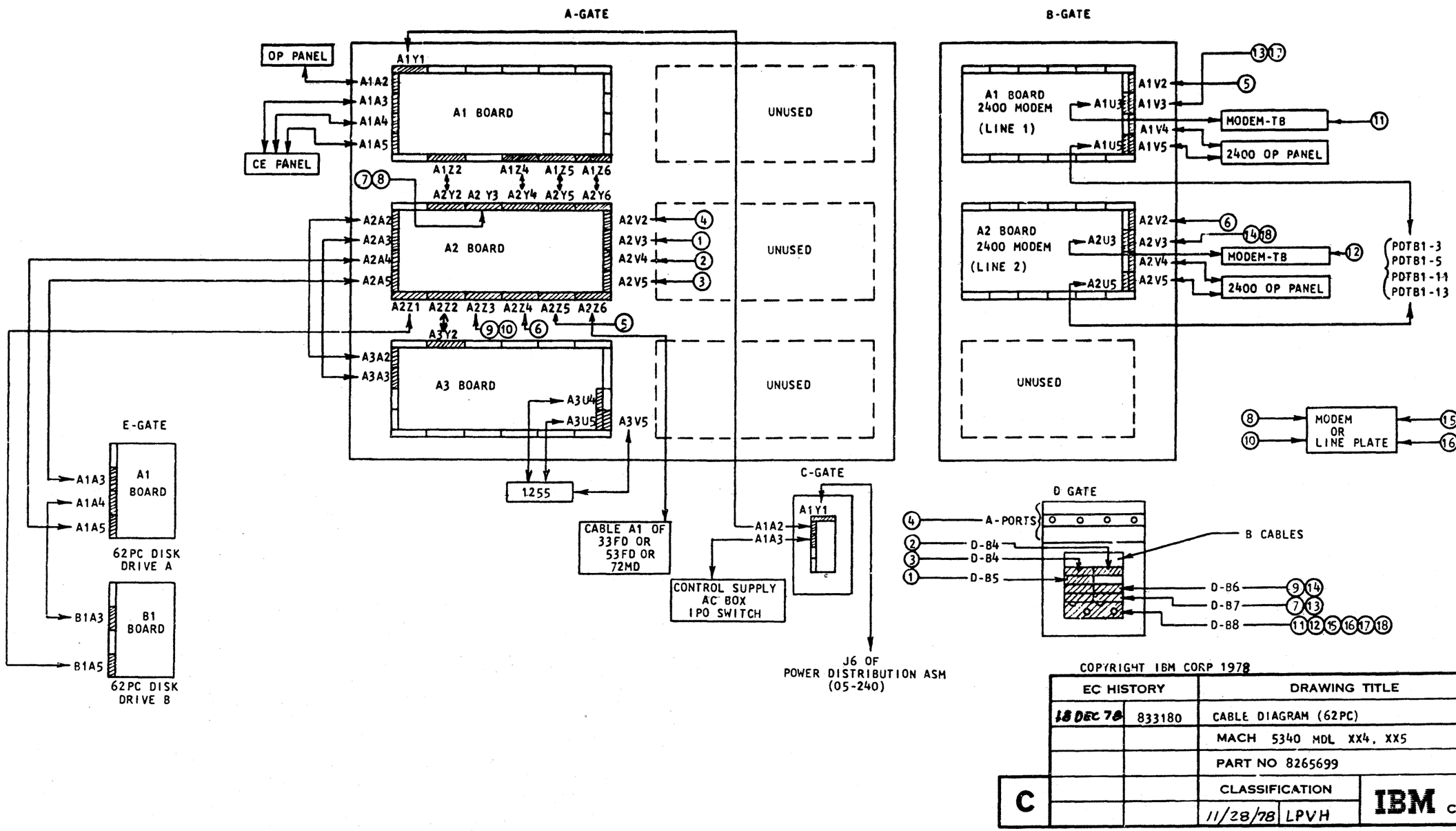
AA100

AA100

620-0131-1 MROZ 780522201 ALD DRAWING FORMAT ASTROCLOTH N6697 3730 ABCDE

DRAFTING MEDIA GRAPHIC CONTROLS CORPORATION Buffalo, New York Printed in U.S.A.

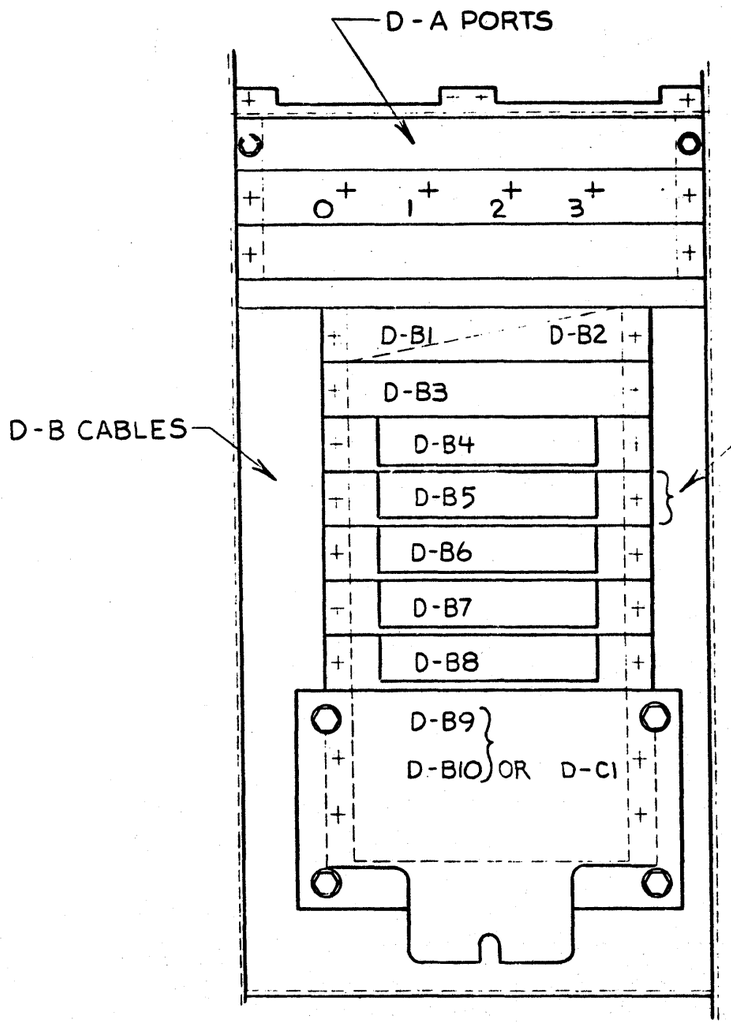
CABLE DIAGRAM (WITH 62PC DISK DRIVE ATTACHED)



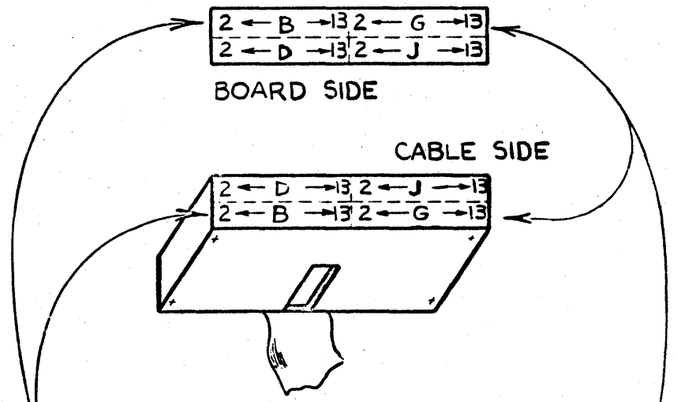
EC HISTORY		DRAWING TITLE
18 DEC 78	833180	CABLE DIAGRAM (62PC)
		MACH 5340 MDL XX4, XX5
		PART NO 8265699
C		CLASSIFICATION
		11/28/78 LPVH

IBM CORP

A8110



FOR PRINTER CABLE, WHEN REFERRING TO A PIN, USE THE FOLLOWING NOTATION



EACH PIN IS REFERENCED, FOR EXAMPLE:

D-B5G13
OR
D-B5B02

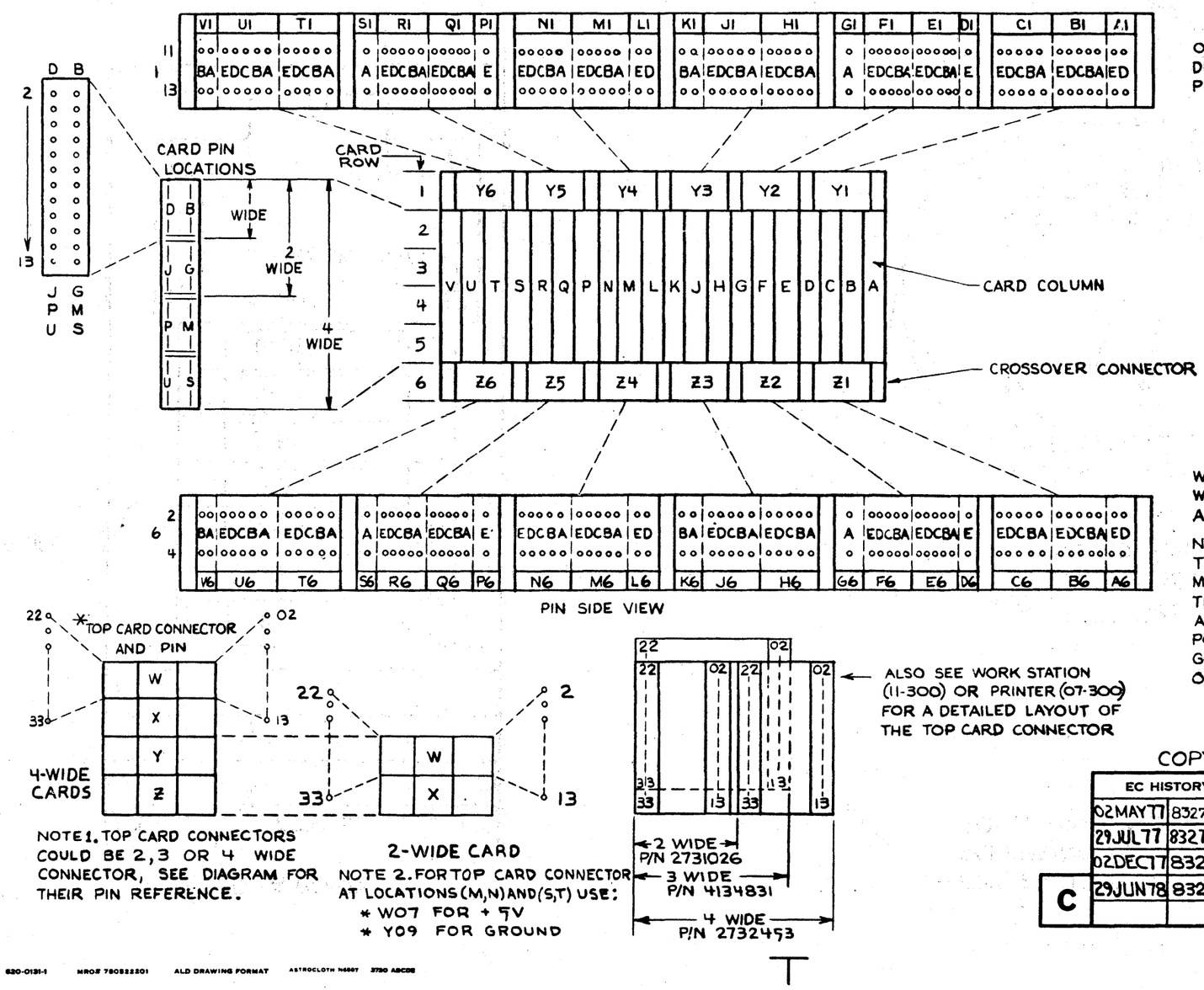
EC HISTORY		DRAWING TITLE	
02MAY77	8327426	D GATE (CABLE TOWER)	
02DEC77	8328501	MACH 5340	
		PART NO 423 7703	
C		CLASSIFICATION	IBM CORP
		4/18/77 J.C	

AB200

AB200

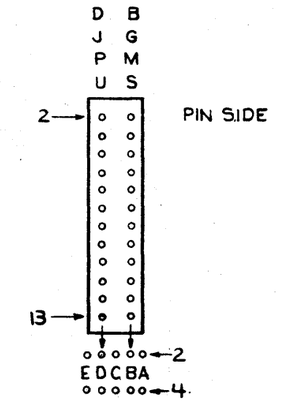
4237704

AB300



* CROSS-OVER CONNECTOR PIN

FOR PINS THAT RESIDE IN THE CROSS-OVER CONNECTOR AREAS, THE FOLLOWING DIAGRAM IS USED TO HELP LOCATE THE PIN:



THE PINS RIGHT BELOW THE COLUMNS WILL BE DESIGNATED D AND B. FROM THERE, WE CAN COUNT LEFT OR RIGHT TO FIND A AND E

NOTE: QUITE OFTEN, WHEN WORKING IN THE POWER SECTION, REFERENCE WILL BE MADE TO PIN 14. THIS IS THE PIN THAT THE POWER DISTRIBUTION CABLES GO TO AND IT'S DIRECTLY BELOW PIN 13. POWER DISTRIBUTION CABLES CAN ALSO GO TO PIN 01 WHICH IS ABOVE PIN 02 OF ANY COLUMN

NOTE 1. TOP CARD CONNECTORS COULD BE 2, 3 OR 4 WIDE CONNECTOR, SEE DIAGRAM FOR THEIR PIN REFERENCE.

NOTE 2. FOR TOP CARD CONNECTOR AT LOCATIONS (M,N) AND (S,T) USE:
* W07 FOR + 5V
* Y09 FOR GROUND

EC HISTORY		DRAWING TITLE
02MAY77	8327426	PIN CONNOTATION
29JUL77	8327421M	MACH 5340
02DEC77	832850	PART NO 423 7704
29JUN78	832999	CLASSIFICATION
		4/18/77 J.C

C

IBM CORP

AB300

AB300

620-0131-1 MROF 780822201 ALD DRAWING FORMAT ASTROCLOTH N6007 3780 ABCDE

GRAPHIC MEDIA GRAPHIC CONTROLS CORPORATION Buffalo, New York Printed in U.S.A.

4231216

AC1Ø Ø

BOARD A-A1

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
	CABLE 4236691 Y1					Y2				Y3				Y4			Y5		Y6
2	A2 4236310 CABLE				E2 NOTE 6 CSXXX CONTROL STORE 4T	F2 NOTE 6 CP STORAGE CONTROL CARD PC000-PC099	G2 NOTE 6 CP SYSTEM CONTROL CARD PC100-PC199	H2 NOTE 6 CP DATA FLOW CARD PC200-PC299	J2 NOTE 6 CP STATUS 1 CARD PC300-PC399	K2 NOTE 6 CP STATUS 2 CARD PC400-PC499	L2 NOTE 6 PC500-PC599 PORT CARD		N2 NOTE 6 MSP SYSTEM CONTROL CARD PM000-PM299	P2 NOTE 6 MSP DATA FLOW CARD PM300-PM499	Q2 NOTE 6 MSP STORAGE CONTROL CARD PM700-PM899	R2 NOTE 6 MSXXX MAIN STORE Ø-16K	S2 NOTE 6 MSXXX MAIN STORE 16-32K	T2 NOTE 2-3 4,5 MAIN STORE NOTE 6 MSXXX 32-48K	U2 NOTE 3 4,5 MAIN STORE NOTE 6 MSXXX 48-64K
3	A3 4236311 CABLE																		
4	A4 4236311 CABLE			D4 NOTE 6 CSXXX CONTROL STORE 4T												R4 NOTE 4,5 NOTE 6 MAIN STORE 64-80K	S4 NOTE 4,5 NOTE 6 MAIN STORE 80-96K	T4 NOTE 4,5 NOTE 6 MAIN STORE 96-112K	U4 NOTE 4,5 NOTE 6 MAIN STORE 112-128K
5	A5 4236311 CABLE			D4 NOTE 6 CSXXX CONTROL STORE Lo															
	Z1	COMM CABLE 4236311 NOTE-1 IND		Z3		CROSSOVER 5802294 Z4						CROSSOVER 5802294 Z5					CROSSOVER 5802294 Z6		

NOTES

1 FOR BSCA FEATURE
2 FOR 48K FEATURE
3 FOR 64K FEATURE
4 FOR 96K FEATURE
5 FOR 128K FEATURE
6 THIS IS NOT A CARD SUBSTITUTION LIST
A-A1D4, E2, R2, R4, S2, S4, T2, T4, U2, U4, P/N 8238222
A-A1F2 P/N 4238418
A-A1G2 P/N 4238446 OR 4238484
A-A1H2 P/N 4238424
A-A1J2 P/N 4238412
A-A1K2 P/N 4238444, 4238456, 4238472
A-A1L2 P/N 4238452 4238470, 4238466
A-A1N2 P/N 8264524 OR 4238582 P/N 4238506 OR 4238531
A-A1P2 P/N 4238440
A-A1Q2 P/N 4238458, 8264485, 8264492

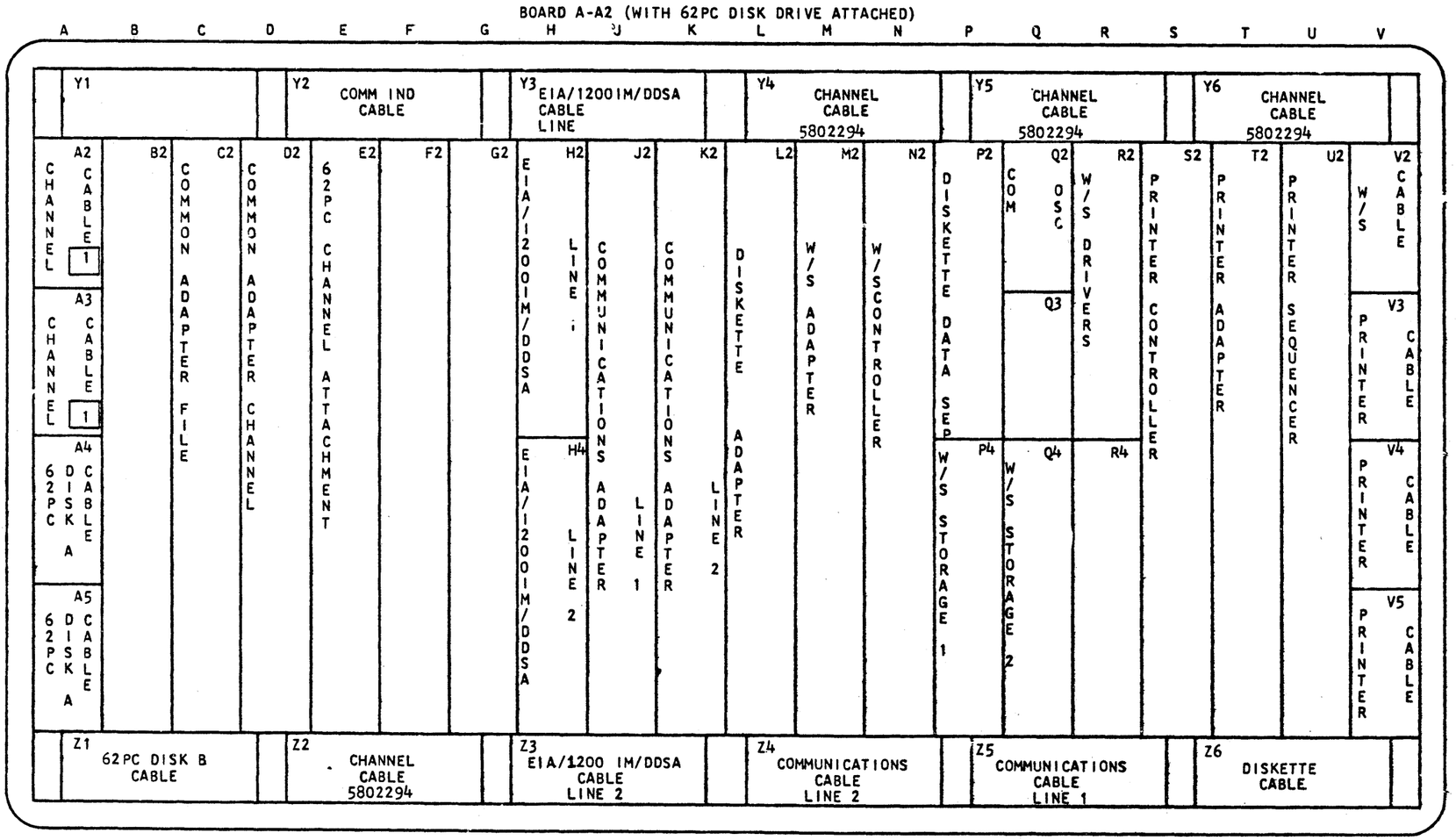
EC HISTORY		DRAWING TITLE
09NOV78	833020	PLUG CHART A-AL
11 APR79	834763	MACH 5340
25JUL79	834824	PART NO 4237276
C 10 OCT 79	834874	CLASSIFICATION
		4-13-77 JDS

IBM CORP

AC1Ø Ø

AC1Ø Ø

BOARD A-A2 (WITH 62PC DISK DRIVE ATTACHED)



NOTE:

[1] PART OF CABLE ASM 4236529

EC HISTORY		DRAWING TITLE
18 DEC 78	833180	PLUG CHART BOARD A2 (62PC)
25 JUL 79	834824	MACH 5340 MDL XX4, XX5
		PART NO 8265698
C		CLASSIFICATION
		11/28/78 LPVH

IBM CORP

AC120

4237705

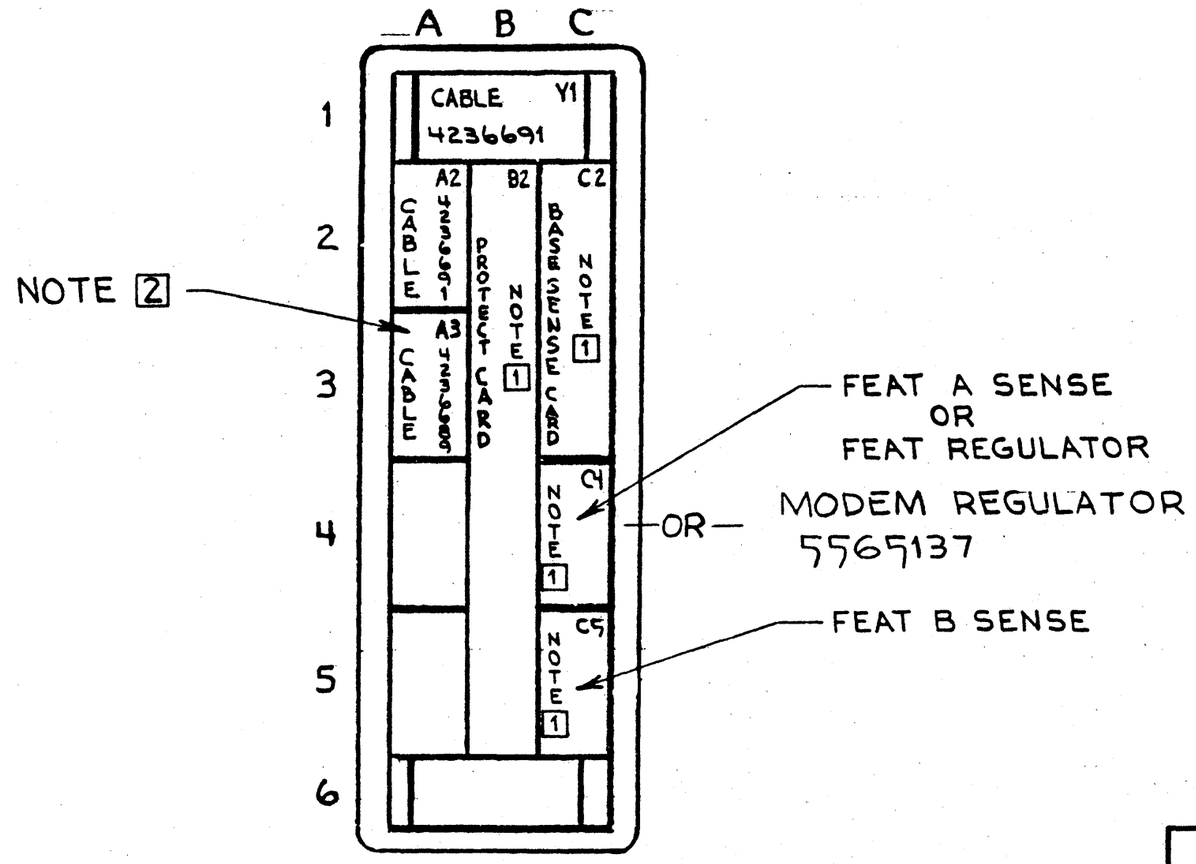
AC170

THIS IS NOT A CARD SUBSTITUTION LIST

NOTE

[1] B2 PROTECT CARD 4176720, 4176723
C2 BASE SENSE CARD 4176725
C4 FEATURE A SENSE 4176730
C4 FEATURE REGULATOR 5565137
C5 FEATURE B SENSE 4176730

[2] SPECIAL OPTION P/N 4236992



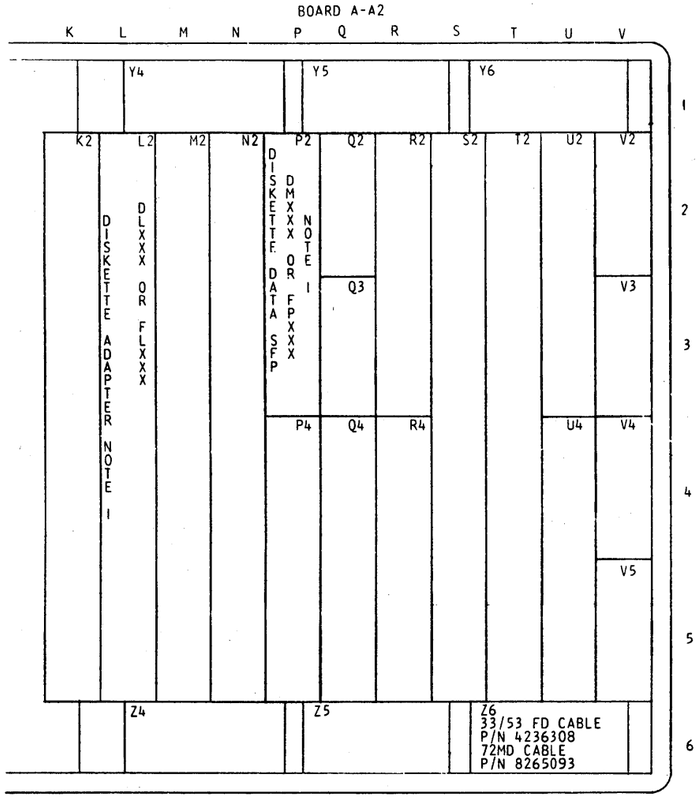
POWER LOGIC BOARD P/N 4176722
BOARD C-A1
(ALL UNDER PAGES YAXXX)

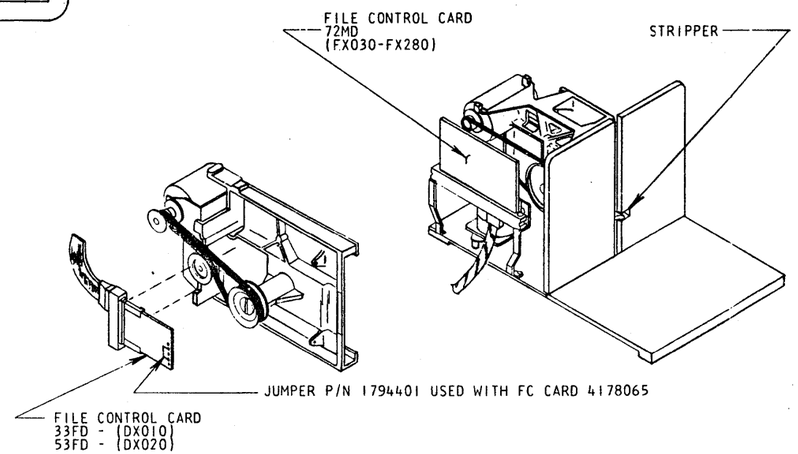
	EC HISTORY		DRAWING TITLE		
	02MAY77	832742G	PLUG CHART C-A1		
	21NOV77	832855A	MACH 5340		
	02DEC77	832850	PART NO 4237705		
B	29JUN78	832999	CLASSIFICATION		IBM CORP
	13DEC78	834177	4-18-77	JLC	

AC170

AC170

4236639





AC300

NOTES

1

DISKETTE DRIVE	FILE CONTROL (ON DRIVE)	DATA SEPARATOR (A-A2P2)	DISKETTE ATTACHMENT (A-A2L2,
33FD	8528202	8527646	4238550 OR 4238468 OR 4238474 OR 4238480
		2462692	4238536(NOTE 2, 3)
53FD	8528195 OR 4178068 OR 4178065(NOTE 5)	1607217	4238550 OR 4238468 OR 4238474 OR 4238480
		2462692	4238536(NOTE 2, 3)
72MD WITH STRIPPER	5563731 OR 5563739 OR 5563743	2462692	4238536(NOTE 3)
72MD W/O STRIPPER (NOTE 6)	5563735		

2 WHEN THIS COMBINATION OF CARDS IS USED ON MACHINES WITH A 33FD OR 53FD DRIVE, A FEATURE WIRE IS REQUIRED FROM L3D09 TO L3D08 ON THE 01A-A2 BOARD.

3 ON MACHINES WITH 01A-A2 BOARD P/N 423604 A FEATURE WIRE IS REQUIRED FROM P3D02 TO L3D09.

4 THIS IS NOT A CARD SUBSTITUTION LIST.

5 WHEN 53FD FILE CONTROL CARD P/N 4178065 IS USED, A JUMPER MUST BE PLACED FROM THP2 TO THP4 AS SHOWN IN PICTORIAL.

6 72MD DRIVE W/O STRIPPER CAN BE IDENTIFIED BY THE ABSENCE OF STRIPPER AS VIEWED FROM MACHINE FRONT.(SEE PICTORIAL)

	EC HISTORY		DRAWING TITLE	
	02MAR79	834782	PLUG CHART-DISKETTE DRIVE	
RED	07 JUN 79	834828	MACH 5340	
			PART NO 4236639	
D			CLASSIFICATION	IBM CORP
			PCP 4-12-77	

AC300

P/N 4236658

WS ATTACHMENT

THIS IS NOT A CARD SUBSTITUTION LIST

NOTE 1

A-A2M2	656786, 4238538, OR 8264490
A-A2N2	4238420
A-A2P4	4238422, 4238460, OR 4238500
A-A2Q4	4238422, 4238462, 4238478, 4238502, 8264476, OR 8264478
A-A2R2	4238448
A-A2R4	4238422, 4238490, OR 8264486

NOTE 2

P/N FOR TOP CARD CONNECTORS		
2 WIDE	———	2731026
3 WIDE	———	4134831
4 WIDE	———	2732453

CONNECTIONS	
A-A2M2W	A-A2N2W
A-A2M2X	A-A2N2X
A-A2N2Y	A-A2P4W, A-A2Q4W, (A-A2R4W)*
A-A2N2Z	A-A2P4X, A-A2Q4X, (A-A2R4X)*

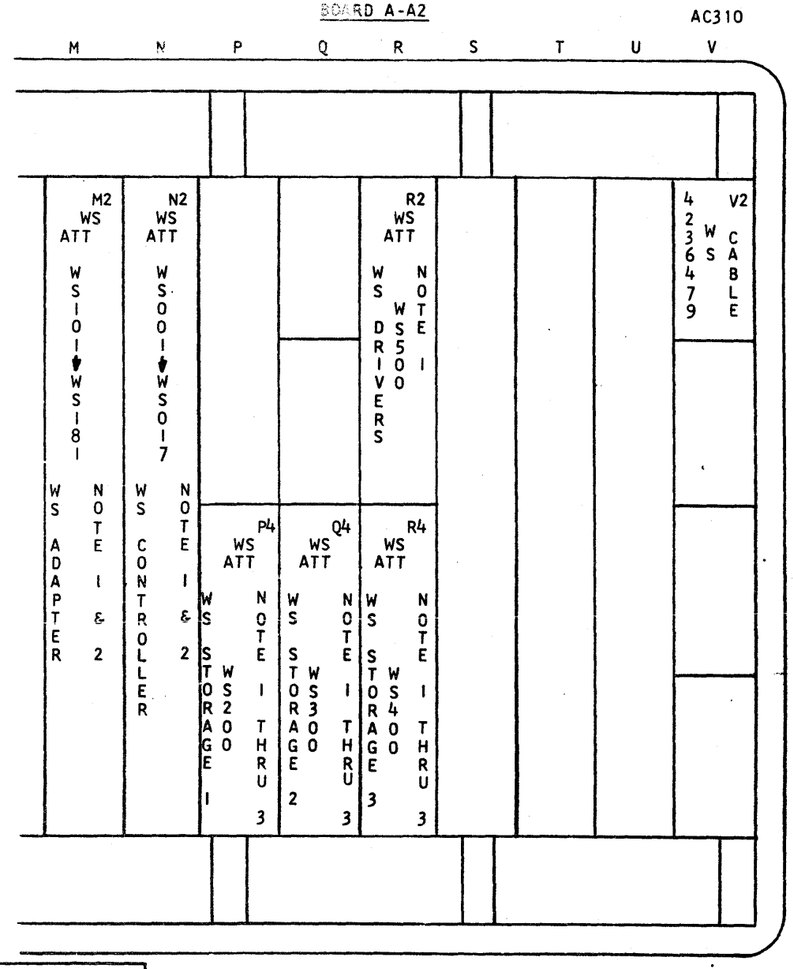
*USE 4 WIDE TOP CARD CONNECTOR IF A-A2R4 CARD INSTALLED OTHERWISE USE 3 WIDE TOP CARD CONNECTOR.

NOTE 3

THE FOLLOWING CHART INDICATES W/S STORAGE CARD COMPATIBILITY.

BOARD A-A2

AC310



AC310	BASE STORAGE W/O FEATURES	BASE STORAGE W/O FEATURES	BASE STORAGE W/O FEATURES	BASE STORAGE W/MULTINATIONAL CONTROL FEATURES	BASE STORAGE W/WS CONTROL EXP'A' FEATURE	BASE STORAGE W/WS CONTROL EXP'B' FEATURE	BASE STORAGE W/WS CONTROL EXP'A' AND MULTINATIONAL CONTROL FEATURES	BASE STORAGE W/WS CONTROL EXP'B' AND MULTINATIONAL CONTROL FEATURES
A-A2P4	4238422	4238460	4238500	4238500	4238500	4238500	4238500	4238500
A-A2Q4	4238422	4238462 OR 4238478	4238502 OR 8264476	8264478	4238502 OR 8264476	4238502 OR 8264476	8264478	8264478
A-A2R4	4238422	-------	-------	--------	4238490	8264486	4238490	8264486

EC HISTORY		DRAWING TITLE
31 MAY 79	833104	PLUG CHART, WS ATTACHMENT
25 OCT 79	834877	MACH 5340
		PART NO 4236658
		CLASSIFICATION
		4-13-77 LDW

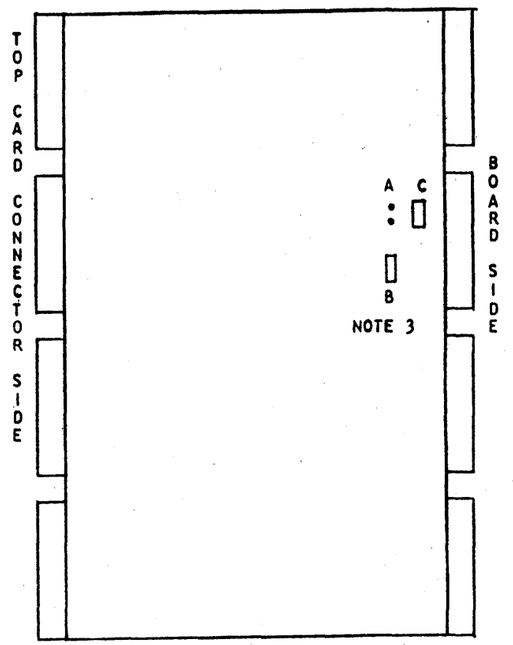
C

IBM CORP

AC310

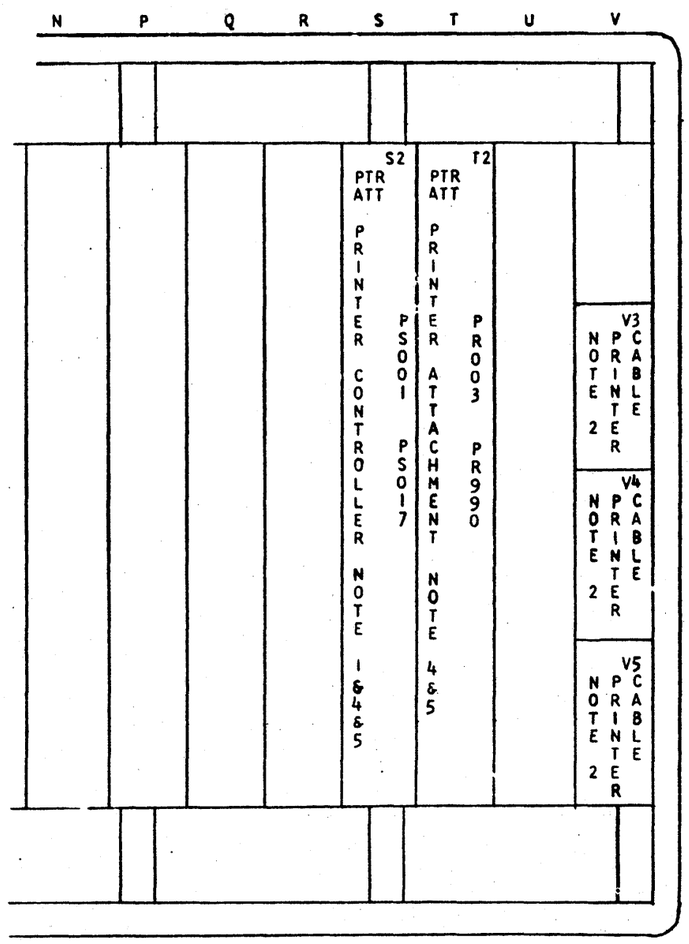
4237795

AC320



PRINTER ATTACHMENT
A-A2T2

BOARD A-A2



PRINTER ATTACHMENT

NOTE 1. FOR DIAGNOSTIC PURPOSES THE A-A2N2 AND THE A-A2S2 LOGIC CARDS MAY BE SWAPPED. (IF SAME PART NUMBER)

2. CABLE LIST PART NUMBER 4236476.

3. JUMPER CONFIGURATION
JUMPER PART NUMBER 1675209
A - NOT NEEDED
B - NEEDED FOR PROPER OPERATION
C - NEEDED FOR 300 LPM
C - REMOVED FOR 160 LPM

4. THIS IS NOT A CARD SUBSTITUTION LIST.

A-A2S2 4238420
A-A2T2 4238432, 4238476, 4238508, 8264472

5. THERE ARE FOUR 2 WIDE TOP CARD CONNECTORS BETWEEN A-A2S2 & A-A2T2.
PN 2731026

EC HISTORY		DRAWING TITLE	
04MAY77	832742H	PLUG CHART, PRINTER ATTACHMENT	
02DEC77	832850	MACH 5340	
14JUN78	832923	PART NO 4237795	
C 01SEP78	833152	CLASSIFICATION	IBM CORP
27DEC78	833047	4/13/79 JEN	

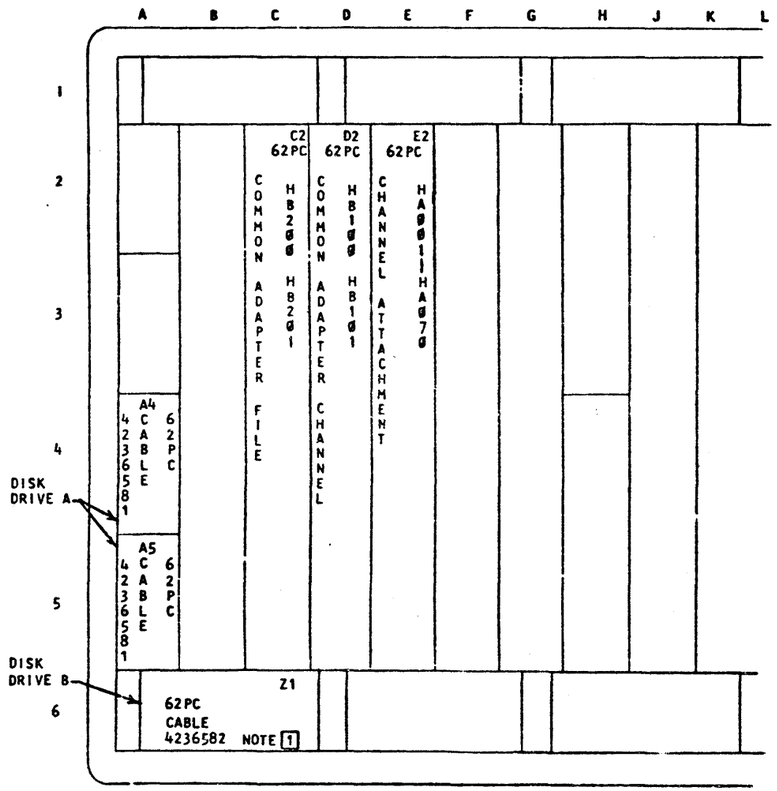
AC320

AC320

4238225

AC351

BOARD A-A2 (WITH 62PC DISK DRIVE ATTACHED)



NOTE [1] THIS CABLE PRESENT WHEN 2 DISK DRIVES INSTALLED IN SYSTEM.

THIS IS NOT A CARD SUBSTITUTION LIST

CARD SOCKET		
A-A2C2	COMMON ADAPTER FILE	P/N 5643073, 5643076, 5643149
A-A2D2	COMMON ADAPTER CHANNEL	P/N 5643072, 5643035, 5643135, 5643082, 5643086, 5643143, 5643146, 5643141, 5643087, 5643156, 5643153
A-A2E2	62PC CHANNEL ATTACHMENT	P/N 4238541, 4238526, 8264477, 8264509, 8264484

AC351

	EC HISTORY		DRAWING TITLE
	18 DEC 78	833180	PLUG CHART, 62PC ATTACHMENT
	15 MAR 79	834769	MACH 5340 MDL XX4, XX5
	23 MAY 79	834775	PART NO 4238225
C	08 AUG 79	833185	CLASSIFICATION
	05 NOV 79	834912	11/28/78 LPVH

IBM CORP

62PC ATTACHMENT 1A-A2 I/O BOARD JUMPERS (BLACK)
65MB (ONE DISK DRIVE INSTALLED)

WIRE DATA	FSL PAGE NO.	NET NAME
A4D08 TO A4B02	HH001	-CABLE CONTINUITY

130MB (TWO DISK DRIVES INSTALLED)

WIRE DATA	FSL PAGE NO.	NET NAME
B6E02 TO A6D04	HH001	-CABLE CONTINUITY

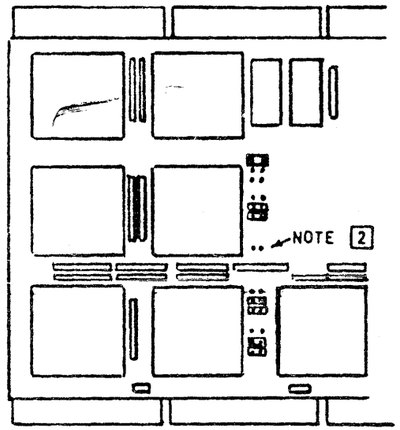
NOTES

1. REFER TO FSL PAGE YA080 (NOTE 2) FOR JUMPER NEEDED ON DC DISTRIBUTION BOARD FOR SYSTEMS WITH ONLY ONE 62 PC DISK DRIVE INSTALLED.

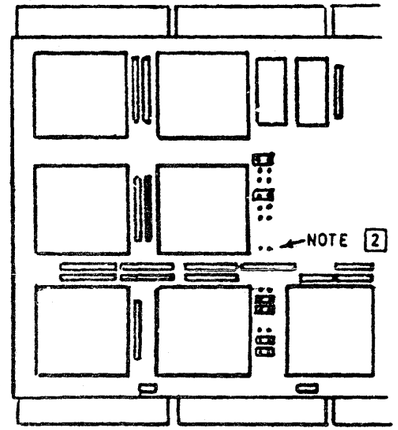
[2] THIS JUMPER SHOULD ALWAYS BE OFF.

1AA2D2 CARD JUMPER CONFIGURATION FOR 62PC ATTACHMENT

65MB (ONE DISK DRIVE INSTALLED)



130MB (TWO DISK DRIVES INSTALLED)



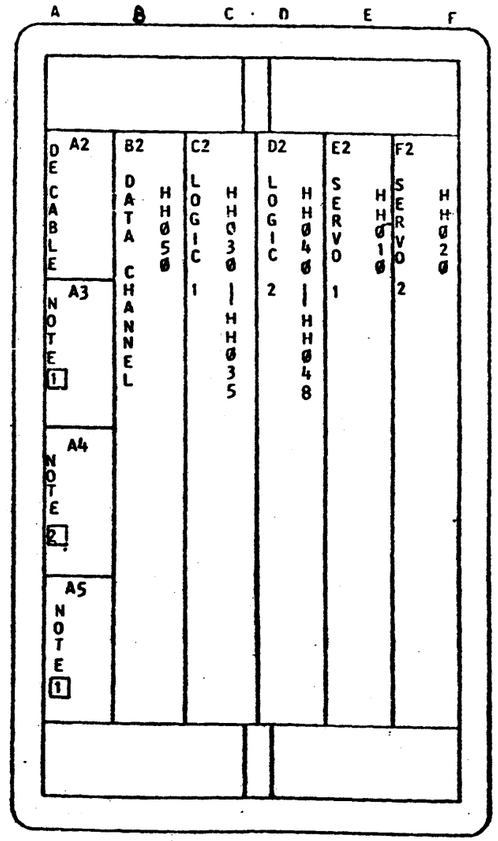
	EC HISTORY		DRAWING TITLE	
	18 DEC 78	833180	A2 BOARD AND CARD JUMPERS	
			MACH 5340 MDL XX4, XX5	
			PART NO 4238226	
C			CLASSIFICATION	IBM CORP
			11/28/78 LPVH	

AC352

REA 10-26980

AC353

BOARD E-A1 OR B1 *



THIS IS NOT A CARD SUBSTITUTION LIST

CARD SOCKET *		
E-XX B2	DATA CHANNEL	8230298, 8230301, 8230320
E-XX C2	LOGIC 1	5830301, 5830465, 5148713
E-XX D2	LOGIC 2	5830294, 5830575
E-XX E2	SERVO 1	8230246, 8230248
E-XX F2	SERVO 2	8230247, 8230318

NOTES:

1. CABLE P/N 4236581 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE) AND CABLE P/N 4236582 WILL BE PLUGGED IN B1 BOARD (LOWER DISK DRIVE) IF INSTALLED.
2. WHEN 1 DISK DRIVE INSTALLED TERMINATOR CARD P/N 5861353 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE). WHEN 2 DISK DRIVES ARE INSTALLED CABLE P/N 4236582 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE) AND TERMINATOR CARD P/N 5861353 WILL BE PLUGGED IN B1 BOARD (LOWER DISK DRIVE).

* A1 BOARD FOR UPPER DISK DRIVE AND B1 BOARD FOR LOWER DISK DRIVE IF INSTALLED.

AC353

EC HISTORY		DRAWING TITLE
18 DEC 78	833180	PLUG CHARD E-A1 OR B1
		MACH 5340 MDL XX4, XX5
		PART NO 4238267
		CLASSIFICATION
		11/28/78 LPVH

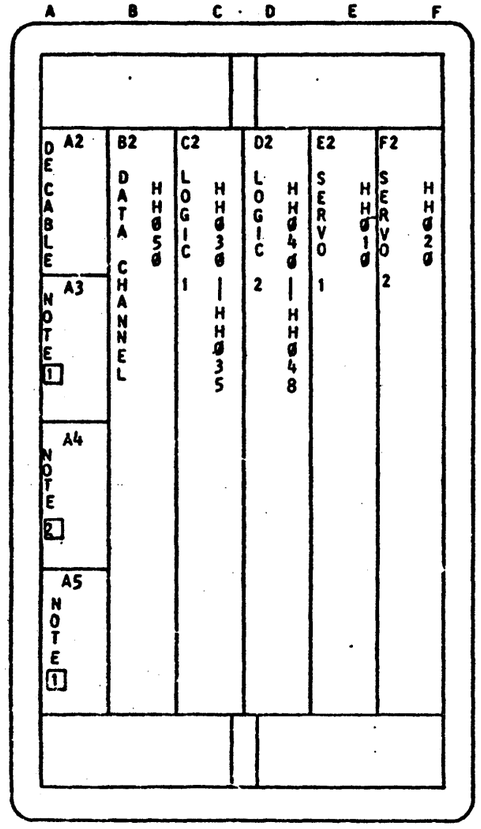
C

IBM CORP

AC353

KEH 10-26987 12/12

BOARD E-A1 OR B1 *



THIS IS NOT A CARD SUBSTITUTION LIST

CARD SOCKET *		
E-XX B2	DATA CHANNEL	8230298, 8230301
E-XX C2	LOGIC 1	5830301, 5830465, 5148713
E-XX D2	LOGIC 2	5830294, 5830575
E-XX E2	SERVO 1	8230246, 8230248
E-XX F2	SERVO 2	8230247, 8230318

NOTES:

1. CABLE P/N 4236581 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE) AND CABLE P/N 4236582 WILL BE PLUGGED IN B1 BOARD (LOWER DISK DRIVE) IF INSTALLED.
2. WHEN 1 DISK DRIVE INSTALLED TERMINATOR CARD P/N 5861353 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE). WHEN 2 DISK DRIVES ARE INSTALLED CABLE P/N 4236582 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE) AND TERMINATOR CARD P/N 5861353 WILL BE PLUGGED IN B1 BOARD (LOWER DISK DRIVE).

* A1 BOARD FOR UPPER DISK DRIVE AND B1 BOARD FOR LOWER DISK DRIVE IF INSTALLED.

EC HISTORY		DRAWING TITLE
18 DEC 78	833180	PLUG CHARD E-A1 OR B1
		MACH 5340 MDL XX4. XX5
		PART NO 4238267
		CLASSIFICATION
		11/28/78 LPVH

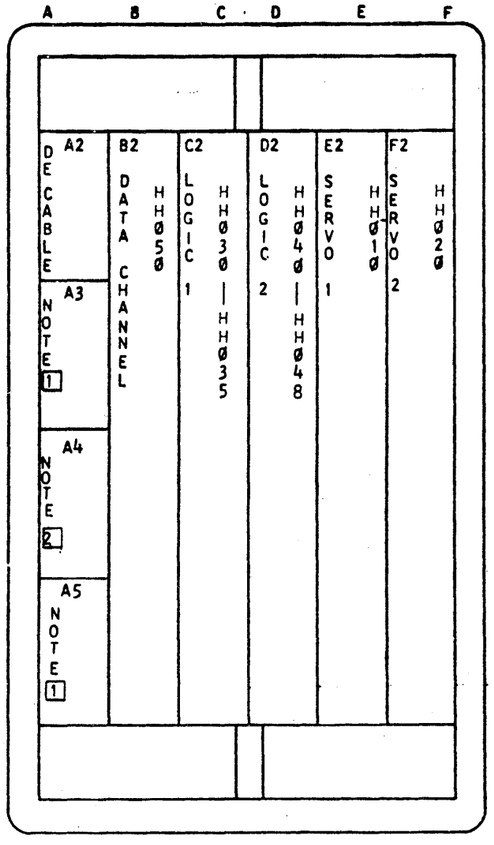
C

IBM CORP

AC353

AC353

BOARD E-A1 OR B1 *



THIS IS NOT A CARD SUBSTITUTION LIST

CARD SOCKET *		
E-XX B2	DATA CHANNEL	8230298, 8230301
E-XX C2	LOGIC 1	5830301, 5830465
E-XX D2	LOGIC 2	5830294, 5830575
E-XX E2	SERVO 1	8230246, 8230248
E-XX F2	SERVO 2	8230247

NOTES:

1. CABLE P/N 4236581 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE) AND CABLE P/N 4236582 WILL BE PLUGGED IN B1 BOARD (LOWER DISK DRIVE) IF INSTALLED.

2. WHEN 1 DISK DRIVE INSTALLED TERMINATOR CARD P/N 5861353 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE). WHEN 2 DISK DRIVES ARE INSTALLED CABLE P/N 4236582 WILL BE PLUGGED IN A1 BOARD (UPPER DISK DRIVE) AND TERMINATOR CARD P/N 5861353 WILL BE PLUGGED IN B1 BOARD (LOWER DISK DRIVE).

* A1 BOARD FOR UPPER DISK DRIVE AND B1 BOARD FOR LOWER DISK DRIVE IF INSTALLED.

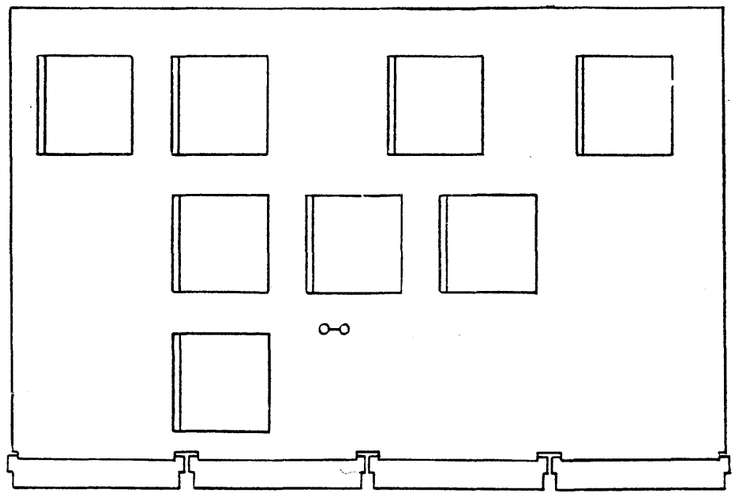
EC HISTORY		DRAWING TITLE	
18DEC78	833180	PLUG CHARD E-A1 OR B1	
		MACH 5340 MDL XX4, XX5	
		PART NO 4238267	
C		CLASSIFICATION	IBM CORP
		11/28/78 LPVH	

AC353

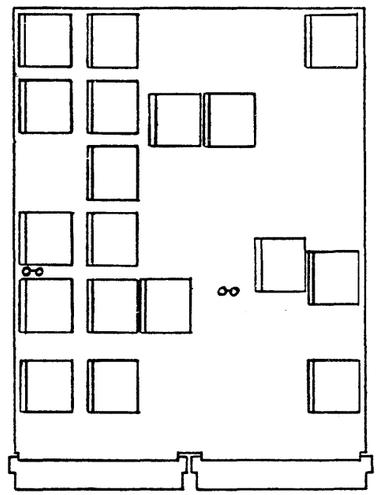
AC353

AC354

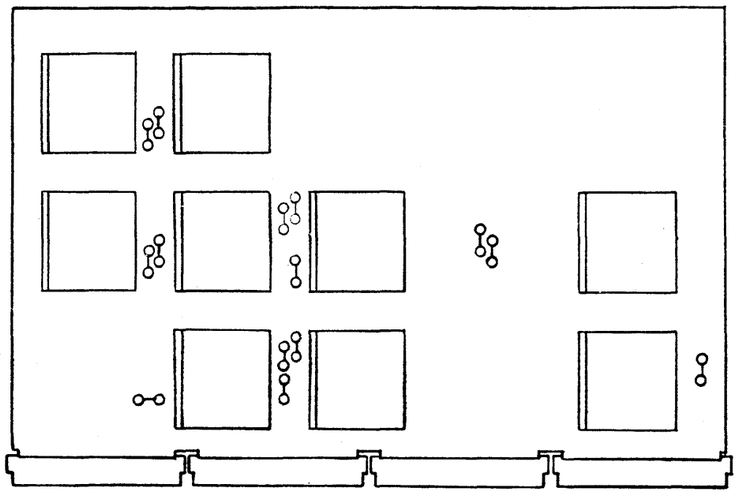
LOGIC 1
C2
USE JUMPERS
P/N 1794401



SERVO 1
E2
USE JUMPERS
P/N 8:6645



LOGIC 2
D2
USE JUMPERS
P/N 1794401



NOTES

1. JUMPERS MUST BE INSTALLED AT ALL TIMES AS SHOWN. THEY ARE PROVIDED FOR AUTOMATIC CARD TESTING PURPOSES ONLY AND ARE NOT FIELD PROGRAMMABLE.

2. ONLY LOGIC 1, LOGIC 2, AND SERVO 1 CARDS HAVE JUMPER LOCATIONS.

EC HISTORY		DRAWING TITLE	
25JUL79	834824	CARD JUMPER LOCATIONS	
		MACH 5340 MODEL/XX4,XX5	
		PART NO 4238361	
C		CLASSIFICATION	IBM CORP
		06/19/79 JLC	

AC354

AC354

CARD SWAPPING LIST

YOU CAN SWAP THE FOLLOWING CARDS DURING TROUBLESHOOTING.

BOARD A-A1

- ALL EIGHT MAIN STORAGE CARDS (A-A1R2, A-A1R4, A-A1S2, A-A1S4, A-A1T2, A-A1T4, A-A1U2, A-A1U4).

- TWO CONTROL STORAGE CARDS (A-A1D4, A-A1E2).

NOTE: CONTROL STORAGE CARDS AND MAIN STORAGE CARDS MAY BE DIFFERENT PART NUMBER, BUT THEY CAN BE SWAPPED FOR DIAGNOSTIC PURPOSE.

BOARD A-A2

- THE PRINTER CONTROLLER CARD (A-A2S2) AND THE WORK STATION CONTROLLER CARD (A-A2N2), ONLY IF THEY ARE THE SAME PART NUMBER.

- 1255 MICR CONTROLLER CARD A-A3S2 (IF INSTALLED).

- THE DATA COMMUNICATION A-A2J2 AND A-A2K2 ON THE A-A2 BOARD (IF INSTALLED CHECK SWITCH SWITCHINGS). A-A2H2 AND A-A2H4 (IF CARDS ARE SAME PN, CHECK SWITCH AND/OR JUMPER SETTINGS.

- DO NOT MOVE THE REMAINING CARDS ON THE DATA COMMUNICATION BOARD (B-A1) FROM THEIR ASSIGNED POSITION.

- 62EH DISK DRIVE A'S ATTACHMENTS AND 62EH DISK DRIVES B'S ATTACHMENTS CAN BE SWAPPED RESPECTIVELY. REFER TO PAGES AC350 AC360 FOR CARD LOCATIONS.

- 62PC DISK DRIVE A'S AND 62PC DISK DRIVE B'S CAN BE SWAPPED RESPECTIVELY. REFER TO PAGE AC 353.

BOARD C-A1

- FEATURE POWER SUPPLY A SENSE CARD C-A1C4 AND FEATURE POWER SUPPLY B SENSE CARD C-A1C5 (IF INSTALLED).

NOTE: SOME OF THE ABOVE MENTIONED CARDS MAY NOT BE INSTALLED IN YOUR SYSTEM.

AC500

EC HISTORY		DRAWING TITLE	
02DEC77	832870	CARD SWAPPING LIST	
29JUN78	832999	MACH 5340	
13DEC78	834777	PART NO 4237706	
25JUL79	834824	CLASSIFICATION	IBM CORP
C		4/18/77 JC	

AC500

4237840

PIN LISTS AND NET LISTS

INTRODUCTION

THE PIN LISTS AND NET LISTS ARE DESIGNED TO AID THE CE'S IN QUICK TRACING A NET WHEN CHECKING FOR CONTINUITY OR WHEN REPAIRING A NET ON A BOARD. THEY ARE GENERATED FROM THE FIELD SERVICE LOGICS AND USED AS SUPPLEMENTAL INFORMATION TO THE FIELD SERVICE LOGICS AND MAPS (VOL. A).

HOW TO USE

WHEN YOU ARE GIVEN A PIN LOCATION AND ASKED TO TRACE THE NET THAT THE PIN BELONGS TO, THE PIN LIST IS ALWAYS USED FIRST TO LOCATE THE NET NAME (PINS ARE LISTED IN ALPHABETICAL ORDER IN THE PIN LIST). AFTER OBTAINING THIS NET NAME, NET LIST OF EACH BOARD IS USED TO TRACE OUT THE WHOLE NET (NET LIST IS ALSO LISTED IN ALPHABETICAL ORDER). SINCE NET LISTED IS GENERATED ON THE BOARD BASIS, A CABLE DIAGRAM (AB100 OR AB11Ø) IS USED IN CONJUNCTION WITH THE NET LIST TO GIVE THE USER A PICTORIAL VIEW OF THE SYSTEM NET LIST.

NET AND PIN LISTS OF THE FOLLOWING BOARDS WERE GENERATED:

A - A1	AD100 AND AD150
A - A2	AD200 AND AD250
A - A3	AD300 AND AD350
B - A1, A2	AD400 AND AD450
C - A1	AD500 AND AD550
E - A1, B1	AD600 AND AD650

NOTE: FIELD SERVICE LOGICS FOR DISK DRIVE BØ ARE NOT GENERATED BECAUSE THEY ARE IDENTICAL TO DISK DRIVE AØ'S LOGICS. PAGE GF4ØØ OF DISK FIELD SERVICE LOGICS SHOWS THE INTERFACE BETWEEN DRIVE BØ AND THE I/O CHANNEL.

TO LOCATE PIN AND NET LISTS BETWEEN DRIVE BØ AND THE I/O CHANNEL, REFER TO PAGE GF4ØØ FOR MORE INFORMATION. FOR INTERNAL PIN AND NET LISTS OF DRIVE BØ (THOSE NOT LISTED IN PAGE GF4ØØ), USE THE PIN AND NET LISTS OF DISK DRIVE AØ ON THE A-A2 BOARD PIN AND NET LISTS.

ALL PIN LOCATIONS AND NET NAMES FOR DRIVE BØ ARE THE SAME AS PIN LOCATIONS AND NET NAMES OF DRIVE AØ, USERS HAVE TO SUBSTITUTE A2 BY A3 FOR ALL PIN LOCATIONS WHEN REFERING TO DRIVE BØ.

EC HISTORY		DRAWING TITLE	
02DEC77	832850	PIN LISTS AND NET LISTS	
13DEC78	834777	MACH 5340	
25JUL79	834824	PART NO 4237840	
B		CLASSIFICATION	IBM CORP
		7/14/77 J.C.	

NET NO.	PIN	PIN
CE110FB20	A4D05*	J2G09
CE110FB40	A4D04*	J2G06
CE110FB60	A4B03*	J2J09
CE110FB80	A4D02*	J2J06
CE110FF20	A4D10*	J2J07
CE110FF40	A4D09*	J2G05
CE110FF60	A4B08*	J2G02
CE110FF80	A4D07*	J2J02
CE120FB20	A4D06*	K2M11
CE120FB40	A4B05*	K2M08
CE120FB60	A4B04*	G2M12
	K2U12	
CE120FB80	A4B02*	G2S04
	K2P10	
CE120FF20	A4D11*	K2G13
CE120FF40	A4B10*	K2J13
CE120FF60	A4B09*	K2M04
CE120FF80	A4B07*	K2P05
CE130DA20	A4B13*	K2M12
CE130DA40	A4B12*	G2J04
CE130DA60	A4D13*	G2J02
CE130DA80	A4D12*	G2J05
CE140AA32	A5D13*	F2G06
	K2J05	Q2U10
CE140AA36	A5D11*	C1A13*
CE140AA46	A5D09*	K2U13
CE140AA57	A5D06*	G2D06
	K2B12	
CE140AA62	A5D05*	K2J04
CE140AA66	A5B10*	K2B05
CE140AA67	A5B08*	K2B03
CE140AA72	A5B09*	B1E13*
CE140AA76	A5B12*	J2G04
CE140AA77	A5B13*	B1B13*
CE140AA78	A1D11*	A5B11*
CE140AA81	A5D12*	J2P11
CE140AA83	A5B06*	C1C13*
CE140EA10	A5B05*	F6B02*
CE140EA30	A5D10*	F6C02*
CH001AA01	L2M02	R6A04*
CH001AA03	L2M04	R6E04*
CH001AA05	L2M05	R6B02*
CH001AA07	L2M06	Q6D02*
CH001AB01	L2M07	R6B04*
CH001AB03	L2M08	R6C02*
CH001AB05	L2M09	Q6E02*
CH001AB07	L2M10	S6A04*
CH001AC01	L2P12	Q6E04*
CH001AD01	L2J12	Q6A02*
CH001AD03	L2S06	Q6A04*
CH001AD05	L2S04	Q6C04*
CH002AE01	L2M12	P6E02*
CH002AE03	L2M11	R6C04*
CH002AE05	L2M13	T6B02*
CH002AF01	F2M08	K2B04
	L2D07	M6C02*
	Q2D07	
CH002AF05	B1B11*	N6C04*
CH002AF07	B1A11*	J2D06
	K2B07	M6A04*
CH002AG01	Q2M13	T6E04*
CH002AG03	K2J09	V6B04*
CH002AG05	K2G10	V6A02*
CH002AG07	K2U06	V6B02*
CH002AH01	K2U07	U6D04*
CH002AH03	K2S06	U6E04*
CH002AH05	K2S02	K2S10
	V6A04*	
CH002AH07	K2S13	N6B04*
CH003AA01	F2M06	K2U02
	M6D02*	
CH003AA03	A5D07*	M6E04*
CH003AB01	L2B10	Q6D04*
CH003AB03	F2J13	L2G07
	T6C02*	
CH003AB05	L2D11	U6C02*
CH003AC01	G2B02	J2M08
	K2S07	L2B06
	N2S12	U6E02*
CH003AC03	A5B04*	F2U06
	J2D10	K2B10
	L2D06	N6B02*
CH003AD01	N6D04*	
CH003AE01	L2G12	N6A04*
CH003AF03	B1D11*	N6D02*
CH005AA30	L2U10	T6A02*
CH005AB30	L2U05	R6E02*
CH005AC30	L2U11	T6B04*
CH005AD30	L2S12	T6C04*
CH006AE30	L2S10	S6A02*

NET NO.	PIN	PIN
CH006AF30	L2U09	T6D04*
CH006AG30	L2U04	T6D02*
CH006AH30	L2U02	T6E02*
CH006AJ30	L2S03	U6A02*
CH007AA30	N6E02*	
CH007AB30	L2B09	Q6C02*
CH007AC30	L2M03	Q6B04*
CH007AD30	G2S06	U6C04*
CH008AE30	G2S08	L2S02
	U6B04*	
CH008AF30	G2P11	L2D12
	U6D02*	
CH008AG30	G2M09	U6A04*
CH008AH30	L2J13	R6D02*
CH008AJ30	L2G11	L6D02*
CH009AA30	L2G13	M6D04*
CH009AB30	L2J04	L6E04*
CH009AC30	L2J11	R6D04*
CH009AD30	A2D12*	L6E02*
CH009AE30	B1C11*	N6C02*
CH011AA30	L2B04	M6B04*
CH011AC30	L2D02	M6A03*
CH011AD30	L2B02	Q6B02*
CS110EKN0	E2B04	
CS110EK40	E2J11	G2J11
	H2P05	
CS110EK41	E2J12	G2P07
	H2M04	
CS110EK42	E2J07	G2J13
	H2P04	
CS110EK43	E2J09	G2P09
	H2M05	
CS110EK44	E2J04	G2G11
	H2J10	J2P07
CS110EK45	E2J05	G2G13
	H2M06	J2P06
CS110EK46	E2D12	G2M04
	H2P06	J2P04
CS110EK47	E2D13	G2M03
	H2G09	J2P05
CS110EK48	E2D09	G2G09
	H2G13	
CS110EK50	E2B11	
CS110EK51	E2G11	
CS110EK52	E2D03	
CS110EK53	E2J03	
CS110EK54	E2B06	
CS110EK55	E2G06	
CS110EK56	E2D08	
CS110EK57	E2J08	
CS110EK58	E2G13	
CS110EK59	E2B03	
CS112EKN0	D4B04	
CS112EK50	D4B11	
CS112EK51	D4G11	
CS112EK52	D4D03	
CS112EK53	D4J03	
CS112EK54	D4B06	
CS112EK55	D4G06	
CS112EK56	D4D08	
CS112EK57	D4J08	
CS112EK58	D4G13	
CS112EK59	D4B03	
MS110EK50	R2B11	
MS110EK51	R2G11	
MS110EK52	R2D03	
MS110EK53	R2J03	
MS110EK54	R2B06	
MS110EK55	R2G06	
MS110EK56	R2D08	
MS110EK57	R2J08	
MS110EK58	R2G13	
MS110EK59	R2B03	
MS120EK50	S2B11	
MS120EK51	S2G11	
MS120EK52	S2D03	
MS120EK53	S2J03	
MS120EK54	S2B06	
MS120EK55	S2G06	
MS120EK56	S2D08	
MS120EK57	S2J08	
MS120EK58	S2G13	
MS120EK59	S2B03	
MS130EK50	T2B11	
MS130EK51	T2G11	
MS130EK52	T2D03	
MS130EK53	T2J03	
MS130EK54	T2B06	
MS130EK55	T2G06	
MS130EK56	T2D08	

NET NO.	PIN	PIN
MS130EK57	T2J08	
MS130EK58	T2G13	
MS130EK59	T2B03	
MS140EK50	U2B11	
MS140EK51	U2G11	
MS140EK52	U2D03	
MS140EK53	U2J03	
MS140EK54	U2B06	
MS140EK55	U2G06	
MS140EK56	U2D08	
MS140EK57	U2J08	
MS140EK58	U2G13	
MS140EK59	U2B03	
MS150EK50	R4B11	
MS150EK51	R4G11	
MS150EK52	R4D03	
MS150EK53	R4J03	
MS150EK54	R4B06	
MS150EK55	R4G06	
MS150EK56	R4D08	
MS150EK57	R4J08	
MS150EK58	R4G13	
MS150EK59	R4B03	
MS160EK50	S4B11	
MS160EK51	S4G11	
MS160EK52	S4D03	
MS160EK53	S4J03	
MS160EK54	S4B06	
MS160EK55	S4G06	
MS160EK56	S4D08	
MS160EK57	S4J08	
MS160EK58	S4G13	
MS160EK59	S4B03	
MS170EK50	T4B11	
MS170EK51	T4G11	
MS170EK52	T4D03	
MS170EK53	T4J03	
MS170EK54	T4B06	
MS170EK55	T4G06	
MS170EK56	T4D08	
MS170EK57	T4J08	
MS170EK58	T4G13	
MS170EK59	T4B03	
MS180EK50	U4B11	
MS180EK51	U4G11	
MS180EK52	U4D03	
MS180EK53	U4J03	
MS180EK54	U4B06	
MS180EK55	U4G06	
MS180EK56	U4D08	
MS180EK57	U4J08	
MS180EK58	U4G13	
MS180EK59	U4B03	
OP110AA31	A1D13*	A2D02*
OP110AA32	A2B03*	B1A13*
OP110AA51	A2B07*	F2J09
OP110AA52	A2B06*	J2J04
OP110AB21	A2B05*	K2D04
OP110AB22	A2B04*	K2D02
OP110AB31	A2B08*	K2D06
PA110BA10	H2P09	J2U09
	K2S08	L2P02
PA110BM10	H2M07	J2S04
	K2U11	L2P09
PA110CD10	H2M12	J2S08
	K2U09	L2P04
PA110CP10	H2M08	J2S06
	K2U10	L2P10
PA110CY10	H2B08	J2U02
	K2S05	L2P07
PA110DG10	H2M11	J2U07
	K2S09	L2P05
PA110DS10	H2M13	J2S03
	K2U05	L2P11
PA110EJ10	H2M09	J2S05
	K2S11	L2P06
PA110EV10	H2M10	J2U05
	K2S04	L2P13
PA120BA10	A3B10*	C1E11*
	E6B04*	J2D12
PA120BM10	A3D04*	C1C11*
	E6B02*	J2G03
PA120BY10	A3B12*	F6A04*
	J2B04	
PA120CD10	A3B03*	C1E13*
	E6C04*	J2J05
PA120CP10	A3B04*	C1B11*
	E6C02*	J2D13
PA120DG10	A3D03*	C1D11*
	E6D04*	J2B02

NET NO.	PIN	PIN
PA120DS10	A3D05*	C1B13*
	E6D02*	J2D11
PA120DZ30	F2U02	G2M08
	L2G09	
PA120EJ10	A3D02*	C1D13*
	E6E04*	J2B09
PA120EV10	A3B05*	C1A11*
	E6E02*	J2B13
PA130BA10	D4J11	G2G12
	H2J13	P2P11
	Q2M11	
PA130BG10	D4J07	G2P02
	H2G10	P2P06
	Q2M06	
PA130BM10	D4J04	G2M02
	H2M03	P2P09
	Q2M09	
PA130BS10	D4D12	G2P05
	H2G12	P2M02
	Q2B13	
PA130BY10	D4D09	G2G02
	H2J12	P2M09
	Q2P07	
PA130DD10	D4J12	G2P06
	H2M02	P2P12
	Q2M12	
PA130DJ10	D4J09	G2J12
	H2G11	P2P04
	Q2M04	
PA130DP10	D4J05	G2P04
	H2F02	P2P07
	Q2M07	
PA130DV10	D4D13	G2M05
	H2J11	P2M03
	Q2G03	
PA140BA10	N2G02	R2J11
	R4J11	S2J11
	S4J11	T2J11
	T4J11	U2J11
	U4J11	
PA140BD10	N2G03	R2J12
	R4J12	S2J12
	S4J12	T2J12
	T4J12	U2J12
	U4J12	
PA140BG10	N2G04	R2J07
	R4J07	S2J07
	S4J07	T2J07
	T4J07	U2J07
	U4J07	
PA140BJ10	N2J05	R2J09
	R4J09	S2J09
	S4J09	T2J09
	T4J09	U2J09
	U4J09	
PA140BM10	N2J07	R2J04
	R4J04	S2J04
	S4J04	T2J04
	T4J04	U2J04
	U4J04	
PA140BP10	N2G08	R2J05
	R4J05	S2J05
	S4J05	T2J05
	T4J05	U2J05
	U4J05	
PA140BS10	N2J02	R2D12
	R4D12	S2D12
	S4D12	T2D12
	T4D12	U2D12
	U4D12	
PA140BV10	N2G09	R2D13
	R4D13	S2D13
	S4D13	T2D13
	T4D13	U2D13
	U4D13	
PA140BY10	N2J06	R2D09
	R4D09	S2D09
	S4D09	T2D09
	T4D09	U2D09
	U4D09	
PC002EP10	A3D06*	F2M03
PC002EP11	A3B06*	F2S12
PC002EP12	A3D07*	F2M09
PC002EP13	A3D10*	F2P09
PC002EP14	A3B09*	F2G08
PC002EP15	A3D09*	F2G10
PC002EP16	A3B08*	F2G11
PC002EP17	A3B07*	F2G13
PC002EP18	A3D11*	F2M02
PC002GA21	D4B09	E2B09

NET NO.	PIN	PIN
PC002GA21	F2U07	
PC002GA31	D4J06	E2J06
	F2M12	
PC002GB10	D4D05	E2D05
	F2U10	
PC002GB21	D4G12	E2G12
	F2S06	
PC002GB31	D4B13	E2B13
	F2P13	
PC002GB41	D4D06	E2D06
	F2M13	
PC002GB51	D4J10	E2J10
	F2P06	
PC002GB61	D4J02	E2J02
	F2U12	
PC002GB71	D4D11	E2D11
	F2U13	
PC002GB81	D4J13	E2J13
	F2M11	
PC012DT30	E2D04	F2D05
PC012DT40	D4D04	F2D06
PC020DL10	D4B08	E2B08
	F2B13	
PC020DL20	D4D07	E2D07
	F2B08	
PC020DL30	D4B05	E2B05
	F2B07	
PC020DL40	D4D02	E2D02
	F2B06	
PC020FD30	D4B02	E2B02
	F2B11	
PC020FG30	F2B10	
PC020FJ30	F2G02	
PC020FP31	D4G08	E2G08
	F2D11	
PC020FP41	D4G02	E2G02
	F2D07	
PC022BI60	F2M05	K2D07
PC022CP20	F2M04	G2S13
	H2J07	
PC022DV30	F2J04	F2P04
	G2J06	N2J10
	Q2P09	
PC022FY30	A2B09*	F2J05
PC022GD30	F2S03	G2P13
PC022GK30	A2B10*	A2D10*
	F2B04	
PC024EA30	F2D10	J2J12
PC024FE30	F2D09	J2S10
PC030BC30	F2G07	N2J10
PC030DF30	F2B09	Q2J04
PC030DI30	F2G04	N2J09
	P2B04	Q2S02
PC030DP30	F2G09	N2J11
PC030DS30	D4D10	E2D10
	F2J02	
PC030FK30	F2P11	G2J07
	H2J09	J2P10
	K2B11	
PC100DT30	F2D04	G2D05
	N2S09	Q2P10
PC100EJ30	G2M06	J2B06
PC110CA30	F2G12	G2S09
	J2M04	K2P13
	L2D09	
PC110EN30	G2S12	H2P10
	K2B08	L2B08
	P2G08	
PC110FT30	G2B04	J2M09
	K2B13	
PC120GB30	G2B03	H2G03
PC120GD30	G2D09	H2G08
PC120GG30	G2B07	H2D06
PC120GJ30	G2B05	H2D11
PC130FD30	F2J07	G2B08
	J2S11	N2S10
PC130GM30	G2M07	
PC132BA30	G2B13	K2G03
PC134FA30	F2B05	G2B09
PC134FF30	F2G05	G2D02
PC136FA30	G2D11	H2B03
PC136FD30	G2D10	H2D10
PC136FG30	G2J10	H2D09
PC136FJ30	G2J09	H2B09
PC138FA30	G2G05	H2G04
PC138FD30	G2G10	H2G06
PC138FJ30	G2D12	H2G02
PC138FM30	F2U04	G2M07
	J2U11	L2J05
PC138GG30	G2B10	H2G07
PC140FE30	G2B11	H2S07

NET NO.	PIN	PIN
PC140FE30	H2S07	
PC142DM30	F2S07	G2U07
	H2P11	J2D09
	K2M07	
PC142EA30	F2J05	G2M10
PC142ED30	G2U09	H2P12
PC142EH30	G2U10	H2P07
PC146FK30	G2U11	J2U06
PC150FB30	G2U06	H2U06
	Q2G10	
PC150FG30	G2M13	H2U05
	Q2M10	
PC150FL30	G2P12	H2S05
	Q2G02	
PC152FE30	G2U05	H2P13
PC152FK30	G2S02	H2S06
PC160FA30	G2D13	H2S11
PC160FD30	G2G06	H2B13
PC160GB30	G2B06	J2U04
PC162ET30	F2D02	G2S07
	J2M06	
PC162FB30	G2G04	J2D02
	K2J11	
PC162FF30	G2U04	J2D07
	K2M05	
PC162FH30	G2S05	J2B05
	K2M06	
PC162FJ30	G2G07	J2B03
	K2G12	
PC162FL30	G2U02	J2D04
	K2P04	
PC162GF30	G2G08	J2D05
	K2P06	
PC162GV30	G2S03	H2S03
PC210GX30	H2U08	H2U12
PC220BA30	H2D13	J2P09
PC220BG30	H2J02	J2M10
PC220DH30	H2J06	J2U10
PC230BCB4	H2S13	
PC230BC61(0)	E2G09	F2M07
	H2D12	J2G10
	Q2B02	
PC230BC61(1)	E2G10	F2P07
	H2D07	J2J13
	Q2B03	
PC230BC61(2)	E2G05	F2J10
	H2B12	J2M02
	Q2B04	Q2D04
PC230BC61(3)	E2G07	F2D13
	H2B06	J2G13
PC230BC61(4)	E2G03	F2B03
	H2B07	J2J10
	Q2D05	
PC230BC61(5)	E2G04	F2B02
	H2B05	J2J11
	Q2B05	
PC230BC61(6)	E2B10	F2U11
	H2B11	J2G11
	Q2D06	
PC230BC61(7)	E2B12	F2S09
	H2D05	J2J12
	Q2B06	
PC230BQE0	H2U13	
PC230BQ21(10)	D4G05	F2S02
	H2S02	K2M09
	L2U06	N2B11
	P2G08	
PC230BQ21(11)	D4G07	F2S04
	H2S04	K2P09
	L2U07	P2J05
PC230BQ21(12)	D4G03	F2U09
	H2U09	K2P02
	L2U12	N2B12
	N2D12	P2G05
PC230BQ21(13)	D4G04	F2P12
	H2U10	K2G11
	L2S11	N2B05
	P2B13	
PC230BQ21(14)	D4B10	F2S08
	H2S08	K2P07
	L2S08	P2D13
PC230BQ21(15)	D4B12	F2S10
	H2S10	K2M02
	L2S05	N2D11
	P2D12	
PC230BQ21(8)	D4G09	F2P10
	H2U02	K2M10
	L2U13	N2U02
	P2G12	
PC230BQ21(9)	D4G10	F2M10

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZERDES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD A-A1
P/N 423 6400

NET LIST

LOC=1A-A1

PN 4237967 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135038 DATE= 79199

NET NO.	PIN	PIN
PC230BQ21(9)	F2M10	H2U04
	K2P12	L2S09
	N2P13	P2J06
PC230CB30	H2G05	
PC230CD30	H2U11	
PC230DA30	E2B07	F2S13
	H2B10	J2G12
	Q2D02	
PC230DC30	H2D02	J2S02
PC230DQ30	F2S11	H2B04
	L2S07	P2B10
PC230DT30	D4B07	H2D04
PC250ED30	H2S09	J2S12
PC260BC41	F2J11	H2J05
	J2B07	
PC260BF31	H2B02	
PC302FA20	G2B12	J2M05
PC304DE30	G2D07	J2P02
PC310DE30	F2J12	J2B10
	L2G10	N2G11
	N2G12	
PC320CC30	J2M13	
PC330BA30	A2B12*	J2S09
PC330BD30	A3B11*	J2B12
PC330CV30	J2S13	K2D09
PC330DT30	F2P02	J2U13
	K2D05	
PC330GG30	J2B11	K2P11
PC340FB30	J2S07	K2J02
PC400AF50	J2G08	K2G08
	L2J09	N2U06
PC400AK30	K2D12	
PC400AQ30	K2D13	L2S13
PC402EB30	A2D09*	K2J06
PC404CF30	K2G09	L2G02
PC404CS51	K2G06	N2U13
PC404EZ30	K2G07	N2G07
PC404FW30	A2D05*	A2D06*
	K2J07	
PC406CJ30	J2B08	K2J10
PC422AB90	J2P13	K2M03
PC422AC20	G2U12	K2B06
	L2B13	N2U07
PC422AG30	F2B12	J2M07
	K2B02	
PC430AA53	K2S03	
PC430AH1	K2S12	
PC440AK30	K2U04	N2S13
PC440AL30	J2P12	K2G02
PC440AM30	K2J12	
PC504CRC0	L2D13	
PC506FP30	K2G04	L2J07
PC508BVC1	L2J10	
PC508EC20	L2B07	
PC508EEB2	L2G05	
PC508FR20	G2P10	L2G03
PC510EB10	G2D04	L2G04
PC510EX20	F2P05	G2G03
	J2G07	L2B07
	N2U12	
PC532GF30	G2S11	K2D10
	L2B11	
PC532GJ30	G2S10	K2B09
	L2G08	
PC532GN30	G2U13	K2D11
	L2B12	
PC532GR30	K2M13	L2D10
	N6A02*	
PC532GU30	A3B13*	L2B05
PC532GX30	A3D13*	L2D04
PC532G030	A3D12*	L2D05
PC534CFC3	L2J02	L2J08*
PC534FH50	L2G06	
PC554BV30	E6C02*	L2J06
	N2S08	
PC554GH30	L2B03	M6C04*
PM002BT30	N2S11	Q2P13
PM004BED0	N2J12	
PM008BF30	N2M02	Q2D12
PM008BI30	N2P02	Q2B12
PM042BK40	N2P05	P2G10
PM042DB40	N2P04	P2M11
PM042DN40	N2G13	P2M10
PM042FH40	N2M04	P2G09
PM044AB30	F2J06	N2G10
PM044FK30	N2J11	P2M07
PM104DA30	N2P12	P2U09
PM106DA30	N2M12	P2S09
PM106GN30	N2M13	P2U10
PM122DB30	N2U04	P2G13

NET NO.	PIN	PIN
PM122DB30	P2G13	
PM122DE40	N2S04	P2P10
PM122FG40	N2U05	P2P05
PM126ED40	N2S05	P2J11
PM130FT30	N2J13	
PM142DG41	N2P09	P2M05
PM142DN30	N2P06	P2B05
	Q2J07	
PM144EJ20	N2P07	P2M06
PM144EN30	N2M09	P2B11
PM144ER30	N2M08	P2B12
PM144FU20	N2M07	P2M08
PM164FU40	N2B08	P2M12
PM164GS40	N2D05	P2M13
PM168EF30	N2B07	Q2M05
PM168GA30	F2D12	N2D07
PM168GP30	N2D06	P2D04
PM204DE12	P2G11	
PM204DE12(P)	N2G05	P2S04
PM204DE12(10)	N2D10	P2U12
PM204DE12(11)	N2B10	P2S07
PM204DE12(12)	N2B09	P2U05
PM204DE12(13)	N2J09	P2S08
PM204DE12(14)	N2D09	P2U04
PM204DE12(15)	N2B06	
PM204DE12(8)	N2G06	P2U11
PM204DE12(9)	N2J04	P2U07
PM222BN30	N2S06	P2S06
PM222BQ30	N2S07	P2D10
PM222BU40	N2M05	Q2D10
PM222DM91	N2M11	P2J13
PM222DZ30	N2M06	P2J10
PM240CTF0	N2D04	P2S05
PM240CTG3	N2D02	N2D08
PM300BC41	P2U13	
PM300BC41(P)	Q2B09	
PM300BC41(0)	P2S10	Q2P05
PM300BC41(1)	P2S11	Q2P02
PM300BC41(2)	P2S12	Q2B11
PM300BC41(3)	P2S13	Q2M02
PM300BC41(4)	P2S02	Q2J02
PM300BC41(5)	P2P13	Q2D09
PM300BC41(6)	P2S03	Q2B10
PM300BC41(7)	P2U06	Q2D11
PM300DV11	P2B06	Q2G07
	R2D05	R4D05
	S2D05	S4D05
	T2D05	T4D05
	U2D05	U4D05
PM300DV21	P2B03	Q2G05
	R2G12	R4G12
	S2G12	S4G12
	T2G12	T4G12
	U2G12	U4G12
PM300DV31	P2B02	Q2J10
	R2B13	R4B13
	S2B13	S4B13
	T2B13	T4B13
	U2B13	U4B13
PM300DV41	P2B07	Q2J11
	R2D06	R4D06
	S2D06	S4D06
	T2D06	T4D06
	U2D06	U4D06
PM300DV51	N2P11	P2D07
	Q2G12	R2J10
	R4J10	S2J10
	S4J10	T2J10
	T4J10	U2J10
	U4J10	
PM300DV61	N2M10	P2D05
	Q2G11	R2J02
	R4J02	S2J02
	S4J02	T2J02
	T4J02	U2J02
	U4J02	
PM300DV71	N2P10	P2B08
	Q2J06	R2D11
	R4D11	S2D11
	S4D11	T2D11
	T4D11	U2D11
	U4D11	
PM300DV81	N2M03	P2D09
	Q2G09	R2J13
	R4J13	S2J13
	S4J13	T2J13
	T4J13	U2J13
	U4J13	
PM300DV91	P2D06	Q2B08
PM300FE30	N2S03	P2P02

NET NO.	PIN	PIN
PM380CL30	N2D13	P2J12
PM420FR30	N2B13	P2U02
PM440BZ30	N2S02	P2M04
PM440DC20	P2J02	R2G09
	R4G09	S2G09
	S4G09	T2G09
	T4G09	U2G09
	U4G09	
PM440DF20	P2J04	R2G10
	R4G10	S2G10
	S4G10	T2G10
	T4G10	U2G10
	U4G10	
PM440DJ20	P2G07	R2G05
	R4G05	S2G05
	S4G05	T2G05
	T4G05	U2G05
	U4G05	
PM440DM20	P2J07	R2G07
	R4G07	S2G07
	S4G07	T2G07
	T4G07	U2G07
	U4G07	
PM440DP20	P2G02	R2G03
	R4G03	S2G03
	S4G03	T2G03
	T4G03	U2G03
	U4G03	
PM440DS20	P2G03	R2G04
	R4G04	S2G04
	S4G04	T2G04
	T4G04	U2G04
	U4G04	
PM440DV20	P2G04	R2B10
	R4B10	S2B10
	S4B10	T2B10
	T4B10	U2B10
	U4B10	
PM440DX20	P2G06	R2B12
	R4B12	S2B12
	S4B12	T2B12
	T4B12	U2B12
	U4B12	
PM440DZ20	P2B09	R2B07
	R4B07	S2B07
	S4B07	T2B07
	T4B07	U2B07
	U4B07	
PM704ABC0	Q2D13	
PM704CB31	U4J06	
PM704CB31(2)	R2B09	
PM704CB31(6)	Q2S06	R4B09
	S2B09	S4B09
	T2B09	T4B09
	U2B09	U4B09
PM704CB31(7)	Q2S07	R2J06
	R4J06	S2J06
	S4J06	T2J06
	T4J06	U2J06
PM720AG30	Q2S04	S2B04
	S4B04	U2B04
	U4B04	
PM720AG40	Q2S03	R2B04
	R4B04	T2B04
	T4B04	
PM720CB30	Q2U11	R2B02
	S2B02	
PM720CB40	Q2U12	T2B02
	U2B02	
PM720CB50	Q2U13	R4B02
	S4B02	
PM720CB60	Q2S13	T4B02
	U4B02	
PM720CB70	Q2S12	
PM720EB30	Q2U09	R2D10
	R4D10	S2D10
	S4D10	T2D10
	T4D10	U2D10
	U4D10	
PM720EF30	Q2S08	R2G08
	R4G08	S2G08
	S4G08	T2G08
	T4G08	U2G08
	U4G08	
PM720EF40	Q2S09	R2G02
	R4G02	S2G02
	S4G02	T2G02
	T4G02	U2G02
	U4G02	
PM720EK30	Q2U04	R2B08

NET NO.	PIN	PIN
PM720EK30	R4B08	S2B08
	S4B08	T2B08
	T4B08	U2B08
	U4B08	
PM720EK40	Q2U05	R2D07
	R4D07	S2D07
	S4D07	T2D07
	T4D07	U2D07
	U4D07	
PM720EK50	Q2U06	R2B05
	R4B05	S2B05
	S4B05	T2B05
	T4B05	U2B05
	U4B05	
PM720GK30	Q2U07	R2D02
	R4D02	S2D02
	S4D02	T2D02
	T4D02	U2D02
	U4D02	
PM722GF30	F2G03	Q2S05
PM722GJ30	Q2S11	S2D04
	S4D04	U2D04
	U4D04	
PM722GL30	Q2S10	R2D04
	R4D04	T2D04
	T4D04	
PM764DQ30	J2M11	Q2G06
PM764DQ50	J2M12	Q2G04
PM764EK30	N2B04	Q2B07
PM768DJ30	K2G05	Q2U02
PM780CG30	Q2M08	
YA303FB30	A2D13*	B1D13*
YA303FD30	A2B13*	B1C13*
YA320AA01	A1E11*	A1E13*
	A2B02*	A5B02*
YA410AK10	A2D03*	
YA410AK30	A2D08*	
YA410AW10	A5D04*	
YA410AW20	A5B03*	
YA410AW30	A3D08*	A4D08*
	A5D08*	
YA410AW40	A5D02*	

NET NO.	PIN	PIN

NET NO.	PIN	PIN

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD A-A1
F/N 423 6400

NET LIST

LOC=1A-A1

PN 4237967 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135038 DATE= 79199

PIN	NET NO.
A1D11	CE140AA78
A1D13	DP110AA31
A1E11	YA320AA01
A1E13	YA320AA01
A2B02	YA320AA01
A2B03	DP110AA32
A2B04	DP110AB22
A2B05	DP110AB21
A2B06	DP110AA52
A2B07	DP110AA51
A2B08	DP110AB31
A2B09	PC022FY30
A2B10	PC022GK30
A2B12	PC330BA30
A2B13	YA303FD30
A2D02	DP110AA31
A2D03	YA410AK10
A2D05	PC404FW30
A2D06	PC404FW30
A2D08	YA410AK30
A2D09	PC402EB30
A2D10	PC022GK30
A2D12	CH009AD30
A2D13	YA303FB30
A3B03	PA120CD10
A3B04	PA120CP10
A3B05	PA120EV10
A3B06	PC002EP11
A3B07	PC002EP17
A3B08	PC002EP16
A3B09	PC002EP14
A3B10	PA120BA10
A3B11	PC330BD30
A3B12	PA120BY10
A3B13	PC532GU30
A3D02	PA120EJ10
A3D03	PA120DG10
A3D04	PA120BM10
A3D05	PA120DS10
A3D06	PC002EP10
A3D07	PC002EP12
A3D08	YA410AW30
A3D09	PC002EP15
A3D10	PC002EP13
A3D11	PC002EP18
A3D12	PC532G030
A3D13	PC532GX30
A4B02	CE120FB80
A4B03	CE110FB60
A4B04	CE120FB60
A4B05	CE120FB40
A4B07	CE120FF80
A4B08	CE110FF60
A4B09	CE120FF60
A4B10	CE120FF40
A4B12	CE130DA40
A4B13	CE130DA20
A4D02	CE110FB80
A4D04	CE110FB40
A4D05	CE110FB20
A4D06	CE120FB20
A4D07	CE110FF80
A4D08	YA410AW30
A4D09	CE110FF40
A4D10	CE110FF20
A4D11	CE120FF20
A4D12	CE130DA80
A4D13	CE130DA60
A5B02	YA320AA01
A5B03	YA410AW20
A5B04	CH003AC03
A5B05	CE140EA10
A5B06	CE140AA83
A5B08	CE140AA67
A5B09	CE140AA72
A5B10	CE140AA66
A5B11	CE140AA78
A5B12	CE140AA76
A5B13	CE140AA77
A5D02	YA410AW40
A5D04	YA410AW10
A5D05	CE140AA62
A5D06	CE140AA57
A5D07	CH003AA03
A5D08	YA410AW30
A5D09	CE140AA46
A5D10	CE140EA30
A5D11	CE140AA36
A5D12	CE140AA81
A5D13	CE140AA32

PIN	NET NO.
B1A11	CH002AF07
B1A13	DP110AA32
B1B11	CH002AF05
B1B13	CE140AA77
B1C11	CH009AG30
B1C13	YA303FD30
B1D11	CH003AF03
B1D13	YA303FB30
B1E13	CE140AA72
C1A11	PA120EV10
C1A13	CE140AA36
C1B11	PA120CP10
C1B13	PA120DS10
C1C11	PA120BM10
C1C13	CE140AA83
C1D11	PA120DG10
C1D13	PA120EJ10
C1E11	PA120BA10
C1E13	PA120CD10
D4B02	PC020FD30
D4B03	CS112EK59
D4B04	CS112EKN0
D4B05	PC020DL30
D4B06	CS112EK54
D4B07	PC230DT30
D4B08	PC020DL10
D4B09	PC002GA21
D4B10	PC230BQ21(14)
D4B11	CS112EK50
D4B12	PC230BQ21(15)
D4B13	PC002GB31
D4D02	PC020DL40
D4D03	CS112EK52
D4D04	PC012DT40
D4D05	PC002GB10
D4D06	PC002GB41
D4D07	PC020DL20
D4D08	CS112EK56
D4D09	PA130BY10
D4D10	PC030DS30
D4D11	PC002GB71
D4D12	PA130BS10
D4D13	PA130DV10
D4G02	PC020FP41
D4G03	PC230BQ21(12)
D4G04	PC230BQ21(13)
D4G05	PC230BQ21(10)
D4G06	CS112EK55
D4G07	PC230BQ21(11)
D4G08	PC020FP31
D4G09	PC230BQ21(8)
D4G10	PC230BQ21(9)
D4G11	CS112EK51
D4G12	PC002GB21
D4G13	CS112EK58
D4J02	PC002GB61
D4J03	CS112EK53
D4J04	PA130BM10
D4J05	PA130DP10
D4J06	PC002GA31
D4J07	PA130BG10
D4J08	CS112EK57
D4J09	PA130DJ10
D4J10	PC002GB51
D4J11	PA130BA10
D4J12	PA130DD10
D4J13	PC002GB81
E2B02	PC020FD30
E2B03	CS110EK59
E2B04	CS110EKN0
E2B05	PC020DL30
E2B06	CS110EK54
E2B07	PC230DA30
E2B08	PC020DL10
E2B09	PC002GA21
E2B10	PC230BC61(6)
E2B11	CS110EK50
E2B12	PC230BC61(7)
E2B13	PC002GB31
E2D02	PC020DL40
E2D04	PC012DT30
E2D05	PC002GB10
E2D06	PC002GB41
E2D07	PC020DL20
E2D08	CS110EK56
E2D09	CS110EK48
E2D10	PC030DS30
E2D11	PC002GB71
E2D12	CS110EK46

PIN	NET NO.
E2D13	CS110EK47
E2G02	PC020FP41
E2G03	PC230BC61(4)
E2G04	PC230BC61(5)
E2G05	PC230BC61(2)
E2G06	CS110EK55
E2G07	PC230BC61(3)
E2G08	PC020FP31
E2G09	PC230BC61(0)
E2G10	PC230BC61(1)
E2G11	CS110EK51
E2G12	PC002GB21
E2G13	CS110EK58
E2J02	PC002GB61
E2J03	CS110EK53
E2J04	CS110EK44
E2J05	CS110EK45
E2J06	PC002GA31
E2J07	CS110EK42
E2J08	CS110EK57
E2J09	CS110EK43
E2J10	PC002GB51
E2J11	CS110EK40
E2J12	CS110EK41
E2J13	PC002GB81
E6B02	PA120BM10
E6B04	PA120BA10
E6C02	PA120CP10
E6C02	PC554BV30
E6C04	PA120CD10
E6D02	PA120DS10
E6D04	PA120DG10
E6E02	PA120EV10
E6E04	PA120EJ10
F2B02	PC230BC61(5)
F2B03	PC230BC61(4)
F2B04	PC022GK30
F2B05	PC134FA30
F2B06	PC020DL40
F2B07	PC020DL30
F2B08	PC020DL20
F2B09	PC030DF30
F2B10	PC020FG30
F2B11	PC020FD30
F2B12	PC422AG30
F2B13	PC020DL10
F2D02	PC162ET30
F2D04	PC100DT30
F2D05	PC012DT30
F2D06	PC012DT40
F2D07	PC020FP41
F2D09	PC024FE30
F2D10	PC024EA30
F2D11	PC020FP31
F2D12	PM168GA30
F2D13	PC230BC61(3)
F2G02	PC020FJ30
F2G03	PM722GF30
F2G04	PC030DI30
F2G05	PC134FF30
F2G06	CE140AA32
F2G07	PC030BC30
F2G08	PC002EP14
F2G09	PC030DP30
F2G10	PC002EP15
F2G11	PC002EP16
F2G12	PC110CA30
F2G13	PC002EP17
F2J02	PC030DS30
F2J04	PC022DV30
F2J05	PC142EA30
F2J06	PM044AB30
F2J07	PC130FD30
F2J09	DP110AA51
F2J10	PC230BC61(2)
F2J11	PC260BC41
F2J12	PC310DE30
F2J13	CH003AB03
F2M02	PC002EP18
F2M03	PC002EP10
F2M04	PC022CP20
F2M05	PC022BI60
F2M06	CH003AA01
F2M07	PC230BC61(0)
F2M08	CH002AF01
F2M09	PC002EP12
F2M10	PC230BQ21(9)
F2M11	PC002GB81
F2M12	PC002GA31
F2M13	PC002GB41

PIN	NET NO.
F2P02	PC330DT30
F2P04	PC022DV30
F2P05	PC510EX20
F2P06	PC002GB51
F2P07	PC230BC61(1)
F2P09	PC002EP13
F2P10	PC230BQ21(8)
F2P11	PC030FK30
F2P12	PC230BQ21(13)
F2P13	PC002GB31
F2S02	PC230BQ21(10)
F2S03	PC022GD30
F2S04	PC230BQ21(11)
F2S06	PC002GB61
F2S07	PC142DM30
F2S08	PC230BQ21(14)
F2S09	PC230BC61(7)
F2S10	PC230BQ21(15)
F2S11	PC230DG30
F2S12	PC002EP11
F2S13	PC230DA30
F2U02	PA120DZ30
F2U04	PC138FM30
F2U05	PC022FY30
F2U06	CH003AC03
F2U07	PC002GA21
F2U09	PC230BQ21(12)
F2U10	PC002GB10
F2U11	PC230BC61(6)
G2B02	CH003AC01
G2B03	PC120GB30
G2B04	PC110FT30
G2B05	PC120GJ30
G2B06	PC160GB30
G2B07	PC120GG30
G2B08	PC130FD30
G2B09	PC134FA30
G2B10	PC138GG30
G2B11	PC140FE30
G2B12	PC302FA20
G2B13	PC132BA30
G2D02	PC134FF30
G2D04	PC510EB10
G2D05	PC100DT30
G2D06	CE140AA57
G2D07	PC304DE30
G2D09	PC120GD30
G2D10	PC136FD30
G2D11	PC136FA30
G2D12	PC138FJ30
G2D13	PC160FA30
G2G02	PA130BY10
G2G03	PC510EX20
G2G04	PC030DI30
G2G05	PC134FF30
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G2G08	PC002EP14
G2G09	PC030DP30
G2G10	PC002EP15
G2G11	PC002EP16
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G2G13	CS110EK45
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G2M13	PC120GD30
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H2P04	PA130DP10
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H2U07	PC002EP11
H2U08	PC230DA30
H2U09	PA120DZ30
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J2B06	PC100EJ30
J2B07	PC260BC41
J2B08	PC406CJ30
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J2B11	PC330GG30
J2B12	PC330BD30
J2B13	PA120EV10
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J2D04	PC162FL30
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J2G11	PC230BC61(6)
J2G12	PC230DA30
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J2J05	PA120CD10
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J2J07	CE110FF20
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J2J11	PC230BC61(5)
J2J12	PC230BC61(7)
J2J13	PC230BC61(1)
J2M02	PC230BC61(2)
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J2M06	PC162ET30
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J2M08	CH003AC01
J2M09	PC110FT30
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J2M11	PM764DD30
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J2M13	PC320CC30
J2P02	PC304DE30
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J2P07	CS110EK44
J2P09	PC220BA30
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PIN	NET NO.
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H2P10	PC110EN30
H2P11	PC142DM30
H2P12	PC142EH30
H2P13	PC152FE30
H2S02	PC230BQ21(10)
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H2S05	PC150FL30
H2S06	PC152FK30
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H2S08	PC230BQ21(14)
H2S09	PC250ED30
H2S10	PC230BQ21(15)
H2S11	PC160FA30
H2S13	PC230BCB4
H2U02	PC230BQ21(8)
H2U04	PC230BQ21(9)
H2U05	PC150FG30
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H2U08	PC210GX30
H2U09	PC230BQ21(12)
H2U10	PC230BQ21(13)
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H2U12	PC210GX30
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J2B03	PC162FJ30
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J2B05	PC162FH30
J2B06	PC100EJ30
J2B07	PC260BC41
J2B08	PC406CJ30
J2B09	PA120EJ10
J2B10	PC310DE30
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J2B12	PC330BD30
J2B13	PA120EV10
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J2D04	PC162FL30
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J2J02	CE110FF80
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J2J09	CE110FB60
J2J10	PC230BC61(4)
J2J11	PC230BC61(5)
J2J12	PC230BC61(7)
J2J13	PC230BC61(1)
J2M02	PC230BC61(2)
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J2M06	PC162ET30
J2M07	PC422AG30
J2M08	CH003AC01
J2M09	PC110FT30
J2M10	PC220BG30
J2M11	PM764DD30
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J2M13	PC320CC30
J2P02	PC304DE30
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J2S06	PA110CP10
J2S07	PC340FB30
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J2S09	PC330BA30
J2S10	PC024FE30
J2S11	PC130FD30
J2S12	PC250ED30
J2S13	PC330CV30
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J2U09	PA110BA10
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K2B12	CE140AA57
K2B13	PC110FT30
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K2D04	DP110AB21
K2D05	PC330DT30
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K2D07	PC022BI60
K2D09	PC330CV30
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K2G03	PC132BA30
K2G04	PC506FP30
K2G05	PM768DJ30
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K2G08	PC400AF50
K2G09	PA120DZ30
K2G10	CH002AG05
K2G11	PC230BQ21(13)
K2G12	PC162FJ30
K2G13	CE120FF20
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K2J06	PC402EB30
K2J07	PC506FP30
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K2J10	PC506BVC1
K2J11	PC162FB30
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K2J13	CE120FF40
K2M02	PC230BQ21(15)
K2M03	PC422AB90
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K2M09	PC230BQ21(10)
K2M10	PC230BQ21(8)
K2M11	CE120FB20
K2M12	CE130DA20
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K2P02	PC230BQ21(12)
K2P04	PC162FL30
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K2P07	PC230BQ21(14)
K2P09	PC230BQ21(11)
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K2S08	PA110BA10
K2S09	PA110DG10
K2S10	CH002AH05
K2S11	PA110EJ10
K2S12	PC430CAH1
K2S13	CH002AH07
K2U02	CH003AA01
K2U04	PC440AK30
K2U05	PA110DS10
K2U06	CH002AG07
K2U07	CH002AH01
K2U09	PA110CD10
K2U10	PA110CP10
K2U11	PA110BM10
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K2U13	CE140AA46
L2B02	CH011AD30
L2B03	PC554GH30
L2B04	CH011AA30
L2B05	PC532GU30
L2B06	CH003AC01
L2B07	PC508EC20
L2B08	PC110EN30
L2B09	CH007AB30
L2B10	CH003AB01
L2B11	PC532GF30
L2B12	PC532GN30
L2B13	PC422AC20
L2D02	CH011AC30
L2D04	PC532GX30
L2D05	PC532G030
L2D06	CH003AC03
L2D07	CH002AF01
L2D09	PC110CA30
L2D10	PC532GR30
L2D11	CH003AB05
L2D12	CH008AF30
L2D13	PC504CRC0
L2G02	PC404CF30
L2G03	PC508FR20
L2G04	PC510EB10
L2G05	PC508EEB2
L2G06	PC534FH50
L2G07	CH003AB03
L2G08	PC532GJ30
L2G09	PA120DZ30
L2G10	PC310DE30
L2G11	CH008AJ30
L2G12	CH003AE01
L2G13	CH009AA30
L2J02	PC534CFC3
L2J04	CH009AB30
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L2J07	PC506FP30
L2J08	PC534CFC3
L2J09	PC400AF50
L2J10	PC508BVC1
L2J11	CH009AC30
L2J12	CH001AD01
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L2M02	CH001AA01
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L2M04	CH001AA03
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L2M06	CH001AA07
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L2M09	CH001AB05
L2M10	CH001AB07
L2M11	CH002AE03
L2M12	CH002AE01
L2M13	CH002AE05
L2P02	PA110BA10
L2P04	PA110CD10
L2P05	PA110DG10
L2P06	PA110EJ10
L2P07	PA110CY10
L2P09	PA110BM10
L2P10	PA110CP10
L2P11	PA110DS10
L2P12	CH001AC01

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD A-A1
P/N 423 6400

PIN LIST

LOC=1A-A1

PN 4237971 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135624 DATE= 79199

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PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.
L2P13	PA110EV10	N2P04	PM042DB40	P2M11	PM042DB40	Q2P13	PM002BT30	R4B11	MS150EK50	S2J08	MS120EK57	T2G12	PM300DV21	U2D09	PA140BY10
L2S02	CH008AE30	N2P05	PM042BK40	P2M12	PM164FU40	Q2S02	PC030DI30	R4B12	PM440DX20	S2J09	PA140BJ10	T2G13	MS130EK58	U2D10	PM720EB30
L2S03	CH006AJ30	N2P06	PM142DN30	P2M13	PM164GS40	Q2S03	PM720AG40	R4B13	PM300DV31	S2J10	PM300DV51	T2J02	PM300DV61	U2D11	PM300DV71
L2S04	CH001AD05	N2P07	PM144EJ20	P2P02	PM300FE30	Q2S04	PM720AG30	R4D02	PM720GK30	S2J11	PA140BA10	T2J03	MS130EK53	U2D12	PA140BS10
L2S05	PC230BQ21(15)	N2P09	PM142DG41	P2P04	PA130DJ10	Q2S05	PM722GF30	R4D03	MS150EK52	S2J12	PA140BD10	T2J04	PA140BM10	U2D13	PA140BV10
L2S06	CH001AD03	N2P10	PM300DV71	P2P08	PM122FG40	Q2S06	PM704CB31(6)	R4D04	PM722GL30	S2J13	PM300DV81	T2J05	PA140BP10	U2G02	PM720EF40
L2S07	PC230DQ30	N2P11	PM300DV51	P2P06	PA130BG10	Q2S07	PM704CB31(7)	R4D05	PM300DV11	S4B02	PM720CB50	T2J06	PM704CB31(7)	U2G03	PM440DP20
L2S08	PC230BQ21(14)	N2P12	PM104DA30	P2P07	PA130DP10	Q2S08	PM720EF30	R4D06	PM300DV41	S4B03	MS160EK59	T2J07	PA140BG10	U2G04	PM440DS20
L2S09	PC230BQ21(9)	N2P13	PC230BQ21(9)	P2P09	PA130BM10	Q2S09	PM720EF40	R4D07	PM720EK40	S4B04	PM720AG30	T2J08	MS130EK57	U2G05	PM440DJ20
L2S10	CH006AE30	N2S02	PM440BZ30	P2P10	PM122DE40	Q2S10	PM722GL30	R4D08	MS150EK56	S4B05	PM720EK50	T2J09	PA140BJ10	U2G06	MS140EK55
L2S11	PC230BQ21(13)	N2S03	PM300FE30	P2P11	PA130BA10	Q2S11	PM722GJ30	R4D09	PA140BY10	S4B06	MS160EK54	T2J10	PM300DV51	U2G07	PM440DM20
L2S12	CH005AD30	N2S04	PM122DE40	P2P12	PA130DD10	Q2S12	PM720CB70	R4D10	PM720EB30	S4B07	PM440DZ20	T2J11	PA140BA10	U2G08	PM720EF30
L2S13	PC400AQ30	N2S05	PM126ED40	P2P13	PM300BC41(5)	Q2S13	PM720CB60	R4D11	PM300DV71	S4B08	PM720EK30	T2J12	PA140BD10	U2G09	PM440DC20
L2U02	CH006AH30	N2S06	PM222BN30	P2S02	PM300BC41(4)	Q2U02	PM768DJ30	R4D12	PA140BS10	S4B09	PM704CB31(6)	T2J13	PM300DV81	U2G10	PM440DF20
L2U04	CH006AG30	N2S07	PM222BQ30	P2S03	PM300BC41(6)	Q2U04	PM720EK30	R4D13	PA140BV10	S4B10	PM440DV20	T4B02	PM720CB60	U2G11	MS140EK51
L2U05	CH005AB30	N2S08	PC554BV30	P2S04	PM204DE12(P)	Q2U05	PM720EK40	R4G02	PM720EF40	S4B11	MS160EK50	T4B03	MS170EK59	U2G12	PM300DV21
L2U06	PC230BQ21(10)	N2S09	PC100DT30	P2S05	PM240CTF0	Q2U06	PM720EK50	R4G03	PM440DP20	S4B12	PM440DX20	T4B04	PM720AG40	U2G13	MS140EK58
L2U07	PC230BQ21(11)	N2S10	PC130FD30	P2S06	PM222BN30	Q2U07	PM720GK30	R4G04	PM440DS20	S4B13	PM300DV31	T4B05	PM720EK50	U2J02	PM300DV61
L2U09	CH006AF30	N2S11	PM002BT30	P2S07	PM204DE12(11)	Q2U09	PM720EB30	R4G05	PM440DJ20	S4D02	PM720GK30	T4B06	MS170EK54	U2J03	MS140EK53
L2U10	CH005AA30	N2S12	CH003AC01	P2S08	PM204DE12(13)	Q2U10	CE140AA32	R4G06	MS150EK55	S4D03	MS160EK52	T4B07	PM440DZ20	U2J04	PA140BM10
L2U11	CH005AC30	N2S13	PC440AK30	P2S09	PM106DA30	Q2U11	PM720CB30	R4G07	PM440DM20	S4D04	PM722GJ30	T4B08	PM720EK30	U2J05	PA140BP10
L2U12	PC230BQ21(12)	N2U02	PC230BQ21(8)	P2S10	PM300BC41(0)	Q2U12	PM720CB40	R4G08	PM720EF30	S4D05	PM300DV11	T4B09	PM704CB31(6)	U2J06	PM704CB31(7)
L2U13	PC230BQ21(8)	N2U04	PM122DB30	P2S11	PM300BC41(1)	Q2U13	PM720CB50	R4G09	PM440DC20	S4D06	PM300DV41	T4B10	PM440DV20	U2J07	PA140BG10
L6D02	CH008AJ30	N2U05	PM122FG40	P2S12	PM300BC41(2)	Q6A02	CH001AD01	R4G10	PM440DF20	S4D07	PM720EK40	T4B11	MS170EK50	U2J08	MS140EK57
L6E02	CH009AD30	N2U06	PC400AF50	P2S13	PM300BC41(3)	Q6A04	CH001AD03	R4G11	MS150EK51	S4D08	MS160EK56	T4B12	PM440DX20	U2J09	PA140BJ10
L6E04	CH009AB30	N2U07	PC422AC20	P2U02	PM420FR30	Q6B02	CH011AD30	R4G12	PM300DV21	S4D09	PA140BY10	T4B13	PM300DV31	U2J10	PM300DV51
M6A03	CH011AC30	N2U09	PC030DI30	P2U04	PM204DE12(14)	Q6B04	CH007AC30	R4G13	MS150EK58	S4D10	PM720EB30	T4D02	PM720GK30	U2J11	PA140BA10
M6A04	CH002AF07	N2U10	PC030BC30	P2U05	PM204DE12(12)	Q6C02	CH007AB30	R4J02	PM300DV61	S4D11	PM300DV71	T4D03	MS170EK52	U2U12	PA140BD10
M6B04	CH011AA30	N2U11	PC030DP30	P2U06	PM300BC41(7)	Q6C04	CH001AD05	R4J03	MS150EK53	S4D12	PA140BS10	T4D04	PM722GL30	U2U13	PM300DV81
M6C02	CH002AF01	N2U12	PC510EX20	P2U07	PM204DE12(9)	Q6D02	CH001AA07	R4J04	PA140BM10	S4D13	PA140BV10	T4D05	PM300DV11	U4B02	PM720CB60
M6C04	PC554GH30	N2U13	PC404CS51	P2U09	PM104DA30	Q6D04	CH003AB01	R4J05	PA140BP10	S4G02	PM720EF40	T4D06	PM300DV41	U4B03	MS180EK59
M6D02	CH003AA01	N6A02	PC532GR30	P2U10	PM106GN30	Q6E02	CH001AB05	R4J06	PM704CB31(7)	S4G03	PM440DP20	T4D07	PM720EK40	U4B04	PM720AG30
M6D04	CH009AA30	N6A04	CH003AE01	P2U11	PM204DE12(8)	Q6E04	CH001AC01	R4J07	PA140BG10	S4G04	PM440DS20	T4D08	MS170EK56	U4B05	PM720EK50
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N2B04	PM764EK30	N6B04	CH002AH07	P2U13	PM300BC41	R2B03	MS110EK59	R4J09	PA140BJ10	S4G06	MS160EK55	T4D10	PM720EB30	U4B07	PM440DZ20
N2B05	PC230BQ21(13)	N6C02	CH009AG30	P6E02	CH002AE01	R2B04	PM720AG40	R4J10	PM300DV51	S4G07	PM440DM20	T4D11	PM300DV71	U4B08	PM720EK30
N2B06	PM204DE12(15)	N6C04	CH002AF05	Q2B02	PC230BC61(0)	R2B05	PM720EK50	R4J11	PA140BA10	S4G08	PM720EF30	T4D12	PA140BS10	U4B09	PM704CB31(6)
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N2B08	PM164FU40	N6D04	CH003AD01	Q2B04	PC230BC61(2)	R2B07	PM440DZ20	R4J13	PM300DV81	S4G10	PM440DF20	T4G02	PM720EF40	U4B11	MS180EK50
N2B09	PM204DE12(12)	N6E02	CH007AA30	Q2B05	PC230BC61(5)	R2B08	PM720EK30	R6A04	CH001AA01	S4G11	MS160EK51	T4G03	PM440DP20	U4B12	PM440DX20
N2B10	PM204DE12(11)	P2B02	PM300DV31	Q2B06	PC230BC61(7)	R2B09	PM704CB31(2)	R6B02	CH001AA05	S4G12	PM300DV21	T4G04	PM440DS20	U4B13	PM300DV31
N2B11	PC230BQ21(10)	P2B03	PM300DV21	Q2B07	PM764EK30	R2B10	PM440DV20	R6B04	CH001AB01	S4G13	MS160EK58	T4G05	PM440DJ20	U4D02	PM720GK30
N2B12	PC230BQ21(12)	P2B04	PC030DI30	Q2B08	PM300DV91	R2B11	MS110EK50	R6C02	CH001AB03	S4J02	PM300DV61	T4G06	MS170EK55	U4D03	MS180EK52
N2B13	PM420FR30	P2B05	PM142DN30	Q2B09	PM300BC41(P)	R2B12	PM440DX20	R6C04	CH002AE03	S4J03	MS160EK53	T4G07	PM440DM20	U4D04	PM722GJ30
N2D02	PM240CTG3	P2B06	PM300DV11	Q2B10	PM300BC41(6)	R2B13	PM300DV31	R6D02	CH008AH30	S4J04	PA140BM10	T4G08	PM720EF30	U4D05	PM300DV11
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N2D06	PM168GP30	P2B09	PM440DZ20	Q2B13	PA130BS10	R2D04	PM722GL30	R6E04	CH001AA03	S4J07	PA140BG10	T4G11	MS170EK51	U4D08	MS180EK56
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N2D09	PM204DE12(14)	P2B12	PM144ER30	Q2D05	PC230BC61(4)	R2D07	PM720EK40	S2B04	PM720AG30	S4J10	PM300DV51	T4J02	PM300DV61	U4D11	PM300DV71
N2D10	PM204DE12(10)	P2B13	PC230BQ21(13)	Q2D06	PC230BC61(6)	R2D08	MS110EK56	S2B05	PM720EK50	S4J11	PA140BA10	T4J03	MS170EK53	U4D12	PA140BS10
N2D11	PC230BQ21(15)	P2D04	PM168GP30	Q2D07	CH002AF01	R2D09	PA140BY10	S2B06	MS120EK54	S4J12	PA140BD10	T4J04	PA140BM10	U4D13	PA140BV10
N2D12	PC230BQ21(12)	P2D05	PM300DV61	Q2D09	PM300BC41(5)	R2D10	PM720EB30	S2B07	PM440DZ20	S4J13	PM300DV81	T4J05	PA140BP10	U4G02	PM720EF40
N2D13	PM380CL30	P2D06	PM300DV91	Q2D10	PM222BU40	R2D11	PM300DV71	S2B08	PM720EK30	S6A02	CH006AE30	T4J06	PM704CB31(7)	U4G03	PM440DP20
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N2G05	PM204DE12(P)	P2D12	PC230BQ21(15)	Q2G02	PC150FL30	R2G03	PM440DP20	S2B12	PM440DX20	T2B04	PM720AG40	T4J10	PM300DV51	U4G07	PM440DM20
N2G06	PM204DE12(8)	P2D13	PC230BQ21(14)	Q2G03	PA130DV10	R2G04	PM440DS20	S2B13	PM300DV31	T2B05	PM720EK50	T4J11	PA140BA10	U4G08	PM720EF30
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N2G10	PM044AB30	P2G05	PC230BQ21(12)	Q2G07	PM300DV11	R2G08	PM720EF30	S2D05	PM300DV11	T2B09	PM704CB31(6)	T6B02	CH002AE05	U4G12	PM300DV21
N2G11	PC310DE30	P2G06	PM440DX20	Q2G09	PM300DV81	R2G09	PM440DC20	S2D06	PM300DV41	T2B10	PM440DV20	T6B04	CH005AC30	U4G13	MS180EK58
N2G12	PC310DE30	P2G07	PM440DJ20	Q2G10	PC150FB30	R2G10	PM440DF20	S2D07	PM720EK40	T2B11	MS130EK50	T6C02	CH003AB03	U4J02	PM300DV61
N2G13	PM042DN40	P2G08	PC230BQ21(10)	Q2G11	PM300DV61	R2G11	MS110EK51	S2D08	MS120EK56	T2B12	PM440DX20	T6C04	CH005AD30	U4J03	MS180EK53
N2J02	PA140BS10	P2G09	PM042FH40	Q2G12	PM300DV51	R2G12	PM300DV21	S2D09	PA140BY10	T2B13	PM300DV31	T6D02	CH006AG30	U4J04	PA140BM10
N2J04	PM204DE12(9)	P2G10	PM042BK40	Q2J02	PM300BC41(4)	R2G13	MS110EK58	S2D10	PM720EB30	T2D02	PM720GK30	T6D04	CH006AF30	U4J05	PA140BP10
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N2J06	PA140BY10	P2G12	PC230BQ21(8)	Q2J06	PM300DV71	R2J03	MS110EK53	S2D12	PA140BS10	T2D04	PM722GL30	T6E04	CH002AG01	U4J07	PA140BG10
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N2J09	PM204DE12(13)	P2J02	PM440DC20	Q2J10	PM300DV31	R2J05	PA140BP10	S2G02	PM720EF40	T2D06	PM300DV41	U2B03	MS140EK59	U4J09	PA140BJ10
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N2J11	PM044FK30	P2J05	PC230BQ21(11)	Q2M02	PM300BC41(3)	R2J07	PA140BG10	S2G04	PM440DS20	T2D08	MS130EK56	U2B05	PM720EK50	U4J11	PA140BA10
N2J12	PM004BED0	P2J06	PC230BQ21(9)	Q2M04	PA130DJ10	R2J08	MS110EK57	S2G05	PM440DJ20	T2D09	PA140BY10	U2B06	MS140EK54	U4J12	PA140BD10
N2J13	PM130FT30	P2J07	PM440DM20	Q2M05	PM168EF30	R2J09	PA140BJ10	S2G06	MS120EK55	T2D10	PM720EB30	U2B07	PM440DZ20	U4J13	PM300DV81
N2M02	PM008BF30	P2J10	PM222DZ30	Q2M06	PA130BG10	R2J10	PM300DV51	S2G07	PM440DM20	T2D11	PM300DV71	U2B08	PM720EK30	U6A02	CH006AJ30
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N2M06	PM222DZ30	P2M02	PA130BS10	Q2M10	PC150FG30	R4B02	PM720CB50	S2G11	MS120EK51	T2G03	PM440DP20	U2B12	PM440DX20	U6C04	CH007AD30
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N2M11	PM222DM91	P2M07	PM044FK30	Q2P05	PM300BC41(0)	R4B07	PM440DZ20	S2J04	PA140BM10	T2G08	PM720EF30	U2D05	PM300DV11	V6A02	CH002AG05
N2M12	PM106DA30	P2M08	PM144FU20	Q2P07	PA130BY10	R4B08	PM720EK30	S2J05	PA140BP10	T2G09	PM440DC20	U2D06	PM300DV41	V6A04	CH002AH05
N2M13	PM106GN30	P2M09	PA130BY10	Q2P09	PC022DV30	R4B09	PM704CB31(6)	S2J06	PM704CB31(7)	T2G10	PM440DF20	U2D07	PM720EK40	V6B02	CH002AG07
N2P02	PM008BI30	P2M10	PM042DN40	Q2P10	PC100DT30	R4B10	PM440DV20	S2J07	PA140BG10	T2G11	MS130EK51	U2D08	MS140EK56	V6B04	CH002AG03

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD A-A1
P/N 423 6400

PIN LIST

LOC=1A-A1

PN 4237971 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135624 DATE= 79199

NET NO.	PIN	PIN
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CE140EA30	F1C11*	
CH001AA01	A2B08*	E2B08
	F2B08	G2B10
	J2B08	L2B08
	M2B08	R1A13*
	T2B08	U2B08
CH001AA03	A2B12*	E2B12
	F2B12	G2B04*
	J2B12	L2B12
	M2B12	R1E13*
	T2B12	U2B12
CH001AA05	A2D09*	E2D11
	F2D11	G2B08
	J2D11	L2D11
	M2D11	R1B11*
	T2D11	U2D09
CH001AA07	A2D06*	E2D06
	F2D06	G2B07
	J2D06	L2D06
	M2D06	Q1D11*
	T2D06	U2D06
CH001AB01	A2B09*	E2B09
	F2B09	G2B05
	J2B09	L2B09
	M2B09	R1B13*
	T2B09	U2B09
CH001AB03	A2D10*	E2D12
	F2D12	G2B04*
	J2D12	L2D12
	M2D12	R1C11*
	T2D12	U2D10
CH001AB05	A2D07*	E2D10
	F2D10	G2B03
	J2D10	L2D10
	M2D10	Q1E11*
	T2D10	U2D07*
CH001AB07	A2B13*	E2B13
	F2B13	G2B02
	J2B13	L2B13
	M2B13	S1A13*
	T2B13	U2B13
CH001AC01	A2B07*	E2B07
	F2B07	J2B07
	L2B07	M2B07
	Q1E13*	T2B07
	U2B07	
CH001AD01	A2B02*	E2D02
	J2D02	L2D02
	M2D02	Q1A11*
	T2D02	U2B02*
CH001AD03	A2B03*	E2B03
	J2B03	L2B03
	M2B03	Q1A13*
	T2B03	U2B03
CH001AD05	A2B05*	E2B05
	J2B05	L2B05
	M2B05	Q1C13*
	T2B05	U2B05
CH002AE01	A2D02*	E2B02
	J2B02	L2B02
	M2B02	P1E11*
	T2B02	U2D02
CH002AE03	A2B10*	E2B10
	J2B10	L2B10
	M2B10	R1C13*
	T2B10	U2B10
	U2P13	
CH002AE05	A3D02*	E2D09
	J2D09	L2D09
	M2D09	T1B11*
	T2D09	U2J02
	U3D02*	
CH002AF01	E2D07	E6D02*
	J2D07	L2D07
	M1C11*	M2D07
	T2D07	
CH002AF05	E2P10	F6D04*
	L2P04	N1C13*
	T2B06	U2B06
CH002AF07	E2B06	E2P06
	E6B04*	M1A13*
CH002AG01	A3B06*	E2G06
	J2P07	L2M04
	T1E13*	U3B06*
CH002AG03	A3B13*	L2S10
	U3B13*	V1B13*
CH002AG05	A3D12*	J2U13
	U3D12*	V1A11*
CH002AG07	A3D13*	L2M05

NET NO.	PIN	PIN
CH002AG07	L2M05	T2J12
	U3D13*	V1B11*
CH002AH01	A3B10*	J2U11
	M2P06	U1D13*
	U3B10*	
CH002AH03	A3B11*	J2M12
	T2G07	U1E13*
	U3B11*	
CH002AH05	A3B12*	E2M05
	M2P12	U2G12
	U3B12*	V1A13*
CH002AH07	F6C04*	N1B13*
CH003AA01	E2B11	F2B02
	L2P09	M1D11*
CH003AA03	E2G10	F2D04
	F6A04*	L2M09
	L2P07	M1E13*
CH003AB01	A2B06*	E2P12
	F2S12	L2U12
	Q1D13*	U2B06*
CH003AB03	A3D04*	E2P13
	F2S03	L2U07
	L2U12	T1C11*
	U3D04*	
CH003AB05	A3D09*	E2S02
	F2J11	L2M02
	U1C11*	U3D09*
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	U1E11*	U3D11*
CH003AC03	M2U02	N1B11*
CH003AD01	N1D13*	
CH003AE01	F2U13	M2J11
	N1A13*	
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	V3B02*	
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	F2G02	J2G02
	L2G02	M2G02
	T1A11*	T2X26
	U3B02*	
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	F2J02	J2J02
	L2J02	M2J02
	R1E11*	T2X04
	U2D12*	
CH005AC30	A3B03*	E2G03
	F2G03	J2G03
	L2G03	M2G03
	M2G10	T1B13*
	T2X25	U3B03*
CH005AD30	A3B04*	E2G04
	F2G04	J2G04
	L2G04	M2G04
	T1C13*	T2X03
	U3B04*	
CH006AE30	A2D13*	E2J04
	F2J04	G2G07
	J2J04	L2J04
	M2J04	S1A11*
	T2X22	U2D13*
CH006AF30	A3B05*	E2G05
	F2G05	G2G08
	J2G05	L2G05
	M2G05	T1D13*
	T2X06	U3B05*
CH006AG30	A3D05*	E2J05
	F2J05	G2G09
	J2J05	L2J05
	M2J05	T1D11*
	T2X24	U3D05*
CH006AH30	A3D06*	E2J06
	F2J06	G2G10
	J2J06	L2J06
	M2J06	T1E11*
	T2X05	U3D06*
CH006AJ30	A3D07*	E2J07
	F2J07	L2J07
	M2J07	U1A11*
	U3D07*	
CH007AA30	E2G10	E2U05
	G6AG2*	J2G10
	L2G10	N1E11*
CH007AB30	A2D05*	E2D05
	J2D05	L2D05
	M2D05	Q1C11*
	T2D05	U2D05*
CH007AC30	A2B04*	E2B04
	J2B04	L2B04
	M2B04	Q1B13*

NET NO.	PIN	PIN
CH007AC30	T2B04	U2B04*
CH007AD30	A3B09*	E2G09
	F2G09	L2G09
	M2G09	U1C13*
	U3B09*	
CH008AE30	A3B08*	F2G08
	L2G08	M2G08
	U1B13*	U3B08*
CH008AF30	A3D10*	M2J10
	U1D11*	U3D10*
CH008AG30	A3B07*	F2G07
	L2J10	M2G07
	U1A13*	U3B07*
CH008AH30	A2D11*	E2D13
	F2D13	J2S12
	L2D13	M2D13
	R1D11*	T2D13
	U2D11*	
CH008AJ30	D6E02*	E2D04
	J2D04	L1D11*
	L2D04	M2D04
	T2D04	
CH009AA30	E6E04*	M1D13*
	M2M03	
CH009AB30	E2S03	E6A04*
	F2S04	L1E13*
	L2G12	
CH009AC30	A2B11*	E2M12
	F2J09	L2G07
	R1D13*	U2B11*
CH009AD30	L1E11*	M2M13
CH009AG30	E2J09	N1C11*
CH011AA30	E2J09	E6C04*
	L2P02	M1B13*
CH011AC30	E6B02*	M1A11*
CH011AD30	A2D04*	E2J13
	E2J04	G2D07
	L2G13	M2J09
	Q1B11*	T2J09*
	U2D04*	
DL020AA60	L2M04	
DL061AA11	L2G10	
DL061AA21	L2S02	
DL061AA31	L2M10	
DL061AA41	L2S09	P2D07
DL061AA51	L2P10	
DL061AA61	L2P10	L2U10
DL061AA81	L2S07	P2B09
DL061AA91	L2P12	
DL061AB42	L2P11	
DL220DA30	L2U05	P2B10
DL220DB30	L2U06	P2B13
DL310AE20	L2M08	L6D02*
DL310AG30	L2S08	P2B07
DL510BA11	L2S13	T6A04*
DL510BA21	L2U13	T6B04*
DL510BA31	L2P13	T6C04*
DL510BA41	L2M13	T6D04*
DL510DA30	L2J12	
DL520AF30	L2M07	
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DM010BC30	L2S03	P2B04
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DM010CC30	L2U04	P2B02
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DM020AA60	P2G02	
DM020ABH1	P2G02	
DM020ABH2	P2D11	
DM020ABI1	P2J02	
DM020ABI2	P2D10	
DM020ABJ1	P2G02	
DM020ABJ2	P2D10	
DM020ABN1	P2G02	
DM020ABN2	P2J02	
DM020ABO1	P2D11	
DM020ABO2	P2D10	
DM020ABP1	P2G02	
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DM020AC20	P2J06	
DM020AD20	P2J04	
DM020AE30	P2D13	
DM020AF10	P2J12	
DM020AF20	P2J11	
DM020AF30	P2J09	
DM020AF40	P2D06	
DM020AF50	P2D05	

NET NO.	PIN	PIN
DM020AF90	P2G07	
DM020BC71	P2J05	
DM020CAG0	P2D04	
DM020CB50	L2S04	P2B03
DM020CB70	L2S05	P2D12
DM020CB80	P2G05	
DM020CC20	P2J13	
DM020CC60	P2G13	
DM020DA31	P2D10	
DM020DB30	P2D11	
DM020DF30	P2G07	
DX010AA90	P2B12	U6A04*
DX010BA30	L2M07	V6B04*
DX020AA50	P2B12	U6A04*
DX020AB30	L2U09	U6C02*
DX020BA30	L2M07	V6B04*
DX020BB30	L2M12	U6B04*
DX020CA72	L2U02	U6C04*
FA001AA20	J2G06	J2J08
FA001AF20	J2D13	
FA010AF80	J2G07	J2J03
FA010AH20	J2J11	
FA015AEB0	J2G08	
FA025AAB0	J2J13	
FA025AAC0	J2G09	
FA030AAD0	J2P04	
FA030AAE0	J2G12	
FA030AC40	J2M08	
FA030AD21	J2B06	
FA030AD31	J2B11	
FA030AD41	J2J07	
FA035AA21	J2S06	J2S11
FA035AC10	J2M11	
FA040ABD3	J2U02	
FA040AFE0	J2P05	
FA041AA20	J2M03	
FA041AC20	J2P02	
FA041AD20	J2J10	
FA045AF30	J2P12	
FA046AP30	J2M06	
FA046AR30	J2M07	
FA050AI40	J2G13	
FA051AA30	J2G11	
FA055AE30	J2M09	
FA055AF30	J2J12	
FA056AH30	J2U09	
FA056AJ30	J2P09	
FA088AA21	D04	H2D04
	J2P13	S6A04*
FA088AA31	H2B02	J2M13
	R6A04*	
FA088AA41	D02	H2D02
	J2P06	R6C04*
FA088AA51	H2B03	J2M05
	P6E02*	
FA088AA61	H2B04	J2P10
	P6E04*	
FA088AA71	B05	H2B05
	J2M10	Q6B04*
	FA088AA81	J2M04	Q6B02*
FA088AB21	J2B13	
FA088AB31	J2B08	
FA088AB41	J2B10	
FA088AB51	J2D02	
FA088AB61	J2B02	
FA088AB71	J2B04	
FA088AB81	H2B09	J2D04
FA091AA20	B08	H2B08
	J2S05	
FA091AB20	B07	H2B07
	J2S08	
FA091AC20	B10	H2B10
	J2U10	
FA091AD20	B13	H2B13
	J2S10	
FA091AE20	D13	H2D13
	J2S09	
FA091AF20	H2D12	J2S07
FA091AG20	B12	H2B12
	J2S13	
FA091AJ20	D10	H2D10
	J2P11	
FA101AA20	H2D07	
FA101ACB0	H2D11	
FA101AEE1	H2D09	
FA101AE21	H1C11*	H2J02
FA101AE31	H1E11*	H2G03
FA101AE41	H1C13*	H2J07
FA101AE51	H2G12	
FA101AE61	H2G07	K1B13*

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FA101AE71	H1D13*	H2GU5
FA101AE81	H1A13*	H2J06
FA101AE91	H2G08	K1B11*
FA101AFB2	H2J11	
FA101ALB0	H2D05	
FA101AM20	H2D06	
FA188AA20	11	14
	18	2
	20	23
	4	
FA188AB11	B02	B04
	B05	B13
	D04	D06
	D13	
FA188AD11	15	17
	22	3
	5	6
	7	8
FA188AE20	B10	B12
	D02	D05
	D07	D08
	D09	D12
FA188AF11	H1A11*	H2J09
FA188AF21	H2J12	J1C11*
FA188AF31	H2G04	K1A11*
FA188AF41	H2G10	K1A13*
FA188AF51	H2G13	J1D13*
FA188AF61	H2J04	J1A11*
FA188AF71	H1D11*	H2J10
FA188AG20	2	5
FA188AG30	22	4
FA188AG40	20	6
FA188AG50	15	23
FA188AG60	11	17
FA188AG70	18	3
FA201AC20	H2J05	J1E11*
FA201AC40	H1B13*	H2G02
FA201AF20	B10	H2B10
FA201AF30	B12	H2B12
FA201AF40	B13	H2B13
FA201AG40	D10	H2D10
FA201AM20	B08	H2B08
FA201AM30	B07	H2B07
FA201AP20	D13	H2D13
FA288AA11	B03	D11
FA288AB11	B08	D10
	3	4
FA288AC11	B08	D10
	GND	
FA288AD11	B03	D11
	5	6
FA288AD31	D08	
FA288AF11	H2G09	J1B13*
FA288AF21	H2J13	J1D11*
FA288AH20	3	5
FA288AH30	4	6
FA288AK21	D02	H2D02
FA288AK23	D04	H2D04
FA288AK25	B05	H2B05
FA301AH20	G02	H1B13*
	H2G02	
FA301AH40	J05	H2J05
	J1E11*	
FA301AT20	H2D05	H2D06
FA304AT20	B10	H2B10
FA307AA20	D10	H2D10
FA307AC20	D13	H2D13
FA307AH80	H2GND	
FA307AJ20	B12	H2B12
FA307AM80	H2B03	
FA307AR20	B13	H2B13
FA388AA11	B03	D11
	1	2
FA388AB11	BLK	YEL
	4	5
FA388AC11	B08	D10
	4	5
FA388AD11	RED	WTE
	1	2
FA388AF11	G09	H2G09
	J1B13*	
FA388AF21	J13	H2J13
	J1D11*	
FA388AK21	D02	H2D02
FA388AK23	D04	H2D04
FA388AK25	B05	H2B05
FA401AT20	H2D05	H2D06
	J1C13*	
FA401AW80	H2D11	
FA404AT20	H2B10	

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FA407AA20	H2D10	
FA407AC20	H2D13	
FA407AJ20	H2B12	
FA410AB60	H2D12	
FA410AC20	H1E11*	H2G03
FA410AC30	H1C11*	H2J02
FA410ADB0	H2GND	
FA410AJ20	H2B13	
FA488AB11	H2D04	
FA488AB21	H2D06	
FA488AB31	H2D08	
FA488AB41	H2B07	
FA488AB51	H2B09	
FA488AC21	H2D02	
FA488AC23	H2D04	
FA488AC25	H2B05	
FA488AC27	H2B04	
FA488AC29	H2B02	
FA488AD11	H2B10	H2B12
	H2CCT	H2D02
	H2RI	H2SH
FA488AE10	H2B10	H2B12
	H2D02	
FA488AF10	H2DA	H2DR
	H2DT	H2DH
	H2SG	
FA488AH11	H2G13	J1D13*
FA488AH21	H2G10	K1A13*
FA488AH31	H1A11*	H2J09
FA501AH20	G02	H1B13*
	H2G02	
FA501AH40	J05	H2J05
	J1E11*	
FA501AP20	B13	H2B13
FA504AT20	B10	H2B10
FA507AA20	D10	H2D10
FA507AC20	D13	H2D13
FA507AHB0	H2GND	
FA507AJ20	B12	H2B12
FA588AA11	B03	D11
	2	4
FA588AB11	BLK	YEL
	10	6
FA588AC11	B08	D10
	7	9
FA588AD11	RED	WTE
	1	5
FA588AF11	G09	H2G09
	J1B13*	
FA588AF21	J13	H2J13
	J1D11*	
FA588AK21	D02	H2D02
FA588AK23	D04	H2D04
FA588AK25	B05	H2B05
FA601AT20	H2D05	H2D06
	J1C13*	
FA604AT20	H2B10	
FA607AA20	H2D10	
FA607AC20	H2D13	
FA607AJ20	H2B12	
FA610AF20	H2D12	
FA610AJ20	H2B13	
FA610AL50	H1E11*	H2G03
FA610AN20	H1A11*	H2J09
FA610AP20	H2B11	J1E13*
FA688AC21	H2D02	
FA688AC23	H2D04	
FA688AC25	H2B05	
FA688AC27	H2B02	
FA688AG21	H1C11*	
FA688AG23	H2G10	K1A13*
FA688AG25	H2G13	J1D13*
FA688AH20	J1A13*	
FA801AA40	J2M02	Q2D07
FA801AA60	Q2B02	
FL061AA41	P2D07	
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FL061AB93	L2S07	P2B09
FL062AA11	L2S09	P2D07
FL110AA91	L2J07	
FL115AP41	L2G09	
FL115AP91	L2G07	
FL115AP93	L2G12	
FL220BC30	L2U05	P2B10
FL220CB30	L2J09	P2J02
FL220CC30	L2J08	
FL220DA30	P2B10	
FL220DB30	P2B13	
FL230AD30	L2M04	
FL230DE30	L2S08	P2B07

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NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E.CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

BOARD A-A2
P/N 423 6404

P/N 826 4452

P/N —— ——

P/N —— ——

NET LIST

A
D
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0
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LOC=1A-A2

PN 4237968 EC 834824
MACH TYPE=5340
PPN PEC PG01
TIME= 135239, DATE= 79199

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FL310AG30	P2B07	
FL320AD30	L2M08	Z6D02
FL320BB30	L2P10	Z6B10
FL330AD30	L2P11	
FL330BA30	L2P12	Z6D05
FL330BB30	L2P11	Z6D04
FL540AB30	L2P05	Z6D12
FL540DB30	L2S10	
FL550AC21	L2S12	Z6B06
FL550AC71	L2U10	Z6B12
FL550AC81	L2M10	Z6D06
FL550AC91	L2S02	Z6D07
FL550AE11	L2S13	Z6B02
FL550AE21	L2U13	Z6B03
FL550AE31	L2P13	Z6B04
FL550AE41	L2M13	Z6B05
FL810AA20	Z6D02	Z6J02
FL810AA25	Z6D03	Z6J03
FL810AA30	Z6D04	Z6J04
FL810AA35	Z6D05	Z6J05
FL810AA40	Z6D12	Z6J12
FL810AA45	Z6B06	Z6G06
FL810AA50	Z6B07	Z6G07
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FL810AA60	Z6B02	Z6G02
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FL810AA70	Z6B04	Z6G04
FL810AA75	Z6B05	Z6G05
FL810AA80	Z6D10	Z6J10
FL810AB20	Z6G02	
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FL810AB45	Z6J06	
FL810AB50	Z6J07	
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FL810BA20	Z6D11	Z6J11
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FL810BB40	Z6D09	
FL810BB50	Z6D13	
FL810BB60	Z6D07	
FL810BC30	Z6J13	
FL810BC40	Z6J07	
FL810BD21	Z6D08	
FL810BD31	Z6B09	
FL810BD41	Z6D09	
FL810BD51	Z6D13	
FL810BD61	Z6D07	
FL810BE20	L2P07	Z6B11
FL810BE30	L2M12	Z6B08

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FL810BE40	L2U09	Z6D09
FL810BE50	L2U11	Z6D13
FL810BE60	L2U02	Z6B09
FL810BE70	L2M07	Z6B13
FL810BE80	P2B12	Z6B07
FM010AB30	P2B12	
FM010BA60	P2B05	
FM010BB60	P2G03	
FM010BC30	P2B04	
FM010CA60	P2G12	
FM010CB60	P2D02	
FM010CC30	P2B02	
FM010DB30	P2J02	
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FM110AC60	P2G10	
FM110AE30	P2J13	
FM110BB20	P2J07	
FM110BD30	P2D10	
FM110BE21	P2D02	
FM110BE22	P2D04	
FM110BE61	P2B05	
FM110BE62	P2B08	
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FM110CC30	L2U04	P2B02
FM120AB21	P2G05	
FM120AB41	P2J07	
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FM120AC51	P2B13	
FM120AC52	P2D13	
FM120AC61	P2D11	
FM120AC62	P2G04	
FM120AD21	P2G02	
FM120AD61	P2G03	
FM120AE40	P2J11	
FM120AE90	P2J09	
FM120AF31	L2S04	P2B03
FM120AF51	L2S05	P2D12
FM120AG30	P2G07	
FM120AH30	P2G08	
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FX010BA30	L2M07*	V6B04*
FX020AA50	P2B12	U6A04*
FX020AB30	L2U09*	U6C02*
FX020BA30	L2M07*	V6B04*
FX020BB30	L2M12*	U6B04*
FX020CA72	L2U02*	U6C04*
FX110AA90	Z6G07	
FX110BA30	Z6G13	
FX120AA50	Z6B07	
FX120AB30	Z6D09	
FX120BA30	Z6B13	
FX120BB30	Z6B08	
FX120CA72	Z6B09	
FX130BD30	Z6G07	
FX142AD30	Z6G13	
FX142CA30	Z6G09	
FX270AC30	Z6G11	

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FX271AC30	Z6J09	
FX271BB30	Z6J13	
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GE040EF30	E2G07	F2S06
GE050DB30	E2U05	F2M06
GE050DB50	E2U07	F2M07
GE050DB70	E2S08	F2B06
GE050DB80	E2S09	F2D02
GE070AD81	E2J12	F2M03
GE070CC30	E2J11	F2U09
GE073FA60	E2M04	F2G11
GE100BB10	E2M08	F2S05
GE100BD20	E2P09	F2U07
GE100CA20	E2P07	F2S07
GE100FB30	E2M10	F2U12
GE100FC30	E2M07	F2U11
GE110BC20	E2G12	F2G10
GE110BE20	E2P05	F2S02
GE110CD20	E2S02	F2P04
GE110EB20	E2U02	F2M02
GF020DB20	E2P02	F2S13
GF020DF30	E2G13	F2U10
GF030AK20	E2U04	F2D07
GF031AF20	E2S03	F2U06
GF040AH30	E2B07	F2G12
GF051EC30	F2M04	
GF070EW30	F2B05	F2D05
GF300ABB0	F2J12	
GF300ABD0	F2P07	
GF300BAM6	E2P11*	F2P09
GF300BAN7	F2M08	
GF400AA48	L2G10	
GV080AA01	E2S05	F2B04
	G2D10	
GV080AA03	E2M03	F2P06
	G2J09	
GV080AA05	E2S07	G2J04
GV080AA07	E2U06	G2J05
GV080AB01	D2M13	E2P04
	G2J13	
GV080AB03	D2U02	E2P10
GV080AB05	D2S04	E2U11
	F2S09	G2D12
GV080AB07	C2J02	F2J13
GV080AC01	C2J12	F2P10
GV080AC03	D2U06	F2U05
GV080AC05	F2S08	G2G05
GV080AD01	C2B03	F2D09
GV080AD03	C2D02	F2B03
GV080AD05	D2S13	E2S04
	F2M09	G2J02
GV080AD07	D2S08	F2U02
GV080AE01	D2S07	F2P05
GV080AE03	D2S05	F2P12
GV080AE05	C2D05	D2M02
	F2J10	
GV080AE07	D2U09	F2S11
GV080AF01	B4J13	D2B12
	F2M11	
GV080AF03	B4B07	D2D12
	F2M12	
GV080AF05	C2J04	D2J09
	E2J07	F2B10
GV090AA03	C4P07	D2G05
	F2M10	G2M09
GV090AA05	D2D02	E2S10
	F2B11	
GV090AA07	D2P13	E2P12
	F2G06	
GV090AB01	B4D12	D2G09
	F2P13	G2U02
GV090AB03	D2D13*	E2M13
	F2U04	
GV090AB05	D2P11	E2U13
GV090AB07	D2M09	E2M02
GV090AC01	C4J02	D2B09
	F2M13	G2D02
GV090AC03	D2G08	E2P13
	G2J07	
GV090AC05	D2P07	E2M09
	G2D04	
GV090AC07	C4G08	D2B03
	E2M12	
GV090AD01	C4B08	D2D06
	E2S12	F2M05
GV090AD03	A5D09*	D2U12
	F2P02	
GV090AD05	D2G13	D2J11
	E2J10	

NET NO.	PIN	PIN
GV090AD07	D2B05	E2U10
	G2D05	
GV090AE01	B4J09	D2D07
	D2D09	E2U12
	G2J10	
GV090AE03	A5B10*	A5D04*
	E2G09	G2G04
GV100AB20	A4B02*	A4B05*
	A4D02*	
GV100AB40	G02	
GV100AC40	B13	G13
	A5B13*	A5D13*
GV100AD10	B09	G09
	J11	
GV100AE10	D12	J06
	J12	
GV100AF10	D11	
GV100AG40	B06	D06
	G06	A5B06*
	A5B07*	
GV100CF40	B11	G11
	A5B11*	A5D11*
GV120AA50	G2B06	G2B11
	G2M03	
GV120AA80	G2M02	
GV120AB40	G2M06	
GV120AE30	G2D13	
GV120AE50	G2B13	
GV120BB10	G2M13	G2P13
GV120BC10	G2M04	
GV120BD10	G2M05	
GV120CA40	D2U10	G2S12
GV130AC10	A5B09*	A5D10*
	G2G02	
GV130AC11	A5B08*	A5D07*
	G2G03	
GV130AD40	D2D04	G2J12
GV130AM30	B2G02	G2P09
GV140AA10	G2P04	G2P05
GV140AB20	G2S10	
GV140AC30	G2S04	G2S05
	G2S08	G2S09
	G2S13	G2U06
	G2U07	G2U11
GV140AC50	G2S11	
GV140AC70	G2U09	
GV140AF10	G2U04	
GV140BC60	G2U12	
GV140BD40	D2D11	G2B12
GV140BE30	B4J10	G2S02
GV140BF60	G2U13	
GV140CA40	G2P11	
GV140CB10	G2U05	
GV140CB40	G2S06	G2S07
GV160AA20	B2B03	
GV160AA40	B2D04	
GV160AB10	B2B02	B2D08
	B2G12	
GV160AD30	A4D08*	
GV160AE30	A4B08*	A4D07*
	B2D05	
GV160BB40	B2B10	
GV160BB50	B2D02	
GV160BB60	A4D13*	B2B12
GV160BC20	B1A11*	B2B04
GV160BC40	B1B11*	B2B05
GV160BD10	B2J11	
GV160CA30	B2J02	
GV160CB40	B2D10	
GV160CD30	B2J13	
GV160CF30	B2J10	C2G04
GV160DA10	B2G04	
GV160DB10	B2J04	
GV160DC30	B2J05	D2P10
GV160DD40	A4D12*	B2D08
GV160EA20	B2D11	B4B08
	C4D04	
GV160EA40	B2D13	B4J06
	C4B04	
GV160EB10	B2D09	
GV170AA30	C4B07	D2D10
	G2P06	
GV170AD30	C4G03	
GV170AD50	C4D05	
GV170BC20	A4D10*	C4J13
GV170BC60	A4D11*	
GV170CC50	C4G07	
GV170CD40	A4B07*	C4D02
GV170DA30	C4G10	G2G13
GV170DB30	C4J04	D2D05

NET NO.	PIN	PIN
GV170DB50	C4J07	
GV170DD30	C4G04	D2B02
GV180AC20	B4D13	
GV180AC30	B4B12	
GV180AC50	B4B11*	B4D02
GV180AG10	B4B05	
GV180AH10	B4D04	
GV180AJ10	B4D09	
GV180BA30	A4B03*	B4B03
GV180BB30	A4B04*	B4B04
GV180BC30	B4B10	C4J10
GV180BE30	B4D05	C4D09
GV190AA20	D2G02	
GV190AB20	D2G12	D2M10
GV190AC40	D2B10	D2S09
GV190AD20	D2B08	D2M07
GV190AE30	D2G04	D2P12
GV190BB20	D2P09	G2P07
GV190BF30	C4G05	D2M04
GV190CA40	B2G03	D2P04
GV190CB40	B2J07	D2M03
GV190CC30	B2J09	D2J12
GV190CD30	B2G05	D2J13
GV190CE20	D2G10	D2S02
GV200AD40	D2P02	
GV200BB30	D2J02	
GV210AE20	D2B04	
GV210CD20	C4G12	D2B13
GV210CD40	C4J05	D2M12
GV210CE20	D2J07	
GV210CG30	B4J02	D2B07
GV230AA10	D2M08	D2U13
GV230AB10	D2M05	D2S03
GV230BB20	A5D06*	D2S10
GV230BB40	C2J11	D2S12
GV230BC30	A5B12*	D2U07
GV230BD30	A5D05*	D2U05
GV240BA30	A5B04*	D2U04
GV240CB30	A5B03*	D2U11
GV250CB20	C2J10	C6E02*
GV250CB40	C2J09	C6C02*
GV250DB30	A5D12*	C2B02
GV260AC20	C2B04	
GV260AE20	C2G08	
GV260BC30	C2G09	
GV260BD50	C2D04	
GV260BE20	C2G07	
GV260BE40	C2G10	
GV260BG30	C2G03	C2J06
GV260BH10	C2G05	
GV270AC10	C2D06	
GV270AD10	C2D11	
GV270AE20	C2D13	
GV270AG10	C2J07	
GV270AI10	C2B09	
GV270AK10	C2B12	
GV270BB10	C2D09	
GV270BC10	C2B05	
GV270BD10	C2D07	
GV270BF10	C2B07	
GV270BG30	C2B10	
GV270CA30	C2G02	G2P02
GV270CB30	C2D10	
GV270CD20	C2J13	
GV270CD40	C2G12	
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HA001AH30	E2P11	
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HA020AE30	E2U06	
HA020AS30	E2G08	
HA025AS30	E2S13	
HA025AY30	E2S12	
HA035AJ30	E2U13	
HA040AD30	E2U02	
HA040AF30	E2S11	
HA040AG30	E2S10	
HA040AH60(0)	E2J12	
HA040AH60(1)	E2J13	
HA040AH60(2)	E2M02	
HA040AH60(3)	E2P02	
HA040AH60(4)	E2P04	
HA040AH60(5)	E2G11	
HA040AH60(6)	E2G12	
HA040AH60(7)	E2G13	
HA040AJ60	E2M03	
HA040AK60(11)	E2M07	
HA040AK60(12)	E2M08	
HA040AK60(13)	E2P05	
HA040AK60(14)	E2P06	
HA040AK60(15)	E2P07	

NET NO.	PIN	PIN
HA040AK60(8)	E2M04	
HA040AK60(9)	E2M05	E2M06
HA040AL60	E2P09	
HA050AN30	D2J12	E2J11
HA050AN50	E2U10	
HA050AN70	E2G07	
HA050AU30	E2S04	
HA060AC11	E2U07	
HA060AC12	E2U09	
HA060AC13	E2U10	
HA060AC14	E2U11	
HA060AC15	E2S05	
HA060AC16	E2S06	
HA060AC17	E2S07	
HA060AC18	E2S08	
HB010AA60	E2J09	E2M09
	E2M10	E2P10
HB010AB90	D2U04	D2U05
	D2U06	D2U07
	D2U09	D2U10
	D2U11	D2U12
	D2U13	
HB010AC90	D2M08	D2M09
	D2M10	D2M11
	D2M12	D2M13
	D2S02	D2S03
	D2S12	
HB010AD90	D2S04	D2S05
	D2S06	D2S07
	D2S08	D2S09
	D2S10	D2S11
	D2S13	
HB010AE70	C2S03	C2S13
	C2U05	D2D12
	D2U05	D2J12
	D2J13	D2M02
	D2M03	D2P11
HB100AAA0	D2B02	D2B03
	D2B04	D2B05
	D2D02	D2D04
	D2D05	D2D06
	D2D07	D2D09
	D2D10	
HB100AF20	D2G02	D2J02
HB100AF30	D2B07	D2G03
HB100AF40	D2P12	D2P13
HB100AH00	D2B09	D2B10
	D2B12	D2B13
HB100AH10	D2G05	D2G07
	D2G08	D2G09
	D2G10	D2G12
	D2G13	D2J07
HB100AJA1	D2J11	
HB100AJA2	D2J10	
HB100AJA6	D2J06	
HB100AJA7	D2U02	
HB100AP16	C2B03	C2S05
	C2S07	C2U10
	D2P10	
HB100AP20	C2M07	C2P07
	D2B08	
HB200AD10	C2D02	C2D04
HB200AD20	C2D10	C2D11
HB200AD30	C2D07	C2D09
HB200AD40	C2D05	C2D06
HB200BG10	C2P02	C2S02
HB200TP10	C2S09	C2S11
HB200TP20	C2S10	C2U10
HB200TP30	C2M08	C2S08
HB200TP40	C2U06	
HB200TP50	C2U09	
HB200TP60	C2U13	
HC010AB11	C2P02	
HC010AB21	C2S02	
HC010AB31	C2M02	
HC010AB41	C2M03	
HC010ACB3	C2M04	
HC010ACB4	C2M05	
HC010ADB1	C2G09	
HC010ADB3	C2G10	
HC010AEB1	C2G12	
HC010AEB3	C2G13	
HC020AJ11	C2B08	
HC020AJ21	C2B07	
HC020AJ31	C2D09	
HC020AJ41	C2D07	
HC020AK11	C2B10	
HC020AK21	C2B09	
HC020AK31	C2D11	

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2
0 NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E.CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

BOARD A-A2 P/N 423 6404 | P/N 826 4452 | P/N —— —— | P/N —— ——

NET LIST

LOC=1A-A2

PN 4237968 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135239r DATE= 79199

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HC020AL11	C2S12	
HC020AL21	C2B02	
HC020AL31	C2D04	
HC020AL41	C2D02	
HC020AM11	C2B05	
HC020AM21	C2B04	
HC020AM31	C2D06	
HC020AM41	C2D05	
HC030ABD2	C2G04	
HC030ABE2	C2G03	
HC030ACD2	C2G07	
HC030ACE2	C2G08	
HC030ADD2	C2B12	
HC030ADE2	C2B13	
HC030AED2	C2G02	
HC030AEE2	C2G03	
HC130AB11	C2Z30	D2Z30
HC130AB21	C2Z29	D2Z29
HC130AB31	C2Z28	D2Z28
HC130AB41	C2Z26	D2Z26
HC130AC13	C2Y32	D2Y32
HC130AC23	C2Y20	C2Y30
	D2Y30	
HC130AC33	C2Y29	D2Y29
HC130AC43	C2Y28	D2Y28
HC225AA11	C2W10	D2W10
HC225AC12	C2W11	D2W11
HC275AF11	C2X10	D2X10
HC275AG11	C2X09	D2X09
HC310AE14	C2X27	
HC320AE11	C2S04	
HC320AG11	C2W13	D2W13
HC320AG31	C2X07	C2Y07
	D2X07	
HC325AAJ3	C2P09	
HC375AD11	C2W05	
HC450AJ11	C2U09	
HC625AD11	C2M10	
HC625AG11	C2M08	C2S08
HC625AM11	C2Y03	D2Y03
HC700AA38	C2X07	
HC930AB11	C2Z25	D2Z25
HC930AB21	C2Z24	D2Z24
HC930AB31	C2Z23	D2Z23
HC930AB41	C2Z22	D2Z22
HC930AC13	C2Y26	D2Y20
	D2Y26	
HC930AC23	C2Y25	D2Y25
HC930AC33	C2Y24	D2Y24
HC930AC43	C2Y23	D2Y23
HD100AE11	D2G03	
HD100AE21	D2B07	
HD100AE31	D2P07	
HD100AE41	D2P09	
HD100AJ11	C2W09	D2W09
HD100AJ21	C2W06	C2W08
	D2W06	
HD100AJ31	C2W07	D2W07
HD100AK11	D2J02	
HD100AK21	D2G02	
HD100AK31	D2J04	
HD100AK41	D2G04	
HD125AE11	C2W26	D2W26
HD125AL11	D2P12	
HD125AL21	D2P13	
HD125AL31	D2M05	
HD125AL41	D2M04	
HD200AA11	C2Y05	D2Y05
HD200AE11	D2Y12	
HD200AE21	D2Z33	
HD200AE31	D2Y02	
HD200AH11	C2Z06	D2Z05
HD200AH31	C2Z05	D2Z06
HD200AH51	C2Z07	C2Z13
	D2Z07	
HD200AH71	C2Z09	D2Z09
HD200AK11	C2Z02	D2Z02
HD225AA11	D2Y23	
HD225AJ11	C2Z10	D2Z10
HD225AJ31	C2Z11	D2Z11
HD225AJ51	C2Z12	D2Z12
HD225AJ71	D2Z13	
HD400AD31	C2Y07	D2Y07
HD500AA11	D2J10	
HD500AA21	D2J06	
HD500AA41	C2Y22	D2Y22
HD500AB21	D2J11	
HD500AB31	C2Y10	D2Y10
HD500AB51	C2X22	D2X22

NET NO.	PIN	PIN
HD500AB51	D2X22	
HD500AB52	D2B10	
HD500AB61	C2X06	D2S06
	D2X06	
HD500AB62	D2B09	
HD500AB71	C2X05	D2X05
HD500AB72	D2B12	
HD500AB81	C2X23	D2X23
HD500AB82	D2B13	
HD500AC31	C2Y09	D2Y09
HD500AD11	C2X11	D2X11
HD525AB11	D2J07	
HD525AB21	C2Y23	
HD525AB31	D2G07	
HD525AB51	D2G08	
HD525AB71	D2G09	
HD525AC11	D2G10	
HD525AC31	D2J09	
HD525AC51	D2G12	
HD525AC71	D2G13	
HD525AD11	D2G05	
HD525AE14	C2Y06	D2Y06
HD525AF11	C2Y13	D2Y13
HD525AF13	D2X02	
HD525AF15	C2W33	D2W33
HD525AF19	C2W32	D2W32
HD525AF21	C2W28	D2W28
HD525AF23	C2B03	C2S06
	C2S07	D2P10
HD525AF25	C2Y11	D2Y11
HD525AF29	C2W28	C2W30
	D2W30	
HD525AG11	D2W03	
HD525AJ11	C2Y33	D2Y33
HD525AK12	D2B08	
HD600AA49	C2X12	
HD600AA53	C2X13	
HD600AA55	C2W02	
HD700AB31	C2X24	D2X24
HD700AB41	C2X25	D2X25
	D2Y25	
HD725AC31	C2X26	D2X26
HD725AC41	C2X28	D2X28
HD730AAE3	D2P05	
HD730AAF3	D2P06	
HD800AB21	D2U02	
HD800AE12	D2U02	
HD800AF11	C2X03	D2X03
HD800AG11	C2W29	D2W29
HD925AL11	C2X29	D2X29
HD925AL21	C2X30	D2X30
HD925AL31	C2X32	D2X32
HD925AL41	C2X33	D2X33
HE200AK11	C2Z03	D2Z03
HH000EE00	A4B03*	
HH000EE01	A4D04*	
HH000EE02	A4D05*	
HH000EE03	A4D06*	
HH000EE04	A4D09*	
HH000EE05	A4D11*	
HH000EE06	A4B10*	
HH000EE07	A4B12*	
HH000FF00	A4D03*	C2J02
HH000FF01	A4B04*	D2P02
HH000FF02	A4B05*	C2J07
HH000FF03	A4D07*	C2J05
HH000FF04	A4B08*	C2P05
HH000FF05	A4D10*	C2J12
HH000FF06	A4D12*	C2J10
HH000FF07	A4B09*	C2D12
HH000GG00	A5B04*	
HH000GG01	A5B03*	
HH000GG02	A5B02*	
HH000GG03	A5B05*	
HH000GG04	A5D04*	
HH000GG05	A5D05*	
HH000GG06	A5D06*	
HH000GG07	A5D07*	
HH000GG08	A5D09*	
HH000GG09	A5D10*	
HH000GG10	A5D11*	
HH000GG11	A5D12*	
HH000GG12	A5D13*	
HH000HH09	A4B03*	D2P04
HH001EE00	A6E02*	
HH001EE01	B6A02*	
HH001EE02	B6B02*	
HH001EE03	B6C02*	
HH001EE04	C6A02*	
HH001EE05	C6C02*	

NET NO.	PIN	PIN
HH001EE06	C6B04*	
HH001EE07	C6D04*	
HH001FF00	A6E02*	C2J04
HH001FF01	B6A04*	D2D11
HH001FF02	B6B04*	C2J09
HH001FF03	B6D02*	C2J06
HH001FF04	B6E04*	C2P06
HH001FF05	C2J13	C6B02*
HH001FF06	B6B02*	C2J11
HH001FF07	C2D13	C6A04*
HH001HH09	A6E04*	
HH001MM10	B6E02*	
HH001NN10	A4D08*	
HH001PPA0	A6D04*	
HH001PP20	C6E02*	
HH001QQA0	A4B02*	
HH001QQ20	A4D13*	
HH001RRA0	A5D02*	
HH001RR20	A5B13*	D2M07
PA120BA10	E1B13*	J2U05
PA120BM10	E1B11*	J2U04
PA120BY10	F1A13*	
PA120CD10	E1C13*	J2U07
PA120CP10	E1C11*	J2S04
PA120DG10	E1D13*	J2S02
PA120DS10	E1D11*	
PA120EJ10	E1E13*	J2U06
PA120EV10	E1E11*	
PC532GR30	N1A11*	
PC554BV30	M1B11*	
PC554GH30	E2M13	E6D04*
	J2J09	M1C13*
	M2J12	
PR003AAA1	T2S02	V3D09*
PR003AAA3	T2M13	V3D11*
PR003AAA5	T2S03	V3D13*
PR003AAA7	T2U02	V3D12*
PR003AAA9	T2U13	V4D04*
PR003ABA1	T2G13	V4D06*
PR003ABA3	T2P07	V4D07*
PR003ABA5	T2S05	V4D09*
PR003ABA7	T2M02	V4D12*
PR003ABA9	T2P02	V5D07*
PR003ACA1	T2P06	V5B02*
PR003ADA7	T2M10	V5B10*
PR003ADA9	T2J13	V5D06*
PR003AEA1	T2U07	V5D09*
PR003AEA3	T2U10	V5D10*
PR003AEA5	T2U12	V5D11*
PR003AEA7	T2U09	V5D12*
PR003AEA9	T2U11	V5D13*
PR003BA01	T2S12	V3B05*
PR003BA03	T2S13	V3B06*
PR003BA05	T2P04	V3B08*
PR003BA07	T2S09	V3B11*
PR003BA09	T2P12	V3B12*
PR003BB01	T2J11	V3D07*
PR003BB03	T2P11	T2S03
	V3D10*	
PR003BB05	T2S08	V4B02*
PR003BB07	T2S10	V4B03*
PR003BB09	T2M03	V4B04*
PR003BC01	T2M04	V4B06*
PR003BC03	T2G10	V4B07*
PR003BC05	T2U06	V4B08*
PR003BC07	T2G08	V4B09*
PR003BC09	T2B11	V4B11*
PR003BD01	T2J10	V4B12*
PR003BD03	T2U04	V4D11*
PR003BD05	T2P13	V4D13*
PR003BD07	T2S04	V5B12*
PR003BD09	T2G12	V5D04*
PR003BE01	T2S07	V5D05*
PR003BE03	T2U05	V5B13*
PR009BA01	T2G09	
PR009BA03	T2W22	
PR009BA05	S2U08*	T2G06
PR011AA40(P)	T2B07	
PR011AA40(0)	T2B08	
PR011AA40(1)	T2B12	
PR011AA40(2)	T2D11	
PR011AA40(3)	T2D06	
PR011AA40(4)	T2B09	
PR011AA40(5)	T2D12	
PR011AA40(6)	T2D10	
PR011AA40(7)	T2B13	
PR011AH20	T2J11	
PR021AG31	S2W27	T2W27
PR031AB31	S2W28	T2W28
PR031AB71	S2W30	T2W30

NET NO.	PIN	PIN
PR031AD30	S2W29	T2W29
PR031AP20	S2X02	T2X02
PR041AB21	T2S03	
PR041AB31	T2U02	
PR041AB41	T2S02	
PR041AB51	T2M13	
PR043AC20	T2G13	
PR043AE50	T2S05	
PR043AF30	T2P02	
PR047AP30	T2J13	
PR065AJ51	T2P07	
PR065AJ61	T2M02	
PR101AA30	T2G12	
PR101AC30	T2S04	
PR101AE30	T2P13	
PR101AG30	T2S12	
PR101AJ30	T2U11	
PR101AL30	T2G08	
PR101AN30	T2S13	
PR101AR30	T2S09	
PR101AW30	T2S07	
PR101AY30	T2J10	
PR101AZ30	T2P12	
PR102AB21	T2U04	
PR102AB31	T2U06	
PR102AB41	T2S10	
PR103AC30	T2U13	
PR111AJ30	T2U07	
PR111AK30	T2U10	
PR111AL30	T2U12	
PR111AM30	T2U09	
PR111AN30	T2U11	
PR121AB21(0)	T2P06	
PR121AB21(1)	T2P05	V5B03*
PR121AB21(2)	T2M05	V5B04*
PR121AB21(3)	T2M07	V5B05*
PR121AB21(4)	T2P09	V5B06*
PR121AB21(5)	T2M08	V5B07*
PR121AB21(6)	T2M09	V5B08*
PR121AB21(7)	T2P10	V5B09*
PR121AC30	T2M10	
PR163AA30	T2P07	
PR163AD21	S2W10	T2W10
PR163AD31	S2W11	T2W11
PR201BB30	T2M12	
PR830CA30	T2X26	
PR830CD30	T2X04	
PR830CG30	T2X25	
PR830CJ30	T2X03	
PR830CM30	T2X22	
PR830CP30	T2X06	
PR830CS30	T2X24	
PR830CV30	T2X05	
PR830CY30	T2X23	
PR830CZ21(P)	T2X23	
PR830CZ21(0)	S2X26	T2X26
PR830CZ21(1)	S2X04	T2X04
PR830CZ21(2)	S2X25	
PR830CZ21(3)	S2X03	T2X03
PR830CZ21(4)	S2X22	T2X22
	T2X25	
PR830CZ21(5)	S2X06	T2X06
PR830CZ21(6)	S2X24	T2X24
PR830CZ21(7)	S2X05	T2X05
PR830CZ21(8)	S2X23	
PR990CM20	S2U02	S2Y29
	T2Y29	
PS001AB31(PH)	S2Z23	T2Z23
PS001AB31(PL)	S2Z02	T2Z02
PS001AB31(0)	S2Z30	T2Z30
PS001AB31(11)	S2Z25	T2Z25
PS001AB31(12)	S2Z06	T2Z06
PS001AB31(13)	S2Z26	T2Z26
PS001AB31(14)	S2Z05	T2Z05
PS001AB31(15)	S2Z24	T2Z24
PS001AB31(2)	S2Z11	T2Z11
PS001AB31(3)	S2Z12	T2Z12
PS001AB31(4)	S2Z32	T2Z32
PS001AB31(5)	S2Z31	T2Z31
PS001AB31(6)	S2Z10	T2Z10
PS001AB31(7)	S2Z09	T2Z09
PS001AB31(8)	S2Z28	T2Z28
PS001AB31(9)	S2Z03	T2Z03
PS001AJ31	S2Z02	S2Z03
	S2Z04	S2Z05
	S2Z06	S2Z09
	S2Z10	S2Z11
	S2Z12	S2Z23
	S2Z24	S2Z25
	S2Z26	S2Z28

NET NO.	PIN	PIN
PS001AJ31	S2Z29	S2Z30
	S2Z31	S2Z32
PS001CB31(0)	S2S05	
PS001CB31(1)	S2S03	
PS001CB31(2)	S2U10	
PS001CB31(3)	S2S09	
PS001CB35(4)	S2S13	
PS001CB35(5)	S2U13	
PS001CB35(6)	S2S08	
PS001CB35(7)	S2S07	
PS001CB39	S2U07	
PS001CB41(10)	S2U04	
PS001CB41(11)	S2S12	
PS001CB41(8)	S2U12	
PS001CB41(9)	S2S04	
PS001CB45(0)	S2U06	
PS001CB45(1)	S2U05	
PS001CB45(15)	S2U09	
PS001CB45(2)	S2U11	
PS001CB49	S2S10	
PS001EB19(0)	S2X28	
PS001EB19(1)	S2X08	
PS001EB19(2)	S2X27	
PS001EB19(3)	S2X09	
PS001FB11	S2B12	
PS001FB12	S2G10	
PS001FB13	S2J09	
PS001FB19(0)	S2X28	T2X28
PS001FB19(1)	S2X08	T2X08
PS001FB19(2)	S2X27	T2X27
PS001FB19(3)	S2X09	T2X09
PS001FB23(4)	S2W13	T2W13
PS001FB23(5)	S2W31	T2W31
PS001FB23(6)	S2W12	T2W12
PS001FB23(7)	S2W33	T2W33
PS001GC30	S2Z04	S2Z29
	T2Z04	T2Z29
PS003DB13(X2)	S2Y11	T2Y11
PS003DB13(X3)	S2Y31	T2Y31
PS003DB13(0)	S2Y30	T2Y30
PS003DB16	T2Z07	T2Z08
PS003DB16(1)	S2Y13	T2Y13
PS003DB16(10)	S2Y12	T2Y12
PS003DB16(2)	S2Z22	T2Z22
PS003DB16(3)	S2Z08	
PS003DB16(5)	S2Z27	T2Z27
PS003DB16(6)	S2Z07	
PS003DB16(7)	S2Y32	T2Y32
PS003DB16(8)	S2Z33	S2Z33
	T2Y33	T2Z33
PS003DB16(9)	S2Z13	T2Z13
PS003DB30	S2P02	
PS003FB00	S2M08	S2Y08
	T2Y08	
PS003FB10	S2M10	
PS003FB20	S2P11	
PS003FB30	S2M12	
PS005AB31(0)	S2J07	
PS005AB31(1)	S2P09	
PS005AB31(2)	S2P10	
PS005AB31(3)	S2G07	
PS005DB21(0)	S2Y05	
PS005DB21(1)	S2Y04	
PS005DB21(2)	S2Y22	
PS005DB21(3)	S2Y03	
PS005DE21(4)	S2Y25	
PS005DE21(5)	S2Y24	
PS005DE21(6)	S2Y23	
PS005DE21(7)	S2Y02	
PS005DJ30	S2W32	
PS005EH21(0)	S2J10	S2Y08
	S2Y28	
PS005EH21(2)	S2M04	
PS005EH21(3)	S2Y07	
PS005FC30	S2Y07	
PS005FC30(P)	T2X30	
PS005FE31(P)	S2X30	T2X30
	T2Y07	
PS005FE31(0)	S2X11	T2X11
	T2Y05	
PS005FE31(1)	S2X29	T2X29
	T2Y04	
PS005FE31(2)	S2X10	T2X10
	T2Y22	
PS005FE31(3)	S2X32	T2X32
	T2Y03	
PS005FE31(4)	S2X12	T2X12
	T2Y25	
PS005FE31(5)	S2X31	T2X31

NET NO.	PIN	PIN
PS005FE31(6)	S2X33	T2X33
	T2Y23	
PS005FE31(7)	S2X13	T2X13
	T2Y02	
PS005GG21	S2W06	T2W06
PS005GG22	S2W24	T2W24
PS005GG23	S2W23	T2W23
PS007FH21(0)	S2M02	
PS007FH21(1)	S2G13	
PS007FH21(2)	S2J12	
PS007FH21(3)	S2G12	
PS009AK50	S2W08	T2W08
PS009BBD0	S2B04	
PS009BH30	S2W09	
PS009CCD0	S2D06	
PS009EB21	S2W03	T2W03
PS009EB22	S2G03	
PS009EB23	S2W04	T2W04
PS009EB24	S2G04	T2J07
PS009EB25	S2Y10	T2Y10
PS009EB26	S2J04	
PS009EB31	S2P05	S2P06
PS009GB30	S2D09	
PS011AM30	S2M07	
PS011CJ30	S2J06	
PS011CL30	S2B13	T2M06
PS011CN30	S2J05	T2S06
PS011CP31	S2M13	
PS011CP32	S2D02	
PS011CP33	S2B02	
PS011CW30	S2P07	
PS011CZ30	S2P12	
PS013AR30	S2P13	
PS013CBD0	S2G05	
PS013CB30	S2Y27	T2Y27
PS013CE30	S2Y26	T2Y26
PS013CG30	S2Y06	T2Y06
PS013CK50	S2W05	T2W05
PS013CM30	S2G09	
PS013CP30	S2B08	
PS015CF30	S2W02	T2W02
PS015CL30	S2B09	
PS015CW30	S2J11	
PS015CZ30	S2J13	
PS017AMC1	S2D12	
PS017AMC2	S2D13	
PS017AMC3	S2B03	
PS017AMC4	S2B05	
PS017AMC5	S2P04	
PS017AMC6	S2M09	
PS017CB30	S2W25	T2W25
PS017CF30	S2W26	T2W26
PS017CJ30	S2D07	
PS017FM30	S2Y09	
PS017FM50	S2W07	
PS017FP30	S2D05	
PS017FP50	S2S02	
PS017FT31	S2D10	
PS017FT32	S2B07	
PS017FT33	S2D04	
PS017FT34	S2D11	
PS017FT35	S2G08	
PS017FT36	S2M03	
PS017FT37	S2B10	
PS101AB31(PH)	S2Z23	
PS101AB31(PL)	S2Z02	
PS101AB31(0)	S2Z29	
PS101AB31(1)	S2Z30	
PS101AB31(10)	S2Z04	
PS101AB31(11)	S2Z25	
PS101AB31(12)	S2Z06	
PS101AB31(13)	S2Z26	
PS101AB31(14)	S2Z05	
PS101AB31(15)	S2Z24	
PS101AB31(2)	S2Z11	
PS101AB31(3)	S2Z12	
PS101AB31(4)	S2Z32	
PS101AB31(5)	S2Z31	
PS101AB31(6)	S2Z10	
PS101AB31(7)	S2Z09	
PS101AB31(8)	S2Z28	
PS101AB31(9)	S2Z03	
PS101AJ31	S2Z02	S2Z03
	S2Z04	S2Z05
	S2Z06	S2Z09
	S2Z10	S2Z11
	S2Z12	S2Z23
	S2Z24	S2Z25
	S2Z26	S2Z28
	S2Z29	S2Z30

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0 0 NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

BOARD A-A2 P/N 423 6404 P/N 826 4452 P/N —— —— P/N —— ——

NET LIST

LOC=1A-A2

PN 4237968 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135239, DATE= 79199

A D 2 0 0 PG03

NET NO.	PIN	PIN
PS101AJ31	S2Z31	S2Z32
PS101CB31(0)	S2S05	
PS101CB31(1)	S2S03	
PS101CB31(2)	S2U10	
PS101CB31(3)	S2S09	
PS101CB35(4)	S2S13	
PS101CB35(5)	S2U13	
PS101CB35(6)	S2S08	
PS101CB35(7)	S2S07	
PS101CB39	S2U07	
PS101CB41(10)	S2U04	
PS101CB41(11)	S2S12	
PS101CB41(8)	S2U12	
PS101CB41(9)	S2S04	
PS101CB45(0)	S2U06	
PS101CB45(1)	S2U05	
PS101CB45(15)	S2U09	
PS101CB45(2)	S2U11	
PS101CB49	S2S10	
PS101EB19(0)	S2X28	
PS101EB19(1)	S2X08	
PS101EB19(2)	S2X27	
PS101EB19(3)	S2X09	
PS101FB11	S2B12	
PS101FB12	S2G10	
PS101FB13	S2J09	
PS101FB19(0)	S2X28	T2X28
PS101FB19(1)	S2X08	T2X08
	U2X08	
PS101FB19(2)	S2X27	T2X27
	U2X27	
PS101FB19(3)	S2X09	T2X09
	U2X09	
PS101FB23(4)	S2W13	T2W13
	U2W13	
PS101FB23(5)	S2W31	T2W31
	U2W31	
PS101FB23(6)	S2W12	T2W12
	U2W12	U2X33
PS101FB23(7)	S2W33	T2W33
	U2W33	
PS103DB13(X2)	S2Y11	U2Y11
PS103DB13(X3)	S2Y31	U2Y31
PS103DB13(0)	S2Y30	U2Y30
PS103DB16(1)	S2Y13	U2Y13
PS103DB16(10)	S2Y12	U2Y12
PS103DB16(2)	S2Z22	U2Y22
	U2Z22	
PS103DB16(3)	S2Z08	U2Z08
PS103DB16(4)	U2Y33	U2Z33
PS103DB16(5)	S2Z27	U2Z27
PS103DB16(6)	S2Z07	U2Z07
PS103DB16(7)	S2Y32	U2Y32
PS103DB16(8)	S2Y33	S2Z33
PS103DB16(9)	S2Z13	U2Z13
PS103DB30	S2P02	
PS103FB00	S2M08	S2Y08
	U2Y08	
PS103FB10	S2M10	
PS103FB20	S2P11	
PS103FB30	S2M12	
PS105AB31(0)	S2J07	
PS105AB31(1)	S2P09	
PS105AB31(2)	S2P10	
PS105AB31(3)	S2G07	
PS105DB21(0)	S2Y05	
PS105DB21(1)	S2Y04	
PS105DB21(2)	S2Y22	
PS105DB21(3)	S2Y03	
PS105DE21(4)	S2Y25	
PS105DE21(5)	S2Y24	
PS105DE21(6)	S2Y23	
PS105DE21(7)	S2Y02	
PS105DJ30	S2W32	
PS105EH21(0)	S2Y08	S2Y28
PS105EH21(1)	S2J10	
PS105EH21(2)	S2M04	
PS105EH21(3)	S2X07	
PS105FC30	S2Y07	
PS105FC30(P)	T2X30	
PS105FE31(P)	S2X30	T2X30
	U2X30	
PS105FE31(0)	S2X11	T2X11
	U2X11	
PS105FE31(1)	S2X29	T2X29
	U2X29	
PS105FE31(2)	S2X10	T2X10
	U2X10	
PS105FE31(3)	S2X32	T2X32
	U2X32	

NET NO.	PIN	PIN
PS105FE31(4)	S2X12	T2X12
	U2X12	
PS105FE31(5)	S2X31	T2X31
	U2X31	
PS105FE31(6)	S2X33	T2X33
	U2X33	
PS105FE31(7)	S2X13	T2X13
	U2X13	
PS105GG21	S2W06	T2W06
PS105GG22	S2W24	T2W24
PS105GG23	S2W23	T2W23
PS107FH21(0)	S2M02	
PS107FH21(1)	S2G13	
PS107FH21(2)	S2J12	
PS107FH21(3)	S2G12	
PS109AK50	S2W08	T2W08
PS109BBC0	S2J02	
PS109BBD0	S2B04	
PS109BH30	S2W09	
PS109CCD0	S2D06	
PS109EB21	S2W03	T2W03
	U2W03	
PS109EB22	S2G03	T2M12
	U2S02	
PS109EB23	S2W04	T2W04
	U2W04	
PS109EB24	S2G04	T2J07
	U2S06	
PS109EB25	S2Y10	T2Y10
	U2Y10	
PS109EB26	S2J04	U2U02
PS109EB31	S2P05	S2P06
PS109GB30	S2D09	
PS111AM30	S2M07	
PS111CJ30	S2J06	
PS111CL30	S2B13	T2M06
PS111CN30	S2J05	T2S06
PS111CP31	S2M13	
PS111CP32	S2D02	
PS111CP33	S2B02	
PS111CW30	S2P07	
PS111CZ30	S2P12	
PS113AR30	S2P13	
PS113CB00	S2G05	
PS113CB30	S2Y27	U2Y27
PS113CE30	S2Y26	U2Y26
PS113CG30	S2Y06	U2Y06
PS113CK50	S2W05	T2W05
PS113CM30	S2G09	
PS113CP30	S2B08	
PS115CF30	S2W02	T2W02
PS115CL30	S2B09	
PS115CW30	S2J11	
PS115CZ30	S2J13	
PS117AMC1	S2D12	
PS117AMC2	S2D13	
PS117AMC3	S2B03	
PS117AMC4	S2B05	
PS117AMC5	S2P04	
PS117AMC6	S2M09	
PS117CB30	S2W25	T2W25
	U2W25	
PS117CF30	S2W26	T2W26
PS117CJ30	S2D07	
PS117FM30	S2Y09	
PS117FM50	S2W07	
PS117FP30	S2D05	
PS117FP50	S2S02	
PS117FT31	S2D10	
PS117FT32	S2B07	
PS117FT33	S2D04	
PS117FT34	S2D11	
PS117FT35	S2G08	
PS117FT36	S2M03	
PS117FT37	S2B10	
PT003BA01	T2S12	V3B05*
PT003BA03	T2S13	V3B06*
PT003BA05	T2P04	U2J13
	V3B08*	
PT003BA07	T2S09	V3B11*
PT003BA09	T2P12	V3B12*
PT003BB01	T2J11	V3D07*
PT003BB03	T2P11	T2S03
	V3D10*	
PT003BB05	T2S08	V4B02*
PT003BB07	T2S10	V4B03*
PT003BB09	T2M03	V4B04*
PT003BC01	T2M04	V4B06*
PT003BC03	T2G10	V4B07*
PT003BC05	T2U06	V4B08*

NET NO.	PIN	PIN
PT003BC07	T2G08	V4B09*
PT003BC09	T2B11	V4B11*
PT003BD01	T2J10	V4B12*
PT003BD03	T2U04	V4D11*
PT003BD05	T2P13	V4D13*
PT003BD07	T2S04	V5B12*
PT003BD09	T2G12	V5D04*
PT003BE01	T2S07	V5D05*
PT003BE03	T2U05	V5B13*
PT003BH01	T2M09	V4D10*
PT003BH03	T2M07	V3B03*
PT003BH05	T2M08	V3D05*
PT009BA01	T2Y05	
PT009BA05	S2UG8*	T2G06
PT011AA40(P)	T2B07	
PT011AA40(0)	T2B08	
PT011AA40(1)	T2B12	
PT011AA40(2)	T2D11	
PT011AA40(3)	T2D06	
PT011AA40(4)	T2B09	
PT011AA40(5)	T2D12	
PT011AA40(6)	T2D10	
PT011AA40(7)	T2B13	
PT011AD20	L2D04	T2D04
PT011AH20	T2J11	
PT011AM20	L2B04	T2B04
PT011AM30	L2D05	T2D05
PT011AQ30	T2Z09	
PT021AG31	S2W27	T2W27
PT023AF50	L2G13	T2J09
PT023AH21(0)	L2G02	T2G02
PT023AH21(1)	L2J02	T2J02
PT023AH21(2)	L2G03	T2G03
PT023AH21(3)	L2G04	T2G04
PT023AH21(4)	L2J04	T2J04
PT023AH21(5)	L2G05	T2G05
PT023AH21(6)	L2J05	T2J05
PT023AH21(7)	L2J06	T2J06
PT025AF30	T2Z28	
PT031AB31	S2W28	T2W28
PT031AD30	S2W29	T2W29
PT031AP20	S2X02	T2X02
PT031BD30	S2W30	T2W30
PT041AF21	T2S03	V3D13*
PT041AF31	T2U02	V3D12*
PT041AF41	T2S02	V3D09*
PT041AF51	T2M13	V3D11*
PT043AA31	T2G13	
PT043AA32	T2G13	V4D06*
PT043AC30	T2S05	V4D09*
PT065AJ61	T2M02	V4D12*
PT101AB40	T2P12	
PT103AH21	S2W10	T2W10
PT103AH31	S2W11	T2W11
PT103AK30	T2P07	V4D07*
PT103AL30	T2U13	V4D04*
PT111AJ30	T2U07	U2P07
	V5D09*	
PT111AK30	T2U10	U2P10
	U2P11	V5D10*
PT111AL30	T2U12	U2P12
	V5D11*	
PT111AM30	T2U09	U2P09
	U2P10	V5D12*
PT111AN30	T2U11	U2P09
	U2P11	V5D13*
PT161AL30	T2Z02	U2Z02
PT163AJ30	T2Z03	U2Z03
PT163AL30	T2P02	V5D07*
PT165AL30	T2Z05	U2Z05
PT167AC50	T2Y23	U2Y23
PT167AF50	T2Y24	U2Y24
PT167AJ50	T2Y25	U2Y25
PT167AM30	T2Z04	U2Z04
PT201AA30	T2W25	
PT201AD30	T2M11	U2P13
PT201BG30	T2M11	
PT830CA30	T2X26	
PT830CD30	T2X04	
PT830CG30	T2X25	
PT830CJ30	T2X03	
PT830CM30	T2X22	
PT830CP30	T2X06	
PT830CS30	T2X24	
PT830CV30	T2X05	
PT830CY30	T2X23	
PT830CZ21(P)	T2X23	
PT830CZ21(0)	S2X26	T2X26
PT830CZ21(1)	S2X04	T2X04
PT830CZ21(2)	S2X25	

NET NO.	PIN	PIN
PT830CZ21(3)	S2X03	T2X03
PT830CZ21(4)	S2X22	T2X22
	T2X25	
PT830CZ21(5)	S2X06	T2X06
PT830CZ21(6)	S2X24	T2X24
PT830CZ21(7)	S2X05	T2X05
PT830CZ21(8)	S2X23	
PU010AH41	U2Y04	
PU010AK40	L2D13	U2D11
PU020AC30	T2D13	T2J13
	U2M03	V5D06*
PU020AE50	T2W22	U2W22
PU030AL30	T2Y28	U2Y28
PU040AD30	U2Y05	
PU060ABJ0	U2X13	
PU070AH30	T2G09	U2J12
	V3B02*	
PU080AB21(4)	U2P02	
PU080AB21(5)	U2P04	
PU080AB21(6)	T2P05	T2P09
	U2P05	
PU080AB21(7)	T2P06	T2P10
	U2P06	
PU080AC81	T2Y02	U2Y02
PU080AC91	T2Y03	U2Y03
PU100AK41(0)	T2Z23	U2Z23
PU100AK41(1)	T2Z24	U2Z24
PU100AK41(2)	T2Z25	U2Z25
PU130AD21(0)	U2Y27	
PU140AB21	S2U02	S2Y29
	U2Y29	
PU140AG41(PH)	U2U07	
PU140AG41(PL)	U2S10	
PU140AG41(1)	U2S03	
PU140AG41(10)	U2U04	
PU140AG41(11)	U2S12	
PU140AG41(12)	U2U06	
PU140AG41(13)	U2U05	
PU140AG41(14)	U2U11	
PU140AG41(15)	U2U09	
PU140AG41(2)	U2U10	
PU140AG41(3)	U2S09	
PU140AG41(4)	U2S13	
PU140AG41(5)	U2U13	
PU140AG41(6)	U2S08	
PU140AG41(7)	U2S07	
PU140AG41(8)	U2U12	
PU140AG41(9)	U2S04	
PU150AB21(0)	U2M04	V5B02*
PU150AB21(1)	U2M05	V5B03*
PU150AB21(2)	U2M06	V5B04*
PU150AB21(3)	U2M07	V5B05*
PU150AB21(4)	U2M08	V5B06*
PU150AB21(5)	U2M09	V5B07*
PU150AB21(6)	U2M10	V5B08*
PU150AB21(7)	U2M12	V5B09*
PU150AD30	T2M10	U2M13
	V5B10*	
WS001AB31(PH)	N2Z28	
WS001AB31(PL)	N2Z02	
WS001AB31(0)	N2Z29	
WS001AB31(1)	N2Z30	
WS001AB31(10)	N2Z25	
WS001AB31(11)	N2Z06	
WS001AB31(12)	N2Z26	
WS001AB31(13)	N2Z05	
WS001AB31(14)	N2Z24	
WS001AB31(15)	N2Z23	
WS001AB31(2)	N2Z11	
WS001AB31(3)	N2Z12	
WS001AB31(4)	N2Z32	
WS001AB31(5)	N2Z31	
WS001AB31(6)	N2Z10	
WS001AB31(7)	N2Z09	
WS001AB31(8)	N2Z03	
WS001AB31(9)	N2Z04	
WS001AJ31	N2S03	N2S04
	N2S05	N2S07
	N2S06	N2S09
	N2S10	N2S12
	N2S13	N2U04
	N2U05	N2U06
	N2U07	N2U09
	N2U10	N2U11
	N2U12	N2U13
WS001CB31(0)	N2S05	
WS001CB31(1)	N2S03	
WS001CB31(3)	N2S09	
WS001CB35(4)	N2S13	

NET NO.	PIN	PIN
WS001CB35(5)	N2U13	
WS001CB35(6)	N2S08	
WS001CB35(7)	N2S07	
WS001CB39	N2U07	
WS001CB41(10)	N2U04	
WS001CB41(11)	N2S12	
WS001CB41(8)	N2U12	
WS001CB41(9)	N2S04	
WS001CB45(12)	N2U06	
WS001CB45(13)	N2U05	
WS001CB45(14)	N2U11	
WS001CB45(15)	N2U09	
WS001CB49	N2S10	
WS001EB19(0)	N2X28	
WS001EB19(1)	N2X08	
WS001EB19(2)	N2X27	
WS001EB19(3)	N2X09	
WS001FB11	N2B12	
WS001FB12	N2G10	
WS001FB13	N2J09	
WS001FB19(0)	N2X28	
WS001FB19(1)	N2X08	
WS001FB19(2)	N2X27	
WS001FB19(3)	M2X09	N2X09
WS001FB23(1)	N2W33	
WS001FB23(4)	M2W13	N2W13
WS001FB23(5)	M2W31	N2W31
WS001FB23(6)	M2W12	N2W12
WS001FB23(7)	M2W33	
WS003DB13	N2Y11	R4W11
WS003DB13(X2)	P4W11	Q4W11
WS003DB13(X3)	N2Y31	P4W31
	Q4W31	R4W31
WS003DB13(0)	N2Y30	P4W30
	Q4W30	R4W30
WS003DB16	N2Y12	N2Y13
	R4W12	R4W13
WS003DB16(1)	P4W13	Q4W13
WS003DB16(10)	P4W12	Q4W12
WS003DB16(2)	N2Z22	P4X22
	Q4X22	R4X22
WS003DB16(3)	N2Z08	P4X08
	Q4X08	Q4X13
	R4X08	
WS003DB16(4)	N2Z33	P4W33
	Q4W33	R4W33
WS003DB16(5)	N2Z27	P4X27
	Q4X27	R4X27
WS003DB16(6)	N2Z07	P4X07
	Q4X07	R4X07
WS003DB16(7)	N2Y32	P4W32
	Q4W32	R4W32
WS003DB16(8)	N2Y33	P4X33
	Q4X33	R4X33
WS003DB16(9)	N2Z13	P4X13
	Q4X13	R4X13
WS003DB30	N2P02	
WS003FB00	N2M08	N2Y08
	P4D11	
WS003FB10	N2M10	P4J10
	Q4D11	
WS003FB20	N2P11	Q4J10
	R4D11	
WS003FB30	N2M12	P4J10
WS005AB31(0)	N2J07	
WS005AB31(1)	N2P09	
WS005AB31(2)	N2P10	
WS005AB31(3)	N2G07	
WS005DB21(0)	N2Y05	P4W05
	Q4W05	R4W05
WS005DB21(1)	N2Y04	P4W04
	Q4W04	R4W04
WS005DB21(2)	N2Y22	P4W22
	Q4W22	R4W22
WS005DB21(3)	N2Y03	P4W03
	R4W03	
WS005DB21(4)	Q4W03	
WS005DE21	Q4W25	
WS005DE21(4)	N2Y25	P4W25
	P4W25	
WS005DE21(5)	N2Y24	P4W24
	Q4W24	R4W24
WS005DE21(6)	N2Y23	P4W23
	Q4W23	R4W23
WS005DE21(7)	N2Y02	P4W02
	Q4W02	R4W02
WS005DJ30	N2W32	
WS005EH21(2)	N2Y28	
WS005EH21(1)	N2J10	
WS005EH21(2)	N2M04	

NET NO.	PIN	PIN
WS005EH21(3)	N2X07	
WS005FC30	N2Y07	P4W07
	Q4W07	R4W07
WS005FE31(P)	M2X30	N2X30
WS005FE31(0)	M2X11	N2X11
WS005FE31(1)	M2X29	N2X29
WS005FE31(2)	M2X10	N2X10
WS005FE31(3)	M2X32	N2X32
WS005FE31(4)	M2X12	N2X12
WS005FE31(5)	M2X31	N2X31
WS005FE31(6)	M2X33	N2X33
WS005FE31(7)	M2X13	N2X13
WS005GG21	M2W06	N2W06
WS005GG22	M2W24	N2W24
WS005GG23	M2W23	N2W23
WS007FH21(0)	N2M02	
WS007FH21(1)	N2G13	
WS007FH21(2)	N2J12	
WS007FH21(3)	N2G12	
WS009AK50	M2W08	N2W08
WS009BBD0	N2B04	
WS009BH30	N2W09	
WS009CCD0	N2D06	
WS009EB21	M2W03	N2W03
WS009EB22	N2G03	
WS009EB23	N2W04	
WS009EB24	N2G04	
WS009EB25	N2Y10	P4W10
	Q4W10	R4W10
WS009EB26	N2J04	
WS009EB31	N2P05	N2P06
WS009GB30	N2D09	
WS011AM30	N2M07	
WS011CJ30	N2J06	
WS011CL30	N2B13	
WS011CN30	N2J05	
WS011CP31	N2M13	
WS011CP32	N2D02	
WS011CP33	N2B02	
WS011CW30	N2P07	
WS011CZ30	N2P12	
WS013AR30	M2P05	N2P13
WS013CB00	N2G05	
WS013CB30	N2Y27	P4W27
	Q4W27	R4W27
WS013CE30	N2Y26	P4W26
	Q4W26	R4W26
WS013CG30	N2Y06	P4W06
	Q4W06	R4W06
WS013CK50	N2W05	
WS013CM30	N2G09	
WS013CP30	N2B08	
WS015CF30	M2W02	N2W02
WS015CL30	N2B09	
WS015CW30	N2J11	
WS015CZ30	N2J13	
WS017AMC1	N2D12	
WS017AMC2	N2D13	
WS017AMC3	N2B03	
WS017AMC4	N2B05	
WS017AMC5	N2P04	
WS017AMC6	N2M09	
WS017CB30	M2W25	N2W25
WS017CF30	M2W26	N2W26
WS017CJ30	N2D07	
WS017FM30	N2Y09	
WS017FM50	N2W07	
WS017FP30	M2M07	N2D05
WS017FP50	M2M09	N2S02
WS017FT31	N2D10	
WS017FT32	N2B07	
WS017FT33	N2D04	
WS017FT34	N2D11	
WS017FT35	N2G08	
WS017FT36	N2M03	
WS017FT37	N2B10	
WS101HB82	M2Y02	
WS101PA30	M2Y03	
WS101PA60	M2Y23	
WS101RB30	M2S13	M2U11
WS101RB50	M2M10	
WS111RD20	M2W28	N2W28
WS111VD20	M2W29	N2W29
WS111XB50	M2Z28	
WS131BD30	M2W30	N2W30
WS131GAB0	M2Y24	
WS131PB40	M2X02	N2X02
WS131QA20	M2Z11	
WS131QA30	M2Y04	
WS131YD30	M2W27	N2W27

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0

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

BOARD A-A2
P/N 423 6404

P/N 826 4452

P/N —— ——

P/N —— ——

NET LIST

LOC=1A-A2

PN 4237968 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135239 DATE= 79199

NET NO.	PIN	PIN
WS141DA15	M2Y11	
WS141DA17	M2Y25	
WS141DA63	M2M02	R2G13
WS141WB30	M2Y31	
WS143GB50	M2Y32	
WS143ID11	M2W11	N2W11
WS143ID21	M2W10	N2W10
WS143KB50	M2Y05	
WS143TB50	M2M04	M2P04
WS143VD30	M2P11	
WS143WC21	M2P13	
WS143WC41	M2P10	R2B12
WS143WC61	M2P09	R2B11
WS143WC81	M2M05	R2B10
WS151BX31(P)	M2X23	N2X23
WS151BX31(0)	M2X26	N2X26
WS151BX31(1)	M2X04	N2X04
WS151BX31(2)	M2X25	N2X25
WS151BX31(3)	M2X03	N2X03
WS151BX31(4)	M2X22	N2X22
WS151BX31(5)	M2X06	N2X06
WS151BX31(6)	M2X24	N2X24
WS151BX31(7)	M2X05	N2X05
WS171AB30	M2Y09	
WS171AF30	M2Y30	
WS171AL30	M2Y13	
WS171AR30	M2Y07	
WS171CB11	M2Z23	
WS171CL11	M2Y12	
WS171CL12	M2Z22	
WS171CR50	M2Y29	
WS171ER30	M2Y06	
WS171EW50	M2Y08	
WS171FD30	M2Y22	
WS173AB30	M2S12	M2U10
WS173AB50	M2Z13	
WS173AH30	M2Y27	
WS173ARB0	M2Z30	
WS173ARC0	M2Z25	
WS173ARD0	M2Z24	
WS173ARE0	M2M12	
WS173ARF0	M2U04	
WS173BB30	M2Z04	
WS173BC30	M2P07	R2D11
WS173DB30	M2Z02	
WS173EB50	M2Z31	
WS173FR21	M2Z06	
WS173FR22	M2Z05	
WS173FR23	M2Z12	
WS173FR24	M2Z32	
WS173FR25	M2Z27	
WS173FR26	M2Z29	
WS173FR27	M2Z26	
WS173FR28	M2Z10	
WS173FR29	M2Y33	
WS173FR30	M2Y28	
WS173FR31	M2Y10	
WS173FR32	M2Y26	
WS173FR33	M2Z03	
WS181AB30	M2U13	R2D12
WS181AJ30	M2Z08	
WS181BN30	M2Z07	
WS181BN50	M2Z09	
WS181FH30	M2M08	R2D10
WS200CC31	N2U02	N2Y29
	P4B12	
WS200ER40	M2P02	P4B04
WS200ER50	M2G12	P4B05
WS200FC31(PH)	N2U07	P4B10
WS200FC31(PL)	N2S10	P4G02
WS200FC31(0)	N2S05	P4D09
WS200FC31(1)	N2S03	P4D07
WS200FC31(10)	N2U04	P4D12
WS200FC31(11)	N2S12	P4G03
WS200FC31(12)	N2U06	P4J04
WS200FC31(13)	N2U05	P4G04
WS200FC31(14)	N2U11	P4J05
WS200FC31(15)	N2U09	P4J02
WS200FC31(2)	N2U10	P4B09
WS200FC31(3)	N2S09	P4D10
WS200FC31(4)	N2S13	P4J06
WS200FC31(5)	N2U13	P4J07
WS200FC31(6)	N2S08	P4G08
WS200FC31(7)	N2S07	P4G07
WS200FC31(8)	N2U12	P4D06
WS200FC31(9)	N2S04	P4D13
WS300CC31	Q4B12	
WS300ER40	M2U09	Q4G05
WS300ER50	M2S03	Q4J12
WS300FC31	Q4B09	Q4B10
WS300FC31(PH)	N2U07	
WS300FC31(PL)	N2S10	Q4G02
WS300FC31(0)	N2S05	
WS300FC31(1)	N2S03	Q4D07
WS300FC31(10)	N2U04	Q4D12
WS300FC31(11)	N2S12	Q4G03
WS300FC31(12)	N2U06	Q4J04
WS300FC31(13)	N2U05	Q4G04
WS300FC31(14)	N2U11	Q4J05
WS300FC31(15)	N2U09	Q4J02
WS300FC31(2)	N2U10	Q4D09
WS300FC31(3)	N2S09	Q4D10
WS300FC31(4)	N2S13	Q4J06
WS300FC31(5)	N2U13	Q4J07
WS300FC31(6)	N2S08	Q4G08
WS300FC31(7)	N2S07	Q4G07
WS300FC31(8)	N2U12	Q4D06
WS300FC31(9)	N2S04	Q4D13
WS400FC31(PH)	R4B10	
WS400FC31(PL)	R4G02	
WS400FC31(0)	R4D09	
WS400FC31(1)	R4D07	
WS400FC31(10)	R4D12	
WS400FC31(11)	R4G03	
WS400FC31(12)	R4J04	
WS400FC31(13)	R4G04	
WS400FC31(14)	R4J05	
WS400FC31(15)	R4J02	
WS400FC31(2)	R4B09	
WS400FC31(3)	R4D10	
WS400FC31(4)	R4J06	
WS400FC31(5)	R4J07	
WS400FC31(6)	R4G08	
WS400FC31(7)	R4G07	
WS400FC31(8)	R4D06	
WS400FC31(9)	R4D13	
WS500AA00	R2B06	
WS500AA10	R2J09	
WS500AA20	R2J11	
WS500AA30	R2J13	
WS500AA40	R2B04	
WS500AA50	R2D05	
WS500AA60	R2B05	
WS500AA70	R2J04	
WS500BA30	M2S10	R2D13
WS500CA30	M2U12	N2J02
	R2D04	S2J02
WS500DA30	M2S09	R2B13
WS500FA60	R2B03	
WS500FB60	R2D06	
WS500FC60	R2B08	
WS500FD60	R2G03	
WS501AA30	R2D02	V2D02
WS501AA60	R2B02	V2B02
WS501AB30	R2D07	V2D04
WS501AB60	R2B07	V2B04
WS501AC30	R2D09	V2D05
WS501AC60	R2B09	V2B05
WS501AD30	R2J02	V2D07
WS501AD60	R2G02	V2B07
WS501BA30	R2G04	R4J13
WS501BB30	R2G08	R4J12
WS501BC30	R2G09	R4G10
WS501BD30	R2G11	R4G13
YA420BA30	Q2B05	
YA420BB50	C2B11	C2G11
	D2B11	D2G11
	Q2B03	
YA420CA30	C2B06	C2G06
	D2B06	D2G06
YA420DA30	C2D03	C2J03
	C2P03	C2U03
	D2D03	D2J03
	D2P03	D2U03
	E2D03	E2J03
	E2P03	E2U03
	Q2D03	
YA420DA50	C2D08	C2J08
	C2P08	C2U08
	D2D08	D2J08
	D2P08	D2U08
	E2D08	E2J08
	E2P08	E2U08
	J1A13*	J1B11*

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0 NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E.CH005AC30),
0 THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN
LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES,
THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A
BUNDLE NET

BOARD A-A2
P/N 423 6404

P/N 826 4452

P/N —— ——

P/N —— ——

NET LIST

LOC=1A-A2

PN 4237968 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135239r DATE= 79199

A
D
2
0
0
PG05

PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.
BLK	FA388AB11	J11	GV100AD10	A3B09	CH007AD30	B2B04	GV160BC20	C2D07	HC020AJ41	C2U08	YA420DA50	C4G03	GV170AD30	D2G10	GV190CE20
BLK	FA588AB11	J12	GV100AE10	A3B10	CH002AH01	B2B05	GV160BC40	C2D08	YA420DA50	C2U09	HB200TP50	C4G04	GV170DD30	D2G10	HB100AH10
B02	FA188AB11	J13	FA388AF21	A3B11	CH002AH03	B2B10	GV160BB40	C2D09	GV270BB10	C2U09	HC450AJ11	C4G05	GV190BF30	D2G10	HD525AC11
B03	FA288AA11	J13	FA568AF21	A3B12	CH002AH05	B2B12	GV160BB60	C2D09	HB200AD30	C2U10	HB100AP16	C4G07	GV170CC50	D2G11	YA420BB50
B03	FA288AD11	RED	FA388AD11	A3B13	CH002AG03	B2D02	GV160BB50	C2D09	HC020AJ31	C2U10	HB200TP20	C4G08	GV090AC07	D2G12	GV190AB20
B03	FA388AA11	RED	FA588AD11	A3D02	CH002AE05	B2D04	GV160AA40	C2D10	GV270CB30	C2U13	HB200TP60	C4G10	GV170DA30	D2G12	HB100AH10
B03	FA588AA11	WTE	FA388AD11	A3D04	CH003AB03	B2D05	GV160AE30	C2D10	HB200AD20	C2W02	HD600AA55	C4G12	GV210CD20	D2G12	HD525AC51
B04	FA188AB11	WTE	FA588AD11	A3D05	CH006AG30	B2D08	GV160AB10	C2D10	HC020AK41	C2W05	HC375AD11	C4J02	GV090AC01	D2G13	GV090AD05
B05	FA088AA71	YEL	FA388AB11	A3D06	CH006AH30	B2D08	GV160DD40	C2D11	GV270AD10	C2W06	HD100AJ21	C4J04	GV170DB30	D2G13	HB100AH10
B05	FA188AB11	YEL	FA588AB11	A3D07	CH006AJ30	B2D09	GV160EB10	C2D11	HB200AD20	C2W07	HD100AJ31	C4J05	GV210CD40	D2G13	HD525AC71
B05	FA288AK25	1	FA388AA11	A3D09	CH003AB05	B2D10	GV160CB40	C2D11	HC020AK31	C2W08	HD100AJ21	C4J07	GV170DB50	D2J02	GV200BB30
B05	FA388AK25	1	FA388AD11	A3D10	CH008AF30	B2D11	GV160EA20	C2D12	HH000FF07	C2W09	HD100AJ11	C4J10	GV180BC30	D2J02	HB100AF20
B05	FA588AK25	1	FA588AD11	A3D11	CH003AC01	B2D13	GV160EA40	C2D13	GV270AE20	C2W10	HC225AA11	C4J13	GV170BC20	D2J02	HD100AK11
B06	GV100AG40	10	FA588AB11	A3D12	CH002AG05	B2G02	GV130AM30	C2D13	HH001FF07	C2W11	HC225AC12	C6A02	HH001EE04	D2J03	YA420DA30
B07	FA091AB20	11	FA188AA20	A3D13	CH002AG07	B2G03	GV190CA40	C2G02	GV270CA30	C2W13	HC320AG11	C6A04	HH001FF07	D2J04	HD100AK31
B07	FA201AM30	11	FA188AG60	A4B02	GV100AB20	B2G04	GV160DA10	C2G02	HC030AED2	C2W26	HD125AE11	C6B02	HH001FF05	D2J05	HB010AE70
B08	FA091AA20	14	FA188AA20	A4B02	HH001QQA0	B2G05	GV190CD30	C2G03	GV260BG30	C2W28	HD525AF21	C6B04	HH001EE06	D2J06	HB100AJA6
B08	FA201AM20	15	FA188AD11	A4B03	GV180BA30	B2G12	GV160AB10	C2G03	HC030ABE2	C2W28	HD525AF29	C6C02	GV250CB40	D2J06	HD500AA21
B08	FA288AB11	15	FA188AG50	A4B03	HH000EE00	B2J02	GV160CA30	C2G03	HC030AEE2	C2W29	HD800AG11	C6C02	HH001EE05	D2J07	GV210CE20
B08	FA288AC11	17	FA188AD11	A4B03	HH000MH09	B2J04	GV160DB10	C2G04	GV160CF30	C2W30	HD525AF29	C6D04	HH001EE07	D2J07	HB100AH10
B08	FA388AC11	17	FA188AG60	A4B04	GV180BB30	B2J05	GV160DC30	C2G04	HC030ABD2	C2W32	HD525AF19	C6E02	GV250CB20	D2J07	HD525AB11
B08	FA588AC11	18	FA188AA20	A4B04	HH000FF01	B2J07	GV190CB40	C2G05	GV260BH10	C2W33	HD525AF15	C6E02	HH001PP20	D2J08	YA420DA50
B09	GV100AD10	18	FA188AG70	A4B05	GV100AB20	B2J09	GV190CC30	C2G06	YA420CA30	C2X03	HD800AF11	D2B02	GV170DD30	D2J09	GV080AF05
B10	FA091AG20	2	FA188AA20	A4B05	HH000FF02	B2J10	GV160CF30	C2G07	GV260BE20	C2X05	HD500AB71	D2B02	HB100AA40	D2J09	HB100AH10
B10	FA188AE20	2	FA188AG20	A4B07	GV170CD40	B2J11	GV160BD10	C2G07	HC030ACD2	C2X06	HD500AB61	D2B03	GV090AC07	D2J09	HD525AC31
B10	FA201AF20	2	FA388AA11	A4B08	GV160AE30	B2J13	GV160CD30	C2G08	GV260AE20	C2X07	HC320AG31	D2B03	HB100AA40	D2J10	HB100AJA2
B10	FA304AT20	2	FA388AD11	A4B08	HH000FF04	B4B03	GV180BA30	C2G08	HC030ACE2	C2X07	HC700AA38	D2B04	GV210AE20	D2J10	HD500AA11
B10	FA504AT20	2	FA588AA11	A4B09	HH000FF07	B4B04	GV180BB30	C2G09	GV260BC30	C2X09	HC275AG11	D2B04	HB100AA40	D2J11	GV090AD05
B11	GV100CF40	20	FA188AA20	A4B10	HH000EE06	B4B05	GV180AG10	C2G09	HC010ADB1	C2X10	HC275AF11	D2B05	GV090AD07	D2J11	HB100AJA1
B12	FA091AG20	20	FA188AG40	A4B12	HH000EE07	B4B07	GV080AF03	C2G10	GV260BE40	C2X11	HD500AD11	D2B05	HB100AA40	D2J11	HD500AB21
B12	FA188AE20	22	FA188AD11	A4D02	GV100AB20	B4B08	GV160EA20	C2G10	HC010ADB3	C2X12	HD600AA49	D2B06	YA420CA30	D2J12	GV190CC30
B12	FA201AF30	22	FA188AG30	A4D03	HH000FF00	B4B10	GV180BC30	C2G11	YA420BB50	C2X13	HD600AA53	D2B07	GV210CG30	D2J12	HA050AN30
B12	FA307AJ20	23	FA188AA20	A4D04	HH000EE01	B4B11	GV180AC50	C2G12	GV270CD40	C2X22	HD500AB51	D2B07	HB100AF30	D2J12	HB010AE70
B12	FA507AJ20	23	FA188AG50	A4D05	HH000EE02	B4B12	GV180AC30	C2G12	HC010AEB1	C2X23	HD500AB81	D2B07	HD100AE21	D2J13	GV190CD30
B13	FA091AD20	3	FA188AD11	A4D06	HH000EE03	B4D02	GV180AC50	C2G13	HC010AEB3	C2X24	HD700AB31	D2B08	GV190AD20	D2J13	HB010AE70
B13	FA188AB11	3	FA188AG70	A4D07	GV160AE30	B4D04	GV180AH10	C2J02	GV080AB07	C2X25	HD700AB41	D2B08	HB100AP20	D2M02	GV080AE05
B13	FA201AF40	3	FA288AB11	A4D07	HH000FF03	B4D05	GV180BE30	C2J02	HH000FF00	C2X26	HD725AC31	D2B08	HD525AK12	D2M02	HB010AE70
B13	FA307AR20	3	FA288AH20	A4D08	GV160AD30	B4D09	GV180AJ10	C2J03	YA420DA30	C2X27	HC310AE14	D2B09	GV090AC01	D2M03	GV190CB40
B13	FA501AP20	4	FA188AA20	A4D08	HH001NN10	B4D12	GV090AB01	C2J04	GV080AF05	C2X28	HD725AC41	D2B09	HB100AH00	D2M03	HB010AE70
B13	GV100AC40	4	FA188AG30	A4D09	HH000EE04	B4D13	GV180AC20	C2J04	HH001FF00	C2X29	HD925AL11	D2B09	HD500AB62	D2M04	GV190BF30
D02	FA088AA41	4	FA288AB11	A4D10	GV170BC20	B4J02	GV210CG30	C2J05	HH000FF03	C2X30	HD925AL21	D2B10	GV190AC40	D2M04	HD125AL41
D02	FA188AE20	4	FA288AH30	A4D10	HH000FF05	B4J06	GV160EA40	C2J06	GV260BG30	C2X32	HD925AL31	D2B10	HB100AH00	D2M05	GV230AB10
D02	FA288AK21	4	FA388AB11	A4D11	GV170BC60	B4J09	GV090AE01	C2J06	HH001FF03	C2X33	HD925AL41	D2B10	HD500AB52	D2M05	HD125AL31
D02	FA388AK21	4	FA388AC11	A4D11	HH000EE05	B4J10	GV140BE30	C2J07	GV270AG10	C2Y03	HC625AM11	D2B11	YA420BB50	D2M07	GV190AD20
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D04	FA088AA21	5	FA188AD11	A4D12	HH000FF06	B6A02	HH001EE01	C2J08	YA420DA50	C2Y06	HD525AE14	D2B12	HB100AH00	D2M08	GV230AA10
D04	FA188AB11	5	FA188AG20	A4D13	GV160BB60	B6A04	HH001FF01	C2J09	GV250CB40	C2Y07	HC320AG31	D2B12	HD500AB72	D2M08	HB010AC90
D04	FA288AK23	5	FA288AD11	A4D13	HH001QQ20	B6B02	HH001EE02	C2J09	HH001FF02	C2Y07	HD400AD31	D2B13	GV210CD20	D2M09	GV090AB07
D04	FA388AK23	5	FA288AH20	A5B02	HH000GG02	B6B02	HH001FF06	C2J10	GV250CB20	C2Y09	HD500AC31	D2B13	HB100AH00	D2M09	HB010AC90
D04	FA588AK23	5	FA388AB11	A5B03	GV240CB30	B6B04	HH001FF02	C2J10	HH000FF06	C2Y10	HD500AB31	D2B13	HD500AB82	D2M10	GV190AB20
D05	FA188AE20	5	FA388AC11	A5B03	HH000GG01	B6C02	HH001EE03	C2J11	GV230BB40	C2Y11	HD525AF25	D2D02	GV090AA05	D2M10	HB010AC90
D06	FA188AB11	5	FA588AD11	A5B04	GV240BA30	B6D02	HH001FF03	C2J11	HH001FF06	C2Y13	HD525AF11	D2D02	HB100AA40	D2M11	HB010AC90
D06	GV100AG40	6	FA188AD11	A5B04	HH000GG00	B6E02	HH001MM10	C2J12	GV080AC01	C2Y20	HC130AC23	D2D03	YA420DA30	D2M12	GV210CD40
D07	FA188AE20	6	FA188AG40	A5B05	HH000GG03	B6E04	HH001FF04	C2J12	HH000FF05	C2Y22	HD500AA41	D2D04	GV130AD40	D2M12	HB010AC90
D08	FA188AE20	6	FA288AD11	A5B06	GV100AG40	C2B02	GV250DB30	C2J13	GV270CD20	C2Y23	HC930AC43	D2D04	HB100AA40	D2M13	GV080AB01
D08	FA288AD31	6	FA288AH30	A5B07	GV100AG40	C2B02	HC020AL21	C2J13	HH001FF05	C2Y23	HD525AB21	D2D05	GV170DB30	D2M13	HB010AC90
D09	FA188AE20	6	FA588AB11	A5B08	GV130AC11	C2B03	GV080AD01	C2M02	HC010AB31	C2Y24	HC930AC33	D2D05	HB100AA40	D2P02	GV200AD40
D10	FA091AJ20	7	FA188AD11	A5B09	GV130AC10	C2B03	HB100AP16	C2M03	HC010AB41	C2Y25	HC930AC23	D2D06	GV090AD01	D2P02	HH000FF01
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D10	FA288AC11	9	FA588AC11	A5B12	GV230BC30	C2B04	HC020AM21	C2M07	HB100AP20	C2Y29	HC130AC33	D2D07	HB100AA40	D2P04	HH000HH09
D10	FA307AA20	A2B02	CH001AD01	A5B13	GV100AC40	C2B05	GV270BC10	C2M08	HB200TP30	C2Y30	HC130AC23	D2D08	YA420DA50	D2P05	HD730AAE3
D10	FA388AC11	A2B03	CH001AD03	A5B13	HH001RR20	C2B05	HC020AM11	C2M08	HC625AG11	C2Y32	HC130AC13	D2D09	GV090AE01	D2P06	HD730AAF3
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D10	FA588AC11	A2B05	CH001AD05	A5D04	GV090AE03	C2B07	GV270BF10	C2P02	HB200BG10	C2Z02	HD200AK11	D2D10	GV170AA30	D2P07	HD100AE31
D11	FA288AA11	A2B06	CH003AB01	A5D04	HH000GG04	C2B07	HC020AJ21	C2P02	HC010AB11	C2Z03	HE200AK11	D2D10	HB100AA40	D2P08	YA420DA50
D11	FA288AD11	A2B07	CH001AC01	A5D05	GV230BD30	C2B08	HC020AJ11	C2P03	YA420DA30	C2Z05	HD200AH31	D2D11	GV140BD40	D2P09	GV190BB20
D11	FA388AA11	A2B08	CH001AA01	A5D05	HH000GG05	C2B09	GV270AI10	C2P05	HH000FF04	C2Z06	HD200AH11	D2D11	HH001FF01	D2P09	HD100AE41
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D11	GV100AF10	A2B10	CH002AE03	A5D06	HH000GG06	C2B10	GV270BG30	C2P07	HB100AP20	C2Z09	HD200AH71	D2D12	HB010AE70	D2P10	HB100AP16
D12	FA188AE20	A2B11	CH009AC30	A5D07	GV130AC11	C2B10	HC020AK11	C2P08	YA420DA50	C2Z10	HD225AJ11	D2D13	GV090AB03	D2P10	HD525AF23
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D13	FA091AE20	A2B13	CH001AB07	A5D09	GV090AD03	C2B12	GV270AK10	C2S02	HB200BG10	C2Z12	HD225AJ51	D2G02	HB100AF20	D2P11	HB010AE70
D13	FA188AB11	A2D02	CH002AE01	A5D09	HH000GG08	C2B12	HC030ADD2	C2S02	HC010AB21	C2Z13	HD200AH51	D2G02	HD100AK21	D2P12	GV190AE30
D13	FA201AP20	A2D04	CH011AD30	A5D10	GV130AC10	C2B13	HC030ADE2	C2S03	HB010AE70	C2Z22	HC930AB41	D2G03	HB100AF30	D2P12	HB100AF40
D13	FA307AC20	A2D05	CH007AB30	A5D10	HH000GG09	C2D02	GV080AD03	C2S04	HC320AE11	C2Z23	HC930AB31	D2G03	HD100AE11	D2P12	HD125AL11
D13	FA507AC20	A2D06	CH001AA07	A5D11	GV100CF40	C2D02	HB200AD10	C2S05	HB100AP16	C2Z24	HC930AB21	D2G04	GV190AE30	D2P13	GV090AA07
GND	FA288ADD1	A2D07	CH001AB05	A5D11	HH000GG10	C2D02	HC020AL41	C2S06	HD525AF23	C2Z25	HC930AB11	D2G04	HD100AK41	D2P13	HB100AF40
G02	FA301AH20	A2D09	CH001AA05	A5D12	GV250DB30	C2D03	YA420DA30	C2S07	HB100AP16	C2Z26	HC130AB41	D2G05	GV090AA03	D2P13	HD125AL21
G02	FA501AH20	A2D10	CH001AB03	A5D12	HH000GG11	C2D04	GV260BD50	C2S07	HD525AF23	C2Z28	HC130AB31	D2G05	HB100AH10	D2S02	GV190CE20
G02	GV100AB40	A2D11	CH008AH30	A5D13	GV100AC40	C2D04	HB200AD10	C2S08	HB200TP30	C2Z29	HC130AB21	D2G05	HD525AD11	D2S02	HB010AC90
G06	GV100AG40	A2D12	CH005AB30	A5D13	HH000GG12	C2D04	HC020AL31	C2S08	HC625AG11	C2Z30	HC130AB11	D2G06	YA420CA30	D2S03	GV230AB10
G09	FA388AF11	A2D13	CH006AE30	A6D04	HH001PPA0	C2D05	GV080AE05	C2S09	HB200TP10	C4B04	GV160EA40	D2G07	HB100AH10	D2S03	HB010AC90
G09	FA588AF11	A3B02	CH005AA30	A6E02	HH001EE00	C2D05	HB200AD40	C2S10	HB200TP20	C4B07	GV170AA30	D2G07	HD525AB31	D2S04	GV080AB05
G09	GV100AD10	A3B03	CH005AC30	A6E02	HH001FF00	C2D05	HC020AM41	C2S11	HB200TP10	C4B08	GV090AD01	D2G08	GV090AC03	D2S04	HB010AD90
G11	GV100CF40	A3B04	CH005AD30	A6E04	HH001HH09	C2D06	GV270AC10	C2S12	HC020AL11	C4D02	GV170CD40	D2G08	HB100AH10	D2S05	GV080AE03
G13	GV100AC40	A3B05	CH006AF30	B1A11	GV160BC20	C2D06	HB200AD40	C2S13	HB010AE70	C4D04	GV160EA20	D2G08	HD525AB51	D2S05	HB010AD90
J05	FA301AH40	A3B06	CH002AG01	B1B11	GV160BC40	C2D06	HC020AM31	C2U03	YA420DA30	C4D05	GV170AD50	D2G09	GV090AB01	D2S06	HB010AD90
J05	FA501AH40	A3B07	CH008AG30	B2B02	GV160AB10	C2D07	GV270BD10	C2U05	HB010AE70	C4D07	GV090AA03	D2G09	HB100AH10	D2S06	HD500AB61
J06	GV100AE10	A3B08	CH008AE30	B2B03	GV160AA20	C2D07	HB200AD30	C2U06	HB200TP40	C4D09	GV180BE30	D2G09	HD525AB71	D2S07	GV080AE01

A
D
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NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E.CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

BOARD A-A2
P/N 423 6404

P/N 826 4452

P/N —— ——

P/N —— ——

PIN LIST

LOC=1A-A2

PN 4237972 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135742 DATE= 79199

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D2S08	GV080AD07
D2S08	HB010AD90
D2S09	GV190AC40
D2S09	HB010AD90
D2S10	GV230BB20
D2S10	HB010AD90
D2S11	HB010AD90
D2S12	GV230BB40
D2S12	HB010AC90
D2S13	GV080AD05
D2S13	HB010AD90
D2U02	GV080AB03
D2U02	HB100AJA7
D2U02	HD800AB21
D2U02	HD800AE12
D2U03	YA420DA30
D2U04	GV240BA30
D2U04	HB010AB90
D2U05	GV230BD30
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D2U06	GV080AC03
D2U06	HB010AB90
D2U07	GV230BC30
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D2U08	YA420DA50
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D2U12	HB010AB90
D2U13	GV230AA10
D2U13	HB010AB90
D2W03	HD525AG11
D2W06	HD100AJ21
D2W07	HD100AJ31
D2W09	HD100AJ11
D2W10	HC225AA11
D2W11	HC225AC12
D2W13	HC320AG11
D2W26	HD125AE11
D2W28	HD525AF21
D2W29	HD800AG11
D2W30	HD525AF29
D2W32	HD525AF19
D2W33	HD525AF15
D2X02	HD525AF13
D2X03	HD800AF11
D2X05	HD500AB71
D2X06	HD500AB61
D2X07	HC320AG31
D2X09	HC275AG11
D2X10	HC275AF11
D2X11	HD500AD11
D2X22	HD500AB51
D2X23	HD500AB81
D2X24	HD700AB31
D2X25	HD700AB41
D2X26	HD725AC31
D2X28	HD725AC41
D2X29	HD925AL11
D2X30	HD925AL21
D2X32	HD925AL31
D2X33	HD925AL41
D2Y02	HD200AE31
D2Y03	HC625AM11
D2Y05	HD200AA11
D2Y06	HD525AE14
D2Y07	HD400AD31
D2Y09	HD500AC31
D2Y10	HD500AB31
D2Y11	HD525AF25
D2Y12	HD200AE11
D2Y13	HD525AF11
D2Y20	HC930AC13
D2Y22	HD500AA41
D2Y23	HC930AC43
D2Y23	HD225AA11
D2Y24	HC930AC33
D2Y25	HC930AC23
D2Y25	HD700AB41
D2Y26	HC930AC13
D2Y28	HC130AC43
D2Y29	HC130AC33
D2Y30	HC130AC23
D2Y32	HC130AC13
D2Y33	HD525AJ11

PIN	NET NO.
D2Z02	HD200AK11
D2Z03	HE200AK11
D2Z05	HD200AH11
D2Z06	HD200AH31
D2Z07	HD200AH51
D2Z09	HD200AH71
D2Z10	HD225AJ11
D2Z11	HD225AJ31
D2Z12	HD225AJ51
D2Z13	HD225AJ71
D2Z22	HC930AB41
D2Z23	HC930AB31
D2Z24	HC930AB21
D2Z25	HC930AB11
D2Z26	HC130AB41
D2Z28	HC130AB31
D2Z29	HC130AB21
D2Z30	HC130AB11
D2Z33	HD200AE21
D6E02	CH008AJ30
E1B11	PA120BM10
E1B13	PA120BA10
E1C11	PA120CP10
E1C13	PA120CD10
E1D11	PA120DS10
E1D13	PA120DG10
E1E11	PA120EV10
E1E13	PA120EJ10
E2B02	CH002AE01
E2B03	CH001AD03
E2B04	CH007AC30
E2B05	CH001AD05
E2B06	CH002AF07
E2B07	CH001AC01
E2B07	GF040AH30
E2B08	CH001AA01
E2B09	CH001AB01
E2B10	CH002AE03
E2B11	CH003AA01
E2B12	CH001AA03
E2B13	CH001AB07
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L2B05	CH001AD05
L2B07	CH001AC01

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D COPYRIGHT IBM CORP. 1978
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5 NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E.CH005AC30),
0 THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN
LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES,
THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A
BUNDLE NET

BOARD A-A2 P/N 826 4452 P/N ——— P/N ———
P/N 423 6404

PIN LIST
LOC=1A-A2
PN 4237972 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135742 DATE= 79199

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PG02

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L2B13	CH001AB07
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L2D04	PT011AD20
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L2D05	PT011AM30
L2D06	CH001AA07
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L2D12	CH001AB03
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NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E.CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

BOARD A-A2 P/N 423 6404 P/N 826 4452 P/N —— —— P/N —— ——

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PN 4237972 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135742 DATE= 79199

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Q4X13	WS003DB16(9)
Q4X22	WS003DB16(2)
Q4X27	WS003DB16(5)
Q4X33	WS003DB16(8)
Q6B02	FA088AA81
Q6B04	FA088AA71
R1A13	CH001AA01
R1B11	CH001AA05
R1B13	CH001AB01
R1C11	CH001AB03
R1C13	CH002AE03
R1D11	CH008AH30
R1D13	CH009AC30
R1E11	CH005AB30
R1E13	CH001AA03
R2B02	WS501AA60
R2B03	WS500FA60
R2B04	WS500AA40
R2B05	WS500AA60
R2B06	WS500AA00
R2B07	WS501AB60
R2B08	WS500FC60
R2B09	WS501AC60
R2B10	WS143WC81
R2B11	WS143WC61
R2B12	WS143WC41
R2B13	WS500DA30
R2D02	WS501AA30
R2D04	WS500CA30
R2D05	WS500AA50
R2D06	WS5C0FB60
R2D07	WS501AB30
R2D09	WS501AC30
R2D10	WS181FH30
R2D11	WS173BC30
R2D12	WS181AB30
R2D13	WS500BA30

PIN	NET NO.
R2G02	WS501AD60
R2G03	WS500FD60
R2G04	WS501BA30
R2G08	WS501BB30
R2G09	WS501BC30
R2G11	WS501BD30
R2G13	WS141DA63
R2J02	WS501AD30
R2J04	WS500AA70
R2J09	WS500AA10
R2J11	WS500AA20
R2J13	WS500AA30
R4B09	WS400FC31(2)
R4B10	WS400FC31(PH)
R4D06	WS400FC31(8)
R4D07	WS400FC31(1)
R4D09	WS400FC31(0)
R4D10	WS400FC31(3)
R4D11	WS003FB20
R4D12	WS400FC31(10)
R4D13	WS400FC31(9)
R4G02	WS400FC31(PL)
R4G03	WS400FC31(11)
R4G04	WS400FC31(13)
R4G07	WS400FC31(7)
R4G08	WS400FC31(6)
R4G10	WS501BC30
R4G13	WS501BD30
R4J02	WS400FC31(15)
R4J04	WS400FC31(12)
R4J05	WS400FC31(14)
R4J06	WS400FC31(4)
R4J07	WS400FC31(5)
R4J10	WS003FB30
R4J12	WS501BB30
R4J13	WS501BA30
R4W02	WS005DE21(7)
R4W03	WS005DB21(3)
R4W04	WS005DB21(1)
R4W05	WS005DB21(0)
R4W06	WS013CG30
R4W07	WS005FC30
R4W10	WS009EB25
R4W11	WS003DB13
R4W12	WS003DB16
R4W13	WS003DB16
R4W22	WS005DB21(2)
R4W23	WS005DE21(6)
R4W24	WS005DE21(5)
R4W25	WS005DE21(4)
R4W26	WS013CE30
R4W27	WS013CB30
R4W30	WS003DB13(0)
R4W31	WS003DB13(X3)
R4W32	WS003DB16(7)
R4W33	WS003DB16(4)
R4X07	WS003DB16(6)
R4X08	WS003DB16(3)
R4X13	WS003DB16(9)
R4X22	WS003DB16(2)
R4X27	WS003DB16(5)
R4X33	WS003DB16(8)
R6A04	FA088AA31
R6C04	FA088AA41
S1A11	CH006AE30
S1A13	CH001AB07
S2B02	PS011CP33
S2B02	PS111CP33
S2B03	PS017AMC3
S2B03	PS117AMC3
S2B04	PS009BBD0
S2B04	PS109BBD0
S2B05	PS017AMC4
S2B05	PS117AMC4
S2B07	PS017FT32
S2B07	PS117FT32
S2B08	PS013CP30
S2B08	PS113CP30
S2B09	PS015CL30
S2B09	PS115CL30
S2B10	PS017FT37
S2B10	PS117FT37
S2B12	PS001FB11
S2B12	PS101FB11
S2B13	PS011CL30
S2B13	PS111CL30
S2D02	PS011CP32
S2D02	PS111CP32
S2D04	PS017FT33
S2D04	PS117FT33

PIN	NET NO.
S2D05	PS017FP30
S2D05	PS117FP30
S2D06	PS009CCD0
S2D06	PS109CCD0
S2D07	PS017CJ30
S2D07	PS117CJ30
S2D09	PS009GB30
S2D09	PS109GB30
S2D10	PS017FT31
S2D10	PS117FT31
S2D11	PS017FT34
S2D11	PS117FT34
S2D12	PS017AMC1
S2D12	PS117AMC1
S2D13	PS017AMC2
S2D13	PS117AMC2
S2G03	PS009EB22
S2G03	PS109EB22
S2G04	PS009EB24
S2G04	PS109EB24
S2G05	PS013CBD0
S2G05	PS113CBD0
S2G07	PS005AB31(3)
S2G07	PS105AB31(3)
S2G08	PS017FT35
S2G08	PS117FT35
S2G09	PS013CM30
S2G09	PS113CM30
S2G10	PS001FB12
S2G10	PS101FB12
S2G12	PS007FH21(3)
S2G12	PS107FH21(3)
S2G13	PS007FH21(1)
S2G13	PS107FH21(1)
S2J02	PS109BBC0
S2J02	WS500CA30
S2J04	PS009EB26
S2J04	PS109EB26
S2J05	PS011CN30
S2J05	PS111CN30
S2J06	PS011CJ30
S2J06	PS111CJ30
S2J07	PS005AB31(0)
S2J07	PS105AB31(0)
S2J09	PS001FB13
S2J09	PS101FB13
S2J10	PS005EH21(0)
S2J10	PS105EH21(1)
S2J11	PS015CW30
S2J11	PS115CW30
S2J12	PS007FH21(2)
S2J12	PS107FH21(2)
S2J13	PS015CZ30
S2J13	PS115CZ30
S2M02	PS007FH21(0)
S2M02	PS107FH21(0)
S2M03	PS017FT36
S2M03	PS117FT36
S2M04	PS005EH21(2)
S2M04	PS105EH21(2)
S2M07	PS011AM30
S2M07	PS111AM30
S2M08	PS003FB00
S2M08	PS103FB00
S2M09	PS017AMC6
S2M09	PS117AMC6
S2M10	PS003FB10
S2M10	PS103FB10
S2M12	PS003FB30
S2M12	PS103FB30
S2M13	PS011CP31
S2M13	PS111CP31
S2P02	PS003DB30
S2P02	PS103DB30
S2P04	PS017AMC5
S2P04	PS117AMC5
S2P05	PS009EB31
S2P05	PS109EB31
S2P06	PS009EB31
S2P06	PS109EB31
S2P07	PS011CW30
S2P07	PS111CW30
S2P09	PS005AB31(1)
S2P09	PS105AB31(1)
S2P10	PS005AB31(2)
S2P10	PS105AB31(2)
S2P11	PS003FB20
S2P11	PS103FB20
S2P12	PS011CZ30
S2P12	PS111CZ30

PIN	NET NO.
S2P13	PS013AR30
S2P13	PS113AR30
S2S02	PS017FP50
S2S02	PS117FP50
S2S03	PS001CB31(1)
S2S03	PS101CB31(1)
S2S04	PS001CB41(9)
S2S04	PS101CB41(9)
S2S05	PS001CB31(0)
S2S05	PS101CB31(0)
S2S07	PS001CB35(7)
S2S07	PS101CB35(7)
S2S08	PS001CB35(6)
S2S08	PS101CB35(6)
S2S09	PS001CB31(3)
S2S09	PS101CB31(3)
S2S10	PS001CB49
S2S10	PS101CB49
S2S12	PS001CB41(11)
S2S12	PS101CB41(11)
S2S13	PS001CB35(4)
S2S13	PS101CB35(4)
S2U02	PR990CM20
S2U02	PU140AB21
S2U04	PS001CB41(10)
S2U04	PS101CB41(10)
S2U05	PS001CB45(1)
S2U05	PS101CB45(1)
S2U06	PS001CB45(0)
S2U06	PS101CB45(0)
S2U07	PS001CB39
S2U07	PS101CB39
S2U08	PR009BA05
S2U08	PT009BA05
S2U09	PS001CB45(15)
S2U09	PS101CB45(15)
S2U10	PS001CB31(2)
S2U10	PS101CB31(2)
S2U11	PS001CB45(2)
S2U11	PS101CB45(2)
S2U12	PS001CB41(8)
S2U12	PS101CB41(8)
S2U13	PS001CB35(5)
S2U13	PS101CB35(5)
S2W02	PS015CF30
S2W02	PS115CF30
S2W03	PS009EB21
S2W03	PS109EB21
S2W04	PS009EB23
S2W04	PS109EB23
S2W05	PS013CK50
S2W05	PS113CK50
S2W06	PS005GG21
S2W06	PS105GG21
S2W07	PS017FM50
S2W07	PS117FM50
S2W08	PS009AK50
S2W08	PS109AK50
S2W09	PS009BH30
S2W09	PS109BH30
S2W10	PR163AD21
S2W10	PT103AH21
S2W11	PR163AD31
S2W11	PT103AH31
S2W12	PS001FB23(6)
S2W12	PS101FB23(6)
S2W13	PS001FB23(4)
S2W13	PS101FB23(4)
S2W23	PS005GG23
S2W23	PS105GG23
S2W24	PS005GG22
S2W24	PS105GG22
S2W25	PS017CB30
S2W25	PS117CB30
S2W26	PS017CF30
S2W26	PS117CF30
S2W27	PR021AG31
S2W27	PT021AG31
S2W28	PR031AB31
S2W28	PT031AB31
S2W29	PR031AD30
S2W29	PT031AD30
S2W30	PR031AB71
S2W30	PT031BD30
S2W31	PS001FB23(5)
S2W31	PS101FB23(5)
S2W32	PS005DJ30
S2W32	PS105DJ30
S2W33	PS001FB23(7)
S2W33	PS101FB23(7)

PIN	NET NO.
S2X02	PR031AP20
S2X02	PT031AP20
S2X03	PR830CZ21(3)
S2X03	PT830CZ21(3)
S2X04	PR830CZ21(1)
S2X04	PT830CZ21(1)
S2X05	PR830CZ21(7)
S2X05	PT830CZ21(7)
S2X06	PR830CZ21(5)
S2X06	PT830CZ21(5)
S2X07	PS005EH21(3)
S2X07	PS105EH21(3)
S2X08	PS001EB19(1)
S2X08	PS001FB19(1)
S2X09	PS101EB19(1)
S2X08	PS101FB19(1)
S2X09	PS001EB19(3)
S2X09	PS001FB19(3)
S2X09	PS101EB19(3)
S2X09	PS101FB19(3)
S2X10	PS005FE31(2)
S2X10	PS105FE31(2)
S2X11	PS005FE31(0)
S2X11	PS105FE31(0)
S2X12	PS005FE31(4)
S2X12	PS105FE31(4)
S2X13	PS005FE31(7)
S2X13	PS105FE31(7)
S2X22	PR830CZ21(4)
S2X22	PT830CZ21(4)
S2X23	PR830CZ21(8)
S2X23	PT830CZ21(8)
S2X24	PR830CZ21(6)
S2X24	PT830CZ21(6)
S2X25	PR830CZ21(2)
S2X25	PT830CZ21(2)
S2X26	PR830CZ21(0)
S2X26	PT830CZ21(0)
S2X27	PS001EB19(2)
S2X27	PS001FB19(2)
S2X27	PS101EB19(2)
S2X27	PS101FB19(2)
S2X28	PS001EB19(0)
S2X28	PS001FB19(0)
S2X28	PS101EB19(0)
S2X28	PS101FB19(0)
S2X29	PS005FE31(1)
S2X29	PS105FE31(1)
S2X30	PS005FE31(P)
S2X30	PS105FE31(P)
S2X31	PS005FE31(5)
S2X31	PS105FE31(5)
S2X32	PS005FE31(3)
S2X32	PS105FE31(3)
S2X33	PS005FE31(6)
S2X33	PS105FE31(6)
S2Y02	PS005DE21(7)
S2Y02	PS105DE21(7)
S2Y03	PS005DB21(3)
S2Y03	PS105DB21(3)
S2Y04	PS005DB21(1)
S2Y04	PS105DB21(1)
S2Y05	PS005DB21(0)
S2Y05	PS105DB21(0)
S2Y06	PS013CG30
S2Y06	PS113CG30
S2Y07	PS005FC30
S2Y07	PS105FC30
S2Y08	PS003FB00
S2Y08	PS005EH21(0)
S2Y08	PS103FB00
S2Y08	PS105EH21(0)
S2Y09	PS017FM30
S2Y09	PS117FM30
S2Y10	PS009EB25
S2Y10	PS109EB25
S2Y11	PS003DB13(X2)
S2Y11	PS103DB13(X2)
S2Y12	PS003DB16(10)
S2Y12	PS103DB16(10)
S2Y13	PS003DB16(1)
S2Y13	PS103DB16(1)
S2Y22	PS005DB21(2)
S2Y22	PS105DB21(2)
S2Y23	PS005DE21(6)
S2Y23	PS105DE21(6)
S2Y24	PS005DE21(5)
S2Y24	PS105DE21(5)
S2Y25	PS005DE21(4)
S2Y25	PS105DE21(4)

PIN	NET NO.
S2Y26	PS013CE30
S2Y26	PS113CE30
S2Y27	PS013CB30
S2Y27	PS113CB30
S2Y28	PS005EH21(0)
S2Y28	PS105EH21(0)
S2Y29	PR990CM20
S2Y29	PU140AB21
S2Y30	PS003DB13(0)
S2Y30	PS103DB13(0)
S2Y31	PS003DB13(X3)
S2Y31	PS103DB13(X3)
S2Y32	PS003DB16(7)
S2Y32	PS103DB16(7)
S2Y33	PS003DB16(8)
S2Y33	PS103DB16(8)
S2Z02	PS001AB31(PL)
S2Z02	PS001AJ31
S2Z02	PS101AB31(PL)
S2Z02	PS101AJ31
S2Z03	PS001AB31(9)
S2Z03	PS001AJ31
S2Z03	PS101AB31(9)
S2Z03	PS101AJ31
S2Z04	PS001AJ31
S2Z04	PS001GC30
S2Z04	PS101AB31(10)
S2Z04	PS101AJ31
S2Z05	PS001AB31(14)
S2Z05	PS001AJ31
S2Z05	PS101AB31(14)
S2Z05	PS101AJ31
S2Z06	PS001AB31(12)
S2Z06	PS001AJ31
S2Z06	PS101AB31(12)
S2Z06	PS101AJ31
S2Z07	PS003DB16(6)
S2Z07	PS103DB16(6)
S2Z08	PS003DB16(3)
S2Z08	PS103DB16(3)
S2Z09	PS001AB31(7)
S2Z09	PS001AJ31
S2Z09	PS101AB31(7)
S2Z09	PS101AJ31
S2Z10	PS001AB31(6)
S2Z10	PS001AJ31
S2Z10	PS101AB31(6)
S2Z10	PS101AJ31
S2Z11	PS001AB31(2)
S2Z11	PS001AJ31
S2Z11	PS101AB31(2)
S2Z11	PS101AJ31
S2Z12	PS001AB31(3)
S2Z12	PS001AJ31
S2Z12	PS101AB31(3)
S2Z12	PS101AJ31
S2Z13	PS003DB16(9)
S2Z13	PS103DB16(9)
S2Z22	PS003DB16(2)
S2Z22	PS103DB16(2)
S2Z23	PS001AB31(PH)
S2Z23	PS001AJ31
S2Z23	PS101AB31(PH)
S2Z23	PS101AJ31
S2Z24	PS001AB31(15)
S2Z24	PS001AJ31
S2Z24	PS101AB31(15)
S2Z24	PS101AJ31
S2Z25	PS001AB31(11)
S2Z25	PS001AJ31
S2Z25	PS101AB31(11)
S2Z25	PS101AJ31
S2Z26	PS001AB31(13)
S2Z26	PS001AJ31
S2Z26	PS101AB31(13)
S2Z26	PS101AJ31
S2Z27	PS003DB16(5)
S2Z27	PS103DB16(5)
S2Z28	PS001AB31(8)
S2Z28	PS001AJ31
S2Z28	PS101AB31(8)
S2Z28	PS101AJ31
S2Z29	PS001AJ31
S2Z29	PS001GC30
S2Z29	PS101AB31(C)
S2Z29	PS101AJ31
S2Z30	PS001AB31(1)
S2Z30	PS001AJ31
S2Z30	PS101AB31(1)
S2Z30	PS101AJ31
S2Z31	PS001AB31(5)
S2Z31	PS001AJ31
S2Z31	PS101AB31(5)
S2Z31	PS101AJ31
S2Z32	PS001AB31(4)
S2Z32	PS001AJ31
S2Z32	PS101AB31(4)
S2Z32	PS101AJ31
S2Z33	PS003DB16(8)
S2Z33	PS103DB16(8)
S6A04	FA088AA21
T1A11	CH005AA30
T1B11	CH002AE05
T1B13	CH005AC30
T1C11	CH003AB03
T1C13	CH005AD30
T1D11	CH006AG30
T1D13	CH006AF30
T1E11	CH006AH30
T1E13	CH002AG01
T2B02	CH002AE01
T2B03	CH001AD03
T2B04	CH007AC30
T2B04	PT011AM20
T2B05	CH001AD05
T2B06	CH002AF05
T2B07	CH001AC01
T2B07	PR011AA40(P)
T2B07	PT011AA40(P)
T2B08	CH001AA01
T2B08	PR011AA40(0)
T2B08	PT011AA40(0)
T2B09	CH001AB01
T2B09	PR011AA40(4)
T2B09	PT011AA40(4)
T2B10	CH002AE03
T2B11	PR003BC09
T2B11	PT003BC09
T2B12	CH001AA03
T2B12	PR011AA40(1)
T2B12	PT011AA40(1)
T2B13	CH001AB07
T2B13	PR011AA40(7)
T2B13	PT011AA40(7)
T2D02	CH001AD01
T2D04	CH008AJ30
T2D04	PT011AD20
T2D05	CH007AB30
T2D05	PT011AM30
T2D06	CH001AA07
T2D06	PR011AA40(3)
T2D06	PT011AA40(3)
T2D07	CH002AF01
T2D09	CH002AE05
T2D10	CH001AB05
T2D10	PR011AA40(6)
T2D10	PT011AA40(6)
T2D11	CH001AA05
T2D11	PR011AA40(2)
T2D11	PT011AA40(2)
T2D12	CH001AB03
T2D12	PR011AA40(5)
T2D12	PT011AA40(5)
T2D13	CH008AH30
T2D13	PU020AC30
T2G02	PT023AH21(0)
T2G03	PT023AH21(2)
T2G04	PT023AH21(3)
T2G05	PT023AH21(5)
T2G06	PR009BA05
T2G06	PT009BA05
T2G07	CH002AH03
T2G08	PR003BC07
T2G08	PR101AL30
T2G08	PT003BC07
T2G09	PR009BA01
T2G09	PU070AH30
T2G10	PR003BC03
T2G10	PT003BC03
T2G12	PR003BD09
T2G12	PR101AA30
T2G12	PT003BD09
T2G13	PR003ABA1
T2G13	PR043AC20
T2G13	PT043AA31
T2G13	PT043AA32
T2J02	PT023AH21(1)
T2J04	PT023AH21(4)
T2J05	PT023AH21(6)
T2J06	PT023AH21(7)

PIN	NET NO.
T2J07	PS009EB24
T2J07	PS109EB24
T2J09	CH011AD30
T2J09	PT023AF50
T2J10	PR003BD01
T2J10	PR101AY30
T2J10	PT003BD01
T2J11	PR003BB01
T2J11	PR011AH20
T2J11	PR101AJ30
T2J11	PT003BB01
T2J11	PT011AH20
T2J12	CH002AG07
T2J13	PR003ADA9
T2J13	PR047AP30
T2J13	PU020AC30
T2M02	PR003ABA7
T2M02	PR065AJ61
T2M02	PT065AJ61
T2M03	PR003BB09
T2M03	PT003BB09
T2M04	PR003BC01
T2M04	PT003BC01
T2M05	PR121AB21(2)
T2M06	PS011CL30
T2M06	PS111CL30
T2M07	PR121AB21(3)
T2M07	PT003BH03
T2M08	PR121AB21(5)
T2M08	PT003BH05
T2M09	PR121AB21(6)
T2M09	PT003BH01
T2M10	PR003ADA7
T2M10	PR121AC30
T2M10	PU150AD30
T2M11	PT201AD30
T2M11	PT201BG30
T2M12	PR201BB30
T2M12	PS109EB22
T2M13	PR003AAA3
T2M13	PR041AB51
T2M13	PT041AF51
T2P02	PR003ABA9
T2P02	PR043AF30
T2P02	PT163AL30
T2P04	PR003BA05
T2P04	PT003BA05
T2P05	PR121AB21(1)
T2P05	PU080AB21(6)
T2P06	PR003ACA1
T2P06	PR121AB21(0)
T2P06	PU080AB21(7)
T2P07	PR003ABA3
T2P07	PR065AJ51
T2P07	PR163AA30
T2P07	PT103AK30
T2P09	PR121AB21(4)
T2P09	PU080AB21(6)
T2P10	PR121AB21(7)
T2P10	PU080AB21(7)
T2P11	PR003BB03
T2P11	PT003BB03
T2P12	PR003BA09
T2P12	PR101AZ30
T2P12	PT003BA09
T2P12	PT101AB40
T2P13	PR003BD05
T2P13	PR101AE30
T2P13	PT003BD05
T2S02	PR003AAA1
T2S02	PR041AB41
T2S02	PT041AF41
T2S03	PR003AAA5
T2S03	PR003BB03
T2S03	PR041AB21
T2S03	PT003BB03
T2S03	PT041AF21
T2S04	PR003BD07
T2S04	PR101AC30
T2S04	PT003BD07
T2S05	PR003ABA5
T2S05	PR043AE50
T2S05	PT043AC30
T2S06	PS011CN30
T2S06	PS111CN30
T2S07	PR003BE01
T2S07	PR101AW30
T2S07	PT003BE01
T2S08	PR003BB05
T2S08	PT003BB05

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5 NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E.CH005AC30),
0 THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN
LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES,
THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A
BUNDLE NET

BOARD A-A2
P/N 423 6404

P/N 826 4452

P/N —— ——

P/N —— ——

PIN LIST

LOC=1A-A2

PN 4237972 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135742/ DATE= 79199

A
D
2
5
0

PIN	NET NO.
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T2S09	PR101AR30
T2S09	PT003BA07
T2S10	PR003BB07
T2S10	PR102AB41
T2S10	PT003BB07
T2S12	PR003BA01
T2S12	PR101AG30
T2S12	PT003BA01
T2S13	PR003BA03
T2S13	PR101AN30
T2S13	PT003BA03
T2U02	PR003AAA7
T2U02	PR041AB31
T2U02	PT041AF31
T2U04	PR003BD03
T2U04	PR102AB21
T2U04	PT003BD03
T2U05	PR003BE03
T2U05	PT003BE03
T2U06	PR003BC05
T2U06	PR102AB31
T2U06	PT003BC05
T2U07	PR003AEA1
T2U07	PR111AJ30
T2U07	PT111AJ30
T2U09	PR003AEA7
T2U09	PR111AM30
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T2U10	PT111AK30
T2U11	PR003AEA9
T2U11	PR111AN30
T2U11	PT111AN30
T2U12	PR003AEA5
T2U12	PR111AL30
T2U12	PT111AL30
T2U13	PR003AAA9
T2U13	PR103AC30
T2U13	PT103AL30
T2W02	PS015CF30
T2W02	PS115CF30
T2W03	PS009EB21
T2W03	PS109EB21
T2W04	PS009EB23
T2W04	PS109EB23
T2W05	PS013CK50
T2W05	PS113CK50
T2W06	PS005GG21
T2W06	PS105GG21
T2W08	PS009AK50
T2W08	PS109AK50
T2W10	PR163AD21
T2W10	PT103AH21
T2W11	PR163AD31
T2W11	PT103AH31
T2W12	PS001FB23(6)
T2W12	PS101FB23(6)
T2W13	PS001FB23(4)
T2W13	PS101FB23(4)
T2W22	PR009BA03
T2W22	PU020AE50
T2W23	PS005GG23
T2W23	PS105GG23
T2W24	PS005GG22
T2W24	PS105GG22
T2W25	PS017CB30
T2W25	PS117CB30
T2W25	PT201AA30
T2W26	PS017CF30
T2W26	PS117CF30
T2W27	PR021AG31
T2W27	PT021AG31
T2W28	PR031AB31
T2W28	PT031AB31
T2W29	PR031AD30
T2W29	PT031AD30
T2W30	PR031AB71
T2W30	PT031BD30
T2W31	PS001FB23(5)
T2W31	PS101FB23(5)
T2W33	PS001FB23(7)
T2W33	PS101FB23(7)
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T2X02	PT031AP20
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T2X03	PR830CZ21(3)
T2X03	PT830CJ30
T2X03	PT830CZ21(3)
T2X04	CH005AB30
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T2X04	PR830CZ21(1)
T2X04	PT830CD30
T2X04	PT830CZ21(1)
T2X05	CH006AH30
T2X05	PR830CV30
T2X05	PR830CZ21(7)
T2X05	PT830CV30
T2X05	PT830CZ21(7)
T2X06	CH006AF30
T2X06	PR830CP30
T2X06	PR830CZ21(5)
T2X06	PT830CP30
T2X06	PT830CZ21(5)
T2X08	PS001FB19(1)
T2X08	PS101FB19(1)
T2X09	PS001FB19(3)
T2X09	PS101FB19(3)
T2X10	PS005FE31(2)
T2X10	PS105FE31(2)
T2X11	PS005FE31(0)
T2X11	PS105FE31(0)
T2X12	PS005FE31(4)
T2X12	PS105FE31(4)
T2X13	PS005FE31(7)
T2X13	PS105FE31(7)
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T2X22	PR830CM30
T2X22	PR830CZ21(4)
T2X22	PT830CM30
T2X22	PT830CZ21(4)
T2X23	PR830CY30
T2X23	PR830CZ21(P)
T2X23	PT830CY30
T2X23	PT830CZ21(P)
T2X24	CH006AG30
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T2X24	PR830CZ21(6)
T2X24	PT830CS30
T2X24	PT830CZ21(6)
T2X25	CH005AC30
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T2X25	PT830CG30
T2X25	PT830CZ21(4)
T2X26	CH005AA30
T2X26	PR830CA30
T2X26	PR830CZ21(0)
T2X26	PT830CA30
T2X26	PT830CZ21(0)
T2X27	PS001FB19(2)
T2X27	PS101FB19(2)
T2X28	PS001FB19(0)
T2X28	PS101FB19(0)
T2X29	PS005FE31(1)
T2X29	PS105FE31(1)
T2X30	PS005FC30(P)
T2X30	PS005FE31(P)
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T2X33	PS005FE31(6)
T2X33	PS105FE31(6)
T2Y02	PS005FE31(7)
T2Y02	PU080AC81
T2Y03	PS005FE31(3)
T2Y03	PU080AC91
T2Y04	PS005FE31(1)
T2Y05	PS005FE31(0)
T2Y05	PT009BA01
T2Y06	PS013CG30
T2Y07	PS005FE31(P)
T2Y08	PS003FB00
T2Y10	PS009EB25
T2Y10	PS109EB25
T2Y11	PS003DB13(X2)
T2Y12	PS003DB16(10)
T2Y13	PS003DB16(1)
T2Y22	PS005FE31(2)
T2Y23	PS005FE31(6)
T2Y23	PT167AC50
T2Y24	PS005FE31(5)
T2Y24	PT167AF50
T2Y25	PS005FE31(4)
T2Y25	PT167AJ50
T2Y26	PS013CE30
T2Y27	PS013CB30
T2Y28	PU030AL30
T2Y29	PR990CM20
T2Y30	PS003DB13(0)
T2Y31	PS003DB13(X3)
T2Y32	PS003DB16(7)
T2Y33	PS003DB16(8)
T2Z02	PS001AB31(PL)
T2Z02	PT161AL30
T2Z03	PS001AB31(9)
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T2Z04	PS001GC30
T2Z04	PT167AM30
T2Z05	PS001AB31(14)
T2Z05	PT165AL30
T2Z06	PS001AB31(12)
T2Z07	PS003DB16
T2Z08	PS003DB16
T2Z09	PS001AB31(7)
T2Z09	PT011AQ30
T2Z10	PS001AB31(6)
T2Z11	PS001AB31(2)
T2Z12	PS001AB31(3)
T2Z13	PS003DB16(9)
T2Z22	PS003DB16(2)
T2Z23	PS001AB31(PH)
T2Z24	PS001AB31(15)
T2Z24	PU100AK41(1)
T2Z25	PS001AB31(11)
T2Z25	PU100AK41(2)
T2Z26	PS001AB31(13)
T2Z27	PS003DB16(5)
T2Z28	PS001AB31(8)
T2Z28	PT025AF30
T2Z29	PS001GC30
T2Z30	PS001AB31(1)
T2Z31	PS001AB31(5)
T2Z32	PS001AB31(4)
T2Z33	PS003DB16(8)
T6A04	DL510BA11
T6B04	DL510BA21
T6C04	DL510BA31
T6D04	DL510BA41
U1A11	CH006AJ30
U1A13	CH008AG30
U1B13	CH008AE30
U1C11	CH003AB05
U1C13	CH007AD30
U1D11	CH008AF30
U1D13	CH002AH01
U1E11	CH003AC01
U1E13	CH002AH03
U2B02	CH001AD01
U2B03	CH001AD03
U2B04	CH007AC30
U2B05	CH001AD05
U2B06	CH002AF05
U2B06	CH003AB01
U2B07	CH001AC01
U2B08	CH001AA01
U2B09	CH001AB01
U2B10	CH002AE03
U2B11	CH009AC30
U2B12	CH001AA03
U2B13	CH001AB07
U2D02	CH002AE01
U2D04	CH011AD30
U2D05	CH007AB30
U2D06	CH001AA07
U2D07	CH001AB05
U2D09	CH001AA05
U2D10	CH001AB03
U2D11	CH008AH30
U2D11	PU010AK40
U2D12	CH005AB30
U2D13	CH006AE30
U2G12	CH002AH05
U2G13	CH003AF03
U2J02	CH002AE05
U2J12	PU070AH30
U2J13	PT003BA05
U2M03	PU020AC30
U2M04	PU150AB21(0)
U2M05	PU150AB21(1)
U2M06	PU150AB21(2)
U2M07	PU150AB21(3)
U2M08	PU150AB21(4)
U2M09	PU150AB21(5)
U2M10	PU150AB21(6)
U2M12	PU150AB21(7)
U2M13	PU150AD30
U2P02	PU080AB21(4)
U2P04	PU080AB21(5)
U2P06	PU080AB21(6)
U2P07	PU080AB21(7)
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U2P10	PT111AK30
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U2P11	PT111AN30
U2P12	PT111AL30
U2P13	CH002AE03
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U2S02	PS109EB22
U2S03	PU140AG41(1)
U2S04	PU140AG41(9)
U2S06	PS109EB24
U2S07	PU140AG41(7)
U2S08	PU140AG41(6)
U2S09	PU140AG41(3)
U2S10	PU140AG41(PL)
U2S12	PU140AG41(11)
U2S13	PU140AG41(4)
U2U02	PS109EB26
U2U04	PU140AG41(10)
U2U05	PU140AG41(13)
U2U06	PU140AG41(12)
U2U07	PU140AG41(PH)
U2U09	PU140AG41(15)
U2U10	PU140AG41(2)
U2U11	PU140AG41(14)
U2U12	PU140AG41(8)
U2U13	PU140AG41(5)
U2W03	PS109EB21
U2W04	PS109EB23
U2W12	PS101FB23(6)
U2W13	PS101FB23(4)
U2W22	PU020AE50
U2W25	PS117CB30
U2W31	PS101FB23(5)
U2W33	PS101FB23(7)
U2X08	PS101FB19(1)
U2X09	PS101FB19(3)
U2X10	PS105FE31(2)
U2X11	PS105FE31(0)
U2X12	PS105FE31(4)
U2X13	PS105FE31(7)
U2X13	PU060ABJ0
U2X27	PS101FB19(2)
U2X29	PS105FE31(1)
U2X30	PS105FE31(P)
U2X31	PS105FE31(5)
U2X32	PS105FE31(3)
U2X33	PS101FB23(6)
U2X33	PS105FE31(6)
U2Y02	PU080AC81
U2Y03	PU080AC91
U2Y04	PU010AH41
U2Y05	PU040AD30
U2Y06	PS113CG30
U2Y08	PS103FB00
U2Y10	PS109EB25
U2Y11	PS103DB13(X2)
U2Y12	PS103DB16(10)
U2Y13	PS103DB16(1)
U2Y22	PS103DB16(2)
U2Y23	PT167AC50
U2Y24	PT167AF50
U2Y25	PT167AJ50
U2Y26	PS113CE30
U2Y27	PS113CB30
U2Y27	PU130AD21(0)
U2Y28	PU030AL30
U2Y29	PU140AB21
U2Y30	PS103DB13(0)
U2Y31	PS103DB13(X3)
U2Y32	PS103DB16(7)
U2Y33	PS103DB16(4)
U2Z02	PT161AL30
U2Z03	PT163AJ30
U2Z04	PT167AM30
U2Z05	PT165AL30
U2Z07	PS103DB16(6)
U2Z08	PS103DB16(3)
U2Z13	PS103DB16(9)
U2Z22	PS103DB16(2)
U2Z23	PU100AK41(0)
U2Z24	PU100AK41(1)
U2Z25	PU100AK41(2)
U2Z27	PS103DB16(5)
U2Z33	PS103DB16(4)
U3B02	CH005AA30
U3B03	CH005AC30
U3B04	CH005AD30
U3B05	CH006AF30
U3B06	CH002AG01
U3B07	CH008AG30
U3B08	CH008AE30
U3B09	CH007AD30
U3B10	CH002AH01
U3B11	CH002AH03
U3B12	CH002AH05
U3B13	CH002AG03
U3D02	CH002AE05
U3D04	CH003AB03
U3D05	CH006AG30
U3D06	CH006AH30
U3D07	CH006AJ30
U3D09	CH003AB05
U3D10	CH008AF30
U3D11	CH003AC01
U3D12	CH002AG05
U3D13	CH002AG07
U6A04	DX010AA90
U6A04	DX020AA50
U6A04	FX010AA90
U6A04	FX020AA50
U6B04	DX020BB30
U6B04	FX020BB30
U6C02	DX020AB30
U6C02	FX020AB30
U6C04	DX020CA72
U6C04	FX020CA72
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V1A13	CH002AH05
V1B11	CH002AG07
V1B13	CH002AG03
V2B02	WS501AA60
V2B04	WS501AB60
V2B05	WS501AC60
V2B07	WS501AD60
V2D02	WS501AA30
V2D04	WS501AB30
V2D05	WS501AC30
V2D07	WS501AD30
V3B02	CH003AF03
V3B02	PU070AH30
V3B03	PT003BH03
V3B05	PR003BA01
V3B06	PR003BA03
V3B08	PR003BA05
V3B08	PT003BA05
V3B11	PT003BA07
V3B12	PR003BA09
V3B12	PT003BA09
V3D05	PT003BH05
V3D07	PR003BB01
V3D07	PT003BB01
V3D09	PR003AAA1
V3D09	PT041AF41
V3D10	PR003BB03
V3D10	PT003BB03
V3D11	PR003AAA3
V3D11	PT041AF51
V3D12	PR003AAA7
V3D12	PT041AF31
V3D13	PR003AAA5
V3D13	PT041AF21
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V4B04	PR003BB09
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V4B06	PR003BC01
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V4B11	PR003BC09
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V4D04	PR003AAA9
V4D04	PT103AL30
V4D06	PR003ABA1
V4D06	PT043AA32
V4D07	PR003ABA3
V4D07	PT103AK30
V4D09	PR003ABA5
V4D09	PT043AC30
V4D10	PT003BH01
V4D11	PR003BD03
V4D11	PT003BD03
V4D12	PR003ABA7
V4D12	PT065AJ61
V4D13	PR003BD05
V4D13	PT003BD05
V5B02	PR003ACA1
V5B02	PU150AB21(0)
V5B03	PR121AB21(1)
V5B03	PU150AB21(1)
V5B04	PR121AB21(2)
V5B04	PU150AB21(2)
V5B05	PR121AB21(3)
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V5B08	PR121AB21(6)
V5B08	PU150AB21(6)
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V5B09	PU150AB21(7)
V5B10	PR003ADA7
V5B10	PU150AD30
V5B12	PR003BD07
V5B12	PT003BD07
V5B13	PR003BE03
V5B13	PT003BE03
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V5D06	PR003ADA9
V5D06	PU020AC30
V5D07	PR003ABA9
V5D07	PT163AL30
V5D09	PR003AEA1
V5D09	PT111AJ30
V5D10	PR003AEA3
V5D10	PT111AK30
V5D11	PR003AEA5
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V5D12	PR003AEA7
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V3D05	PT003BH05
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Z6B03	FL550AE21
Z6B04	FL810AC25
Z6B04	FL550AE31
Z6B04	FL810AA70
Z6B04	FL810AC30
Z6B05	FL550AE41
Z6B05	FL810AA75
Z6B05	FL810AC35
Z6B06	FL550AC21
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Z6B07	FL810AA50
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Z6B10	FL810AC80
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Z6B13	FL810BA50
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Z6D03	FL810AA25
Z6D04	FL330BB30
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Z6D05	FL330BA30
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Z6D07	FL550AC91
Z6D07	FL810AC50
Z6D07	FL810BB60
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Z6D08	FL810BB20
Z6D08	FL810BD21
Z6D09	FL810BB40
Z6D09	FL810BD41
Z6D09	FL810BE40
Z6D09	FX120AB30
Z6D10	FL810AA80
Z6D11	FL810BA20
Z6D12	FL540AB30
Z6D12	FL810AA40
Z6D12	FL810AC65
Z6D13	FL810BB50
Z6D13	FL810BD51
Z6D13	FL810BE50
Z6G02	FL810AA60
Z6G02	FL810AB20
Z6G02	FL810AD20
Z6G03	FL810AB25
Z6G03	FL810AD25
Z6G04	FL810AA70
Z6G04	FL810AB30
Z6G04	FL810AD30
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Z6G07	FL810AA50
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Z6G09	FL810BA40
Z6G09	FX142CA30
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Z6G12	FL810AD40
Z6G13	FL810BA50
Z6G13	FX110BA30
Z6G13	FX142AD30
Z6J02	FL810AA20
Z6J02	FL810AB60
Z6J02	FL810AD60
Z6J03	FL810AA25
Z6J04	FL810AA30
Z6J04	FL810AB70
Z6J04	FL810AD70
Z6J05	FL810AA35
Z6J05	FL810AB75
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Z6J06	FL810AD45
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Z6J09	FX271AC30
Z6J10	FL810AA80
Z6J11	FL810BA20
Z6J12	FL810AA40
Z6J12	FL810AB65
Z6J12	FL810AD65
Z6J13	FL810BA70
Z6J13	FL810BC30
Z6J13	FX271BB30

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THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

BOARD A-A2 P/N 423 6404 P/N 826 4452 P/N ——— P/N ———

PIN LIST

LOC=1A-A2

PN 4237972 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135742/ DATE= 79199

NET NO.	PIN	PIN
CH001AA01	A2B08*	E2B08*
	F2B08*	G2B10*
	R2B08	U2B08*
CH001AA03	A2B12*	E2B12*
	F2B12*	G2B09*
	R2B12	U2B12*
CH001AA05	A2D09*	E2D11*
	F2D11*	G2B08*
	R2D11	U2D09*
CH001AA07	A2D06*	E2D06*
	F2D06*	G2B07*
	R2D06	U2D06*
CH001AB01	A2B09*	E2B09*
	F2B09*	G2B05*
	R2B09	U2B09*
CH001AB03	A2D10*	E2D12*
	F2D12*	G2B04*
	R2D12	U2D10*
CH001AB05	A2D07*	E2D10*
	F2D10*	G2B03*
	R2D10	U2D07*
CH001AB07	A2B13*	E2B13*
	F2B13*	G2B02*
	R2B13	U2B13*
CH001AC01	A2B07*	F2B07*
	R2B07	U2B07*
CH001AD01	A2B02*	E2D02*
	R2D02	U2B02*
CH001AD03	A2B03*	E2B03*
	R2B03	U2B03*
CH001AD05	A2B05*	E2B05*
	R2B05	U2B05*
CH002AE01	A2D02*	E2B02*
	R2B02	U2D02*
CH002AE03	A2B10*	E2B10*
	R2B10	U2B10*
CH002AE05	A3D02*	E2D09*
	R2D09	U3D02
CH002AF01	E1D11*	E2D07*
	R2D07	V4D06*
CH002AF05	E2P11*	F1D13*
	T2J07	V4B11*
CH002AF07	E1B13*	E2P06*
	V4B04*	
CH002AG01	A3B06*	U3B06
CH002AG03	A3B13*	U3B13
CH002AG05	A3D12*	U3D12
CH002AG07	A3D13*	U3D13
CH002AH01	A3B10*	U3B10*
CH002AH03	A3B11*	U3B11
CH002AH05	A3B12*	E2M05*
	R2P12	U3B12
CH002AH07	F1C13*	V4B10*
CH003AA03	F1A13*	V4B08*
CH003AB01	A2B06*	F2S12*
	U2B06*	
CH003AB03	A3D04*	F2S03*
	U3D04	
CH003AB05	A3D09*	F2J11*
	U3D09	
CH003AC01	A3D11*	U3D11
CH003AC03	F1C11*	V4D10*
CH003AD01	F1E13*	V4B12*
CH003AE01	F1B13*	F2U13*
	V4B09*	
CH003AF01	F1D11*	F6D02*
CH005AA30	A3B02*	E2G02*
	F2G02*	R2G02
	U3B02*	
CH005AB30	A2D12*	E2J02*
	F2J02*	R2J02
	U2D12*	
CH005AC30	A3B03*	E2G03*
	F2G03*	R2G03
	U3B03*	
CH005AD30	A3B04*	E2G04*
	F2G04*	R2G04
	U3B04*	
CH006AE30	A2D13*	E2J04*
	F2J04*	G2G07*
	R2J04	U2D13*
CH006AF30	A3B05*	E2G05*
	F2G05*	G2G08*
	R2G05	U3B05*
CH006AG30	A3D05*	E2J05*
	F2J05*	G2G09*
	R2J05	U3D05*
CH006AH30	A3D06*	E2J06*
	F2J06*	G2G10*
	R2J06	U3D06*

NET NO.	PIN	PIN
CH006AJ30	A3D07*	F2J07*
	R2J07	U3D07*
CH007AA30	G1A11*	V4D13*
CH007AB30	A2D05*	E2D05*
	R2D05	U2D05*
CH007AC30	A2B04*	E2B04*
	R2B04	U2B04*
CH007AD30	A3B09*	F2G09*
	U3B09*	
CH008AE30	A3B08*	F2G08*
	U3B08*	
CH008AF30	A3D10*	U3D10*
CH008AG30	A3B07*	F2G07*
	U3B07*	
CH008AH30	A2D11*	E2D13*
	F2D13*	R2D13
	U2D11*	
CH008AJ30	D1E11*	E2D04*
	R2D04	V4D02*
CH009AA30	E1E13*	V4B07*
CH009AB30	E1A13*	F2S04*
	V4B03*	
CH009AC30	A2B11*	F2J09*
	U2B11*	
CH011AA30	E1C13*	E2J09*
	V4B05*	
CH011AC30	E1B11*	V4D04*
CH011AD30	A2D04*	E2J13*
	G2D07*	R2M09
	U2D04*	
GF400AA48	E2G10*	
GF400AA49	E2U09*	
MR001BC11	R10	T2P12
	V5B03*	
MR001BC12	B02	B03
	B04	B05
	B06	B07
	B08	B09
	B10	B11
	C11	K05
	K06	K07
	K08	K09
	K10	K11
	K12	K13
	S02	S03
	X04	X06
	X07	
MR001BC13	D03	T2S13
	U5B12*	
MR001BC15	R02	T2U09
	V5B13*	
MR001BC17	R03	T2S09
	V5B12*	
MR001BC19	D02	T2U13
	U5B13*	
MR001BC22	J07	T2U11
	U5D10*	
MR001BC24	J06	T2S12
	U5D11*	
MR001BC26	J04	T2U12
	U5D12*	
MR001BC28	R09	T2P13
	V5B04*	
MR001BC31	R04	T2S08
	V5B10*	
MR001BC33	R05	T2S06
	V5B09*	
MR001BC35	R06	T2U04
	V5B08*	
MR001BC37	R07	T2S04
	V5B07*	
MR001BC39	R08	T2S02
	V5B05*	
MR001BC42	R11	T2M12
	V5B02*	
MR001BC44	A11	T2S11
	V5D13*	
MR001BC46	H12	T2J12
	U4D04*	
MR001BC48	H11	T2J13
	U4D05*	
MR001BC51	H10	T2M04
	U4D06*	
MR001BC53	H09	T2M06
	U4D07*	
MR001BC55	H08	T2P06
	U4D09*	
MR001BC57	H07	T2M07
	U4D10*	
MR001BC59	H06	T2P07

NET NO.	PIN	PIN
MR001BC59	U4D11*	
MR001BC62	H05	T2M11
	U4D12*	
MR001BC64	H13	T2G12
	U4D02*	
MR002EC11	R2U12	T2U02
MR002EC13	R2U09	T2U06
MR002EC15	R2U07	T2P09
MR002EC17	R2U11	T2S05
MR002EC19	R2U10	T2S10
MR002EC21	R2U05	T2S03
MR002EC23	R2S03	T2U10
MR002EC25	R2U06	T2P11
MR002EC27	R2U13	T2U05
MR002EC29	R2S12	T2U07
MR002EC31	R2S13	T2M10
MR002EC33	R2S10	T2M08
MR002EC35	R2S05	T2P04
MR002EC37	R2S07	T2P10
MR002EC39	R2S08	T2M02
MR002EC41	R2S09	T2S07
MR002EC43	R2M13	T2P02
MR002EC45	R2M12	T2J10
MR002EC47	R2M08	T2M03
MR002EC49	R2M07	T2G10
MR002EC51	R2M05	T2P05
MR002EC53	R2M04	T2M09
MR002EC55	R2M03	T2J11
MR002EC57	R2M02	T2M05
MR002EC59	R2S04	T2G11
MR005DCJ0	T2D12	
MR005DCZ1	T2G06	
MR005DC11	D11	T2D05
	U5B02*	
MR005DC13	E08	T2D06
	U5B07*	
MR005DC15	D04	T2D04
	U5B10*	
MR005DC17	J08	T2D02
	U5D09*	
MR005DC19	H04	T2D07
	U4D13*	
MR005DC21	T04	T2D09
	V5D11*	
MR005DC23	D07	T2D10
	U5B08*	
MR005DC25	D09	T2D11
	U5B04*	
MR005DC27	J13	T2B02
	U5D02*	
MR005DC29	J12	T2B03
	U5D04*	
MR005DC31	J11	T2B04
	U5D05*	
MR005DC33	J10	T2B05
	U5D06*	
MR005DC35	J09	T2B06
	U5D07*	
MR005DC37	T13	T2B07
	V5D02*	
MR005DC39	T12	T2B08
	V5D04*	
MR005DC41	T11	T2B09
	V5D05*	
MR005DC43	T10	T2B10
	V5D06*	
MR005DC45	T09	T2B11
	V5D07*	
MR005DC47	T06	T2B12
	V5D10*	
MR005DC49	T08	T2B13
	V5D09*	
MR006FC11	D11	
MR006FC12	S11	
MR006FC13	E08	
MR006FC14	F08	
MR006FC15	D04	
MR006FC16	S04	
MR006FC17	J08	
MR006FC18	X08	
MR006FC19	H04	
MR006FC21	K04	
MR006FC22	T04	
MR006FC23	G04	
MR006FC24	D07	
MR006FC25	S07	
MR006FC26	D09	
MR006FC27	S09	
MR006FC28	J13	
MR006FC29	X13	

NET NO.	PIN	PIN
MR006FC31	J12	
MR006FC32	X12	
MR006FC33	J11	
MR006FC34	X11	
MR006FC35	J10	
MR006FC36	X10	
MR006FC37	J09	
MR006FC38	X09	
MR006FC39	T13	
MR006FC41	G13	
MR006FC42	T12	
MR006FC43	G12	
MR006FC44	T11	
MR006FC45	G11	
MR006FC46	T10	
MR006FC47	G10	
MR006FC48	T09	
MR006FC49	G09	
MR006FC51	T06	
MR006FC52	G06	
MR006FC53	T08	
MR006FC54	G08	
MR006FC55	E09	
MR006FC56	F09	
MR101AJ31	S2S03	S2S04
	S2S05	S2S07
	S2S08	S2S09
	S2S10	S2S12
	S2S13	S2U04
	S2U05	S2U06
	S2U07	S2U09
	S2U10	S2U11
	S2U12	S2U13
MR101AJ31(.6)	S2S06	
MR101CB31(2)	S2S05	S2U10
MR101CB31(3)	S2S03	S2S09
MR101CB35(4)	S2S13	
MR101CB35(5)	S2U13	
MR101CB35(6)	S2S08	
MR101CB35(7)	S2S07	
MR101CB39	S2U07	
MR101CB41	S2U12	
MR101CB41(10)	S2U04	
MR101CB41(11)	S2S12	
MR101CB41(8)	S2U12	
MR101CB41(9)	S2S04	
MR101CB45(12)	S2U06	
MR101CB45(13)	S2U05	
MR101CB45(14)	S2U11	
MR101CB45(15)	S2U09	
MR101CB49	S2S10	
MR101EB19	S2X08	S2X09
	S2X27	S2X28
MR101FB11	S2B12	
MR101FB12	S2G10	
MR101FB13	S2J09	
MR101FB19(0)	S2X28	
MR101FB19(1)	S2X08	
MR101FB19(2)	S2X27	
MR101FB19(3)	R2X09	S2X09
MR101FB23(4)	R2W13	S2W13
MR101FB23(5)	R2W31	S2W31
MR101FB23(6)	R2W12	S2W12
MR101FB23(7)	R2W33	S2W33
MR101GC30	R2Z25	R2Z29
	S2Z25	S2Z29
MR103DB13	R2Y11	S2Y11
MR103DB13(X3)	S2Y31	
MR103DB13(0)	R2Y30	S2Y30
MR103DB13(3)	R2Y31	
MR103DB16	R2Y12	R2Y13
	S2Y12	S2Y13
MR103DB16(2)	R2Z22	S2Z22
MR103DB16(3)	R2Z08	S2Z08
MR103DB16(4)	S2Y33	
MR103DB16(5)	R2Z27	S2Z27
MR103DB16(6)	R2Z07	S2Z07
MR103DB16(7)	R2Y32	S2Y32
MR103DB16(8)	R2Y33	R2Z33
	S2Z33	
MR103DB16(9)	R2Z13	S2Z13
MR103DB30	S2P02	
MR103FB00	R2Y08	S2M08
	S2Y08	
MR103FB10	S2M10	
MR103FB20	S2P11	
MR103FB30	S2M12	
MR105AB31(0)	S2J07	
MR105AB31(1)	S2P09	
MR105AB31(2)	S2P10	

NET NO.	PIN	PIN
MR105AB31(3)	S2G07	
MR105DB21(0)	R2Y05	S2Y05
MR105DB21(1)	R2Y04	S2Y04
MR105DB21(2)	R2Y22	S2Y22
MR105DB21(3)	R2Y03	S2Y03
MR105DE21(4)	R2Y25	S2Y25
MR105DE21(5)	R2Y24	S2Y24
MR105DE21(6)	R2Y23	S2Y23
MR105DE21(7)	R2Y02	S2Y02
MR105DJ30	R2W32	S2W32
MR105EH21(0)	S2Y28	
MR105EH21(1)	S2J10	
MR105EH21(2)	S2M04	
MR105EH21(3)	S2X07	
MR105FC30	R2Y07	S2Y07
MR105FE31(P)	R2X30	S2X30
MR105FE31(0)	R2X11	S2X11
MR105FE31(1)	R2X29	R2X32
	S2X29	
MR105FE31(2)	R2X10	S2X10
MR105FE31(3)	R2X32	S2X32
MR105FE31(4)	R2X12	S2X12
MR105FE31(5)	R2X31	S2X31
MR105FE31(6)	R2X33	S2X33
MR105FE31(7)	R2X13	S2X13
MR105GG21	R2W06	S2W06
MR105GG22	R2W24	S2W24
MR105GG23	R2W23	S2W23
MR107FH21(0)	S2M02	
MR107FH21(1)	S2G13	
MR107FH21(2)	S2J12	
MR107FH21(3)	S2G12	
MR109AK50	R2W08	S2W08
MR109BBD0	S2B04	
MR109BH30	S2W09	
MR109CCD0	S2D06	
MR109EB21	R2W03	S2W03
MR109EB22	S2G03	
MR109EB23	S2W04	
MR109EB24	S2G04	
MR109EB25	R2Y10	S2Y10
MR109EB26	S2J04	
MR109EB31	S2P05	S2P06
MR109GB30	S2D09	
MR111AM30	S2M07	
MR111CJ30	S2J06	
MR111CL30	S2B13	
MR111CN30	S2J05	
MR111CP31	S2M13	
MR111CP32	S2D02	
MR111CP33	S2B02	
MR111CW30	S2P07	
MR111CZ30	S2P12	
MR113AR30	R2P10	S2P13
MR113CBD0	S2G05	
MR113CB30	R2Y27	S2Y27
MR113CE30	R2Y26	S2Y26
MR113CG30	R2Y06	S2Y06
MR113CK50	S2W05	
MR113CM30	S2G09	
MR113CP30	S2B08	
MR115CF30	R2W02	S2W02
MR115CL30	S2B09	
MR115CW30	S2J11	
MR115CZ30	S2J13	
MR117AMC1	S2D12	
MR117AMC2	S2D13	
MR117AMC3	S2B03	
MR117AMC4	S2B05	
MR117AMC5	S2P04	
MR117AMC6	S2M09	
MR117CB30	R2W25	S2W25
MR117CF30	S2W26	
MR117CJ30	S2D07	
MR117FM30	S2Y09	
MR117FM50	S2W07	
MR117FP30	R2S02	S2D05
MR117FP50	R2U02	S2S02
MR117FT31	S2D10	
MR117FT32	S2B07	
MR117FT33	S2D04	
MR117FT34	S2D11	
MR117FT35	S2G08	
MR117FT36	S2M03	
MR117FT37	S2B10	
MR201BCD0	R2J09	
MR203DC30	R2G08	
MR205CU30	R2W27	S2W27
MR205FK60	R2W28	S2W28
MR205FS60	R2W29	S2W29

NET NO.	PIN	PIN
MR205FS60	S2W29	
MR205GJ30	R2W30	S2W30
MR207GB21	R2G07	
MR209DI20	R2X02	S2X02
MR209EB30	R2U04	
MR209FB30	R2P04	S2J02
MR209FC31	R2G09	
MR209FD30	R2J10	
MR211FQ30	R2W11	S2W11
MR211FS30	R2W10	S2W10
MR217FA21(P)	R2X23	S2X23
MR217FA21(0)	R2X26	S2X26
MR217FA21(1)	R2X04	S2X04
MR217FA21(2)	R2X25	S2X25
MR217FA21(3)	R2X03	S2X03
MR217FA21(4)	R2X22	S2X22
MR217FA21(5)	R2X06	S2X06
MR217FA21(6)	R2X24	S2X24
MR217FA21(7)	R2X05	S2X05
MR219DB40	R2G10	T2G03
MR219DF31	R2P13	T2G04
	T2G05	
MR219DF41	R2P11	T2D13
MR219DF51	R2P09	T2U02
MR219DF61	R2P02	T2G02
MR219DF71	R2G12	T2U04
MR219DK31	R2M10	T2G07
MR219DK41	R2P05	T2G08
MR219DK51	R2P06	T2G09
MR219DK61	R2P07	T2J09
MR221CM70	R2Y29	S2U02
	S2Y29	
MR221ED11	R2Z06	
MR221ED11(PH)	R2Z28	S2Z28
MR221ED11(PL)	R2Z02	S2Z02
MR221ED11(1)	R2Z30	S2Z30
MR221ED11(11)	S2Z06	
MR221ED11(12)	R2Z26	S2Z26
MR221ED11(13)	R2Z05	S2Z05
MR221ED11(14)	R2Z24	S2Z24
MR221ED11(15)	R2Z23	S2Z23
MR221ED11(2)	R2Z11	S2Z11
MR221ED11(3)	R2Z12	S2Z12
MR221ED11(4)	R2Z32	S2Z32
MR221ED11(5)	R2Z31	S2Z31
MR221ED11(6)	R2Z10	S2Z10
MR221ED11(7)	R2Z09	S2Z09
MR221ED11(8)	R2Z03	S2Z03
MR221ED11(9)	R2Z04	S2Z04
MR301AD31	S2S03	S2S04
	S2S05	S2S07
	S2S08	S2S09
	S2S10	S2S12
	S2U05	S2U06
	S2U07	S2U09
	S2U10	S2U11
	S2U12	S2U13
MR401AD31	S2S03	S2S04
	S2S05	S2S07
	S2S08	S2S09
	S2S10	S2S12
	S2S13	S2U04
	S2U05	S2U06
	S2U07	S2U09
	S2U10	S2U11
	S2U12	S2U13
PC554BV30	E1C11*	V4D05*
PC554GH30	E1D13*	V4B06*

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD A-A3
P/N 423 6402

NET LIST

LOC=1A-A3

PN 4237969 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135321 DATE= 79199

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PG01

PIN	NET NO.
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B02	MR001BC12
B03	MR001BC12
B04	MR001BC12
B05	MR001BC12
B06	MR001BC12
B07	MR001BC12
B08	MR001BC12
B09	MR001BC12
B10	MR001BC12
B11	MR001BC12
C11	MR001BC12
D02	MR001BC19
D03	MR001BC13
D04	MR005DC15
D04	MR006FC15
D07	MR005DC23
D07	MR006FC24
D09	MR005DC25
D09	MR006FC26
D11	MR005DC11
D11	MR006FC11
E08	MR005DC13
E08	MR006FC13
E09	MR006FC55
F08	MR006FC14
F09	MR006FC56
G04	MR006FC23
G06	MR006FC52
G08	MR006FC54
G09	MR006FC49
G10	MR006FC47
G11	MR006FC45
G12	MR006FC43
G13	MR006FC41
H04	MR005DC19
H04	MR006FC19
H05	MR001BC62
H06	MR001BC59
H07	MR001BC57
H08	MR001BC55
H09	MR001BC53
H10	MR001BC51
H11	MR001BC48
H12	MR001BC46
H13	MR001BC64
J04	MR001BC26
J06	MR001BC24
J07	MR001BC22
J08	MR005DC17
J08	MR006FC17
J09	MR005DC35
J09	MR006FC37
J10	MR005DC33
J10	MR006FC35
J11	MR005DC31
J11	MR006FC33
J12	MR005DC29
J12	MR006FC31
J13	MR005DC27
J13	MR006FC28
K04	MR006FC21
K05	MR001BC12
K06	MR001BC12
K07	MR001BC12
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K13	MR001BC12
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R06	MR001BC35
R07	MR001BC37
R08	MR001BC39
R09	MR001BC28
R10	MR001BC11
R11	MR001BC42
S02	MR001BC12
S03	MR001BC12
S04	MR006FC16
S07	MR006FC25
S09	MR006FC27
S11	MR006FC12
T04	MR005DC21
T04	MR006FC22
T06	MR005DC47
T06	MR006FC51
T08	MR005DC49
T08	MR006FC53
T09	MR005DC45
T09	MR006FC48
T10	MR005DC43
T10	MR006FC46
T11	MR005DC41
T11	MR006FC44
T12	MR005DC39
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T2B08	MR005DC39
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T2U04	MR002EC27

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD A-A3
P/N 423 6402

PIN LIST

LOC=1A-A3

PN 4237973 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135822 DATE= 79199

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PG01

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T2U10	MR002EC23
T2U11	MR001BC22
T2U12	MR001BC26
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U2B02	CH001AD01
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U2B05	CH001AD05
U2B06	CH003AB01
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V4B05	CH011AA30
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V4B08	CH003AA03
V4B09	CH003AE01
V4B10	CH002AH07
V4B11	CH002AF05
V4B12	CH003AD01
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V5D10	MR005DC47
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PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD A-A3
P/N 423 6402

PIN LIST

LOC=1A-A3

PN 4237973 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135822 DATE= 79199

NET NO.	PIN	PIN
FA088AB21	B13	
FA088AB31	B08	
FA088AB41	B10	
FA088AB51	D02	
FA088AB61	B02	
FA088AB71	B04	
FA088AB81	D04	
FA091AA20	D05	
FA091AB20	D07	
FA091AC20	B12	
FA091AD20	D13	
FA091AE20	B07	
FA091AF20	B05	
FA091AG20	B09	
FA701AB30	J4J02	
FA701AE30	J4D11	
FA701AF30	J4D13	
FA701AK30	J4J09	
FA701AL30	J4J11	Q2B02
FA701AM30	J4D06	
FA701AN30	J4B03	
FA701AQ30	J4B02	
FA701AR30	J4G13	Q2B05
FA701AS30	J4J13	Q2B03
FA701AT30	J4D05	M2B05
	S4D13	
FA701AUA0	J4J02	
FA701AU20	J4J02	
FA704AA20	G10	Q2G10
FA704AA30	J13	Q2J13
FA704AA50	Q2J06	
FA704AA60	Q2J07	
FA704AF21	B13	M2B13
	Q2D12	
FA704AF31	J02	M2J02
	Q2D11	
FA704AG20	Q2J05	
FA704AK30	K4B12	Q2G08
FA704AL30	H3B02	K3B02
	K4B08	Q2G09
FA704AM20	D12	M2D12
	Q2G12	
FA704AM40	D11	M2D11
	Q2J12	
FA704AP20	D13	D2B12
	L2D13	Q2D13
	T4D13	
FA707AA30	K4J09	
FA707AD30	K4J13	
FA707AE30	K4B13	P2G10
	R2J13	
FA707AH30	G2B09	K4B02
FA707AL30	K4G02	Q4J13
FA707AL40	K4G05	T2J07
FA707AM30	K4G13	Q4D06
FA707AN30	K4G07	M2G10
	N4J02	
FA707AP30	E2G07	K4D13
FA707AQ30	D09	E2D13
	K4D09	Q4B09
FA707AR40	G2B12	K4D02
FA707AR60	G2B10	K4D04
FA707AR80	G2B13	K4B05
FA707AS30	K4B09	K4J04
	Q2B08	
FA707AT30	G2G03	K4D12
FA707AW30	D11	K4D11
FA707AY20	K4J09	
FA710AA30	N4B12	
FA710AB30	N4B03	
FA710AC30	N4G09	
FA710AF30	D2M09	N4G02
FA710AG30	D2M10	N4B09
FA710AH30	N4D10	N4J10
FA710AJ30	B07	N4J06
FA710AL30	G2P09	N4D04
FA710AM30	G2M08	N4D06
FA710AN30	D06	N4G07
FA710AN70	E2J10	N4J04
FA710AN90	N4J07	
FA710AP21	N4G12	
FA710AP23	N4J12	
FA710AP25	N4G10	
FA710AP27	N4G03	
FA710AP29	N4G08	
FA710AP31	N4J13	
FA710AP33	N4G13	
FA710AP35	N4J11	
FA710AP37	N4G05	
FA710AP39	N4J05	

NET NO.	PIN	PIN
FA710AT30	N4G09	
FA713AA72	T2D07	
FA713AD20	T2G03	
FA713AE30	T2G03	
FA713AF30	T2J04	
FA713AG30	T2B12	
FA713AH21	B12	T2D06
FA713AH22	B09	T2B05
FA713AH23	D05	T2B08
FA713AH24	D07	T2D09
FA713AH25	B07	T2B13
FA713AKD2	T2G05	
FA713AKE2	T2J05	
FA713AKF2	T2G08	
FA713AK20	T2B09	
FA713AK31	K4J09	T2D13
FA713AK41	G09	T2G09
FA713AK51	Q4G07	T2G10
FA713AK61	E2J06	G2G13
	K4J05	T2J11
FA713AK71	G2U13	T2J02
FA713AP20	H3D07	K3D07
	Q4J09	T2B09
FA713AQ20	T2D02	
FA716AA10	D07	Q4J11
FA716AA31	Q4D09	T2D05
	T2D11	T2G13
	T2J12	
FA716AA41	K4G03	Q4D07
FA716AC30	G2G08	Q4J06
FA716AE30	D10	Q4D02
FA716AF20	D13	Q4D11
FA716AH30	Q4B12	Q4D05
FA716AJ30	D09	Q4J05
FA716AK30	K4J07	Q4J07
FA716AM30	P2J11	Q4D13
	R2D07	
FA716AP30	G09	E2B13
	Q4G09	
FA716AS20	Q4D06	
FA719AA40	G2S02	G2S03
FA719AB30	G2B05	G2P04
FA719AD30	G2U02	K4D07
FA719AE30	G2D13	T2D04
FA719AG30	G2S04	J4J12
FA719AH30	G2U04	J4G10
FA719AJ30	G2P02	
FA719AJ40	G2J13	
FA719AJ50	G2G12	
FA719AJ60	G2J07	
FA719AL30	G2M07	J4D02
FA719AM30	G2P07	J4B09
FA719AN30	G2G07	
FA719AN40	G2J06	
FA719AN50	G2G05	
FA719AN60	G2J05	
FA719AR20	U11	G2U11
FA719AT20	G2D02	G2M10
FA722AJ31	G2D05	Q4J12
	T2B10	
FA722AJ32	G2D04	H3D11
	K3D11	Q2J02
FA722AJ41	E2J07	G2D07
	H3D04	K3D04
	K4G12	N4D13
FA722AJ42	G2B08	
FA722AJ43	E2B09	G2B07
FA722AJ44	G2D09	
FA722AK30	G2J09	G2J10
FA722AL30	G2D06	N4G09
FA722AQ30	G2M05	N4D05
FA722AQ50	G2M04	N4B02
FA725AA30	G2S12	G2S13
FA725AB30	G2U05	G2U06
FA725ADC3	G2S08	
FA725ADC4	G2U09	
FA725AE30	G2G09	G2G10
FA725AF20	E2D07	G2S05
	K3B13	
FA725AF31	G2M02	G2M03
FA725AF41	S07	G2S07
FA725AH30	G2B04	
FA725AM20	G2S09	
FA725AN20	G2B04	Q4G12
	T2B03	
FA728AB30	G2P06	N4B05
FA728AB40	G2P12	G2P13
FA728AB50	G2P05	G2P11
	T2B07	
FA728AC30	G2J11	G2J12

NET NO.	PIN	PIN
FA728AC30	G2J12	
FA731AQ20	E2G03	
FA731AQ50	E2J02	
FA731AT21	D2U11	E2B07
FA731AT31	D2U09	E2J09
FA731AT41	D2S05	E2J11
FA731AT51	G09	D2U06
	E2G09	
FA731AU20	E2G02	
FA734AF20	E2B10	T2D02
FA734AK20	D2D09	E2D02
FA734AK21	B12	E2B05
FA734AK30	D2J07	E2B02
FA734AK31	D07	E2B12
FA734AK40	D2J09	E2D04
FA734AK41	D09	E2D06
FA734AK50	D2D13	E2J12
FA734AK51	B09	E2G10
FA734AK60	D2D11	E2G12
FA734AK61	D10	E2G13
FA734AK70	D2D12	E2J13
FA734AK71	D13	E2B03
FA734AP20	E2J04	
FA734AR20	D05	E2D09
	G2M09	
FA734AS20	B08	E2B08
	G2M13	M3B10
FA734AT20	E2B09	
FA734AU20	E2J07	
FA737AC40	D2G05	
FA737AH30	D2B02	
FA737AJ30	D2U05	E2G08
FA737AK40	D2U02	
FA737AL40	D2U12	
FA737AM30	D2S10	E2G05
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FA740AE30	T4J13	
FA740AG30	T4G13	
FA740AJ30	T4J12	
FA740AM30	B08	J09
	M2B08	T4J09
FA740AQ20	T4D13	
FA743AA30	S4J05	
FA743AC30	S4D09	
FA743AE30	S4J13	
FA743AG30	S4G13	
FA743AJ30	S4J12	
FA743AM30	B07	J09
	M2B07	S4J09
FA743AQ20	S4D13	
FA746AA30	L2J13	
FA746AC30	L2D09	
FA746AE30	L2G13	
FA746AL30	L2J09	M2D09
FA749AA30	L2B07	M2G07
FA749AA40	L2D04	M2J12
FA749AA50	L2J07	M2G09
FA749AD30	M2J04	
FA749AG30	G02	M2G02
FA749AH30	M2G03	
FA749AJ30	M2B12	
FA749AK21	M2B02	
FA749AK41	M2B03	
FA749AL30	M2B10	
FA749AM21	M2J07	
FA749AM31	M2G08	
FA749AM41	M2J09	
FA749AM51	M2J13	
FA749AN30	M2D13	
FA749AP21	M2D04	
FA749AP31	M2D02	
FA749AQ20	D07	M2D05
	M2D07	
FA749AQ30	B09	M2B09
	M2D06	
FA752AA30	K2B13	
FA752AB30	K2D13	K4J12
FA752AC30	K2B08	M2J05
FA752AD30	K2B09	
FA752AEB0	K2B03	
FA752AED0	K2B10	
FA752AE30	K2D04	
FA752AF30	K2D05	
FA752AG30	G2J04	K2B05
FA752AH30	G2G04	K2D06
FA752AJ30	G05	K2D09
	M2G05	
FA752AK30	G12	K2D11
	M2G12	

NET NO.	PIN	PIN
FA755AAD1	R2D02	
FA755AA60	R2D11	
FA755AB60	R2D04	S3B03
FA755AD30	R2J11	
FA755AL30	R2B13	S3D04
FA755AL60	R2D13	
FA755AMC0	R2B05	
FA755AM30	R2G02	S3B02
FA758AC21	S3B09	
FA758AC22	B05	S3D07
FA758AC23	R2D06	S3D02
FA758AD21	D06	S3B12
FA758AD31	R2D09	S3D13
FA758AD41	R2B02	S3B10
FA758AD51	R2D05	S3D05
FA758AF30	S3D06	
FA758AG30	S3B02	
FA758AH30	S3D12	
FA758AL20	B02	S3B02
FA758AN20	D06	S3D06
FA761AAD0	H3B12	
FA761AC30	D09	H3D09
FA761AJ30	H3B07	
FA761AJ71	H3D05	N4D07
FA761AL30	H3B08	
FA761AN30	H3B05	
FA761AQ30	H3D06	Q4D06
FA761AR30	E2J05	H3B09
FA764AB30	K3B08	
FA764AC30	D02	K3D02
	T2D02	
FA764AM30	D09	K3D09
FA764AS20	K3B13	
FA767AA30	P2G13	
FA767AC30	P2J12	
FA767AE30	P2J09	
FA767AF30	P2D12	
FA767AJ41	P2B12	
FA767AK30	P2J04	
FA767AK50	P2D05	
FA767AL30	P2G12	
FA767AM30	P2B05	
FA767AN30	P2D06	
FA767AN40	P2D02	
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FA770AC12	B02	
FA770AC21	D02	
FA770AC31	B03	
FA770AC41	D04	
FA770AC51	B04	
FA770AD11	D13	
FA770AD22	D12	
FA770AE11	B03	
FA770AE21	B05	
FA770AE22	B07	
FA770AE31	B08	
FA770AE32	B04	
FA770AF11	B10	
FA770AF21	B09	
FA770AF22	D10	
FA770AF31	B11	
FA770AF32	D09	
FA773AA20	J07	E2J07
FA773AB11	J4G02	
FA773AC11	T4B07	
FA773AC21	T4D04	
FA773AC31	T4J02	
FA773AC41	P2G03	T4G03
FA773AC51	P2G02	T4G02
FA773AD11	S4B07	
FA773AD21	S4D04	
FA773AD31	S4J02	
FA773AD41	S4G03	
FA773AD51	S4G02	
FA773AE20	D02	
FA773AF20	D08	
FA773AG11	H3D13	K3D13
	K4G10	S3D09
	G2G02	
FA773AH11	S09	G2S09
FA773AJ11	D06	K4D06
FA773AJ21	B13	P2B13
FA773AJ31	D13	
FA773AL20	D09	
FA773AM20	G2J02	G2P10
FA774AA21	G2U07	
FA774AA31	J4G09	
FA774AA41	K4D05	
FA774AA51	G2J04	
FA774AA61	G2G03	
FA774AA71		

NET NO.	PIN	PIN
FA774AA81	Q2D02	
FA774AA91	Q2B07	
FA779AB11	J03	
FA779AA11	G13	K3D12
	K4B10	M2G13
	B09	E2B09
FA779AB21	J07	E2J07
FA779ACD1	J08	
FA779AC41	B13	K3B13
FA779AD21	G03	T2G03
FA779AD61	D13	P2D13
FA779AD71	S10	G2S10
FA779AD81	S09	G2S09
FA779AD91	G05	P2G05
FA779AE11	J06	T2J06
FA780AA11	D13	S4D13
FA780AB11	J04	
FA780AB21	G03	
FA780AB31	B02	
FA780AB41	B03	
FA780AB51	J13	
FA780AB61	J09	
FA780AB71	D04	
FA780AB81	D02	
FA780AC11	G10	
FA780AD11	B09	T2B09
FA780AE11	B04	G2B04
FA780AG11	D13	T4D13
FA782AA11	B09	
FA782AA21	B07	
FA782AA31	D06	S3D06
FA782AB11	B02	
FA782AB21	B03	
FA782AB31	J11	Q2J11
FA782AB41	G13	Q2G13
FA782AD11	B12	
FA782AD21	B13	
FA788AA10	2	4
FA788ABD1	D08	
FA788AB10	B07	B09
	D04	D06
	D08	11
	20	23
	7	
FA788AD11	RED	WTE
	1	5
FA788AE11	RED	WTE
	1	5
FA788AF10	DA	DR
	DT	OH
	SG	
FA788AL20	D04	
FA791AA11	BLK	YEL
	10	6
FA791AC11	B10	B12
	CCT	D02
	RI	SH
FA791AD41	B02	B03
	13	25
FA791AE11	B07	B08
	7	9
FA791AF10	B10	B12
	D02	06
	18	22
FA791AG11	B07	
FA791AG21	B08	
FA791AH11	B10	P2G07
	S3B07	
FA791AH21	B12	P2G08
	S3B13	
FA791AH31	D02	P2J07
	S3D11	
FA791AH41	B02	
FA791AH51	B03	
FA791AJ11	B08	S3B08
FA791AJ21	B10	T2G07
FA791AJ31	B13	T2G02
FA791AJ41	B04	T2J13
FA791AJ51	B02	T2J09
FA791AJ61	D02	T2G12
FA791AJ71	D04	
FA794AAD1	B08	
FA794AAD3	B09	
FA794AAD5	B10	
FA794AAG5	D08	
FA794AA11	D06	
FA794AA13	B07	
FA794AA21	D07	
FA794AA23	D09	
FA794AA25	D10	

NET NO.	PIN	PIN
FA794AA31	B08	
FA794AA33	B09	
FA794AA35	B10	
FA794AA41	B02	Q4G10
FA794AA43	D05	K4J06
	Q4B13	
FA794AA51	D02	K4G08
	Q4J02	
FA794AA53	B03	K4G09
	Q4G13	
FA794AA55	D04	Q4G02
FA794AA57	B04	Q4B10
FA794AA61	D13	P2J06
	R2G13	
FA794AA63	D12	
FA794AA65	D08	
FA794ABD1	D08	
FA794AB11	B05	
FA794AB13	B07	
FA794AB15	B04	
FA794AB17	B08	
FA794AB19	B03	
FA794AB21	B09	
FA794AB23	D10	
FA794AB25	D09	
FA794AB27	B11	
FA794AB29	B10	
FA794AB31	D08	
FA794AE11	D02	D05
FA794AE13	B02	D07
FA794AE21	B04	B12
FA794AE23	B05	B10
FA794AE31	B07	B13
FA794AE33	B08	D13
YA510AA10	D2B04	D2D03
	D2G04	D2J03
	D2M04	D2P03
	D2S04	D2U03
	E2B04	E2D03
	E2G04	E2J03
	G2B03	G2D03
	G2M08	G2U08
	H3B04	H3D03
	J4B04	J4D03
	J4G04	J4J03
	K3B04	K3D03
	K4B03	K4B04
	K4D03	K4G04
	K4J03	L2B04
	L2D03	L2G04
	L2J03	M2B04
	M2D03	M2G04
	M2J03	N4B04
	N4D03	N4G04
	N4J03	P2B04
	P2D03	P2G04
	P2J03	Q2B04
	Q2D03	Q2G04
	Q2J03	Q4B03
	Q4B04	Q4D03
	Q4G04	Q4J03
	R2B04	R2D03
	R2G04	R2J03
	S3B04	S3B05
	S3D03	S4B04
	S4D03	S4G04
	S4J03	T2B02
	T2B04	T2D03
	T2G04	T2J03
	T4B04	T4D03
	T4G04	T4J03
YA510AA30	D08	G2M12
	G2S08	G2U08
	G2U09	K2B07
	K2B12	K2D02
	K2D08	N4J08
	N4J09	S3D08
YA510AA40	D2D10	D2J10
	D2P10	D2U10
	E2D05	G2B02
	H3D10	J4D10
	J4J10	K3D10
	K4D10	K4J10
	L2D10	L2J10
	M2D10	M2J10
	N4D10	P2D10
	P2J10	Q2D10
	Q2J10	Q4D10
	Q4J10	R2D10
	R2J10	S3D10

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD B-A1
P/N 254 6838

NET LIST

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LOC=1B-A1

PN 4237970 EC 834824
MACH TYPE=5340
PPN PEC PG01
TIME= 135413 DATE= 79199

NET NO.	PIN	PIN	NET NO.	PIN	PIN	NET NO.	PIN	PIN	NET NO.	PIN	PIN	NET NO.	PIN	PIN	NET NO.	PIN	PIN
YA510AA40	S4D10	S4J10															
	T2D10	T2J10															
	T4D10	T4J10															
YA510AA50	D2U13	E2D11															
	G2D11	H3B03															
	K2	K2B02															
	K2D07	K2D12															
	K3B03	K4J02															
	N4D02	P2G09															
	T2D12																
YA510AA60	E2D10	E2D12															
	G2D10	G2D12															
	G2U10	G2U12															
	K4B07																

A
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0

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD B-A1
P/N 254 6838

NET LIST

LOC=1B-A1

PN 4237970 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135413 DATE= 79199

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D
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PIN	NET NO.
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B02	FA758AL20
B02	FA770AC12
B02	FA780AB31
B02	FA782AB11
B02	FA791AD41
B02	FA791AH41
B02	FA791AJ51
B02	FA794AA41
B02	FA794AE13
B03	FA770AC31
B03	FA770AE11
B03	FA780AB41
B03	FA782AB21
B03	FA791AD41
B03	FA791AH51
B03	FA794AA53
B03	FA794AB19
B04	FA088AB71
B04	FA770AC51
B04	FA770AE32
B04	FA780AE11
B04	FA791AJ41
B04	FA794AA57
B04	FA794AB15
B04	FA794AE21
B05	FA091AF20
B05	FA758AC22
B05	FA770AE21
B05	FA794AB11
B05	FA794AE23
B07	FA091AE20
B07	FA710AJ30
B07	FA713AH25
B07	FA743AM30
B07	FA770AE22
B07	FA782AA21
B07	FA788AB10
B07	FA791AE11
B07	FA791AG11
B07	FA794AA13
B07	FA794AB13
B07	FA794AE31
B08	FA088AB31
B08	FA734AS20
B08	FA740AM30
B08	FA770AE31
B08	FA791AE11
B08	FA791AG21
B08	FA791AJ11
B08	FA794AAD1
B08	FA794AA31
B08	FA794AB17
B08	FA794AE33
B09	FA091AG20
B09	FA713AH22
B09	FA734AK51
B09	FA749AQ30
B09	FA770AF21
B09	FA779AB11
B09	FA780AD11
B09	FA782AA11
B09	FA788AB10
B09	FA794AAD3
B09	FA794AA33
B09	FA794AB21
B10	FA088AB41
B10	FA770AF11
B10	FA791AC11
B10	FA791AF10
B10	FA791AH11
B10	FA791AJ21
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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD B-A1
P/N 254 6838

PIN LIST

LOC=1B-A1

PN 4237974 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135900 DATE= 79199

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T2J04	FA713AF30
T2J05	FA713AKE2
T2J06	FA779AE11
T2J07	FA707AL40
T2J09	FA791AJ51
T2J10	YA510AA40
T2J11	FA713AK61
T2J12	FA716AA31
T2J13	FA791AJ41
T4B04	YA510AA10
T4B07	FA773AC11
T4D03	YA510AA10
T4D04	FA773AC21
T4D09	FA740AC30
T4D10	YA510AA40
T4D13	FA704AP20
T4D13	FA740AQ20
T4D13	FA780AG11
T4G02	FA773AC51
T4G03	FA773AC41
T4G04	YA510AA10
T4G13	FA740AG30
T4J02	FA773AC31
T4J03	YA510AA10
T4J05	FA740AA30
T4J09	FA740AM30
T4J10	YA510AA40
T4J12	FA740AJ30
T4J13	FA740AE30

PIN	NET NO.

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD B-A1
P/N 254 6838

PIN LIST

LOC=1B-A1

PN 4237974 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135900 DATE= 79199

NET NO.	PIN	PIN
CE140AA36	A2B11*	B2D12
CE140AA72	A2B08*	A4B02*
	B2D11	
CE140AA77	A2B05*	B2B11
CE140AA78	A2D02*	B2B10
CE140AA83	A2B11*	B2B12
CH002AF05	A2D05*	B2J07
CH002AF07	A1B11*	A2D04*
	B2G12	
CH003AF03	A2D07*	
CH009AG30	B2J10	
DP110AA31	A2B02*	B2D10
DP110AA32	A2B04*	B2B13
PA120BA10	A2D13*	B2B08
PA120BM10	A2D11*	B2B06
PA120CD10	A2B13*	B2D07
PA120CP10	A2D10*	B2D05
PA120DG10	A2D12*	B2B07
PA120DS10	A2B10*	B2B04
PA120EJ10	A2B12*	B2D06
PA120EV10	A2D09*	B2D04
YA020JJ04	A4D04*	
YA020JJ08	A4D05*	
YA020JJ12	A4D06*	
YA040J501	B2S12	
YA040J503	B2U10	
YA040J504	B2U12	
YA080BB02	B2S09	
YA080BB03	B2U09	
YA080BB09	B2U02	
YA080BB11	B2D02	
YA132BA10	A4B03*	
YA200AA10	B2J06	
YA200AF10	B2P04	
YA200AF20	B2M10	
YA200AF30	B2M06	
YA200AF40	B2P12	
YA200AF50	B2P06	
YA200AF60	B2P07	
YA200AG10	B2S06	
YA200AH10	B2U11	
YA200AH20	B2U06	
YA200AJ10	B2U13	
YA200AK10	B2P10	
YA200AK20	B2M05	
YA200AK30	B2M12	
YA200AK40	B2P05	
YA200AK50	B2M07	
YA220AA20	B2G08	
YA220AB10	B2S05	
YA220AC20	B2M13	
YA220AD10	B2M02	
YA220AD20	B2P09	
YA220AE10	B2M11	
YA240AA10	B2U04	
YA240AC10	B2J11	
YA240AC20	B2U07	
YA240AE10	B2G07	
YA301DA40	A3D12*	B2G13
YA301DC40	A3D13*	B2G11
YA302DA40	B2M03	B2M04
YA302DB40	B2J09	B2S11
YA302DC40	B2S07	B2S13
YA302EA40	A4B04*	B2J13
YA302EG30	B2B02	B2B03
YA303ABD3	B2P11	
YA303ABD4	B2P13	
YA303ABD5	B2P02	
YA303ABD6	B2M09	
YA303ABD7	B2M08	
YA303ACD3	B2J12	
YA303ACD6	B2U05	
YA303AED3	B2S04	
YA303AED4	B2S08	
YA303AED5	B2S10	
YA303AED6	B2S03	
YA303AED7	B2S02	
YA303BC30	B2G10	
YA303FB30	A2B07*	B2B05
YA303FD30	A2B06*	B2D09
YA320AA01	A2B03*	A2D03*
YA320AA03	C2D03*	
YA320AA04	A4D03*	
YA320AB01	A3M08*	A3D09*
YA320AB04	A4C02*	A4D02*
YA320AD01	A3B09*	B2D13

NET NO.	PIN	PIN

NET NO.	PIN	PIN

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD C-A1
P/N 417 6722

NET LIST

LOC=1C-A1

PN 4238370 EC 834824
PIACH TYPE=5340
PPN PEC
TIME= 135501 DATE= 79199

PIN	NET NO.
A1B11	CH002AF07
A2B02	DP110AA31
A2B03	YA320AA01
A2B04	DP110AA32
A2B05	CE140AA77
A2B06	YA303FD30
A2B07	YA303FB30
A2B08	CE140AA72
A2B10	PA120DS10
A2B11	CE140AA36
A2B11	CE140AA83
A2B12	PA120EJ10
A2B13	PA120CD10
A2D02	CE140AA78
A2D03	YA320AA01
A2D04	CH002AF07
A2D05	CH002AF05
A2D07	CH003AF03
A2D09	PA120EV10
A2D10	PA120CP10
A2D11	PA120BM10
A2D12	PA120DG10
A2D13	PA120BA10
A3B09	YA320AD01
A3D08	YA320AB01
A3D09	YA320AB01
A3D12	YA301DA40
A3D13	YA301DC40
A4B02	CE140AA72
A4B03	YA132BA10
A4B04	YA302EA40
A4C02	YA320AB04
A4D02	YA320AB04
A4D03	YA320AA04
A4D04	YA020JJ04
A4D05	YA020JJ08
A4D06	YA020JJ12
B2B02	YA302EG30
B2B03	YA302EG30
B2B04	PA120DS10
B2B05	YA303FB30
B2B06	PA120BM10
B2B07	PA120DG10
B2B08	PA120BA10
B2B10	CE140AA78
B2B11	CE140AA77
B2B12	CE140AA63
B2B13	DP110AA32
B2D02	YA080BB11
B2D04	PA120EV10
B2D05	PA120CP10
B2D06	PA120EJ10
B2D07	PA120CD10
B2D09	YA303FD30
B2D10	DP110AA31
B2D11	CE140AA72
B2D12	CE140AA36
B2D13	YA320AD01
B2G07	YA240AE10
B2G08	YA220AA20
B2G10	YA303BC30
B2G11	YA301DC40
B2G12	CH002AF07
B2G13	YA301DA40
B2J06	YA200AA10
B2J07	CH002AF05
B2J09	YA302DB40
B2J10	CH009AG30
B2J11	YA240AC10
B2J12	YA303ACD3
B2J13	YA302EA40
B2M02	YA220AD10
B2M03	YA302DA40
B2M04	YA302DA40
B2M05	YA200AK20
B2M06	YA200AF30
B2M07	YA200AK50
B2M08	YA303ABD7
B2M09	YA303ABD6
B2M10	YA200AF20
B2M11	YA220AE10
B2M12	YA200AK30
B2M13	YA220AC20
B2P02	YA303ABD5
B2P04	YA200AF10
B2P05	YA200AK40
B2P06	YA200AF50
B2P07	YA200AF60
B2P09	YA220AD20
B2P10	YA200AK10
B2P11	YA303ABD3
B2P12	YA200AF40
B2P13	YA303ABD4
B2S02	YA303AED7
B2S03	YA303AED6
B2S04	YA303AED3
B2S05	YA220AB10
B2S06	YA200AG10
B2S07	YA302DC40
B2S08	YA303AED4
B2S09	YA080BB02
B2S10	YA303AED5
B2S11	YA302DB40
B2S12	YA040J501
B2S13	YA302DC40
B2U02	YA080BB09
B2U04	YA240AA10
B2U05	YA303ACD6
B2U06	YA200AH20
B2U07	YA240AC20
B2U09	YA080BB03
B2U10	YA040J503
B2U11	YA200AH10
B2U12	YAC40J504
B2U13	YA200AJ10
C2D03	YA320AA03

PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.	PIN	NET NO.

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES. THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD C-A1
P/N 417 6722

PIN LIST

LOC=1C-A1

PN 4238371 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135927 DATE= 79199

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NET NO.	PIN	PIN
HH000EE00	A5B03*	C2G09
HH000EE01	A5D04*	C2J13
HH000EE02	A5D05*	B2S02
HH000EE03	A5D06*	C2S10
	D2P13	
HH000EE04	A5D09*	C2J11
HH000EE05	A5D11*	C2G12
HH000EE06	A5B10*	B2U02
HH000EE07	A5B12*	C2B03
HH000FF00	A5D03*	
HH000FF01	A5B04*	
HH000FF02	A5B05*	
HH000FF03	A5D07*	
HH000FF04	A5B08*	
HH000FF05	A5D10*	
HH000FF06	A5D12*	
HH000FF07	A5B09*	
HH000GG00	A3B04*	A4B04*
	C2P07	
HH000GG01	A3B03*	A4B03*
	C2M07	
HH000GG02	A3B02*	A4B02*
	C2M09	
HH000GG03	A3B05*	A4B05*
	C2M08	
HH000GG04	A3D04*	A4D04*
	C2M04	
HH000GG05	A3D05*	A4D05*
	C2P02	
HH000GG06	A3D06*	A4D06*
	C2M03	
HH000GG07	A3D07*	A4D07*
	C2M02	
HH000GG08	A3D09*	A4D09*
	C2M05	
HH000GG09	A3D10*	A4D10*
	C2P06	
HH000GG10	A3D11*	A4D11*
	C2P05	
HH000GG11	A3D12*	A4D12*
	C2M06	
HH000GG12	A3D13*	A4D13*
	C2P04	
HH000HH09	A5B03*	
HH001FF05	A5D10*	
HH001QQB0	A5D13*	
HH001QQ10	A5B02*	
HH001RRB0	A3B13*	
HH001RR10	A3D02*	
HH005AA01	F2G10	
HH010AB00	E2B08	
HH010AB01	E2D06	
HH010AC00	E2B02	
HH010AC01	C2G03	E2D09
HH010AC02	E2B07	
HH010AC03	E2B10	
HH010AC04	E2D04	
HH010AD01	E2B13	F2P06
HH010AE00	E2J10	
HH010AE01	E2J11	
HH010AE02	C2G13	E2J13
HH010AE03	B2U06	E2G03
HH010AE05	E2B09	
HH010AE06	E2J05	
HH010BB00	E2J12	
HH010BC00	B2M10	E2G12
HH010DE00	E2G05	
HH010HH00	E2B12	
HH010HI00	E2D05	
HH020AA01	F2B02	
HH020AB00	D2P06	F2G13
HH020AC00	C2S13	D2U09
	F2P02	
HH020AD00	D2M09	F2P09
HH020AF00	D2S12	F2D13
HH020AF01	D2U12	F2M08
HH020AF02	D2J07	F2S02
HH020AF03	D2B07	F2D11
HH020AG00	F2P04	
HH020BA00	E2D13	F2D02
HH020BB00	F2J02	
HH020BC00	C2U11	F2J04
HH020BD00	F2S12	
HH020CB00	F2J09	
HH020CC00	D2B09	F2S10
HH020CD00	C2B12	E2G13
	F2G12	
HH020CE00	E2B04	F2B07
HH020CG00	D2G05	F2B04
HH020CJ00	F2J11	

NET NO.	PIN	PIN
HH020CK00	F2S04	
HH020CK01	E2D10	F2J10
	F2P10	F2U10
HH020DJ00	F2D10	
HH020EF00	F2G04	
HH020EH00	F2G09	
HH020EJ00	F2M10	
HH020EL00	F2U09	
HH020EM00	F2P13	
HH020EN00	F2S03	
HH020EQ00	F2U02	
HH020ED01	F2M12	
HH020EP00	F2U04	
HH020EP01	F2U07	
HH020FD00	C2G07	F2G03
HH030AB00	C2U13	
HH030AG00	B2P07	C2P12
HH030AG01	B2P05	C2P10
HH030AG02	B2P10	C2J06
HH030AG03	B2P06	C2G02
HH030AG04	B2M05	C2D09
	D2J04	
HH030AG05	C2G04	D2P12
HH030BB02	C2B05	
HH030CA07	C2D10	
HH030CC00	C2J04	
HH030CC01	C2G05	D2M08
HH030CD00	C2M12	D2P09
HH030CH00	C2B13	D2S04
HH030FG00	C2D05	D2P11
HH030FL00	C2D02	D2B02
HH032DA00	C2M04	
HH032DA01	C2P02	
HH032DA02	C2M03	
HH032DA03	C2M02	
HH032DA04	C2M05	
HH032DA05	C2P06	
HH032DA06	C2P05	
HH032DA07	C2M06	
HH032DA08	C2P04	
HH035AC00	B2M03	C2U09
HH035AC10	C2S04	
HH035BB00	C2S12	
HH035BC00	B2G13	C2U12
HH035BD00	B2J12	C2J12
HH035FD00	B2J06	C2G11
HH035FE00	C2S09	E2J06
	F2B03	
HH035GA00	C2D06	
HH035GE00	C2J05	D2U02
HH035GF00	B2M02	C2S11
HH035GG00	C2S07	D2M12
HH035HJ00	C2P09	
HH035HL00	C2D07	D2G09
	D2S09	
HH040AA04	D2M06	
HH040AA06	D2B12	
HH040AC00	D2J10	E2J04
HH040BB00	D2G04	F2D09
HH040BB01	D2J06	F2B10
HH040BB02	D2G03	F2B08
HH040BB03	D2G02	F2B09
HH040BC05	D2S08	
HH040DB00	C2M10	D2M04
HH040EB00	D2S13	
HH040EB01	D2S10	
HH040ED00	D2J09	E2G10
HH040GB00	D2U13	E2G04
HH040GC00	B2B04	C2J02
	D2G09	
HH040HA00	D2B13	E2G07
HH040HB00	C2G10	D2U06
HH040HC00	C2G08	D2P05
HH040HD01	D2G08	
HH040HG00	C2D13	D2U11
HH040JA00	C2B10	D2P02
HH040JB00	D2D13	E2D11
HH040JM00	D2J02	E2J07
HH044DG00	D2M11	
HH044FB00	D2J12	
HH044FE00	D2S06	
HH044FG00	C2U10	D2G07
HH044GC00	C2U04	D2D09
HH044QB00	C2S05	D2D07
HH044QC00	C2S06	D2D05
HH044TT00	D2G13	F2B12
HH044TT01	D2M05	
HH044TT02	D2J11	
HH044TT03	D2G06	
HH045DA00	D2D11	F2S08

NET NO.	PIN	PIN
HH045DD00	C2B06	D2U10
HH045HA00	C2U05	D2P04
HH045HB00	D2U05	
HH045HC00	C2U07	D2P10
HH045HD00	C2J07	D2D06
	F2S13	
HH045HE00	D2S11	
HH045HF01	C2S08	D2M07
HH045HG00	C2M13	D2S07
HH045HH00	C2U02	D2U07
HH046BE00	C2D11	D2B03
HH046FD01	C2P11	D2J13
	F2S07	
HH046FE00	D2S03	
HH046GA00	D2S05	F2P05
HH046GB00	D2U04	F2P07
HH046GF00	C2U06	D2B05
HH046GG00	D2B04	
HH046GH00	C2B04	D2D10
HH046GJ00	C2D04	D2B10
HH048AB00	D2G12	
HH048AD00	C2J09	D2M03
HH048AD01	C2S02	D2M02
HH048AF00	D2M02	
HH048AJ00	C2B08	D2P07
	F2M02	
HH048AK00	C2B02	D2B08
HH048AN00	D2G11	
HH048AN01	D2G10	
HH048BA00	D2M13	
HH050AB03	B2D04	
HH050AC02	B2D11	
HH050AD00	B2J09	
HH050CA00	B2P09	
HH050CA01	B2M11	
HH050CA02	B2M09	
HH050CA03	B2M08	
HH050CA04	B2M07	
HH050CA05	B2M04	
HH050CA06	B2P04	
HH050DF02	B2G05	
HH050DF03	B2G11	
HH050DJ01	B2G03	
HH050EA00	B2D13	
HH050EA01	B2B13	
HH050EA02	B2G02	
HH050EA03	B2J02	
HH050FB00	B2P11	E2G08
HH050FD00	B2J07	
HH050FF03	B2U10	
HH050FF04	B2P13	
HH050NP00	B2S10	
HH050NP01	B2B08	
HH050SE00	B2B10	
HH050SF00	B2B07	
HH050SI00	B2D07	
HH050SP00	B2G12	
HH050SR00	B2U13	
HH050SS00	B2U11	D2J05
HH050SU00	B2B02	E2B03
HH050SU01	B2B03	E2D02
HH050TBA0	B2D09	
HH050TBA2	B2D10	
HH050TB00	B2D09	
HH050TB01	B2D10	
HH050TC00	B2D05	
HH050TC01	B2D06	
HH050TF00	B2U12	
HH050TG00	B2G10	C2M11
HH050TH00	B2S07	
HH050TI00	B2U07	
HH050TJ00	B2J10	
HH050TK00	B2G07	
HH050TL00	B2J11	
HH050TM00	B2B12	
HH050TM01	B2B09	
HH070BB00	F2J05	
HH070BB01	F2M05	
HH070BB02	F2M04	
HH070BB03	F2S05	
HH070BB05	F2U05	
HH070BB06	D2D04	
HH070BB07	D2U08	
HH075AA00	F2D05	
HH075AA01	F2D06	
HH075AA02	B2P12	
HH075AA03	B2D05	
HH075AA04	B2D06	

NET NO.	PIN	PIN

NET NO.	PIN	PIN

NET NO.	PIN	PIN

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* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD E-A1,E-B1
P/N 588 2184

NET LIST

LOC=1E-A1

PN 8265775 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135533 DATE= 79199

PIN	NET NO.
A3B02	HH000GG02
A3B03	HH000GG01
A3B04	HH000GG00
A3B05	HH000GG03
A3B13	HH001RR80
A3D02	HH001RR10
A3D04	HH000GG04
A3D05	HH000GG05
A3D06	HH000GG06
A3D07	HH000GG07
A3D09	HH000GG08
A3D10	HH000GG09
A3D11	HH000GG10
A3D12	HH000GG11
A3D13	HH000GG12
A4B02	HH000GG02
A4B03	HH000GG01
A4B04	HH000GG00
A4B05	HH000GG03
A4D04	HH000GG04
A4D05	HH000GG05
A4D06	HH000GG06
A4D07	HH000GG07
A4D09	HH000GG08
A4D10	HH000GG09
A4D11	HH000GG10
A4D12	HH000GG11
A4D13	HH000GG12
A5B02	HH001QQ10
A5B03	HH000EE00
A5B03	HH000HH09
A5B04	HH000FF01
A5B05	HH000FF02
A5B08	HH000FF04
A5B09	HH000FF07
A5B10	HH000EE06
A5B12	HH000EE07
A5D03	HH000FF00
A5D04	HH000EE01
A5D05	HH000EE02
A5D06	HH000EE03
A5D07	HH000FF03
A5D09	HH000EE04
A5D10	HH000FF05
A5D10	HH001FF05
A5D11	HH000EE05
A5D12	HH000FF06
A5D13	HH001QQB0
B2B02	HH050SU00
B2B03	HH050SU01
B2B04	HH040GC00
B2B07	HH050SF00
B2B08	HH050NP01
B2B09	HH050TM01
B2B10	HH050SE00
B2B12	HH050TM00
B2B13	HH050EA01
B2D04	HH050AB03
B2D05	HH050TC00
B2D05	HH075AA03
B2D06	HH050TC01
B2D06	HH075AA04
B2D07	HH050SI00
B2D08	HH050TBA0
B2D09	HH050TB00
B2D10	HH050TB01
B2D11	HH050AC02
B2D13	HH050EA00
B2G02	HH050EA02
B2G03	HH050DJ01
B2G05	HH050DF02
B2G07	HH050TK00
B2G10	HH050TG00
B2G11	HH050DF03
B2G12	HH050SP00
B2G13	HH035BC00
B2J02	HH050EA03
B2J06	HH035FD00
B2J07	HH050FD00
B2J09	HH050AD00
B2J10	HH050TJ00
B2J11	HH050TL00
B2J12	HH035BD00
B2M02	HH035GF00
B2M03	HH035AC00
B2M04	HH050CA05
B2M05	HH030AG04
B2M07	HH050CA04
B2M08	HH050CA03
B2M09	HH050CA02
B2M10	HH010BC00
B2M11	HH050CA01
B2P04	HH050CA06
B2P05	HH030AG01
B2P06	HH030AG03
B2P07	HH030AG00
B2P09	HH050CA00
B2P10	HH030AG02
B2P11	HH050FB00
B2P12	HH075AA02
B2P13	HH050FF04
B2S02	HH000EE02
B2S07	HH050TH00
B2S10	HH050NP00
B2U02	HH000EE06
B2U06	HH010AE03
B2U07	HH050TI00
B2U10	HH050FF03
B2U11	HH050SS00
B2U12	HH050TF00
B2U13	HH050SR00
C2B02	HH048AK00
C2B03	HH000EE07
C2B04	HH046GH00
C2B05	HH030BB02
C2B06	HH045DD00
C2B08	HH048AJ00
C2B10	HH040JA00
C2B12	HH020CD00
C2B13	HH030CH00
C2D02	HH030FL00
C2D04	HH046GJ00
C2D05	HH030FG00
C2D06	HH035GA00
C2D07	HH035HL00
C2D09	HH030AG04
C2D10	HH030CA07
C2D11	HH046BE00
C2D13	HH040HG00
C2G02	HH030AG03
C2G03	HH010AC01
C2G04	HH030AG05
C2G05	HH030CC01
C2G07	HH020FD00
C2G08	HH040HC00
C2G09	HH000EE00
C2G10	HH040HB00
C2G11	HH035FD00
C2G12	HH000EE05
C2G13	HH010AE02
C2J02	HH040GC00
C2J04	HH030CC00
C2J05	HH035GE00
C2J06	HH030AG02
C2J07	HH045HD00
C2J09	HH048AD00
C2J11	HH000EE04
C2J12	HH035BD00
C2J13	HH000EE01
C2M02	HH000GG07
C2M02	HH032DA03
C2M03	HH000GG06
C2M03	HH032DA02
C2M04	HH000GG04
C2M04	HH032DA00
C2M05	HH000GG08
C2M05	HH032DA04
C2M06	HH000GG11
C2M06	HH032DA07
C2M07	HH000GG01
C2M08	HH000GG03
C2M09	HH000GG02
C2M10	HH040DB00
C2M11	HH050TG00
C2M12	HH030CD00
C2M13	HH045HG00
C2P02	HH000GG05
C2P02	HH032DA01
C2P04	HH000GG12
C2P04	HH032DA08
C2P05	HH000GG10
C2P05	HH032DA06
C2P06	HH000GG09
C2P06	HH032DA05
C2P07	HH000GG00
C2P09	HH035HJ00
C2P10	HH030AG01
C2P11	HH046FD01
C2P12	HH030AG00
C2S02	HH048AD01
C2S04	HH035AC10
C2S05	HH044QB00
C2S06	HH044QC00
C2S07	HH035GG00
C2S08	HH045HF01
C2S09	HH035FE00
C2S10	HH000EE03
C2S11	HH035GF00
C2S12	HH035BB00
C2S13	HH020AC00
C2U02	HH045HH00
C2U04	HH044GC00
C2U05	HH045HA00
C2U06	HH046GF00
C2U07	HH045HC00
C2U09	HH035AC00
C2U10	HH044FG00
C2U11	HH020BC00
C2U12	HH035BC00
C2U13	HH030AB00
D2B02	HH030FL00
D2B03	HH046BE00
D2B04	HH046GG00
D2B05	HH046GF00
D2B07	HH020AF03
D2B08	HH048AK00
D2B09	HH020CC00
D2B10	HH046GJ00
D2B12	HH040AA06
D2B13	HH040HA00
D2D04	HH070BB06
D2D05	HH044QC00
D2D06	HH045HD00
D2D07	HH044QB00
D2D09	HH044GC00
D2D10	HH046GH00
D2D11	HH045DA00
D2D13	HH040JB00
D2G02	HH040BB03
D2G03	HH040BB02
D2G04	HH040BB00
D2G05	HH020CG00
D2G06	HH044TT03
D2G07	HH044FG00
D2G08	HH040HD01
D2G09	HH035HL00
D2G09	HH040GC00
D2G10	HH048AN01
D2G11	HH048AN00
D2G12	HH048AB00
D2G13	HH044TT00
D2J02	HH040JM00
D2J04	HH030AG04
D2J05	HH050SS00
D2J06	HH040BB01
D2J07	HH020AF02
D2J09	HH040ED00
D2J10	HH040AC00
D2J11	HH044TT02
D2J12	HH044FB00
D2J13	HH046FD01
D2M02	HH048AD01
D2M02	HH048AF00
D2M03	HH048AD00
D2M04	HH040DB00
D2M05	HH044TT01
D2M06	HH040AA04
D2M07	HH045HF01
D2M08	HH030CC01
D2M09	HH020AD00
D2M11	HH044DG00
D2M12	HH035GG00
D2M13	HH048BA00
D2P02	HH040JA00
D2P04	HH045HA00
D2P05	HH040HC00
D2P06	HH020AB00
D2P07	HH048AJ00
D2P09	HH030CD00
D2P10	HH045HC00
D2P11	HH030FG00
D2P12	HH030AG05
D2P13	HH000EE03
D2S03	HH046FE00
D2S04	HH030CH00
D2S05	HH046GA00
D2S06	HH044FE00
D2S07	HH045HG00
D2S08	HH040BC05
D2S09	HH035HL00
D2S10	HH040EB01
D2S11	HH045HE00
D2S12	HH020AF00
D2S13	HH040EB00
D2U02	HH035GE00
D2U04	HH046GB00
D2U05	HH045HB00
D2U06	HH040HB00
D2U07	HH045HH00
D2U08	HH070BB07
D2U09	HH020ACC0
D2U10	HH045DD00
D2U11	HH040HG00
D2U12	HH020AF01
D2U13	HH040GB00
E2B02	HH010AC00
E2B03	HH050SU00
E2B04	HH020CE00
E2B07	HH010AC02
E2B08	HH010AB00
E2B09	HH010AE05
E2B10	HH010AC03
E2B12	HH010HH00
E2B13	HH010AD01
E2D02	HH050SU01
E2D04	HH010AC04
E2D05	HH010HI00
E2D06	HH010AB01
E2D09	HH010AC01
E2D10	HH020CK01
E2D11	HH040JB00
E2D13	HH020BA00
E2G03	HH010AE03
E2G04	HH040GB00
E2G05	HH010DE00
E2G07	HH040HA00
E2G08	HH050FB00
E2G10	HH040ED00
E2G12	HH010BC00
E2G13	HH020CD00
E2J04	HH040AC00
E2J05	HH010AE06
E2J06	HH035FE00
E2J07	HH040JM00
E2J10	HH010AE00
E2J11	HH010AE01
E2J12	HH010BB00
E2J13	HH010AE02
F2B02	HH020AA01
F2B03	HH035FE00
F2B04	HH020CG00
F2B07	HH020CE00
F2B08	HH040BB02
F2B09	HH040BB03
F2B10	HH040BB01
F2B12	HH044TT00
F2D02	HH020BA00
F2D05	HH075AA00
F2D09	HH040BB00
F2D10	HH020DJ00
F2D11	HH020AF03
F2D13	HH020AF00
F2G03	HH020FJ00
F2G04	HH020EF00
F2G09	HH020EH00
F2G10	HH005AA01
F2G12	HH020CD00
F2G13	HH020AB00
F2J02	HH020BB00
F2J04	HH020BC00
F2J05	HH070BB00
F2J09	HH020CB00
F2J10	HH020CK01
F2J11	HH020CJ00
F2M02	HH048AJ00
F2M04	HH070BB02
F2M05	HH070BB01
F2M08	HH020AF01
F2M10	HH020EJ00
F2M12	HH020ED01
F2P02	HH020AC00
F2P04	HH020AG00
F2P05	HH046GA00
F2P06	HH010AD01
F2P07	HH046GB00
F2P09	HH020AD00
F2P10	HH020CK01
F2P13	HH020EM00
F2S02	HH020AF02
F2S03	HH020EN00
F2S04	HH020CK00
F2S05	HH070BB03
F2S07	HH046FD01
F2S08	HH045DA00
F2S10	HH020CC00
F2S12	HH020BD00
F2S13	HH045HD00
F2U02	HH020ED00
F2U04	HH020EP00
F2U05	HH070BB05
F2U07	HH020EP01
F2U09	HH020EL00
F2U10	HH020CK01

* DENOTES I/O CABLE PIN
(NN) DENOTES BIT (NN) OF A BUNDLE NET

NOTE: IF THE NET NAME HAS A TRAILING ZERO (I.E. CH005AC30), THIS TRAILING ZERO WILL BE SHOWN IN THE NET AND PIN LISTS. THE LOGIC PAGES WILL OMIT THESE TRAILING ZEROES, THUS CH005AC30 AND CH005AC3 REPRESENT THE SAME NET.

BOARD E-A1,E-B1
P/N 588 2184

PIN LIST

LOC=1E-A1

PN 8265776 EC 834824
MACH TYPE=5340
PPN PEC
TIME= 135953 DATE= 79199

4237841

AE000

AE000

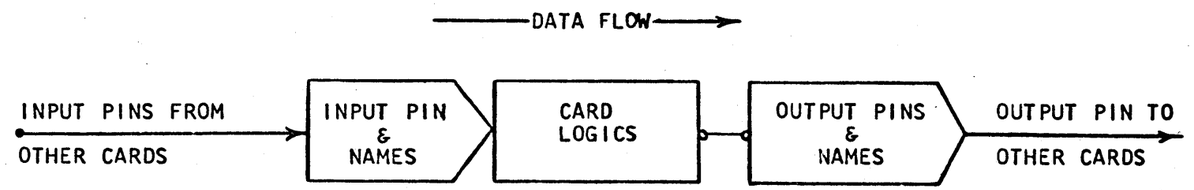
SECOND LEVEL LOGIC DIAGRAMS

INTRODUCTION

THE FOLLOWING DIAGRAMS ARE USED AS SUPPLEMENTAL INFORMATION TO THE FIELD SERVICE LOGICS. THEY ARE COMBINATIONS OF DETAILED FIELD SERVICE LOGICS AND HIGH-LEVEL FLOW DIAGRAM. DIAGRAM ON EACH PAGE SHOWS ALL THE TAB PINS AND LOGIC BLOCKS OF ONE LOGIC CARD IT ALSO SHOWS WHERE THE INPUTS TO THE CARD COME FROM AND PLACES THE OUTPUTS GO TO.

HOW TO USE

THESE LOGIC DIAGRAMS CAN BE REPRESENTED BY THE FOLLOWING SYMBOL.



THE DATA FLOW IS FROM LEFT TO RIGHT. EACH INPUT TAB PIN IS SHOWN AND ALSO CONNECTED TO PINS OF OTHER CARDS THAT HAVE THE SAME NET. OUTPUT TAB PINS LOCATION AND NAMES ARE SHOWN ON THE RIGHT AND ALSO PINS OF OTHER CARDS THAT THE OUTPUT TAB PINS GO TO.

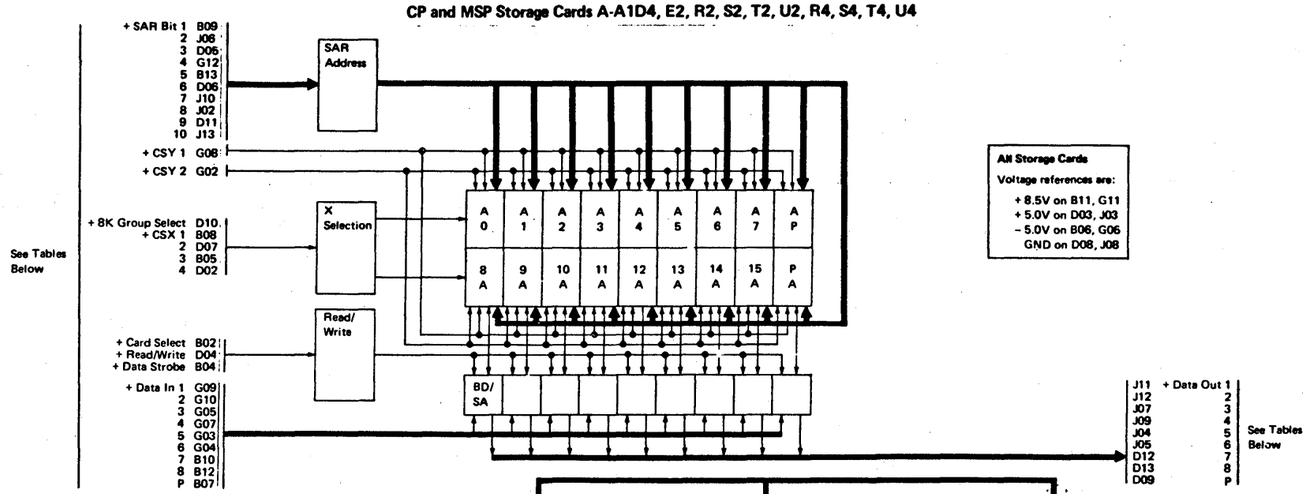
EACH TIME YOU PROBE A PIN AND FIND THE LOGIC LEVEL ON THAT PIN IS NOT CORRECT YOU CAN TRACE THE DATA FLOW FROM THAT PIN TO BOTH DIRECTIONS AND FIND OUT WHICH OF THE OTHER LOGIC CARDS THAT MAY HAVE CAUSED THE ERROR.

EC HISTORY		DRAWING TITLE	
02DEC77	832850	SECOND LEVEL LOGIC DIAGRAMS	
		MACH 5340	
		PART NO 4237841	
B		CLASSIFICATION	IBM CORP
		7/14/77 J.C.	

AE000

AE000

CP and MSP Storage Cards A-A1D4, E2, R2, S2, T2, U2, R4, S4, T4, U4



Card →	A1E2		A1D4		A1R2, T2, R4, T4		A1S2, U2, S4, U4	
+ Card Select	F2 B11	+ CS Card Select 0–16K	F2 B11	+ CS Card Select 0–16K		+ MS Card Select		+ MS Card Select
+ Read/Write	F2 D05	+ CS Write Pulse Hi	F2 D06	+ CS Write Pulse Lo	Q2 S10	+ MS Write Pulse Lo	Q2 S11	+ MS Write Pulse Hi
+ Date Strobe		+ Board Tieup		+ Board Tieup	Q2 S03	+ MS Data Strobe Lo	Q2 S04	+ MS Data Strobe Hi
+ 8K Group Select	F2 J02	+ 8K Group Select	F2 J02	+ 8K Group Select	Q2 U09	– MS 8K Group Select Lo	Q2 U09	– MS 8K Group Select Lo

Card ↓	+ Card Select		ATR 0 To 3
A1R2, S2	Q2U11	+ MS Card Select 0–32K	0000
A1T2, U2	Q2U12	+ MS Card Select 32–64K	0001
A1R4, S4	Q2U13	+ MS Card Select 64–96K	0010
A1T4, U4	Q2S13	+ MS Card Select 96–128K	0011

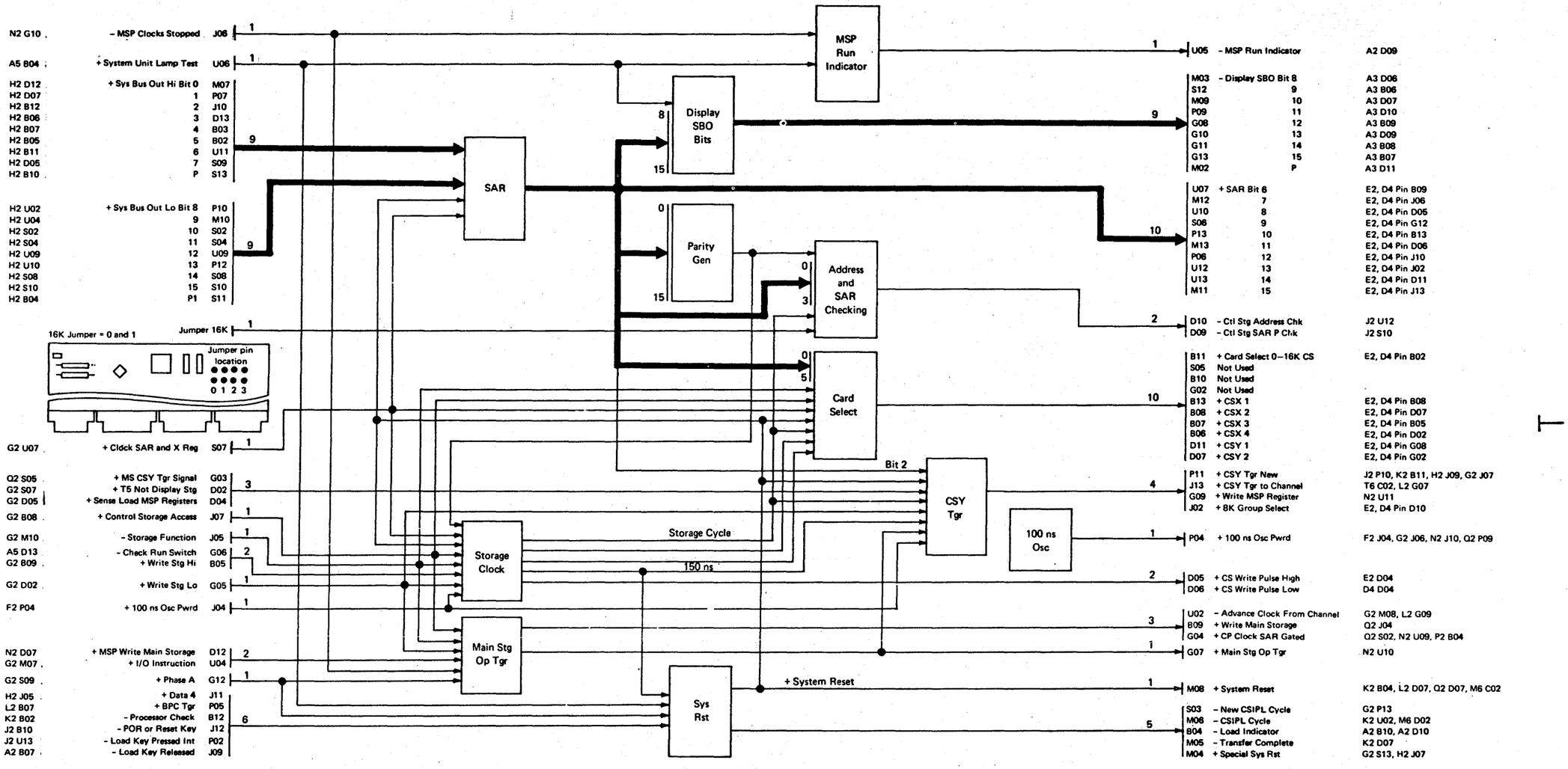
Card →	A1E2			A1D4			A1R2, S2, T2, U2, R4, S4, T4, U4	
+ Data Out 1	G2 J11	+ Storage Bus Bit	0	G2 G12	+ Storage Bus Bit	8	N2 G02	+ MS Storage Bus Bit 8
2	G2 P07		1	G2 P06		9	N2 G03	9
3	G2 J13		2	G2 P02		10	N2 G04	10
4	G2 P09		3	G2 J12		11	N2 J05	11
5	G2 G11		4	G2 M02		12	N2 J07	12
6	G2 G13		5	G2 P04		13	N2 G08	13
7	G2 M04		6	G2 P05		14	N2 J02	14
8	G2 M03		7	G2 M05		15	N2 G09	15
P	G2 G09		P Hi	G2 G02		Lo P	N2 J06	P
+ Data In 1	H2 D12	+ System Bus Out	0	H2 U04	+ System Bus Out Lo	8	P2 J02	+ MS Gt Out Bit 8
2	H2 D07		1	H2 U04		9	P2 J04	9
3	H2 B12		2	H2 S02		10	P2 G07	10
4	H2 B06		3	H2 S04		11	P2 J07	11
5	H2 B07		4	H2 U09		12	P2 G02	12
6	H2 B05		5	H2 U10		13	P2 G03	13
7	H2 B11		6	H2 S08		14	P2 G04	14
8	H2 D05		7	H2 S10		15	P2 G06	15
P	H2 B10	+ System Bus Out Hi Bit	P	H2 D04	+ Sys Bus Out Lo	P2	P2 B09	P

Card →	A1E2 & A1D4		A1R2,S2,T2,U2,R4,S4,T4,U4	
+ SAR Bit 1	F2 U07	+ SAR Bit 6	Q2 S06	+ MSAR Bit 6
2	F2 M12	7	Q2 S07	7
3	F2 U10	8	P2 B06	8
4	F2 S06	9	P2 B03	9
5	F2 P13	10	P2 B02	10
6	F2 M13	11	P2 B07	11
7	F2 P06	12	P2 D07	12
8	F2 U12	13	P2 D05	13
9	F2 U13	14	P2 B08	14
10	F2 M11	15	P2 D09	15
+ CSX 1	F2 B13	+ CSX 1	Q2 U04	+ MS CSX 1
2	F2 B08	2	Q2 U05	2
3	F2 B07	3	Q2 U06	3
4	F2 B06	4	Q2 U07	4
+ CSY 1	F2 D11	+ CSY 1	Q2 S08	+ MS CSY 1
2	F2 D07	2	Q2 S09	2

EC HISTORY		DRAWING TITLE
02OCT77	832850	STORAGE CARDS
30JUN78	832999	MACH 5340
		PART NO. 4237980
		CLASSIFICATION
		02OCT77 JDS

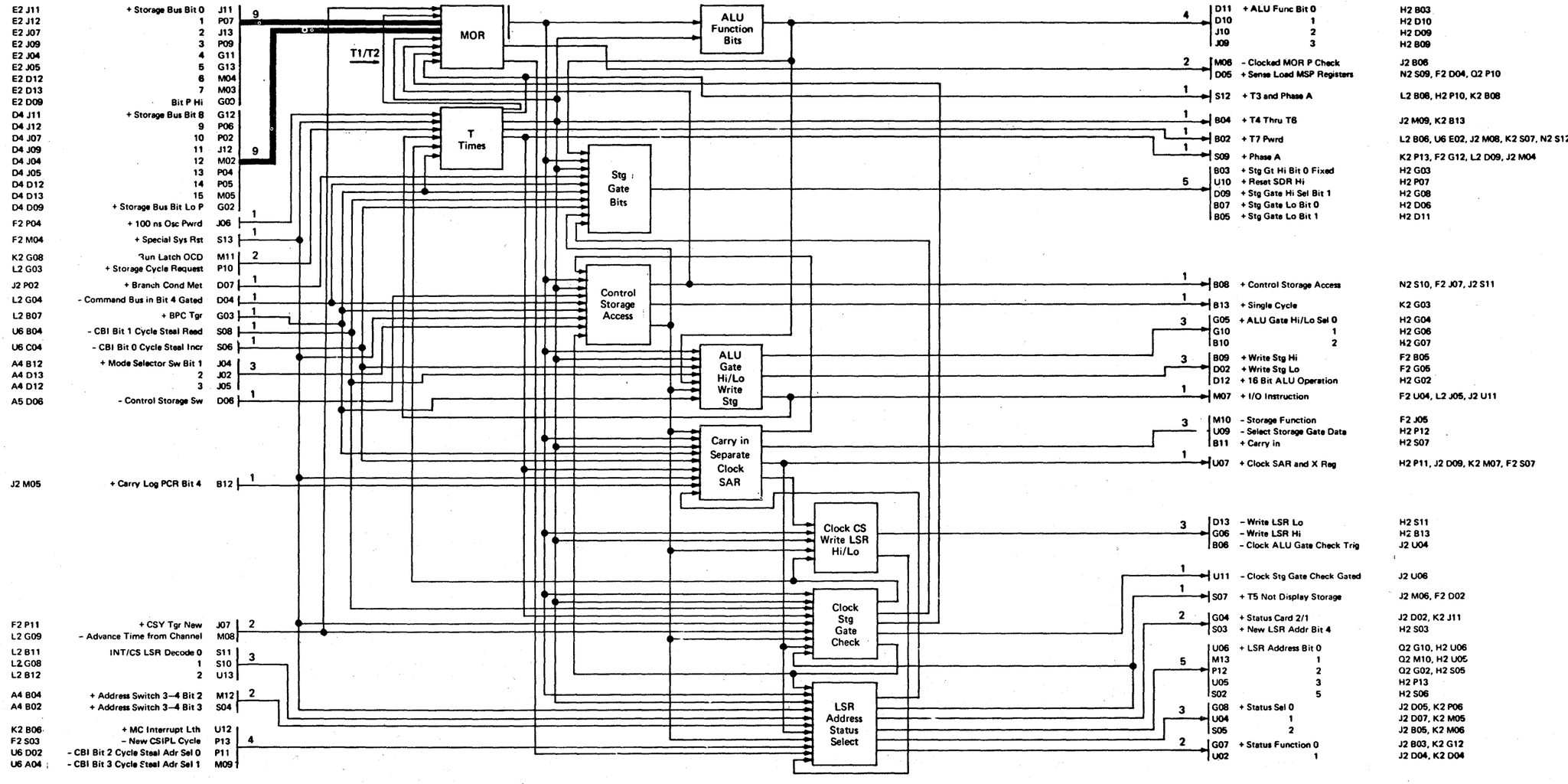
IBM CORP

CP Storage Control Card A-A1F2



EC HISTORY		DRAWING TITLE
02OCT77	832850	CP STORAGE CONTROL CARD
30JUN78	832999	MACH 5340
		PART NO. 4237981
		CLASSIFICATION
02OCT77	JDS	IBM CORP

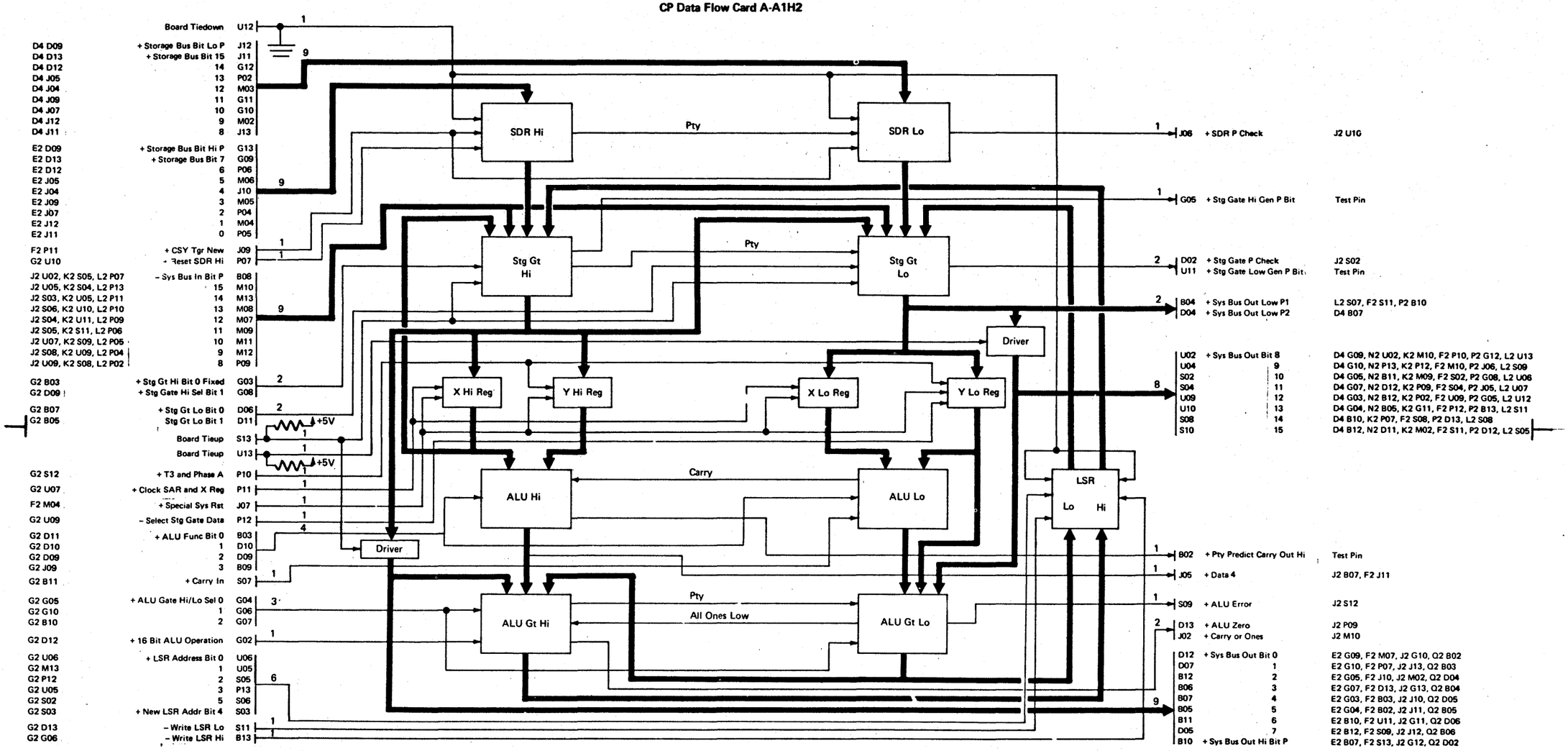
CP System Control Card A-A1G2



EC HISTORY		DRAWING TITLE
02OCT77	832850	CP SYSTEM CONTROL CARD
30JUN78	832999	MACH 5340
		PART NO. 4237982
		CLASSIFICATION
02OCT77	JDS	IBM CORP

AE030

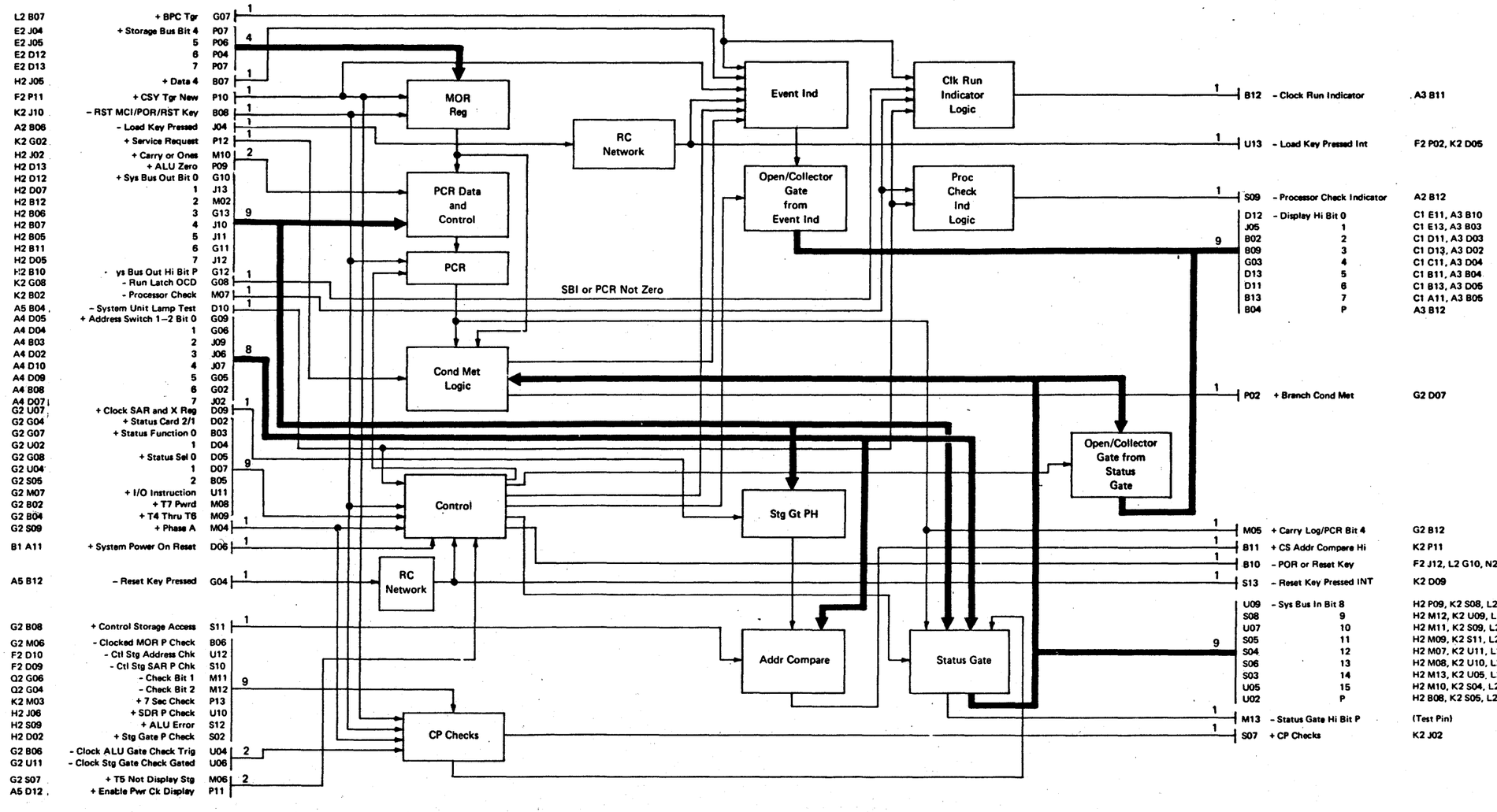
CP Data Flow Card A-A1H2



EC HISTORY		DRAWING TITLE
020CT77	832850	CP DATA FLOW CARD
30JUN78	832999	MACH 5340
		PART NO. 4237983
		CLASSIFICATION
020CT77	JDS	IBM CORP

AE040

CP Status 1 Card A-A1J2



EC HISTORY		DRAWING TITLE
02 OCT 77	832850	CP STATUS 1 CARD
30 JUN 78	832999	MACH 5340
		PART NO. 4237984
		CLASSIFICATION
		02 OCT 77 JDS IBM CORP

CP Status 2 Card A-A1K2

J2 B11	+ CS Addr Compare Hi	P11	7
G2 B13	+ Single Cycle	G03	
A5 B08	- CE Start Key Pressed	B03	
A5 B10	- CE Start Key Released	B05	
A5 D05	- Address Comp Stop Sw	J04	
A5 D06	- Control Storage Sw	B12	
Q2 U02	+ MS Addr Compare	G05	
L2 D10	+ Interrupt Request to Run Lth	M13	1
F2 M08	+ System Reset	B04	1
F2 M05	- Transfer Complete	D07	1
G2 U02	+ Status Function 1	D04	1
J2 S13	- Reset Key Pressed Int	D09	1
B1 A11	+ System Power On Reset	B07	1
J2 U13	- Load Key Pressed Int	D05	1
G2 G08	+ Status Sel 0	P06	1
G2 S05	+ Status Sel 2	M06	1
G2 U07	+ Clock SAR and X Reg	M07	1
G2 B02	+ T7 Pwrd	S07	1
F2 P11	+ CSY Tgr New	B11	1
G2 B04	+ T4 Thru T6	B13	1
G2 G04	+ Status Card 2/1	J11	1
G2 G07	+ Status Function 0	G12	1
G2 S09	+ Phase A	P13	1
L2 J07	+ New Channel Check	G04	
J2 S07	+ CP Checks	J02	4
G2 S12	+ T3 and Phase A	B08	
A5 B04	- System Unit Lamp Test	B10	
L2 B11	- INT/CS LSR Decode 0	D10	3
L2 G08	1	B09	
L2 B12	2	D11	
G2 U04	+ Status Select 1	M05	2
F2 M06	- CSIPL Cycle	U02	
A4 D06	+ Address Switch 3–4 Bit 0	M11	
A4 B05	1	M08	
A4 B04	2	U12	
A4 B02	3	P10	
A4 D11	4	G13	8
A4 B10	5	J13	
A4 B09	6	M04	
A4 B07	7	P05	
K2 S10	+ 1 Sec Clk Pwrd	S02	1
A5 D13	- Check Run Switch	J05	
A5 D09	+ Load Disk	U13	3
Not Used	- I/O Overlap	S12	
A4 B13	+ Mode Selector Sw Bit 0	M12	
H2 U02	+ System Bus Out Lo 8	M10	
H2 U04	9	P12	
H2 S02	10	M09	
H2 S04	11	P09	
H2 U09	12	P02	
H2 U10	13	G11	8
H2 S08	14	P07	
H2 S10	15	M02	
A2 B04	- Op Start Key Pressed	D02	
A2 B05	- Op Start Key Released	D04	3
A2 B08	+ Stop Key Pressed	D06	

Run Lth Add Comp Sync

Decodes

Check Interrupt

I/O Clocks Mach Chk Proc Chk 7 Sec Chk

Selector Gate Bits

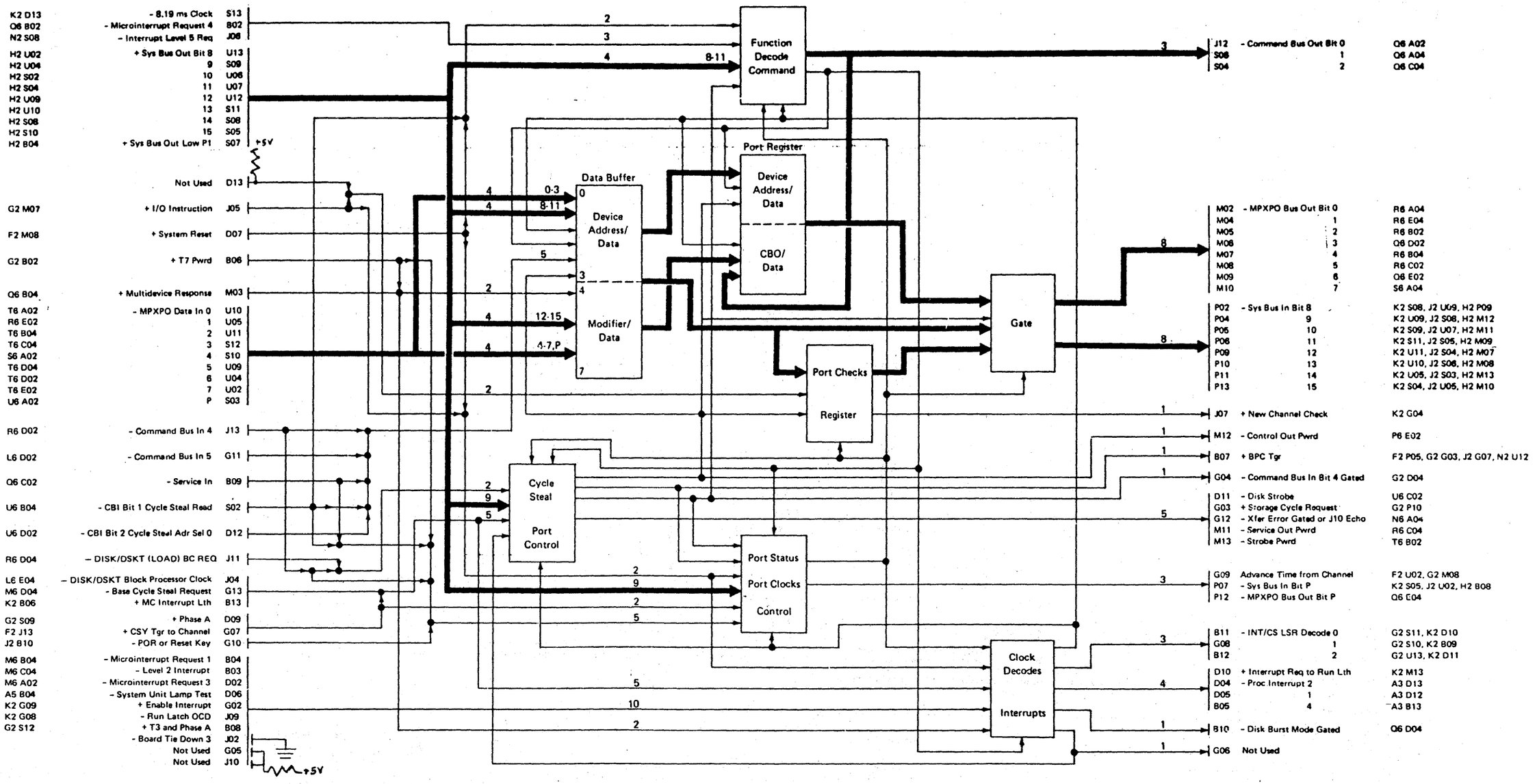
Stop Lth Serv Request CP Metering In

And/Or

2	D13	- 8.19 ms Clock	L2 S13
	D12	- Address Compare Sync	
1	G08	- Run Latch OCD	L2 J09, N2 U06, G2 M11, J2 G08
5	J06	- Stop Indicator	A2 B09
	G09	+ Enable Interrupts	L2 G02
	G06	- Start MSP	N2 U13
	J07	- System In Use	A2 D05, A2 D06
	G07	+ System Reset or Reset MSP	N2 G07
5	U10	- Sys Bus In Bit 13	H2 M08, J2 S06, L2 P10
	U05	14	H2 M13, J2 S03, L2 P11
	S04	15	H2 M10, J2 U05, L2 P13
	S08	8	H2 P09, J2 U09, L2 P02
	S05	P	H2 B08, J2 U02, L2 P07
1	J10	- RST MCI/POR/RST Key	J2 B08
5	S13	+ 16.38 ms Clock	N6 B04
	U06	+ 512 µs Clk Pwrd	V6 B02
	S06	+ 131.1 ms Clk Pwrd	U6 E04
	U07	+ 1.02 ms Clk Pwrd	U6 D04
	S03	- 65.54 ms Clock Not Used	Not Used
3	J09	+ 1 µs Clk Pwrd	V6 B04
	G10	+ 4 µs Clk Pwrd	V6 A02
	M03	+ 7 sec Check	J2 P13
1	B06	+ MC Interrupt Lth	G2 U12, L2 B13, N2 U07
1	B02	- Processor Check	F2 B12, J2 M07
1	S10	+ 1 sec Clk Pwrd	V6 A04, K2 S02
4	U09	- Sys Bus In Bit 9	H2 M12, J2 S08, L2 P04
	S09	10	H2 M11, J2 U07, L2 P05
	S11	11	H2 M09, J2 S05, L2 P06
	U11	12	H2 M07, J2 S04, L2 P09
3	G02	+ Service Request	J2 P12
	U04	+ Service Request to MSP	N2 S13
	J12	- CP Metering In	N6 E02

EC HISTORY		DRAWING TITLE
20OCT77	832850	CP STATUS 2 CARD
30JUN78	832999	MACH 5340
		PART NO. 4237985
		CLASSIFICATION
20OCT77	JDS	IBM CORP

CP Port Card A-A1L2



K2 D13	- 8.19 ms Clock	S13		J12	- Command Bus Out Bit 0	Q6 A02
Q6 B02	- Microinterrupt Request 4	B02		S06	1	Q6 A04
N2 S08	- Interrupt Level 5 Req	J06		S04	2	Q6 C04
H2 U02	+ Sys Bus Out Bit 8	U13				
H2 U04	9	S09				
H2 S02	10	U06				
H2 S04	11	U07				
H2 U09	12	U12				
H2 U10	13	S11				
H2 S08	14	S08				
H2 S10	15	S05				
H2 B04	+ Sys Bus Out Low P1	S07				
	Not Used	D13				
G2 M07	+ I/O Instruction	J05		M02	- MPXPO Bus Out Bit 0	R6 A04
				M04	1	R6 E04
F2 M08	+ System Reset	D07		M05	2	R6 B02
G2 B02	+ T7 Pwrd	B06		M06	3	Q6 D02
				M07	4	R6 B04
				M08	5	R6 C02
Q6 B04	+ Multidevice Response	M03		M09	6	Q6 E02
				M10	7	S6 A04
T6 A02	- MPXPO Data In 0	U10		P02	- Sys Bus In Bit 8	K2 S08, J2 U09, H2 P09
R6 E02	1	U05		P04	9	K2 U09, J2 S08, H2 M12
T6 B04	2	U11		P05	10	K2 S09, J2 U07, H2 M11
T6 C04	3	S12		P06	11	K2 S11, J2 S05, H2 M09
S6 A02	4	S10		P09	12	K2 U11, J2 S04, H2 M07
T6 D04	5	U09		P10	13	K2 U10, J2 S06, H2 M08
T6 D02	6	U04		P11	14	K2 U05, J2 S03, H2 M13
T6 E02	7	U02		P13	15	K2 S04, J2 U05, H2 M10
U6 A02	P	S03				
R6 D02	- Command Bus In 4	J13		J07	+ New Channel Check	K2 G04
L6 D02	- Command Bus In 5	G11		M12	- Control Out Pwrd	P6 E02
Q6 C02	- Service In	B09		B07	+ BPC Tgr	F2 P05, G2 G03, J2 G07, N2 U12
U6 B04	- CBI Bit 1 Cycle Steal Read	S02		G04	- Command Bus In Bit 4 Gated	G2 D04
U6 D02	- CBI Bit 2 Cycle Steal Adr Sel 0	D12		D11	- Disk Strobe	U6 C02
				G03	+ Storage Cycle Request	G2 P10
				G12	- Xfer Error Gated or J10 Echo	N6 A04
				M11	- Service Out Pwrd	R6 C04
				M13	- Strobe Pwrd	T6 B02
R6 D04	– DISK/DSKT (LOAD) BC REQ	J11				
L6 E04	– DISK/DSKT Block Processor Clock	J04		G09	Advance Time from Channel	F2 U02, G2 M08
M6 D04	- Base Cycle Steal Request	G13		P07	- Sys Bus In Bit P	K2 S05, J2 U02, H2 B08
K2 B06	+ MC Interrupt Lth	B13		P12	- MPXPO Bus Out Bit P	Q6 E04
G2 S09	+ Phase A	D09				
F2 J13	+ CSY Tgr to Channel	G07		B11	- INT/CS LSR Decode 0	G2 S11, K2 D10
J2 B10	- POR or Reset Key	G10		G08	1	G2 S10, K2 B09
				B12	2	G2 U13, K2 D11
M6 B04	- Microinterrupt Request 1	B04		D10	+ Interrupt Req to Run Lth	K2 M13
M6 C04	- Level 2 Interrupt	B03		D04	- Proc Interrupt 2	A3 D13
M6 A02	- Microinterrupt Request 3	D02		D05	1	A3 D12
A5 B04	- System Unit Lamp Test	D06		B05	4	A3 B13
K2 G09	+ Enable Interrupt	G02				
K2 G08	- Run Latch OCD	J09		B10	- Disk Burst Mode Gated	Q6 D04
G2 S12	+ T3 and Phase A	B08				
	- Board Tie Down 3	J02		G06	Not Used	
	Not Used	G05				
	Not Used	J10				

EC HISTORY		DRAWING TITLE
02 OCT 77	832850	CP PORT CARD
30 JUN 78	832999	MACH 5340
13 DEC 78	834177	PART NO. 4237986
		CLASSIFICATION
		02 OCT 77 JDS IBM CORP

MSP Control Card A-A1N2

- Board Tiedown 2 D02
+ Board Tieup J12
Spare B02
Spare B03
+ TP7/LSR Sel Bit 0 D04

Status Byte 0
Bit 0 Spare
1 Complement lth
2–5 Encoded cycle time
6–7 Encoded phase time

Status Byte 1
Bit 0 Step mode
1 Check run
2 Check reset
3–6 Spare
7 Set/reset carr tgr

Status Byte 2
Bit 0 Non executable inst
1 CTRL gate P chk
2 LSR gate P chk
3 MS gate P chk
4 First cycle
5 Recomplement cycle
6 MSP addr chks
7 Carry tgr

Lines Enter Box from:
Left: Data In
Right: Data Out
Top or Bottom: Control
Bus
Individual Lines

All MS Storage Cards Pin J11 +MS Stg Bus Bit 8 G02
J12 9 G03
J07 10 G04
J09 11 J05
J04 12 J07
J05 13 G08
D12 14 J02
D13 15 G09
D09 P J06

J2 B10 - POR or Reset Key G11
J2 B10 - POR or Reset Key G12

P2 U02 - All Ones, + Zero B13

F2 P04 + 100 Ns Osc Pwrd J10
K2 G07 + System Rst or Rst MSP G07

Q2 B07 + MSP Addr Chks B04
P2 M04 + MS Gt Parity Bad S02
P2 P02 + LSR Gt Bad Parity S03
H2 U02 + System Bus Out Bit 8 U02
H2 U04 9 P13
H2 S02 10 B11
H2 S04 11 D12
H2 U09 12 B12
H2 U10 13 B05
H2 S10 15 D11

P2 D07 + MSAR Bit 12 P11
P2 D05 13 M10
P2 B08 14 P10
P2 D09 15 M03

P2 J12 + AU, ALU Carry Out Gated D13

K2 G06 - Start MSP U13
K2 G08 - Run Lth OCD U06
K2 B06 + MC Interrupt Lth U07
L2 B07 + BPC Trg U12
G2 B08 + Control Storage Access S10
G2 B02 + T7 Pwrd S12
K2 U04 + Service Request to MSP S13

F2 G04 + CP Clk SAR Gated U09
F2 G07 + Main Stg OP Tgr U10
F2 G09 + Write MSP Registers U11
G2 D05 + Sense Load MSP Registers S09

Op Reg 0–7
Op Reg Decodes
QB Reg 0–7
Q Reg 0–7
MSP CTRL GT 8–15 P
PSR Reg 2–7
Status GT 0–7 P
Status Byte 0 0–7
Status Byte 2 0–7
Status Byte 1 0–7
MSP CLKS and Decodes
Nonexec Op
Parity Checks
LSR Controls
CP/MSP Interface CP → MSP / MSP → CP
MSP Gate Select Decodes
Main Storage Controls
ALU Controls and X and Y Reg Controls

M02 + Cycle Tag Line 1 Q2 D12
P02 + Cycle Tag Line 2 Q2 B12
G10 – MSP Clocks Stopped F2 J06
S11 + MSP Load PMR Cmd Q2 P13

G06 – MSP Ctrl Gt Bit 8 P2 U11
J04 9 P2 U07
D10 10 P2 U12
B10 11 P2 S07
B09 12 P2 U05
J09 13 P2 S08
D09 14 P2 U04
B06 15 P2 G11
G05 P P2 S04

M05 – Check Reset Q2 D10
J13 + MSP Hardware Chks For Test

S07 – Write LSR Lo P2 D10
S06 – Write LSR Hi P2 S06
P12 + LSR Select Bit 1 P2 U09
M12 2 P2 S09
M13 3 P2 U10
D04 0 P2 S05

P04 +MS Gt Sel Bit 0 P2 M11
G13 1 P2 M10
M04 2 P2 G09
P05 3 P2 G10
D05 + ALU Gt Sel Bit 0 P2 M13
B08 1 P2 M12
M11 + CP Gt Sel Bit 0 P2 J13
M06 1 P2 J10

B07 – MSP Storage Function Q2 M05
D07 + MSP Write Main Stg F2 D12
P06 + MSP Clock MSAR P2 B05, Q2 J07
D06 + Complement Lth P2 D04
S05 + Carry Bit to ALU P2 J11
U04 + ALU Func Sel Bit 0 P2 G13
S04 1 P2 P10
U05 2 P2 P05
M08 + Reset MSP Y P2 B12
M09 + Reset MSP X P2 B11
M07 – Rst Y ZN/Sel X ZN P2 M08
J11 + MSP XL, YL Sel Bit P2 M07
P07 + Clock MSP X P2 M06
P09 + Clock Y Gated P2 M05
S08 – Interrupt Level 5 Reg L2 J06

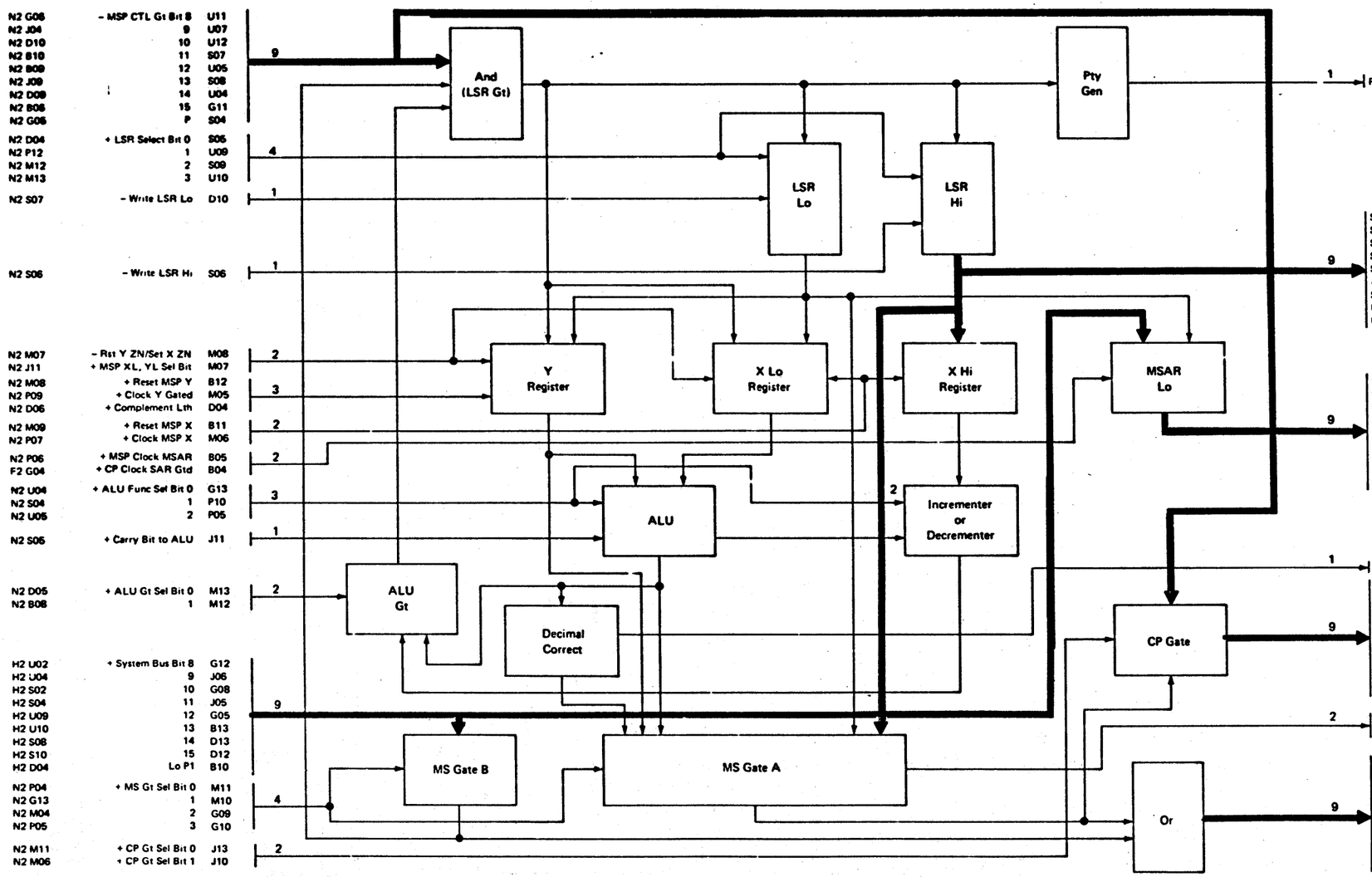
EC HISTORY		DRAWING TITLE
02 OCT 77	832850	MSP CONTROL CARD
30 JUN 78	832999	MACH 5340
		PART NO. 4237987
		CLASSIFICATION
		02 OCT 77 JDS IBM CORP

AE080

4237988

AE090

MSP Data Flow Card A-A1P2



N2 G08	- MSP CTL Gt Bit 8	U11	9		
N2 J04	9	U07			
N2 D10	10	U12			
N2 B10	11	S07			
N2 B09	12	U05			
N2 J09	13	S08			
N2 D09	14	U04			
N2 B08	15	G11			
N2 G05	P	S04			
N2 D04	+ LSR Select Bit 0	S05	4		
N2 P12	1	U09			
N2 M12	2	S09			
N2 M13	3	U10			
N2 S07	- Write LSR Lo	D10	1		
N2 S06	- Write LSR Hi	S06	1		
N2 M07	- Rst Y ZN/Set X ZN	M08	2		
N2 J11	+ MSP XL, YL Sel Bit	M07			
N2 M08	+ Reset MSP Y	B12			
N2 P09	+ Clock Y Gated	M05	3		
N2 D05	+ Complement Lth	D04			
N2 M09	+ Reset MSP X	B11	2		
N2 P07	+ Clock MSP X	M06			
N2 P06	+ MSP Clock MSAR	B05	2		
F2 G04	+ CP Clock SAR Gtd	B04			
N2 U04	+ ALU Func Sel Bit 0	G13	3		
N2 S04	1	P10			
N2 U05	2	P05			
N2 S05	+ Carry Bit to ALU	J11	1		
N2 D05	+ ALU Gt Sel Bit 0	M13	2		
N2 B08	1	M12			
H2 U02	+ System Bus Bit 8	G12	9		
H2 U04	9	J06			
H2 S02	10	G08			
H2 S04	11	J05			
H2 U09	12	G05			
H2 U10	13	B13			
H2 S08	14	D13			
H2 S10	15	D12			
H2 D04	Lo P1	B10			
N2 P04	+ MS Gt Sel Bit 0	M11	4		
N2 G13	1	M10			
N2 M04	2	G09			
N2 P05	3	G10			
N2 M11	+ CP Gt Sel Bit 0	J13	2		
N2 M06	+ CP Gt Sel Bit 1	J10			

1	P02	+ LSR Gt Bad Parity	N2 S03
9	S10	+ MSP LSR Bit 0	Q2 P05
	S11	1	Q2 P02
	S12	2	Q2 B11
	S13	3	Q2 M02
	S02	4	Q2 J02
	S13	5	Q2 D09
	S03	6	Q2 B10
	U06	7	Q2 D11
	U13	P Hi	Q2 B09
9	B06	+ MSAR Bit 8	Q2 G07 All MS Storage Cards Pin D05
	B03	9	Q2 G05 All MS Storage Cards Pin G12
	B02	10	Q2 J10 All MS Storage Cards Pin B13
	B07	11	Q2 J11 All MS Storage Cards Pin D06
	D07	12	Q2 G12, N2 P11 All MS Storage Cards Pin J10
	D05	13	Q2 G11, N2 M10 All MS Storage Cards Pin J02
	B08	14	Q2 J06, N2 P10 All MS Storage Cards Pin D11
	D09	15	Q2 G09, N2 M03 All MS Storage Cards Pin J13
	D08	P Lo	Q2 B08
1	J12	+ AL, ALU Carry Out Gated	N2 D13
9	P11	+ Storage Bus Bit 8	D4 J11, G2 G12, H2 J13, Q2 M11
	P12	9	D4 J12, G2 P06, H2 M02, Q2 M12
	P08	10	D4 J07, G2 P02, H2 G10, Q2 M06
	P04	11	D4 J09, G2 J12, H2 G11, Q2 M04
	P09	12	D4 J04, G2 M02, H2 M03, Q2 M09
	P07	13	D4 J05, G2 P04, H2 P02, Q2 M07
	M02	14	D4 D12, G2 P05, H2 G12, Q2 B13
	M03	15	D4 D13, G2 M05, H2 J11, Q2 G03
	M09	P Lo	D4 D09, G2 G02, H2 J12, Q2 P07
2	M04	+ MS Gt Parity Bad	N2 S02
	U02	- All Ones, + Zero	N2 B13
9	J02	+ MS Gt Out Bit 8	All MS Storage Cards Pin G09
	J04	9	G10
	G07	10	G05
	J07	11	G07
	G02	12	G03
	G03	13	G04
	G04	14	B10
	G08	15	B12
	B09	P	B07

EC HISTORY		DRAWING TITLE
02DEC77	832850	MSP DATA FLOW CARD
		MACH 5340
		PART NO. 4237988
		CLASSIFICATION
		02 OCT 77 JDS IBM

B

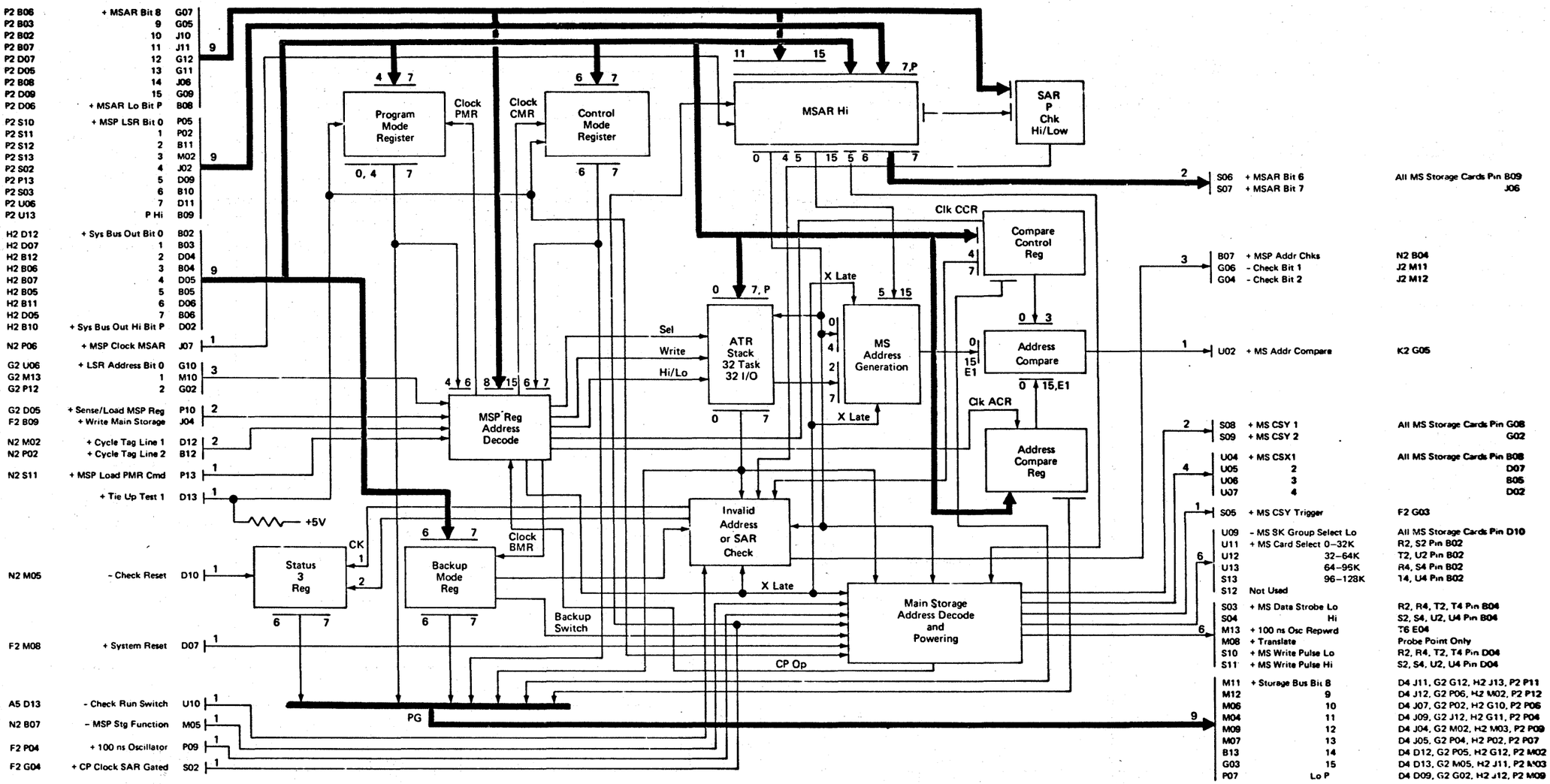
AE090

AE090

4237989

AE100

MSP Storage Control Card A-A1Q2



EC HISTORY		DRAWING TITLE
02DEC77	832850	MSP STORAGE CONTROL CARD
		MACH 5340
		PART NO. 4237989
		CLASSIFICATION
		020CT77 JDS IBM CORP

B

AE100

AE100

AF000

4237975

A-A1 BOARD VOLTAGE DISTRIBUTION

AF000

	A2	B2	C2	D2	E2	F2	G2	H2	J2	K2	L2	M2	N2	P2	Q2	R2	S2	T2	U2	V2
GND	D04 D08 J08 P08 U02 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08
-5V *		B06 G06 M06 S06	B06 G06 M06 S06	B06 G06 M06 S06	B06 G06 M06 S06											B06 G06 M06 S06	B06 G06 M06 S06	B06 G06 M06 S06	B06 G06 M06 S06	B06 G06 M06 S06
+5V *	D03 D11 D07 U04 S03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03
+5V(S)*	B02 S02																			
+8.5V *		B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11											B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11

CABLES

GND: B1E11, F1A11, J1B11, M1E11, R1A11, U1B11
B6E02, F6A02, J6B02, M6E02, R6A02, U6B02

+5V(S): A1E13

INPUT VOLTAGES AT MINI-BUS CONNECTOR

GND: D1C10, D1C13, G1D10, G1D13, P1C10, S1D10
D6C05, G6D05, P6B05, P6C05, P6C02, S6D02, S6D05

+5V: D1B10, D1B13, G1C10, G1C13, P1B10, S1C10

-5V: P1B13, S1C13, D6B02, G6C02

+8.5V: D6C02, G6D02, P1C13, S1D13

* THESE VOLTAGES ARE FOR REF ONLY. FOR VOLTAGE MEASUREMENT, REFER TO SECTION 05-710 OF MAINTENANCE MANUAL (VOL B)

AF000

EC HISTORY		DRAWING TITLE	
02DEC77	832850	A-A1 BOARD VOLTAGE DISTRIBUTION	
13DEC78	834777	MACH 5340	
		PART NO 423 7975	
B		CLASSIFICATION	IBM CORP
		8/11/77 J.C.	

AF000

4237976

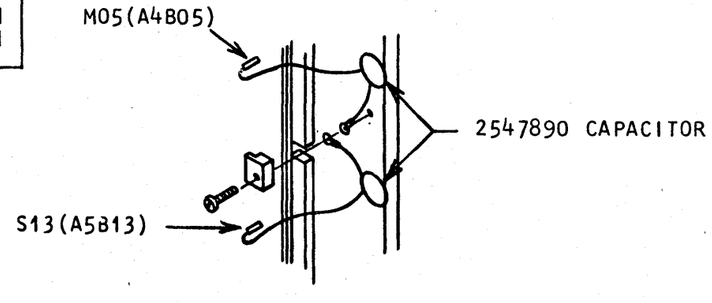
AFØ1Ø

SEE DETAIL A

A-A2 BOARD VOLTAGE DISTRIBUTION

	A2	B2	C2	D2	E2	F2	G2	H2	J2	K2	L2	M2	N2	P2	Q2	R2	S2	T2	U2	V2
GND	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08
-24V *	S13	B13 M13 S13	S13																	
NOTE 1 -12V *		D12 U12	U12				J06	D07 ** P07												
-5V *					B06 G06 M06 S06			B06 G06 M06 S06			B06 G06 M06 S06			B06 G06		G06				
-4V *	S06	B06 G06 M06 S06	B06 G06 M06 S06				D06													
+5V *	J03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	
+8.5V *					B11 G11 M11 S11		D11	B11 G11 M11 S11			B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	G11 S11	M11 S11	
NOTE 1 +12V *		B09 M09	S09				J11													
+24V *		M02 S02	S02																	
+24V(S) *	M02 M05																			
+6V *	S11	B11 G11	B11 G11																	

SEE DETAIL A



DETAIL A

CABLES:

GND: B1E11,F1A11,J1B11,M1E11,R1A11,U1B11
B6E02,F6A02,J6B02,M6E02,R6A02,U6B02

INPUT VOLTAGES AT MINI-BUS CONNECTOR.

GND: B2E14,B3E14,B4E14,U2E14,U3E14,U4E14

-24V: B4A14

-5V: U2A14,U4A14

-4V: B3A14

+5V: B2A14,U3A01,B4E01,B5A01,U4A01,U5A01

+6V: B3E01,B4A01

+8.5V: U3E01,U5E01,U4E01

+24V: B5E01

+24(S): B3A01

-12V: U3A14 (SEE *)

NOTE 1: THESE VOLTAGES ARE GENERATED FROM THE BOARD

*: THESE VOLTAGES ARE FOR REF ONLY. FOR VOLTAGE MEASUREMENT, REFER TO SECTION 05-710 OF MAINTENANCE MANUAL (VOL B).

**: USED ONLY IF ANY DATA COMMUNICATIONS FEATURE IS INSTALLED COMES FROM U3A14.

	EC HISTORY		DRAWING TITLE	
	02DEC77	832850	A-A2 BOARD VOLTAGE DISTRIBUTION	
	08MAY78	833014A	MACH 5340	
	13DEC78	834777	PART NO 423 7976	
B	20FEB79	834778	CLASSIFICATION	IBM CORP
			8/11/77 J.C.	

AFØ1Ø

AFØ1Ø

A-A2 BOARD VOLTAGE DISTRUBITION (WITH 62PC DISK DRIVE ATTACHED)

	A2	B2	C2	D2	E2	F2	G2	H2	J2	K2	L2	M2	N2	P2	Q2	R2	S2	T2	U2	V2
GND	D03 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08
-12V *								D07 ** P07												
-5V *		B06 G06	306 G06	306 G06			B06 G06	306 G06 M06 S06			B06 G06 M06 S06			306 G06		G06				
+5V *	J03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03
+8.5V *		B11 G11	B11 G11	B11 G11			B11 G11	B11 G11 M11 S11			B11 G11 M11 S11	B11 G11 M11 S11	B11 G11 M11 S11	M11 S11	B11 G11 M11 S11	M11 S11	B11 G11 M11 S11	G11 S11	M11 S11	

CABLES:

GND: B1E11,F1A11,J1B11,M1E11,R1A11,U1B11
B6E02,F6A02,J6B02,M6E02,R6A02,U6B02

INPUT VOLTAGES AT MINI-BUS CONNECTOR.

GND: B2E14,B3E14,B4E14,U2E14,U3E14,U4E14

-24V: B4A14 (UNUSED)

-5V: U2A14,U4A14

-4V: B3A14 (UNUSED)

+5V: B2A14,U3A01,B4E01,B5A01,U4A01,U5A01

+6V: B3E01,B4A01 (UNUSED)

+8.5V: U3E01,U5E01,U4E01

+24V: B5E01 (UNUSED)

+24(S): B3A01 (UNUSED)

-12V: U3A14 (SEE *)

*: THESE VOLTAGES ARE FOR REF ONLY. FOR VOLTAGE MEASUREMENT, REFER TO SECTION 05-710 OF MAINTENANCE MANUAL (VOL B).

**: USED. ONLY IF ANY DATA COMMUNICATIONS FEATURE IS INSTALLED.

EC HISTORY		DRAWING TITLE
18 DEC 78	833180	A-A2 BOARD VOLTAGE DISTRIBUTION (62PC)
20 FEB 79	834778	MACH 5340 MDL XX4, XX5
		PART NO 8265697
		CLASSIFICATION
		11/28/78 LPVH

C

IBM CORP

AF015

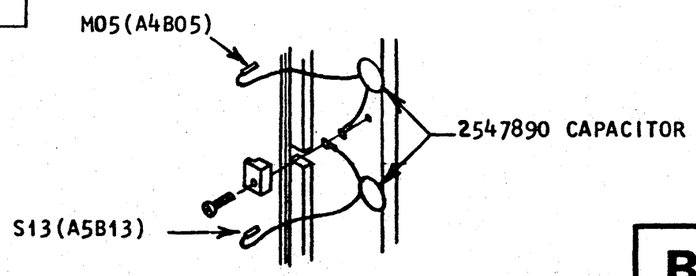
AF015

A-A3 BOARD VOLTAGE DISTRIBUTION

	A2	B2	C2	D2	E2	F2	G2	H2	J2	K2	L2	M2	N2	P2	Q2	R2	S2	T2	U2	V2
GND	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08
-24V NOTE 1	S13	B13 M13 S13	S13		SEE DETAIL A															
-12V NOTE 1		D12 U12	U12				J06													
-5V NOTE 1					B06 G06 M06 S06															
-4V NOTE 1	S06	B06 G06 M06 S06	B06 G06 M06 S06				D06													
-4V(S)* NOTE 1																				
+5V NOTE 1		D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03	
+6V NOTE 1	S11	B11 G11	B11 G11																	
+8.5V NOTE 1					B11 G11 M11 S11		D11									B11 G11 M11 S11	B11 G11 M11 S11			
+12V NOTE 1		B09 M09	S09				J11													
+24V NOTE 1		M02 S02	S02																	
+24V(S)* NOTE 1	M02 M05																			

*SPECIAL

SEE DETAIL A



DETAIL A

4237977

A F Ø 2 Ø

CABLES:

GND: B1E11,F1A11,J1B11,M1E11,R1A11,U1B11
B6E02,F6A02,J6B02,M6E02,R6A02,U6B02

INPUT VOLTAGES AT MINI-BUS CONNECTORS.

GND: B2E14,U2E14,B4E14,U4E14,B3E14,
U3E14

-24V: B4A14

-4V: B3A14

-4V(S): U3A14

-5V: U2A14,U4A14

+5V: B2A14,B4E01,B5A01,U3A01,U4A01,
U5A01

+6V: B3E01,B4A01

+8.5V: U3E01,U4E01,U5E01

24V: B5E01

+24V(S): B3A01

NOTE:

1 THESES VOLTAGES ARE FOR REF ONLY. FOR VOLTAGE MEASUREMENT, REFER TO SEC 05-710 OF MAINTENANCE MANUAL (VOL B).

EC HISTORY		DRAWING TITLE	
02DEC77	832850	A-A3 BOARD VOLTAGE DISTRIBUTION	
08MAY78	833014A	MACH 5340	
29JUN78	832999	PART NO 423 7977	
13DEC78	834777	CLASSIFICATION	IBM CORP
		8/11/77 J.C.	

B

AF020

AF020

B-A1 AND A2 BOARD VOLTAGE DISTRIBUTION

4237990

AF030

	A2	B2	C2	D2	E2	F2	G2	H2	J2	K2	L2	M2	N2	P2	Q2	R2	S2	T2	U2	V2
GND	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 M12 P08 S08 U08 U09	D08 J08 P08 U08	D08 J08 P08 U08	D02 B07 D08 B12 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08 U09	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U07 *U08	D08 J08 P08 U08
+12V NOTE 1			 **	B04 G04 M04 S04 **	B04 G04 **	 **	B03 **	G04 **	 M04 S04 **	G04 M04 S04 **	B04 G04 **	B04 G04 **	 M04 S04 **	B04 **	B03 B04 G04 M04 S04 **	B04 G04 **	G04 G05 M04 S04 **	B02 B04 G04 M04 S04 **	 *U04	S08 S09 S10
+8.5V NOTE 1				 U13	D11 		D11 U11	G03 		B02 D07 D12 G03 U02			 P02 	 G09 				D12 	 *U11	
-5V NOTE 1					D10 D12 		D10 D12 U10 U12			M07 								 	 *U12	
-12V NOTE 1				D10 J10 P10 U10	D05 		B02 	 J10 P10 U10	 P10 U10	 J10 P10 U10	D10 J10 P10 U10	D10 J10 P10 U10	 P10 U10	D10 J10 P10 U10	D10 J10 P10 U10	D10 J10 P10 U10	 J10 P10 U10	D10 J10 P10 U10	U10 * 	

NOTE:

1. THESE VOLTAGES ARE FOR REF ONLY. FOR VOLTAGE MEASUREMENT, REFER TO SECTION 05-710 OF MAINTENANCE MANUAL. (VOL B)

* SOURCE INPUT

** D03, J03, P03, & U03

B-A1 AND A2 BOARD VOLTAGE DISTRIBUTION

AF030

EC HISTORY		DRAWING TITLE	
02DEC77	832850	B-A1 AND A2 BOARD VOLTAGE DISTRIBUTION	
13DEC78	834777	MACH 5340	
25JUL79	834824	PART NO 4237990	
B		CLASSIFICATION	IBM CORP
		8/11/77 J.C.	

AF030

620-0130-0 MRO# 780522200 ALD DRAWING FORMAT ASTROCLOTH N650T B-276

DRAFTING MEDIA GRAPHIC CONTROLS CORPORATION Buffalo, New York Printed in U.S.A.

4237991

AF040

C-AI BOARD VOLTAGE DISTRIBUTION

	A2	B2	C2
GND	D08 G08 G13 J08 J09 P08 U08	D08 G08 J08 P08 U08	D08 J08 J13 P08 U08
-24V NOTE 1 *	G07		D06
-6V * NOTE 2			G13 P13 S11 U13
-5V * NOTE 1	J06		J06 P06 U06
+5V * NOTE 1	D03 G02 G03 J02 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03
+6V * NOTE 2			B13 P11 U11
+24V * NOTE 1	G05		D11 J11

CABLES:

GND: B1C11,B6C02

MINI BUS CONNECTOR PINS (REF ONLY)

GND: B2E14,B4E14

+5V: B3A01,B5A01

NOTES:

1. SUPPLIED BY A3 CABLE.
2. SUPPLIED BY C2 CARD.

* THESE VOLTAGES ARE FOR REF ONLY. FOR VOLTAGE MEASUREMENT, REFER TO SECTION 05-710 OF MAINTENANCE MANUAL (VOL B).

	EC HISTORY		DRAWING TITLE	
	02DEC77	832850	C-AI BOARD VOLTAGE DISTRIBUTION	
			MACH 5340	
			PART NO 4237991	
B			CLASSIFICATION	IBM CORP
			09/06/77 J.C.	

AF040

AF040

DRAFTING MEDIA GRAPHIC CONTROLS CORPORATION Buffalo, New York Printed in U.S.A.

E-A1 AND E-B1*** BOARD VOLTAGE DISTRIBUTION (62PC DISK DRIVE BOARD)

	A2	B2	C2	D2	E2	F2
GND	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08	D08 J08 P08 U08 S09
+5*	P03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03	D03 J03 P03 U03
-4*	D06	B06 G06 M06 S06			B06 G06 M06 S06	B06 G06 M06 S06
+12*		B11	B11	B11	B11	B05 B11 G11 M11 S11
-12*		D12	D12	D12	D12	D12 J12 P12 U12
-7**					D10	D10 J10 P10 U10
-8**	B10 B12 D09 D13					S04
+6**	D03	B12				
+24*				S02		G02

INPUT VOLTAGES AT MINI-BUS CONNECTOR

GND: B2A14, B3E01, B4A14, B5E01, B6E01

+5: B2E14, B4E14

-4: B3A01, B5A01

-12: B2E01

+12: B1E14

+24: B5E14, B6A01

CABLE SOCKETS

GND: A1B11, A1C11, B1A11, B1B11, B1C11, B6B02, C1A11, C1B11, C1C11, E1C11, C6B02

+5: D1C11

-4: A1D13, B1D13, E1A13

-12: F1B11

+12: F1A13

+6: B1A13, C1A13

* THESE VOLTAGES ARE FOR REF ONLY. FOR VOLTAGE MEASUREMENTS, REFER TO SECTION 05-710 OF MAINTENANCE MANUAL (VOL 8).

** THESE VOLTAGES ARE GENERATED FROM THE BOARD.

*** A1 BOARD FOR UPPER DISK DRIVE AND B1 BOARD FOR LOWER DISK DRIVE IF INSTALLED.

EC HISTORY		DRAWING TITLE
18 DEC 78	833180	E-A1 BOARD VOLTAGE DISTRIBUTION (62PC
25 JUL 79	834824	MACH 5340 MDL XX4, XX5
12 DEC 79	834926	PART NO 8265696
		CLASSIFICATION
		11/28/78 LPVH

C

IBM CORP

AF050

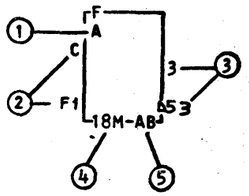
AF050

4237827

AY003

A)

CONVENTIONS



1. FUNCTION

   THIS IDENTIFIES THE FUNCTION OF THE BLOCK - ('AND')

2. LINE POSITION

   ALPHA CHARACTERS NEXT TO THE INPUT OF THE LOGIC BLOCK IDENTIFY THE POSITION OF THE LINE ON THE BLOCK

3. LINE POSITION

   NUMERIC CHARACTER NEXT TO THE LOGIC BLOCK ON THE OUTPUT IDENTIFIES THE POSITION OF THE LINE ON THE BLOCK

4 LOCATION

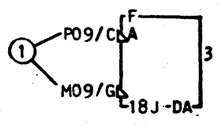
   THIS IDENTIFIES THE POSITION OF THE BLOCK ON THE PAGE

5. BLOCK I.D.

   THIS IS USED TO IDENTIFY THE OUTPUT NET WITH ITEM 3

   (EXAMPLE: OUTPUT NET OF THIS BLOCK WOULD BE AB3)

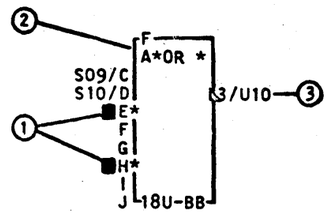
B)



1. PROBEABLE INPUT BOARD PINS

C)

CONVENTIONS



1. DELIMITER

   ASTERISK IS A DELIMITER AND SEPARATES GROUPS OF INPUTS

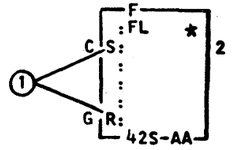
2. BLOCK FUNCTION

   A*OR INDICATES 'AND' BLOCKS FEEDING AN 'OR' BLOCK

   THIS EXAMPLE SHOWS 3 'AND' BLOCKS FEEDING AN 'OR' BLOCK. THE 3 'AND' BLOCK FUNCTIONS ARE SEPARATED BY THE ASTERISKS

3. PROBEABLE OUTPUT BOARD PIN

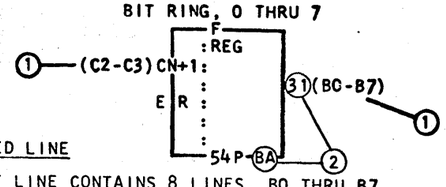
D)



1. ENGLISH PIN CHARACTERS

   THEY ARE INSIDE THE BLOCK AND DENOTED BY THE DOTTED LINE

E)



1. BUNDLED LINE

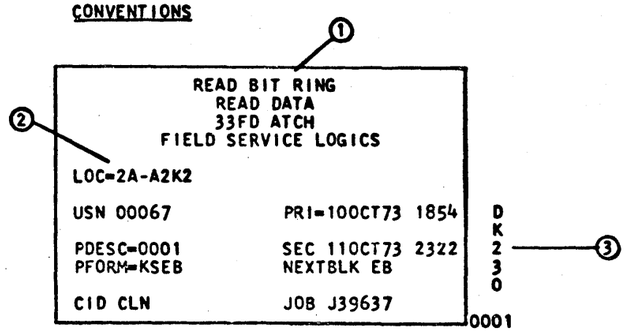
   OUTPUT LINE CONTAINS 8 LINES, B0 THRU B7
   INPUT LINE CONTAINS 2 LINES, C2 AND C3.

2. PROBEABLE BUNDLED LINE

   USE PIN LOCATION TABLE IN THE LEFT CORNER OF THE COMMENT AREA. EACH GROUP OF BUNDLED LINES WILL BE IDENTIFIED BY BLOCK NAME (BA) AND STARTING LOCATION (31). IN THIS CASE, 31 WILL BE FOR B0; 32 WILL BE FOR B1; ETC.

F)

CONVENTIONS



PAGE TITLE BLOCK

1. DESCRIPTION OF LOGIC ON THE PAGE
2. CARD LOCATION OF LOGIC ON PAGE
3. PAGE NUMBER

G)

EDGE OF BLOCK CHARACTERS

P — A POSITIVE-GOING SHIFT OR PULSE ACTIVATES THE BLOCK

N — A NEGATIVE-GOING SHIFT OR PULSE ACTIVATES THE BLOCK

T — A TEST POINT

O — NEGATIVE DC ACTIVE LEVEL

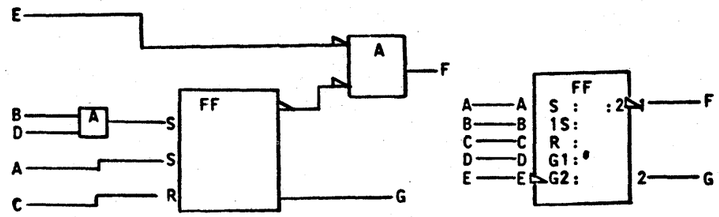
I — POSITIVE DC ACTIVE LEVEL

	EC HISTORY		DRAWING TITLE
	29JUL77	832742M	LOGIC BLOCK SYMBOLOGY
	02DEC77	832850	MACH 5340
			PART NO 4237827
C			CLASSIFICATION
			27/05/77 JLC IBM CORP

AY003

AY003

CONVENTIONS

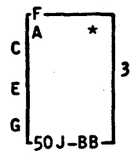


LINE DEPENDENCY NOTATIONS

THIS FIGURE IS PROVIDED TO ILLUSTRATE THE DEPENDENCY NOTATION. INPUT B AND OUTPUT F ARE DEPENDENT LINES. INPUT D IS THE DEPENDENCY FOR INPUT B AND IS CALLED G1. THE INPUT B IS NOTED WITH A 1 TO COMPLETE THE INPUT DEPENDENCY NOTATION. INPUT E IS THE DEPENDENCY FOR OUTPUT F. IT IS INDICATED AS G2. OUTPUT F IS DESIGNATED WITH A 2 TO COMPLETE ITS DEPENDENCY NOTATION. INPUTS A, C AND OUTPUT G ARE LINES THAT HAVE NO DEPENDENCY.

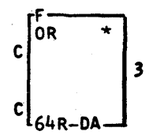
ENGLISH PIN CHARACTERS

A	ADDRESS (READ AND/OR WRITE)
AR*	READ FROM ADDRESS
AW*	WRITE INTO ADDRESS
C	CONTROL (USED WITH DATA STORAGE)
CD	DATA
G	GATES OTHER SIGNALS
J	ALONE, CAUSES SET WITH K, COMPLEMENTS
K	ALONE, CAUSES RESET. WITH J, COMPLEMENTS
R	CAUSES RESET
S	CAUSES SET
T	COMPLEMENTS FUNCTION
Z	COMMON SIGNAL DISTRIBUTION
>	SHIFT DOWN
<	SHIFT UP
+	INCREMENT THE COUNT
-	DECREMENT THE COUNT
NUMERAL(S)	DECODER LINE WEIGHT OR DEPENDENCY UPON CONTROLLING LINE



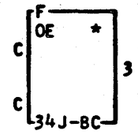
AND BLOCK

THE OUTPUT OF THIS AND BLOCK IS AT ITS INDICATED POLARITY ONLY WHEN ALL OF ITS INPUTS ARE AT THEIR INDICATED POLARITIES. THE LETTERS IN THE BLOCK ARE THE SYMBOL OF THE FUNCTION. IN THIS CASE, A IS THE SYMBOL FOR THE AND FUNCTION.



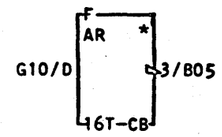
OR BLOCK

THE OUTPUT OF THE OR BLOCK IS AT ITS INDICATED POLARITY ONLY WHEN ONE OR MORE OF ITS INPUTS ARE AT THEIR INDICATED POLARITY.



EXCLUSIVE OR

THE OUTPUT OF AN EXCLUSIVE OR BLOCK IS AT ITS INDICATED POLARITY WHEN ONLY ONE OF ITS INPUTS IS AT THE INDICATED POLARITY.



AMPLIFIER

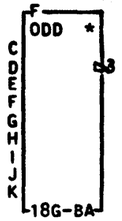
THE AMPLIFIER PROVIDES ADEQUATE DRIVING ENERGY AND AN APPROPRIATE IMPEDANCE MATCH TO OTHER BLOCKS. THE AMPLIFIER OUTPUT IS AT ITS INDICATED POLARITY ONLY WHEN THE INPUT IS AT ITS INDICATED POLARITY. AN AMPLIFIER CAN HAVE NO MORE THAN ONE LOGIC INPUT. AN AMPLIFIER HAVING INPUT OR OUTPUT OF OTHER THAN STANDARD LOGIC SIGNAL VOLTAGE HAS DISTINCTIVE LABELING AT THE BLOCK.

EC HISTORY		DRAWING TITLE		
29JUL77	832742M	LOGIC BLOCK SYMBOLOGY		
02DEC77	832850	MACH 5340		
		PART NO 4237828		
		CLASSIFICATION		IBM CORP
		26/05/77	JLC	

C

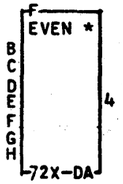
AY004

AY004



ODD COUNT

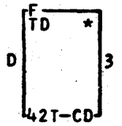
THE OUTPUT OF ODD COUNT (ODD) COUNT IS AT ITS INDICATED POLARITY ONLY WHEN AN ODD NUMBER (SUCH AS 1, 3, 5, *OR* 7) OF THE INPUTS ARE AT THEIR INDICATED POLARITY.



EVEN COUNT

SIMILAR TO THE ODD EXCEPT THE OUTPUT OF EVEN COUNT (EVEN) IS AT ITS INDICATED POLARITY ONLY WHEN AN EVEN NUMBER (SUCH AS 0, 2, 4, *OR* 6) OF THE INPUTS ARE AT THEIR INDICATED POLARITY

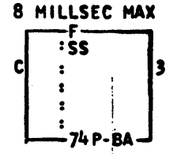
750 NANOSEC TYPICAL



TIME DELAY

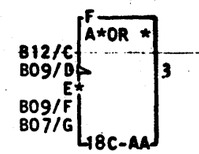
THE TIME DELAY BLOCK DELAYS A SIGNAL WITHOUT INTENTIONAL DISTORTION OF THE SIGNAL. THE TIME DELAY SYMBOL MUST ALWAYS BE ACCOMPANIED BY THE TIME DELAY. TIME DELAYS HAVING A DELAY TIME FOR THE LEADING EDGE OF THE OUTPUT THAT IS DIFFERENT FROM THE TIME DELAY FOR THE TRAILING EDGE ARE IDENTIFIED BY THE PLACEMENT OF AN L FOR LEADING AND A T FOR TRAILING IMMEDIATELY PRIOR TO THE SEPARATE DELAY TIMES IN THE BLOCK AREA THE INPUT POLARITY AT THE BLOCK MUST BE THAT ASSOCIATED WITH THE LEADING EDGE OF THE OUTPUT.

8 MILLSEC MAX



SINGLESHOT

THE OUTPUT OF THE SINGLESHOT CHANGES TEMPORARILY TO THE INDICATED POLARITY WHEN WHEN IT RECEIVES AN INPUT SIGNAL OF THE INDICATED POLARITY. THE OUTPUT REMAINS IN THIS QUASI-STABLE STATE FOR A TIME CHARACTERISTIC OF THE PARTICULAR BLOCK. THE SINGLESHOT ALWAYS HAS THE TIME DURATION SHOWN IN THE TITLE AREA OF THE BLOCK. IF A SINGLESHOT HAS MORE THAN ONE OUTPUT NOT OF THE SAME DURATION, THE BLOCK IS LABELED OR A REFERENCE NOTE ON THE PAGE RELATES PIN NUMBERS TO TIME DURATION.

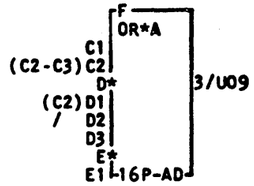


AND TO OR

THE A*OR OUTPUT(S) WILL STAND AT ITS INDICATED POLARITY WHEN AND ONLY WHEN ONE OR MORE OF THE INPUT 'AND' GROUPINGS HAS ALL ITS INPUTS STANDING AT THEIR INDICATED POLARITY.

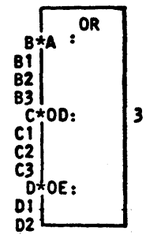
SYMMETRICAL TWO-LEVEL LOGIC COMBINATIONS

INPUT LEVEL	OUTPUT LEVEL	SYMBOL
OE OD OR	A	OE*A OD*A OR*A
A OE	OR	A*OR OE*OR
A OR	OD	A*OD OR*OD
A OR	OE	A*OE OR*OE
A OE OR OD	SS	A*SS OE*SS OR*SS OD*SS



OR TO AND

THE OR*A OUTPUT(S) WILL STAND AT ITS INDICATED POLARITY WHEN AND ONLY WHEN ALL OF THE INPUT 'OR' GROUPINGS HAVE ONE OR MORE OF THEIR INPUTS STANDING AT ITS INDICATED POLARITY.



TWO LEVEL LOGIC NON-SYMMETRICAL INPUTS

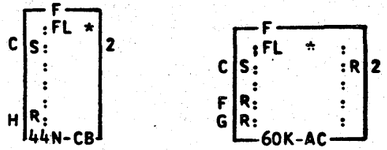
NON-SYMMETRICAL INPUT FUNCTIONS TO THE OR; THESE MAY BE ANY COMBINATION OF BASIC LOGIC FUNCTIONS, EXCLUDING STORAGE.

DEFINITION: THE OUTPUT(S) OF THIS OR WILL STAND AT ITS INDICATED POLARITY WHEN AND ONLY WHEN ONE OR MORE OF THE INPUT FUNCTIONS HAVE BEEN SATISFIED.

EC HISTORY		DRAWING TITLE	
29JUL77	832742M	LOGIC BLOCK SYMBOLOGY	
02DEC77	832850	MACH 5340	
		PART NO 4237829	
C		CLASSIFICATION	IBM CORP
		26/05/77 JLC	

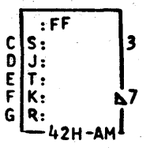
AY005

AY005



FLIPLATCH

THE FLIPLATCH IS A STORAGE BLOCK WITH TWO STABLE STATES, ONE IS THE SET STATE AND THE OTHER IS THE RESET STATE. AN ENGLISH CHARACTER,(S,R) ON THE OUTPUT INDICATES THE STATE THE OUTPUT WILL ASSUME IF THE SET AND RESET ARE ACTIVATED SIMMULTANEOUSLY.

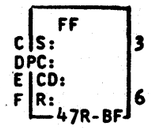


FLIP FLOP

THE FLIP-FLOP HAS TWO STABLE STATES. ONE OF THESE IS THE '1' STATE OR SET STATE, THE OTHER IS THE '0' STATE OR RESET STATE.

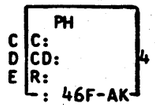
THE OUTPUT(S) WILL HAVE THE INDICATED POLARITY WHILE THE FLIP-FLOP IS IN THE SET STATE.

A FLIP-FLOP CAN HAVE FIVE TYPES (S, R, J, K, AND T) OF INPUTS, IN DIFFERENT COMBINATIONS. INPUTS J AND K, RESPECTIVELY, ACT LIKE INPUTS S AND R IN THE FLIP LATCH EXCEPT THAT SIMULTANEOUS APPLICATION OF A J SET AND K RESET WILL COMPLEMENT THE OUTPUT. THE T INPUT COMPLEMENTS EACH OUTPUT.



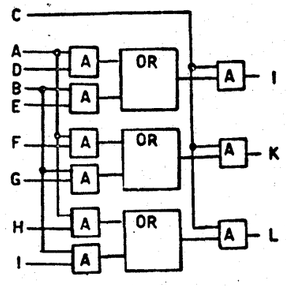
FLIP-FLOP WITH C AND CD

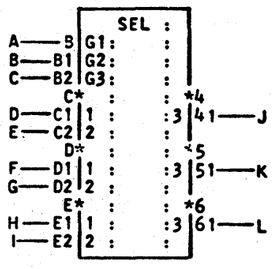
THE FLIP-FLOP CAN BE SET AND RESET WITH THE S AND R INPUTS. A PLUS SHIFT ON THE C INPUT WILL CLOCK THE CD INPUT. THIS WILL SET THE FLIP-FLOP IF THE CD LINE IS ACTIVE OR WILL RESET THE FLIP-FLOP IF THE CD LINE IS INACTIVE.



POLARITY HOLD

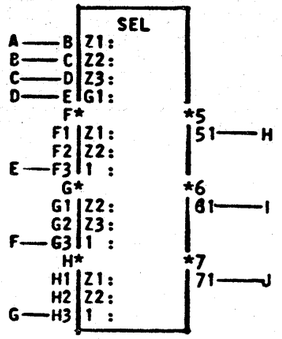
THE OUTPUT OF THIS BLOCK IS AT THE INDICATED POLARITY WHEN THE DATA LINE IS AT ITS INDICATED POLARITY AND THE CONTROL LINE IS AT ITS POLARITY. WHEN THE CONTROL INPUT GOES TO THE POLARITY OPPOSITE TO THAT INDICATED, THE OUTPUT REMAINS AT WHATEVER POLARITY IT POSSESSES AT THAT MOMENT. THE PH BLOCK MAY HAVE A RESET INPUT. WHEN RESET THE OUTPUT IS OPPOSITE TO THAT OF ITS INDICATED POLARITY.





SELECTOR

THE SELECTOR IS A GATING DEVICE. THE UPPER SECTION OF THE BLOCK CONTAINS THE GATES. THESE LINES ARE DESIGNATED G. THE LOWER SECTION CONTAINS THE GATED DATA LINES.



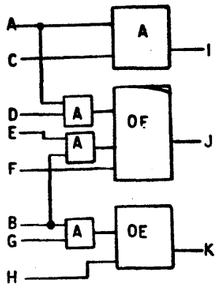
SELECTOR WITH Z INPUT

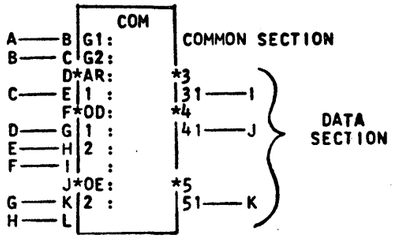
WHEN AN INPUT LINE IS COMMON TO A NUMBER OF FUNCTIONS IN A STACKED OR MACRO BLOCK CONFIGURATION IT IS DESIGNATED AS A Z LINE. THE Z INPUT LINE IS BROUGHT TO THE COMMON SECTION OF THE LOGIC SYMBOL AND THE APPROPRIATE Z DESIGNATION IS REPEATED IN ALL THE LOGIC FUNCTIONS AFFECTED. THE Z INPUT ACTIVE AT EACH FUNCTION WILL EXIST PROVIDING THE Z INPUT STANDS AT THE POLARITY INDICATED.

EC HISTORY		DRAWING TITLE	
29JUL77	832742M	LOGIC BLOCK SYMBOLOGY	
02DEC77	832850	MACH 5340	
		PART NO 4237830	
C		CLASSIFICATION	IBM CORP
		26/05/77 JLC	

AY006

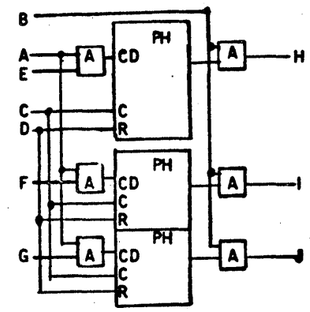
AY006

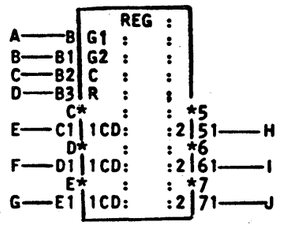




COMMON BLOCK

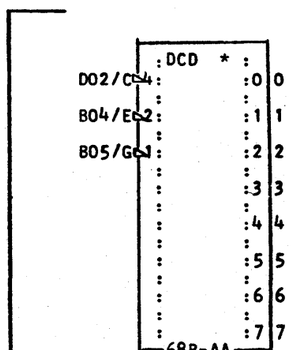
THE COMMON SECTION MAY BE ASSOCIATED WITH ANY GROUP OF BASIC LOGIC ELEMENTS FUNCTIONALLY GROUPED BY THEIR DEPENDENT GATING. FOR THIS APPLICATION, EACH FUNCTIONAL ELEMENT SHALL CONTAIN THE PROPER LETTER(S) THAT MAKES IT AN APPROVED LOGIC SYMBOL. THE COMMON SECTION MAY CONTAIN THE LETTERS COM AT THE TOP LINE.





REGISTER

A REGISTER LOGIC BLOCK CONSISTS OF A GROUP OF ASSOCIATED STORAGE ELEMENTS (FF,FL,PH) WITH COMMON INPUT AND/OR OUTPUT GATING OR OTHER COMMON INPUT LINES SUCH AS RESET.



DECODE

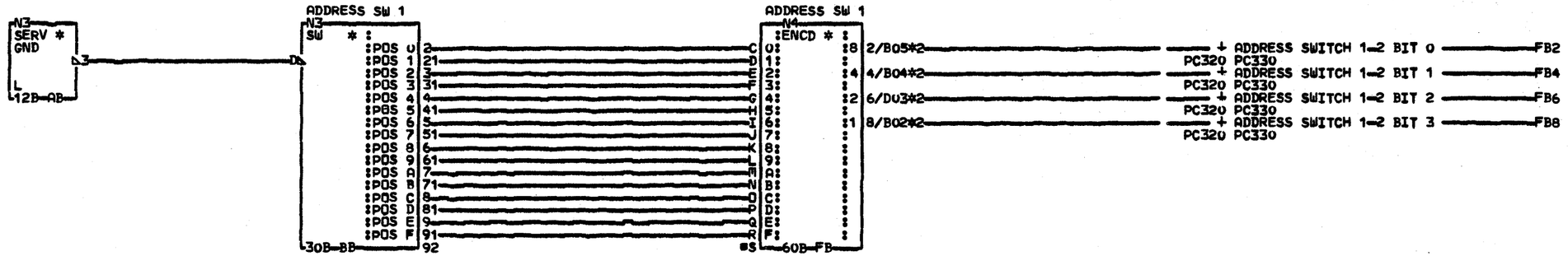
THE DECODER TRANSLATES A GROUP OF RELATED INPUTS INTO A SPECIFIC OUTPUT. INPUTS ARE NUMBERED IN BINARY PROGRESSION: 1, 2, 4, 8, AND SO ON. THE OUTPUT EQUALS THE SUM OF THE ACTIVE INPUTS.

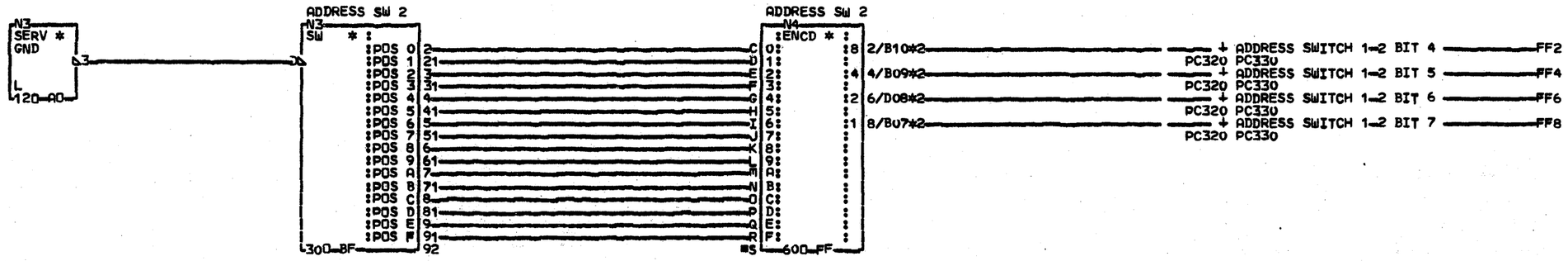
EC HISTORY		DRAWING TITLE	
29JUL77	832742M	LOGIC BLOCK SYMBOLOGY	
02DEC77	832850	MACH 5340	
		PART NO 4237831	
		CLASSIFICATION	IBM CORP
		26/05/77 JLC	

C

AY007

AY007





COMMENTS

D1COPYRIGHT IBM CORP. 1978

CONNECTORS

FB2
0001/1A-A1/A4D05
FB4
0002/1A-A1/A4D04
FB6
0003/1A-A1/A4B03
FB8
0004/1A-A1/A4D02
FF2
0005/1A-A1/A4D10
FF4
0006/1A-A1/A4D09
FF6
0007/1A-A1/A4B08

CONNECTORS

FF8
0008/1A-A1/A4D07

CE PANEL
ADDRESS SWITCHES
CE PANEL Y1
PN4237277 EC832850 PEC832742E

LOC=CE-PANELY1

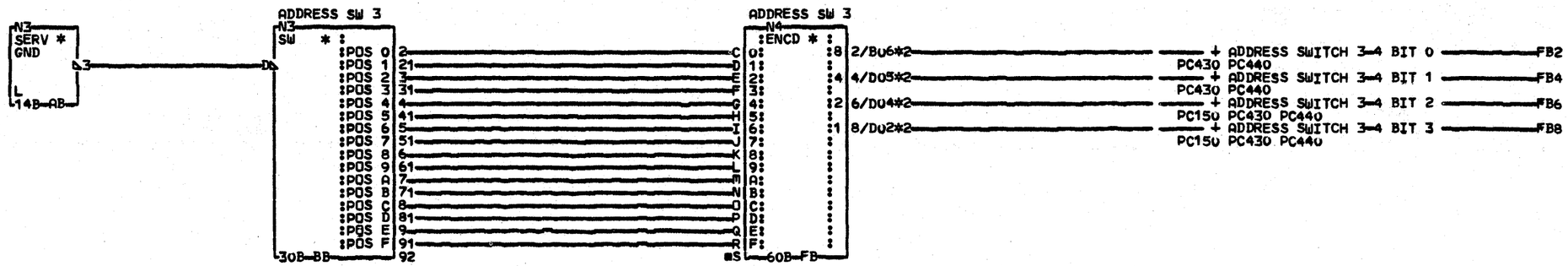
USN 00006 PRI=09SEP77 0040

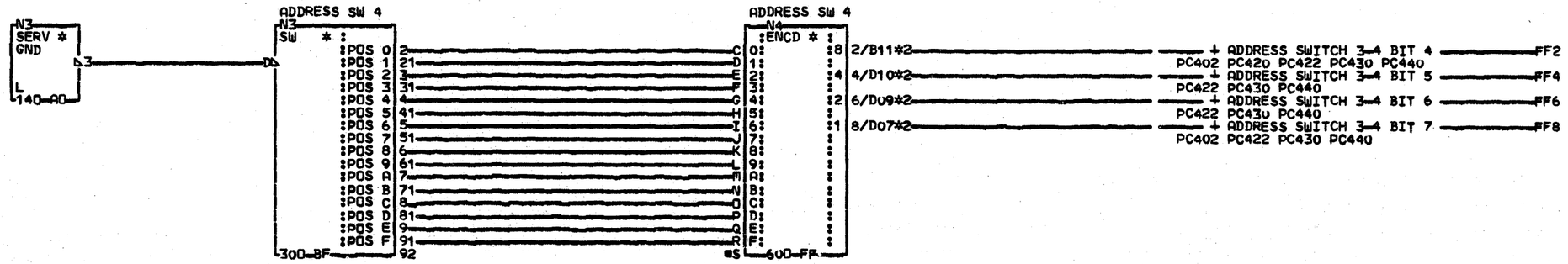
AUC= SEC
PFORM=KSEB NEXTBLK FG

CID PIOFE JOB M5301415

CE110 0001

CE110 0001





COMMENTS

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E

CONNECTORS

FB2
0001/1A-A1/A4D06
FB4
0002/1A-A1/A4B05
FB6
0003/1A-A1/A4B04
FB8
0004/1A-A1/A4B02
FF2
0005/1A-A1/A4D11
FF4
0006/1A-A1/A4B10
FF6
0007/1A-A1/A4B09

CONNECTORS

FF8
0008/1A-A1/A4B07

CE PANEL
ADDRESS SWITCHES
CE PANEL Y1
PN4237278 EC832850 PEC832742E

LOC=CE-PANELY1

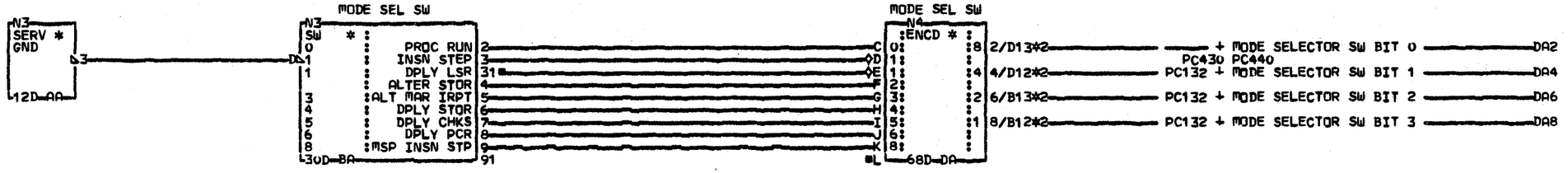
USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK FG

CID PIOFE JOB M5301415

CE120 0001

CE120 0001



COMMENTS

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CONNECTORS

DA2
0001/1A-A1/A4B13
DA4
0002/1A-A1/A4B12
DA6
0003/1A-A1/A4D13
DA8
0004/1A-A1/A4D12

CE PANEL
MODE SELECTOR SWITCH
CE PANEL Y1
PN4237279 EC832850 PEC832742E

LOC=CE-PANELY1

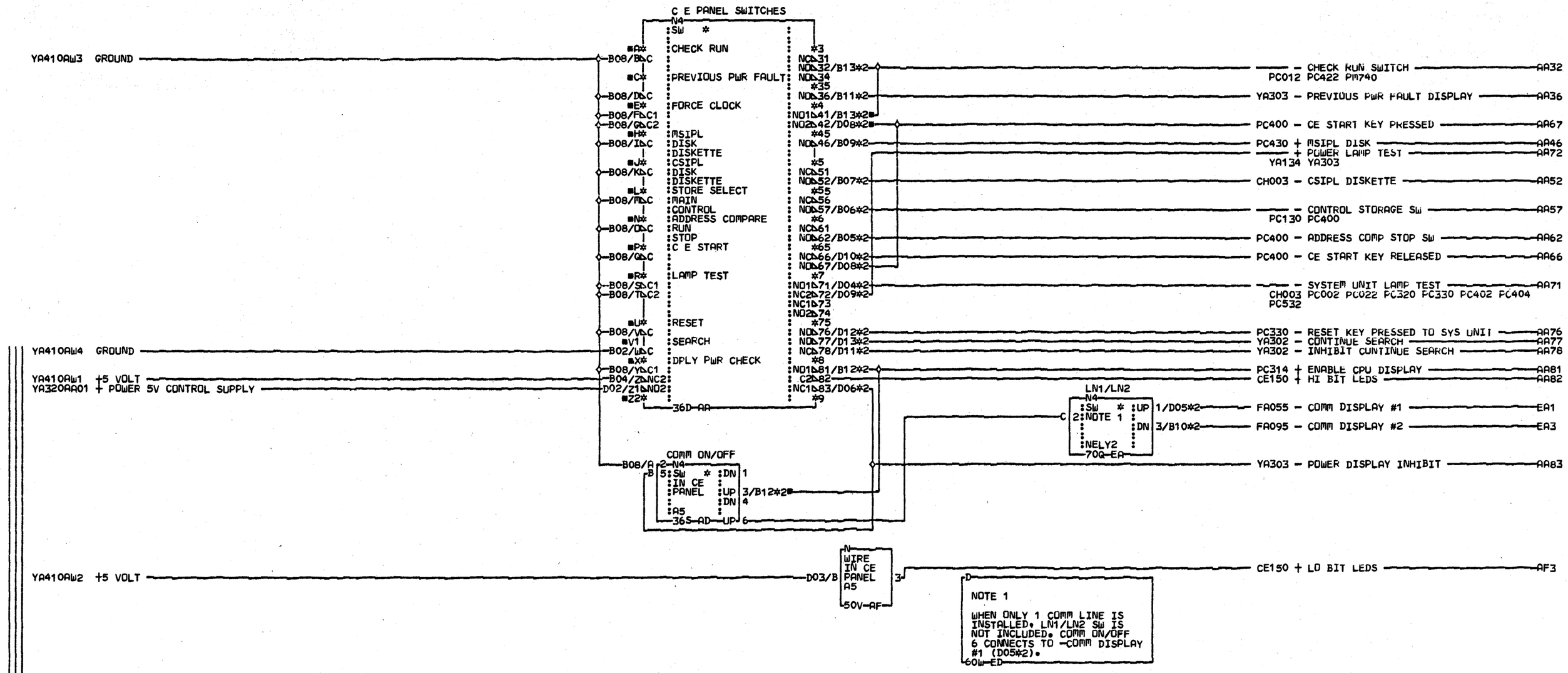
USN 00006 PRI=19SEP77 1624

AUC= SEC
PFORM=KSEB NEXTBLK DB

CID PIOFE JOB M5301415

CE130 0001

CE130 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

CONNECTORS

- AA32
  - 0003/1A-A1/A5D13
- AA36
  - 0004/1A-A1/A5D11
  - 0022/1A-A1/C1A13
  - 0023/1C-A1/A2B11
- AA46
  - 0006/1A-A1/A5D09
- AA52
  - 0018/1A-A1/A5D07
- AA57
  - 0008/1A-A1/A5D06
- AA62
  - 0009/1A-A1/A5D05

CONNECTORS

- AA66
  - 0010/1A-A1/A5B10
- AA67
  - 0011/1A-A1/A5B08
- AA71
  - 0036/1A-A1/A5B04
- AA72
  - 0013/1A-A1/A5B09
  - 0026/1A-A1/B1E13
  - 0027/1C-A1/A2B08
  - 0037/1C-A1/A4B02
- AA76
  - 0014/1A-A1/A5B12
- AA77

CONNECTORS

- 0015/1A-A1/A5B13
- 0028/1A-A1/B1B13
- 0029/1C-A1/A2B05
- AA78
  - 0030/1A-A1/A1D11
  - 0016/1A-A1/A5B11
  - 0031/1C-A1/A2D02
- AA81
  - 0017/1A-A1/A5D12
- AA83
  - 0005/1A-A1/A5B06
  - 0024/1A-A1/C1C13
  - 0025/1C-A1/A2B11
- EA1

CONNECTORS

- 0001/1A-A1/A5B05
- 0032/1A-A1/F6B02
- 0034/1A-A2/F1B11
- EA3
  - 0002/1A-A1/A5D10
  - 0033/1A-A1/F6C02
  - 0035/1A-A2/F1C11

C E PANEL SWITCHES
CONNECTOR-Y2
CE PANEL Y2
PN4237280 EC834824 PEC834778

LOC=CE-PANELY2

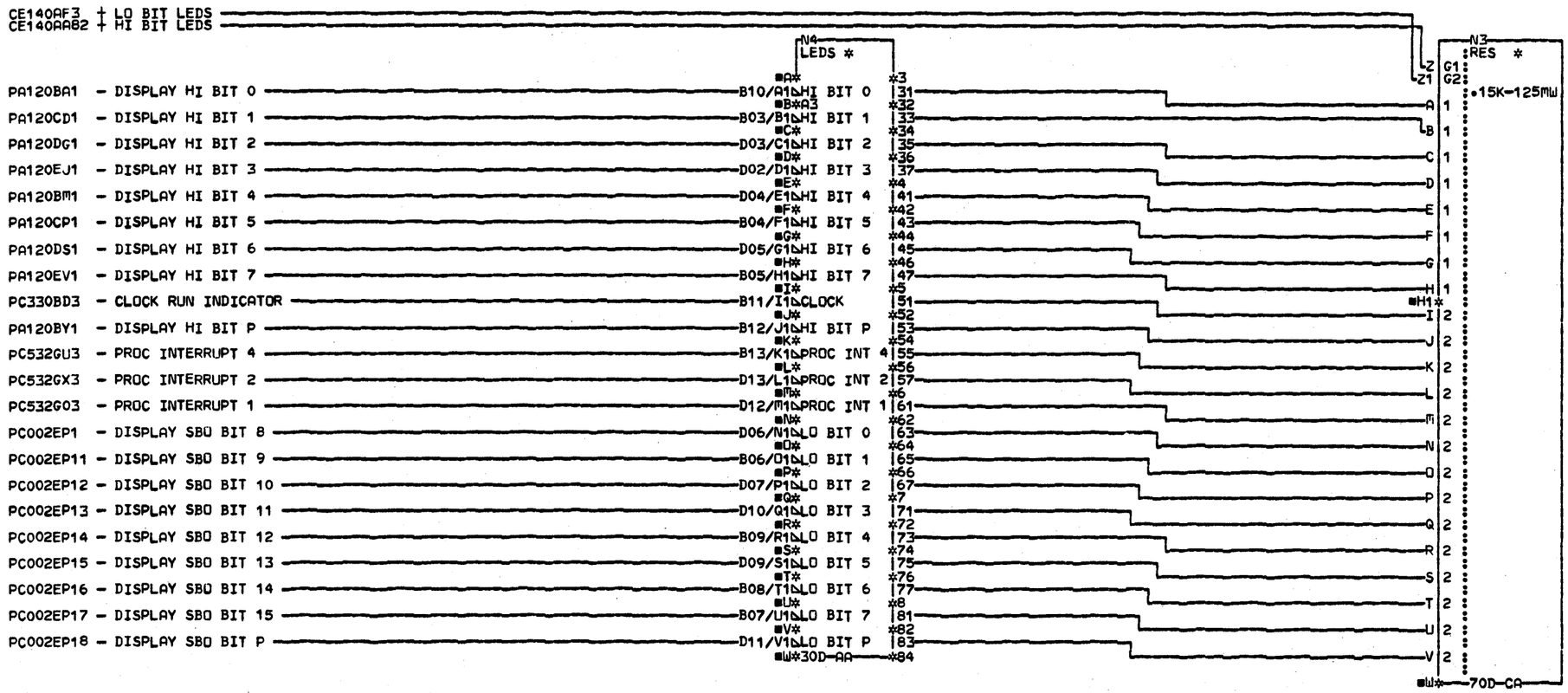
USN 00008 PRI=22MAY79 1409

AUC= SEC

PFORM=KSEB NEXTBLK EE

CID PIOFE JOB T4301503

CE140 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

C E PANEL LIGHTS
SOCKET J2 EXCEPT AS NOTED
CE PANEL Y3
PN4237281 EC832984 PEC832850

LOC=CE-PANELY3

USN 00008 PRI=01FEB78 1748

AUC= SEC
PFORM=KSEB NEXTBLK CB

CID PIOFE JOB L6901004

CE150 0001

AA1-A5 (Y2) CE140

B02	- GROUND TO DISPLAY PWR CHK	D02	+ PWR 5V TO CONTROL SUPPLY
B03		D03	+ SYS UNIT 5V TO CE PANEL
B04	+ SYS UNIT 5V TO CE PANEL	D04	- SYS UNIT LAMP TEST
B05	- ADDRESS COMP STOP SW	D05	- COMM DISPLAY =1
B06	- CONTROL STORAGE SW	D06	- POWER DISPLAY INHIBIT
B07	- CSIPL DISKETTE	D07	- CE METER KEY
B08	- GROUND TO DISPLAY PWR CHK	D08	- CE START KEY PRESSED
B09	+ MSIPL DISK	D09	+ POWER LAMP TEST
B10	- COMM DISPLAY =2	D10	- CE START KEY RELEASED
B11	- PREVIOUS PWR FAULT DISPLAY	D11	- INHIBIT CONTINUE SEARCH
B12	+ ENABLE PWR CK DISPLAY	D12	- RESET KEY PRESSED TO CP
B13	- CHECK RUN SWITCH	D13	- CONTINUE SEARCH

B AND D POSITIONS ARE SWITCHED ON Y2 CABLE FROM THE MAPLE BLOCK TO THE SWITCHES.

AA1-A4 (Y1) CE110,120,130

B02	+ ADDRESS SWITCH 1-2 BIT 3	D02	+ ADDPESS SWITCH 3-4 BIT 3
B03		D03	+ ADDRESS SWITCH 1-2 BIT 2
B04	+ ADDRESS SWITCH 1-2 BIT 1	D04	+ ADDRESS SWITCH 3-4 BIT 2
B05	+ ADDRESS SWITCH 1-2 BIT 0	D05	+ ADDRESS SWITCH 3-4 BIT 1
B06	+ ADDRESS SWITCH 3-4 BIT 0	D06	
B07	+ ADDRESS SWITCH 1-2 BIT 7	D07	+ ADDRESS SWITCH 3-4 BIT 7
B08	- GROUND	D08	+ ADDRESS SWITCH 1-2 BIT 6
B09	+ ADDRESS SWITCH 1-2 BIT 5	D09	+ ADDRESS SWITCH 3-4 BIT 6
B10	+ ADDRESS SWITCH 1-2 BIT 4	D10	+ ADDRESS SWITCH 3-4 BIT 5
B11	+ ADDRESS SWITCH 3-4 BIT 4	D11	
B12	+ MODE SELECTOR SW BIT 3	D12	+ MODE SELECTOR SW BIT 1
B13	+ MODE SELECTOR SW BIT 2	D13	+ MODE SELECTOR SW BIT 0

B AND D POSITIONS ARE SWITCHED ON Y1 CABLE FROM THE MAPLE BLOCK TO THE SWITCHES.

AA1-A3 (Y3) CE150

D02	- DISPLAY HIGH BIT 3	B02	
D03	- DISPLAY HIGH BIT 2	B03	- DISPLAY HIGH BIT 1
D04	- DISPLAY HIGH BIT 4	B04	- DISPLAY HIGH BIT 5
D05	- DISPLAY HIGH BIT 6	B05	- DISPLAY HIGH BIT 7
D06	- DISPLAY SBO BIT 8	B06	- DISPLAY SBO BIT 9
D07	- DISPLAY SBO BIT 10	B07	- DISPLAY SBO BIT 15
D08	- GROUND	B08	- DISPLAY SBO BIT 14
D09	- DISPLAY SBO BIT 13	B09	- DISPLAY SBO BIT 12
D10	- DISPLAY SBO BIT 11	B10	- DISPLAY POWER CHECK BIT 0
D11	- DISPLAY SBO BIT P	B11	- CLOCK RUN INDICATOR
D12	- PROC INTERRUPT 1	B12	- DISPLAY HI BIT P
D13	- PROC INTERRUPT 2	B13	- FROC INTERRUPT 4

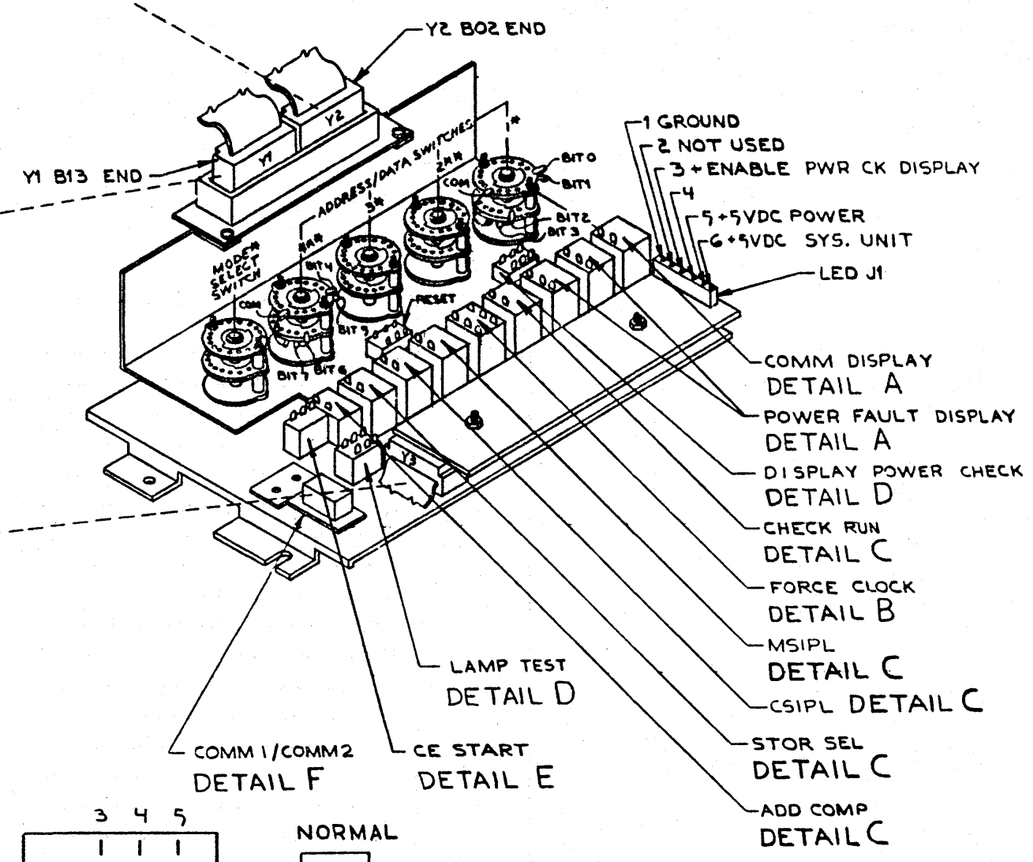
* MODE SELECT SWITCH ADDRESS/DATA SW 1 AND 3

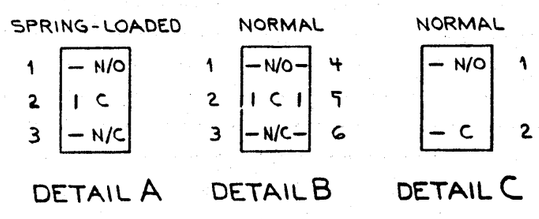
BIT 0
BIT 1
BIT 2
BIT 3

**ADDRESS/DATA SW 2 AND 4

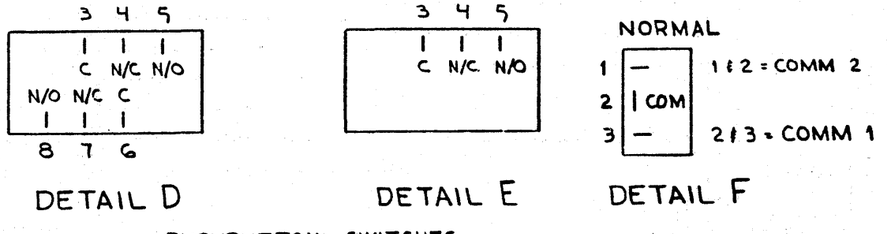
BIT 4
BIT 5
BIT 6
BIT 7

CE PANEL-REAR VIEW





TOGGLE SWITCHES



PUSHBUTTON SWITCHES

EC HISTORY		DRAWING TITLE
04MAY77	8327428	CE PANEL
02DEC77	832850	MACH 5340
29JUN78	832999	PART NO 4237282
13 DEC 78	834777	CLASSIFICATION
		4-13-77 JDS

D

IBM CORP

CE160

CE160

PC506FI2 - MPXPO BUS OUT BIT 0 — A1
PC506FI3 - MPXPO BUS OUT BIT 1 — A3
PC506FI4 - MPXPO BUS OUT BIT 2 — A5
PC506FI5 - MPXPO BUS OUT BIT 3 — A7

T ENTR 46A-AA

01*2 — DBO 0 — AA01
DL010 DL061 DL071 DL310 FA010 FL010 FL062
FL063 FL220 FL251 FL352 GE040 GE070 GE110
GF040 GF060 GF400 GV120 GV130 HA010 HA035
HA040 HA050 HA060 MR201 MR215 PR011 PT011
PU010 PU150 WS101 WS161

02 03*2 — DBO 1 — AA03
DL010 DL061 DL071 DL072 DL310 FA010 FL010
FL061 FL062 FL063 FL251 FL352 GE040 GE072
GE110 GF040 GF060 GF085 GF400 GV120 HA010
HA035 HA040 HA050 HA060 MR201 MR215 PR011
PT011 PU010 PU150 WS101 WS161

04 05*2 — DBO 2 — AA05
DL010 DL061 DL072 DL310 FA010 FL010 FL061
FL062 FL063 FL230 FL251 FL352 GE040 GE070
GE072 GE073 GE100 GF040 GF060 GF400 GV120
GV130 HA010 HA035 HA040 HA050 HA060 MR201
MR215 PR011 PT011 PU010 PU150 WS101 WS161

06 07*2 08 — DBO 3 — AA07
DL010 DL061 DL071 DL310 FA010 FL010 FL061
FL063 FL251 FL352 GE040 GE073 GE100 GF040
GF070 GF400 GV120 GV130 HA010 HA035 HA040
HA050 HA060 MR201 MR215 PR011 PT011 PU010
PU150 WS101 WS161

PC506FI6 - MPXPO BUS OUT BIT 4 — A1
PC506FI7 - MPXPO BUS OUT BIT 5 — A3
PC506FI8 - MPXPO BUS OUT BIT 6 — A5
PC506FI9 - MPXPO BUS OUT BIT 7 — A7

T ENTR 46H-AB

01*2 — DBO 4 — AB01
DL010 DL030 DL071 DL310 FA010 FL010 FL020
FL030 FL061 FL062 FL063 FL251 FL352 FL550
GE070 GE072 GE082 GE110 GF040 GF070 GF400
GV120 GV130 HA010 HA040 HA050 HA060 MR201
MR215 PR011 PT011 PU010 PU150 WS101 WS161

02 03*2 — DBO 5 — AB03
DL010 DL030 DL310 FA010 FL010 FL030 FL061
FL062 FL063 FL071 FL251 FL352 FL540 FL550
GE072 GE073 GE082 GF040 GF400 GV120 HA010
HA040 HA050 HA060 MR201 MR215 PR011 PT011
PU010 PU150 WS101 WS161

04 05*2 — DBO 6 — AB05
DL010 DL030 DL061 DL310 DL510 FA010 FL010
FL030 FL061 FL062 FL063 FL071 FL251 FL352
FL550 GE072 GE082 GE100 GE110 GF040 GF060
GF400 GV120 GV130 HA010 HA040 HA060 MR201
MR215 PR011 PT011 PU010 PU150 WS101 WS161

07*2 08 — DBO 7 — AB07
DL010 DL030 DL061 DL310 DL510 FA010 FL010
FL030 FL061 FL062 FL063 FL071 FL251 FL352
FL550 GE060 GE072 GE082 GE100 GE110 GF040
GF400 GV120 GV130 GV140 HA010 HA040 HA060
MR201 MR215 PR011 PT011 PU010 PU150 WS101
WS161

PC518GN3 - MPXPO BUS OUT BIT P — A1

T ENTR 46P-AC

01*2 — DBO P — AC01
DL010 DL310 FA010 FL010 FL352 GF040 GF400
HA010 HA050 MR201 PR011 PT011 PU010 PU150
WS101

PC542FC3 - COMMAND BUS OUT BIT 0 — A1
PC542DR3 - COMMAND BUS OUT BIT 1 — A3
PC542DN3 - COMMAND BUS OUT BIT 2 — A5

T ENTR 46T-AD

01*2 — COMMAND BUS OUT BIT 0 — AD01
DL050 FA010 FL050 GE080 GE081 GF400 HA010
HA030 HA035 MR201 MR203 PR011 PT011 PU010
WS101 WS111

02 03*2 — COMMAND BUS OUT BIT 1 — AD03
DL050 FA010 FL050 GE080 GE081 GF400 HA010
HA030 HA035 MR201 MR203 PR011 PT011 PU010
WS101 WS111

04 05*2 06 — COMMAND BUS OUT BIT 2 — AD05
DL010 DL020 DL030 DL050 FA010 FL010 FL030
FL030 GE080 GE081 GE082 GF400 HA010 HA030
HA035 MR201 MR203 PR011 PT011 PU010 WS101
WS111

COMMENTS
D1COPYRIGHT IBM CORP. 1978

C H 0 0 1 0001

CONNECTORS — AA01
01?9/1A-A1/R6A04
0086/1A-A2/A #A2B08
0030/1A-A2/A #R1A13
0001/1A-A2/A #U2B08
0144/1A-A3/A2B08
0145/1A-A3/U2B08

CONNECTORS — AA03
0148/1A-A1/R6E04
0087/1A-A2/A #A2B12
0031/1A-A2/A #R1E13
0002/1A-A2/A #U2B12
0146/1A-A3/A2B12
0147/1A-A3/U2B12

CONNECTORS — AA05
0151/1A-A1/R6B02
0088/1A-A2/A #A2D09
0032/1A-A2/A #R1B11
0003/1A-A2/A #U2D09
0149/1A-A3/A2D09
0150/1A-A3/U2D09

CONNECTORS — AA07
0154/1A-A1/Q6D02
0089/1A-A2/A #A2D06
0033/1A-A2/A #Q1D11
0004/1A-A2/A #U2D06
0152/1A-A3/A2D06
0153/1A-A3/U2D06

CONNECTORS — AB01
0157/1A-A1/R6B04
0090/1A-A2/A #A2B09
0034/1A-A2/A #R1B13
0005/1A-A2/A #U2B09
0155/1A-A3/A2B09
0156/1A-A3/U2B09

CONNECTORS — AB03
0160/1A-A1/R6C02
0091/1A-A2/A #A2D10
0035/1A-A2/A #R1C11
0006/1A-A2/A #U2D10
0158/1A-A3/A2D10
0159/1A-A3/U2D10

CONNECTORS — AB05
0163/1A-A1/Q6E02
0092/1A-A2/A #A2D07
0036/1A-A2/A #Q1E11
0007/1A-A2/A #U2D07
0161/1A-A3/A2D07
0162/1A-A3/U2D07

CONNECTORS — AB07
0166/1A-A1/S6A04
0093/1A-A2/A #A2B13
0037/1A-A2/A #S1A13
0008/1A-A2/A #U2B13
0164/1A-A3/A2B13
0165/1A-A3/U2B13

CONNECTORS — AC01
0169/1A-A1/Q6E04
0094/1A-A2/A #A2B07
0038/1A-A2/A #Q1E13
0009/1A-A2/A #U2B07
0167/1A-A3/A2B07
0168/1A-A3/U2B07

CONNECTORS — AD01
0172/1A-A1/Q6A02
0095/1A-A2/A #A2B02
0039/1A-A2/A #Q1A11
0010/1A-A2/A #U2B02
0170/1A-A3/A2B02
0171/1A-A3/U2B02

CONNECTORS — AD03
0175/1A-A1/Q6A04
0096/1A-A2/A #A2B03
0040/1A-A2/A #Q1A13
0011/1A-A2/A #U2B03
0173/1A-A3/A2B03
0174/1A-A3/U2B03

CONNECTORS — AD05
0178/1A-A1/Q6C04
0097/1A-A2/A #A2B05
0041/1A-A2/A #Q1C13
0012/1A-A2/A #U2B05
0176/1A-A3/A2B05
0177/1A-A3/U2B05

CHIP ENTER BLOCKS
I/O BOARD ENTER FROM CPU

PN4237402 EC834824 PEC834777

LOC=1A-A2

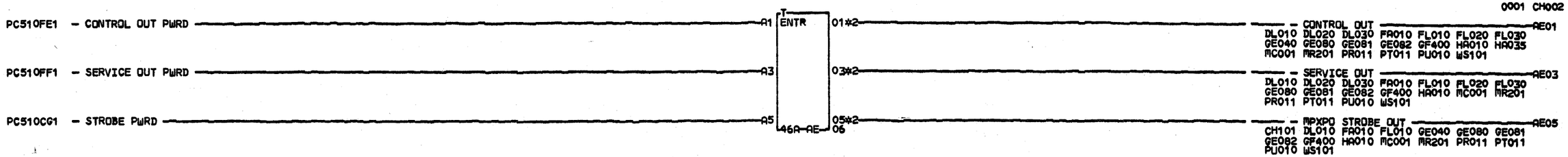
USN 00008 PRI=16MAY79 2152

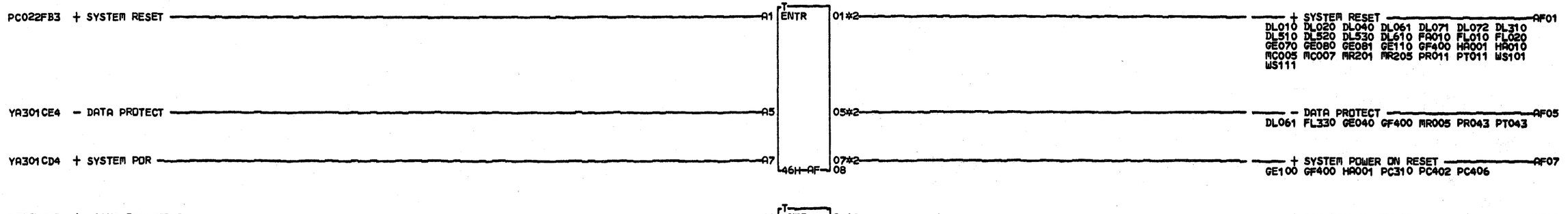
AUC= SEC

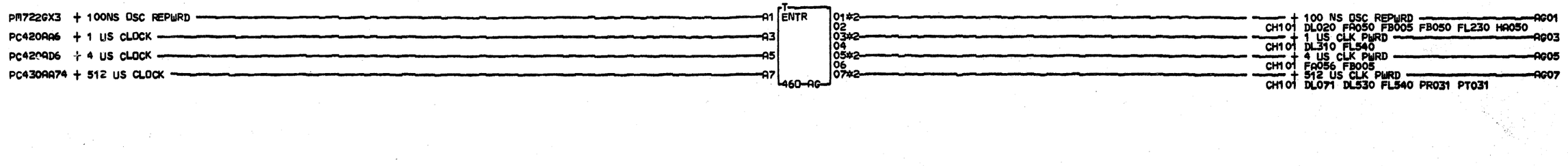
PFORM=KSEB NEXTBLK AK

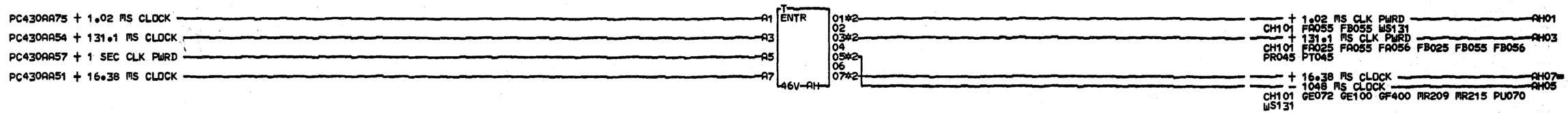
CID PIOFE JOB T4301503

C H 0 0 1 0001









COMMENTS

D1 COPYRIGHT IBM CORP. 1978

CONNECTORS

AE01
0147/1A-A1/P6E02
0098/1A-A2/A *A2D02
0042/1A-A2/A *P1E11
0013/1A-A2/A *U2D02
0145/1A-A3/A2D02
0146/1A-A3/U2D02
AE03
0150/1A-A1/R6C04
0099/1A-A2/A *A2B10
0043/1A-A2/A *R1C13
0028/1A-A2/A *U2B10
0148/1A-A3/A2B10
0149/1A-A3/U2B10
AE05
0153/1A-A1/T6B02
0100/1A-A2/A *A3D02
0044/1A-A2/A *T1B11
0015/1A-A2/A *U3D02
0151/1A-A3/A3D02
0152/1A-A3/U3D02
AF01
0140/1A-A1/M6C02
0[illegible]/1A-A[illegible] *D02

CONNECTORS

0045/1A-A2/A *M1C11
0154/1A-A3/E1D11
0155/1A-A3/V4D06
AF05
0142/1A-A1/B1B11
0143/1A-A1/N6C04
0018/1A-A2/A *F6D04
0047/1A-A2/A *M1C13
0156/1A-A3/F1D13
0157/1A-A3/V4B11
AF07
0182/1A-A2/E6B04
0181/1A-A2/M1A13
0183/1A-A3/E1B13
0184/1A-A3/V4B04
AG01
0144/1A-A1/T6E04
0101/1A-A2/A *A3B06
0048/1A-A2/A *T1E13
0019/1A-A2/A *U3B06
0158/1A-A3/A3B06
0159/1A-A3/R3B06
AG03
0[illegible]/1A-A[illegible]6B04

CONNECTORS

0102/1A-A2/A *A3B13
0020/1A-A2/A *U3B13
0049/1A-A2/A *V1B13
0160/1A-A3/A3B13
0161/1A-A3/U3B13
AG05
0165/1A-A1/V6A02
0103/1A-A2/A *A3D12
0021/1A-A2/A *U3D12
0050/1A-A2/A *V1A11
0163/1A-A3/A3D12
0164/1A-A3/U3D12
AG07
0168/1A-A1/V6B02
0104/1A-A2/A *A3D13
0022/1A-A2/A *U3D13
0051/1A-A2/A *V1B11
0166/1A-A3/A3D13
0167/1A-A3/U3D13
AH01
0171/1A-A1/U6D04
0105/1A-A2/A *A3B10
0052/1A-A2/A *U1D13
0[illegible]/1A-A[illegible] *[illegible]10

CONNECTORS

0169/1A-A3/A3B10
0170/1A-A3/U3B10
AH03
0174/1A-A1/U6E04
0106/1A-A2/A *A3B11
0053/1A-A2/A *U1E13
0024/1A-A2/A *U3B11
0172/1A-A3/A3B11
0173/1A-A3/U3B11
AH05
0177/1A-A1/V6A04
0107/1A-A2/A *A3B12
0025/1A-A2/A *U3B12
0054/1A-A2/A *V1A13
0175/1A-A3/A3B12
0176/1A-A3/U3B12
AH07
0180/1A-A1/N6B04
0029/1A-A2/A *F6C04
0055/1A-A2/A *V1B13
0178/1A-A3/F1C13
0179/1A-A3/V4B10

CHIP ENTER BLOCKS
I/O BOARD ENTER FROM CPU

PN4237403 EC834926 PEC834824

LOC=1A-A2

USN 00008 PRI=08NOV79 1614

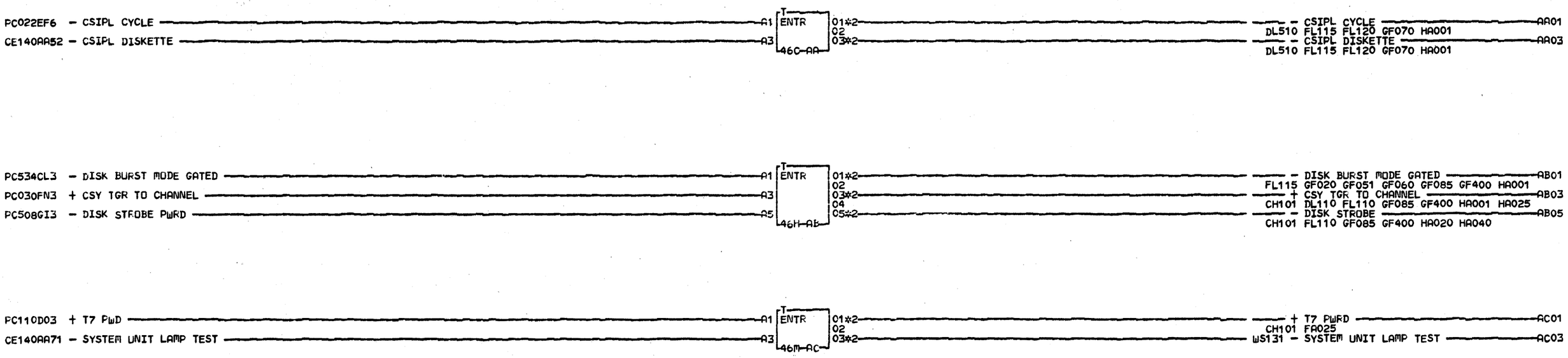
AUC= SEC

PFORM=KSEB NEXTBLK AI

CID PIOFE JOB N5800928

CH002

0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

CONNECTORS

AA01
0001/1A-A1/A #M6D02
0010/1A-A2/A #M1D11
AA03
0002/1A-A1/A #A5D07
0052/1A-A1/M6E04
0031/1A-A2/F6A04
0011/1A-A2/A #M1E13
0029/1A-A3/F1A13
0030/1A-A3/V4B08
AB01
0034/1A-A1/Q6D04
0022/1A-A2/A #A2B06
0012/1A-A2/A #Q1D13
0003/1A-A2/A #U2B06

CONNECTORS

0032/1A-A3/A2B06
0033/1A-A3/U2B06
AB03
0037/1A-A1/T6C02
0023/1A-A2/A #A3D04
0013/1A-A2/A #T1C11
0004/1A-A2/A #U3D04
0035/1A-A3/A3D04
0036/1A-A3/U3D04
AB05
0040/1A-A1/U6C02
0025/1A-A2/A #A3D09
0014/1A-A2/A #U1C11
0005/1A-A2/A #U3D09
0038/1A-A3/A3D09

CONNECTORS

0039/1A-A3/U3D09
AC01
0043/1A-A1/U6E02
0024/1A-A2/A #A3D11
0015/1A-A2/A #U1E11
0006/1A-A2/A #U3D11
0041/1A-A3/A3D11
0042/1A-A3/U3D11
AC03
0009/1A-A1/A #A5B04
0028/1A-A1/N6B02
0016/1A-A2/A #N1B11
0044/1A-A3/F1C11
0045/1A-A3/V4D10
AD01

CONNECTORS

0007/1A-A1/A #N6D04
0017/1A-A2/A #N1D13
0046/1A-A3/F1E13
0047/1A-A3/V4B12
AE01
0008/1A-A1/A #N6A04
0018/1A-A2/A #N1A13
0048/1A-A3/F1B13
0049/1A-A3/V4B09
AF01
0050/1A-A3/F1D11
0051/1A-A3/F6D02
AF03
0021/1A-A2/A #N1D11
0020/1A-A2/A #V3B02

CHIP ENTER BLOCKS
I/O BOARD ENTER FROM
SYSTEM UNIT
FN4237404 EC834824 PEC834777

LOC=1A-A2

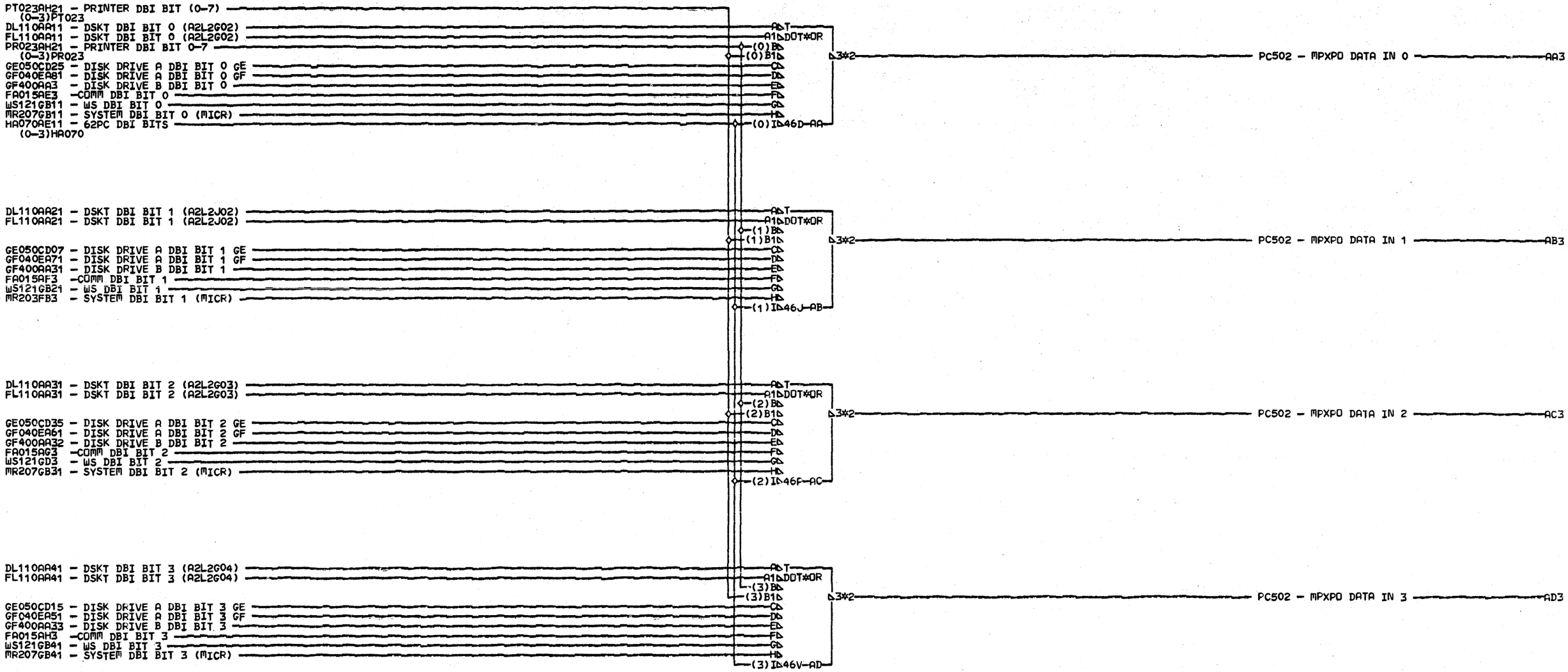
USN 00008 PRI=21MAY79 1423

AUC= SEC
PFORM=KSEB NEXTBLK AG

CID PIOFE JOB T4301503

CH003 0001

CH003 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

CONNECTORS

AA3

0038/1A-A1/T6A02
0019/1A-A2/A *A3B02
0010/1A-A2/A *T1A11
0001/1A-A2/A *U3B02
0041/1A-A3/A3B02
0042/1A-A3/U3B02

AB3

0037/1A-A1/R6E02
0020/1A-A2/A *A2D12
0011/1A-A2/A *R1E11
0002/1A-A2/A *U2D12
0043/1A-A3/A2D12
0044/1A-A3/U2D12

CONNECTORS

AC3

0039/1A-A1/T6B04
0021/1A-A2/A *A3B03
0012/1A-A2/A *T1B13
0003/1A-A2/A *U3B03
0045/1A-A3/A3B03
0046/1A-A3/U3B03

AD3

0040/1A-A1/T6C04
0022/1A-A2/A *A3B04
0013/1A-A2/A *T1C13
0004/1A-A2/A *U3B04
0047/1A-A3/A3B04
0048/1A-A3/U3B04

I/O BOARD EXIT TO SYS UNIT

PN4237405 EC834824 PEC834777

LOC=1A-A2

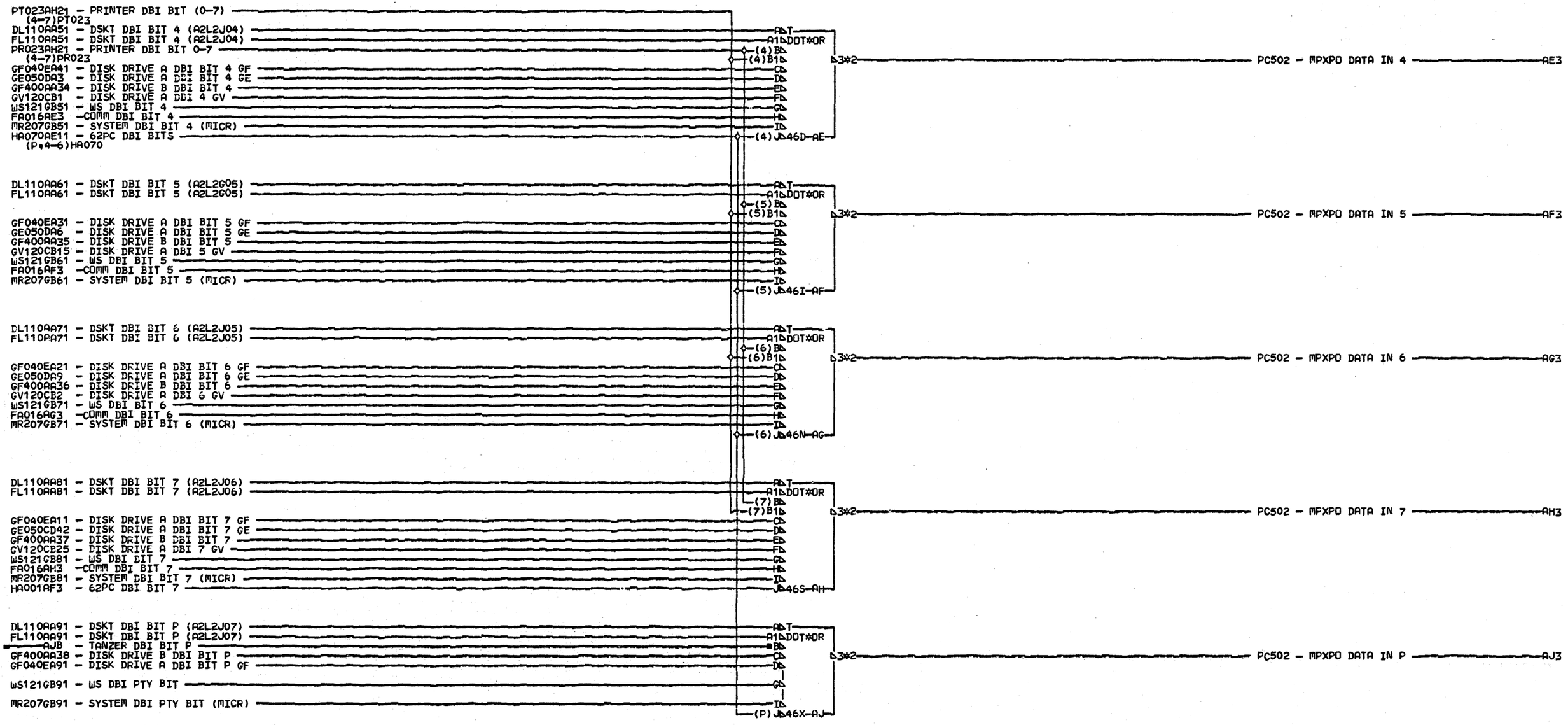
USN 00008 PRI=30MAY79 2111

AUC= SEC

PFORM=KSEB NEXTBLK AK

CID PIOFE JOB T4301503

C H 0 0 5 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

CONNECTORS
AE3
0037/1A-A1/S6A02
0023/1A-A2/A *A2D13
0014/1A-A2/A *S1A11
0005/1A-A2/A *U2D13
0042/1A-A3/A2D13
0043/1A-A3/U2D13
AF3
0039/1A-A1/T6D04
0006/1A-A2/A *A3B05
0015/1A-A2/A *T1D13
0024/1A-A2/A *U3B05
0044/1A-A3/A3B05
0045/1A-A3/U3B05

CONNECTORS
AG3
0038/1A-A1/T6D02
0007/1A-A2/A *A3D05
0016/1A-A2/A *T1D11
0025/1A-A2/A *U3D05
0046/1A-A3/A3D05
0047/1A-A3/U3D05
AH3
0040/1A-A1/T6E02
0008/1A-A2/A *A3D06
0017/1A-A2/A *T1E11
0026/1A-A2/A *U3D06
0048/1A-A3/A3D06
0049/1A-A3/U3D06

CONNECTORS
AJ3
0041/1A-A1/U6A02
0009/1A-A2/A *A3D07
0018/1A-A2/A *U1A11
0027/1A-A2/A *U3D07
0050/1A-A3/A3D07
0051/1A-A3/U3D07

I/O BOARD EXIT TO SYS UNIT

PN4237406 EC834824 PEC834777

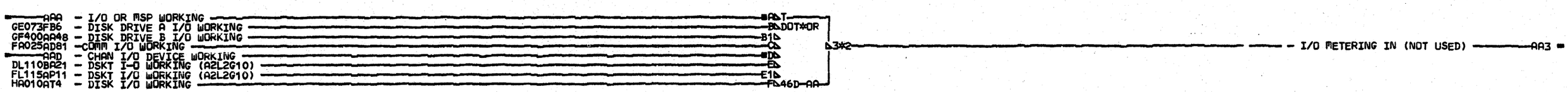
LOC=1A-A2

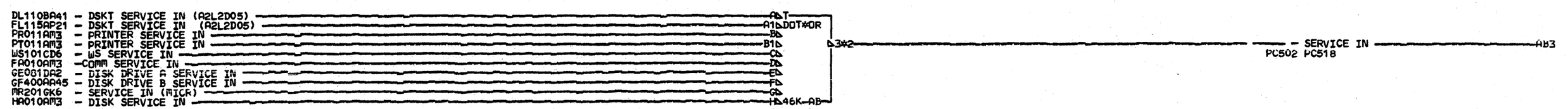
USN 00008 PRI=30MAY79 2111

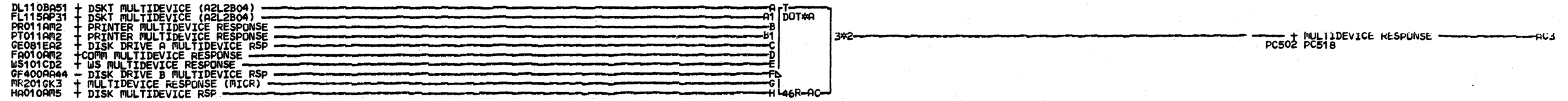
AUC= SEC
PFORM=KSEB NEXTBLK AK

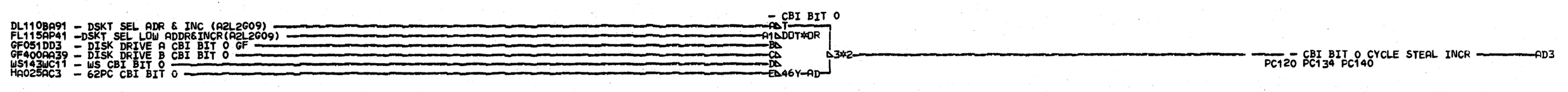
CID PIOFE JOB T4301503

CH006 0001









COMMENTS

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CONNECTORS

AA3

0034/1A-A1/N6E02
0001/1A-A2/A *G6A02
0010/1A-A2/A *M1E11
0035/1A-A3/G1A11
0036/1A-A3/V4D13

AB3

0032/1A-A1/Q6C02
0002/1A-A2/A *A2D05
0011/1A-A2/A *Q1C11
0019/1A-A2/A *U2D05
0037/1A-A3/A2D05
0038/1A-A3/U2D05

AC3

CONNECTORS

0031/1A-A1/Q6B04
0003/1A-A2/A *A2B04
0012/1A-A2/A *Q1B13
0021/1A-A2/A *U2B04
0039/1A-A3/A2B04
0040/1A-A3/U2B04

AD3

0033/1A-A1/U6C04
0023/1A-A2/A *A3B09
0013/1A-A2/A *U1C13
0004/1A-A2/A *U3B09
0041/1A-A3/A3B09
0042/1A-A3/U3B09

I/O BOARD EXIT TO SYS UNIT

PN4237407 EC834824 PEC834777

LOC=1A-A2

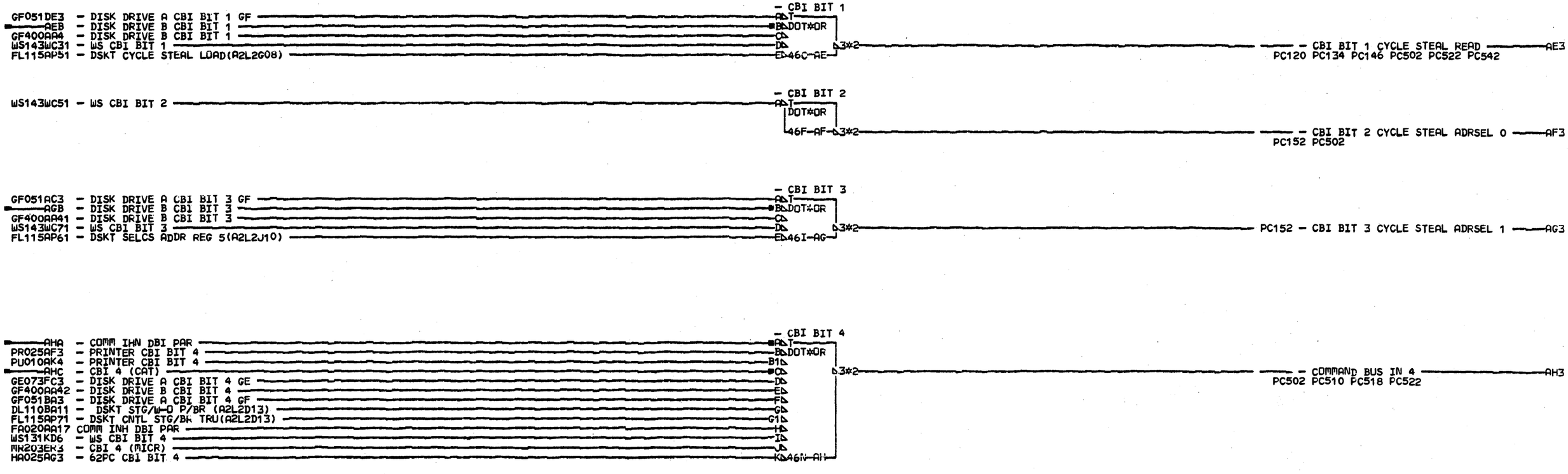
USN 00008 PRI=30MAY79 2111

AUC= SEC

PFORM=KSEB NEXTBLK AK

CID PIOFE JOB T4301503

CHO7 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

CONNECTORS — AE3

0031/1A-A1/U6B04
0024/1A-A2/A *A3B08
0014/1A-A2/A *U1B13
0005/1A-A2/A *U3B08
0036/1A-A3/A3B08
0037/1A-A3/U3B08

CONNECTORS — AF3

0032/1A-A1/U6D02
0025/1A-A2/A *A3D10
0015/1A-A2/A *U1D11
0006/1A-A2/A *U3D10
0038/1A-A3/A3D10
0039/1A-A3/U3D10

CONNECTORS — AG3

0035/1A-A1/U6A04
0026/1A-A2/A *A3B07
0016/1A-A2/A *U1A13
0007/1A-A2/A *U3B07
0040/1A-A3/A3B07
0041/1A-A3/U3B07

CONNECTORS — AH3

0034/1A-A1/R6D02
0020/1A-A2/A *A2D11
0017/1A-A2/A *R1D11
0008/1A-A2/A *U2D11
0042/1A-A3/A2D11
0043/1A-A3/U2D11

CONNECTORS — AJ3

0033/1A-A1/L6D02
0009/1A-A2/A *D6E02
0018/1A-A2/A *L1D11
0044/1A-A3/D1E11
0045/1A-A3/V4D02

I/O BOARD EXIT TO SYS UNIT

PN4237408 EC834824 PEC834777

LOC=1A-A2

USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AK

CID PIOFE JOB T4301503

C H 0 0 8 0001

WS111CC5 - WS BASE CYCLE STEAL REQUEST — A — T — DOT*OR — 26B-AA — 3*2 — BASE CYCLE STEAL REQUEST - PC508 PC534 — AA3

DL110BA71 - DSKT BLK PRC CLK (A2L2G12)
FL115AP93 - DSKT BLOCK PROC CLK (A2L2G12)
GF060EH3 - DISK DRIVE A BLOCK PROC CLOCK
GF400AA5 - DISK DRIVE B BPC
HA020AK3 -62PC BLOCK PROCESSOR CLOCK
— A — T — A1 — DOT*OR — B — C — D — 26E-AB — 3*2 — PC508 - DISK/DSKT BLK PROCESSOR CLK — AB3

DL110BA81 - DSKT CYC STEAL (A2L2G07)
FL115AP91 - DSKT CYCLE STEAL REQ (A2L2G07)
GF050ED2 - DISK DRIVE A CS REQUEST
GF400AA51 - DISK DRIVE B CS REQUEST
HA001BB3 -62PC DISK CYCLE STEAL
— A — T — A1 — DOT*OR — B — C — D — 26H-AC — 3*2 — PC508 - DISK/DSKT (LOAD) BC REQ — AC3

WS131HD3 - CONSOLE CHECK LED — A — T — DOT*OR — 26K-AD — 3*2 — OP110 - CONSOLE CHECK LED — AD3

GEU60AC3 + CHAN BRAKE FAILURE — A — T — DOT*OR — 26T-AG — 3*2 — YA301 + DISK BRAKE FAULT — AG3

COMMENTS

CONNECTORS

AA3
0015/1A-A1/M6D04
0004/1A-A2/A *E6E04
0008/1A-A2/A *M1D13
0019/1A-A3/E1E13
0020/1A-A3/V4B07

AB3
0014/1A-A1/L6E04
0005/1A-A2/A *E6A04
0009/1A-A2/A *L1E13
0021/1A-A3/E1A13
0022/1A-A3/V4B03

AC3
0017/1A-A1/R6D04

CONNECTORS

0012/1A-A2/A *A2B11
0010/1A-A2/A *R1D13
0006/1A-A2/A *U2B11
0023/1A-A3/A2B11
0024/1A-A3/U2B11

AD3
0018/1A-A1/A2D12
0013/1A-A1/L6E02
0007/1A-A2/A *L1E11

AG3
0027/1A-A1/B1C11
0026/1A-A1/N6C02
0002/1A-A2/A *N1C11

I/O BOARD EXIT TO SYS UNIT

PN4237409 EC834777 PEC832850

LOC=1A-A2

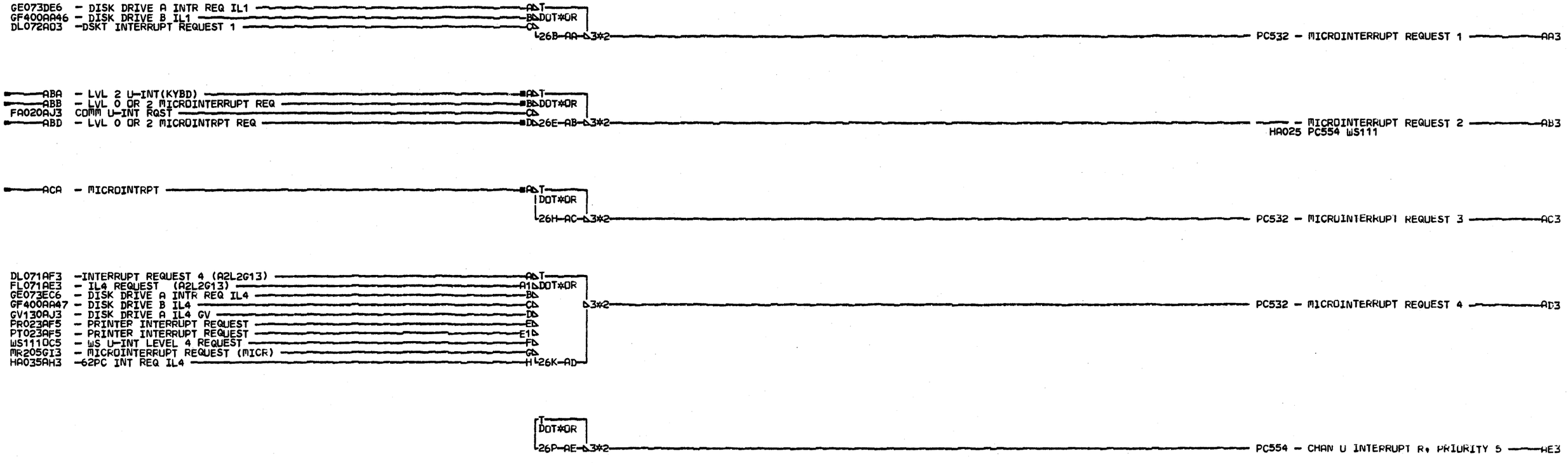
USN 00008 PRI=08NOV78 1747

AUC= SEC

PFORM=KSEB NEXTBLK AW

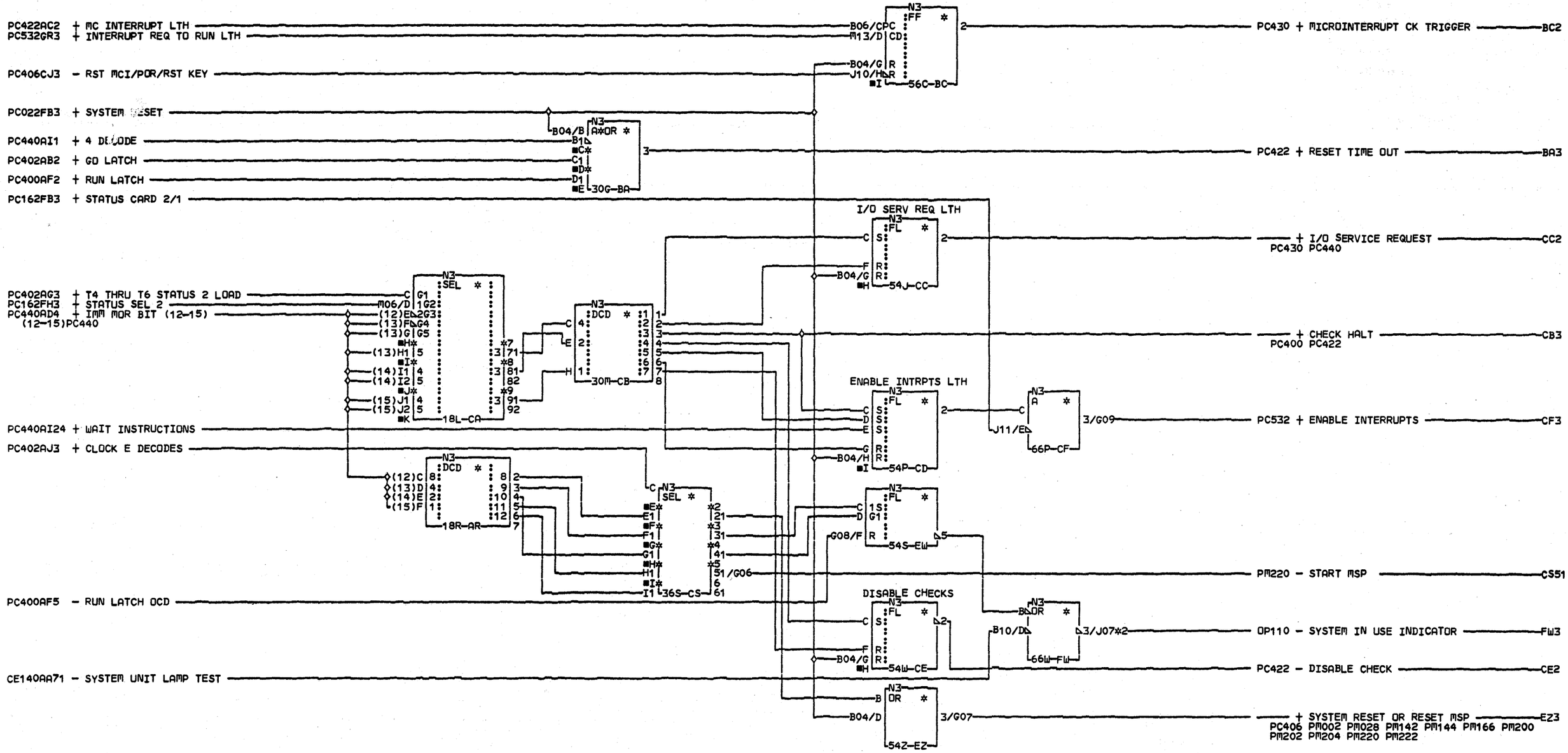
CID PIOFE JOB N3901119

CHOO9 0001



COMMENTS	CONNECTORS	CONNECTORS	CONNECTORS	
D1COPYRIGHT IBM CORP. 1978	AA3	0003/1A-A2/A *E6B02	0010/1A-A2/A *M1B11	I/O BOARD EXIT TO SYS UNIT
	0014/1A-A1/M6B04	0008/1A-A2/A *M1A11	0025/1A-A3/E1C11	
	0001/1A-A2/A *E6C04	0021/1A-A3/E1B11	0026/1A-A3/V4D05	PN4237410 EC834824 PEC834777
	0006/1A-A2/A *M1B13	0022/1A-A3/V4D04		
	0017/1A-A3/E1C13	AD3		LOC=1A-A2
	0018/1A-A3/V4B05	0016/1A-A1/Q6B02		USN 00008 PRI=30MAY79 2111
	AB3	0011/1A-A2/A *A2D04		
	0015/1A-A1/M6C04	0009/1A-A2/A *Q1B11		AUC= SEC
	0002/1A-A2/A *E6D04	0012/1A-A2/A *T2J09		PFORM=KSEB NEXTBLK AF
	0007/1A-A2/A *M1C13	0004/1A-A2/A *U2D04		
	0019/1A-A3/E1D13	0023/1A-A3/A2D04		CID PIOFE JOB T4301503
	0020/1A-A3/V4B06	0024/1A-A3/U2D04		
	AC3	AE3		
	0013/1A-A1/M6A03	0005/1A-A1/A *E6C02		

C IO11 1 0001 — C H 0 1 1 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

CONNECTORS
FW3
0001/1A-A1/A2D05
0002/1A-A1/A2D06

DECODES

CP PN4237334 STATUS 2 CARD EC832999 PEC832850

LOC=1A-A1K2

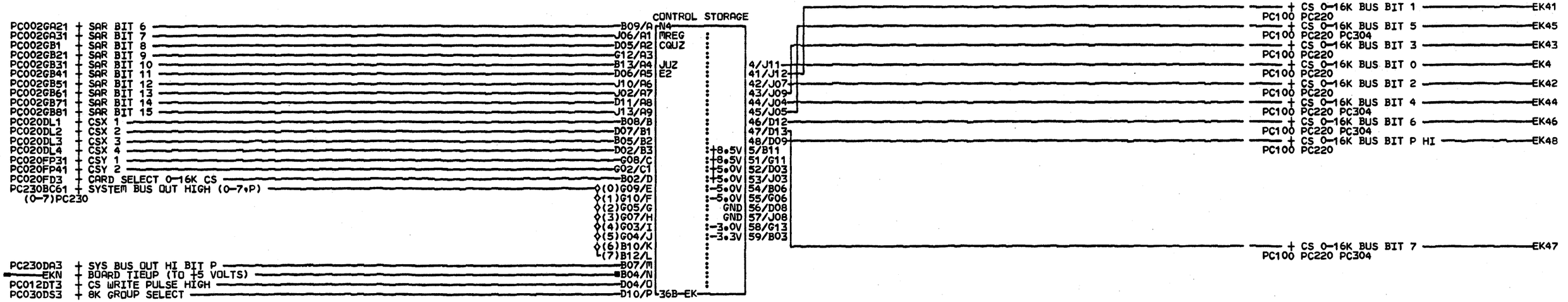
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GU

CID PIOFE JOB N5101128

PC404 0001

PC404 0001



D
+ 8.5V ON B11, G11
+ 5.0V ON D03, J03
- 5.0V ON B06, G06
GND ON D08, J08
26T-BT

COMMENTS
D1COPYRIGHT IBM CORP. 1978

STORAGE CARD CS HI 0-16K
CS STG CARD

PN4237283 EC834777 PEC832850

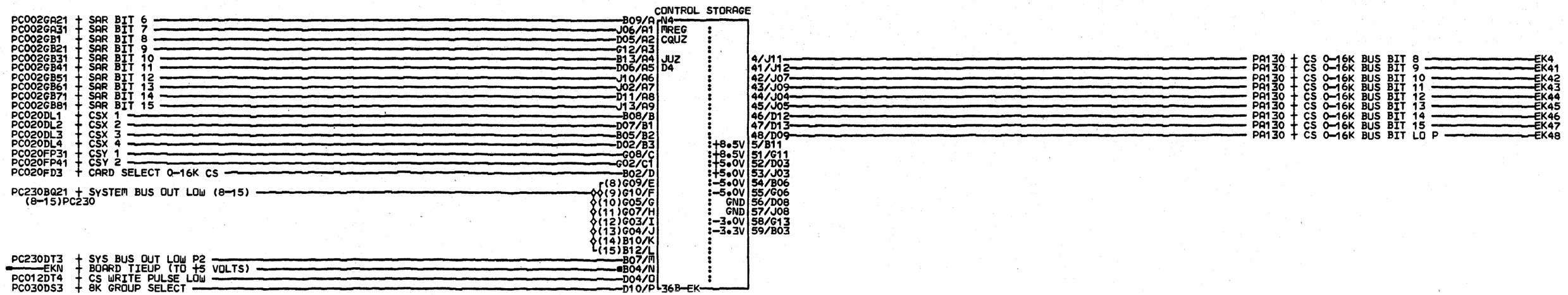
LOC=1A-A1E2

USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK EL

CID PIOFE JOB L6301459

CS110 0001



D
+ 8.5V ON B11, G11
+ 5.0V ON D03, J03
- 5.0V ON B06, G06
GND ON D08, J08
26T-BT

COMMENTS
D1COPYRIGHT IBM CORP. 1978

STORAGE CARD CS LO 0-16K
CS STG CARD

PN4237284 EC834777 PEC832850

LOC=1A-A1D4

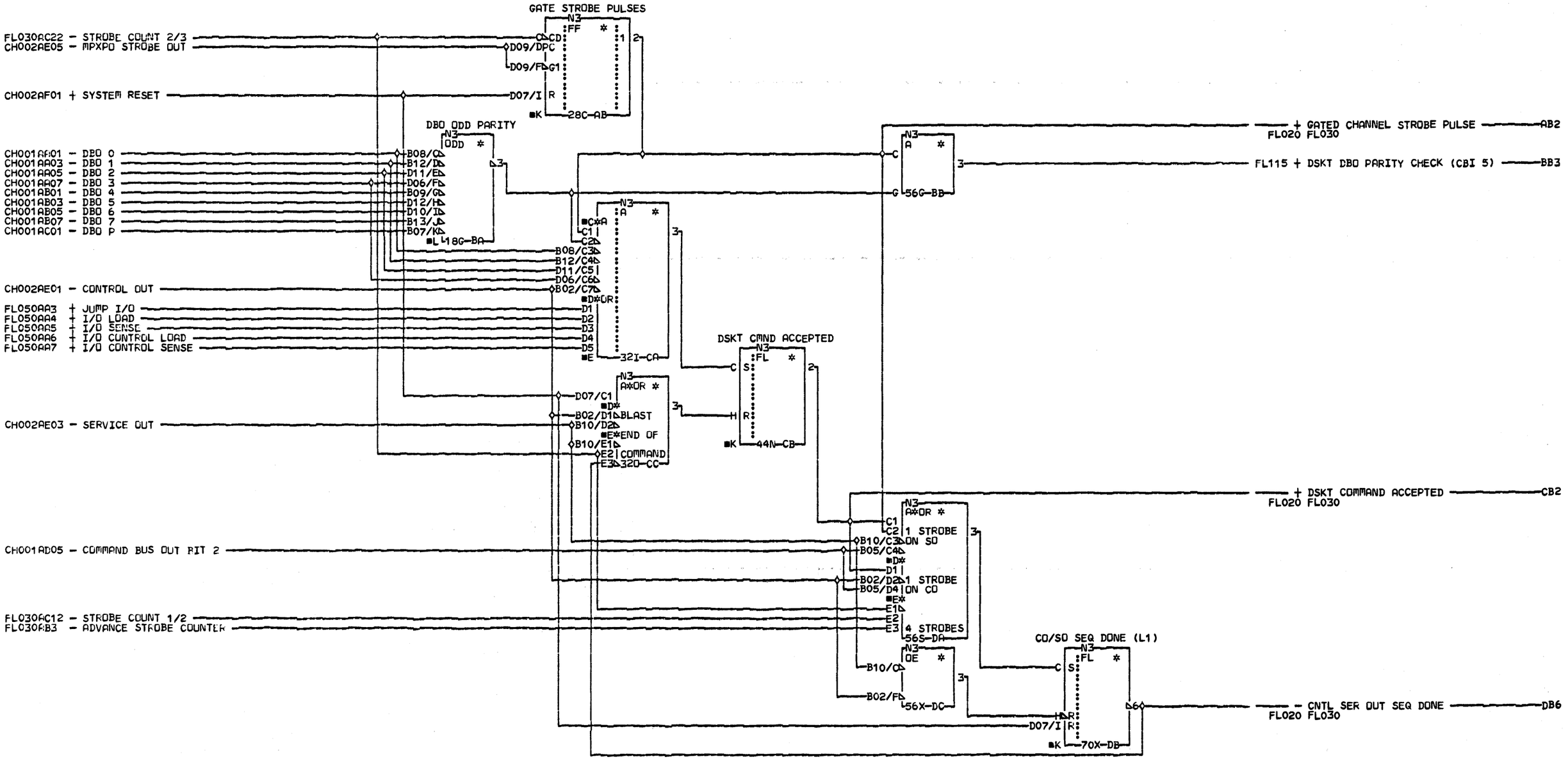
USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK EL

CID PIOFE JOB L6301459

CS112 0001

CS112 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

U-CODE CMND ACCEPT
CPU CHANNEL INTERFACE
DSKT ATCH
PN4238277 EC834824 PEC833174

LOC=1A-A2L2

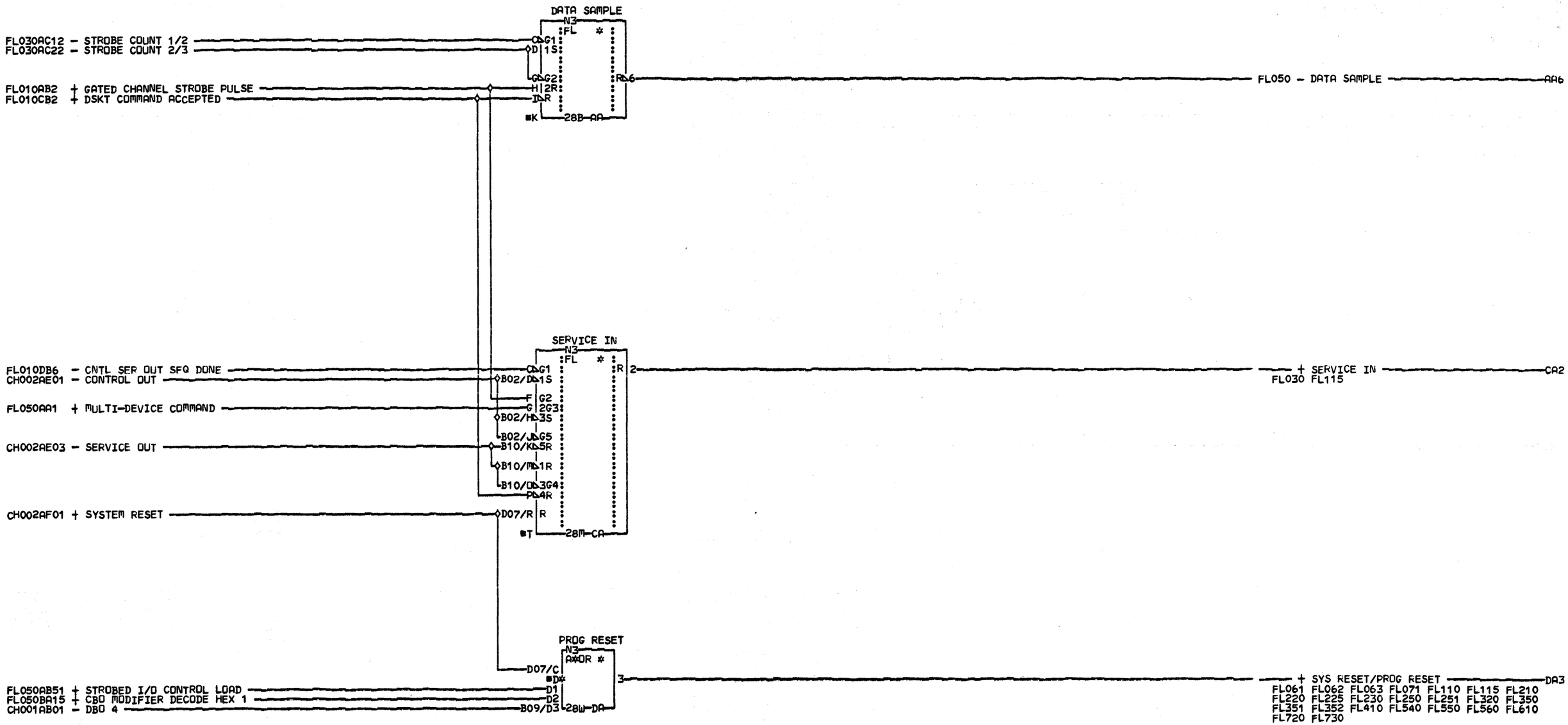
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK DD

CID PIOFE JOB T4301503

FL010 0001

FL010 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

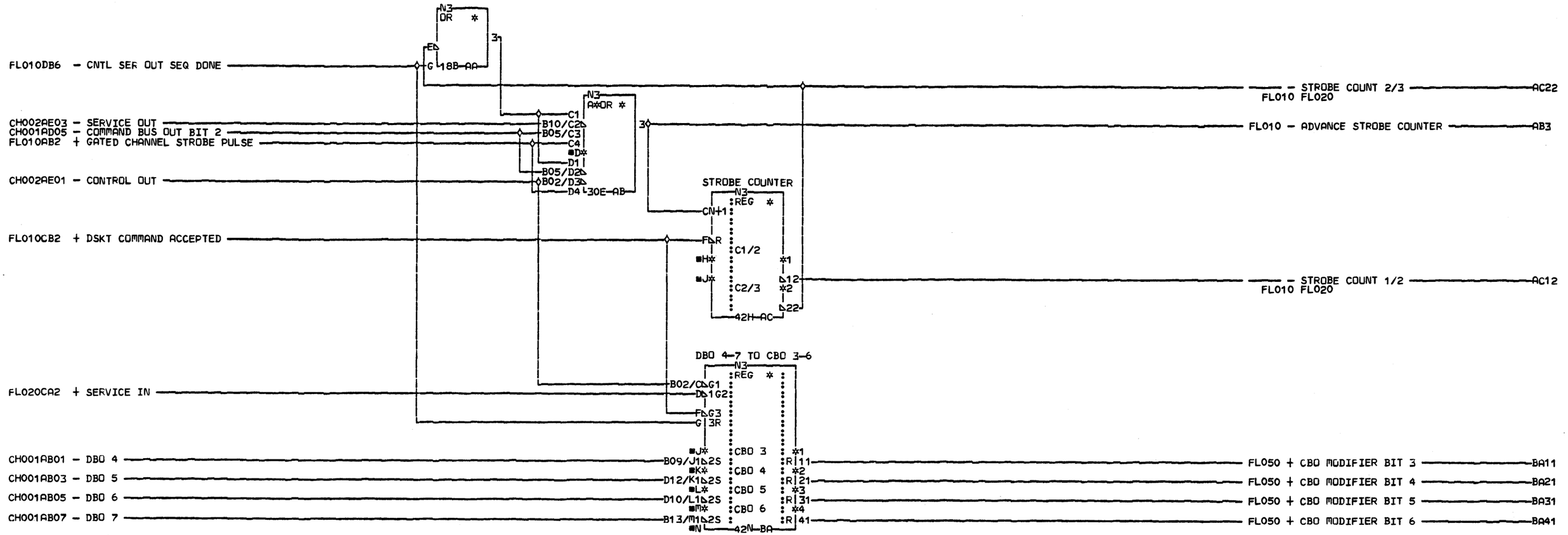
CHANNEL TIMING LATCHES
CPU CHANNEL INTERFACE
DSKT ATCH
PN4238278 EC834824 PEC833174

LOC=1A-A2L2

USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK DB

CID PIOFE JOB T4301503



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

STROBE CNTR & CCB 3-6
CPU CHANNEL INTERFACE
DSKT ATCH
PN4238279 EC833174

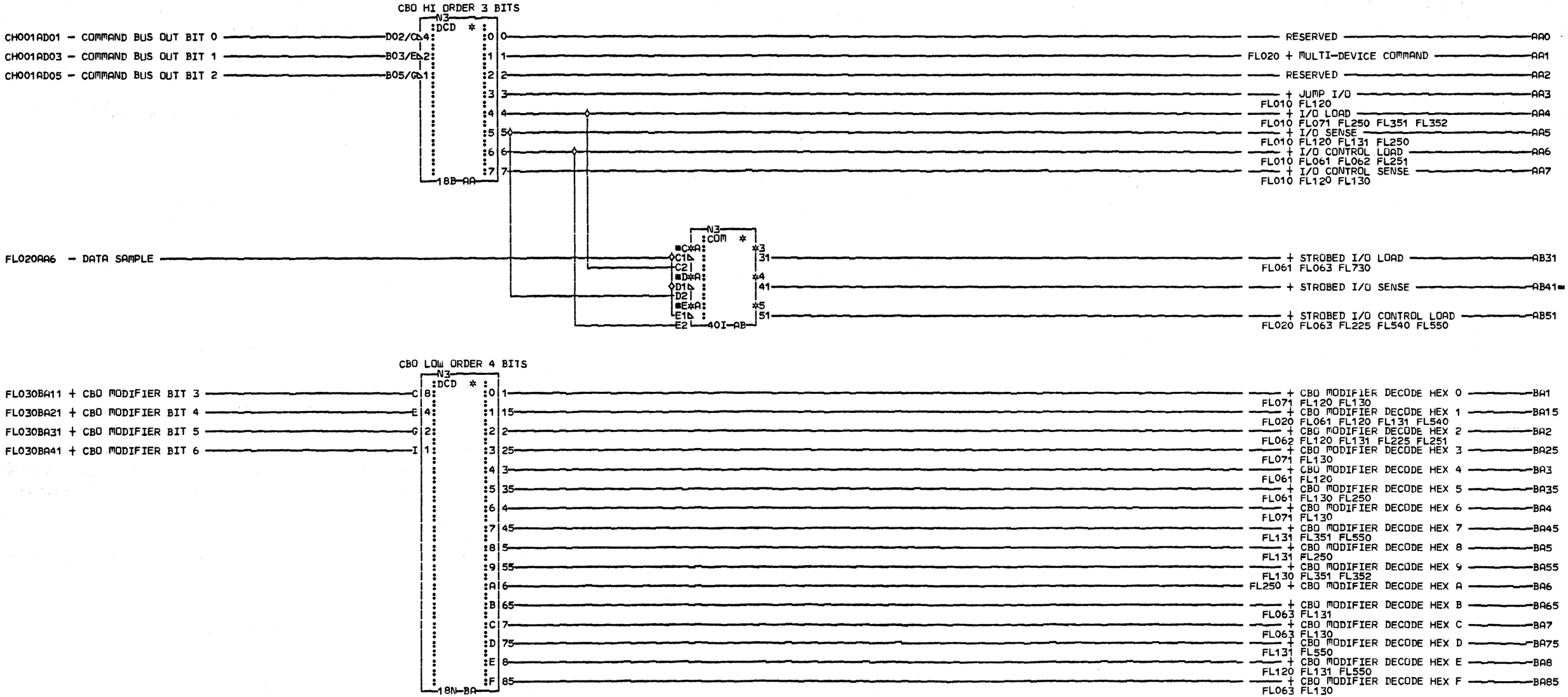
LOC=1A-A2L2

USN 00008 PRI=13OCT78 1322

AUC= SEC 22NOV78 1530
PFORM=KSEB NEXTBLK BB

CID PIOFE JOB N7501528

FL030 0001



COMMENTS

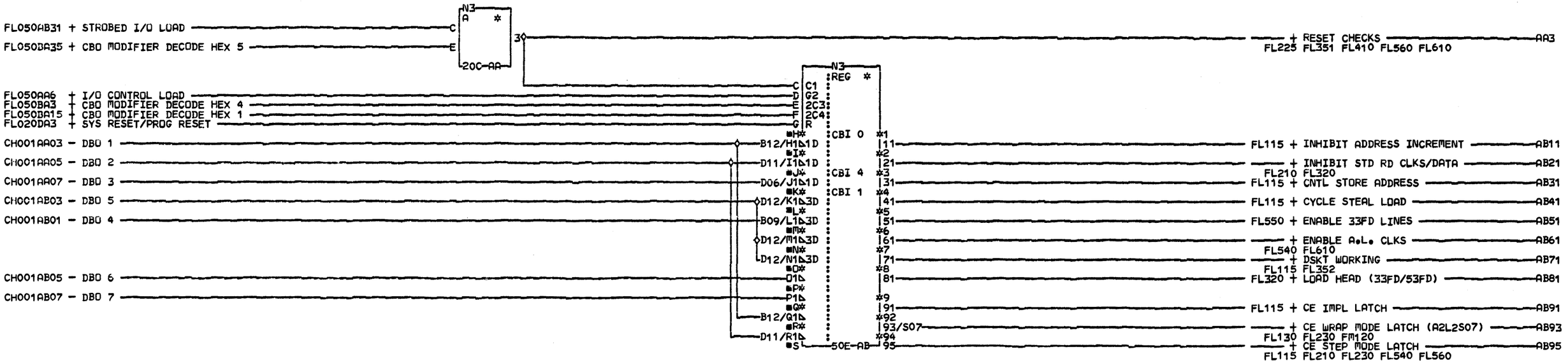
CCB DECODE
CPU CHANNEL INTERFACE
DSKT ATCH
PN4238280 EC833174

LOC=1A-A2L2

USN 00008 PRI=13OCT78 1322

AUC= SEC 22NOV78 1530
PFORM=KSEB NEXTBLK BB

CID PIOFE JOB N7501528



COMMENTS

DECODES

PN4238281 EC834824 PEC833174

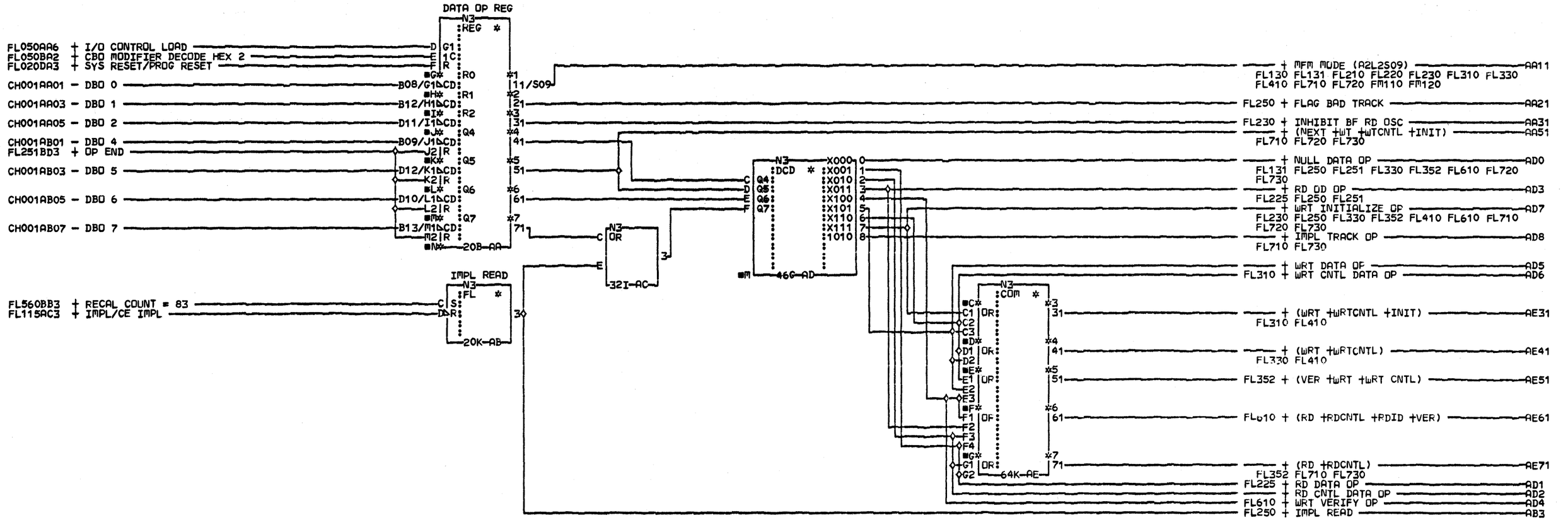
LOC=1A-A2L2

USN 00008 PRI=09MAY79 1445

AUC= SEC
PFORM=KSEB NEXTBLK AC

CID PIOFE JOB T4301503

FL061 0001



COMMENTS
D1 COPYRIGHT IBM CORP. 1978

DATA XFER OPERATION DECODES

PN4238282 EC834824 PEC833174

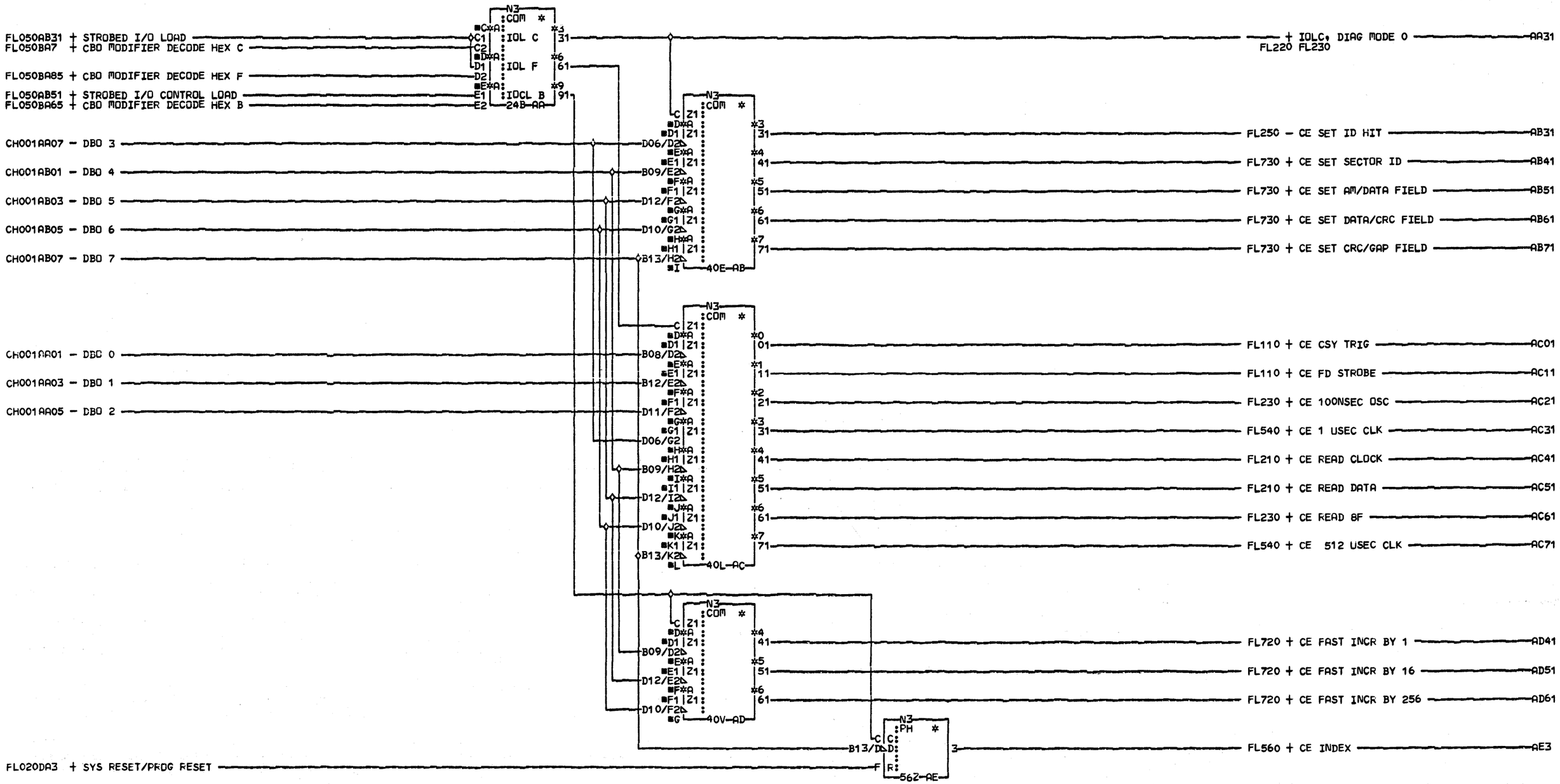
LOC=1A-A2L2

USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK AF

CID PIOFE JOB T4301503

FL062 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

CE DIAGNOSTIC DECODES

PN4238283 EC834824 PEC833174

LOC=1A-A2L2

USN 00008 PRI=09MAY79 1445

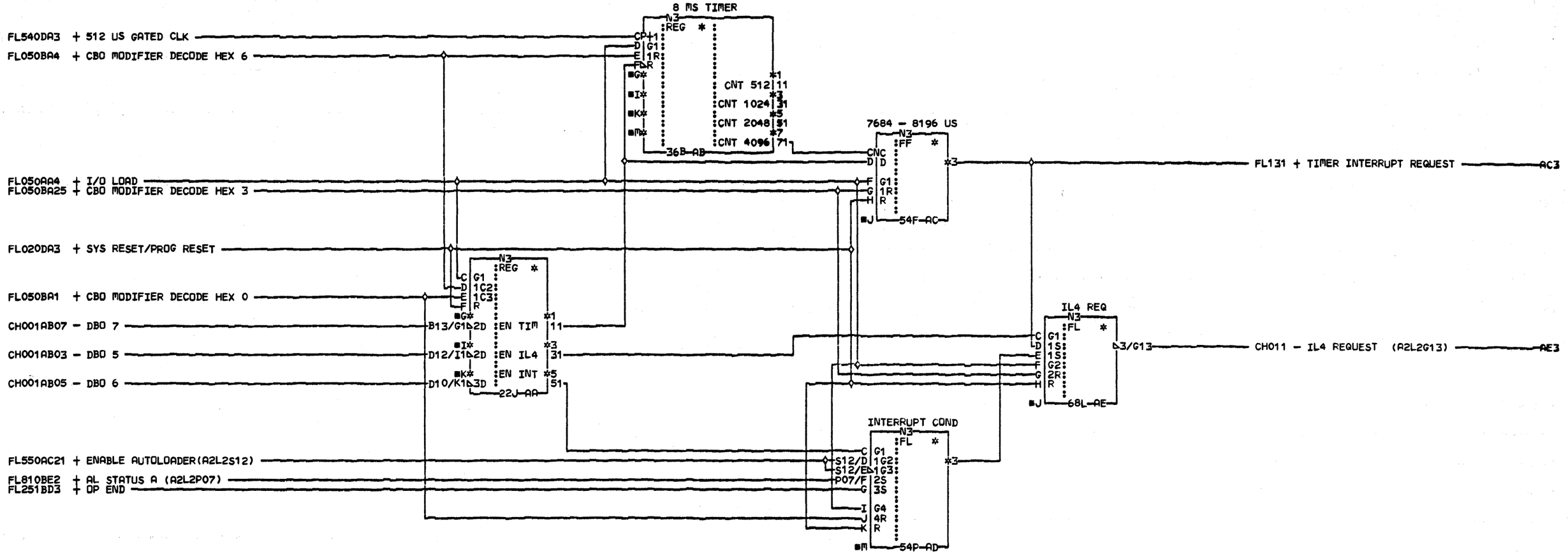
AUC= SEC

PFORM=KSEB NEXTBLK AF

CID PIOFE JOB T4301503

FL063 0001

FL063 0001



COMMENTS

INTERRUPT LEVEL 4 REQUEST

PN4238284 EC834824 PEC833174

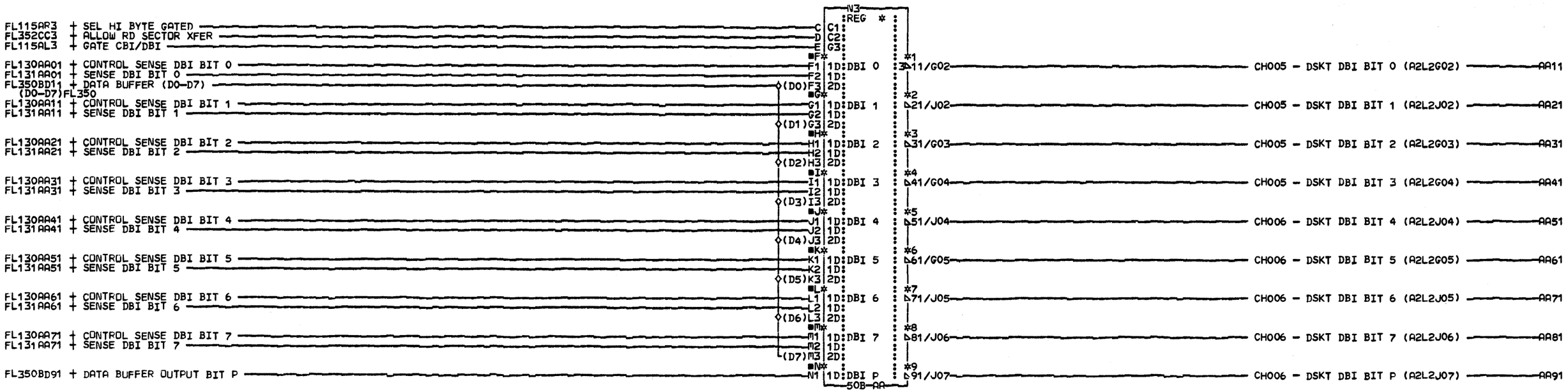
LOC=1A-A2L2

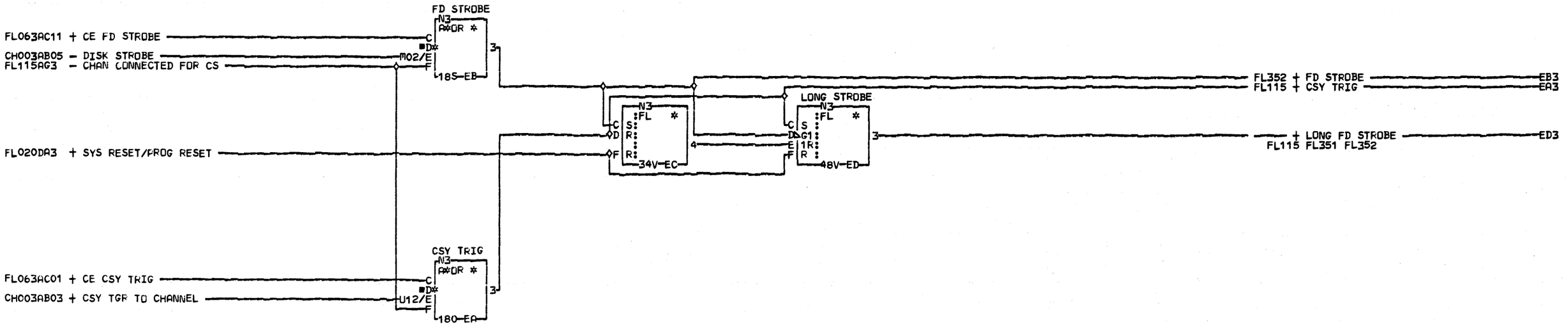
USN 00008 PRI=08MAY79 2116

AUC= SEC

PFORM=KSEB NEXTBLK AF

CID PIOFE JOB T4301503





COMMENTS

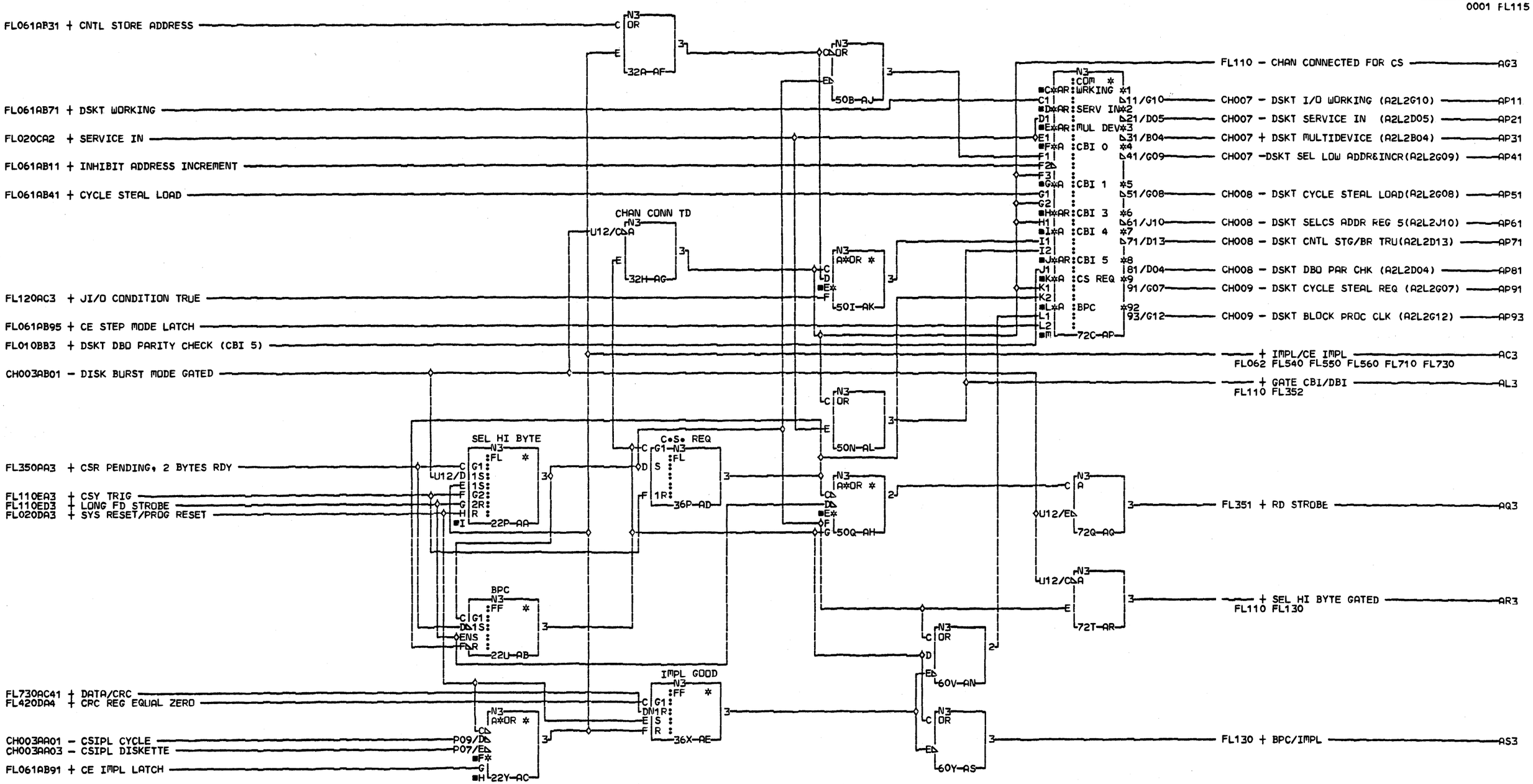
EXIT FROM DSKT TO CPU
CPU CHANNEL INTERFACE
DSKT ATCH
PN4238285 EC834824 PEC833174

LOC=1A-A2L2

USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK EE

CID PIOFE JOB T4301503



COMMENTS

D1COPYRIGHT IBM CORP. 1978

EXIT FROM DSKT TO CPU
CPU CHANNEL INTERFACE

PN4238286 EC833174

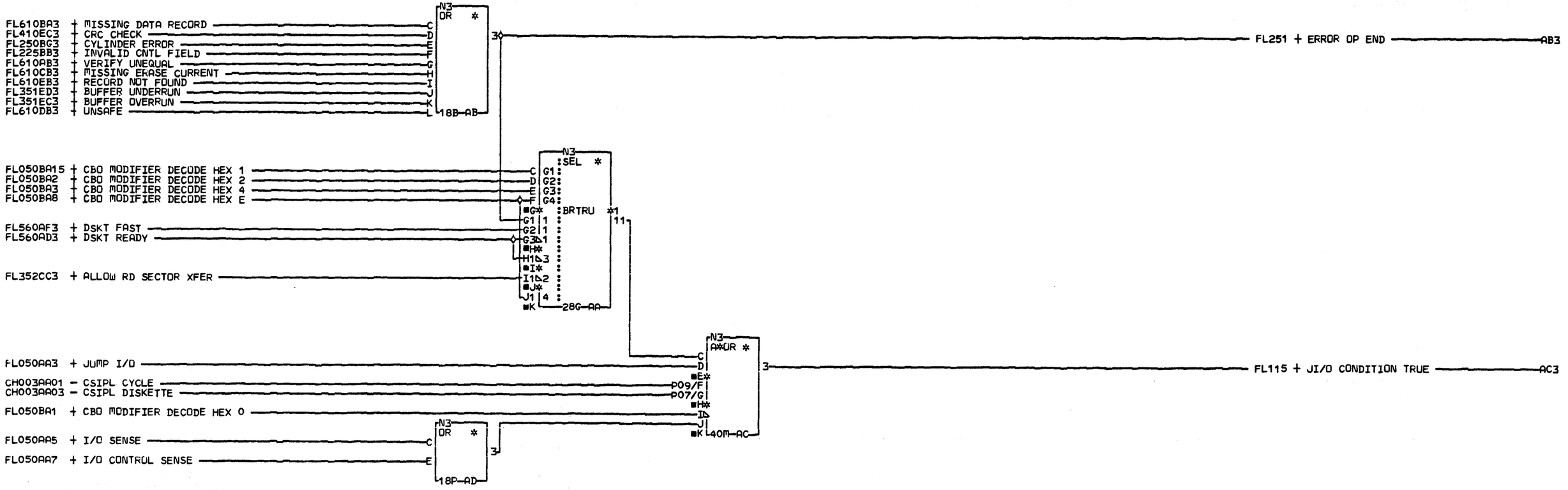
LOC=1A-A2L2

USN 00008 PRI=13OCT78 1322

AUC= SEC 08NOV78 1747
PFORM=KSEB NEXTBLK AT

CID PIOFE JOB N7501528

FL115 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

DBI REG & J10 TRUE REG
CPU CHANNEL INTERFACE
DSKT ATCH
PN4238287 EC833174

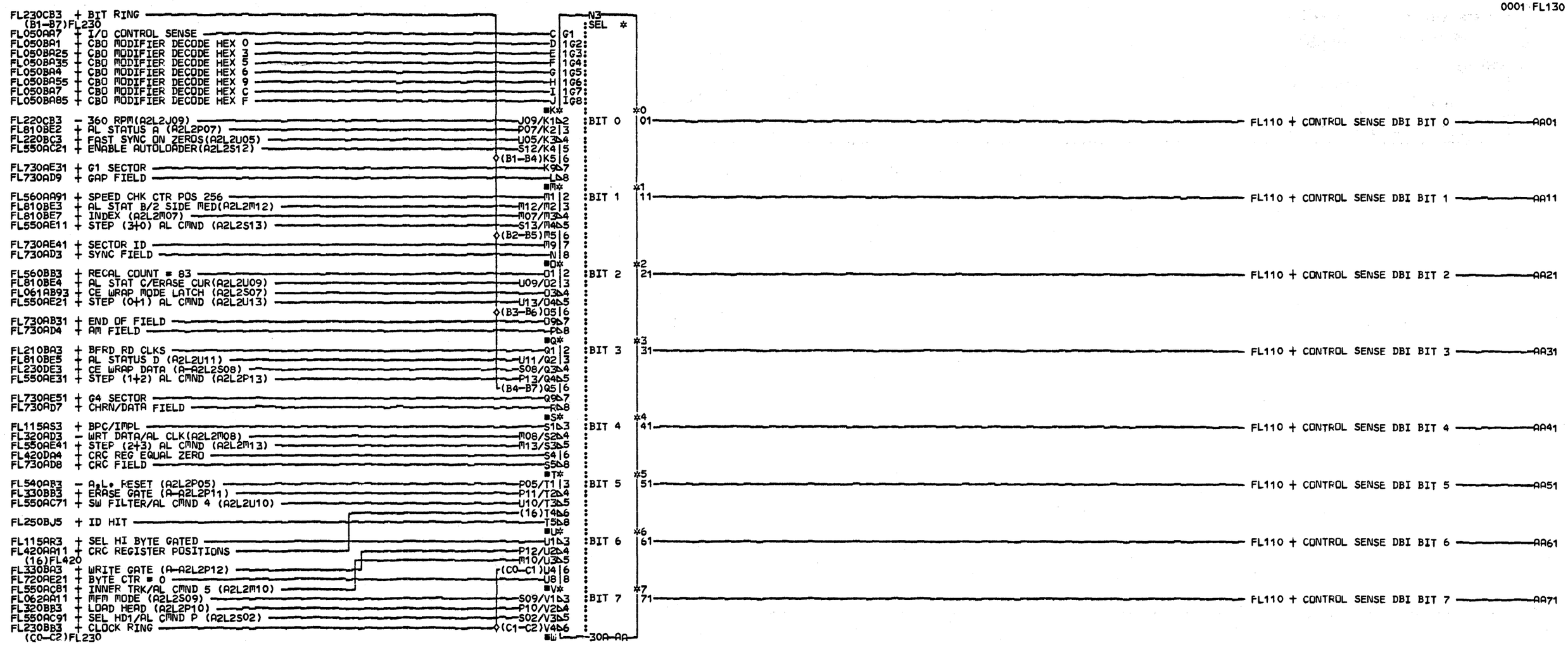
LOC=1A-A2L2

USN 00008 PRI=13OCT78 1322

AUC= SEC
PFORM=KSEB NEXTBLK BB

CID PIOFE JOB N7501528

FL120 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

DBI SELECT
CONTROL SENSE

PN4238288 EC834824 PEC833174

LOC=1A-A2L2

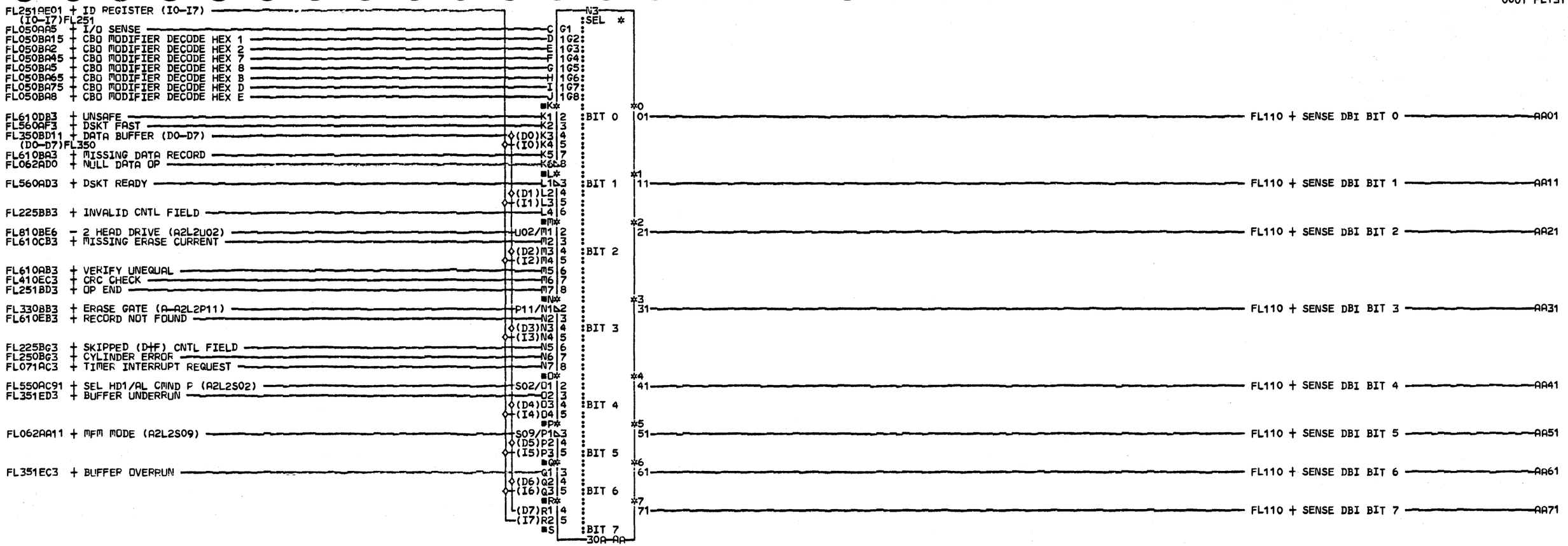
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK AB

CID PIOFE JOB T4301503

FL130 0001

FL130 0001



COMMENTS

DBI SELECT SENSE

PN4238289 EC834824 PEC833174

LOC=1A-A2L2

USN 00008 PRI=16MAY79 2152

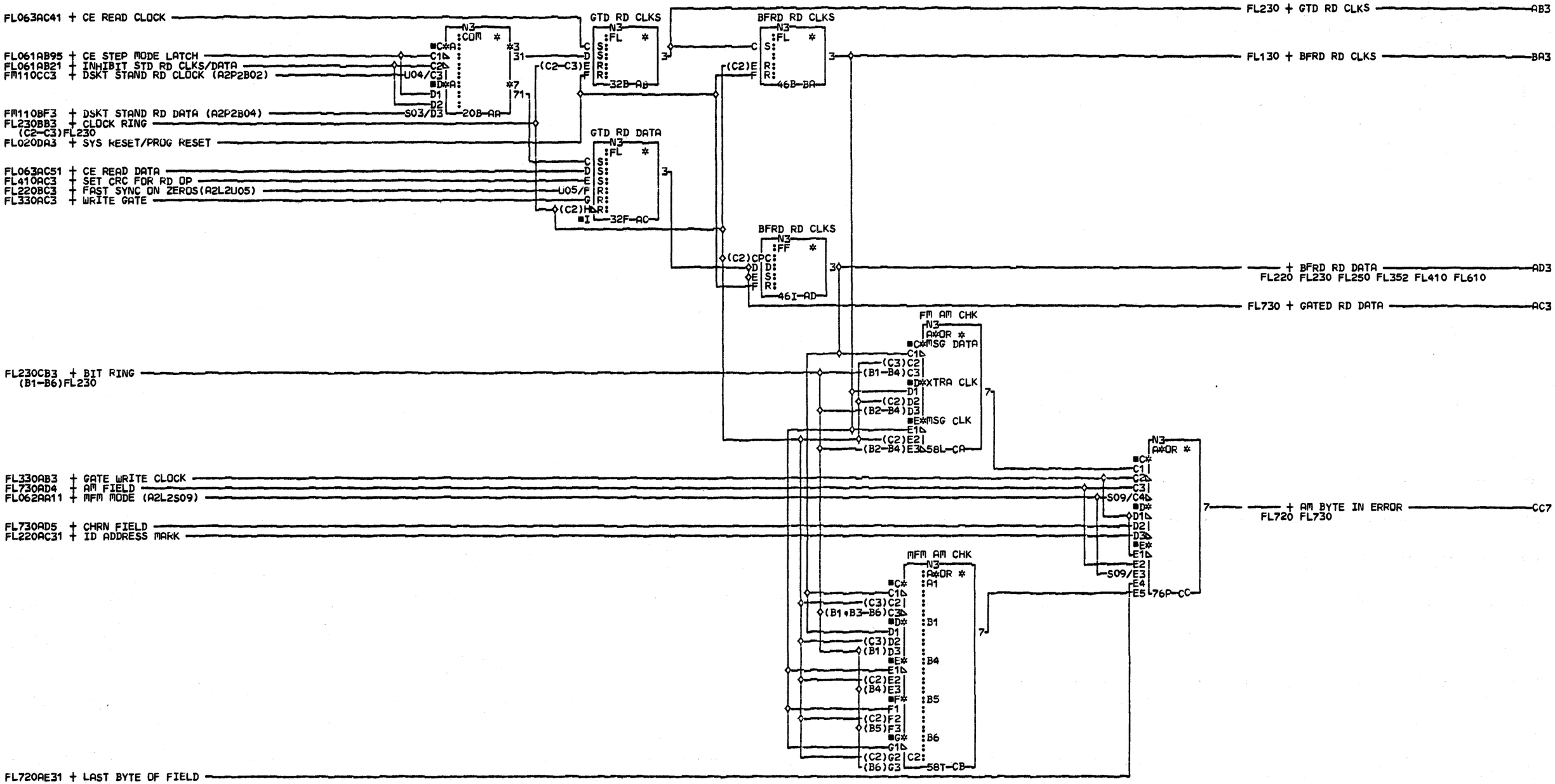
AUC= SEC

PFORM=KSEB NEXTBLK AB

CID PIOFE JOB T4301503

FL131 0001

FL131 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

READ DATA, READ CLOCKS
AM VALIDITY CHECK

PN4238290 EC834824 PEC833174

LOC=1A-A2L2

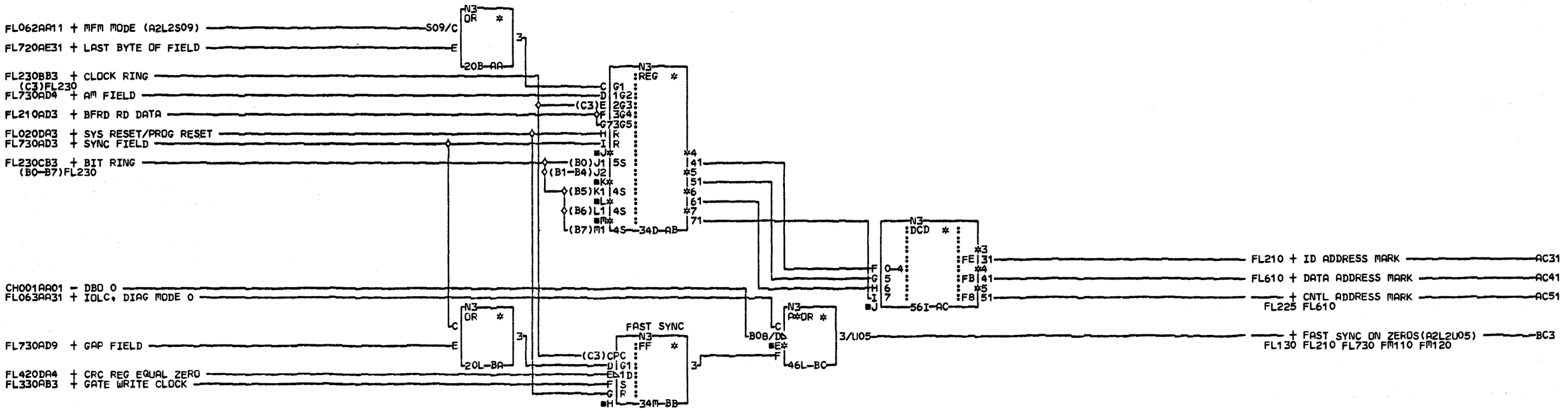
USN 00008 PRI=16MAY79 2152

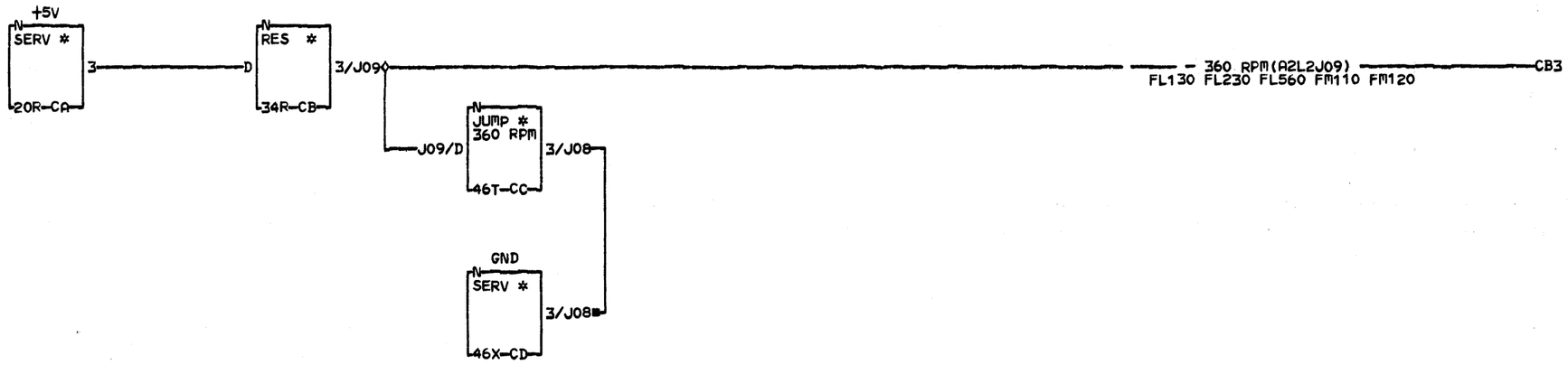
AUC= SEC

PFORM=KSEB NEXTBLK CD

CID PIOFE JOB T4301503

FL210 0001





COMMENTS
D1COPYRIGHT IBM CORP. 1978

A.M. RECOGNITION
FAST SYNC ON ZEROS

PN4238291 EC834824 PEC833174

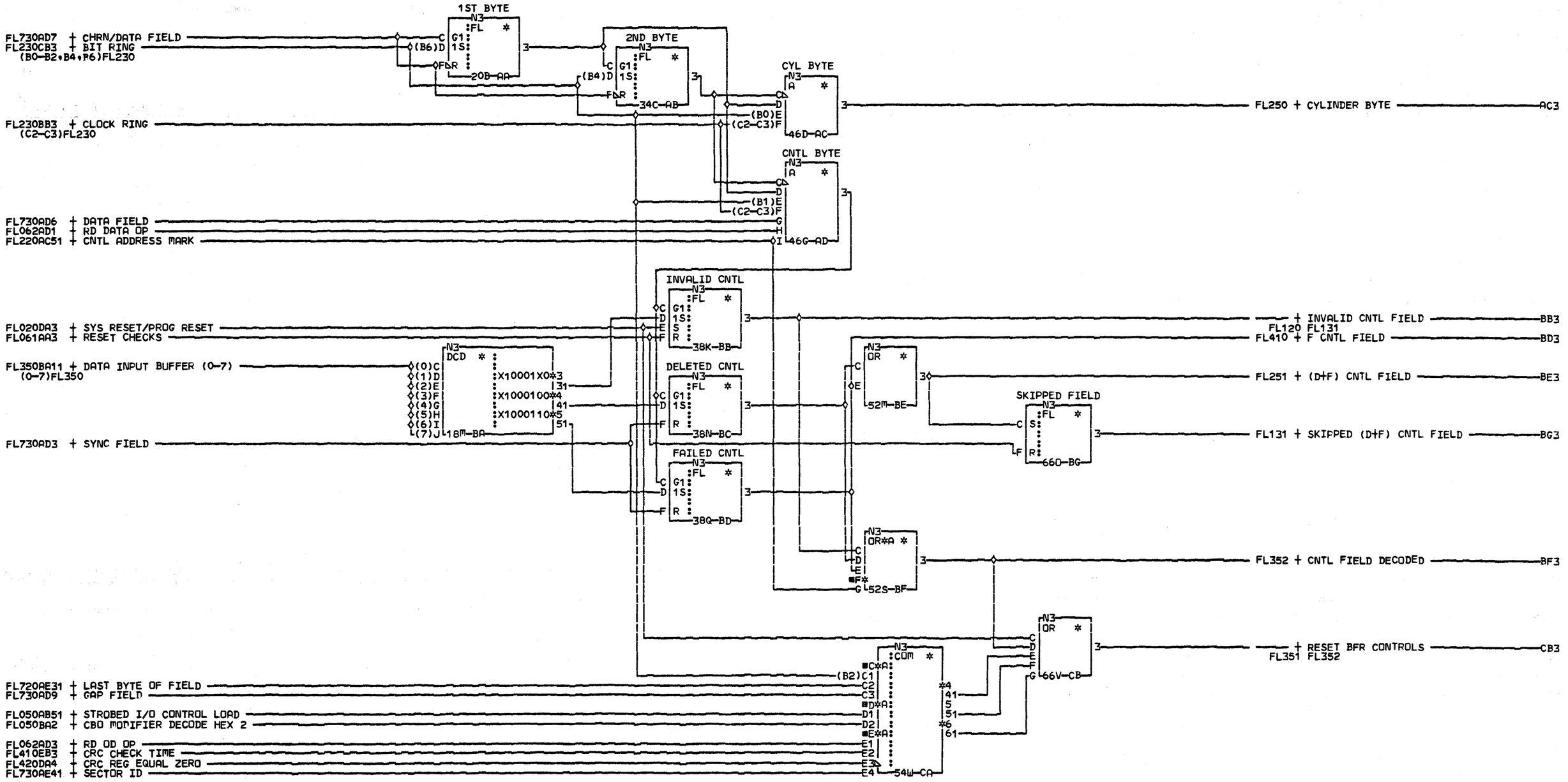
LOC=1A-A2L2

USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK CE

CID PIOFE JOB T4301503

FL220 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

CONTROL FIELD DECODE

PN4238292 EC833174

LOC=1A-A2L2

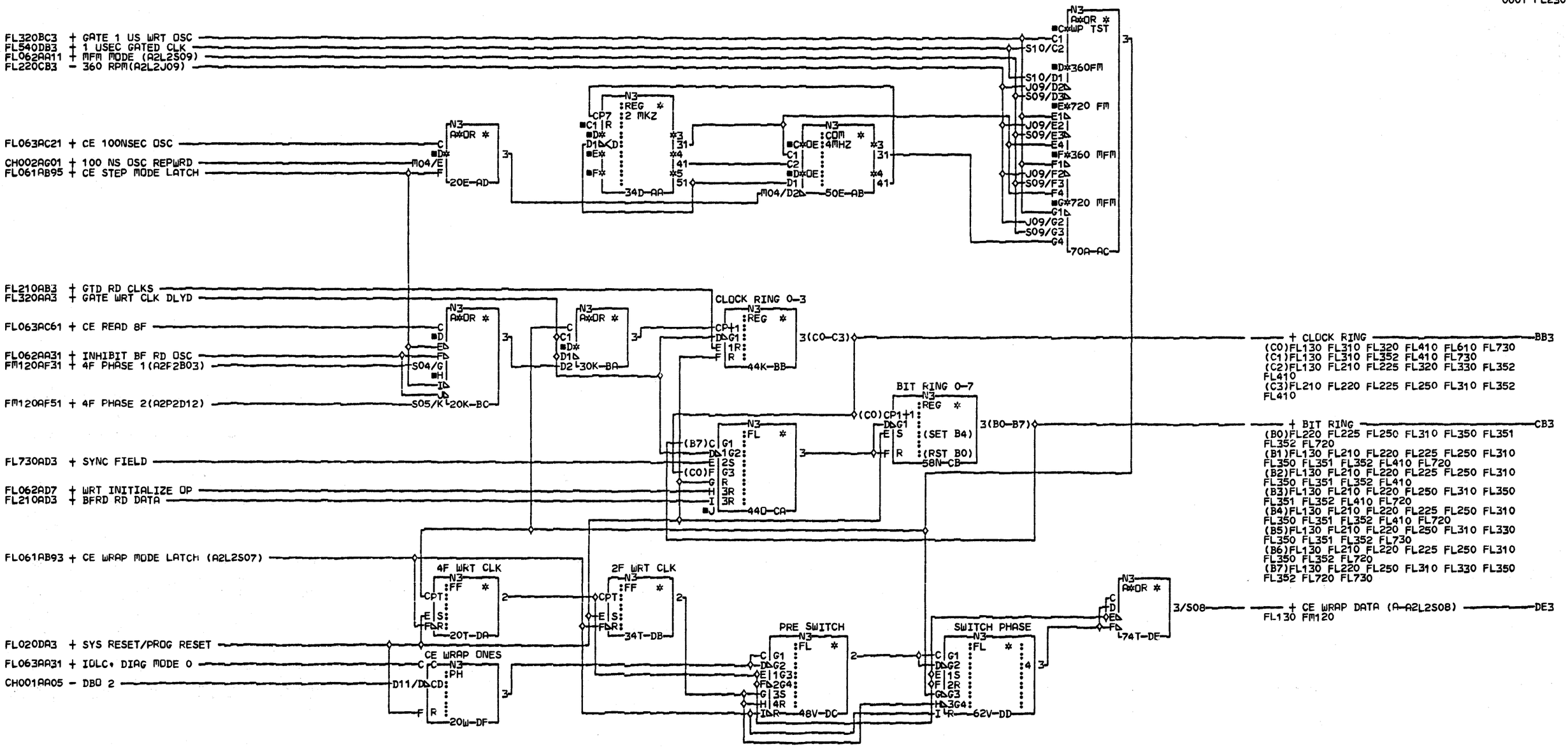
USN 00008 PRI=13OCT78 1322

AUC= SEC

PFORM=KSEB NEXTBLK CC

CID PIOFE JOB N7501528

FL225 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

CLOCK RING & BIT RING

PN4238293 EC834824 PEC833174

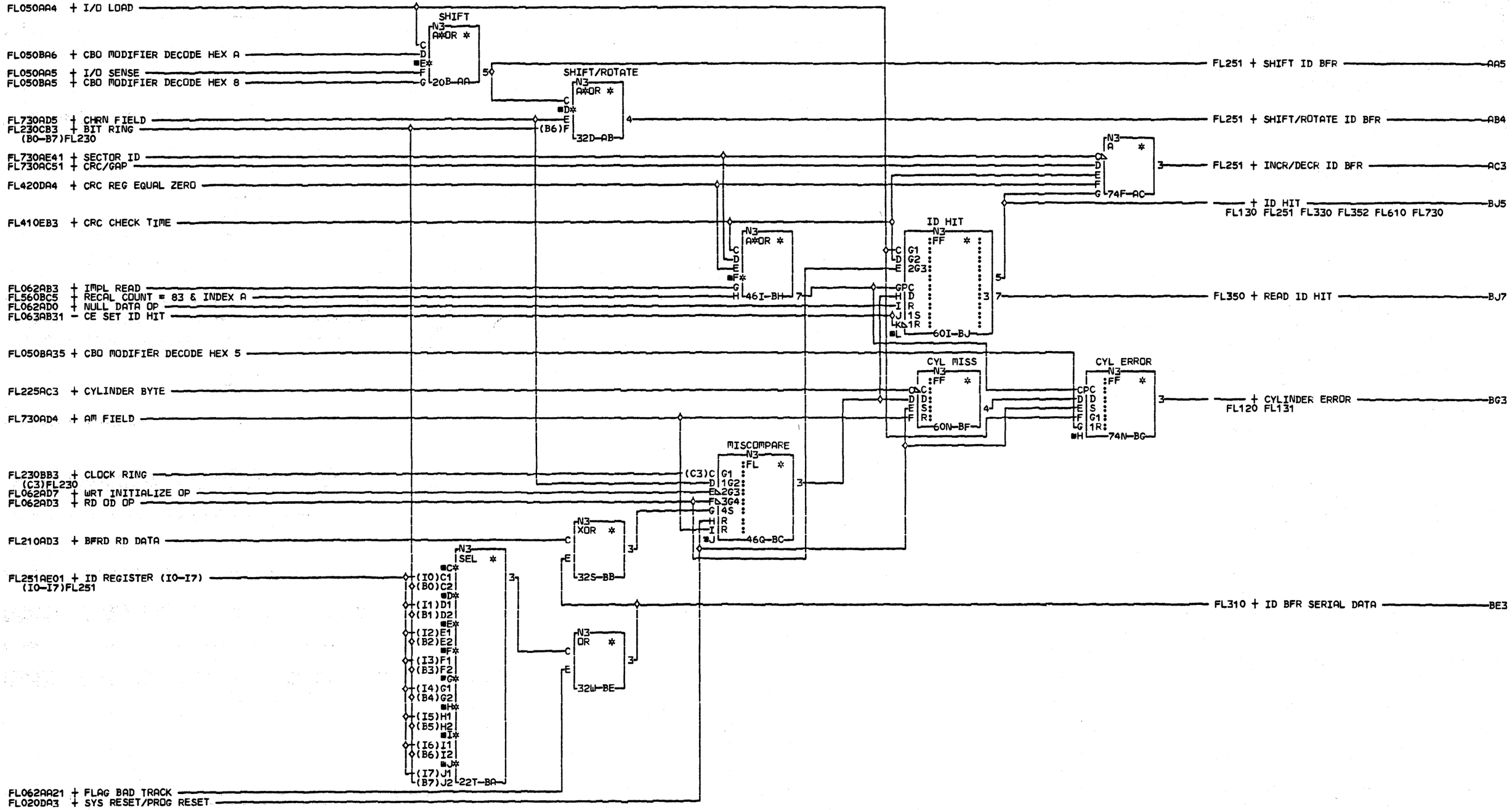
LOC=1A-A2L2

USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK DG

CID PIOFE JOB T4301503



COMMENTS

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ID BUFFER - CONTROLS: CYLINDER ERROR & ID HIT

PN4238294 EC833174

LOC=1A-A2L2

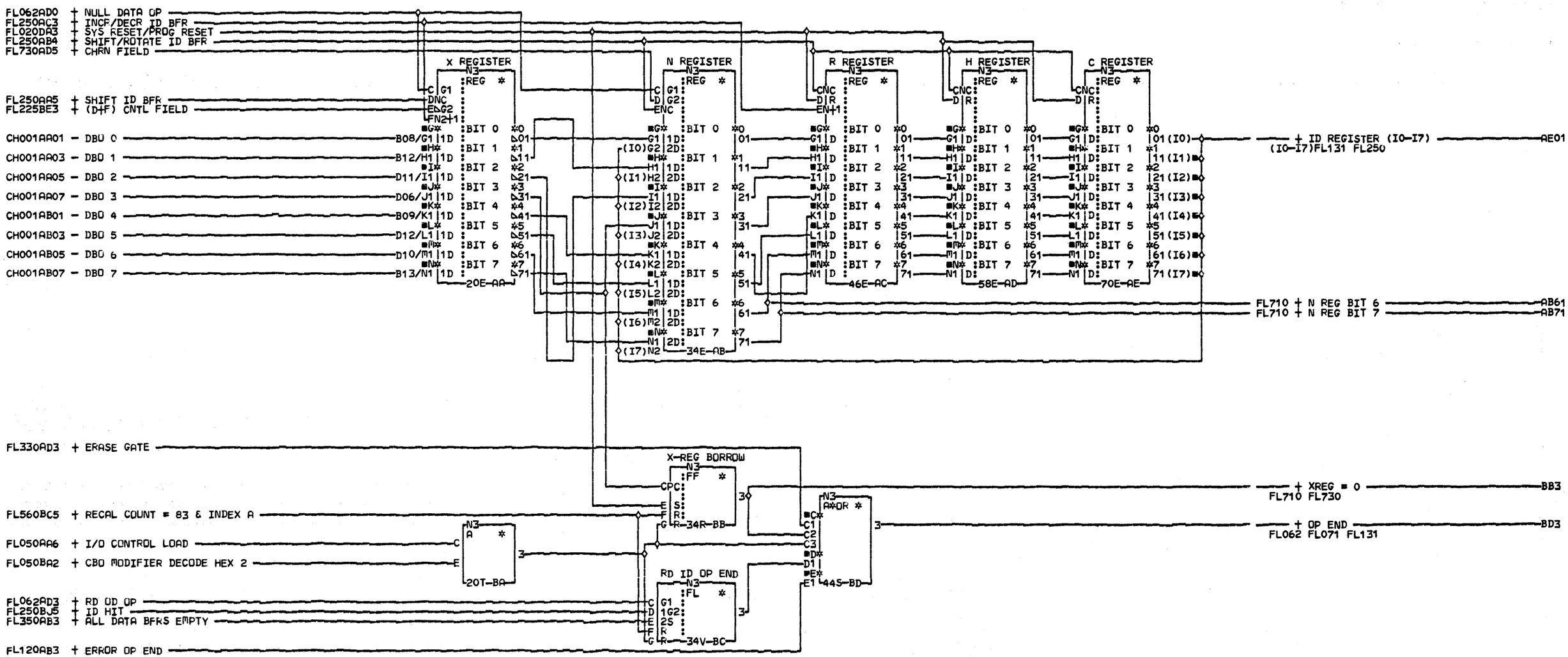
USN 00008 PRI=13OCT78 1322

AUC= SEC

PFORM=KSEB NEXTBLK BK

CID PIOFE JOB N7501528

FL250 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

ID BUFFER - CHRNX REGS AND OP END

PN4238295 EC834824 PEC833174

LOC=1A-A2L2

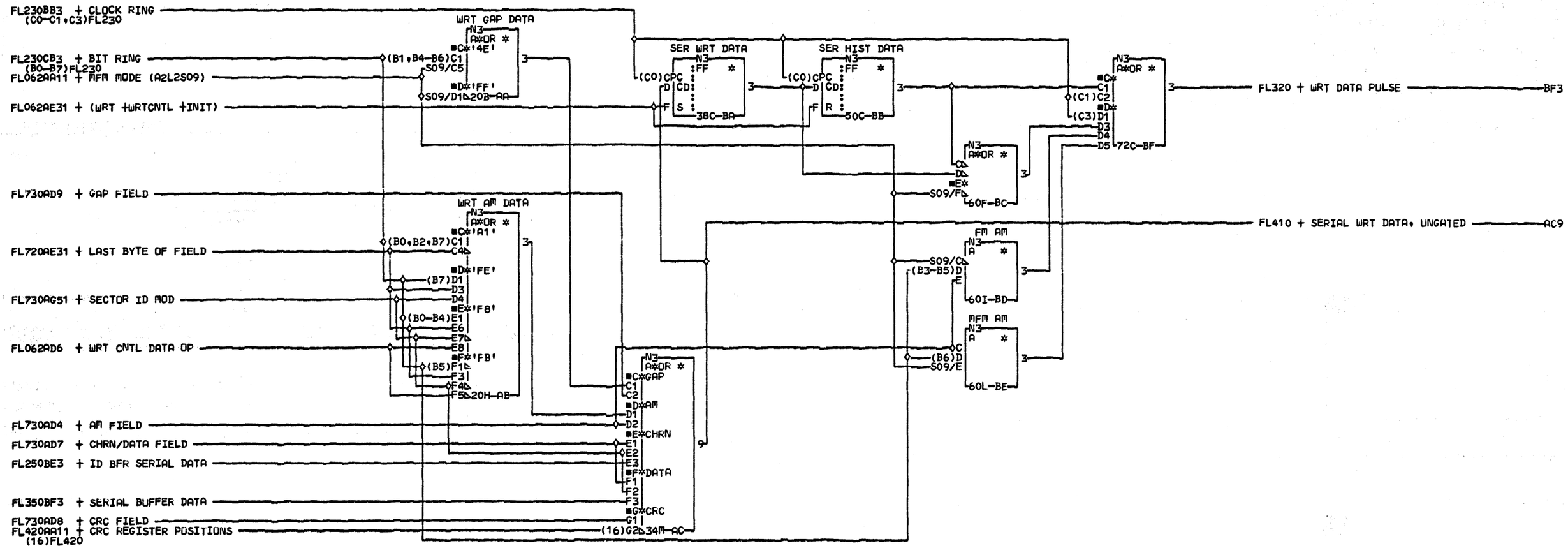
USN 00008 PRI=08MAY79 2116

AUC= SEC

PFORM=KSEB NEXTBLK BE

CID PIOFE JOB T4301503

FL251 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

SERIAL WRITE DATA

PN4238296 EC834824 PEC833174

LOC=1A-R2L2

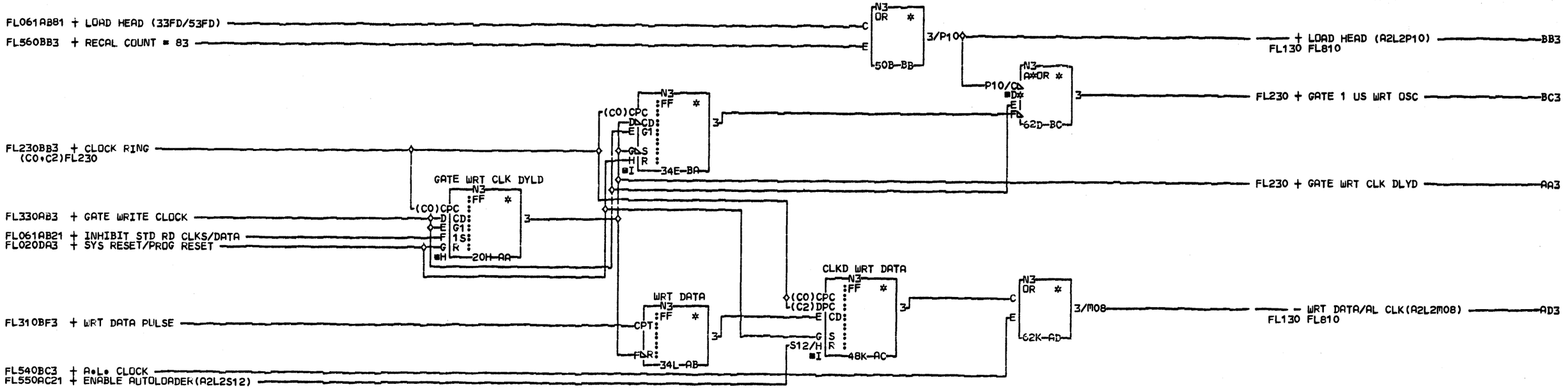
USN 00008 PRI=09MAY79 1445

AUC= SEC

PFORM=KSEB NEXTBLK BG

CID PIOFE JOB T4301503

FL310 0001



COMMENTS

CLOCKED WRITE DATA

PN4238297 EC834824 PEC833174

LOC=1A-A2L2

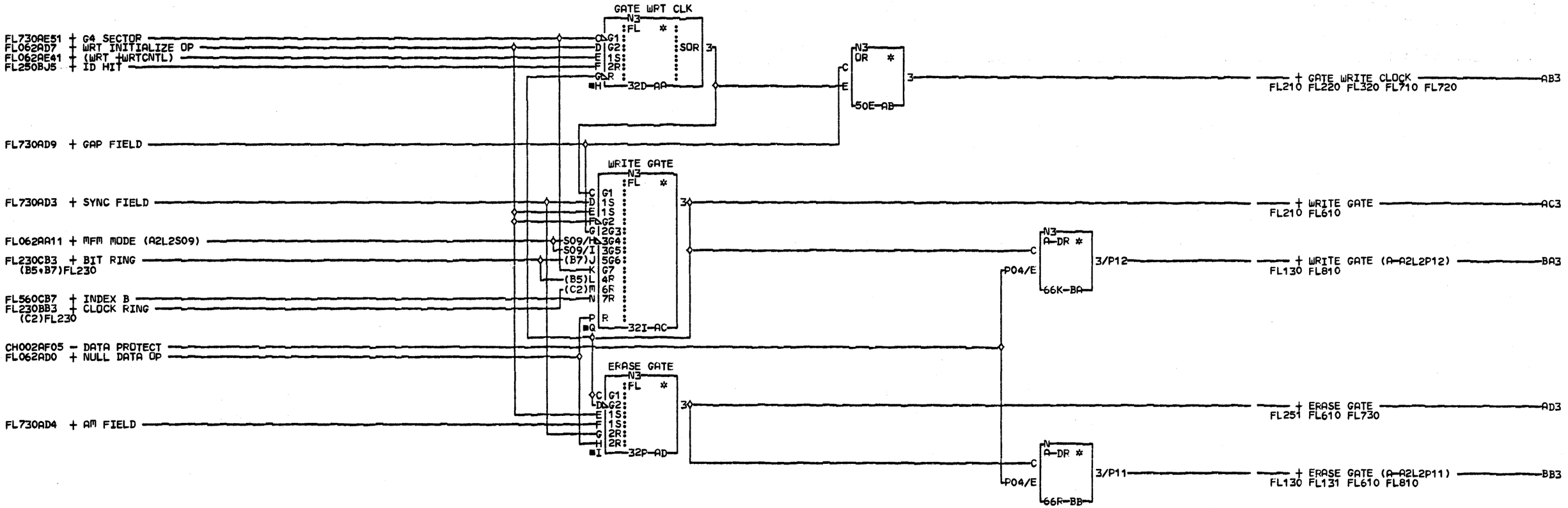
USN 00008 PRI=08MAY79 2116

AUC= SEC

PFORM=KSEB NEXTBLK BD

CID PIOFE JOB T4301503

FL320 0001



COMMENTS

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GATES - WRT CLK, WRITE AND ERASE

PN4238298 EC834824 PEC833174

LOC=1A-A2L2

USN 00008 PRI=08MAY79 2116

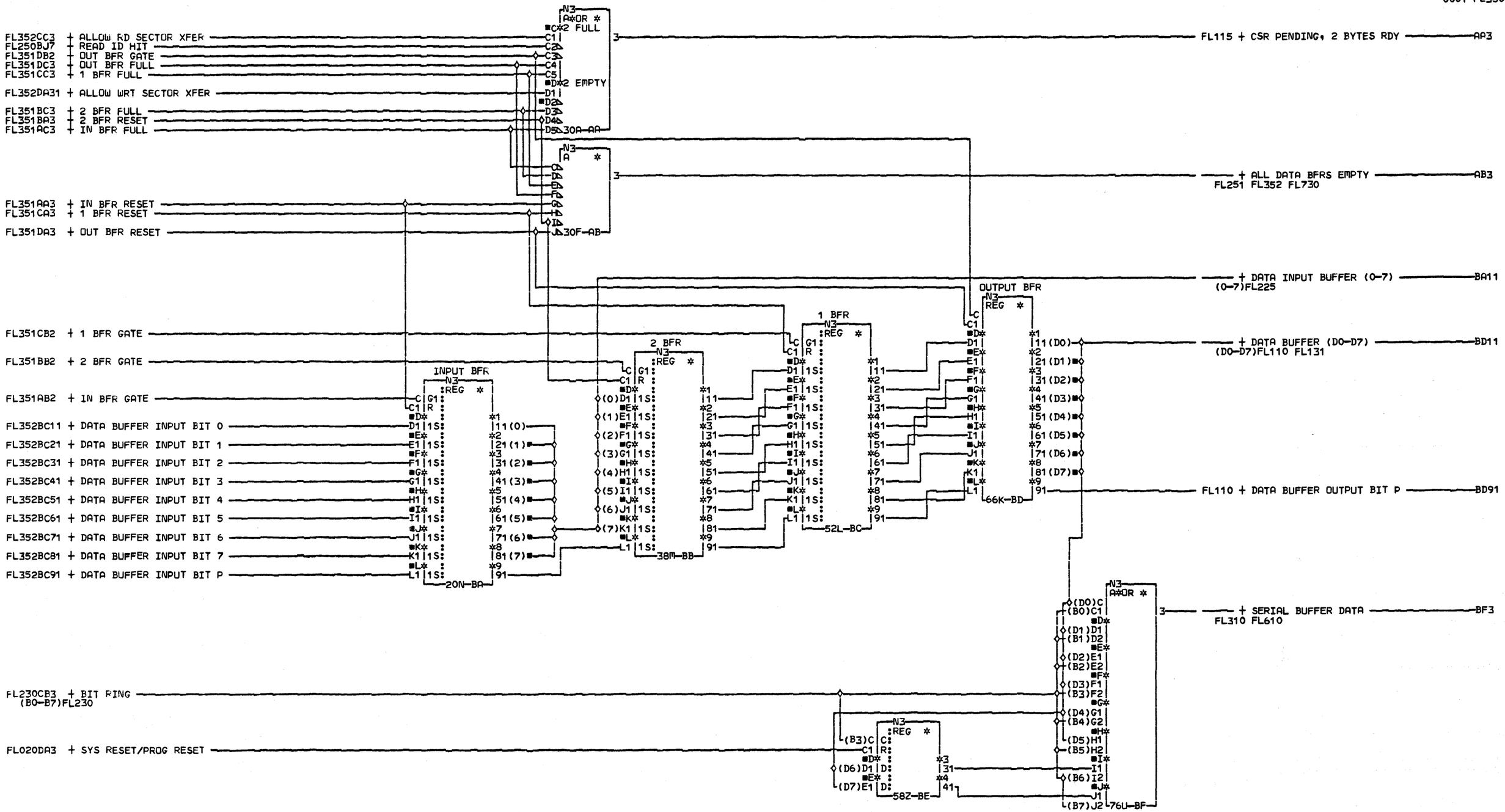
AUC= SEC

PFORM=KSEB NEXTBLK BC

CID PIDFE JOB T4301503

FLMO 0001

0001 FLMO



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

DATA BUFFER
4 REGISTERS AND STATUS

PN4238299 EC833174

LOC=1A-A2L2

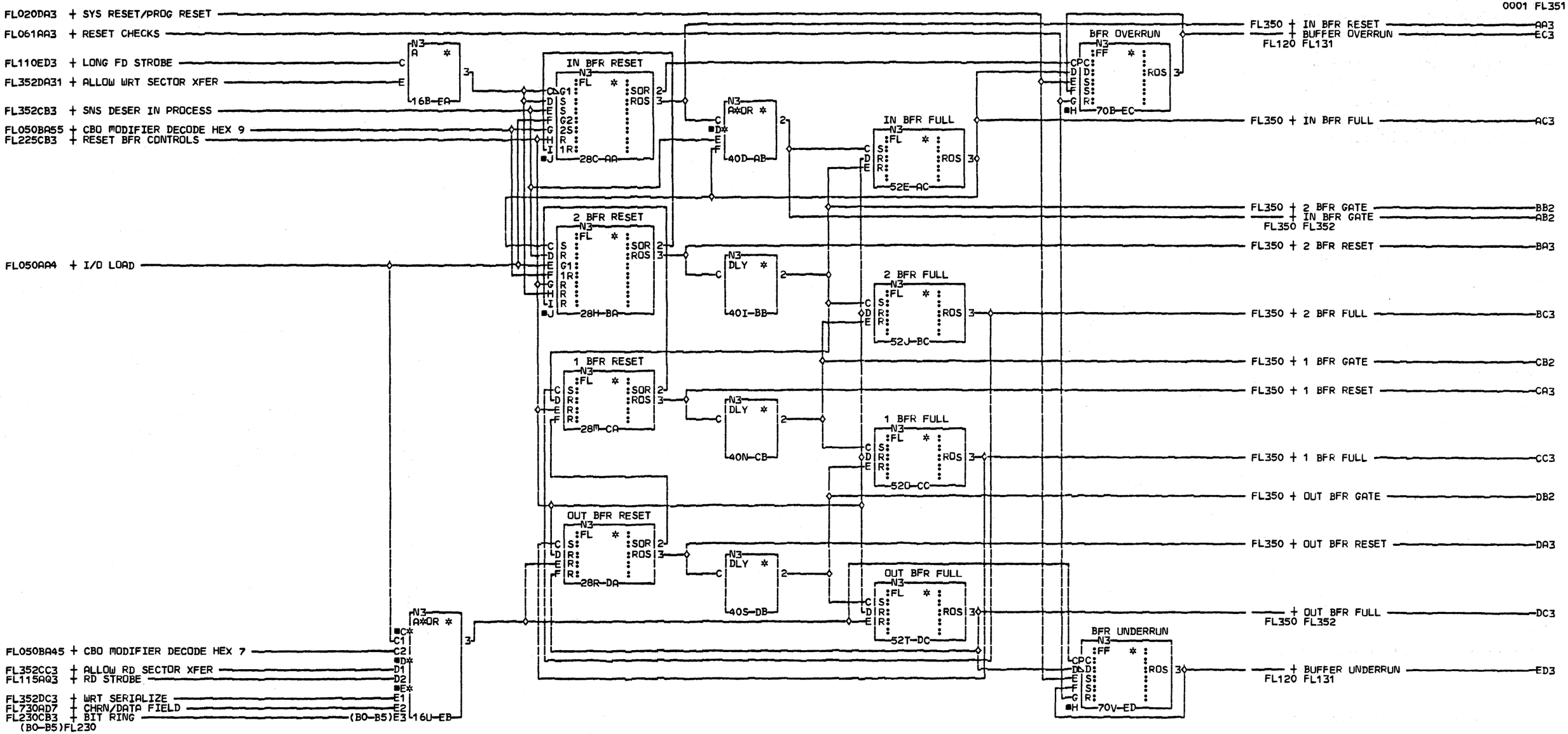
USN 00008 PRI=130CT78 1322

AUC= SEC
PFORM=KSEB NEXTBLK BG

CID PIOFE JOB N7501528

FL350 0001

FL350 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

DATA BUFFER
RIPPLE CONTROLS

PN4238300 EC833174

LOC=1A-A2L2

USN 00008 PRI=13OCT78 1322

AUC= SEC
PFORM=KSEB NEXTBLK EE

CID PIOFE JOB N7501528

FL351 0001

FL351 0001

FL061AB71 + DSKT WORKING

FL062AD7 + WRT INITIALIZE OP
FL230CB3 + BIT RING
(B0-B7)FL230
FL062AE71 + (RD +RDCNTL)
FL250BJ5 + ID HIT

FL730AD5 + CHRN FIELD
FL730AD6 + DATA FIELD
FL730AD8 + CRC FIELD
FL225BF3 + CNTL FIELD DECODED

FL225CB3 + RESET BFR CONTROLS

FL062AD0 + NULL DATA OP

FL351DC3 + OUT BFR FULL

FL730AD3 + SYNC FIELD
FL730AG51 + SECTOR ID MOD

FL351AB2 + IN BFR GATE
FL110ED3 + LONG FD STROBE

FL062AE51 + (VER +WRT +WRT CNTL)

FL720AE21 + BYTE CTR = 0
FL350AB3 + ALL DATA BFRS EMPTY

FL210AD3 + BFRD RD DATA
FL230BB3 + CLOCK RING
(C1-C3)FL230
FL020DA3 + SYS RESET/PROG RESET

FL050AA4 + I/O LOAD
FL050BA55 + CBO MODIFIER DECODE HEX 9

FL115AL3 + GATE CBI/DBI
FL110EB3 + FD STROBE

CH001AA01 - DBO 0
CH001AA03 - DBO 1
CH001AA05 - DBO 2
CH001AA07 - DBO 3
CH001AB01 - DBO 4
CH001AB03 - DBO 5
CH001AB05 - DBO 6
CH001AB07 - DBO 7
CH001AC01 - DBO P

ALLOW RD DESER — N3 :FL — 22B-CA
SNS DESER IN PROC — N3 :PH — 36B-CB
RD SECTOR XFER — N3 :FF — 70B-CC
+ ALLOW RD SECTOR XFER — CC3
FL110 FL120 FL350 FL351

+ ALLOW WRT SECTOR XFER — DA31
FL350 FL351

WRT SERIALIZE — N3 :FF — 70G-DC
FL351 + WRT SERIALIZE — DC3

ALLOW WRT XFER — N3 :FL — 22H-DA
N3 :SEL — 36H-DB
FL351 + SNS DESER IN PROCESS — CB3

DLYD RD DATA — N3 :FF — 26N-AB
PARITY GEN — N3 :FF — 48N-AC
N3 A*OR — 58N-AD
N3 :SEL — 70Q-BC
N3 :REG

DBO BFR — N3 :REG — B08/D1 B12/E1 D11/F1 D06/G1 B09/H1 D12/I1 D10/J1 B13/K1 B07/L1 20U-BA

BIT 0	*1	FL350 + DATA BUFFER INPUT BIT 0 — BC11
BIT 1	*2	FL350 + DATA BUFFER INPUT BIT 1 — BC21
BIT 2	*3	FL350 + DATA BUFFER INPUT BIT 2 — BC31
BIT 3	*4	FL350 + DATA BUFFER INPUT BIT 3 — BC41
BIT 4	*5	FL350 + DATA BUFFER INPUT BIT 4 — BC51
BIT 5	*6	FL350 + DATA BUFFER INPUT BIT 5 — BC61
BIT 6	*7	FL350 + DATA BUFFER INPUT BIT 6 — BC71
BIT 7	*8	FL350 + DATA BUFFER INPUT BIT 7 — BC81
BIT P	*9	FL350 + DATA BUFFER INPUT BIT P — BC91

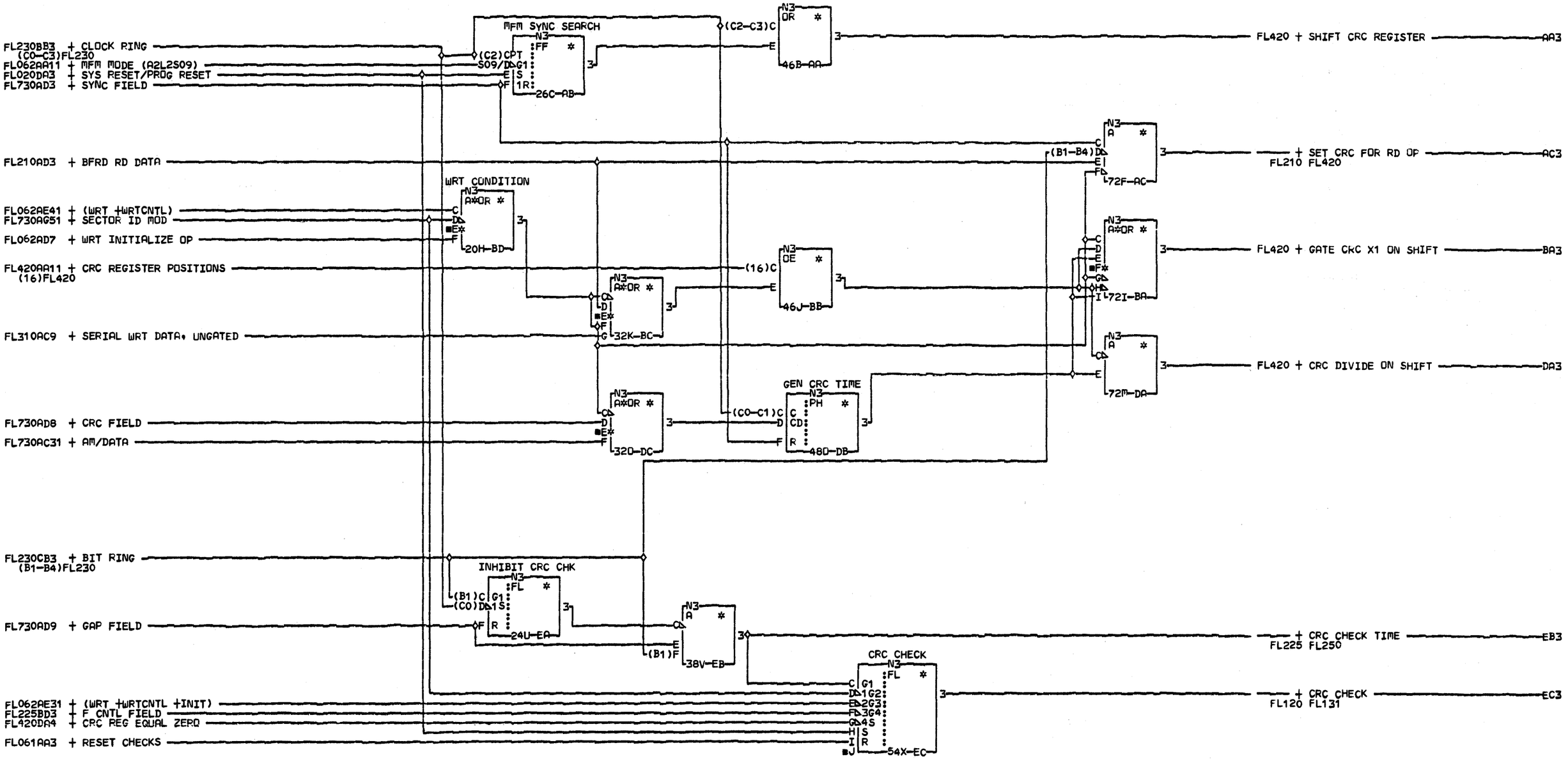
COMMENTS

DATA BUFFER
DESERIALIZER & BFR I/O
CONTROLS
PN4238301 EC833174

LOC=1A-A2L2

USN 00008 PRI=13OCT78 1322
AUC= SEC 22NOV78 1530
PFORM=KSEB NEXTBLK DD
CID PIOFE JOB N7501528

FL352 0001



COMMENTS

CRC CONTROL & CHECK
CRC

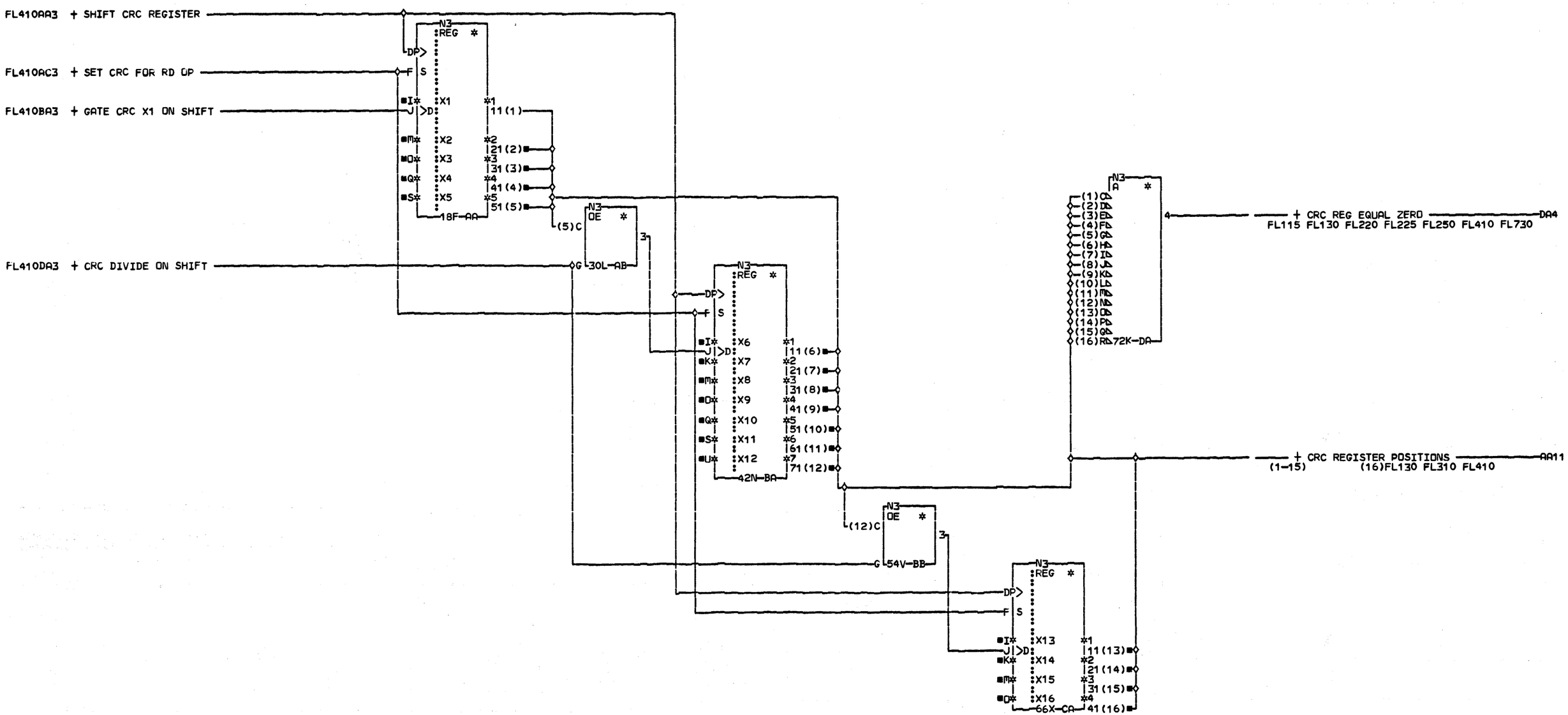
PN4238302 EC834824 PEC833174

LOC=1A-A2L2

USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK ED

CID PIDFE JOB T4301503



COMMENTS

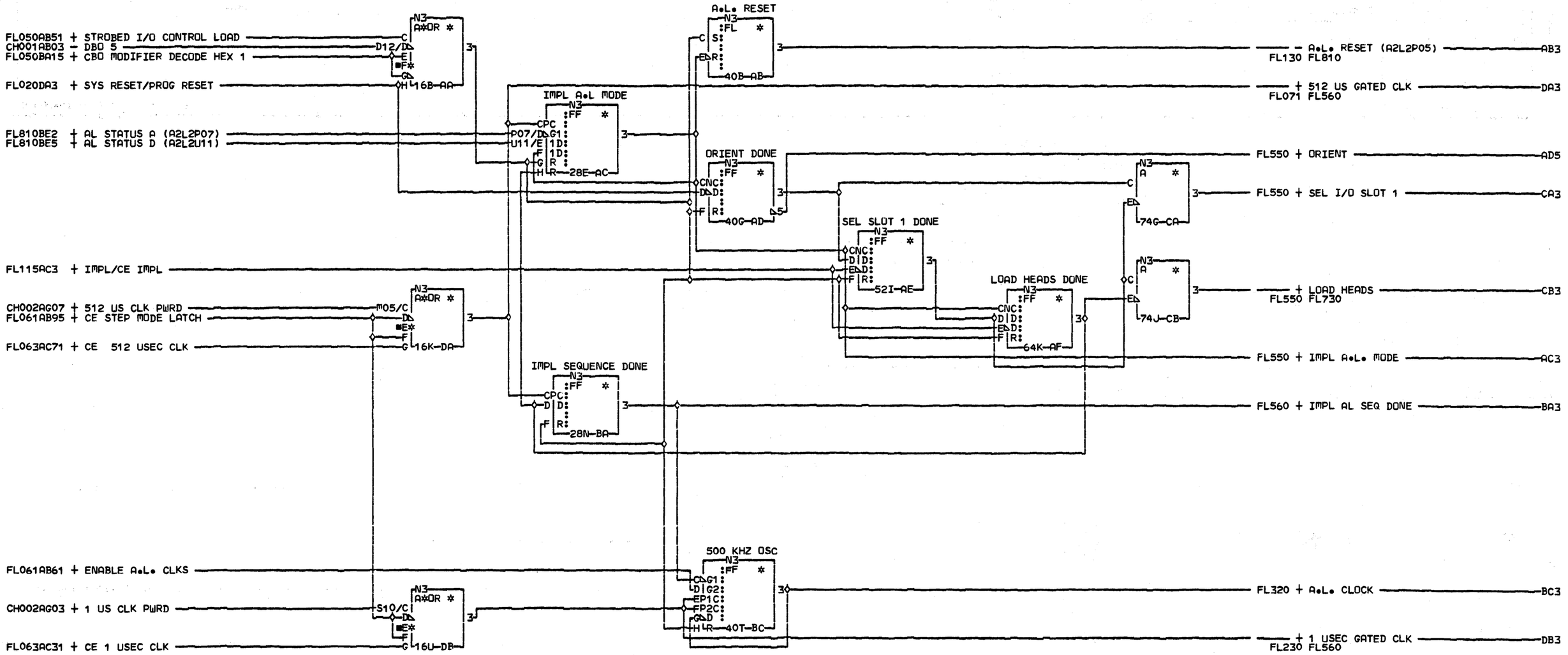
CRC SHIFT REG
CRC
DSKT ATCH
PN4238303 EC833174

LOC=1A-A2L2

USN 00008 PRI=130CT78 1322

AUC= SEC
PFORM=KSEB NEXTBLK EB

CID PIOFE JOB N7501528



COMMENTS

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IMPL/POR SEQUENCE

PN4238304 EC833174

LOC=1A-A2L2

USN 00008 PRI=13OCT78 1322

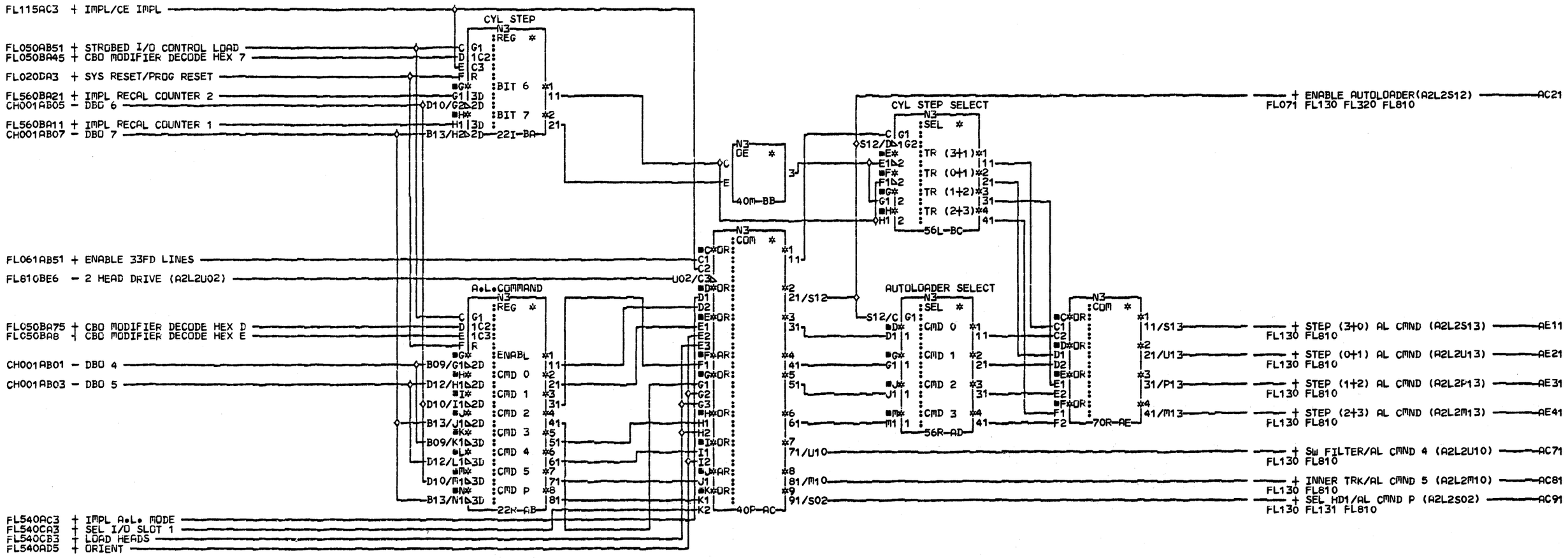
AUC= SEC 22NOV78 1530

PFORM=KSEB NEXTBLK DC

CID PIOFE JOB N7501528

FL540 0001

FL540 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

AUTOLOADER CONTROL LINES
HEAD ACCESS ADD MPXD DRIVE LINES

PN4238305 EC834824 PEC833174

LOC=1A-A2L2

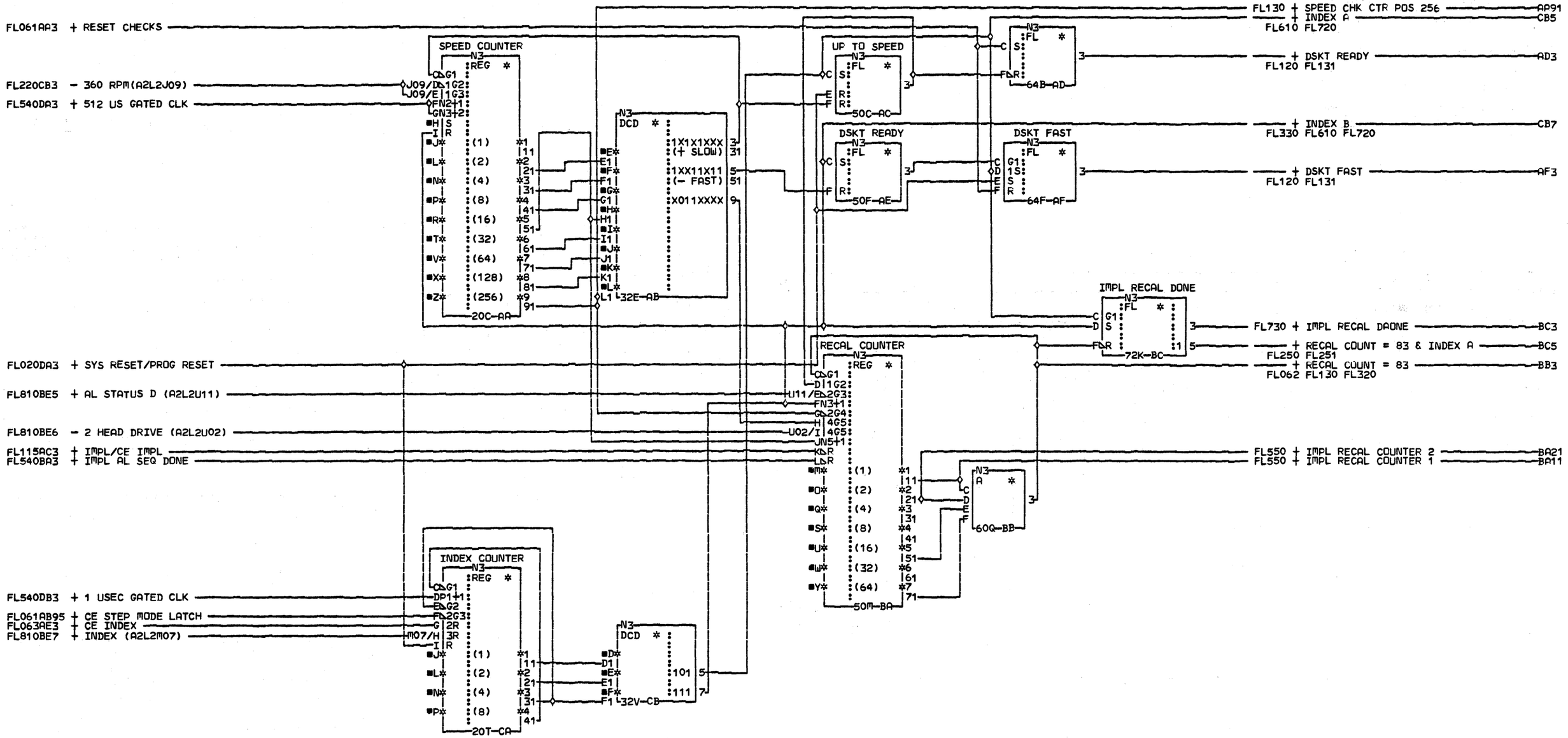
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK BD

CID PIOFE JOB T4301503

FL550 0001

FL550 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

SPEED CHECK AND IMPL RECAL COUNTER

PN4238306 EC833174

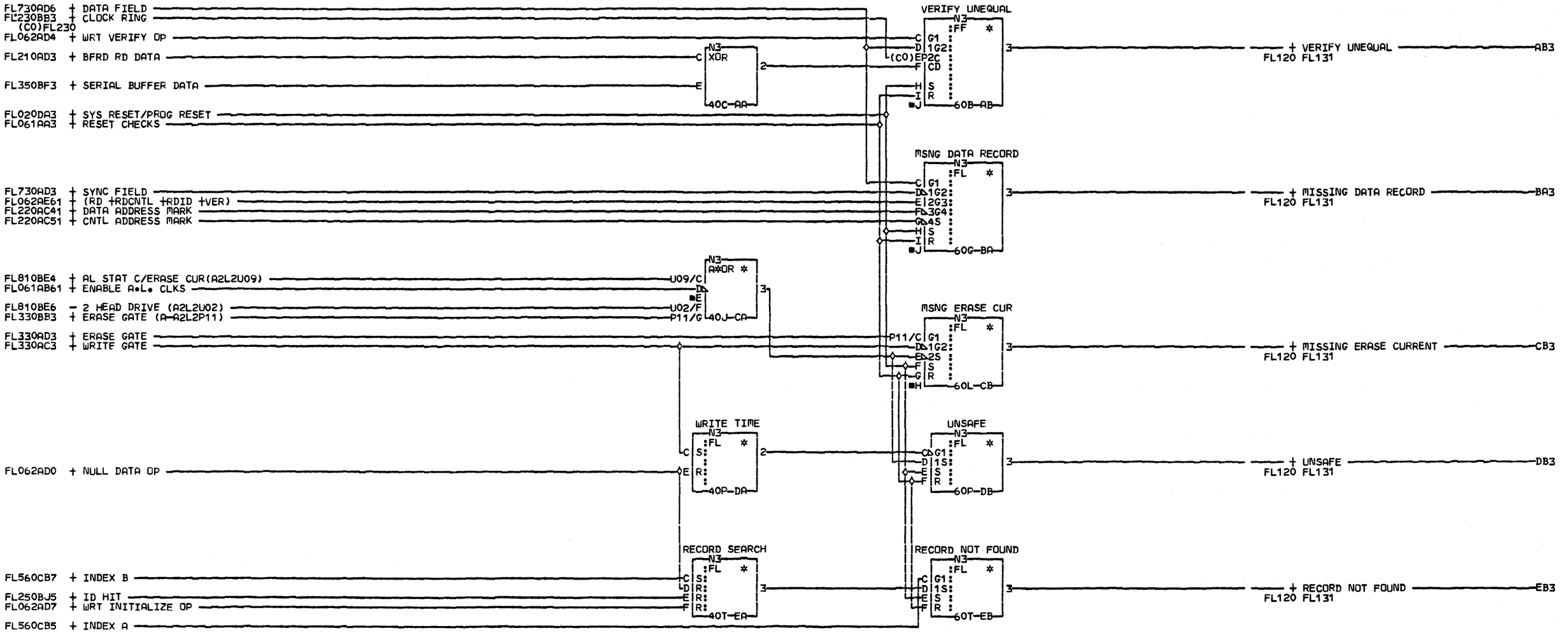
LOC=1A-A2L2

USN 00008 PRI=130CT78 1322

AUC= SEC

PFORM=KSEB NEXTBLK CC

CID PIOFE JOB N7501528



COMMENTS

D1 COPYRIGHT IBM CORP• 1978

ERROR CHECK CIRCUITS

PN4238307 EC833174

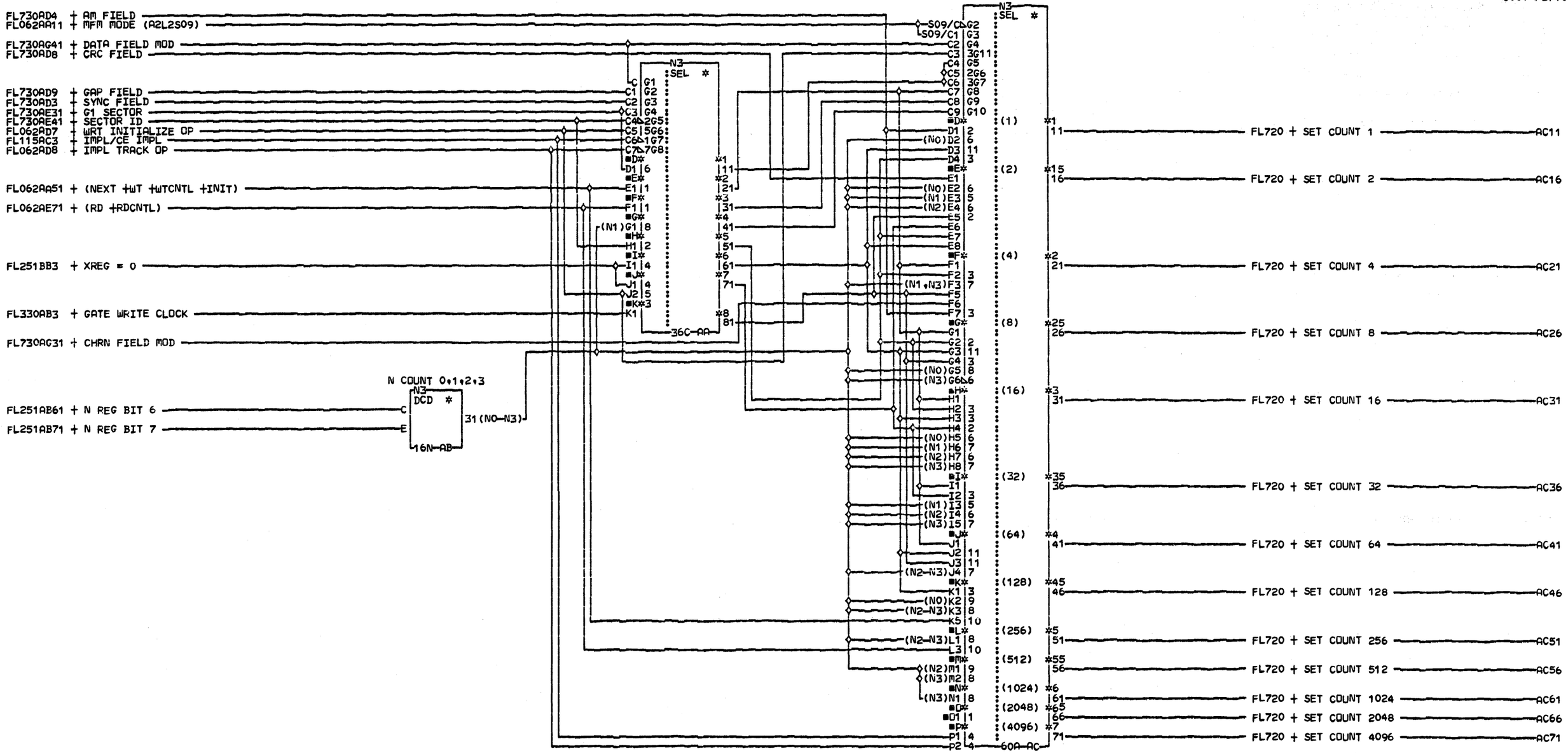
LOC=1A-A2L2

uSN 00008 PRI=130CT78 1322

AUC= SEC

PFORM=KSEB NEXTBLK EC

CID PIOFE JOB N7501528



COMMENTS

SEQUENCER
FIELD BYTE COUNT SELECT

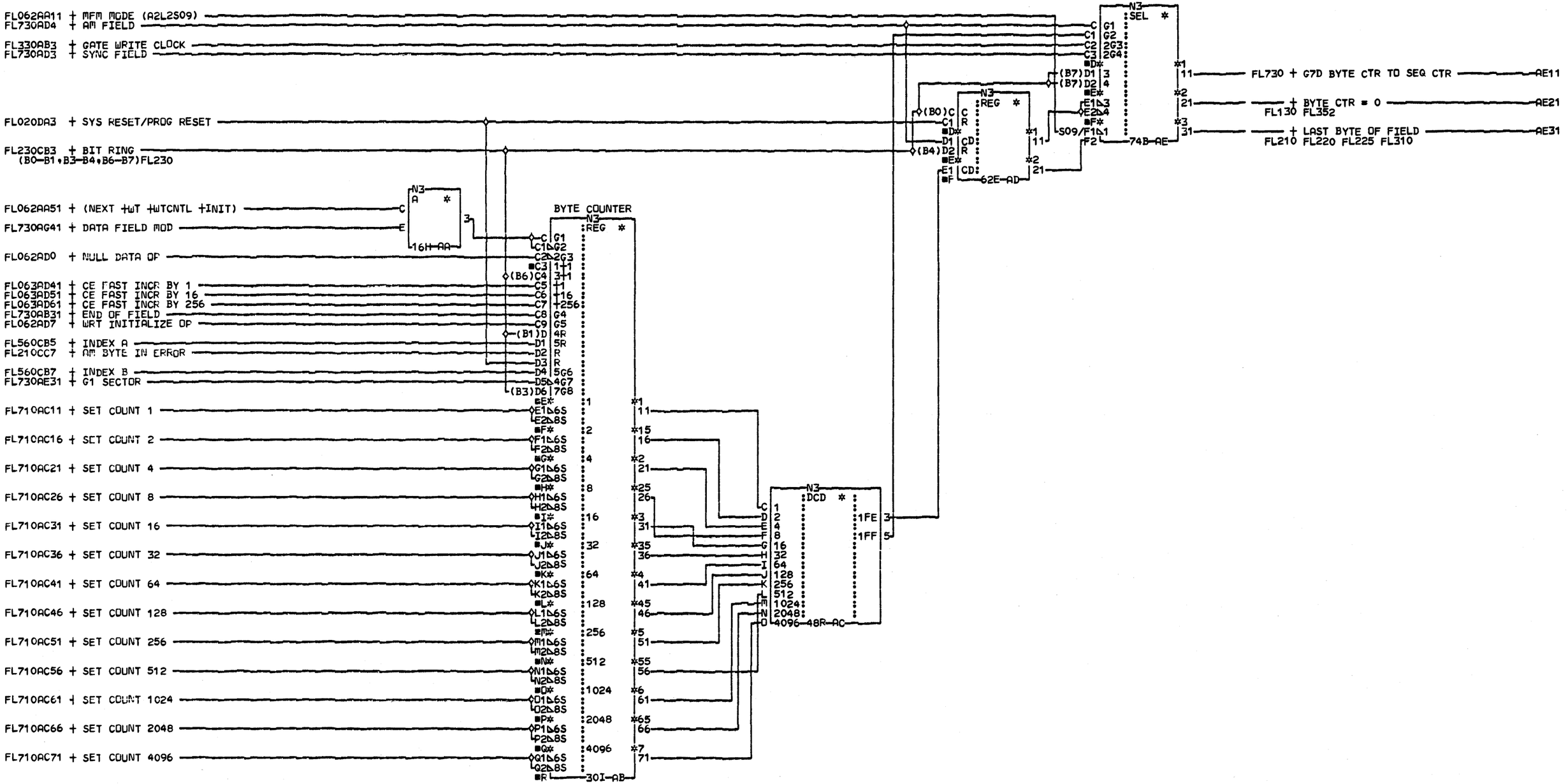
PN4238308 EC834824 PEC833174

LOC=1A-A2L2

USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK AD

CID PIOFE JOB T4301503



COMMENTS

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SEQUENCER
BYTE COUNTER

PN4238309 EC834824 PEC833174

LOC=1A-A2L2

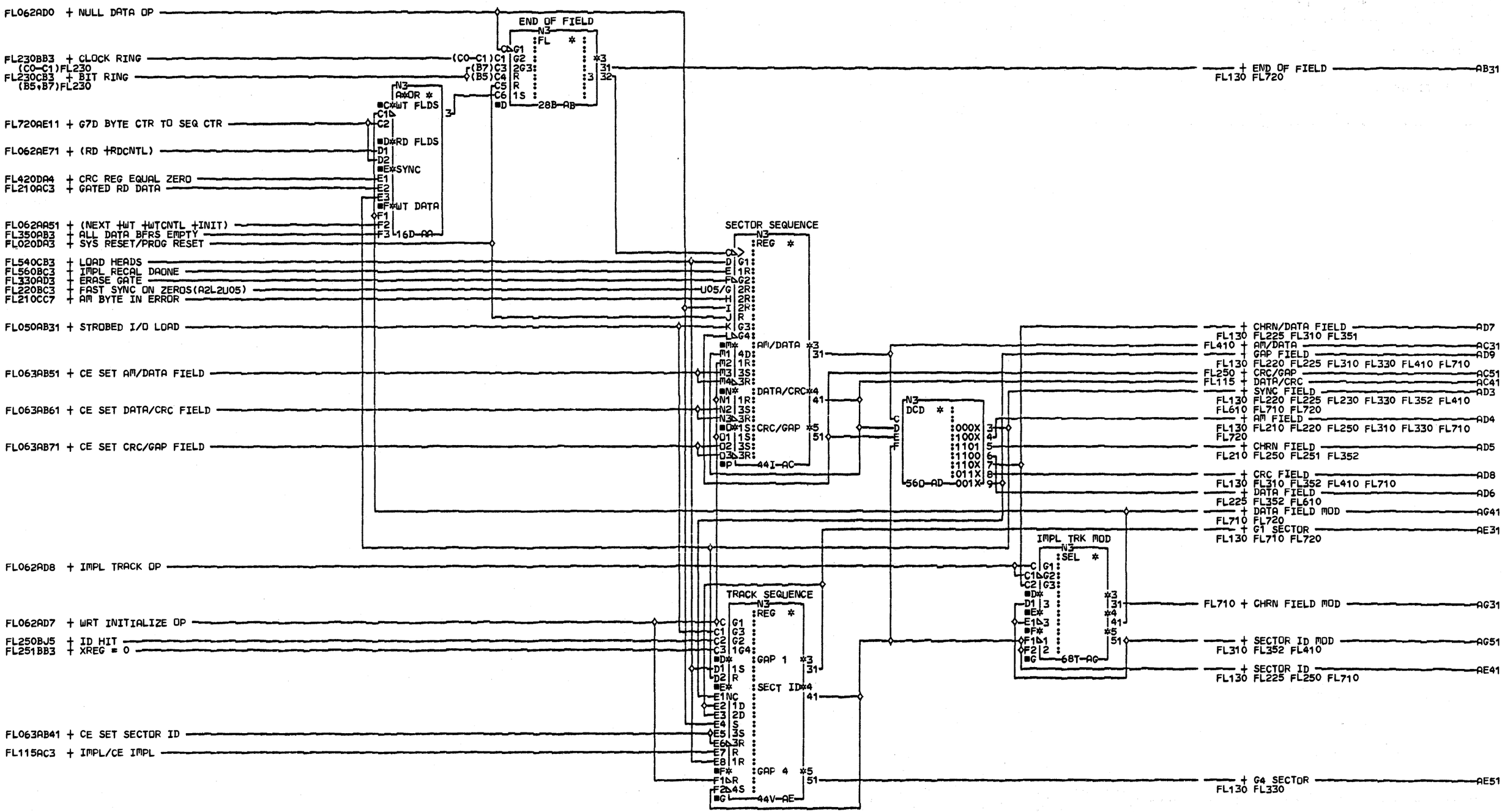
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK AF

CID PIOFE JOB T4301503

FL720 0001

0001 FL720



COMMENTS
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SEQUENCER
SECTOR AND TRACK

PN4238310 EC834824 PEC833174

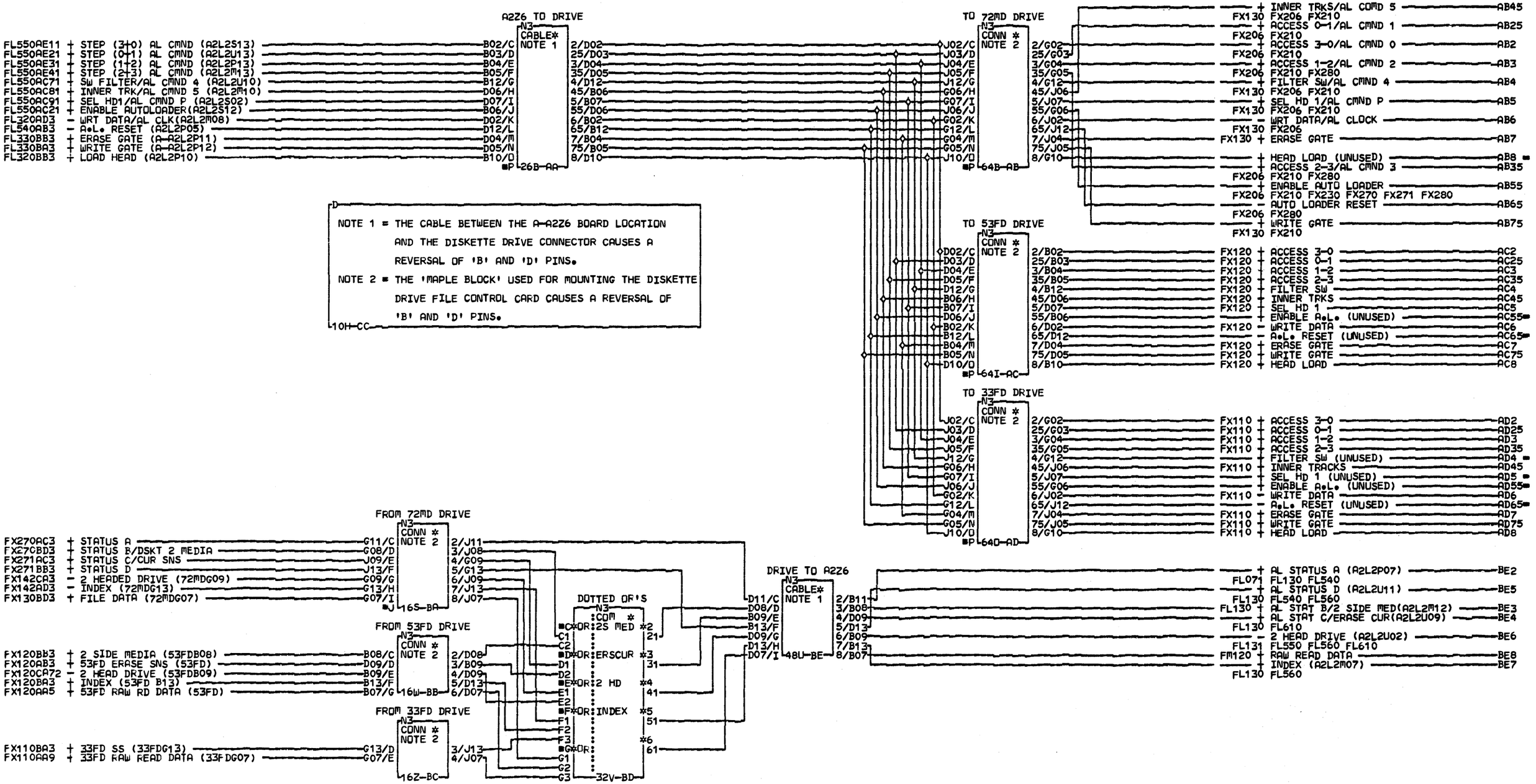
LOC=1A-A2L2

USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK AH

CID PIOFE JOB T4301503

FL730 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

ENTRY/EXIT PAGE
DISKETTE DRIVE

PN4238311 EC834824 PEC833174

LOC=1A-A2Z6

USN 00008 PRI=08MAY79 2116

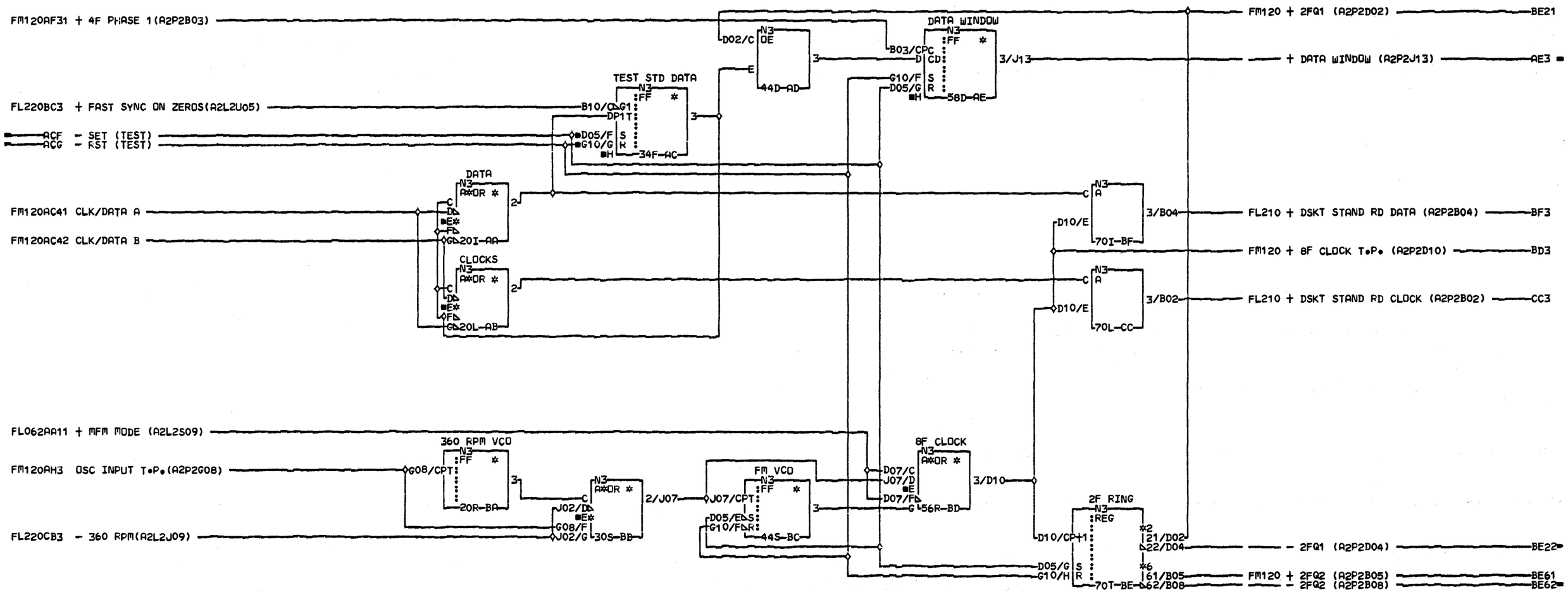
ALC= SEC

PFORM=KSEB NEXTBLK CD

CID PIOFE JOB T4301503

FL810 0001

FL810 0001



COMMENTS

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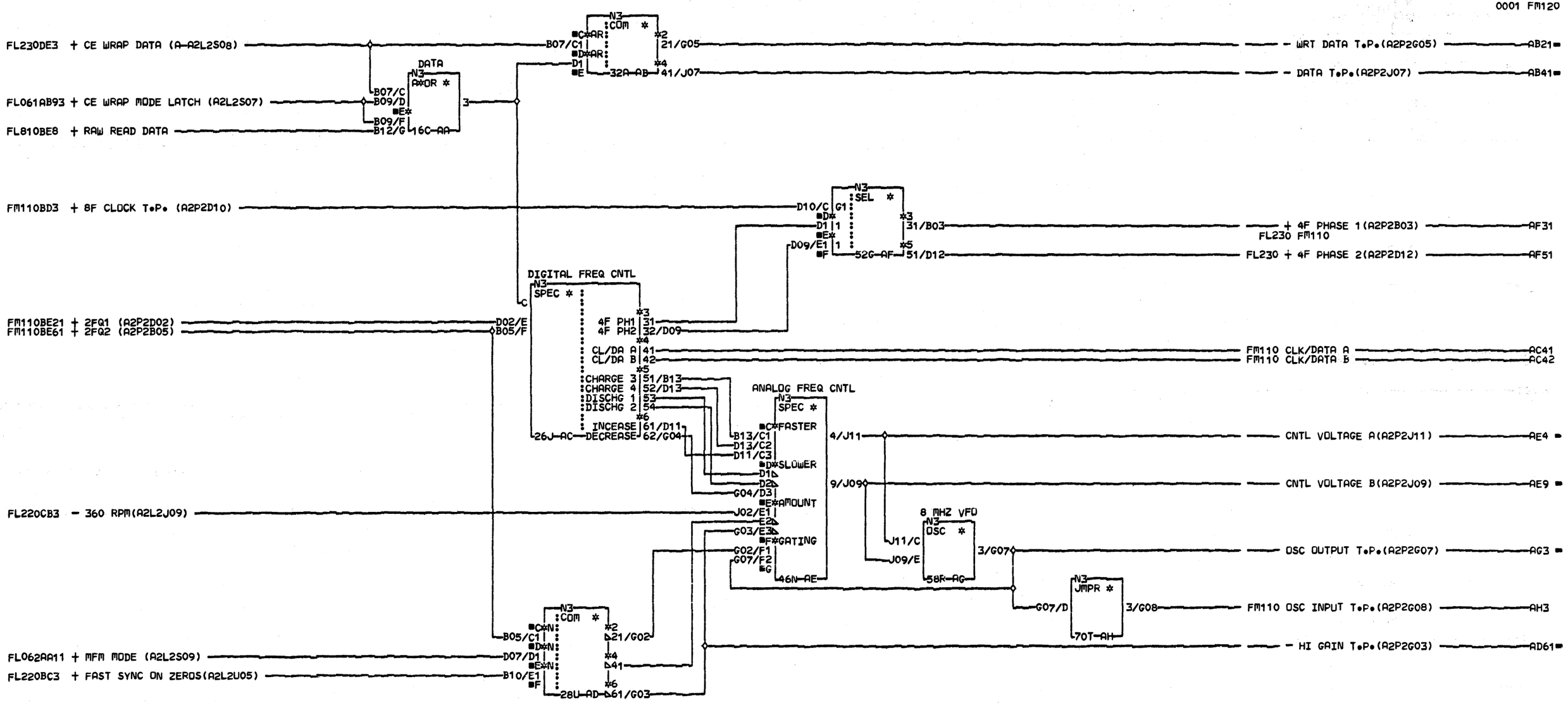
DATA CONTROL
DATA SEPARATOR
DSKT ATCH
PN4238312 EC834824 FEC833174

LOC=1A-A2P2

USN 00008 PRI=14JUN79 2037

AUC= SEC
PFORM=KSEB NEXTBLK CD

CID PIOFE JOB T4301503



OSC CONTROL
DATA SEPARATOR
DSKT ATCH
PN4238313 EC834824 PEC833174

LOC=1A-A2P2

USN 00008 PRI=14JUN79 2037

AUC= SEC
PFORM=KSEB NEXTBLK AI

CID PIOFE JOB T4301503

FM120 0001

FL810AD7 + ERASE GATE
FL810AD75 + WRITE GATE

WT CUR IS 3.5/5 MA
N3 COM *
J05/C G1
J06/E G2
FL810AD45 + INNER TRACKS
FL810AD6 - WRITE DATA
I CS 3.5 MA *1 1 11/B13
J02/J
L CS 1.5 MA
J02/M 2
O CS 3.5 MA *3 1 31/B12
J02/P
R CS 1.5 MA
J02/S 2
T 18B-AD

N3 SERV * GND 3/B09
36B-EB

READ/WRITE HEAD
N3 HEAD *
D E GREEN COMMON NOTE 2 1
G H WHITE RD-WT 1 6 OHM *3 WHITE 31
M N BLACK RD-WT 2 6 OHM *5 BLACK 51
T U RED ERASE 1.2 OHM *7
V 52B-AB

ERASE COIL DRIVER
N3 CS *
J04/D 80 MA OR 25 OHMS TO + 2 VDC 3/B10
36H-AC

J05/C G1
J04/E G2
B13/J 1
B12/Y 1 Z
68B-AA

READ AMP
N3 DF *
2/D12 READ REAMP 1 (•1VP-P ONES) AA2
3/D13 READ REAMP 2 (•1VP-P ONES) AA3
5/G12 READ DETECTOR/BALANCE AA5
6/J12 READ DETECTOR/BALANCE AA6
2
B12/B13 VOLT P-P 0.5-10 MILLIVOLT TYPICAL INNER TRACK 2-3 MILLIVOLT OUTER TRACK 6-8 MILLIVOLT
9/G07 FL810 + 33FD RAW READ DATA (33FDG07) AA9

LIGHT EMIT DIODE
N3 SERV * 91 OHM TO +5V RESISTOR 2/D07 C
12L-BD GND 6/D06 G
N3 LED * YEL-ANODE INFRA-RED NON-VISIBLE LIGHT 3 D
BLK/CATHODE NOTE 3
34L-BC

PHOTO TRANSISTOR
N3 Q NPN VOLT OUT OFF +5 ON 0/+4.0 LIGHT COL/YEL 2 B08/C
NOTE 3 EMITTER/BLK 6 D09/G
52L-BB

8 MILLSEC MAX
N3 SS *
INPUT IS 20K OHM
3/G13 FL810 + 33FD SS (33FDG13) BA3
GND TO +5VDC
74L-BA

MAGNET DRIVER
N3 AR *
FL810AD8 + HEAD LOAD
G10/D
3/B05
44P-CB

HEAD LOAD MAGNET
N3 MAGNET 200 OHMS
C BLACK
G YELLOW 62P-CA

33FD DRIVE
N3 MOTOR*
•YA000TA08 AC1 TO MOTORS ACTB1-8 C BLACK
•YA000TA11 AC2 TO MOTORS ACTB1-11 E BLACK
•YA000GD6 AC GND G GRN/YEL 20R-GA

N3 SERV *
•YA080PD15 +24V PDTB1-15 J10/C + 24 VDC
•YA080VP01 +5V PLATE J03/E + 5 VDC
•YA080GP01 GROUND J08/G GROUND
•YA080PD09 -5V PDTB1-9 J11/I - 5 VDC 33FD 20U-FA

+24 VDC
N3 SERV * +24V 2/D04 +24V 3/D05
44V-EA

MAGNET DRIVER
N3 COM *
FL810AD2 + ACCESS 3-0
FL810AD25 + ACCESS 0-1
FL810AD3 + ACCESS 1-2
FL810AD35 + ACCESS 2-3
I A TRK 0 *3
G02/J
G03/K
L A TRK 1 *5
G03/M
G04/N
O A TRK 2 *7
G04/P
G05/Q
R A TRK 3 *9
G05/S
G02/T
U 36W-DB
31/B03
51/D02
71/B04
91/B02

33FD STEPPING MOTOR
N3 MOTOR*
C D BLUE COMMON 120 OHMS/WINDING *1
F G WHITE TRK 0 *3
I J RED TRK 1 *5
L M YELLOW TRK 2 *7
O P BLACK TRK 3 *9
Q 62X-DA

COMMENTS
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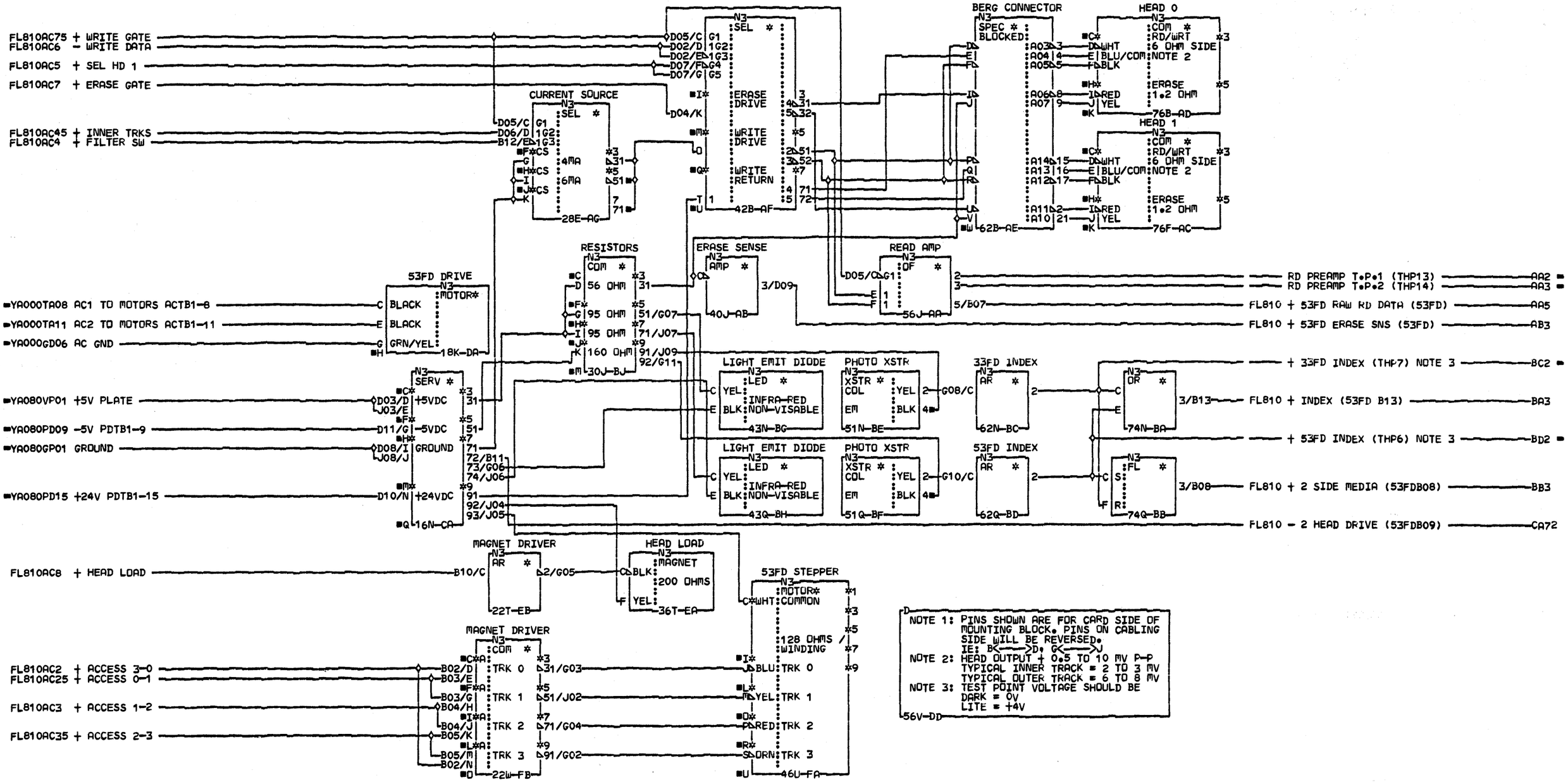
AMPLIFIERS & DRIVERS
1 SIDED DRIVE
33FD
PN4238314 EC834824 PEC833174
LOC=5A-33FD
USN 00008 PKI=08MAY79 2116
AUC= SEC 10MAY79 0925
PFORM=KSEB NEXTBLK GB
CID PIOFE JOB T4301503

FX110 0001
FX110 0001



NOTE 1: PINS SHOWN ARE FOR CARD SIDE OF MOUNTING BLOCK. PINS ON CABLING SIDE WILL BE REVERSED.
IE: B<——>D, G<——>J
NOTE 2: HEAD OUTPUT + 0.5 TO 10 MV P-P
TYPICAL INNER TRACK = 2 TO 3 MV
TYPICAL OUTER TRACK = 6 TO 8 MV
NOTE 3: TEST POINT VOLTAGE SHOULD BE
DARK = 0V
LITE = +4V
56V-DD

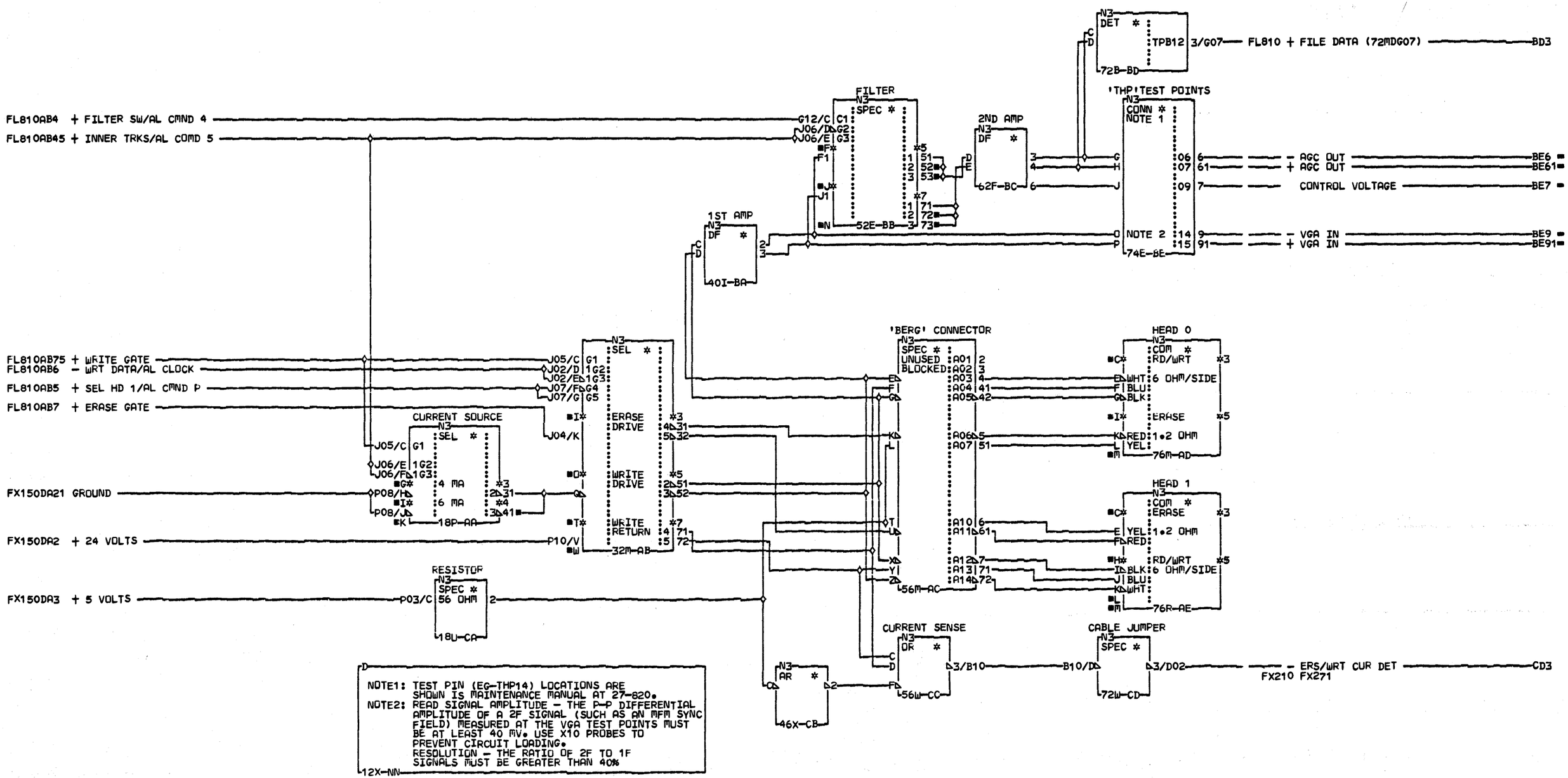
COMMENTS
D1COPYRIGHT IBM CORP. 1978

AMPLIFIERS & DRIVERS
2 SIDED DRIVE
53FD
PN4238315 EC834824 PEC833174

LOC=5A-53FD

USN 00008 PRI=09MAY79 1445
AUC= SEC 10MAY79 0925
PFORM=KSEB NEXTBLK FC
CID PIOFE JOB T4301503

FX120 0001



COMMENTS

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72MD DRIVE
RD/WRT HEAD & CIRCUITS

PN4238316 EC834824 PEC833174

LOC=5A-72MD

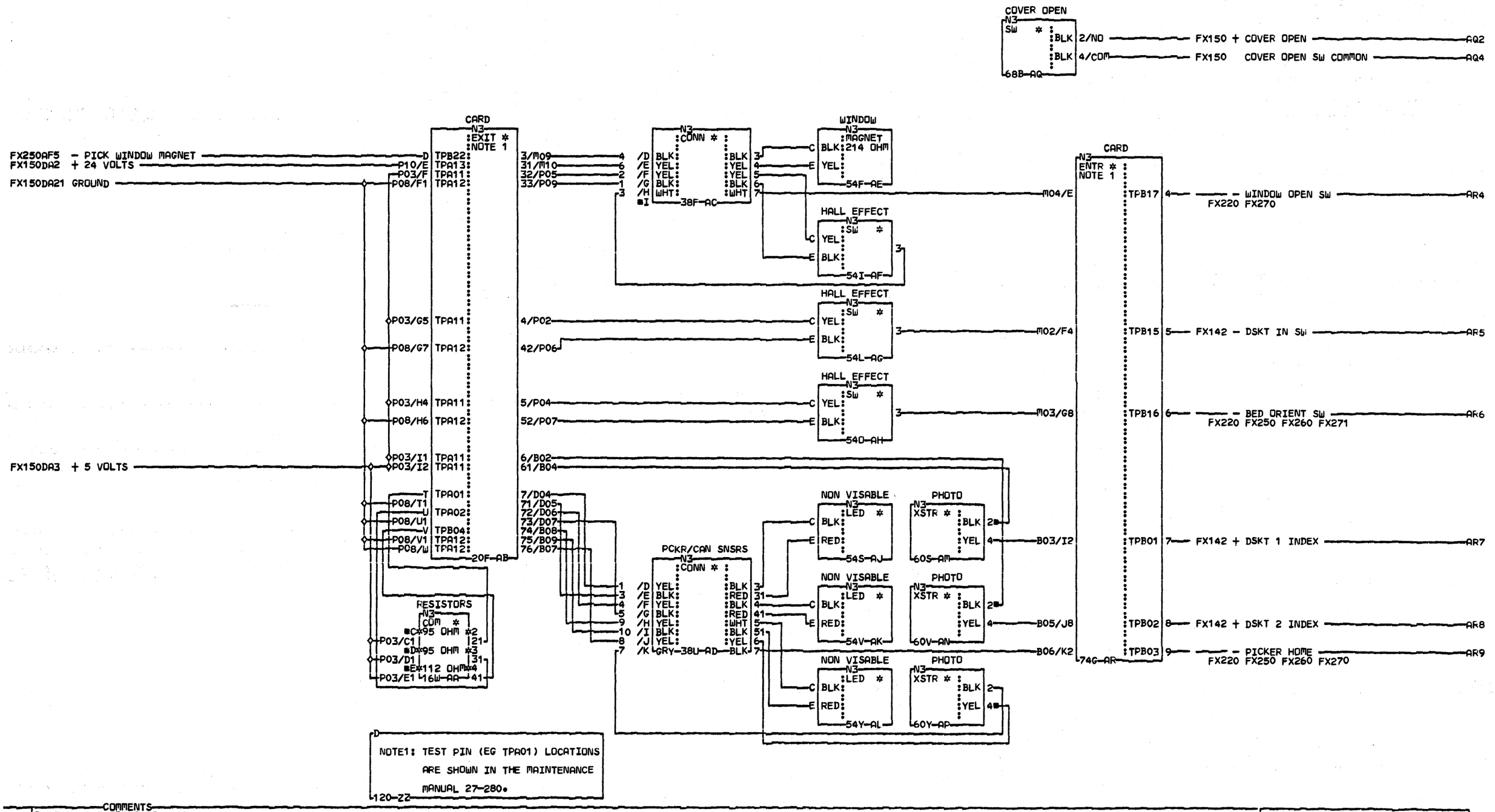
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK NO

CID PIOFE JOB T4301503

FX130 0001

FX130 0001



COMMENTS
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72MD DRIVE
SWITCH & SENSORS

PN4238317 EC834824 PEC833174

LOC=5A-72MD

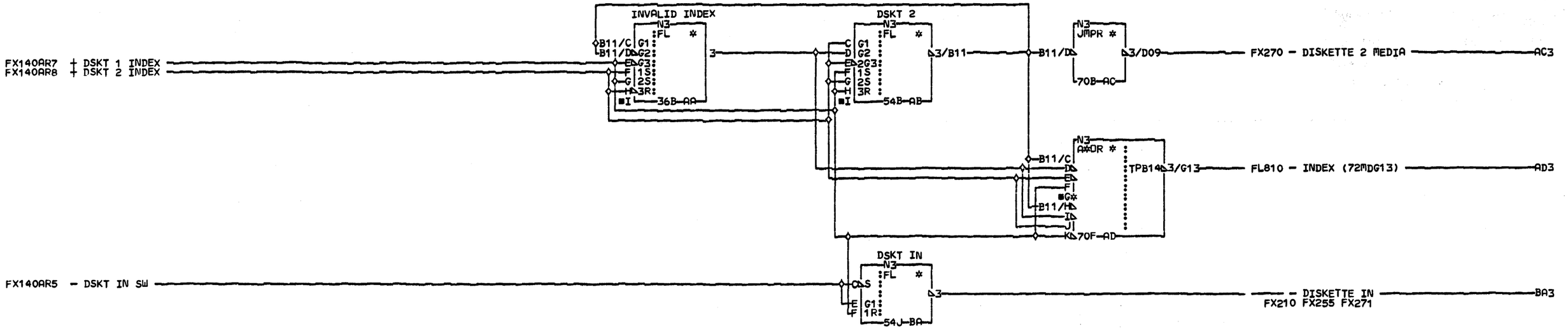
USN 00008 PRI=08MAY79 2116

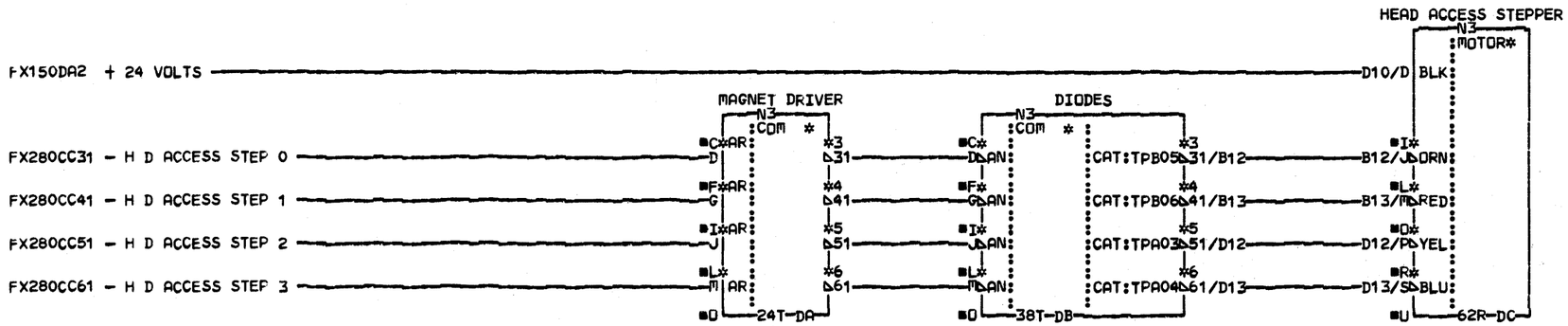
AUC= SEC
PFORM=KSEB NEXTBLK Z0

CID PIOFE JOB T4301503

FX140 0001

FX140 0001





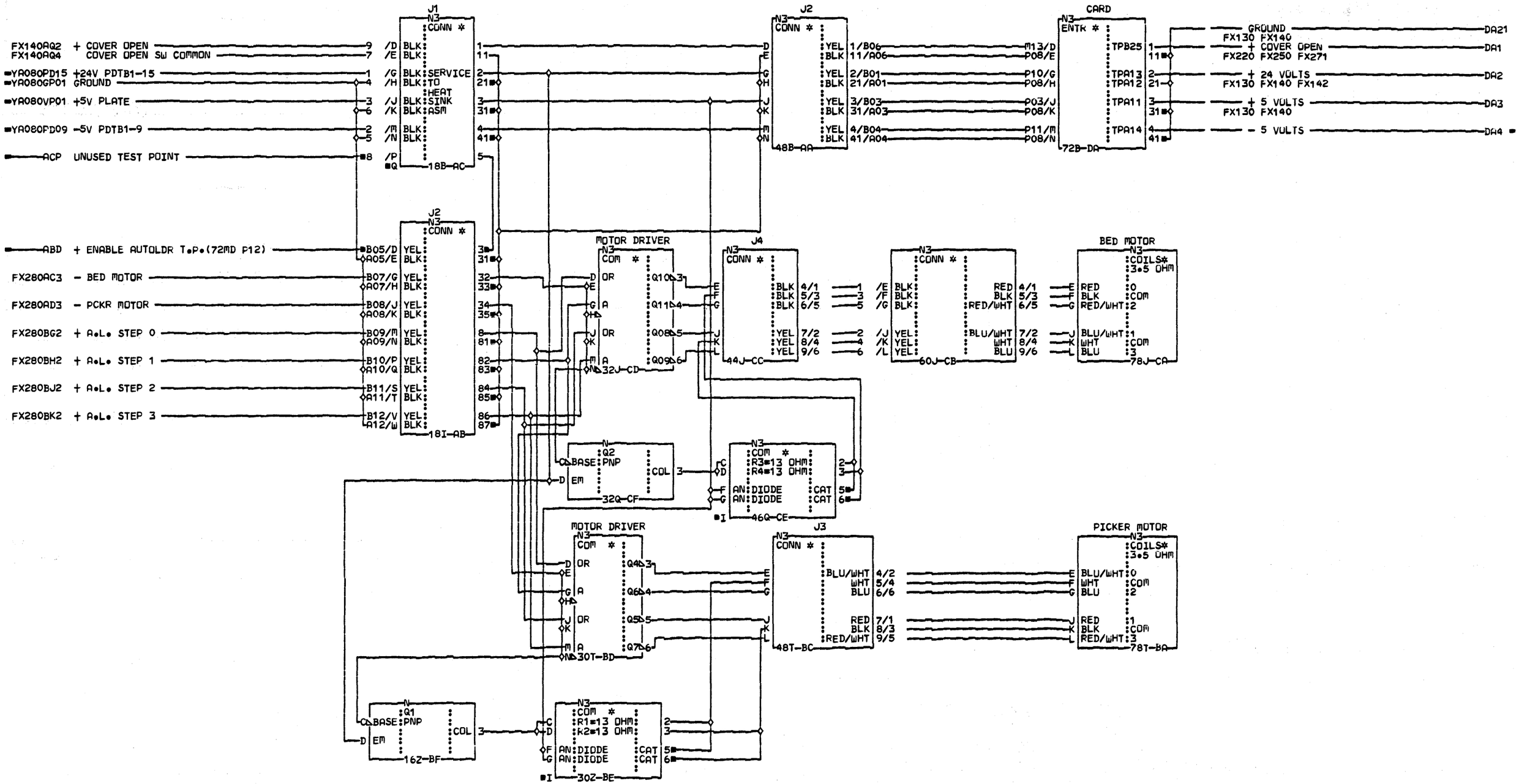
COMMENTS

D1 COPYRIGHT IBM CORP. 1978

72MD DRIVE	
INDEX & DSKT TYPE MOTORS	
PN4238318 EC834824 PEC833174	
LOC=5B-72MD	
USN 00008	PRI=08MAY79 2116
AUC=	SEC
PFORM=KSEB	NEXTBLK EC
CID PIDFE	JOB T4301503

FX142 0001

FX142 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

72MD DRIVE
HEAT SINK & STEPPER MOTORS

PN4238319 EC834824 PEC833174

LOC=5B-72MD

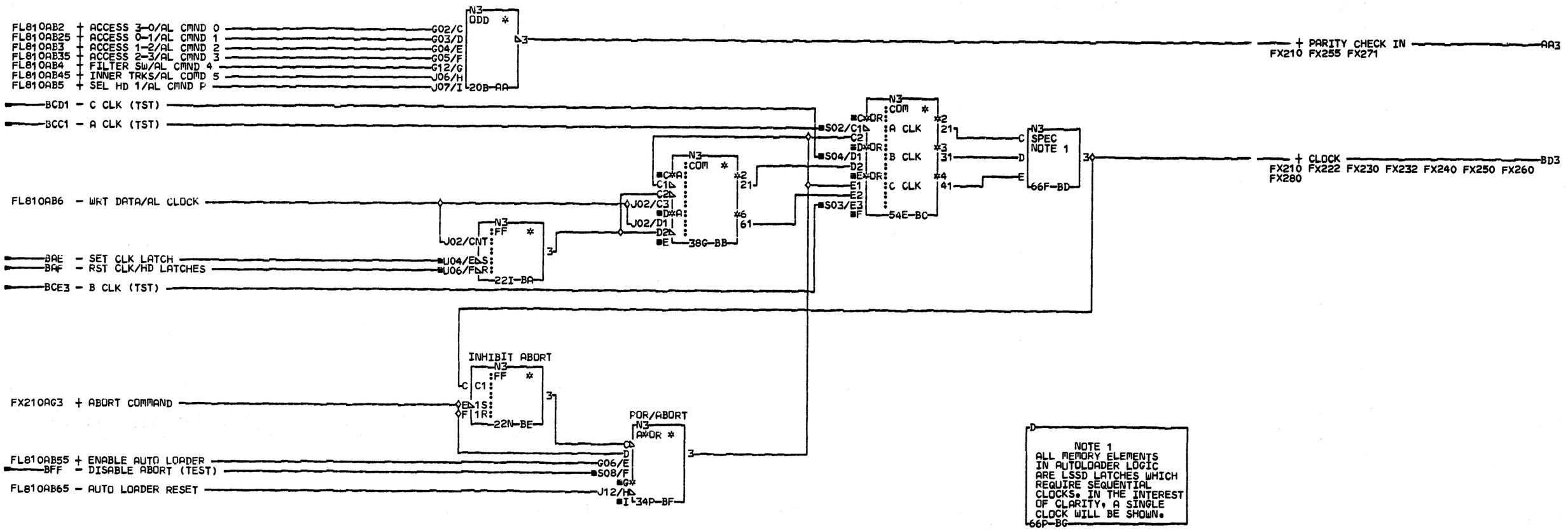
USN 00008 PRI=08MAY79 2116

AUC= SEC 10MAY79 0925
PFORM=KSEB NEXTBLK DB

CID PIOFE JOB T4301503

FX150 0001

FX150 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

72MD AUTOLOADER
CLOCK/CMND PARITY

PN4238320 EC834824 PEC833174

LOC=72MD

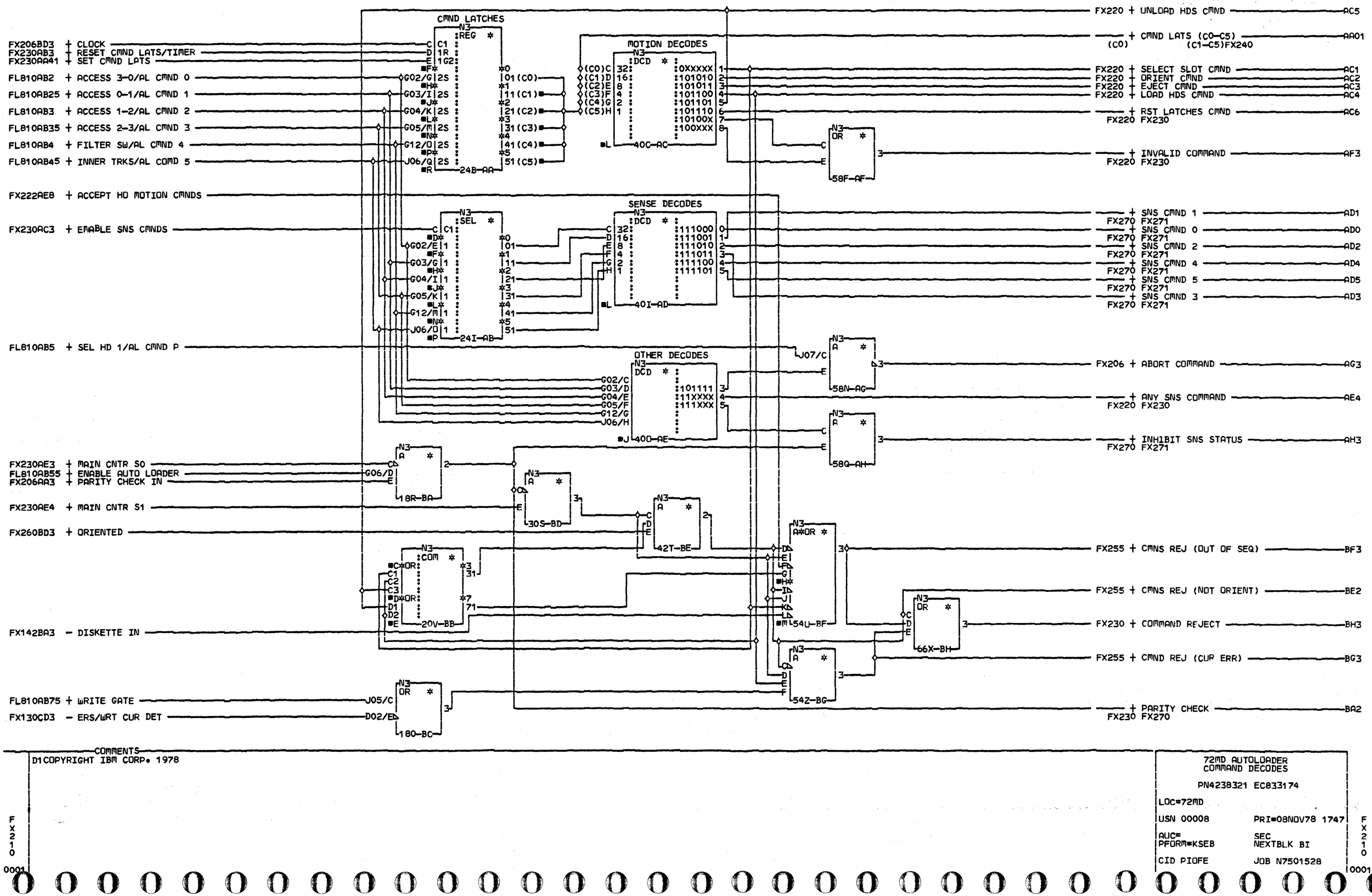
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK BH

CID PIOFE JOB T4301503

FX206 0001

FX206 0001



COMMENTS

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72MD AUTOLOADER
COMMAND DECODES

PN4238321 EC833174

LOC=72MD

USN 00008 PRI=08NOV78 1747

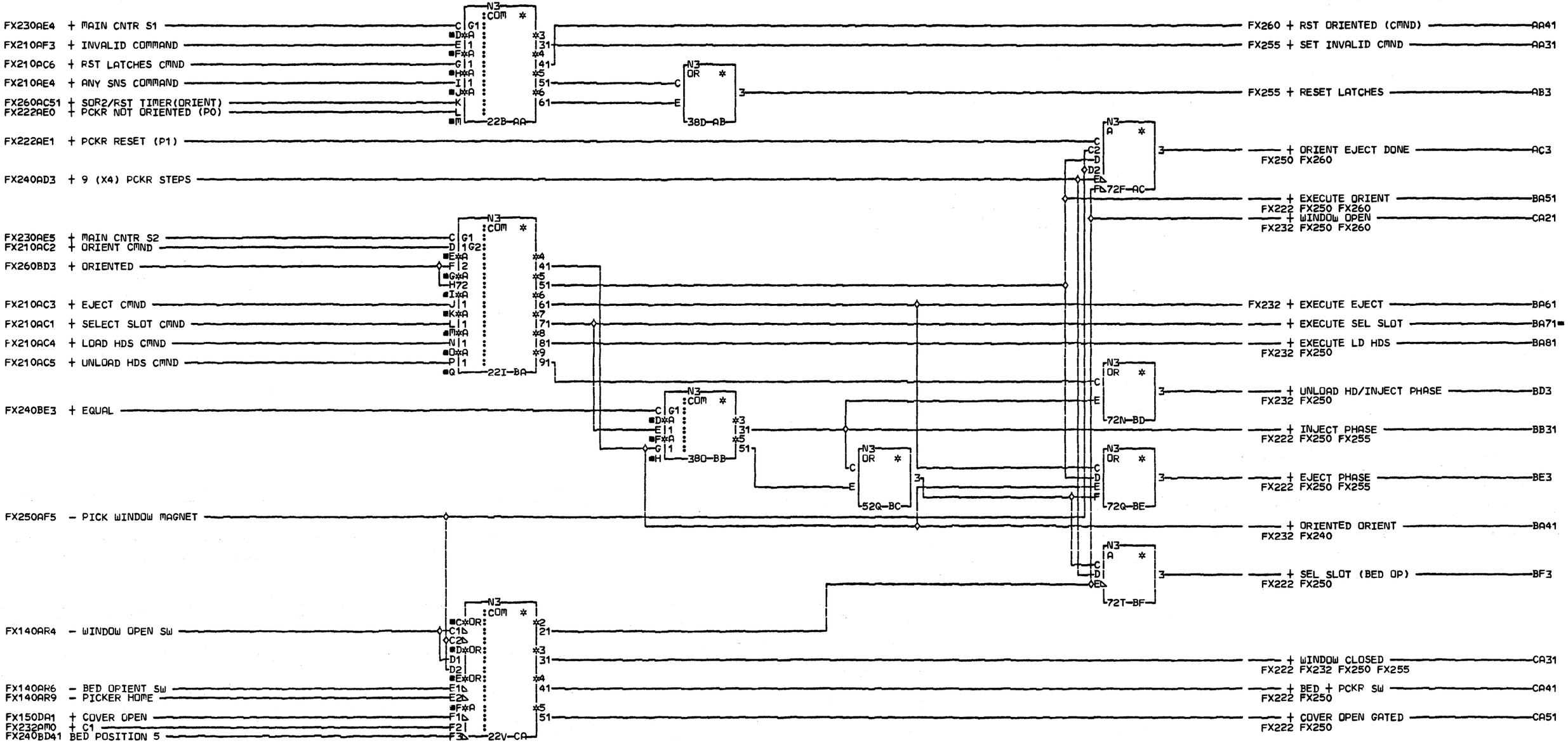
AUC= SEC

PFORM=KSEB NEXTBLK BI

CID PIOFE JOB N7501528

FX210 0001

FX210 0001



COMMENTS

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72MD AUTOLOADER
MISC CONTROL GATING

PN4238322 EC833174

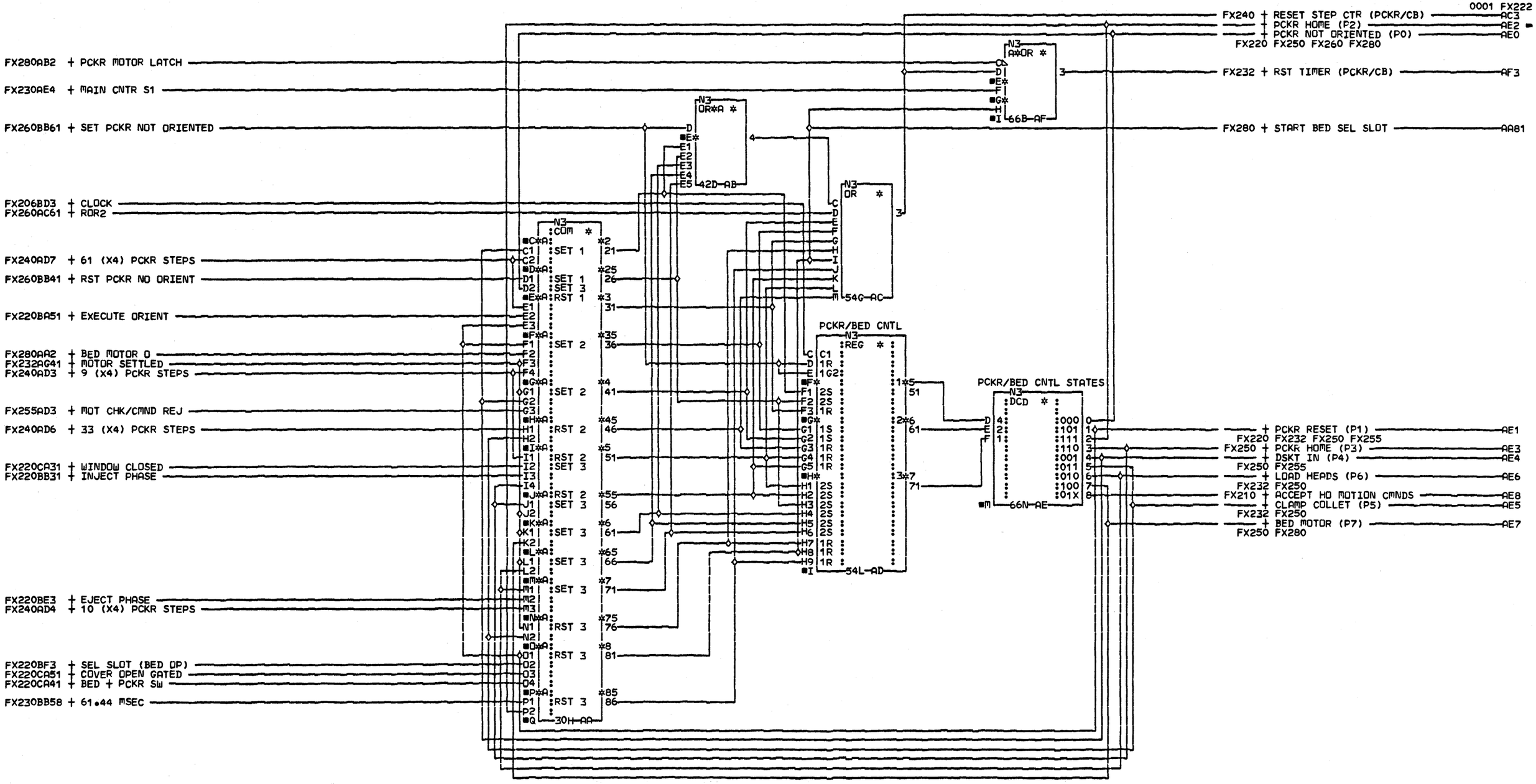
LOC=72MD

USN 00008 PRI=30OCT78 2010

AUC= SEC 03NOV78 1046
PFORM=KSEB NEXTBLK CB

CID PIOFE JOB N7501528

FX220 0001



COMMENTS

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72MD AUTOLOADER
PCKR/BED CONTROLLER

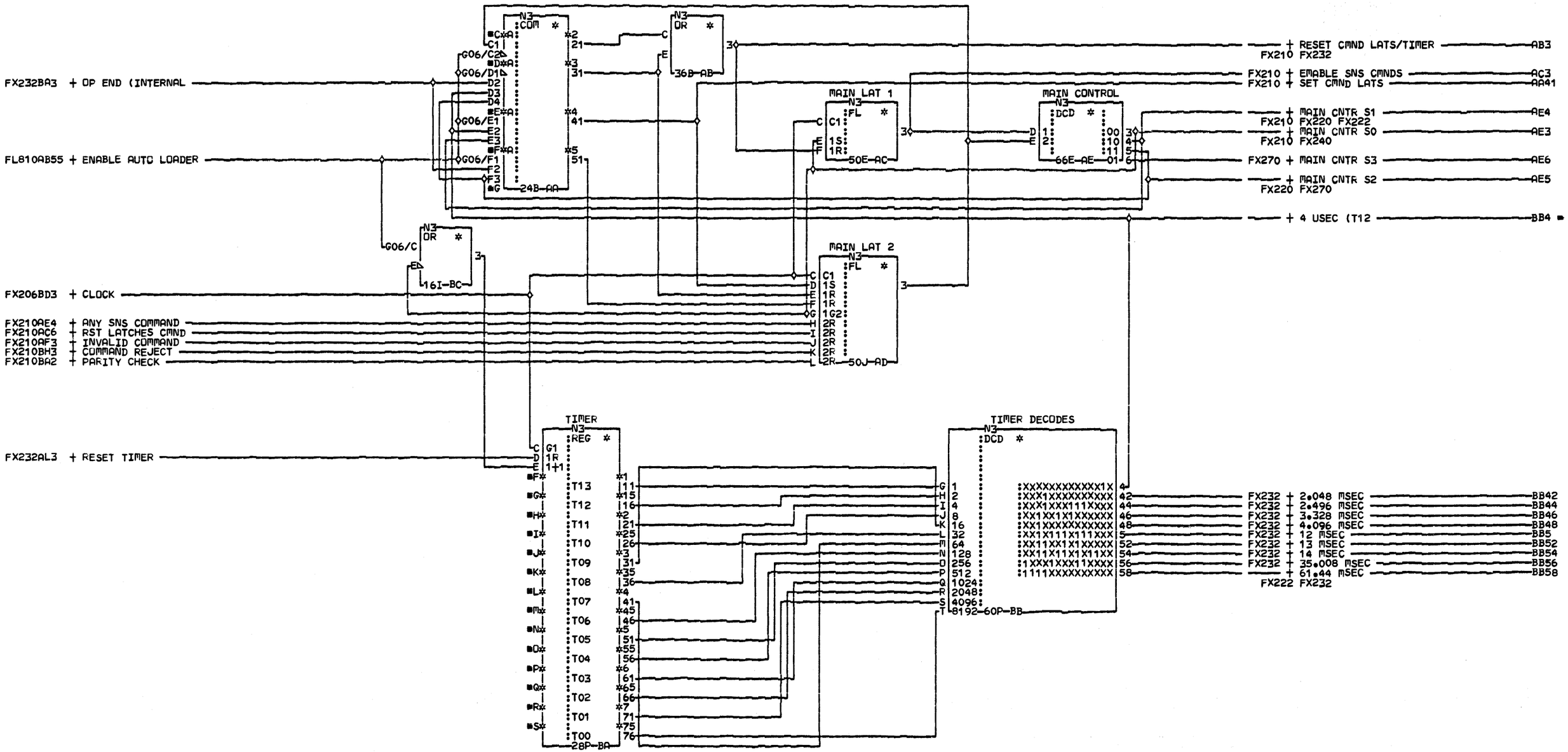
PN4238323 EC833174

LOC=72MD

USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK AG

CID PIOFE JOB N7501528



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

72MD AUTOLOADER
TIMER & MAIN CONTROLLER

PN4238324 EC834824 PEC833174

LOC=72MD

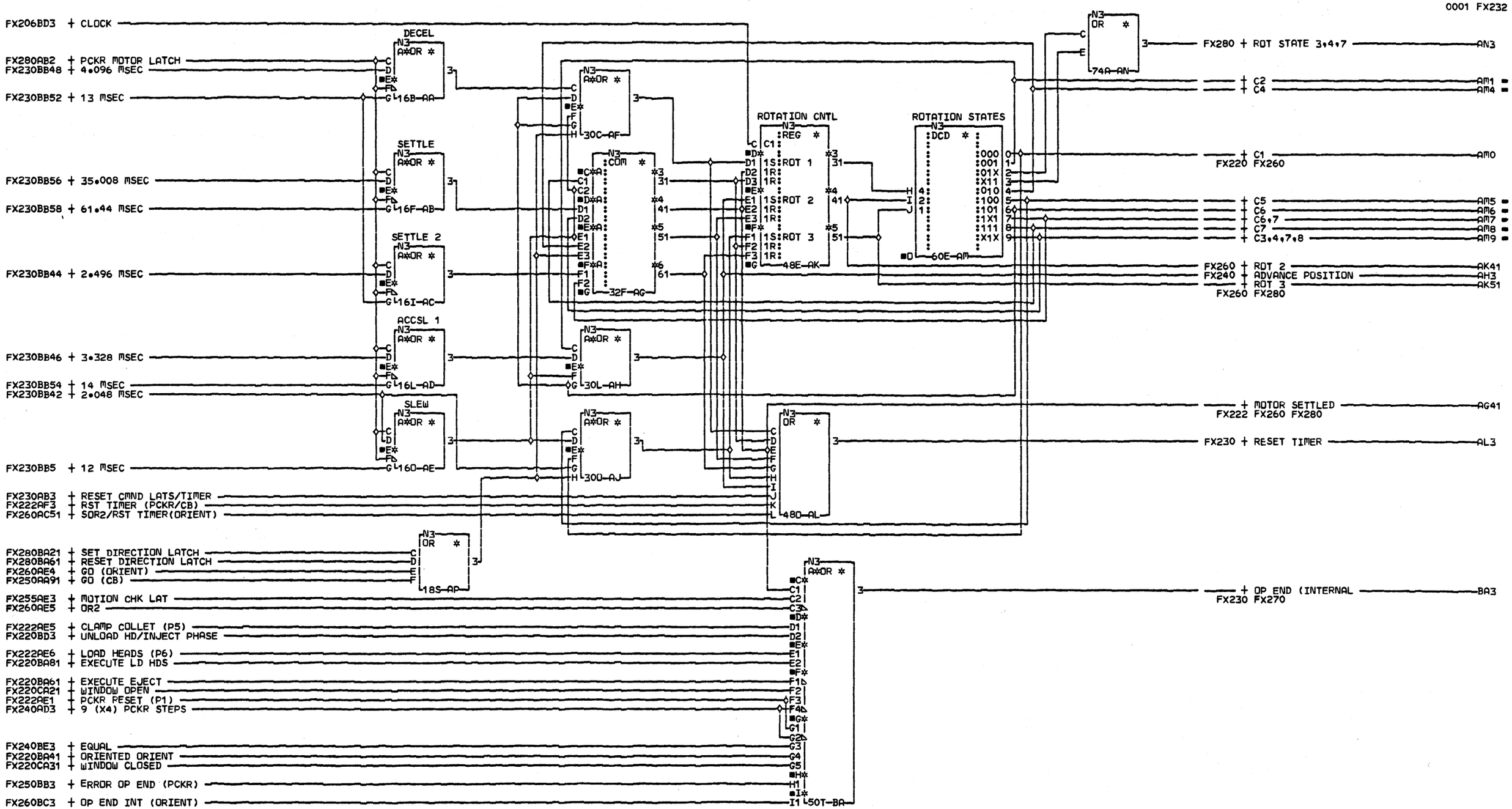
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK BD

CID PIOFE JOB T4301503

FX230 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

72MD AUTOLOADER
ROTATION CONTROLLER

PN4238325 EC833174

LOC=72MD

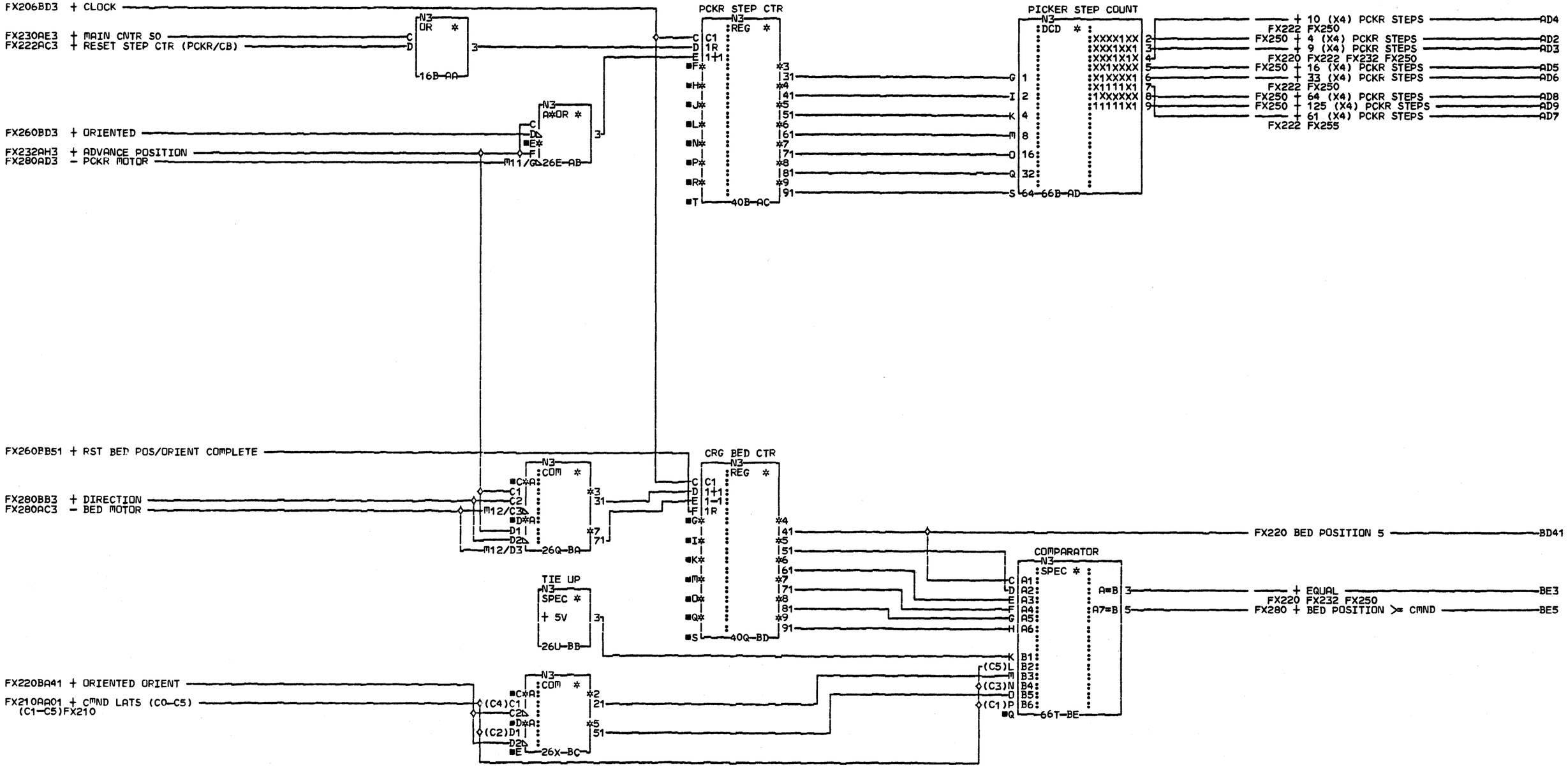
USN 00008 PRI=06NOV78 1338

AUC= SEC

PFORM=KSEB NEXTBLK BB

CID PIOFE JOB N7501528

FX232 0001



COMMENTS

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72MD AUTOLOADER
PCKR STEPS/CRG BED POSITION

PN4238326 EC833174

LOC=72MD

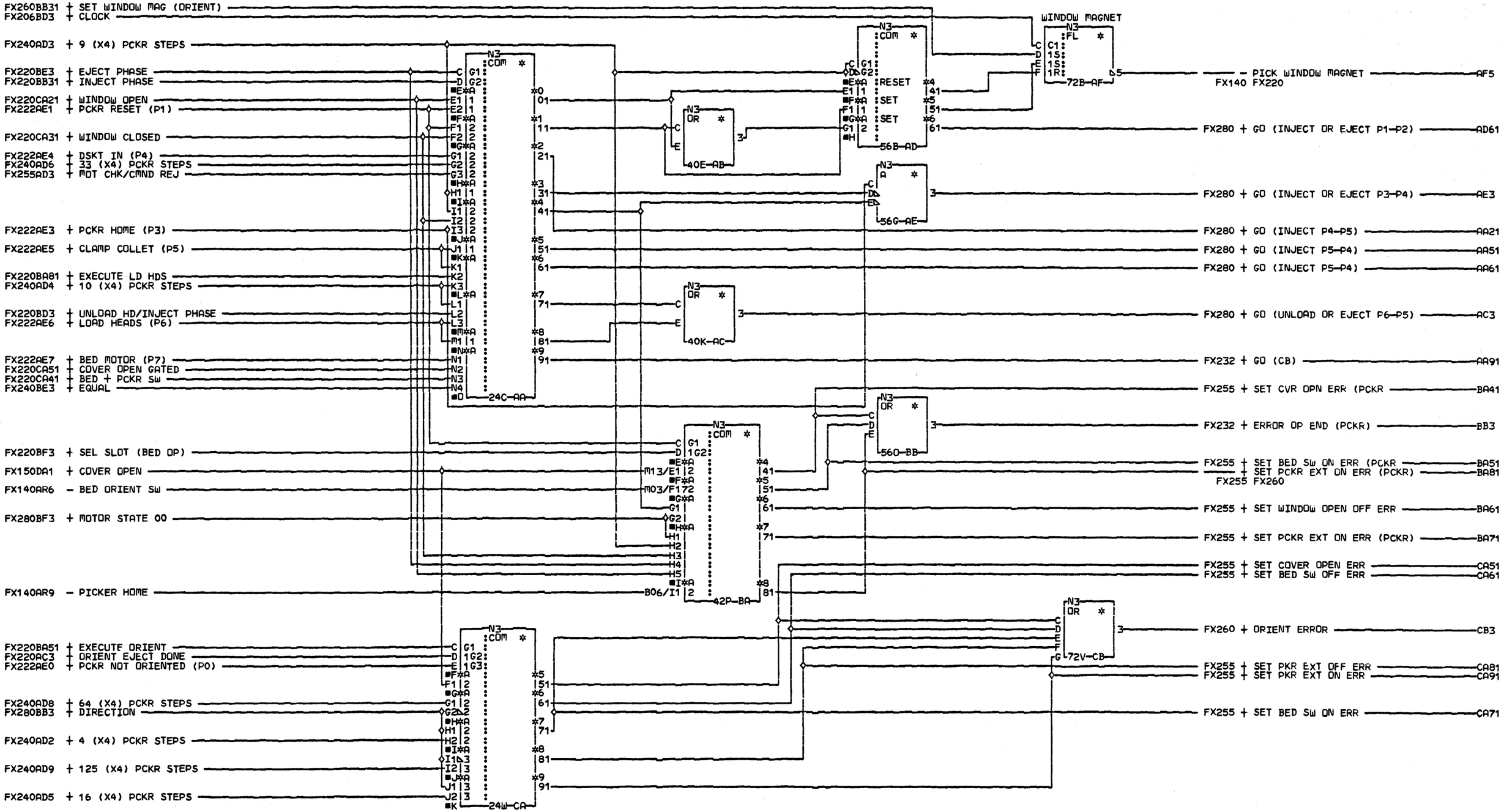
USN 00008 PRI=03NOV78 1046

AUC= SEC
PFORM=KSEB NEXTBLK BF

CID PIOFE JOB N7501528

FX240 0001

FX240 0001



COMMENTS

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72MD AUTOLOADER
GO/ERROR CONDITIONS

PN4238327 EC833174

LOC=72MD

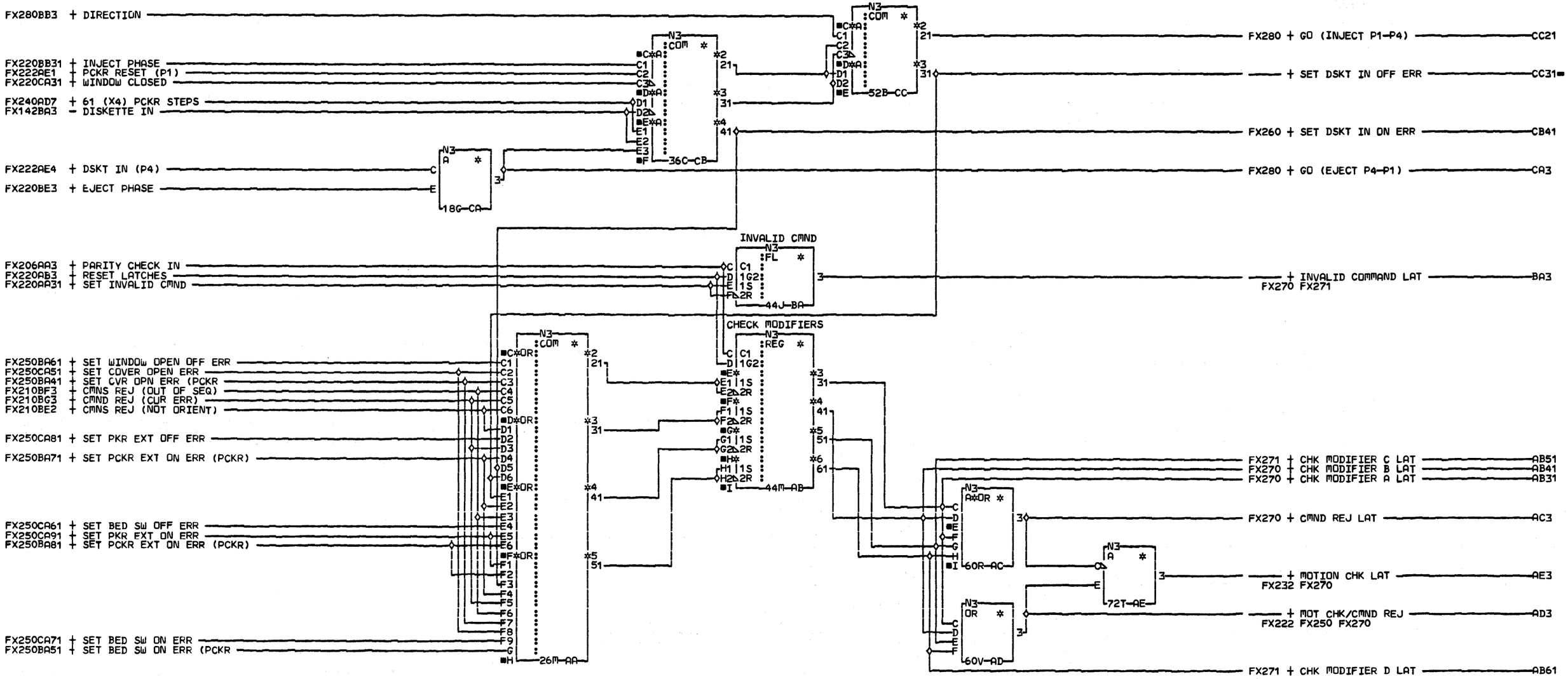
USN 00008 PRI=13NOV78 2025

AUC= SEC

PFORM=KSEB NEXTBLK CC

CID PIOFE JOB N7501528

FX250 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

72MD AUTOLOADER
ERROR CHKS/CHK MODIFIERS

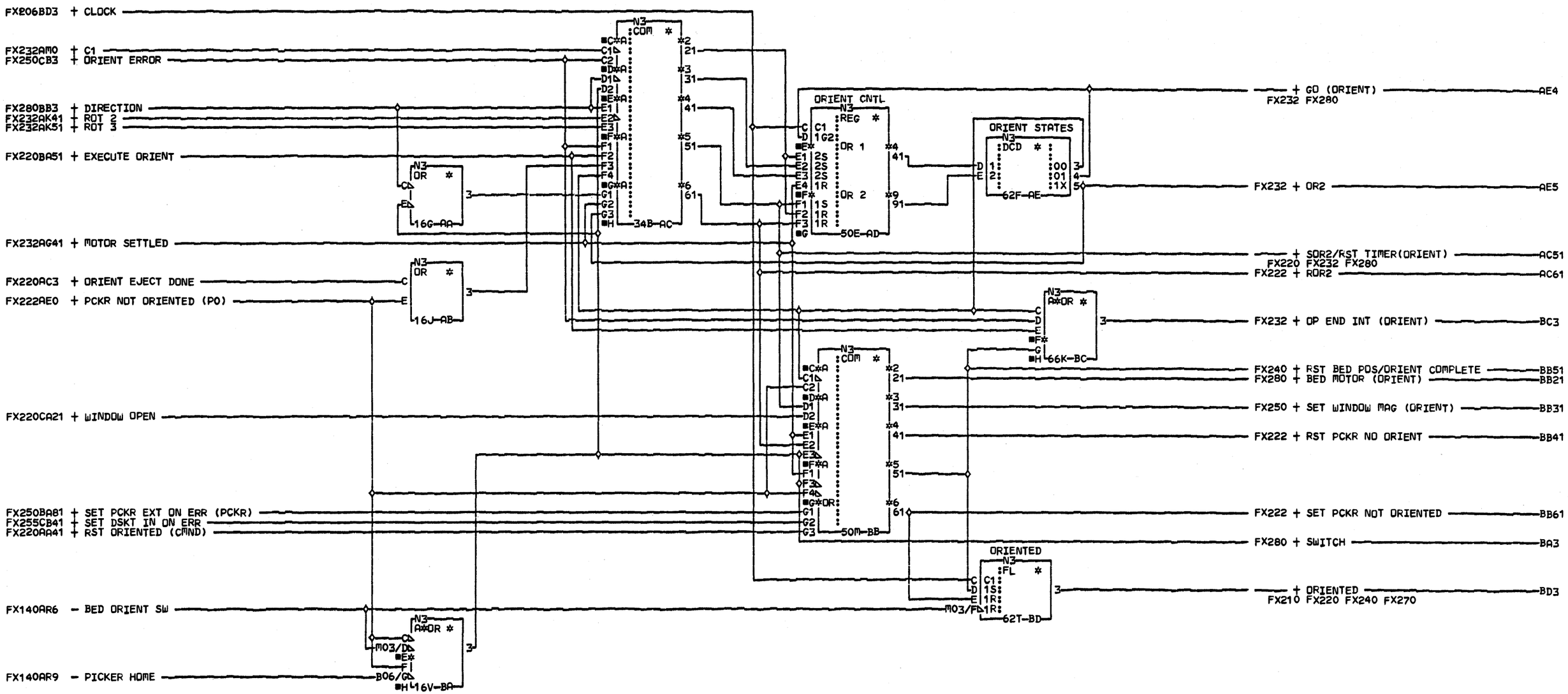
PN4238328 EC833174

LOC=72MD

USN 00008 PRI=14NOV78 1311

AUC= SEC
PFORM=KSEB NEXTBLK CD

CID PIOFE JOB N7501528



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

72MD AUTOLOADER
ORIENT CONTROL

PN4238329 EC834824 PEC833174

LOC=72MD

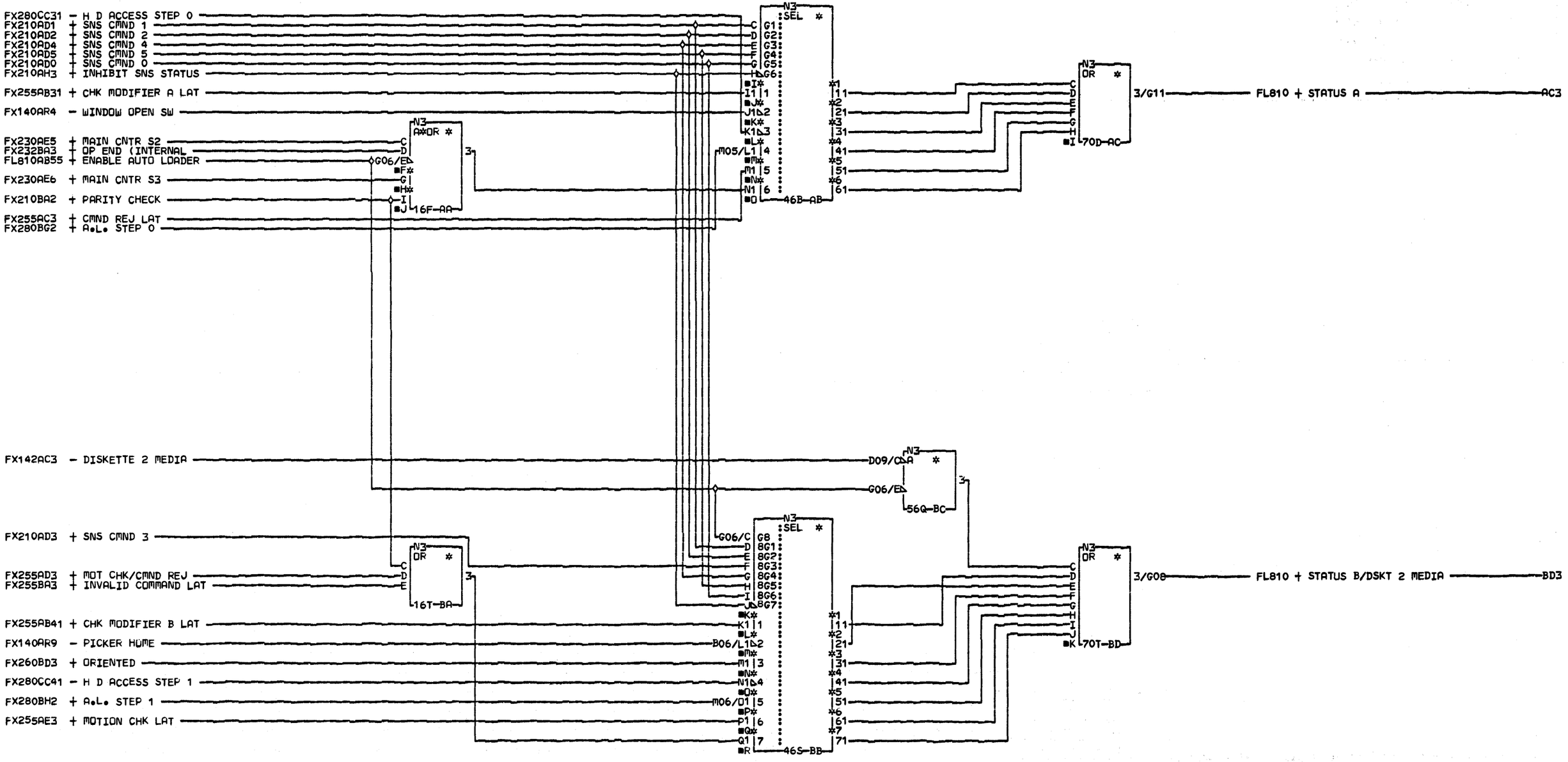
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK BE

CID PIOFE JOB T4301503

FX260 0001

FX260 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

72MD AUTOLOADER
STATUS ASSEMBLER (A&B)

PN4238330 EC834824 PEC833174

LOC=72MD

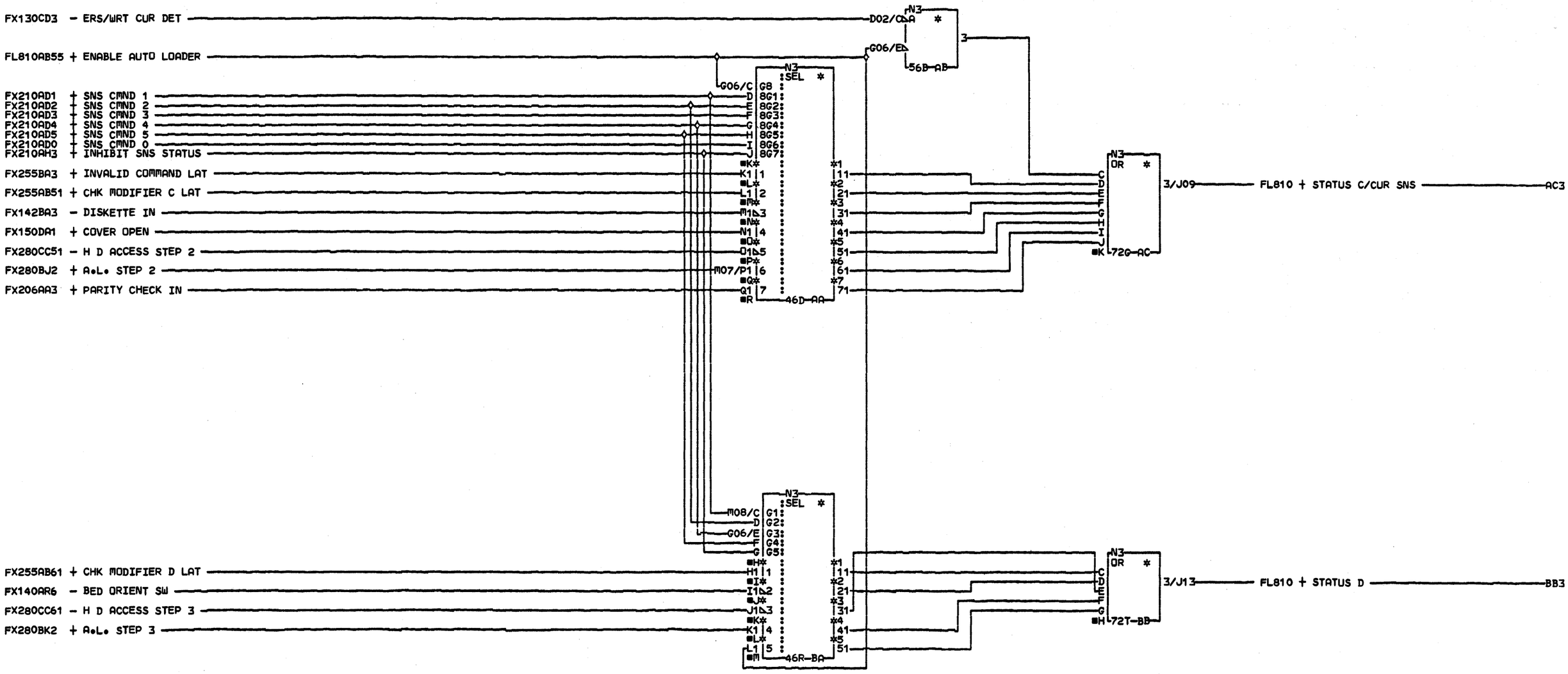
USN 00008 FRI=09MAY79 1445

AUC= SEC
PFORM=KSEB NEXTBLK BE

CID PIOFE JOB T4301503

FX270 0001

FX270 0001



COMMENTS

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72MD AUTOLOADER
STATUS ASSEMBLER (C&D)

PN4238331 EC834824 PEC833174

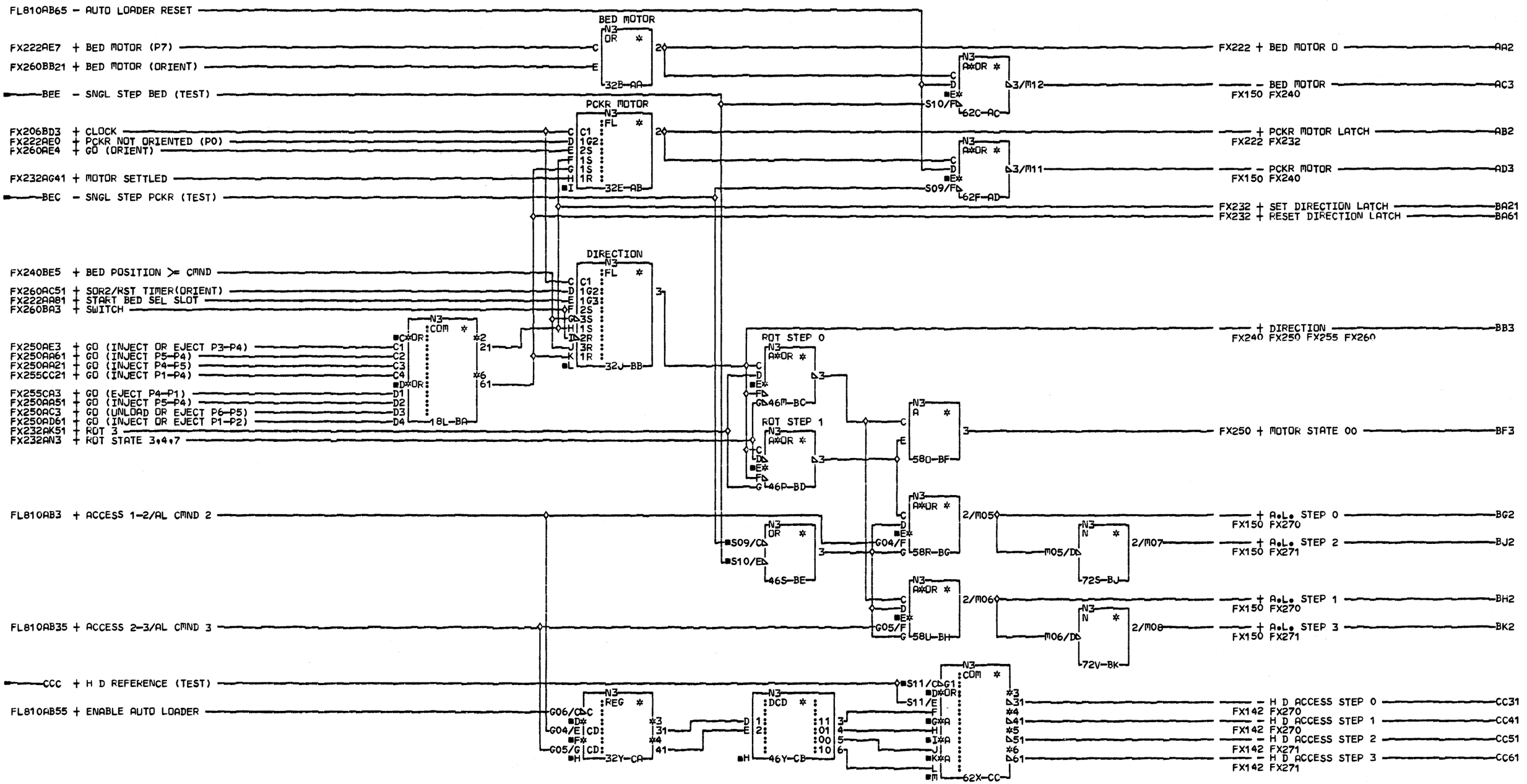
LOC=72MD

USN 00008 PRI=16JUL79 1708

AUC= SEC
PFORM=KSEB NEXTBLK BC

CID PIOFE JOB N5300749

FX271 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

72MD AUTOLOADER
MOTOR CONTROL LINES

PN4238332 EC834824 PEC833174

LOC=72MD

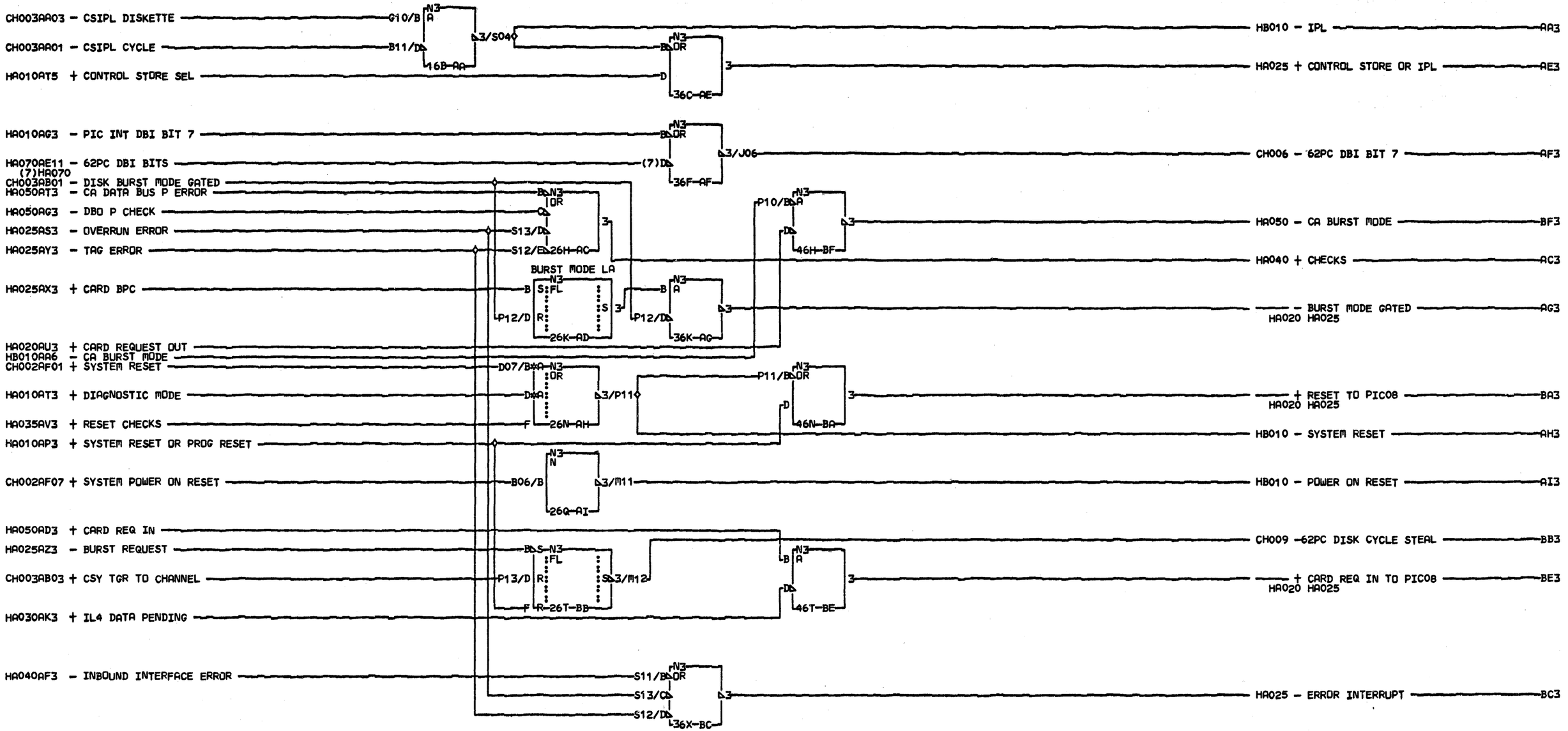
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK CD

CID PIOFE JOB T4301503

FX280 0001

FX280 0001



COMMENTS

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VTL

PN8265600 EC834824 PEC833180

LOC=1A-A2E2

USN 00008 PRI=16MAY79 2152

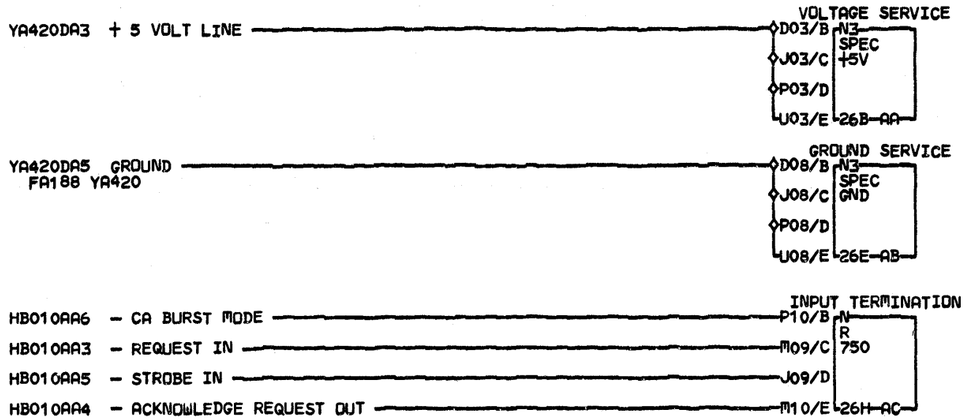
AUC= SEC

PFORM=KSEB NEXTBLK BG

CID PIOFE JOB T4301503

HA001 0001

HA001 0001



COMMENTS

VOLTAGE AND GROUND TAB PINS
INPUT LINE TERMINATION

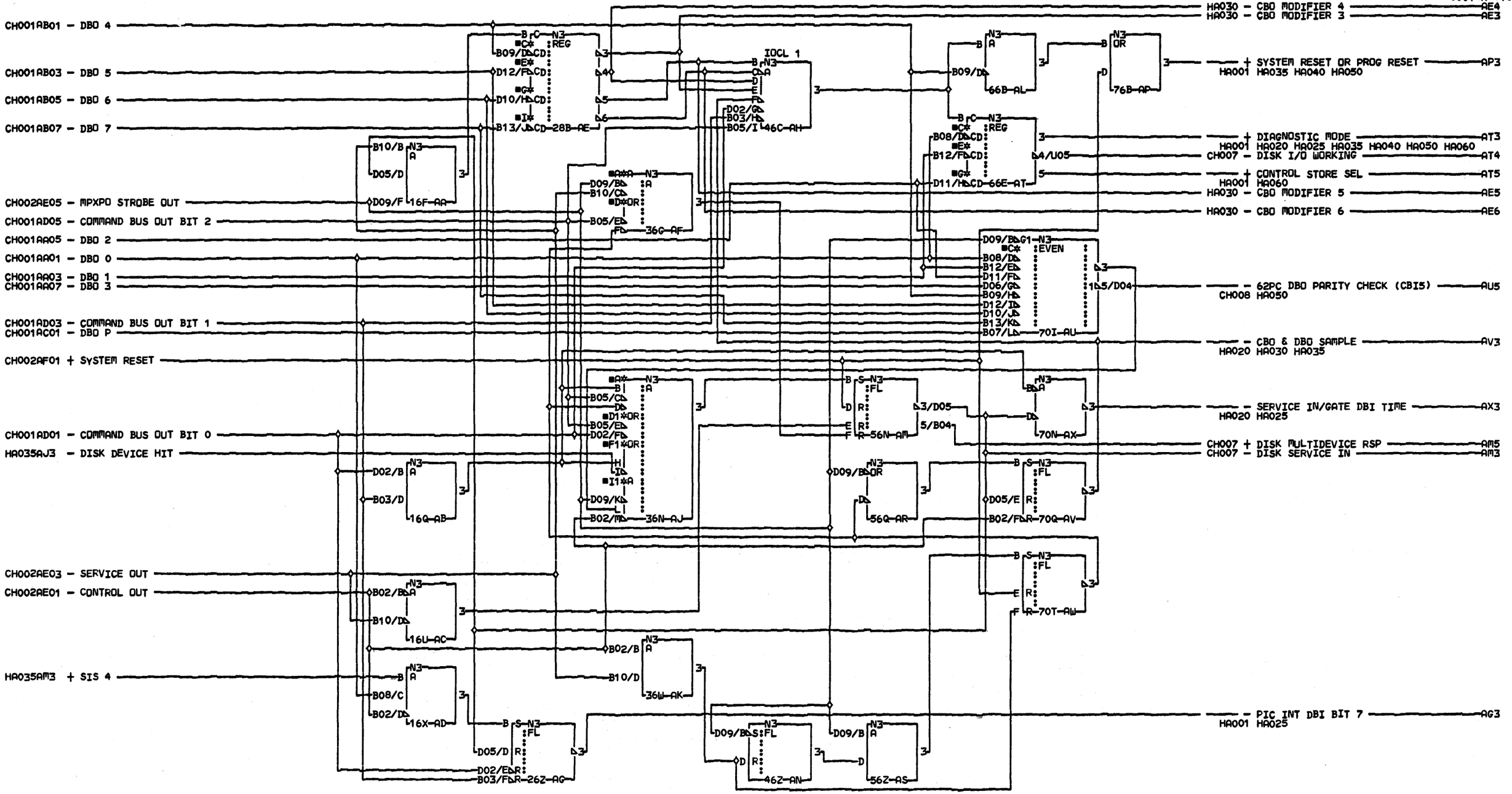
PN 8265601 EC 834824 PEC 833180

LOC=1A-A2E2

USN 00008 PRI=12JUN79 1954

AUC= SEC
PFORM=KSEB NEXTBLK AD

CID PIOFE JOB T4301503



COMMENTS

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INTERFACE
CHANNEL TO ADAPTER

PN8265602 EC834824 PEC833180

LOC=1A-A2E2

USN 00008 PRI=09MAY79 1445

AUC= SEC 14JUN79 2037
PFORM=KSEB NEXTBLK AY

CID PIOFE JOB T4301503

HA010 0001

HA010 0001

CH003AB05 – DISK STROBE
HA025AU3 + OUT BOUND TAGS
HA025AP3 + INBOUND TAGS
HA001AG3 – BURST MODE GATED
HA035AK3 + SET REQUEST OUT
HA010AV3 – CBO & DBO SAMPLE
HA050AD6 + CARD CA BURST
HA010AX3 – SERVICE IN/GATE DBI TIME
HA025AZ3 – BURST REQUEST
HA050AD5 – CARD STROBE IN
HA050AJ3 + CARD STROBE OUT
HA030AM3 – SET REQUEST OUT PEND
HA001AA3 + RESET TO PIC08
HA001BE3 + CARD REQ IN TO PIC08
HA025AJ3 + ALLOW CYCLE STEAL
HA025AH3 + IL4 REQ PEND
HA025AF3 + INTERRUPT TAGS
HA050AD4 + CARD ACK REQ OUT
HA030AD3 + IOS OR IOCS
HA025AX3 + CARD BPC
HA010AT3 + DIAGNOSTIC MODE

COUNT
REQ OUT LA

16B-AA
24B-AE
3/U06
U06/B
38B-AL
46B-AT
56B-AX
16F-AB
28G-AF
46G-AM
56G-AU
68E-AY
16I-AC
28K-AG
38K-AN
16L-AD
36D-AP
56D-AV
66D-AW
76I-BA
16D-AH
46S-AR
26V-AJ
46W-AS
3/G08
26Z-AK
3/S03
76Q-AZ

HA025 + COUNT — AE3
HA025 HA040
HA025 + STROBE IN OR STROBE OUT — AC3
HA025 + COUNT LATCH — AX3
HA025 + CARD REQUEST OUT — AU3
HA001 HA025 HA035 HA040 HA050 HA060
HA050 HA060 + CARD ACK REQ IN — BA3
HA025 – CAP INT REQUEST — AP5
HA035 – CS DBI SELECT L — AW3
HA050 HA070 – GATE OUT DBI — AZ3
HA050 + START STROBE OUT — AR3
– 62PC CBI BIT 1 — AS3
CH009 –62PC BLOCK PROCESSOR CLOCK — AK3

COMMENTS
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CHIP08
CYCLE STEAL

PN8265603 EC834824 PEC833180
LOC=1A-A2E2
USN 00008 PRI=16MAY79 2152
AUC= SEC
PFORM=KSEB NEXTBLK BB
CID PIOFE JOB T4301503

CH011AB3 - MICROINTERRUPT REQUEST 2

HA001AG3 - BURST MODE GATED

HA020AX3 + COUNT LATCH

HA050AD6 + CARD CA BURST

HA001BE3 + CARD REQ IN TO PIC08

HA060AC11 - TAG BIT 0

HA060AE4 - TAG IN P-CHK

HA020AU3 + CARD REQUEST OUT

HA010AT3 + DIAGNOSTIC MODE

HA060AC12 - TAG BIT 1

HA020AE3 + COUNT

HA001AE3 + CONTROL STORE OR IPL

HA035AV3 + RESET CHECKS

HA035AN3 + JUMP OR SENSE CBI 4

HA010AX3 - SERVICE IN/GATE DBI TIME

HA010AG3 - PIC INT DBI BIT 7

HA001BA3 + RESET TO PIC08

HA050AD5 - CARD STROBE IN

CH003AB03 + CSY TGR TO CHANNEL

HA001BC3 - ERROR INTERRUPT

HA020AP5 - CAP INT REQUEST

HA030AK3 + IL4 DATA PENDING

HA035AL2 + CHANNEL BUSY

HA020AC3 + STROBE IN OR STROBE OUT

HA030AE5 + IOL (3)

ALLOW CYCLE STEAL LA

BPC LATCH

+ CARD BPC AX3
HA001 HA020 HA035 HA040 HA060

+ IL4 REQ PEND AH3
HA020 HA035 HA060

HA020 + INTERRUPT TAGS AF3

HA020 + OUT BOUND TAGS AU3

- BURST REQUEST AZ3
HA001 HA020

- TAG ERROR AY3
HA001 HA070

HA020 + INBOUND TAGS AP3

CH007 - 62PC CBI BIT 0 AC3

CH008 - 62PC CBI BIT 4 AG3

HA020 + ALLOW CYCLE STEAL AJ3

- OVERRUN ERROR AS3
HA001 HA070

HA040 + TRANSFER ERROR GATE AW3

COMMENTS

CHIP08
CYCLE STEAL

PN8265604 EC834824 PEC833180

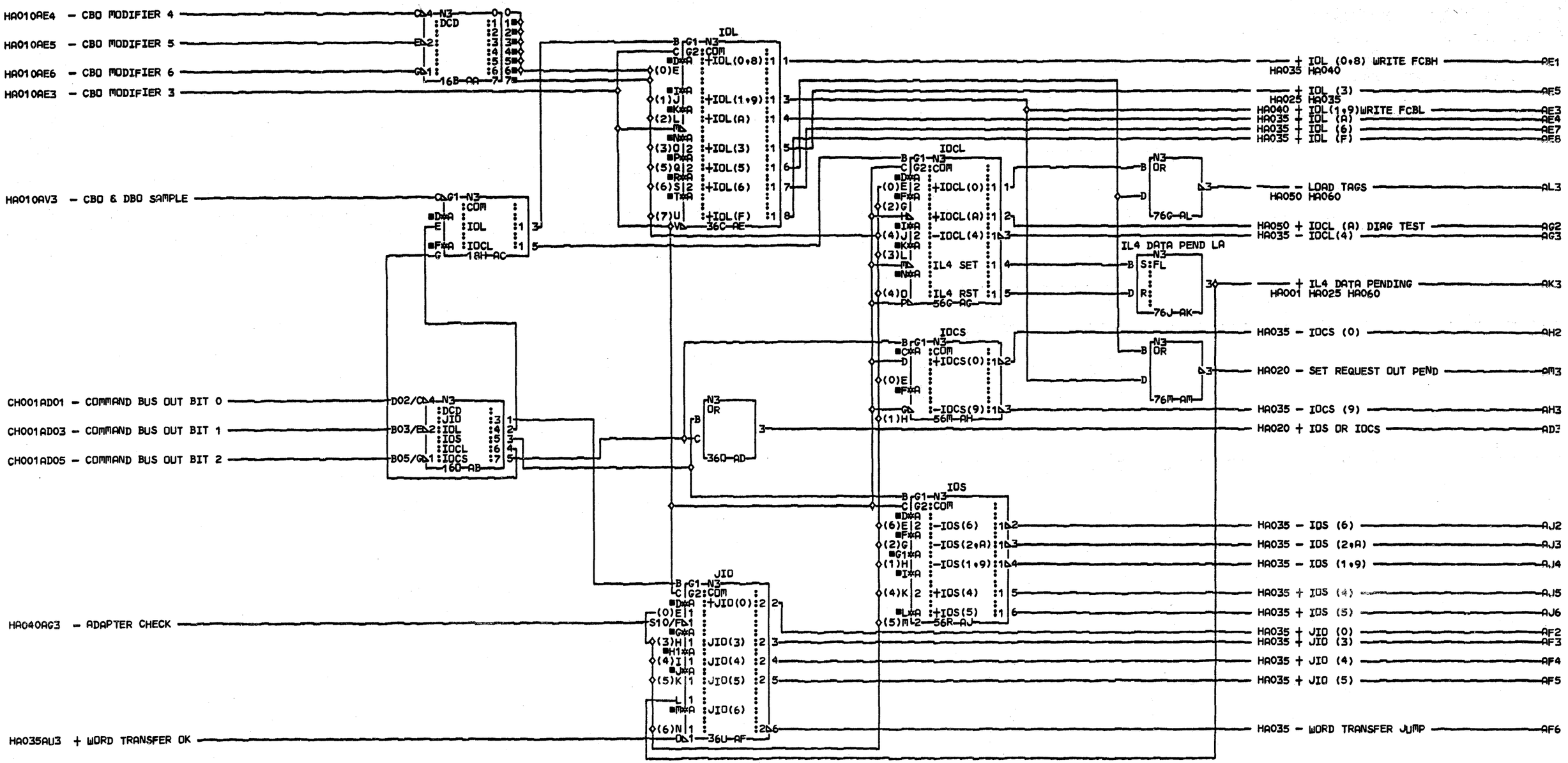
LOC=1A-A2E2

USN 00008 PRI=14JUN79 2037

AUC= SEC
PFORM=KSEB NEXTBLK A0

CID PIOFE JOB T4301503

HA025 0001



COMMENTS

CHIP03
COMMAND DECODE

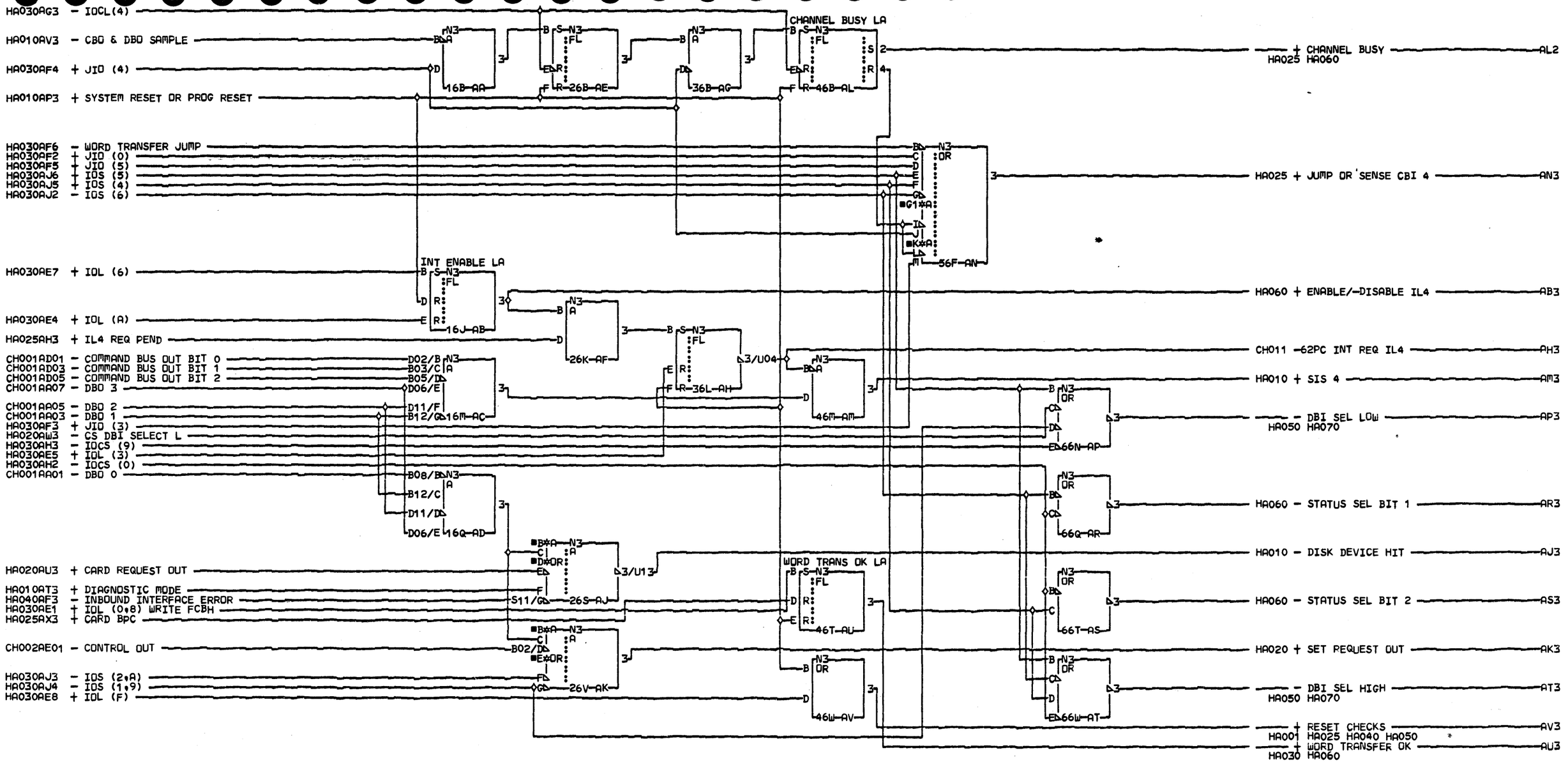
PN8265605 EC834824 PEC833180

LOC=1A-A2E2

USN 00008 PRI=14JUN79 2037

AUC= SEC
PFORM=KSEB NEXTBLK AN

CID PIOFE JOB T4301503



COMMENTS

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CHIP03
COMMAND DECODE

PN8265606 EC834824 PEC833180

LOC=1A-A2E2

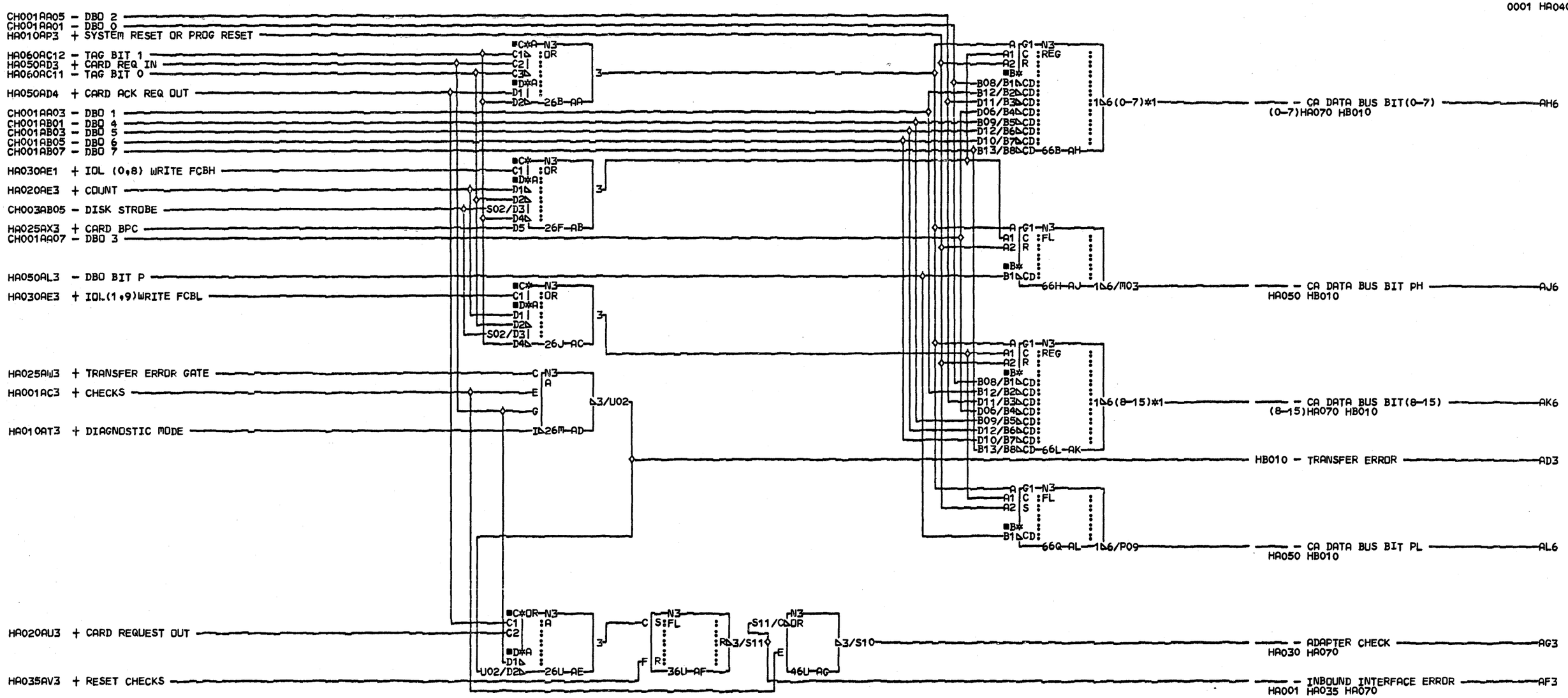
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK AW

CID PIOFE JOB T4301503

HA035 0001

HA035 0001



COMMENTS	PINS AH	PINS
D1COPYRIGHT IBM CORP. 1978	60/J12	64/M08
	61/J13	65/P05
	62/M02	66/P06
	63/P02	67/P07
	64/P04	
	65/G11	
	66/G12	
	67/G13	
	AK	
	60/M04	
	61/M05	
	62/M06	
	63/M07	

CHIP07
DATA PATH

PN8265607 EC834824 PEC833180

LOC=1A-A2E2

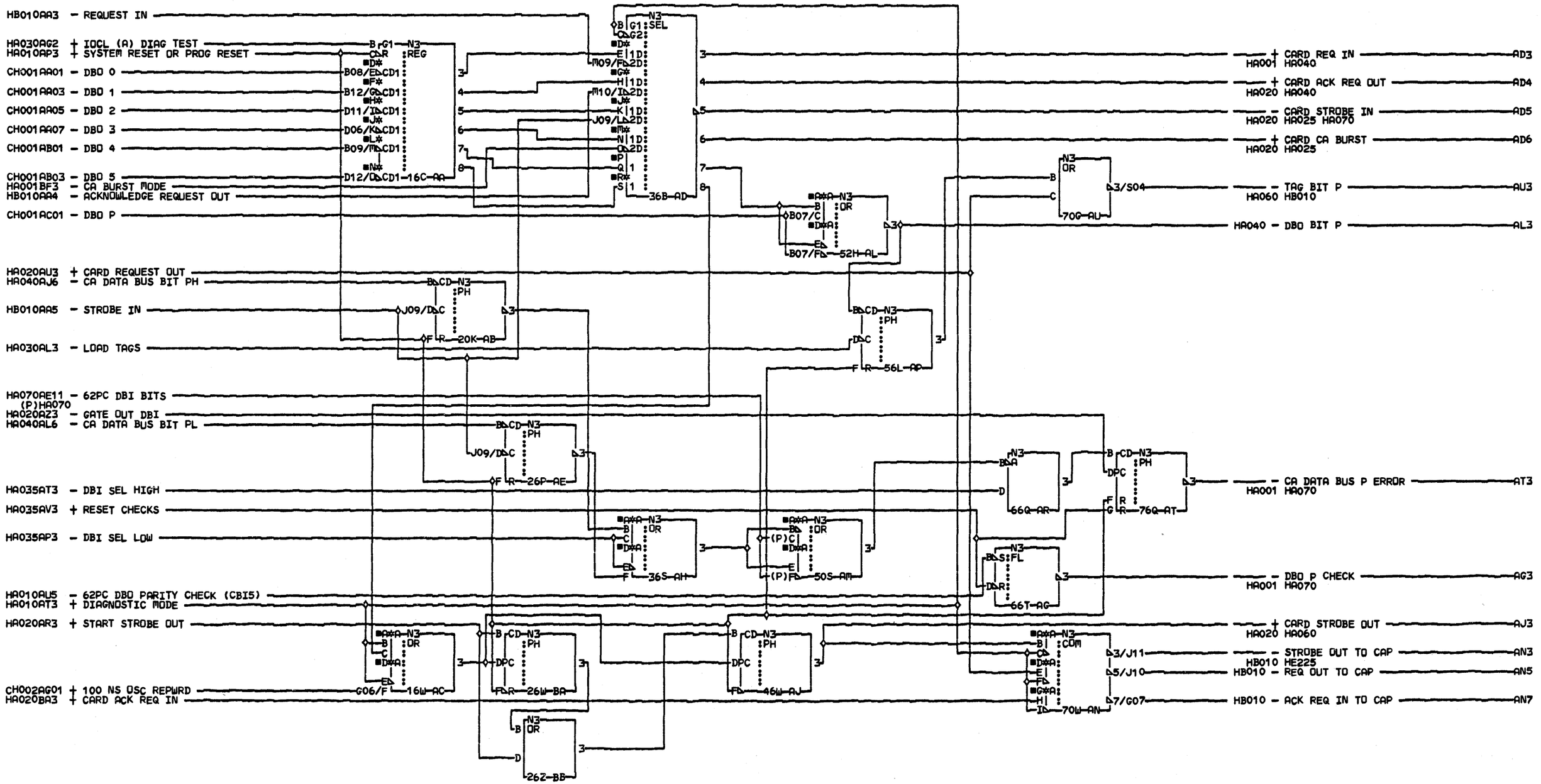
USN 00008 PRI=08MAY79 2116

AUC= SEC
PFORM=KSEB NEXTBLK AM

CID PIDFE JOB T4301503

HA040 0001

HA040 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

CHIP06
INTERFACE : ADAPTER TO CAP

PN8265608 EC834824 PEC833180

LOC=1A-A2E2

USN 00008 PRI=09MAY79 1445

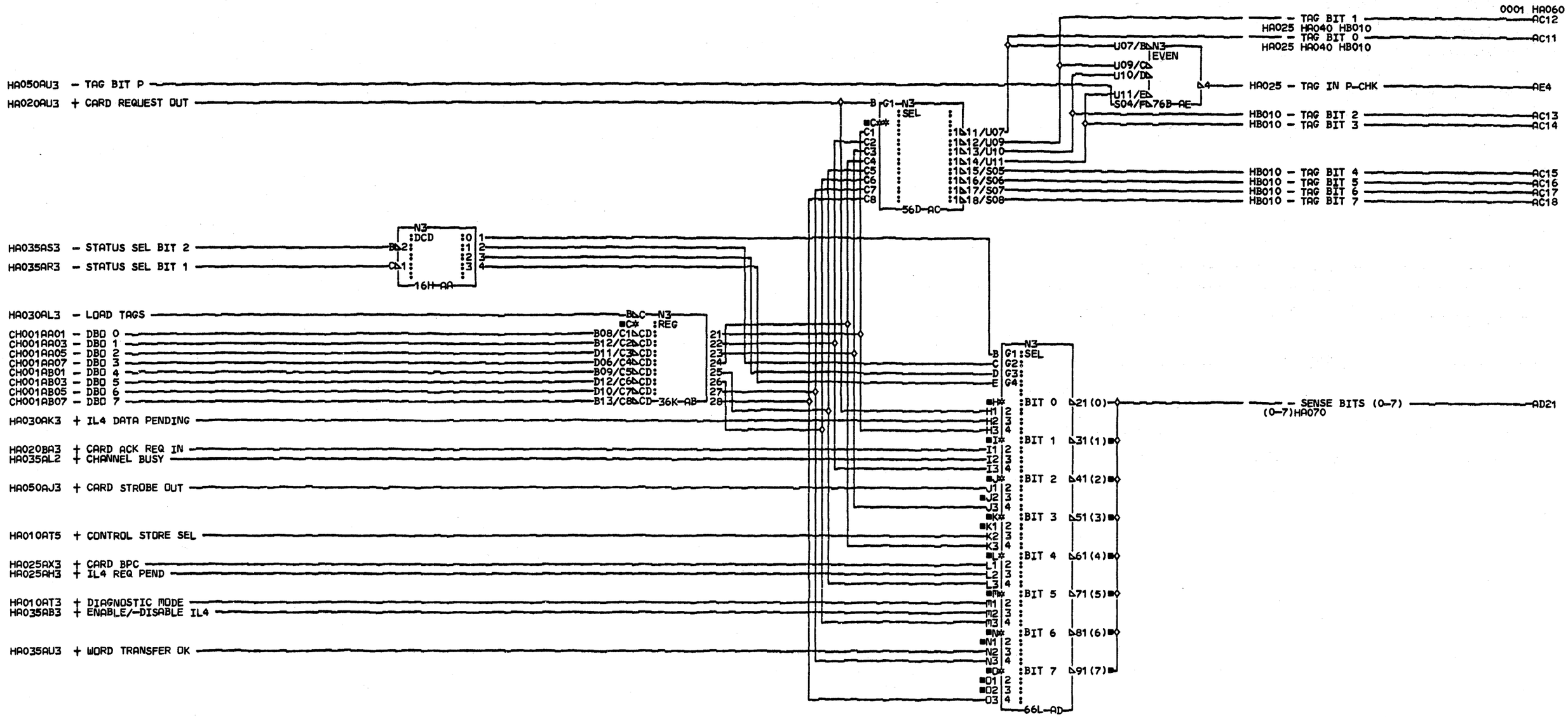
AUC= SEC 14JUN79 2037

PFORM=KSEB NEXTBLK BC

CID PIOFE JOB T4301503

HA050 0001

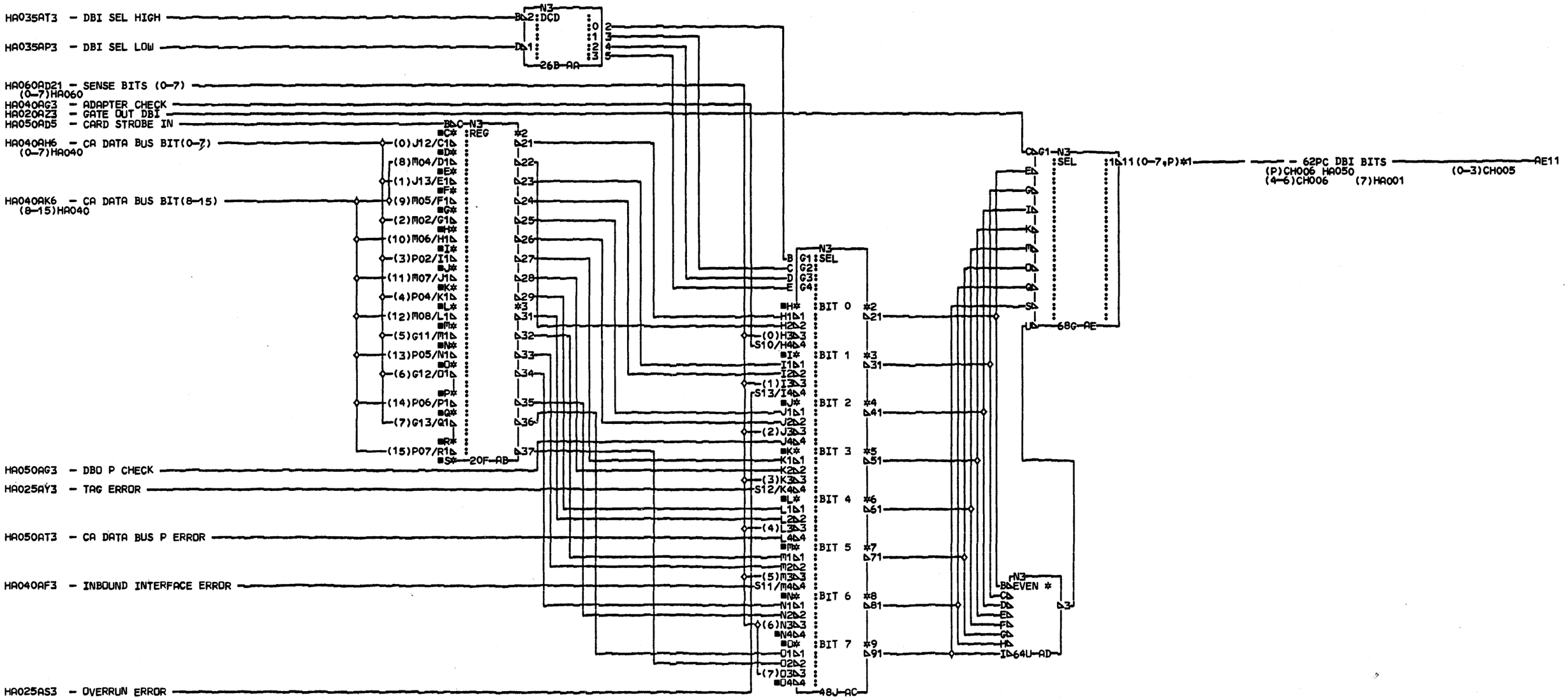
HA050 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

CHIP09
SENSE BIT SELECT AND TAGS
PN8265609 EC834824 PEC833160
LOC=1A-A2E2
USN 00008 PRI=08MAY79 2116
AUC= SEC
PFORM=KSEB NEXTBLK AF
CID PIOFE JOB T4301503

HA060 0001 HA060



COMMENTS
D1 COPYRIGHT IBM CORP. 1978

PINS
AE
11/G02
12/J02
13/G03
14/G04
15/J04
16/G05
17/J05
19/J07

SELBP
SELECT DATA TO SYSTEM

PN8265610 EC834824 PEC833180

LOC=1A-A2E2

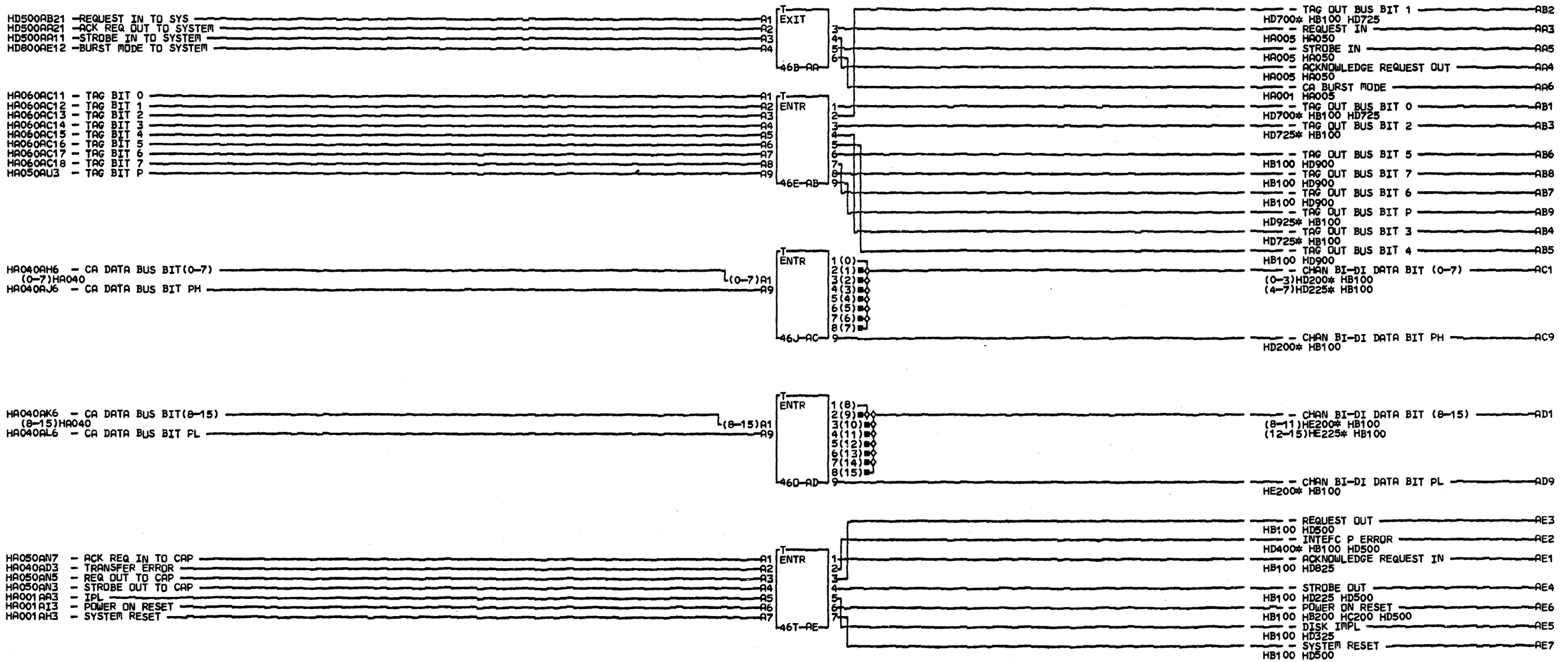
USN 00008 PRI=14JUN79 2037

AUC= SEC
PFORM=KSEB NEXTBLK AF

CID PIOFE JOB T4301503

HA070 0001

HA070 0001



COMMON ADAPTER ENTR-EXIT

PN8265683 EC834824 PEC833180

LOC=1A-A2

USN 00008 PRI=16MAY79 2152

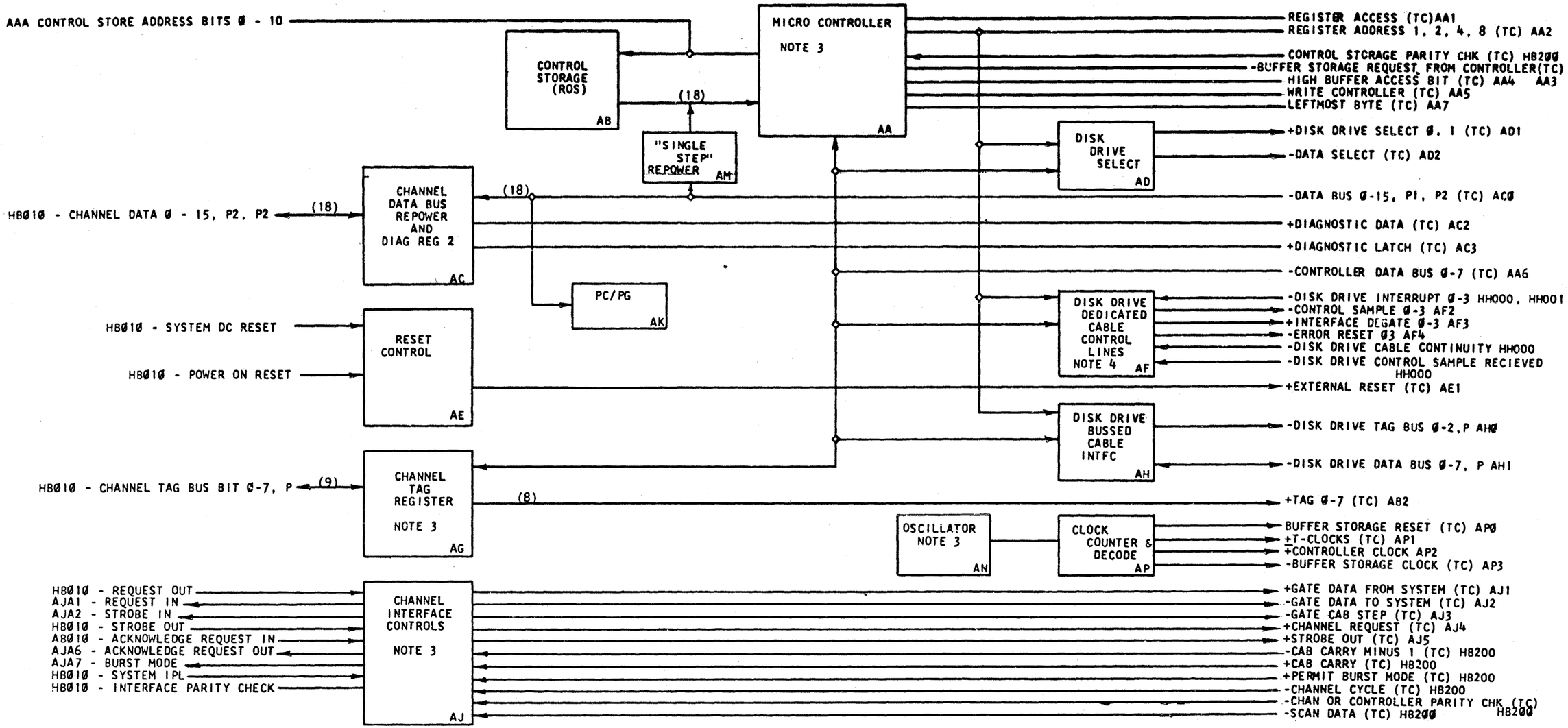
AUC= SEC

PFORM=KSEB NEXTBLK AF

CID PIOFE JOB T4301503

HB010 0001

HB100



NOTES

1. REFER TO LOGIC PAGES HD010-HE225 FOR DETAILED LOGIC DIAGRAMS
2. (TC) FOLLOWING THE SIGNAL NAME MEANS THAT NET IS A TOP CARD CONNECTOR NET. REFER TO LOGIC PAGE HB300 FOR TOP CARD CONNECTOR PIN/NET LIST.
3. REFER TO 62PC THEORY SECTION TITLED 'DATA FLOW.'
4. REFER TO 62PC THEORY SECTION TITLED 'OPERATIONS.'

EC HISTORY		DRAWING TITLE
18 DEC 78	833180	CHANNEL INTERFACE CARD A-A2D2
		MACH 5340 MDL XX4, XX5
		PART NO 4238362
C		CLASSIFICATION
		12/12/78 CSB

IBM CORP

HB100

HB101

LINE NAME		NET #	PIN	PIN
- CONTROL STORAGE ADDRESS BIT	Ø	HB100AAAØ	A-A2D2BØ3	
	1	HB100AAA1	A-A2D2BØ2	
	2	HB100AAA2	A-A2D2BØ5	
	3	HB100AAA3	A-A2D2BØ4	
	4	HB100AAA4	A-A2D2DØ4	
	5	HB100AAA5	A-A2D2DØ2	
	6	HB100AAA6	A-A2D2DØ6	
	7	HB100AAA7	A-A2D2DØ5	
	8	HB100AAA8	A-A2D2DØ7	
	9	HB100AAA9	A-A2D2DØ9	
	10	HB100AAAA	A-A2D2D10	
-CHANNEL TAG BUS BIT	Ø	HBØ10AB10	A-A2D2UØ4	A-A2E2UØ7
	1	HBØ10AB20	A-A2D2UØ5	A-A2E2UØ9
	2	HBØ10AB30	A-A2D2UØ6	A-A2E2U10
	3	HBØ10AB40	A-A2D2UØ7	A-A2E2U11
	4	HBØ10AB50	A-A2D2UØ9	A-A2E2SØ5
	5	HBØ10AB60	A-A2D2U10	A-A2E2SØ6
	6	HBØ10AB70	A-A2D2U11	A-A2E2SØ7
	7	HBØ10AB80	A-A2D2U12	A-A2E2SØ8
	P	HBØ10AB90	A-A2D2U13	A-A2E2SO4
-CHANNEL DATA BUS BIT	Ø	HBØ10AC10	A-A2D2MO8	A-A2E2J12
	1	HBØ10AC20	A-A2D2MO9	A-A2E2J13
	2	HBØ10AC30	A-A2D2M10	A-A2E2MO2
	3	HBØ10AC40	A-A2D2M11	A-A2E2PO2
	4	HBØ10AC50	A-A2D2M12	A-A2E2PO4
	5	HBØ10AC60	A-A2D2M13	A-A2E2G11
	6	HBØ10AC70	A-A2D2SO2	A-A2E2G12
	7	HBØ10AC80	A-A2D2SO3	A-A2E2G13
	8	HBØ10AD10	A-A2D2SO4	A-A2E2MO4
	9	HBØ10AD20	A-A2D2SO5	A-A2E2MO5
	10	HBØ10AD30	A-A2D2SO6	A-A2E2MO6
	11	HBØ10AD40	A-A2D2SO7	A-A2E2MO7
	12	HBØ10AD50	A-A2D2SO8	A-A2E2MO8
	13	HBØ10AD60	A-A2D2SO9	A-A2E2PO5
	14	HBØ10AD70	A-A2D2S10	A-A2E2PO6
	15	HBØ10AD80	A-A2D2S11	A-A2E2PO7
	P(0-7)	HBØ10AC90	A-A2D2S12	A-A2E2MO3
	P(8-15)	HBØ10AD90	A-A2D2S13	A-A2E2PO9
-DISK DRIVE DATA BUS	Ø	HB100AH10	A-A2D2JO7	E-A1C2MO4
	1	HB100AH11	A-A2D2GO7	E-A1C2PØ2
	2	HB100AH12	A-A2D2GO8	E-A1C2MO3
	3	HB100AH13	A-A2D2GO9	E-A1C2MØ2
	4	HB100AH14	A-A2D2G10	E-A1C2MØ5
	5	HB100AH15	A-A2D2JO9	E-A1C2PØ6
	6	HB100AH16	A-A2D2G12	E-A1C2PØ5
	7	HB100AH17	A-A2D2G13	E-A1C2MØ6
	P	HB100AH18	A-A2D2GØ5	E-A1C2PØ4

LINE NAME		NET #	PIN	PIN	
-DISK DRIVE TAG BUS	Ø	HB100AHØØ	A-A2D2B10	E-A1C2PØ7	NOTE 1
	1	HB100AHØ1	A-A2D2BO9	E-A1C2MO7	NOTE 1
	2	HB100AHØ2	A-A2D2B12	E-A1C2MO9	NOTE 1
	P	HB100AHØ3	A-A2D2B13	E-A1C2MO8	NOTE 1
-DISK DRIVE INTERRUPT	Ø	HHØØØFF01	A-A2D2PO2	E-A1C2DØ6	
	1	HHØØ1FF01	A-A2D2D11	E-B1C2DØ6	
TIED INACTIVE			A-A2D2PO5		
TIED INACTIVE			A-A2D2PO6		
-CONTROL SAMPLE	Ø	HB100AF20	A-A2D2JO2	E-A1C2GØ9	
	1	HB100AF21	A-A2D2GO2	E-B1C2GØ9	
TIED INACTIVE			A-A2D2JO4		
TIED INACTIVE			A-A2D2GO4		
+INTERFACE DEGATE	Ø	HB100AF30	A-A2D2GO3	E-A1C28Ø3	
	1	HB100AF31	A-A2D2BO7	E-B1C28Ø3	
TIED INACTIVE			A-A2D2PO7		
TIED INACTIVE			A-A2D2PO9		
-ERROR RESET	Ø	HB100AF40	A-A2D2P12	E-A1C2S10	
	1	HB100AF41	A-A2D2P13	E-B1C2S10	
TIED INACTIVE			A-A2D2MO5		
TIED INACTIVE			A-A2D2MO4		
-DISK DRIVE CABLE CONTINUITY		HHØ01RR20	A-A2D2MO7	A-A2A48Ø2	NOTE 2
-DISK DRIVE CONTROL SAMPLE RECIEVED		HHØØØHH09	A-A2D2PO4	E-A1C2PØ9	
-REQUEST OUT		HBØ10AE30	A-A2D2J13	A-A2EJ10	
-REQUEST IN		HB100AJA1	A-A2D2J11	A-A2E2MØ9	
-ACKNOWLEDGE REQUEST OUT		HB100AJA6	A-A2D2JO6	A-A2E2M10	
-ACKNOWLEDGE REQUEST IN		HBØ10AE10	A-A2D2JO5	A-A2E2GØ7	
-STROBE OUT		HBØ10AE40	A-A2D2J12	A-A2E2J11	
-STROBE IN		HB100AJA2	A-A2D2J10	A-A2E2JO9	
-BURST MODE		HB100AJA7	A-A2D2UO2	A-A2E2P10	
-SYSTEM IPL		HBØ10AE50	A-A2D2D12	A-A2E2SØ4	
-INTERFACE PARITY CHECK		HBØ10AE20	A-A2D2P11	A-A2E2UO2	
-SYSTEM DC RESET		HBØ10AE70	A-A2D2MO3	A-A2E2P11	
-POWER ON RESET		HBØ10AE60	A-A2D2MO2	A-A2E2M11	
TIED INACTIVE			A-A2D2D13		
TIED INACTIVE			A-A2D2MO6		
+T6		HB100AP16	A-A2D2P10	A-A2C2BØ3	
+CONTROLLER CLOCK		HB100AP20	A-A2D2BØ8	A-A2C2MØ7	

NOTES

1 THESE NETS EXTEND TO THE SAME TAB PINS ON THE E-B1 BOARD FOR 2 DRIVE SYSTEMS.

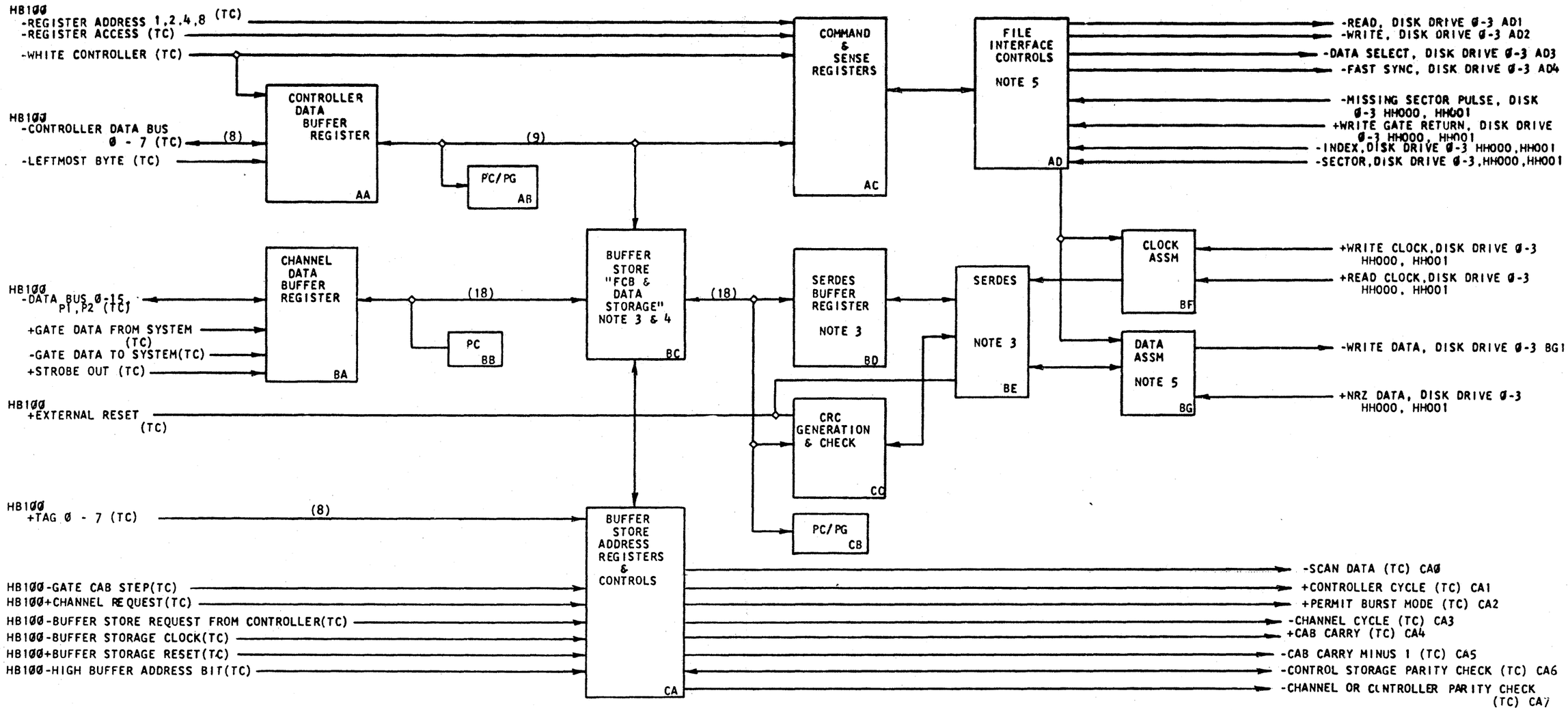
2 ON 2 DRIVE SYSTEM PROBE PIN A-A2A6DØ4 FOR CABLE CONTINUITY. THIS NET IS TIED TO LOGIC GROUND VIA A FEATURE WIRE(REF. AC352).

H B 1 Ø 1

EC HISTORY		DRAWING TITLE	
18 Dec 78	833180	CHANNEL INTERFACE CARD BOARD PIN LIST A-A2D2	
		MACH 5340 MDLXX4, XX5	
		PART NO 4238363	
		CLASSIFICATION	IBM CORP
		12/12/78 CSB	

C

HB200



NOTES

1. REFER TO LOGIC PAGES HC005 - HC950 FOR MORE DETAILED LOGIC DIAGRAMS
2. (TC) FOLLOWING THE SIGNAL NAME MEANS THAT NET IS A TOP CARD CONNECTOR NET. REFER TO LOGIC PAGE HB300 FOR TOP CARD CONNECTOR PIN/NET LIST
3. REFER TO 62PC THEORY SECTION TITLED 'DATA FLOW.'
4. REFER TO 62PC THEORY SECTION TITLED 'COMMON ADAPTER FILE CONTROL BLOCK.'
5. REFER TO 62PC THEORY SECTION TITLED 'READ WAVESHAPES' OR 'WRITE WAVESHAPES.'

EC HISTORY		DRAWING TITLE
18 DEC 78	833180	FILE INTERFACE CARD A-A2C2
		MACH 5340 MDLXX4, XX5
		PART NO 4238364
C		CLASSIFICATION
		12/12/78 CSB

IBM CORP

H8201

LINE NAME	NET #	PIN	PIN
-READ, DISK DRIVE Ø	H8200AD1Ø	A-A2C2D02	E-A1C2J11
1	H8200AD11	A-A2C2D04	E-B1C2J11
TIED INACTIVE		A-A2C2B02	
TIED INACTIVE		A-A2C2S12	
-WRITE, DISK DRIVE Ø	H8200AD2Ø	A-A2C2D10	E-A1C2G12
1	H8200AD21	A-A2C2D11	E-B1C2G12
TIED INACTIVE		A-A2C2B09	
TIED INACTIVE		A-A2C2B10	
-DATA SELECT, DISK DRIVE Ø	H8200AD3Ø	A-A2C2D07	E-A1C2J13
1	H8200AD31	A-A2C2D09	E-B1C2J13
TIED INACTIVE		A-A2C2B07	
TIED INACTIVE		A-A2C2B08	
-FAST SYNC, DISK DRIVE Ø	H8200AD4Ø	A-A2C2D05	E-A1B2SO2
1	H8200AD41	A-A2C2D06	E-B1B2SO2
TIED INACTIVE		A-A2C2B04	
TIED INACTIVE		A-A2C2B05	
-INDEX, DISK DRIVE Ø	HHØØØFFØ3	A-A2C2JO5	E-A1D2S13
1	HHØØ1FFØ3	A-A2C2JO6	E-B1D2S13
TIED INACTIVE		A-A2C2GO4	
TIED INACTIVE'		A-A2C2GO5	
-SECTOR, DISK DRIVE Ø	HHØØØFFØ2	A-A2C2JO7	E-A1D2S10
1	HHØØ1FFØ2	A-A2C2JO9	E-B1D2S10
TIED INACTIVE		A-A2C2GO7	
TIED INACTIVE		A-A2C2GO8	
+WRITE GATE RETURN, DISK DRIVE Ø	HHØØØFFØØ	A-A2C2JO2	E-A1B2JØ7
1	HHØØ1FFØØ	A-A2C2JO4	E-B1B2JØ7
TIED INACTIVE		A-A2C2GO2	
TIED INACTIVE		A-A2C2GO3	
-MISSING SECTOR PULSE, DISK DRIVE Ø	HHØØØFFØ7	A-A2C2D12	E-A1D2GØ8
1	HHØØ1FFØ7	A-A2C2D13	E-B1D2GØ8
TIED INACTIVE		A-A2C2B12	
TIED INACTIVE		A-A2C2B13	
+T6	H8100AP16	A-A2C2BO3	A-A2D2P1Ø
+T6	H8100AP16	A-A2C2SO5	A-A2C2BØ3
+T6	H8100AP16	A-A2C2SO7	A-A2C2SØ5
+T6 GATE	H8100AP16	A-A2C2SO6	A-A2C2SØ7
+CONTROLLER CLOCK	H8100AP2Ø	A-A2C2MO7	A-A2D2BO8
+CONTROLLER CLOCK	H8100AP2Ø	A-A2C2PO7	A-A2C2MØ7
+CLOCK 11	TEST POINT	A-A2C2S11	A-A2C2SØ9
+BRB	TEST POINT	A-A2C2U10	A-A2C2S1Ø

LINE NAME	NET #	PIN	PIN
+READ CLOCK, DISK DRIVE Ø	HHØØØFFØ5	A-A2C2J12	E-A1B2UØ7
1	HHØØ1FFO5	A-A2C2J13	E-B1B2UØ7
TIED INACTIVE		A-A2C2G12	
TIED INACTIVE		A-A2C2G13	
+WRITE CLOCK, DISK DRIVE Ø	HHØØØFFØ6	A-A2C2J10	E-A1B2U11
1	HHØØ1FFØ6	A-A2C2J11	E-B1B2U11
TIED INACTIVE		A-A2C2GO9	
TIED INACTIVE		A-A2C2G10	
+NRZI DATA, DISK DRIVE Ø	HHØØØFFØ4	A-A2C2PO5	E-A1B2SØ7
1	HHØØ1FFØ4	A-A2C2PO6	E-B1B2SØ7
TIED INACTIVE		A-A2C2MO4	
TIED INACTIVE		A-A2C2MO5	
-WRITE DATA, DISK DRIVE Ø	H8200BG1Ø	A-A2C2PO2	E-A1B2UO2
1	H8200BG11	A-A2C2SO2	E-B1B2UO2
TIED INACTIVE		A-A2C2MO2	
TIED INACTIVE		A-A2C2MO3	
-POWER ON RESET	H8Ø1ØAE6C	A-A2C2S13	A-A2D2MO2
-POWER ON RESET	H8Ø1ØAE6Ø	A-A2C2SO3	A-A2C2S13
-POWER ON RESET	H8Ø1ØAE6Ø	A-A2C2UO5	A-A2C2SØ3
+WRITE SELECT +	TEST POINT	A-A2C2MO8	A-A2C2SØ8
+SERDES BUFFER BIT Ø	TEST POINT	A-A2C2UO6	A-A2C2SØ8
-SYNC BIT FOUND	TEST POINT	A-A2C2UO9	A-A2C2SØ8
+LSSD SCAN OUT	TEST POINT	A-A2C2U13	A-A2C2SØ8

H
B
2
0
1

EC HISTORY		DRAWING TITLE
18DEC78	833180	FILE INTERFACE CARD BOARD PIN LIST A-A2C2
		MACH 5340 MDLXX4, XX5
		PART NO 4238365
C		CLASSIFICATION
		12/12/78 CSB — IBM CORP

H
B
2
0
1

HB300

LINE NAME	NET #	PIN
+TAG Ø	HB100AG20	A-A2D2X24
1	HB100AG21	A-A2D2X25
2	HB100AG22	A-A2D2X26
3	HB100AG23	A-A2D2X28
4	HB100AG24	A-A2D2X29
5	HB100AG25	A-A2D2X30
6	HB100AG26	A-A2D2X32
7	HB100AG27	A-A2D2X33
-CONTROLLER DATA BUS BIT Ø	HB100AA60	A-A2D2Y23
1	HB100AA61	A-A2D2Y24
2	HB100AA62	A-A2D2Y25
3	HB100AA63	A-A2D2Y26
4	HB100AA64	A-A2D2Y28
5	HB100AA65	A-A2D2Y29
6	HB100AA66	A-A2D2Y30
7	HB100AA67	A-A2D2Y32
-DATA BUS BIT Ø	HB100AC01	A-A2D2Z05
1	HB100AC02	A-A2D2Z06
2	HB100AC03	A-A2D2Z07
3	HB100AC04	A-A2D2Z09
4	HB100AC05	A-A2D2Z10
5	HB100AC06	A-A2D2Z11
6	HB100AC07	A-A2D2Z12
7	HB100AC08	A-A2D2Z13
8	HB100AC09	A-A2D2Z22
9	HB100AC10	A-A2D2Z23
10	HB100AC11	A-A2D2Z24
11	HB100AC12	A-A2D2Z25
12	HB100AC13	A-A2D2Z26
13	HB100AC14	A-A2D2Z28
14	HB100AC15	A-A2D2Z29
15	HB100AC16	A-A2D2Z30
P1(0-7)	HB100AC17	A-A2D2Z02
P2(8-15)	HB100AC18	A-A2D2Z03
+DISK DRIVE SELECT BIT Ø	HB100AD10	A-A2D2W06
1	HB100AD11	A-A2D2W07
-DATA SELECT	HB100AD20	A-A2D2W09
-REGISTER ADDRESS 1	HB100AA20	A-A2D2X05
2	HB100AA21	A-A2D2X06
4	HB100AA22	A-A2D2X22
8	HB100AA23	A-A2D2X23
-REGISTER ACCESS	HB100AA10	A-A2D2X11
-WRITE CONTROLLER	HB100AA50	A-A2D2Y22

LINE NAME	NET #	PIN
+GATE DATA FROM SYSTEM	HB100AJ10	A-A2D2Y05
-GATE DATA TO SYSTEM	HB100AJ20	A-A2D2Y07
+STORAGE OUT	HB100AJ50	A-A2D2Y09
-GATE CAB STEP	HB100AJ30	A-A2D2W29
+CHANNEL REQUEST	HB100AJ40	A-A2D2X03
-BUFFER STORE REQUEST FROM CONTROLLER	HB100AA30	A-A2D2X13
-BUFFER STORAGE CLOCK	HB100AP30	A-A2D2Y33
+BUFFER STORAGE RESET	HB100AP00	A-A2D2Y06
+PERMIT BURST MODE	HB200CA20	A-A2C2W13
-CHANNEL CYCLE	HB200CA30	A-A2C2W10
+CAB CARRY	HB200CA40	A-A2C2X09
-CAB CARRY MINUS 1	HB200CA50	A-A2C2X10
+CONTROLLER CYCLE	HB200CA10	A-A2C2W11
+TØ	HB100AP10	A-A2D2W12
+TØ	HB100AP10	A-A2D2Y13
+TØ	HB100AP10	A-A2D2X02
+T2	HB100AP12	A-A2D2W33
+T4	HB100AP14	A-A2D2W32
+T5	HB100AP15	A-A2D2W28
+T7	HB100AP17	A-A2D2Y11
+T9	HB100AP19	A-A2D2W30
+OSCILLATOR INPUT	TEST POINT	A-A2D2W03
+OSCILLATOR OUTPUT	TEST POINT	A-A2D2W23
-CONTROLLER WRAP	TEST POINT	A-A2D2W05
-CONTROLLER WRAP	TEST POINT	A-A2D2W22
+EXTERNAL RESET	HB100AE1	A-A2D2W26
-CONTROL STORAGE PARITY CHECK	HB200CA60	A-A2C2W02
-HIGH BUFFER ADDRESS BIT	HB200CA40	A-A2D2X12
-CHANNEL OR CONTROLLER PARITY CHECK	HB200CA70	A-A2C2Y03
+DIAGNOSTIC DATA	HB100AC10	A-A2D2Z32
+DIAGNOSTIC LATCH 1	HB100AC20	A-A2D2Y12
2	HB100AC21	A-A2D2Z33
3	HB100AC22	A-A2D2Y02
+SCAN DATA	HB200CAØ	A-A2C2X07
-LEFTMOST BYTE	HB100AA7	A-A2D2Y10

CONFIGURATION JUMPERS

CARD LOC A-A2D2:

INSTALL JUMPERS TO CONTROL

FCB WORD 6, BITS 5, 6, 7

- · · BIT 5
- · · 6 DISK DRIVE Ø
- · · 7

- · · BIT 5
- · · 6 DISK DRIVE 1
- · · 7

- · · MODE SELECTION

- · · BIT 5
- · · 6 DISK DRIVE 2
- · · 7

- · · BIT 5
- · · 6 DISK DRIVE 3
- · · 7

JUMPER INSTALLED: BIT = Ø
JUMPER NOT INSTALLED: BIT = 1

MODE SELECTION:
JUMPER INSTALLED : INTERLEAVED MODE
JUMPER NOT INSTALLED:
NON INTERLEAVED MODE

H NOTE 1 THIS LOGIC PAGE IS THE NET/PIN LIST FOR THE TOP CARD CONNECTORS (TC).

B NOTE 2 PINS SHOWN ARE THE SOURCE PINS FOR THE NETS. THE SINK PINS WOULD BE ON THE OTHER CARD (A-A2D2 OR A-A2C2).

3

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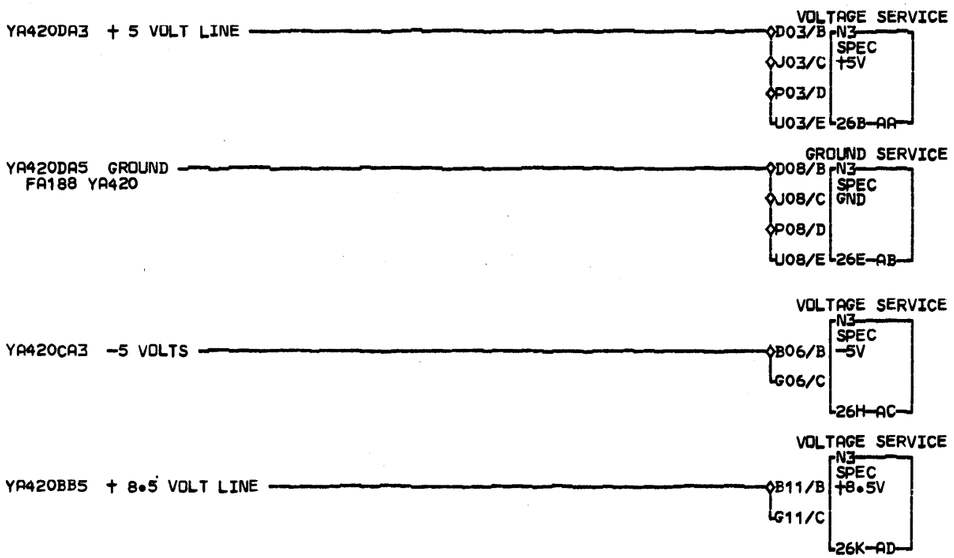
EC HISTORY		DRAWING TITLE
18 DEC 78	833180	CHANNEL/FILE INTFC TOP CARD CONNECTORS A-A2C2, D2
24 JUL 79	834824	MACH 5340 MDLXX4, XX5
		PART NO 4238366
		CLASSIFICATION
		12/12/78 C&B

C

IBM CORP

H B 3 Ø Ø



COMMENTS

VOLTAGE AND GROUND TAB PINS

P/N 8265676 EC 833180

LOC=1A-A2C2

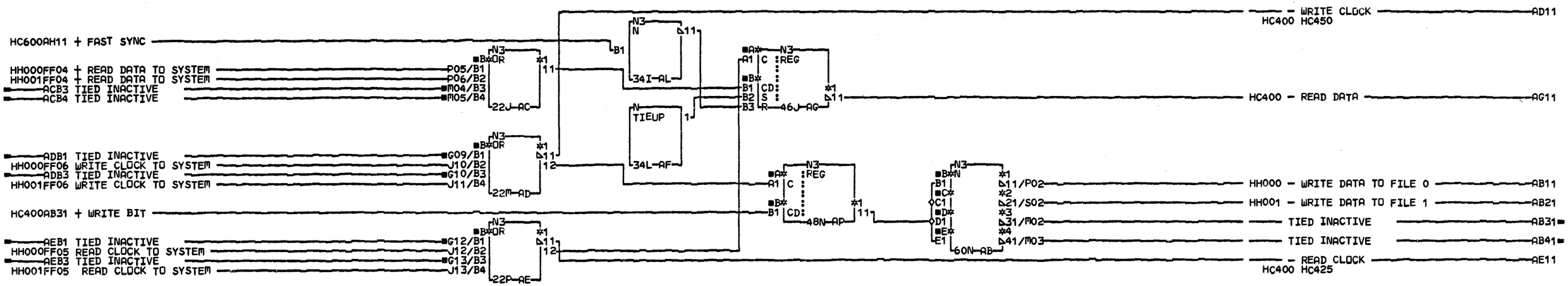
USN 00008 PRI=07OCT78 0124

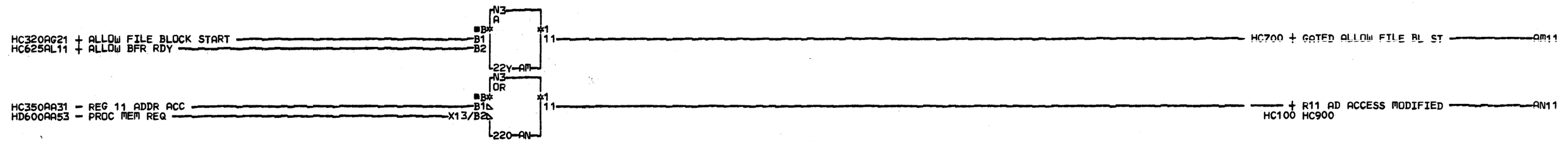
AUC= SEC 09NOV78 0842

PFORM=KSEB NEXTBLK AE

CID PIOFE JOB K1500929

HC005 0001





COMMENTS

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READ/WRITE GATING

PN8265634 EC834824 PEC833180

LOC=1A-A2C2

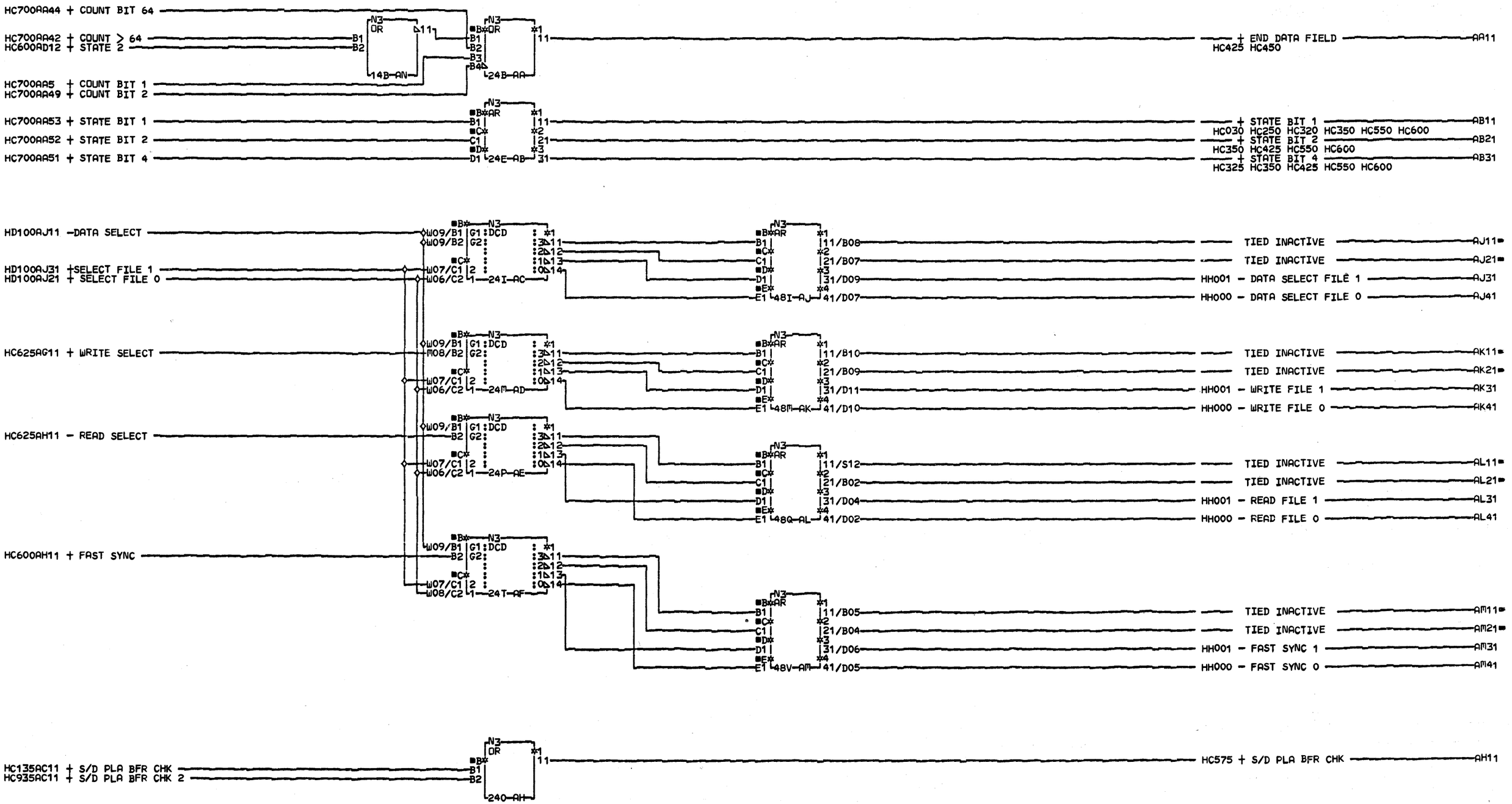
USN 00008 PRI=16MAY79 2152

AUC= SEC 05JUN79 0851

PFORM=KSEB NEXTBLK AQ

CID PIDFE JOB T4301503

HC010 0001 HC010



COMMENTS

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FILE SELECTION

PN8265635 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=14JUN79 2037

AUC= SEC

PFORM=KSEB NEXTBLK A0

CID PIOFE JOB T4301503

HC020 0001

HC020 0001

HH001FF03 – SYSTEM INDEX
HH000FF03 – SYSTEM INDEX
HD100AJ31 +SELECT FILE 1
HD100AJ21 + SELECT FILE 0
ABD2 TIED INACTIVE
ABE2 TIED INACTIVE
HH000FF02 – SYSTEM SECTOR
HC275AE11 + FAB L2 BITS 1–64
HC225AB11 – FILE CYCLE
HH001FF02 – SYSTEM SECTOR
ACD2 TIED INACTIVE
ACE2 TIED INACTIVE
HH000FF07 – SECTOR PULSES MISSING
HC925AF11 +S/D BFR BIT 11–8
HC925AH11 + S/D BFR BIT 3–0
HH001FF07 – SECTOR PULSES MISSING
ADD2 TIED INACTIVE
ADE2 TIED INACTIVE
HH001FF0 + WRITE GATE RETURN
HC125AF11 + S/D BFR BIT 15–12
HC125AH11 + S/D BFR BIT 7–4
HH000FF0 + WRITE GATE RETURN
HD525AJ11 +RAM CLOCK
HC225AM11 + RAM CYCLE
AEE2 TIED INACTIVE
AED2 TIED INACTIVE
HD525AE14 +RAM RESET
HC020AB11 + STATE BIT 1
HD125AE11 +EXT RESET

N3 DCD 18C–AA
N3 OR 18H–AF
N3 A 20M–AG
N3 A 20R–AH
N3 A 24U–AJ
N3 A 24Y–AK
N3 OR 40Z–AL
N3 A*OR J05/B2 40B–AB
N3 A*OR J07/B2 40H–AC
N3 A*OR D12/B2 40N–AD
N3 A*OR J02/B2 40T–AE
N3 OR 62E–AM

HC320 HC325 – SELECTED INDEX – AB11
HC425 HC450 HC625 + IND OR SECT – AM11
HC320 HC325 – SELECTED SECTOR – AC11
HC300 HC325 HC375 – FILE SECT END – AF11
HC500 – SERDES LO BYTES ALL ONES – AG11
HC350 – SEL MISSING SECTOR – AD11
HC500 – SERDES HI BYTES ALL ONES – AH11
HC800 – RAM SELECT – AJ11
HC350 + WRT GTE RTN – AE11
HC800 – RAM RESET – AK11
HC425 + MODIFIED STATE BIT 1 – AL11

COMMENTS
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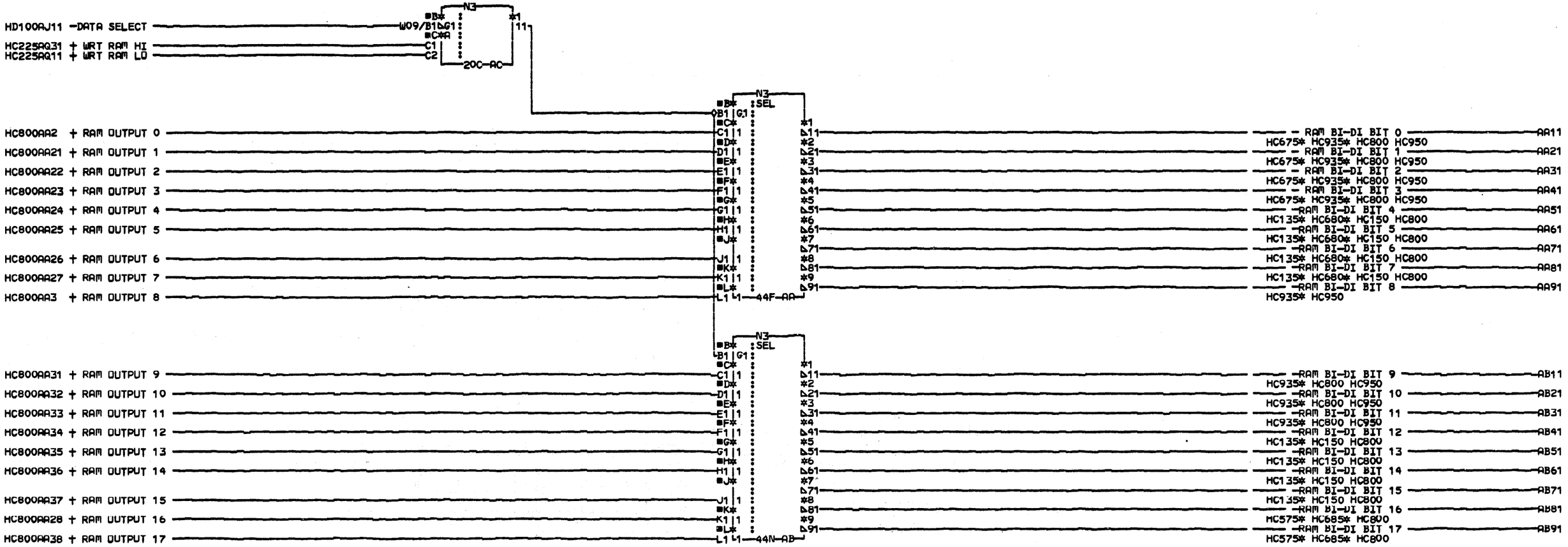
SECTOR AND INDEX GATING
P/N 8265636 EC 833180
LOC=1A–A2C2
USN 00008 PRI=17NOV78 1558
AUC= SEC
PFORM=KSEB NEXTBLK AN
CID PIOFE JOB K1500929

HC030 0001



COMMENTS

RAM BI-DIRECTIONAL

P/N 8265637 EC 833180

LOC=1A-A2C2

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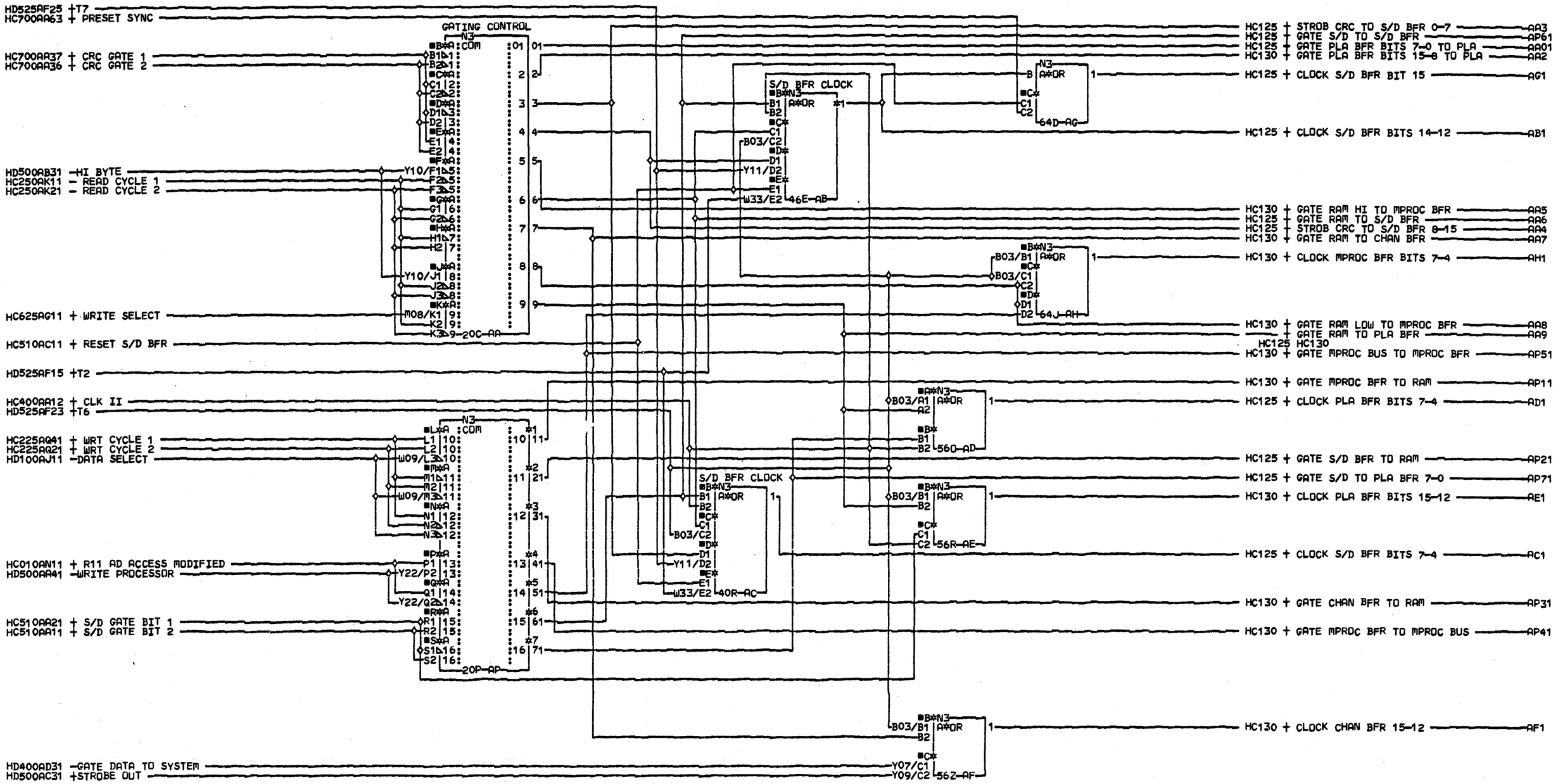
AUC= SEC
PFORM=KSEB NEXTBLK AD

CID PIOFE JOB K1500929

HC040 0001



COMMENTS
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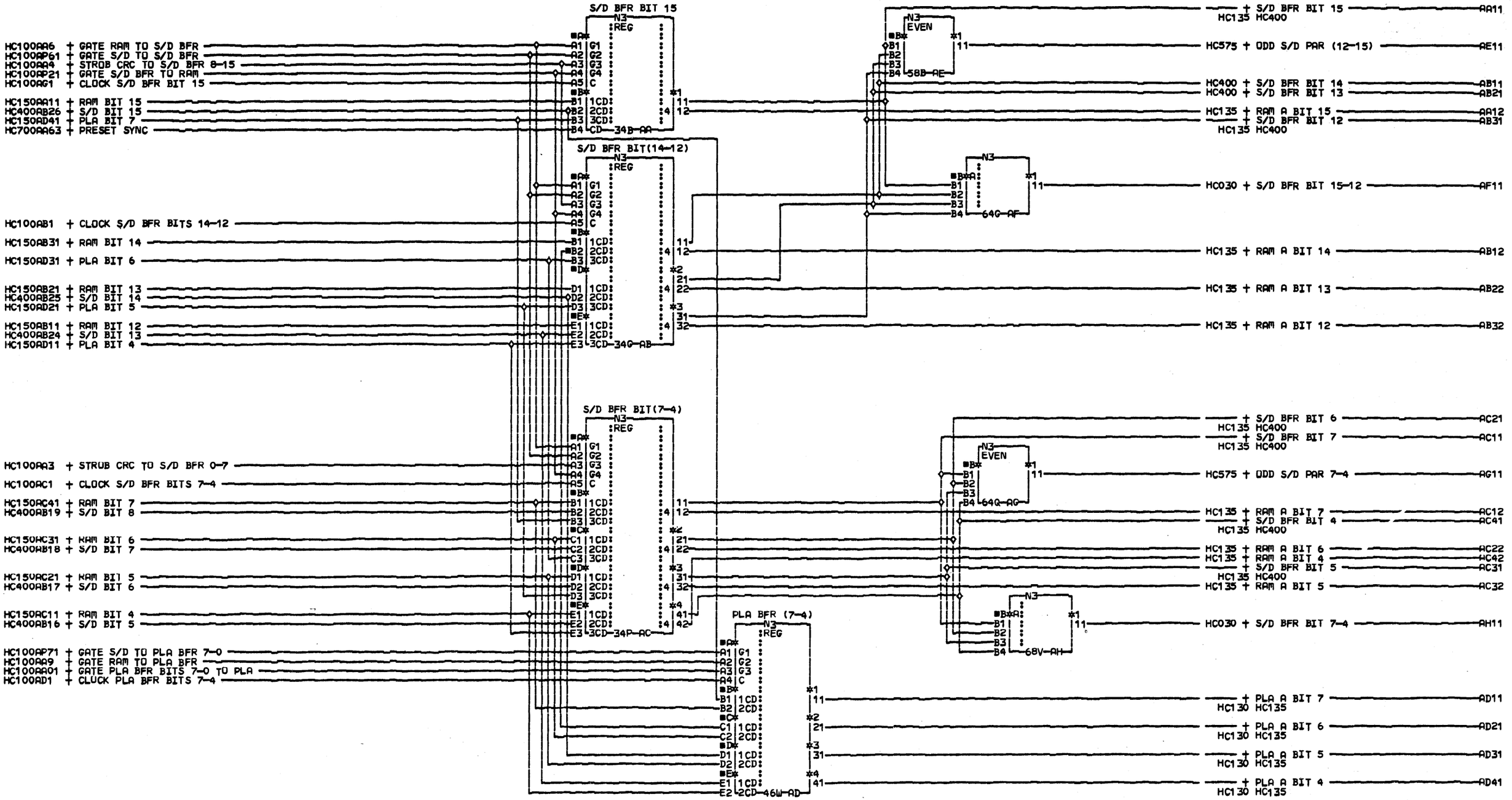
DATA FLOW CONTROL

PN8265638 EC834824 PEC833180
LOC=1A-A2C2
USN 00008 PRI=16MAY79 2152
AUC= SEC
PFORM=KSEB NEXTBLK AQ
CID PIDFE JOB T4301503

HC100 01 HC100



COMMENTS

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SERDES BUFFER

P/N 8265639 EC 833180

LOC=1A-A2C2

USN 00008 PRI=17NOV78 1558

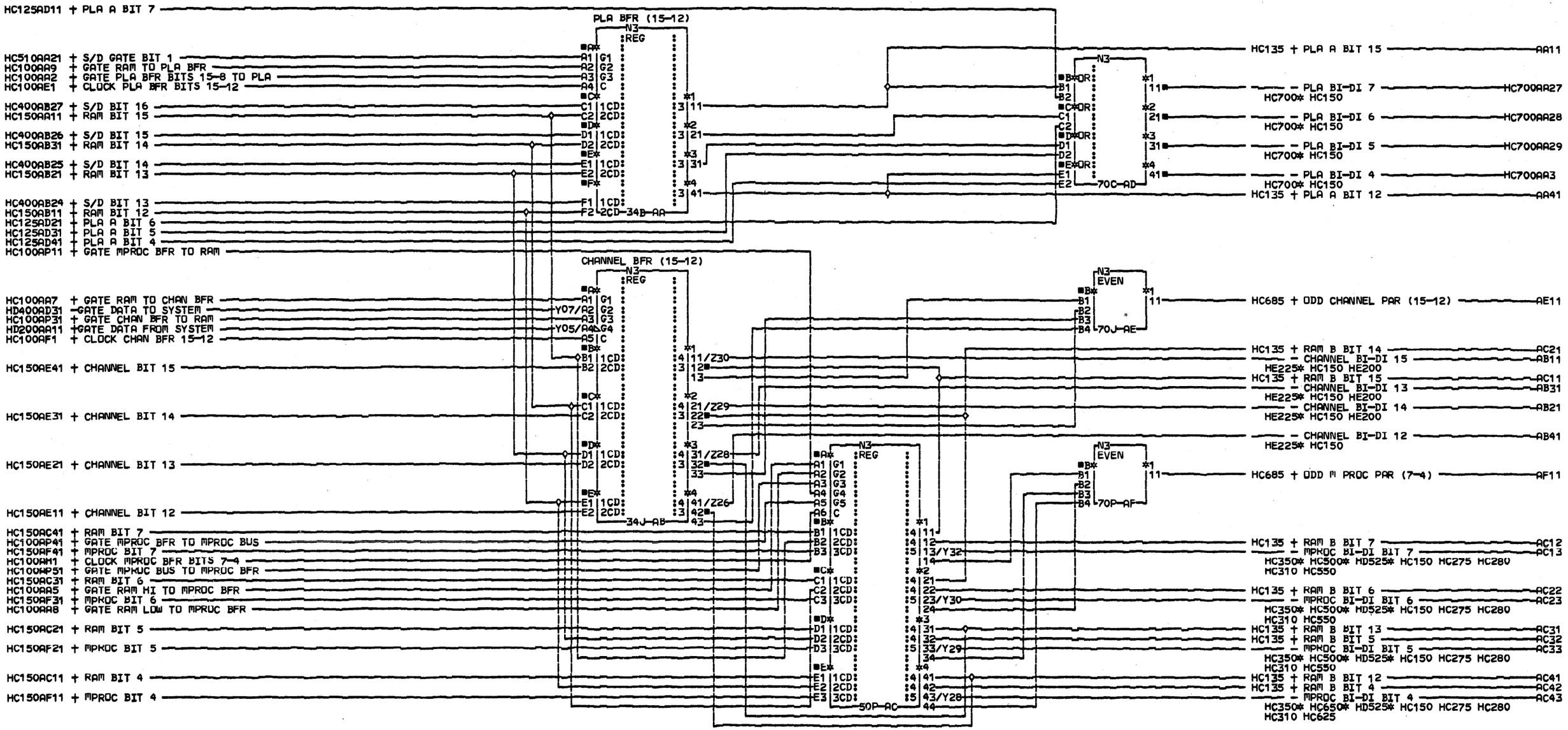
AUC= SEC

PFORM=KSEB NEXTBLK AI

CID PIDFE JOB K1500929

HC125 0001

HC125 0001



COMMENTS
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PLA AND CHANNEL BFR

P/N 8265640 EC 833180

LOC=1A-A2C2

USN 00008 PRI=16OCT78 0818

AUC= SEC 17NOV78 1558

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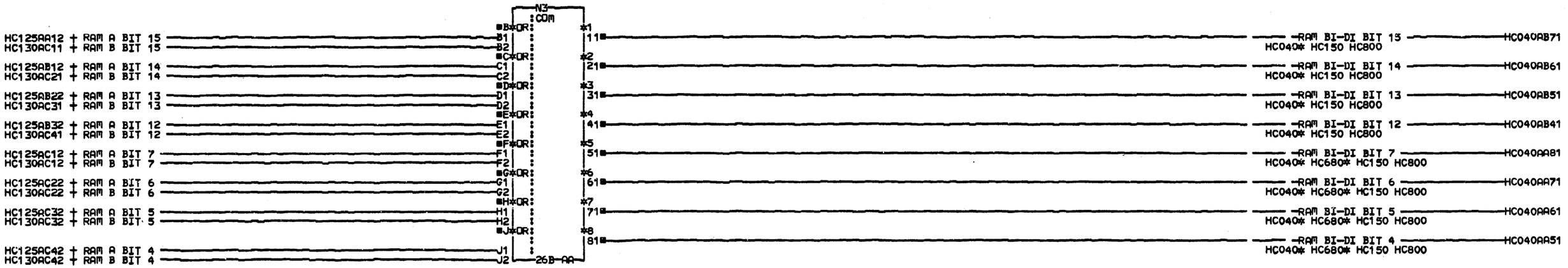
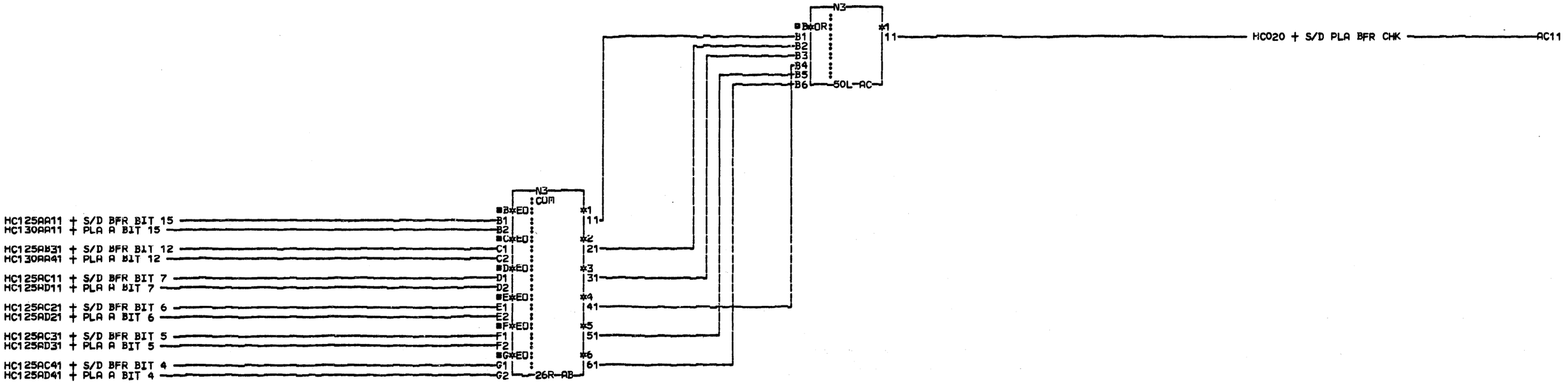
CID PIOFE JOB K1500929

HC130 0001 HC130 0001





COMMENTS

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RAM BI-DI BITS 4-15

P/N 8265641 EC 833180

LOC=1A-A2C2

USN 00008 PRI=16OCT78 0818

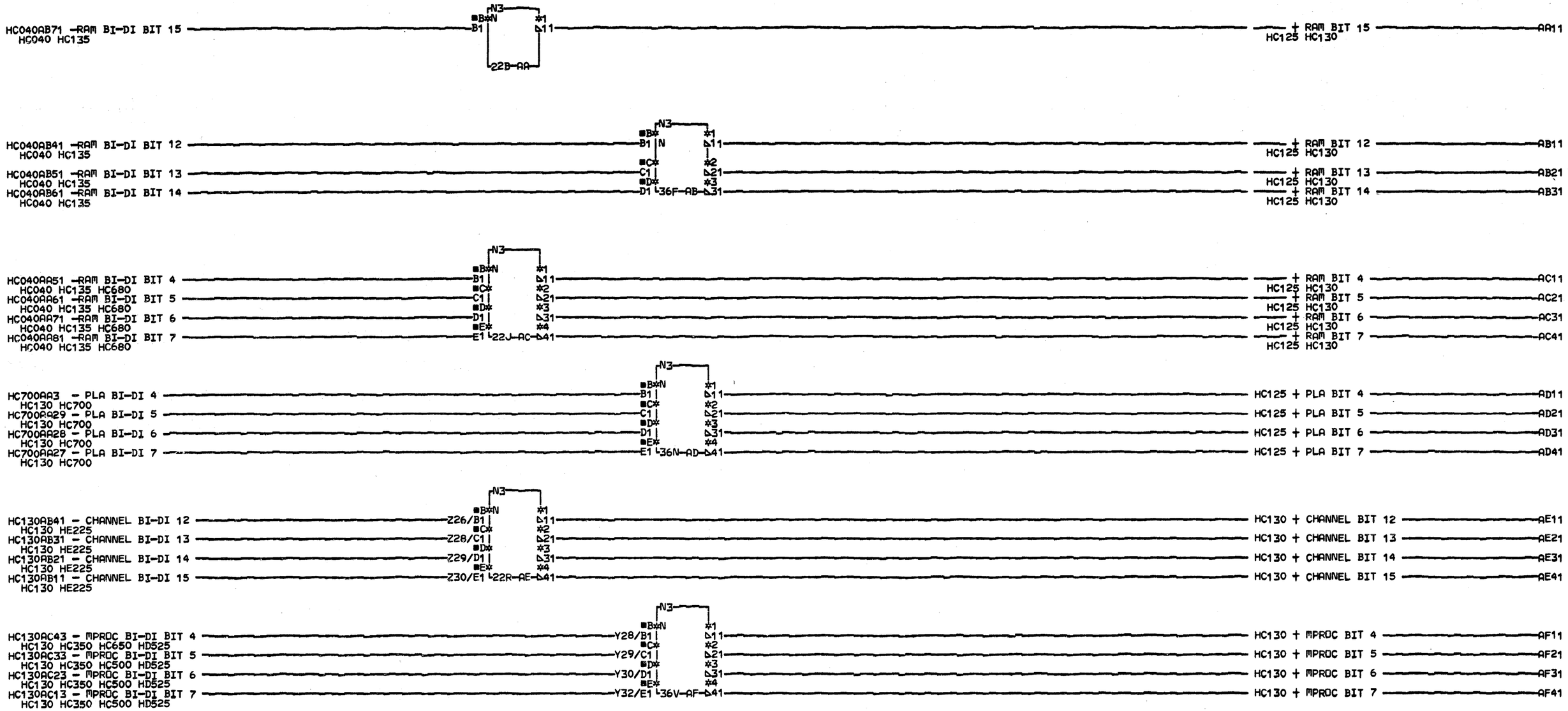
AUC= SEC

PFORM=KSEB NEXTBLK AD

CID PIOFE JOB K1500929

HC135 0001

HC135 0001



COMMENTS

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BI-DI BIT INVERTERS

PN8265642 EC834824 PEC833180

LOC=1A-A2C2

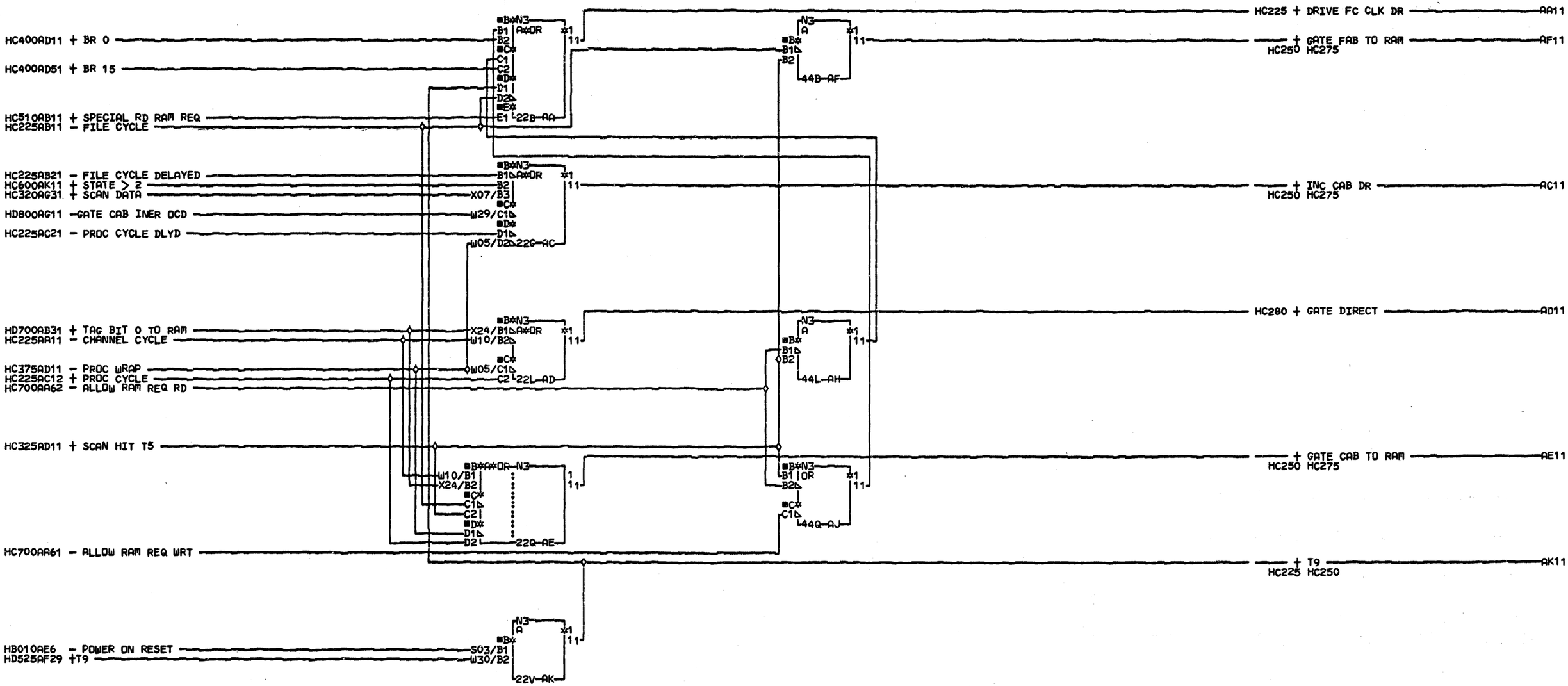
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AG

CID PIOFE JOB T4301503

HC150 0001



COMMENTS

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RAM GATING

PN8265643 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

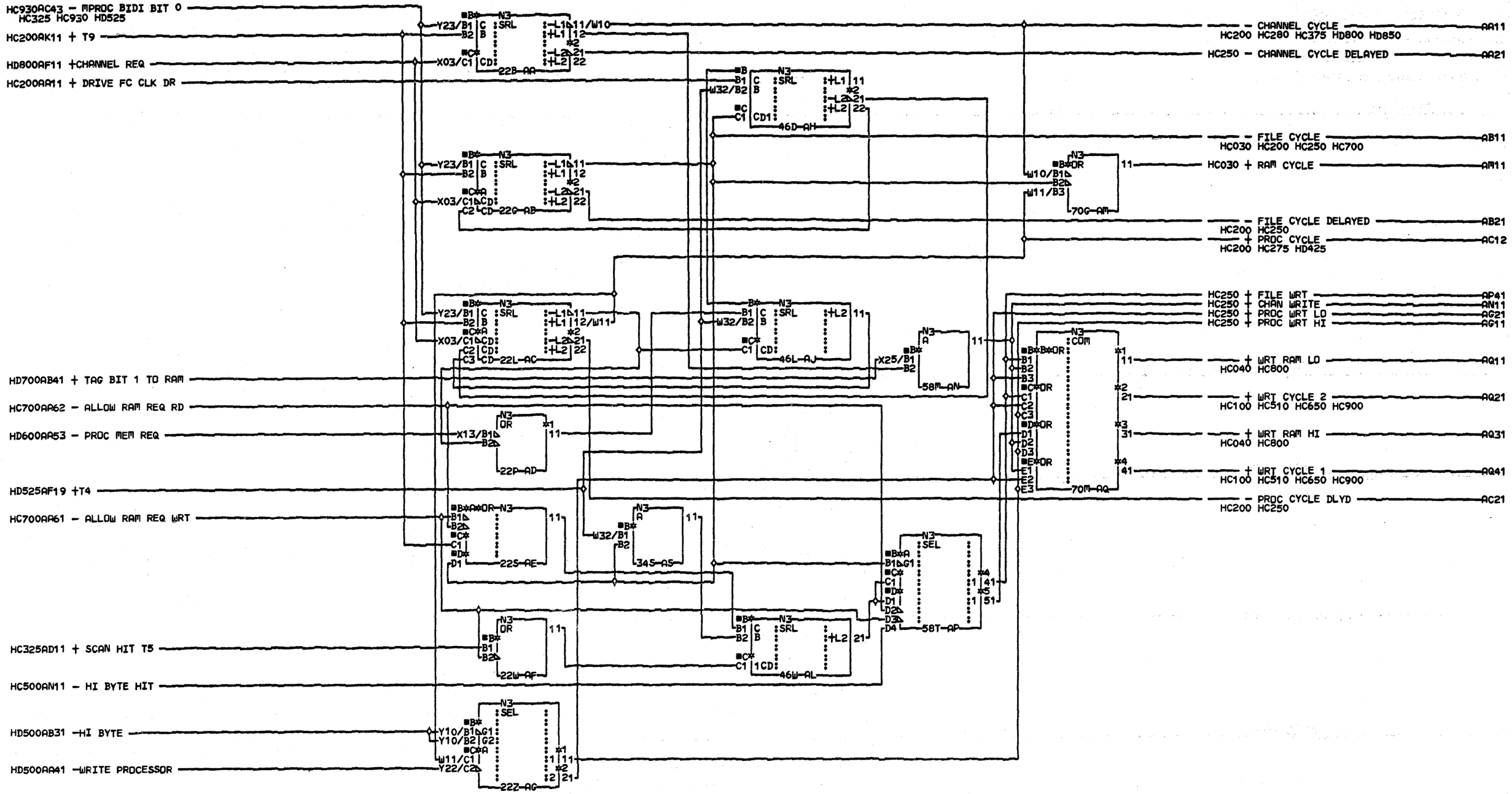
AUC= SEC

PFORM=KSEB NEXTBLK AL

CID PIDFE JOB T4301503

HC200 0001

HC200 0001



COMMENTS
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FILE-CHANNEL-PROCESSOR
CYCLE GEN

PN8265644 EC834824 PEC833180

LOC=1A-A2C2

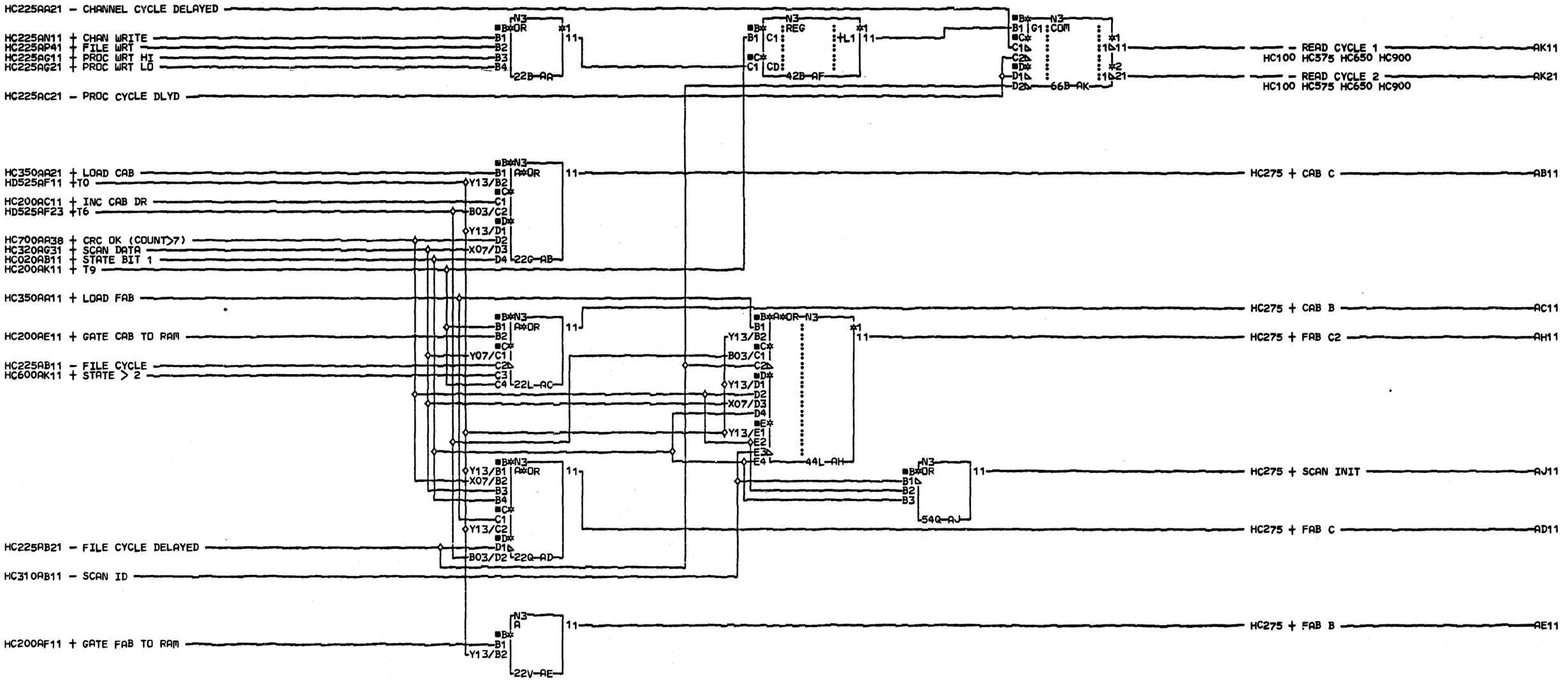
USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK AT

CID PIDFE JOB T4301503

HC225 0001

HC225 0001



COMMENTS

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SCAN INITIALIZE

PN8265645 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

AUC= SEC

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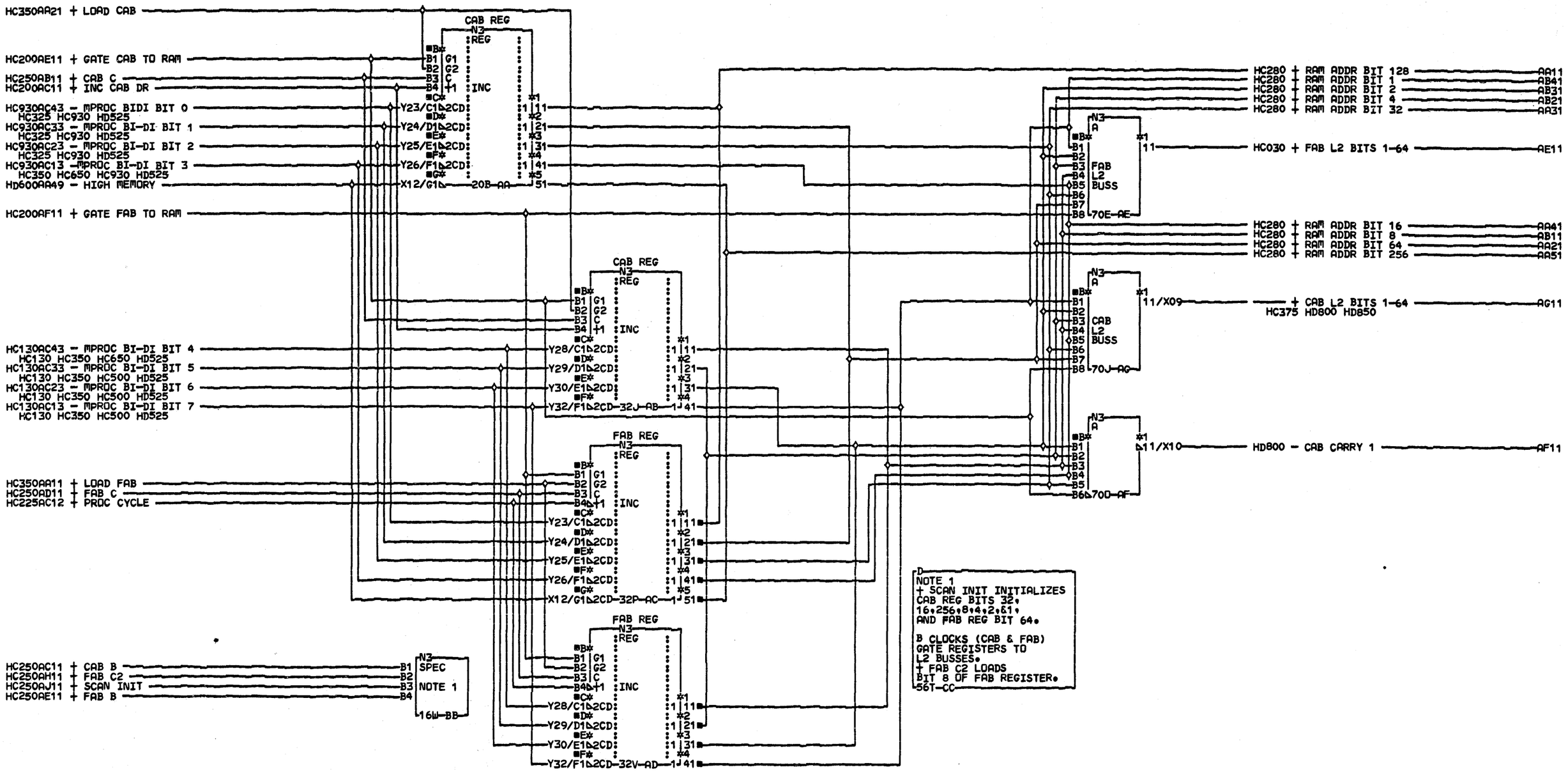
CID PIOFE JOB T4301503

HC250 0001

HC250 0001



COMMENTS

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RAM ADDRESS INCREMENTING

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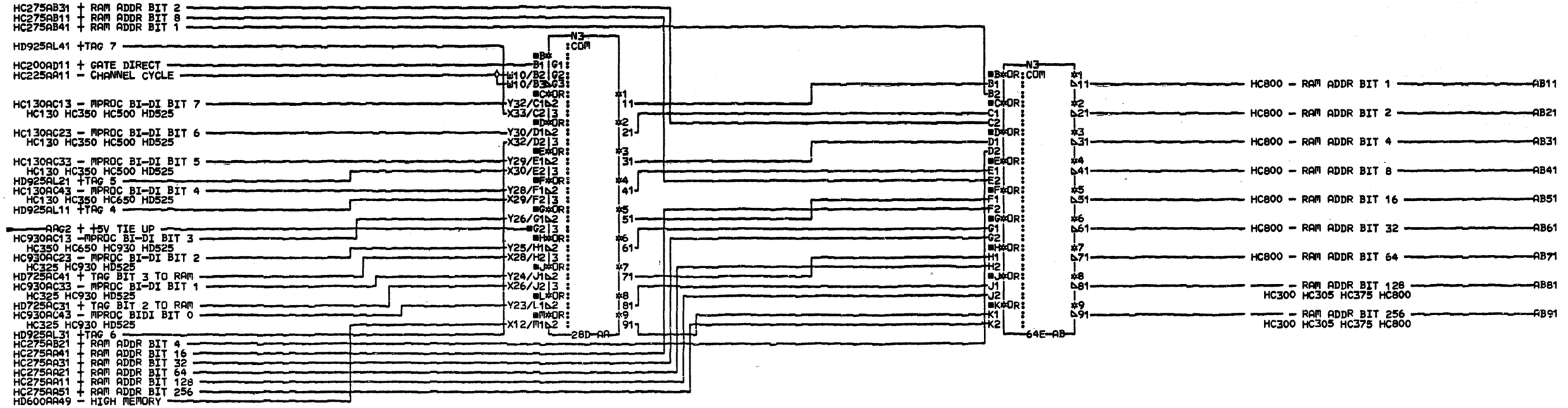
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK CD

CID PIOFE JOB T4301503

HC275 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

RAM ADDRESS BITS

PN8265647 EC834824 PEC833180

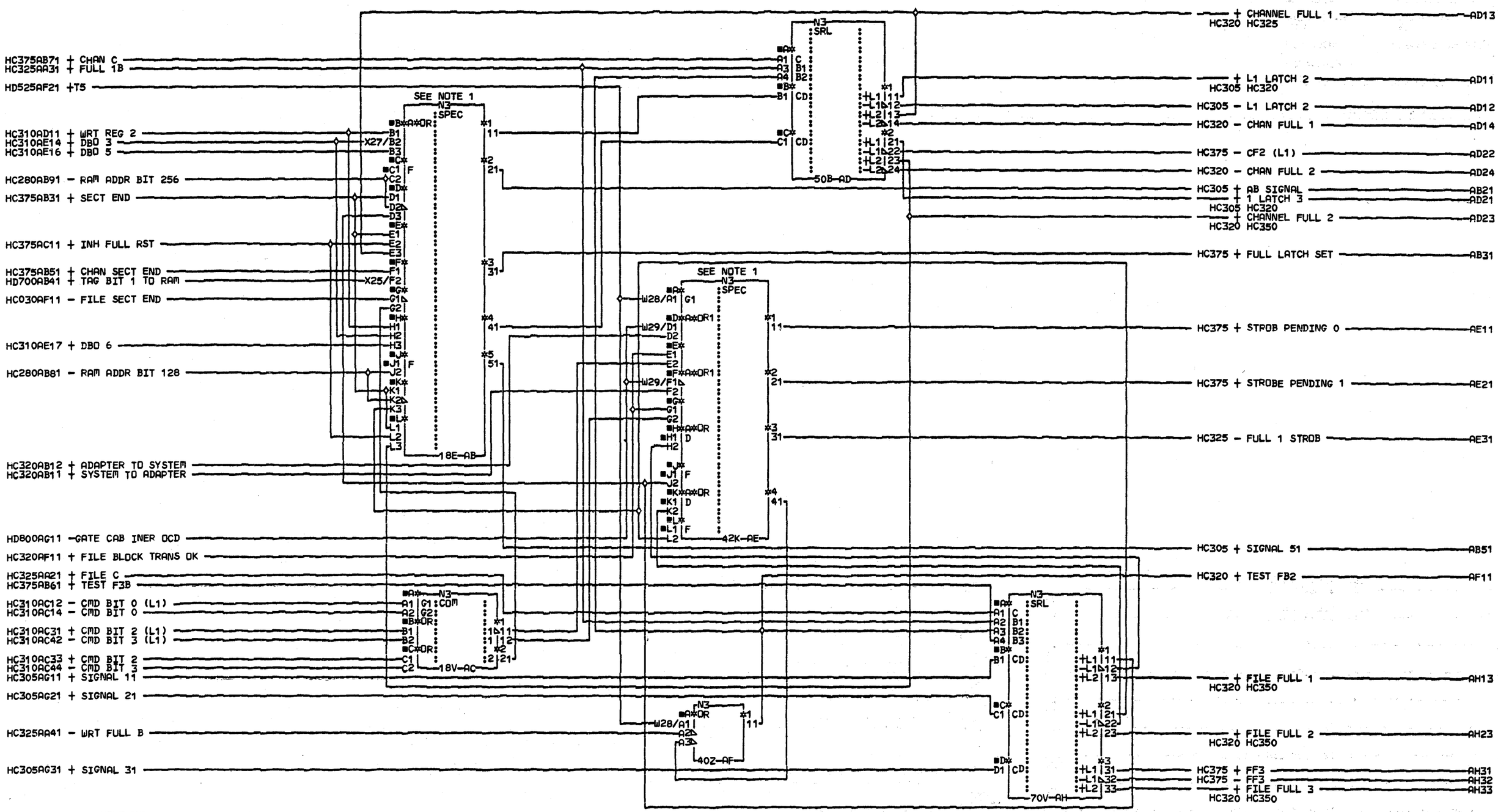
LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK AC

CID PIOFE JOB T4301503

HC280 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

RAM CONTROL 1 MODULE

PN8265648 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=18MAY79 2041

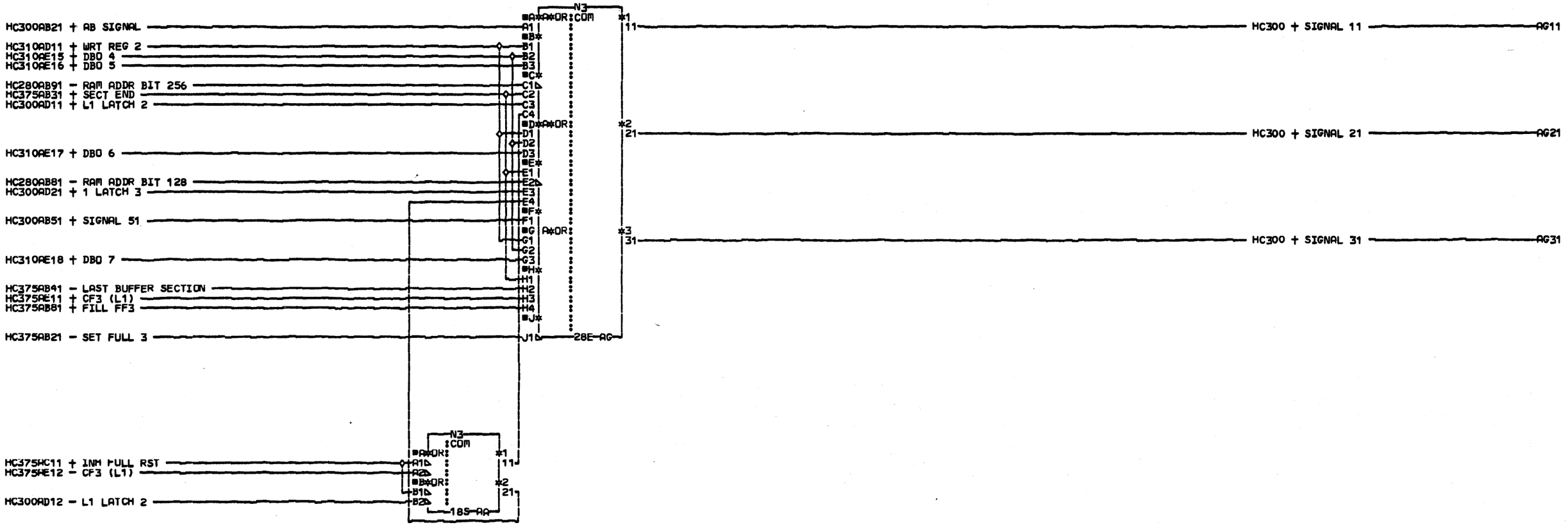
AUC= SEC

PFORM=KSEB NEXTBLK AL

CID PIOFE JOB T4301503

HC300 0001

HC300 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

RAM CONTROL 1 MOD

P/N 8265649 EC 833180

LOC=1A-A2C2

USN 00008 PRI=16OCT78 0818

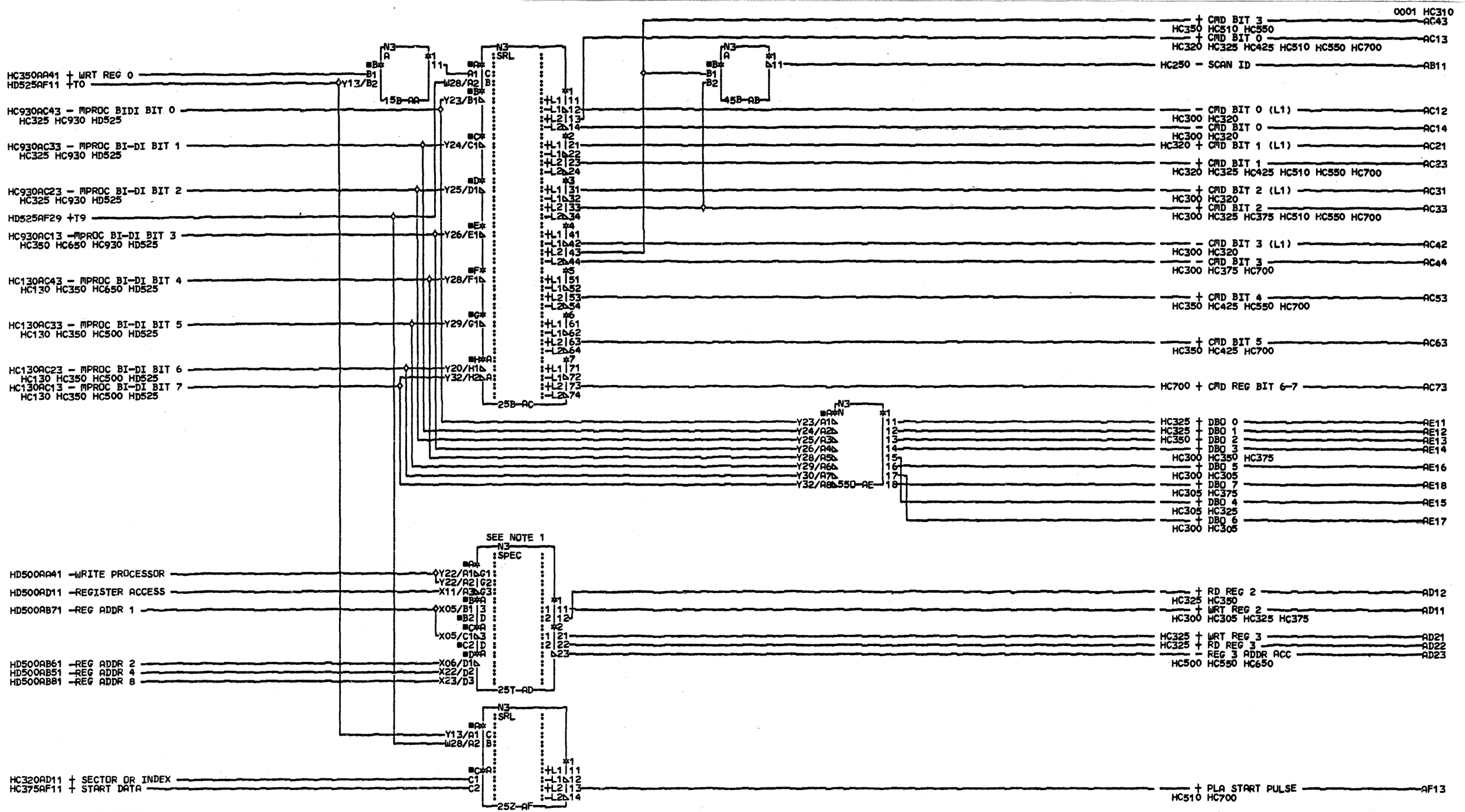
AUC= SEC

PFORM=KSEB NEXTBLK AH

CID PIOFE JOB K1500929

HC305 0001

HC305 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

RAM CONTROL 1 MOD

PN8265650 EC834824 PEC833180

LOC=1A-A2C2

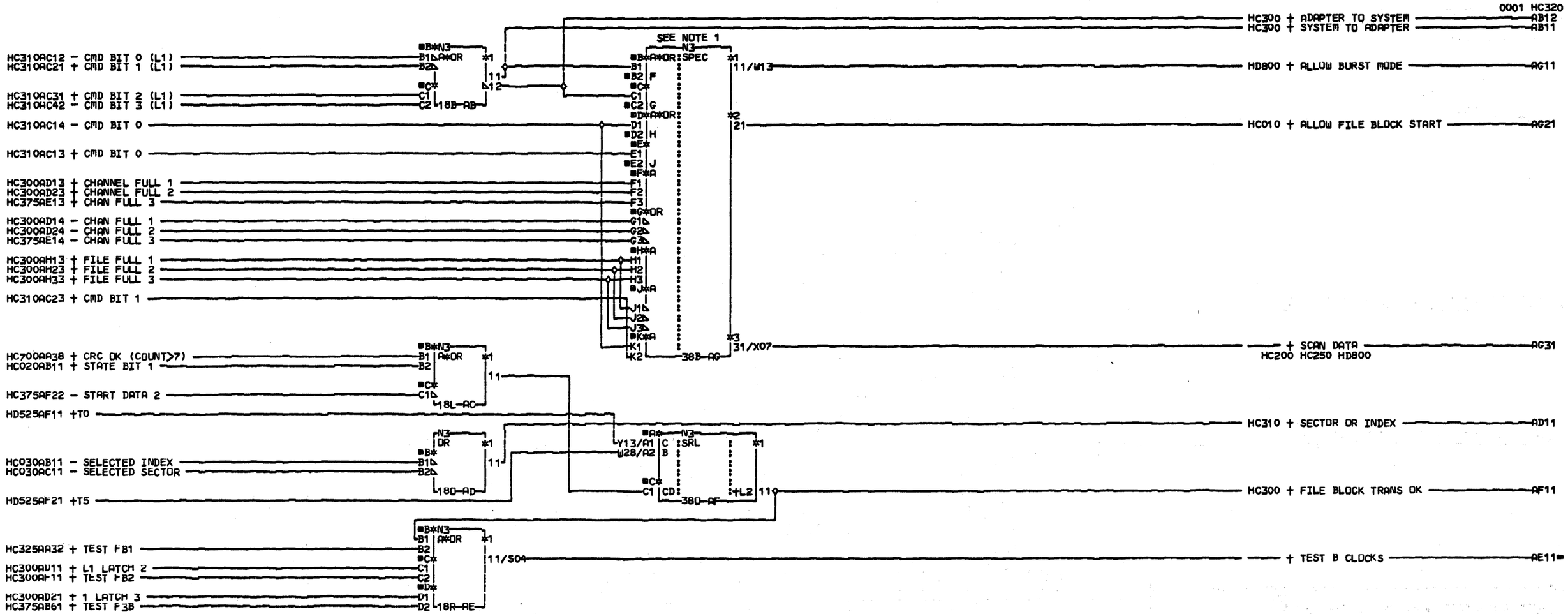
USN 00008 PRI=14JUN79 2037

AUC= SEC

PFORM=KSEB NEXTBLK AG

CID PIDFE JOB T4301503

HC310 0001 HC310 0001



COMMENTS

RAM CONTROL 1 MOD

P/N 8265651 EC 833180

LOC=1A-A2C2

USN 00008 PRI=16OCT78 0818

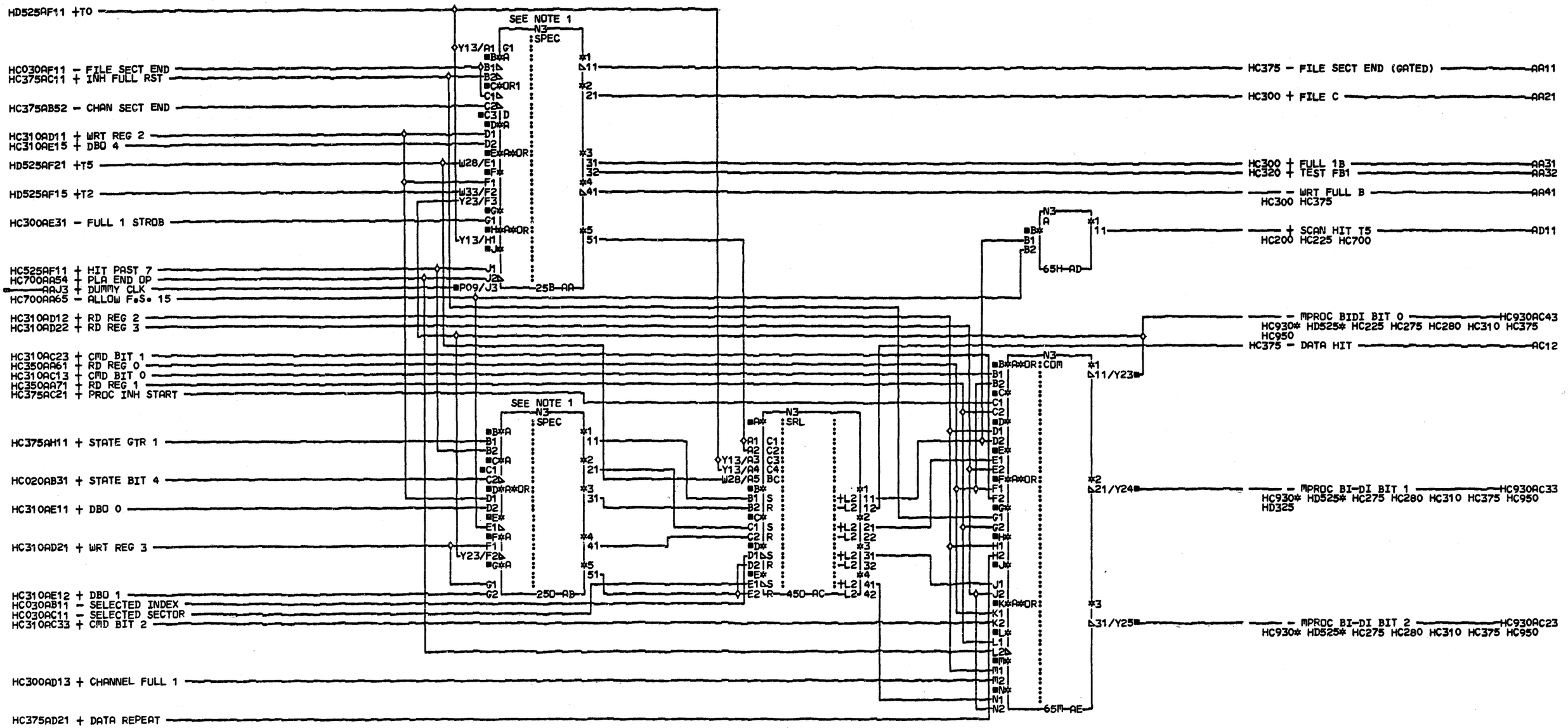
AUC= SEC

PFORM=KSEB NEXTBLK AH

CID PIOFE JOB K1500929

HCM20 0001

HCM20 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

RAM CONTROL 1 MOD

PN8265652 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

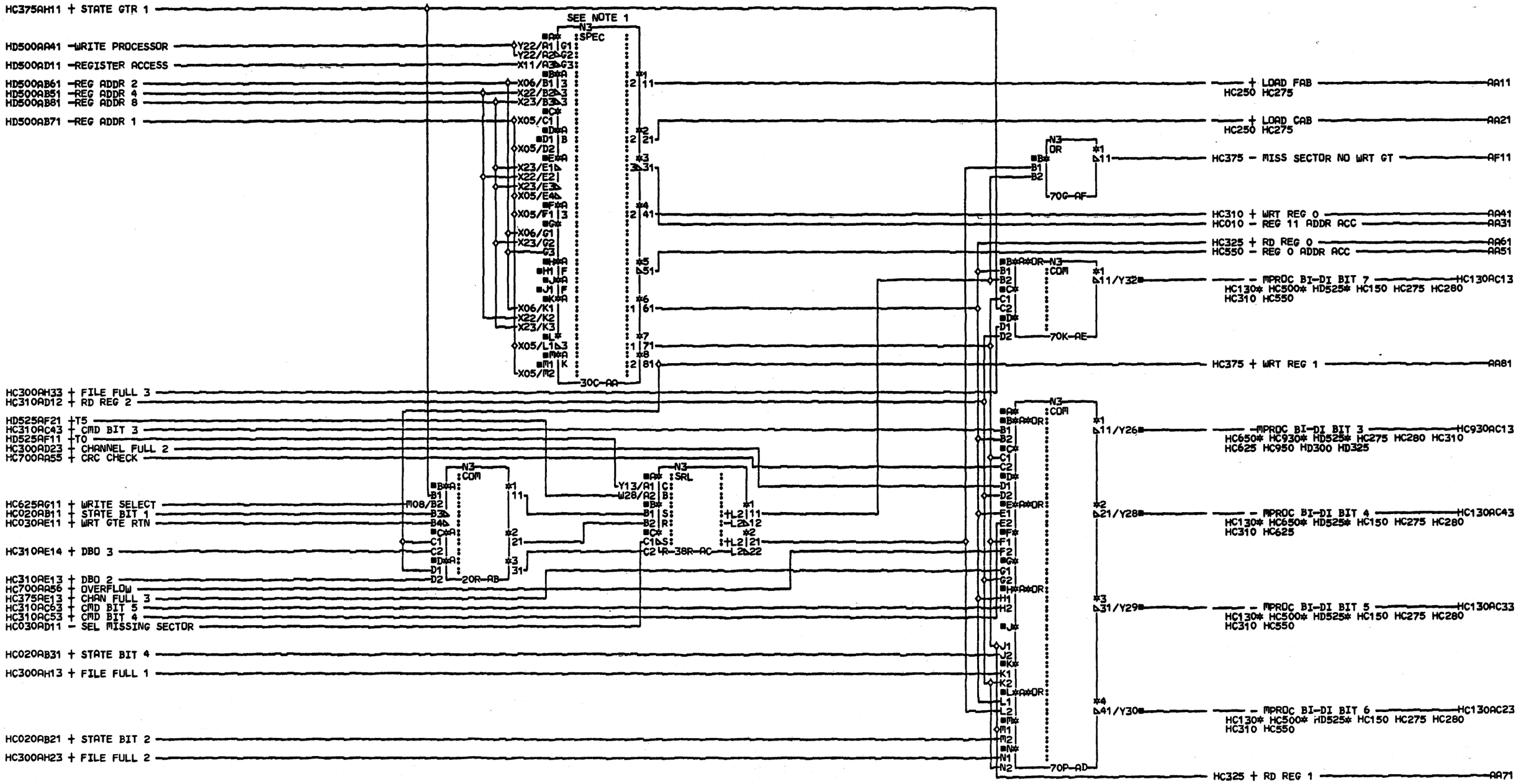
AUC= SEC

PFORM=KSEB NEXTBLK AF

CID PIOFE JOB T4301503

HCMMS 0001

HCMMS 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

RAM CONTROL 1 MOD

PN8265653 EC834824 PEC833180

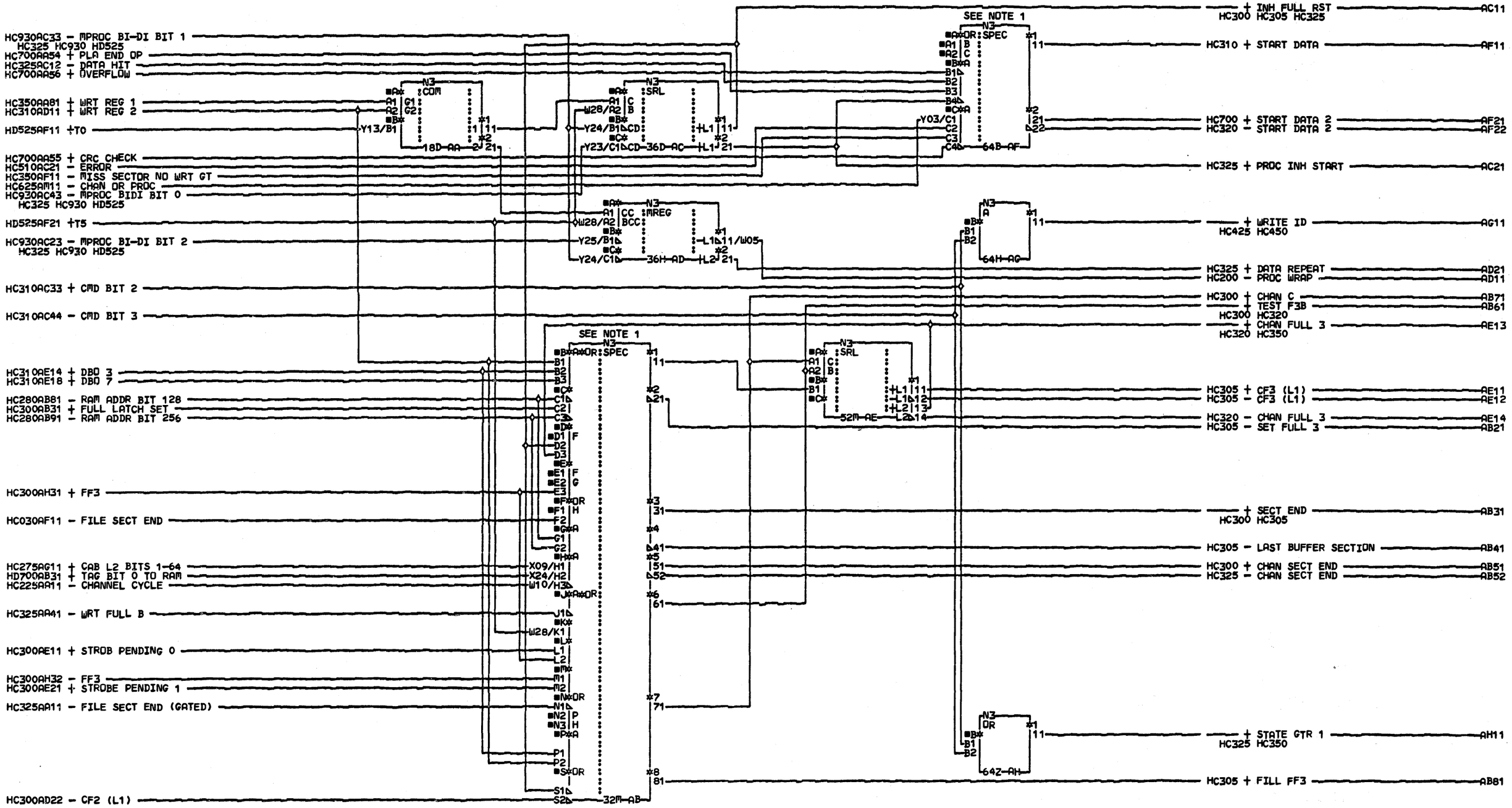
LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK AG

CID PIOFE JOB T4301503

HC350 0001



COMMENTS
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RAM CONTROL 1 MOD

PN8265654 EC834824 PEC833180

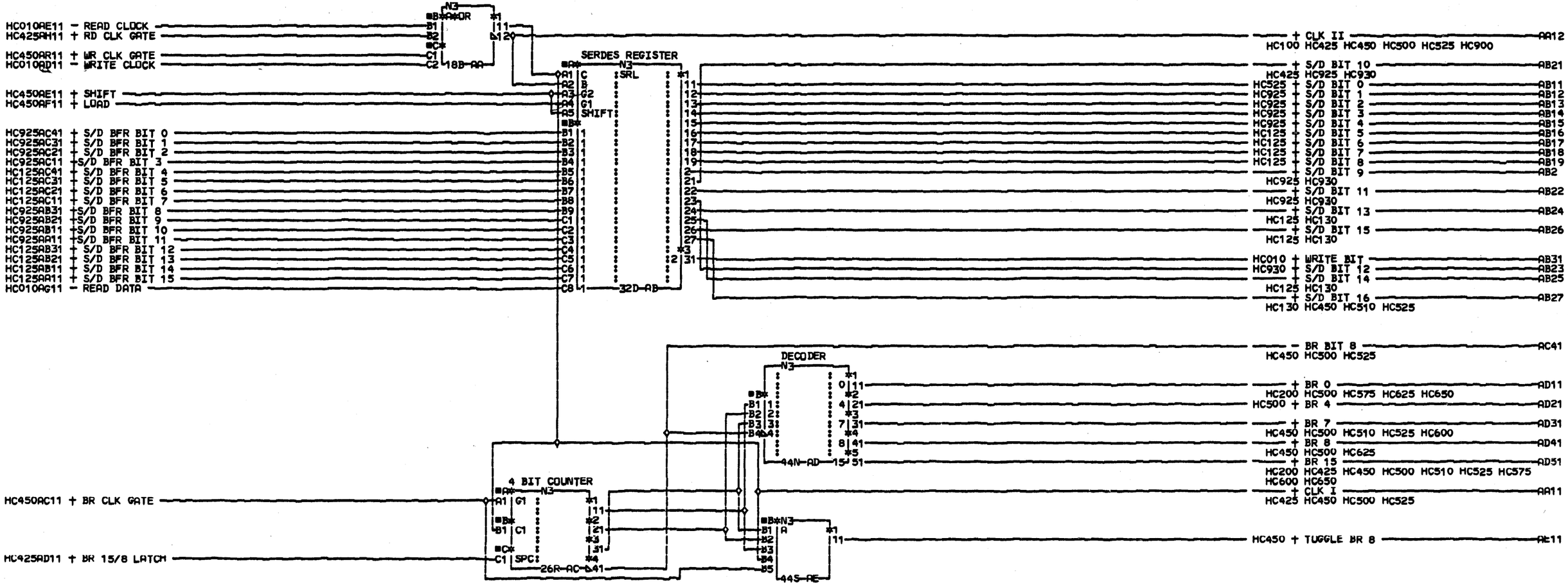
LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK AI

CID PIOFE JOB T4301503

HC375 0001 HC375



NOTE

THE SPC LINE ON THE COUNTER CAUSES THE COUNTER TO RESET TO 8 RATHER THAN 0 AFTER IT REACHES 15, THE REASON FOR THIS TO ADD THE TIME OF ONE BYTE TO THE SPACING ON THE FILE

18W-AF

COMMENTS

SERDES AND BIT RING MOD

P/N 8265655 EC 833180

LOC=1A-A2C2

USN 00008 PRI=16OCT78 0818

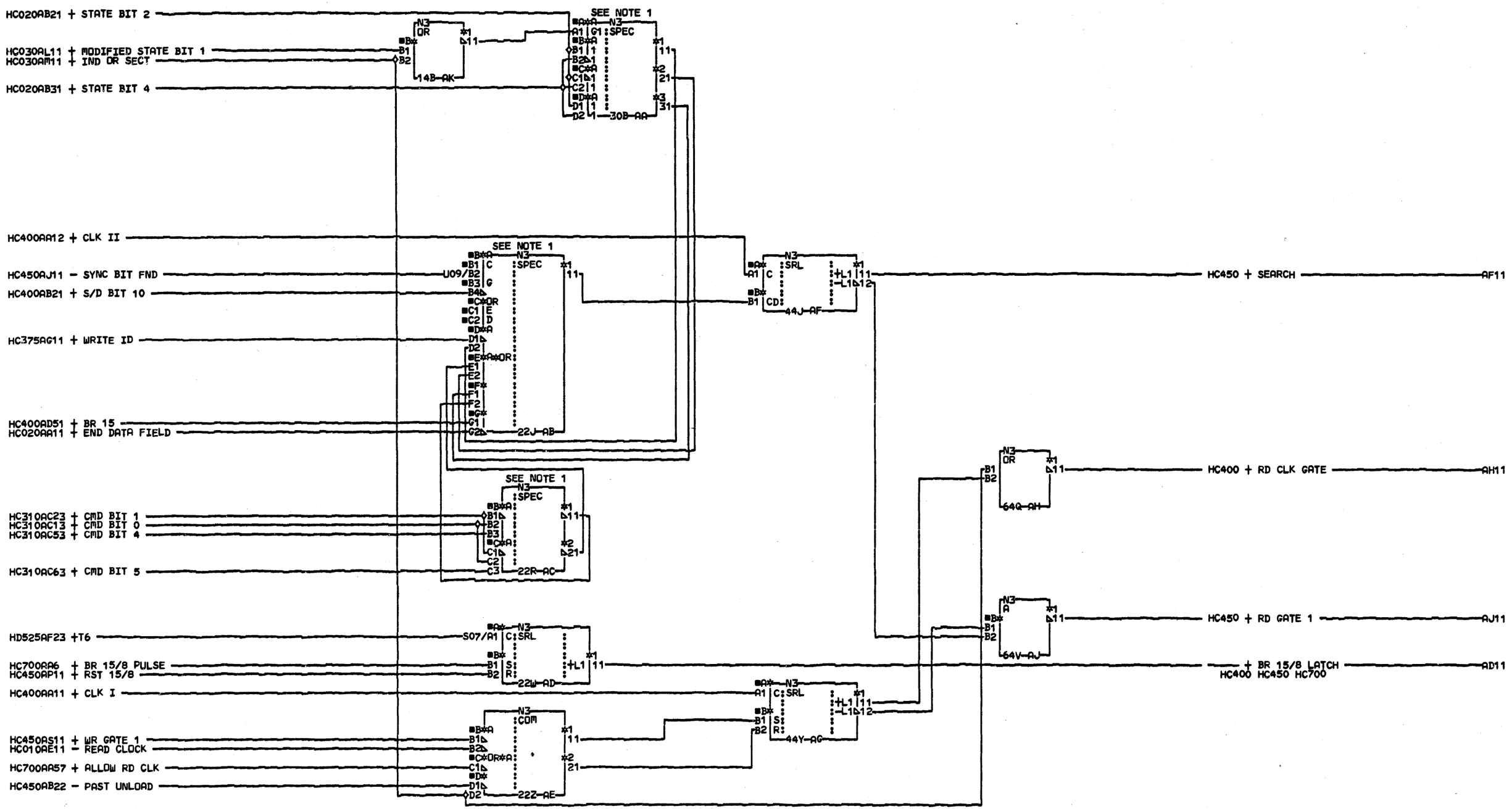
AUC= SEC

PFORM=KSEB NEXTBLK AG

CID PIOFE JOB K1500929

HC400 0001

HC400 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

SERDES AND BIT RING MOD

PN8265656 EC834824 PEC833180

LOC=1A-A2C2

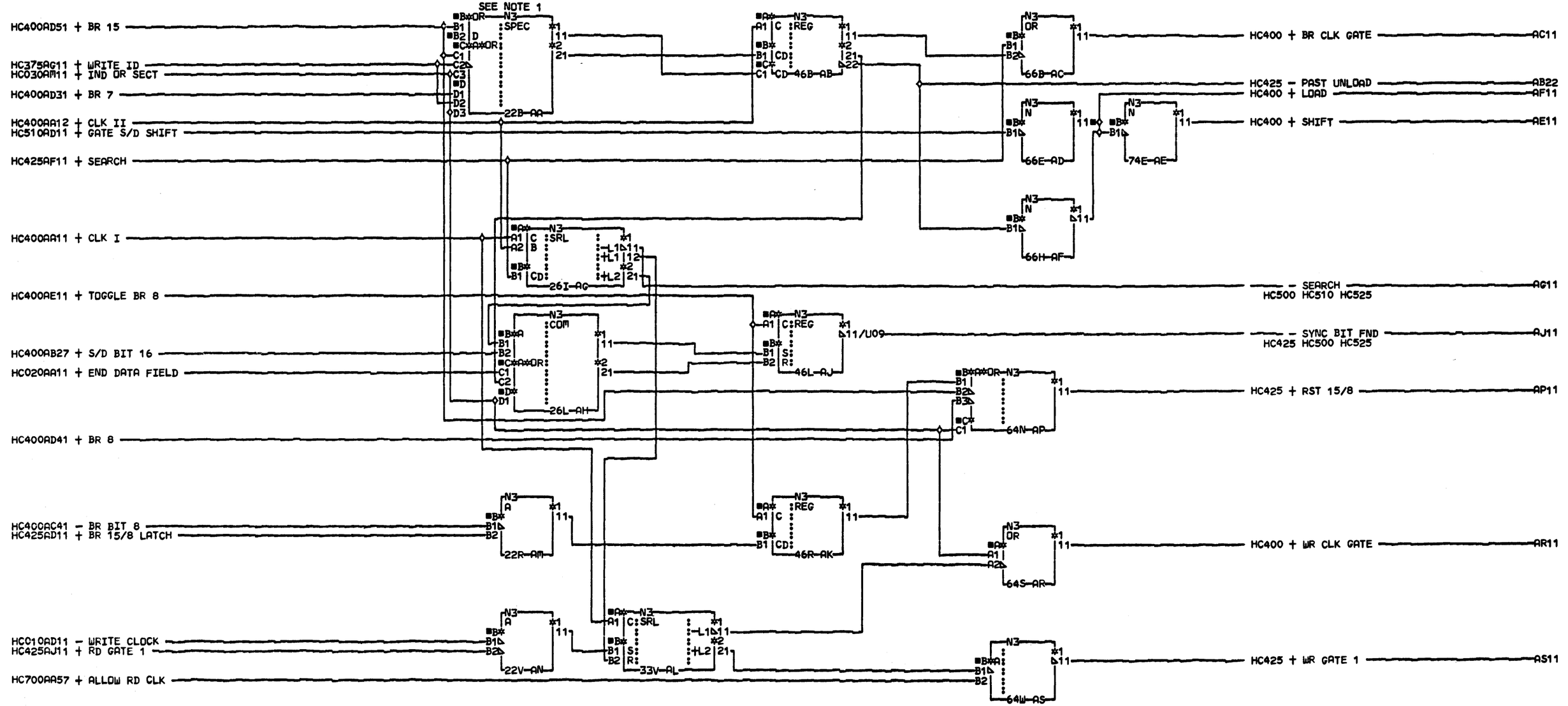
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AL

CID PIOFE JOB T4301503

HC425 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

SERDES AND BIT RING MOD

PN8265657 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AT

CID PIOFE JOB T4301503

HC450 0001

HC400AA12 + CLK II
HC400AC41 - BR BIT 8
HC525AH21 + SCAN STR 2
HC400AD51 + BR 15
HC400AA11 + CLK I
HC030AH11 - SERDES HI BYTES ALL ONES
HC030AG11 - SERDES LO BYTES ALL ONES
HC550AG21 + SCAN RD DATA 1
HC550AF21 + STATE 4
HC550AG51 + SCAN RD DATA 2
HC550AF31 + STATE 6
HC400AD31 + BR 7
HC600AH11 + FAST SYNC
HC575AH11 + SCAN R DATA CLK I
HC400AD41 + BR 8
HC450AJ11 - SYNC BIT FND
HC400AD21 + BR 4
HC450AG11 - SEARCH
HC550AF11 + STATE 2
HC400AD11 + BR 0
HC575AG11 - COUNT 1 INT
HC550AH41 + SCAN ID

N3 REG 18B-AA
N3 A 40B-AD
N3 A 28D-AC
SEE NOTE 1 N3 SPEC 18E-AB
N3 REG 38E-AE
SEE NOTE 1 N3 SPEC 58B-AM
N3 REG 18K-AF
SEE NOTE 1 N3 OR SPEC 38K-AK
N3 A 14N-AG
N3 REG 66M-AN
N3 OR 68R-AP

HC525 + COMPARE GATE — AK11
HC525 - COMPARE GATE — AK12
HC225 - HI BYTE HIT — AN11
HC525 + ALLOW DECISION — AP11

HC550AH42 - SCAN ID
HC550AF12 - STATE 2
HC575AF11 + COUNT 2 INT
N3 OR 18S-AH

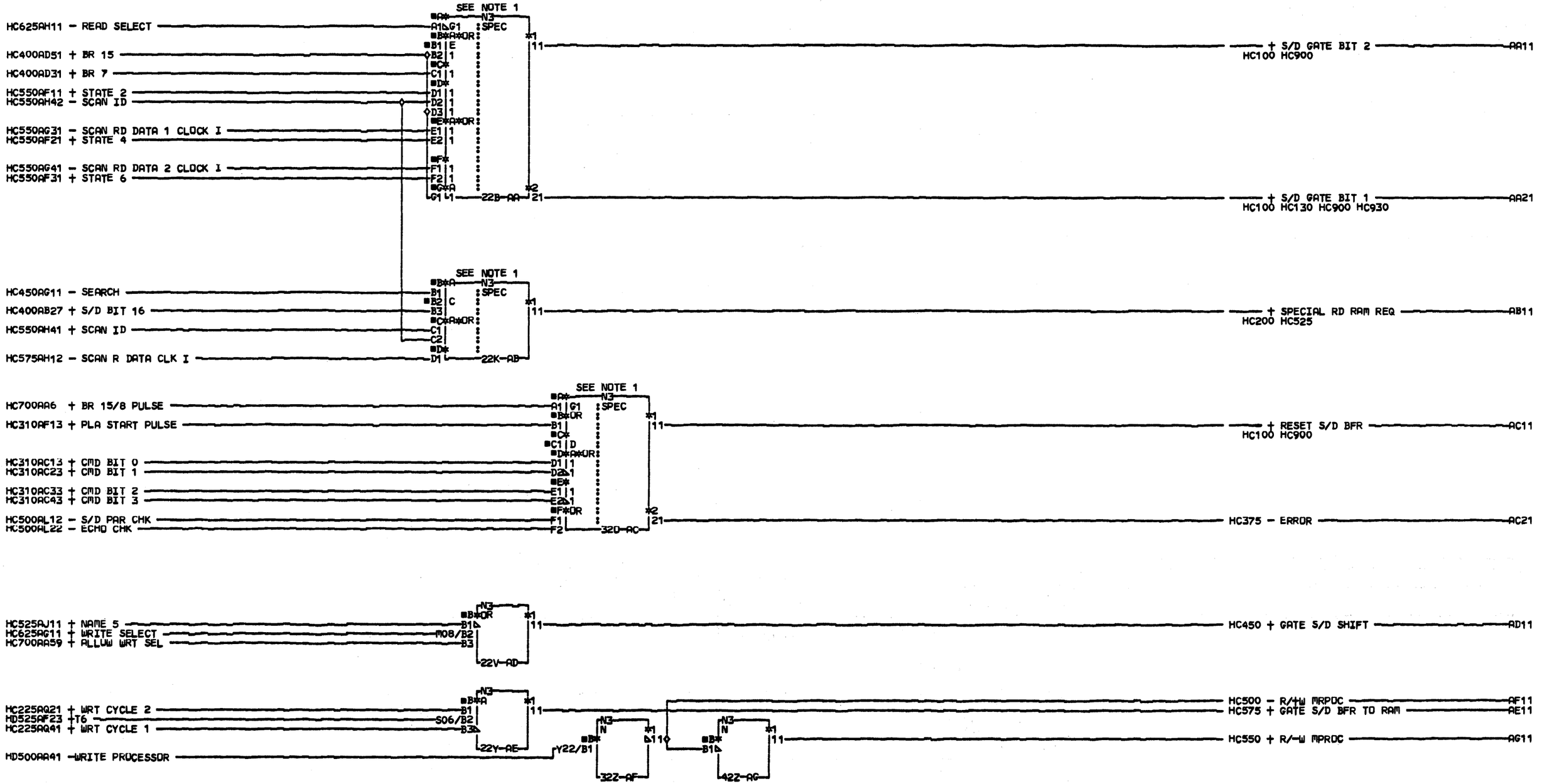
HD525AF23 +T6
HC575AJ11 - BFR PAR CHK
HC575AE11 - S/D BFR PAR CHK 1
HC575AE21 - S/D BFR PAR CHK 2
HC310AD23 - REG 3 ADDR ACC
HC510AF11 - R/+W MPROC
HC550AD11 + RST1
HD600AA55 - ROS P CHK
HC550AD21 + RST2
HC525AC21 + SCAN EQ ON
HC550AD31 + RST3

N3 A OR SRL 18V-AJ
N3 A SRL 40V-AL

- MPROC BI-DI BIT 5 — HC130AC33
HC130* HC350* HD525* HC150 HC275 HC280 HC310 HC550
HC510 - S/D PAR CHK — AL12
- MPROC BI-DI BIT 6 — HC130AC23
HC130* HC350* HD525* HC150 HC275 HC280 HC310 HC550
HC510 - ECHO CHK — AL22
- MPROC BI-DI BIT 7 — HC130AC13
HC130* HC350* HD525* HC150 HC275 HC280 HC310 HC550

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

FILE INTF CNTRL MOD
PN8265658 EC834824 PEC833180
LOC=1A-A2C2
USN 00008 PRI=16MAY79 2152
AUC= SEC
PFORM=KSEB NEXTBLK AQ
CID PIOFE JOB T4301503



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

FILE INTF CNTL MOD

P/N 8265659 EC 833180

LOC=1A-A2C2

USN 00008 PRI=16OCT78 0818

AUC= SEC

PFORM=KSEB NEXTBLK AH

CID PIOFE JOB K1500929

HC510 0001

HC510 0001

HC400AA11 + CLK I
HC400AA12 + CLK II
HC500AK11 + COMPARE GATE
HC400AB11 + S/D BIT 0
HC400AB27 + S/D BIT 16
HC400AD31 + BR 7
HC500AK12 - COMPARE GATE
HC400AD51 + BR 15
HC600AH11 + FAST SYNC
HC400AC41 - BR BIT 8
HC500AP11 + ALLOW DECISION
HC550AG61 + SCAN RD HI/EQ
HC550AG11 + SCAN RD LO/EQ
HC550AH41 + SCAN ID
HC550AF11 + STATE 2
HC575AH11 + SCAN R DATA CLK I
HC550AG71 + SCAN RD EQ
HC450AJ11 - SYNC BIT FND
HC450AG11 - SEARCH
HC510AB11 + SPECIAL RD RAM REQ

20B-AA
36B-AD
62B-AL
62H-AK
50D-AE
20E-AB
44L-AF
62M-AH
28N-AC
46Z-AG
60Y-AJ

SEE NOTE 1

HC325 + HIT PAST 7 — AF11
HC550 - SCAN HIT DLYD — AH11
HC500 + SCAN STR 2 — AH21
HC550 - SCAN STR 2 — AH22
HC500 + SCAN EQ ON — AC21
HC510 + NAME 5 — AJ11

COMMENTS
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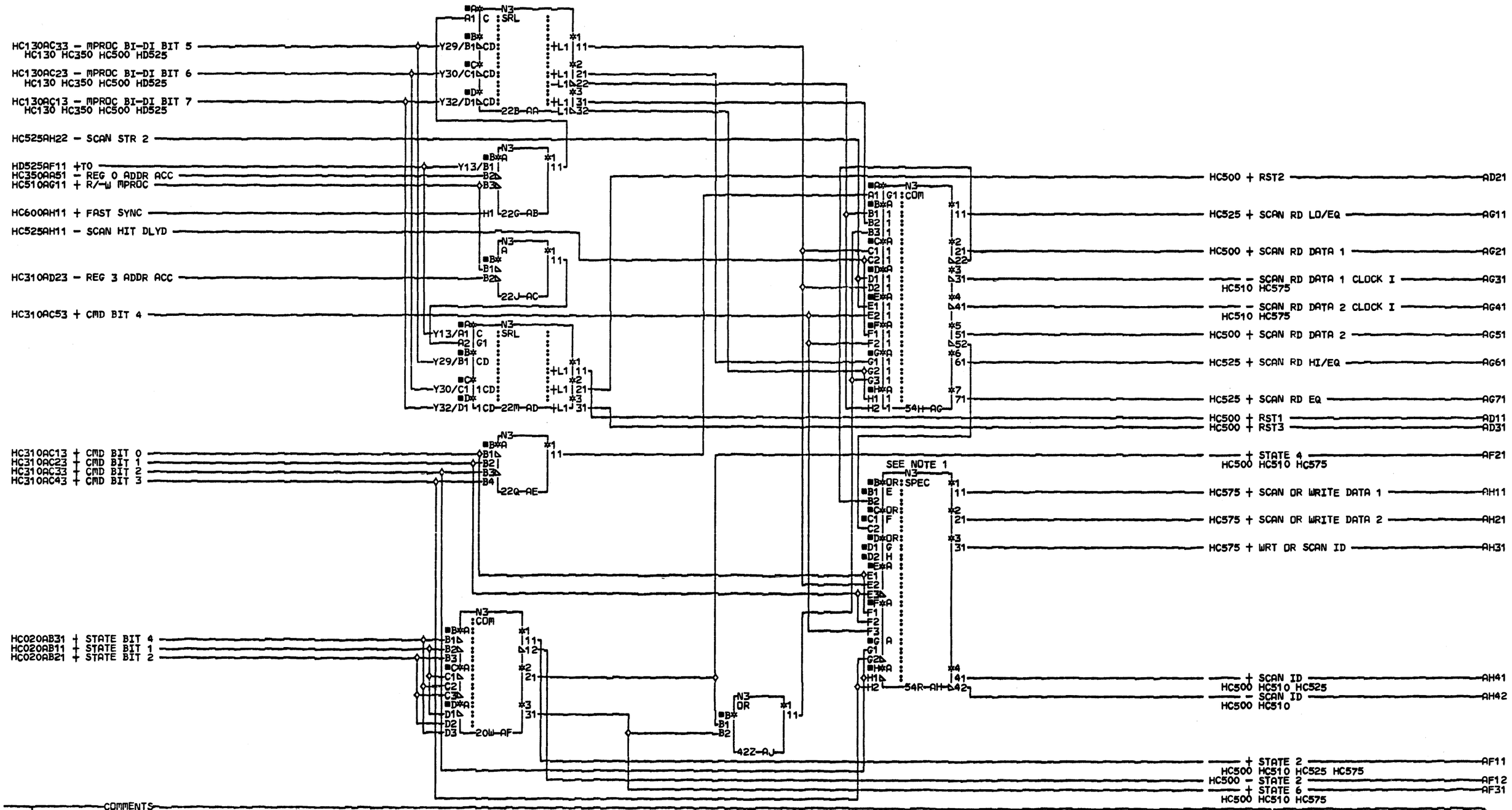
FILE INTF CNTL MOD

PN8265660 EC834824 PEC833180
LOC=1A-A2C2
USN 00008 PRI=16MAY79 2152
AUC= SEC
PFORM=KSEB NEXTBLK AM
CID PIOFE JOB T4301503

HC525 0001

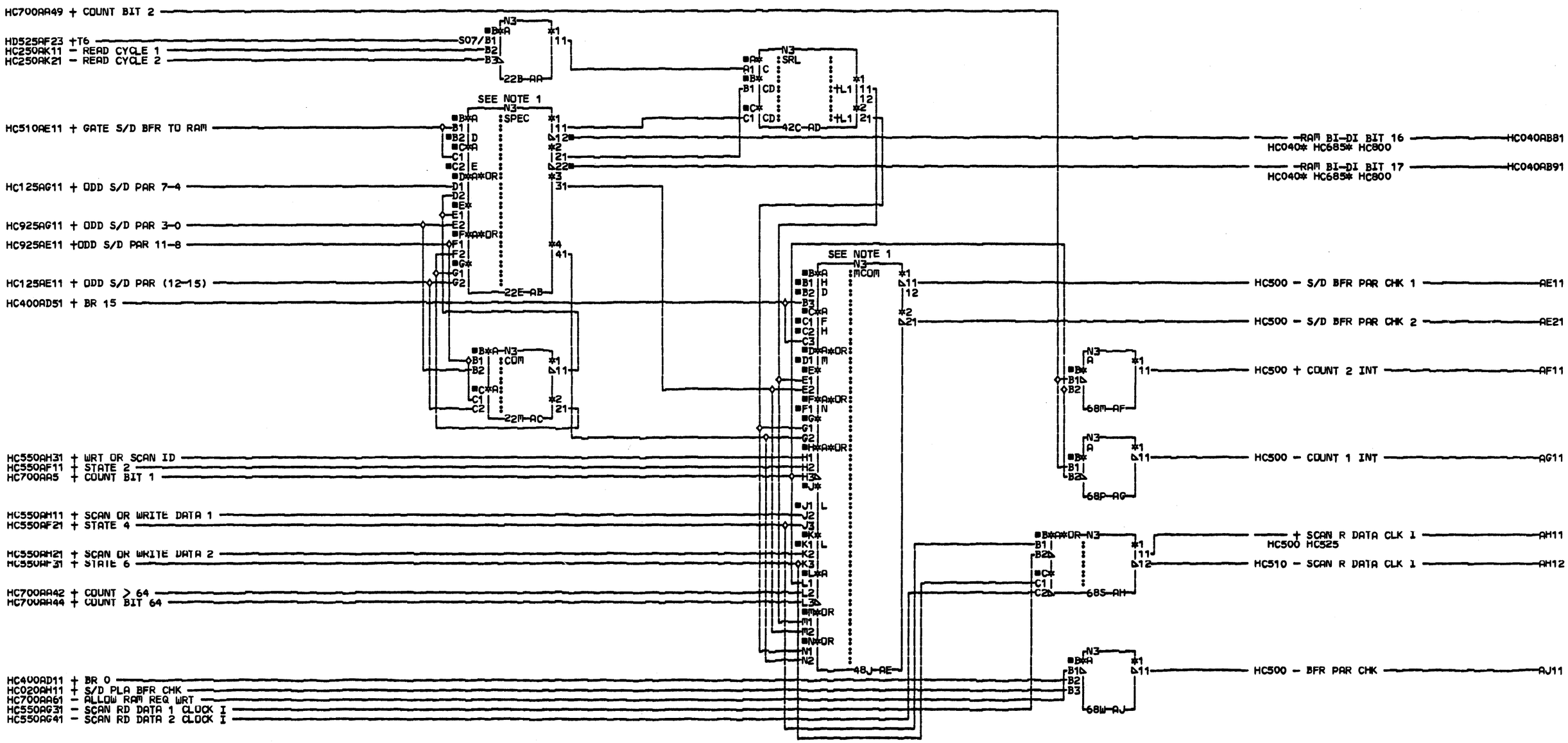


COMMENTS

D1 COPYRIGHT IBM CORP. 1978

FILE INTF CNTL MOD	
PN8265661 EC834824 PEC833180	
LOC=1A-A2C2	
USN 00008	PRI=16MAY79 2152
AUC=	SEC
PFORM=KSEB	NEXTBLK AK
CID PIOFE	JOB T4301503

HC550 0001



COMMENTS

FILE INTF CNTL MOD

P/N 8265662 EC 833180

LOC=1A-A2C2

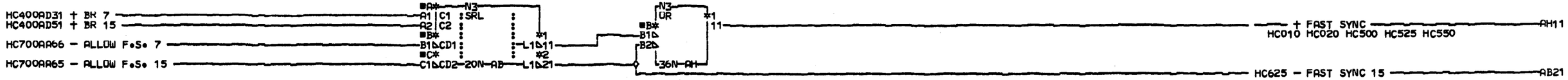
USN 00008 PRI=16OCT78 0818

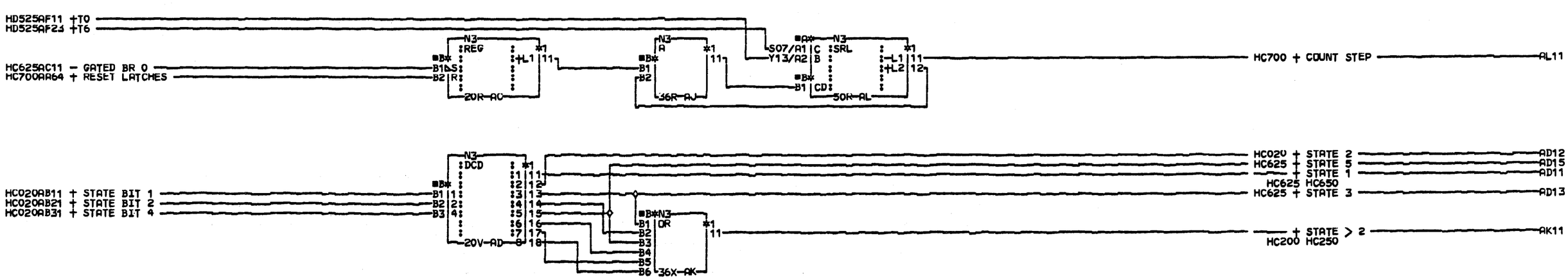
AUC= SEC

PFORM=KSEB NEXTBLK AK

CID PIDFE JOB K1500929

HC575 0001





COMMENTS

MISC CNTL MOD

P/N 8265663 EC 833180

LOC=1A-A2C2

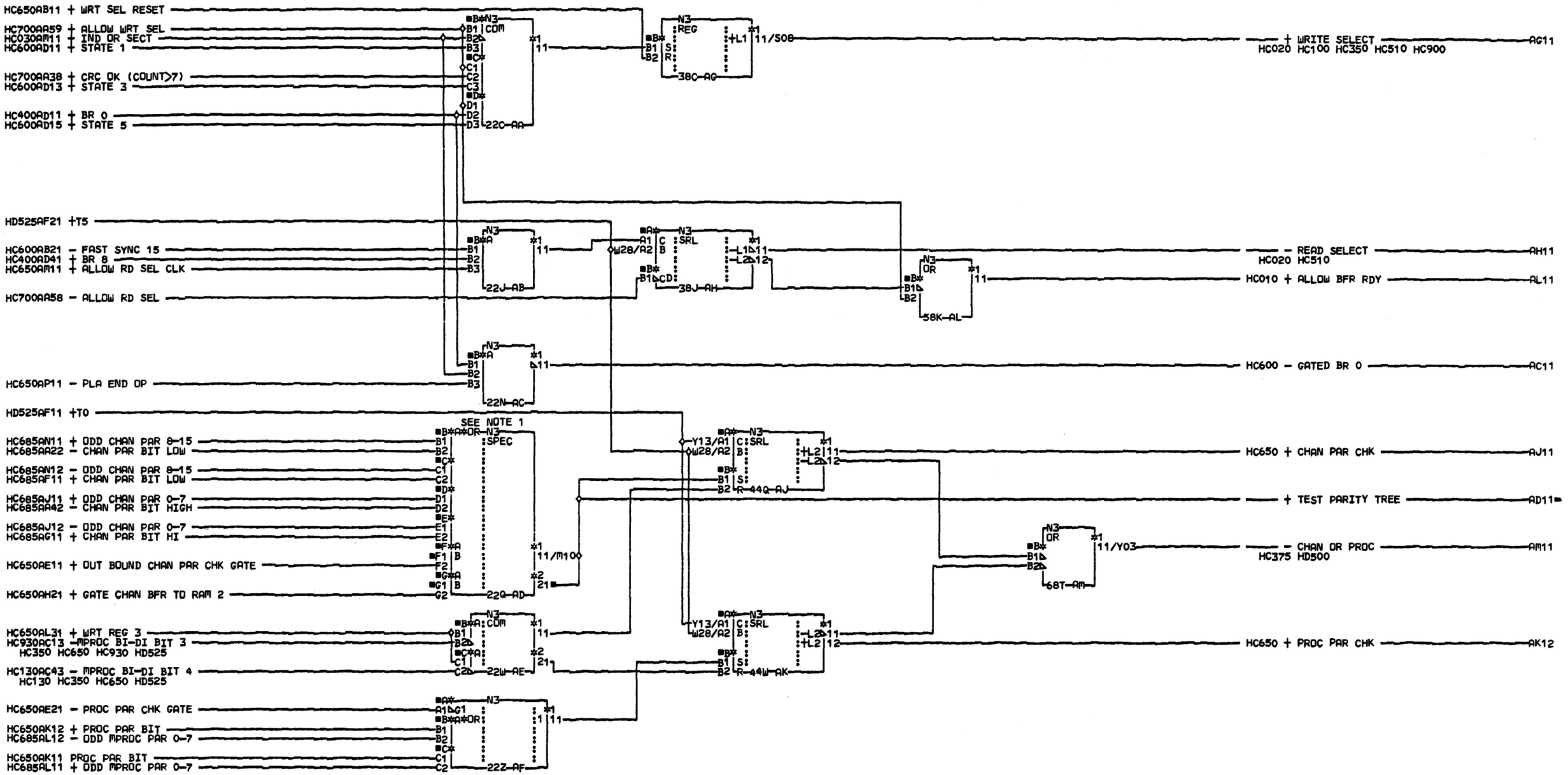
USN 00008 PRI=16OCT78 0818

AUC= SEC

PFORM=KSEB NEXTBLK AM

CID PIOFE JOB K1500929

HC600 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

MISC CNTL MOD

PN8265664 EC834824 PEC833180

LOC=1A-A2C2

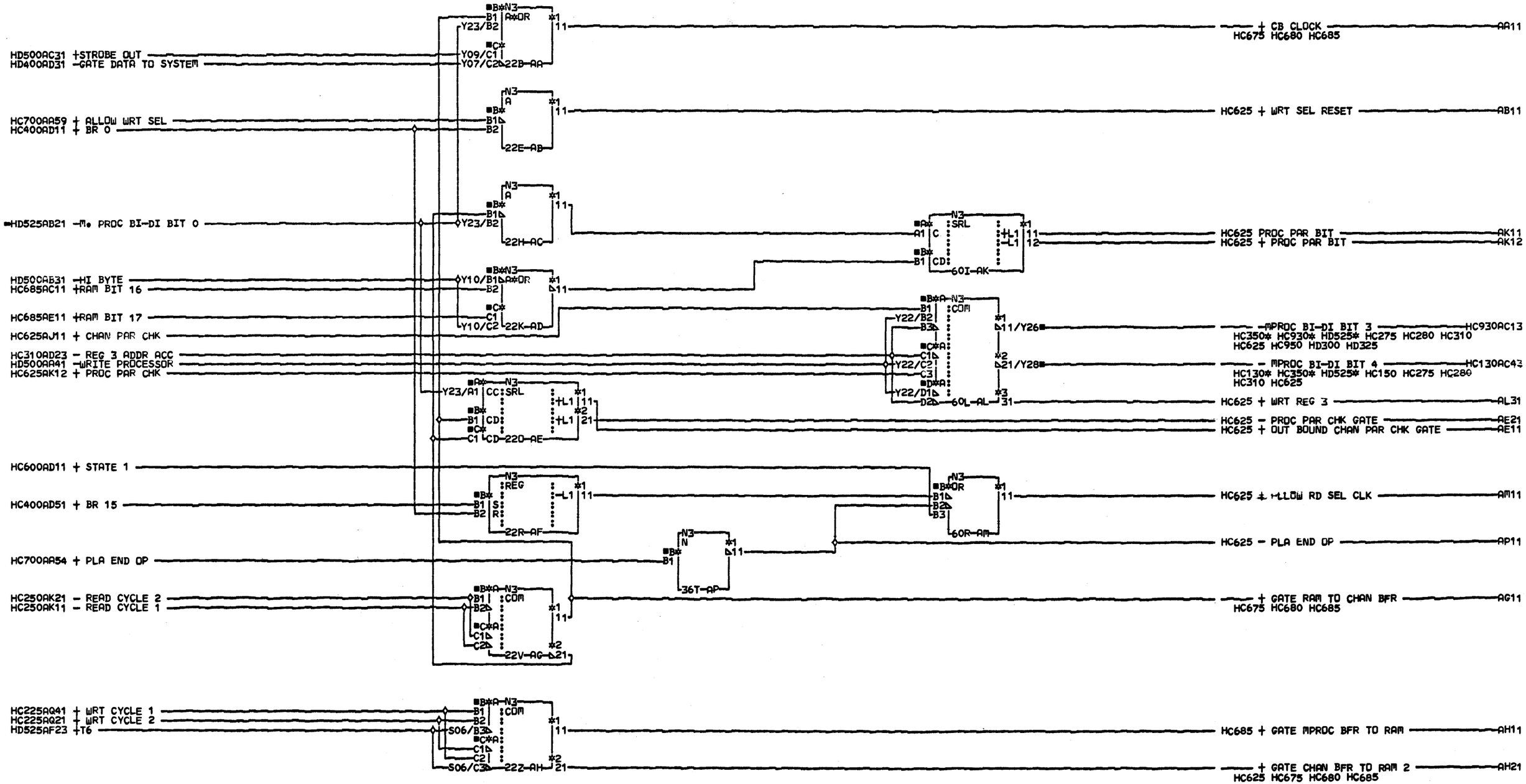
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AN

CID PIOFE JOB T4301503

HC625 0001 HC625 0001



COMMENTS

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MISC CNTL MOD

PN8265665 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=14JUN79 2037

AUC= SEC

PFORM=KSEB NEXTBLK AQ

CID PIOFE JOB T4301503

HC650 0001

HC650 0001

HC650AA11 + CB CLOCK
HD400AD31 -GATE DATA TO SYSTEM
HC650AG11 + GATE RAM TO CHAN BFR
HD200AA11 +GATE DATA FROM SYSTEM
HC650AH21 + GATE CHAN BFR TO RAM 2

N3 REG
A1 C
Y07/A2 G2
A3 G3
Y05/A4 G4
A5 G5
B1 2CD
C1 3CD
D1 2CD
E1 3CD
F1 2CD
G1 3CD
H1 2CD
J1 3CD-20B-AA
*1 4 11/Z05
*2 5 21
*3 4 31/Z06
*4 5 41
*5 4 51/Z07
*6 5 61
*7 4 71/Z09
*8 5 81

Z05/B1 — 66D-AB
Z06/B1 — 66I-AD
Z07/B1 — 66N-AF
Z09/B1 — 66S-AH
B1 — 48G-AC
B1 — 48L-AE
B1 — 48P-AG
B1 — 48U-AJ

-CAP BI-DI DATA BUS BIT 3 — HD200AH71
HD200*
-CAP BI-DI DATA BUS BIT 0 — HD200AH31
HD200*
- RAM BI-DI BIT 0 — HC040AA11
HC040* HC935* HC800 HC950
- RAM BI-DI BIT 1 — HC040AA21
HC040* HC935* HC800 HC950
- RAM BI-DI BIT 2 — HC040AA31
HC040* HC935* HC800 HC950
-CAP BI-DI DATA BUS BIT 1 — HD200AH11
HD200*
-CAP BI-DI DATA BUS BIT 2 — HD200AH51
HC680* HD200*

HC685 + CHAN BFR 1 — AK21

HC685 + CHAN BFR 3 — AK41
HC685 + CHAN BFR 2 — AK31
HC685 + CHAN BFR 0 — AK11
- RAM BI-DI BIT 3 — HC040AA41
HC040* HC935* HC800 HC950

COMMENTS
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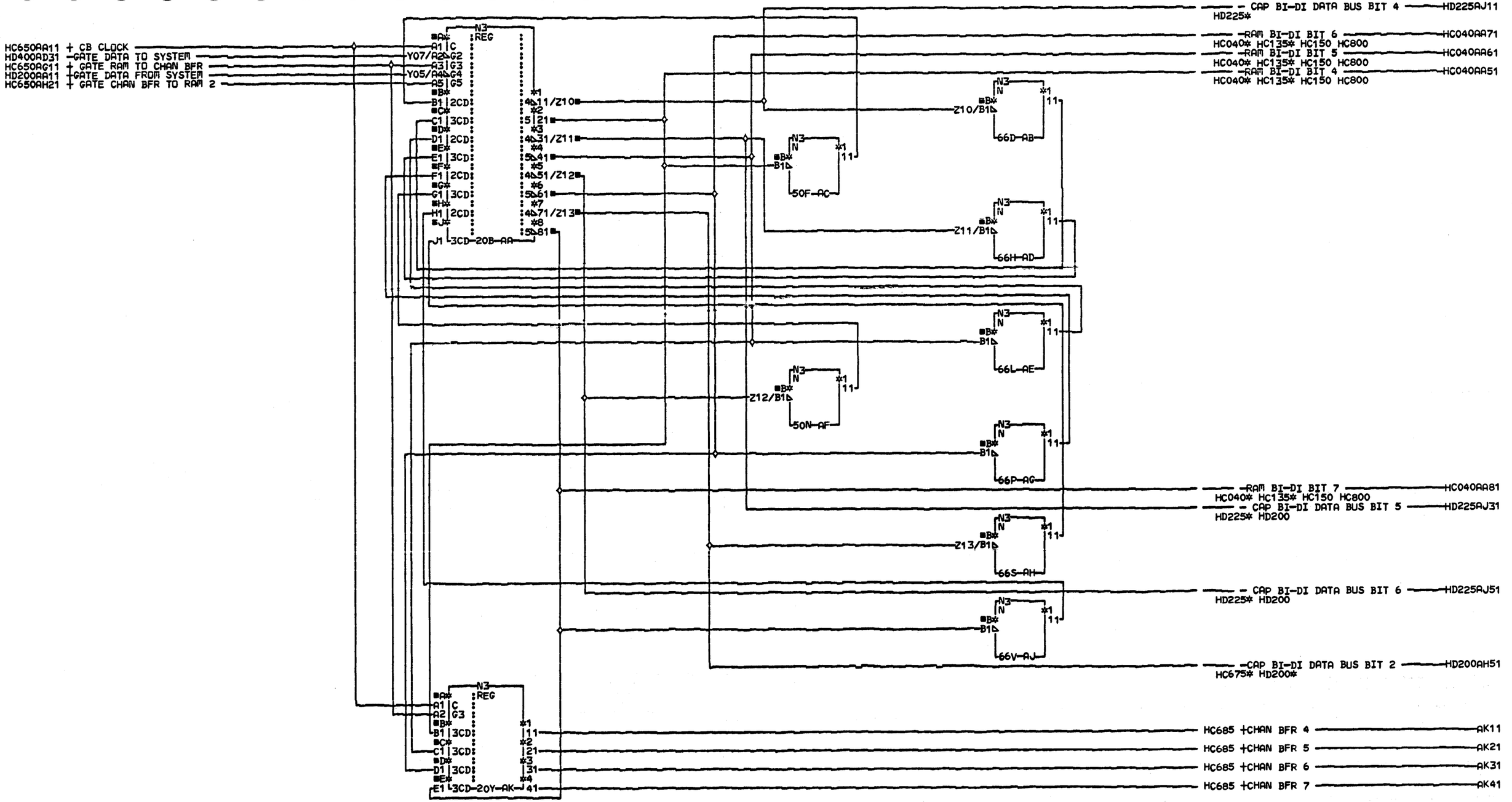
MISC CNTL MOD

PN8265666 EC834824 PEC833180
LOC=1A-A2C2
USN 00008 PRI=14JUN79 2037
AUC= SEC
PFORM=KSEB NEXTBLK AL
CID PIOFE JOB T4301503

HC675 0001



COMMENTS

MISC CNTL MOD

PN8265667 EC834824 PEC833180

LOC=1A-A2C2

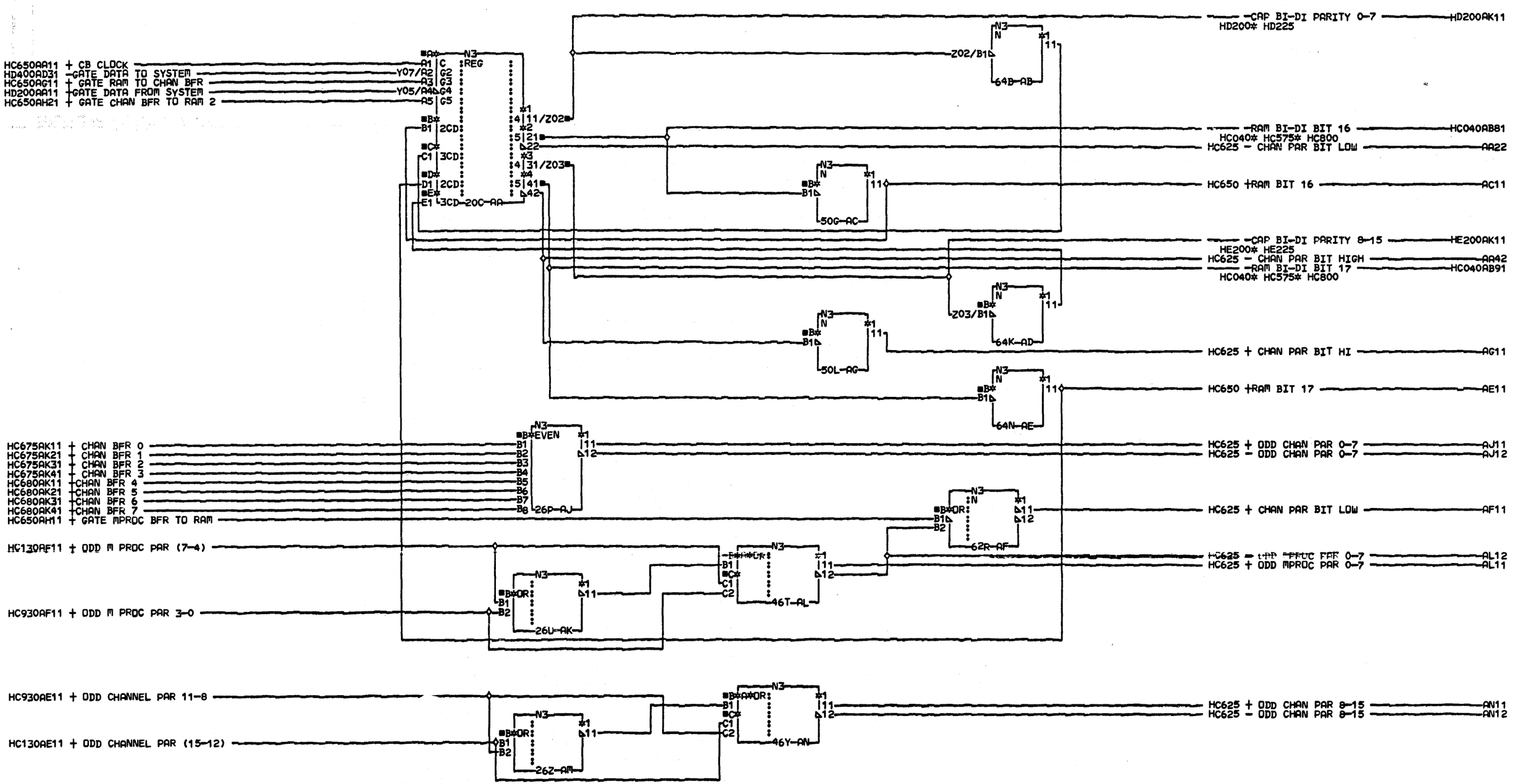
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AL

CID PIOFE JOB T4301503

HC680 0001



COMMENTS
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MISC CNTL MOD

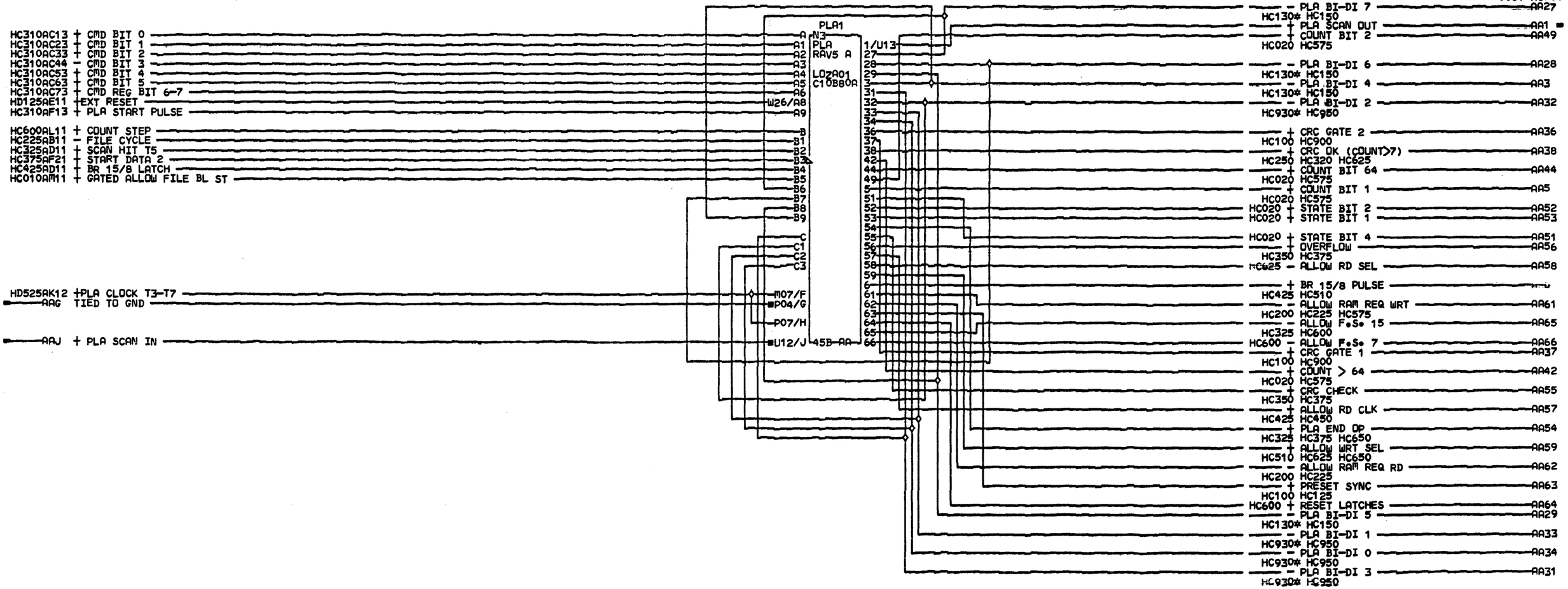
PN8265668 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK AD

CID PIOFE JOB T4301503



COMMENTS

FILE CNT PLA

PN8265669 EC834824 PEC833180

LOC=1A-A2C2

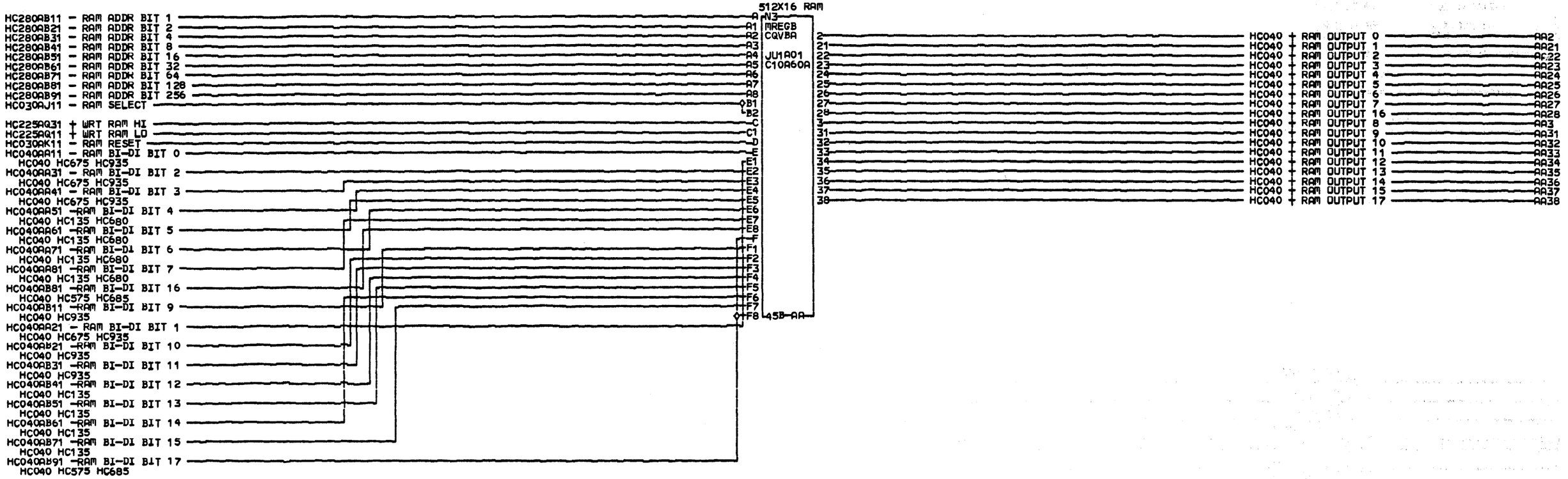
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AR

CID PIOFE JOB T4301503

HC700 0001



COMMENTS

DATA STORE RAM

P/N 8265670 EC 833180

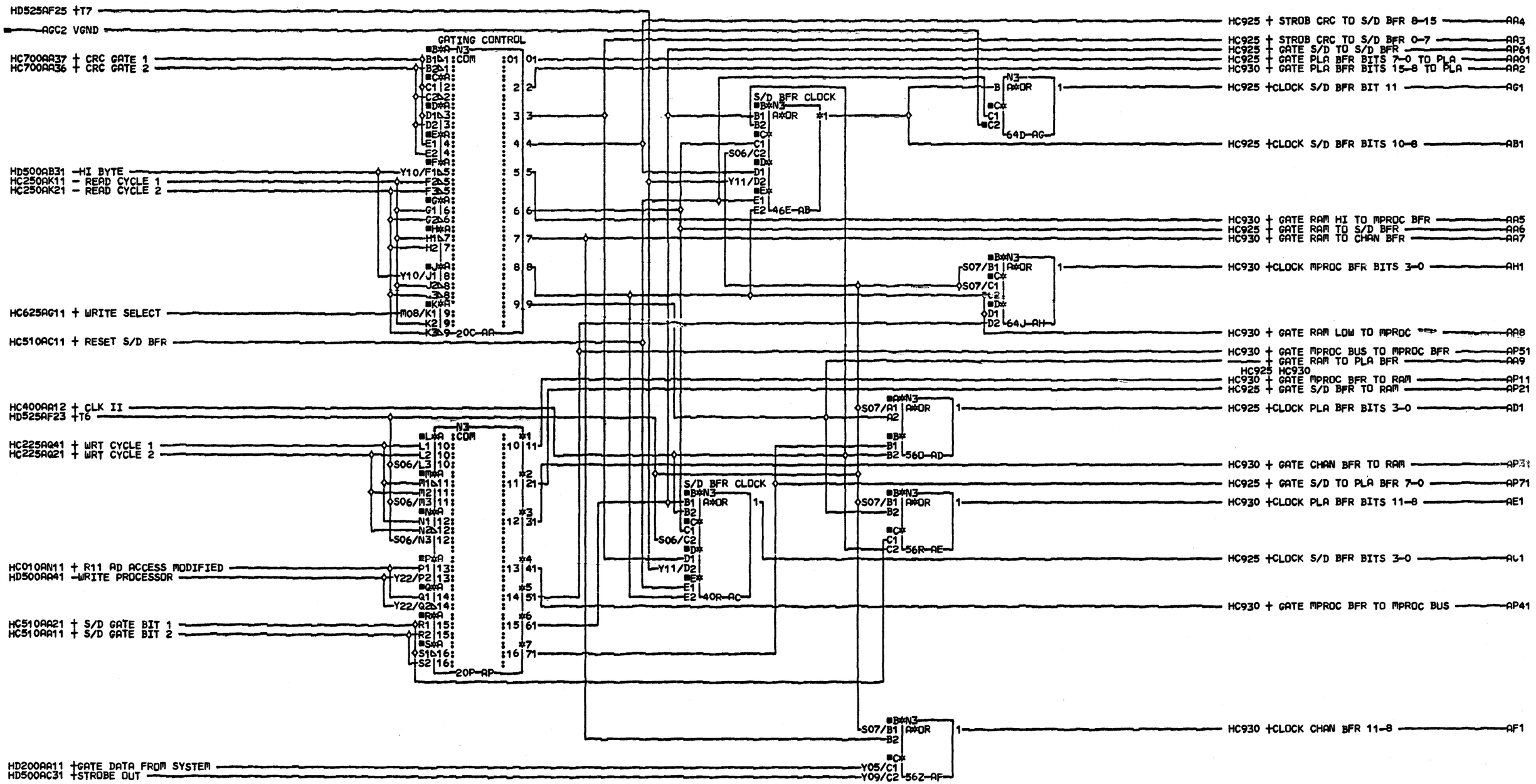
LOC=1A-A2C2

USN 00008 PRI=16OCT78 0818

AUC= SEC

PFORM=KSEB NEXTBLK AK

CID PIOFE JOB K1500929



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

DATA FLOW CONTROL

PN8265671 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

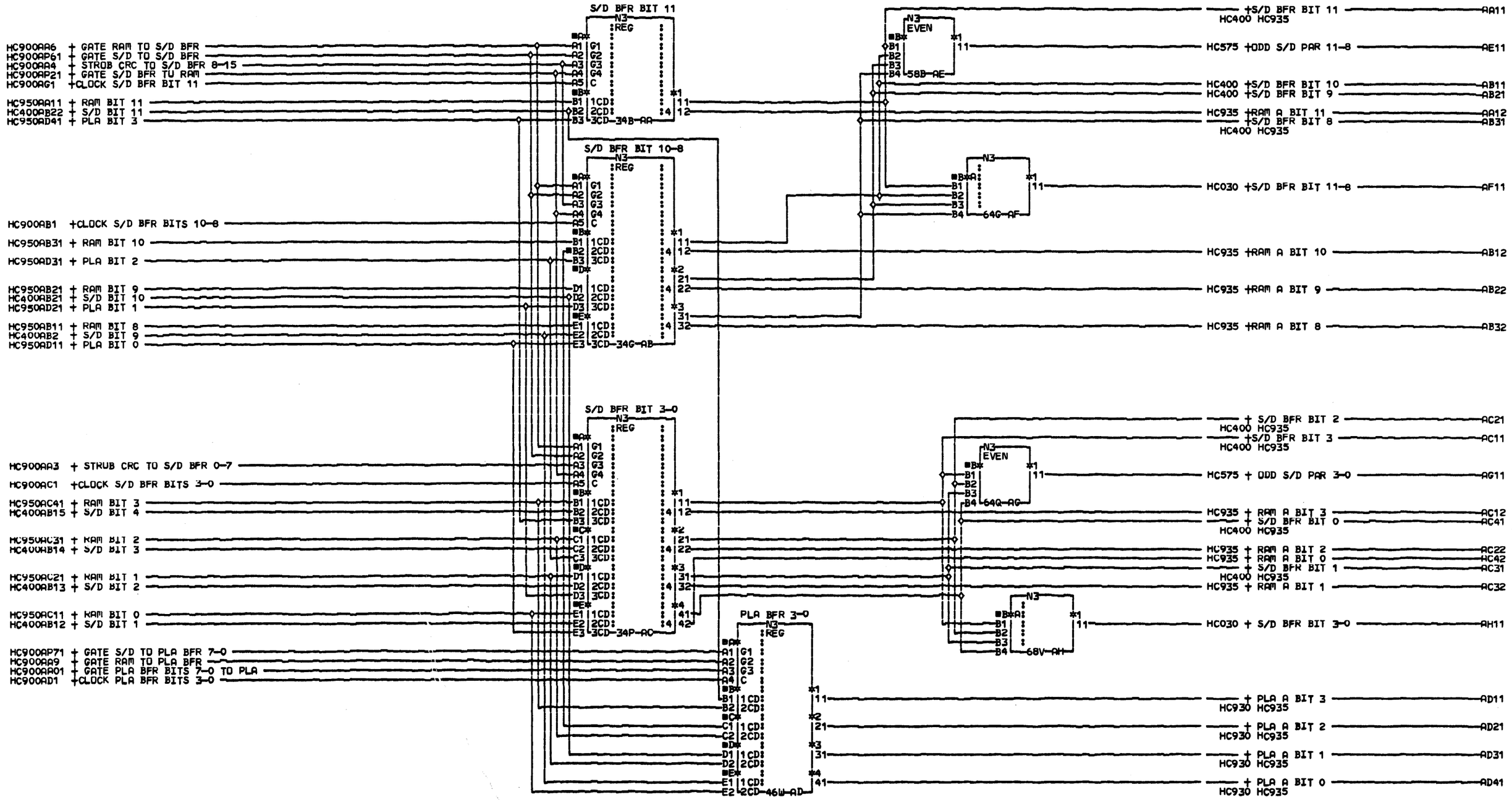
AUC= SEC

PFORM=KSEB NEXTBLK AQ

CID PIDFE JOB T4301503

HC900 0001

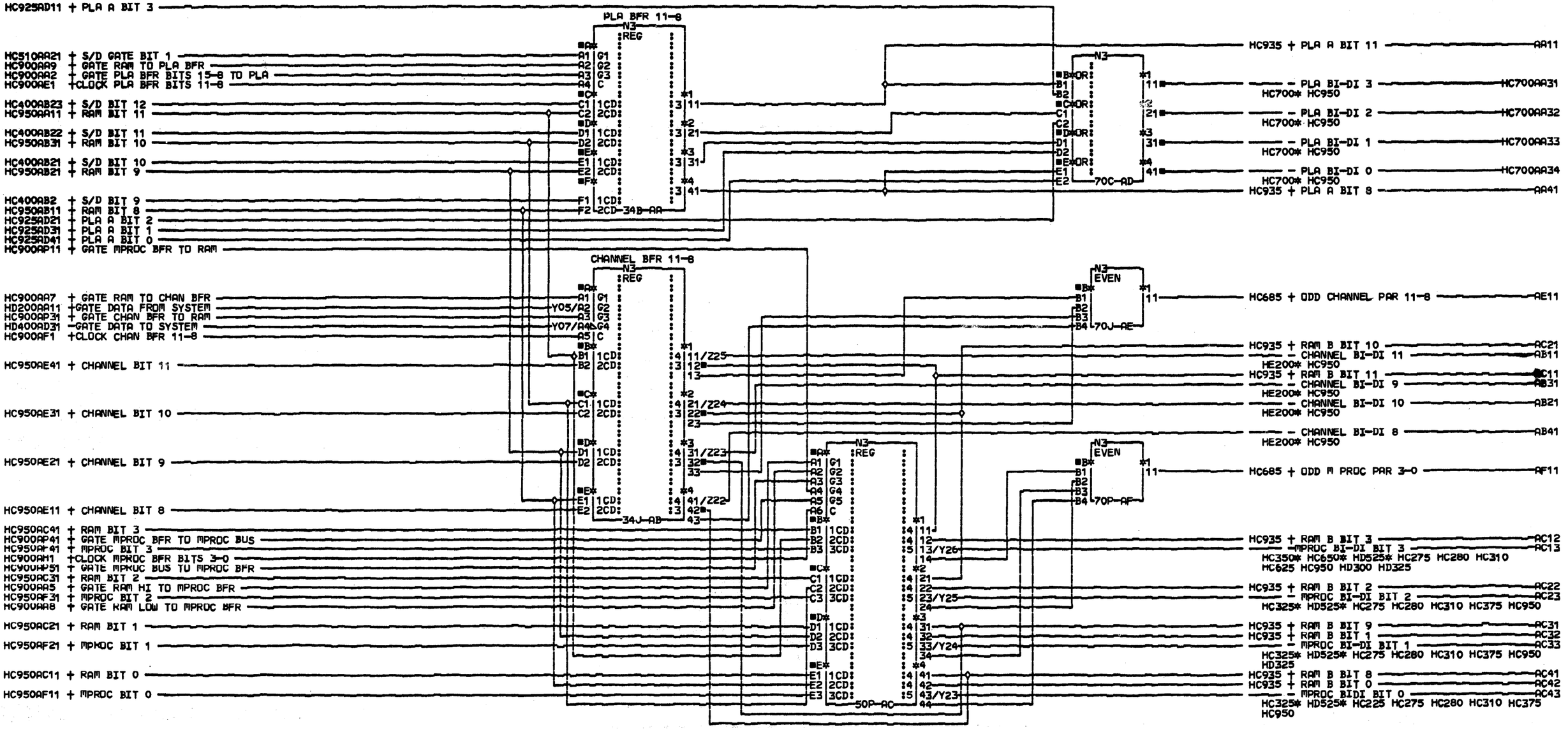
HC900 0001



COMMENTS
D1 COPYRIGHT IBM CORP. 1978

DATA FLOW MOD
P/N 8265672 EC 833180
LOC=1A-A2C2
USN 00008 PRI=16OCT78 0818
AUC= SEC
PFORM=KSEB NEXTBLK AI
CID PIOFE JOB K1500929

HC925 0001 HC925



COMMENTS

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DATA FLOW MOD

P/N 8265673 EC 833180

LOC=1A-A2C2

USN 00008 PRI=16OCT78 0818

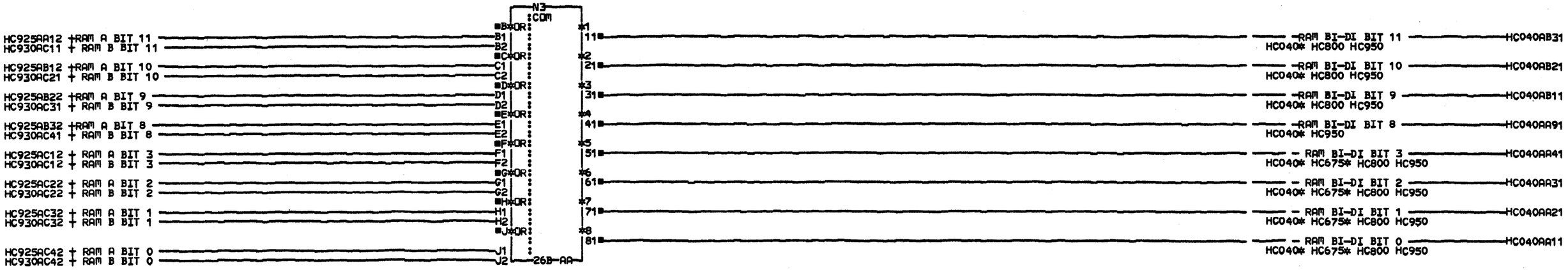
AUC= SEC 21NOV78 0757

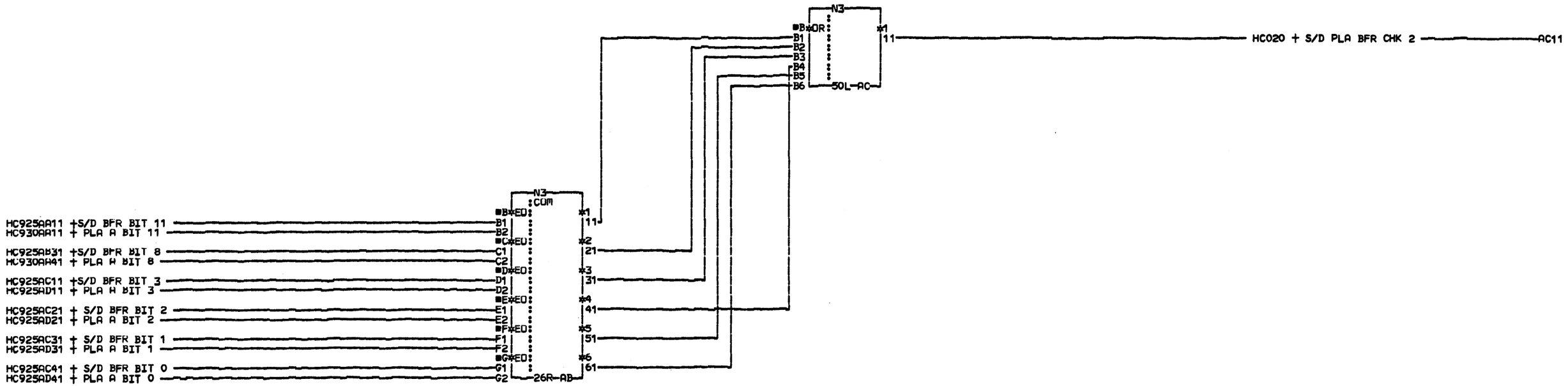
PFORM=KSEB NEXTBLK AG

CID PIOFE JOB K1500929

HC930 0001

HC930 0001





COMMENTS

D1 COPYRIGHT IBM CORP. 1978

DATA FLOW MOD

P/N 8265674 EC 833180

LOC=1A-A2C2

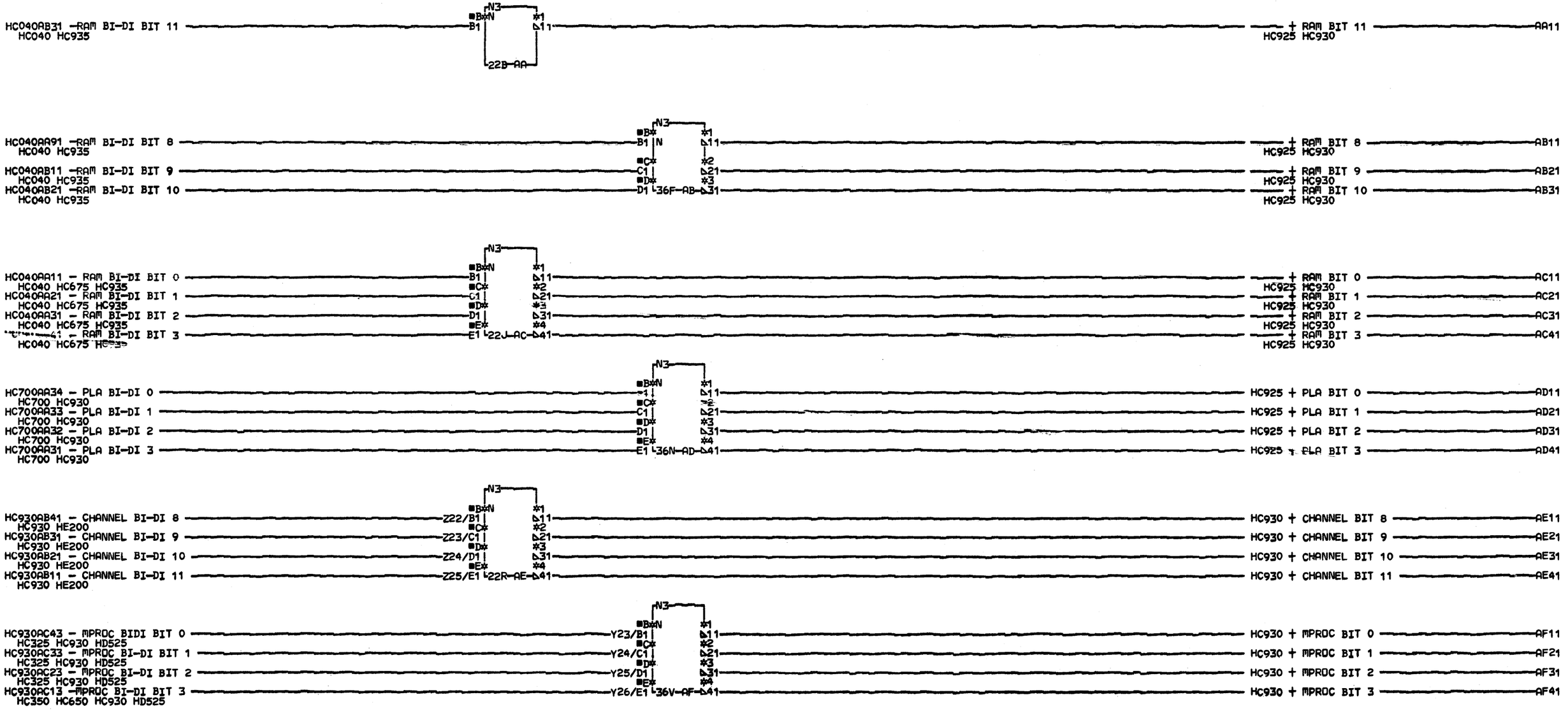
USN 00008 PRI=16OCT78 0818

AUC= SEC

PFORM=KSEB NEXTBLK AD

CID PIOFE JOB K1500929

HC935 0001 HC935 0001



COMMENTS

DATA FLOW MOD

PN8265675 EC834824 PEC833180

LOC=1A-A2C2

USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AG

CID PIOFE JOB T4301503

NOTE 1

SPECIAL BLOCKS:A SPECIAL BLOCK IS A MODIFICATION OF THE COMMON BLOCK FOUND IN LOGIC BLOCK SYMBOLOGY (PART#2547427).WHAT IT DUES IS REPLICATES AT ONE PIN (SPECIAL PIN) AN ENTIRE FUNCTION FOU ND ELSEWHERE IN THE BLOCK.HOW THIS IS INDICATED IS BY A LETTER IN THE E NGLISH POSITION ON THE INSIDE OF THE BLOCK.THE LETTER MATCHES A LE TTER AT A VIRTUAL PIN.THE FUNCTION AT THIS VIRTUAL PIN ALONG WITH THE SAME INPUTS IS REPEATED AT THIS SPECIAL PIN .BELOW IS SHOWN 2 EXAMPLES.WITH THE REGULAR LOGIC ABOVE ITS SPECIAL REPRESENTATION

18B-AA

ABA1 SIGNAL B
ABA2 SIGNAL C
ABA3 SIGNAL D
→ N3 A → 66E-AB → SIGNAL M → AB1

ACA1 SIGNAL X
ACA2 SIGNAL Y
→ N OR → 66H-AC → SIGNAL N → AC1

ADB1 SIGNAL B
ADB2 SIGNAL C
ADB3 SIGNAL D
ADC1 SIGNAL X
ADC2 SIGNAL Y
→ N :SPEC B*A OR C*A*OR B → 66K-AD → SIGNAL M → AD11; SIGNAL N → AD21

AEA1 SIGNAL L
AEA2 SIGNAL O
→ N3 A → 30P-AE → SIGNAL K → AE1

AFA1 SIGNAL R
AFA2 SIGNAL S
AFA3 SIGNAL T
→ N3 A → 18R-AF

AGA1 SIGNAL P
AGA2 SIGNAL Q
→ N3 A → 18U-AG

AHA2 SIGNAL J

N3 OR (A1 ← AF, A2 ← AG) → 30S-AJ → SIGNAL H → AJ1

N3 A (A1 ← AG, A2 ← AHA2) → 30V-AH → SIGNAL Z → AH1

AIB1 SIGNAL L
AIB2 SIGNAL O
AIC1 SIGNAL R
AIC2 SIGNAL S
AIC3 SIGNAL T
AID1 SIGNAL P
AID2 SIGNAL Q
AIE2 SIGNAL J
→ N :SPEC B*A A*OR D E*A D → 18X-AI → SIGNAL K → AI11; SIGNAL H → AI21; SIGNAL Z → AI31

COMMENTS
D1COPYRIGHT IBM CORP. 1978

NOTE 1: SPECIAL BLOCKS

P/N 8265611 EC 833180

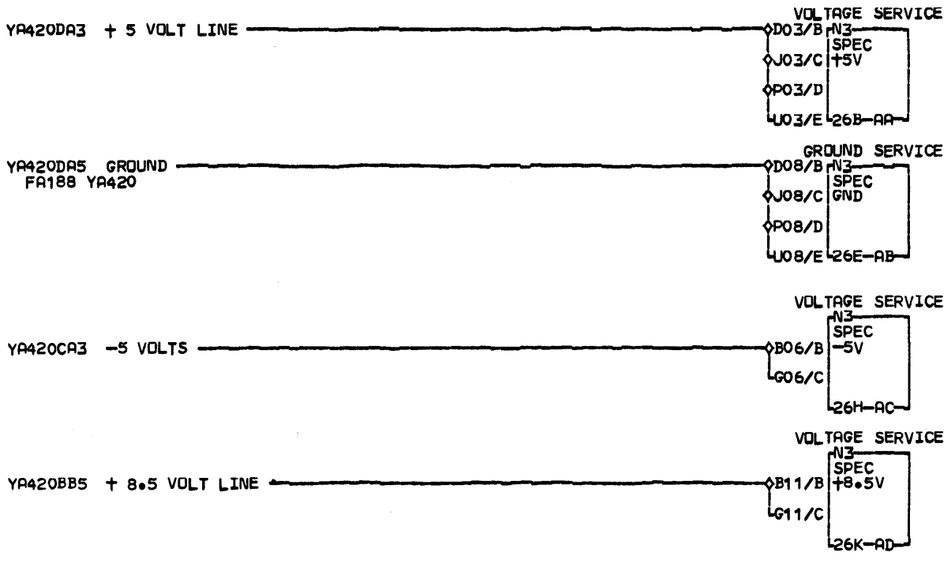
LOC=1A-A2D2

USN 00008 PRI=16OCT78 0818

AUC= SEC
PFORM=KSEB NEXTBLK AK

CID PIOFE JOB K1500929

HDO10 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

VOLTAGE AND GROUND TAB PINS

P/N 8265677 EC 833180

LOC=1A-A2D2

USN 00008 PRI=16OCT78 0818

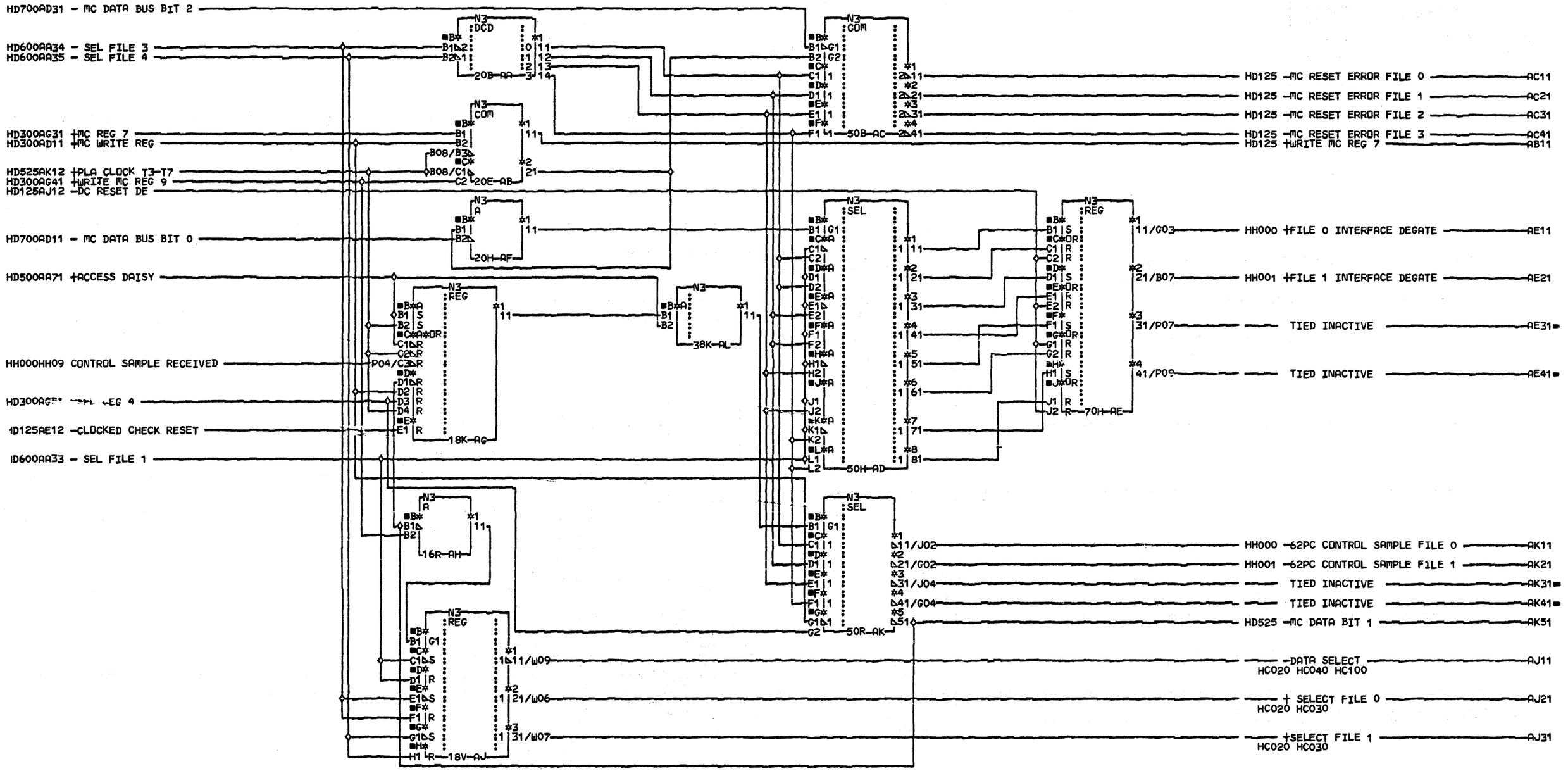
AUC= SEC 09NOV78 0842

PFORM=KSEB NEXTBLK AE

CID PIOFE JOB K1500929

HD015 0001

HD015 0001



COMMENTS

RESET CHIP

PN8265612 EC834824 PEC833180

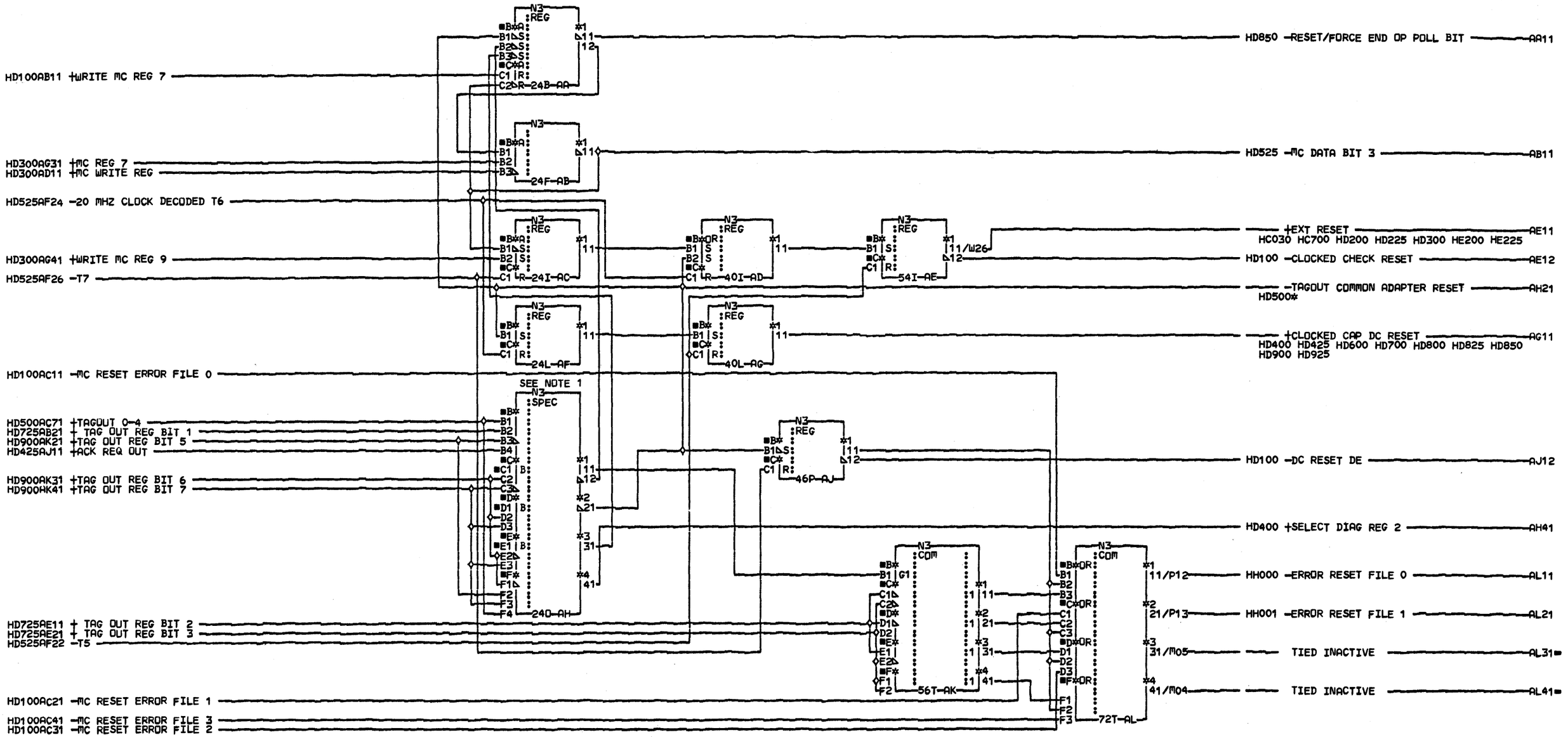
LOC=1A-A2D2

USN 00008 PRI=16MAY79 2152

AUC= SEC 04JUN79 1411

PFORM=KSEB NEXTBLK AM

CID PIOFE JOB T4301503



COMMENTS
D1COPYRIGHT IBM CORP. 1978

RESET CHIP

PN8265613 EC834824 PEC833180

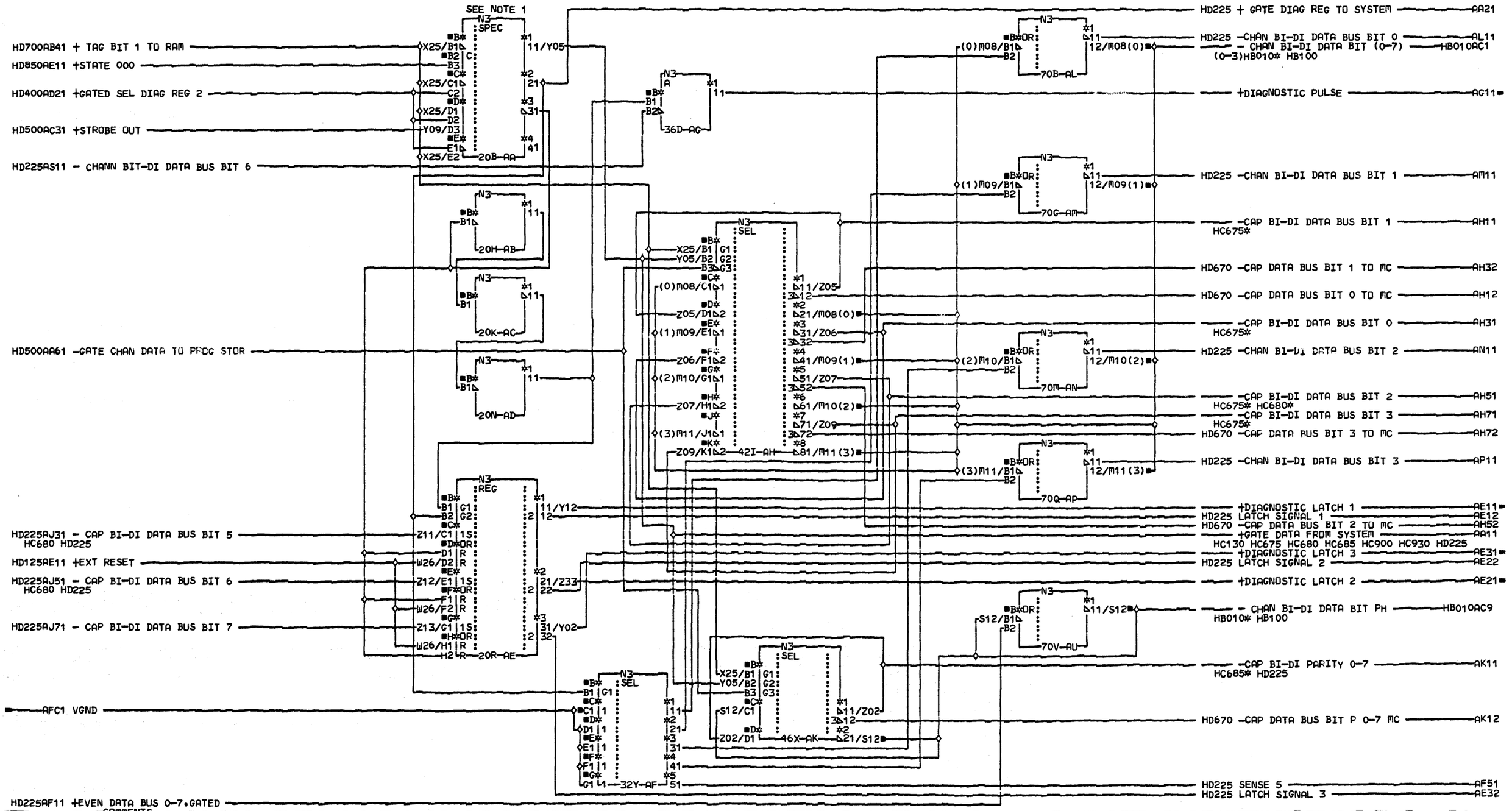
LOC=1A-A2D2

USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK AM

CID PIOFE JOB T4301503

HD125 0001 HD125 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

DATAFLO CHIP

PN8265614 EC834824 PEC833180

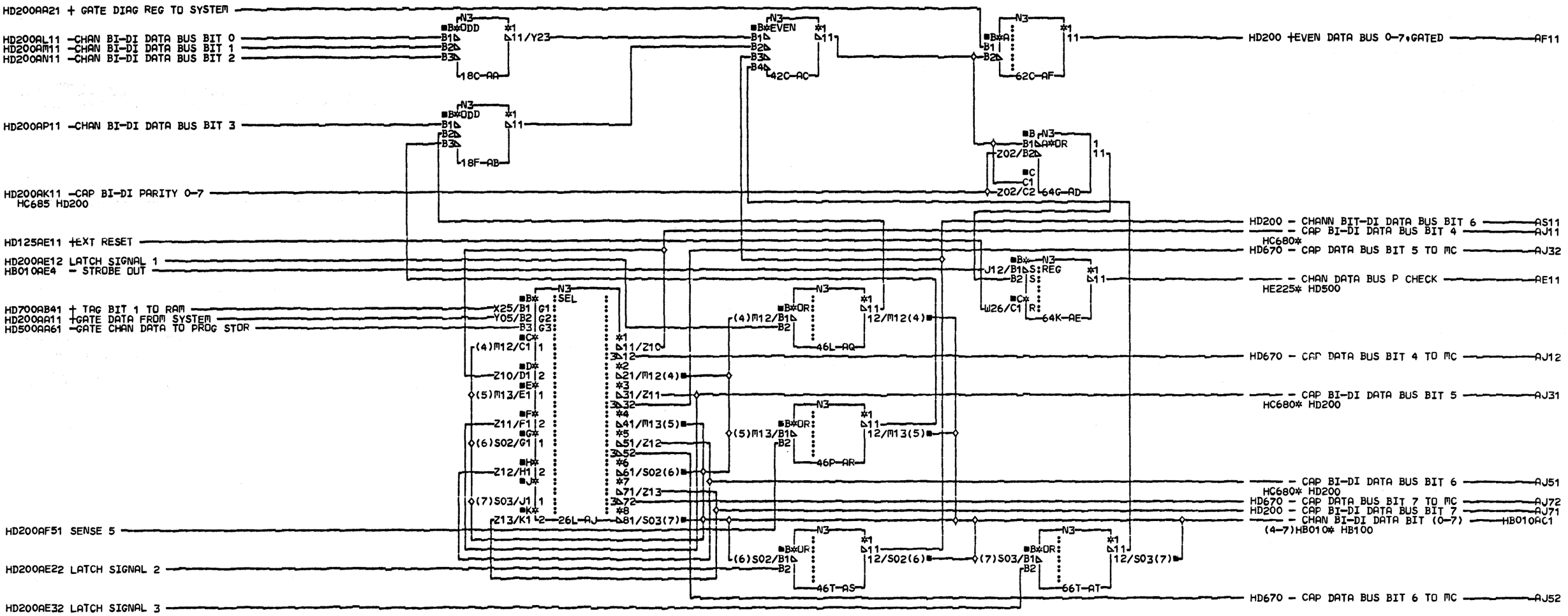
LOC=1A-A2D2

USN 00008 PRI=14JUN79 2037

AUC= SEC

PFORM=KSEB NEXTBLK AV

CID PIOFE JOB T4301503



COMMENTS
D1©UPYRIGHT IBM CORP. 1978

DATAFLO CHIP

PN8265615 EC834824 PEC833180

LOC=1A-A2D2

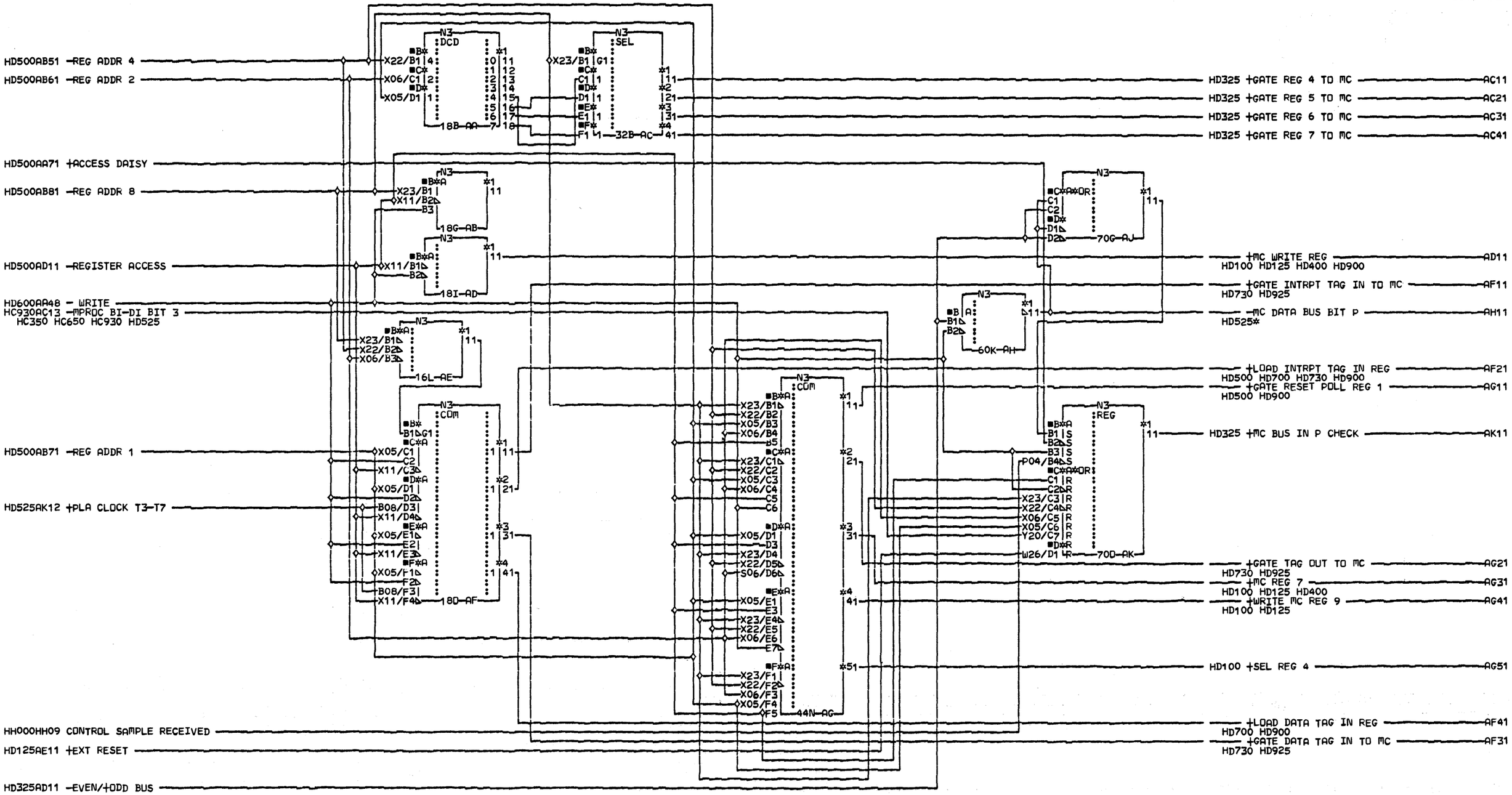
USN 00008 PRI=21MAY79 1423

AUC= SEC

PFORM=KSEB NEXTBLK AU

CID PIDFE JOB T4301503

HD225 0001 HD225 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

M.P. CNTRL CHIP

PN8265616 EC834824 PEC833180

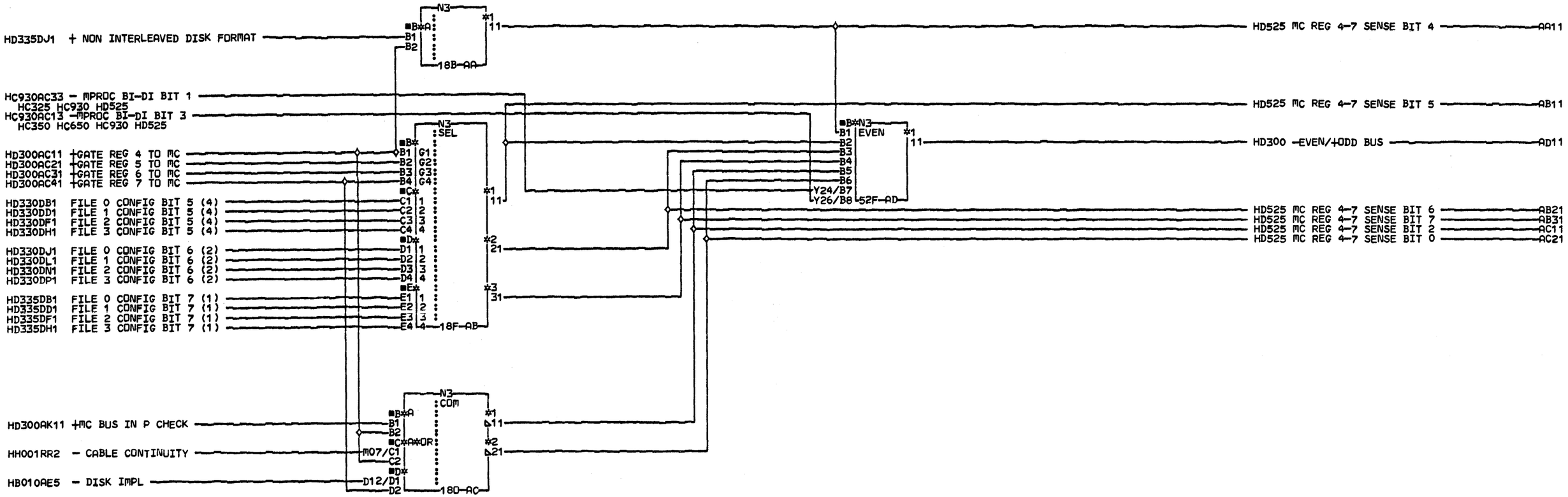
LOC=1A-A2D2

USN 00008 PRI=14JUN79 2037

AUC= SEC

PFORM=KSEB NEXTBLK AL

CID PIOFE JOB T4301503



COMMENTS

M.P. CNTRL CHIP

PN8265617 EC834824 PEC833180

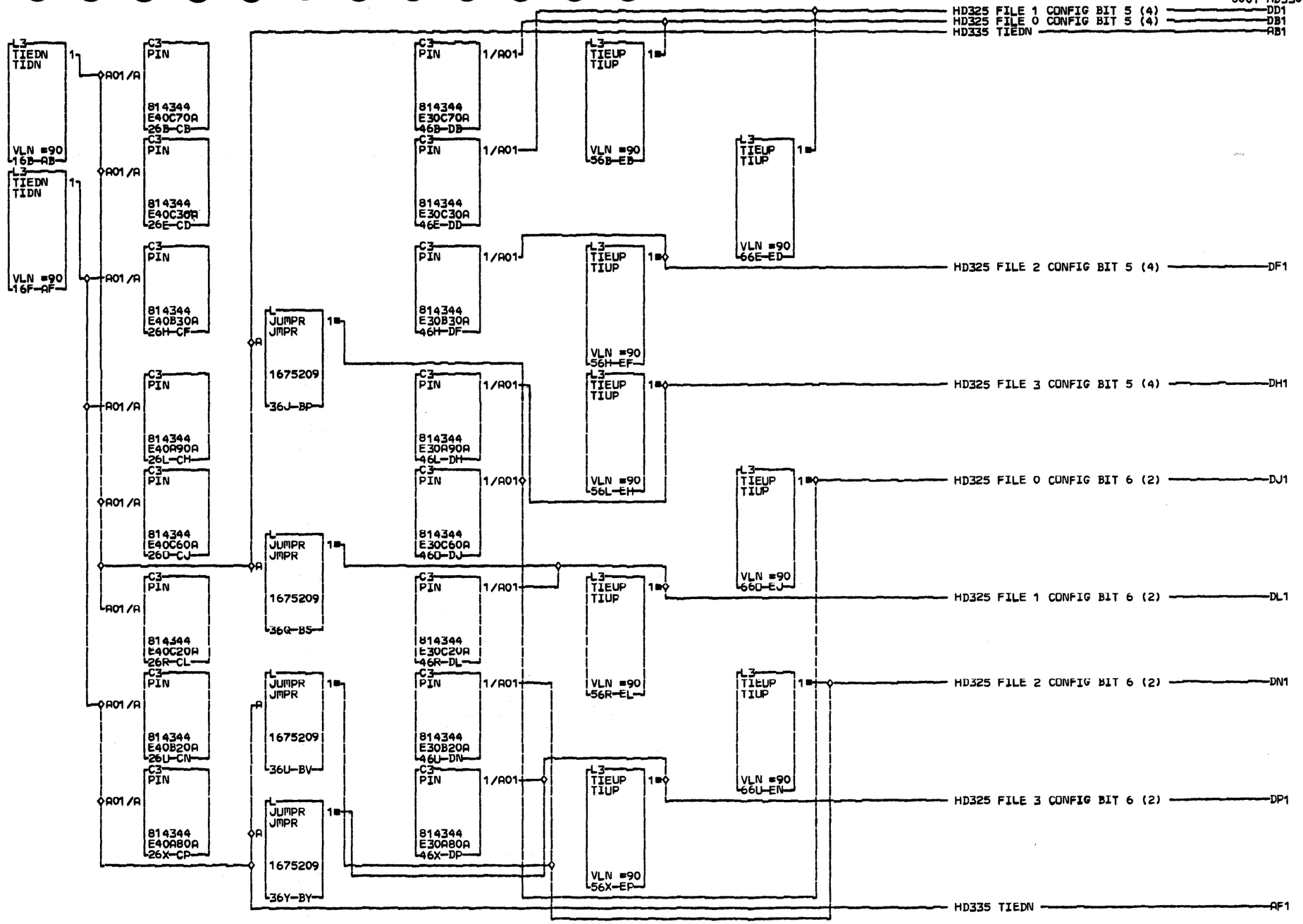
LOC=1A-A2D2

USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK AE

CID PIOFE JOB T4301503

HD325 0001



COMMENTS

M.P. CNTRL CHIP

P/N 8265678 EC 833180

LOC=1A-A2D2

USN 00008 PRI=16OCT78 0818

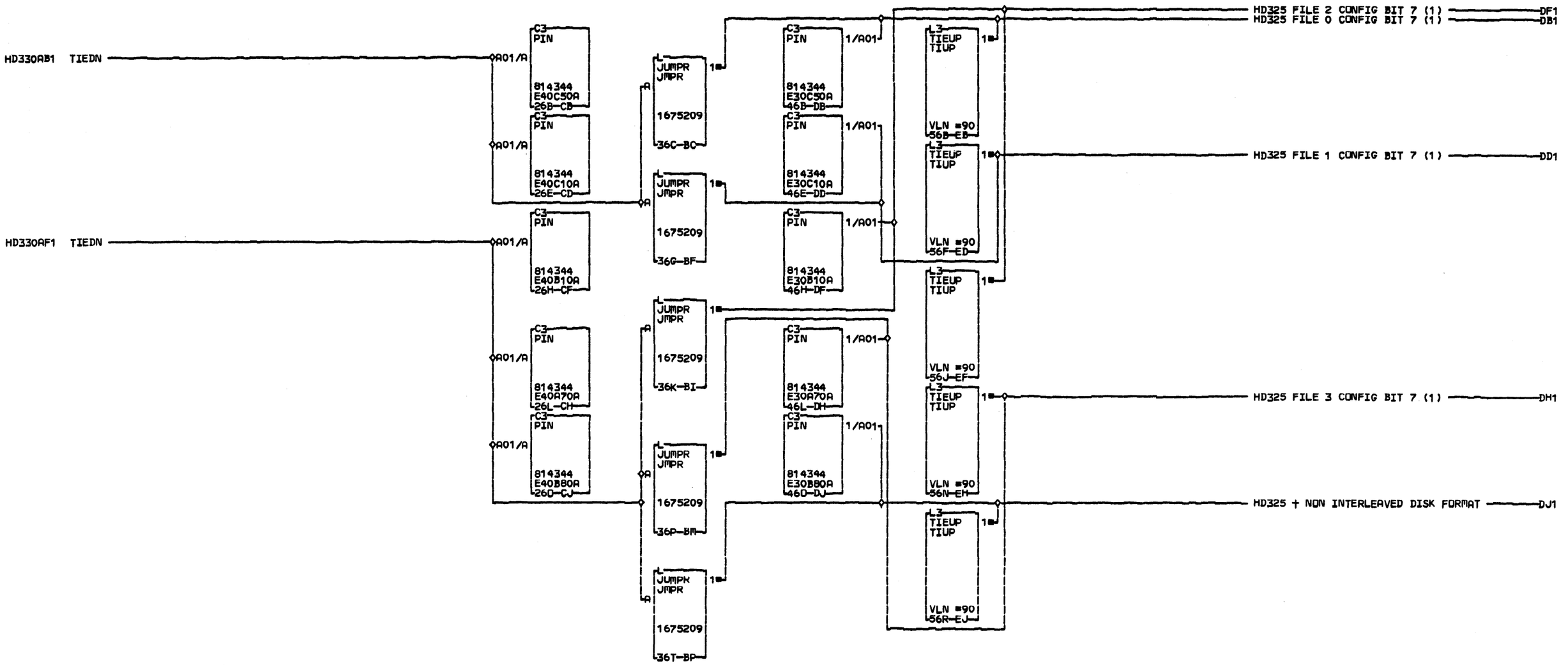
AUC= SEC

PFORM=KSEB NEXTBLK EQ

CID PIOFE JOB K1500929

HD330 0001

HD330 0001



COMMENTS

M.P. CNTRL CHIP

P/N 8265679 EC 833180

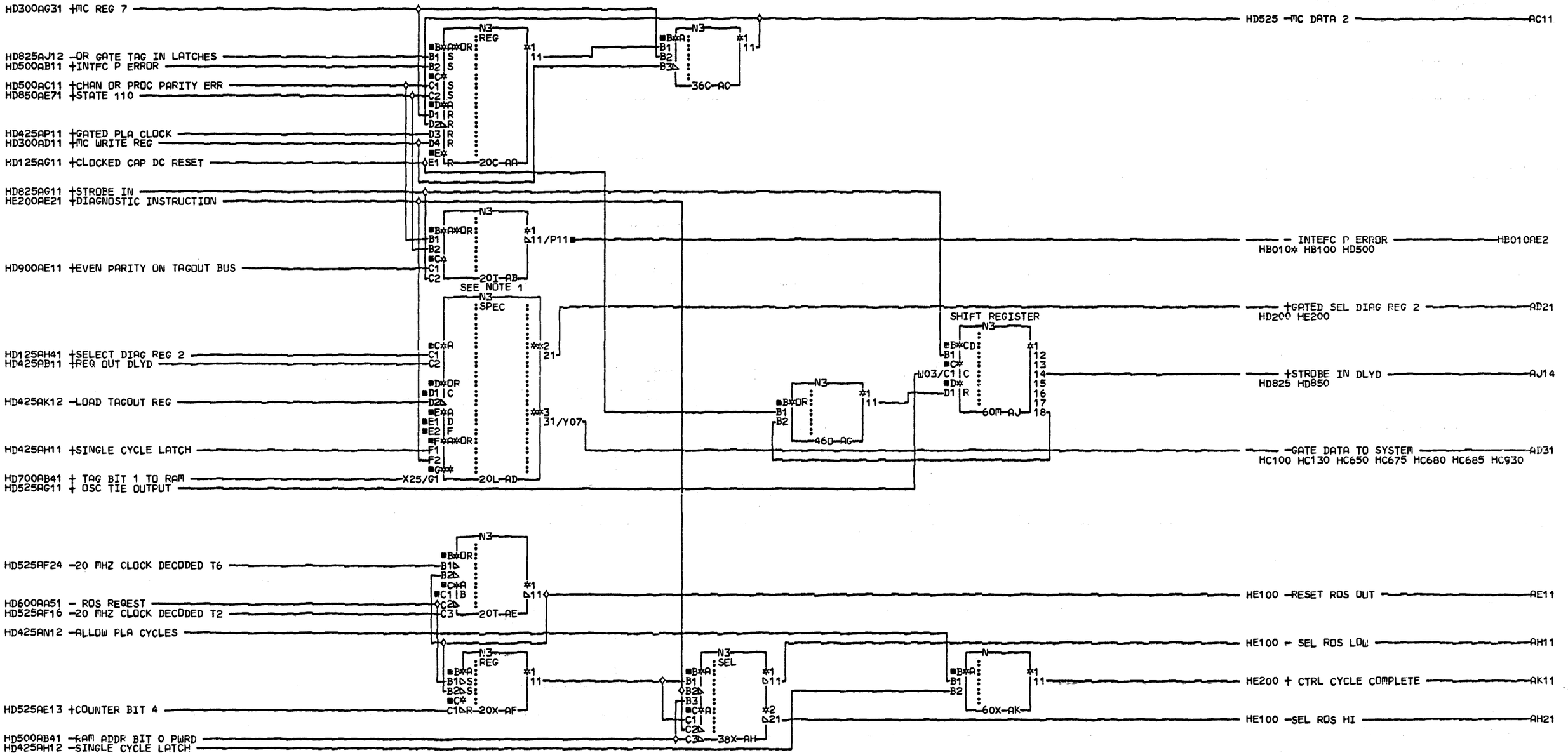
LOC=1A-A2D2

USN 00008 PRI=16OCT78 0818

AUC= SEC

PFORM=KSEB NEXTBLK EK

CID PIOFE JOB K1500929



COMMENTS

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MISC CNTRL CHIP

PN8265618 EC834824 PEC833180

LOC=1A-A2D2

USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AL

CID PIDFE JOB T4301503

HD900AE11 +EVEN PARITY ON TAGOUT BUS
HD525AF24 -20 MHZ CLOCK DECODED T6
HD500AA31 +REQ OUT
HD825AJ12 -OR GATE TAG IN LATCHES
HD525AF3 +T10
HD525AE13 +COUNTER BIT 4
HD850AE11 +STATE 000
HD600AA54 - ACCESS DAISY
HD600AA5 - SELECT HIGH BYTE
HH000HH09 CONTROL SAMPLE RECEIVED
HE200AG11 +SET SINGLE CYCLE CONTROL PULSE
HC225AC12 + PROC CYCLE
HD600AA51 - ROS REQEST
HD125AG11 +CLOCKED CAP DC RESET
HE200AE11 +DIAGNOSTIC CONTROL LATCH
HD525AK11 -PLA CLOCK

N3 :REG — 20C-AA
N3 :REG — 40C-AB
N3 :REG — 20G-AC
N3 :REG — 40G-AG
N3 :REG — 20K-AD
N3 :REG — 20N-AE
N3 :REG — 20Q-AF
N3 :REG — 42P-AH
N3 — 58A-AJ
N3 — 58E-AK
N3 — 58P-AL
N3 — 58S-AM
N3 :REG — 58V-AN
N3 — 58Z-AP

HD400 +REQ OUT DLYD — AB11
+ACK REQ OUT HD125 HD500 HD825 HD850 — AJ11
+LOAD TAGOUT REG HD725 HD900 HD925 — AK11
HD400 -LOAD TAGOUT REG — AK12
-RESET TAG REG HD725 HD900 HD925 — AG11
HD525 -GATE MC TO DAISY BUS — AD11
HD525 -GATE DAISY BUS TO MC — AE11
HD600 +STORAGE MEMORY CYCLE — AF11
HD400 -SINGLE CYCLE LATCH — AH12
HD400 +SINGLE CYCLE LATCH — AH11
HD400 -ALLOW PLA CYCLES — AN12
HD400 +GATED PLA CLOCK — AP11
HD600 -GATED PLA CLOCK — AP12

COMMENTS

MISC CNTRL CHIP

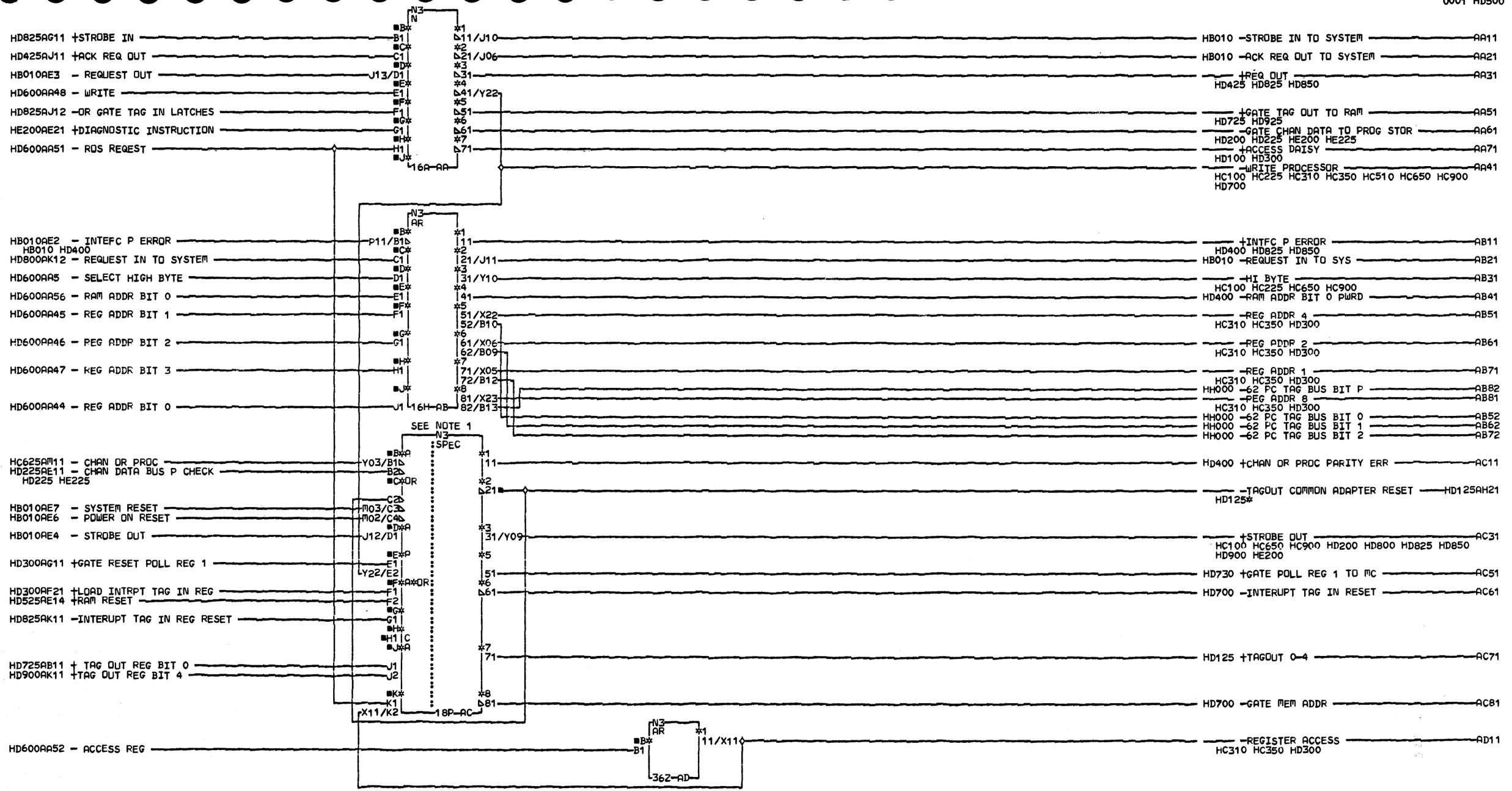
PN8265619 EC834824 PEC833180

LOC=1A-A2D2

USN 00008 PRI=16MAY79 2152

AUC= SEC 04JUN79 1411
PFORM=KSEB NEXTBLK AQ

CID PIOFE JOB T4301503



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

DATA BUS REPOWER

PN8265620 EC834824 PEC833180

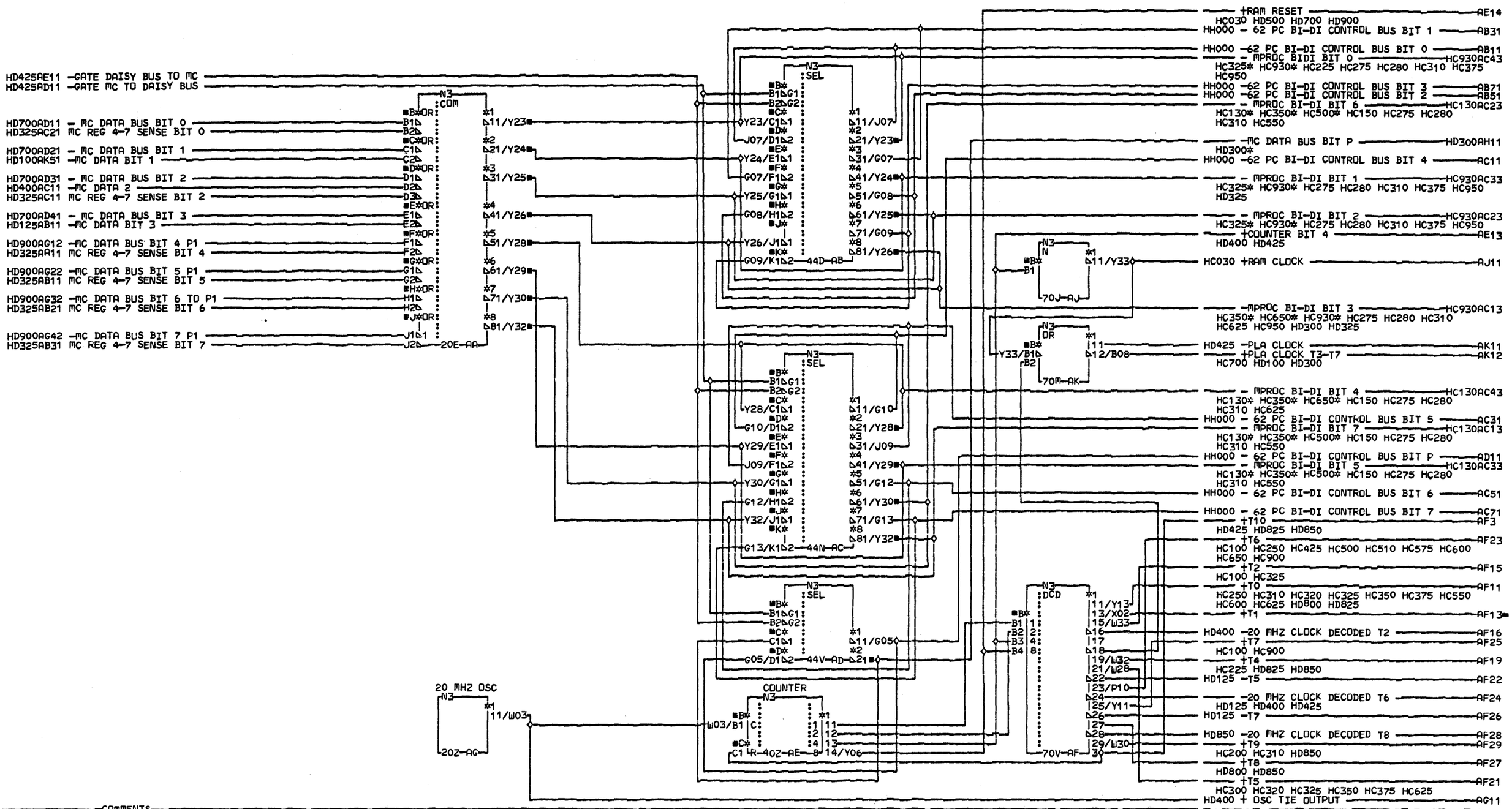
LOC=1A-A2D2

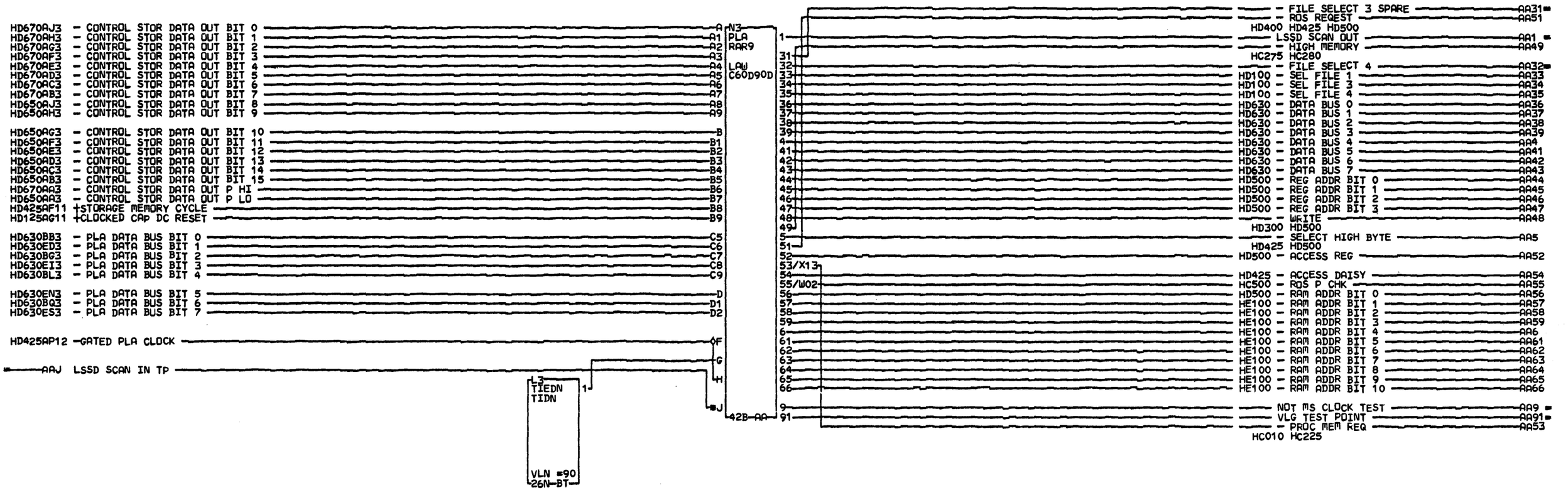
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AE

CID PIOFE JOB T4301503


HD425AE11 -GATE DAISY BUS TO MC
HD425AD11 -GATE MC TO DAISY BUS
HD700AD11 - MC DATA BUS BIT 0
HD325AC21 MC REG 4-7 SENSE BIT 0
HD700AD21 - MC DATA BUS BIT 1
HD100AK51 -MC DATA BIT 1
HD700AD31 - MC DATA BUS BIT 2
HD400AC11 -MC DATA 2
HD325AC11 MC REG 4-7 SENSE BIT 2
HD700AD41 - MC DATA BUS BIT 3
HD125AB11 -MC DATA BIT 3
HD900AG12 -MC DATA BUS BIT 4 P1
HD325AA11 MC REG 4-7 SENSE BIT 4
HD900AG22 -MC DATA BUS BIT 5 P1
HD325AB11 MC REG 4-7 SENSE BIT 5
HD900AG32 -MC DATA BUS BIT 6 TO P1
HD325AB21 MC REG 4-7 SENSE BIT 6
HD900AG42 -MC DATA BUS BIT 7 P1
HD325AB31 MC REG 4-7 SENSE BIT 7
20E-AA
+RAM RESET
HC030 HD500 HD700 HD900
HH000 - 62 PC BI-DI CONTROL BUS BIT 1
HH000 -62 PC BI-DI CONTROL BUS BIT 0
- MPROC BIDI BIT 0
HC325* HC930* HC225 HC275 HC280 HC310 HC375 HC950
HH000 -62 PC BI-DI CONTROL BUS BIT 3
HH000 -62 PC BI-DI CONTROL BUS BIT 2
- MPROC BI-DI BIT 6
HC130* HC350* HC500* HC150 HC275 HC280 HC310 HC550
-MC DATA BUS BIT P
HD300*
HH000 -62 PC BI-DI CONTROL BUS BIT 4
- MPROC BI-DI BIT 1
HC325* HC930* HC275 HC280 HC310 HC375 HC950 HD325
- MPROC BI-DI BIT 2
+COUNTER BIT 4
HD400 HD425
HC030 +RAM CLOCK
-MPROC BI-DI BIT 3
HC350* HC650* HC930* HC275 HC280 HC310 HC625 HC950 HD300 HD325
HD425 -PLA CLOCK
+PLA CLOCK T3-T7
HC700 HD100 HD300
- MPROC BI-DI BIT 4
HC130* HC350* HC650* HC150 HC275 HC280 HC310 HC625
HH000 - 62 PC BI-DI CONTROL BUS BIT 5
- MPROC BI-DI BIT 7
HC130* HC350* HC500* HC150 HC275 HC280 HC310 HC550
HH000 - 62 PC BI-DI CONTROL BUS BIT P
- MPROC BI-DI BIT 5
HC130* HC350* HC500* HC150 HC275 HC280 HC310 HC550
HH000 - 62 PC BI-DI CONTROL BUS BIT 6
HH000 - 62 PC BI-DI CONTROL BUS BIT 7
+T10
HD425 HD825 HD850
+T6
HC100 HC250 HC425 HC500 HC510 HC575 HC600 HC650 HC900
+T2
HC100 HC325
+T0
HC250 HC310 HC320 HC325 HC350 HC375 HC550 HC600 HC625 HD800 HD825
+T1
HD400 -20 MHZ CLOCK DECODED T2
+T7
HC100 HC900
+T4
HC225 HD825 HD850
HD125 -T5
-20 MHZ CLOCK DECODED T6
HD125 HD400 HD425
HD125 -T7
HD850 -20 MHZ CLOCK DECODED T8
+T9
HC200 HC310 HD850
+T8
HD800 HD850
+T5
HC300 HC320 HC325 HC350 HC375 HC625
HD400 + OSC TIE OUTPUT
20 MHZ OSC
COUNTER
70J-AJ
70M-AK
70V-AF
20Z-AG
40Z-AE
44D-AB
44V-AD
44N-AC
COMMENTS
D1COPYRIGHT IBM CORP. 1978
DATA BUS REPOWER
PN8265621 EC834824 PEC833180
LOC=1A-A2D2
USN 00008
PRI=18MAY79 2041
AUC=
SEC
PFORM=KSEB
NEXTBLK AL
CID PIDFE
JOB T4301503
HD525
0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

2K X 18 ROS

PN8265622 EC834824 PEC833180

LOC=1A-A2D2

USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK B0

CID PIOFE JOB T4301503

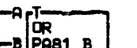
HD600 0001

HD600 0001

HD700AD13 – PLA TO MC DATA BUS BIT 0
HD600AA36 – DATA BUS 0

HD600 – PLA DATA BUS BIT 0 – BB3

HD700AD23 – PLA MC DATA BUS BIT 1
HD600AA37 – DATA BUS 1

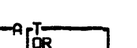


HD600 – PLA DATA BUS BIT 1 – ED3

HD700AD33 – PLA MC DATA BUS BIT 2
HD600AA38 – DATA BUS 2

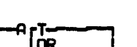
HD600 – PLA DATA BUS BIT 2 – BG3

HD700AD43 – PLA MC DATA BUS BIT 3
HD600AA39 – DATA BUS 3



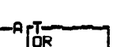
HD600 – PLA DATA BUS BIT 3 – EI3

HD900AF12 –PLA MC DATA BUS BIT 4
HD600AA4 – DATA BUS 4



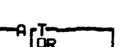
HD600 – PLA DATA BUS BIT 4 – BL3

HD900AF22 –PLA MC DATA BUS BIT 5
HD600AA41 – DATA BUS 5



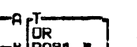
HD600 – PLA DATA BUS BIT 5 – EN3

HD900AF32 –PLA MC DATA BUS BIT 6
HD600AA42 – DATA BUS 6



HD600 – PLA DATA BUS BIT 6 – BQ3

HD900AF42 –PLA MC DATA BUS BIT 7
HD600AA43 – DATA BUS 7



HD600 – PLA DATA BUS BIT 7 – ES3

COMMENTS
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PLA DATA BUS DOT AND TERMINATION

P/N 8265680 EC 833180

LOC=1A–A2D2

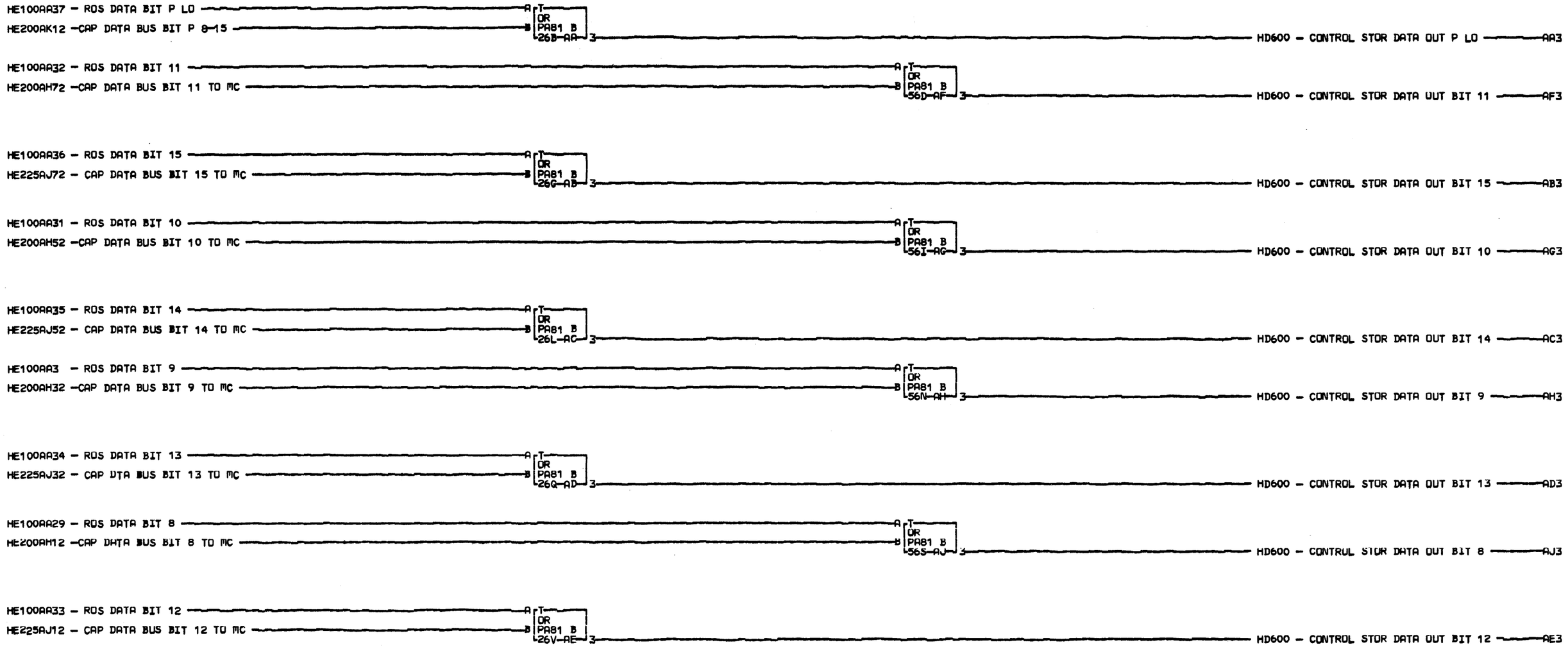
USN 00008 PRI=16OCT78 0818

AUC= SEC

PFORM=KSEB NEXTBLK FT

CID PIOFE JOB K1500929

HD630 0001



COMMENTS

CTRL STORE DATA ASSEMBLY
8-15,P

P/N 8265681 EC 833180

LOC=1A-A2D2

USN 00008 PRI=17NOV78 1558

AUC= SEC
PFORM=KSEB NEXTBLK BK

CID PIOFE JOB K1500929

HD650 0001

HE100AA28 – ROS DATA BIT P HI
HD200AK12 –CAP DATA BUS BIT P 0–7 MC
→ OR PA81 B 26B–AA 3 → HD600 – CONTROL STOR DATA OUT P HI – AA3

HE100AA23 – ROS DATA BIT 3
HD200AH72 –CAP DATA BUS BIT 3 TO MC
→ OR PA81 B 56D–AF 3 → HD600 – CONTROL STOR DATA OUT BIT 3 – AF3

HE100AA27 – ROS DATA BIT 7
HD225AJ72 – CAP DATA BUS BIT 7 TO MC
→ OR PA81 B 26G–AB 3 → HD600 – CONTROL STOR DATA OUT BIT 7 – AB3

HE100AA22 – ROS DATA BIT 2
HD200AH52 –CAP DATA BUS BIT 2 TO MC
→ OR PA81 B 56I–AG 3 → HD600 – CONTROL STOR DATA OUT BIT 2 – AG3

HE100AA26 – ROS DATA BIT 6
HD225AJ52 – CAP DATA BUS BIT 6 TO MC
→ OR PA81 B 26L–AC 3 → HD600 – CONTROL STOR DATA OUT BIT 6 – AC3

HE100AA21 – ROS DATA BIT 1
HD200AH32 –CAP DATA BUS BIT 1 TO MC
→ OR PA81 B 56N–AH 3 → HD600 – CONTROL STOR DATA OUT BIT 1 – AH3

HE100AA25 – ROS DATA BIT 5
HD225AJ42 – CAP DATA BUS BIT 5 TO MC
→ OR PA81 B 26Q–AD 3 → HD600 – CONTROL STOR DATA OUT BIT 5 – AD3

HE100AA2 – ROS DATA BIT 0
HD200AH12 –CAP DATA BUS BIT 0 TO MC
→ OR PA81 B 56S–AJ 3 → HD600 – CONTROL STOR DATA OUT BIT 0 – AJ3

HE100AA24 – ROS DATA BIT 4
HD225AJ12 – CAP DATA BUS BIT 4 TO MC
→ OR PA81 B 26V–AE 3 → HD600 – CONTROL STOR DATA OUT BIT 4 – AE3

COMMENTS

CTRL STORE DATA ASSEMBLY
0–7,P

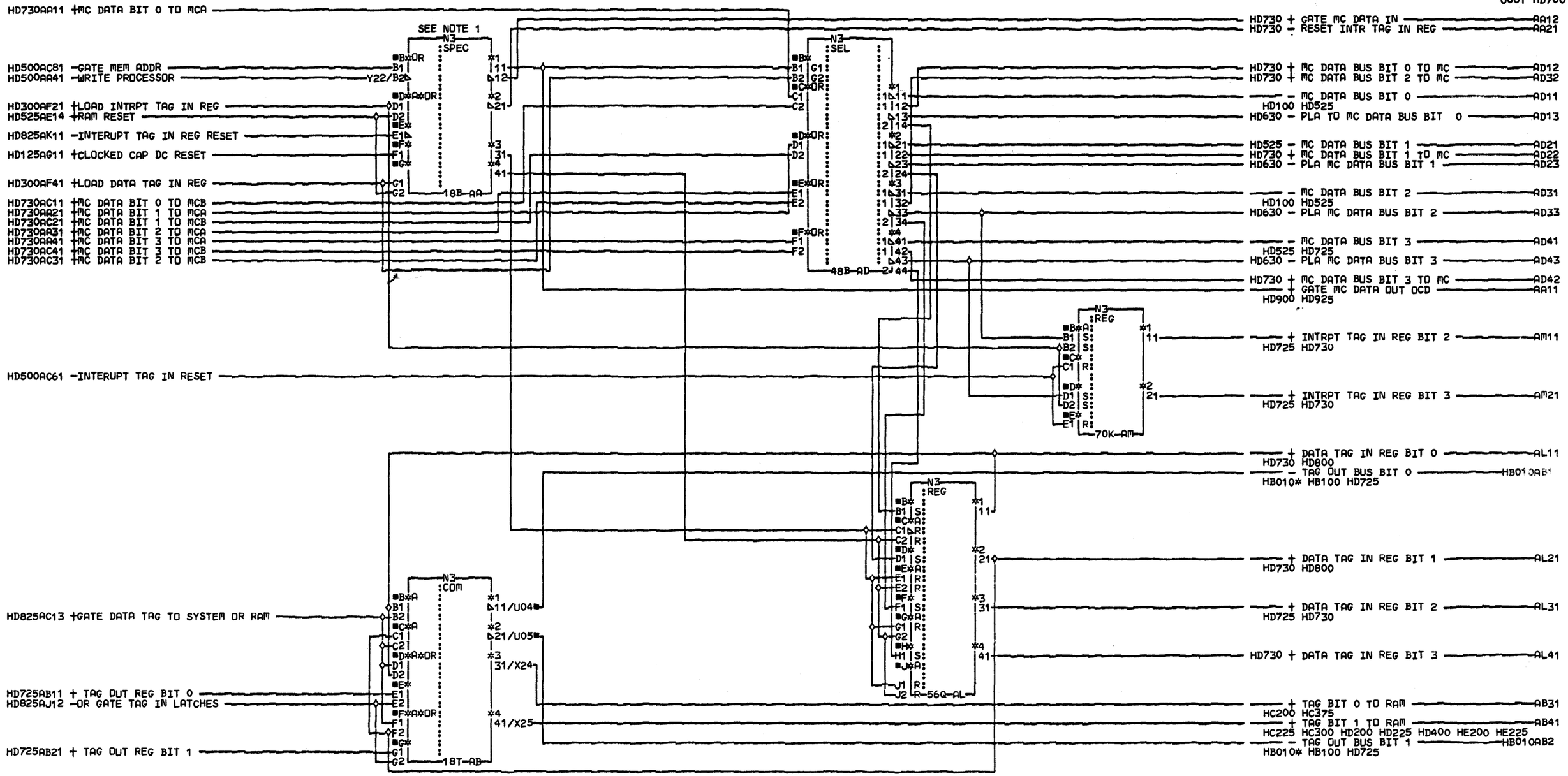
P/N 8265682 EC 833180

LOC=1A–A2D2

USN 00008 PRI=17NOV78 1558

AUC= SEC
PFORM=KSEB NEXTBLK BK

CID PIOFE JOB K1500929



COMMENTS

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TAGHI CHIP

PN8265623 EC834824 PEC833180

LOC=1A-A2D2

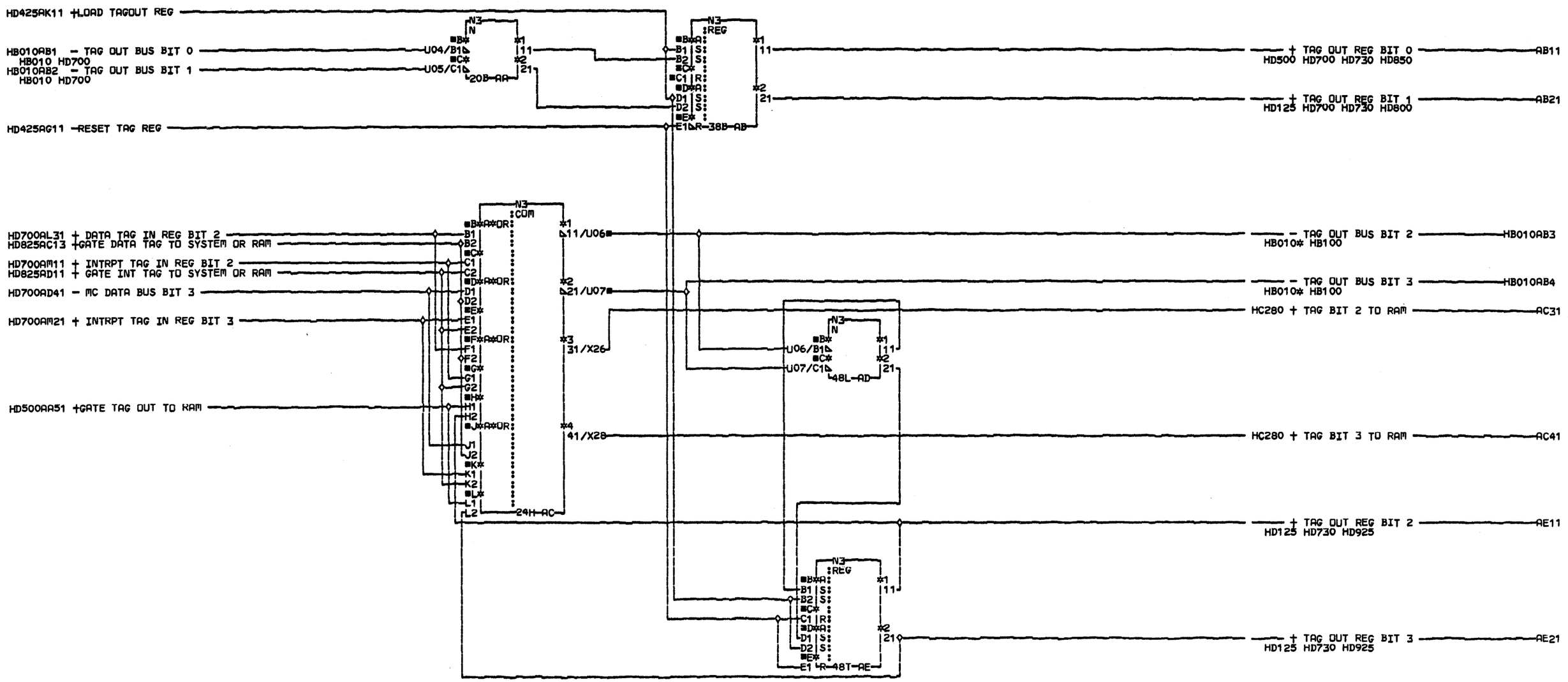
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AN

CID PIOFE JOB T4301503

HD700 0001



COMMENTS
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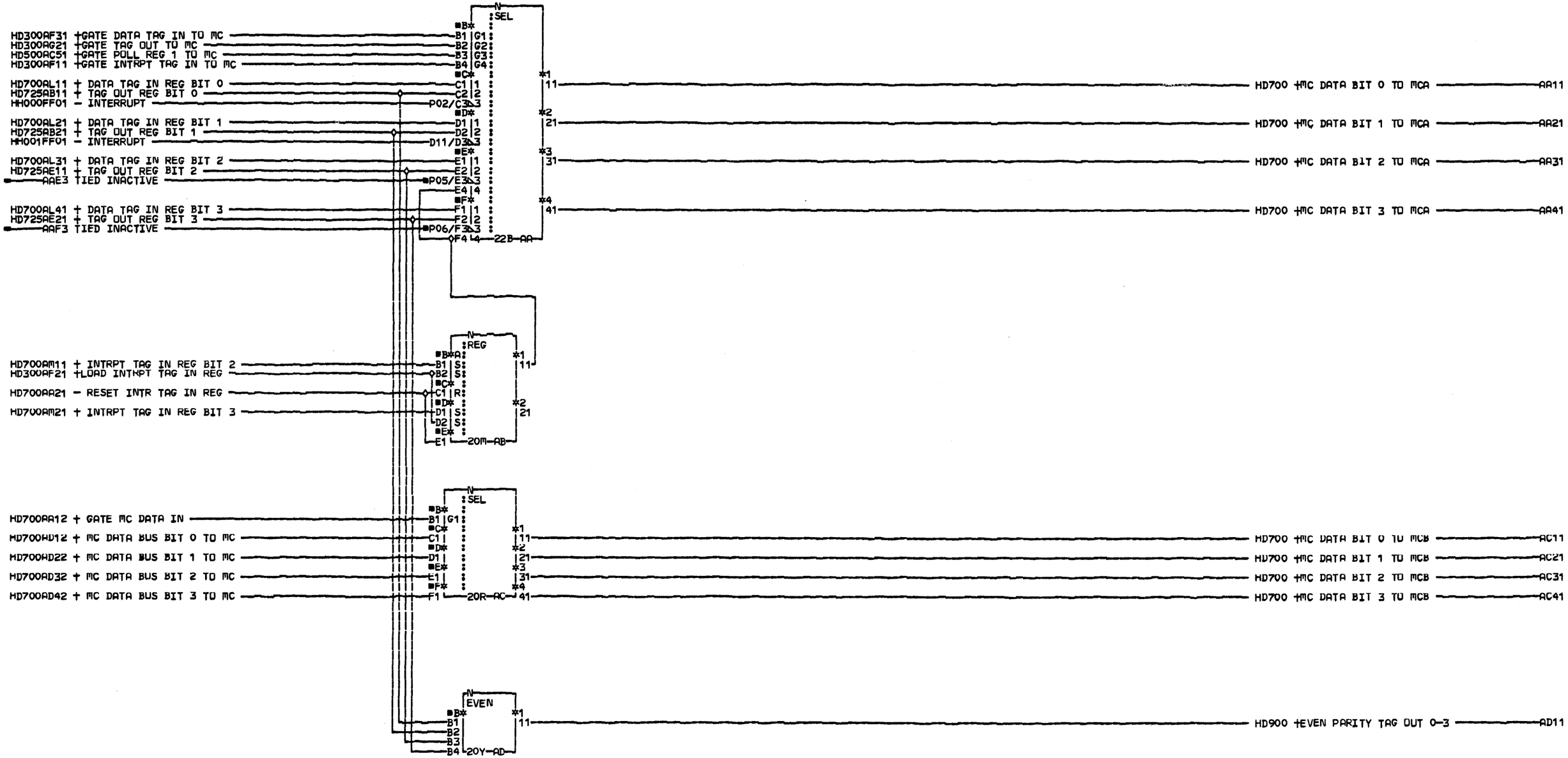
TAGHI CHIP

PN 8265624 EC 834824 PEC 833180
LOC=1A-A2D2
USN 00008 PRI=31JUL79 1719
AUC= SEC
PFORM=KSEB NEXTBLK AF
CID PIOFE JOB N6101127



COMMENTS

TAGHI CHIP

P/N 8265625 EC 833180

LOC=1A-A2D2

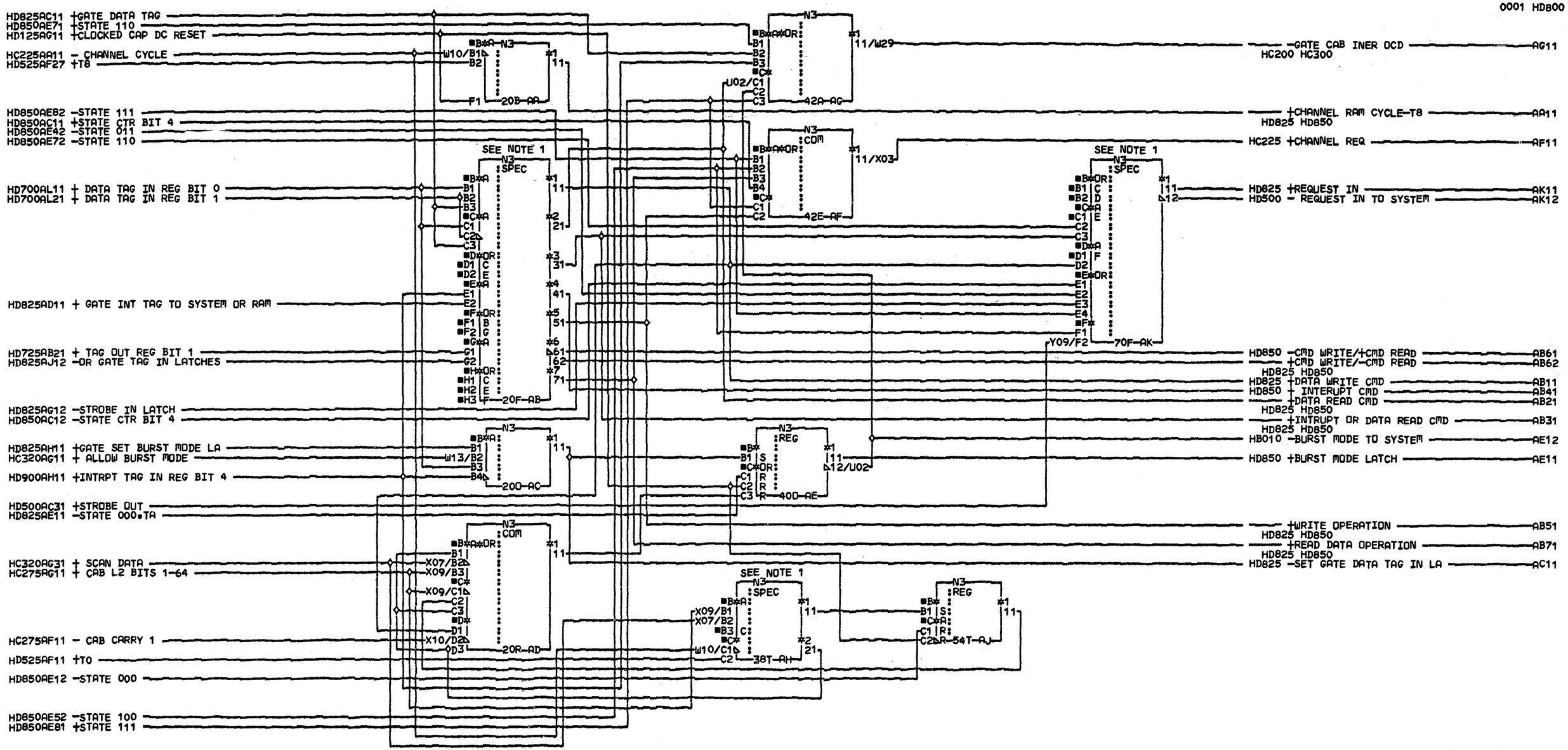
USN 00008 PRI=17NOV78 1558

AUC= SEC

PFORM=KSEB NEXTBLK AE

CID PIDFE JOB K1500929

HD730 0001



COMMENTS

CHAN CNTRL CHIP

PN8265626 EC834824 PEC833180

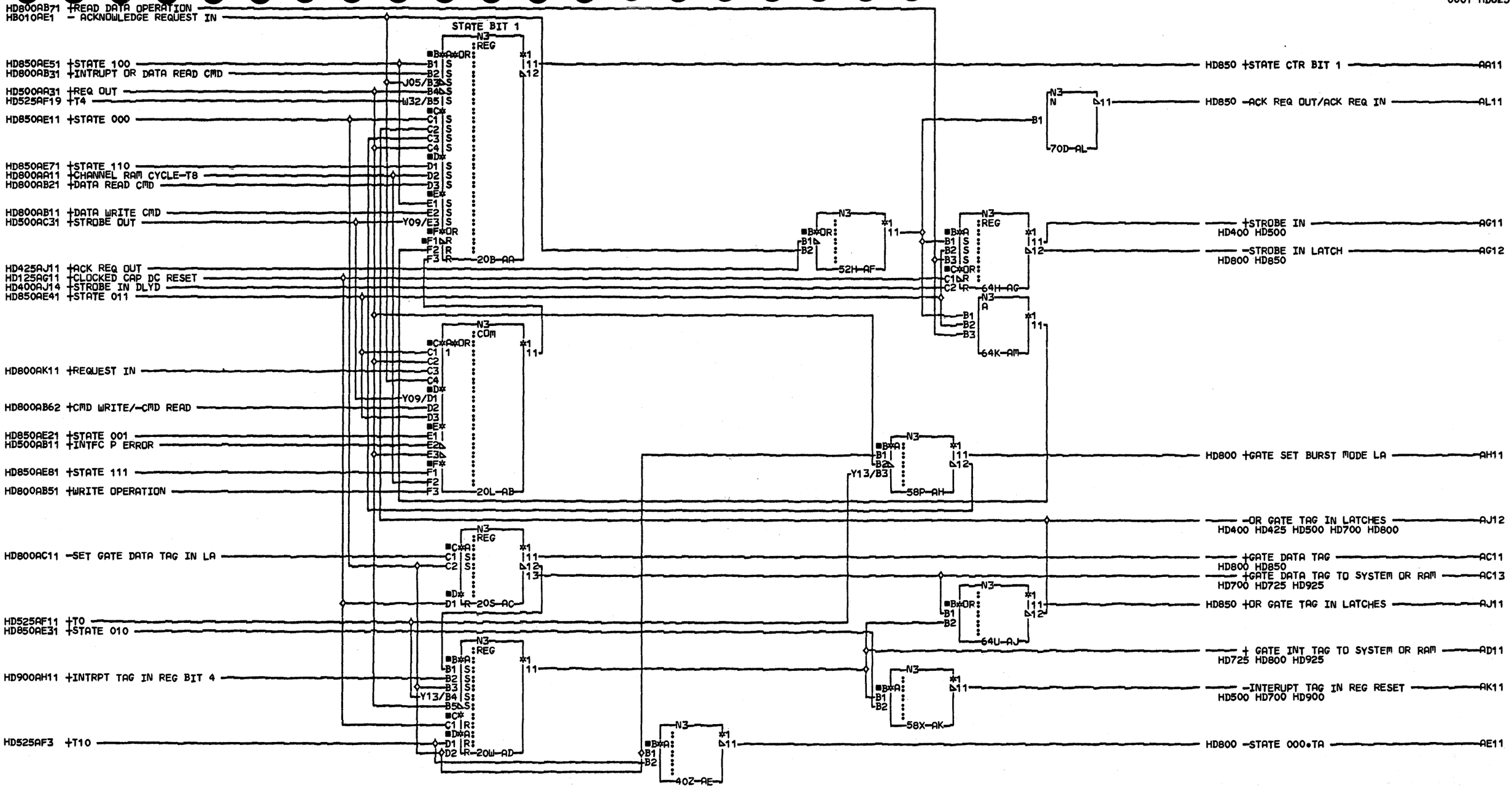
LOC=1A-A2D2

USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AL

CID PIOFE JOB T4301503



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

CHAN CNTRL CHIP

PN8265627 EC834824 PEC833180

LOC=1A-A2D2

USN 00008 PRI=16MAY79 2152

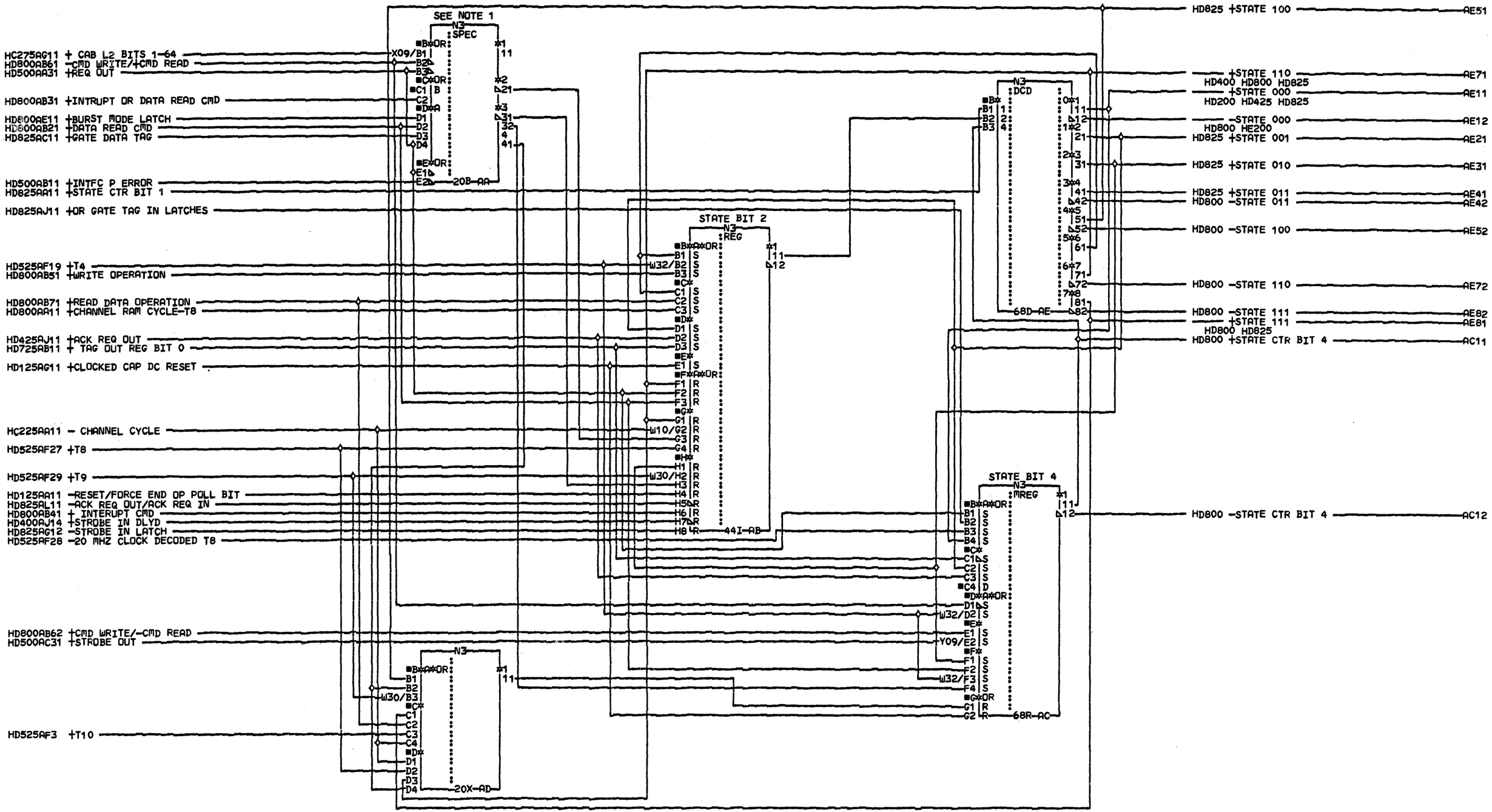
AUC= SEC

PFORM=KSEB NEXTBLK AN

CID PIOFE JOB T4301503

HD825 0001

HD825 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

CHAN CNTRL CHIP

PN8265628 EC834824 PEC833180

LOC=1A-A2D2

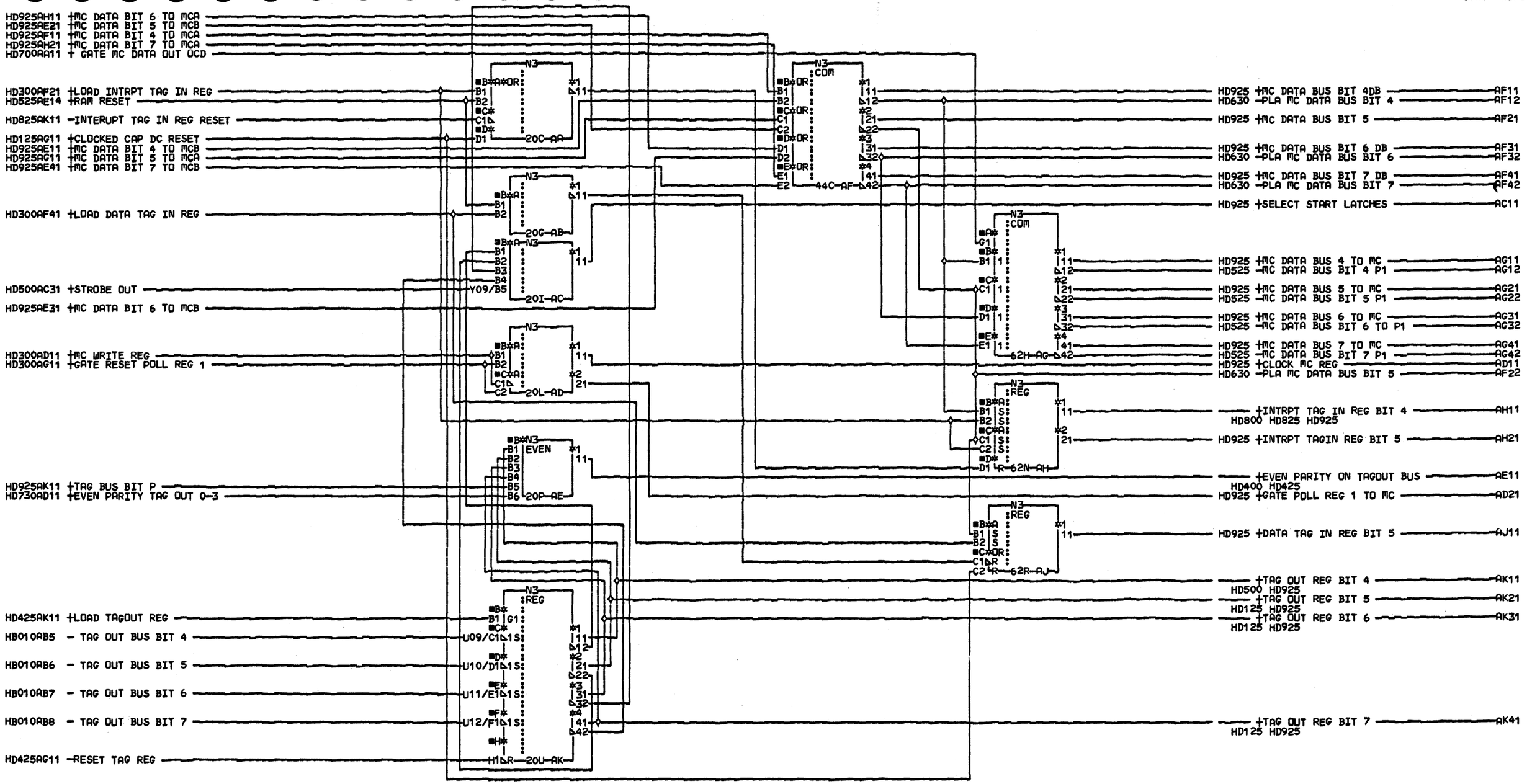
USN 00008 PRI=16MAY79 2152

AUC= SEC

PFORM=KSEB NEXTBLK AF

CID PIOFE JOB T4301503

HD850 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

TAGLO CHIP

PN8265629 EC834824 PEC833180

LOC=1A-A2D2

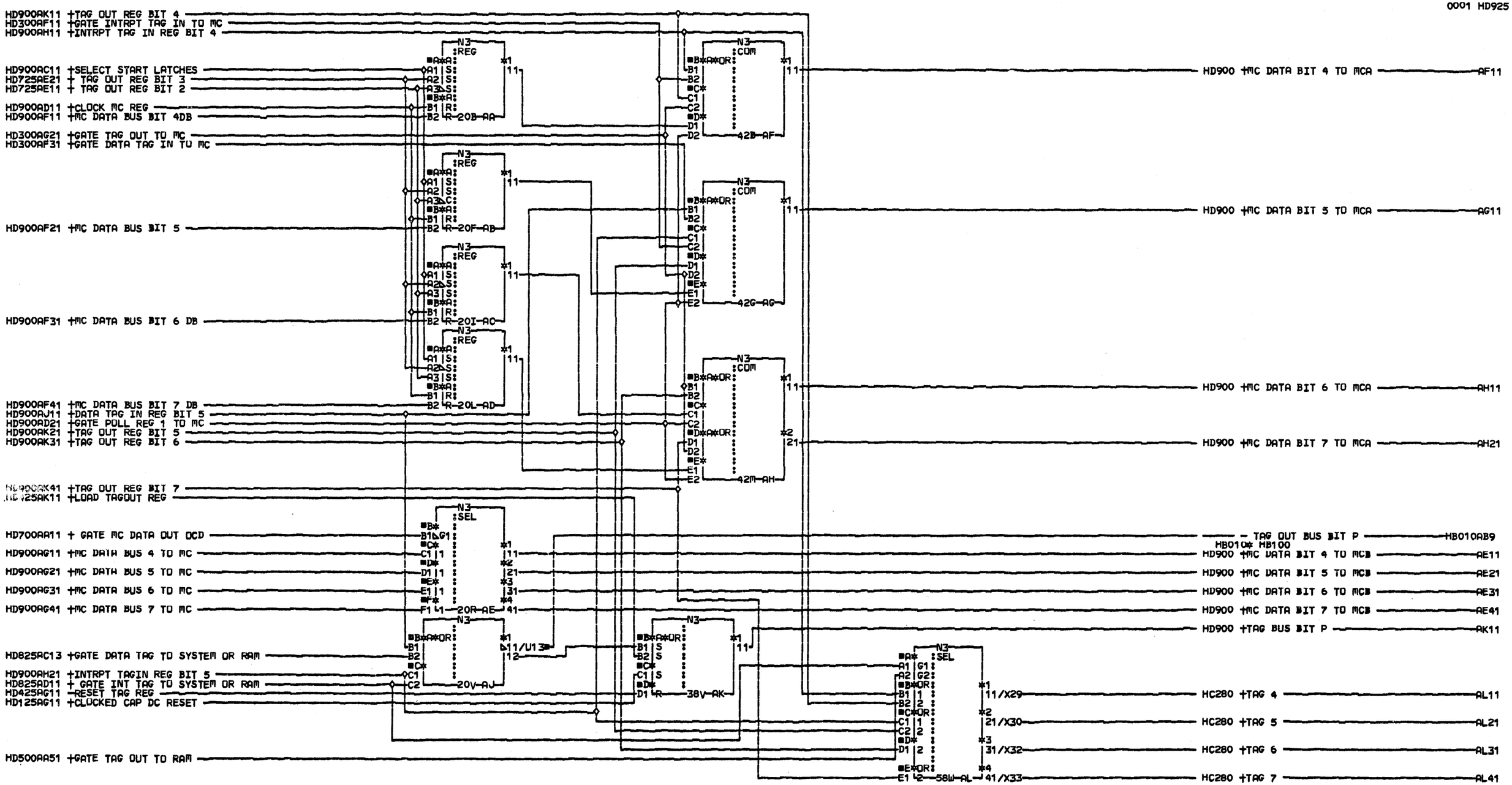
USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK 00

CID PIOFE JOB T4301503

HD900 0001

HD900 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

TAGLO CHIP

P/N 8265630 EC 833180

LOC=1A-A2D2

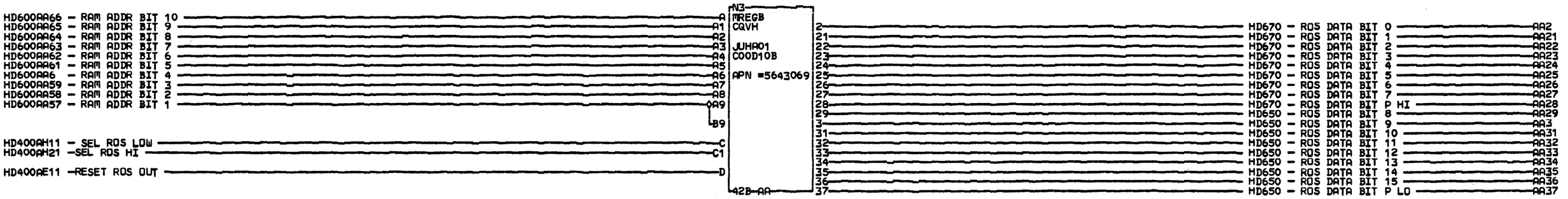
USN 00008 PRI=25OCT78 2339

AUC= SEC 04DEC78 1936

PFORM=KSEB NEXTBLK AM

CID PIOFE JOB K1500929

HD925 0001 HD925 0001



COMMENTS

2K X 18 ROS

P/N 8265631 EC 833180

LOC=1A-A2D2

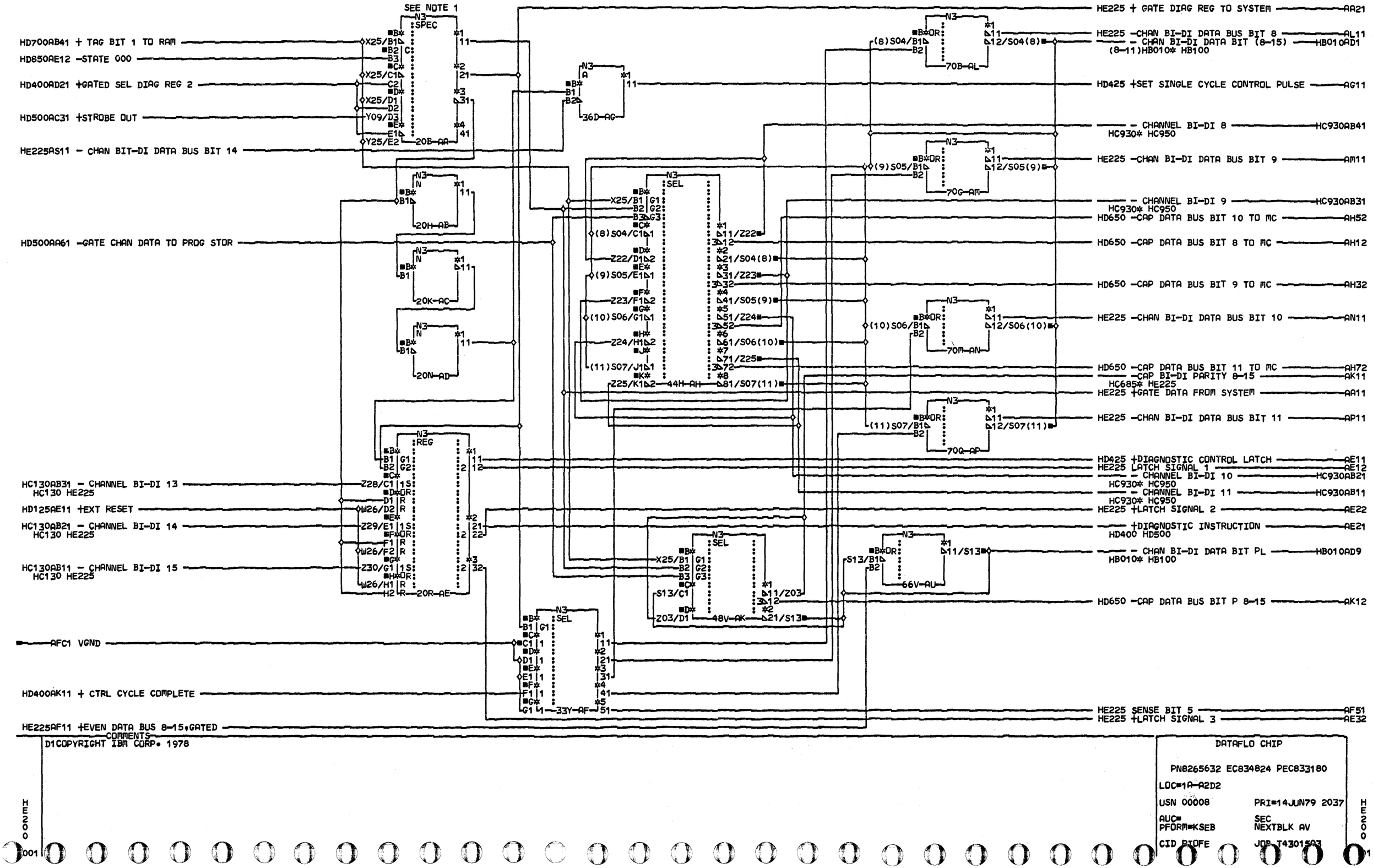
USN 00008 PRI=16OCT78 0818

AUC= SEC

PFORM=KSEB NEXTBLK AB

CID PIOFE JOB K1500929

HE100 0001



COMMENTS

D1COPYRIGHT IBM CORP. 1978

DATAFLO CHIP

PN8265632 EC834824 PEC833180

LOC=1A-A2D2

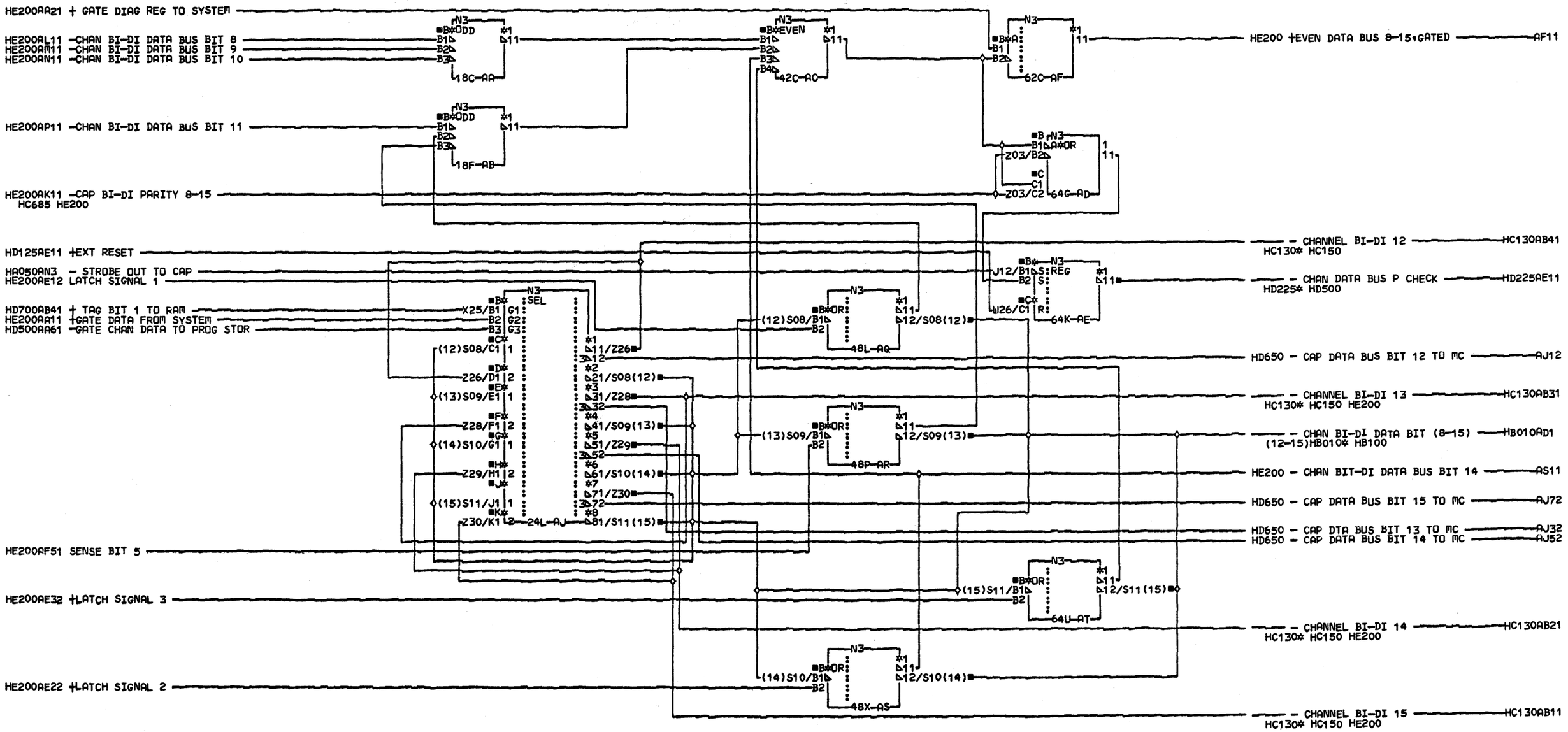
USN 00008 PRI=14JUN79 2037

AUC= SEC

PFORM=KSEB NEXTBLK AV

CID PIOFE JOB T4301503

HE200 0001 HE200



COMMENTS
D1COPYRIGHT IBM CORP. 1978

DATAFLO CHIP

PN8265633 EC834824 PEC833180

LOC=1A-A2D2

USN 00008 PKI=14JUN79 2037

AUC= SEC
PFORM=KSEB NEXTBLK AU

CID PIOFE JOB T4301503

HE225 0001

HE225 0001

AAA CONTROL BUS CABLE
AAA1 DEDICATED CABLE A
BBA1 DEDICATED CABLE B

DSD A — 28A-AA
DSD B — 38A-BB

1 CONTROL BUS CABLE IS CASCADED TO UP TO 2 DSDS. EACH DSD HAS 1 DEDICATED CABLE. — 62A-LL

CONFIGURATION DIAGRAM — 29D-MM

HD100AK11 -62PC CONTROL SAMPLE FILE 0
HC020AJ41 - DATA SELECT FILE 0
HC020AM41 - FAST SYNC 0
HD125AL11 -ERROR RESET FILE 0
HC020AL41 - READ FILE 0
HC020AK41 - WRITE FILE 0
HC010AB11 - WRITE DATA TO FILE 0
HD100AE11 +FILE 0 INTERFACE DEGATE

ENTR
DEDICATED CABLE
A5
REF HH076
40E-EE

HH050FD0 +WRITE GATE RETURN
HH035GA0 -INTERRUPT
HH040EB01 -SECTOR
HH040EB0 -INDEX
HH050TH0 +READ DATA
HH050TI0 READ CLOCK
HH050SS0 WRITE CLOCK
HH040MD01 -MISSING SECTOR PULSE

EXIT
DEDICATED CABLE
A5
REF HH076
40K-FF

HD500AB72 -62 PC TAG BUS BIT 2
HD500AB62 -62 PC TAG BUS BIT 1
HD500AB52 -62 PC TAG BUS BIT 0
HD500AB82 -62 PC TAG BUS BIT P
HD525AB11 -62 PC BI-DI CONTROL BUS BIT 0
HD525AB31 - 62 PC BI-DI CONTROL BUS BIT 1
HD525AB51 -62 PC BI-DI CONTROL BUS BIT 2
HD525AB71 -62 PC BI-DI CONTROL BUS BIT 3
HD525AC11 -62 PC BI-DI CONTROL BUS BIT 4
HD525AC31 - 62 PC BI-DI CONTROL BUS BIT 5
HD525AC51 - 62 PC BI-DI CONTROL BUS BIT 6
HD525AC71 - 62 PC BI-DI CONTROL BUS BIT 7
HD525AD11 - 62 PC BI-DI CONTROL BUS BIT P

ENTR
CONTROL BUS CABLE A3
REF HH076
NOTE: CONTROL BUS BITS 0-7,P ARE BIDIRECTIONAL
40P-GG

HH035HJ0 -CONTROL SAMPLE RECEIVED

EXIT
CONTROL BUS CABLE
A3
REF HH076
40U-HH

0*2 01*2 02*2 03*2 04*2 05*2 06*2 07*2 1*2 11*2 12*2 09*2

- TAG BIT 0 — HH001 HH030 — GG02
- DATA SELECT — HH035 HH076 — EE01
- CONTROL SAMPLE — HH030 HH035 HH076 — EE0
- FAST SYNC — HH050 HH076 — EE02
- WRITE — HH035 HH076 — EE05
+ INTERFACE DEGATE — HH032 HH076 — EE07
- RESET ERROR — HH030 HH035 HH048 HH076 — EE03
- READ — HH035 HH076 — EE04
- WRITE DATA — HH050 HH076 — EE06
- TAG BIT 1 — HH001 HH030 — GG01
- INTERRUPT — HB100 HD730 HH076 — FF01
+ WRITE GATE RETURN — HB200 HC030 HH076 — FF0
- SYSTEM SECTOR — HB200 HC030 HH076 — FF02
+ READ DATA TO SYSTEM — HB200 HC010 HH076 — FF04
WRITE CLOCK TO SYSTEM — HB200 HC010 HH076 — FF06
- SYSTEM INDEX — HB200 HC030 HH076 — FF03
READ CLOCK TO SYSTEM — HB200 HC010 HH076 — FF05
- SECTOR PULSES MISSING — HB200 HC030 HH076 — FF07
- TAG BIT 2 — HH001 HH030 — GG0
- TAG PARITY BIT — HH001 HH030 — GG03
- CONTROL BUS BIT 1 — HH001 HH030 — GG05
- CONTROL BUS BIT 3 — HH001 HH030 — GG07
- CONTROL BUS BIT 6 — HH001 HH030 — GG1
- CONTROL BUS BIT 0 — HH001 HH030 — GG04
CONTROL SAMPLE RECEIVED — HB100 HD100 HD300 HD425 HH001 HH076 — HH09
- CONTROL BUS BIT 2 — HH001 HH030 — GG06
- CONTROL BUS BIT 4 — HH001 HH030 — GG08
- CONTROL BUS BIT 5 — HH001 HH030 — GG09
- CONTROL BUS BIT 7 — HH001 HH030 — GG11
- CONTROL BUS PARITY BIT — HH001 HH030 HH032 — GG12

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

CONNECTORS
EE0
0031/1A-A2/A4B03
0032/1E-A1/A5B03
EE01
0033/1A-A2/A4D04
0034/1E-A1/A5D04
EE02
0035/1A-A2/A4D05
0036/1E-A1/A5D05
EE03
0037/1A-A2/A4D06
0038/1E-A1/A5D06
EE04
0039/1A-A2/A4D09
0040/1E-A1/A5D09
EE05
0151/1A-A2/A4D11
0152/1E-A1/A5D11
EE06
0041/1A-A2/A4B10
0042/1E-A1/A5B10
EE07
0043/1A-A2/A4B12
0044/1E-A1/A5B12
FF0
0045/1A-A2/A4D03

CONNECTORS
0046/1E-A1/A5D03
FF01
0047/1A-A2/A4B04
0048/1E-A1/A5B04
FF02
0049/1A-A2/A4B05
0050/1E-A1/A5B05
FF03
0051/1A-A2/A4D07
0052/1E-A1/A5D07
FF04
0053/1A-A2/A4B08
0054/1E-A1/A5B08
FF05
0055/1A-A2/A4D10
0056/1E-A1/A5D10
FF06
0057/1A-A2/A4D12
0058/1E-A1/A5D12
FF07
0059/1A-A2/A4B09
0060/1E-A1/A5B09
GG0
0067/1A-A2/A5B04
0069/1E-A1/A3B04
0068/1E-A1/A4B04

CONNECTORS
GG01
0070/1A-A2/A5B03
0072/1E-A1/A3B03
0071/1E-A1/A4B03
GG02
0073/1A-A2/A5B02
0075/1E-A1/A3B02
0074/1E-A1/A4B02
GG03
0001/1A-A2/A5B05
0003/1E-A1/A3B05
0002/1E-A1/A4B05
GG04
0004/1A-A2/A5D04
0006/1E-A1/A3D04
0005/1E-A1/A4D04
GG05
0007/1A-A2/A5D05
0009/1E-A1/A3D05
0008/1E-A1/A4D05
GG06
0010/1A-A2/A5D06
0012/1E-A1/A3D06
0011/1E-A1/A4D06
GG07
0013/1A-A2/A5D07

CONNECTORS
0015/1E-A1/A3D07
0014/1E-A1/A4D07
GG08
0016/1A-A2/A5D09
0018/1E-A1/A3D09
0017/1E-A1/A4D09
GG09
0019/1A-A2/A5D10
0021/1E-A1/A3D10
0020/1E-A1/A4D10
GG1
0022/1A-A2/A5D11
0024/1E-A1/A3D11
0023/1E-A1/A4D11
GG11
0025/1A-A2/A5D12
0027/1E-A1/A3D12
0026/1E-A1/A4D12
GG12
0028/1A-A2/A5D13
0030/1E-A1/A3D13
0029/1E-A1/A4D13
HH09
0153/1A-A2/A4B03
0154/1E-A1/A5B03

DSD-CONTROLLER INTERFACE
FILE A

P/N8265684 EC834824 PEC833180

LOC=

USN 00008 — PRI=04JUN79 1411
AUC= — SEC 08JUN79 1845
PFORM=KSEB — NEXTBLK MN
CID PIOFE — JOB T4301503

HH000 0001

HD100AK21 -62PC CONTROL SAMPLE FILE 1 — A
HC020AJ31 - DATA SELECT FILE 1 — A1
HC020AM31 - FAST SYNC 1 — A2
HD125AL21 -ERROR RESET FILE 1 — A3
HC020AL31 - READ FILE 1 — A4
HC020AK31 - WRITE FILE 1 — A5
HC010AB21 - WRITE DATA TO FILE 1 — A6
HD100AE21 +FILE 1 INTERFACE DEGATE — A7

N ENTR
DEDICATED CABLE
A5
REF HH076
40A-EE

N EXIT
DEDICATED CABLE
A5
REF HH076
40D-FF

0*2 — + WRITE GATE RETURN — HB200 HC030 — FF0
01*2
02*2 — - SYSTEM SECTOR — HB200 HC030 — FF02
03*2
04*2 — + READ DATA TO SYSTEM — HB200 HC010 — FF04
05*2
06*2 — WRITE CLOCK TO SYSTEM — HB200 HC010 — FF06
07*2 — - INTERRUPT — HB100 HD730 — FF01
— - SECTOR PULSES MISSING — HB200 HC030 — FF07
— - SYSTEM INDEX — HB200 HC030 — FF03
— READ CLOCK TO SYSTEM — HB200 HC010 — FF05

D
LINES TO AND FROM FILE B ARE SHOWN ONLY FROM ADAPTER TO BOARD CABLE SOCKETS. FROM THIS POINT ON USE FILE A FIELD SERVICE LOGICS, NOTING THAT THE BOARD IS ACTUALLY 1E-B1 INSTEAD OF 1E-A1.
62A-LL

HH000GG0 - TAG BIT 2 — A
HH000GG01 - TAG BIT 1 — A1
HH000GG02 - TAG BIT 0 — A2
HH000GG03 - TAG PARITY BIT — A3
HH000GG04 - CONTROL BUS BIT 0 — A4
HH000GG05 - CONTROL BUS BIT 1 — A5
HH000GG06 - CONTROL BUS BIT 2 — A6
HH000GG07 - CONTROL BUS BIT 3 — A7
HH000GG08 - CONTROL BUS BIT 4 — A8
HH000GG09 - CONTROL BUS BIT 5 — A9
HH000GG1 - CONTROL BUS BIT 6 — B
HH000GG11 - CONTROL BUS BIT 7 — B1
HH000GG12 - CONTROL BUS PARITY BIT — B2

N ENTR
CONTROL BUS CABLE A3
REF HH076
NOTE:
CONTROL BUS BITS 0-7,P ARE BIDIRECTIONAL
40H-GG

HH000HH09 CONTROL SAMPLE RECEIVED — A9

N EXIT
CONTROL BUS CABLE A5
REF HH076
40M-HH

09*2 — HH076 - CONTROL SAMPLE RECEIVED — HH09

N SPEC TIED TO GND IF 2 FILE SYSTEM 16P-MM
N SPEC TIED TO GND IF 1 FILE SYSTEM 16S-NN

1*2 — DED. B CABLE: A — N SPEC — 1*2 / B — 2*2 — 26Q-PP
DED. A CABLE: A — N SPEC — 1*2 / B — 2*2 — 36Q-QQ
CONTROL CABLE: A — N SPEC — 1*2 / B — 2*2 — 46Q-RR
2*2 — - CABLE CONTINUITY — HB100 HD325 — RR2

COMMENTS
D1COPYRIGHT IBM CORP. 197

CONNECTORS
EE0
0013/1A-A2/A6E02
0014/1E-B1/A5D03
EE01
0015/1A-A2/B6A02
0016/1E-B1/A5D04
EE02
0017/1A-A2/B6B02
0018/1E-B1/A5D05
EE03
0019/1A-A2/B6C02
0020/1E-B1/A5D06
EE04
0023/1A-A2/C6A02
0024/1E-B1/A5D09
EE05
0027/1A-A2/C6C02
0028/1E-B1/A5D11
EE06
0009/1A-A2/C6B04

CONNECTORS
0010/1E-B1/A5B10
EE07
0011/1A-A2/C6D04
0012/1E-B1/A5B12
FF0
0077/1A-A2/A6E02
0078/1E-B1/A5D03
FF01
0001/1A-A2/B6A04
0002/1E-B1/A5B04
FF02
0003/1A-A2/B6B04
0004/1E-B1/A5B05
FF03
0021/1A-A2/B6D02
0022/1E-B1/A5D07
FF04
0005/1A-A2/B6E04
0006/1E-B1/A5B08
FF05

CONNECTORS
0075/1A-A2/C6B02
0076/1E-A1/A5D10
FF06
0025/1A-A2/B6B02
0030/1E-B1/A5D12
FF07
0007/1A-A2/C6A04
0008/1E-B1/A5B09
HH09
0079/1A-A2/A6E04
0080/1E-B1/A5B03
MM1
0061/1A-A2/B6E02
NN1
0074/1A-A2/A4D08
PPA
0062/1A-A2/A6D04
PPB
0063/1E-B1/A5D13
PP1

CONNECTORS
0064/1E-B1/A5B02
PP2
0065/1A-A2/C6E02
QQA
0066/1A-A2/A4B02
QQB
0067/1E-A1/A5D13
QQ1
0068/1E-A1/A5B02
QQ2
0069/1A-A2/A4D13
RRA
0070/1A-A2/A5D02
RRB
0071/1E-A1/A3B13
RR1
0072/1E-A1/A3D02
RR2
0073/1A-A2/A5B13

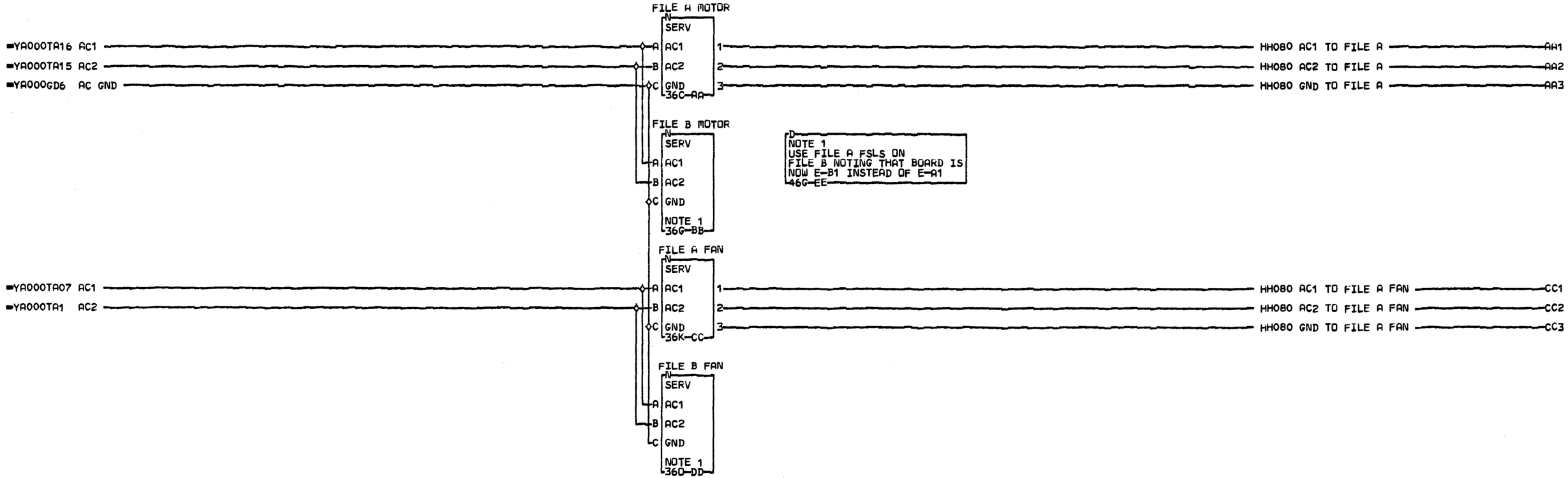
DSD-CONTROLLER INTERFACE
FILE B
AND CABLE CONTINUITY
P/N8265685 EC834824 PEC833180

LOC=

USN 00008 — PRI=08JUN79 1845
AUC= — SEC
PFORM=KSEB — NEXTBLK RS
CID PIOFE — JOB T4301503

HH001 0001

HH001 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

AC SERVICE

PN 8265695 EC 834824 PEC 833180

LOC=

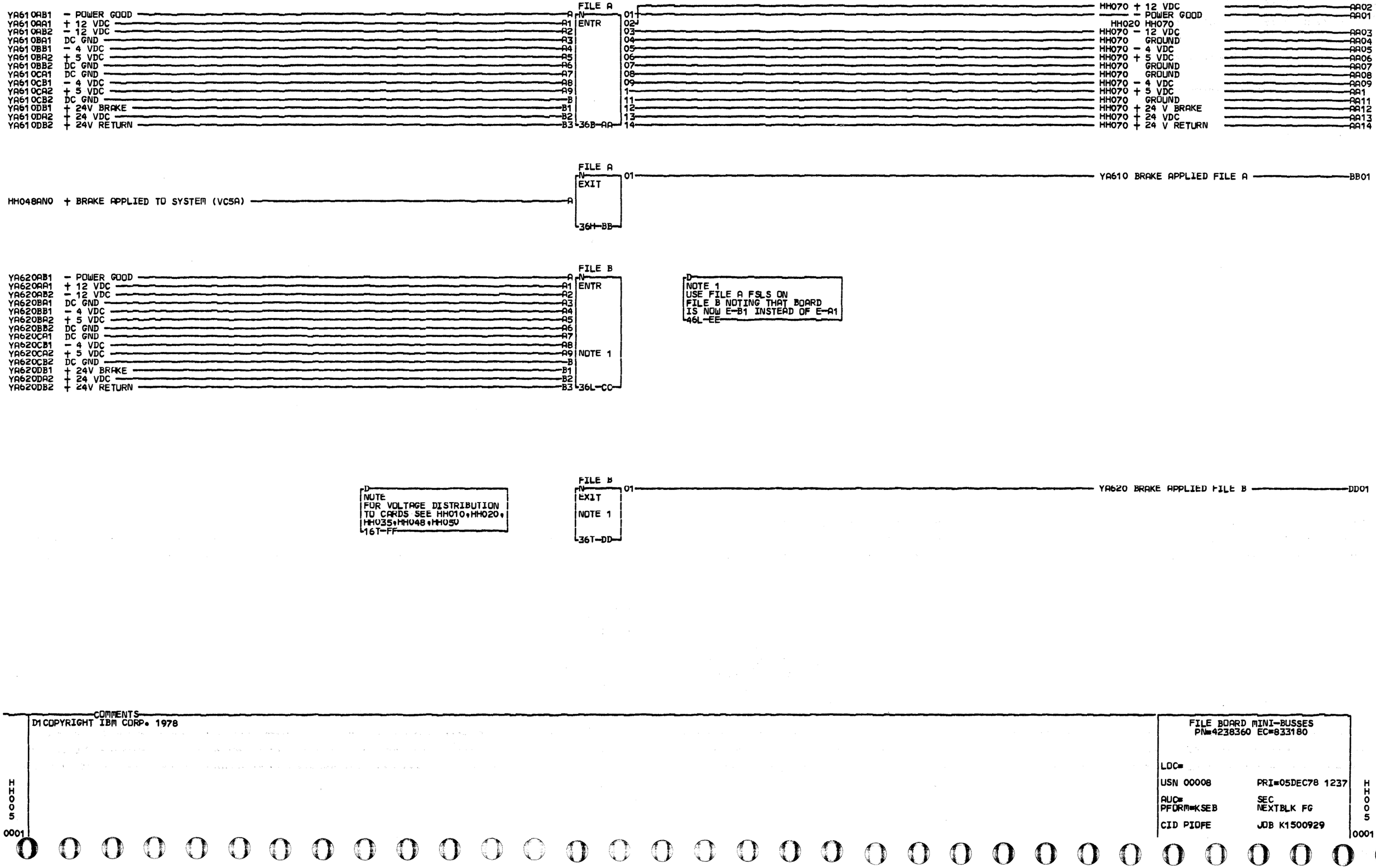
USN 00008 PRI=14JUN79 2037

AUC= SEC

PFORM=KSEB NEXTBLK EF

CID PIOFE JOB T4301503

HH003 0001



COMMENTS

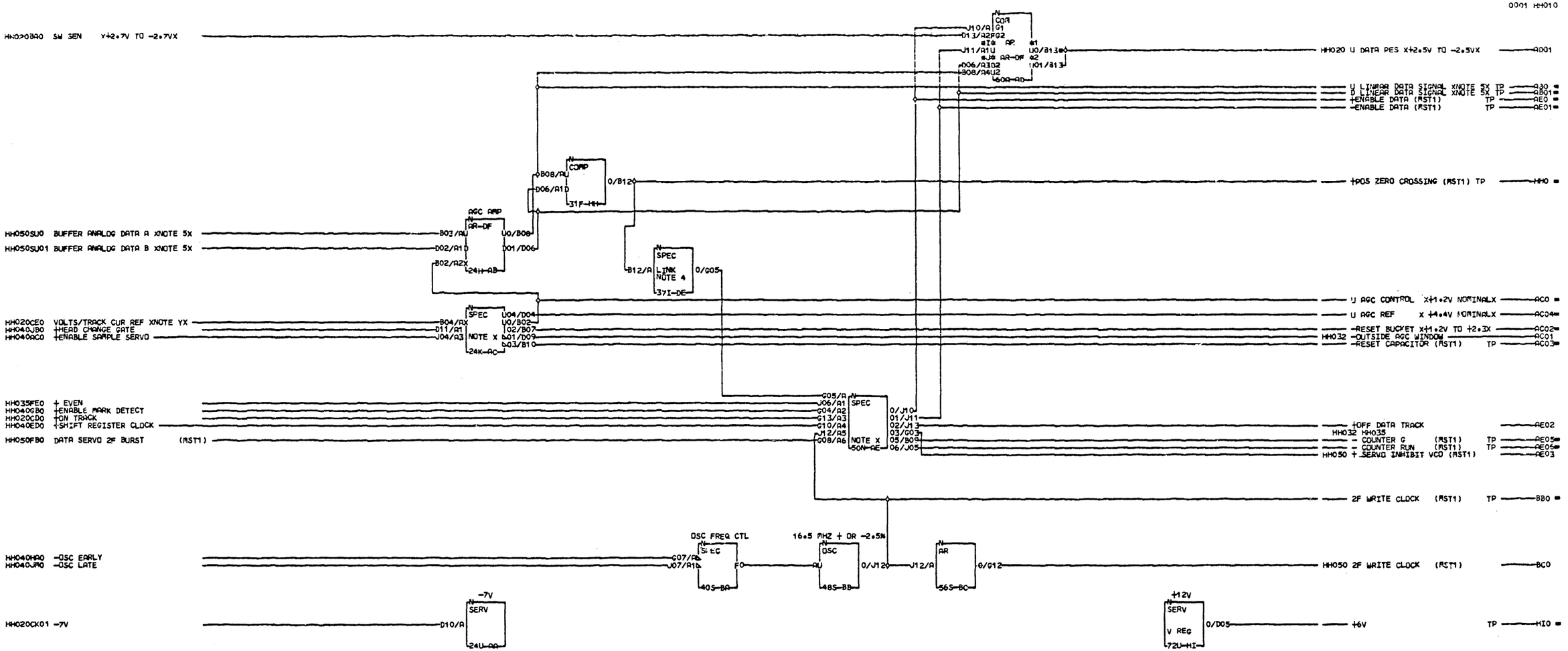
FILE BOARD MINI-BUSSES
PN=4238360 EC=833180

LOC=

USN 00008 PRI=05DEC78 1237

AUC= SEC
PFORM=KSEB NEXTBLK FG

CID PIOFE JOB K1500929



	COMMENTS	COMMENTS	COMMENTS	COMMENTS	COMMENTS
	A0 COPYRIGHT IBM CORP. 1979	5 (POSITION ERROR SIGNAL).	7 WITHIN LIMITS.	5 PINS B12 AND G05	6
	1 VOLTAGE DISTRIBUTION	6 COUNTER G IS ONE BIT OF	8	6	J1 NOTE Y
	2 GND D08, J08	7 DIVIDER CHAIN USED BY THE	E1 NOTE 3	G1 NOTE 5	2 THIS INPUT IS NOT SUITABLE
	3 +5V J03	8 TIMING CIRCUITS. INLUDED	2 OSCILLATOR FREQUENCY IS	2 6.4V PEAK TO PEAK	3 FOR SCOPING
	4 +12V B11	9 HERE AS IT IS REFERENCED BY	3 SYNCHRONISED TO DISC	3	
	5 -12V D12	C1 THE MAPS.	4 ROTATION AND MUST BE	H1 NOTE 6	
	6 -4V G06.	2 SEE ALSO NOTE X	5 WITHIN 2.5% WHEN DISC IS	2 VARIABLE! CHECK	
H	7 LOGIC INPUT AND OUTPUT ARE	3	6 UP TO SPEED.	3 OUTPUT LEVEL AND AGC.	
H	8 .V IL UNLESS NOTED OTHERWISE.	D1 NOTE 2	7	4	
0	9	2 PROVIDES AUTOMATIC GAIN	8	I1 NOTE X	
1	31 NOTE 1	3 CONTROL (AGC) FOR AGC AMP	F1 NOTE 4	2 LOGIC CIRCUITS WITHIN THIS	
0	2 TIMING LOGIC TO SELECT	4 +INSIDE AGC WINDOW IS INPUT	2 POSITIVE ZERO CROSSING IS	3 BLOCK DO NOT PROVIDE	
	3 DEDICATED SERVO OR SAMPLE	5 TO SENSE BYTES TO INDICATE	3 LINKED EXTERNALLY THROUGH	4 SUFFICIENT TEST POINTS FOR	
0001	4 SERVO INPUT TO DATA PES	6 AGC CONTROL VOLTAGE IS	4 THE BOARD WIRING BETWEEN	5 EFFECTIVE SCOPING	

SERVO 1 CARD
PN=8265686
EC=834824
PEC=833180

LOC=1E-91E2

USN 00008 PRI=21JUN79 0931

AUC= SEC
PFORM= NEXTBLK HJ

CID PICFE JOB N3401133

0001

HH033FEC + EVEN
HH044TTO +4 TTL ERROR

=HH075AA0 -SERVO PRE AMP OUTPUT
=HH075AA01 +SERVO PRE AMP OUTPUT

=HH070BB0 CLOCK THRESHOLD XNOTE YX

HH040BB01 -SELECT DEMOD N2
HH040BB02 -SELECT DEMOD Q1
HH040BB03 -SELECT DEMOD Q2
HH010AD01 U DATA PES X+2.5V TO -2.5VX
HH040BB0 -SELECT DEMOD N1

HH048AJ0 +BRAKE APPLIED

HH046FD01 -SEEK COMPLETE

HH045HD0 +OUT DIRECTION
=HH070BB03 CSR OUT XOV TO +1.2VX

HH005AA01 - POWER GOOD

HH045DA0 +SEEK
=HH070BB02 VCM START
=HH070BB01 VCM FINISH
=HH070BB05 CSR IN XOV TO +1.2VX

HH045HH0 -OUT DRIVE

HH046GB0 +SELECT INTEGRATOR
HH046GA0 -SELECT INTEGRATOR

HH045HJ0 -IN DRIVE

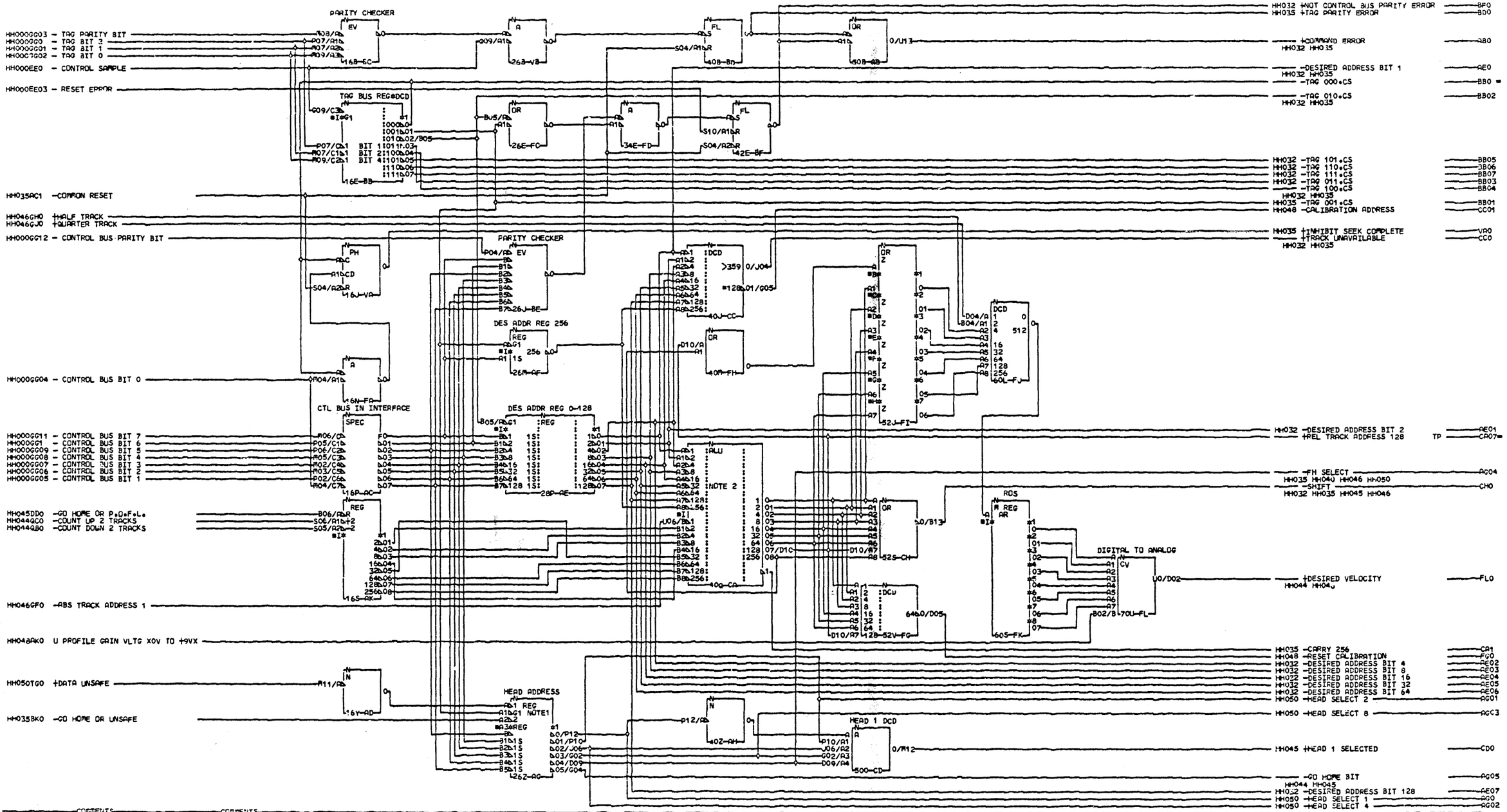
HH010 SW SEN X+2.7V TO -2.7VX — 8A0
HH SW XOV TO +3VX — 8B0 =
HH048 -MISSING SERVO CLOCKS — 8B0
HYBRID PES OUT X+2.7V TO -2.7VX — CJ0 =
HYBRID PES N TP — CB0 =
HYBRID PES Q TP — EF0 =
SW SEQ. X+2.7V TO -2.7VX TP — BB0 =
HH032 - BAD AGC LEVEL — BC0
HH040 +SERVO CLOCK SS 280NS — CC0
HH046 COIL CURRENT SIGNAL X+5V TO -5VX — CC0
+ON TRACK — CD0
HH010 HH032
-POWER ON DELAY — AC0
HH032 HH035 HH040 HH044 HH045 HH046 HH048
HH010 VOLTS/TRACK CUR REF XNOTE YX — CE0
HH044 +N/2 ERROR X+1.3 TO -1.3VX — AF0
HH044 -N/2 ERROR X+1.3V TO -1.3VX — AF01
HH044 +Q/2 ERROR X+1.3V TO -1.3VX — AF02
HH070 D BASE NPN OUT XOV TO +3.45VX — ED0
HH070 U BASE PNP OUTX+19.5V TO +26.4VX — ED01
HH044 -Q/2 ERROR X+1.3V TO -1.3VX — AF03
HH070 D BASE NPN IN XOV TO +3.45VX — EP0
HH070 U BASE PNP IN X+19.5V TO +26.4VX — EP01
DRIVER PREAMP TP — EL0 =
HH032 COIL CURRENT LOW — FD0
HYBRID PES IN X+2.7V TO -2.7VX — EH0 =
INTEGRATOR OUTPUT TP — AG0 =
HH010 -7V — CK01
REF VOLTAGE xNOTE 6 x — FB0 =
HH075 SPA -8V — CK0
OUT BASE DRIVE TP — EA0 =
IN BASE DRIVE TP — EN0 =
TRIBITS X+2.2V TO -2.2VX TP — AR01 =
HH048 -POWER GOOD DELAYED — AD0
NOTCH FILTER TP — EJ0 =

VGA
AR-DF
280NS
SS
348-CD
Z
P/C NETWORK
22D-CE
CS
SPEC
22C-AB
17 S
22K-AC
AGC CONTROL
AR
34K-EC
LOW PASS FLTR
22N-AD
COMP
22Q-EG
SPEC LINK NOTE 4
34Q-EH
FLTR
26S-EJ
A
36S-EK
AR-DF
46S-EL
AR G1
56S-EA
AR
66S-ED
COR
48A-BA
48E-BB
48H-BC
RESISTOR NETWORK
60E-CB
60H-EA
48J-EQ
48L-ER
NOTE 3
60K-BD
SPEC
NOTE 1
70L-CD
S13/A1G2
S12/A1DG2
70D-CJ
S13/A1G1
60O-CC
AR G1
55U-EN
66U-EP
SERV
46W-FA
RESISTOR NETWORK
56W-FB
COMP
66W-FD
-12V SERV V REG -8V
V REG -7V
16Z-CK
SERV -7V
26Z-DK
SPEC LINK NOTE 5
36Z-DJ
RESISTOR NETWORK
46Z-FC
COMP
66Z-FE
+5V SERV
NOTE 7
NOTE 8
NOTE 9

COMMENTS
A0 COPYRIGHT ISM CORP. 1979
1 =4V B06,P06,G06,S06
2 =-7V D10,P10,J10,U10
3 =-12V D12,P12,J12,U12
4 +5V D03,P03,J03,U03
5 +12V B11,R11,G11,S11
6 GND D08,P08,J08,U08
7 +24V G02
8 ALL LOGIC OUTPUTS 366.VTL..
9
F1 NOTE 1
2 COMBINES HYBRID PES AND
3 VOICE COIL CURRENT SIGNAL
4 TO DETERMINE WHEN ACCESS
5 IS WITHIN 12% OF TRACK
6 CENTER.
7 =SEEK COMPLETE PREVENTS
8 OUTPUT DURING SEEK
9 OPERATION.
G1 NOT= 2
2 AMPLIFIER/INTEGRATING
3 AMPLIFIER-DRIVER FOR HYBRID
4 PES. P03 AND P07 INPUTS
5 SELECT & CONTROL SIGNAL
6 INTEGRATION AT THE END OF A
7 SEEK OPERATION.
8
J1 NOTE 3
2 COMPARATOR COMPARES OUTPUT
3 LEVELS OF PEAK DETECTORS &
4 SELECTS WHICH IS MIXED WITH
5 DATA PES TO GIVE HYBRID PES
6 OUTPUT.
7
X1 NOTE 4
2 HYBRID PES OUT & IN ARE
3 LINKED VIA BOARD WIRING
4 I.E. F2J11-F2G09.
L1
M1 NOTE 5.
2 -7V IS LINKED
3 EXTERNALLY THROUGH BOARD
4 WIRING.
5
N1 NOTE Y
2 THIS INPUT IS NOT SUITABLE
3 FOR SCOPING.
4
Q1 NOTE 6
2 REF VOLTAGES EQUIVALENT TO
3 CURRENT LEVEL BETWEEN 0.14
4 A AND 0.22A.
5 REF VOLTAGES CANNOT BE
6 MEASURED AS THERE ARE NO
7 CARD PINS FOR THESE LINES.
8
P1 NOTE 7
2 CIRCUIT TO DETECT MISSING
3 CLOCK PULSES. THE GATE
4 CONDITION PREVENTS FALSE
5 OUTPUT DURING THE DISC
6 DECELERATION.
7
Q1 NOTE 8
2 CIRCUITS TO DETECT MISSING
3 NORMAL OR QUADRATURE
4 POSITION ERROR SIGNALS.

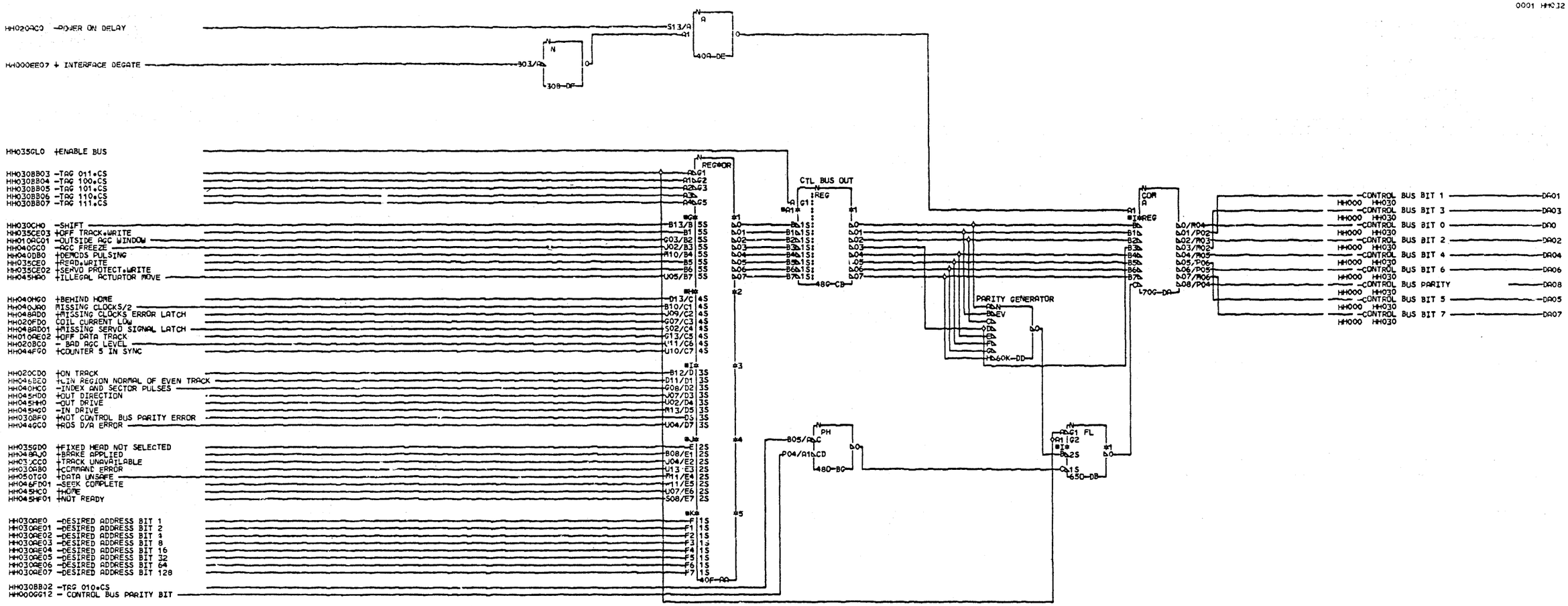
SERVO 2 CARD
PN=8265687
SEC=834824
PEC=833180
LOC=1E-A1F2
USN 00008 PRI=21JUN79 0931
AUC= SEC
PFORM= NEXTBLK FF
CID PIOFE JOB N3401133

0001



COMMENTS	COMMENTS
A0 COPYRIGHT IBM CORP. 1979	6 WHICH DIRECTION ACCESS APM
1 ALL LOGIC OUTPUTS ARE VTL	7 MOVES TO REDUCE DIFFERENCE
2	8 COUNT TO ZERO.
B1 NOTE 1	9
2 COMMON INPUTS AFFECT THE	
3 HEAD ADDRESS AS FOLLOWS:-	
4 1. FORCES OUTPUT TO HEAD 11	
5 2. FORCES OUTPUT TO HEAD 1	
6	
D1 NOTE 2	
2 ALU COMPARES THE DESIRED	
3 WITH THE ABSOLUTE ADDRESS.	
4 OUTPUT IS DIFFERENCE COUNT.	
5 CARRY OUTPUT DETERMINES IN	

LOGIC 1 CARD	
PN=3265488	
EC=834824	
PEC=833180	
LOC=1E-A1C2	
USN 00008	PRI=21 JUN 79 0931
ALC=	SEC
PFORM=KSEC	NEXTBLK VC
CID PIOFE	JOB N3401133



COMMENTS
A0 COPYRIGHT IBM CORP. 1979

LOGIC 1 CARD
PN=4230367
EC=834824

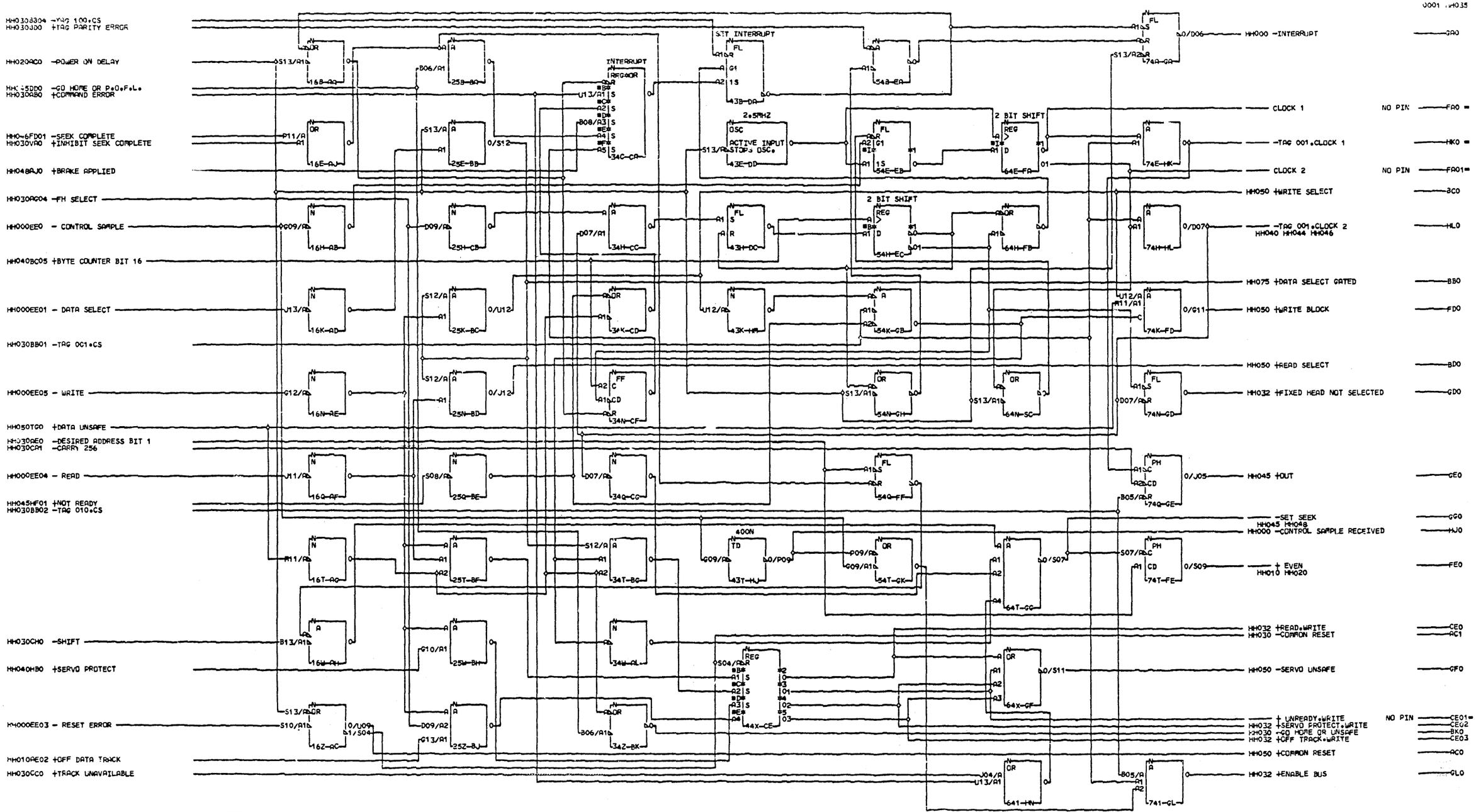
LOC=1E-A1C2

USN 00008 PRI=21JUN79 0931

PFORM=KSEC SEC NEXTBLK DG

CID PIOFE JOB N3401133

HH0132 0001



COMMENTS	
A0	COPYRIGHT IBM CORP* 1979
1	VOLTAGE DISTRIBUTION
2	+12V B11
3	+5V D03*J03*P03*L03
4	GND D08*J08*P08*L08
5	-12V D12
6	ALL LOGIC I/O PINS ARE VTL
7	
B1	NOTE 1
2	CTL SAMPLE RCD IS RESPONSE
3	TO CONTROL SAMPLE* DELAYED
4	APPROX 400NS*
5	THE REMAINING OUTPUTS ARE
6	DESCRIBED BY LINE NAME*

COMMENTS	
7	CLOCK 1 & 2 INPUTS ARE
8	A4 & A5*
9	

LOGIC 1 CARD
PN=8265689
EC=834824
PEC=833180

LOC=1E-A1C2

USN 00008 PRI=21JUN79 0931

BUC= SEC
PROM=KSEC NEXTBLK SD

CID PICFE JOB N3401133

0001

HH044FG0 +COUNTER 5 IN SYNC
HH020AC0 -POWER ON DELAY
HH044PC0 -RESET BYTE COUNTER
HH050SS0 WRITE CLOCK
HH044GH0 -PRESET COUNTER 5
HH020CG0 +SERVO CLOCK 5S 280NS
HH048AB0 -COMMON RESET
HH035HL0 -TAG 001*CLOCK 2
HH030AG04 -FH SELECT

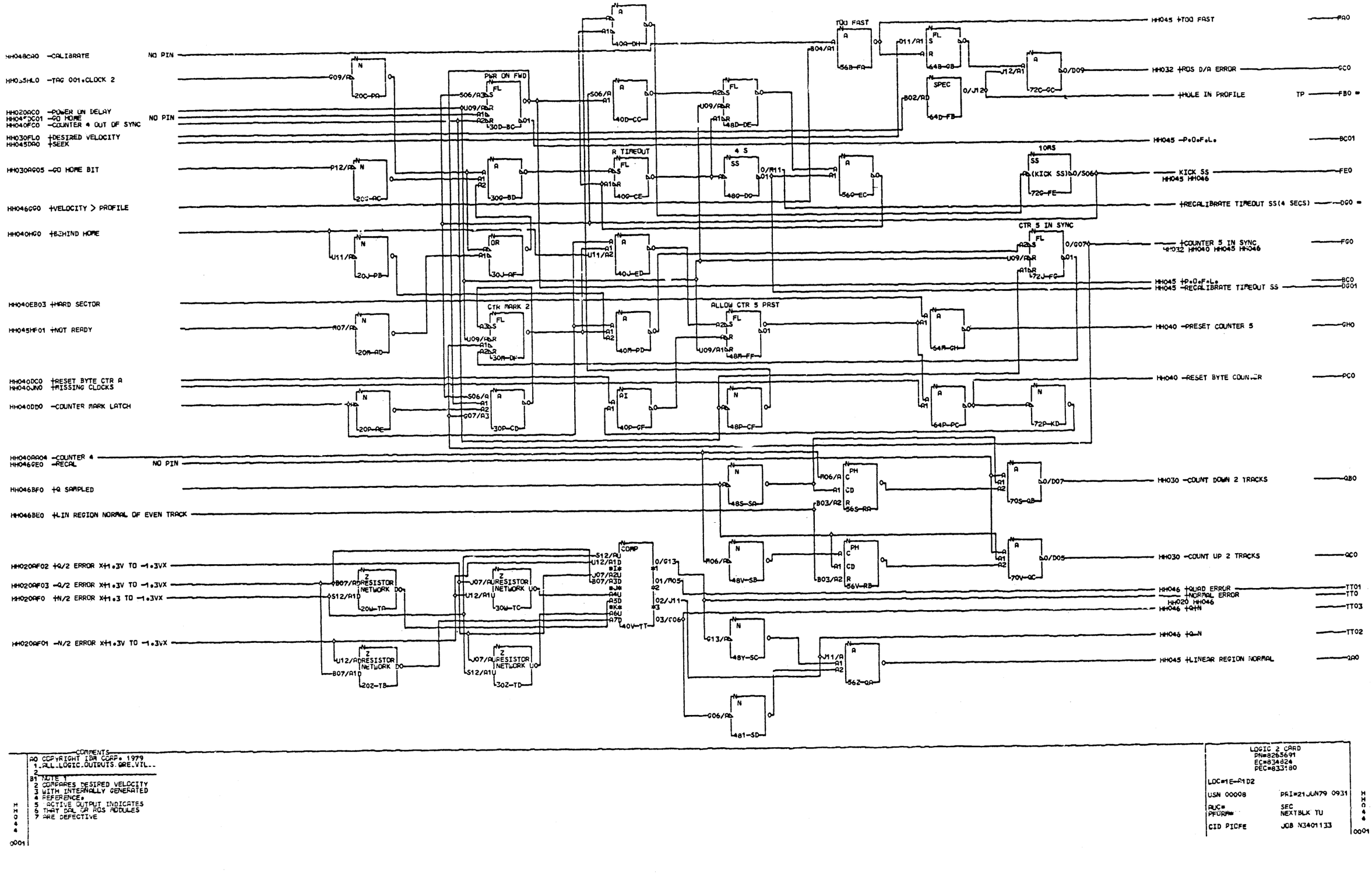
COUNTERS 1-5
SYNC DETECTOR
BYTE CTR
11 BIT SHIFT REG
CLOCK
PLD SETTLE 320US
RUN
RESET BYTE CTR
CTR MARK
BYTE PARITY
BYTE 13*25
SECT EARLY+LATE
BYTE 9*5
MISS SECT
BEHIND HOME
SR CLOCK
DIV BY 2
ENBL MK DETECT
HD CHANGE
AGC FREEZE

HH020 -SELECT DEMOD Q2 — BB03
HH020 -SELECT DEMOD N1 — BB0
+HARD SECTOR — EB03
HH044 HH045
HH01C +ENABLE SAMPLE SERVO — AC0
HH000 -SECTOR — EB01
HH032 +DEMODS PULSING — DB0
-COUNTER 4 OUT OF SYNC — FC0
HH044 HH045 HH048
HH046 -CTR 5 — AA06
HH020 -SELECT DEMOD N2 — BB01
HH020 -SELECT DEMOD A1 — BB02
HH035 +SERVO PROTECT — HB0
HH000 -INDEX — EB0
+HARD SECTOR (NO PIN) — EB02
HH000 -MISSING SECTOR PULSE — HD01
HH032 -INDEX AND SECTOR PULSES — HC0
+BYTE COUNTER BIT 16 — BC05
HH035 HH046
-SAD SERVO CLOCK I/P — AB02
HH046 HH048
HH045 +SECTOR PULSES MISSING — HD0
HH044 +RESET BYTE CTR A — DC0
HH044 -COUNTER 4 — AA04
+BEHIND HOME — HG0
HH032 HH044
HH045 -BEHIND HOME — HG01
HH044 -COUNTER MARK LATCH — DD0
HH048 +BYTE CTR BIT 32 — BC06
HH010 +SHIFT REGISTER CLOCK — ED0
HH010 -OSC EARLY — HF0
HH032 MISSING CLOCKS/2 — JA0
HH046 +BYTE CTR BIT 64 — BC07
HH044 +MISSING CLOCKS — JN0
HH010 -OSC LATE — JH0
HH010 +ENABLE MARK DETECT — GB0
-AGC FREEZE — GC0
HH032 HH050
HH010 +HEAD CHANGE GATE — JB0

COMMENTS
A0 COPYRIGHT IBM CORP. 1979
1 ALL LOGIC OUTPUTS ARE VTL
2
B1 NOTE 1
2 DECODE OF COUNTERS 4 AND 5
3 COMMON RESET FORCES ALL
4 OUTPUTS TO ZERO.
5 1= B.D 2= A.D
6 3= B.C 4= A.C
7
C1 NOTE 2
2 OUTPUT IS SQUARE WAVE OF 4
3 US PERIOD APPROX. USED BY
4 DIAGNOSTIC MAPS TO CHECK
5 FOR CORRECT SEQUENCE OF
6 DEMODS N1, N2, Q1, Q2)
7
D1 NOTE 3
2 BYTE COUNTER RUNS FROM BIT
3 2 THROUGH BIT 512. BIT 1 OF
4 BYTE COUNT IS OUTPUT OF
5 COUNTER 4.
6
E1 NOTE 4
2 LOGIC TO DETECT
3 SYNC+ONISM OF COUNTER 4
4 WITH SERVO CLOCK 5/S.
5 SEE ALSO NOTE X
6
F1 NOTE 5
2 EXAMINES DATA BEING
3 SHIFTED THROUGH REGISTER TO
4 DETECT SECTOR AND INDEX
5 PULSES.
6 SEE ALSO NOTE X
7
G1 NOTE 6
2 SPECIAL CHECK CIRCUIT TO
3 PROTECT SAMPLE SERVO IF
4 SECTOR OR INDEX FALL EARLY.
5
H1 NOTE X
2 LOGIC CIRCUITS WITHIN THIS
3 BLOCK DO NOT PROVIDE
4 SUFFICIENT TEST POINTS FOR
5 EFFECTIVE SCOPING.

LOGIC 2 CARD
PN=8265690
EC=834824
PEC=833180
LOC=1E-A102
USN 00008 PRI=21 JUN 79 0931
AUC= SEC
PFORM=KSEC NEXTBLK KB
CID PIOFE JUB N3401133

0001



COMMENTS

```
A0 COPYRIGHT IBM CORP. 1979
 1 .ALL.LOGIC.OUTPUTS.ARE.VIL..
 2
B1 NOTE 1
 2 COMPARES DESIRED VELOCITY
 3 WITH INTERNALLY GENERATED
 4 REFERENCE.
 5 ACTIVE OUTPUT INDICATES
 6 THAT DAL OR ROS MODULES
 7 ARE DEFECTIVE
```

LOGIC 2 CARD
PN=8263691
EC=834824
PEC=833180

LOC=1E-A1D2

USN 00008 PRI=21JUN79 0931

AUC= SEC
PFORM= NEXTBLK TU

CID PICFE JOB N3401133

HH044 0001

HH044FG0 +COUNTER 5 IN SYNC
HH035G00 -SET SEEK
HH044PE0 KICK SS
HH040FC0 -COUNTER 4 OUT OF SYNC
HH046GF0 -ABS TRACK ADDRESS 1
HH020AC0 -POWER ON DELAY
HH030CH0 -SHIFT
HH046BE0 +LIN REGION NORMAL OF EVEN TRACK
HH043HG01 -BEHIND HOME
HH043CD0 +HEAD 1 SELECTED
HH046FD0 +SEEK COMPLETE
HH040HD0 +SECTOR PULSES MISSING
HH035GE0 +OUT
HH046DE0 -TAG 001•CLK2•NO FIX HD•
HH030AG05 -GO HOME BIT
HH046BA0 -SEEK TIMEOUT ERROR
HH044QA0 +LINEAR REGION NORMAL
HH044BC01 -P•O•F•L•
HH044BC0 +P•O•F•L•
HH046GG0 +VELOCITY > PROFILE
HH040EB03 +HARD SECTOR
HH044DG01 -RECALIBRATE TIMEOUT SS
HH044FA0 +TOO FAST

SEEK
EVEN/ODD
ILLEGAL MOVE
HOME TRACK
GO HOME
RECAL OUT
READY
STOP

HH032 +ILLEGAL ACTUATOR MOVE — HA0
-GO HOME OR P•O•F•L• HH030 HH035 HH046 HH048 — DD0
HH046 -SET GO HOME — NO PIN FE0
HH048 +SEEK TIMEOUT SS — HB0
+SEEK HH020 HH044 HH046 HH048 — CA0
+HOME HH032 HH048 — HC0
HH044 -GO HOME — NO PIN DC01
+OUT DIRECTION HH020 HH032 — HD0
HH075 -DEDICATED READY — HE0
+NOT READY HH032 HH035 HH044 — HF01
-IN DRIVE HH020 HH032 — HG0
-OUT DRIVE HH020 HH032 — HH0

LOGIC 2 CARD
PN=4238368
EC#834824
LOC=1E-A102
USN 00008 PRI=21JUN79 0931
PWC= SEC
PROGRAM NEXT8LK HI
CID PIDFE JOB N3401133

HH040BC07 +BYTE CTR BIT 64
HH040BC05 +BYTE COUNTER BIT 16
HH040D40 +SEEK
HH034F00 +COUNTER 5 IN SYNC
HH045FE0 -SET GO HOME
NO PIN
HH020AC0 -POWER ON DELAY
HH044FE0 KICK SS
HH030AG04 -FH SELECT
HH035HL0 -TAG 001•CLOCK 2
HH030CH0 -SHIFT
HH045DD0 -GO HOME OR P•O•F•L•
HH030FL0 +DESIRED VELOCITY
HH040AA06 -CTR 5
HH040AB02 -BAD SERVO CLOCK I/P
HH044TT0 +NORMAL ERROR
HH044TT01 +QUAD ERROR
HH020CC0 COIL CURRENT SIGNAL X+5V TO -5VX
HH044TT02 +Q-N
HH044TT03 +Q+N

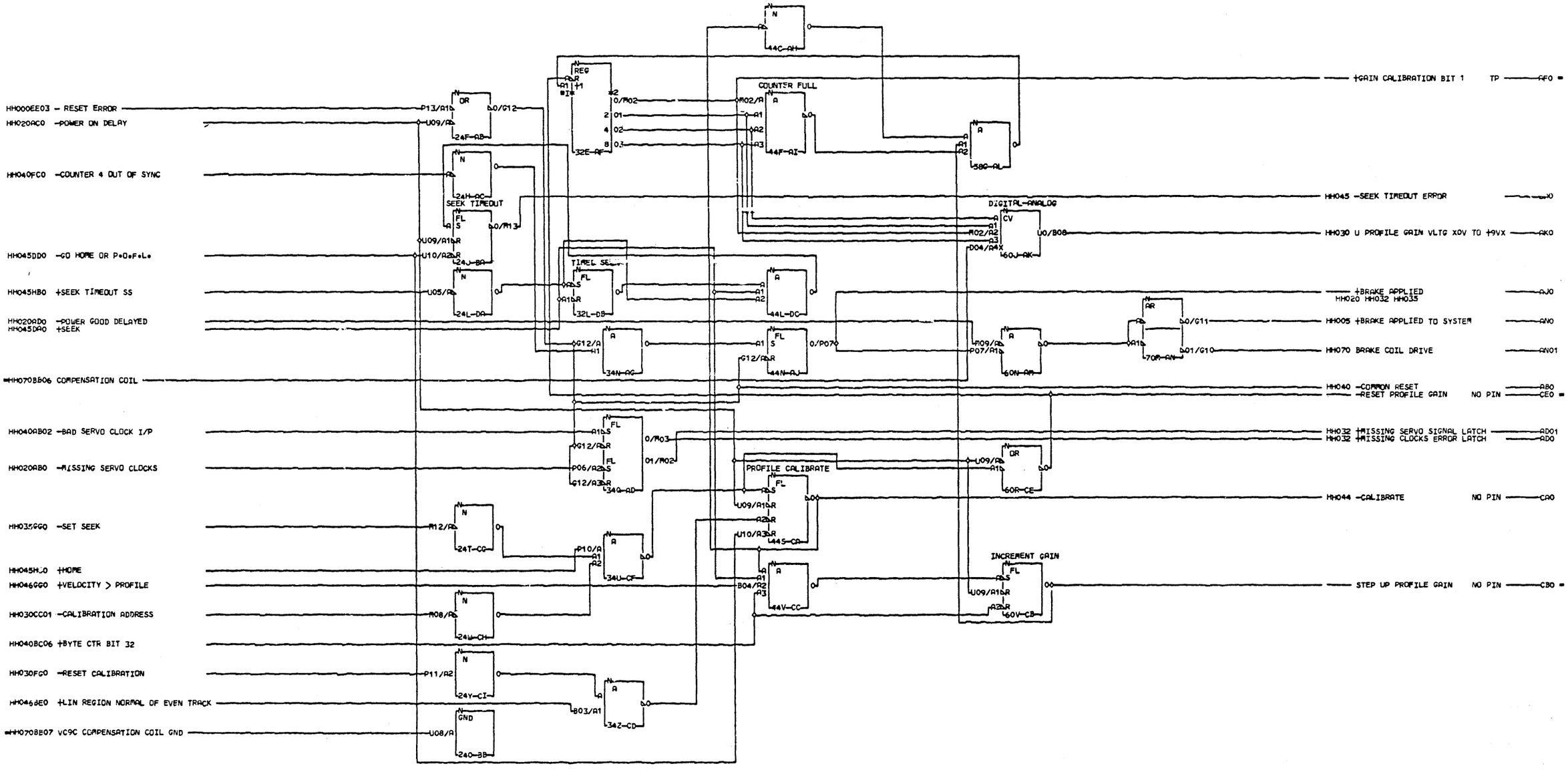
ALLOW CAL
CLOCK GATE
Q
0-64
7-0
TIMER RESET
INTEGRATOR
SEEK COMPLETE
DIGITAL-ANALOG

HH020 -SELECT INTEGRATOR — GA0
HH045 +SEEK COMPLETE — FD0
HH020 +SELECT INTEGRATOR — GB0
-SEEK COMPLETE HH020 HH032 HH035 — FD01
HANDOVER VELOCITY — TP FE0
HH044 -RECAL — NO PIN GE0
HH044 +Q SAMPLED — BF0
-ABS ...ACK ADDRESS 1 HH030 HH045 — GF0
HH045 -TAG 001•CLK2•NO FIX HD• — DE0
+LIN REGION NORMAL OF EVEN TRACK HH032 HH044 HH045 HH048 — BE0
+VELOCITY > PROFILE HH044 HH045 HH048 — GG0
HH030 +HALF TRACK — GH0
HH030 +QUARTER TRACK — GJ0

COMMENTS
A0 COPYRIGHT IBM CORP• 1979

LOGIC 2 CARD
PN=4238369
EC=834824
LOC=1E-A1D2
USN 00008 PRI=21JUN79 0931
ALICE SFC
PFORM= NEXTBLK GK
CID PIOPE JOB N3401133

HH046 0001



COMMENTS

```
AO COPYRIGHT IBM CORP. 1979
 1 +5V D03,V03,U03,P03
 2 +12V B11
 3 +24V S02
 4 GND D08,V08,P08,U08
 5 -12V D12
 6 ALL LOGIC OUTPUTS SEE VIL..
 7
```

LOGIC 2 CARD
PN=8255692
EC=834824
PEC=833180

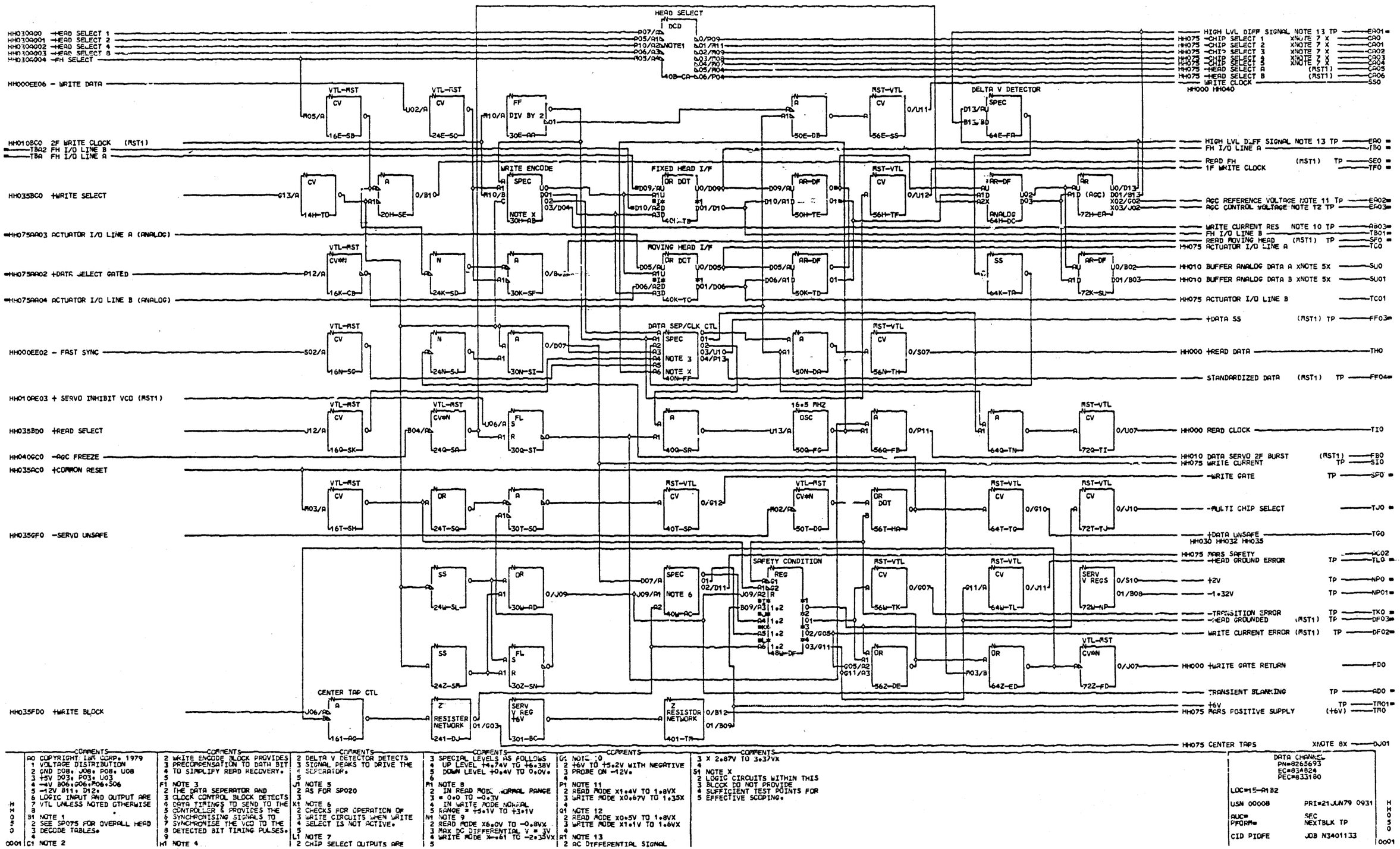
LOC=1E-A1D2

USN 00008 PRI=21 JUN 79 0931

AUC= SEC
PFORM= NEXTBLK DD

CID PIOFE JOB N3401133

0001



COMMENTS

A0 COPYRIGHT IAM CORP. 1979
1 VOLTAGE DISTRIBUTION
2 GND D08, J08, P08, U08
3 +5V D03, P03, U03
4 -4V B06,G06,P06,S06
5 -12V B11, D12.
6 LOGIC INPUT AND OUTPUT ARE
7 VTL UNLESS NOTED OTHERWISE
8
B1 NOTE 1
2 SEE SPO7S FOR OVERALL HEAD
3 DECODE TABLES.
4
C1 NOTE 2

COMMENTS

2 WRITE ENCODE BLOCK PROVIDES
3 PRECOMPENSATION TO DATA BIT
4 TO SIMPLIFY READ RECOVERY.
5
F1 NOTE 3
2 THE DATA SEPERATOR AND
3 CLOCK CONTROL BLOCK DETECTS
4 DATA TIMINGS TO SEND TO THE
5 CONTROLLER & PROVIDES THE
6 SYNCHRONISING SIGNALS TO
7 SYNCHRONISE THE VCO TO THE
8 DETECTED BIT TIMING PULSES.
9
H1 NOTE 4

COMMENTS

2 DELTA V DETECTOR DETECTS
3 SIGNAL PEAKS TO DRIVE THE
4 SEPERATOR.
5
J1 NOTE 5
2 AS FOR SP020
3
K1 NOTE 6
2 CHECKS FOR OPERATION OF
3 WRITE CIRCUITS WHEN WRITE
4 SELECT IS NOT ACTIVE.
5
L1 NOTE 7
2 CHIP SELECT OUTPUTS ARE

COMMENTS

3 SPECIAL LEVELS AS FOLLOWS
4 UP LEVEL +4.74V TO +5.38V
5 DOWN LEVEL +0.4V TO 0.0V.
6
M1 NOTE 8
2 IN READ MODE NORMAL RANGE
3 = 0.0 TO -0.3V
4 IN WRITE MODE NORMAL
5 RANGE = +5.1V TO +3.1V
N1 NOTE 9
2 READ MODE X6.0V TO -0.8VX
3 MAX DC DIFFERENTIAL V = 3V
4 WRITE MODE X=.61 TO -2.35Vx
5

COMMENTS

G1 NOTE 10
2 +6V TO +5.2V WITH NEGATIVE
3 PROBE ON -12V.
4
P1 NOTE 11
2 READ MODE X1.4V TO 1.8VX
3 WRITE MODE X0.67V TO 1.35X
4
Q1 NOTE 12
2 READ MODE X0.5V TO 1.8VX
3 WRITE MODE X1.1V TO 1.6VX
4
R1 NOTE 13
2 AC DIFFERENTIAL SIGNAL

COMMENTS

3 X 2.87V TO 3.37Vx
4
S1 NOTE X
2 LOGIC CIRCUITS WITHIN THIS
3 BLOCK DO NOT PROVIDE
4 SUFFICIENT TEST POINTS FOR
5 EFFECTIVE SCOPING.

DATA CHANNEL
PN=8265693
EC=834824
PEC=833180

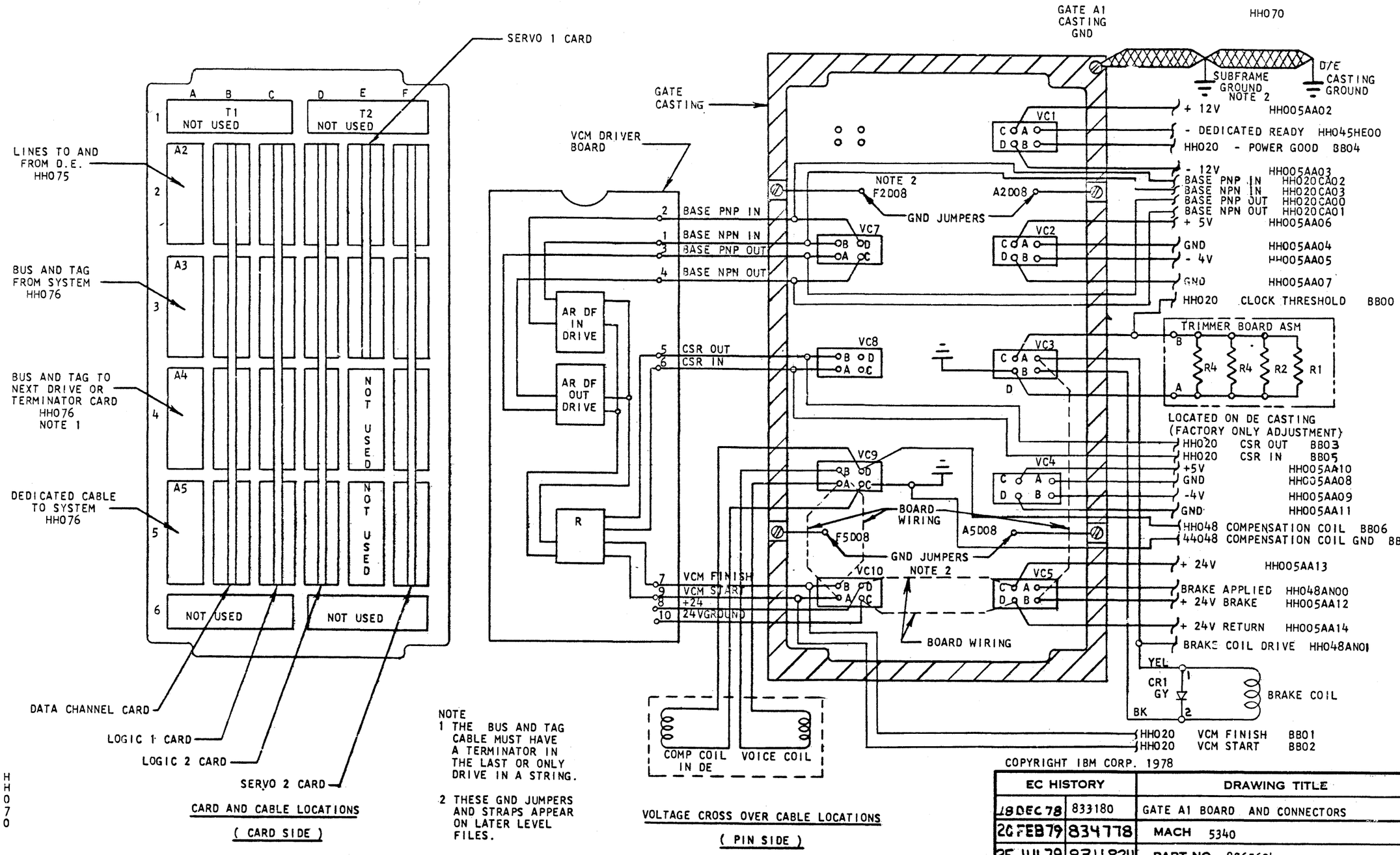
LOC=15-A182

USN 00008 PRI=21 JUN 79 0931

AUC= SEC
PFORM= NEXTBLK TP

CID PIDFE JOB N3401133

0001



NOTE
1 THE BUS AND TAG CABLE MUST HAVE A TERMINATOR IN THE LAST OR ONLY DRIVE IN A STRING.

2 THESE GND JUMPERS AND STRAPS APPEAR ON LATER LEVEL FILES.

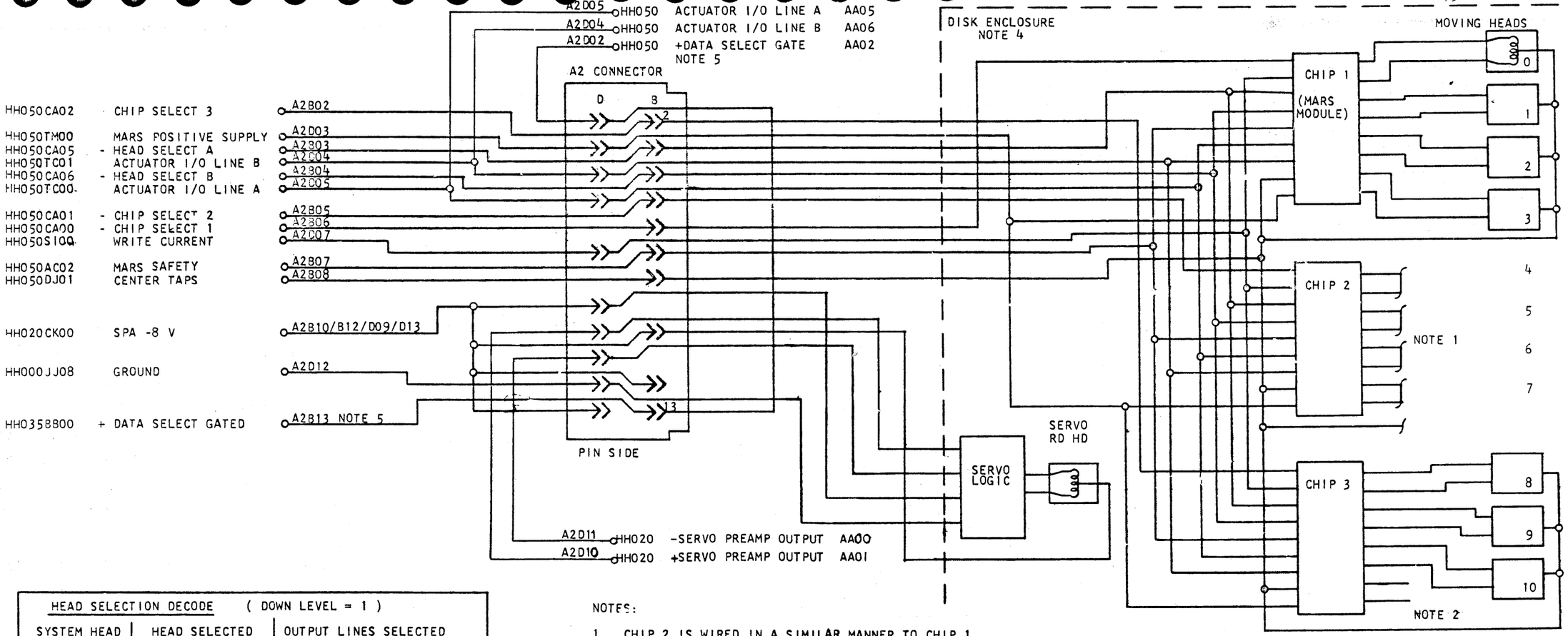
EC HISTORY		DRAWING TITLE
18DEC78	833180	GATE A1 BOARD AND CONNECTORS
26FEB79	834778	MACH 5340
25JUL79	834824	PART NO 8265694
		CLASSIFICATION 12/78 LCK

C

IBM CORP

HH070

HH070



HEAD SELECTION DECODE (DOWN LEVEL = 1)

SYSTEM HEAD SELECT CODE	HEAD SELECTED	OUTPUT LINES SELECTED						
		CHIP SELECTS					HEAD SELECTS	
		1	2	3	4	5	A	B
00000	0	1	0	0	0	0	0	0
00001	1	1	0	0	0	0	1	0
00010	2	1	0	0	0	0	0	1
00011	3	1	0	0	0	0	1	1
00100	4	0	1	0	0	0	0	0
00101	5	0	1	0	0	0	1	0
00110	6	0	1	0	0	0	0	1
00111	7	0	1	0	0	0	1	1
01000	8	0	0	1	0	0	0	0
01001	9	0	0	1	0	0	1	0
01010	10	0	0	1	0	0	0	1
01011	11	0	0	1	0	0	1	1
NOTE 3	NOTE 2							

NOTES:

1 CHIP 2 IS WIRED IN A SIMILAR MANNER TO CHIP 1

2 HEAD 11 IS NOT FITTED. IF AN UNSAFE CONDITION IS DETECTED LOGIC CIRCUITS FORCE SELECTION OF HEAD 11 TO AVOID OVERWRITING DATA TRACKS.

3 ALL OTHER SYSTEM HEAD SELECT CODES ARE INVALID.

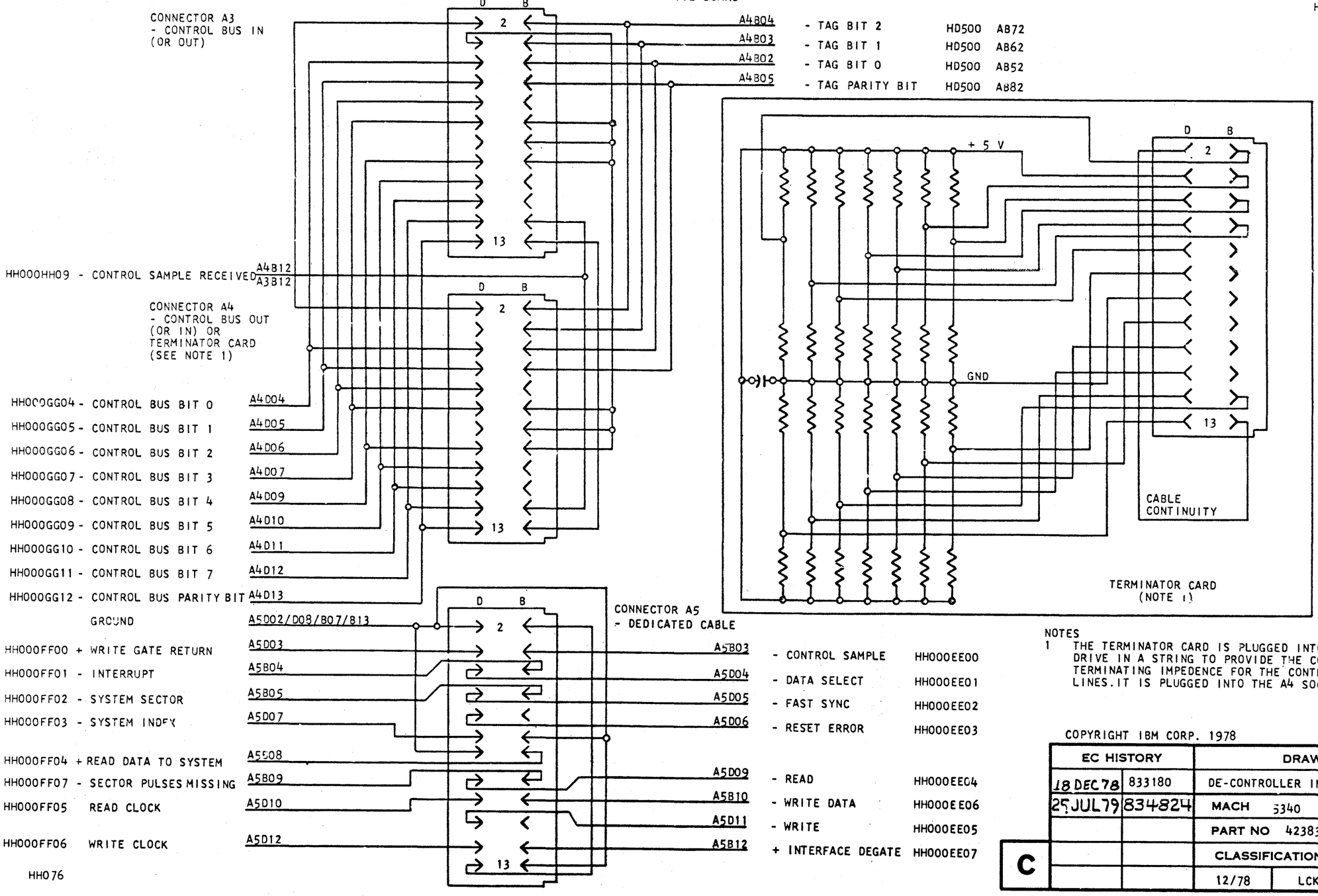
4 COMPONENTS WITHIN THE DE ARE SEALED AND CANNOT BE SERVICED IN THE FIELD.

5 DATA SELECT GATED IS LOOPED THROUGH THE A2 CONNECTOR TO TEST IF THE CONNECTOR IS CORRECTLY INSTALLED.

EC HISTORY		DRAWING TITLE	
18 DEC 78	833180	LOGIC DE INTERFACE	
25 JUL 79	834824	MACH 5340	
		PART NO 4238357	
C		CLASSIFICATION	IBM CORP
		12/78 LCK	

HH076

CONNECTORS A3,A4,A5 VIEWED FROM PROBE SIDE OF DISK DRIVE BOARD



NOTES
1 THE TERMINATOR CARD IS PLUGGED INTO THE LAST DRIVE IN A STRING TO PROVIDE THE CORRECT TERMINATING IMPEDENCE FOR THE CONTROL BUS LINES. IT IS PLUGGED INTO THE A4 SOCKET

EC HISTORY		DRAWING TITLE		
18 DEC 78	833180	DE-CONTROLLER INTERFACE AND TERM.		
25 JUL 79	834824	MACH 3340		
		PART NO 4238358		
C		CLASSIFICATION		IBM CORP
		12/78	LCK	

HH076

HH076

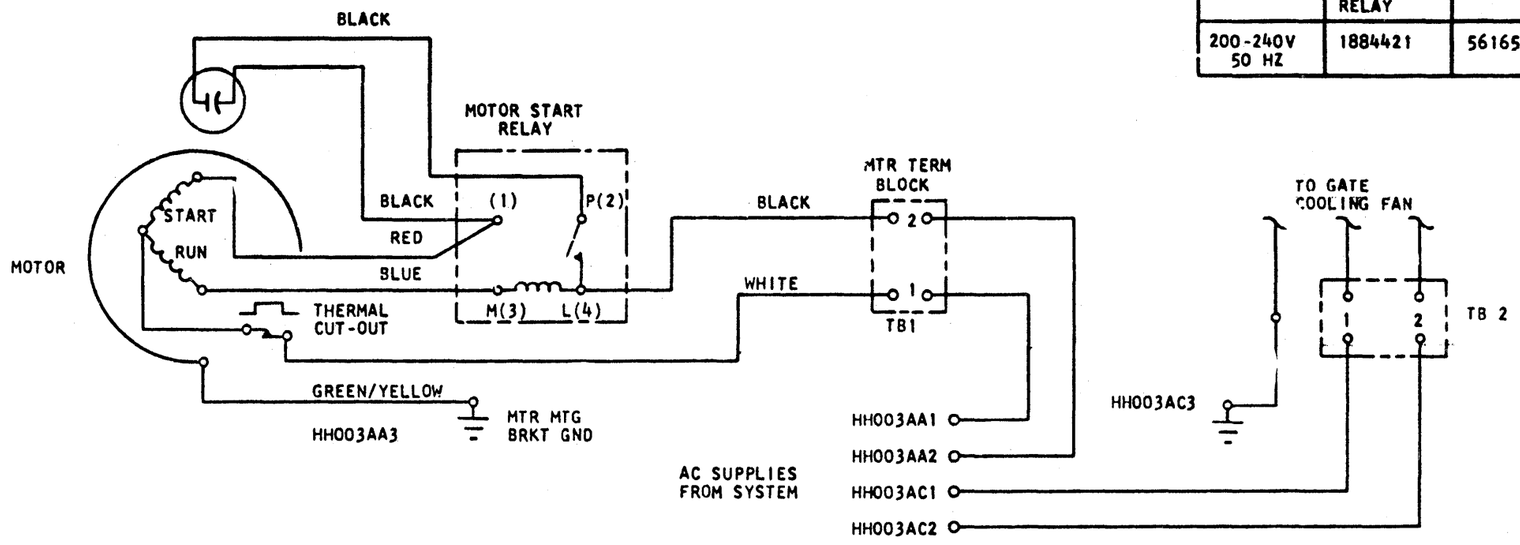
620-0131-0 MRO# 780822201 ALD DRAWING FORMAT ASTROCLOTH N666T 8450

DRAFTING MEDIA GRAPHIC CONTROLS CORPORATION Buffalo, New York Printed in U.S.A.

HH080

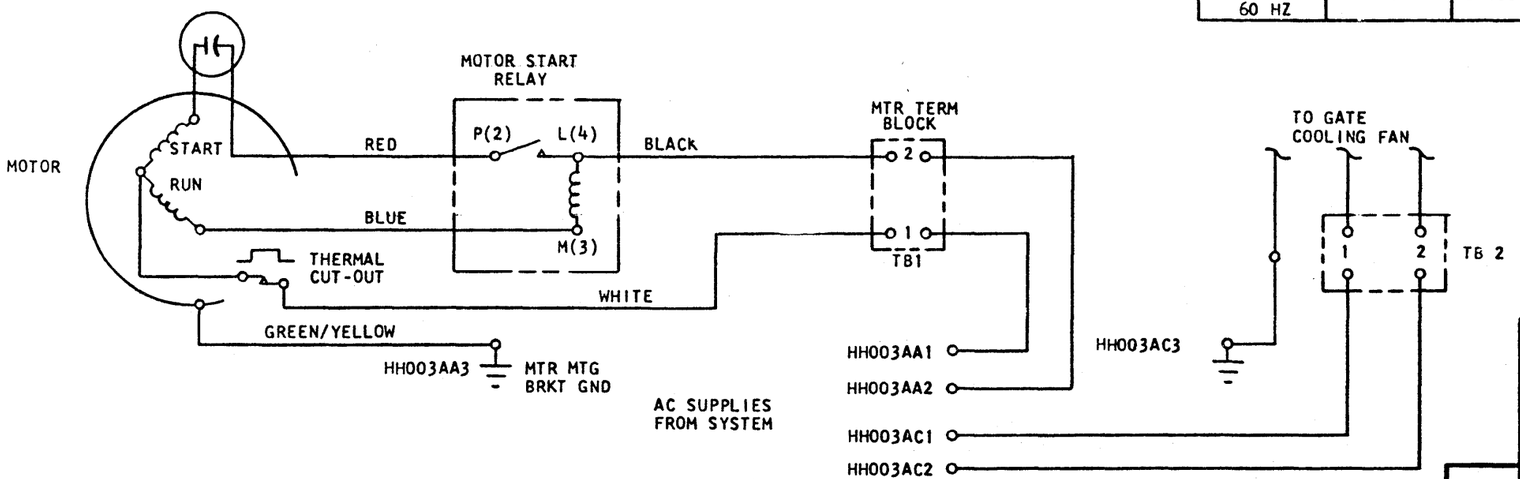
200 - 240 V 50 HZ

VOLTAGE	DRIVE ASM WITH START RELAY	START RELAY	GATE COOLING FAN ASM
200-240V 50 HZ	1884421	5616573	5145639



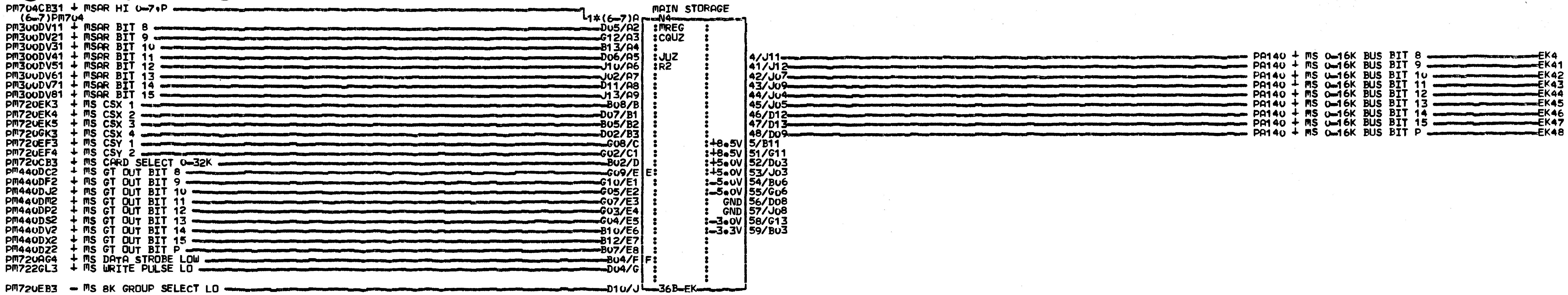
200 - 240 V 60 HZ

VOLTAGE	DRIVE ASM WITH START RELAY	START RELAY	GATE COOLING FAN ASM
200-240 V 60 HZ	1884482	2410082	5145639



EC HISTORY		DRAWING TITLE	
18 DEC 78	833180	50 & 60 HZ AC WIRING DIAGRAM	
		MACH 5340	
		PART NO 4238359	
C		CLASSIFICATION	IBM CORP
		12/78 LCK	

HH080



D
+ 8.5V ON B11, G11
+ 5.0V ON D03, J03
- 5.0V ON B06, G06
GND ON D08, J08
26T-BT

COMMENTS

O

PINS
EK
A0/B09
A1/J06

STORAGE CARD MS 0-16K
0-16K MS STG CARD

PN4237285 EC832850 PEC832742E

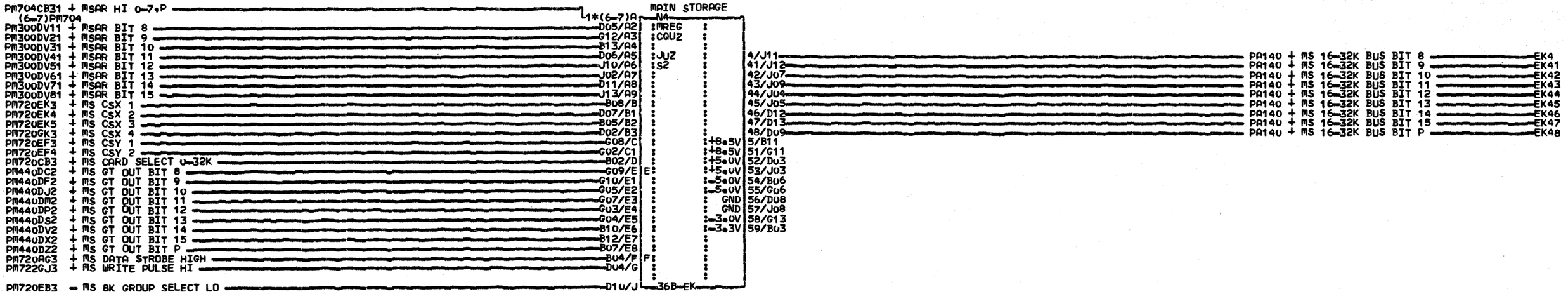
LOC=1A-A1R2

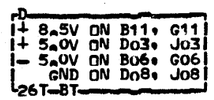
USN 00006 PRI=16SEP77 2052

AUC=
PFORM=KSEB

SEC
NEXTBLK EL

CID PIOFE JOB M5301328





COMMENTS
D1 COPYRIGHT IBM CORP. 1978

PINS
EK
A0/B09
A1/J06

STORAGE CARD MS 16-32K
16-32K MS STG CARD

PN4237286 EC832850 PEC832742E

LOC=1A-A1S2

USN 00006 PRI=16SEP77 2052

AUC= SEC
PFORM=KSEB NEXTBLK EL

CID PIOFE JOB M5301328

MS120 0001

E

MS120 0001

PM704CB31 + MSAR HI 0-7,P	(6-7)PM704	1*(6-7)A					
PM300DV11 + MSAR BIT 8	D05/A2						
PM300DV21 + MSAR BIT 9	G12/A3						
PM300DV31 + MSAR BIT 10	B13/A4						
PM300DV41 + MSAR BIT 11	D06/A5						
PM300DV51 + MSAR BIT 12	J10/A6						
PM300DV61 + MSAR BIT 13	J02/A7						
PM300DV71 + MSAR BIT 14	D11/A8						
PM300DV81 + MSAR BIT 15	J13/A9						
PM720EK3 + MS CSX 1	B08/B						
PM720EK4 + MS CSX 2	D07/B1						
PM720EK5 + MS CSX 3	B05/B2						
PM720GK3 + MS CSX 4	D02/B3						
PM720EF3 + MS CSY 1	G08/C						
PM720EF4 + MS CSY 2	G02/C1						
PM720CB4 + MS CARD SEL 32-64K	B02/D						
PM440DC2 + MS GT OUT BIT 8	G09/E	E					
PM440DF2 + MS GT OUT BIT 9	G10/E1						
PM440DJ2 + MS GT OUT BIT 10	G05/E2						
PM440DM2 + MS GT OUT BIT 11	G07/E3						
PM440DP2 + MS GT OUT BIT 12	G03/E4						
PM440DS2 + MS GT OUT BIT 13	G04/E5						
PM440DV2 + MS GT OUT BIT 14	B10/E6						
PM440DX2 + MS GT OUT BIT 15	B12/E7						
PM440DZ2 + MS GT OUT BIT P	B07/E8						
PM720AG4 + MS DATA STROBE LOW	B04/F	F					
PM722GL3 + MS WRITE PULSE LO	D04/G						
PM720EB3 - MS 8K GROUP SELECT LO	D10/J						

MAIN STORAGE
N4
MREG
CQUZ
JUZ
T2
36B-EK

4/J11	PA14U + MS 32-48K BUS BIT 8	EK4		
41/J12	PA14U + MS 32-48K BUS BIT 9	EK41		
42/J07	PA14U + MS 32-48K BUS BIT 10	EK42		
43/J09	PA14U + MS 32-48K BUS BIT 11	EK43		
44/J04	PA14U + MS 32-48K BUS BIT 12	EK44		
45/J05	PA14U + MS 32-48K BUS BIT 13	EK45		
46/D12	PA14U + MS 32-48K BUS BIT 14	EK46		
47/D13	PA14U + MS 32-48K BUS BIT 15	EK47		
48/D09	PA14U + MS 32-48K BUS BIT P	EK48		
			+8.5V	5/B11
			+8.5V	51/G11
			+5.0V	52/D03
			+5.0V	53/J03
			-5.0V	54/B06
			-5.0V	55/G06
			GND	56/D08
			GND	57/J08
			-3.0V	58/G13
			-3.3V	59/B03

D
+ 8.5V ON B11, G11
+ 5.0V ON D03, J03
- 5.0V ON B06, G06
GND ON D08, J08
26T-BT

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

PINS
EK
A0/B09
A1/J06

STORAGE CARD MS 32-48K
32-48K MS STG CARD

PN4237287 EC832850 PEC832742E

LOC=1A-A1T2

USN 00006 PRI=16SEP77 2052

AUC= SEC
PFORM=KSEB NEXTBLK EL

CID PIOFE JOB M5301328

```
PM704CB31 + MSAR HI 0-7,P ──────────────────────────────────────────────┐1*(6-7)A  MAIN STORAGE
  (6-7)PM704                                                            └─N4──────┐
PM300DV11 + MSAR BIT 8 ──────────────────────────────────────────────────D05/A2 :MREG   :
PM300DV21 + MSAR BIT 9 ──────────────────────────────────────────────────G12/A3 :CQUZ   :
PM300DV31 + MSAR BIT 10 ─────────────────────────────────────────────────B13/A4 :       :
PM300DV41 + MSAR BIT 11 ─────────────────────────────────────────────────D06/A5 :JUZ    :
PM300DV51 + MSAR BIT 12 ─────────────────────────────────────────────────J10/A6 :U2     :
PM300DV61 + MSAR BIT 13 ─────────────────────────────────────────────────J02/A7 :       :
PM300DV71 + MSAR BIT 14 ─────────────────────────────────────────────────D11/A8 :       :
PM300DV81 + MSAR BIT 15 ─────────────────────────────────────────────────J13/A9 :       :
PM720EK3  + MS CSX 1 ────────────────────────────────────────────────────B08/B  :       :
PM720EK4  + MS CSX 2 ────────────────────────────────────────────────────D07/B1 :       :
PM720EK5  + MS CSX 3 ────────────────────────────────────────────────────B05/B2 :       :
PM720GK3  + MS CSX 4 ────────────────────────────────────────────────────D02/B3 :       :
PM720EF3  + MS CSY 1 ────────────────────────────────────────────────────G08/C  :       :+8.5V 5/B11
PM720EF4  + MS CSY 2 ────────────────────────────────────────────────────G02/C1 :       :+8.5V 51/G11
PM720CB4  + MS CARD SEL 32-64K ──────────────────────────────────────────B02/D  :       :+5.0V 52/D03
PM440DC2  + MS GT OUT BIT 8 ─────────────────────────────────────────────G09/E  E:      :+5.0V 53/J03
PM440DF2  + MS GT OUT BIT 9 ─────────────────────────────────────────────G10/E1 :       :-5.0V 54/B06
PM440DJ2  + MS GT OUT BIT 10 ────────────────────────────────────────────G05/E2 :       :-5.0V 55/G06
PM440DM2  + MS GT OUT BIT 11 ────────────────────────────────────────────G07/E3 :       :  GND 56/D08
PM440DP2  + MS GT OUT BIT 12 ────────────────────────────────────────────G03/E4 :       :  GND 57/J08
PM440DS2  + MS GT OUT BIT 13 ────────────────────────────────────────────G04/E5 :       :-3.0V 58/G13
PM440DV2  + MS GT OUT BIT 14 ────────────────────────────────────────────B10/E6 :       :-3.3V 59/B03
PM440DX2  + MS GT OUT BIT 15 ────────────────────────────────────────────B12/E7 :       :
PM440DZ2  + MS GT OUT BIT P ─────────────────────────────────────────────B07/E8 :       :
PM720AG3  + MS DATA STROBE HIGH ─────────────────────────────────────────B04/F  F:      :
PM722GJ3  + MS WRITE PULSE HI ───────────────────────────────────────────D04/G  :       :
                                                                                :       :
PM720EB3  - MS 8K GROUP SELECT LO ───────────────────────────────────────D10/J  └─36B-EK──┘

4/J11  ── PA140 + MS 48-64K BUS BIT 8  ── EK4
41/J12 ── PA140 + MS 48-64K BUS BIT 9  ── EK41
42/J07 ── PA140 + MS 48-64K BUS BIT 10 ── EK42
43/J09 ── PA140 + MS 48-64K BUS BIT 11 ── EK43
44/J04 ── PA140 + MS 48-64K BUS BIT 12 ── EK44
45/J05 ── PA140 + MS 48-64K BUS BIT 13 ── EK45
46/D12 ── PA140 + MS 48-64K BUS BIT 14 ── EK46
47/D13 ── PA140 + MS 48-64K BUS BIT 15 ── EK47
48/D09 ── PA140 + MS 48-64K BUS BIT P  ── EK48
```

```
┌D──────────────┐
│+ 8.5V ON B11, G11
│+ 5.0V ON D03, J03
│- 5.0V ON B06, G06
│   GND ON D08, J08
└26T-BT─────────┘
```

COMMENTS

D1COPYRIGHT IBM CORP. 1978

PINS

EK
AV/BU9
A1/J06

E

STORAGE CARD MS 48-64K
48-64K MS STG CARD

PN4237288 EC832850 PEC832742E

LOC=1A-A1U2

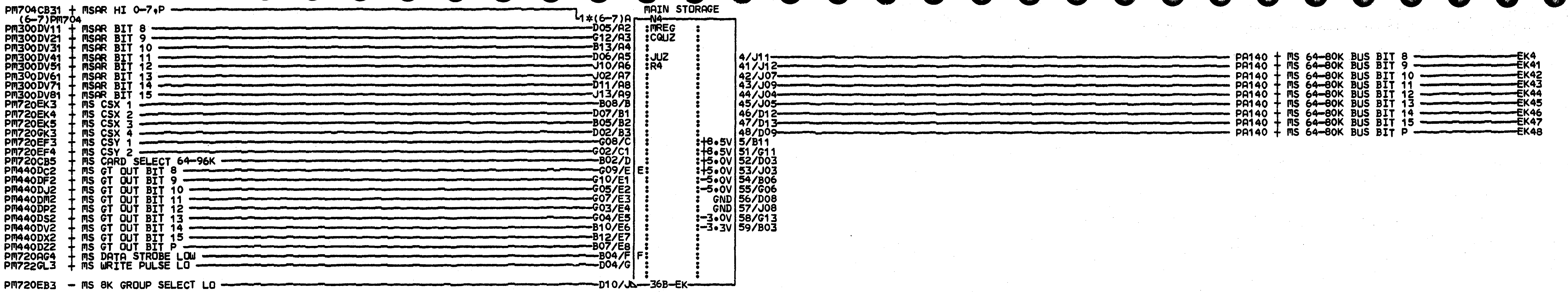
USN 00006 PRI=16SEP77 2052

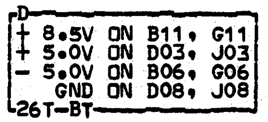
AUC= SEC
PFORM=KSEB NEXTBLK EL

CID PIOFE JOB M53U1328

MS140 0001

MS140 0001





COMMENTS

0

PINS
EK
A0/B09
A1/J06

STORAGE CARD MS 64-80K
64-80K MS STG CARD

PN4238219 EC832999 PEC832850

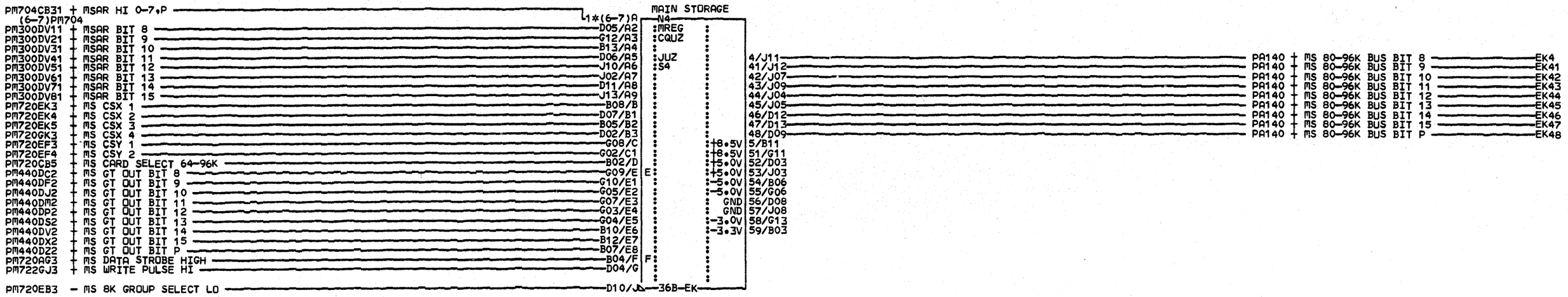
LOC=1A-A1R4

USN 00008 PRI=04MAY78 1616

AUC=
PFORM=KSEB

SEC
NEXTBLK EL

CID PIOFE JOB N5101128



D
+ 8.5V ON B11, G11
+ 5.0V ON D03, J03
- 5.0V ON B06, G06
GND ON D08, J08
26T-BT

COMMENTS
D1COPYRIGHT IBM CORP. 1978

PINS
EK
A0/B09
A1/J06

E

STORAGE CARD MS 80-96K
80-96K MS STG CARD

PN4238220 EC832999 PEC832850

LOC=1A-A1S4

USN 00008 PRI=04MAY78 1616

AUC= SEC
PFORM=KSEB NEXTBLK EL

CID PIOFE JOB N5101128

MS160 0001

MS160 0001

PM704CB31 + MSAR HI 0-7,P — 1*(6-7)A
(6-7)PM704

PM300DV11 + MSAR BIT 8 — D05/A2
PM300DV21 + MSAR BIT 9 — G12/A3
PM300DV31 + MSAR BIT 10 — B13/A4
PM300DV41 + MSAR BIT 11 — D06/A5
PM300DV51 + MSAR BIT 12 — J10/A6
PM300DV61 + MSAR BIT 13 — J02/A7
PM300DV71 + MSAR BIT 14 — D11/A8
PM300DV81 + MSAR BIT 15 — J13/A9
PM720EK3 + MS CSX 1 — B08/B
PM720EK4 + MS CSX 2 — D07/B1
PM720EK5 + MS CSX 3 — B05/B2
PM720GK3 + MS CSX 4 — D02/B3
PM720EF3 + MS CSY 1 — G08/C
PM720EF4 + MS CSY 2 — G02/C1
PM720CB6 + MS CARD SELECT 96-128K — B02/D
PM440DC2 + MS GT OUT BIT 8 — G09/E
PM440DF2 + MS GT OUT BIT 9 — G10/E1
PM440DJ2 + MS GT OUT BIT 10 — G05/E2
PM440DM2 + MS GT OUT BIT 11 — G07/E3
PM440DP2 + MS GT OUT BIT 12 — G03/E4
PM440DS2 + MS GT OUT BIT 13 — G04/E5
PM440DV2 + MS GT OUT BIT 14 — B10/E6
PM440DX2 + MS GT OUT BIT 15 — B12/E7
PM440DZ2 + MS GT OUT BIT P — B07/E8
PM720AG4 + MS DATA STROBE LOW — B04/F
PM722GL3 + MS WRITE PULSE LO — D04/G

PM720EB3 - MS 8K GROUP SELECT LO — D10/J

MAIN STORAGE
N4

	MREG		
	CQUZ		
	JUZ		
	T4		
E			
F			
		+8.5V	5/B11
		+8.5V	51/G11
		+5.0V	52/D03
		+5.0V	53/J03
		-5.0V	54/B06
		-5.0V	55/G06
		GND	56/D08
		GND	57/J08
		-3.0V	58/G13
		-3.0V	59/B03

36B-EK

4/J11 — PA140 + MS 96-112K BUS BIT 8 — EK4
41/J12 — PA140 + MS 96-112K BUS BIT 9 — EK41
42/J07 — PA140 + MS 96-112K BUS BIT 10 — EK42
43/J09 — PA140 + MS 96-112K BUS BIT 11 — EK43
44/J04 — PA140 + MS 96-112K BUS BIT 12 — EK44
45/J05 — PA140 + MS 96-112K BUS BIT 13 — EK45
46/D12 — PA140 + MS 96-112K BUS BIT 14 — EK46
47/D13 — PA140 + MS 96-112K BUS BIT 15 — EK47
48/D09 — PA140 + MS 96-112K BUS BIT P — EK48

D
+ 8.5V ON B11, G11
+ 5.0V ON D03, J03
- 5.0V ON B06, G06
GND ON D08, J08
26T-BT

COMMENTS
D1COPYRIGHT IBM CORP. 1978

PINS
EK
A0/B09
A1/J06

STORAGE CARD MS 96-112K
96-112K MS STG CARD

PN4238221 EC832999 PEC832850

LOC=1A-A1T4

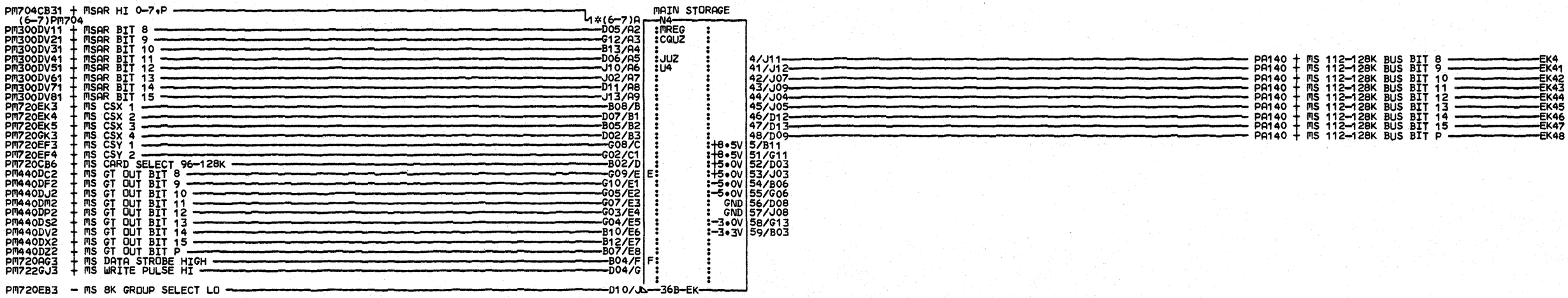
USN 00008 PRI=04MAY78 1616

AUC= SEC
PFORM=KSEB NEXTBLK EL

CID PIOFE JOB N5101128

MS170 0001

MS170 0001



D
+ 8.5V ON B11, G11
+ 5.0V ON D03, J03
- 5.0V ON B06, G06
GND ON D08, J08
26T-BT

COMMENTS
D1COPYRIGHT IBM CORP. 1978

E

PINS
EK
A0/B09
A1/J06

STORAGE CARD MS 112-128K
112-128K MS STG CARD

PN4238222 EC832999 PEC832850

LOC=1A-A1U4

USN 00008 PRI=04MAY78 1616

AUC= SEC
PFORM=KSEB NEXTBLK EL

CID PIOFE JOB N5101128

MS180 0001

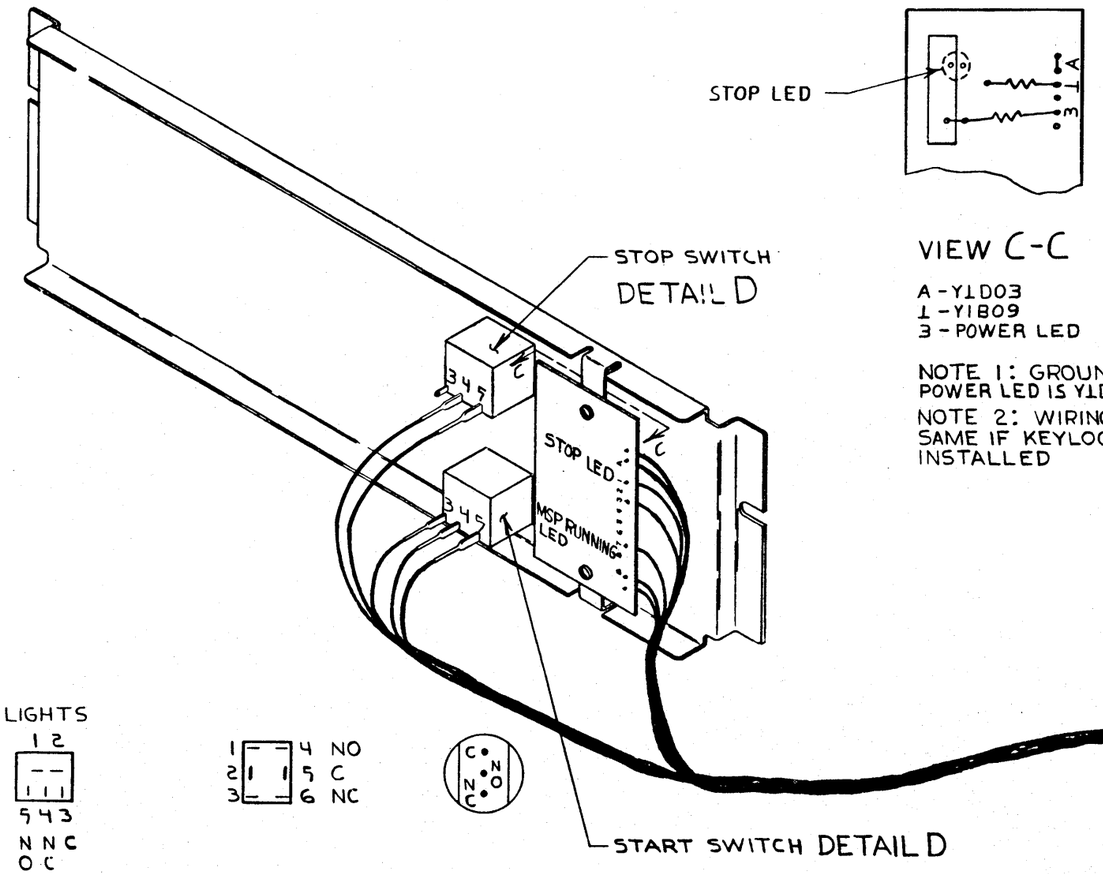
MS180 0001

4237290

OP015

D02 – POWER OFF SWITCH		B02 + POWER 5V TO CONTROL SUPPLY
D03 + SYS. UNIT 5V		B03 – POWER ON SWITCH
D04 – GROUND		B04 – OP START KEY PRESSED
D05 – SYSTEM IN USE		B05 – OP START KEY RELEASED
D06 – SYSTEM IN USE		B06 – LOAD KEY PRESSED
SYS. UNIT 5V TO OP PANEL		B07 – LOAD KEY RELEASED
D08 – GROUND		B08 + STOP KEY PRESSED
D09 – START INDICATOR LED		B09 – STOP INDICATOR LED
D10 – LOAD INDICATOR		B10 – LOAD INDICATOR
SYS. UNIT 5V TO OP PANEL		B11
D12 – CONSOLE CHECK LED		B12 – PROCESSOR CHECK INDICATOR LED
D13 – DISPLAY POWER CHECK LED		B13 – DISPLAY THERMAL CHECK LED

A A1-A2 (Y1) OP110

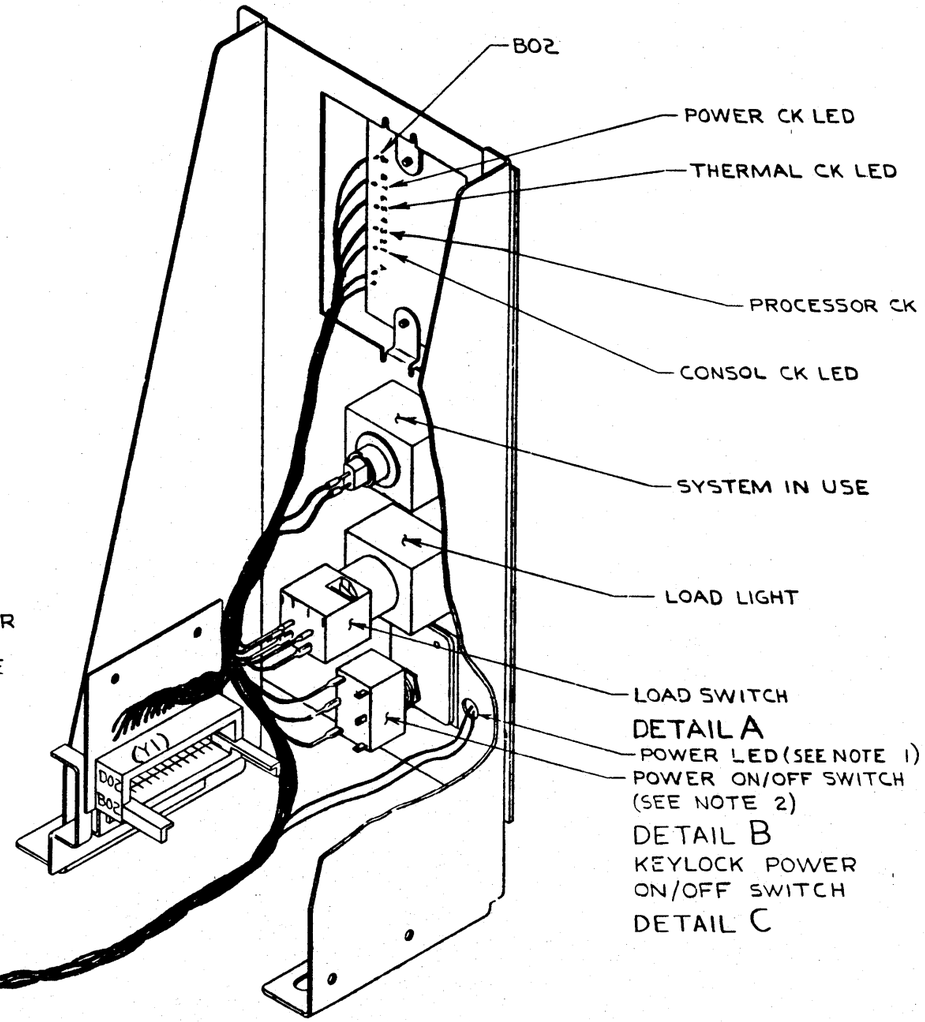


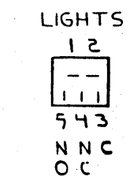
VIEW C-C

A - Y1D03
1 - Y1B09
3 - POWER LED

NOTE 1: GROUND FOR POWER LED IS Y1D08

NOTE 2: WIRING THE SAME IF KEYLOCK INSTALLED

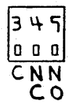




DETAIL A

DETAIL B

DETAIL C



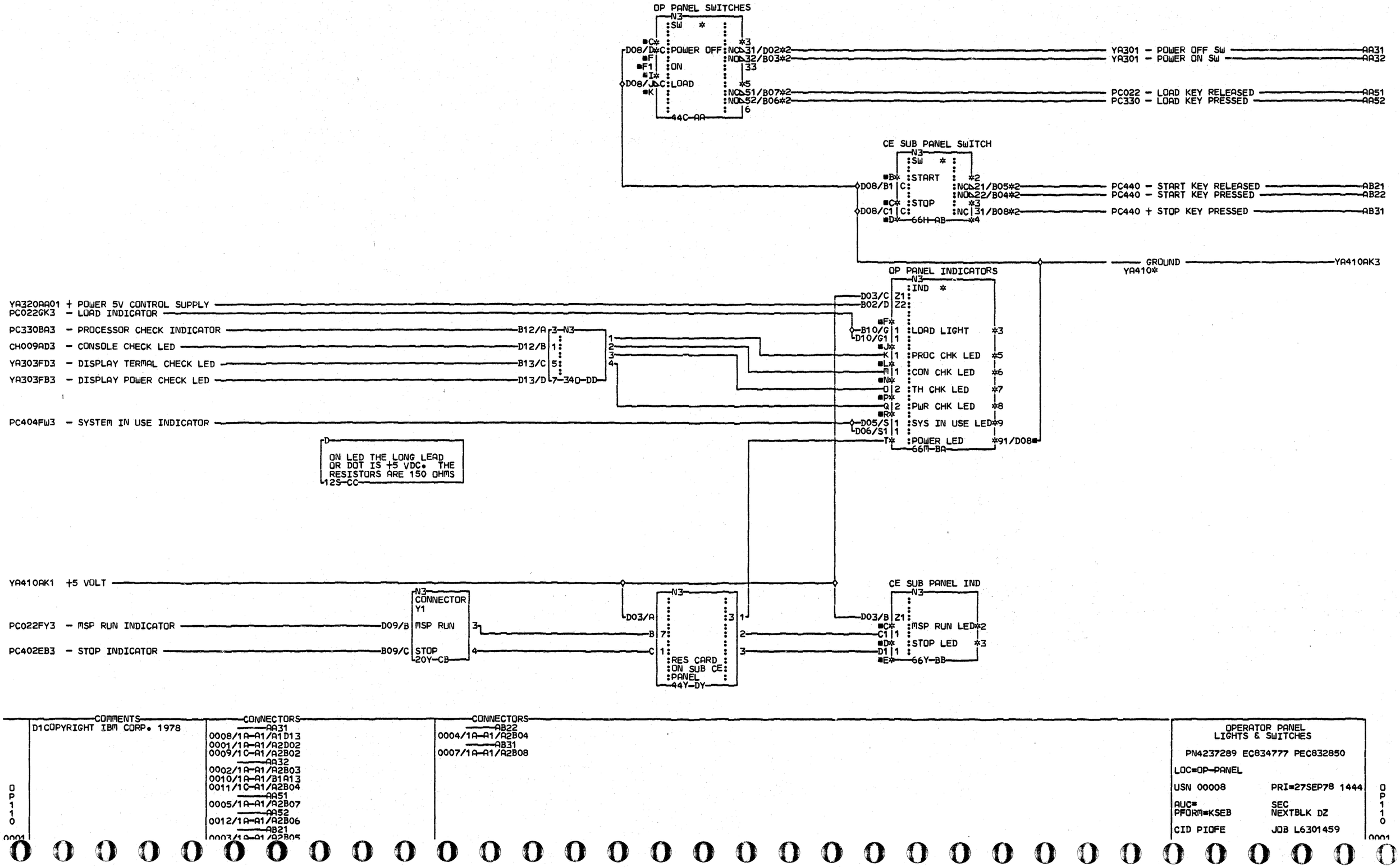
DETAIL D

EC HISTORY		DRAWING TITLE		
04MAY77	832742E	OP PANEL		
29JUL77	832742M	MACH 5340		
02DEC77	832850	PART NO 4237290		
16MAR78	832976	CLASSIFICATION		IBM CORP
29JUN78	832999	4-13-77	JDS	

D

OP015

OP015 0


OP PANEL SWITCHES
N3
SW *
C* *3
D08/D*C POWER OFF NC 31/D02*2
F NO 32/B03*2
F1 ON 33
I*
D08/J*C LOAD *5
K NC 51/B07*2
NO 52/B06*2
44C-AA 6
YA301 - POWER OFF SW AA31
YA301 - POWER ON SW AA32
PC022 - LOAD KEY RELEASED AA51
PC330 - LOAD KEY PRESSED AA52
CE SUB PANEL SWITCH
N3
SW *
B* START *2
D08/B1 C NC 21/B05*2
NO 22/B04*2
C* STOP *3
D08/C1 C NC 31/B08*2
D* 66H-AB *4
PC440 - START KEY RELEASED AB21
PC440 - START KEY PRESSED AB22
PC440 + STOP KEY PRESSED AB31
GROUND
YA410*
YA410AK3
OP PANEL INDICATORS
N3
IND *
D03/C Z1
B02/D Z2
F*
B10/G 1 LOAD LIGHT *3
D10/G1 1
J*
K 1 PROC CHK LED *5
L*
M 1 CON CHK LED *6
N*
O 2 TH CHK LED *7
P*
Q 2 PWR CHK LED *8
R*
D05/S 1 SYS IN USE LED *9
D06/S1 1
T* POWER LED *91/D08*
66M-BA
YA320AA01 + POWER 5V CONTROL SUPPLY
PC022GK3 - LOAD INDICATOR
PC330BA3 - PROCESSOR CHECK INDICATOR B12/A 3-N3
CH009AD3 - CONSOLE CHECK LED D12/B 1
YA303FD3 - DISPLAY TERMAL CHECK LED B13/C 5
YA303FB3 - DISPLAY POWER CHECK LED D13/D 7-340-DD
1
2
3
4
PC404FW3 - SYSTEM IN USE INDICATOR
D
ON LED THE LONG LEAD
OR DOT IS +5 VDC. THE
RESISTORS ARE 150 OHMS
12S-CC
YA410AK1 +5 VOLT
N3
CONNECTOR
Y1
PC022FY3 - MSP RUN INDICATOR D09/B MSP RUN 3
PC402EB3 - STOP INDICATOR B09/C STOP 4
20Y-CB
N3
D03/A 3
B 7
C 1
RES CARD
ON SUB CE
PANEL
44Y-DY
1
2
3
CE SUB PANEL IND
N3
D03/B Z1
C* MSP RUN LED *2
C1 1
D* STOP LED *3
D1 1
E* 66Y-BB
COMMENTS
D1COPYRIGHT IBM CORP. 1978
CONNECTORS
AA31
0008/1A-A1/A1D13
0001/1A-A1/A2D02
0009/1C-A1/A2B02
AA32
0002/1A-A1/A2B03
0010/1A-A1/B1A13
0011/1C-A1/A2B04
AA51
0005/1A-A1/A2B07
AA52
0012/1A-A1/A2B06
AB21
0003/1A-A1/A2B05
CONNECTORS
AB22
0004/1A-A1/A2B04
AB31
0007/1A-A1/A2B08
OPERATOR PANEL
LIGHTS & SWITCHES
PN4237289 EC834777 PEC832850
LOC=OP-PANEL
USN 00008 PRI=27SEP78 1444
AUC= SEC
PFORM=KSEB NEXTBLK DZ
CID PIOFE JOB L6301459
OP110 0001
OP110 0001

PC32UEE31 - STATUS 1 BIT 0 ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT 8 ——— BA1
PC4U6GM3 - STATUS 2 BIT A/B BIT 0 ——— CL
PC506FA2 - PORT SBI BIT 8 ——— DL26A-BA

PC32UEE32 - STATUS 1 BIT 1 ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT 9 ——— CD1
PC43UCA21 - STATUS 2 BIT 1 ——— CL
PC506FA3 - PORT SBI BIT 9 ——— DL26D-CD

PC32UEE33 - STATUS 1 BIT 2 ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT 10 ——— DG1
PC43UCA31 - STATUS 2 BIT 2 ——— CL
PC506FA4 - PORT SBI BIT 10 ——— DL26G-DG

PC32UEE34 - STATUS 1 BIT 3 ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT 11 ——— EJ1
PC43UCA41 - STATUS 2 BIT 3 ——— CL
PC506FA5 - PORT SBI BIT 11 ——— DL26J-EJ

PC32UEE35 - STATUS 1 BIT 4 ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT 12 ——— BM1
PC43UCA51 - STATUS 2 BIT 4 ——— CL
PC506FA6 - PORT SBI BIT 12 ——— DL26M-BM

PC32UEE36 - STATUS 1 BIT 5 ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT 13 ——— CP1
PC406GB3 - STATUS 2 BIT A/B BIT 5 ——— CL
PC506FA7 - PORT SBI BIT 13 ——— DL26P-CP

PC32UEE37 - STATUS 1 BIT 6 ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT 14 ——— DS1
PC406GF3 - STATUS 2 BIT A/B BIT 6 ——— CL
PC506FA8 - PORT SBI BIT 14 ——— DL26S-DS

PC32UEE38 - STATUS 1 BIT 7 ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT 15 ——— EV1
PC406GJ3 - STATUS 2 BIT A/B BIT 7 ——— CL
PC506FA9 - PORT SBI BIT 15 ——— DL26V-EV

PC32UEE39 - STATUS 1 BIT P ——— rT3 BLOR DOT △1 ——— PC23U - SYS BUS IN BIT P ——— CY1
PC4U6GR3 - STATUS 2 BIT P ——— CL
PC518FL3 - PORT DBI BIT P ——— DL26Y-CY

COMMENTS

0

SYSTEM BUS IN 8-15,P DOTS

PN4237291 EC832850 PEC832742E

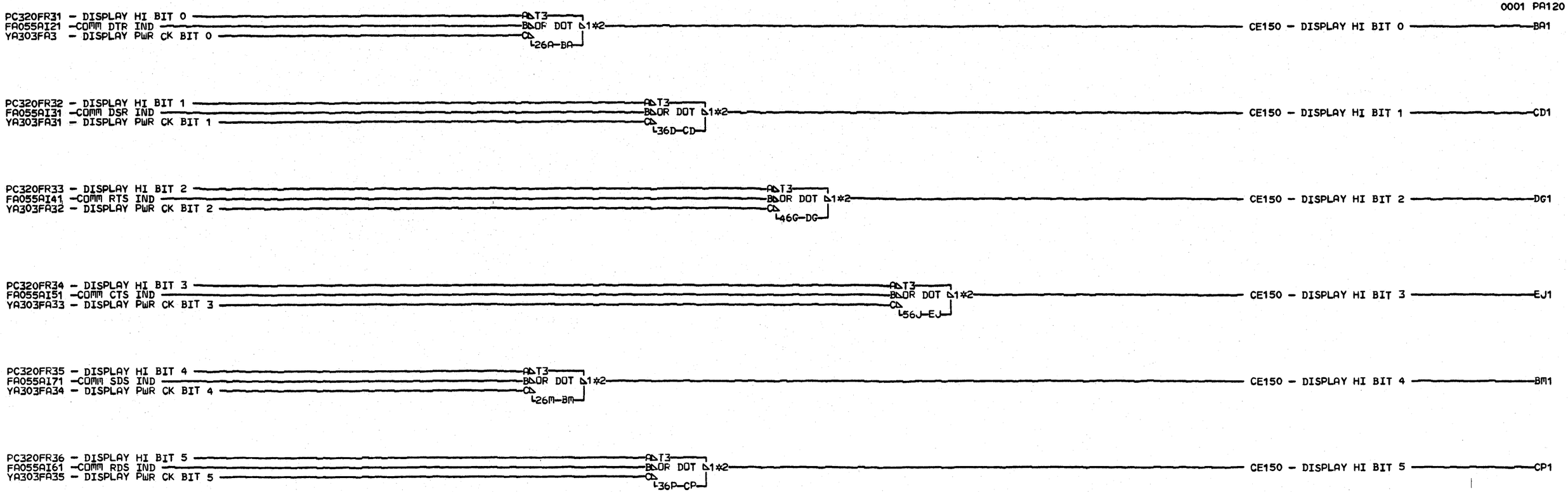
LOC=1A-A1

USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK EW

CID PIOFE JOB M5301328

PA110 0001


PC320FR31 - DISPLAY HI BIT 0
FA055AI21 -COMM DTR IND
YA303FA3 - DISPLAY PWR CK BIT 0
AT3
BAOF DOT A1*2
CA
L26A-BA
CE150 - DISPLAY HI BIT 0 BA1
PC320FR32 - DISPLAY HI BIT 1
FA055AI31 -COMM DSR IND
YA303FA31 - DISPLAY PWR CK BIT 1
AT3
BAOR DOT A1*2
CA
L36D-CD
CE150 - DISPLAY HI BIT 1 CD1
PC320FR33 - DISPLAY HI BIT 2
FA055AI41 -COMM RTS IND
YA303FA32 - DISPLAY PWR CK BIT 2
AT3
BAOR DOT A1*2
CA
L46G-DG
CE150 - DISPLAY HI BIT 2 DG1
PC320FR34 - DISPLAY HI BIT 3
FA055AI51 -COMM CTS IND
YA303FA33 - DISPLAY PWR CK BIT 3
AT3
BAOR DOT A1*2
CA
L56J-EJ
CE150 - DISPLAY HI BIT 3 EJ1
PC320FR35 - DISPLAY HI BIT 4
FA055AI71 -COMM SDS IND
YA303FA34 - DISPLAY PWR CK BIT 4
AT3
BAOR DOT A1*2
CA
L26M-BM
CE150 - DISPLAY HI BIT 4 BM1
PC320FR36 - DISPLAY HI BIT 5
FA055AI61 -COMM RDS IND
YA303FA35 - DISPLAY PWR CK BIT 5
AT3
BAOR DOT A1*2
CA
L36P-CP
CE150 - DISPLAY HI BIT 5 CP1
PC320FR37 - DISPLAY HI BIT 6
YA303FA36 - DISPLAY PWR CK BIT 6
AT3
OR DOT A1*2
CA
L46S-DS
CE150 - DISPLAY HI BIT 6 DS1
PC320FR38 - DISPLAY HI BIT 7
YA303FA37 - DISPLAY PWR CK BIT 7
AT3
OR DOT A1*2
CA
L56V-EV
CE150 - DISPLAY HI BIT 7 EV1
PC320FT3 - DISP EV IND OR ST 1 BIT P
AT3
OR DOT A1*2
26Y-BY
CE150 - DISPLAY HI BIT P BY1
PC030DC3 - ADVANCE CLK FROM MSP
PC518FS1 - ADVANCE TIME FROM CHANNEL
T3
BAOR DOT
CA
L46Z-DZ-A3
- ADVANCED TIME DOT DZ3
PC110 PC144
COMMENTS
D1COPYRIGHT IBM CORP. 1978
CONNECTORS
BA1
0002/1A-A1/A3B10
0062/1A-A1/E6B04
0080/1A-A2/E1B13
BM1
0031/1A-A1/A3D04
0064/1A-A1/E6B02
0081/1A-A2/E1B11
BY1
0033/1A-A1/A3B12
0066/1A-A1/F6A04
0082/1A-A2/F1A13
CD1
CONNECTORS
0068/1A-A1/E6C04
0083/1A-A2/E1C13
CP1
0032/1A-A1/A3B04
0070/1A-A1/E6C02
0084/1A-A2/E1C11
DG1
0004/1A-A1/A3D03
0072/1A-A1/E6D04
0085/1A-A2/E1D13
DS1
0010/1A-A1/A3D05
0074/1A-A1/E6D02
CONNECTORS
EJ1
0030/1A-A1/A3D02
0076/1A-A1/E6E04
0087/1A-A2/E1E13
EV1
0012/1A-A1/A3B05
0078/1A-A1/E6E02
0088/1A-A2/E1E11
DISPLAY HI DOTS
PN4237292 EC834777 PEC832999
LOC=1A-A1
USN 00008
PRI=27SEP78 1444
AUC=
SEC
PFORM=KSEB
NEXTBLK EW
CID PIOFE
JOB L6301459
PA120
PA120

PM380CF31 + CP GT BIT 8
CS112EK4 + CS 0-16K BUS BIT 8
PM766FM31 + MSCTRL TO CP BUS (P,8-15)
(P,8-15)PM766
(8)A T3 B OR DOT C 26A-BA 1 + STORAGE BUS BIT 8 PC100 PC220 BA1

PM380CF32 + CP GT BIT 9
CS112EK41 + CS 0-16K BUS BIT 9
(9)A T3 B OR DOT C 26D-DD 1 + STORAGE BUS BIT 9 PC100 PC220 DD1

PM380CF33 + CP GT BIT 10
CS112EK42 + CS 0-16K BUS BIT 10
(10)A T3 B OR DOT C 26G-BG 1 + STORAGE BUS BIT 10 PC100 PC220 BG1

PM380CF34 + CP GT BIT 11
CS112EK43 + CS 0-16K BUS BIT 11
(11)A T3 B OR DOT C 26J-DJ 1 + STORAGE BUS BIT 11 PC100 PC220 DJ1

PM380CF35 + CP GT BIT 12
CS112EK44 + CS 0-16K BUS BIT 12
(12)A T3 B OR DOT C 26M-BM 1 + STORAGE BUS BIT 12 PC100 PC220 BM1

PM380CF36 + CP GT BIT 13
CS112EK45 + CS 0-16K BUS BIT 13
(13)A T3 B OR DOT C 26P-DP 1 + STORAGE BUS BIT 13 PC100 PC220 DP1

PM380CF37 + CP GT BIT 14
CS112EK46 + CS 0-16K BUS BIT 14
(14)A T3 B OR DOT C 26S-BS 1 + STORAGE BUS BIT 14 PC100 PC220 BS1

PM380CF38 + CP GT BIT 15
CS112EK47 + CS 0-16K BUS BIT 15
(15)A T3 B OR DOT C 26V-DV 1 + STORAGE BUS BIT 15 PC100 PC220 DV1

PM380CF39 + CP GT BIT P
CS112EK48 + CS 0-16K BUS BIT LO P
(P)A T3 B OR DOT C 26Y-BY 1 + STORAGE BUS BIT LO P PC100 PC220 BY1

COMMENTS
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STORAGE BUS BITS 0-15,P DOTTED

PN4237293 EC832999 PEC832850

LOC=1A-A1

USN 00008 PRI=04MAY78 1616

AUC= SEC
PFORM=KSEB NEXTBLK GX

CID PIOFE JOB N5101128

PA130 0001

PA130 0001

MS110EK4 + MS 0-16K BUS BIT 8 — A△T3
MS120EK4 + MS 16-32K BUS BIT 8 — B△OR DOT △1 — + MS STORAGE BUS BIT 8 — BA1
MS130EK4 + MS 32-48K BUS BIT 8 — C△ — PM040 PM204
MS140EK4 + MS 48-64K BUS BIT 8 — D△
MS150EK4 + MS 64-80K BUS BIT 8 — E△
MS160EK4 + MS 80-96K BUS BIT 8 — F△
MS170EK4 + MS 96-112K BUS BIT 8 — G△
MS180EK4 + MS 112-128K BUS BIT 8 — H△26A-BA

MS110EK41 + MS 0-16K BUS BIT 9 — A△T3
MS120EK41 + MS 16-32K BUS BIT 9 — B△OR DOT △1 — + MS STORAGE BUS BIT 9 — BD1
MS130EK41 + MS 32-48K BUS BIT 9 — C△ — PM040 PM204
MS140EK41 + MS 48-64K BUS BIT 9 — D△
MS150EK41 + MS 64-80K BUS BIT 9 — E△
MS160EK41 + MS 80-96K BUS BIT 9 — F△
MS170EK41 + MS 96-112K BUS BIT 9 — G△
MS180EK41 + MS 112-128K BUS BIT 9 — H△26D-BD

MS110EK42 + MS 0-16K BUS BIT 10 — A△T3
MS120EK42 + MS 16-32K BUS BIT 10 — B△OR DOT △1 — + MS STORAGE BUS BIT 10 — BG1
MS130EK42 + MS 32-48K BUS BIT 10 — C△ — PM040 PM204
MS140EK42 + MS 48-64K BUS BIT 10 — D△
MS150EK42 + MS 64-80K BUS BIT 10 — E△
MS160EK42 + MS 80-96K BUS BIT 10 — F△
MS170EK42 + MS 96-112K BUS BIT 10 — G△
MS180EK42 + MS 112-128K BUS BIT 10 — H△26G-BG

MS110EK43 + MS 0-16K BUS BIT 11 — A△T3
MS120EK43 + MS 16-32K BUS BIT 11 — B△OR DOT △1 — + MS STORAGE BUS BIT 11 — BJ1
MS130EK43 + MS 32-48K BUS BIT 11 — C△ — PM040 PM204
MS140EK43 + MS 48-64K BUS BIT 11 — D△
MS150EK43 + MS 64-80K BUS BIT 11 — E△
MS160EK43 + MS 80-96K BUS BIT 11 — F△
MS170EK43 + MS 96-112K BUS BIT 11 — G△
MS180EK43 + MS 112-128K BUS BIT 11 — H△26J-BJ

MS110EK44 + MS 0-16K BUS BIT 12 — A△T3
MS120EK44 + MS 16-32K BUS BIT 12 — B△OR DOT △1 — + MS STORAGE BUS BIT 12 — BM1
MS130EK44 + MS 32-48K BUS BIT 12 — C△ — PM040 PM204
MS140EK44 + MS 48-64K BUS BIT 12 — D△
MS150EK44 + MS 64-80K BUS BIT 12 — E△
MS160EK44 + MS 80-96K BUS BIT 12 — F△
MS170EK44 + MS 96-112K BUS BIT 12 — G△
MS180EK44 + MS 112-128K BUS BIT 12 — H△26M-BM

MS110EK45 + MS 0-16K BUS BIT 13 — A△T3
MS120EK45 + MS 16-32K BUS BIT 13 — B△OR DOT △1 — + MS STORAGE BUS BIT 13 — BP1
MS130EK45 + MS 32-48K BUS BIT 13 — C△ — PM040 PM204
MS140EK45 + MS 48-64K BUS BIT 13 — D△
MS150EK45 + MS 64-80K BUS BIT 13 — E△
MS160EK45 + MS 80-96K BUS BIT 13 — F△
MS170EK45 + MS 96-112K BUS BIT 13 — G△
MS180EK45 + MS 112-128K BUS BIT 13 — H△26P-BP

MS110EK46 + MS 0-16K BUS BIT 14 — A△T3
MS120EK46 + MS 16-32K BUS BIT 14 — B△OR DOT △1 — + MS STORAGE BUS BIT 14 — BS1
MS130EK46 + MS 32-48K BUS BIT 14 — C△ — PM040 PM204
MS140EK46 + MS 48-64K BUS BIT 14 — D△
MS150EK46 + MS 64-80K BUS BIT 14 — E△
MS160EK46 + MS 80-96K BUS BIT 14 — F△
MS170EK46 + MS 96-112K BUS BIT 14 — G△
MS180EK46 + MS 112-128K BUS BIT 14 — H△26S-BS

MS110EK47 + MS 0-16K BUS BIT 15 — A△T3
MS120EK47 + MS 16-32K BUS BIT 15 — B△OR DOT △1 — + MS STORAGE BUS BIT 15 — BV1
MS130EK47 + MS 32-48K BUS BIT 15 — C△ — PM040 PM204
MS140EK47 + MS 48-64K BUS BIT 15 — D△
MS150EK47 + MS 64-80K BUS BIT 15 — E△
MS160EK47 + MS 80-96K BUS BIT 15 — F△
MS170EK47 + MS 96-112K BUS BIT 15 — G△
MS180EK47 + MS 112-128K BUS BIT 15 — H△26V-BV

MS110EK48 + MS 0-16K BUS BIT P — A△T3
MS120EK48 + MS 16-32K BUS BIT P — B△OR DOT △1 — PM204 + MS STORAGE BUS BIT P — BY1
MS130EK48 + MS 32-48K BUS BIT P — C△
MS140EK48 + MS 48-64K BUS BIT P — D△
MS150EK48 + MS 64-80K BUS BIT P — E△
MS160EK48 + MS 80-96K BUS BIT P — F△
MS170EK48 + MS 96-112K BUS BIT P — G△
MS180EK48 + MS 112-128K BUS BIT P — H△26Y-BY

COMMENTS
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MAIN STG BUS DOTS

PN4237294 EC832850 PEC832863

LOC=1A-A1

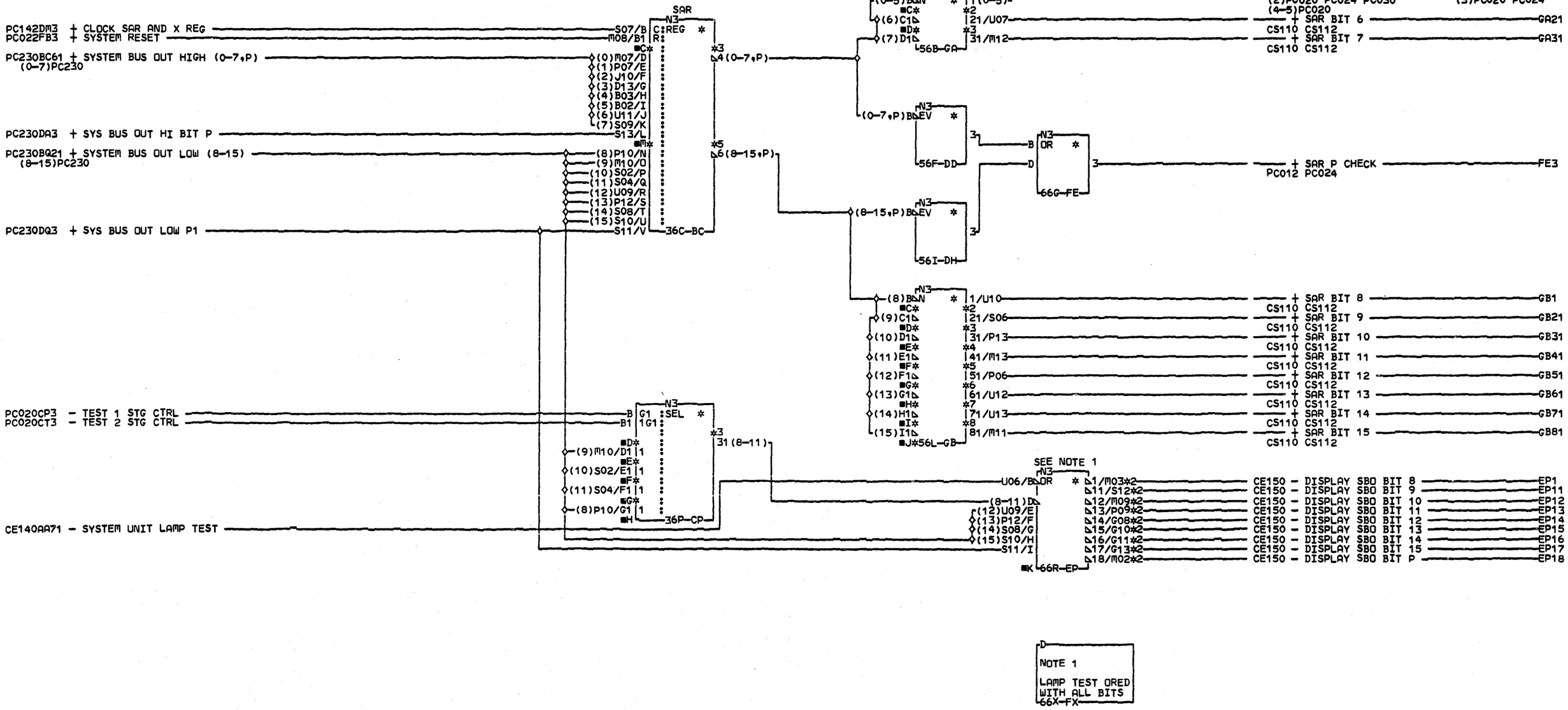
USN 00006 PRI=16SEP77 2052

AUC= SEC
PFORM=KSEB NEXTBLK BZ

CID PIOFE JOB M5301328

PA140 0001

PA140 0001



COMMENTS
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CONNECTORS
EP1
0013/1A-A1/A3D06
EP11
0014/1A-A1/A3B06
EP12
0015/1A-A1/A3D07
EP13
0016/1A-A1/A3D10
EP14
0017/1A-A1/A3B09
EP15
0018/1A-A1/A3D09
EP16
0019/1A-A1/A3B08

CONNECTORS
EP17
0020/1A-A1/A3B07
EP18
0021/1A-A1/A3D11

SAR AND DISPLAY BITS GEN
CP STG CTRL CARD

PN4237295 EC832999 PEC832850

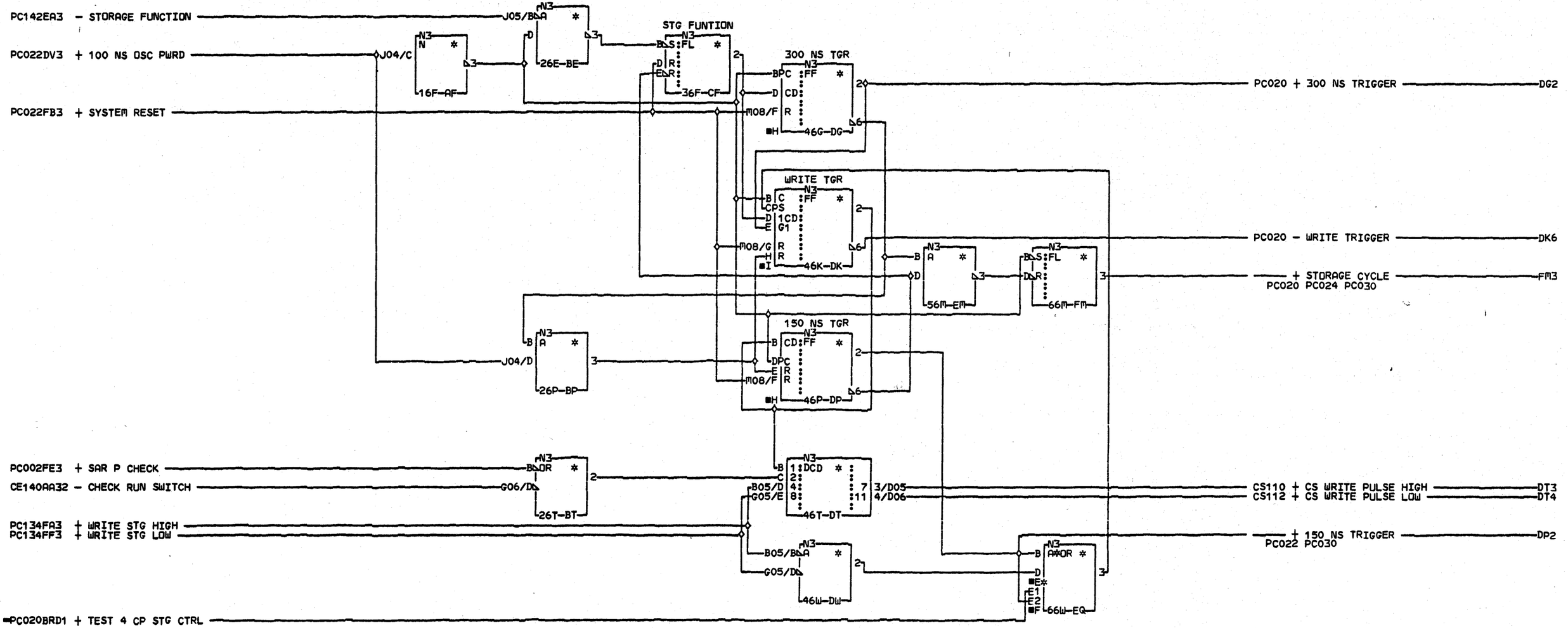
LOC=1A-A1F2

USN 00008 PRI=03MAY78 1007

AUC= SEC
PFORM=KSEB NEXTBLK GC

CID PIOFE JOB N5101128

PC002 0001



COMMENTS

E

STORAGE CLOCK
CP STG CTRL CARD

PN4237296 EC832999 PEC832850

LOC=1A-A1F2

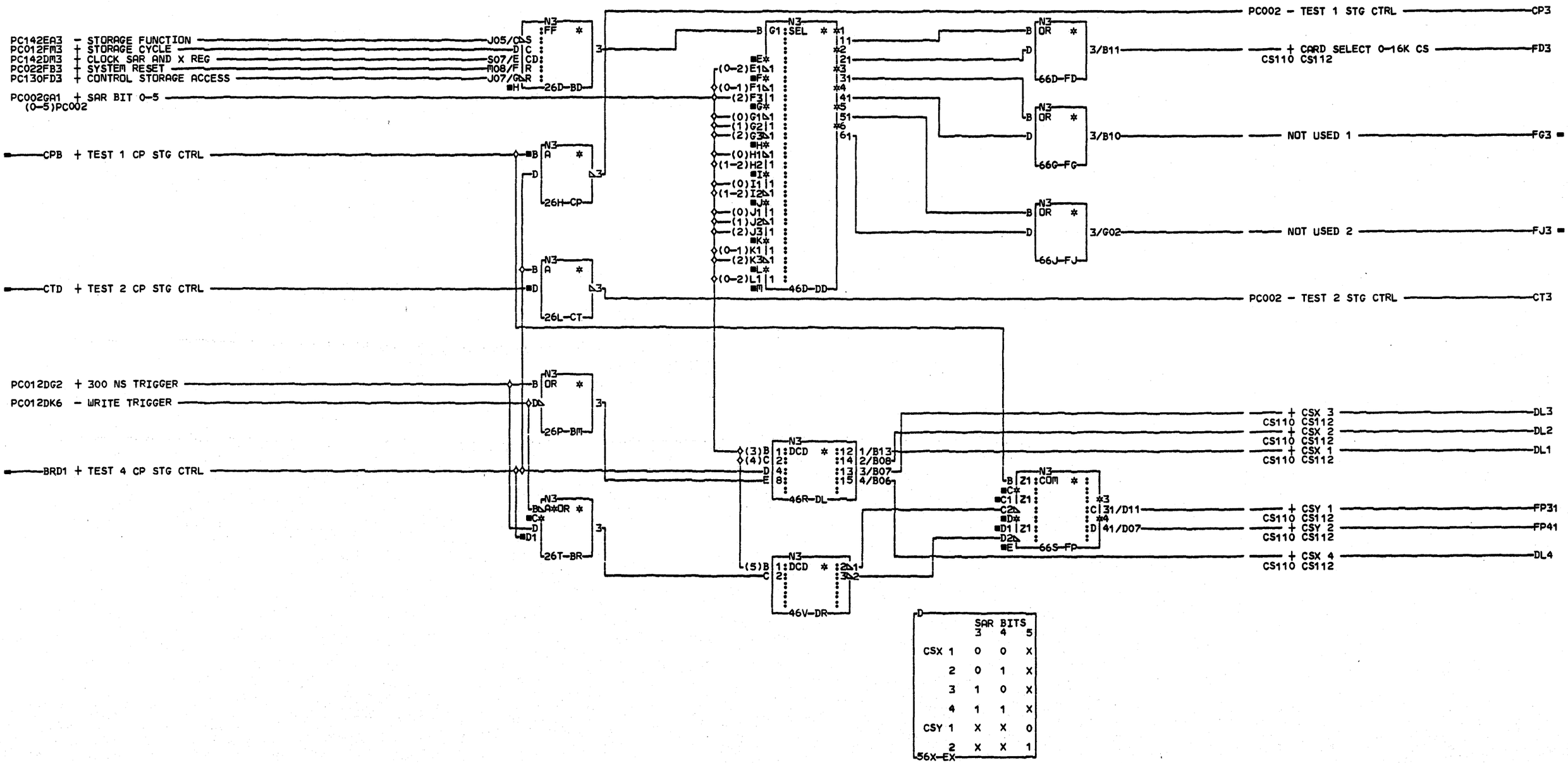
USN 00008 PRI=24APR78 1053

AUC= SEC 28APR78 1436

PFORM=KSEB NEXTBLK GN

CID PIOFE JOB N5101128

PC012 0001 PC012 0001



COMMENTS

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CARD SELECT
CP STG CTRL CARD

PN4237297 EC832999 PEC832850

LOC=1A-A1F2

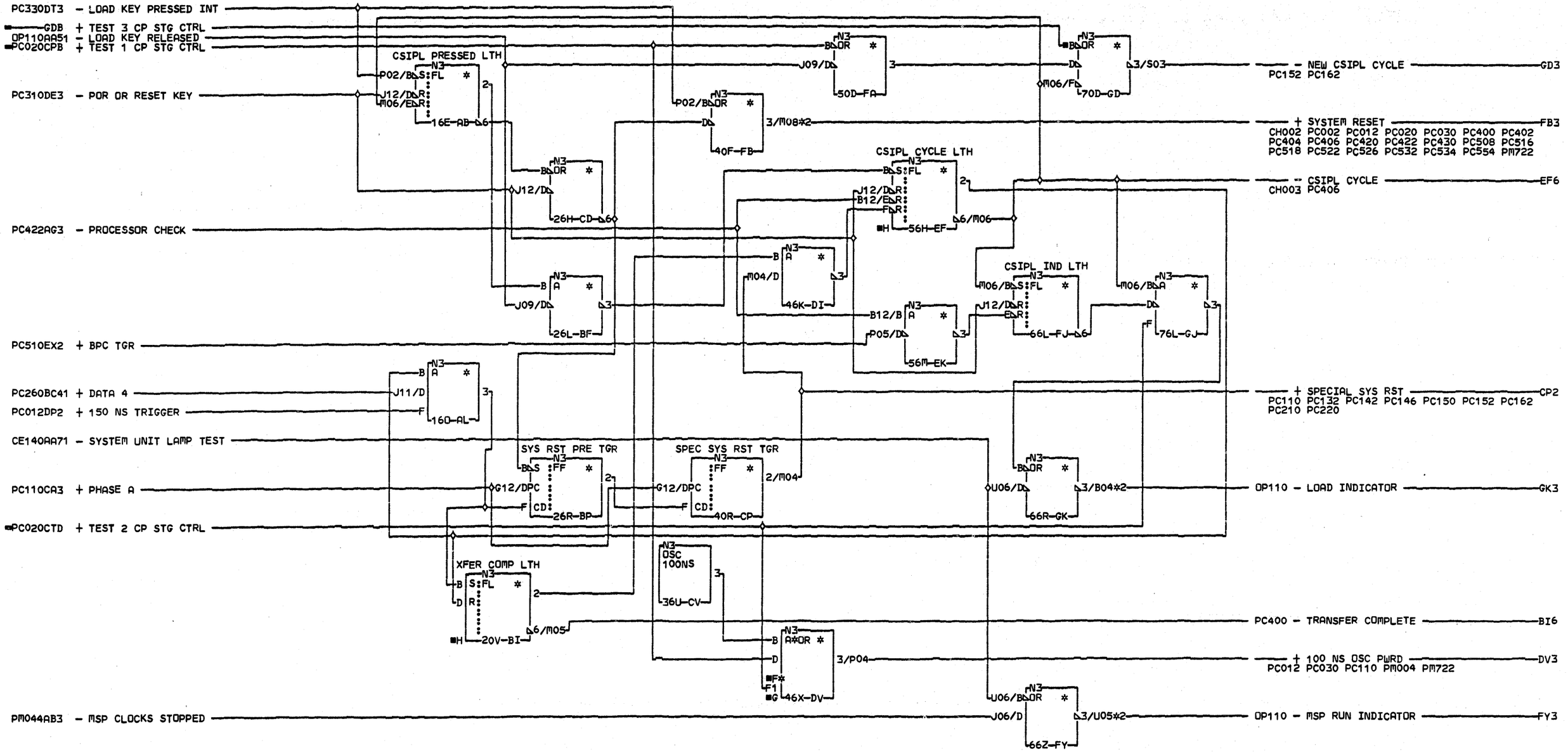
USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FQ

CID PIOFE JOB N5101128

PC020 0001

PC020 0001



COMMENTS
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E

CONNECTORS
FB3
0023/1A-A1/M6C02
FY3
0022/1A-A1/A2B09
GK3
0016/1A-A1/A2B10
0021/1A-A1/A2D10

100 NS OSC AND SYS RST
CP STG CTRL CARD

PN4237298 EC832999 PEC832850

LOC=1A-A1F2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK GY

CID PIOFE JOB N5101128

PC022 0001

PC022 0001

PC012FM3 + STORAGE CYCLE

CAC (0-3) - JUMPER (0-3) — (0-3)C — SEE TABLE N3 DCD — 3 — B

PC002GA1 (0-3)PC002 + SAR BIT 0-5 — (0-3)E — 36B-CA

N3 A — 56A-EA — D — 3/D10 — PC340 - CTRL STG ADDRESS CHK — EA3

PC002FE3 + SAR P CHECK — D

N3 A — 66E-FE — B — 3/D09 — PC340 - CTRL STG SAR P CHK — FE3

TABLE

ADDRESS CHECKING
JUMPER CONFIGURATION

AMT STG	JUMPR 0	JUMPR 1	JUMPR 2	JUMPR 3
16K WORDS	1	1	0	0

1 DENOTES JUMPER INSTALLED

16G-AG

JUMPER PIN LOCATION

MODULE SIDE OF CARD - 1A-A1F2

JUMPER PINS (8) * * * *
* * * *
JUMPER (4 POSSIBLE) 0 1 2 3

THE JUMPER INSTALLED ON THE CARD WILL DEPEND ON THE AMOUNT OF CONTROL STORAGE INSTALLED IN THE MACHINE.
SEE ALSO PAGE AE020.

16P-AP

COMMENTS

CTL STG ADDR CHK
CP STG CTRL CARD

PN4237299 EC832999 PEC832850

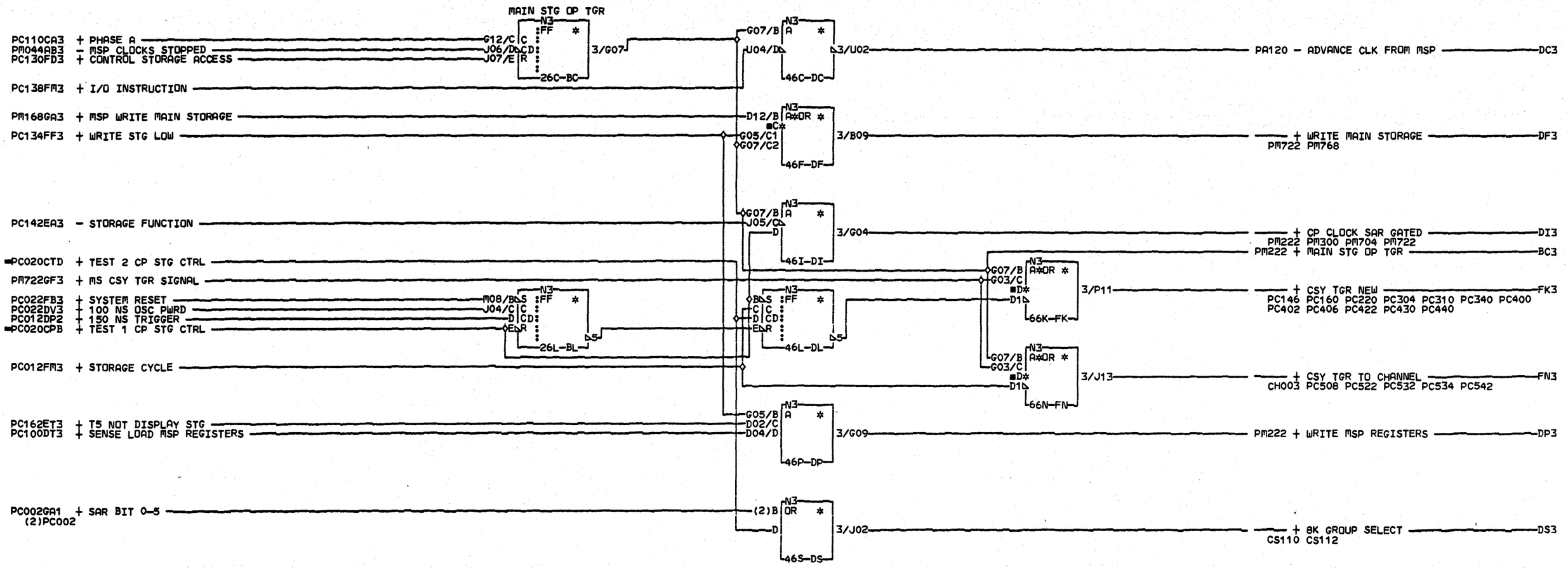
LOC=1A-A1F2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FF

CID PIOFE JOB N5101128

PC024 0001



COMMENTS
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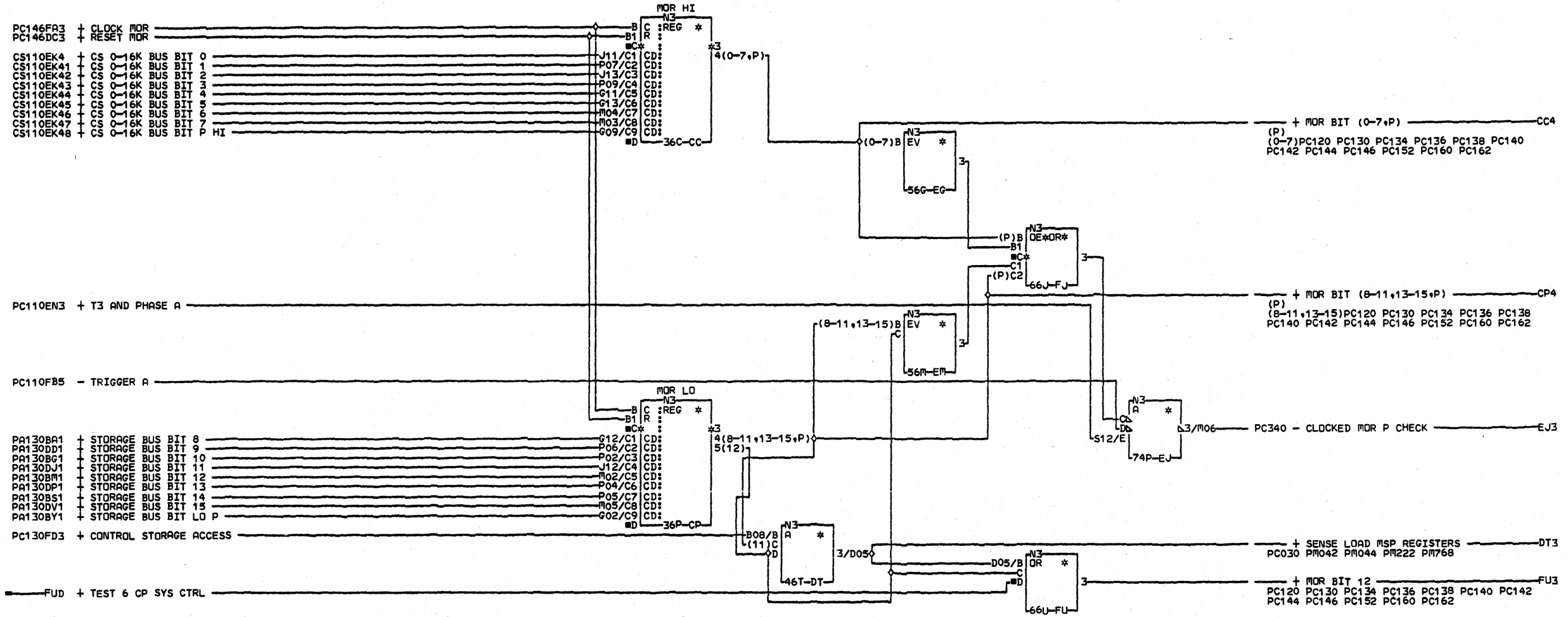
E

CP	CSY TGR STG CTRL CARD
PN4237300	EC832999 PEC832850
LOC=1A-A1F2	
USN 00008	PRI=24APR78 1053
AUC=	SEC 28APR78 1436
PFORM=KSEB	NEXTBLK FD
CID PIOFE	JOB N5101128

PC030 0001

PC030 0001



COMMENTS

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MICRO OPERATION REGISTER (MOR)
CP SYSTEM CONTROL CARD

PN4237301 EC832999 PEC832850

LOC=1A-A1G2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK FV

CID PIOFE JOB N5101128

PC022DV3 + 100 NS OSC PWRD

PC130GM3 + I/O INSTRUCTION OR MS ACCESS

PA120DZ3 - ADVANCED TIME DOT

PC022CP2 + SPECIAL SYS RST

PC508FR2 + STORAGE CYCLE REQUEST
PC510EX2 + BPC TGR

-PC100FUD + TEST 6 CP SYS CTRL

TABLE

INSTRUCTION	0	1	2	T TIME 3	4	5	6
CONTROL WORD FETCH	1	1	1				
BRANCH				1			
BRANCH & LINK				1	1	1	
BRANCH ON CONDITION				1			
I/O BOC				1	1	1	1
I/O STG				1	1	1	1
STORAGE				1	1	1	1
REG CONTROL				1	1	1	1
TEST MASK				1	1		
LOG/ARITH 1				1	1	1	
LOG/ARITH 2				1	1	1	
SET OFF				1	1		
SET ON				1	1		
IMMEDIATE				1	1		
I/O IMMEDIATE				1	1	1	1
COMPARE IMM				1	1		
SUBTRACT IMM				1	1		
STORAGE DIRECT				1	1	1	
MOVE LSR				1	1		
HEX BRANCH				1	1		
HEX MOVE				1	1	1	

12J-AT

(DCD) T TIMES

+ PHASE A — CA3
PC022 PC030 PC142 PC146 PC160 PC302 PC310 PC340 PC402 PC420 PC508 PC510 PC518 PC522 PC526 PC532 PC534

+ TRIGGER A — FB3
PC146 PC160

- TRIGGER A — FB5
PC100 PC142 PC146

+ T6 — DD57
PC120 PC138 PC144 PC146 PC152 PC160

+ T7 — DD58
PC120 PC130 PC132 PC134 PC140 PC144 PC160 PC162

+ T0 — DD51
PC142 PC162

+ T2 — DD53
PC160

+ T4 — DD55
PC142 PC144 PC152 PC160

+ T0-T2 — FH3
PC120 PC130 PC134 PC138 PC140 PC146 PC150 PC152

+ T3 — DD54
PC120 PC142 PC152

+ T3-T5 — FK3
PC138 PC152

+ T3 AND PHASE A — EN3
PC100 PC210 PC402 PC532

+ T3-T6 — FN3
PC130 PC136 PC138 PC140 PC162

+ T5 — DD56
PC120 PC138 PC142 PC144 PC160 PC162

PC152 + T4-T5 — FQ3

+ T8 — ER3
PC120 PC134 PC142 PC146

+ T4 THRU T6 — FT3
PC120 PC134 PC152 PC162 PC302 PC402 PC406 PC422

PC120 + T5-T6 — FW3

PC120 + T3B — FZ3

PC120 + T3A — GZ3

+ T7 PWD — D03
CH003 PC314 PC402 PC406 PC502 PC508 PC510 PC516 PC532 PC534 PM220

COMMENTS
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T TIMES
CP SYSTEM CONTROL CARD

PN4237302 EC834777 PEC832999

LOC=1A-A1G2

USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK G0

CID PIOFE JOB L6301459

PC100CP4 + MDR BIT (8-11,13-15,P) (8-11,13-15)PC100
PC100CC4 + MDR BIT (0-7,P) (0-7)PC100
PC304DE3 + BRANCH COND MET
PC510EB1 - COMMAND BUS IN BIT 4 GATED
PC100FU3 + MDR BIT 12
PC142EH3 + RESET SDR HIGH
PC110DD54 + T3
PC110FW3 + T5-T6
PC110DD57 + T6
PC110FT3 + T4 THRU T6
PC110FH3 + T0-T2
PC110DD58 + T7
PC110ER3 + T8
PC110DD56 + T5
PC110GZ3 + T3A
PC110FZ3 + T3B
PC132FF3 + ALTER MAR OR STG
PC510EX2 + BPC TGR
CH008AE3 - CBI BIT 1 CYCLE STEAL READ
CH007AD3 - CBI BIT 0 CYCLE STEAL INCR
PC132GS3 + DISPLAY STG/CLKD SYS RST
PC132F03 + DISPLAY LSR

SEE TABLE
N3 DCD * 26B-CA
N3 DCD * 20E-CD
N3 OR * 20J-BH
N3 A * 20M-CJ
N3 A * 36A-FA
N3 A * 36D-FD
N3 A * 36G-FG
N3 A * 36J-FJ
N3 A * 36M-FM
N3 A * 36P-FP
N3 A * 36S-FS
N3 A * 36V-FV
N3 A * 36Y-FY
N3 OR * 56A-GA
N3 OR * 56D-GD
N3 OR * 56G-GG
N3 OR * 56J-GJ
N3 A * 56Y-GY
N3 OR * 66B-GB

U10/D
B04/E
B04/D
G03/C
S08/D
S08/B
S06/C
G03/D
S06/B
S08/C
G03/B

3/B03 — PC230 + STG GT HIGH BIT 0 FIXED — GB3
3/D09 — PC230 + STG GATE HI SEL BIT 1 — GD3
3/B07 — PC230 + STG GATE LOW BIT 0 — GG3
3/B05 — PC230 + STG GATE LOW BIT 1 — GJ3

D SEE TABLE ON PAGE PC122 70V-ZZ

COMMENTS
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STG GATE BITS
CP SYSTEM CONTROL CARD
PN4237303 EC832999 PEC832850
LOC=1A-A1G2
USN 00008 PRI=24APR78 1053
AUC= SEC
PFORM=KSEB NEXTBLK Z0
CID PIOFE JOB N5101128

PC120 0001

TABLE

INSTRUCTION		TIME	I/O BR MET	BR MET	MDR BITS IN 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	STG GATE SEL HI 0 1	LOW 0 1
DEFAULT						0 0	0 0
BRANCH	BR	3			0 0 0 0	1 1	0 1
BRANCH & LINK	BAL	5			0 0 0 1	1 1	0 1
BR COND	BOC	3		0	0 0 0 1	0 0	0 0
BR COND	BOC	3		1	0 0 1 0	0 0	0 1
I/O BOC	IOB	3			0 0 1 1	0 1	0 1
	IOB	6	1		0 0 1 1	0 0	0 1
	IOB	6	0		0 0 1 1	0 0	0 0
	IOB	3A			0 0 1 1	0 1	1 1
	IOB	3B			0 0 1 1	0 1	0 0
I/O STG	IOS	3			0 1 0 0 0	0 1	0 1
	IOS	6			0 1 0 0 0 0 0	0 1	0 1
	IOS	6			0 1 0 0 0 0 0	0 1	0 1
	IOS	5-6			0 1 0 0 1 0 0 1	0 1	1 1
	IOS	5-6			0 1 0 0 0 1	1 0	1 0
	IOS	3A			0 1 0 0 0	0 1	1 1
	IOS	3B			0 1 0 0 0	0 1	0 0
STORAGE	STG	4-6			0 1 0 0 1 1 1 0	0 0	1 1
	STG	5-6			0 1 0 0 1 0	0 1	0 1
TEST MASK	TM	3			0 1 0 1 1	0 0	1 1
LOG/ARITH 1	LA1	3			0 1 1 0 1	0 0	1 1
	LA1	4-5			0 1 1 0 1	0 0	1 1
LOG/ARITH 2	LA2	3			0 1 1 1 1 0 1 0 1	0 0	1 1
	LA2	3			0 1 1 1 1 1 0 1 1	0 0	1 1
SET OFF	SF	3			1 0 0 0 1	0 0	1 1
SET ON	SN	3			1 0 0 1 1	0 0	1 1
IMMEDIATE	IMM	3			1 0 1 0	0 0	0 1
I/O IMMEDIATE	IOI	3			1 0 1 1	0 1	0 1
	IOI	3A			1 0 1 1	0 1	1 1
	IOI	5-6			1 0 1 1 1	0 0	1 0
	IOI	5-6			1 0 1 1 0 0	0 0	0 0
	IOI	5-6			1 0 1 1 0 1	0 0	1 1
	IOI	3B			1 0 1 1	0 1	0 0
COMPARE IMM	CI	3			1 1 0 0 1	0 0	1 1
SUBTRACT IMM	SI	3			1 1 0 1 1	0 0	1 1
STORAGE DIRECT	SD	3			1 1 1 0 0	0 1	0 1
	SD	5-6			1 1 1 0 0	0 1	0 1
HEX BRANCH	HB	3			1 1 1 1 1 1	0 0	1 1
HEX MOVE	HM	3			1 1 1 1 1 1	0 0	1 1
	HM	4-6			1 1 1 1 1 0 0 1	0 0	1 1

12B-AA 34B-AB 55B-AC

COMMENTS
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E

STG GATE BITS
CP SYSTEM CONTROL CARD

PN4237304 EC832850 PEC832742E

LOC=1A-A1G2

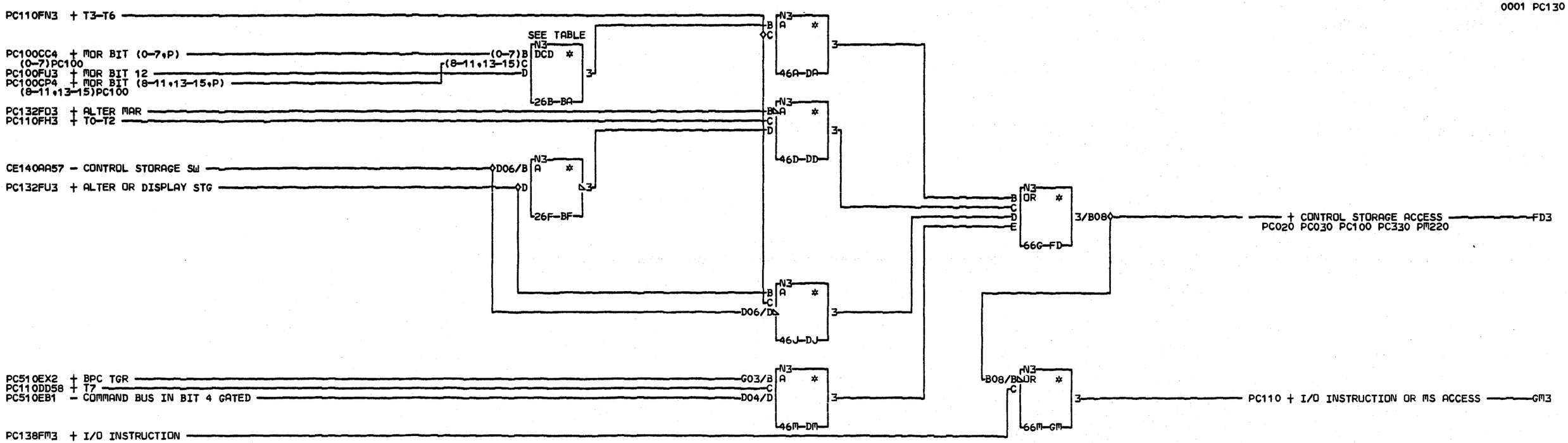
USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK AD

CID PIOFE JOB M53U1328

PC122 0001

PC122 0001



TABLE

INSTRUCTION		TIME	MDR BITS 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STORAGE DIRECT	SD	3-6	1	1	1	0					0							
I/O STORAGE	IOS	3-6	0	1	0	0					0		1					
STORAGE	STG	3-6	0	1	0	0					1		1					

16R-AR

COMMENTS

CONTROL STORE ACCESS
CP SYSTEM CONTROL CARD

PN4237305 EC834777 PEC832850

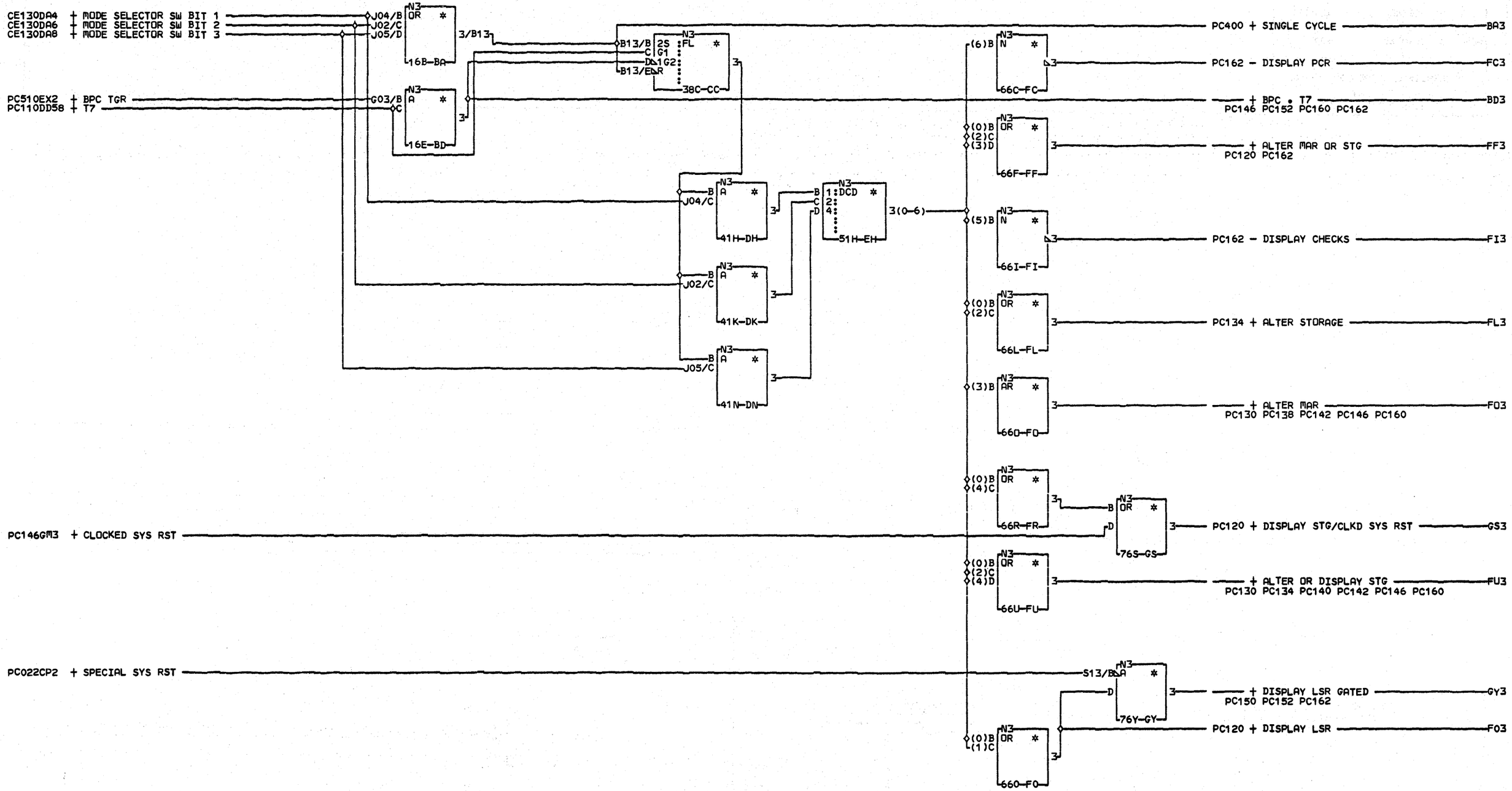
LOC=1A-A1G2

USN 00008 PRI=14NOV78 1620

AUC= SEC
PFORM=KSEB NEXTBLK GN

CID PIOFE JOB L6301459

PC130 0001



COMMENTS
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ALTER AND DISPLAY
CP SYSTEM CONTROL CARD

PN4237306 EC832999 PEC832850

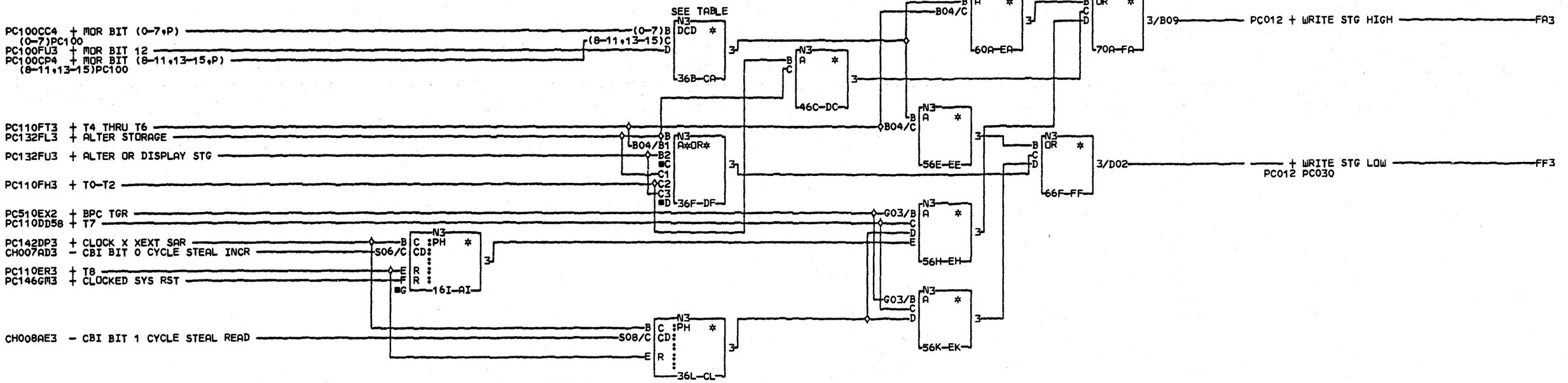
LOC=1A-A1G2

USN 00008 PRI=03MAY78 1007

AUC= SEC
PFORM=KSEB NEXTBLK GZ

CID PIOFE JOB N5101128

PC132 0 PC132 0001



TABLE

INSTRUCTION		TIME	MDR BITS 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	WRITE STG HI	LO
STORAGE	STG	4-6	0	1	0	0						1	1						1	
	STG	4-6	0	1	0	0						1								1
STORAGE DIRECT	SD	4-6	1	1	1	0	1												1	1
I/O STG	IOS	4-6	0	1	0	0	1					1	1						1	
		4-6	0	1	0	0	0					1								1
		4-6	0	1	0	0						1	0							1

16P-AP

COMMENTS

WRITE STG HIGH/LOW
CP SYSTEM CONTROL CARD

PN4237307 EC832999 PEC832850

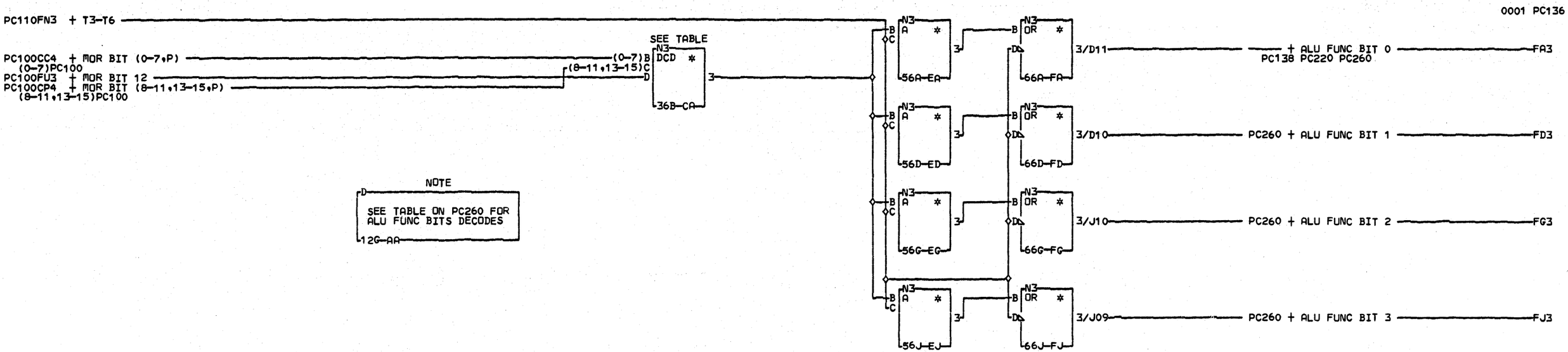
LOC=1A-A1G2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK FG

CID PIOFE JOB N5101128

PC134 0001



NOTE

SEE TABLE ON PC260 FOR ALU FUNC BITS DECODES

12G-AA

TABLE

MICRO INSTRUCTION		MOR BITS IN 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	ALU FUNCTION BITS 0	1	2	3
BRANCH	BR	0	0	0	0													1	1	1	1
BRANCH & LINK	BAL	0	0	0	1													1	1	1	1
BR ON COND	BOC	0	0	1	0													1	1	1	1
I/O BOC	IOB	0	0	1	1													1	1	1	1
I/O STG	IOS	0	1	0	0					0								1	0	0	0
STORAGE	STG	0	1	0	0					1								1	0	0	0
TEST MASK	TM	0	1	0	1													0	1	1	0
LOG/ARITH 1	LA1	0	1	1	0					X	X	X	X					SAME AS MOR			
LOG/ARITH 2	LA2	0	1	1	1					X	X	X	X					BITS 8,9,10,11			

12N-AF

SET OFF	SF	1	0	0	0													0	1	0	1
SET ON	SN	1	0	0	1													0	0	1	1
IMMEDIATE	IMM	1	0	1	0													1	1	1	1
I/O IMMEDIATE	IOI	1	0	1	1													1	1	1	1
COMPARE IMM	CI	1	1	0	0													1	1	1	0
SUBTRACT IMM	SI	1	1	0	1													1	1	1	0
STORAGE DIRECT	SD	1	1	1	0					0								1	1	1	1
MOVE LSR	ML	1	1	1	0					1								1	1	1	1
HEX BRANCH	HB	1	1	1	1												0	1	1	1	1
HEX MOVE	HM	1	1	1	1												1	1	1	1	1

12V-AG

COMMENTS

ALU FUNCTION BITS
CP SYSTEM CONTROL CARD

PN4237308 EC832999 PEC832850

LOC=1A-A1G2

USN 00008 PRI=03MAY78 1007

AUC= SEC
PFORM=KSEB NEXTBLK FK

CID PIOFE JOB N5101128

PC136FA3 + ALU FUNC BIT 0

PC100CC4 + MQR BIT (0-7,P)
(0-7)PC100
PC100FU3 + MQR BIT 12
PC100CP4 + MQR BIT (8-11,13-15,P)
(8-11,13-15)PC100

SEE TABLE
N3 DCD * — 40B-CA
(0-7)B, (8-11,13-15)C, D → 3
N3 A * — 54B-EA
N3 A*OR * — 74B-FA
D11/B1, D12/B2, C1
3/G05 — + ALU GATE HI/LO SEL 0 — FA3
PC210 PC250

PC110DD56 + T5
PC110DD57 + T6
PC110FK3 + T3-T5
PC110FH3 + T0-T2

SEE TABLE
N3 DCD * — 64E-CD
B, C, D, E → 3
N3 A * — 74E-FD
3/G10 — + ALU GATE HI/LO SEL 1 — FD3
PC210 PC250

PC220 + 16 BIT ALU OPERATION — FJ3

PC132F03 + ALTER MAR

N3 OR * — 64H-CF
N3 A * — 74H-FC

N3 A * — 64K-EH
N3 A * — 74K-FJ
3/D12

PC250 + ALU GATE HI/LO SEL 2 — GG3

N3 OR * — 64N-GG
3/B10
N3 A * — 74N-FM
3/M07 — + I/O INSTRUCTION — FM3
PC030 PC130 PC314 PC504 PC518 PC522 PC526

TABLE

INSTRUCTION		TIME	MQR BITS IN 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16 BIT OP	ALU GATE SEL 0 1 2	I/O INST
DEFAULT	SELECTS ALU HI AND ALU LO				0 0 0	
BRANCH	BR		0 0 0 0		0 0 0	
BRANCH & LINK	BAL	5	0 0 0 1		0 0 1	
CPU BR COND MET	BOC		0 0 1 0		0 0 0	
I/O BOC	IOB	6	0 0 1 1		0 0 1	1
I/O STG	IOS		0 1 0 0 0		0 0 0	1
STORAGE	STG	6	0 1 0 0 1 0 1		0 0 1	
	STG	6	0 1 0 0 1 0 0		1 0 1	
TEST MARK	TM		0 1 0 1		0 0 0	
LOG/ARITH 1	LA1		0 1 1 0		1 0 0	
LOG/ARITH 2	LA2		0 1 1 1 0	1	0 0 0	
	LA2		0 1 1 1 1	1	1 0 0	
SET OFF	SF		1 0 0 0		1 0 0	
SET ON	SN		1 0 0 1		1 0 0	
IMMEDIATE	IMM		1 0 1 0		1 0 0	
I/O IMMEDIATE	IOI	3-5	1 0 1 1		1 0 1	
	IOI	3-5	1 0 1 1 0			1
COMPARE IMM	CI	3-5	1 1 0 0		1 0 0	
SUBTRACT IMM	SI	3-5	1 1 0 1		1 0 0	
STORAGE DIRECT	SD	6	1 1 1 0 0		0 0 1	
MOVE LSR	ML		1 1 1 0 1		0 0 0	
HEX BRANCH	HB	3-5	1 1 1 1 0 0		1 1 1	
	HB	3-5	1 1 1 1 0 1		1 1 0	
HEX MOVE	HM	3-5	1 1 1 1 0 0 1		0 1 1	
	HM	3-5	1 1 1 1 0 1 1		0 1 0	
	HM	3-5	1 1 1 1 1 0 1		1 1 0	
	HM	3-5	1 1 1 1 1 1 1		1 1 1	

12J-AM
12T-AN

PC110FN3 + T3-T6

COMMENTS
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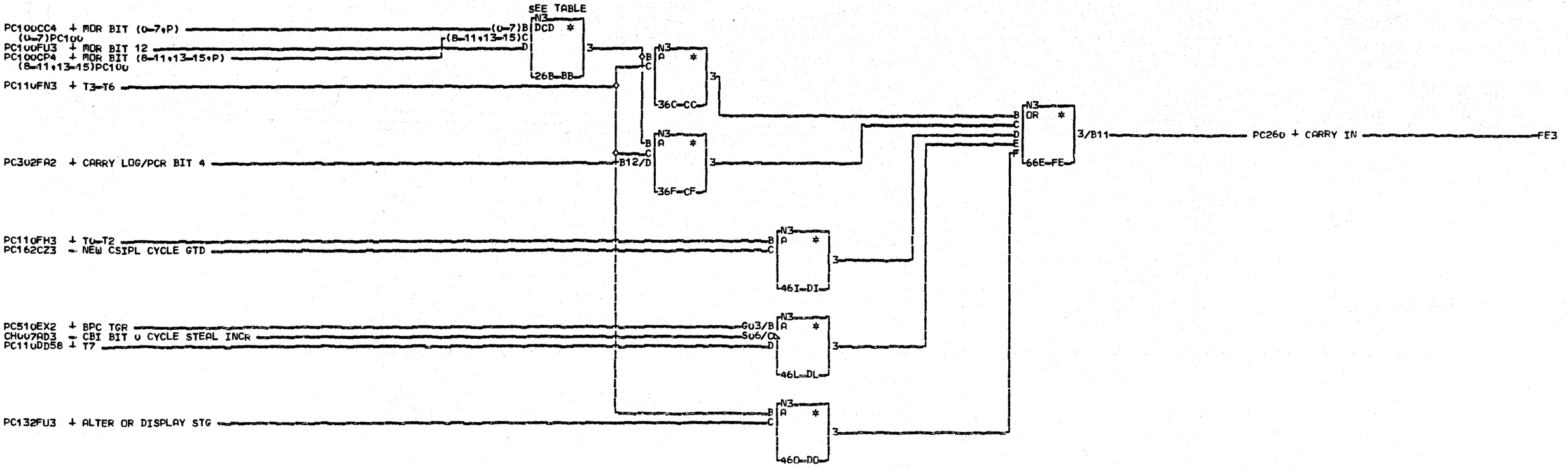
ALU GATE HIGH/LOW SEL 0-2
CP SYSTEM CONTROL CARD
SYSTEM CONTROL CARD
PN4237309 EC834777 PEC832850

LOC=1A-A1G2

USN 00008 PRI=08NOV78 1747
AUC= SEC 14NOV78 1620
PFORM=KSEB NEXTBLK GH
CID PIOFE JOB L6301459

PC138 0001



TABLE

INSTRUCTION	TIME	MDR BITS 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	CARRY TGR
STG	3-6	0	1	0	0					1			0	1				
IOS	3-6	0	1	0	0					0			0	1				
LA1	3-6	0	1	1	0					1	0	1	0					
LA1	3-6	0	1	1	0					1	1	0	0					
LA1	3-6	0	1	1	0					1	1	1	1					
LA1/LA2	3-6	0	1	1						1	0	0	1					1
LA1/LA2	3-6	0	1	1						1	1	1	0					1
LA2	3-6	0	1	1	1					1	0	1	0					
LA2	3-6	0	1	1	1					1	1	0	0					
LA2	3-6	0	1	1	1					1	1	1	1					
CI	3-6	1	1	0	0													
SI	3-6	1	1	0	1													

26T-AP

COMMENTS
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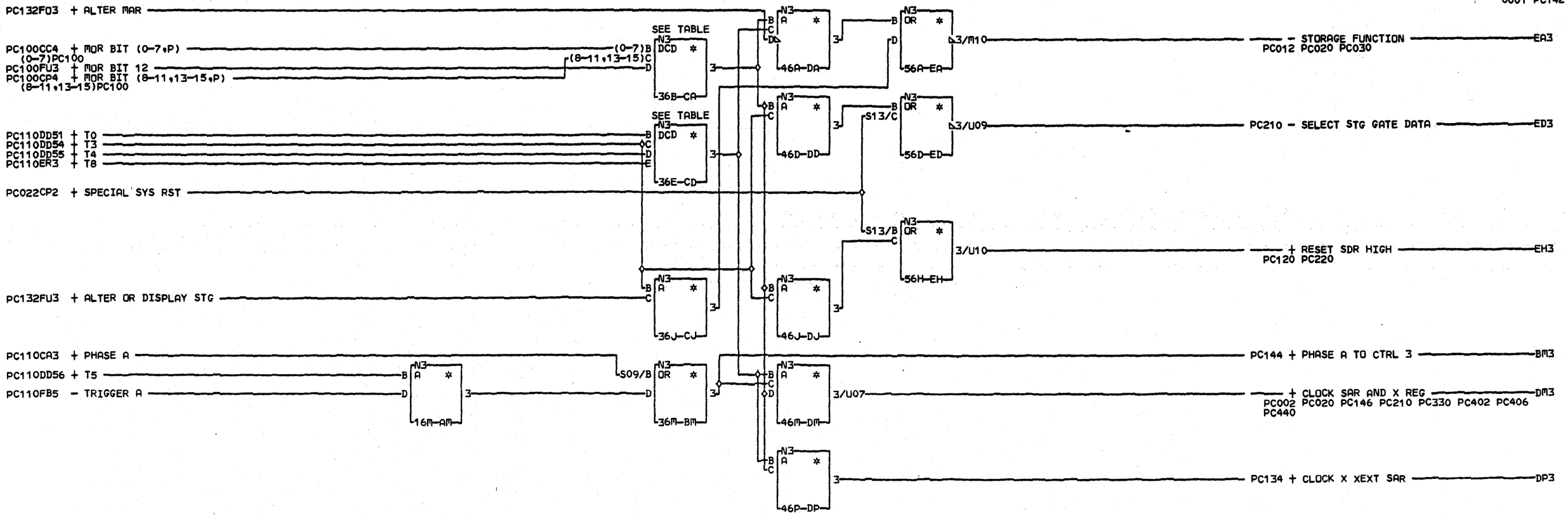
CARRY IN
CP SYSTEM CONTROL CARD
PN4237310 EC832850 PEC832742E
LOC=1A-A1G2
USN 00008 PRI=27SEP77 1315
AUC= SEC
PFORM=KSEB NEXTBLK FF
CID PIOFE JOB M5301328



TABLE

INSTRUCTION	TIME	PHASE	MDR BITS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	CLK SAR AND X REG	SEL STG DATA	RESET SDR HI	STG FUN
ALL INST	0						1
STORAGE	3		0 1 0 0				1
BRANCH	3		0 0 0 0				1
BR ON COND	3		0 0 1 0				1
I/O STG	4		0 1 0 0				1
ALL INST	8						1
I/O STG	4	A	0 1 0 0 0	1	1		
LOG/ARITH	4	A	0 1 1	1	1		
HEX MOVE	4	A	1 1 1 1 1	1	1		
ALL INST	0	A		1			
ALL INST	3	A		1			
ALL INST	8	A		1			
STG DIRECT	3		1 1 1 0 0			1	

CLOCK SAR RESET SDR STG FUN
CP SYSTEM CONTROL CARD

PN4237311 EC832999 PEC832850

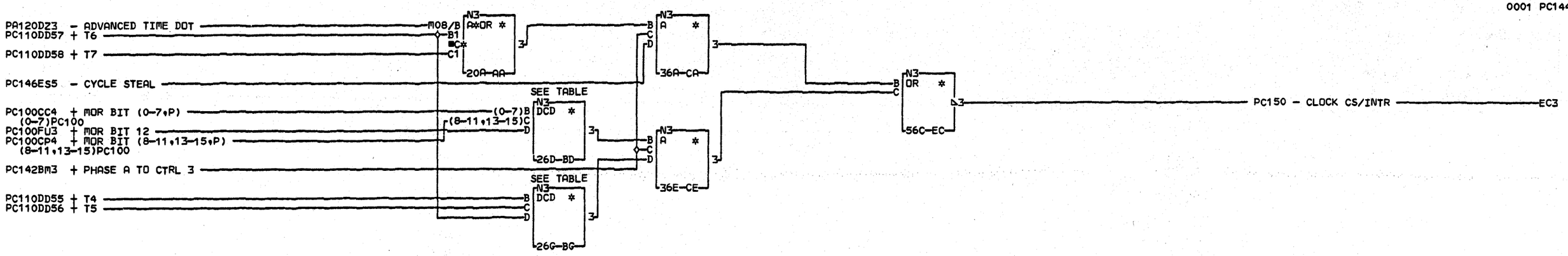
LOC=1A-A1G2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK EI

CID PIOFE JOB N5101128

PC142 0001



TABLE

MOR BITS

INSTRUCTION		TIME	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BRANCH & LINK	BAL	5	0	0	0	1												
LOG/ARITH 1	LA1	5	0	1	1	0												
TEST MASK	TM	4	0	1	0	1												
LOG/ARITH 2	LA2	5	0	1	1	1												
SET OFF	SF	4	1	0	0	0												
SET ON	SN	4	1	0	0	1												
IMMEDIATE	IMM	4	1	0	1	0												
COMPARE IMM	CI	4	1	1	0	0												
SUBTRACT IMM	SI	4	1	1	0	1												
STORAGE DIRECT	SD	5	1	1	1	0					0							
MOVE LSR	ML	4	1	1	1	0					1							
HEX BRANCH	HB	4	1	1	1	1									0			
HEX MOVE	HM	5	1	1	1	1									1			
		6			0	1												
		6			1	0												
STORAGE 16K-AK	STG	6	0	1	0	0					1							

COMMENTS

E

CLOCK CS/INTR
CP SYSTEM CONTROL CARD

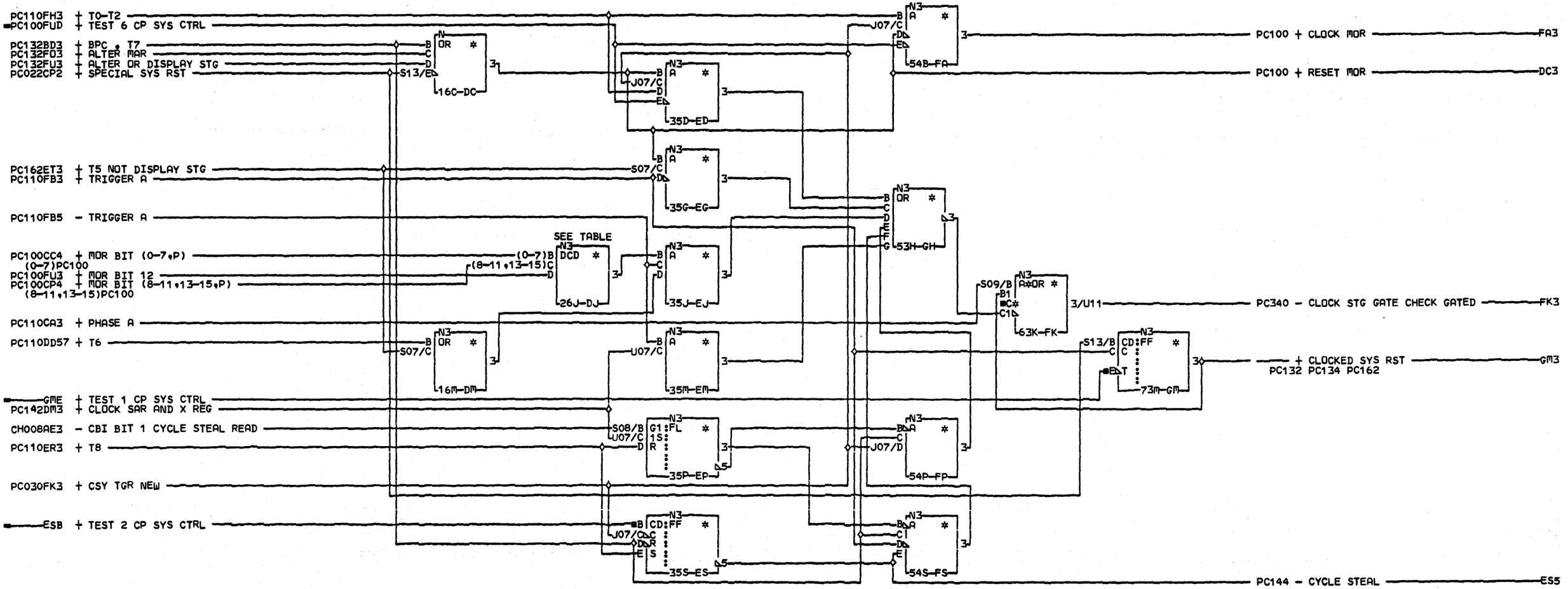
PN4237312 EC832999 PEC832850

LOC=1A-A1G2

USN 00008 PRI=25APR78 1639

AUC= SEC
PFORM=KSEB NEXTBLK ED

CID PIOFE JOB N5101128



TABLE

INSTRUCTION		TIME	WR TGR	MOR BITS 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
I/O STORAGE	IOS	6	0	0	1	0	0					0							
I/O STORAGE	IOS	5		0	1	0	0					0	1						
STORAGE	STG	5		0	1	0	0					1	1						
	STG	6		0	1	0	0					1	0						
	STG	6	0	0	1	0	0					0							
STORAGE DIRECT	SD	6	0	1	1	1	0					0							
	SD	5		1	1	1	0	1				0							

16W-AS

COMMENTS

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CLK STG GT CHK
CP SYSTEM CONTROL CARD

PN4237313 EC832999 PEC832850

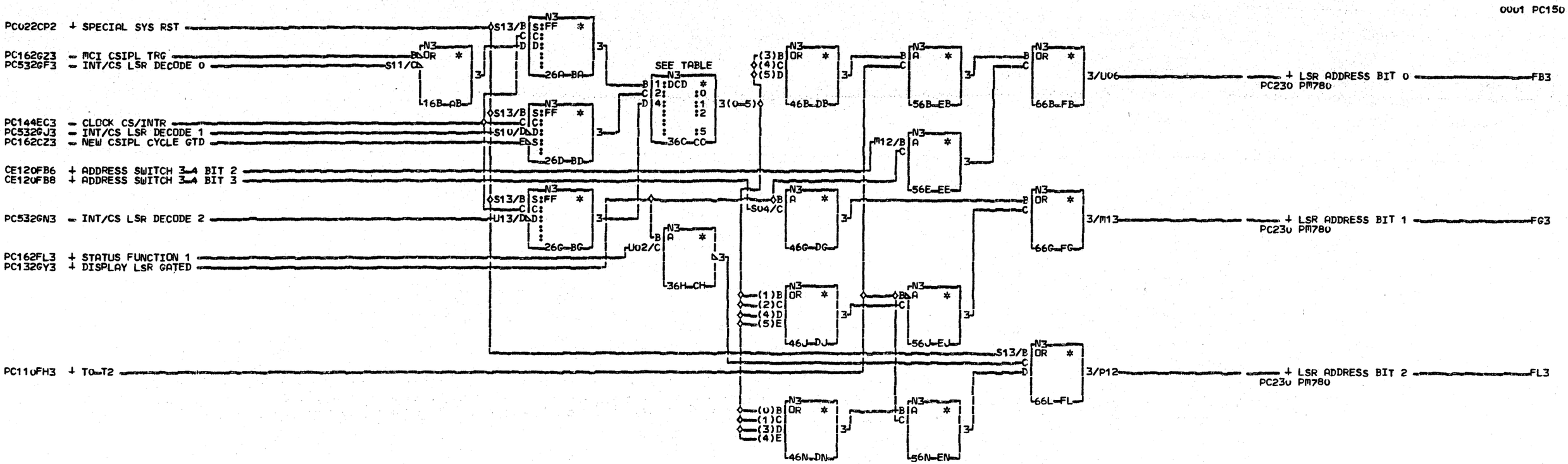
LOC=1A-A1G2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GN

CID PIOFE JOB N5101128

PC146 0001



TABLE

INSTRUCTION		TIME	MDR BIT 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	LSR ADDR 0	1	2
MOVE LSR	ML	3	1	1	1	0	1				1	0									1
MOVE LSR	ML	4	1	1	1	0	1				1	1									1
MOVE LSR	ML	3	1	1	1	0					1	1			1						1
MOVE LSR	ML	4	1	1	1	0					1	0			1						1
MOVE LSR	ML	3	1	1	1	0					1	1	1						1		
MOVE LSR	ML	4	1	1	1	0					1	0	1						1		
MOVE LSR	ML	3	1	1	1	0					1	1		1						1	
MOVE LSR	ML	4	1	1	1	0					1	0		1						1	

12S-AK

COMMENTS

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LSR ADDR BIT 0-2
CP SYSTEM CONTROL CARD

PN4237314 EC832850 PEC832742E

LOC=1A-A1G2

USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK FM

CID PIOFE JOB M53U1328

PC150 0001

E

PC150 0001

PC132BD3 + BPC e T7
PC022GD3 = NEW CSIPL CYCLE
PC022CP2 + SPECIAL SYS RST
CH008AF3 = CBI BIT 2 CYCLE STEAL ADRSEL 0

PC100CC4 + MDR BIT (0=7,P)
(0=7)PC100
CH008AG3 = CBI BIT 3 CYCLE STEAL ADRSEL 1
PC132GY3 + DISPLAY LSR GATED
PC100CP4 + MDR BIT (8=11,13=15,P)
(8=11,13=15)PC100
PC162FF3 + STATUS SEL 1

PC110FH3 + T0=T2
PC110DD54 + T3
PC110FK3 + T3=T5
PC110DD55 + T4
PC110FQ3 + T4=T5
PC110FT3 + T4 THRU T6
PC110DD57 + T6
PC100FU3 + MDR BIT 12

SEE TABLE
N3 DCD * — 26F=CD

TABLE

INSTRUTION		TIME	MDR BITS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	LSR ADDR BITS 3 4 5
MACHINE CHK INT				0 1 0
FETCH		0=1=2		SEE NOTE
BR ON COND	BOC	3	0 0 1 0 1 1 1 1	1
I/O STG	IOS	4=5=6	0 1 0 0 0 X X X	SAME
STORAGE	STG	3	0 1 0 0 1 X X X	AS MDR
	STG	4=5	0 1 0 0 0 X X X	13=15
	STG	4=5	0 1 0 0 X X X 1 1	SAME AS
	STG	6	0 1 0 0 X X X 1 0	MDR 5=7
	STG	6	0 1 0 0 1 1 X X X	MDR 13=15
TEST MASK	TM	3=4	0 1 0 1 X X X	MDR 5=7
LOG/ARITH 1	LA1	3	0 1 1 0 X X X	MDR 13=15
	LA1	4=5	0 1 1 0 X X X	MDR 5=7
LOG/ARITH 2	LA2	3	0 1 1 1 X X X	MDR 13=15
	LA2	4=5	0 1 1 1 X X X	SAME
SET OFF	SF	3=4	1 0 0 0 X X X	AS
SET ON	SN	3=4	1 0 0 1 X X X	MDR
IMMEDIATE	IM	3=4	1 0 1 0 X X X	5=7
I/O IMMEDIATE	IOI	4=5=6	1 0 1 1 X X X	MDR 13=15
COMPARE IMM	CI	3=4	1 1 0 0 X X X	SAME
SUBTRACT IMM	SI	3=4	1 1 0 1 X X X	AS MDR
STORAGE DIRECT	SD	4=5=6	1 1 1 0 X X X 0	5=7
MOVE LSR	ML	3	1 1 1 0 X X X 1 0 X X X	MDR 5=7
		4	1 1 1 0 X X X 1 0 X X X	MDR 13=15
		4	1 1 1 0 X X X 1 0 X X X	MDR 13=15
		4	1 1 1 0 X X X 1 1 X X X	MDR 5=7
HEX BRANCH	HB	3	1 1 1 1 X X X	MDR 5=7
HEX MOVE	HM	3	1 1 1 1 1 X X X	MDR 13=15
		4=5	1 1 1 1 X X X 1	MDR 5=7

SEE TABLE
N3 DCD * — 64H=CA
(0=7)B
(8=11,13=15)C
D

N3 A * — 64K=EE — B/C/D
N3 A * — 64N=EH — U04/C — B/C
N3 A * — 64Q=EK — S05/C — B/C
N3 A * — 64A=BB — P13/C, S13/D, P11/E
N3 A * — 64D=BE — P13/C, S13/D, M09/E

N3 A * — 74H=DA — B/C
N3 OR * — 74K=FE — B/C/D — 3/U05 — PC230 + LSR ADDRESS BIT 3 — FE3
N3 OR * — 74N=FH — B/C — 3 — PC162 + LSR ADDR BIT 4 — FH3
N3 OR * — 74Q=FK — B/C/D — 3/S02 — PC230 + LSR ADDRESS BIT 5 — FK3

NOTE

THESE LSR ADDR BITS
DEPEND UPON WHAT LSR
YOU ARE SELECTING WITHIN
A GIVEN INTERRUPT
60U=AU

PC162FD3 + STATUS SEL 0 GATED
PC162FH3 + STATUS SEL 2

COMMENTS
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LSR ADDR BITS 3,4,5
CP SYSTEM CONTROL CARD

PN4237315 EC832850 PEC832742E
LOC=1A=A1G2
USN 00006 PRI=09SEP77 0040
AUC= SEC
PFORM=KSEB NEXTBLK FL
CID PIOFE JOB M5301328

PC152 0001 — PC152 0001

PC110CA3 + PHASE A
PC110DD55 + T4
PC100CC4 + MDR BIT (0-7,P) (0-7)PC100
PC100CP4 + MDR BIT (8-11,13-15,P) (8-11,13-15)PC100
PC100FU3 + MDR BIT 12
PC110DD58 + T7
PC110FB3 + TRIGGER A
PC110DD53 + T2
PC110DD56 + T5
PC110DD57 + T6
PC132FU3 + ALTER OR DISPLAY STG
PC030FK3 + CSY TGR NEW
PC132BD3 + BPC e T7
PC132F03 + ALTER MAR

SEE TABLE — N3 DCD * — 20B-CA
S09/B — S09/D — N3 A * — 36B-EA
N3 A * — 44B-EG
S09/B — N3 A * — 58B-EM
SEE TABLE — N3 DCD * — 76B-CD
N3 A * — 76F-ED
S09/B — N3 A * — 76I-EJ
J07/D — N3 A * — 72L-EP
N3 OR * — 3/D13 — PC230 = WRITE LSR LOW — FA3 — 72O-FA
N3 OR * — 3/G06 — PC230 = WRITE LSR HIGH — FD3 — 72R-FD
G06/B — N3 OR * — D13/D — 3/B06 — PC340 = CLOCK ALU GATE CHECK TRIGGER — GB3 — 72U-GB

TABLE

INSTRUCTION		PHASE	TIME	TRA	MDR BITS IN 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	WRITE HIGH	WRITE LOW
BRANCH & LINK	BAL	A	4		0 0 0 1	1	1
	BAL		5	0	0 0 0 1	1	1
I/O BOC	IOB	A	6		0 0 1 1	0	1
I/O STG	IOS	A	6		0 1 0 0 0	1	1
STORAGE	STG		5	0	0 1 0 0 1 0	1	1
	STG	A	6		0 1 0 0 1 1	1	1
	STG	A	6		0 1 0 0 1	1	0
	STG	A	6		0 1 0 0 0 1	0	1
	STG	A	6		0 1 0 0 1 1	1	1
LOG/ARITH 1	LA1		5	0	0 1 1 0 1	1	0
	LA1		5	0	0 1 1 0 0	0	1
LOG/ARITH 2	LA2		5	0	0 1 1 1 1	1	1
	LA2		5	0	0 1 1 1 0	1	1
SET OFF	SF	A	4		1 0 0 0 1	1	0
	SF	A	4		1 0 0 0 0	0	1
SET ON	SN	A	4		1 0 0 1 1	1	0
	SN	A	4		1 0 0 1 0	0	1
IMMEDIATE	IMM	A	4		1 0 1 0 1	1	0
I/O IMMEDIATE	IOI		5	0	1 0 1 1 1	1	1
	IOI		5	0	1 0 1 1 1	0	1
SUBTRACT IMM	SI	A	4		1 1 0 1 1	1	0
	SI	A	4		1 1 0 1 0	0	1
STORAGE DIRECT	SD	A	6		1 1 1 0	1	1
MOVE LSR	ML	A	4		1 1 1 0	1	1
HEX BRANCH	HB	A	4		1 1 1 1	0	1
HEX MOVE	HM		5	0	1 1 1 1 1 1	1	0
	HM		5	0	1 1 1 1 1 0	0	1
	HM		5	0	1 1 1 1	1	1

10I-AK
10S-AL

COMMENTS
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WRITE LSR HIGH/LOW
CP SYSTEM CONTROL CARD

PN4237316 EC832850 PEC832742E

LOC=1A-A1G2

USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK GC

CID PIOFE JOB M5301328

PC160 0001

E

PC100CC4 + MDR BIT (0-7,P)
(0-7)PC100
PC132FF3 + ALTER MAR OR STG
PC100CP4 + MDR BIT (8-11,13-15,P)
(8-11,13-15)PC100
PC100FU3 + MDR BIT 12
PC110FN3 + T3-T6
PC132FC3 - DISPLAY PCR
PC110DD58 + T7
PC110DD51 + T0
PC422AC2 + MC INTERRUPT LTH
AJD + TEST 5 CP SYS CTRL
PC146GM3 + CLOCKED SYS RST
PC132GY3 + DISPLAY LSR GATED
PC132FI3 - DISPLAY CHECKS
PC132BD3 + BPC • T7
PC110DD56 + T5
PC022CP2 + SPECIAL SYS RST
PC100FUD + TEST 6 CP SYS CTRL
PC022GD3 - NEW CSIPL CYCLE
PC110FT3 + T4 THRU T6
PC152FH3 + LSR ADDR BIT 4

(0-7)B
(8-11,13-15)C
D
N3 DCD * 3
26B-AB

N3 A * 2
B04/D
46B-DB

N3 OR * 3/G04
66B-FB
+ STATUS CARD 2/1 FB3
PC302 PC314 PC402 PC404 PC420 PC422 PC430

N3 A * 2
46E-DE

N3 OR * 3
66E-FD
PC152 + STATUS SEL 0 GATED FD3

N3 A * 3
46H-DH

N3 OR * 3/U04
66H-FF
+ STATUS SEL 1 FF3
PC152 PC314 PC406 PC422 PC430

N3 A * 3
46K-DK

N3 OR * 3/S05
66K-FH
+ STATUS SEL 2 FH3
PC152 PC314 PC402 PC404 PC422 PC440

N3 A * 3
46N-DN

N3 OR * 3/G07
66N-FJ
+ STATUS FUNCTION 0 FJ3
PC302 PC314 PC402 PC420 PC422 PC430

+ STATUS FUNCTION 1 FL3
PC150 PC302 PC314 PC402 PC422 PC440

N3 OR * 3/U02
66Q-FL

+ T5 NOT DISPLAY STG ET3
PC030 PC146 PC302 PC310

N3 A * 3/S07
56T-ET

N3 A*OR * 3/G08
70T-GF
+ STATUS SEL 0 GF3
PC314 PC402 PC406 PC422

SEE TABLE ON PAGE PC164 16V-AA

N3 A * 3
G04/B
U02/C
(7)D
B04/E
(14)F
G
(13)H
(15)I
J 36U-CV

N3 A 3
S13/B
C
26X-BX

N 3
B A *
P13/C
36Y-CZ

N3 FF * 2
S13/BPC
P13/C CD
DS
ER
F
56X-EX

N3 A*OR * 3/S03
70W-GV
PC230 + NEW LSR ADDR BIT 4 GV3

N3 OR * 3
D
700-GZ
PC150 - MCI CSIPL TRG GZ3

- NEW CSIPL CYCLE GTD CZ3
PC140 PC150

COMMENTS
D1COPYRIGHT IBM CORP• 1978

STATUS SELECT
CP SYSTEM CONTROL CARD
PN4237317 EC832999 PEC832937
LOC=1A-A1G2
USN 00008 PRI=24APR78 1053
AUC= SEC
PFORM=KSEB NEXTBLK GO
CID PIOFE JOB N5101128

PC162 0001

PC162 0001

TABLE

INSTRUCTION		MDR BITS 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LOG ARITH	LA	0	1	1	0					0							
LOG ARITH	LA	0	1	1	0					1							
LOG ARITH	LA	0	1	1	1					0							
LOG ARITH	LA	0	1	1	1					1							
TEST MASK	TM	0	1	0	1												
COMPARE IMM	CI	1	1	0	0												
SUBTRACT IMM	SI	1	1	0	1												
I/O IMMEDIATE	IOI																
SENSE SW 1/2		1	0	1	1	1	0	0	1	0	1	1	0				
CP ERROR BYTE		1	0	1	1	1	0	1	0	0	1	1	1				
SENSE PROCESSOR COND.REG		1	0	1	1	1	0	1	1	0	1	1	0				
CONSOLE STATUS BYTE		1	0	1	1	0	1	0	0	0	1	1	0				
SENSE SW 3/4		1	0	1	1	0	1	0	1	0	1	1	0				
SENSE CLOCK LOW BYTE		1	0	1	1	0	1	1	0	0	1	1	0				
SENSE CLOCK HIGH BYTE		1	0	1	1	0	1	1	1	0	1	1	0				
LOAD PCR		1	0	1	1	0	0	0	0	1	0	1	0	X	X	X	X
RESET CARRY-SET EQUAL		1	0	1	1	0	0	0	1	1	0	1	0	1	1	1	1
RESET EVEN IND 2		1	0	1	1	0	0	1	0	1	0	1	0	1	1	1	1
RESET EVEN IND 3		1	0	1	1	0	0	1	1	1	0	1	0	1	1	1	1
RESET EVEN IND 4		1	0	1	1	0	1	0	0	1	0	1	0	1	1	1	1
RESET EVEN IND 5		1	0	1	1	0	1	0	1	1	0	1	0	1	1	1	1
RESET EVEN IND 6		1	0	1	1	0	1	1	0	1	0	1	0	1	1	1	1
RESET EVEN IND 7		1	0	1	1	0	1	1	1	1	0	1	0	1	1	1	1
SET FLAG		1	0	1	1	1	0	0	0	1	0	1	0	1	1	1	1
RESET FLAG		1	0	1	1	1	0	1	1	1	0	1	0	1	1	1	1
SET I/O SERVICE REQUEST		1	0	1	1	1	1	1	0	1	0	1	0	0	0	1	1
RESET I/O SERVICE REQUEST		1	0	1	1	1	1	1	0	1	0	1	0	0	0	1	0
PROCESSOR CHECK HALT		1	0	1	1	1	1	1	0	1	0	1	0	0	0	1	1
DISABLE CHECKS		1	0	1	1	1	1	1	0	1	0	1	0	0	1	0	0
ENABLE INTERRUPTS		1	0	1	1	1	1	1	0	1	0	1	0	0	1	0	1
DISABLE INTERRUPTS		1	0	1	1	1	1	1	0	1	0	1	0	0	1	1	0
ENABLE CHECKS		1	0	1	1	1	1	1	0	1	0	1	0	0	1	1	1
SET CP WORKING		1	0	1	1	1	1	1	1	1	0	1	0	0	0	0	1
RESET STOP LATCH		1	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0
RESET MCI LATCH		1	0	1	1	1	1	1	1	1	0	1	0	0	0	1	1
RESET GO LATCH		1	0	1	1	1	1	1	1	1	0	1	0	0	0	1	1
ENABLE MICROLOOP TIMEOUT		1	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0
SET STOP LATCH		1	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0
RES RET/MICROLP TMOUT & SET GO		1	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0
SET RETRY		1	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0
ENABLE I/O CLOCKS		1	0	1	1	1	1	1	1	1	0	1	0	0	1	0	0
RESET I/O CLOCKS		1	0	1	1	1	1	1	1	1	0	1	0	1	0	1	0
DISABLE I/O CLOCKS		1	0	1	1	1	1	1	1	1	0	1	0	1	0	1	1
RESET CP WORKING		1	0	1	1	1	1	1	1	1	0	1	0	1	1	0	1
PROCESSOR WAIT		1	0	1	1	1	1	1	1	1	0	1	0	1	1	1	0

10B=AM

10H=AN

10N=AO

CD.2/1	FUN0	FUN1	SEL0	SEL1	SEL2
0	1	0	0	0	0
0	1	1	0	0	0
0	1	0	0	0	0
0	1	1	0	0	0
0	1	0	0	0	0
0	1	0	0	0	0
0	1	0	0	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	1	1
1	0	0	X	0	0
1	0	0	X	0	1

58B=AR

1	0	0	X	1	0
1	0	0	X	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	0	1	1	0	0
0	0	1	1	0	1
0	0	1	1	1	0
0	0	1	1	1	1
0	0	1	1	0	0
0	0	1	1	0	1
1	0	1	1	1	0
1	0	1	1	1	0
1	0	1	1	1	0
1	0	1	1	1	0

58H=AS

1	0	1	1	1	0
1	0	1	1	1	0
1	0	1	1	1	0
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1
1	0	1	1	1	1

58N=AT

COMMENTS

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E

STATUS SELECT
CP SYSTEM CONTROL CARD

PN4237318 EC832850 PEC832742E

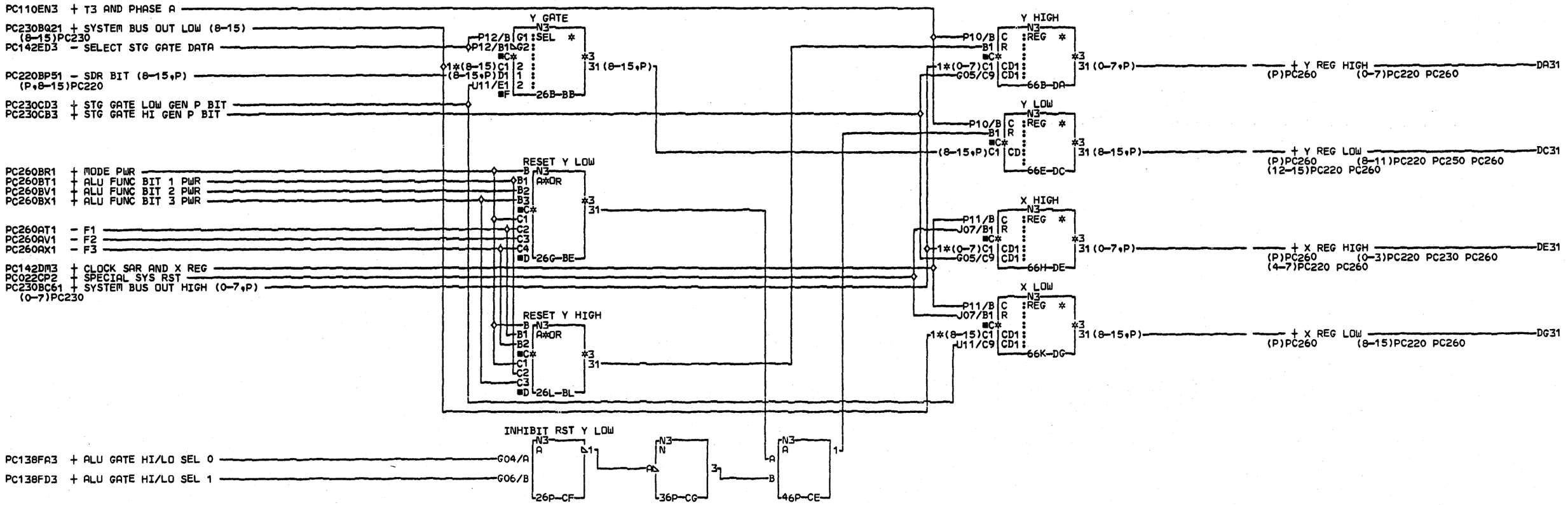
LOC=1A-A1G2

USN 00006 PRI=12SEP77 2351

AUC= SEC
PFORM=KSEB NEXTBLK AU

CID PIOFE JOB M5301328

PC164 0001



COMMENTS	PINS	PINS	PINS
D1COPYRIGHT IBM CORP. 1978	BB	C5/B07	C1/U02
	C1/U02	C6/B05	C2/U04
	C2/U04	C7/B11	C3/S02
	C3/S02	C8/D05	C4/S04
	C4/S04	DE	C5/U09
	C5/U09	C1/D12	C6/U10
	C6/U10	C2/D07	C7/S08
	C7/S08	C3/B12	C8/S10
	C8/S10	C4/B06	
	DA	C5/B07	
	C1/D12	C6/B05	
	C2/D07	C7/B11	
	C3/B12	C8/D05	
	C4/B06	DG	

X-Y REGISTERS
CP DATA FLOW CARD

PN4237319 EC832999 PEC832850

LOC=1A-A1H2

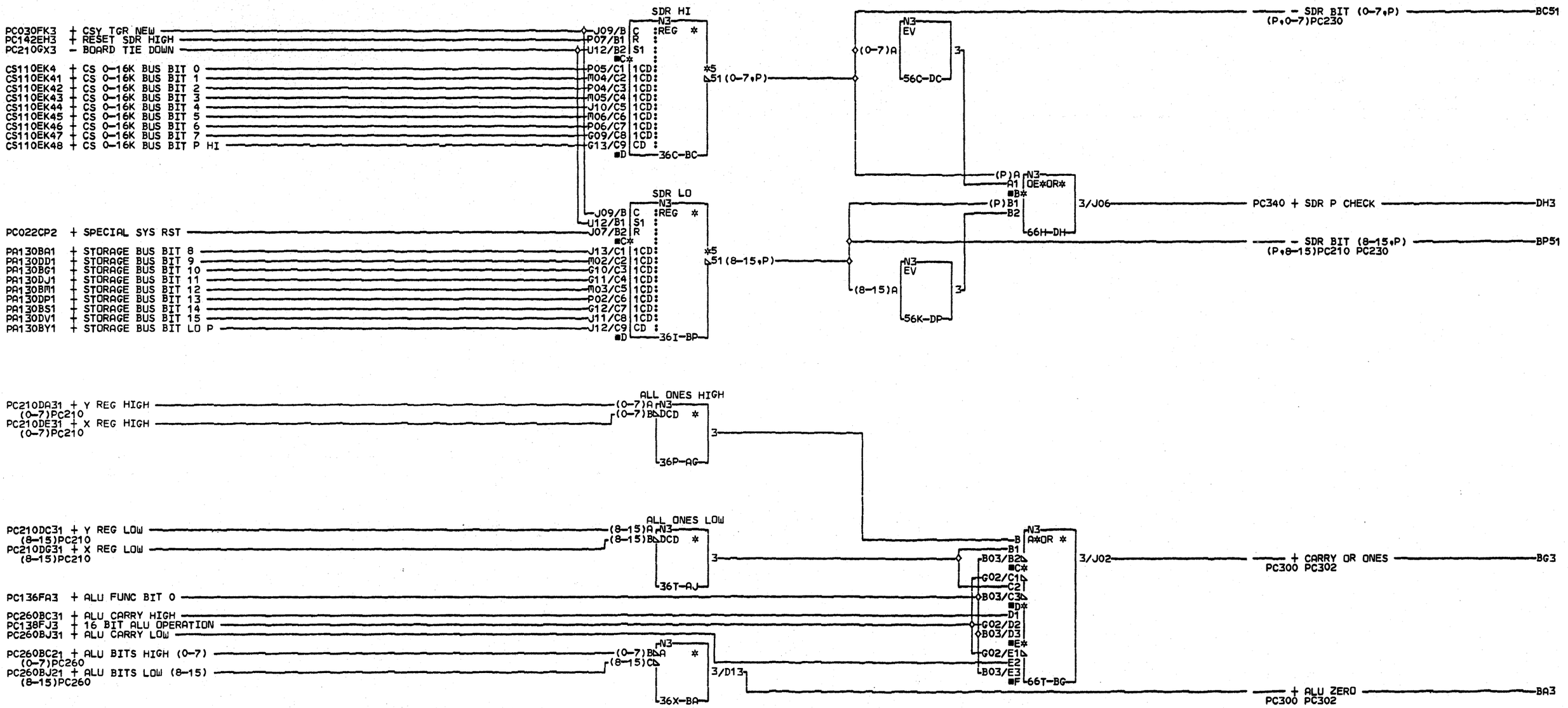
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GY

CID PIOFE JOB N5101128

PC210 0001

PC210 0001



COMMENTS
D1©COPYRIGHT IBM CORP. 1978

STORAGE DATA REGISTERS
ALU ZERO/ONES/CARRY
CP DATA FLOW CARD
PN4237320 EC832999 PEC832850

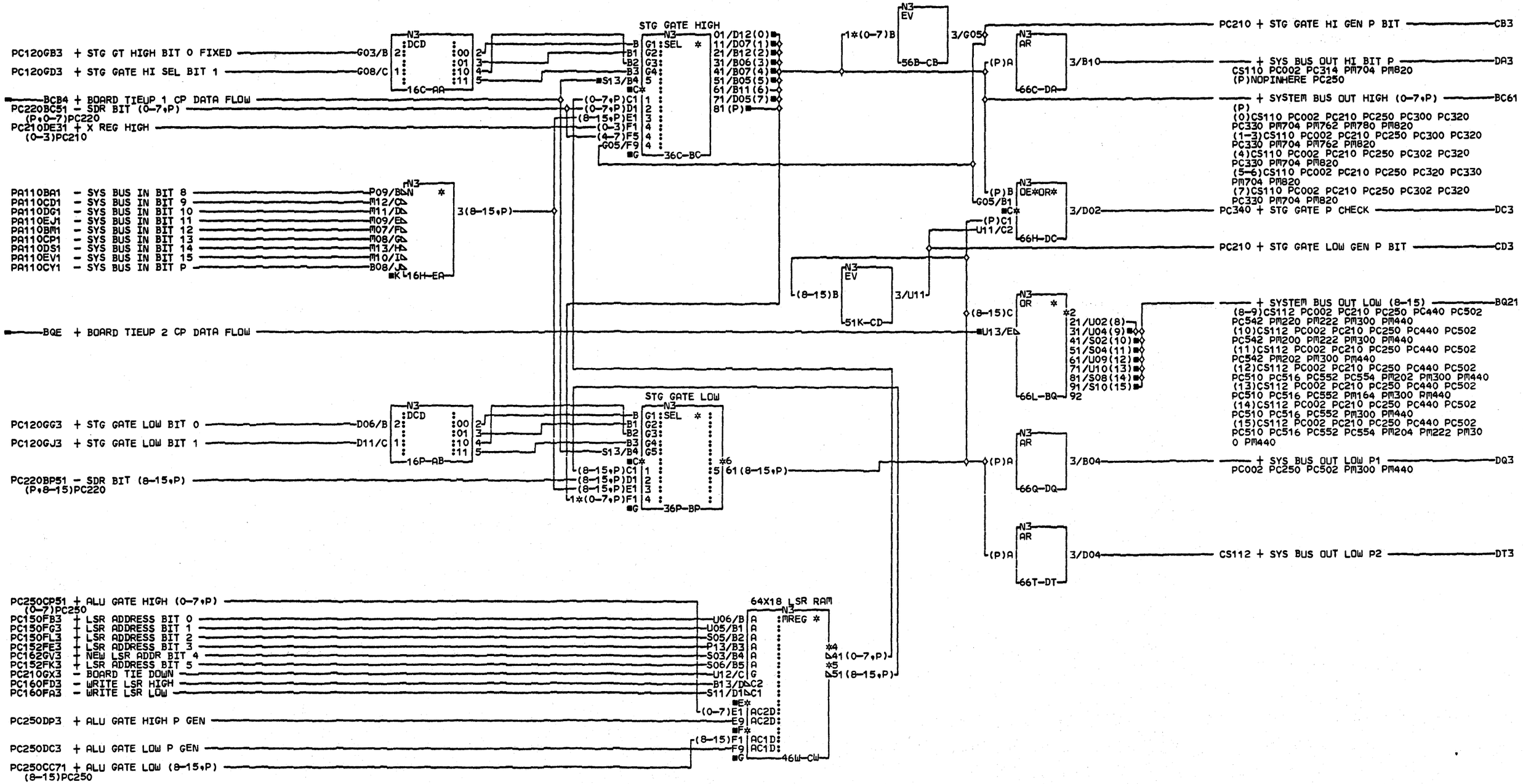
LOC=1A-A1H2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK DQ

CID PIOFE JOB N5101128

PC220 0001 E PC220 0001



COMMENTS	PINS BP	PINS
D1COPYRIGHT IBM CORP. 1978	F1/D12	B4/B07
	F2/D07	B5/B05
	F3/B12	B6/B11
	F4/B06	B7/D05
	F5/B07	
	F6/B05	
	F7/B11	
	F8/D05	
	CB	
	B0/D12	
	B1/D07	
	B2/B12	
	B3/B06	

STORAGE GATE HIGH/LOW
CP DATA FLOW CARD

PN4237321 EC832999 PEC832850

LOC=1A-A1H2

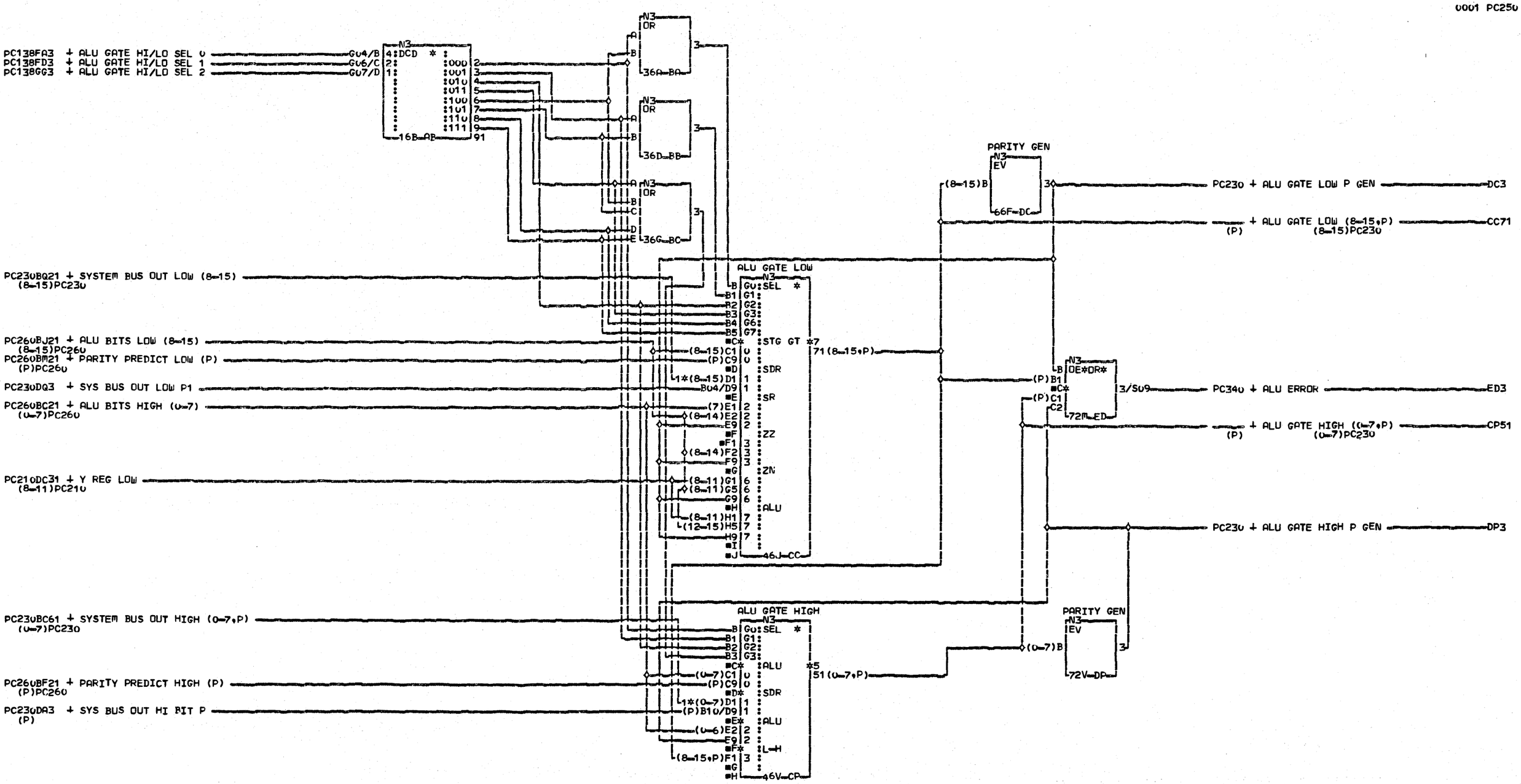
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK EB

CID PIOFE JOB N5101128

PC230 0001

PC230 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

PINS CC	PINS
D1/U02	D5/B07
D2/U04	D6/B05
D3/S02	D7/B11
D4/S04	D8/D05
D5/U09	
D6/U10	
D7/S08	
D8/S10	
CP	
D1/D12	
D2/D07	
D3/B12	
D4/B06	

ALU GATE HIGH/LOW
CP DATA FLOW CARD

PN4237322 EC832850 PEC832742E

LOC=1A-A1H2

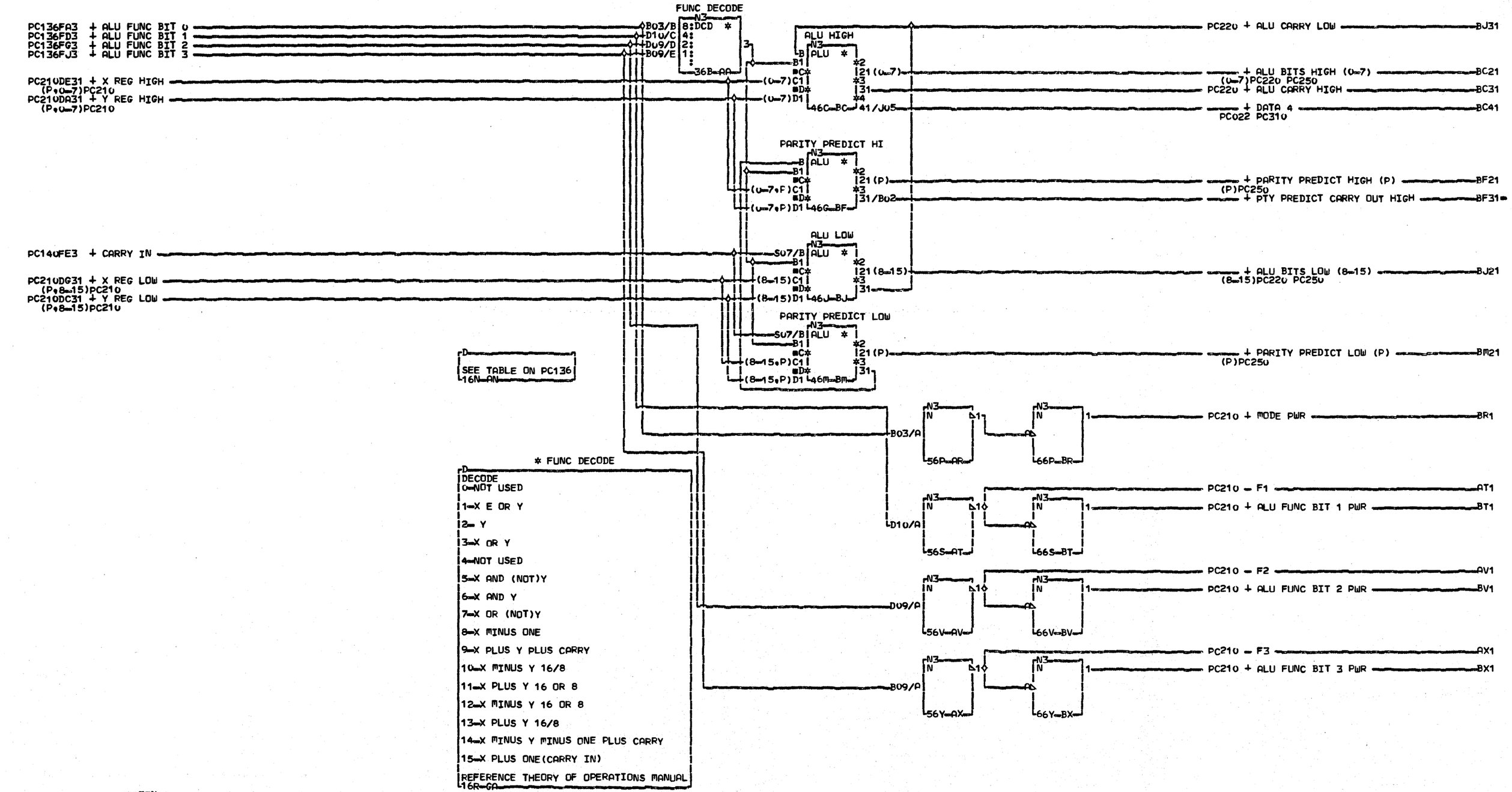
USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK EE

CID PIOFE JOB M5301328

PC250 0001

PC250 0001



COMMENTS

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ALU HIGH/LOW
CP DATA FLOW CARD

PN4237323 EC832850 PEC832742E

LOC=1A=A1H2

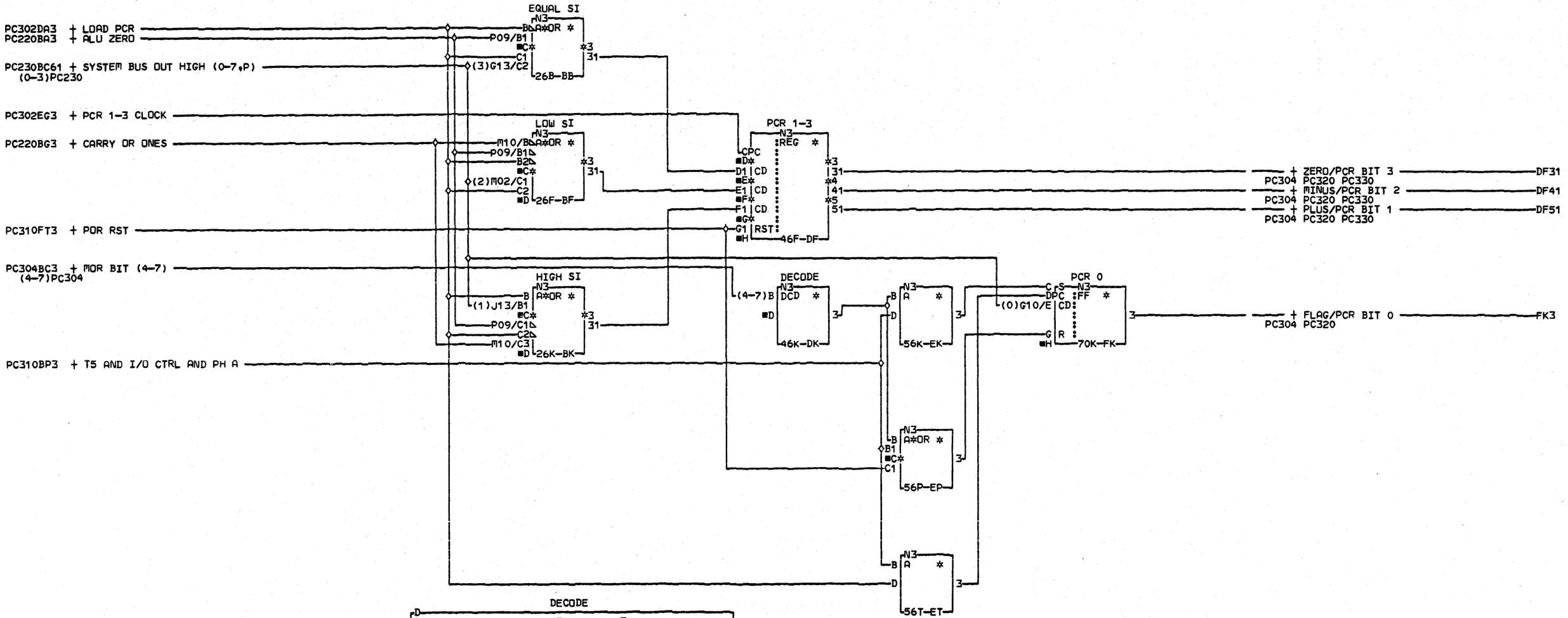
USN 00008 PRI=10SEP77 1519

AUC= SEC 04OCT77 2317
PFORM=KSEB NEXTBLK GB

CID PIOFE JOB M5301328

PC260 0001

PC260 0001



DECODE

	MDR BIT					T5 • I/O CTRL	
CONDITION	0	4	5	6	7	• PHA	SYS RST
SET PCR	0	1	0	0	0	1	
RST PCR	0	1	0	1	1	1	
RST PCT	0						1

16V-EW

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

PROC COND REG 0-3
CP STATUS 1 CARD

PN4237324 EC832999 PEC832850

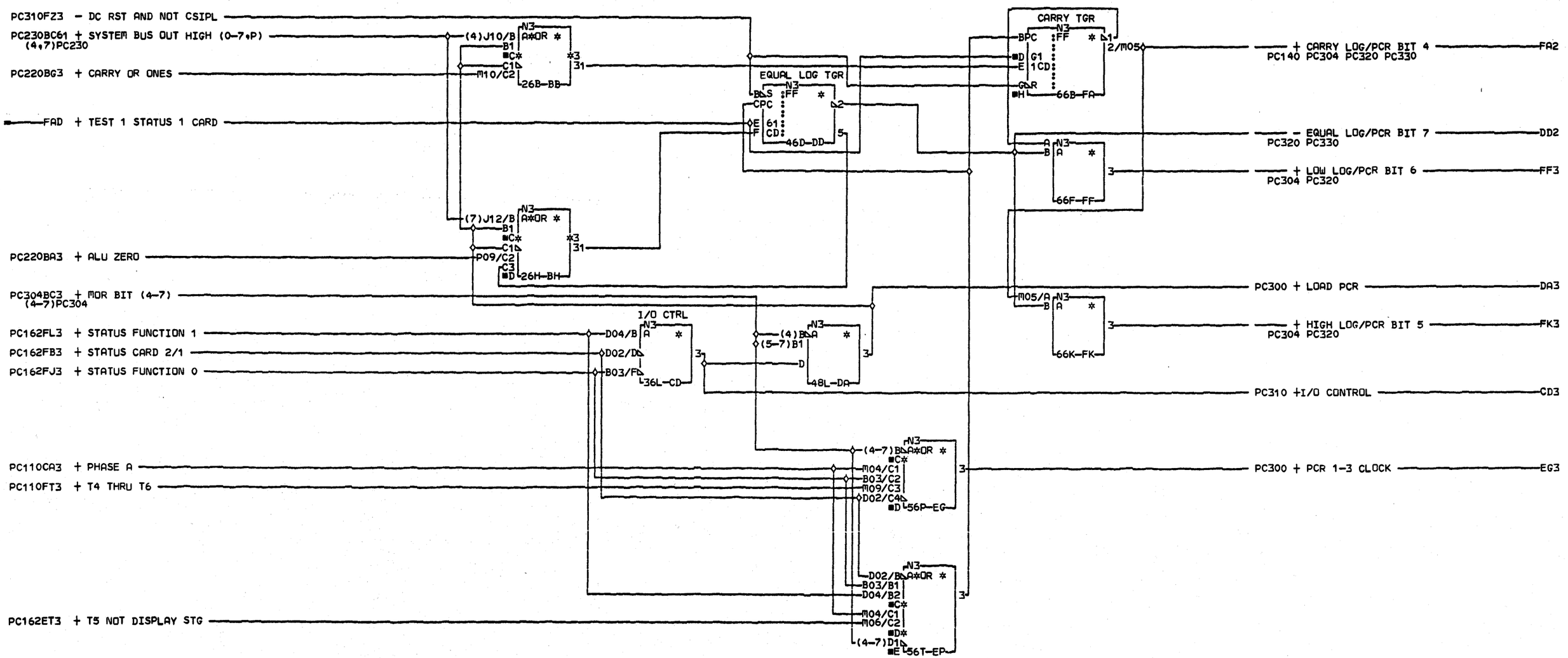
LOC=1A-A1J2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK FL

CID PIOFE JOB N5101128

PC300 0001



COMMENTS

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PROC COND REG 4-7
PCR CLOCKS
CP STATUS 1 CARD
PN4237325 EC832999 PEC832850

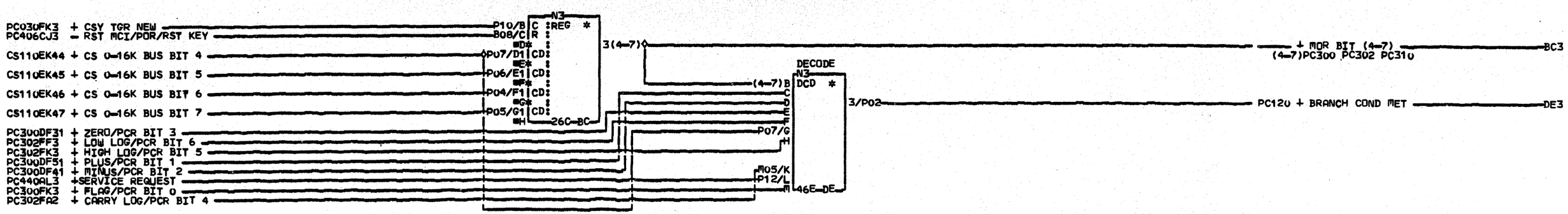
LOC=1A-A1J2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK FL

CID PIOFE JOB N5101128

PC302 0001



DECODE

	MDR BIT				PCR BIT								BR
CONDITION	4	5	6	7	0	1	2	3	4	5	6	7	COND MET
NOT HIGH LOG	1	0	0	1						0			1
HIGH LOG	0	0	0	1						1			1
CARRY LOG	0	0	0	0					1				1
NOT LOW LOG	1	0	1	0							0		1
LOW LOG	0	0	1	0							1		1
NOT EQUAL LOG	1	0	1	1								0	1
EQUAL LOG	0	0	1	1								1	1
NOT PLUS	1	1	0	0		0							1
PLUS	0	1	0	0		1							1
NOT MINUS	1	1	0	1			0						1
MINUS	0	1	0	1			1						1
NOT ZERO	1	1	1	0				0					1
ZERO	0	1	1	0				1					1
FLAG	0	1	1	1	1								1
SERVICE REQUEST	1	0	0	0									1

26P-BH

COMMENTS

E

BR COND MET
CP STATUS 1 CARD

PN4237326 EC832850 PEC832742E

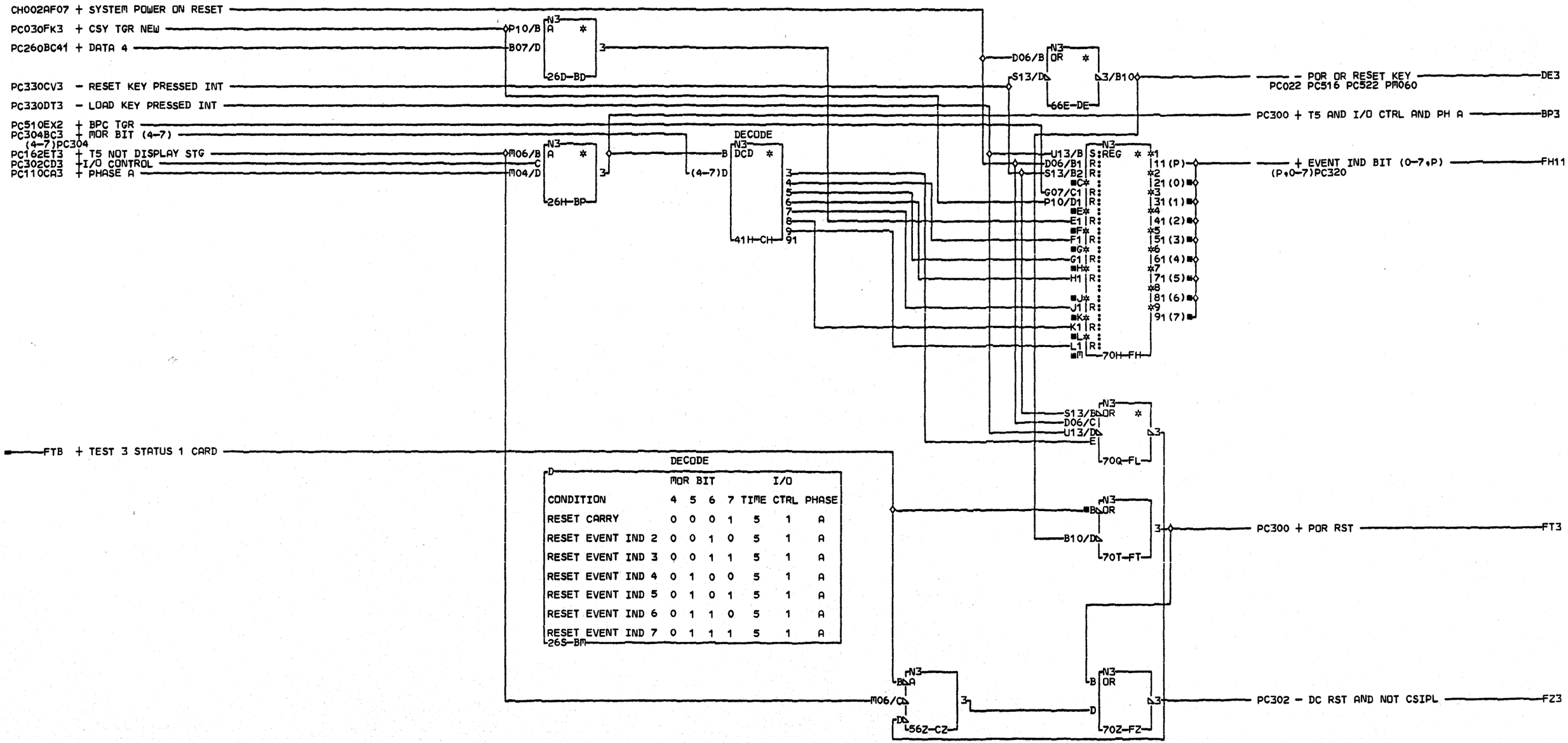
LOC=1A-A1J2

USN 00008 PRI=040CT77 1032

AUC= SEC
PFORM=KSEB NEXTBLK DF

CID PIOFE JOB K0200817

PCM04 0001



DECODE

CONDITION	MOR BIT 4	5	6	7	I/O TIME	CTRL	PHASE
RESET CARRY	0	0	0	1	5	1	A
RESET EVENT IND 2	0	0	1	0	5	1	A
RESET EVENT IND 3	0	0	1	1	5	1	A
RESET EVENT IND 4	0	1	0	0	5	1	A
RESET EVENT IND 5	0	1	0	1	5	1	A
RESET EVENT IND 6	0	1	1	0	5	1	A
RESET EVENT IND 7	0	1	1	1	5	1	A

26S-BM

COMMENTS

EVENT IND 0-7,P
CP STATUS 1 CARD

PN4237327 EC832999 PEC832850

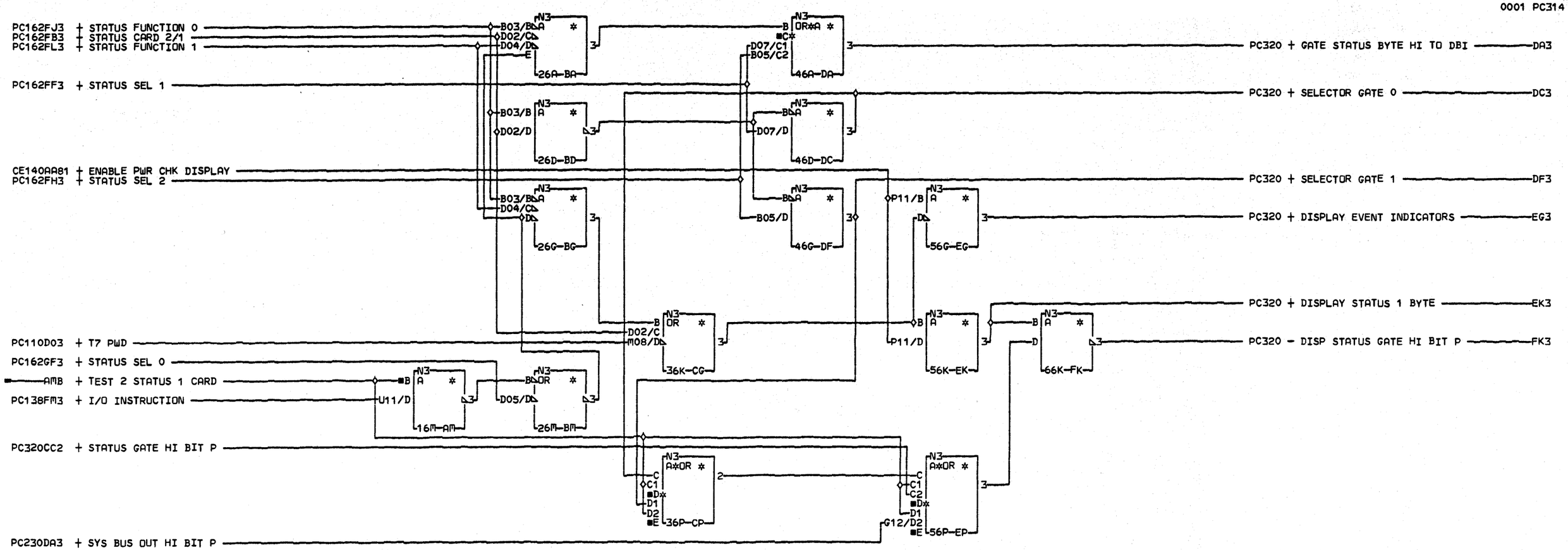
LOC=1A-A1J2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK F0

CID PIOFE JOB N5101128

PC310 0001



COMMENTS
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CONTROL DECODES
CP STATUS 1 CARD

PN4237328 EC832999 PEC832850

LOC=1A-A1J2

USN 00008 PRI=24APR78 1053

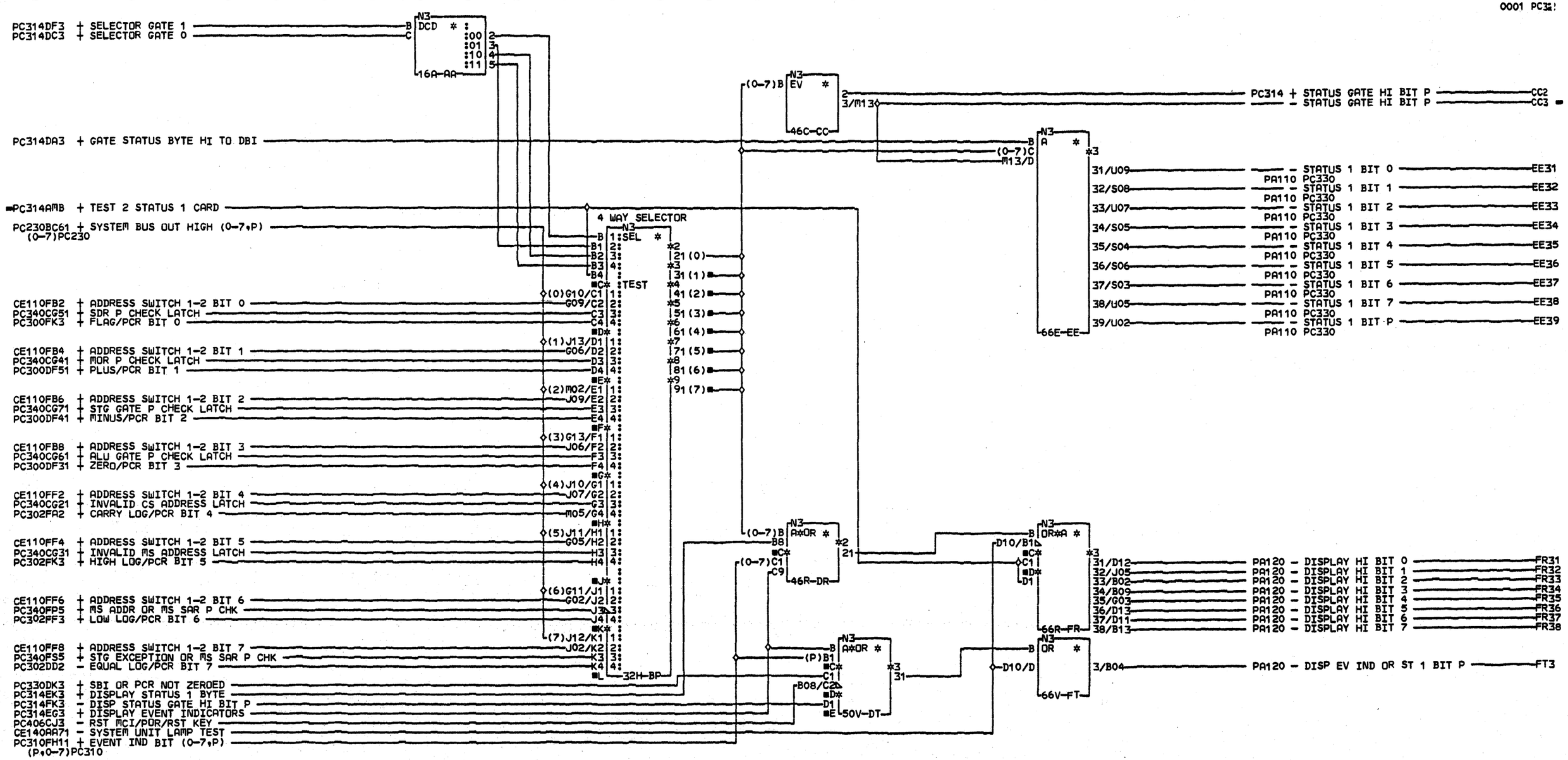
AUC= SEC
PFORM=KSEB NEXTBLK FL

CID PIOFE JOB N5101128

PC314 0001

E

PC314 0001



COMMENTS

4 WAY SEL AND DISPLAY HI BIT CP STATUS 1 CARD

PN4237329 EC832999 PEC832850

LOC=1A-A1J2

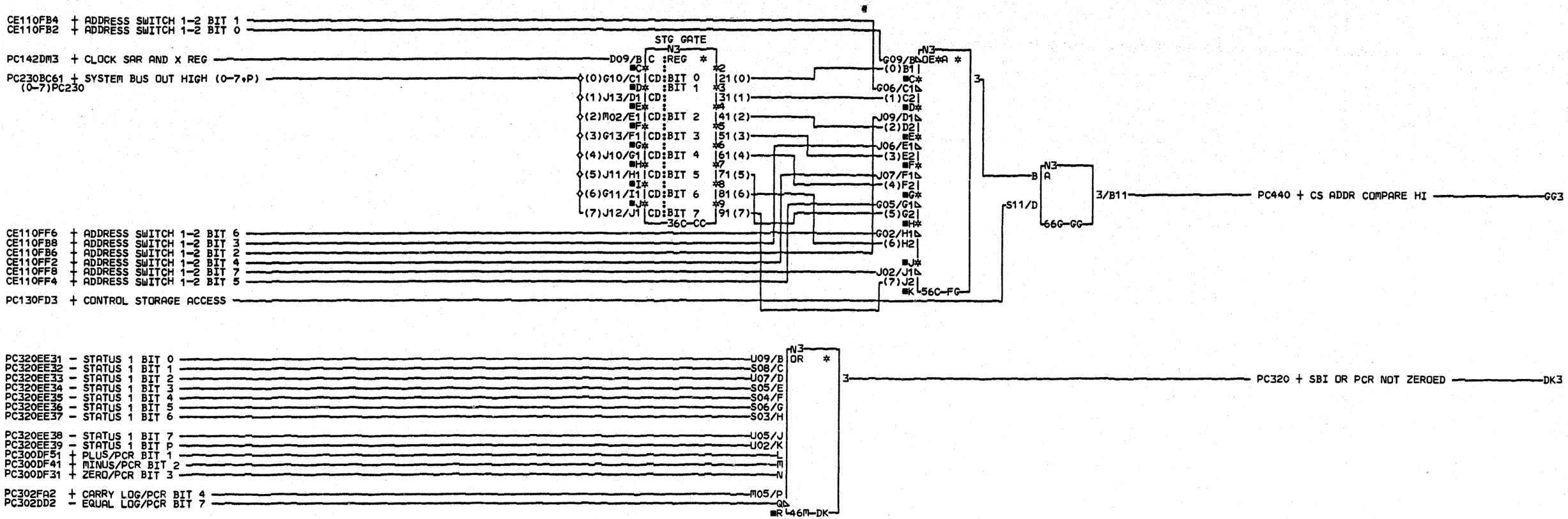
USN 00008 PRI=24APR78 1053

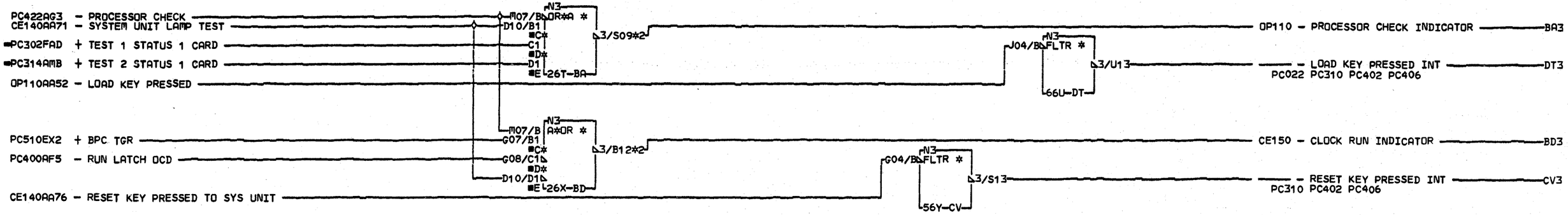
AUC= SEC

PFORM=KSEB NEXTBLK FU

CID PIOFE JOB N5101128

PC320 0001





COMMENTS
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CONNECTORS
BA3
0001/1A-A1/A2B12
BD3
0002/1A-A1/A3B11

ADDRESS COMPARE HI BYTE
CP STATUS 1 CARD

PN4237330 EC832999 PEC832850

LOC=1A-A1J2

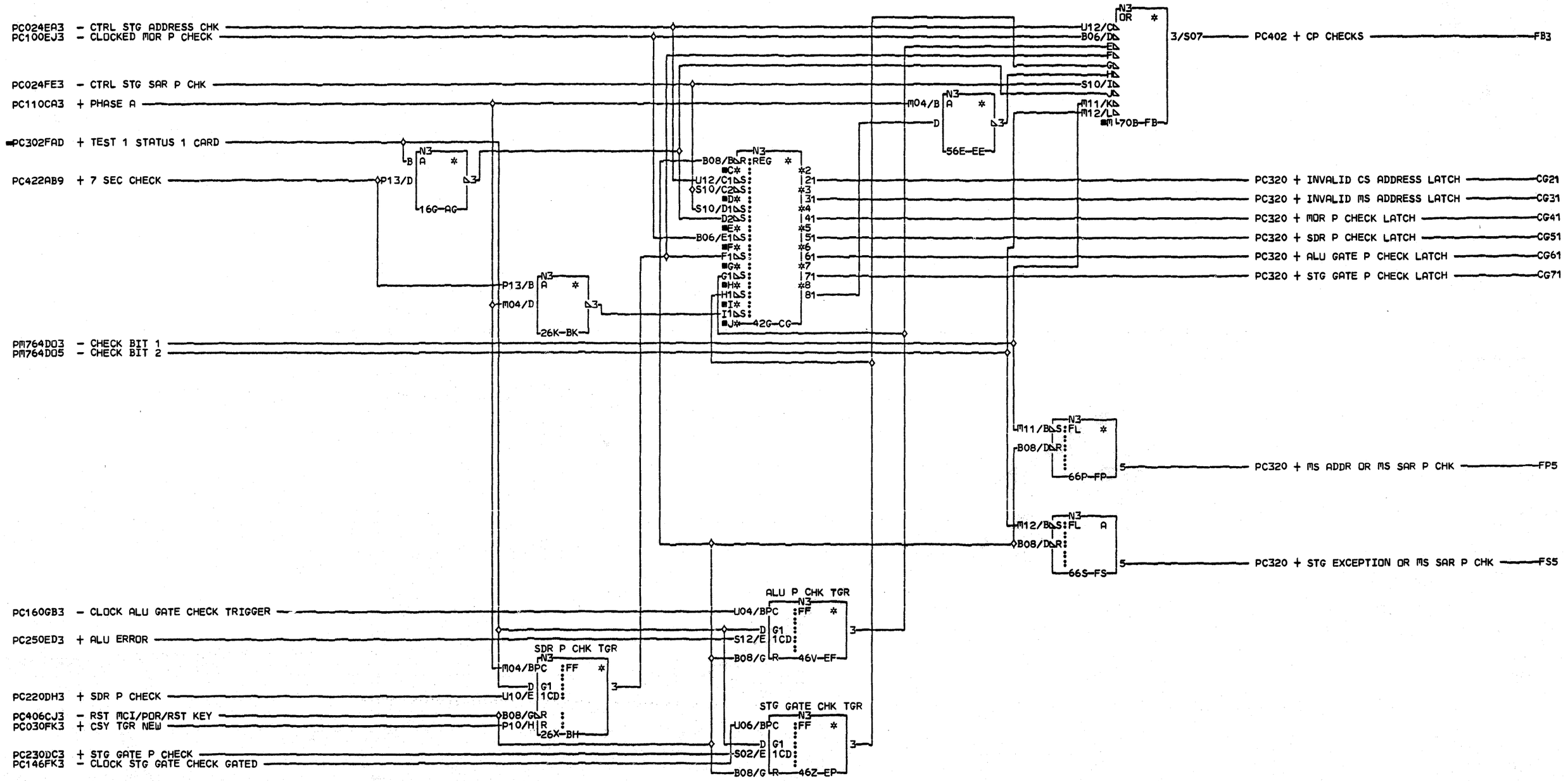
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GH

CID PIOFE JOB N5101128

PCMMO 0001

PCMMO 0001



COMMENTS

CHECK LATCHES
CP STATUS 1 CARD

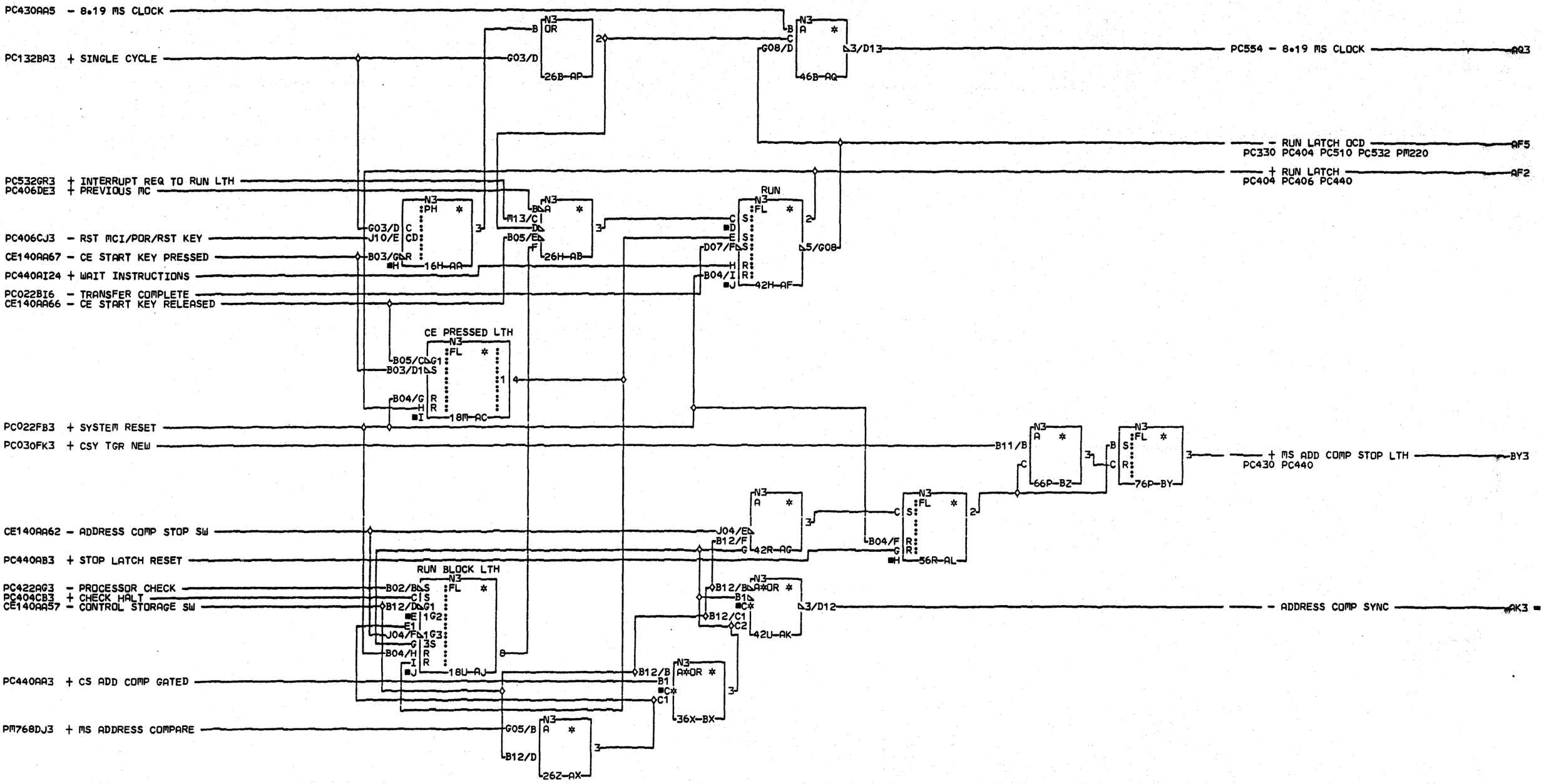
PN4237331 EC832999 PEC832850

LOC=1A-A1J2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FT

CID PIOFE JOB N5101128



COMMENTS

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RUN LTH, ADD COMP LTH
ADD COMP SYNC
CP STATUS 2 CARD
PN4237332 EC832999 PEC832882

LOC=1A-A1K2

USN 00008 PRI=24APR78 1053

AUC= SEC 28APR78 1436
PFORM=KSEB NEXTBLK B0

CID PIOFE JOB N5101128

PC400 0001

PC400 0001

CE140AA71 - SYSTEM UNIT LAMP TEST
EBC3 + TEST 3 STATUS 2 CARD
CBC + TEST 4 STATUS 2 CARD
PC330CV3 - RESET KEY PRESSED INT
CH002AF07 + SYSTEM POWER ON RESET
PC110DD3 + T7 PWD
PC440AE2 + STOP LATCH
PC330DT3 - LOAD KEY PRESSED INT
PC440AI2 + TURN ON CP WORKING LTH
PC440AI33 + RESET CP WORKING LTH
PC162GF3 + STATUS SEL 0
PC142DM3 + CLOCK SAR AND X REG
CLD + TEST 2 STATUS 2 CARD
PC506FP3 + NEW PORT CHECKS
PC030FK3 + CSY TGR NEW
PC110FT3 + T4 THRU T6
PC440AI26 + TURN ON GO LATCH
PC440AI23 + TURN OFF GO LATCH
PC406CJ3 - RST MCI/POR/RST KEY
PC422AC2 + MC INTERRUPT LTH
PC440AI27 + TURN ON RETRY
PC162FB3 + STATUS CARD 2/1
PC162FJ3 + STATUS FUNCTION 0
PC340FB3 + CP CHECKS
PC162FL3 + STATUS FUNCTION 1
PC110EN3 + T3 AND PHASE A
PC110CA3 + PHASE A
CE120FF2 + ADDRESS SWITCH 3-4 BIT 4
CE120FF8 + ADDRESS SWITCH 3-4 BIT 7
PC022FB3 + SYSTEM RESET
PC162FH3 + STATUS SEL 2

N3 PH 36B-CB
N3 A*OR 3/J06*2 — OP110 - STOP INDICATOR — EB3
CP WORKING LTH
N3 FL 18F-AA — 2 — PC404 + GO LATCH — AB2; PC440 + CP WORKING LTH — AA2
N3 A*OR 36G-CG
GATE CP CHKS
N3 FF 54G-EG — 5 — PC422 + CP OR PORT CHECKS — GH2
N3 A*OR 76H-GH — 2
PORT CHECK
N3 FF 66J-FJ — 2
N3 A 44J-DJ — 2
GO
N3 FL 18K-AB — 2
SET PORT CK
N3 FF 34L-CL — 2
RETRY
N3 FL 54D-AD — 2 — PC422 + RETRY LATCH — AD2
N3 A 18P-AG — 3 — PC404 + T4 THRU T6 STATUS 2 LOAD — AG3
N3 A 18S-AF — 3 — PC440 + T4-T6 ST CD 2 NOT STAT FUNC 0 — AF3
CP CHECKS LTH
N3 FL 44T-AE — 2
N3 A 18V-AI — 2 — PC420 + CLOCK F DECODES — AI2
N3 OR 54Y-AH — 3 — + SEL GATE 1 — AH3 (PC406 PC430)
N3 A 18Z-AJ — 3 — PC404 + CLOCK E DECODES — AJ3

COMMENTS
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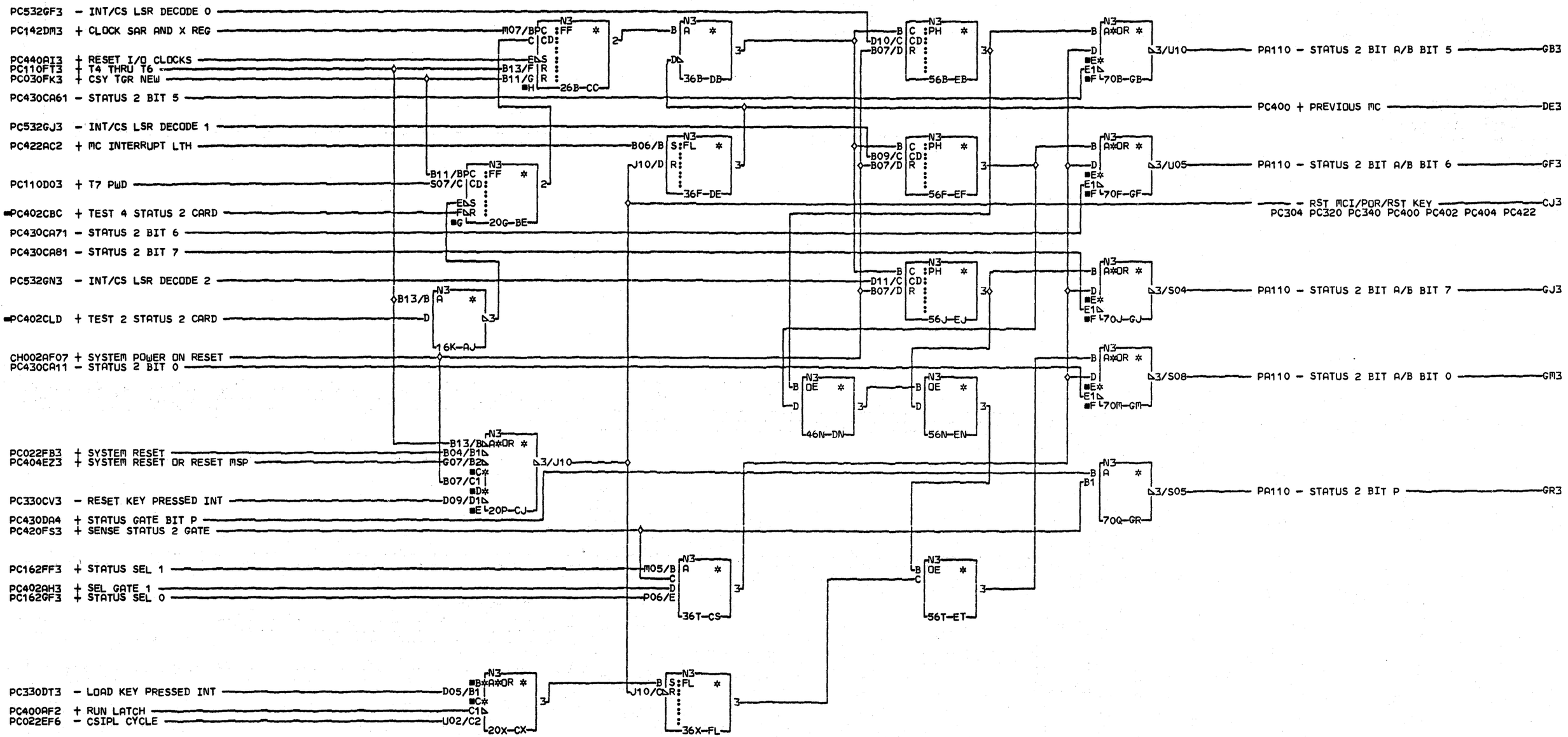
CONNECTORS
EB3
0001/1A-A1/A2D09

IMMEDIATE DECODE
CP STATUS 2 CARD
PN4237333 EC832999 PEC832882
LOC=1A-A1K2
USN 00008 PRI=24APR78 1053
AUC= SEC
PFORM=KSEB NEXTBLK GI
CID PIOFE JOB N5101128

PC402 0001



COMMENTS

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CHECK INTERRUPT
CP STATUS 2 CARD

PN4237335 EC832999 PEC832882

LOC=1A-A1K2

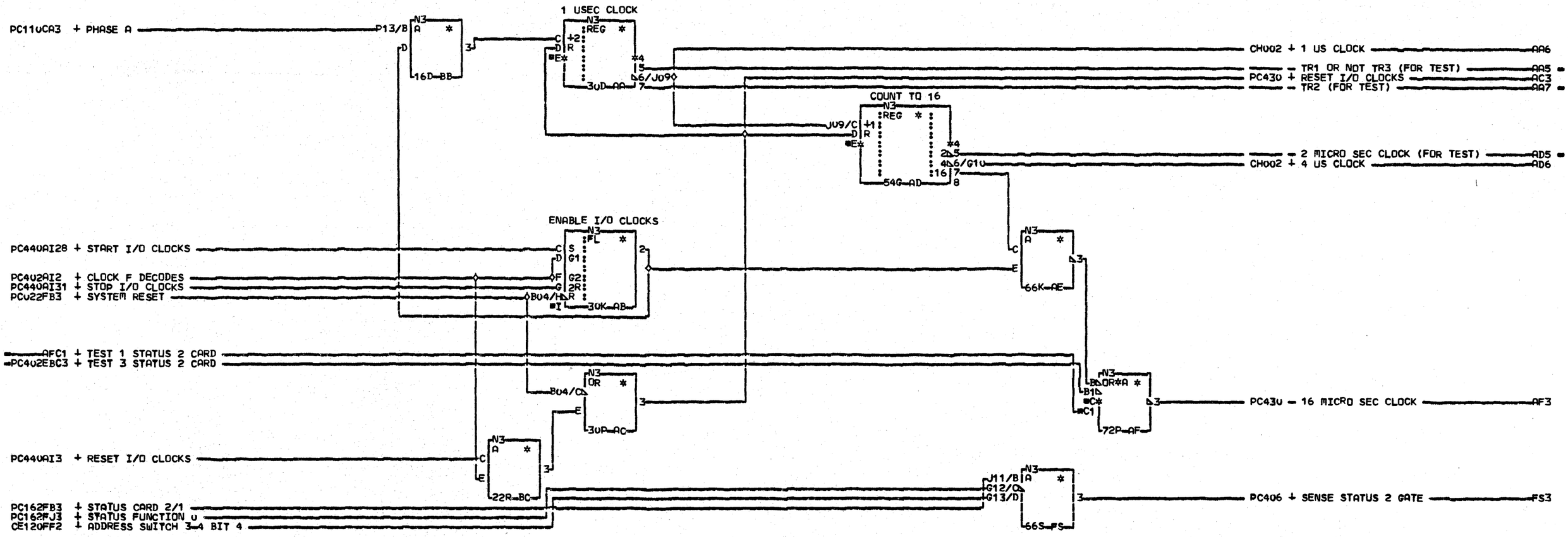
USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK GT

CID PIOFE JOB N5101128

PC406 0001

PC406 0001



COMMENTS

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E

I/O CLOCKS
DISP SYS BUS OUT 12-15
CP STATUS 2 CARD
PN4237336 EC832850 PEC832804

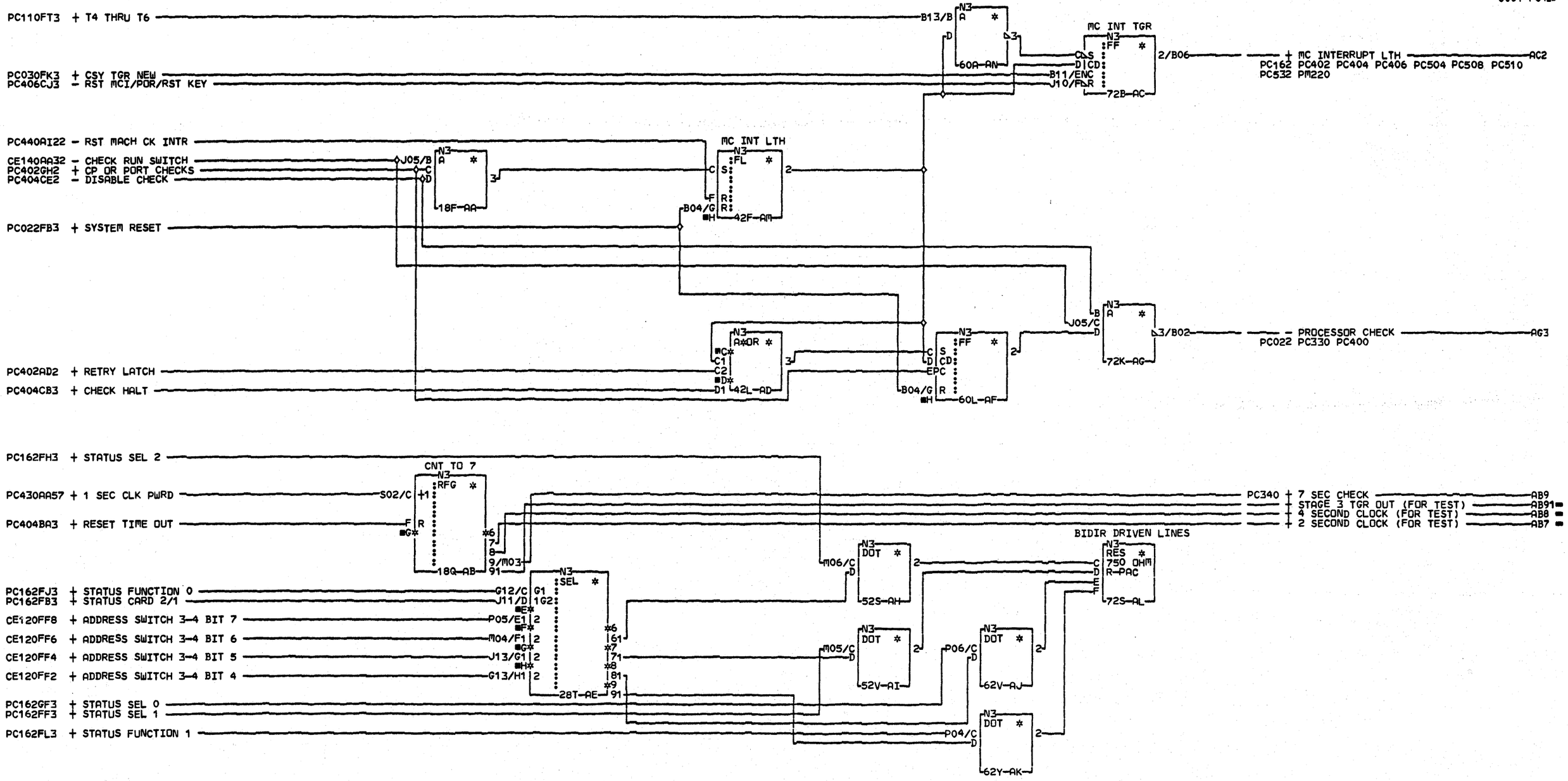
LOC=1A-A1K2

USN 00006 PRI=09SEP77 004u

AUC= SEC
PFORM=KSEB NEXTBLK FT

CID PIOFE JOB K0200817

PC420 0001



COMMENTS

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MACH CHK, PROC CHK
7 SEC CHECK
CP STATUS 2 CARD
PN4237337 EC832999 PEC832850

LOC=1A-A1K2

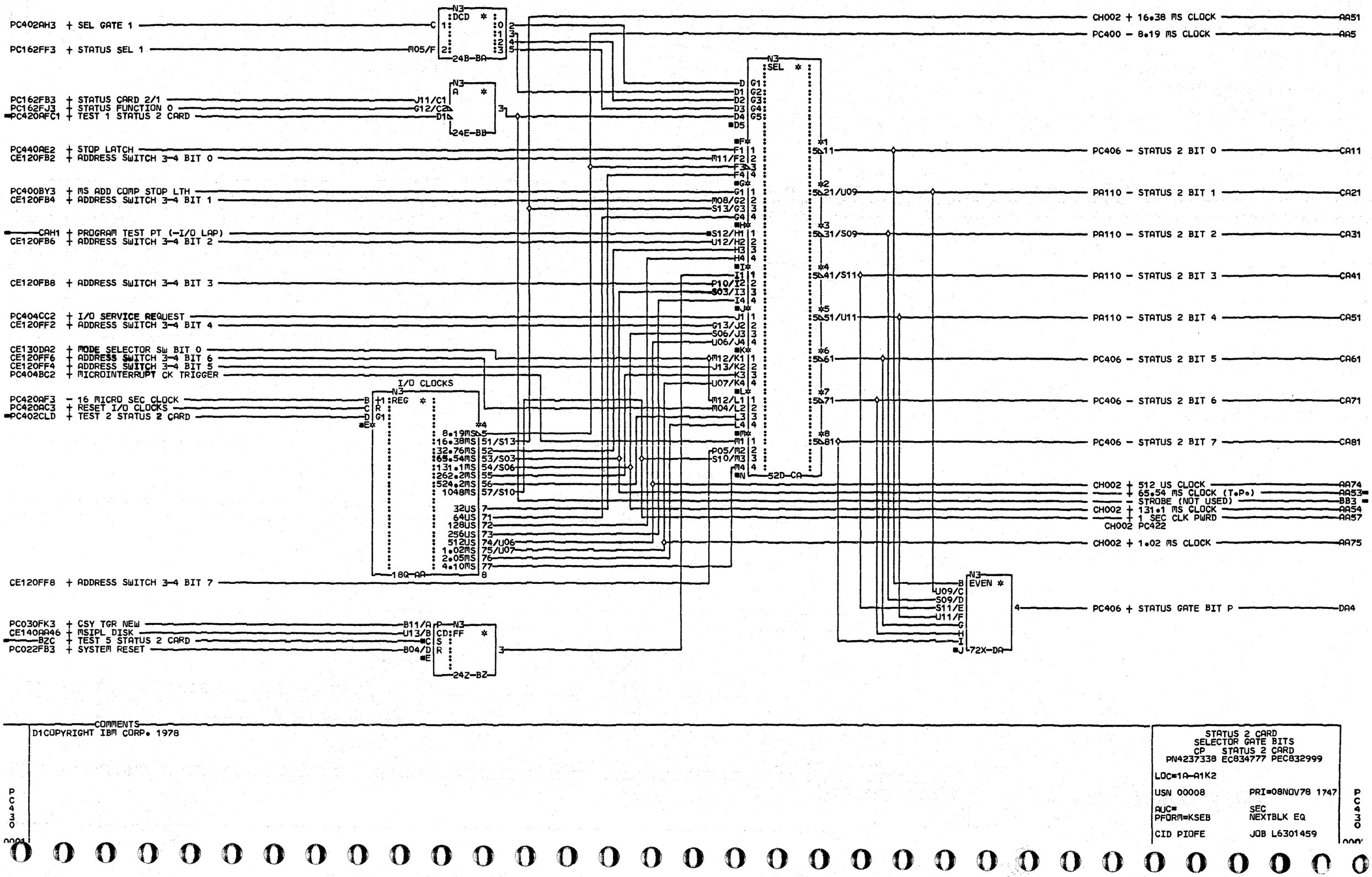
USN 00008 PRI=03MAY78 1316

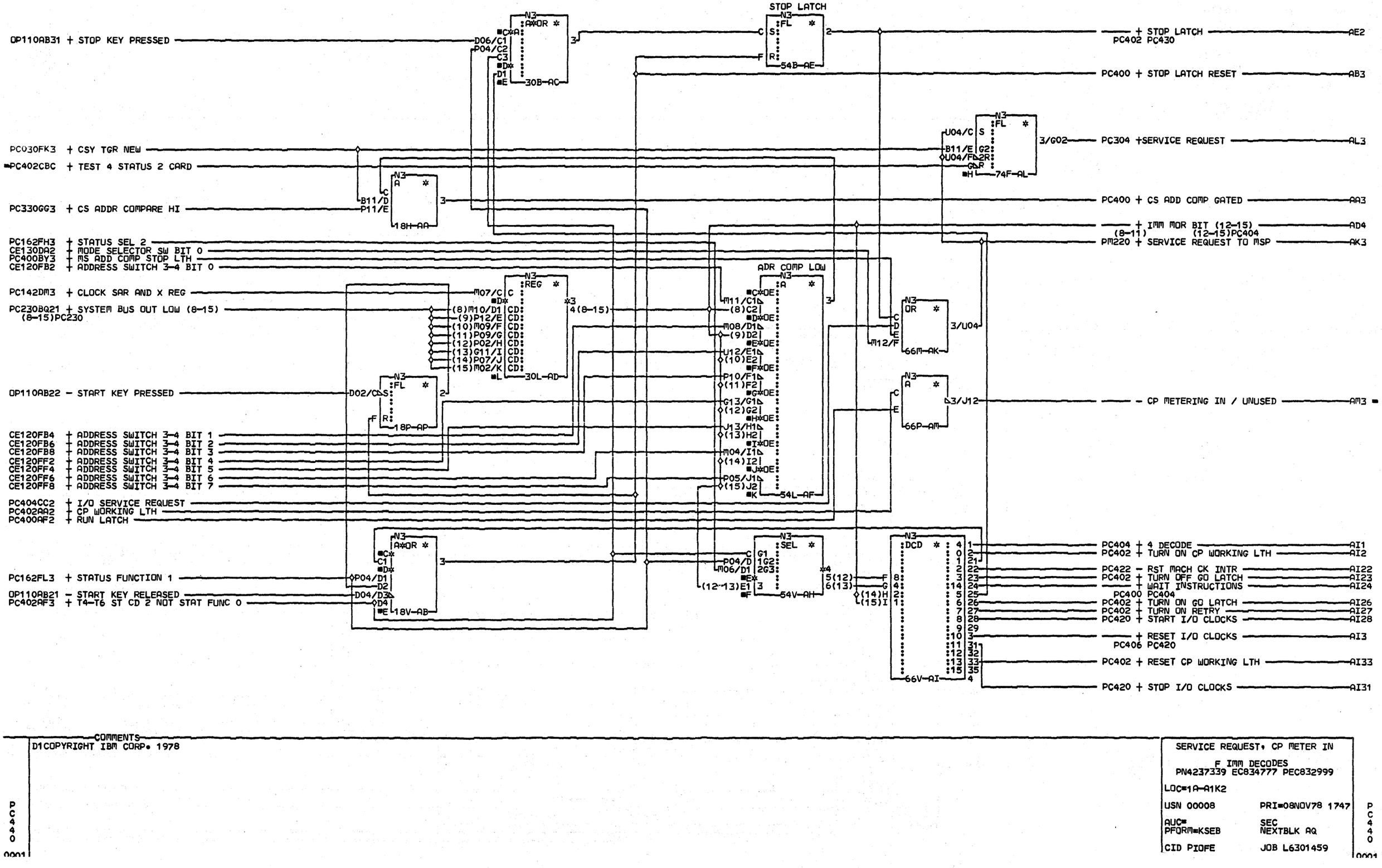
AUC= SEC
PFORM=KSEB NEXTBLK AD

CID PIOFE JOB N5101128

PC422 0001

PC422 0001


PC402AH3 + SEL GATE 1
PC162FF3 + STATUS SEL 1
PC162FB3 + STATUS CARD 2/1
PC162FJ3 + STATUS FUNCTION 0
PC420AFC1 + TEST 1 STATUS 2 CARD
PC440AE2 + STOP LATCH
CE120FB2 + ADDRESS SWITCH 3-4 BIT 0
PC400BY3 + MS ADD COMP STOP LTH
CE120FB4 + ADDRESS SWITCH 3-4 BIT 1
CAH1 + PROGRAM TEST PT (-I/O LAP)
CE120FB6 + ADDRESS SWITCH 3-4 BIT 2
CE120FB8 + ADDRESS SWITCH 3-4 BIT 3
PC404CC2 + I/O SERVICE REQUEST
CE120FF2 + ADDRESS SWITCH 3-4 BIT 4
CE130DA2 + MODE SELECTOR SW BIT 0
CE120FF6 + ADDRESS SWITCH 3-4 BIT 6
CE120FF4 + ADDRESS SWITCH 3-4 BIT 5
PC404BC2 + MICROINTERRUPT CK TRIGGER
PC420AF3 - 16 MICRO SEC CLOCK
PC420AC3 + RESET I/O CLOCKS
PC402CLD + TEST 2 STATUS 2 CARD
CE120FF8 + ADDRESS SWITCH 3-4 BIT 7
PC030FK3 + CSY TGR NEW
CE140AA46 + MSIPL DISK
BZC + TEST 5 STATUS 2 CARD
PC022FB3 + SYSTEM RESET
I/O CLOCKS
8.19MS
16.38MS
32.76MS
65.54MS
131.1MS
262.2MS
524.2MS
1048MS
32US
64US
128US
256US
512US
1.02MS
2.05MS
4.10MS
CH002 + 16.38 MS CLOCK
PC400 - 8.19 MS CLOCK
CH002 + 512 US CLOCK
+ 65.54 MS CLOCK (T.P.)
- STROBE (NOT USED)
CH002 + 131.1 MS CLOCK
+ 1 SEC CLK PWRD
CH002 PC422
CH002 + 1.02 MS CLOCK
PC406 - STATUS 2 BIT 0
PA110 - STATUS 2 BIT 1
PA110 - STATUS 2 BIT 2
PA110 - STATUS 2 BIT 3
PA110 - STATUS 2 BIT 4
PC406 - STATUS 2 BIT 5
PC406 - STATUS 2 BIT 6
PC406 - STATUS 2 BIT 7
PC406 + STATUS GATE BIT P
COMMENTS
D1COPYRIGHT IBM CORP. 1978
STATUS 2 CARD
SELECTOR GATE BITS
CP STATUS 2 CARD
PN4237338 EC834777 PEC832999
LOC=1A-A1K2
USN 00008
PRI=08NOV78 1747
AUC=
SEC
PFORM=KSEB
NEXTBLK EQ
CID PIOFE
JOB L6301459
PC430



COMMENTS

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SERVICE REQUEST, CP METER IN

F IMM DECODES
PN4237339 EC834777 PEC832999

LOC=1A-A1K2

USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK AQ

CID PIOFE JOB L6301459

PC440 0001

PC506FU3 - GATE I/O BUS
CH005AA3 - MPXPO DATA IN 0
PC542FV3 - LOAD DATA BUFFER
PC526CE2 - STROBE LSR DATA
PC230BQ21 + SYSTEM BUS OUT LOW (8-15)
(8-15)PC230
CH007AB3 - SERVICE IN
AYD + TEST 7 PORT CARD
PC534DD5 - BASE CYCLE STEAL LTH
AEC1 + TEST 2 PORT CARD
PC504BI2 + CNTL BITS (0-2)
(0,2)PC504
CH006AE3 - MPXPO DATA IN 4
CH006AF3 - MPXPO DATA IN 5
CH006AG3 - MPXPO DATA IN 6
CH005AB3 - MPXPO DATA IN 1
CH006AJ3 - MPXPO DATA IN P
PC230DQ3 + SYS BUS OUT LOW P1
CH005AD3 - MPXPO DATA IN 3
CH006AH3 - MPXPO DATA IN 7
PC510FE1 - CONTROL OUT PWRD
PC110DO3 + T7 PWD
PC510FU2 + SELECT CBO
CH005AC3 - MPXPO DATA IN 2
PC506DZ3 - CLOCK PORT REGISTER
CH008AH3 - COMMAND BUS IN 4
CH007AC3 + MULTIDEVICE RESPONSE
CH008AJ3 - COMMAND BUS IN 5
PC526AC13 + C02
PC542DR3 - COMMAND BUS OUT BIT 1
PC542DN3 - COMMAND BUS OUT BIT 2
PC522FG3 - RST PORT CHK (¬ CSIPL)
PC542FC3 - COMMAND BUS OUT BIT 0
CH008AE3 - CBI BIT 1 CYCLE STEAL READ
CH008AF3 - CBI BIT 2 CYCLE STEAL ADRSEL 0

DATA BUFFER
26B-BB
36B-CB
36E-CD
16E-AE
60B-DB
70N-GN
PORT REG
46R-ER
46R-FL
36S-CS
46V-DV
46Y-DY
16Y-AY

+ DATA BUFFER (0-7) (0-3)PC506 PC510 — DB11 (4-7)PC506
+ DATA BUFFER P GATED PC506 PC518 PC522 — GN3
+ PORT REG BITS (0-4) (0-4)PC506 — FL51
+ PORT REG BITS (5-7) (5-7)PC506 — FL61
PC506 + DBI/CBI NOT ZERO CHK — DV2
PC506 + DBO P CHECK — DY2

COMMENTS
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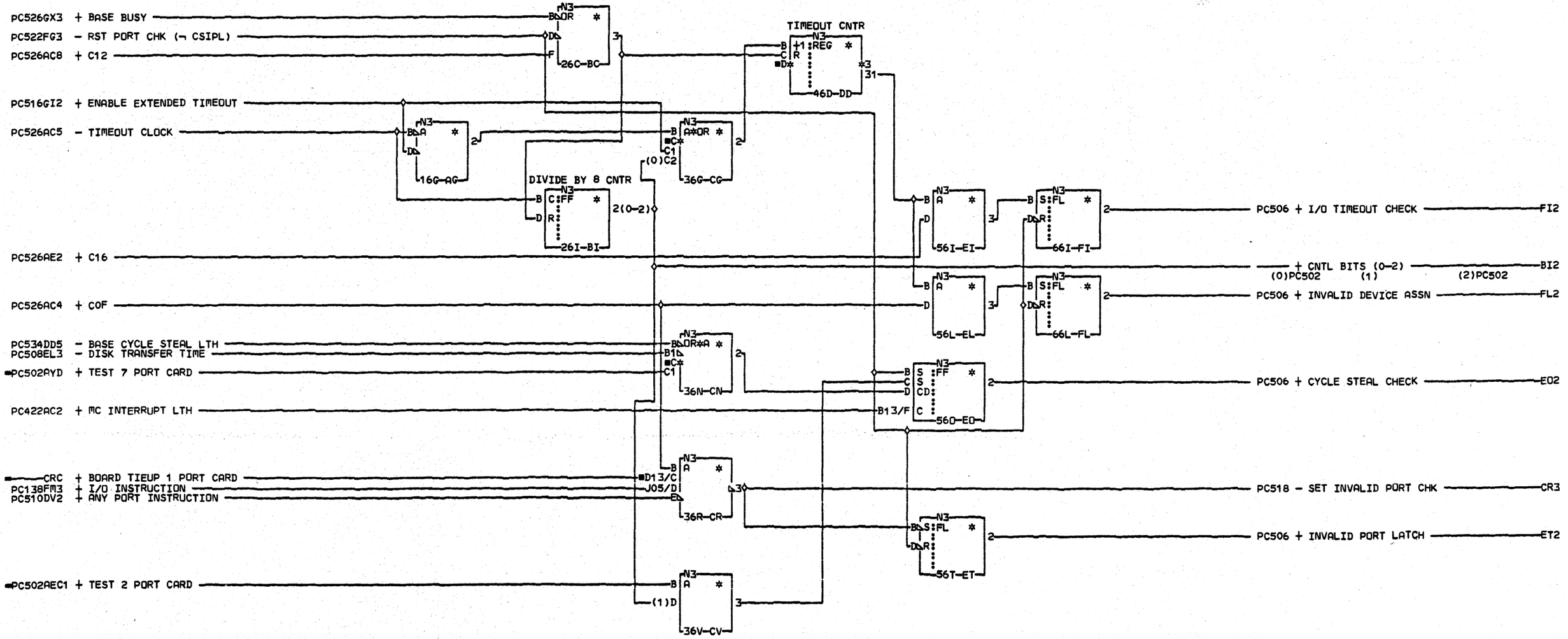
DATA BUFFER/PORT REG
CP PORT CARD

PN4237340 EC832999 PEC832850

LOC=1A-A1L2

USN 00008 PRI=28APR78 1436
AUC= SEC
PFORM=KSEB NEXTBLK GO
CID PIOFE JOB N5101128

PC502 0001



COMMENTS

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PORT CHECKS
CP PORT CARD

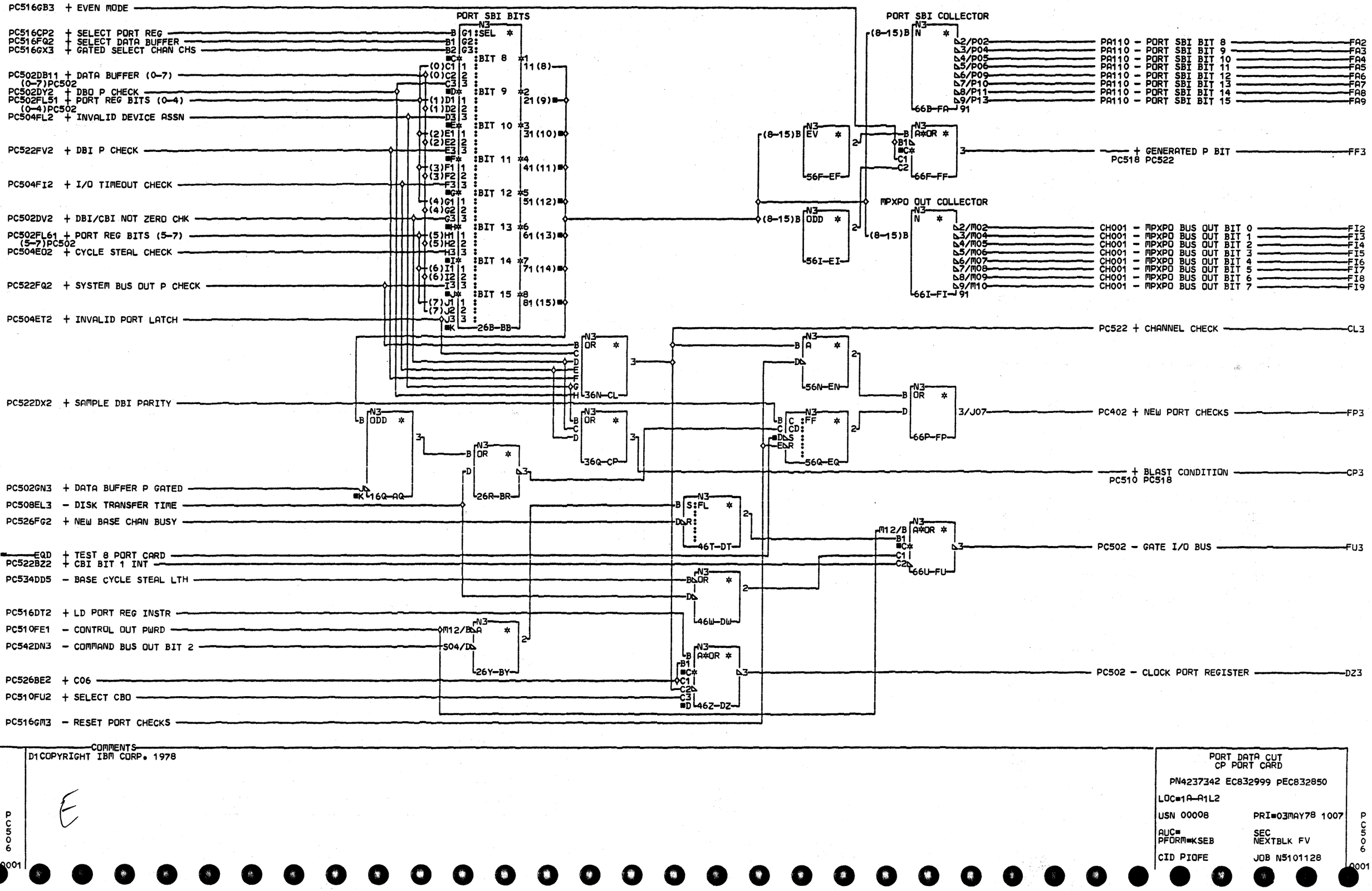
PN4237341 EC832999 PEC832850

LOC=1A-A1L2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FM

CID PIOFE JOB N5101128



COMMENTS

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E

PORT DATA CUT
CP PORT CARD

PN4237342 EC832999 PEC832850

LOC=1A-A1L2

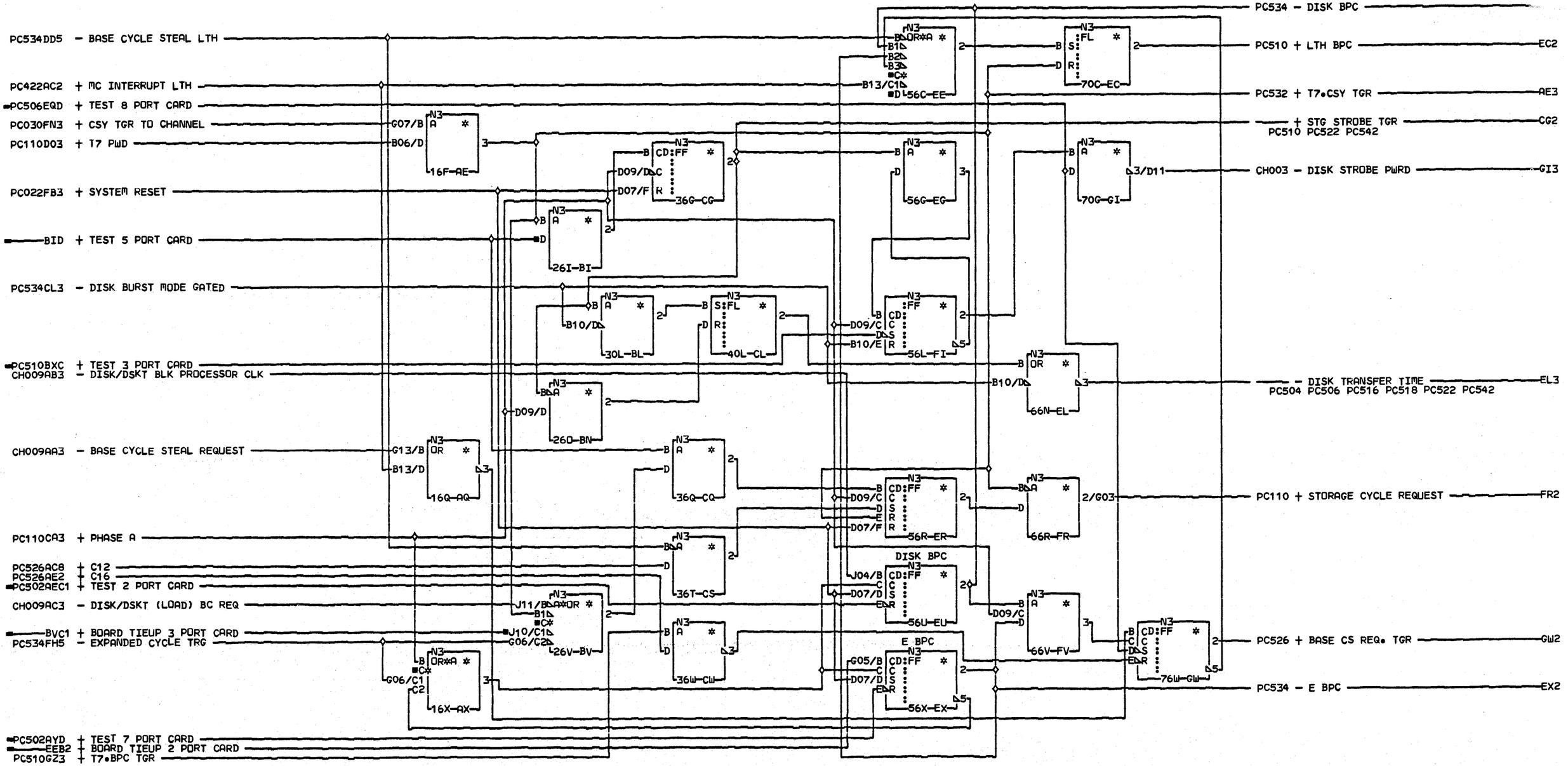
USN 00008 PRI=03MAY78 1007

AUC= SEC
PFORM=KSEB NEXTBLK FV

CID PIOFE JOB N5101128

PC506 0001

PC506 0001



COMMENTS

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CYCLE STEAL
CP PORT CARD

PN4237343 EC834777 PEC832999

LOC=1A-A1L2

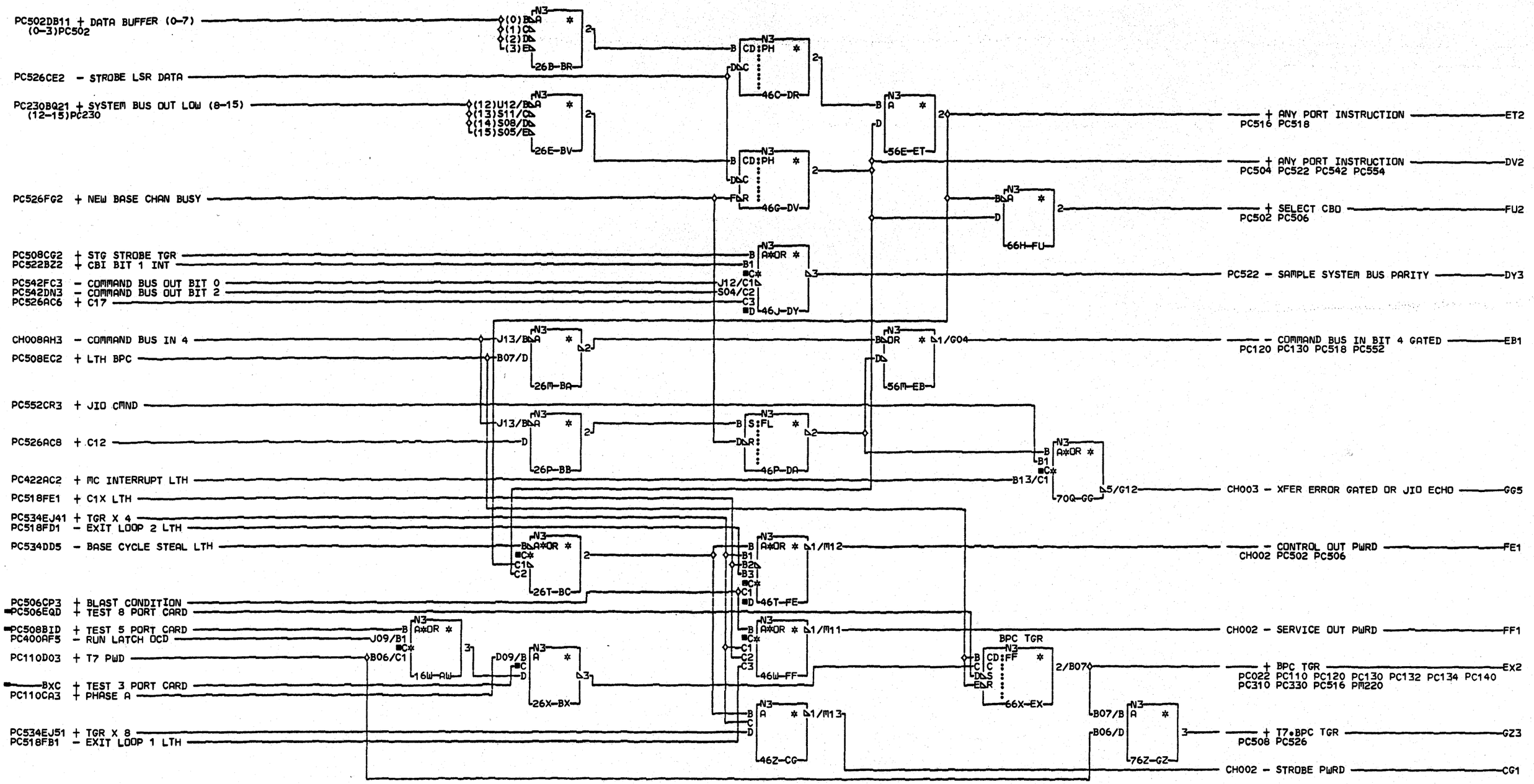
USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK GX

CID PIOFE JOB L6301459

PC508 0001

PC508 0001



COMMENTS
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CYCLE STEAL CHKS/PORT CTRL
CP PORT CARD

PN4237344 EC832999 PEC832850

LOC=1A-A1L2

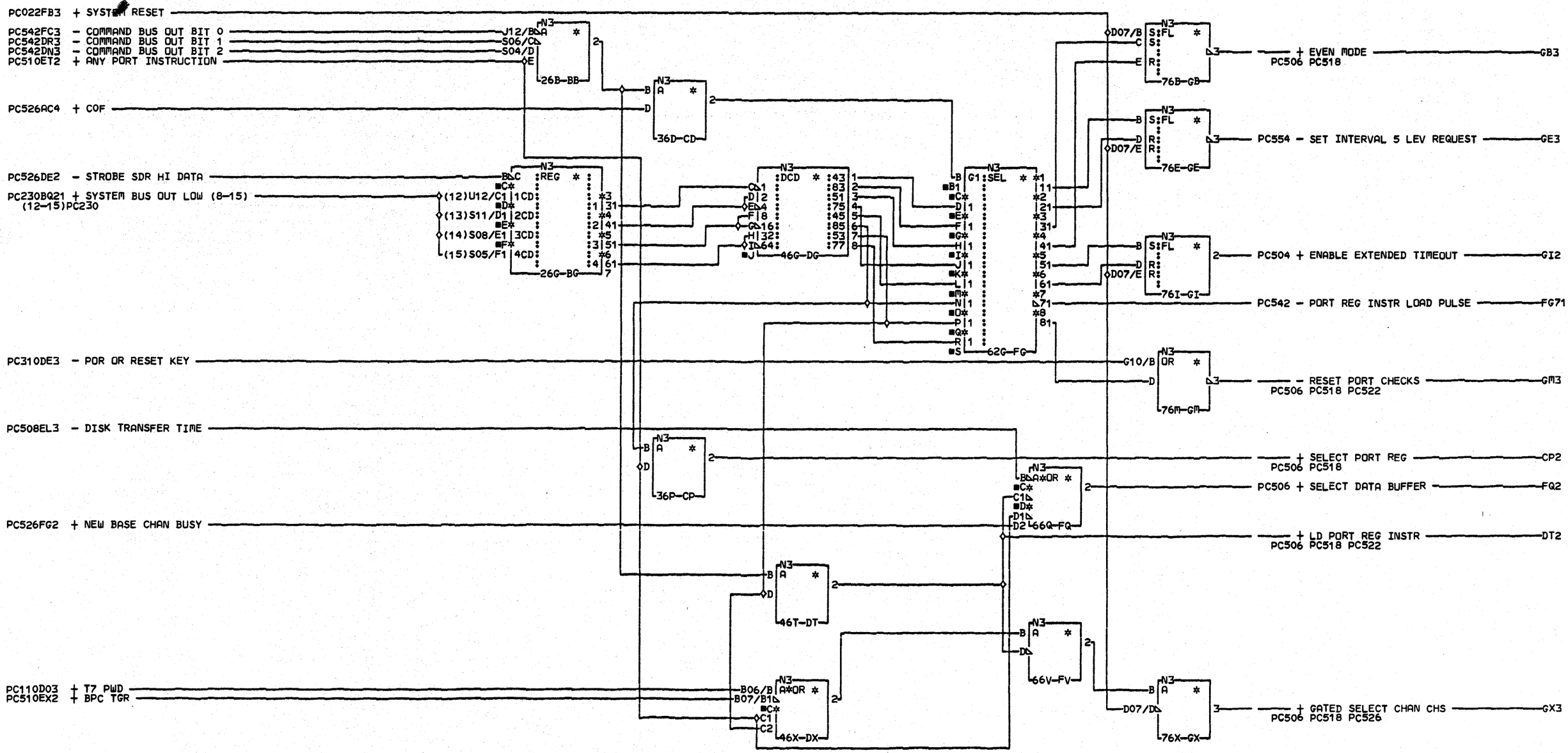
USN 00008 PRI=03MAY78 1007

AUC= SEC
PFORM=KSEB NEXTBLK GO

CID PIOFE JOB N5101128

PC510 0001

PC510 0001



COMMENTS

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PC516 0001

PORT STATUS
CP PORT CARD

PN4237345 EC832999 PEC832850

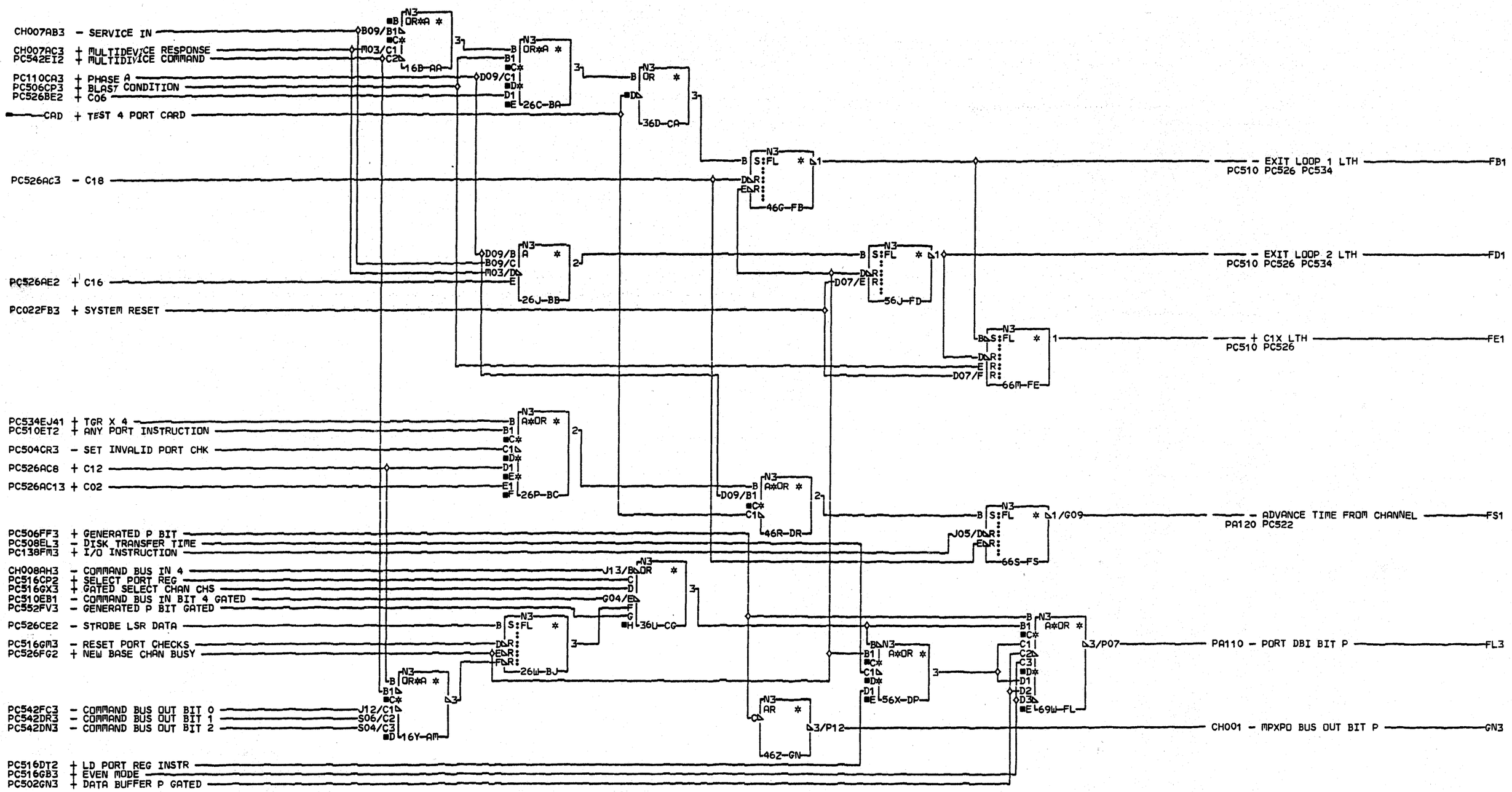
LOC=1A-A1L2

USN 00008 PRI=03MAY78 1007

AUC= SEC
PFORM=KSEB NEXTBLK GY

CID PIOFE JOB N5101128

PC516 0001



COMMENTS

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PORT CLOCKS CONTROL
CP PORT CARD

PN4237346 EC832999 PEC832850

LOC=1A-A1L2

USN 00008 PRI=28APR78 1436

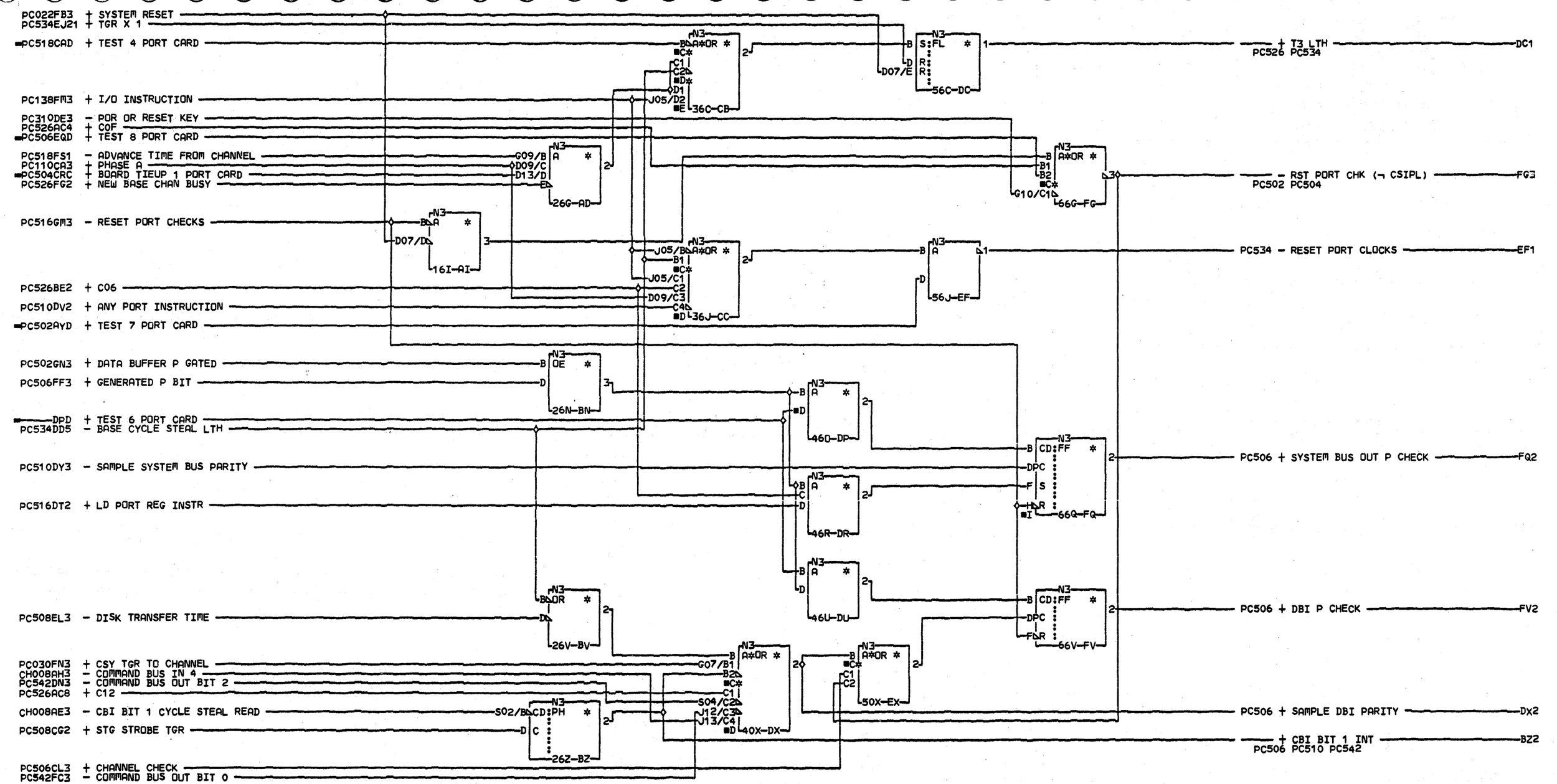
AUC= SEC

PFORM=KSEB NEXTBLK GD

CID PIOFE JOB N5101128

PC518 0001

PC518 0001

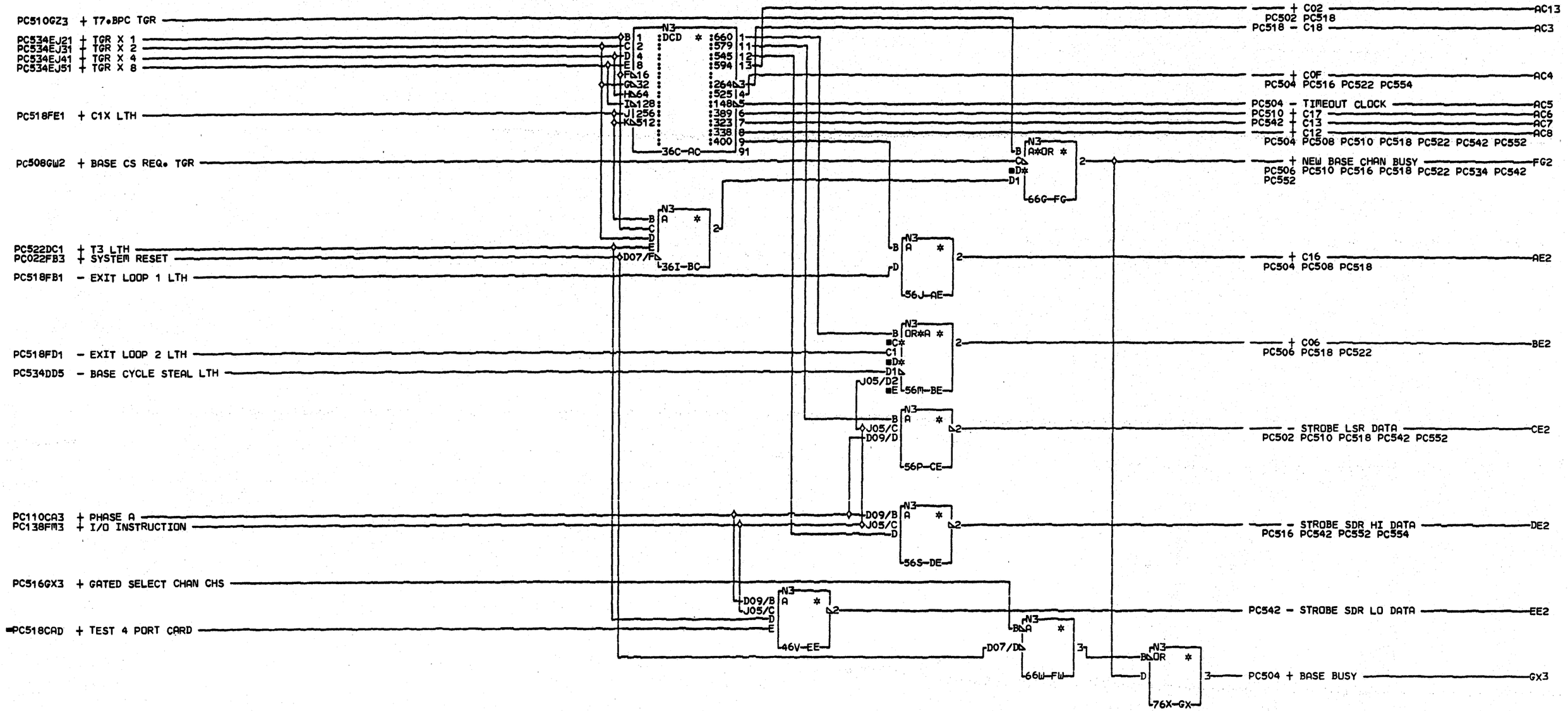


COMMENTS

CLOCKS CTRLS/PORT CHKS CP PORT CARD	
PN4237347 EC832999 PEC832850	
LOC=1A-A1L2	
USN 00008	PRI=28APR78 1436
AUC= PFORM=KSEB	SEC 03MAY78 1007 NEXTBLK FW
CID PIOFE	JOB N5101128

PC522 0001

PC522 0001



COMMENTS

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E

CLOCKS DECODES
CP PORT CARD

PN4237348 EC832999 PEC832850

LOC=1A-A1L2

USN 00008 PRI=28APR78 1436

AUC= SEC

PFORM=KSEB NEXTBLK GY

CID PIOFE JOB N5101128

PC526 0001

PC526 0001

PC022FB3 + SYSTEM RESET
CH011AA3 - MICROINTERRUPT REQUEST 1
PC030FN3 + CSY TGR TO CHANNEL
PC110D03 + T7 PWD
PC110CA3 + PHASE A
PC506EQD + TEST 8 PORT CARD
PC554GH3 - LEVEL 2 INTERRUPT
PC400AF5 - RUN LATCH OCD
CH011AC3 - MICROINTERRUPT REQUEST 3
CH011AD3 - MICROINTERRUPT REQUEST 4
PC554FN5 - LEVEL 5 INTERRUPT INTERNAL
PC534DD5 - BASE CYCLE STEAL LTH
PC534FH5 - EXPANDED CYCLE TRG
PC404CF3 + ENABLE INTERRUPTS
PC110EN3 + T3 AND PHASE A
PC534EJ51 + TGR X 8
PC508AE3 + T7•CSY TGR
PC422AC2 + MC INTERRUPT LTH
CE140AA71 - SYSTEM UNIT LAMP TEST
PC534CL3 - DISK BURST MODE GATED

N3 C FF * — 28A-BA
N3 A*OR * — 16B-AB
N3 C FF * — 28E-BE
N3 B*OR * — 16F-AF
N3 C FF * — 28I-BI
N3 C FF * — 28L-BL
N3 A*OR * — 40U-BB
N3 OR * — 40H-DH
N3 OR * — 40K-DK
N3 OR * — 40N-DN
N3 OR * — 40Q-DQ
N3 B*CD:PH * — 52D-ED
N3 B*CD:PH * — 52G-EG
N3 B*CD:PH * — 52J-EJ
N3 B*CD:PH * — 52M-EM
N3 B*CD:PH * — 52P-EP
N3 OR*A * — 72F-GF
N3 OR*A * — 72J-GJ
N3 OR*A * — 72N-GN
N3 OR * — 72R-GR
N3 OR * — 72U-GU
N3 OR * — 72X-GX
N3 OR * — 72O-GO

3/B11 — INT/CS LSR DECODE 0 — PC150 PC406 — GF3
3/G08 — INT/CS LSR DECODE 1 — PC150 PC406 — GJ3
3/B12 — INT/CS LSR DECODE 2 — PC150 PC406 — GN3
3/D10*2 — + INTERRUPT REQ TO RUN LTH — PC400 PC404 — GR3
3/B05*2 — CE150 - PROC INTERRUPT 4 — GU3
3/D04*2 — CE150 - PROC INTERRUPT 2 — GX3
3/D05*2 — CE150 - PROC INTERRUPT 1 — G03

COMMENTS
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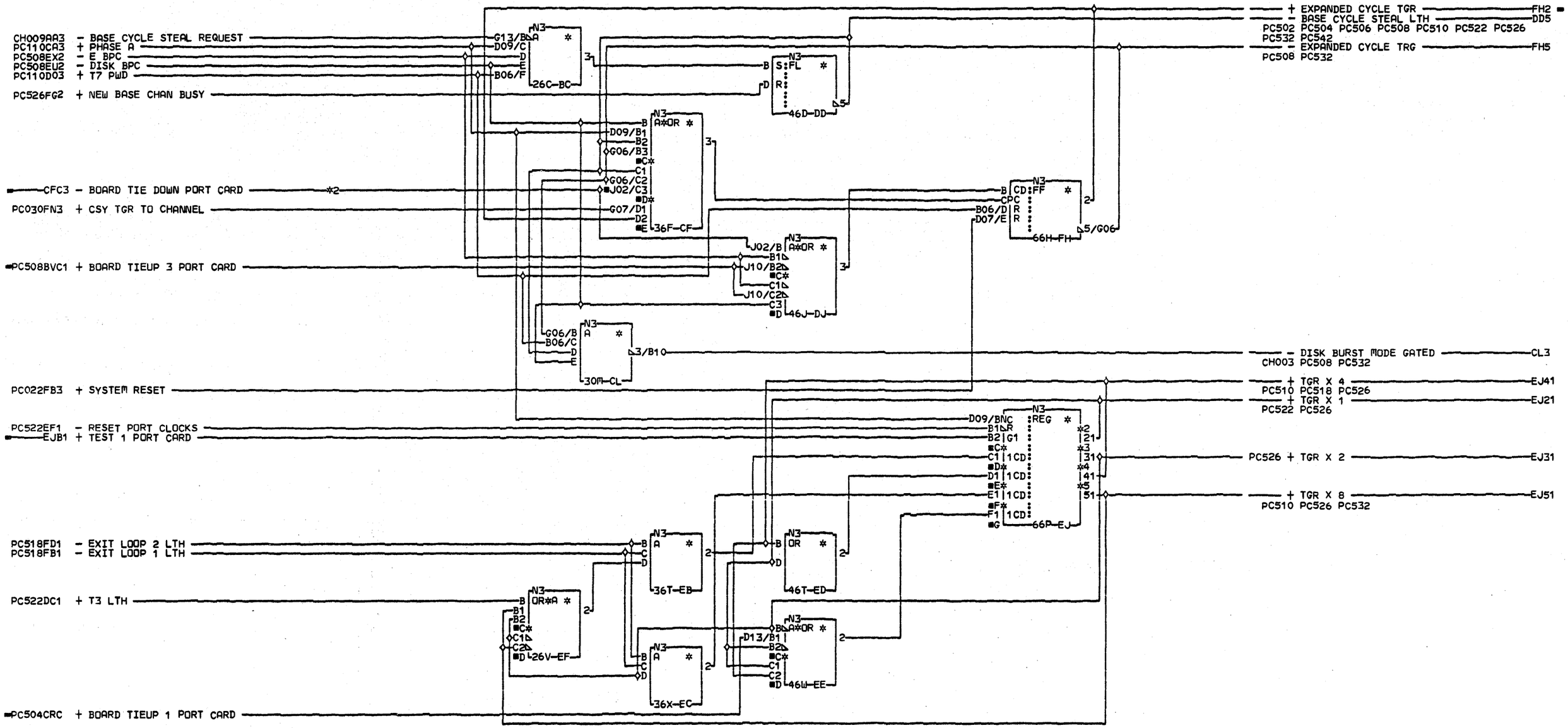
CONNECTORS
GR3
0022/1A-A1/N6A02
0023/1A-A2/N1A11
GU3
0003/1A-A1/A3B13
GX3
0005/1A-A1/A3D13
G03
0007/1A-A1/A3D12

INTERRUPT
NSII PORT CARD
PN4237349 EC832999 PEC832865
LOC=1A-A1L2
USN 00008 PRI=28APR78 1436
AUC= SEC 03MAY78 1007
PFORM=KSEB NEXTBLK G1
CID PIOFE JOB N5101128

PC5532 0001
PC5532 0001



COMMENTS
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E

CONNECTORS
CFC3
0003/1A-A1/L2J08

PORT CONTROLS
CLOCKS TGRS
CP PORT CARD
PN4237350 EC832999 PEC832850

LOC=1A-A1L2

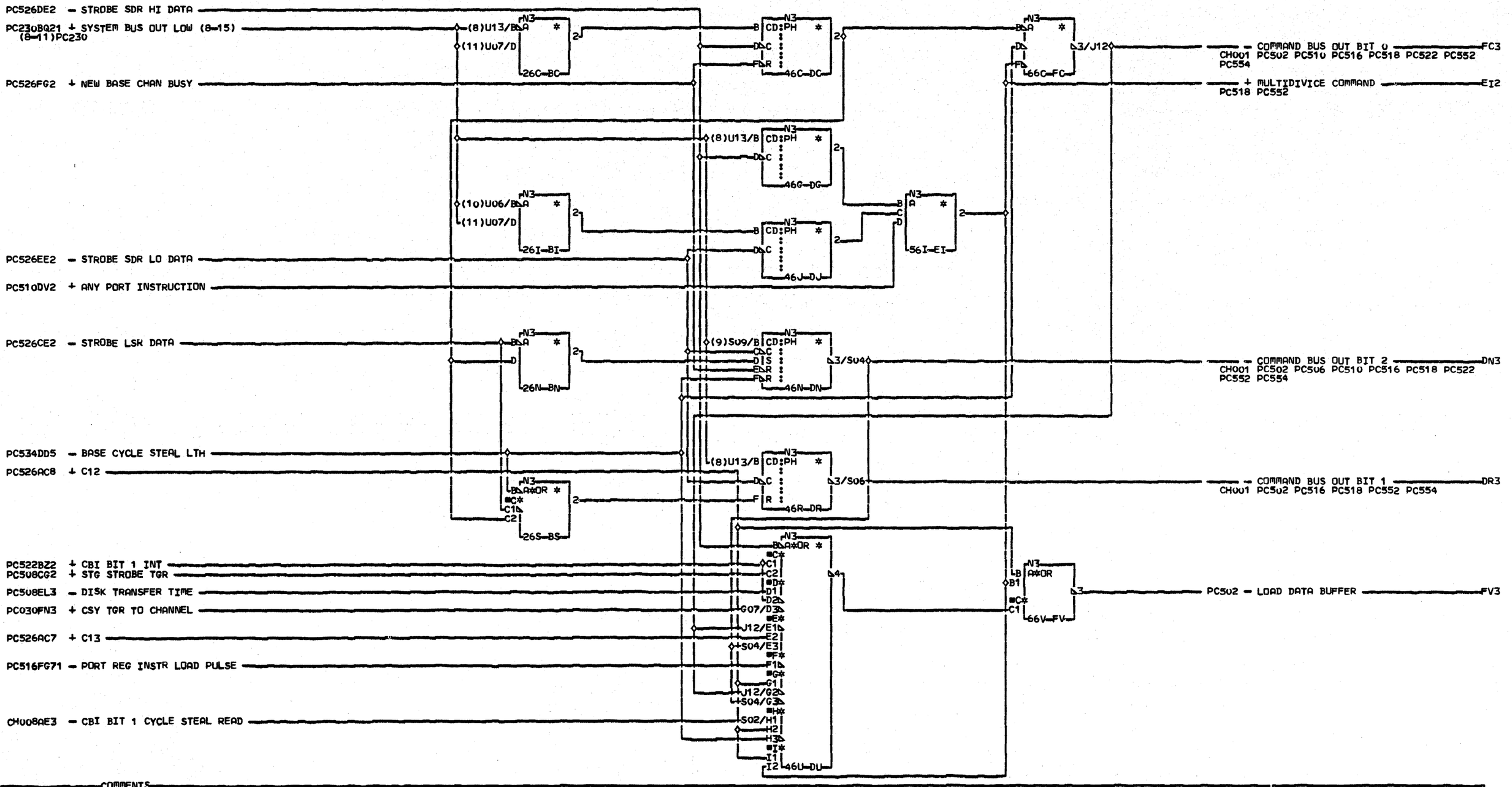
USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK GI

CID PIOFE JOB N5101128

PCS34
0001

PCS34
0001



COMMENTS

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CBO BITS 0-2
CP PORT CARD

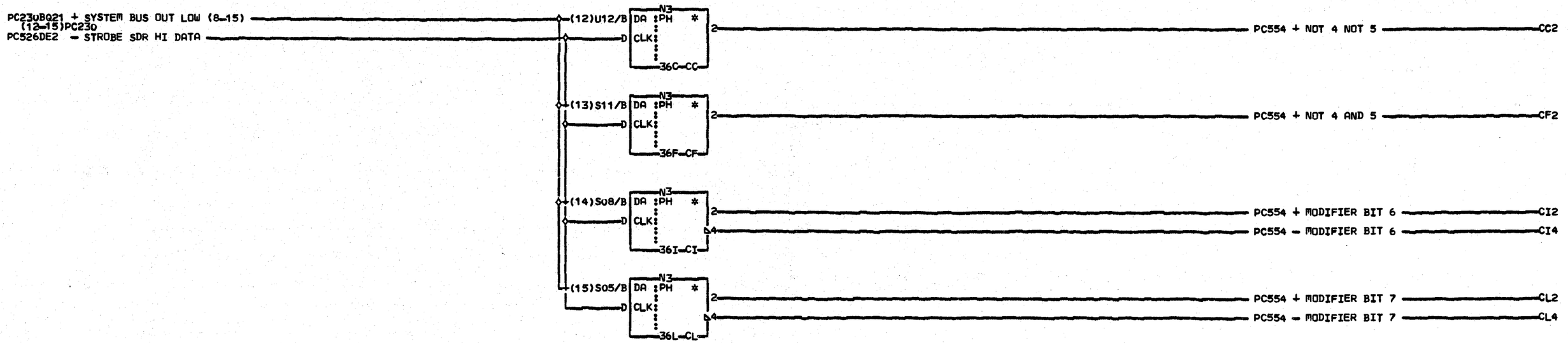
PN4237351 EC832850 PEC832742F

LOC=1A-A1L2

USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK FW

CID PIOFE JOB K0200817



COMMENTS

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MODIFIER BITS - JIO CMND
CP PORT CARD

PN4237352 EC832850 PEC832742F

LOC=1A-A1L2

USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK FW

CID PIOFE JOB Ku200817

PC552 0001

PC552 0001

PC526AC4 + COF
PC502AYD + TEST 7 PORT CARD
CH011AB3 - MICROINTERRUPT REQUEST 2
PC552CC2 + NOT 4 NOT 5
PC400AQ3 - 8.19 MS CLOCK
PC022FB3 + SYSTEM RESET
PC510DV2 + ANY PORT INSTRUCTION
PC542FC3 - COMMAND BUS OUT BIT 0
PC542DR3 - COMMAND BUS OUT BIT 1
PC542DN3 - COMMAND BUS OUT BIT 2
PC552CI4 - MODIFIER BIT 6
PC552CF2 + NOT 4 AND 5
PC552CL2 + MODIFIER BIT 7
PC552CL4 - MODIFIER BIT 7
PC552CI2 + MODIFIER BIT 6
PC516GE3 - SET INTERVAL 5 LEV REQUEST
PC230BQ21 + SYSTEM BUS OUT LOW (8-15)
(12.15)PC230
PC526DE2 - STROBE SDR HI DATA
PM220DD5 - SET INTERRUPT LEVEL 5
CH011AE3 - CHAN U INTERRUPT R. PRIORITY 5

S13/B
J12/D
S06/E
S04/F
16D-BD
30D-CD
D07/E
46D-DD
56C-EC
66E-FB
DOT*OR
72H-GH
3*2
PC532 - LEVEL 2 INTERRUPT
GH3
46J-DJ
56J-EJ
66N-FN
PC532 - LEVEL 5 INTERRUPT INTERNAL
FN5
(12)U12/B
26Q-BQ
S04/E
S06/F
J12/G
46Q-CQ
J06/B
66R-FC
16V-BV
(15)S05/B
38V-BG
D07/F
56V-DG

COMMENTS
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CONNECTORS
GH3
0001/1A-A1L2/B03

LEVEL 4-5 INTERRUPT
CP PORT CARD

PN4237353 EC832999 PEC832850

LOC=1A-A1L2

USN 00008 PRI=03MAY78 1648

AUC= SEC
PFORM=KSEB NEXTBLK GI

CID PIOFE JOB N5101128

PC554 0001

PC554 0001

PM028DL3 - RESET TGR 0
PM004DX3 + CLOCK S/3 TGRS
BBC + TEST 1 MSP SYS CTRL
PM028DA3 - SET TGR 0
CEC + TEST 2 MSP SYS CTRL
PM028DN3 - RESET TGR 1
PM028DC3 - SET TGR 1
PM028DP3 - RESET TGR 2 AND TGR 3
DHC + TEST 3 MSP SYS CTRL
PM028DE3 - SET TGR 2
PC404EZ3 + SYSTEM RESET OR RESET MSP
PM028DG3 - SET TGR 3
PM028DR3 - RESET TGR 4
PM028DJ3 - SET TGR 4
PM028DT3 - RESET TGR 5
PM088EE3 - SET E3
PM040AD18 + OP REG BIT 4
PM040AD2 + OP REG BIT 5
PM040AD22 + OP REG BIT 6
PM040AD24 + OP REG BIT 7
PM040CE35 + F TYPE OP
PM040FM13 + NON EXECUTABLE OP

TGR0 — 26B-BB — 16C-AC
TGR1 — 36E-CE — 26F-BF
TGR2 — 46H-DH — 36I-CI
TGR3 — 56K-EK — 46L-DL
TGR4 — 66N-FN — 56O-EO
TGR5 — 76Q-GQ — 66R-FR
26T-BT
36V-CV
G07/B — 16K-AK
3/S11
S11/B

PM008 - TGR 1 — CE5
PM008 - TGR 0 — BB5
PM008 + TGR 0 — BB2
PM008 + TGR 1 — CE2
PM008 - TGR 3 — EK5
PM008 - TGR 2 — DH5
PM008 + TGR 2 — DH2
PM008 - TGR 4 — FN5
PM008 + TGR 3 — EK2
PM004 - MSP CLOCK SYSTEM RESET — AK3
PM008 + TGR 4 — FN2
PM008 + TGR 5 — GQ2
PM008 - TGR 5 — GQ5
+ MSP LOAD PMR CMD — BT3
PM084 PM088 PM130 PM140 PM768
+ NON EXEC OP GTD — CV3
PM024 PM084 PM104 PM140

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

TRIGGERS 0-5
MSP SYS CTRL CARD

PN4237354 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GR

CID PIOFE JOB N5101128

PE002 0001

E

PE002 0001

PM002BBC + TEST 1 MSP SYS CTRL
PM023DV3 - RESET TGR 6
BED + BOARD TIEUP 1 MSP SYS CTRL
PM028EU3 - RESET TGR 7 AND 8 GTD
PM002AK3 - MSP CLOCK SYSTEM RESET
PM002CEC + TEST 2 MSP SYS CTRL
CFB + TEST 5 MSP SYS CTRL
PC022DV3 + 100 NS OSC PWRD
PM002DHC + TEST 3 MSP SYS CTRL
CKB + TEST 5 MSP SYS CTRL
CKD + TEST 4 MSP SYS CTRL

J12/D
16E-BE
TGR6
36D-CD
36O-CG
36K-DL
TGR7
56E-DF
TGR8
56I-EI
TR3A TGR
36P-CF
J10/E
46P-FF
TR3B TGR
36T-CK
J10/B
46T-FK
46X-DX
70B-FJ
70F-FM
70J-FP
70N-FS
70R-FV
70V-FY
70Z-FZ

PM002 + CLOCK S/3 TGRS — DX3
+ MA+MB — FJ3
PM044 PM104 PM106 PM122 PM126 PM142
+ MA — FM3
PM044 PM060 PM084 PM104 PM140 PM142 PM144 PM164 PM168 PM204 PM220
+ MB — FP3
PM060 PM084 PM104 PM140 PM142 PM164 PM168 PM202
- TG3 A — CF5
PM168 PM200 PM202 PM204 PM220
+ MC — FS3
PM024 PM026 PM028 PM044 PM060 PM084 PM088 PM104 PM106 PM126 PM130 PM140 PM142 PM144 PM168 PM200 PM202 PM204
+ PHASE 1 — FF3
PM040 PM060 PM126 PM130 PM142 PM144 PM204 PM220
+ MC SLOW — FV3
PM040 PM130 PM166 PM204
+ PHASE 2 — FK3
PM060 PM220 PM222
+ MD — FY3
PM026 PM028 PM044 PM084 PM088 PM104 PM106 PM140 PM142 PM164 PM200 PM202 PM204
+ MD SLOW — FZ3
PM126 PM130

TRIGGERS 6-8
MSP SYS CTRL CARD

PN4237355 EC834874 PEC832999

LOC=1A-A1N2

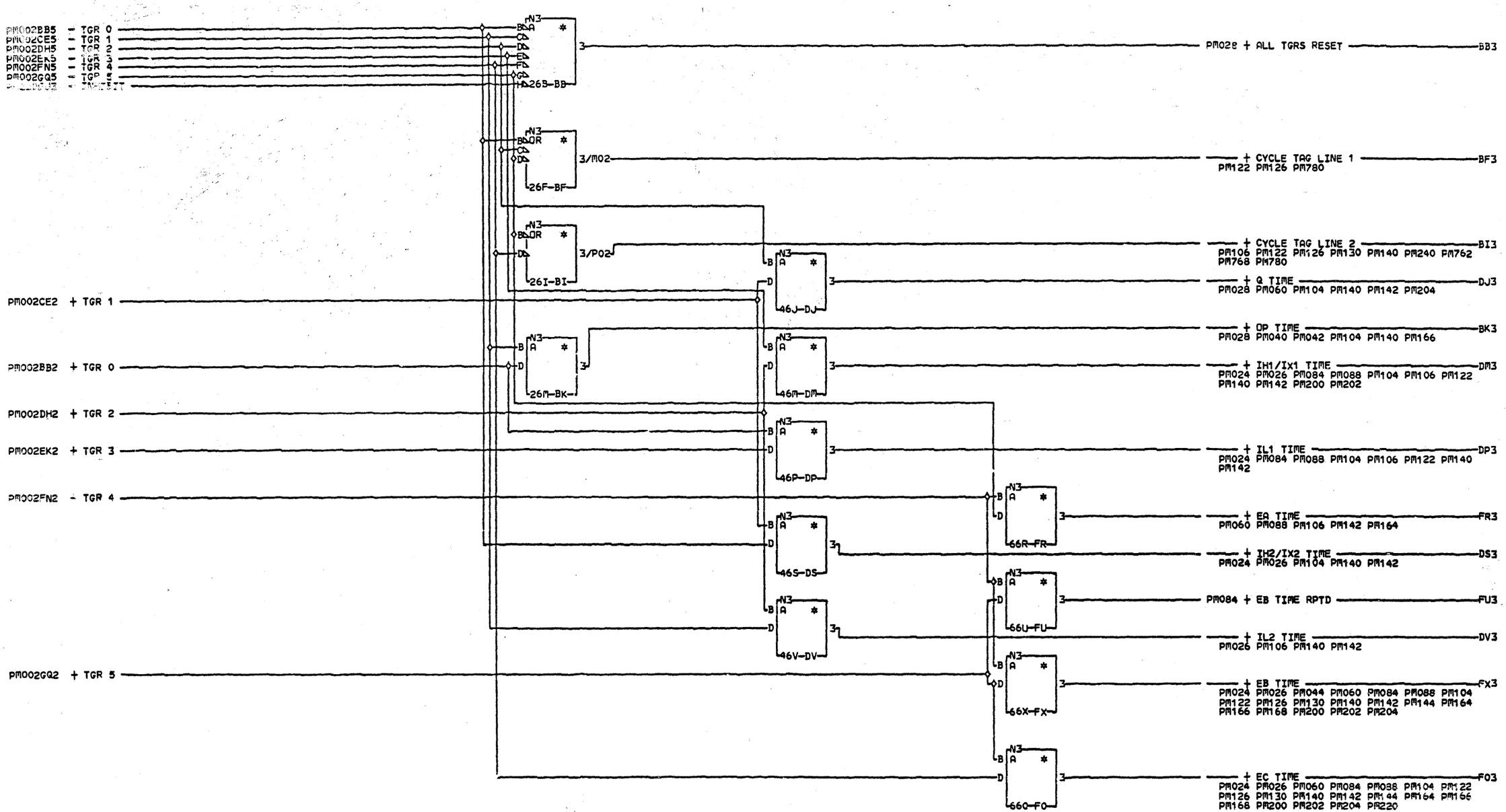
USN 00008 PRI=27JUL79 0814

AUC= SEC=
PFORM=KSEB NEXTBLK F0

CID PIOFE JOB N5500813

PM004

0001



COMMENTS
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MAJOR CYCLE DECODES
MSP SYS CTRL CD

PN4237356 EC=832999 PEC832850

LOC=1A-A1N2

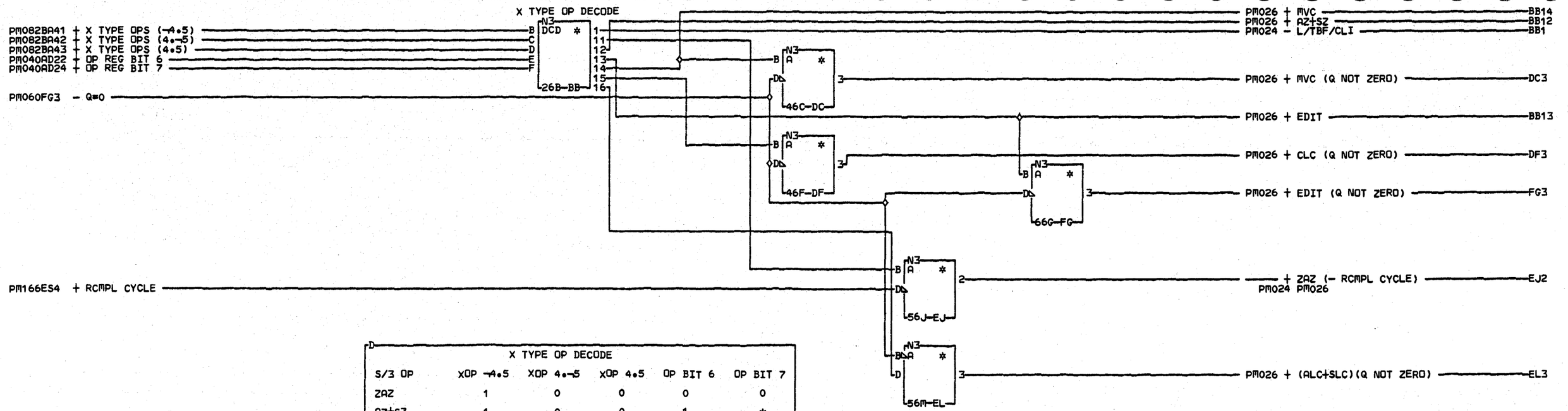
USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK F1

CID PIOFE JOB N5101128

PM008 0001

PM008 0001



X TYPE OP DECODE

S/3 OP	XOP ¬4•5	XOP 4•¬5	XOP 4•5	OP BIT 6	OP BIT 7
ZAZ	1	0	0	0	0
AZ+SZ	1	0	0	1	*
EDIT	0	1	0	1	0
MVC	0	0	1	0	0
CLC	0	0	1	0	1
ALC+SLC	0	0	1	1	*
L+CLI+TBF	0	0	0	0	1

* = DO NOT CARE

12M-AA

OP DECODES
MSP SYS CTRL CD

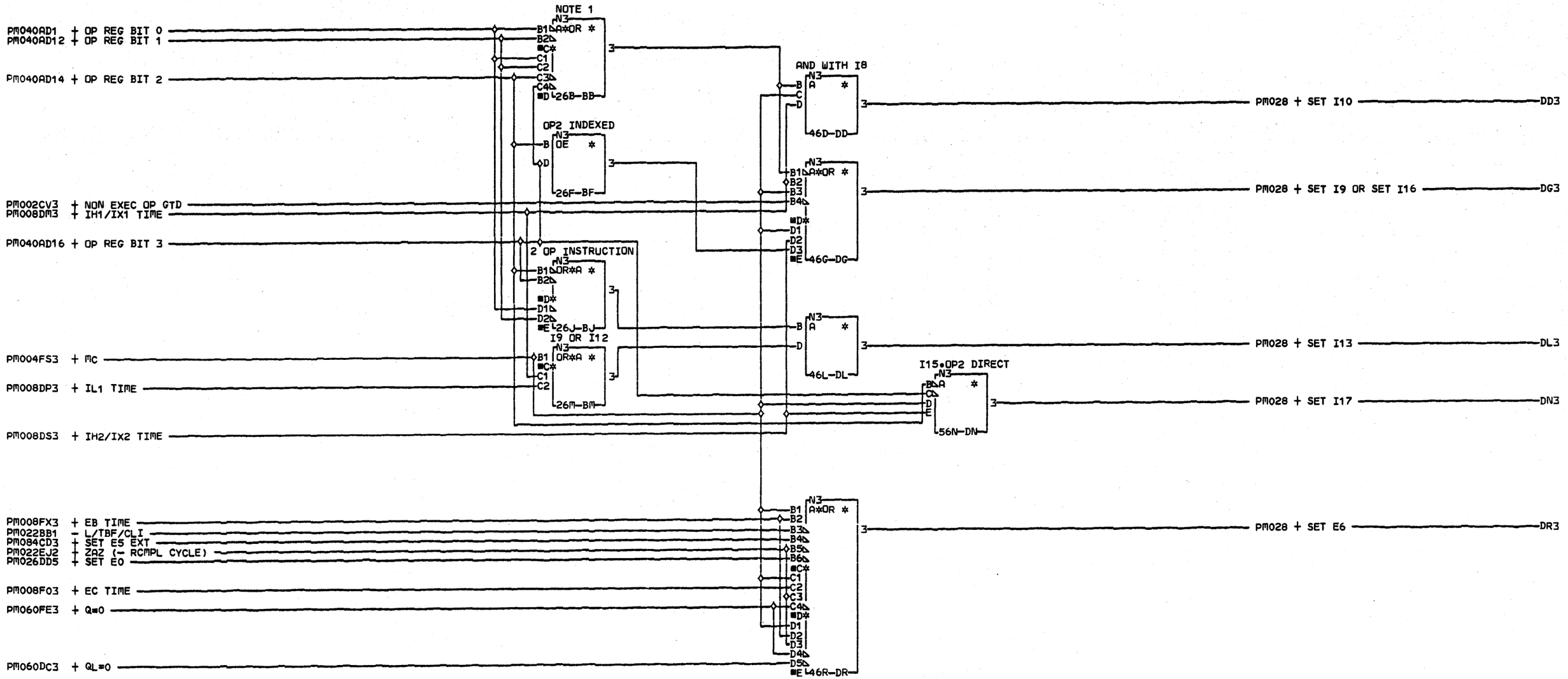
PN4237357 EC=832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FH

CID PIOFE JOB N5101128



COMMENTS

A1 NOTE 1: OP1 DIRECT OR
2 (NO OP1 AND OP2 DIRECT)

E

I TIME SET EQUATIONS
MSP SYS CTRL CD

PN4237358 EC832999 PEC832850

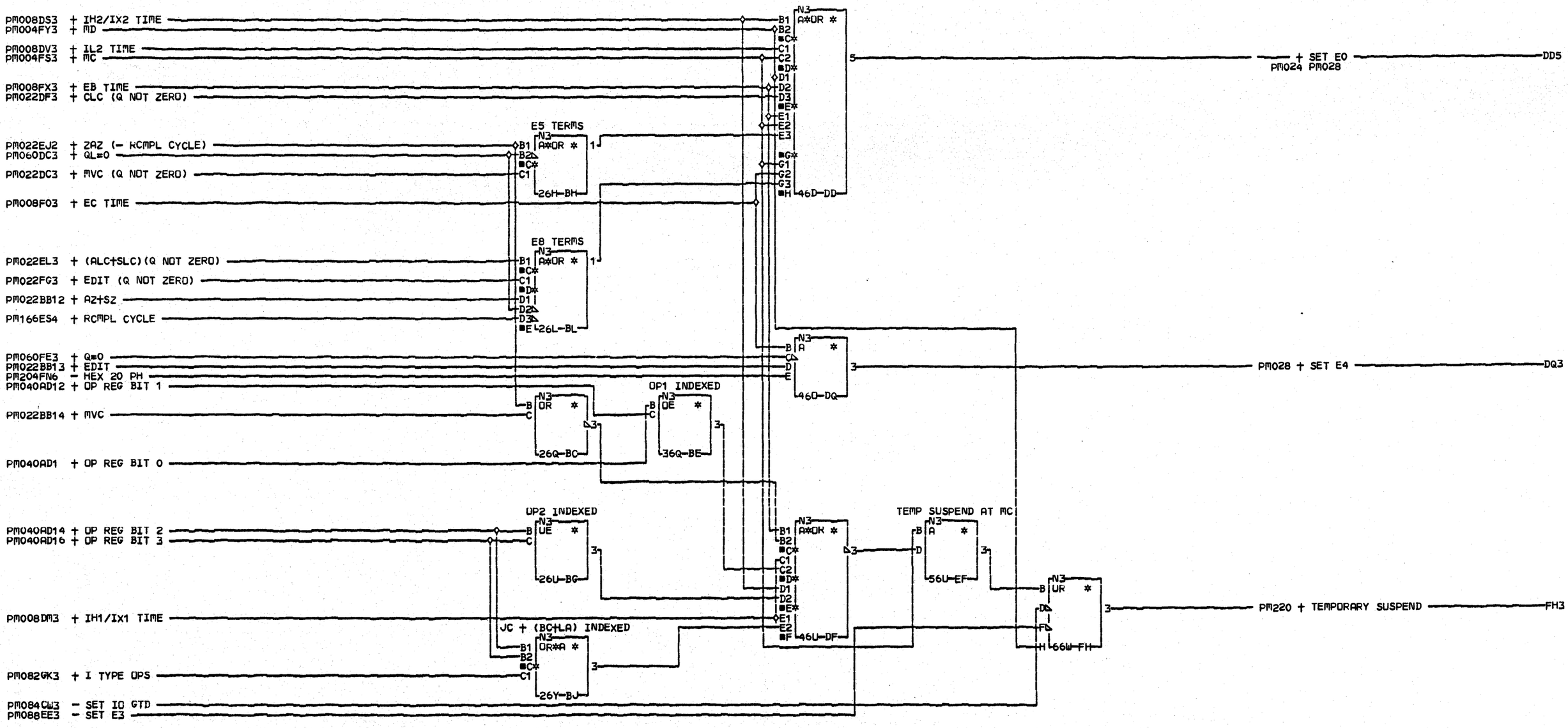
LOC=1A-A1N2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK DS

CID PIOFE JOB N5101128

PE024 0001



COMMENTS
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E TIME SET EQUATIONS
MSP SYS CTRL CD

PN4237359 EC832999 PEC832850

LOC=1A-A1N2

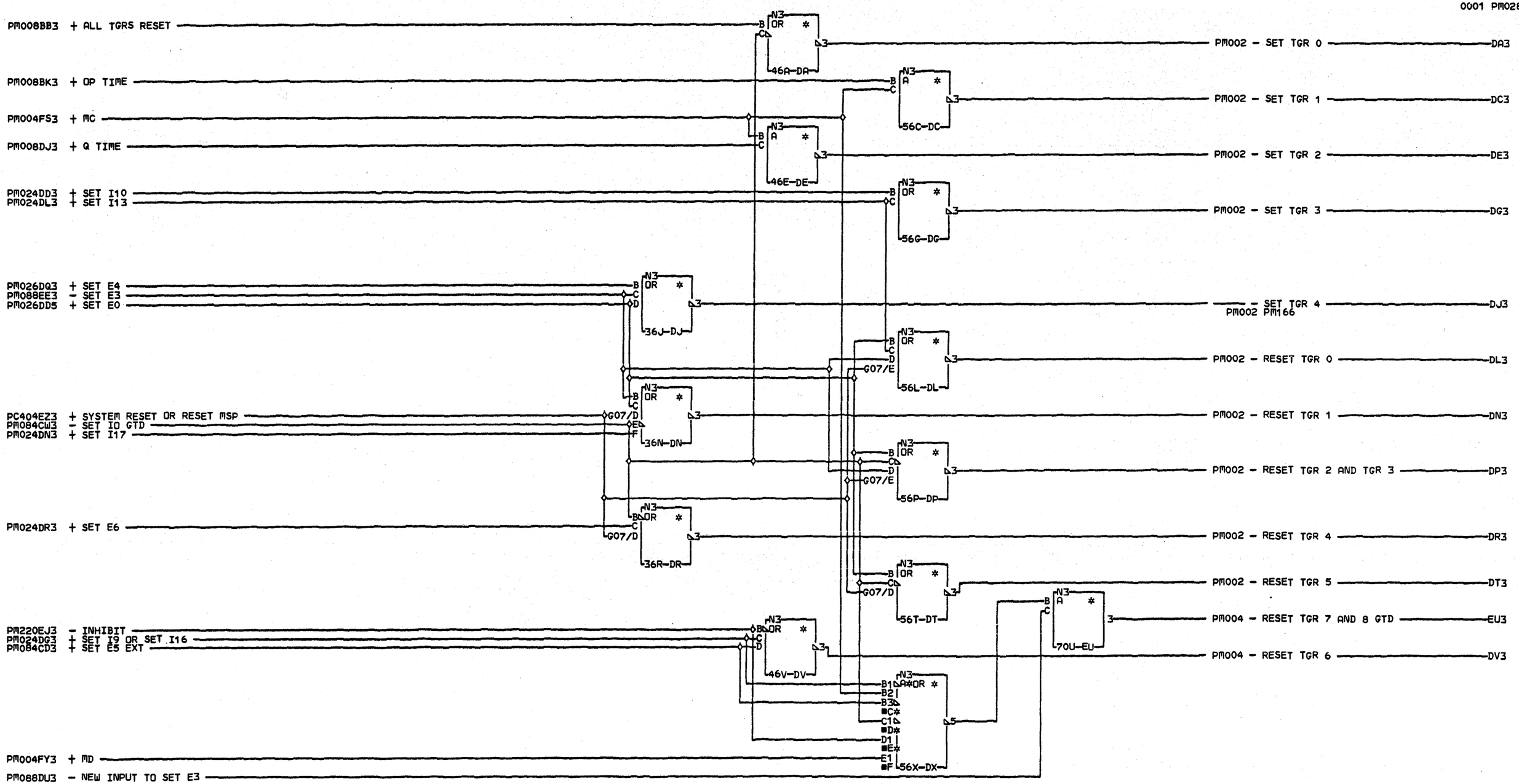
USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FI

CID PIOFE JOB K0201021

PE026 0001

PE026 0001



COMMENTS

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CLOCK TRIGGER EQUATIONS
MSP SYS CTRL CD

PN4237360 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=28APR78 1436

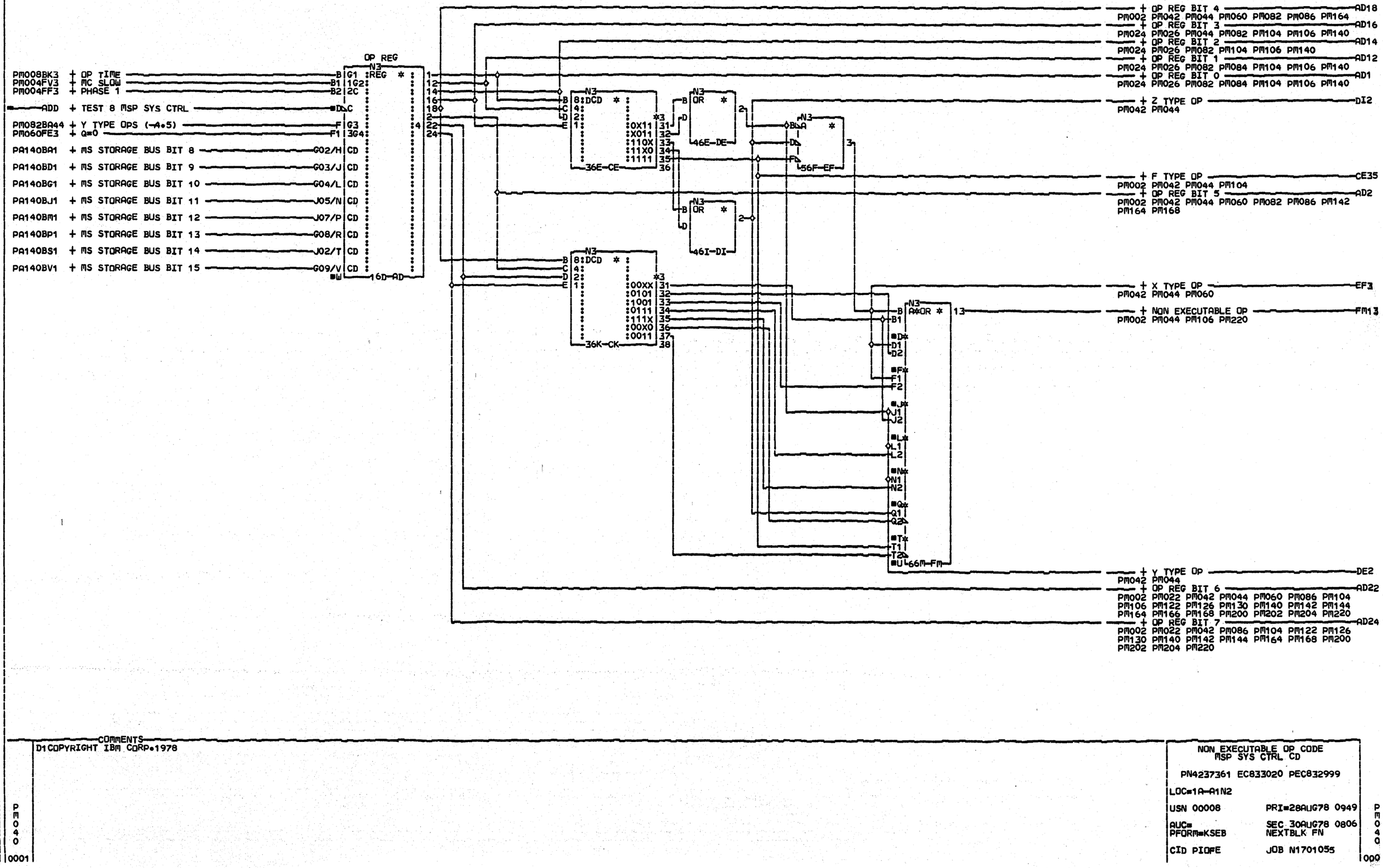
AUC= SEC
PFORM=KSEB NEXTBLK EV

CID PIOFE JOB N5101128

PM028 0001

E

PM028 0001



COMMENTS

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NON EXECUTABLE OP CODE
MSP SYS CTRL CD

PN4237361 EC833020 PEC832999

LOC=1A-A1N2

USN 00008 PRI=28AUG78 0949

AUC= SEC 30AUG78 0806
PFORM=KSEB NEXTBLK FN

CID PIOFE JOB N1701055

PE040 0001

PE040 000

PM060BC7 + Q=6
PM040AD18 + OP REG BIT 4
PM060BC6 + Q=7
PM040AD22 + OP REG BIT 6
PM166ES4 + RCMPL CYCLE
PM040CE35 + F TYPE OP
PM040EF3 + X TYPE OP
PM044AB5 + MSP CLOCKS STOPPED
PM040DE2 + Y TYPE OP
PM166EC4 + 1ST CYCLE TRIGGER
PM060BC8 + Q=5
PM040AD2 + OP REG BIT 5
PM040AD24 + OP REG BIT 7
PM164EF5 + PSR BIT 6 INT
PC100DT3 + SENSE LOAD MSP REGISTERS
PM300DV81 + MSAR BIT 15
PM040DI2 + Z TYPE OP
PM008BK3 + OP TIME

N3 OE * B D 3 16B-AV

N3 BLA*OR *
B1 B2 B3 B4
D D1 D2 D3 D4
F F1 F2 F3 F4 F5
H H1 H2 H3 H4
J J1 J2 J3 J4
L L1 L2 L3 L4
N N1 N2 N3 N4 N5
P P1 P2 P3 P4 P5
R R1 R2
S09/R2
M03/R4
*SL26G-BK

4/P05

N3 BLA*OR *
B1 B2 B3
D D1 D2 D3 D4
F F1 F2 F3 F4
H H1 H2 H3 H4
J J1 J2 J3
L L1 L2 L3
N N1 N2 N3
*O L50N-DN

4/P04

N3 BLA*OR *
B1 B2 B3
D D1 D2 D3 D4
F F1 F2 F3 F4
H H1 H2
J J1 J2
L L1 L2
*M L50B-DB

4/G13

N3 BLA*OR *
B1 B2 B3 B4
D D1 D2 D3 D4
F F1 F2 F3 F4 F5
H H1 H2 H3
J J1 J2 J3
L L1 L2 L3
N N1
S09/N2
*O L70H-FH

4/M04

PM420 + MS GT SEL BIT 3 — BK4
PM420 + MS GT SEL BIT 0 — DB4
PM420 + MS GT SEL BIT 2 — FH4
PM420 + MS GT SEL BIT 1 — DN4

COMMENTS
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E

MS GT SEL BITS
MSP SYS CTRL CD

PN4237362 EC832999 PEC832850

LOC=1A-A1N2

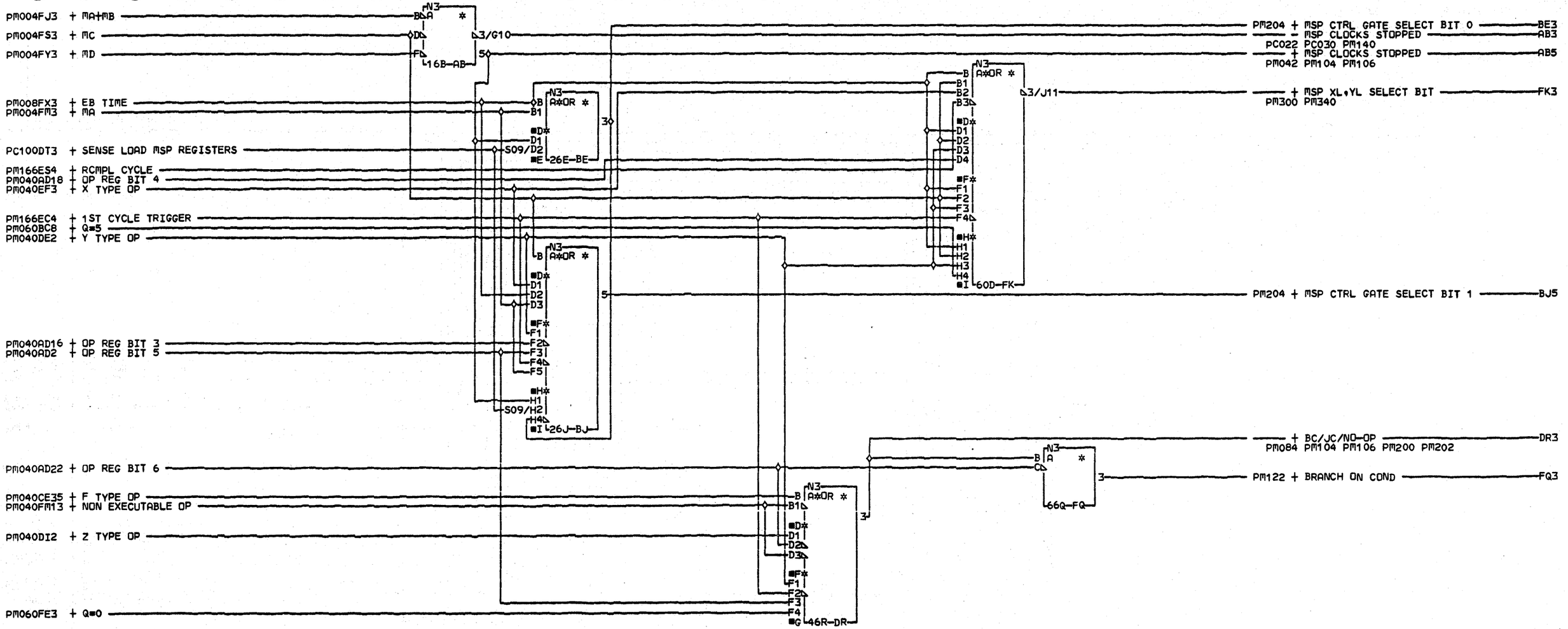
USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FO

CID PIOFE JOB N5101128

PM042 0001

PM042 0001



COMMENTS

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MSP CTR GT BITS
BC/JC/NO-OP
MSP SYS CTRL CD
PN4237363 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FR

CID PIOFE JOB N5101128

PC310DE3 - POR OR RESET KEY
BCC + TEST 9 MSP SYS CTRL
PM204BK3 + QB BIT (0-7,P)
(0-7)PM204
PM008F03 + EC TIME
PM166ES4 + RCMPL CYCLE
PM004FK3 + PHASE 2
PM008DJ3 + Q TIME
PM004FS3 + MC
PM004FF3 + PHASE 1
PM008FX3 + EB TIME
PM166EC4 + 1ST CYCLE TRIGGER
PM004CKD + TEST 4 MSP SYS CTRL
PM040AD2 + OP REG BIT 5
PM040EF3 + X TYPE OP
PM040AD18 + OP REG BIT 4
PM040AD22 + OP REG BIT 6
PM008FR3 + EA TIME
PM004FM3 + MA
PM004FP3 + MB

Q REG LO
G11/B N3 R REG *
C C1
C1 C1
C2 -1
C3 -1
D*
(7)D1 C1D:1
(6)D2 C1D:2
(5)D3 C1D:4
(4)D4 C1D:8
E* 26C-BC

Q REG HI
G12/B N3 R REG *
C C1
C1 C1
C2 -1
C3 -1
D*
(3)D1 C1D:16
(2)D2 C1D:32
(1)D3 C1D:64
(0)D4 C1D:128
E* 26J-BJ

QL=0
N3 1:DCD * 2: 4: 8: :0000
B C D E
46C-DC

QH=0
N3 1:DCD * 2: 4: 8: :0000
B C D E
56J-DJ

N3 A * 56E-FE

N3 N * 66C-FG

N3 A * 76J-FA

N3 A*OR * 26O-BB

N3 FF * C CD R E 36Q-CD

N3 A*OR * 26T-BG

N3 A * 36V-CI

N3 A*OR * 60W-EP

N3 A*OR * B B1 B2 B3 B4 B5 C* D D1 D2 D3 D4 D5 E* F F1 F2 F3 F4 F5 G 68N-EC

N3 A * 76Z-FR

+ Q=4 — BC9
PM104 PM106 PM200 PM202 PM240
+ Q=6 — BC7
PM042 PM104 PM106 PM200 PM240
+ Q=7 — BC6
PM042 PM104 PM106 PM200 PM240
- Q=0 — FG3
PM022 PM240
+ QL=0 — DC3
PM024 PM026 PM088 PM144
+ Q=0 — FE3
PM024 PM026 PM040 PM044 PM084 PM088 PM166 PM168 PM200 PM202
+ Q=5 — BC8
PM042 PM044 PM104 PM106 PM142 PM164 PM200 PM240
PM240 + Q=1 — BJ8
+ Q=3 — BJ6
PM106 PM200 PM202 PM240
+ Q=2 — BJ7
PM106 PM200 PM240

COMMENTS
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E

Q=0
MSP SYS CTRL CD
PN4237364 EC832999 PEC832850
LOC=1A-A1N2
USN 00008 PRI=28APR78 1436
AUC= SEC
PFORM=KSEB NEXTBLK FS
CID PIOFE JOB N5101128

PM060 0001
PM060 0001

PM040AD1 + OP REG BIT 0
PM040AD12 + OP REG BIT 1
PM040AD14 + OP REG BIT 2
PM040AD16 + OP REG BIT 3
PM040AD18 + OP REG BIT 4
PM040AD2 + OP REG BIT 5

SEE DECODE TABLE
N3
:DCD *
C 32:
D 16:
E 8:
F 4:
G 2:
H 1:
*4
66B-BA-*5

41 + X TYPE OPS (-4.5) BA41
PM022 PM086 PM104 PM122 PM126 PM130 PM140
PM144 PM164 PM166 PM168 PM202 PM204

42 + X TYPE OPS (4.-5) BA42
PM022 PM086 PM104 PM122 PM126 PM140 PM142
PM144 PM164 PM168 PM204 PM220

43 + X TYPE OPS (4.5) BA43
PM022 PM086 PM122 PM126 PM130 PM164 PM200

44 + Y TYPE OPS (-4.5) BA44
PM040 PM086 PM122 PM126 PM130 PM140 PM142
PM144 PM164 PM200 PM204

45 + Y TYPE OPS (4.-5) BA45
PM086 PM104 PM122 PM130 PM140 PM142 PM202
PM204

46 + Y TYPE OPS (4.5) BA46
PM086 PM104 PM122 PM130 PM140 PM142

47
48 + F TYPE OPS BA48
49 PM088 + (OP2.OP3) BA49

F OR Z TYPE
N3
B OR *
D
3 PM026 + I TYPE OPS GK3
76K-GK

DECODE TABLE

D

OP REG BIT:	0	1	2	3	4	5	DECODE
	0	*	0	*	0	1	X TYPE OP (-4.5)
	0	*	0	*	1	0	X TYPE OP (4.-5)
	0	*	0	*	1	1	X TYPE OP (4.5)
	0	*	*	0	0	1	X TYPE OP (-4.5)
	0	*	*	0	1	0	X TYPE OP (4.-5)
	0	*	*	0	1	1	X TYPE OP (4.5)
	*	0	0	*	0	1	X TYPE OP (-4.5)

26H-BH

D

	*	0	0	*	1	0	X TYPE OP (4.-5)
	*	0	0	*	1	1	X TYPE OP (4.5)
	*	0	*	0	0	1	X TYPE OP (-4.5)
	*	0	*	0	1	0	X TYPE OP (4.-5)
	*	0	*	0	1	1	X TYPE OP (4.5)
	0	*	1	1	0	1	Y TYPE OP (-4.5)
	0	*	1	1	1	0	Y TYPE OP (4.-5)

26N-BO

D

	0	*	1	1	1	1	Y TYPE OP (4.5)
	*	0	1	1	0	1	Y TYPE OP (-4.5)
	*	0	1	1	1	0	Y TYPE OP (4.-5)
	*	0	1	1	1	1	Y TYPE OP (4.5)
	1	1	1	*	0	0	Z TYPE OP
	1	1	0	1	0	0	Z TYPE OP
	1	1	*	*	*	*	I TYPE OPS
	1	1	1	1	*	*	F TYPE OPS
	*	*	1	1	*	*	(OP2.OP3)

* DO NOT CARE - I AND F TYPE OPS MAY BE HIGH TOGETHER
26S-BV

COMMENTS
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DECODER
MSP SYS CTRL CARD

PN4237365 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=25APR78 1639

AUC= SEC
PFORM=KSEB NEXTBLK GL

CID PIOFE JOB N5101128

PE082 0001

PM008FX3 + EB TIME
PM086DE57 + CLC
PM086DE58 + CLI
PM086DE52 + ADD
PM166EC4 + 1ST CYCLE TRIGGER
PM004FY3 + MD
PM086DE49 + STORE
PM086DE54 + (TBN+TBF)
PM086DE59 + (CLC+CLI)
PM004FM3 + MA
PM040AD1 + OP REG BIT 0
PM008F03 + EC TIME
PM008DM3 + IH1/IX1 TIME
PM086DE46 + ITC
PM164EL4 + SIGNIFICANT DIGIT
PM086DE45 + EDIT
PM204FN6 - HEX 20 PH
PM060FE3 + Q=0
PM004FS3 + MC
PM200DZ3 + BC/JC/NO-OP-IH1/IX1-COND-MET
PM086DE56 + MVI
PM004FP3 + MB
PM044DR3 + BC/JC/NO-OP
PM086DE47 + MVC
PM166ES4 + RCMPL CYCLE
PM086DE41 + ZAZ
PM086DE53 + (L+S)
PM008DP3 + IL1 TIME
PM086DE48 + ED + ITC + ALC + SLC
PM002CV3 + NON EXEC OP GTD
PM008FU3 + EB TIME RPTD
PM040AD12 + OP REG BIT 1
PM086DE43 + DEC OP
PM002BT3 + MSP LOAD PMR CMD
PM088EL3 + SET IO E8 TERM

16B-AB
36B-BA
56B-CA
36E-BD
56F-CD
70G-FG
56J-CG
16N-AN
36P-BO
46N-CJ
70M-DM
16V-BF
56W-CW
70T-DU

+ SET E5 EXT — CD3
PM024 PM028

PM088 + INHIBIT E3 — DM5

- SET IO GTD — CW3
PM026 PM028 PM220

COMMENTS
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SET I/O TERMS
MSP SYS CTRL CARD

PN4237366 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK FH

CID PIOFE JOB N5101128

PE084 0001

PM082BA41 + X TYPE OPS (-4.5) — C
PM082BA42 + X TYPE OPS (4.-5) — D
PM082BA43 + X TYPE OPS (4.5) — E
PM082BA44 + Y TYPE OPS (-4.5) — F
PM082BA45 + Y TYPE OPS (4.-5) — G
PM082BA46 + Y TYPE OPS (4.5) — H
PM040AD18 + OP REG BIT 4 — I
PM040AD2 + OP REG BIT 5 — J
PM040AD22 + OP REG BIT 6 — K
PM040AD24 + OP REG BIT 7 — L

SEE DECODE TABLE

N3 DCD *

*4
41 — + ZAZ — DE41
PM084 PM088
42 — PM088 + (AZ+SZ) — DE42
43 — PM084 + DEC OP — DE43
44 — PM088 + MVX — DE44
45 — PM084 + EDIT — DE45
46 — + ITC — DE46
PM084 PM088
47 — PM084 + MVC — DE47
48 — PM084 + ED + ITC + ALC + SLC — DE48
49 — + STORE — DE49
*5
PM084 PM088
51 — PM088 + LOAD — DE51
52 — + ADD — DE52
PM084 PM088
53 — PM084 + (L+S) — DE53
54 — PM084 + (TBN+TBF) — DE54
55 — PM088 + (SBN+SBF) — DE55
56 — PM084 + MVI — DE56
57 — PM084 + CLC — DE57
58 — PM084 + CLI — DE58
59 — PM084 + (CLC+CLI) — DE59

66B-DE-

DECODE TABLE

D

CODE	X OP -4.5	X OP 4.-5	X OP 4.5	Y OP -4.5
ZAZ	1	0	0	0
AZ+SZ	1	0	0	0
DEC OP	1	0	0	0
MVX	0	1	0	0
EDIT	0	1	0	0
ITC	0	1	0	0

10N-AJ

N3

Y OP 4.-5	Y OP 4.5	OP BIT 4	OP BIT 5	OP BIT 6	OP BIT 7
0	0	0	1	0	0
0	0	0	1	1	*
0	0	0	1	*	*
0	0	1	0	0	0
0	0	1	0	1	0
0	0	1	0	1	1

42N-BJ

D

MVC	0	0	1	0
ED+ITC+ALC+SLC	0	*	*	0
STORE	0	0	0	1
LOAD	0	0	0	1
ADD	0	0	0	1
L+S	0	0	0	1

10S-AQ

N3

0	0	1	1	0	0
0	0	1	*	1	*
0	0	0	1	0	0
0	0	0	1	0	1
0	0	0	1	1	0
0	0	0	1	0	*

42S-BQ

D

TBN+TBF	0	0	0	0
SBN+SBF	0	0	0	0
MVI	0	0	0	0
CLC	0	0	1	0
CLI	0	0	0	0
CLC+CLI	0	0	*	0

10X-AX

N3

1	0	1	0	0	*
1	0	1	0	1	*
0	1	1	1	0	0
0	0	1	1	0	1
0	1	1	1	0	1
0	*	1	1	0	1

42X-BX

COMMENTS
D1COPYRIGHT IBM CORP.1978

DECODER
MSP SYS CTRL CARD

PN4237367 EC=832850 PEC832742F

LOC=1A-A1N2

USN 00006 PRI=09SEP77 0040

AUC= SEC
PFORM=KSEB NEXTBLK DF

CID PIOFE JOB K0200817

PE086 0001

PM166EC4 + 1ST CYCLE TRIGGER
PM004FY3 + MD
PM008F03 + EC TIME
PM086DE52 + ADD
PM008FR3 + EA TIME
PM060FE3 + Q=0
PM166BU3 + RCMPL SIGNAL
PM086DE41 + ZAZ
PM086DE51 + LOAD
PM086DE49 + STORE
PM084DM5 + INHIBIT E3
PM082BA49 + (OP2•OP3)
PM008DP3 + IL1 TIME
PM086DE46 + ITC
PM204EN3 + PSR BIT 7
PM008FX3 + EB TIME
PM086DE44 + MVX
PM060DC3 + QL=0
PM166ES4 + RCMPL CYCLE
PM086DE55 + (SBN+SBF)
PM380CL3 + AU• ALU CARRY OUT GATED
PM168GP3 + COMPLEMENT LTH
PM086DE42 + (AZ+SZ)
PM002BT3 + MSP LOAD PMR CMD
PM008DM3 + IH1/IX1 TIME
PM004FS3 + MC

16C-AC
36C-BD
36G-BH
36K-CK
46N-DN
26Q-AG
70D-EE
70Q-EL
56U-DU

- SET E3 - EE3
PM002 PM026 PM028

PM028 - NEW INPUT TO SET E3 - DU3

PM084 + SET IO E8 TERM - EL3

COMMENTS
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E

SET E3-SET IO E8 TERM
MSP SYS CTRL CARD

PN4237368 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK EM

CID PIOFE JOB N5101128

PM088 0001

PM044AB5 + MSP CLOCKS STOPPED
PM300DV51 + MSAR BIT 12

PM004FJ3 + MA+MB
PM008FX3 + EB TIME
PM004FP3 + MB
PM004FS3 + MC
PM004FY3 + MD

E4+E5+E5X
A1 N3
■B* OR* A *
B1
B2
B3
3
26C-BC

A1 N3
A2 A * 1
36F-CF

PM060BC9 + Q=4
PM060BC8 + Q=5
PM060BC7 + Q=6
PM060BC6 + Q=7

A1 N3
A2 OR * 1
A3
A4
26H-BH

PM002CV3 + NON EXEC OP GTD
PM008DP3 + IL1 TIME
PM082BA41 + X TYPE OPS (-4.5)
PM200DZ3 + BC/JC/NO-OP-IH1/IX1-COND-MET

LOAD ADDRESS
PM040CE35 + F TYPE OP
PM040AD1 + OP REG BIT 0
PM040AD12 + OP REG BIT 1
PM040AD22 + OP REG BIT 6

A1 N3
A2 A * 3
A3
A4
A5
26L-BL

PM008F03 + EC TIME
PM082BA42 + X TYPE OPS (4.-5)
PM008DS3 + IH2/IX2 TIME
PM040AD24 + OP REG BIT 7

PM040AD14 + OP REG BIT 2
PM040AD16 + OP REG BIT 3

A1 N3
A2 XOR * 1
16Q-AQ

A1 N3
A2 A*OR *
■B*
B1
B2
■C*
C1
C2
C3
■D
3
36P-BP

PM166ES4 + RCMPL CYCLE
PM008DM3 + IH1/IX1 TIME

PM044DR3 + BC/JC/NO-OP

+BC
A1 N3
A2 A *
3
36T-BT

PM166EC4 + 1ST CYCLE TRIGGER

PM008BK3 + OP TIME
PM004FM3 + MA
PM082BA46 + Y TYPE OPS (4.5)
PM082BA45 + Y TYPE OPS (4.-5)

A1 N3
A2 A*OR *
A3
A4
■B*
B1
B2
■C
3
36Y-CY

PM008DJ3 + Q TIME

A1 N3
A2 A*OR *
A3
A4
■B*
B1
B2
■C*
C1
C2
C3
■D
5
56Y-EY

A1 N3
A2 A*OR *
A3
A4
A5
■B*
B1
B2
B3
B4
■C*
C1
C2
C3
■D*
D1
D2
D3
■E
70N-EP

A1 N3
A2 A*OR *
A3
■B*
B1
B2
B3
■C*
C1
C2
C3
C4
■D*
D1
■E*
E1
■F
5
76X-FW

P11/A2 A*OR *
■B*
B1
■C*
C1
■D*
D1
■E*
E1
E2
E3
■F*
F1
F2
F3
■G*
G1
G2
G3
■H*
H1
H2
H3
■J*
J1
J2
J3
■K*
K1
K2
K3
K4
■L*
L1
L2
L3
■M
60A-DA

3/P12 PM300 + LSR SELECT BIT 1 DA3

D
SEE LSR SELECTION CHART ON PAGE PM106
68F-EF

PM106 + LA BL3

5 PM106 + COMMON TERM 1 EP5

PM106 + BC BT3

PM106 + COMMON TERM 3 EY5

PM106 + DIRECT 1ST OP CY3
PM106 PM126

PM106 + E4+E5+E5X BC3

5 PM106 + COMMON TERM 2 FW5

COMMENTS

LSR SELECT BIT 1
MSP SYS CTRL CARD

PN4237373 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK FX

CID PIOFE JOB N5101128

PE104 0001

PM104EP5 + COMMON TERM 1
PM104FW5 + COMMON TERM 2
PM004FJ3 + MA+MB
PM104EY5 + COMMON TERM 3
PM104BC3 + E4+E5+E5X
PM060BJ7 + Q=2
PM060BJ6 + Q=3
PM060BC9 + Q=4
PM060BC8 + Q=5
PM004FS3 + MC
PM044DR3 + BC/JC/NO-OP
PM040AD22 + OP REG BIT 6
PM004FY3 + MD
PM008DP3 + IL1 TIME
PM104BT3 + BC
PM044AB5 + MSP CLOCKS STOPPED
PM008BI3 + CYCLE TAG LINE 2
PM008DM3 + IH1/IX1 TIME
PM104CY3 + DIRECT 1ST OP
PM300DV61 + MSAR BIT 13
PM060BC7 + Q=6
PM040FM13 + NON EXECUTABLE OP
PM104BL3 + LA
PM060BC6 + Q=7
PM040AD14 + OP REG BIT 2
PM040AD16 + OP REG BIT 3
PM040AD1 + OP REG BIT 0
PM040AD12 + OP REG BIT 1
PM008DV3 + IL2 TIME
PM008FR3 + EA TIME
PM300DV71 + MSAR BIT 14

LSR SELECTION CHART

	LSR	SELECT	BIT
LSR	1	2	3
OP1	0	0	0
OP2	0	0	1
IAR	0	1	0
OP/Q	0	1	1
XR1	1	0	0
XR2	1	0	1
ARR	1	1	0
LCRR	1	1	1

16N-AN

26D-BD
36C-CC
46P-EP
56Q-FQ
46T-ET
46X-EX
66A-DA
68O-GN

3/M12 PM300 + LSR SELECT BIT 2 DA3
3/M13 PM300 + LSR SELECT BIT 3 GN3

COMMENTS
D1COPYRIGHT IBM CORP.1978

LSR SELECT BIT 2 AND 3
MSP SYS CTRL CARD

PN4237369 EC832999 PEC832850

LOC=1A-A1N2

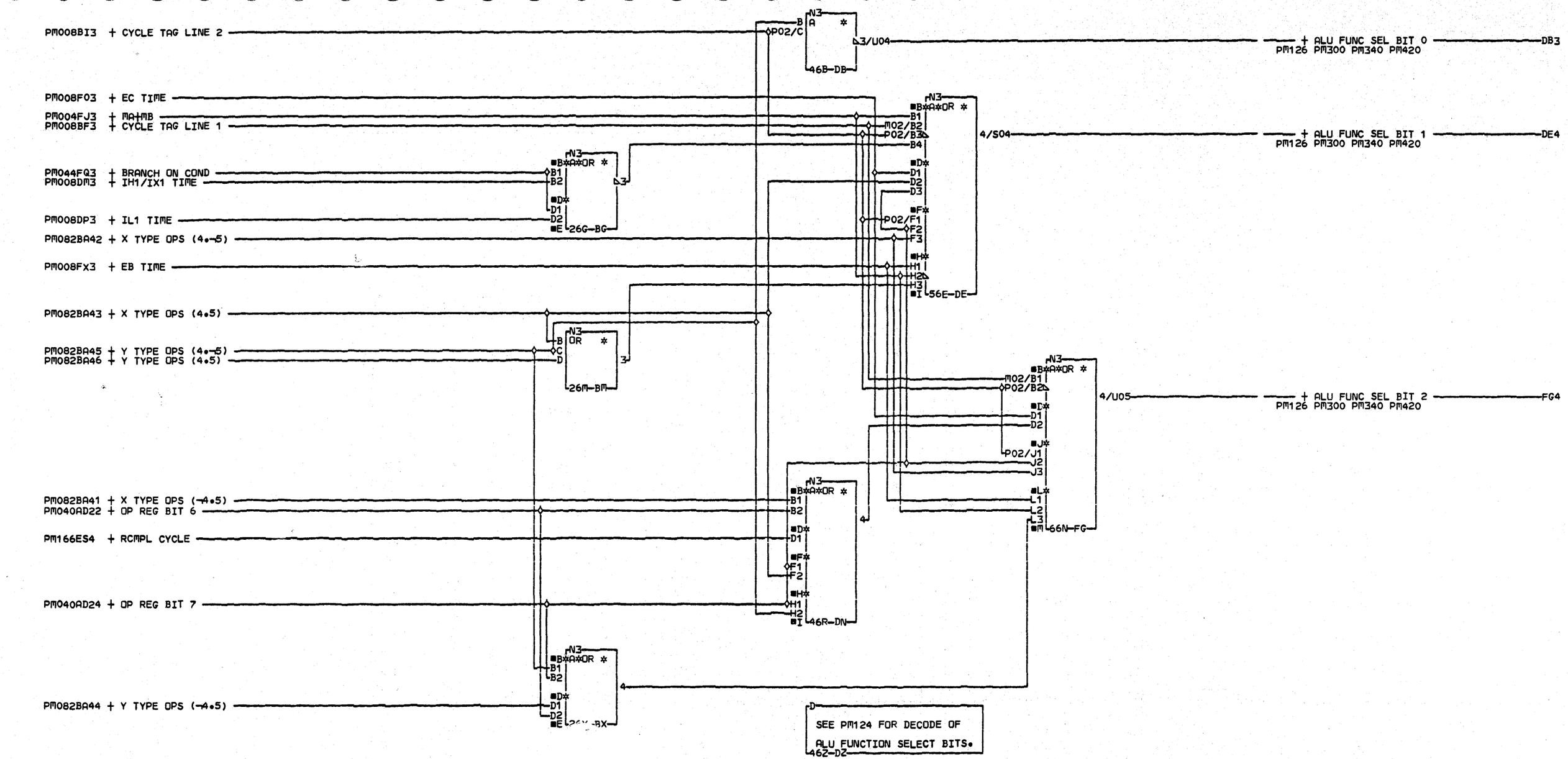
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GO

CID PIOFE JOB N5101128

PM106 0001

PM106



COMMENTS

D1 COPYRIGHT IBM CORP•1978

ALU FUNC SEL BITS 0 & 1
MSP SYS CTRL CD

PN4237370 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=03MAY78 1007

AUC= SEC
PFORM=KSEB NEXTBLK FH

CID PIOFE JOB N5101128

PE122 0001

DECODE OF ALU FUNCTION SELECT BITS
ALU FUNCTION SELECT BITS 0,1,2
BITS 0,1,2 ON EQUAL HEX 7
BITS 0,1,2 OFF EQUAL HEX 0
BIT 0=4, BIT 1=2, BIT 2=1

10A-AA

INSTR	TYPE	OP		OP			Q			IH1/IX1		
			I0	I1	I2	I3	I4	I5	I6	I7	I8	I9
ZAZ	X		7	7	5	7	7	5	7	7	5	5
AZ	X		7	7	5	7	7	5	7	7	5	5
SZ	X		7	7	5	7	7	5	7	7	5	5
MVX	X		7	7	5	7	7	5	7	7	5	5
ED	X		7	7	5	7	7	5	7	7	5	5
ITC	X		7	7	5	7	7	5	7	7	5	5
MVC	X		7	7	5	7	7	5	7	7	5	5
CLC	X		7	7	5	7	7	5	7	7	5	5
ALC	X		7	7	5	7	7	5	7	7	5	5
SLC	X		7	7	5	7	7	5	7	7	5	5
ST	Y		7	7	5	7	7	5	7	7	5	5
L	Y		7	7	5	7	7	5	7	7	5	5
A	Y		7	7	5	7	7	5	7	7	5	5
TBN	Y		7	7	5	7	7	5	7	7	5	5
TBF	Y		7	7	5	7	7	5	7	7	5	5
SBN	Y		7	7	5	7	7	5	7	7	5	5
SBF	Y		7	7	5	7	7	5	7	7	5	5
MVI	Y		7	7	5	7	7	5	7	7	5	5
CLI	Y		7	7	5	7	7	5	7	7	5	5
BC	Z		7	7	5	7	7	5	5	5	5	5
LA	Z		7	7	5	7	7	5	7	7	5	5
JC	F		7	7	5	7	7	5	7	7	5	5
PMR	F		7	7	5	7	7	5	7	7	5	*
SVC	F		7	7	5	7	7	5	7	7	5	*
XFER	F		7	7	5	7	7	5	7	7	5	*
RCMP	X		*	*	*	*	*	*	*	*	*	*

NOTE: RECOMPLEMENT (RCMP) ZAZ, AZ,SZ
*=NOT USED

10D-BA

IL1			IH2/IX2				IL2		
I10	I11	I12	I13	I14	I15	I16	I17	I18	I19
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	7	7	5	5	7	7	5
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
7	7	5	*	*	*	*	*	*	*
5	5	5	*	*	*	*	*	*	*
7	7	5	7	7	5	5	7	7	5
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*

36D-CA

EA			EB				EC		
E0	E1	E2	E3	E4	E5	E5X	E6	E7	E8
4	4	4	4	4	4	*	4	4	4
4	4	4	4	4	4	*	5	5	5
4	4	4	4	4	4	*	5	5	5
4	4	4	4	4	4	*	4	4	4
4	4	4	4	4	4	*	4	4	4
7	7	7	7	7	7	*	7	7	7
4	4	4	4	4	6	*	*	*	*
4	4	4	4	4	6	6	*	*	*
4	4	4	4	4	6	*	5	5	5
4	4	4	4	4	6	*	6	6	6
*	*	*	4	4	4	4	*	*	*
*	*	*	4	4	4	*	*	*	*
*	*	*	4	4	5	5	*	*	*
*	*	*	0	0	2	2	*	*	*
*	*	*	0	0	1	1	*	*	*
*	*	*	0	0	2	*	1	1	1
*	*	*	0	0	3	*	0	0	0
*	*	*	4	4	6	*	*	*	*
*	*	*	4	4	6	6	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	4	4	4	*	7	7	7

58D-DA

COMMENTS
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E

DECODE ALU FUNC SEL BITS
MSP SYS CTRL CD

PN4238223 EC=832999 PEC832850

LOC=1A-A1N2

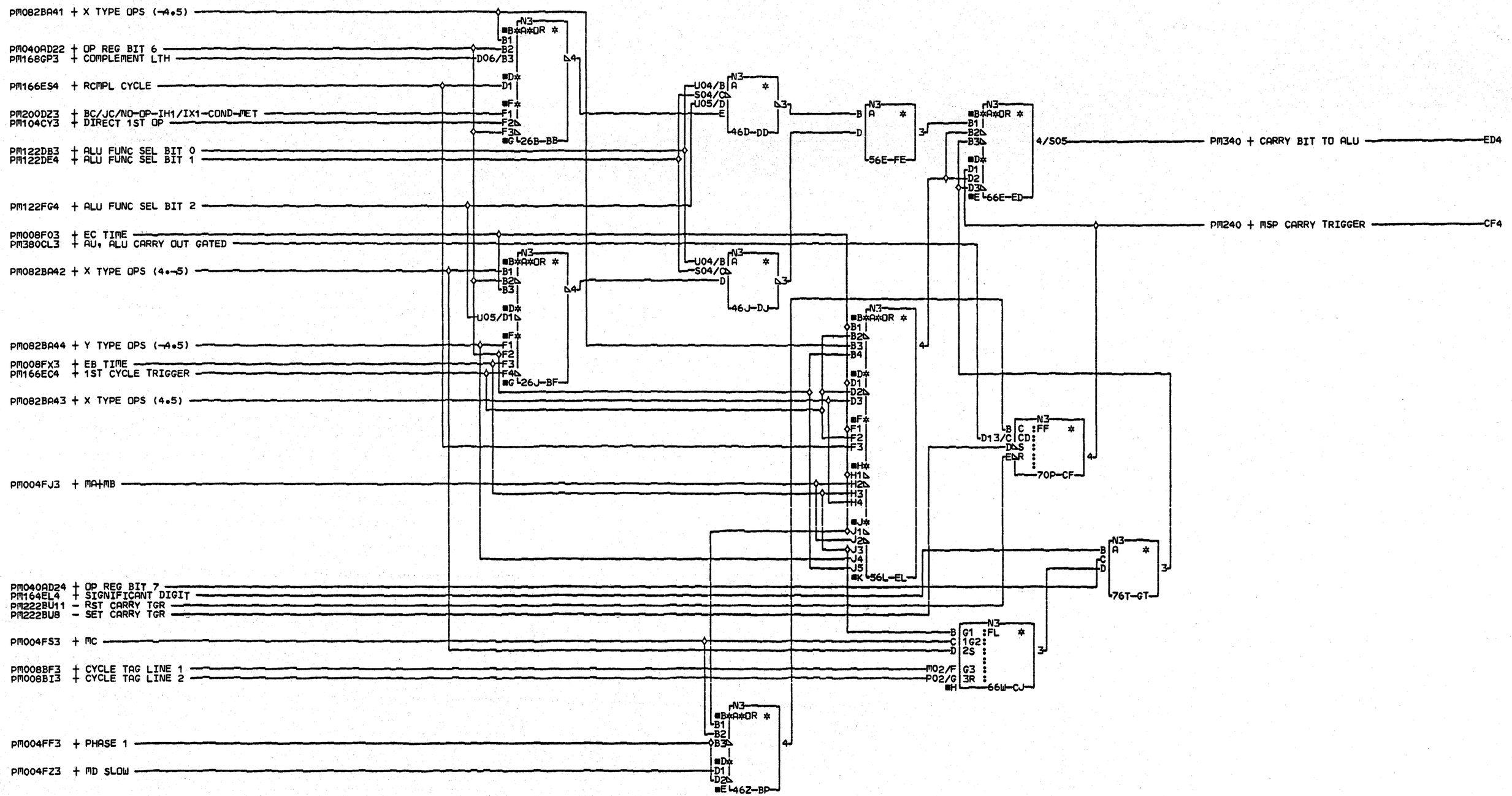
USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK DB

CID PIOFE JOB N5101128

PE124 0001

PE124 0001



COMMENTS

D1 COPYRIGHT IBM CORP.1978

CARRY BIT TO ALU
MSP SYS CTRL CD

PN4237371 EC832999 PEC832850

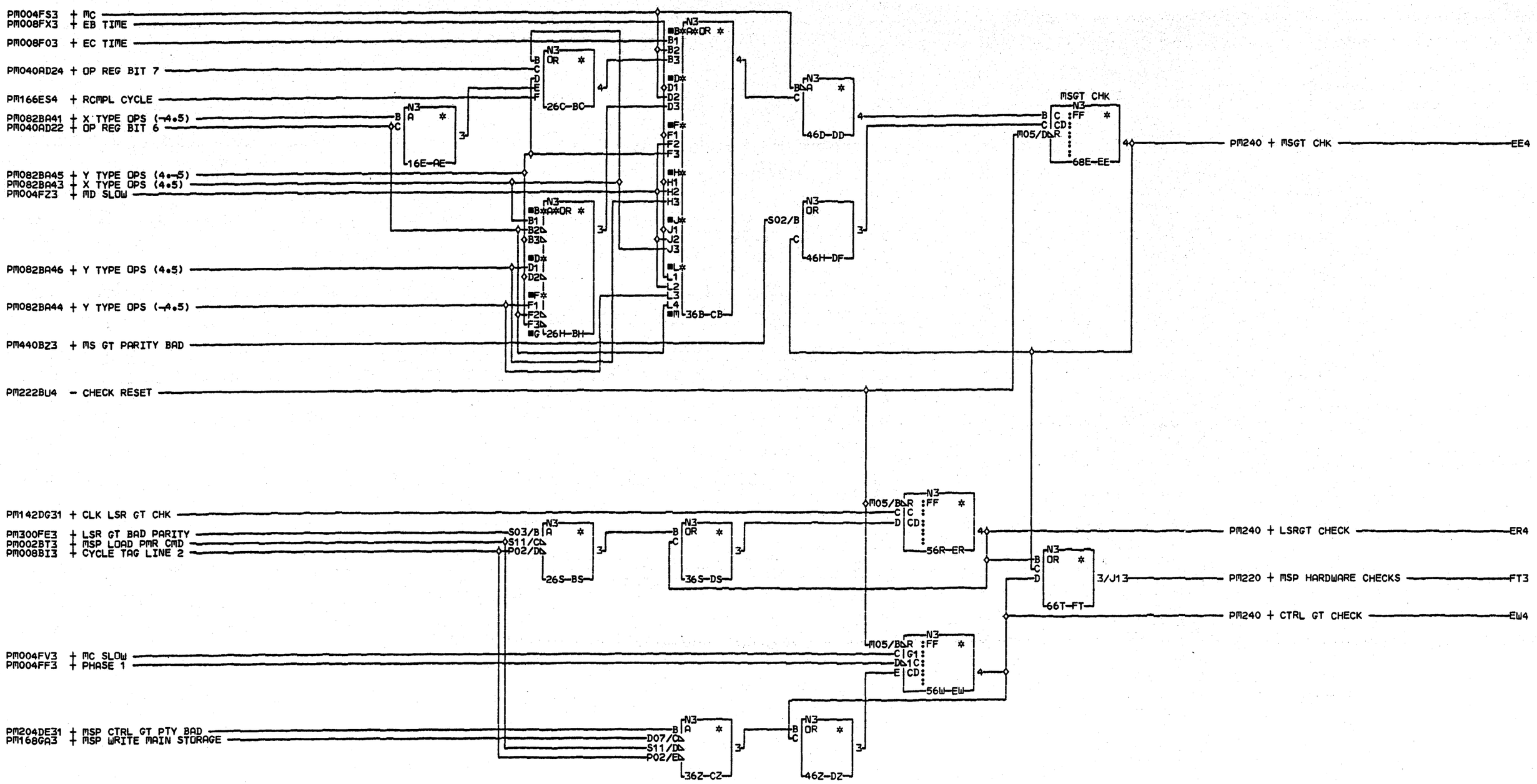
LOC=1A-A1N2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK GU

CID PIOFE JOB N5101128

PE126 0001



COMMENTS

D1COPYRIGHT IBM CORP.1978

E

MSGT CHK
MSP SYS CTRL CD

PN4237372 EC832999 PEC832850

LOC=1A-A1N2

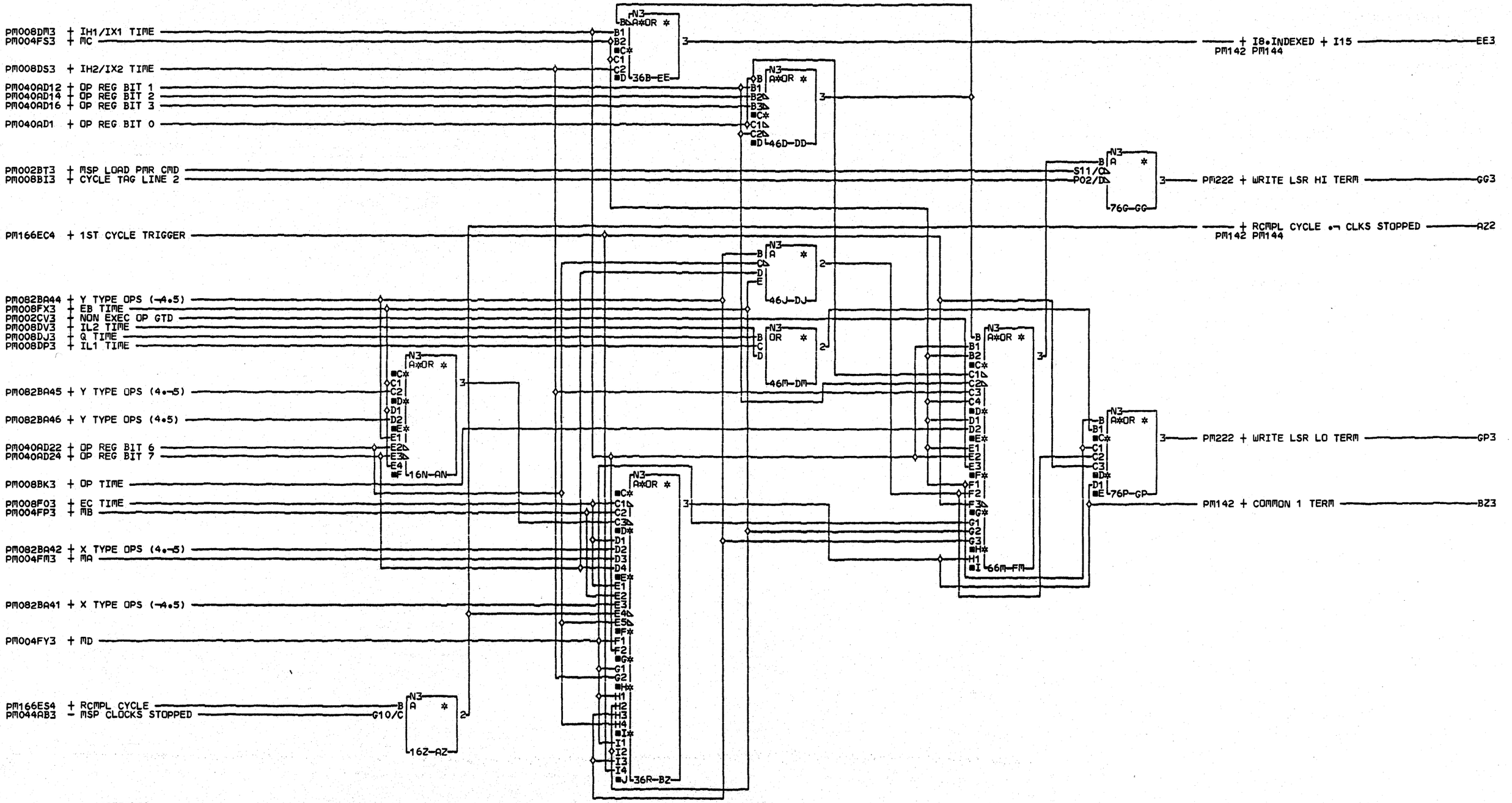
USN 00008 PRI=28APR78 1436

AUC= SEC 03MAY78 1007
PFORM=KSEB NEXTBLK FU

CID PIOFE JOB N5101128

PE130 0001

PE130 0001



COMMENTS

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PE140 0001

WRITE LSR TERMS
MSP SYS CTRL CARD

PN4237374 EC832999 PEC832850

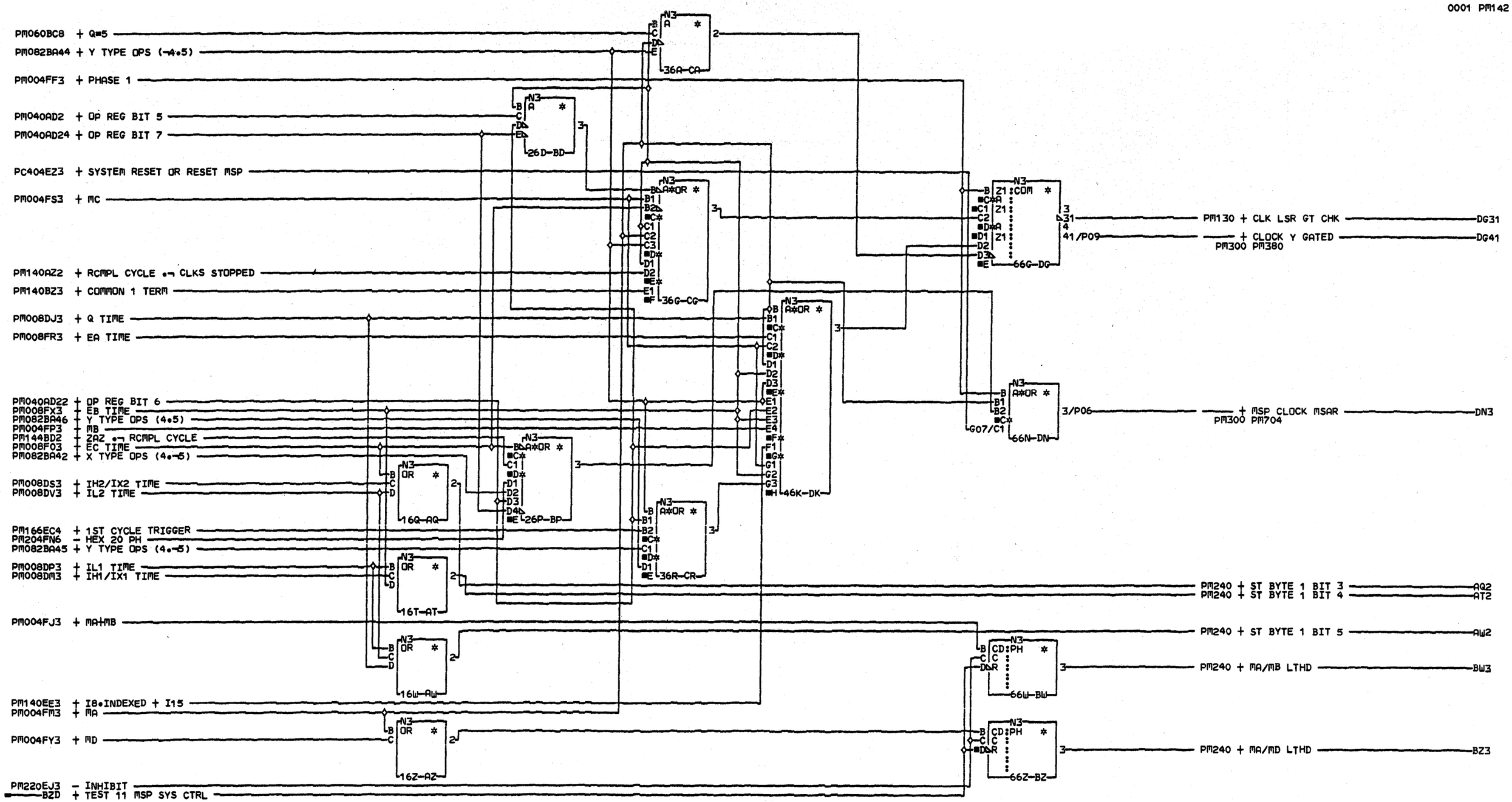
LOC=1A-A1N2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GQ

CID PIOFE JOB N5101128

PE140 0001



COMMENTS

D1COPYRIGHT IBM CORP.1978

E

CLOCK MSAR• Y AND LSR GT CHK
MSP SYS CTRL CARD

PN4237375 EC832999 PEC832850

LOC=1A-A1N2

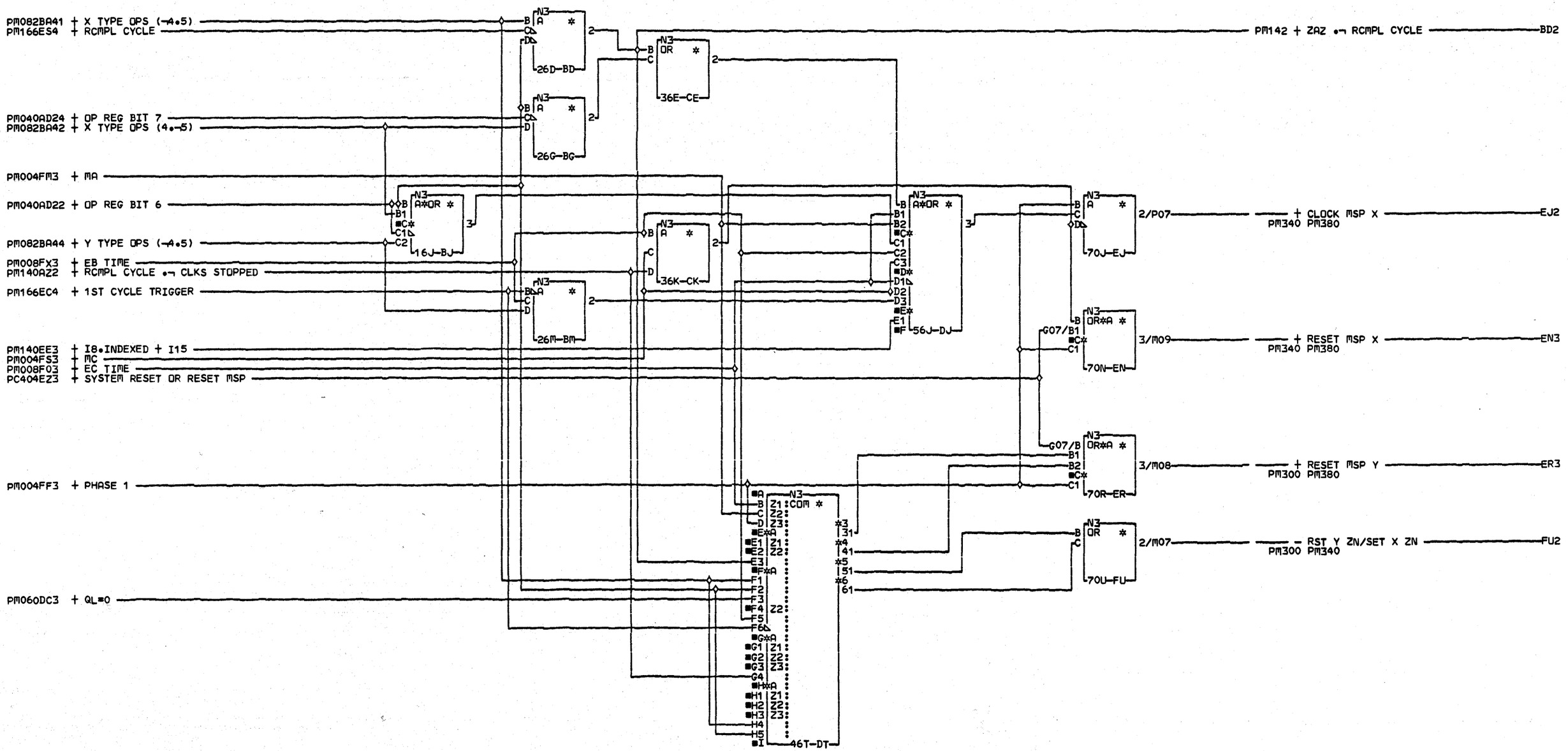
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK DO

CID PIOFE JOB N5101128

PM142 0001

PM142 0001



COMMENTS

D1 COPYRIGHT IBM CORP•1978

CLK X, RST X&Y
MSP SYS CTRL CARD

PN4237376 EC832999 PEC832850

LOC=1A-A1N2

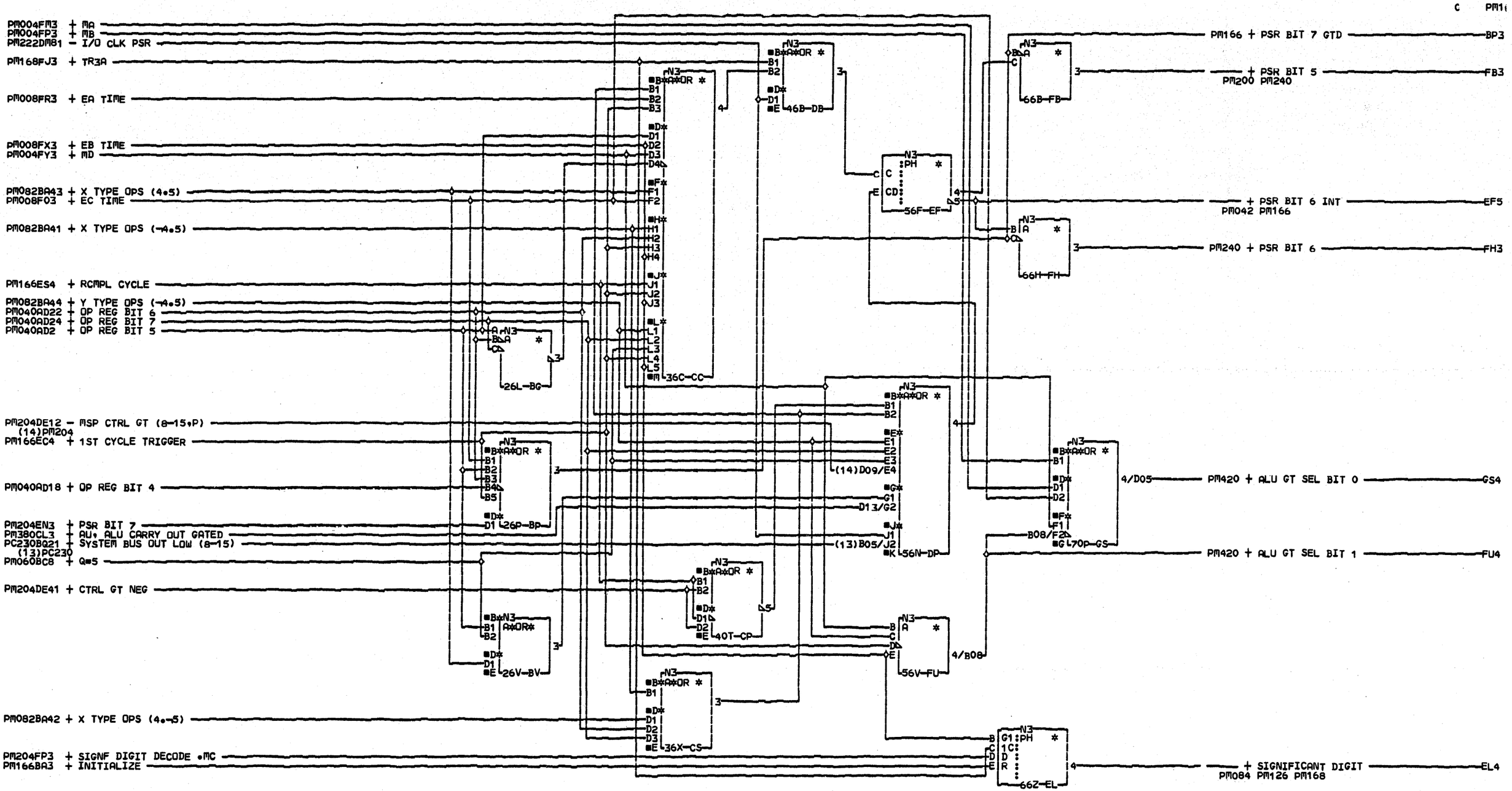
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK FV

CID PIOFE JOB N5101128

PM144 0001

PM144 0001



COMMENTS
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PSR BIT 5 & 6
MSP SYS CTRL CD

PN4237377 EC833020 PEC832999

LOC=1A-A1N2

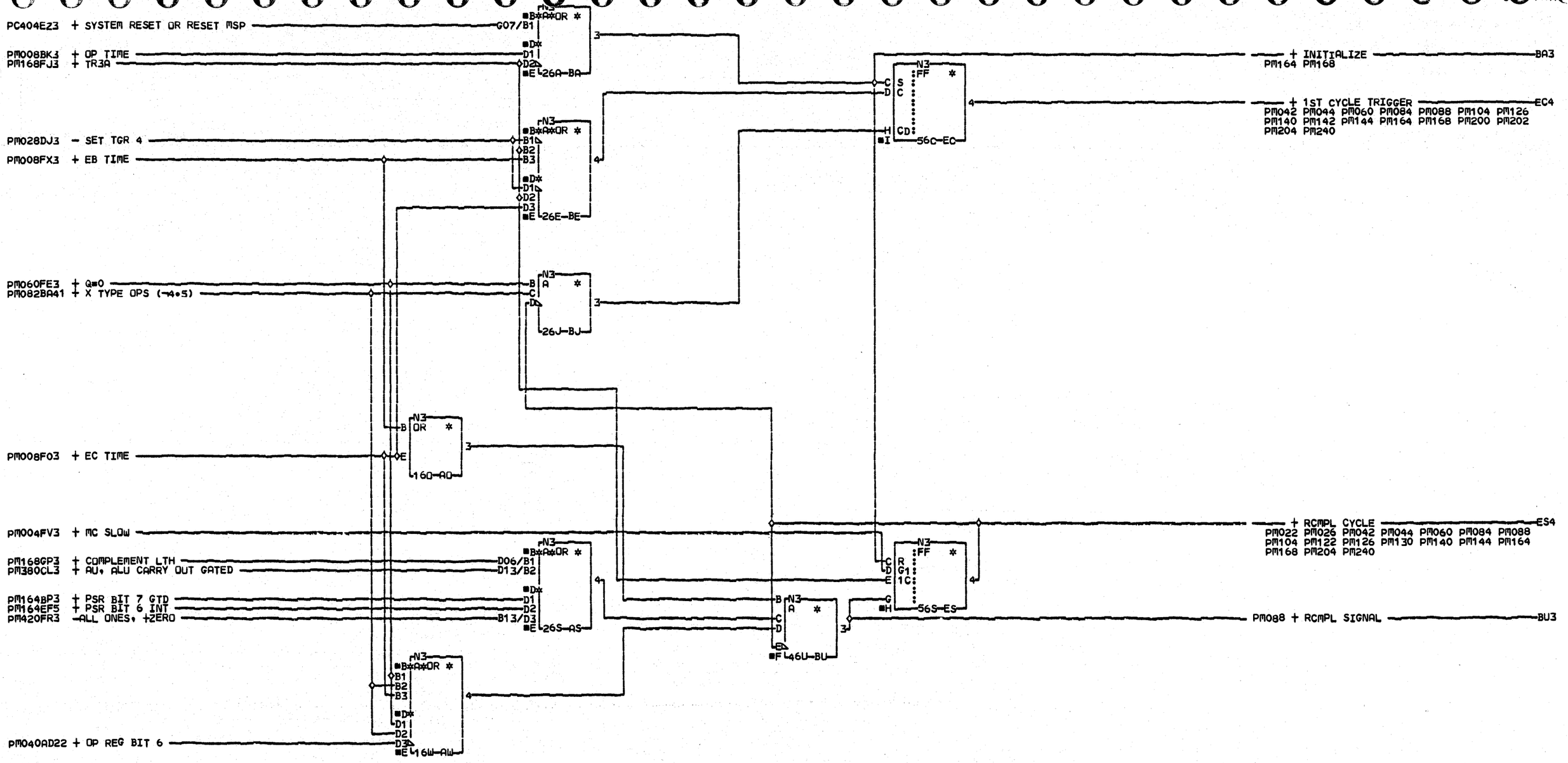
USN 00008 PRI=30AUG78 1245

AUC= SEC
PFORM=KSEB NEXTBLK GT

CID PIOFE JOB N1701055

PM164 0001

PM164 0001



COMMENTS

RCMPL, INITIALIZE, & 1ST CYCLE
MSP SYS CTRL CD

PN4237378 EC833020 PEC832999

LOC=1A-A1N2

USN 00008 PRI=30AUG78 1245

AUC= SEC
PFORM=KSEB NEXTBLK ET

CID PIOFE JOB N1701055

PM004FM3 + MA
PM004FP3 + MB
PM040AD2 + OP REG BIT 5
PM082BA42 + X TYPE OPS (4.-5)
PM004FS3 + MC
PM220EJ3 - INHIBIT
PM040AD22 + OP REG BIT 6
PM040AD24 + OP REG BIT 7
PM204FN6 - HEX 20 PH
PM060FE3 + Q=0
PM164EL4 + SIGNIFICANT DIGIT
PM008F03 + EC TIME
PM200DZ3 + BC/JC/NO-OP-IH1/IX1-COND-MET
PM220DV3 + HDW CHK.-CHK RUN/TEMP STOP
PM082BA41 + X TYPE OPS (-4.5)
PM166EC4 + 1ST CYCLE TRIGGER
PM008FX3 + EB TIME
PM204DE41 + CTRL GT NEG
PM166BA3 + INITIALIZE
PM004CF5 - TG3 A
PM166ES4 + RCMPL CYCLE

N3 OR * — 36B-CB
N3 B*A*OR * — 26C-BG
N3 B*A*OR * — 36E-CE
N3 A * — 26H-BH
N3 B*A*OR * — 26P-BP
N3 B*A * — 46F-EF
N3 B*A*OR * — 46M-EM
N3 A * — 16J-AJ
N3 N — 56J-FJ
N3 B*A*OR * — 60D-FD
N3 C :PH * — 70A-GA
N3 C :PH * — 60N-FN
N3 OR * — 70P-GP

3/D07 — + MSP WRITE MAIN STORAGE — GA3
PC030 PM130

PM722 - MSP STORAGE FUNCTION — EF3

3/B07

+ TR3A — FJ3
PM164 PM166

3/D06 — + COMPLEMENT LTH — GP3
PM088 PM126 PM166 PM202 PM240 PM300 PM380

COMMENTS
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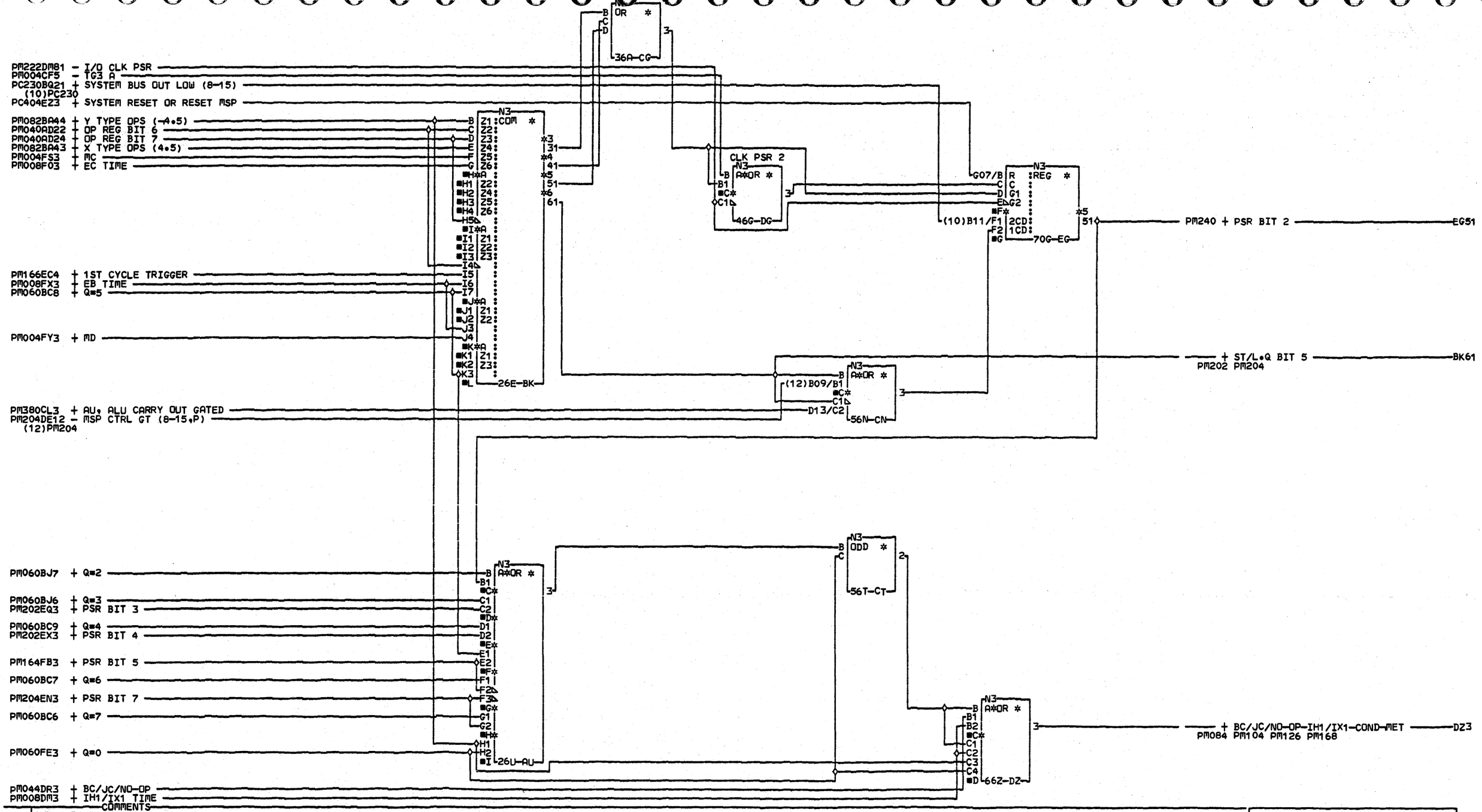
MSP WRT MAIN STG
MSP STG FUCT
MSP SYS CTRL CD
PN4237379 EC832999 PEC832850

LOC=1A-A1N2
USN 00008 PRI=03MAY78 1316
AUC= SEC
PFORM=KSEB NEXTBLK GQ
CID PIOFE JOB N5101128

PE168 0001

E



COMMENTS

PSR BIT 2
MSP SYS CTRL CARD

PN4237380 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=24APR78 1053

AUC= SEC 28APR78 1436
PFORM=KSEB NEXTBLK EH

CID PIOFE JOB N5101128

PE200 0001

PM142BZD + TEST 11 MSP SYS CTRL
PM004CF5 - TG3 A
PM222DM81 - I/O CLK PSR
PM040AD22 + OP REG BIT 6
PM044DR3 + BC/JC/NO-OP
PM082BA45 + Y TYPE OPS (4•-5)
PM004FS3 + MC
PM008FO3 + EC TIME
PM008FX3 + EB TIME
PM004FY3 + MD
PM008DM3 + IH1/IX1 TIME
PM004FP3 + MB
PM060BJ6 + Q=3
PM166EC4 + 1ST CYCLE TRIGGER
PM200BK61 + ST/L•Q BIT 5
PM082BA41 + X TYPE OPS (-4•5)
PM060FE3 + Q=0
PM168GP3 + COMPLEMENT LTH
PM060BC9 + Q=4
PM420FR3 -ALL ONES, +ZERO
PM040AD24 + OP REG BIT 7
PC404EZ3 + SYSTEM RESET OR RESET MSP
PM204DE12 - MSP CTRL GT (8-15•P)
(11-12)PM204
PC230BQ21 + SYSTEM BUS OUT LOW (8-15)
(11-12)PC230
PM380CL3 + AU, ALU CARRY OUT GATED

N3 COM * — 26B-AP
N3 A*OR * — 26Q-BQ
N3 OR * — 26U-BU
N3 A * — 26X-BX
N3 OR * — 46D-BG
N3 OR * — 46H-BM
N3 A * — 46Q-CU
CLK PSR 3&4
N3 G1:SEL * — 66C-CF
N3 A*OR * — 66Q-DQ
N3 C :FF * — 70H-EQ
N3 C :FF * — 70X-EX
N3 A*OR * — 56W-DW
LOAD PSR
PSR BIT 3 DATA
PSR BIT 4 DATA

+ PSR BIT 3 — EQ3
PM200 PM240
PM204 + L PSR — CU3
PM204 + (E5)(-OP REG BIT 6) — AP91
PM204 + MC/MD — BU2
+ PSR BIT 4 — EX3
PM200 PM240

COMMENTS
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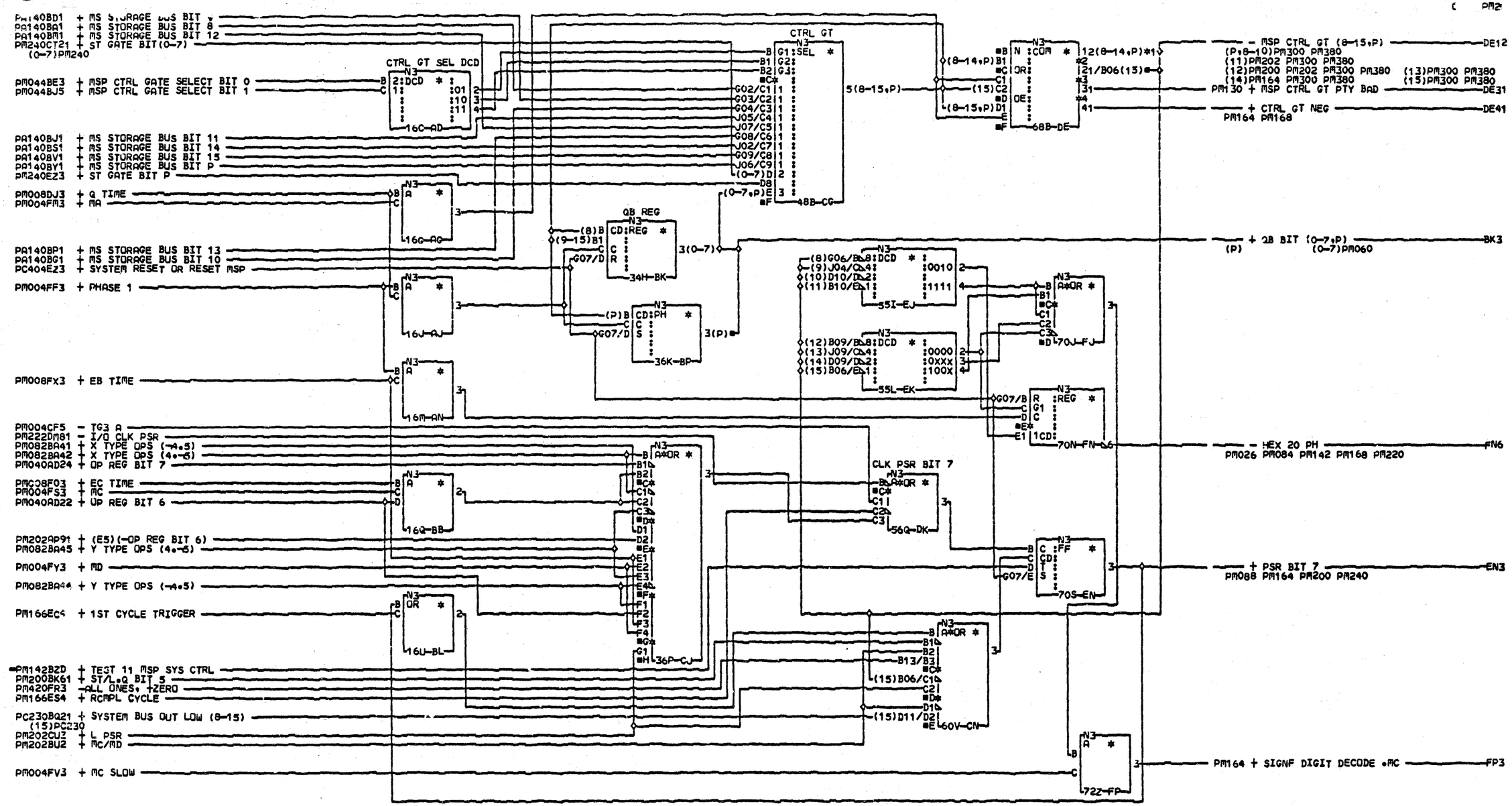
PSR BIT 3 AND 4
MSP SYS CTRL CARD
PN4237381 EC834777 PEC832999
LOC=1A-A1N2
USN 00008 PRI=14NOV78 1620
AUC= SEC
PFORM=KSEB NEXTBLK EY
CID PIOFE JOB L6301459

PE202 0001
PE202 0001



COMMENTS
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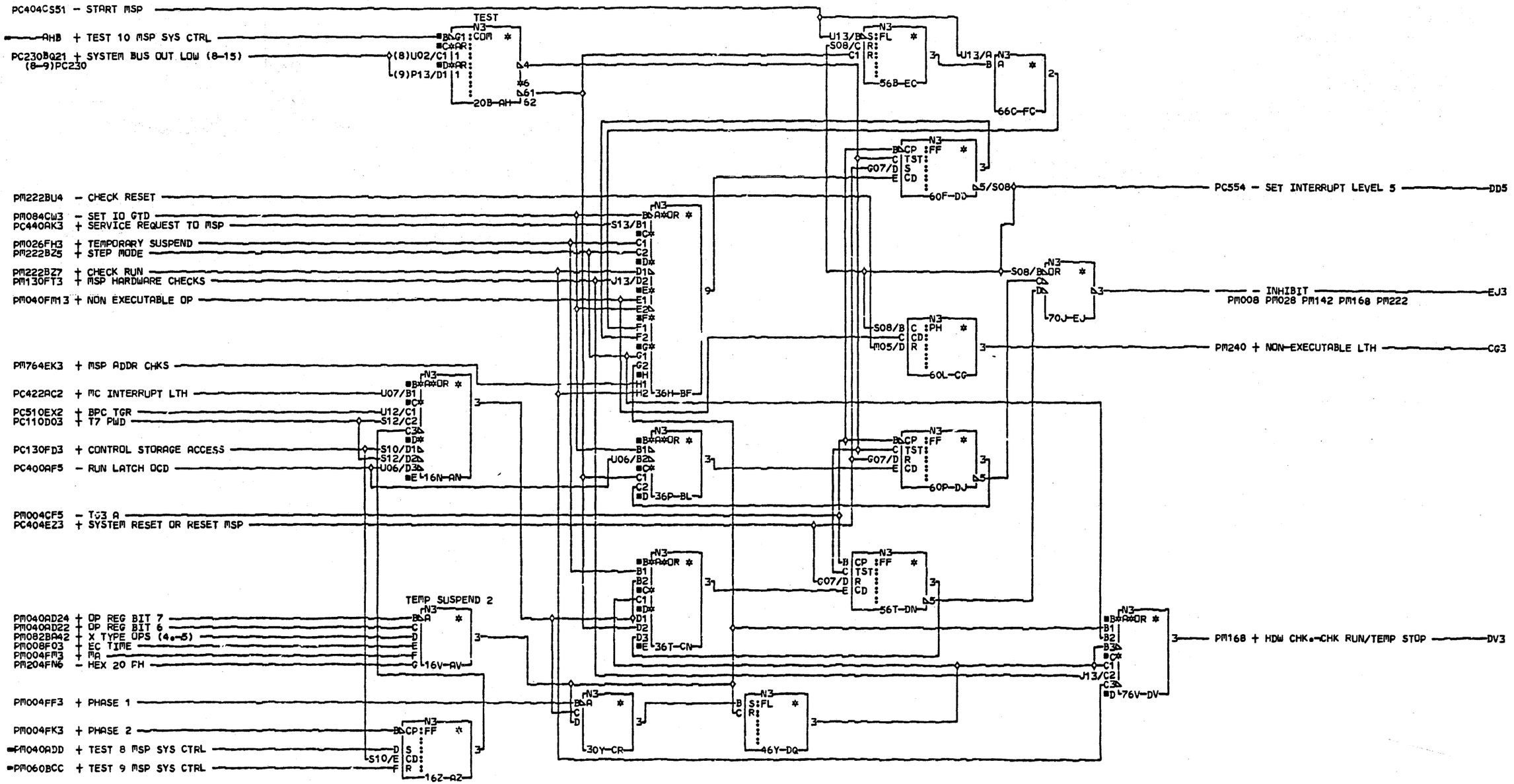
PINS
DE
12/G06
13/J04
14/D10
15/B10
16/B09
17/J09
18/D09
19/G05

PSR BIT 7
CONTROL GATE
MSP SYS CTRL CARD
PN4237382 EC833020 PEC832999

LOC=1A-A1N2

USN 00008 PRI=28AUG78 0949
AUC= SEC 30AUG78 1245
PFORM=KSEB NEXTBLK FQ
CID PIOPE JOB N1701055

PM204 0001



COMMENTS

D1COPYRIGHT IBM CORP.1978

INHIBIT TRIGGERS
MSP SYS CTRL CARD

PN4237383 EC834874 PEC834777

LOC=1A-A1N2

USN 00008 PRI=30JUL79 0945

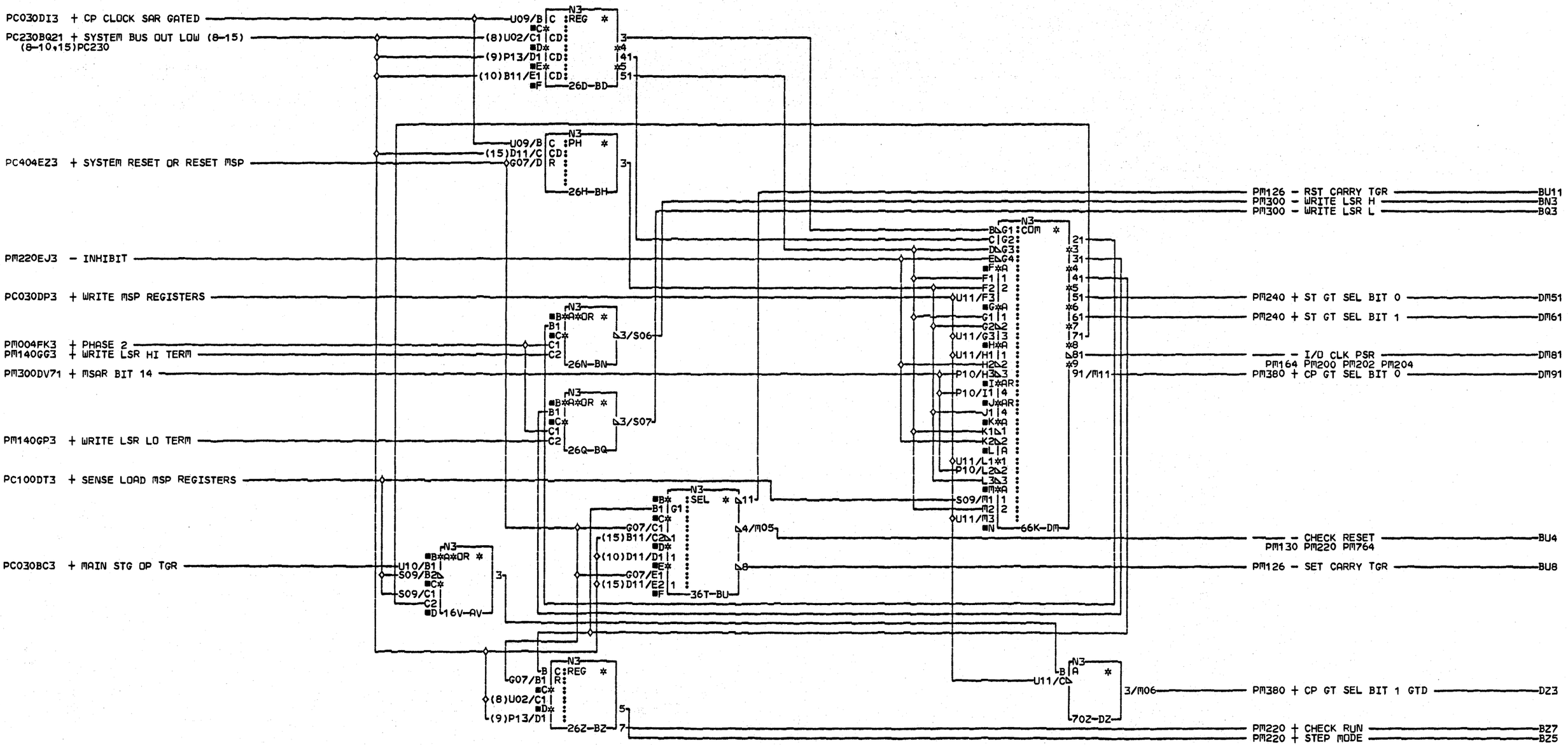
ALC= SEC

PFORM=KSEB NEXTBLK FD

CID PI055 JOB N7600933

PE220 0001

PE220 0001



COMMENTS

D1COPYRIGHT IBM CORP.1978

STATUS BTYE DECODES
MSP SYS CTRL CARD

PN4237384 EC832999 PEC832850

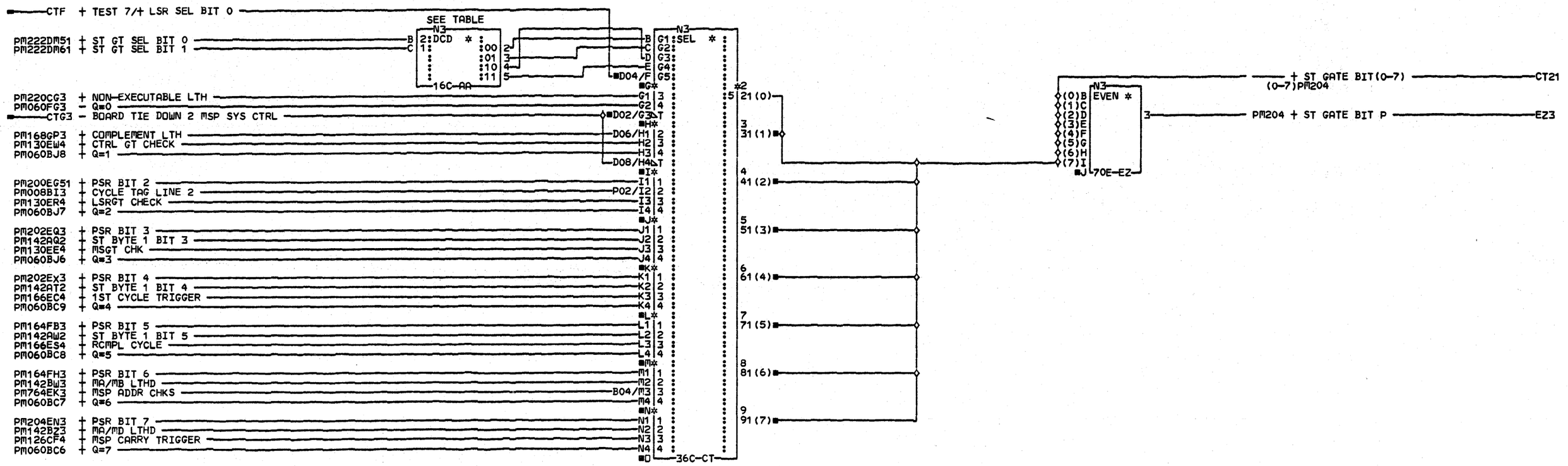
LOC=1A-A1N2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK D0

CID PIOFE JOB N5101128

PE222 0001



STATUS GATE DECODE

ST GT SEL BITS 0	1	SELECTION
0	0	PSR
0	1	ST BYTE 0
1	0	ST BYTE 1
1	1	Q REG

16T-AB

COMMENTS

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E

STATUS GATE
MSP SYS CTRL CARD

PN4237385 EC832999 PEC832850

LOC=1A-A1N2

USN 00008 PRI=24APR78 1053

AUC= SEC 28APR78 1436
PFORM=KSEB NEXTBLK E0

CID PIOFE JOB N5101128

PE240 0001

PE240 0001

PM106GN3 + LSR SELECT BIT 3
PM106DA3 + LSR SELECT BIT 2
PM240CTF + TEST 7/+ LSR SEL BIT 0
PM104DA3 + LSR SELECT BIT 1
ACB + TEST 2 MSP DATA FLOW
PM222BN3 - WRITE LSR H
PM222BQ3 - WRITE LSR L
PM144ER3 + RESET MSP Y
PM044FK3 + MSP XL,YL SELECT BIT
PM142DG41 + CLOCK Y GATED
PM144FU2 - RST Y ZN/SET X ZN
PM168GP3 + COMPLEMENT LTH
DVD + TEST 1 MSP DATA FLOW
PM420FV3 - ALU GT HI DATA (0-7,P)
PM420FZ3 - ALU GT LO DATA (8-15,P)
PM204DE12 - MSP CTRL GT (8-15,P)
(P,8-15)PM204
PM440BE31 - CP MS GT (8-15,P)
(P,8-15)PM440
PM142DN3 + MSP CLOCK MSAR
PC030DI3 + CP CLOCK SAR GATED
PM122DB3 + ALU FUNC SEL BIT 0
PM122DE4 + ALU FUNC SEL BIT 1
PM122FG4 + ALU FUNC SEL BIT 2
PC230BQ21 + SYSTEM BUS OUT LOW (8-15)
(8-15)PC230
PC230DQ3 + SYS BUS OUT LOW P1

LSR/X/Y DATA (8-15,P) (P,8-15) BW7
+ MSP LSR BITS (0-7,P) BC41
(P)PM340 PM704
(0)PM340 PM704 PM780
(1-3)PM340 PM704
(4-7)PM340 PM704 PM820
+ MSP LSR LOW (8-15,P) BC51
(P,8-15)PM340
- LSR/X/Y DATA (0-7,P) BN11
(P)PM340 (0-3)PM340 PM380
(4-7)PM340
+ MSP Y REGISTER (8-15,P) EG3
(P)PM420 (8-11)PM340 PM420
(12-14)PM340 PM380 PM420 (15)PM340 PM420
+ Y PARITY DEGATE CP41
(P)PM340
PM130 + LSR GT BAD PARITY FE3

+ MSAR BIT 8 DV11
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180 PM704 PM762 PM766 PM768
+ MSAR BIT 9 DV21
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180 PM704 PM762 PM766 PM768
+ MSAR BIT 10 DV31
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180 PM704 PM762 PM766
+ MSAR BIT 11 DV41
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180 PM704 PM762 PM766
+ MSAR BIT 12 DV51
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180 PM104 PM704 PM762 PM766
+ MSAR BIT 13 DV61
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180 PM106 PM704 PM762 PM766
+ MSAR BIT 14 DV71
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180 PM106 PM222 PM762 PM766
+ MSAR BIT 15 DV81
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180 PM042 PM762 PM766
PM704 + MSAR LO BIT P DV91

COMMENTS	PINS	PINS	PINS
D1COPYRIGHT IBM CORP.1978	BC	D4/S07	D8/G11
	41/S10	D5/U05	D9/S04
	42/S11	D6/S08	
	43/S12	D7/U04	
	44/S13	D8/G11	
	45/S02	D9/S04	
	46/P13	BW	
	47/S03	D1/U11	
	48/U06	D2/U07	
	49/U13	D3/U12	
	BN	D4/S07	
	D1/U11	D5/U05	
	D2/U07	D6/S08	
	D3/U12	D7/U04	

PM300
0001

LSR GT & MSAR LOW
MSP DATAFLOW CARD

PN4237386 EC832999 PEC832850

LOC=1A-A1P2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK FF

CID PIOFE JOB N5101128

PM300
0001

PM044FK3 + MSP XL,YL SELECT BIT

PM144FU2 - RST Y ZN/SET X ZN
PM300BC51 + MSP LSR LOW (8-15,P)
(P,8-15)PM300
PM300BN11 - LSR/X/Y DATA (0-7,P)
(P,0-7)PM300

X LO
N3
B11/B M07/C M07/D M06/E M08/F
G1 G2 C
R REG
*1 *2 *3 *4
11(8) 21(9) 31(10) 41(11)
(8)G1 (0)G2 (9)H1 (1)H2 (10)I1 (2)I2 (11)J1 (3)J2
1CD 2CD
36B-BG

FUNC DECODE LOW
D
DECODE
0-X AND Y
1-X OR Y
2-X OR (NOT) Y
3-X AND (NOT) Y
4-X MINUS ONE PLUS CARRY
5-X PLUS Y PLUS CARRY
6-X MINUS Y MINUS ONE PLUS CARRY
7-X PLUS CARRY
50B-BR

FUNC DECODE HIGH
D
0-X MINUS ONE PLUS CARRY
1-X PLUS CARRY
50I-CR

X LO
N3
B11/B M07/C M07/D M06/E
G1 G2 C
R REG
*1 *2 *3 *4
11(12) 21(13) 31(14) 41(15)
(12)F1 (4)F2 (13)G1 (5)G2 (14)H1 (6)H2 (15)I1 (7)I2
1CD 2CD
36J-BM

PM126ED4 + CARRY BIT TO ALU

X LO P
N3
B11/B M07/C M07/D M06/E
G1 G2 C
R REG
*1
11(P)
(P)F1 (P)F2
1CD 2CD
36Q-BQ

ALU LOW
N3
J11/B B1 (8-15)C1 (8-15)D1
ALU
*2 *3
21(8-15) 31
66Q-CE

PM144EN3 + RESET MSP X
PM144EJ2 + CLOCK MSP X

X HI
N3
B11/B M06/C
R REG
C
*2 *3 *4 *5 *6 *7 *8 *9
21(0) 31(1) 41(2) 51(3) 61(4) 71(5) 81(6) 91(7)
(0)D1 (1)E1 (2)F1 (3)G1 (4)H1 (5)I1 (6)J1 (7)K1
1CD
16R-DV

PM300BC41 + MSP LSR BITS (0-7,P)
(P,0-7)PM300

ALU HI
N3
B1 (0-7)C1
ALU
*2
2(0-7)
66T-CK

PARITY PREDICT LOW
N3
J11/B B1 (8-15,P)C1 (8-15)D1 (P)D9
ALU
*2 *3
21(P) 31
66W-CH

FUNC DECODE LOW
N3
G13/B P10/C P05/D
DCD
4 2 1
3
46W-BD

FUNC DECODE HIGH
N3
P05/B
DCD
1
3
46Z-BK

PARITY PREDICT HIGH
N3
B B1 (0-7,P)C1
ALU
2(P)
66Z-CN

PM122DB3 + ALU FUNC SEL BIT 0
PM122DE4 + ALU FUNC SEL BIT 1
PM300CP41 + Y PARITY DEGATE
(P)PM300

N3
B11/B M06/C (P)D
C S CD
PH
3(P)
16Z-DZ

PM300EG3 + MSP Y REGISTER (8-15,P)
(8-15)PM300
PM122FG4 + ALU FUNC SEL BIT 2

+ ALU BITS LOW (8-15-P) — CE21
(P)PM380 PM420
(12-15)PM380 PM420
(8-11)PM420

PM380 + ALU CARRY LOW — CE31

+ MSP X BIT (8-15,P) — BG11
(P,8-15)

+ ALU BITS HIGH (0-7,P) — CK2
(P,0-7)PM420

+ MSP X BIT (0-7,P) — DV21
(P,0-7)

COMMENTS
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E

MSP X REGISTER
ALU
MSP DATAFLOW CARD
PN4237387 EC832999 PEC832850

LOC=1A-A1P2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK D0

CID PIOFE JOB N5101128

PE340 0001

PE340 0001

PM420DZ51 - MS GT INT (8-15,P)
(P,8-15)PM420
PM222DM91 + CP GT SEL BIT 0
PM222DZ3 + CP GT SEL BIT 1 GTD

PM300BN11 - LSR/X/Y DATA (0-7,P)
(0-3)PM300

PM204DE12 - MSP CTRL GT (8-15,P)
(P,8-15)PM204
PM142DG41 + CLOCK Y GATED
PM144ER3 + RESET MSP Y
PM144EJ2 + CLOCK MSP X
PM144EN3 + RESET MSP X

PM300EG3 + MSP Y REGISTER (8-15,P)
(12-14)PM300
PM168GP3 + COMPLEMENT LTH

PM420EB3 + MS GT SEL D

PM340CE21 + ALU BITS LOW (8-15-P)
(P,12-15)PM340

PM420BG7 + MS GT SEL AU

PM340CE31 + ALU CARRY LOW

N3 ODD * — 26C-AG
N3 CD:PH * — 46C-BH
N3 CD:PH * — 46F-BK
N3 A * — 46I-BN
N3 ODD * — 60K-CJ
N3 A*OR * — 40P-BG
N3 A*OR * — 40S-BD
N3 A*OR * — 48W-CL
N3 G1:SEL * — 66C-CF

FUNC DECODE

DECODE	
0	ALU
1	ALU + SIX
2	ALU
3	ALU + SIX

16R-AR

FUNC DECODE
N3 2:DCD * — 66S-DG

AL:DECIMAL CORRECT
N3 ALU * — 70W-EN

AU PARTY PREDICT
N3 ALU * — 70Z-ER

31/P11 — PA130 + CP GT BIT 8 — CF31
32/P12 — PA130 + CP GT BIT 9 — CF32
33/P06 — PA130 + CP GT BIT 10 — CF33
34/P04 — PA130 + CP GT BIT 11 — CF34
35/P09 — PA130 + CP GT BIT 12 — CF35
36/P07 — PA130 + CP GT BIT 13 — CF36
37/M02 — PA130 + CP GT BIT 14 — CF37
38/M03 — PA130 + CP GT BIT 15 — CF38
39/M09 — PA130 + CP GT BIT P — CF39

PM420 + ALU P LO GTD — CJ3

+ AU, ALU CARRY OUT GATED — CL3
PM088 PM126 PM164 PM166 PM200 PM202

+ AU (12-15) — EN2
(12-15)PM420

COMMENTS
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PINS
CF
F1/U11
F2/U07
F3/U12
F4/S07
F5/U05
F6/S08
F7/U04
F8/G11
F9/S04

DECIMAL CORRECT
CP GT
MSP DATAFLOW CARD
PN4237388 EC832999 PEC832850

LOC=1A-A1P2

USN 00008 PRI=24APR78 1053
AUC= SEC 28APR78 1436
PFORM=KSEB NEXTBLK ES
CID PIOFE JOB N5101128

PE380 0001

PE380 0001

PM042DB4 + MS GT SEL BIT 0
PM042DN4 + MS GT SEL BIT 1
PM042FH4 + MS GT SEL BIT 2
PM042BK4 + MS GT SEL BIT 3

PM340CE21 + ALU BITS LOW (8-15-P)
(P,8-15)PM340
PM300EG3 + MSP Y REGISTER (8-15,P)
(P,8-15)PM300
PM320BC41 + MSP LSR HIGH (0-7,P)
(P,0-7)

PM380EN2 + AU (12-15)
(12-15)PM380

PM380CJ3 + ALU P LO GTD

PM440BJ3 + MS GT P GEN

PM320BC51 + MSP LSR LOW (8-15,P)
(P,8-15)

PM122DB3 + ALU FUNC SEL BIT 0
PM122DE4 + ALU FUNC SEL BIT 1
PM122FG4 + ALU FUNC SEL BIT 2

PM340CK2 + ALU BITS HIGH (0-7,P)
(P,0-7)PM340
PM164FU4 + ALU GT SEL BIT 1

PM164GS4 + ALU GT SEL BIT 0

N3 8:DCD * M11/B 4: M10/C 2: G09/D 1: G10/E 20B-BG
:1001 1 :1100 11 :1101 12 :1110 13 :1111 14 :11XX 15 :0000 2 :0001 3 :0010 4 :0011 5 :0101 6 :010X 7 :0111 8 :100X 9 91

MS GT A
N3 SEL *
B G1 B1 G2 B2 G3 B3 G4 B4 G5 B5 G6 B6 G7 B7 G8 B8 G9 B9 GA C GB ■D* (0-3)D1 (8-12)E (8-12)F (8-12)G (8-12)H (8-11)I (8-11)J (12-15)K ■L* (4-7)L1 (12-15)M (12-15)N (12-15)O (12-15)P (12-15)Q (12-15)R (12-15)S (8-11)T (12-15)U ■V* (P)V1 (P)W X (P)Y (P)Z1 Z1 ■Z2 46B-DZ
*3 31(8-11) *4 41(12-15)■ *5 51(P)

PM440 + MS GT SEL SOB — BG2

SELECT D
N3 OR *
B C 3 68B-EB
PM380 + MS GT SEL D — EB3

SELECT F/D
N3 OR *
B C 3 66I-EE
PM380 + MS GT SEL AU — BG7

N3 B G1:SEL * ■C* C1 1 (8)C2 ■D* D1 1 (9)D2 ■E* E1 1 (10)E2 ■F* (11)F1 1 ■G 68M-FJ
*3 31(8)■ *4 41(9)■ *5 51(10)■ *6 61(11)■
— MS GT INT (8-15,P) — DZ51
(P,8-15)PM380 PM440

N3 G13/B A * P10/C P05/D 26R-BL 3
N3 ■B A*OR * (8-15)B1 C ■D* E F (12-15)G1 ■H 68R-FR 3/U02
— ALL ONES, +ZERO — FR3
PM166 PM202 PM204

N3 (8-11)B1 ■C* D A*OR * 26V-BM 3
ALU GT HI
■A N3 M13/B M12/C (0-7,P)D (8-15,P)E ■F G1:SEL * G2: 1: 2: 68V-FV 3
PM300 - ALU GT HI DATA (0-7,P) — FV3

ALU GT LO
N3 M13/B G1:SEL * (8-15,P)D 1: 68Z-FZ 3
PM300 - ALU GT LO DATA (8-15,P) — FZ3

COMMENTS
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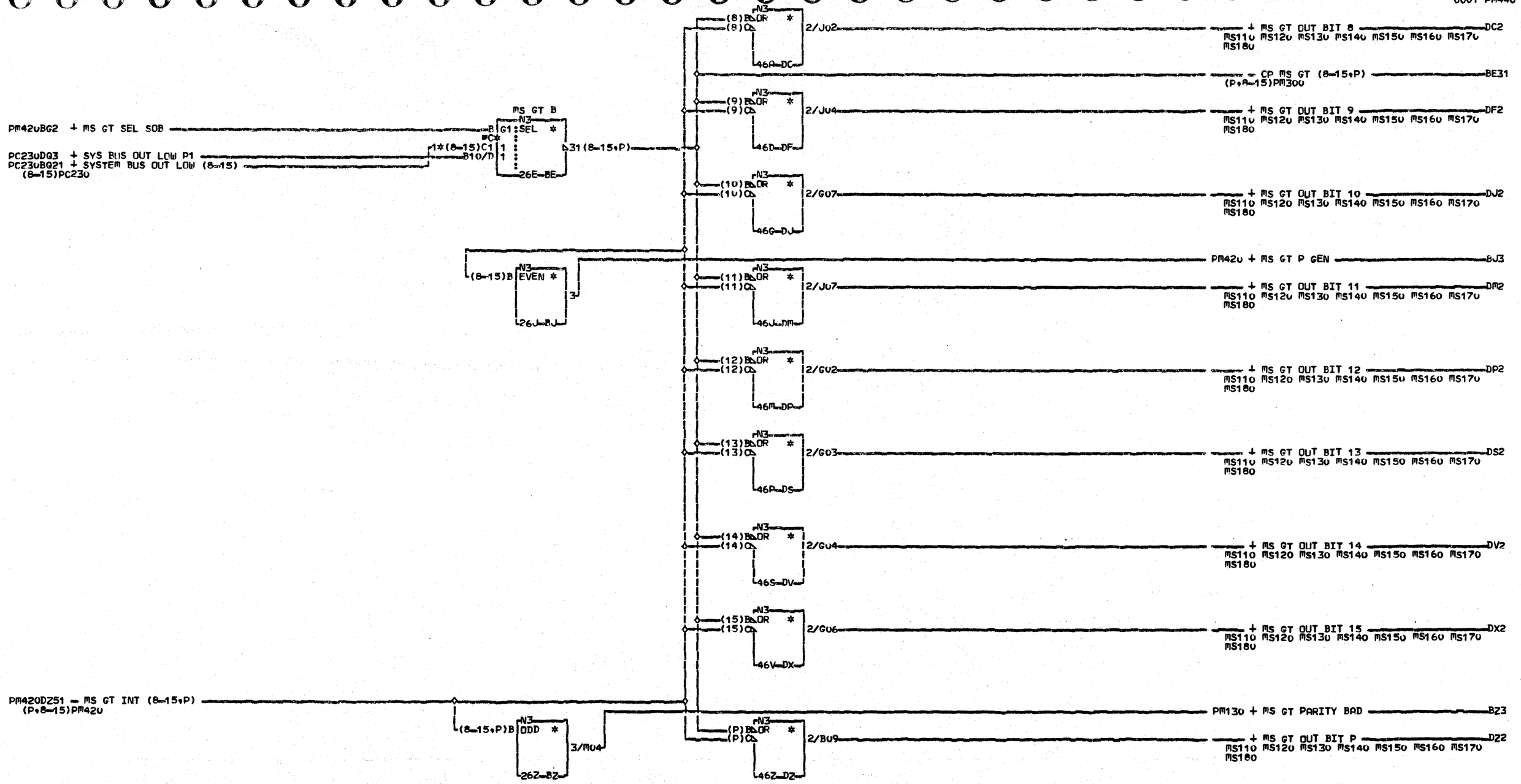
E

MSP — MS GT A DATAFLOW CARD
PN4237389 EC832999 PEC832850
LOC=1A-A1P2
USN 00008 PRI=25APR78 1639
AUC= SEC
PFORM=KSEB NEXTBLK F0
CID PIOFE JOB N5101128



COMMENTS
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PINS
BE
C1/G12
C2/J06
C3/G08
C4/J05
C5/G05
C6/B13
C7/D13
C8/D12

MS GT B
MSP DATAFLOW CARD

PN4237390 EC832863 PEC832742F

LOC=1A-A1P2

USN 00006 PRI=10SEP77 1519

AUC= SEC
PFORM=KSEB NEXTBLK DU

CID PIOFE JOB M5301540

PM440 0001

PM300DV41 + MSAR BIT 11
PC030DI3 + CP CLOCK SAR GATED
PM768CB3 + GATE SENSE BYTE
ABC + TEST 1 MSP STG CTRL
PC230DA3 + SYS BUS OUT HI BIT P
PM300BC41 + MSP LSR BITS (0-7,P)
(P,0-7)PM300
PM142DN3 + MSP CLOCK MSAR
PC230BC61 + SYSTEM BUS OUT HIGH (0-7,P)
(0-7)PC230
PM300DV21 + MSAR BIT 9
PM780CB3 + SELECT I/O ATR
PM300DV11 + MSAR BIT 8
PM300DV91 + MSAR LO BIT P
PM766CG3 + MSAR BIT 14 GATED
PM766CJ3 + MSAR BIT 15 GATED
PM300DV51 + MSAR BIT 12
PM300DV31 + MSAR BIT 10
PM300DV61 + MSAR BIT 13

N3 A * S02/B D13/C 16B-AB 3
N3 A * S02/B D13/C 16E-AE 3

PARITY BIT
N3 FF *
C* S02/C1 PC1 J07/C2 PC3
E* D02/E1 1CD (P)B09/E2 3CD
F* 36B-BB
*3 31(P)

MSAR H1
N3 B R REG *
C* C1 PC1 C2 PC2 J07/C3 PC3
F* (0)B02/F1 1CD (1)B03/F2 2CD (0)P05/F3 3CD
G* (1)B03/G1 1CD (2)D04/G2 2CD (1)P02/G3 3CD
H* (2)D04/H1 1CD (3)B04/H2 2CD (2)B11/H3 3CD
I* (3)B04/I1 1CD (4)D05/I2 2CD (3)M02/I3 3CD
J* (4)D05/J1 1CD (5)B05/J2 2CD (4)J02/J3 3CD
K* (5)B05/K1 1CD (6)D06/K2 2CD (5)D09/K3 3CD
L* (6)D06/L1 1CD (7)B06/L2 2CD (6)B10/L3 3CD
M* (7)B06/M1 1CD (0)B02/M2 2CD (7)D11/M3 3CD
N 36F-BF
*5 51(0-7)

PARITY CHK
N3 EVEN *
(0)D (1)E (2)F (3)G (4)H (5)I (6)S06/J (7)S07/K (P)L
M 70B-DD
3 PM740 + MSAR HI BAD P DD3

PARITY CHK
N3 EVEN *
G07/C G05/D J10/E J11/F G12/G G11/H I J B08/K
L 70I-DI
3 PM740 + MSAR LO BAD P DI3

N3 SEL *
C G1 D G2
E* J10/E1 1 E2 2
F 70N-DN
3 PM820 + I/O ATR SEL DN3

N3 SEL *
C G1 D G2
E* J11/E1 1 E2 2
F* (1)F1 1 G12/F2 2
G* (2)G1 1 G11/G2 2
H* (3)H1 1 H2 2
I* (4)I1 1 I2 2
J* (5)J1
K* (6)K1
L* (7)L1
M* (P)M1
N 66R-CB
*1
11(0) 21(1) 31(2) 41(3) 51(4) 61(5) 71/S06(6) 81/S07(7) 91(P)
+ MSAR HI 0-7,P CB31
(P) (0-2)PM720 PM740 PM762 PM820
(3-4)PM720 PM762 PM820 (5)PM720 PM762
(6-7)MS110 MS120 MS130 MS140 MS150 MS160
MS170 MS180 PM762

COMMENTS
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E

MSAR AND P CHK
MAIN STORAGE CONTROL CARD
PN4237391 EC832999 PEC832850
LOC=1A-A1Q2
USN 00008 PRI=24APR78 1053
AUC= SEC
PFORM=KSEB NEXTBLK DD
CID PIOFE JOB N5101128

PE704 0001
PE704 0001

PM722ED3 + GATE CARD SELECT

PM820DE31 +ATR REG 0-7,P
(0-7)PM820

N3 :DCD * 16B-AB
(0)C 8 → 3
(1)D 4 → 4
(2)E 2 → 5
(3)F 1 → 6
7
8

MAIN STG CARD SEL
N3 :SEL * 46B-CB
C G3 → F 3/U11
M08/D 3G1 → G 4/U12
M08/E 3G2 → H 5/U13
F1 → I 6/S13
(0)F2 → J 7/S12
G1
(0)G2
H1
I1
J1
K

+ MS CARD SELECT 64-96K — CB5
MS150 MS160
+ MS CARD SEL 32-64K — CB4
MS130 MS140
+ MS CARD SELECT 0-32K — CB3
MS110 MS120
+ MS CARD SELECT 96-128K — CB6
MS170 MS180
NOT USED — CB7

N3 :SEL * 66E-EB
M08/C G1
M08/D G2
(5)E1
(2)F1
3/U09
- MS 8K GROUP SELECT LO — EB3
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180

MS ADDRESS DECODING

D
SELECT HI(IF BIT +) OR LO(IF BIT -) XXX K AREA IN STORAGE

	1	2	6	3	1				
	K	8 K	4 K	2 K	6 K	8 K	4 K	2 K	1 K
ATR BIT	0	1	2	3	4	5	6	7	
MSAR BIT				0	1	2	3	4	5
LINE NAME	CARD SELECT				D S	8 K	C S X	C S Y	

(TRANS- USE MSAR, TRANS+ USE ATR)
THE VARIOUS LINES ARE DECODES OF SPECIFIC ATR OR
MSAR BITS AND SELECT A SINGLE 1K SECTION OF MEMORY
MSAR BITS 6-15 SELECT THE SPECIFIED WORD FROM THE 1K BLOCK
(DS=DATA STROBE)
16H-AF

CSY LINES
N3 :SEL * 66J-EF
C G1
D* → D 3/S08
(5)D1 → E 4/S09
E*
(5)E1
F*

+ MS CSY 1 — EF3
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180
+ MS CSY 2 — EF4
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180

PM722BD3 + CSX TGR
PM780CG3 + TRANSLATE

+ MS DATA STROBE LOW — AG4
MS110 MS130 MS150 MS170 PM722

N3 :DCD * 41P-CG
(6)C 2 → 3
(7)D 1 → 4
5
6
7

CSX LINES
N3 :SEL * 61Q-EK
C G3
M08/D 3G1 → F 3/U04
M08/E 3G2 → G 4/U05
F* → H 5/U06
F1 → I 6
F2
G*
G1
G2
H*
H1
H2
I*
I1
I2
J

+ MS CSX 1 — EK3
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180
+ MS CSX 2 — EK4
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180
+ MS CSX 3 — EK5
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180

DATA STROBE LINES
N3 :A*OR * 25S-AG
M08/C G1
M08/D G2
E*1
(4)E1
(6)E2
F*1
(0,4)F1
G*1
(1,4)G1
H*1
(2,4)H1
I*1
(3-4)I1
J*1
(0-4)J1
(6)J6
K*2
(1)K1
(6)K2
L*2
(0-1)L1
M*2
(0-1)M1
(6)M3
N
3/S04
4/S03

N3 :DCD * 41S-CL
(3)C 2 → 0 3
(4)D 1 → 1 4
2 5
3 6
7

PM764DE31 + BMR REG 6-7
(6)PM764

PM704CB31 + MSAR HI 0-7,P
(0-5)PM704

N3 A * 71U-GK
B
C
3/U07
+ MS CSX 4 — GK3
MS110 MS120 MS130 MS140 MS150 MS160 MS170
MS180

+ MS DATA STROBE HIGH — AG3
MS120 MS140 MS160 MS180 PM722

N3 A * 56X-FL
(0)C
(1)D
(2)E
(3)F
(4)G
(5)H
I
3

COMMENTS
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MEMORY CARD SELECTION
MAIN STORAGE CONTROL CARD

PN4237392 EC832999 PEC832850

LOC=1A-A1Q2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK GL

CID PIOFE JOB N5101128

PE720 0001

PE720 0001

PC030DI3 + CP CLOCK SAR GATED

PM168EF3 - MSP STORAGE FUNCTION

PC022FB3 + SYSTEM RESET

PM704ABC + TEST 1 MSP STG CTRL

PC022DV3 + 100 NS OSC PWRD

PC030DF3 + WRITE MAIN STORAGE

PM740GK3 + INHIBIT WRITE PULSE

PM720AG3 + MS DATA STROBE HIGH

PM720AG4 + MS DATA STROBE LOW

STORAGE FUNCTION LTH

CP OP LTH

CSX TGR

CSY TGR

WRITE GATE TGR

END TGR

WRITE TGR

+ CP OP LTH FB3
PM762 PM764 PM768 PM780

PM720 + GATE CARD SELECT ED3

PM720 + CSX TGR BD3

3/S05 + MS CSY TGR SIGNAL GF3
PC030 PM740 PM762 PM768

+ WRITE GATE TGR BJ3
PM768 PM780

3/S11 + MS WRITE PULSE HI GJ3
MS120 MS140 MS160 MS180

3/S10 + MS WRITE PULSE LO GL3
MS110 MS130 MS150 MS170

3/M13 CH002 + 100NS OSC REPWRD GX3

TIMING

	T3(200NS)	T4(200NS)	T5(200NS)	T6(200NS)
100NS OSC				
MSP STG FUN				
CP CLK SAR GATED				
STG FUN LTH				
CP OP LTH				
CSX TGR				
CSY TGR				
WR GATE TGR				
END TGR				
WRITE TGR				
GATE CARD SEL				
CSX & TRANS(-T)				
MS CSY TGR SIG				
MS WR PULSE LO(HI)				

16V-CD

COMMENTS

E

MAIN STORAGE CONTROL SIGNALS
MAIN STORAGE CONTROL CARD

PN4237393 EC832999 PEC832850

LOC=1A-A1Q2

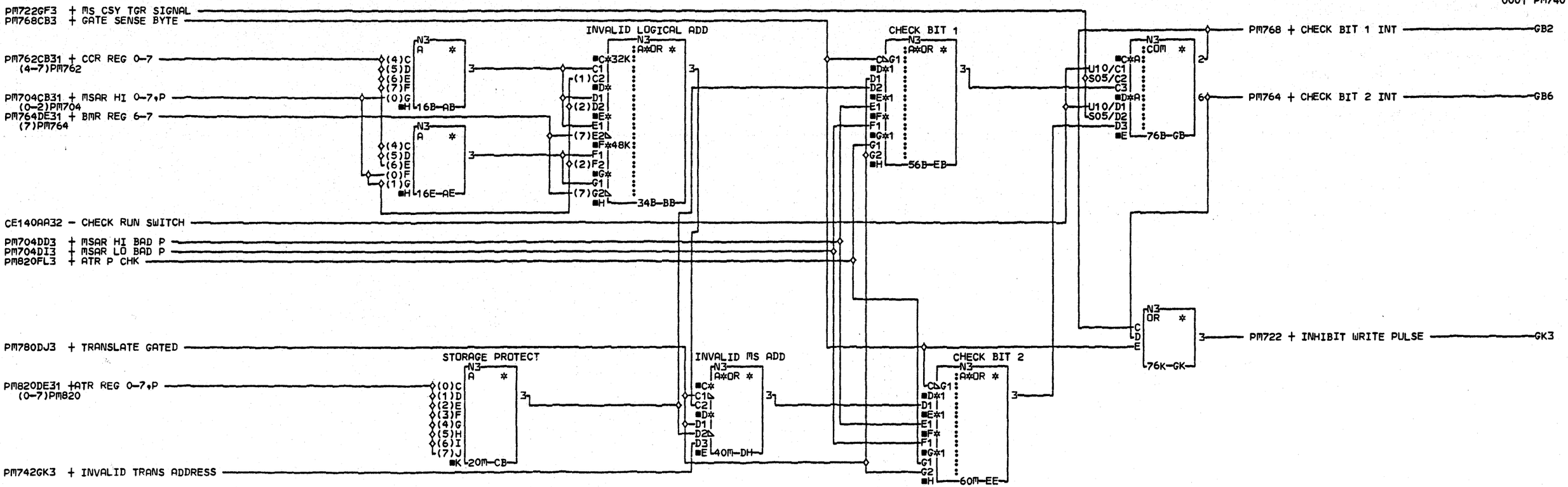
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GY

CID PIOFE JOB N5101128

PE722 0001

PE722 0001



MEMORY CONFIGURATION

MAIN STORAGE CONFIGURATION				
CCR4	CCR5	CCR6	CCR7	CONFIG
1	1	1	1	32K
1	1	1	0	48K
1	1	0	1	64K
1	1	0	0	96K
1	0	1	1	128K

16S-AN

COMMENTS

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MS ADDRESS CHECKS
MAIN STORAGE CONTROL CARD

PN4237394 EC832999 PEC832850

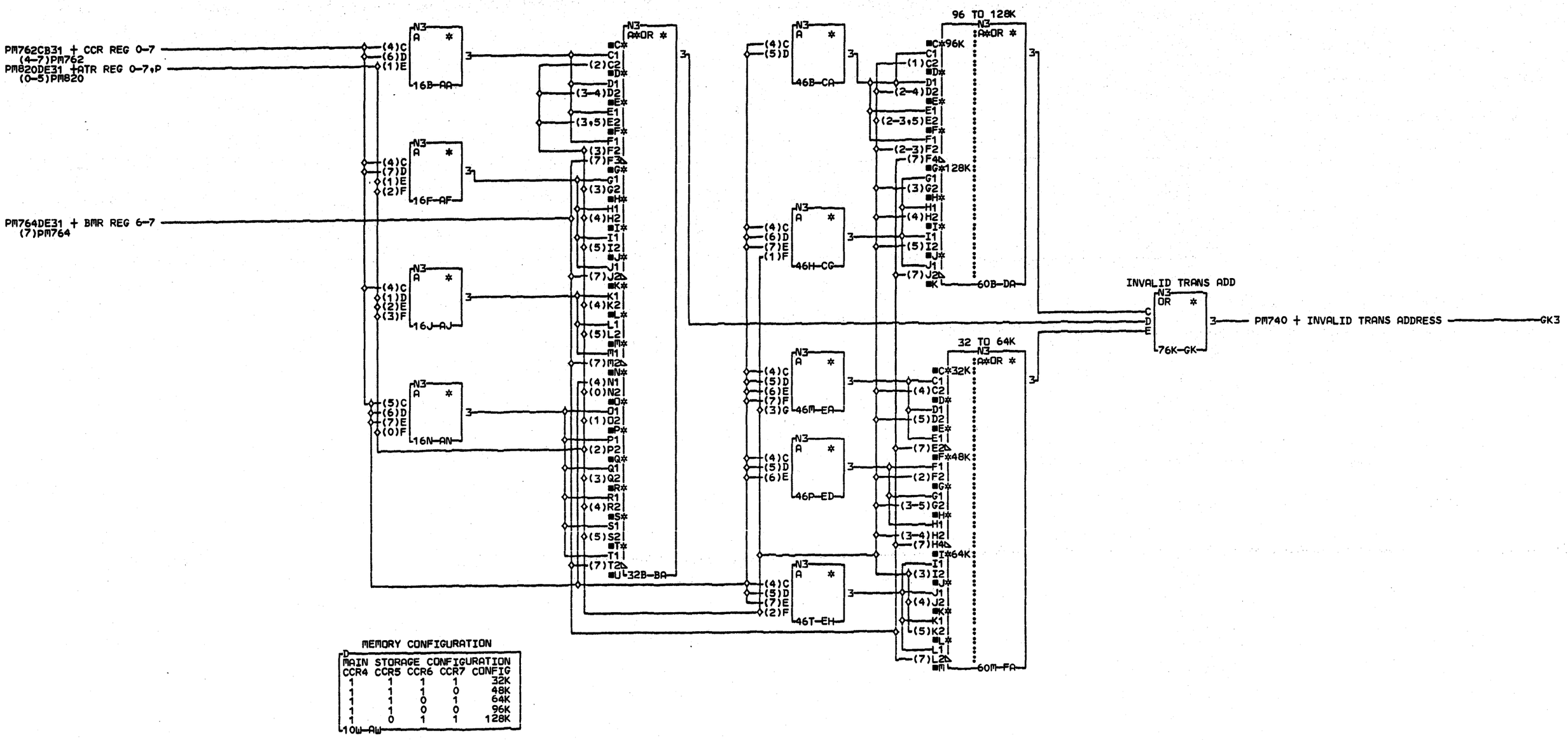
LOC=1A-A1Q2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GL

CID PIOFE JOB N5101128

PE740 0001



MEMORY CONFIGURATION

MAIN STORAGE CONFIGURATION				
CCR4	CCR5	CCR6	CCR7	CONFIG
1	1	1	1	32K
1	1	1	0	48K
1	1	0	1	64K
1	1	0	0	96K
1	0	1	1	128K

10W-AW

COMMENTS

E

MS INVALID TRANS ADD
MAIN STORAGE CONTROL CARD

PN4237395 EC832999 PEC832850

LOC=1A-A1Q2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GL

CID PIOFE JOB N5101128

PE742 0001

PM780AM5 + CLK CCR
PM008BI3 + CYCLE TAG LINE 2
PM722FB3 + CP OP LTH
PM722GF3 + MS CSY TGR SIGNAL
PC230BC61 + SYSTEM BUS OUT HIGH (0-7,P)
(0-3)PC230
PM780AM9 + CLK ACR EXTENSION
PM780AM3 + CLK ACR HI
PM780AM4 + CLK ACR LO
PM820BR11 + SBO 4-7 GATED (4-7)
(4-7)PM820

ADD COMPARE REG
N3 REG *
BPC1
CPC2
DPC3
E* (7)E1|1CD
F* (0)B02/F1|2CD
G* (1)B03/G1|2CD
H* (2)D04/H1|2CD
I* (3)B04/I1|2CD
J* (4)J1|2CD
K* (5)K1|2CD
L* (6)L1|2CD
M* (7)M1|2CD
N* (0)B02/N1|3CD
D* (1)B03/O1|3CD
P* (2)D04/P1|3CD
Q* (3)B04/Q1|3CD
R* (4)R1|3CD
S* (5)S1|3CD
T* (6)T1|3CD
U* (7)U1|3CD
V 20C-AB

5
51(0-16)

COMPARE CONTROL REG
N3 REG *
BPC1
C* (0)B02/C1|1CD
D* (1)B03/D1|1CD
E* (2)D04/E1|1CD
F* (3)B04/F1|1CD
G* (4)G1|1CD
H* (5)H1|1CD
I* (6)I1|1CD
J* (7)J1|1CD
K 46D-CB

*3
31(0-7)

N3 SEL *
C Z1
B12/D Z2
E* E1 Z1
(3)E2 Z2
F* F1 Z1
F2 Z2
(1)F3
G* G1 Z1
G2 Z2
(2)G3
H 66C-EB

+ CCR REG 0-7 — CB31
(0)PM766 PM768 (1-3)PM766
(4-7)PM740 PM742 PM766

N3 A *
C
D
E
F
3 PM768 + MS ADDR COMP — EI3
76I-EI

+ ACR REG 0-16 — AB51
(0-15)PM766 (16)

PM768CB3 + GATE SENSE BYTE

PM780CG3 + TRANSLATE

N3 A *
(0)C
M08/D
3
20P-AD

N3 B*OENOR*A *
(0)B1
(0)B2
C* (1)C1
(1)C2
D* (2)D1
(2)D2
E* (3)E1
(3)E2
F* (4)F1
(4)F2
G* (5)G1
(5)G2
H* (6)H1
(5)H2
I* (7)I1
(6)S06/I2
J* (8)J1
(7)S07/J2
K* (9)K1
G07/K2
L* (10)L1
G05/L2
M* (11)M1
J10/M2
N* (12)N1
J11/N2
O* (13)O1
G12/O2
P* (14)P1
G11/P2
Q* (15)Q1
J06/Q2
R* (16)R1
G09/R2
S 42L-CI

3

CCR MEMORY CONFIG

MAIN STORAGE CONFIGURATION CCR4	CCR5	CCR6	CCR7	CONFIG
1	1	1	1	32K
1	1	1	0	48K
1	1	0	1	64K
1	1	0	0	96K
1	0	1	1	128K

52M-EM

PM704CB31 + MSAR HI 0-7,P
(0-7)PM704

PM820DE31 + ATR REG 0-7,P
(2-7)PM820

N3 B G1 G2 SEL *
D*
(2)D1|1
E*
(3)E1|1
(0)E2|2
F*
(4)F1|1
(1)F2|2
G*
(5)G1|1
(2)G2|2
H*
(6)H1|1
(3)H2|2
I*
(7)I1|1
(4)I2|2
J 20T-AP

*3
31(0-5)

PM300DV41 + MSAR BIT 11
PM300DV51 + MSAR BIT 12
PM300DV21 + MSAR BIT 9
PM300DV71 + MSAR BIT 14
PM300DV61 + MSAR BIT 13
PM300DV81 + MSAR BIT 15
PM300DV11 + MSAR BIT 8
PM300DV31 + MSAR BIT 10

CCR ADD COMP ENABLE

CCR0	CCR1	CCR2	CCR3	MEANING
0	0	0	0	REAL MSP (E OR I CYCLE) OP OR CP OP
0	0	0	1	REAL MSP (E OR I CYCLE) OP
0	0	1	0	REAL MSP (E CYCLE) OP OR CP OP
0	0	1	1	REAL MSP (E CYCLE) OP
0	1	0	0	REAL MSP (I CYCLE) OP OR CP OP
0	1	0	1	REAL MSP (I CYCLE) OP
0	1	1	0	REAL CP OP
0	1	1	1	NONE
1	0	0	0	LOGICAL MSP (E OR I CYCLE) OP OR CP OP
1	0	0	1	LOGICAL MSP (E OR I CYCLE) OP
1	0	1	0	LOGICAL MSP (E CYCLE) OP OR CP OP
1	0	1	1	LOGICAL MSP (E CYCLE) OP
1	1	0	0	LOCICAL MSP (I CYCLE) OP OR CP OP
1	1	0	1	LOGICAL MSP (I CYCLE) OP
1	1	1	0	LOGICAL CP OP
1	1	1	1	NONE
-T	-E	-I	-CP	

52T-EL

COMMENTS
D1 COPYRIGHT IBM CORP.1978

PM762 0001

ADDRESS COMPARE
MAIN STORAGE CONTROL CARD

PN4237396 EC832999 PEC832850

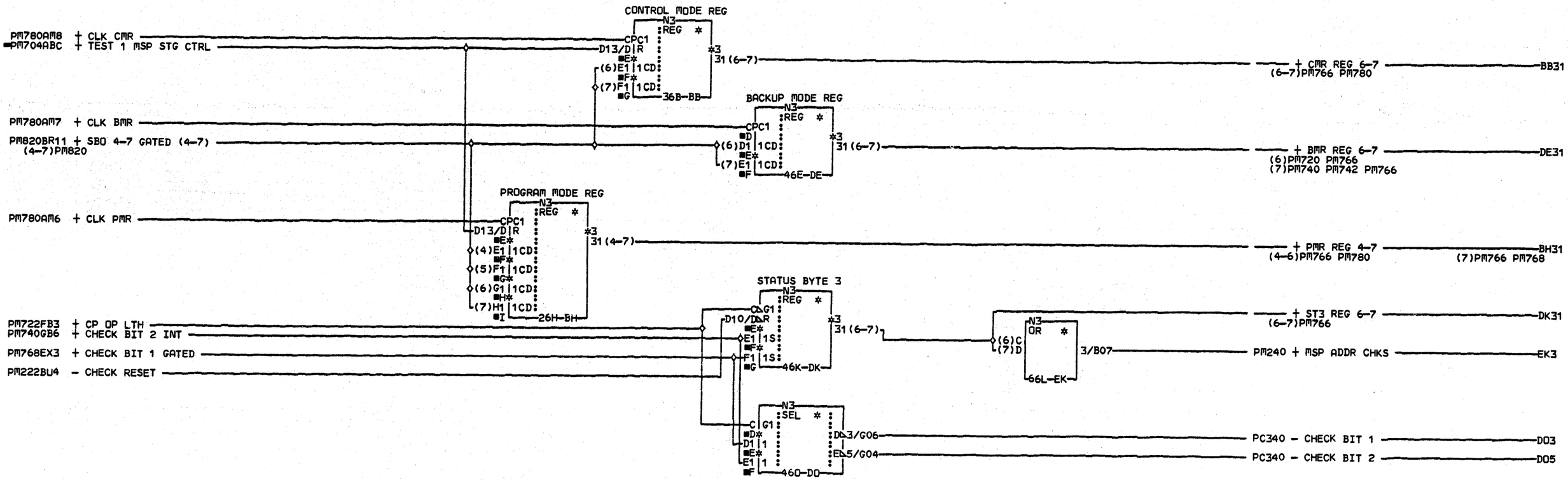
LOC=1A-A1Q2

USN 00008 PRI=28APR78 1436

AUC= SEC
PFORM=KSEB NEXTBLK 'EN

CID PIOFE JOB N5101128

PM762 0001



REGISTER MEANING

	CMR	PMR	BMR	ST3
BIT 4	NOT USED	TRANSLATE DURING MSP I	NOT USED	NOT USED
BIT 5	NOT USED	TRANSLATE DURING MSP EA	NOT USED	NOT USED
BIT 6	(ON)I/O ATRS (OFF)TASK ATRS	TRANSLATE DURING MSP EB	SWAP 0-16K WITH 16-32K	INVALID MS ADD AND PARITY CHK
BIT 7	TRANSLATED CP OP	NOT USED	ALLOW EXTRA 8K ADDRESSING	STOR PROTECT AND PARITY CHK

16T-AR

COMMENTS

CONTROL REGS
MAIN STORAGE CONTROL CARD

PN4237397 EC832999 PEC832850

LOC=1A-A1Q2

USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK GC

CID PIOFE JOB N5101128

PE764 0001

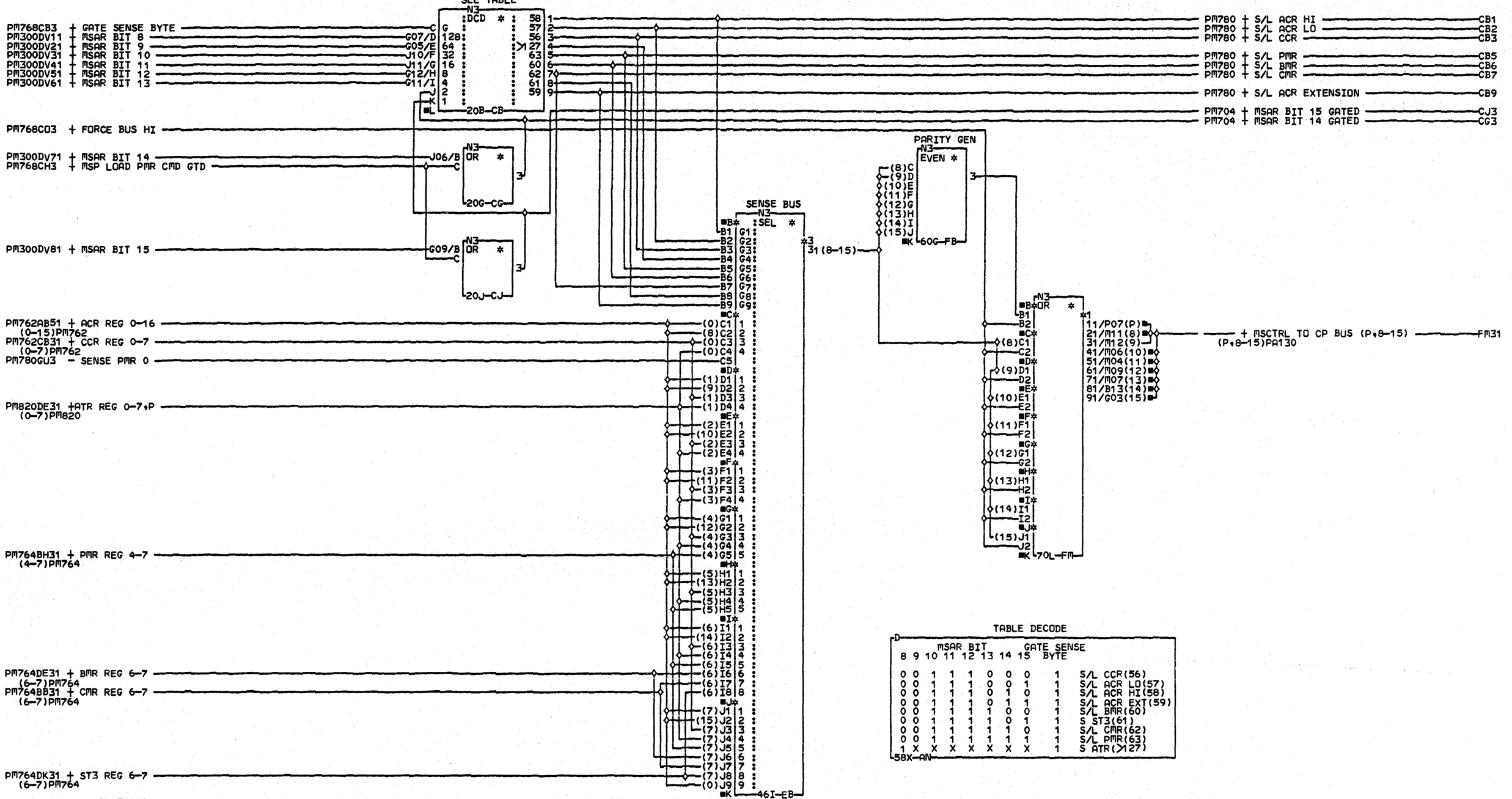


TABLE DECODE

MSAR BIT 8	9	10	11	12	13	14	15	GATE SENSE BYTE	
0	0	1	1	1	0	0	0	1	S/L CCR(56)
0	0	1	1	1	0	0	1	1	S/L ACR LO(57)
0	0	1	1	1	0	1	0	1	S/L ACR HI(58)
0	0	1	1	1	0	1	1	1	S/L ACR EXT(59)
0	0	1	1	1	1	0	0	1	S/L BMR(60)
0	0	1	1	1	1	0	1	1	S ST3(61)
0	0	1	1	1	1	1	0	1	S/L CMR(62)
0	0	1	1	1	1	1	1	1	S/L PMR(63)
1	X	X	X	X	X	X	X	1	S ATR(>127)

58X-AN

COMMENTS

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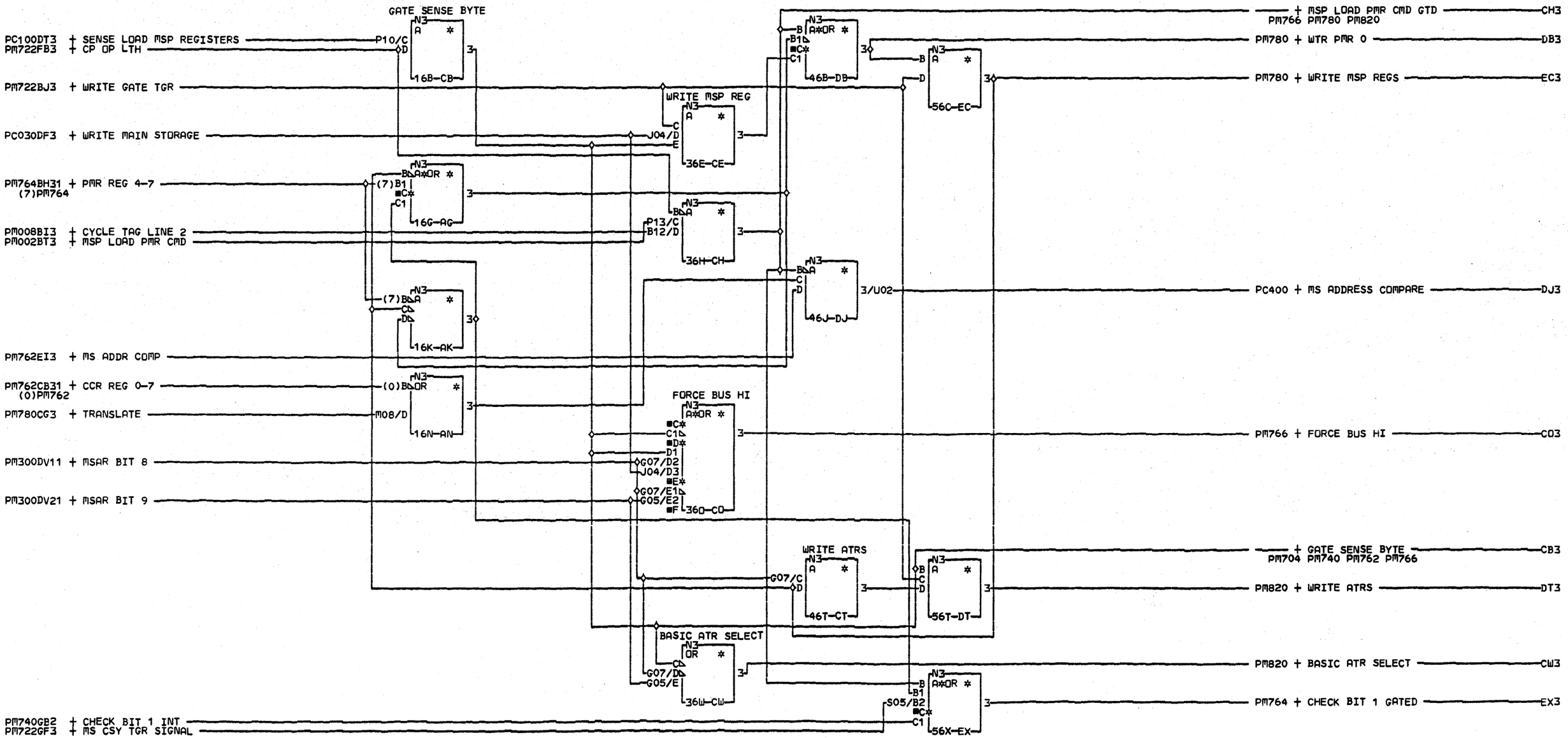
SENSE REGS	
MAIN STORAGE CONTROL CARD	
PN4237398 EC832999 PEC832850	
LOC=1A-A1Q2	
USN 00008	PRI=28APR78 1436
AUC=	SEC
PFORM=KSEB	NEXTBLK FN
CID PIOFE	JOB N5101128

PM766 0001

PM766 0001



COMMENTS

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E

MISC
MAIN STORAGE CONTROL CARD

PN4237399 EC832999 PEC832850

LOC=1A-A1Q2

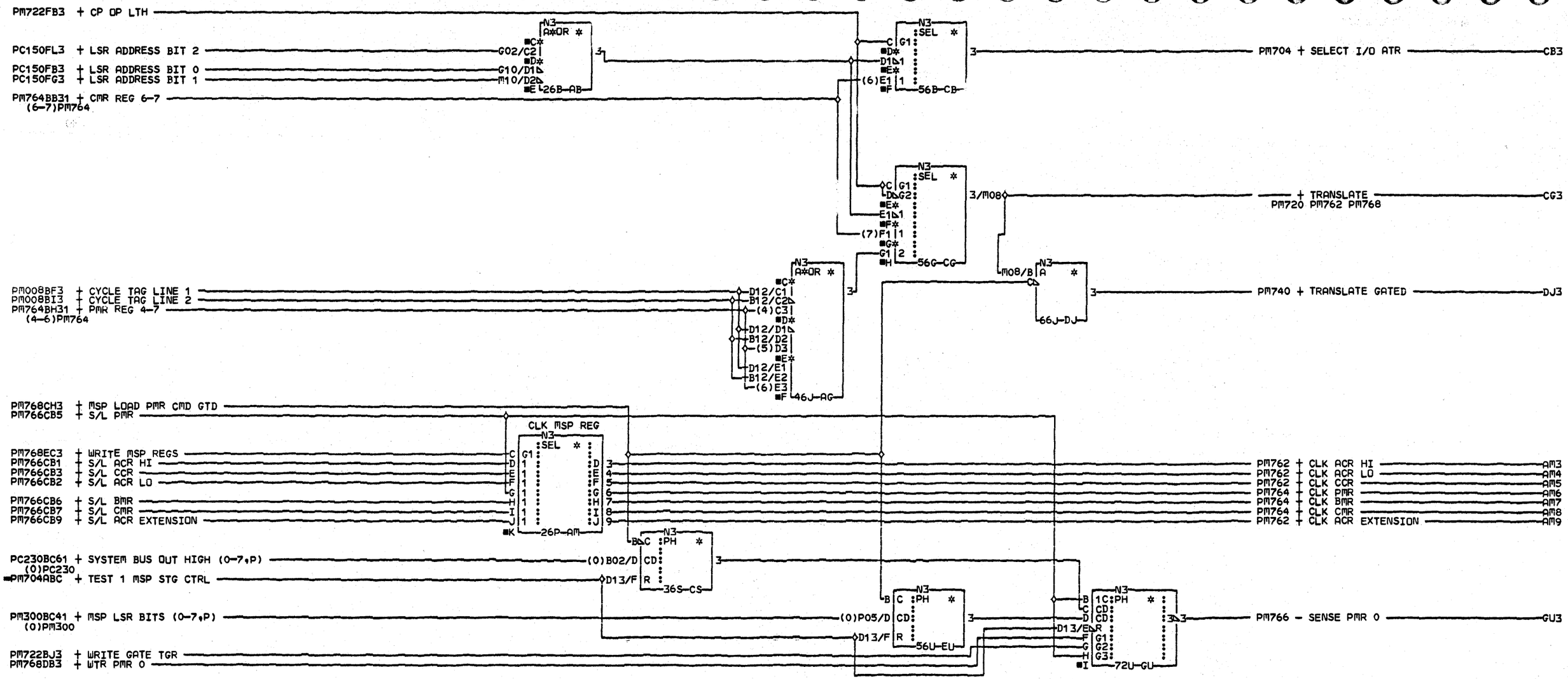
USN 00008 PRI=24APR78 1053

AUC= SEC
PFORM=KSEB NEXTBLK EY

CID PIOFE JOB N5101128

PM768 0001

PM768 0001



COMMENTS

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MISC

MAIN STORAGE CONTROL CARD

PN4237400 EC832999 PEC832850

LOC=1A-A1Q2

USN 00008 PRI=24APR78 1053

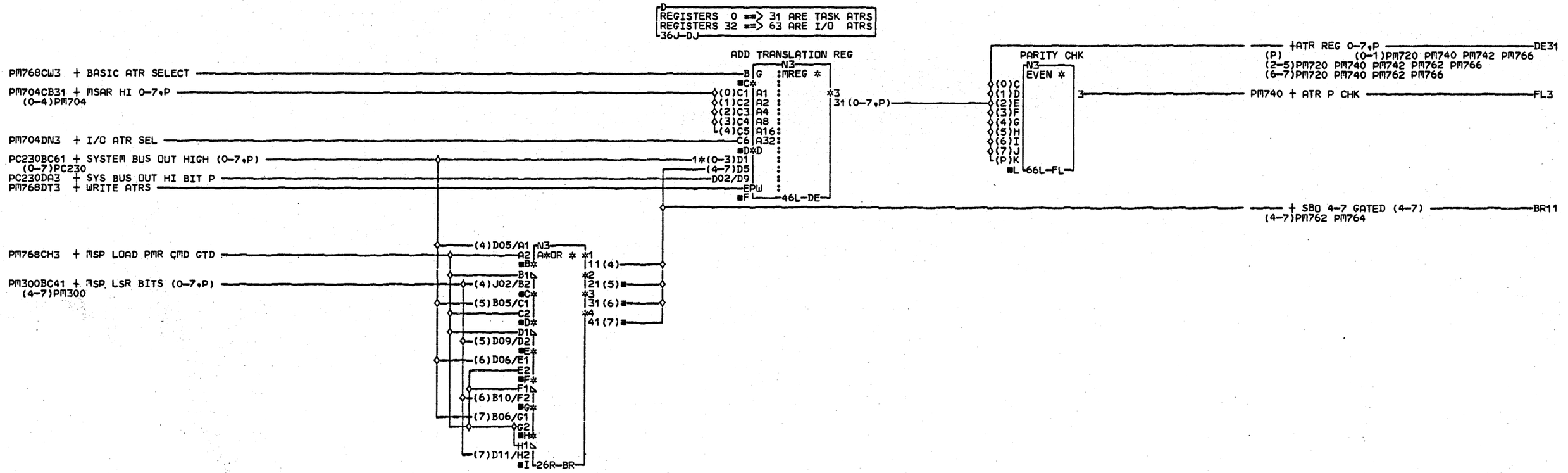
AUC= SEC

PFORM=KSEB NEXTBLK GV

CID PIOFE JOB N5101128

PE780 0001

PE780 0001



COMMENTS
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PINS
DE
D1/B02
D2/B03
D3/D04
D4/B04

PE820
0001

ATR
MAIN STORAGE CONTROL CARD
PN4237401 EC832999 PEC832850
LOC=1A-A1Q2
USN 00008 PRI=24APR78 1053
AUC= SEC
PFORM=KSEB NEXTBLK FM
CID PIOFE JOB N5101128

PE820
0001

```
PR041AB41 - CHECK INDICATOR ------------------------------A1  NOTE 1
PR041AB51 - INTERLOCK INDICATOR --------------------------A3  EXIT
PR041AB21 - READY INDICATOR ------------------------------A5
PR041AB31 - FORMS INDICATOR ------------------------------A7
PR103AC3  - CARRIAGE GO ----------------------------------A9  16B-AA

PR043AC2  + POWER ON RESET (POR) -------------------------A1  NOTE 1
PR163AA3  - ACTIVATE PAPER CLAMP -------------------------A3  EXIT
PR043AE5  - CLOSE 25V CONTACTOR --------------------------A5
PR065AJ61 - BELT GO --------------------------------------A7
PR043AF3  - HAMMER SAMPLE --------------------------------A9  16D-AB

PR121AB21 - DATA BIT (0-7) ----------*2---◇(0)A1  NOTE 1
  (0-7)PR121                            ◇(1)A3  EXIT
                                        ◇(2)A5
                                        ◇(3)A7
                                        ◇(4)A9  16G-AC
                                          |
                                        ◇(5)A1  NOTE 1
                                        ◇(6)A3  EXIT
                                        └(7)A5
PR121AC3  - PARITY BIT -----------------------------------A7
PR047AP3  - STROBE ---------------------------------------A9  16J-AD

PR111AJ3  - SENSE FIRE TIER 1 ----------------------------A1  NOTE 1
PR111AK3  - SENSE FIRE TIER 2 ----------------------------A3  EXIT
PR111AL3  - SENSE FIRE TIER 3 ----------------------------A5
PR111AM3  - SENSE FIRE TIER 4 ----------------------------A7
PR111AN3  - SENSE FIRE TIER 5 ----------------------------A9  16M-AE
```

D

NOTE 3: CABLE INTERLOCK IS A SERIES CIRCUIT THROUGH THE THREE PRINTER INTERFACE CABLES AND THE PRINTER CONSOLE CABLE. SEE 5211 MIM FOR THE WIRING IN THE PRINTER THE SYSTEM BOARD WIRING ON THE 01A-A2 I/O BOARD IS:
01A-A2V3D08 (GND) TO 01A-A2V3D04
01A-A2V3B13 TO 01A-A2V4D05
01A-A2V4B13 TO 01A-A2V5D03
01A-A2V5B13 TO 01A-A2T2U05

36J-BC

```
NOTE 2
T-------01*2--- PR101 - CARRIAGE SPACE SWITCH ------------BA01
ENTR----03*2--- PR101 - CARRIAGE RESTORE SWITCH ---------BA03
    ----05*2--- ----- - POWER COMPLETE ------------------BA05
    ----07*2--- PR103 PR820
76B-BA--09*2--- PR101 - STOP/RESET SWITCH ---------------BA09
NOTE 2          PR101 - CARRIAGE 6 LPI ------------------BA07
T-------01*2--- PR101 - POWER CHECK ---------------------BB01
ENTR----03*2--- PR101 - READY SWITCH --------------------BB03
    ----05*2--- PR810 + END OF FORMS ---------------------BB05
    ----07*2--- PR121 - PRINT SUBSCANS ------------------BB07
76D-BB--09*2--- ----- - THROAT CLOSED ------------------BB09
                PR103 PR810

NOTE 2
T-------01*2--- PR101 - FORMS PULSE ---------------------BC01
ENTR----03*2--- PR121 - CARRIAGE ADVANCE ----------------BC03
    ----05*2--- PR121 - IMPRESSION CTL SS ---------------BC05
    ----07*2--- PR101 - RIBBON CHECK ---------------------BC07
76G-BC--09*2--- PR102 - CE SWITCH ON ---------------------BC09

NOTE 2
T-------01*2--- PR101 - BELT UP TO SPEED ----------------BD01
ENTR----03*2--- PR121 - HOME ----------------------------BD03
    ----05*2--- PR101 - PRINTER BUSY ---------------------BD05
    ----07*2--- PR101 - HAMMER ECHO RETURN ---------------BD07
76J-BD--09*2--- PR101 - NOT PRINT TIME -------------------BD09

NOTE 2,3
T-------01*2--- PR101 - DATA PARITY CHECK ---------------BE01
ENTR----03*2--- PR810 + CABLE INTERLOCK -----------------BE03
76M-BE
```

D

NOTE 1: MATCH WITH PAGE PR005

16S-AF

D

NOTE 2: MATCH WITH PAGE PR007

66S-BF

COMMENTS

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CONNECTORS

AAA1
0002/1A-A2/V3D09
0001/1A-A2T2/S02
AAA3
0004/1A-A2/V3D11
0003/1A-A2T2/M13
AAA5
0006/1A-A2/V3D13
0005/1A-A2T2/S03
AAA7
0008/1A-A2/V3D12
0007/1A-A2T2/U02
AAA9
0010/1A-A2/V4D04
0009/1A-A2T2/U13
ABA1
0018/1A-A2/V4D06
0017/1A-A2T2/G13
ABA3
0020/1A-A2/V4D07
0019/1A-A2T2/P07
ABA5
0012/1A-A2/V4D09
0011/1A-A2T2/S05
ABA7
0014/1A-A2/V4D12
0013/1A-A2T2/M02
ABA9
0016/1A-A2/V5D07
0015/1A-A2T2/P02
ACA1
0022/1A-A2/V5B02
0021/1A-A2T2/P06
ADA7
0038/1A-A2/V5B10
0037/1A-A2T2/M10

CONNECTORS

ADA9
0040/1A-A2/V5D06
0039/1A-A2T2/J13
AEA1
0042/1A-A2/V5D09
0041/1A-A2T2/U07
AEA3
0044/1A-A2/V5D10
0043/1A-A2T2/U10
AEA5
0046/1A-A2/V5D11
0045/1A-A2T2/U12
AEA7
0048/1A-A2/V5D12
0047/1A-A2T2/U09
AEA9
0050/1A-A2/V5D13
0049/1A-A2T2/U11
BA01
0052/1A-A2/V3B05
0051/1A-A2T2/S12
BA03
0054/1A-A2/V3B06
0053/1A-A2T2/S13
BA05
0056/1A-A2/V3B08
0055/1A-A2T2/P04
BA07
0058/1A-A2/V3B11
0057/1A-A2T2/S09
BA09
0060/1A-A2/V3B12
0059/1A-A2T2/P12
BB01
0062/1A-A2/V3D07
0061/1A-A2T2/J11

CONNECTORS

BB03
0064/1A-A2/V3D10
0063/1A-A2T2/S03
BB05
0066/1A-A2/V4B02
0065/1A-A2T2/S08
BB07
0068/1A-A2/V4B03
0067/1A-A2T2/S10
BB09
0070/1A-A2/V4B04
0069/1A-A2T2/M03
BC01
0082/1A-A2/V4B06
0081/1A-A2T2/M04
BC03
0084/1A-A2/V4B07
0083/1A-A2T2/G10
BC05
0086/1A-A2/V4B08
0085/1A-A2T2/U06
BC07
0088/1A-A2/V4B09
0087/1A-A2T2/G08
BC09
0090/1A-A2/V4B11
0089/1A-A2T2/B11
BD01
0072/1A-A2/V4B12
0071/1A-A2T2/J10
BD03
0074/1A-A2/V4D11
0073/1A-A2T2/U04
BD05
0076/1A-A2/V4D13
0075/1A-A2T2/P13

CONNECTORS

BD07
0078/1A-A2/V5B12
0077/1A-A2T2/S04
BD09
0080/1A-A2/V5D04
0079/1A-A2T2/G12
BE01
0092/1A-A2/V5D05
0091/1A-A2T2/S07
BE03
0094/1A-A2/V5B13
0093/1A-A2T2/U05
PR121AB21(01)
0024/1A-A2/V5B03
0023/1A-A2T2/P05
PR121AB21(02)
0026/1A-A2/V5B04
0025/1A-A2T2/M05
PR121AB21(03)
0028/1A-A2/V5B05
0027/1A-A2T2/M07
PR121AB21(04)
0030/1A-A2/V5B06
0029/1A-A2T2/P09
PR121AB21(05)
0032/1A-A2/V5B07
0031/1A-A2T2/M08
PR121AB21(06)
0034/1A-A2/V5B08
0033/1A-A2T2/M09
PR121AB21(07)
0036/1A-A2/V5B09
0035/1A-A2T2/P10

LINE PRINTER ATTACH
PRINTER INTERFACE
ENTER AND EXIT
PN4237796 EC833047 PEC832923

LOC=1A-A2T2

USN 00008 PRI=17NOV78 1727

AUC= SEC
PFORM=KSEB NEXTBLK BH

CID PIOFE JOB L8501548

PR003 0001

PR003 0001

4237797

PR005

FROM	SIGNAL NAME	SYSTEM BOARD SOCKET	SYSTEM CABLE TOWER
CH003AF03	-POWER ON	A-A2V3B02	D-B5B02
PR003AAA1	-CHECK INDICATOR	A-A2V3D09	D-B5D09
PR003AAA3	-INTERLOCK INDICATOR	A-A2V3D11	D-B5D11
PR003AAA7	-FORMS INDICATOR	A-A2V3D12	D-B5D12
PR003AAA5	-READY INDICATOR	A-A2V3D13	D-B5D13

FROM	SIGNAL NAME	SYSTEM BOARD SOCKET	SYSTEM CABLE TOWER
PR003AAA9	-CARRIAGE GO	A-A2V4D04	D-B4J04
PR003ABA1	+POWER ON RESET (POR)	A-A2V4D06	D-B4J06
PR003ABA3	-ACTIVATE PAPER CLAMP	A-A2V4D07	D-B4J07
PR003ABA5	-CLOSE 25V CONTACTOR	A-A2V4D09	D-B4J09
PR003ABA7	-BELT GO	A-A2V4D12	D-B4J12

FROM	SIGNAL NAME	SYSTEM BOARD SOCKET	SYSTEM CABLE TOWER
PR003ACA1	-DATA BIT 0	A-A2V5B02	D-B4B02
PR003ACA3	-DATA BIT 1	A-A2V5B03	D-B4B03
PR003ACA5	-DATA BIT 2	A-A2V5B04	D-B4B04
PR003ACA7	-DATA BIT 3	A-A2V5B05	D-B4B05
PR003ACA9	-DATA BIT 4	A-A2V5B06	D-B4B06
PR003ADA1	-DATA BIT 5	A-A2V5B07	D-B4B07
PR003ADA3	-DATA BIT 6	A-A2V5B08	D-B4B08
PR003ADA5	-DATA BIT 7	A-A2V5B09	D-B4B09
PR003ADA7	-DATA BIT P	A-A2V5B10	D-B4B10
PR003ADA9	-STROBE	A-A2V5D06	D-B4D06
PR003ABA9	-HAMMER SAMPLE	A-A2V5D07	D-B4D07
PR003AEA1	-FIRE TIER 1	A-A2V5D09	D-B4D09
PR003AEA3	-FIRE TIER 2	A-A2V5D10	D-B4D10
PR003AEA5	-FIRE TIER 3	A-A2V5D11	D-B4D11
PR003AEA7	-FIRE TIER 4	A-A2V5D12	D-B4D12
PR003AEA9	-FIRE TIER 5	A-A2V5D13	D-B4D13

EC HISTORY		DRAWING TITLE
04MAY77	832742H	PRINTER INTERFACE CABLE
02DEC77	832850	MACH EXIT TO PRINTER 5340
		PART NO 4237797
C		CLASSIFICATION
		4/13/77 JEN IBM CORP

PR005

PR005

E

4237798

PR007

SIGNAL NAME	SYSTEM CABLE TOWER	SYSTEM BOARD SOCKET	TO
-CARRIAGE SPACE SWITCH	D-B5B05	A-A2V3B05	PR003
-CARRIAGE RESTORE SWITCH	D-B5B06	A-A2V3B06	PR003
-POWER COMPLETE	D-B5B08	A-A2V3B08	PR003
-CARRIAGE 6 LPI	D-B5B11	A-A2V3B11	PR003
-STOP/RESET SWITCH	D-B5B12	A-A2V3B12	PR003
-POWER CHECK	D-B5D07	A-A2V3D07	PR003
-READY SWITCH	D-B5D10	A-A2V3D10	PR003

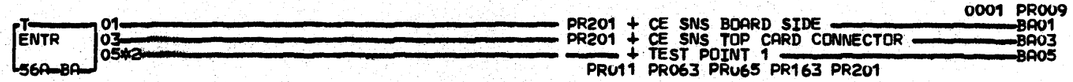
SIGNAL NAME	SYSTEM CABLE TOWER	SYSTEM BOARD SOCKET	TO
+END OF FORMS	D-B4G02	A-A2V4B02	PR003
-PRINT SUBSCANS	D-B4G03	A-A2V4B03	PR003
-THROAT CLOSED	D-B4G04	A-A2V4B04	PR003
-FORMS PULSE	D-B4G06	A-A2V4B06	PR003
-CARRIAGE ADVANCE	D-B4G07	A-A2V4B07	PR003
-IMPRESSION CTL SS	D-B4G08	A-A2V4B08	PR003
-RIBBON CHECK	D-B4G09	A-A2V4B09	PR003
-CE SWITCH ON	D-B4G11	A-A2V4B11	PR003
-BELT UP TO SPEED	D-B4G12	A-A2V4B12	PR003
-HOME	D-B4J11	A-A2V4D11	PR003
-PRINTER BUSY	D-B4J13	A-A2V4D13	PR003

SIGNAL NAME	SYSTEM CABLE TOWER	SYSTEM BOARD SOCKET	TO
-HAMMER ECHO RETURN	D-B4B12	A-A2V5B12	PR003
-NOT PRINT TIME	D-B4D04	A-A2V5D04	PR003
-DATA PARITY CHECK	D-B4D05	A-A2V5D05	PR003

EC HISTORY		DRAWING TITLE
04MAY77	832742H	PRINTER INTERFACE CABLE
02DEC77	832850	MACH ENTER FROM PRINTER 5340
		PART NO 4237798
C		CLASSIFICATION
		4/13/77 JEN

IBM CORP

PR007



COMMENTS
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E

CONNECTORS
BAU5
0002/1A-A2/S2U08
0001/1A-A2T2/G06

LINE PRINTER ATTACH
MISCELLANEOUS ENTRIES

PN4237876 EC=832850 PEC=832742H

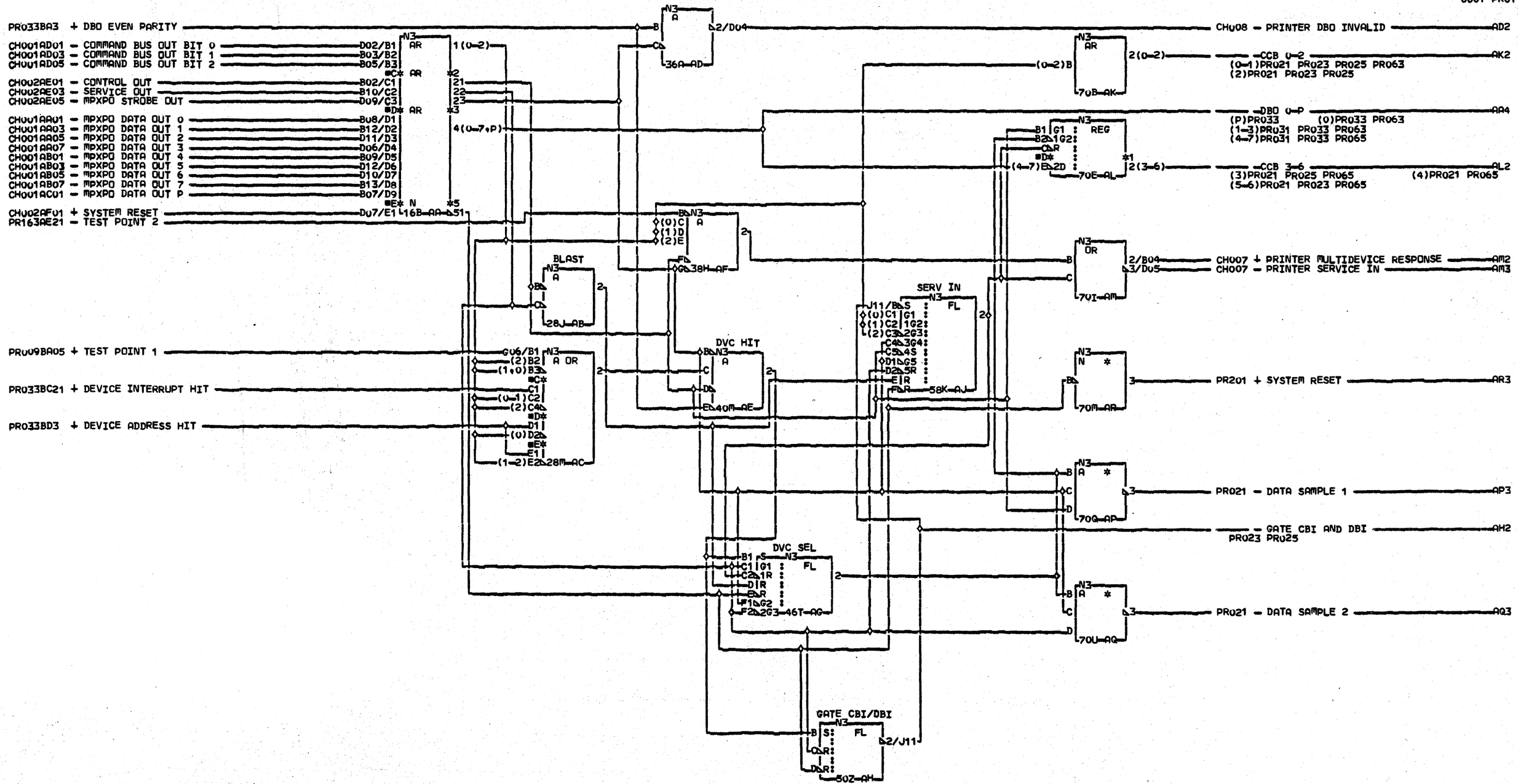
LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK BC

CID PIOFE JOB Ku200817

PR09 0001



COMMENTS

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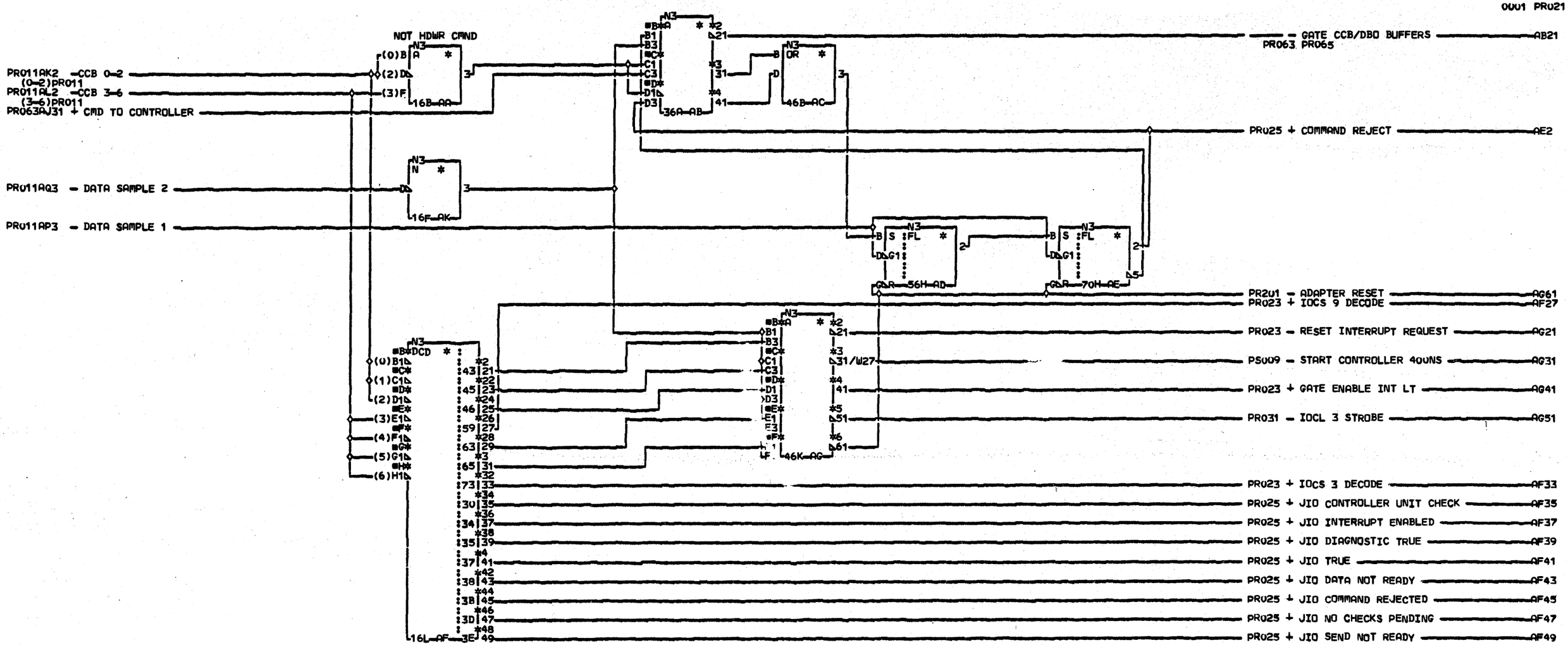
LINE PRINTER ATTACH ADAPT	
PN4237799 EC=832850 PEC=832742H	
LOC=1A-A2T2	
USN 00006	PRI=07SEP77 0115
AUC= PFORM=KSEB	SEC NEXTBLK AS
CID PIOFE	JOB K0200817

PR011 0001

PR011 0001



COMMENTS

LINE PRINTER ATTACH
SYSTEM INTERFACE
COMMAND DECODES
PN4237800 EC=832850 PEC=832742H

LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

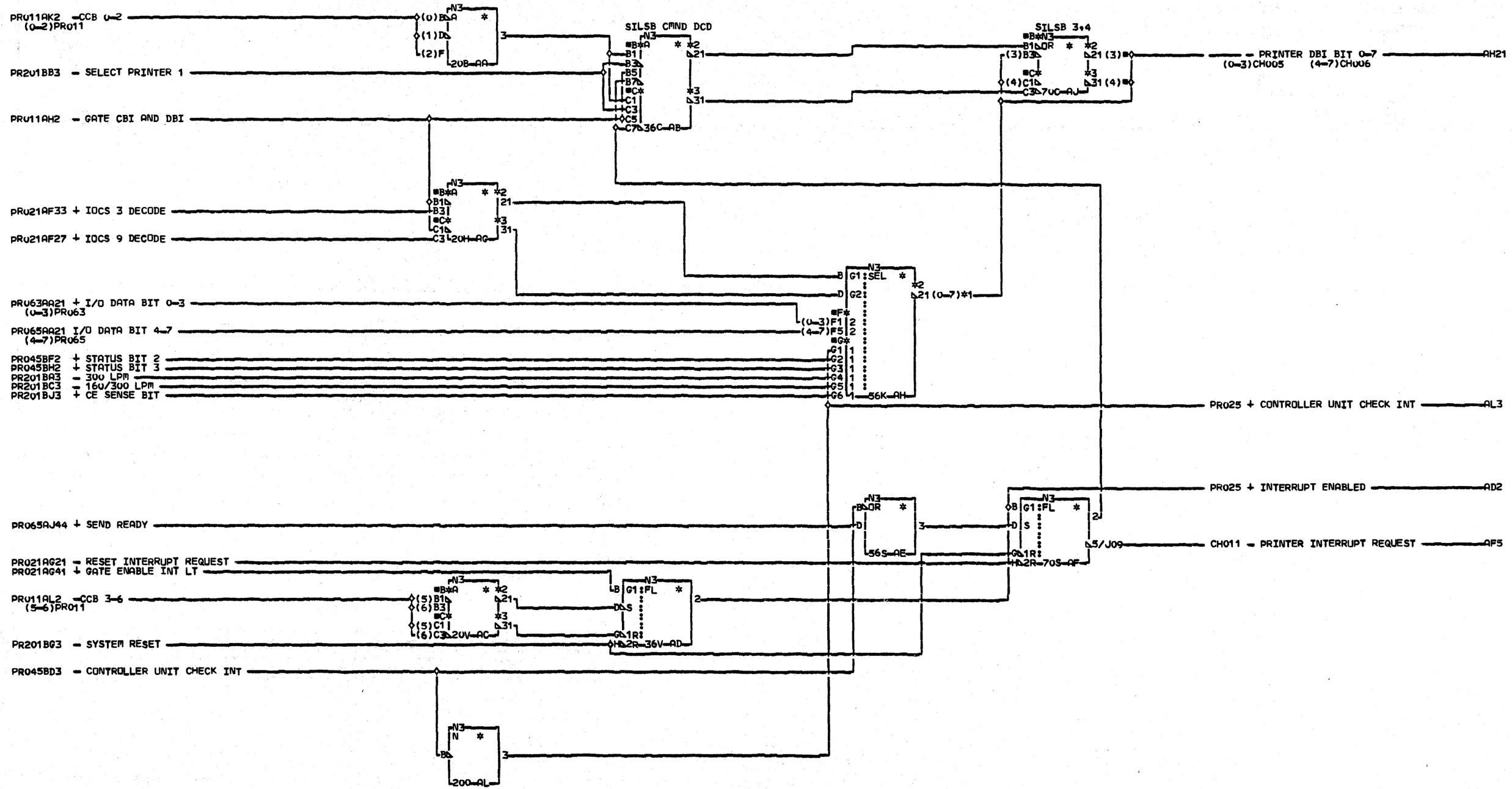
AUC= SEC
PFORM=KSEB NEXTBLK AL

CID PIOFE JOB K0200817

PR021 0001

E

PR021 0001



COMMENTS	PINS
D1COPYRIGHT IBM CORP. 1978	AH
	21/X26
	22/X04
	23/X25
	24/X03
	25/X22
	26/X06
	27/X24
	28/X05

LINE PRINTER ATTACH
SYSTEM DBI ASSEMBLER
INTERRUPT CONTROLS
PN4237801 EC=832850 PEC=832742H

LOC=1A-A2T2

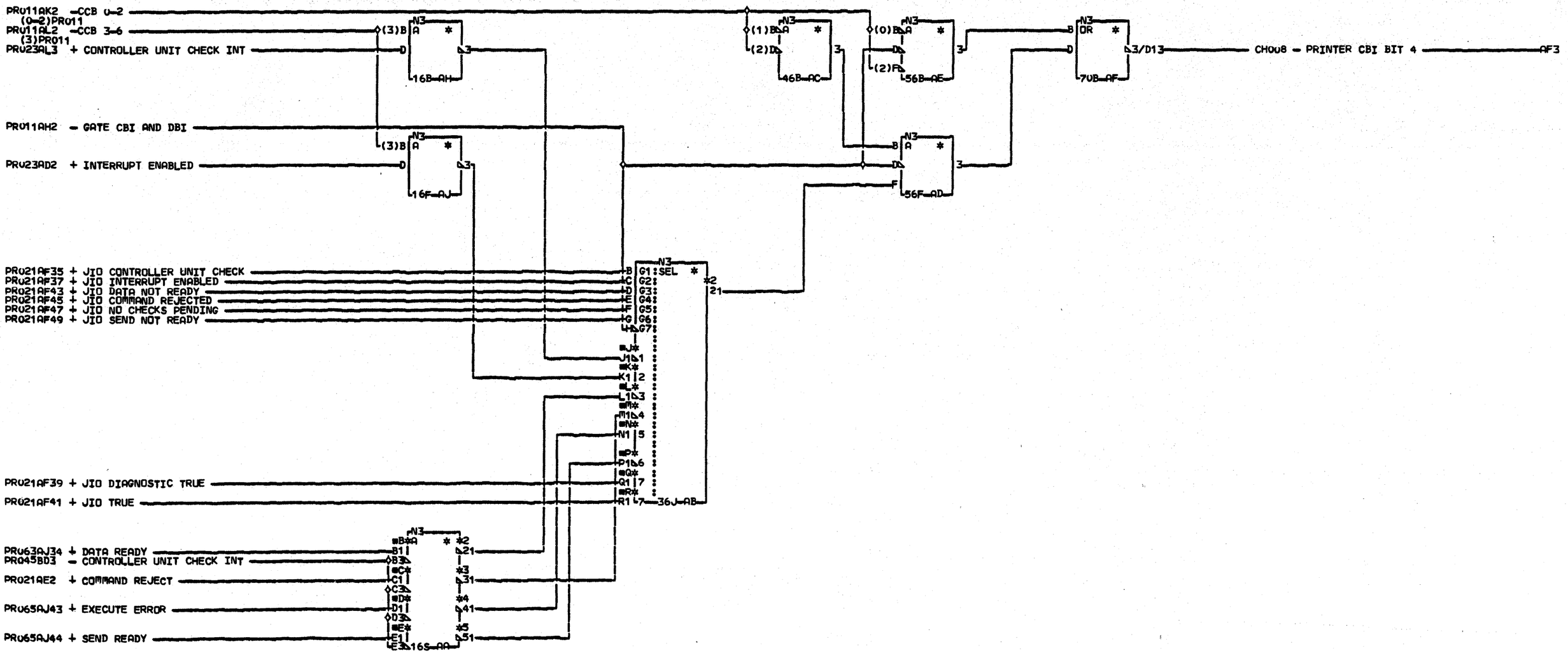
USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AM

CID PIOFE JOB K0200817

PRU23 0001

PRU23 0001



COMMENTS

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E

LINE PRINTER ATTACH
SYSTEM CBI BIT 4
ENABLE INTERRUPT

PN4237802 EC=832850 PEC=832742H

LOC=1A-A2T2

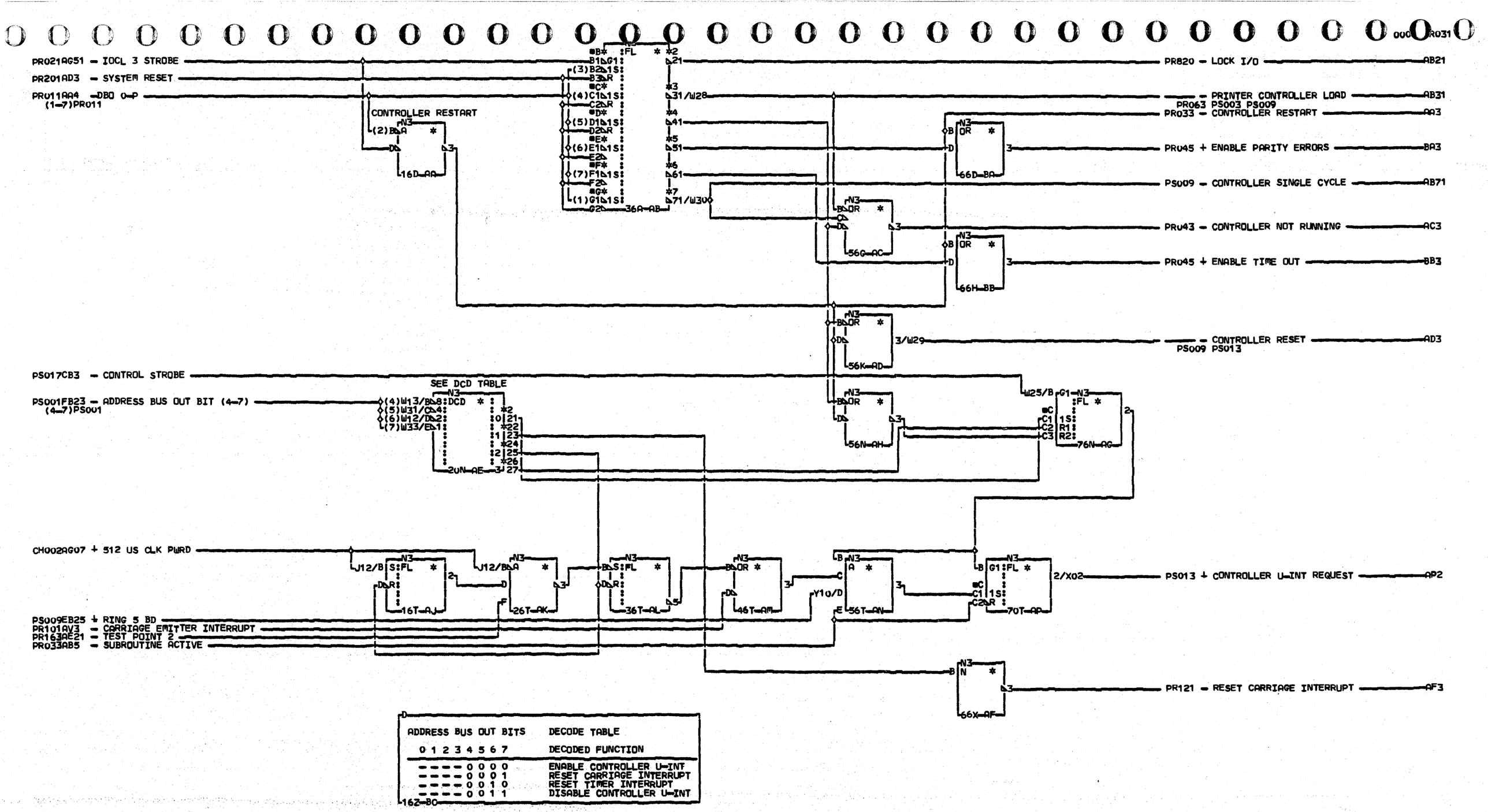
USN 00006 PRI=07SEP77 U115

AUC= SEC
PFORM=KSEB NEXTBLK AK

CID PIOFE JOB K0200817

PR025 0001

PR025 0001



ADDRESS BUS OUT BITS	DECODE TABLE
0 1 2 3 4 5 6 7	DECODED FUNCTION
- - - - 0 0 0 0	ENABLE CONTROLLER U-INT
- - - - 0 0 0 1	RESET CARRIAGE INTERRUPT
- - - - 0 0 1 0	RESET TIMER INTERRUPT
- - - - 0 0 1 1	DISABLE CONTROLLER U-INT

COMMENTS
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LINE PRINTER ATTACH
CONTROLLER MODE
CONTROLLS
PN4237803 EC=832850 PEC=832742H
LOC=1A-A2T2
USN 00006 PRI=07SEP77 0115
AUC= SEC
PFORM=KSEB NEXTBLK BD
CID PIOME JOB K0200817

PRG31 0001

PS011CL3 — LOAD LINK FROM IAR
PS011CN3 — LOAD LINK FROM BACKUP
PR031AA3 — CONTROLLER RESTART
PS005GG21 — ALU ZERO IND
PS009EB21 + RING 1 BD
PS009EB23 + RING 3 BD
PS013CK5 — FORCE BAL INST
PR201BG3 — SYSTEM RESET
PS005GG22 — ALU NON ZERO IND
PS005GG23 — ALU CARRY IND

N3 OR * — M06/B, S06/D — 16A-AA — 3
N3 P:REG * — B, D, E, F — 36C-AB — 5
N3 A * — W03/B, W04/D — 16F-AC — 3
N3 G1:FL * — B, W06/D, S, FD, R — 36F-AD — 5
N3 G1:FL * — B, W24/D, S, FD, R — 36J-AE — 5
N3 G1:FL * — B, W23/D, S, FD, R — 36M-AF — 5

PR031 — SUBROUTINE ACTIVE — AB5
PR810 — PCR ZERO — AD5
PR810 — PCR NONZERO — AE5
PR810 — PCR CARRY — AF5

PR011AA4 — DB0 0-P (P,0-7)PR011
PR201BB3 — SELECT PRINTER 1

N3 OE * — (0)B, M12/D — 20R-BB — 3
N3 DCD * — B, (1)D, (2)F, (3)H — 46R-BC — E — 41 — *2 21, *3 31, *4
N3 OR * — B, D — 66R-BD — 3
N3 EVEN * — (0)B08/B, (1)B12/D, (2)D11/F, (3)D06/H, (4)B09/J, (5)D12/L, (6)D10/N, (7)B13/P, (P)B07/R — 20V-BA — 3

PR011 + DEVICE INTERRUPT HIT — BC21
PR011 + DEVICE ADDRESS HIT — BD3
PR011 + DB0 EVEN PARITY — BA3

COMMENTS
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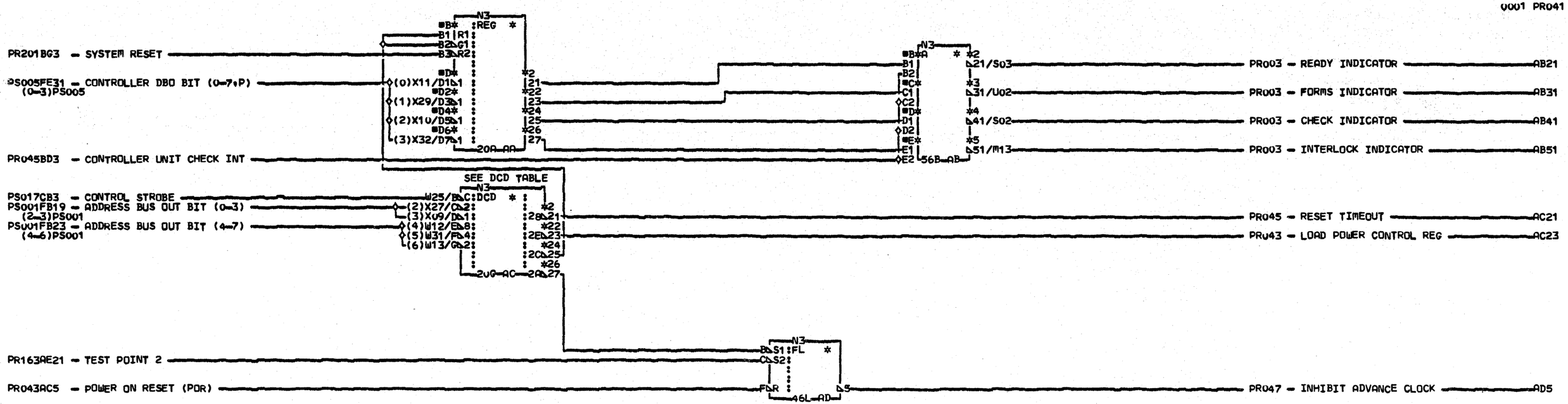
E

LINE PRINTER ATTACH
CONTROLLER PCR SAVE
SYSTEM DB0 PARITY CHECK
PN4237804 EC=832850 PEC=832742H

LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115
AUC= SEC
PFORM=KSEB NEXTBLK BE
CID PIOFE JOB K0200817

PROMS 0001
PROMS 0001



ADDRESS BUS OUT BIT								DECODE TABLE	
0	1	2	3	4	5	6	7	HEX	DECODED FUNCTION
-	-	1	0	1	0	0	-	28	RESET U-LOOP TIME OUT
-	-	1	0	1	0	1	-	2A	INHIBIT PHASE ADVANCE
-	-	1	0	1	1	0	-	2C	LOAD LIGHTS
-	-	1	0	1	1	1	-	2E	LOAD POWER CONTROL REG

20T-AE

COMMENTS

LINE PRINTER ATTACH
PRINTER LIGHT REGISTER
AND PHASE CLOCK CONTROL
PN4237805 EC=832850 PEC=832742H

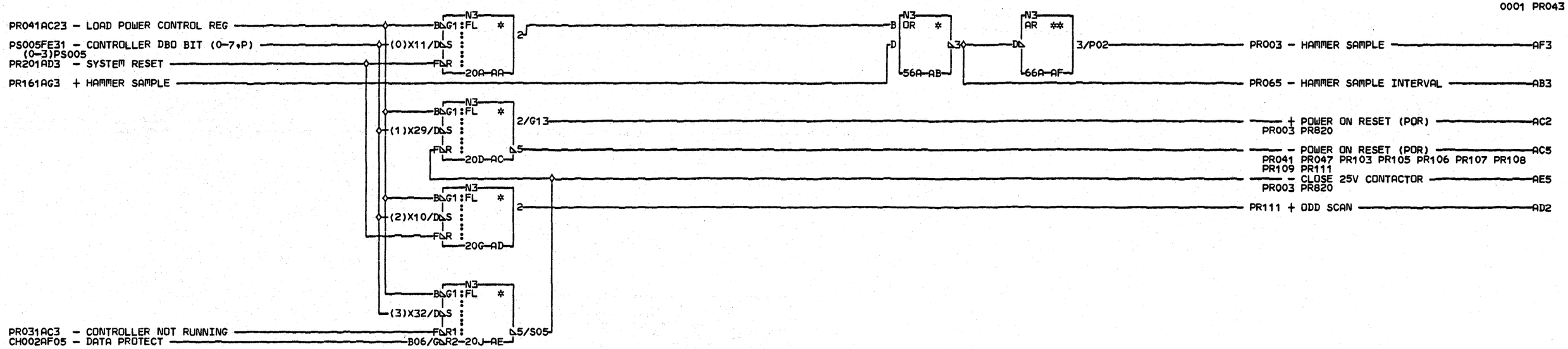
LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AF

CID PIOFE JOB K0200817

PR041 0001



COMMENTS

E.

LINE PRINTER ATTACH
PRINTER POWER
CONTROL REGISTER
PN4237806 EC832923 PEC832850

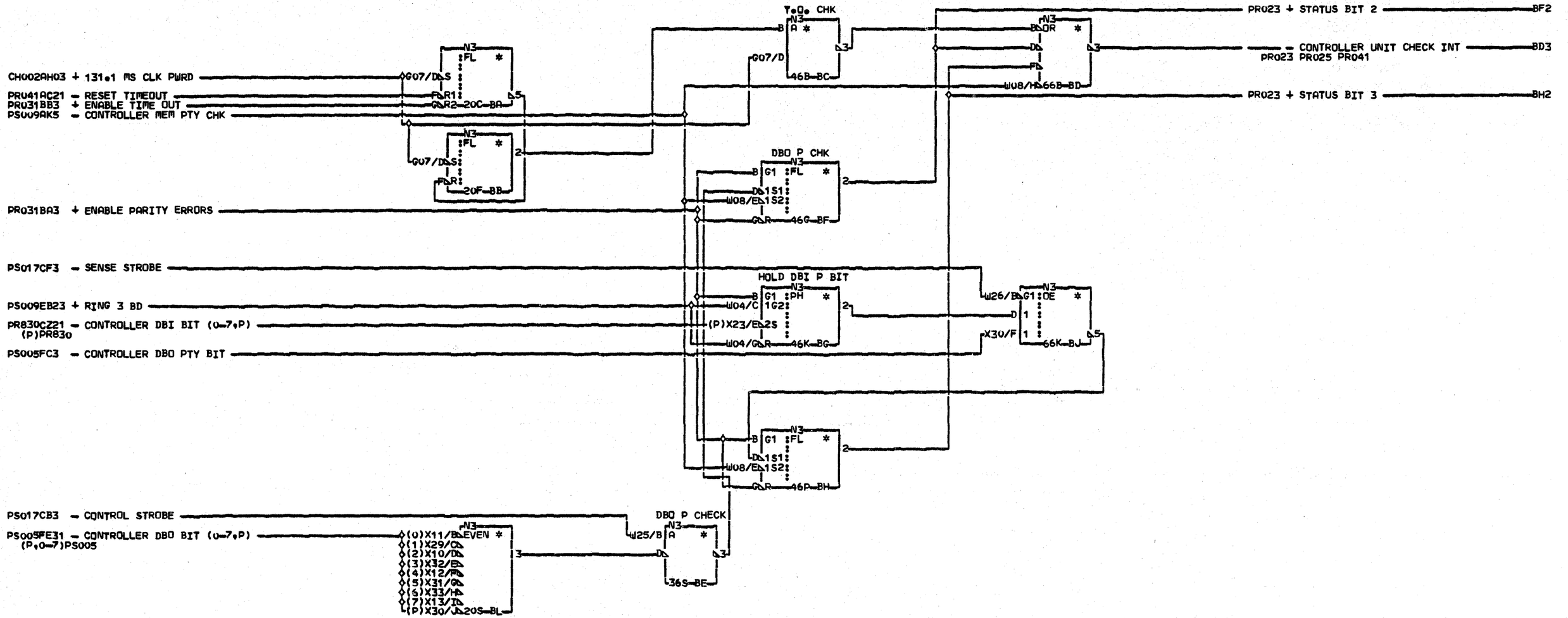
LOC=1A-A2T2

USN 00008 PRI=25APR78 1639

AUC= SEC
PFORM=KSEB NEXTBLK AG

CID PIOFE JOB K0200914

PR043 0001



COMMENTS

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6

LINE PRINTER ATTACH
CONTROLLER ERROR STATUS

PN4237807 EC=832850 PEC=832742H

LOC=1A-A2T2

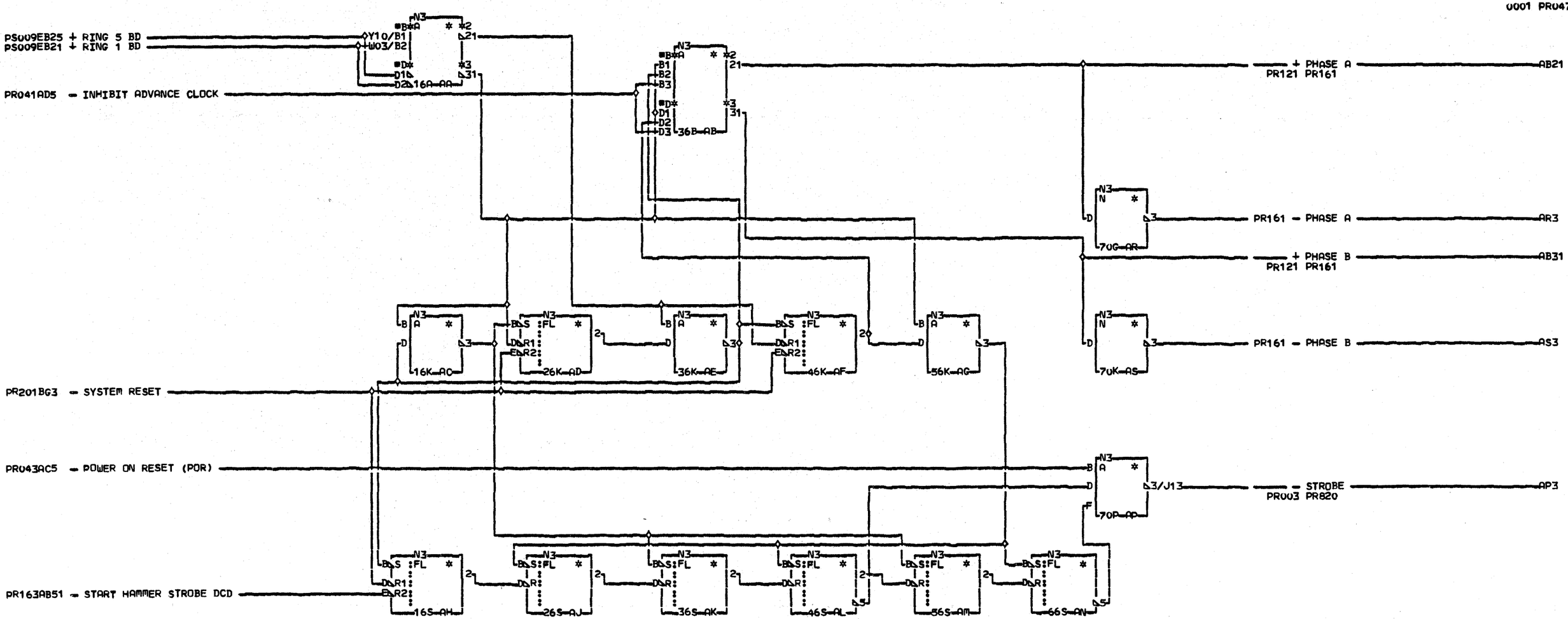
USN 00006 PRI=07SEP77 0115

AUC=
PFORM=K5EB SEC
NEXTBLK BM

CID PIOFE JOB K•200817

PRO45 0001

PRO45 0001



COMMENTS

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E

LINE PRINTER ATTACH
PHASE CLOCK
PRINT DATA STROBE
PN4237808 EC=832850 PEC=832742H

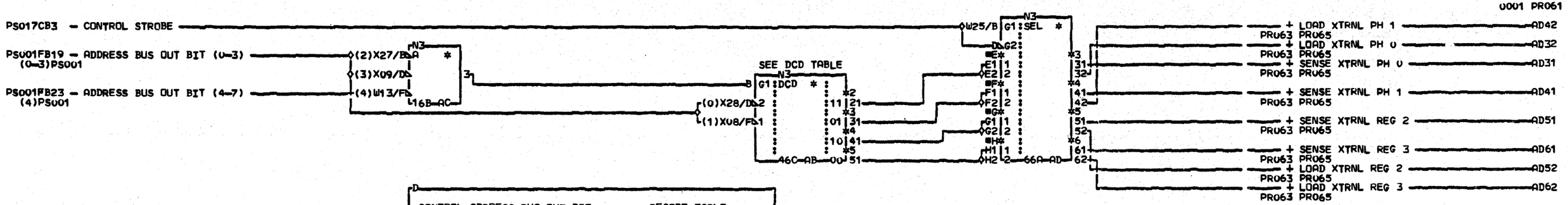
LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AT

CID PIOFE JOB K0200817

PR047 0001



CONTROL ADDRESS BUS OUT BIT — DECODE TABLE

STROBE	0	1	2	3	4	5	6	7	DECODED FUNCTION
1	0	0	1	1	1	—	—	—	LOAD XTRNL REG 3 HI,LOW
1	0	1	1	1	1	—	—	—	LOAD XTRNL REG 2 HI,LOW
1	1	0	1	1	1	—	—	—	LOAD XTRNL PH 1 HI,LOW
1	1	1	1	1	1	—	—	—	LOAD XTRNL PH 0 HI,LOW
0	0	0	1	1	1	S	S	S	SENSE XTRNL REG 3 HI,LOW
0	0	1	1	1	1	S	S	S	SENSE XTRNL REG 2 HI,LOW
0	1	0	1	1	1	S	S	S	SENSE XTRNL PH 1 HI,LOW
0	1	1	1	1	1	S	S	S	SENSE XTRNL PH 0 HI,LOW

S THE CORRECT SELECTOR MODULES, ON PAGE PR810 AND PR820, MUST BE OPTIONED FOR THESE FUNCTIONS

16G-AE

COMMENTS

LINE PRINTER ATTACH
REGISTER SELECT DECODE

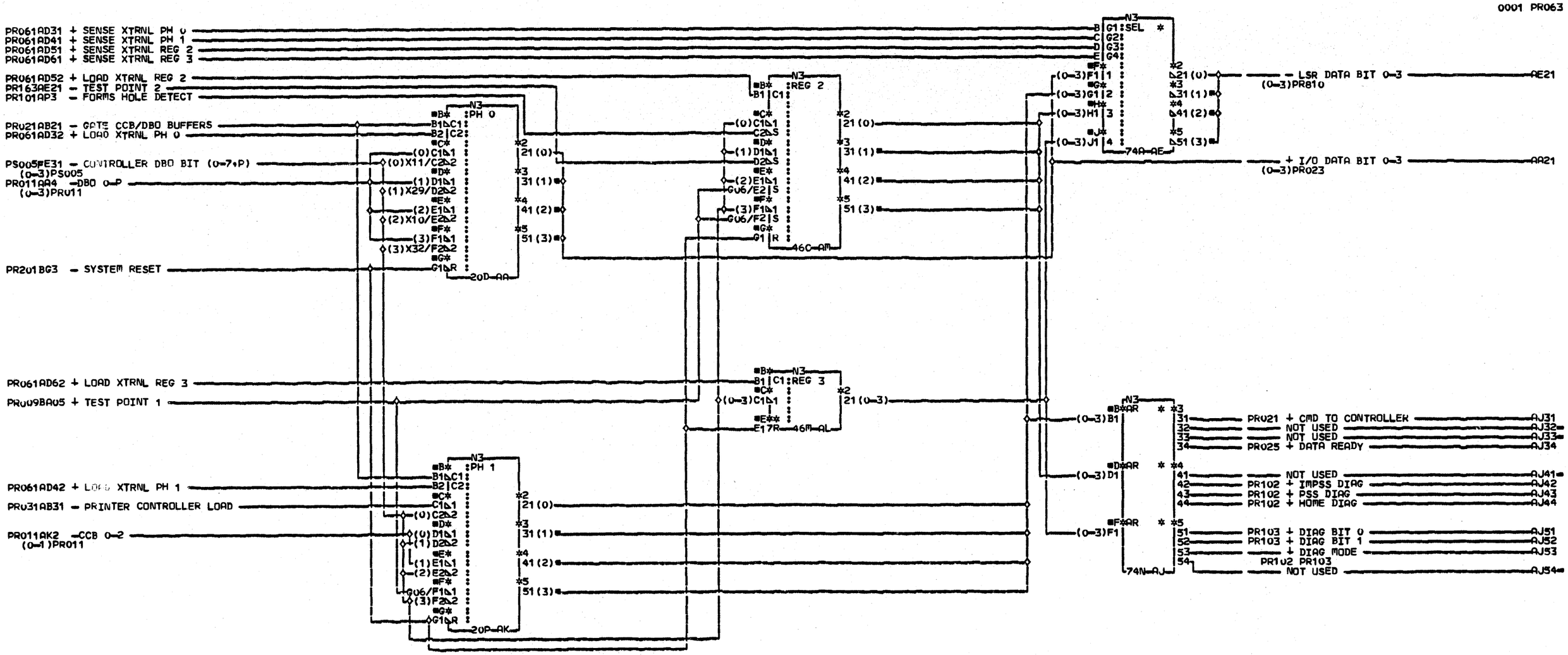
PN4237809 EC=832850 PEC=832742H

LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AF

CID PIOFE JOB K0200817



COMMENTS

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E

LINE PRINTER ATTACH
EXTERNAL REGISTERS
HIGH NIBBLE
PN4237810 EC=832850 PEC=832742H

LOC=1A-A2T2

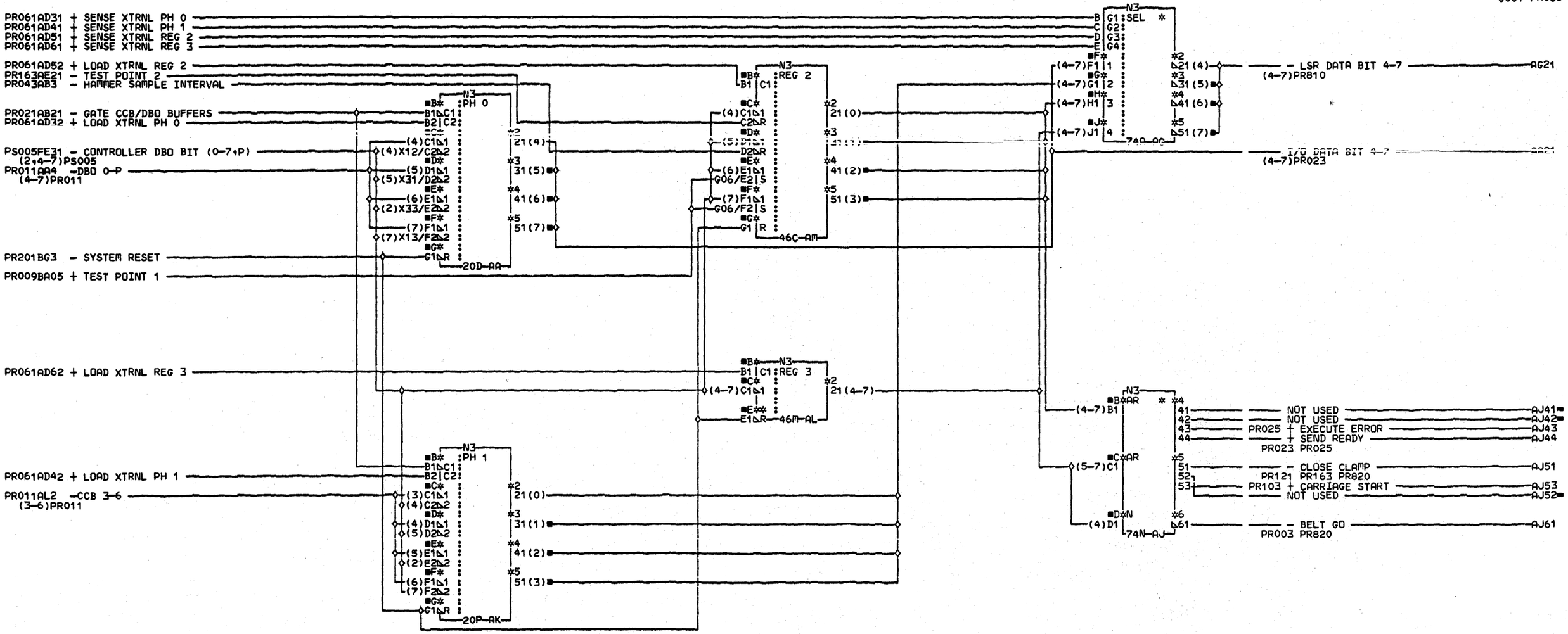
USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AN

CID PIOFE JOB K02U0817

PRU63 0001

PRU63 0001



COMMENTS

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LINE PRINTER ATTACH
EXTERNAL REGISTERS
LOW NIBBLE
PN4237811 EC832923 PEC832850

LOC=1A-A2T2

USN 00008 PRI=25APR78 1639

AUC= SEC
PFORM=KSEB NEXTBLK AN

CID PIOFE JOB K0200914

PR003BD09 – NOT PRINT TIME — C12/BLOCK N3 OR * — D0 D3 — 26A-AA
PR103AA21 – NOT PRINT TIME — D0 D3 — 26A-AA — PR161 PR820 – NOT PRINT TIME – AA3

PR003BD07 – HAMMER ECHO RETURN — S04/BLOCK N3 OR * — D0 D3 — 46C-AC
PR103AA22 – HAMMER ECHO RETURN — D0 D3 — 46C-AC — PR161 PR820 – HAMMER ECHO RETURN – AC3

PR003BD05 – PRINTER BUSY — P13/BLOCK N3 OR * — D0 D3 — 26E-AE
PR103AA31 – PRINTER BUSY — D0 D3 — 26E-AE — PR820 – PRINTER BUSY – AE3

PR003BA01 – CARRIAGE SPACE SWITCH — S12/BLOCK N3 OR * — D0 D3 — 46G-AG
PR103AA32 – CARRIAGE SPACE SW — D0 D3 — 46G-AG — PR820 – CARRIAGE SPACE SWITCH – AG3

PR003BB01 – POWER CHECK — J11/BLOCK N3 OR * — D0 D3 — 26J-AJ
PR103AA33 – POWER FAULT — D0 D3 — 26J-AJ — PR820 – POWER FAULT – AJ3

PR003BC07 – RIBBON CHECK — G08/BLOCK N3 OR * — D0 D3 — 46L-AL
PR103AA41 – RIBBON CHECK — D0 D3 — 46L-AL — PR810 – RIBBON CHECK – AL3

PR003BA03 – CARRIAGE RESTORE SWITCH — S13/BLOCK N3 OR * — D0 D3 — 26N-AN
PR103AA51 – CARRIAGE RESTORE SW — D0 D3 — 26N-AN — PR820 – CARRIAGE RESTORE SWITCH – AN3

PR003BC01 – FORMS PULSE — M04/BLOCK N3 OR * — D0 D3 — 46P-AP
PR103AA52 – FORMS HOLE DETECT — D0 D3 — 46P-AP — PR063 – FORMS HOLE DETECT – AP3

PR003BA07 – CARRIAGE 6 LPI — S09/BLOCK N3 OR * — D0 D3 — 26R-AR
PR103AA53 – CARRIAGE 6 LPI — D0 D3 — 26R-AR — PR820 – CARRIAGE 6 – AR3

PR003BB03 – READY SWITCH — P11/BLOCK N3 OR * — D0 D3 — 46T-AT
PR103AA71 – START SWITCH — D0 D3 — 46T-AT — PR820 – READY SWITCH – AT3

PR121AH5 – CARRIAGE EMITTER DEGLIT — BLOCK N3 OR * — D0 D3 — 26V-AV
PR103AA72 – CARRIAGE EMITTER — D0 D3 — 26V-AV — PR031 PR810 – CARRIAGE EMITTER INTERRUPT – AV3

PR103AA81 – DATA PARITY CHECK — S07/BLOCK N3 OR * — D0 D3 — 46W-AW — PR810 – DATA PARITY CHECK – AW3
PR003BE01 – DATA PARITY CHECK — D0 D3 — 46W-AW

PR003BD01 – BELT UP TO SPEED — J10/BLOCK N3 OR * — D0 D3 — 26Y-AY
PR103AA91 – BELT UP TO SPEED — D0 D3 — 26Y-AY — PR820 – BELT UP TO SPEED – AY3

PR103AA92 – STOP SWITCH — P12/BLOCK N3 OR * — D0 D3 — 46Z-AZ — PR820 – STOP/RESET SWITCH – AZ3
PR003BA09 – STOP/RESET SWITCH — D0 D3 — 46Z-AZ

COMMENTS
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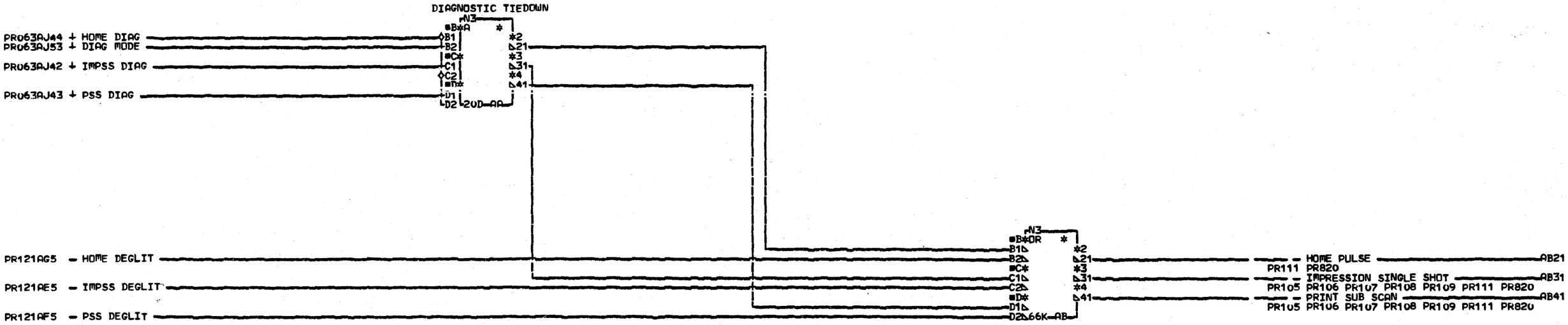
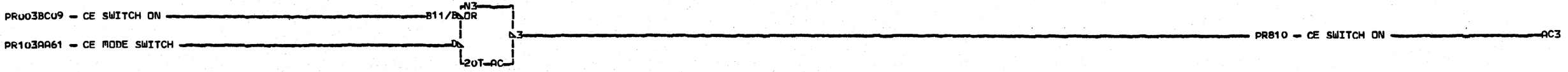
LINE PRINTER ATTACH
PRINTER/ADAPTER INTERFACE
PN4237812 EC=83285U PEC=832742H
LOC=1A-A2T2
USN 00006 PRI=07SEP77 0115
AUC= SEC
PFORM=KSEB NEXTBLK A0
CID PIOFE JOB K0201356

PR101 0001 — PR101 0001

E





COMMENTS

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LINE PRINTER ATTACH
BELT INTERFACE & DIAG.

PN4237813 EC=832850 PEC=832742H

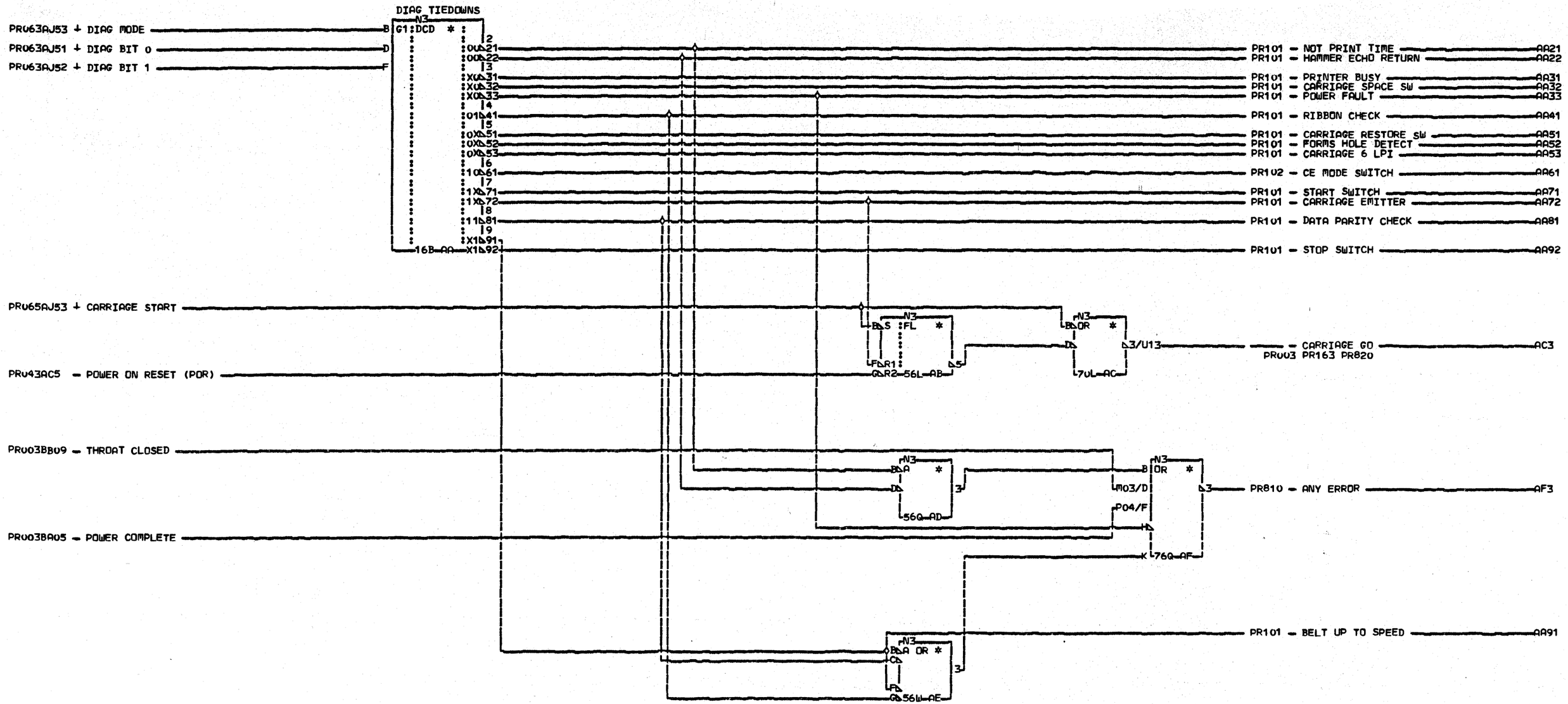
LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AD

CID PIOFE JOB K0201356

PR102 0001



COMMENTS
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LINE PRINTER ATTACH
DIAGNOSTIC TIEDOWNS
ANY-ERROR, CARR. GO
PN4237814 EC=832850 PEC=832742H

LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

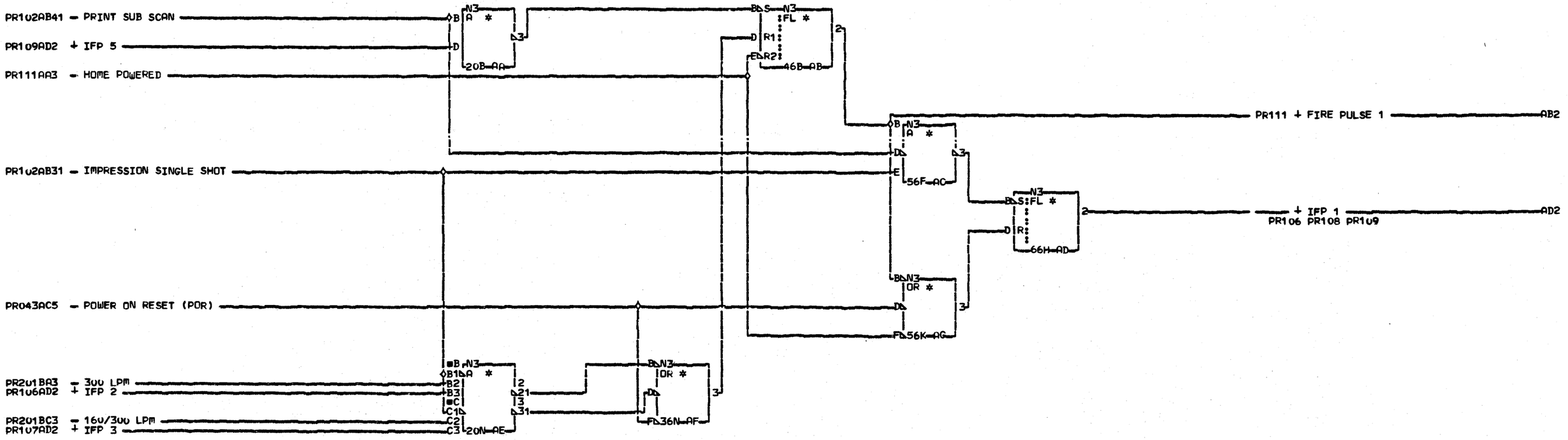
AUC= SEC
PFORM=KSEB NEXTBLK AG

CID PIOFE JOB K0201356

PRU3 0001

E

PRU3 0001



COMMENTS

LINE PRINTER ATTACH
FIRE PULSE 1

PN4237815 EC=832850 PEC=832742H

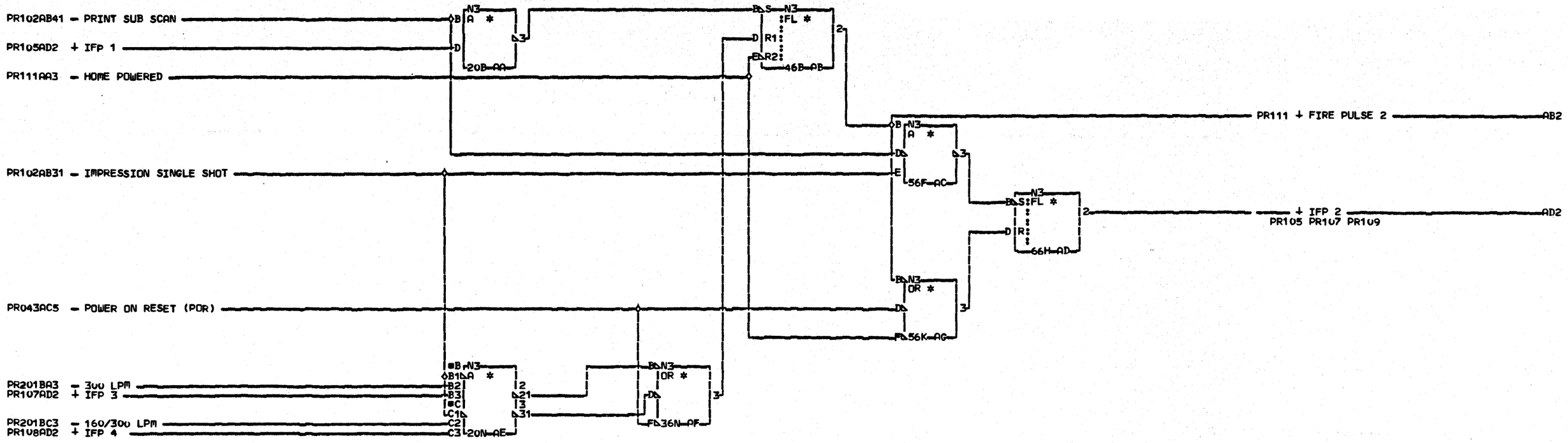
LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AH

CID PIOFE JOB KU201356

PR105 0001



COMMENTS
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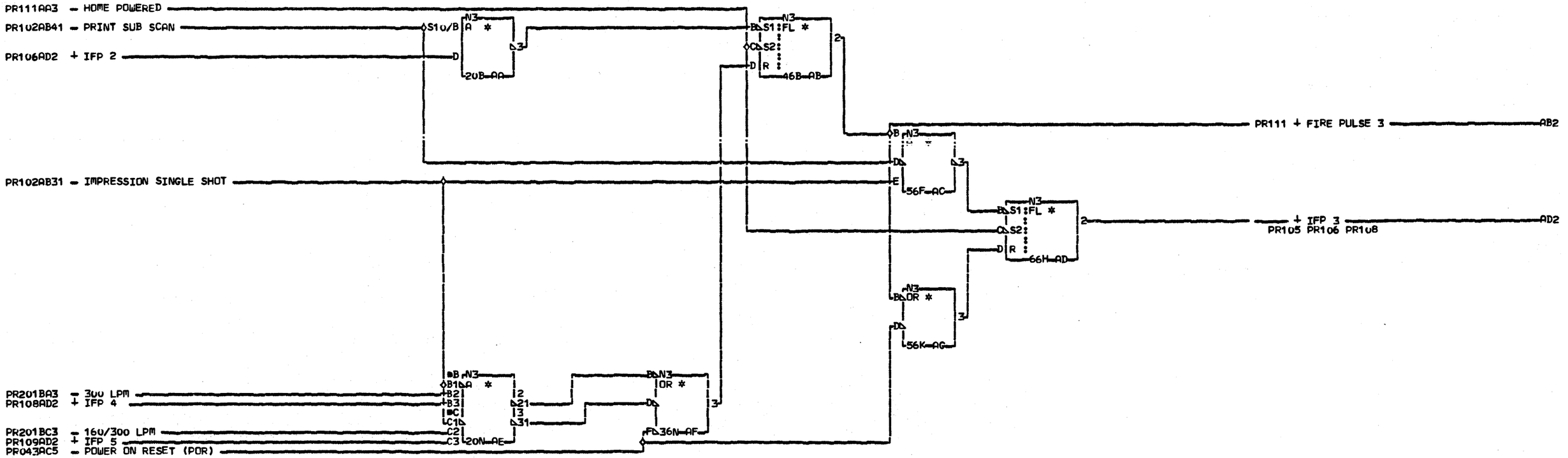
E

LINE PRINTER ATTACH FIRE PULSE 2	
PN4237877 EC=832850 PEC=832742H	
LOC=1A-A2T2	
USN 00006	PRI=07SEP77 0115
AUC=	SEC
PFORM=KSEB	NEXTBLK AH
CID PIOFE	JOB Ku201356

PR106 0001



COMMENTS

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LINE PRINTER ATTACH
FIRE PULSE 3

PN4237816 EC=83285U PEC=832742H

LOC=1A-A2T2

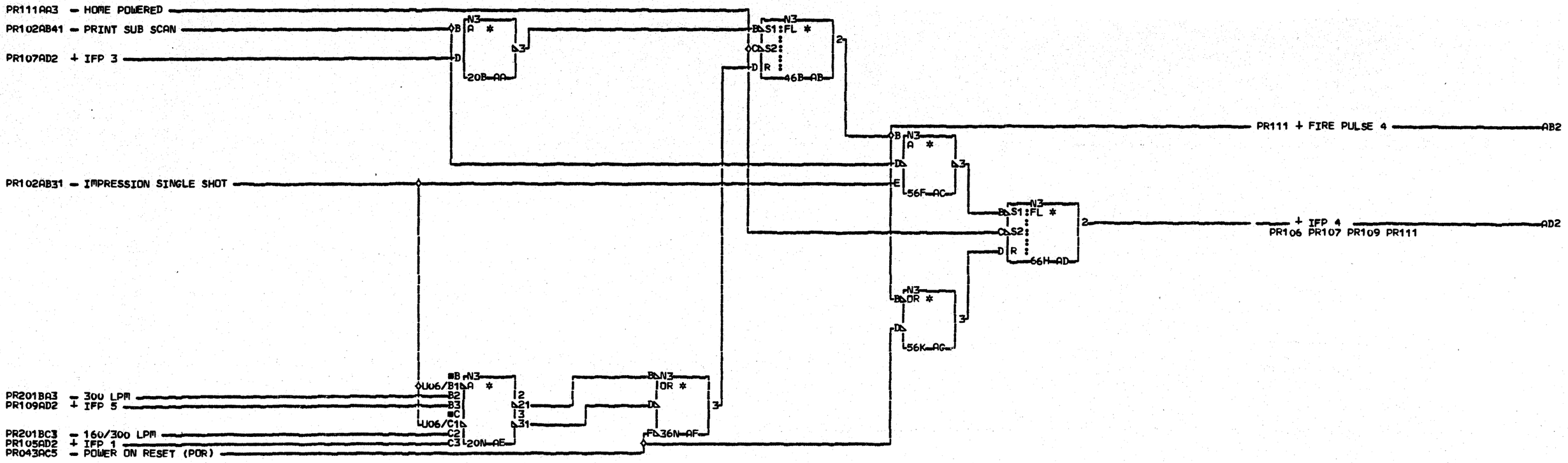
USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AH

CID PIOFE JOB K0201356

PR107 0001

PR107 0001



COMMENTS

E

LINE PRINTER ATTACH
FIRE PULSE 4

PN4237878 EC=832850 PEC=832742H

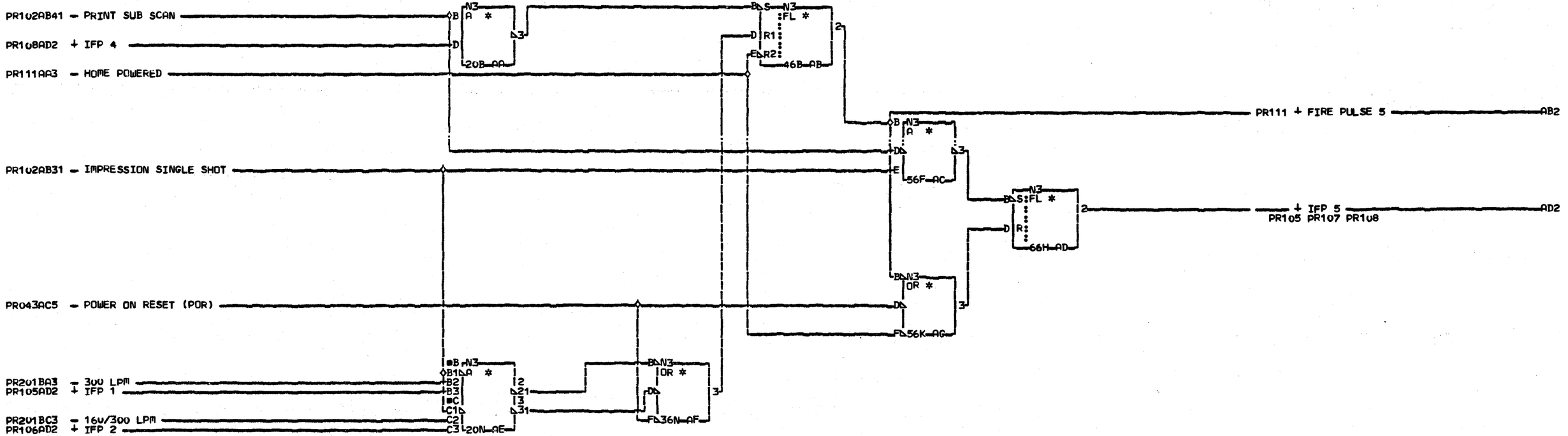
LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK AH

CID PIOFE JOB KU201356

PR108 0001



COMMENTS

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LINE PRINTER ATTACH
FIRE PULSE 5

PN4237817 EC=832850 PEC=832742H

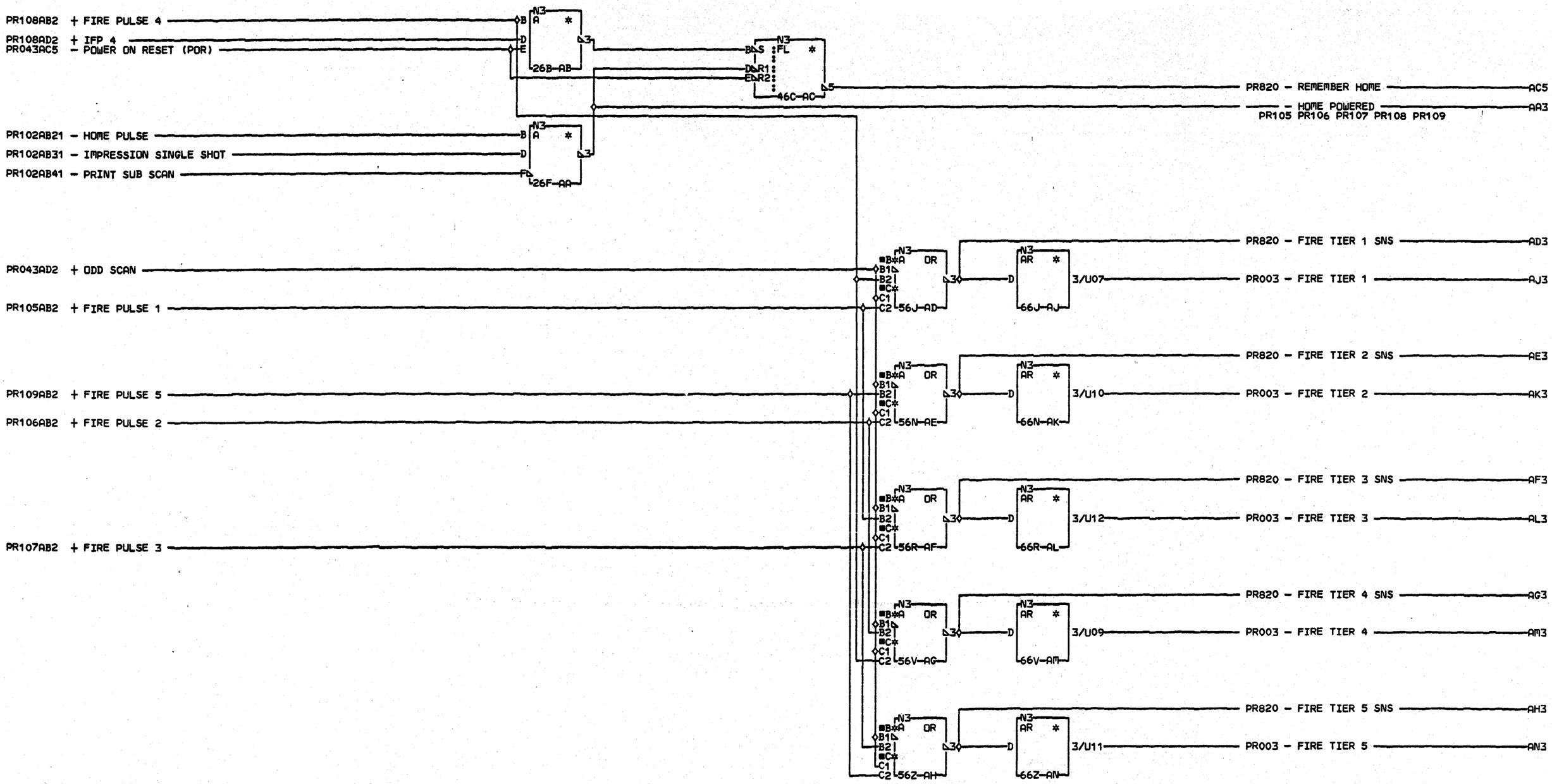
LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC=
PFORM=KSEB SEC
NEXTBLK AH

CID PIOFE JOB K0201356

PR109 0001



COMMENTS
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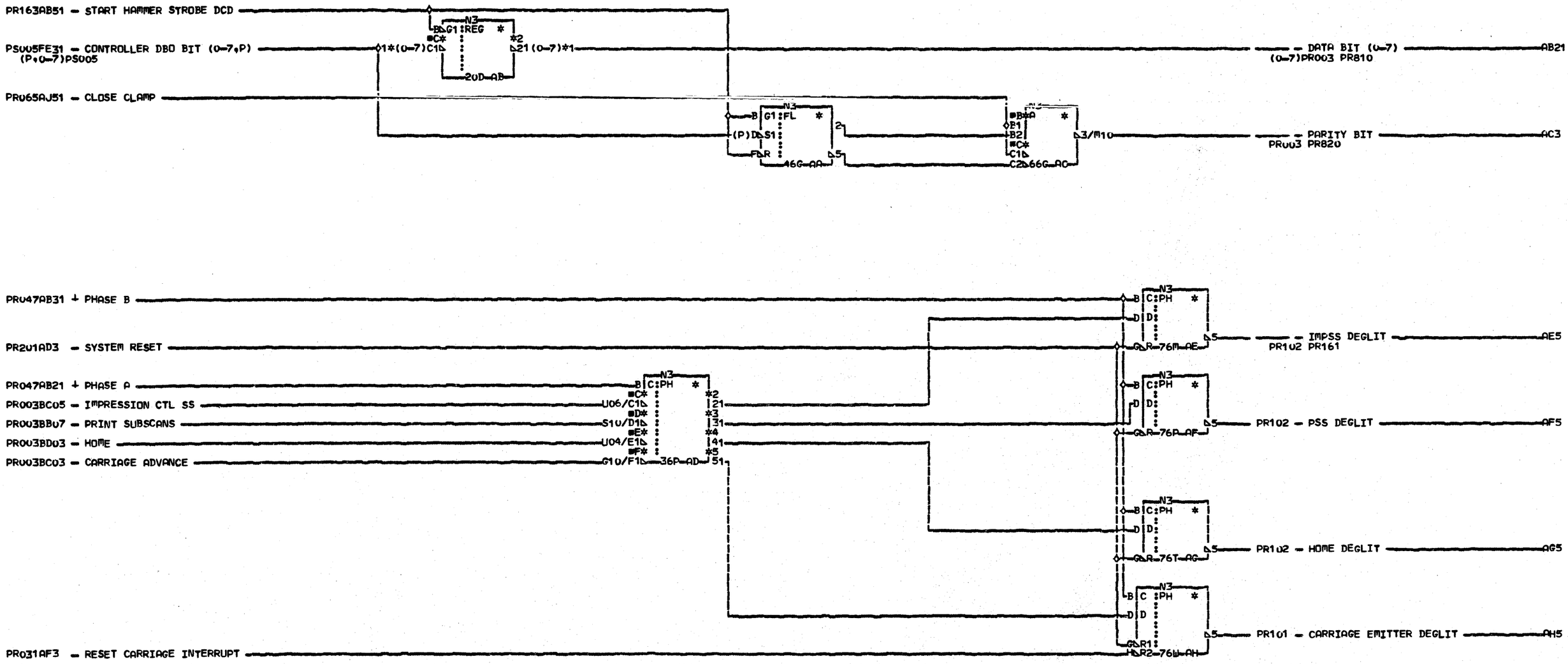
LINE PRINTER ATTACH
FIRE TIER GENERATION
REMEMER HOME
PN4237818 EC832923 PEC832850
LOC=1A-A2T2
USN 00008 PRI=25APR78 1639
AUC= SEC
PFORM=KSEB NEXTBLK A0
CID PIOFE JOB K0200914

PR111 0001

E



COMMENTS	PINS	PINS
D1COPYRIGHT IBM CORP. 1978	AB	26/MU8
	C1/X11	27/MU9
	C2/X29	28/P10
	C3/X10	
	C4/X32	
	C5/X12	
	C6/X31	
	C7/X33	
	C8/X13	
	21/P06	
	22/P05	
	23/MU5	
	24/MU7	
	25/PU9	

LINE PRINTER ATTACH
PRINT DATA REG
BELT/CARRIAGE DEGLITCH
PN4237819 EC=832850 PEC=832742H

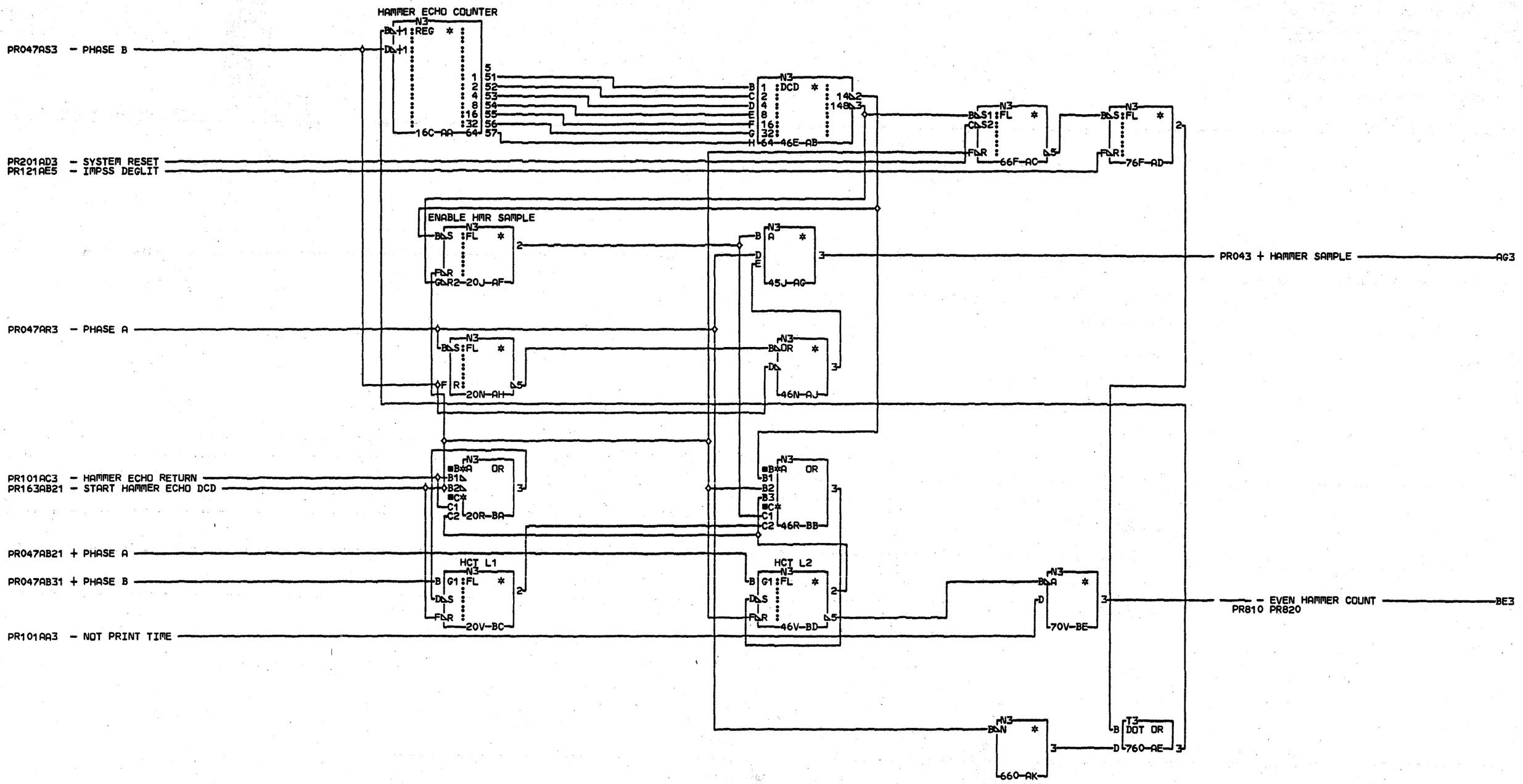
LOC=1A-A2T2

USN 00006 PRI=07SEP77 U115

AUC= SEC
PFORM=KSEB NEXTBLK AI

CID PIOFE JOB K0201356

PR121 0001



COMMENTS

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E

LINE PRINTER ATTACH
HAMER SAMPLE DRIVE
HAMER ECHO RETURN
PN4237820 EC832923 PEC832850

LOC=1A-A2T2

USN 00008 PRI=25APR78 1639

AUC= SEC
PFORM=KSEB NEXTBLK BF

CID PIOFE JOB K0200914

PR161 0001

PR161 0001

PR065AJ51 – CLOSE CLAMP
PR103AC3 – CARRIAGE GO
N3 A * 3/P07 36B–AA
PR003 – ACTIVATE PAPER CLAMP AA3

PS015CF3 – SELECT REGS
PR201AD3 – SYSTEM RESET
CNTRLR REG SEL
N3 S FL * R1 R2 56F–AC 5
W02/B1 A * B2 21/W10 PS007 – SELECT PRIMARY REGS AD21
C C1 C2 7UF–AD 31/W11 PS007 – SELECT AUX REGS AD31

PR201AA3 + CONTROL STROBE
PS001FB23 – ADDRESS BUS OUT BIT (4–7)
(4–7)PS001
N3 B OR * 3 F 20K–AF
(4)W13/D
SEE DCD TABLE
G1–N3 DCD *
(5)W31/E 4
(6)W12/G 2
(7)W33/J 1 46K–AB
*2 100 21
*3 101 31
*4 110 41
*5 111 51
– START HAMMER STROBE DCD AB51
PR047 PR121
PR161 – START HAMMER ECHO DCD AB21

ADDRESS BUS OUT BIT 0 1 2 3 4 5 6 7	DECODE TABLE DECODED FUNCTION
– – – – 0 1 0 0	START HAMMER ECHO DCD
– – – – 0 1 0 1	SELECT PRIMARY REGS
– – – – 0 1 1 0	SELECT AUX REGS
– – – – 0 1 1 1	START HAMMER STROBE DCD

56N–AG

TEST POINT 2•3
N3 B A * 2 3 G06/B1 W23/B2 C G06/C1 C2 36T–AE 21 31
PR009BA05 + TEST POINT 1
PS005GG23 – ALU CARRY IND
PR201BJ3 + CE SENSE BIT
– TEST POINT 2 AE21
PR011 PR031 PR041 PR063 PR065 PR201
– TEST POINT 3 AE31
PR201 PR810 PR820

COMMENTS
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LINE PRINTER ATTACH
CONTROLLER REG SELECT
HAMMER ECHO•STROBE DCD
PN4237821 EC=832850 PEC=832742H
LOC=1A–A2T2
USN 00006 PRI=07SEP77 0115
AUC= SEC
PFORM=KSEB NEXTBLK AH
CID PIOFE JOB K0201356

PR163 0001
PR163 0001

PS017CB3 — CONTROL STROBE — W25/B
PR163AE31 — TEST POINT 3 — D

N3 A * — 20B—AA — 3 → PR163 ↓ CONTROL STROBE — AA3

PR009BA05 ↓ TEST POINT 1 — G06/D

SEE NOTE 1
N3 JMPR * — 56D—BA — 3 → — 300 LPM — BA3
PR023 PR105 PR106 PR107 PR108 PR109 PR810

PR163AE21 — TEST POINT 2
PS009EB24 ↓ RING 4 BD — J07/B — D

N3 A * — 20F—AB — 3 → N3 BC A * — D — 36F—AC — 3 → ↓ RING4 PWRD — AC3
PR810 PR820

SEE NOTE 2
N3 JMPR * — 56H—BB — G06/D — 3 → — SELECT PRINTER 1 — BB3
PR023 PR033 PR810

PR009BA01 ↓ CE SNS BOARD SIDE — G09/B
PR009BA03 ↓ CE SNS TOP CARD CONNECTOR — W22/D

N3 OR — 36J—BJ — 3 → ↓ CE SENSE BIT — BJ3
PR023 PR163

SEE NOTE 3
N3 JMPR * — 56M—BC — G06/D — 3 → — 160/300 LPM — BC3
PR023 PR105 PR106 PR107 PR108 PR109 PR810

PR011AR3 ↓ SYSTEM RESET — D

N3 N * — 20P—BF — 3 → N3 OR * — B — D — 36S—BG — 3 → N3 N * — D — 46S—BH — 3 → N3 A * — B — D — 66S—AD — 3 → — SYSTEM RESET — AD3
PR031 PR043 PR121 PR161 PR163

PR021AG61 — ADAPTER RESET — D — 3 → — SYSTEM RESET — BG3
PR023 PR033 PR041 PR047 PR063 PR065

NOTE 1: THIS JUMPER MUST BE REMOVED FOR 160 LPM OPERATION AND IT MUST BE INSTALLED FOR 300 LPM OPERATION. SEE JUMPERS ON FSL PAGE AC320
10W—BI

NOTE 2: THIS JUMPER MUST ALWAYS BE INSTALLED FOR PROPER OPERATION SEE JUMPERS ON FSL PAGE AC320
35W—BL

NOTE 3: THIS JUMPER IS INSTALLED FOR CARD TEST ONLY. IT MUST BE REMOVED FOR PROPER OPERATION. SEE JUMPERS ON FSL PAGE AC320
55W—BK

COMMENTS
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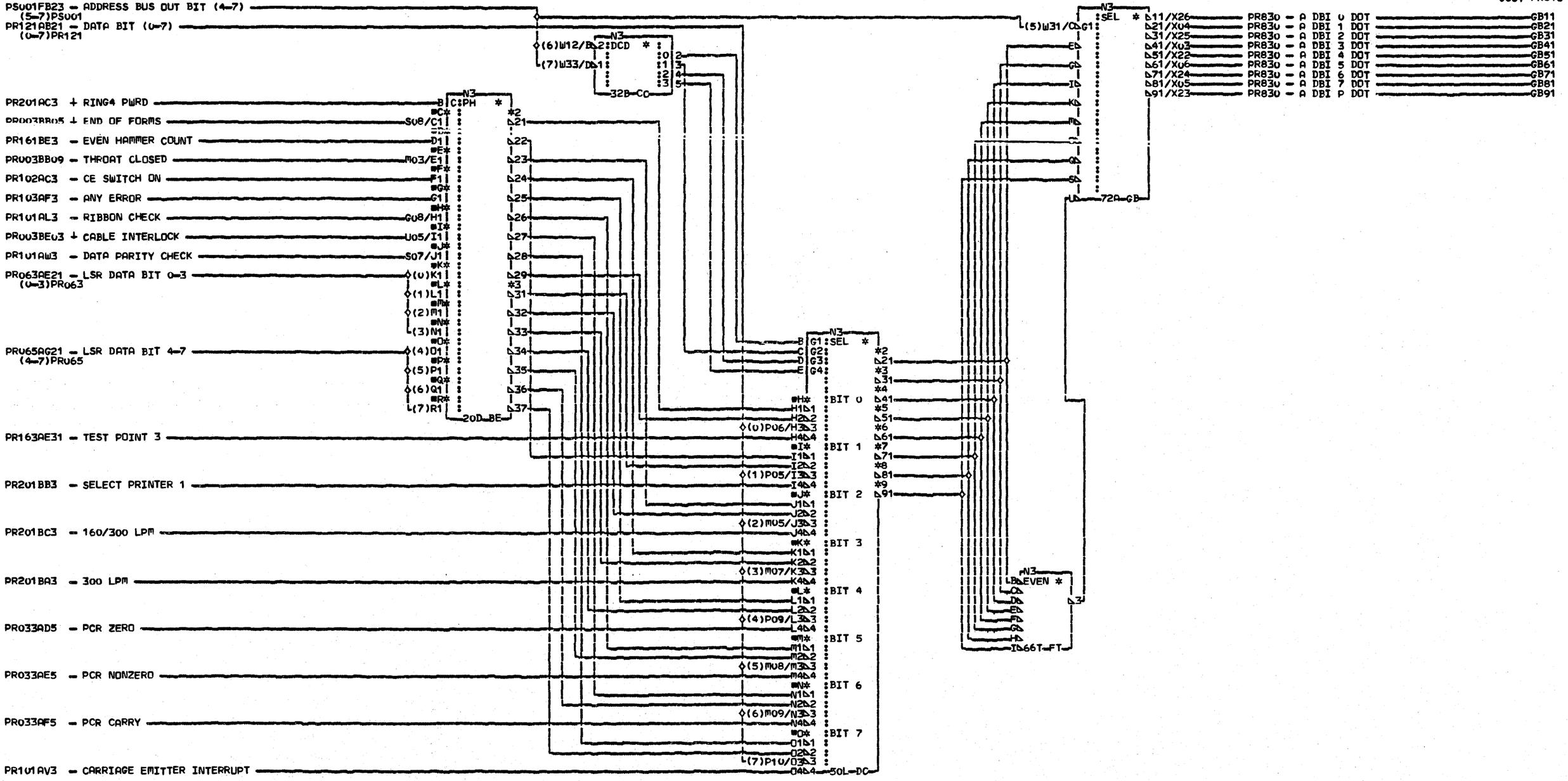
LINE PRINTER ATTACH CARD JUMPERS

PN4237822 EC=832850 PEC=832742H
LOC=1A—A2T2
USN 00006 PRI=07SEP77 0115
AUC= SEC
PFORM=KSEB NEXTBLK BM
CID PIOFE JOB K0201356

PR201 0001

E



COMMENTS
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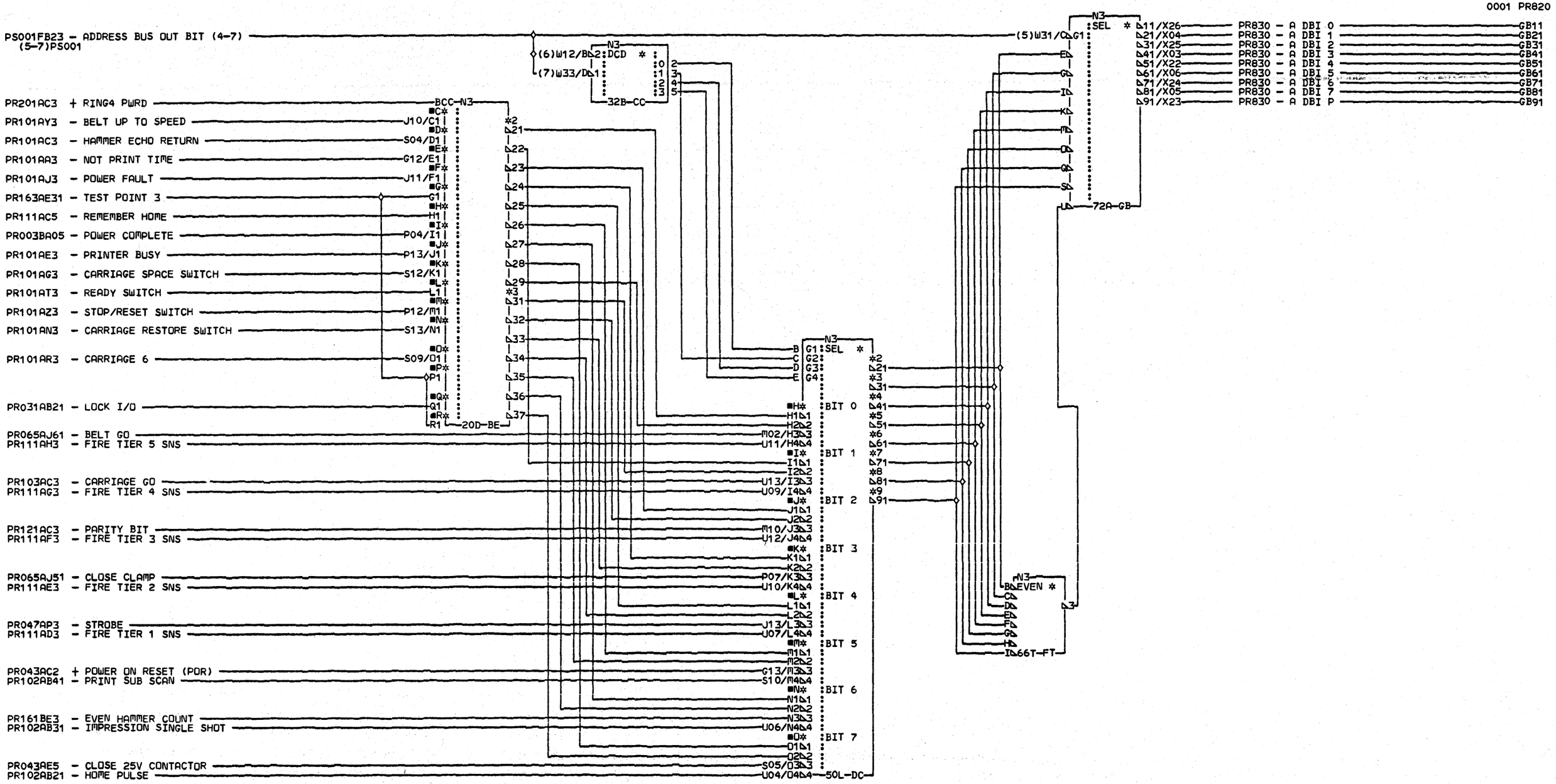
LINE PRINTER ATTACH
CONTROLLER DBI ASM
SELBP1
PN4237823 EC=832850 PEC=832742H
LOC=1A-A2T2
USN 00006 PRI=07SEP77 0115
AUC= SEC
PFORM=KSEB NEXTBLK GC
CID PIOFE JOB KU201356

PR810 0001



COMMENTS
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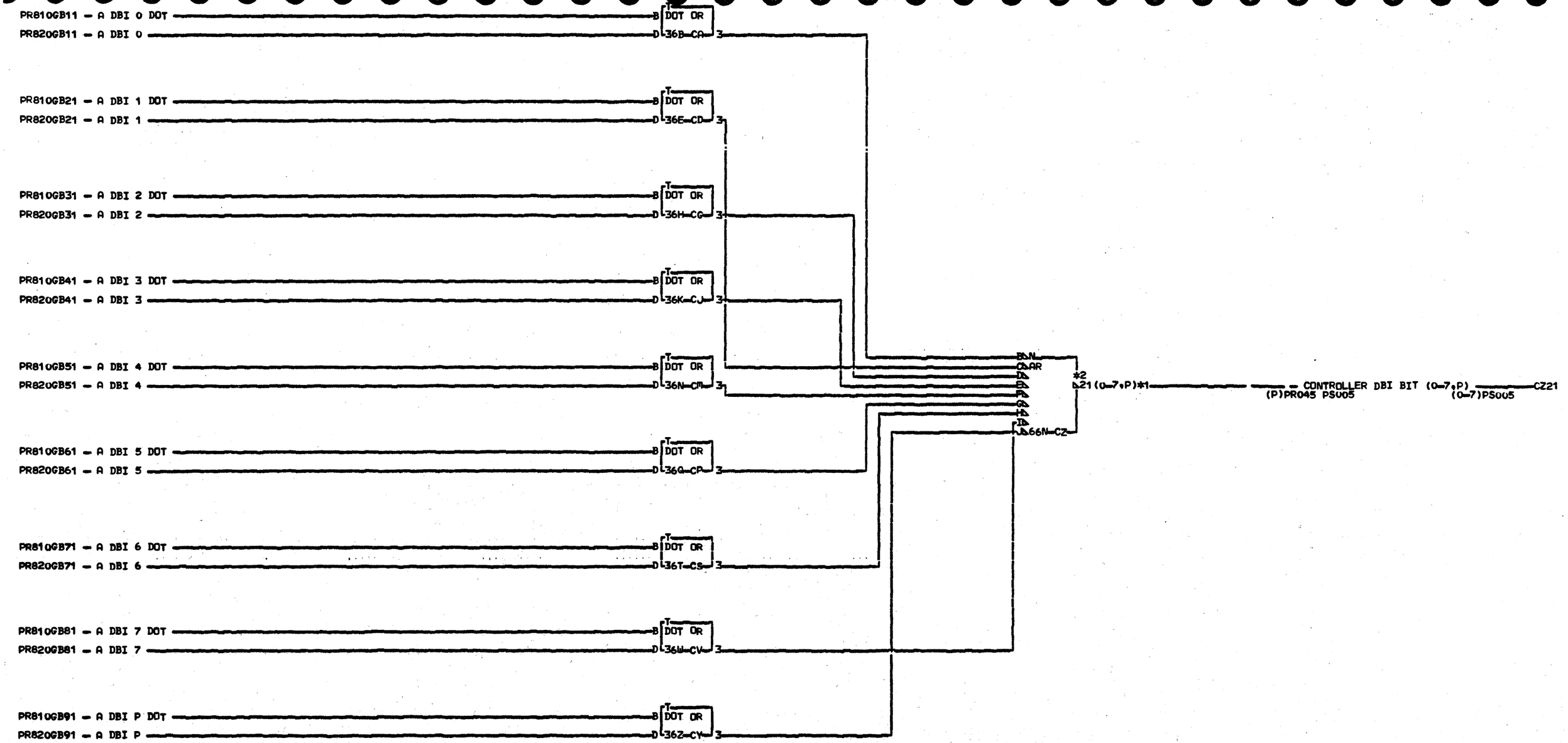
E

LINE PRINTER ATTACH
CONTROLLER DBI ASM
SELBP2
PN4237824 EC832923 PEC832850
LOC=1A-A2T2
USN 00008 PRI=25APR78 1639
AUC= SEC
PFORM=KSEB NEXTBLK GC
CID PIOFE JOB K0200914

PR820 0001

PR820 0001



COMMENTS	PINS
D1COPYRIGHT IBM CORP. 1978	CZ 21/X26 22/X04 23/X25 24/X03 25/X22 26/X06 27/X24 28/X05 29/X23

PR830 0001

LINE PRINTER ATTACH
CONTROLLER DBI DOT

PN4237825 EC=832850 PEC=832742H

LOC=1A-A2T2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK CO

CID PIOFE JOB K0201356

PR830 0001

PS013CG3 + WRITE STG HI BYTE — Y06/A1
PS013CE3 + WRITE STG LO BYTE — Y26/A2
PS013CB3 - RESET STG — Y27/A3
PS005FE31 - CONTROLLER DBO BIT (0-7,P) (P,0-7)PS005 — 1*(0-7,P)B1
PS003DB16 - SAR BIT 1-10 PWRD (1-10)PS003 — 1*(1-10)C1

4K X9 RAM
N3
M REG
D1
D2
56D-ED

11/Z29(0)
12/Z30(1)
13/Z11(2)
14/Z12(3)
15/Z32(4)
16/Z31(5)
17/Z10(6)
18/Z09(7)
19/Z28(8)
2/Z03(9)
21/Z04(10)
22/Z25(11)
23/Z06(12)
24/Z26(13)
25/Z05(14)
26/Z24(15)
27/Z23(PH)
28/Z02(PL)

- STG OUT BIT PWRD (0-15,PH,PL) (PH,PL,0-15)PS001 — ED11

PS009EB25 + RING 5 BD — Y10/B
PS003FB0 - SEL 1ST 16K BYTES — Y08/D

N3
A *
3
20L-EF

PS003DB13 - SAR BIT X2,X3,0 PWRD (X2-X3,0)PS003
(X2)Y11/B
(X3)Y31/D
(0)Y30/F

N3
DCD *
000 2
001 4
010 6
20P-AN

STORAGE SELECT
D
G1-N3
SEL
G 1
I 1
K 1
38P-CM
2/Y29
4
7

PS001 - SELECT STG 0 — CM2

COMMENTS
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PINS ED
B1/Y05
B2/Y04
B3/Y22
B4/Y03
B5/Y25
B6/Y24
B7/Y23
B8/Y02
B9/Y07
C1/Y13
C2/Z22
C3/Z08
C4/Y33

PINS
C5/Z27
C6/Z07
C7/Y32
C8/Z33
C9/Z13
D0/Y12

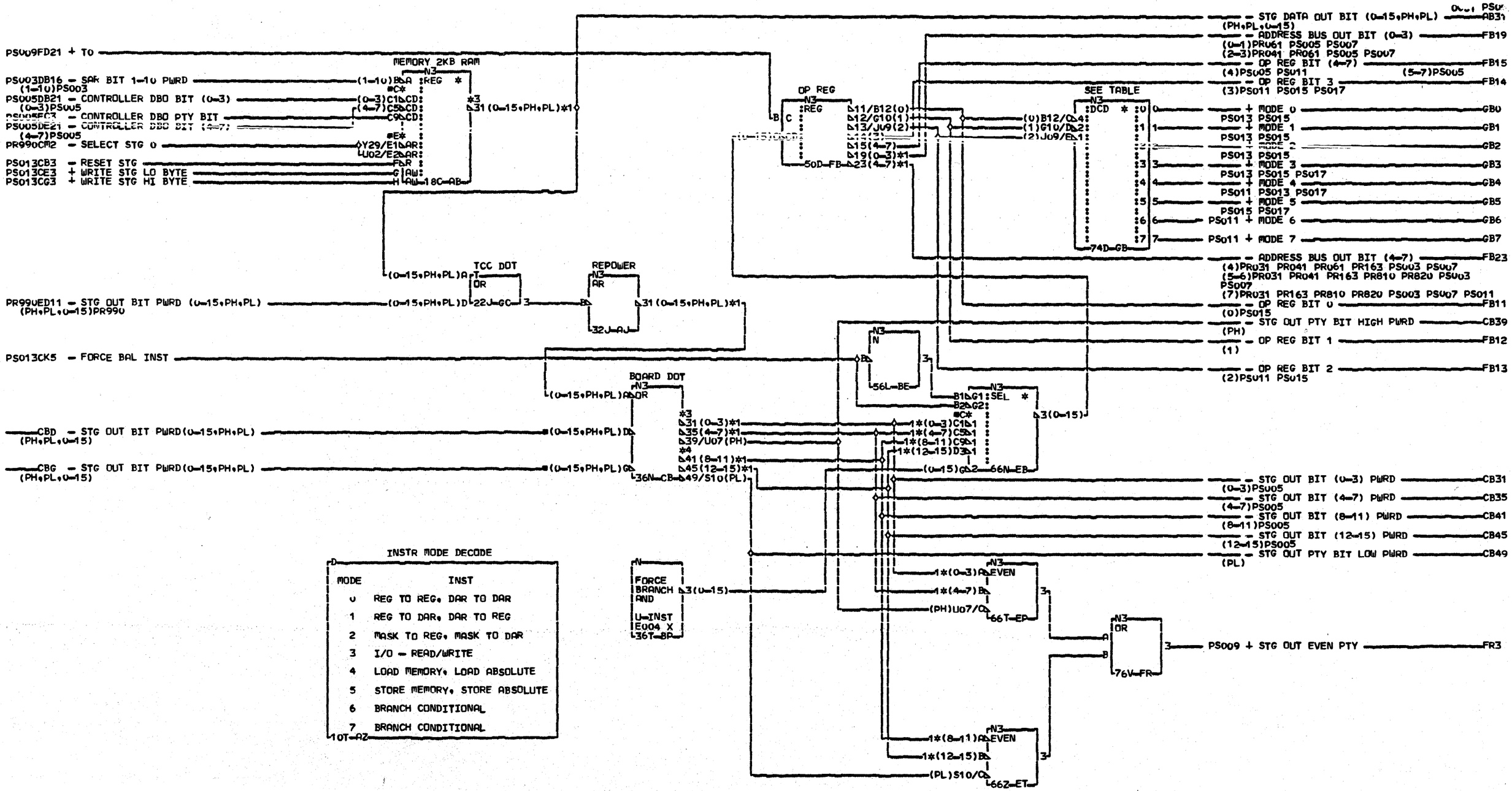
LINE PRINTER ATTACH
CONTROLLER STG 2-8K

PN4237826 EC833047 PEC832850

LOC=1A-A2T2

USN 00008 PRI=17NOV78 1727
AUC= SEC
PFORM=KSEB NEXTBLK EG
CID PIOFE JOB L8501548

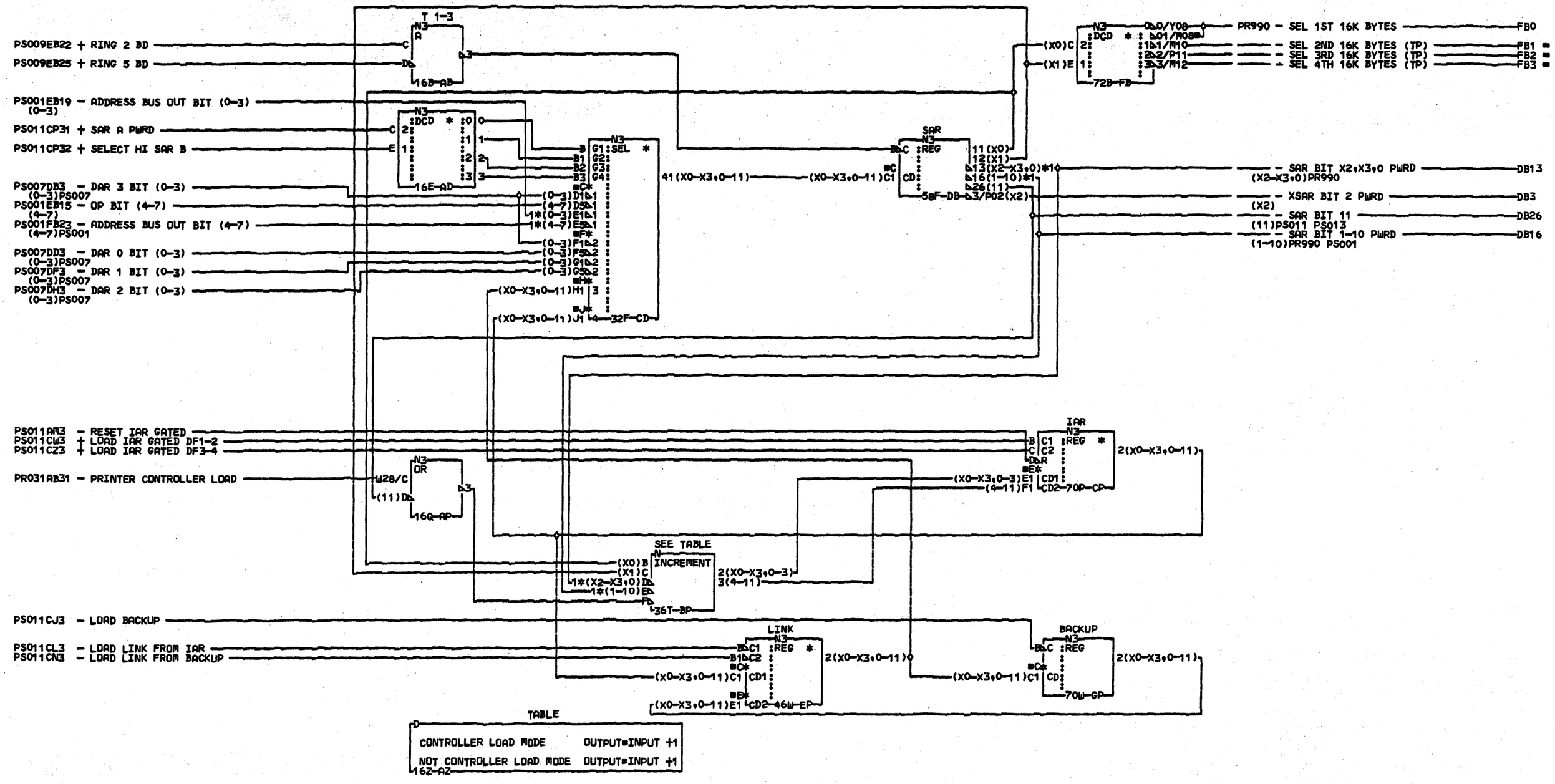
PR990 0001



COMMENTS	PINS	PINS	PINS	PINS	PINS	PINS	PINS	PINS
D1COPYRIGHT IBM CORP. 1978	AB	44/Z26	39/Z28	34/S09	C1/S05	D5/U11	A2/U04	26/W33
	31/Z29	45/Z05	40/Z03	35/S13	C2/S03	D6/U09	A3/S12	
	32/Z30	46/Z24	41/Z04	36/U13	C3/U10	EP	B0/U06	
	33/Z11	47/Z23	42/Z25	37/S08	C4/S09	A0/S05	B1/U05	
	34/Z12	48/Z02	43/Z06	38/S07	C5/S13	A1/S03	B2/U11	
	35/Z32	AJ	44/Z26	41/U12	C6/U13	A2/U10	B3/U09	
	36/Z31	31/Z29	45/Z05	42/S04	C7/S08	A3/S09	FB	
	37/Z10	32/Z30	46/Z24	43/U04	C8/S07	B0/S13	19/X28	
	38/Z09	33/Z11	47/Z23	44/S12	C9/U12	B1/U13	20/X08	
	39/Z28	34/Z12	48/Z02	45/U06	D0/S04	B2/S08	21/X27	
	40/Z03	35/Z32	CB	46/U05	D1/U04	B3/S07	22/X09	
	41/Z04	36/Z31	31/S05	47/U11	D2/S12	ET	23/W13	
	42/Z25	37/Z10	32/S03	48/U09	D3/U06	A0/U12	24/W31	
	43/Z06	38/Z09	33/U10	EB	D4/U05	A1/S04	25/W12	

PRINTER CONTROLLER
MEMORY
OP REG
PN4237867 EC=832850 PEC=832742H
LOC=1A-A2S2
USN 00006 PRI=07SEP77 0115
AUC= SEC
PFORM=KSEB NEXTBLK GD
CID PIOFE JOB KU201356

PS001 0001



COMMENTS

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PINS BP	PINS CD	PINS
D0/Y11	E1/X28	17/Z22
D1/Y31	E2/X08	18/Z08
D2/Y30	E3/X27	19/Y33
E0/Y13	E4/X09	20/Z27
E1/Z22	E5/W13	21/Z07
E2/Z08	E6/W31	22/Y32
E3/Y33	E7/W12	23/Z33
E4/Z27	E8/W33	24/Z13
E5/Z07	DB	25/Y12
E6/Y32	13/Y11	
E7/Z33	14/Y31	
E8/Z13	15/Y30	
E9/Y12	16/Y13	

PRINTER CONTROLLER DATA FLOW

PN4237868 EC833047 PEC832850

LOC=1A-A2S2

USN 00008 PRI=17NOV78 1727

AUC= SEC

PFORM=KSEB NEXTBLK GQ

CID PIOFE JOB L8501548

PS015CL3 - LOAD A-B REGS FROM I/O
PS015CZ3 - LOAD A-REG INTERNAL
PS015CN3 + GATE MASK TO A-B BUS
PS015CR3 + GATE NIBBLE TO A-B BUS
PS011CB3 + GATE HI BYTE HI NIBBLE
PS011CD3 + GATE HI BYTE LO NIBBLE
PS011CF3 + GATE LO BYTE HI NIBBLE
PS011CH3 + GATE LO BYTE LO NIBBLE
PS007FH21 - STACK DATA BIT (0-3) (0-3)PS007
PS001FB19 - ADDRESS BUS OUT BIT (0-3) (0-3)PS001
PS001CB31 - STG OUT BIT (0-3) PWRD (0-3)PS001
PS001CB35 - STG OUT BIT (4-7) PWRD (4-7)PS001
PS001CB41 - STG OUT BIT (8-11) PWRD (8-11)PS001
PS001CB45 - STG OUT BIT (12-15) PWRD (12-15)PS001
PR830CZ21 - CONTROLLER DBI BIT (0-7,P) (P,0-7)PR830
PS015CW3 - LOAD B-REG INTERNAL
PS001FB15 - OP REG BIT (4-7) (4-7)PS001
PS013EP3 - SET INDICATORS
PS009FD24 + T3

ASSEMBLER
A REG
B REG
PARITY GEN
EVEN
SEE TABLE
PCR
PARITY CHECK
EVEN

- CONTROLLER DBO BIT (0-3) (0-3)PS001 — DB21
- CONTROLLER DBO PTY BIT PR045 PS001 — FC3
- CONTROLLER DBO BIT (4-7) (4-7)PS001 — DE21
- CONTROLLER DBO BIT (0-7,P) (P)PR045 PR121 PR990 (0-1)PR041 PR043 PR045 PR063 PR121 PR990 (2)PR041 PR043 PR045 PR063 PR065 PR121 PR990 (3)PR041 PR043 PR045 PR063 PR121 PR990 (4-7)PR045 PR065 PR121 PR990 — FE31
+ ASSEMBLY DOT BIT (0-3) (0-3) — AB31
+ ALU OUT BIT (0-3) (0-3)PS007 — EH21
- ALU ZERO IND PR033 PS011 — GG21
- ALU NON ZERO IND PR033 PS011 — GG22
- ALU CARRY IND PR033 PR163 PS011 — GG23
+ DBI PARITY ERROR (TP) — DJ3

ALU FUNCTION DECODE

OP REG 4 5 6 7	FUNCTION
0 0 0 0	ADD
0 0 0 1	ADD W/CARRY
0 0 1 0	MOVE
0 0 1 1	SUB W/BORROW
0 1 0 0	SUB
0 1 0 1	CUMPARE
0 1 1 0	SUB SUMMARY
0 1 1 1	COMPARE SUMMARY
1 0 0 0	AND
1 0 0 1	TEST BITS
1 0 1 0	AND SUMMARY
1 0 1 1	TEST SUMMARY
1 1 0 0	OR
1 1 0 1	SHIFT RIGHT
1 1 1 0	XOR
1 1 1 1	SHIFT CIRCULAR

16T-AZ

COMMENTS: D1COPYRIGHT IBM CORP. 1978

PINS	PINS	PINS	PINS	PINS	PINS	PINS
AB	M1/U13	34/G07	DE	C0/Y05	C2/Y22	C3/Y02
J0/X28	M2/S08	DB	F0/X22	C1/Y04	C3/Y03	31/X11
J1/X08	M3/S07	F0/X26	F1/X06	C2/Y22	D0/Y25	32/X29
J2/X27	N0/U12	F1/X04	F2/X24	C3/Y03	D1/Y24	33/X10
J3/X09	N1/S04	F2/X25	F3/X03	D0/Y25	D2/Y23	34/X32
K0/M02	N2/U04	F3/X03	G0/J07	D1/Y24	D3/Y02	35/X12
K1/G13	N3/S12	G0/J07	G1/P09	D2/Y23	FE	36/X31
K2/J12	O0/U06	G1/P09	G2/P10	21/Y08	B0/Y05	37/X33
K3/G12	O1/U05	G2/P10	G3/G07	22/J10	B1/Y04	38/X13
L0/S05	O2/U11	G3/G07	21/Y25	23/M04	B2/Y22	39/X30
L1/S03	O3/U09	21/Y05	22/Y24	24/X07	B3/Y03	
L2/U10	31/J07	22/Y04	23/Y23	FC	C0/Y25	
L3/S09	32/P09	23/Y22	24/Y02	C0/Y05	C1/Y24	
M0/S13	33/P10	24/Y03	EH	C1/Y04	C2/Y23	

PRINTER CONTROLLER
ALU

PN4237869 EC833047 PEC832850

LOC=1A-A252

USN 00008 PRI=17NOV78 1727

AUC= SEC
PFORM=KSEB NEXTBLK GH

CID PIOFE JOB L8501548

PS013CP3 + WRITE NIBBLE

PS005EH21 + ALU OUT BIT (0-3)
(0-3)PS005

PS015CF3 - SELECT REGS

PS015CH3 + SEL NIBBLE VIA A-FIELD
PS015CJ3 + SEL NIBBLE VIA B-FIELD

PS001FB19 - ADDRESS BUS OUT BIT (0-3)
(0-3)PS001
PS001FB23 - ADDRESS BUS OUT BIT (4-7)
(4-7)PS001

PR163AD21 - SELECT PRIMARY REGS

PR163AD31 - SELECT AUX REGS

DAR 3
N3
C G1:REG
D C1:
1*(0-3)E CD:
46B-DB
Δ3(0-3)
- DAR 3 BIT (0-3) (0-3)PS003 - DB3

DAR 0
N3
C G1:REG
D C1:
1*(0-3)E CD:
46E-DD
Δ3(0-3)
- DAR 0 BIT (0-3) (0-3)PS003 - DD3

DAR 1
N3
C G1:REG
D C1:
1*(0-3)E CD:
46H-DF
Δ3(0-3)
- DAR 1 BIT (0-3) (0-3)PS003 - DF3

DAR 2
N3
C G1:REG
D C1:
1*(0-3)E CD:
46K-DH
Δ3(0-3)
- DAR 2 BIT (0-3) (0-3)PS003 - DH3

N3
(0)C 8 :
(1)D 4 :
(2)E 2 :
(3)F 1 :
B G1:DCD * :
26F-BM
1:0 0
1:1 1
1:2 2
1:3 3
1:4-15 4

N3
A G1-N3
B G2:SEL *
C G3:
D G4:
E*
(0-3)FΔ1
(0-3)GΔ2
(0-3)HΔ3
(0-3)IΔ4
66F-FF
Δ3(0-3)

ADR SELECT
N3
B G1:SEL *
C G2:
D*
20M-AM
31(0-3)
1*(0-3)EΔ1
1*(4-7)FΔ2

DAR 4-15
N3
:REG *
C AR:
1*(0-3)D CD:
(0-3)E A :
F AW:
46O-DK
Δ3(0-3)

N3
(0-3)BΔDR *
(0-3)CΔ
(0-3)DΔ
(0-3)EΔ
66Q-FH
Δ21(0-3)*1
- STACK DATA BIT (0-3) (0-3)PS005 - FH21

REG 0-15
N3
:REG *
W10/CΔAR:
1*(0-3)D CD:
(0-3)E A :
F AW:
46S-DW
Δ3(0-3)

AUX REG 0-15
N3
:REG *
W11/CΔAR:
1*(0-3)D CD:
(0-3)E A :
F AW:
46W-DZ
Δ3(0-3)

COMMENTS	PINS	PINS	PINS	PINS
D1COPYRIGHT IBM CORP. 1978	AM	DD	E3/X07	D2/M04
	E0/X28	E0/Y28	DK	D3/X07
	E1/X08	E1/J10	D0/Y28	FH
	E2/X27	E2/M04	D1/J10	21/M02
	E3/X09	E3/X07	D2/M04	22/G13
	F0/W13	DF	D3/X07	23/J12
	F1/W31	E0/Y28	DW	24/G12
	F2/W12	E1/J10	D0/Y28	
	F3/W33	E2/M04	D1/J10	
	DB	E3/X07	D2/M04	
	E0/Y28	DH	D3/X07	
	E1/J10	E0/Y28	DZ	
	E2/M04	E1/J10	D0/Y28	
	E3/X07	E2/M04	D1/J10	

E

PRINTER CONTROLLER
LSR

PN4237870 EC=832850 PEC=832742H

LOC=1A-A2S2

USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK FI

CID PIOFE JOB K0201356

PSUU7 0001

WS500CA3 + 16 MHZ OSC — J02/C
BBD - CLOCK STEP MODE (TP) — B04/D
CCD - DIAG CLOCK (TP) — D06/D
PR021AG31 - START CONTROLLER 400NS — W27/C

SEE NOTE 1 — N3 A — 16B-BB
SEE NOTE 1 — N3 OR — 26B-CC
N3 OR — 26E-CD
INHIBIT RING ADVANCE — N3 FF — J04/DNC — 42E-DE
RING COUNTER — N3 REG — P06/C — 56B-EB
INIT CYCLE THRU T8 — N3 FL — W29/CPS — 16G-BJ
WAIT TRIGGER — N3 FF — W04/DNC — 3/W09 — W08/G05 — 36P-BH
PR031AB71 - CONTROLLER SINGLE CYCLE — W30/B
PR031AB31 - PRINTER CONTROLLER LOAD — W28/C
PR031AD3 - CONTROLLER RESET — W29/D
N3 OR — 16P-AH
PS001FR3 + STG OUT EVEN PTY — D
N3 PH — W29/E — 16S-AK — 5/W08

RING COUNTER outputs:
21/W03 — + RING 1 BD — EB21 — PR033 PR047 PS015 PS017
22/G03 — + RING 2 BD — EB22 — PS003 PS013
23/W04 — + RING 3 BD — EB23 — PR033 PR045 PS011 PS013
24/G04 — + RING 4 BD — EB24 — PR201 PS015
25/Y10
26/J04 — + RING 6 T•P• — EB26 — PS013 PS015
31/P05 — + RING 6 T•P• — EB31

+ T3 — FD24 — PS005 PS011 PS013 PS015
+ RING 5 BD — EB25 — PR031 PR047 PR990 PS003 PS013 PS017

SEE TABLE — N3 COM — 76J-FD
W03/B
G03/C
W04/D
G04/E
Y10/F
J04/G

21 — + T0 — FD21 — PS001 PS015
22 — + T1 — FD22
23 — + T2 — FD23
24
25 — PS015 + T4 — FD25
26 — + T5 — FD26
27 — + T6 — FD27 — PS011 PS013
28 — + T7 — FD28
29 — + T8 — FD29
3 — + T9 — FD3 — PS015 PS017
31 — + T10 — FD31 — PS011 PS013
32 — + T11 — FD32

- INIT CYCLE THRU T8 — BJ5 — PS011 PS013
PR045 - CONTROLLER MEM PTY CHK — AK5
+ WAIT TRIGGER (TEST POINT) — BH3

N3 N — Y10/C — 3/D09 — 74U-GB
- RING 5 (TP) — GB3

T TIME DECODE TABLE — D — 46V-AZ

T-TIME	RING 1	2	3	4	5	6
T11	0	0	0	0	0	0
T0	1	0	0	0	0	0
T1	1	1	0	0	0	0
T2	1	1	1	0	0	0
T3	1	1	1	1	0	0
T4	1	1	1	1	1	0
T5	1	1	1	1	1	1
T6	0	1	1	1	1	1
T7	0	0	1	1	1	1
T8	0	0	0	1	1	1
T9	0	0	0	0	1	1
T10	0	0	0	0	0	1

COMMENTS
A1 NOTE 1: PS009BBD AND
2 PS009CCD ARE TIED TO +5
3 VOLTS ON THE CARD
D1COPYRIGHT IBM CORP. 1978

PRINTER CONTROLLER
T-TIME GENERATION

PN4237871 EC833047 PEC832999

LOC=1A-A2S2

USN 00008 — PRI=17NOV78 1727
AUC= — SEC
PFORM=KSEB — NEXTBLK GC
CID PIOFE — JOB L8501548

PS009 0001

PS001GB4 + MODE 4

PS009EB23 + RING 3 BD

PS009FD31 + T10

PS003DB26 - SAR BIT 11
(11)PS003

PS001GB7 + MODE 7

PS009FD24 + T3

PS001GB6 + MODE 6

PS001FB14 - OP REG BIT 3
(3)PS001

PS001FB13 - OP REG BIT 2
(2)PS001

PS001FB23 - ADDRESS BUS OUT BIT (4-7)
(7)PS001

PS001FB15 - OP REG BIT (4-7)
(4)PS001

PS005GG21 - ALU ZERO IND

PS005GG22 - ALU NON ZERO IND

PS005GG23 - ALU CARRY IND

PS009FD27 + T6

PS013CM3 - INIT CONTROLLER RESET

PS009BJ5 - INIT CYCLE THRU T8

SEE TABLE

PS005 + GATE HI BYTE HI NIBBLE — CB3

PS005 + GATE HI BYTE LO NIBBLE — CD3

PS005 + GATE LO BYTE HI NIBBLE — CF3

PS003 + SAR A PWRD — CP31

PS003 + SELECT HI SAR B — CP32

PS005 + GATE LO BYTE LO NIBBLE — CH3

+ SELECT LO SAR B (TP) — CP33

PS003 - LOAD BACKUP — CJ3

- LOAD LINK FROM IAR — CL3
PR033 PS003

- LOAD LINK FROM BACKUP — CN3
PR033 PS003

PS003 - RESET IAR GATED — AM3

PS003 + LOAD IAR GATED DF1-2 — CW3

PS003 + LOAD IAR GATED DF3-4 — CZ3

BRANCH COND CODES

CONDITION CODE	BRANCH
0	BRANCH AND WAIT
1	BRANCH HIGH/NO CARRY
2	BRANCH LOW/NO CARRY
3	BRANCH UNCONDITIONAL
4	BRANCH AND LINK
5	BRANCH NOT EQUAL/NOT ZERO/TRUE
6	BRANCH EQUAL/ZERO/FALSE
7	OP REG BIT 4= 0 - RETURN VIA LINK
	OP REG BIT 4= 1 - RETURN VIA DAR

COMMENTS

PRINTER CONTROLLER
CONTROL SIGNALS

PN4237872 EC833047 PEC832850

LOC=1A-A2S2

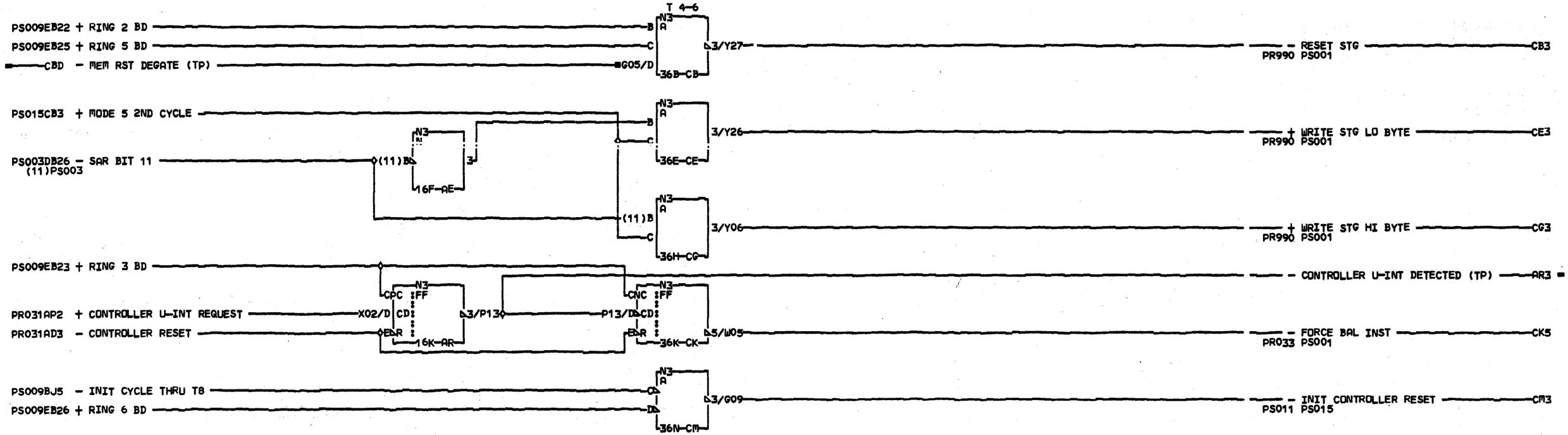
USN 00008 PRI=17NOV78 1727

AUC= SEC

PFORM=KSEB NEXTBLK CO

CID PIOFE JOB L8501548

PS011 0001



COMMENTS

A1 NOTE 1: NET PS013CBD IS
2 TIED TO +5 VOLTS ON
3 THE CARD

PRINTER CONTROLLER
MEMORY CONTROL

PN4237873 EC833047 PEC832850

LOC=1A-A2S2

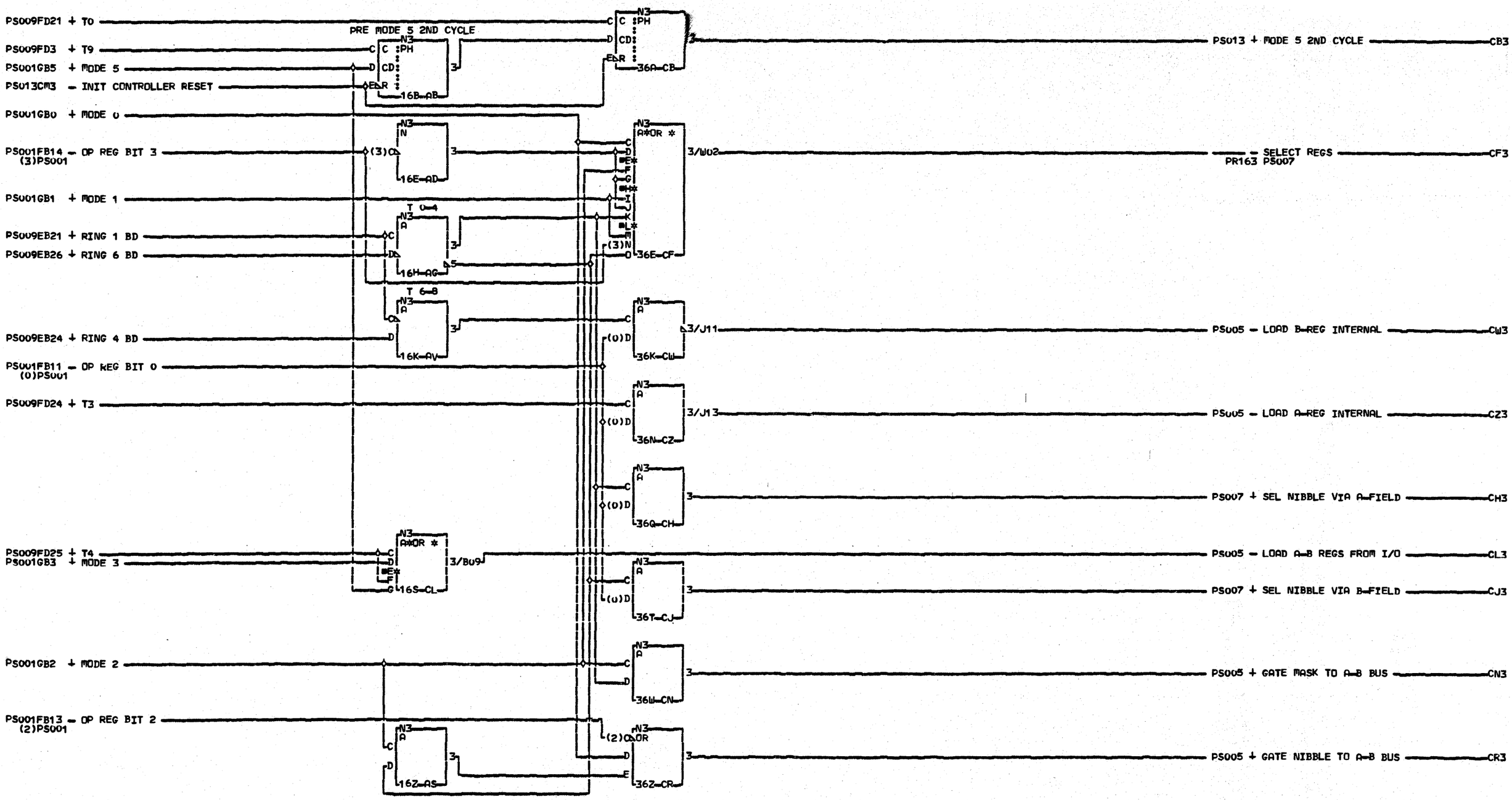
USN 00008 PRI=17NOV78 1727

AUC= SEC
PFORM=KSEB NEXTBLK EQ

CID PIOFE JOB L8501548

PS013 0001

PS013 0001



COMMENTS

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E

PRINTER CONTROLLER
A-B REG CONTROL

PN4237874 EC=832850 PEC=832742H

LOC=1A-A2S2

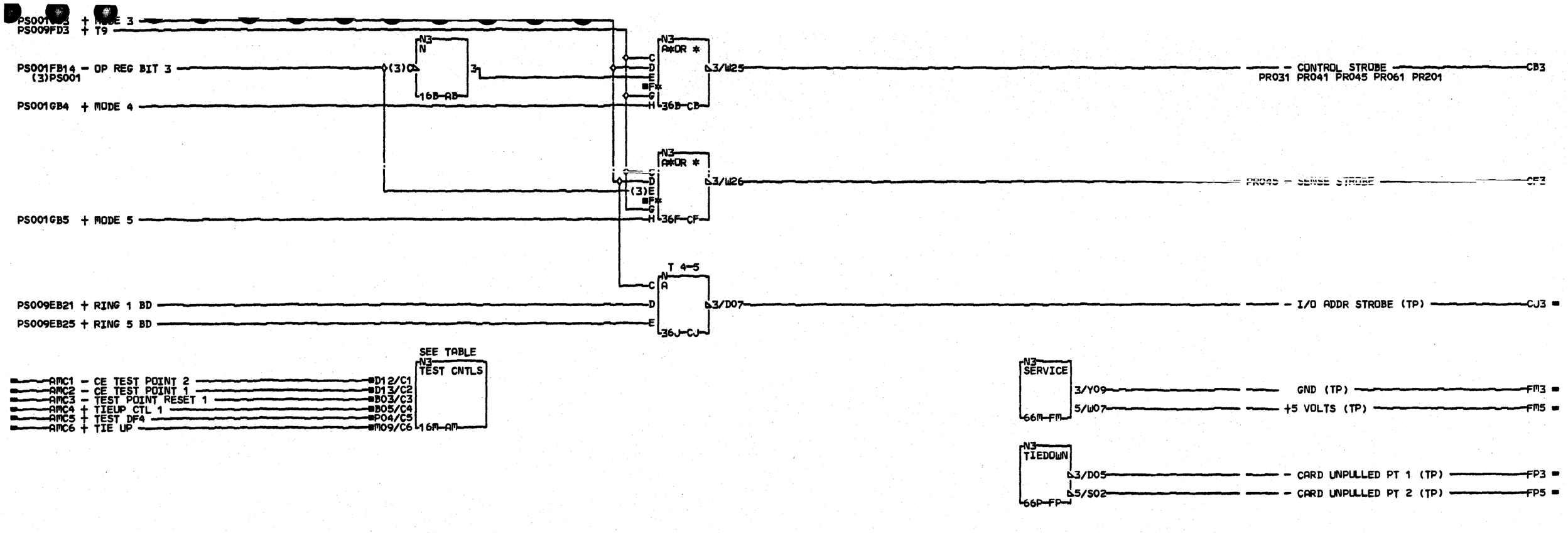
USN 00006 PRI=07SEP77 0115

AUC= SEC
PFORM=KSEB NEXTBLK CO

CID PIOFE JOB K0201356

PSU15 0001

PSU15 0001



TEST CONTROLS

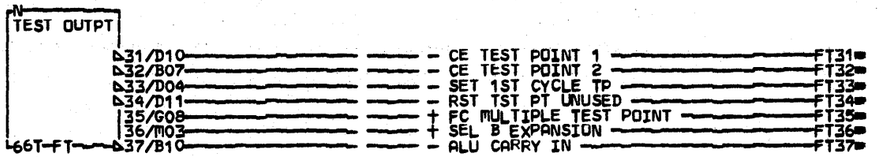
PIN	TEST MODE	RUN MODE
D12	DOWN	UP
D13	DOWN	UP
B03	DOWN	UP
B05	DOWN	UP
P04	UP	DOWN
M09	DOWN	UP

16T-AT

CARD VOLTAGE PINS

+5V	D03	J03	P03	U03
+8.5V	G11	S11		
GND	D08	J08	P08	U08

36W-CW



COMMENTS

A1 NOTE 1: TEST CONTROLS ARE
2 TIED TO RUN MODE ON CARD
3 OR BOARD
D1 COPYRIGHT IBM CORP. 1978

PRINTER CONTROLLER
I/O STROBE PULSES

PN4237875 EC833047 PEC832850

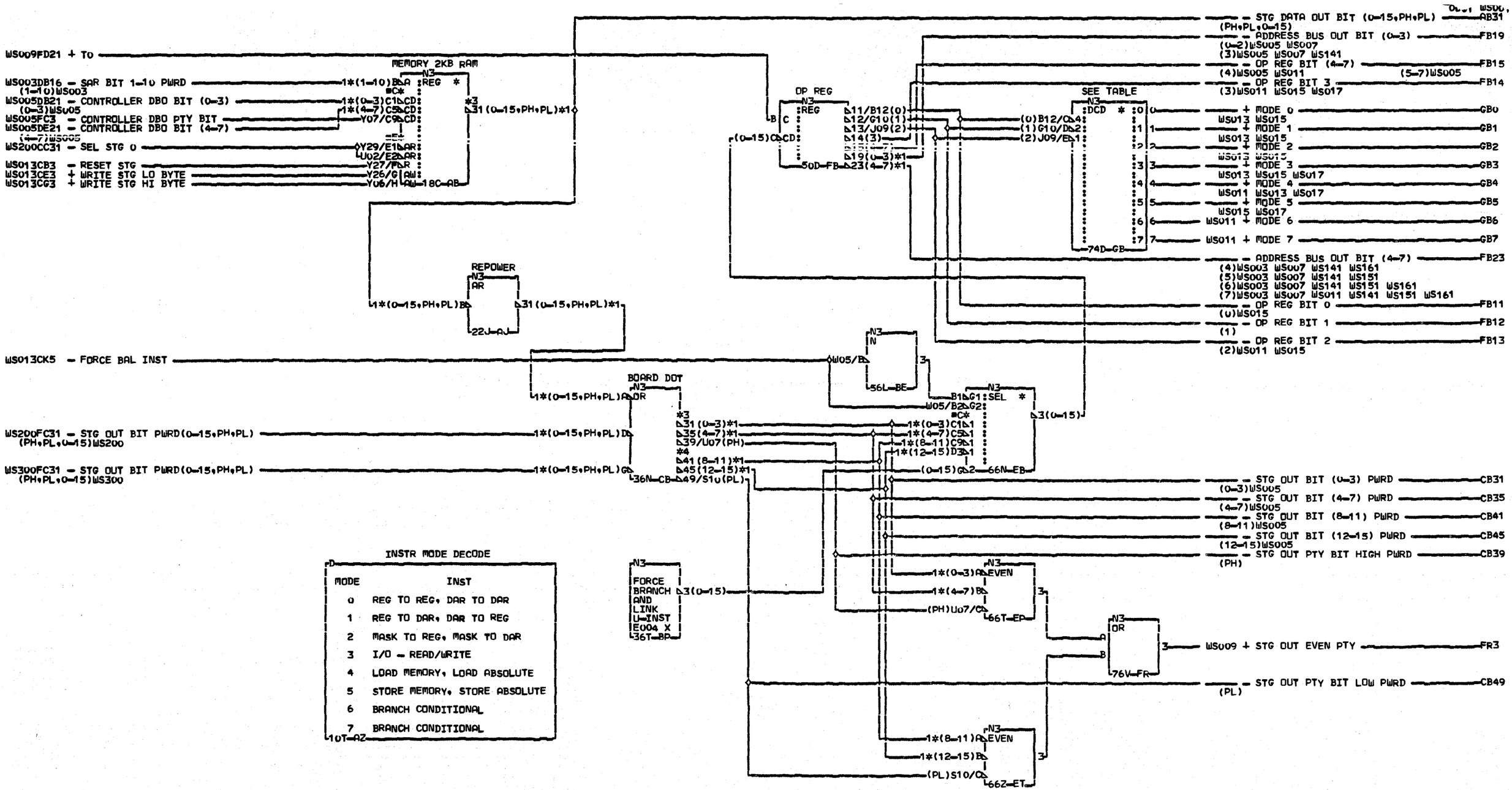
LOC=1A-A2S2

USN 00008 PRI=17NOV78 1727

AUC= SEC
PFORM=KSEB NEXTBLK FU

CID PIOFE JOB L8501548

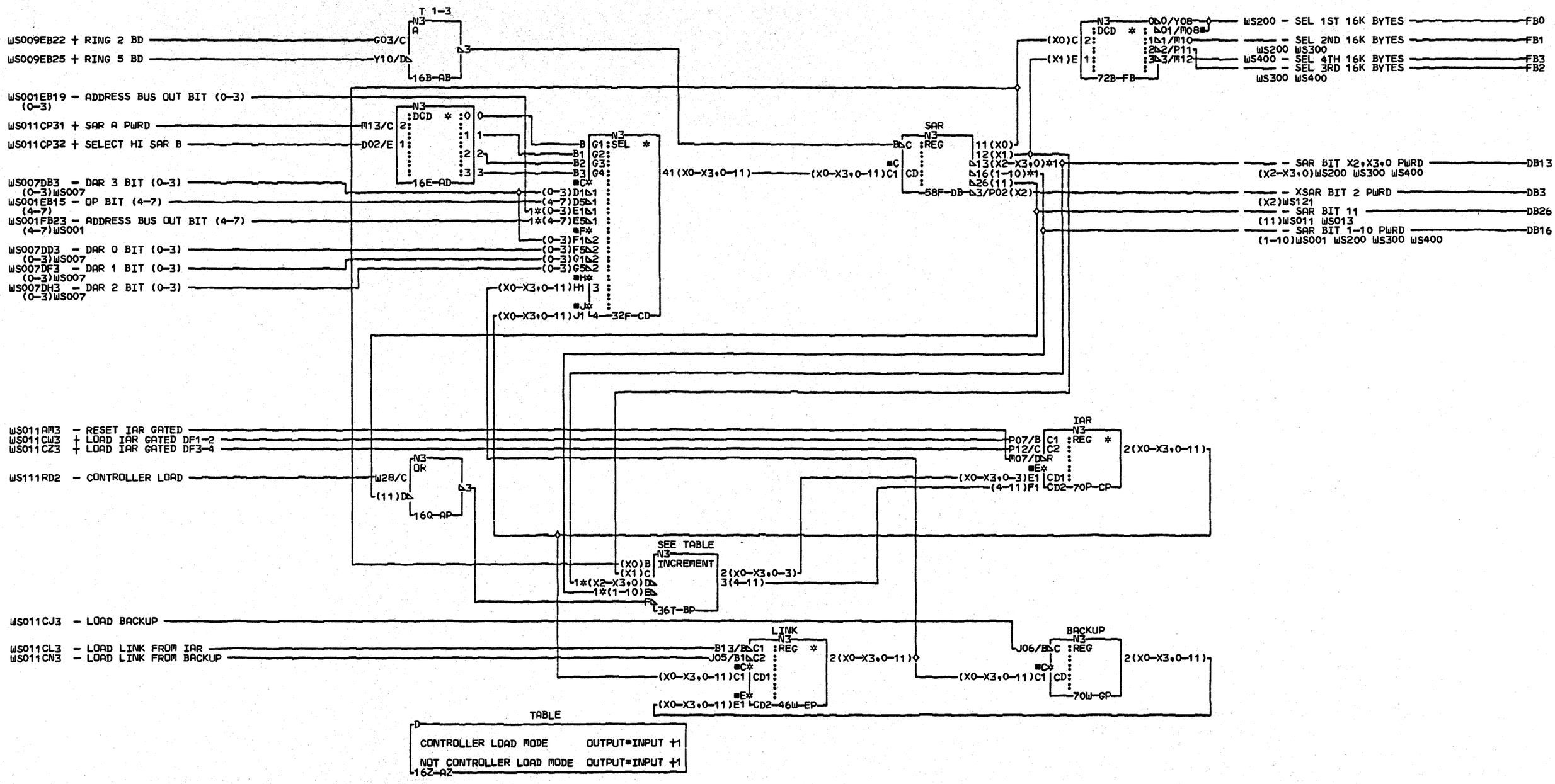
PS017 0001



COMMENTS	PINS	PINS	PINS	PINS	PINS	PINS	PINS	PINS	PINS	PINS	PINS	PINS	PINS	PINS
D1COPYRIGHT IBM CORP. 1978	AB	C4/Y03	A0/Z04	B4/Z32	31/SU5	45/U11	A9/SU4	D5/U13	G1/S03	H5/U09	44/S12	C9/U12	B1/U13	20/X08
	B0/Y13	C5/Y25	41/Z25	B5/Z31	32/S03	46/U09	B0/U04	D6/S08	G2/U10	H6/U07	45/U06	D0/S04	B2/S08	21/X27
	B1/Z22	C6/Y24	42/Z06	B6/Z10	33/U10	47/U07	B1/S12	D7/S07	G3/SU9	H7/S10	46/U05	D1/U04	B3/S07	22/X09
	B2/Z08	C7/Y23	43/Z26	B7/Z09	34/S09	48/S10	B2/U06	D8/U12	G4/S13	31/SU5	47/U11	D2/S12	ET	23/W13
	B3/Y33	C8/Y02	44/Z05	B8/Z03	35/S13	CB	B3/U05	D9/S04	G5/U13	32/S03	48/U09	D3/U06	A0/U12	24/W31
	B4/Z27	31/Z29	45/Z24	B9/Z04	36/U13	A0/S05	B4/U11	E0/U04	G6/Su8	33/U10	EB	D4/U05	A1/S04	25/W12
	B5/Z07	32/Z30	46/Z23	C0/Z25	37/S08	A1/S03	B5/U09	E1/S12	G7/S07	34/SU9	C1/S05	D5/U11	A2/U04	26/W33
	B6/Y32	33/Z11	47/Z28	C1/Z06	38/S07	A2/U10	B6/U07	E2/U06	G8/U12	35/S13	C2/S03	D6/U09	A3/S12	
	B7/Z33	34/Z12	48/Z02	C2/Z26	39/U12	A3/SU9	B7/S10	E3/U05	G9/S04	36/U13	C3/U10	EP	B0/U06	
	B8/Z13	35/Z32	AJ	C3/Z05	40/Su4	A4/S13	D0/SU5	E4/U11	H0/U03	37/S08	C4/SU9	A0/S05	B1/U05	
	B9/Y12	36/Z31	B0/Z29	C4/Z24	41/U04	A5/U13	D1/SU3	E5/U09	H1/S12	38/S07	C5/S13	A1/S03	B2/U11	
	C1/Y05	37/Z10	B1/Z30	C5/Z23	42/S12	A6/S08	D2/U10	E6/U07	H2/U06	41/U12	C6/U13	A2/U10	B3/U09	
	C2/Y04	38/Z09	B2/Z11	C6/Z28	43/U06	A7/S07	D3/SU9	E7/S10	H3/U05	42/S04	C7/S08	A3/SU9	FB	
	C3/Y22	39/Z03	B3/Z12	C7/Z02	44/U05	A8/U12	D4/S13	G0/S05	H4/U11	43/U04	C8/S07	B0/S13	19/X28	

WORKSTATION CONTROLLER MEMORY OP REG
PN4237411 EC832850 PEC832742G
LOC=1A-A2N2
USN 00008 PRI=22SEP77 1845
AUC= SEC
PFORM=KSEB NEXTBLK GC
CID PIOFE JOB K0201356

ESU01 0001 WSU01 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

PINS BP	PINS CD	PINS
D0/Y11	E1/X28	17/Z22
D1/Y31	E2/X08	18/Z08
D2/Y30	E3/X27	19/Y33
E0/Y13	E4/X09	20/Z27
E1/Z22	E5/W13	21/Z07
E2/Z08	E6/W31	22/Y32
E3/Y33	E7/W12	23/Z33
E4/Z27	E8/W33	24/Z13
E5/Z07	DB	25/Y12
E6/Y32	13/Y11	
E7/Z33	14/Y31	
E8/Z13	15/Y30	

WORKSTATION CONTROLLER
DATA FLOW

PN4237412 EC834777 PEC832850

LOC=1A-A2N2

USN 00008 PRI=04AUG78 1208

AUC= SEC
PFORM=KSEB NEXTBLK GQ

CID PIOFE JOB L6301459

WS003 0001

WS015CL3 - LOAD A-B REGS FROM I/O
WS015CZ3 - LOAD A-REG INTERNAL
WS015CN3 + GATE MASK TO A-B BUS
WS015CR3 + GATE NIBBLE TO A-B BUS
WS011CB3 + GATE HI BYTE HI NIBBLE
WS011CD3 + GATE HI BYTE LO NIBBLE
WS011CF3 + GATE LO BYTE HI NIBBLE
WS011CH3 + GATE LO BYTE LO NIBBLE
WS007FH21 - STACK DATA BIT (0-3) (0-3)WS007
WS001FB19 - ADDRESS BUS OUT BIT (0-3) (0-3)WS001
WS001CB31 - STG OUT BIT (0-3) PWRD (0-3)WS001
WS001CB35 - STG OUT BIT (4-7) PWRD (4-7)WS001
WS001CB41 - STG OUT BIT (8-11) PWRD (8-11)WS001
WS001CB45 - STG OUT BIT (12-15) PWRD (12-15)WS001
WS151BX31 - CONTROLLER DBI BIT (0-7,P) (P,0-7)WS151
WS015CW3 - LOAD B-REG INTERNAL

ASSEMBLER
A G1-N3
B G2:SEL *
C G3:
D G4:
E G5:
F G6:
G*:
*3
31(0-3)*1
1*(0-3)J
1*(0-3)L
1*(4-7)M
1*(8-11)N
1*(12-15)D 6—22B—AB

A REG
N3
:REG *
B09/C C1
J13/D C2
1*(0-3)F CD1
1*(0-3)G CD2—42B—DB
21(0-3)*1

B REG
N3
:REG *
B09/C C1
J11/D C2
1*(4-7)F CD1
1*(0-3)G CD2—42H—DE
21(4-7)*1

PARITY GEN
N3
EVEN
1*(0-3)C
1*(4-7)D
3/Y07
58B—FC

1*(0-3)B N3 AR
1*(4-7)C
Y07/D
31(0-7,P)*1
72E—FE

SEE TABLE
1*(0-3)C N3
1*(4-7)D ALU
21(0-3)*1
*3
(4-7)F
W23/H 58L—EH
31
32
33

PCR
N3
B1 CD1 :REG *
B2 CD1 :
B3 CD1 :
C*:
D C1 :
E LR—74M—GG
21/W06
22/W24
23/W23

PARITY CHECK
N3
(0)X26/B EVEN *
(1)X04/C
(2)X25/D
(3)X03/E
(4)X22/F
(5)X06/G
(6)X24/H
(7)X05/J
(P)X23/J 42R—AL
3

N3
A
B09/C
D
58R—DJ
3/W32

WS001FB15 - OP REG BIT (4-7) (4-7)WS001
WS013EP3 - SET INDICATORS
WS009FD24 + T3

- CONTROLLER DBO BIT (0-3) (0-3)WS001 WS200 WS300 WS400 — DB21
- CONTROLLER DBO PTY BIT WS001 WS200 WS300 WS400 — FC3
- CONTROLLER DBO BIT (4-7) (4-7)WS001 WS200 WS300 WS400 — DE21
- CONTROLLER DBO BIT (0-7,P) (P)WS143 (0-4)WS121 WS131 WS143 WS171 (5-7)WS121 WS143 WS171 — FE31
+ ASSEMBLY DOT BIT (0-3) (0-3) — AB31
+ ALU OUT BIT (0-3) (0-3)WS007 — EH21
- ALU ZERO IND WS011 WS121 WS161 — GG21
- ALU NON-ZERO IND WS011 WS121 WS161 — GG22
- ALU CARRY IND WS011 WS121 WS161 — GG23
WS143 + DBI PARITY ERROR — DJ3

ALU FUNCTION DECODE

OP REG 4 5 6 7	FUNCTION
0 0 0 0	ADD
0 0 0 1	ADD W/CARRY
0 0 1 0	MOVE
0 0 1 1	SUB W/BORROW
0 1 0 0	SUB
0 1 0 1	COMPARE
0 1 1 0	SUB SUMMARY
0 1 1 1	COMPARE SUMMARY
1 0 0 0	AND
1 0 0 1	TEST BITS
1 0 1 0	AND SUMMARY
1 0 1 1	TEST SUMMARY
1 1 0 0	OR
1 1 0 1	OR INHIBIT
1 1 1 0	XOR
1 1 1 1	XOR INHIBIT

16T—AZ

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

PINS	PINS	PINS	PINS	PINS	PINS	PINS
AB	M1/U13	34/G07	DE	C0/Y05	C1/Y04	C2/Y23
J0/X28	M2/S08	DB	F0/X22	C1/Y04	C2/Y22	C3/Y02
J1/X08	M3/S07	F0/X26	F1/X06	C2/Y22	C3/Y03	31/X11
J2/X27	N0/U12	F1/X04	F2/X24	C3/Y03	D0/Y25	32/X29
J3/X09	N1/S04	F2/X25	F3/X05	D0/Y25	D1/Y24	33/X10
K0/M02	N2/U04	F3/X03	G0/J07	D1/Y24	D2/Y23	34/X32
K1/G13	N3/S12	G0/J07	G1/P09	D2/Y23	D3/Y02	35/X12
K2/J12	Q0/U06	G1/P09	G2/P10	D3/Y02	FE	36/X31
K3/G12	Q1/U05	G2/P10	G3/G07	21/Y28	B0/Y05	37/X33
L0/S05	Q2/U11	G3/G07	21/Y25	22/J10	B1/Y04	38/X13
L1/S03	Q3/U09	21/Y05	22/Y24	23/M04	B2/Y22	39/X30
L2/U10	31/J07	22/Y04	23/Y23	24/X07	B3/Y03	
L3/S09	32/P09	23/Y22	24/Y02	FC	C0/Y25	
M0/S13	33/P10	24/Y03	EH	C0/Y05	C1/Y24	

WORKSTATION CONTROLLER
ALU

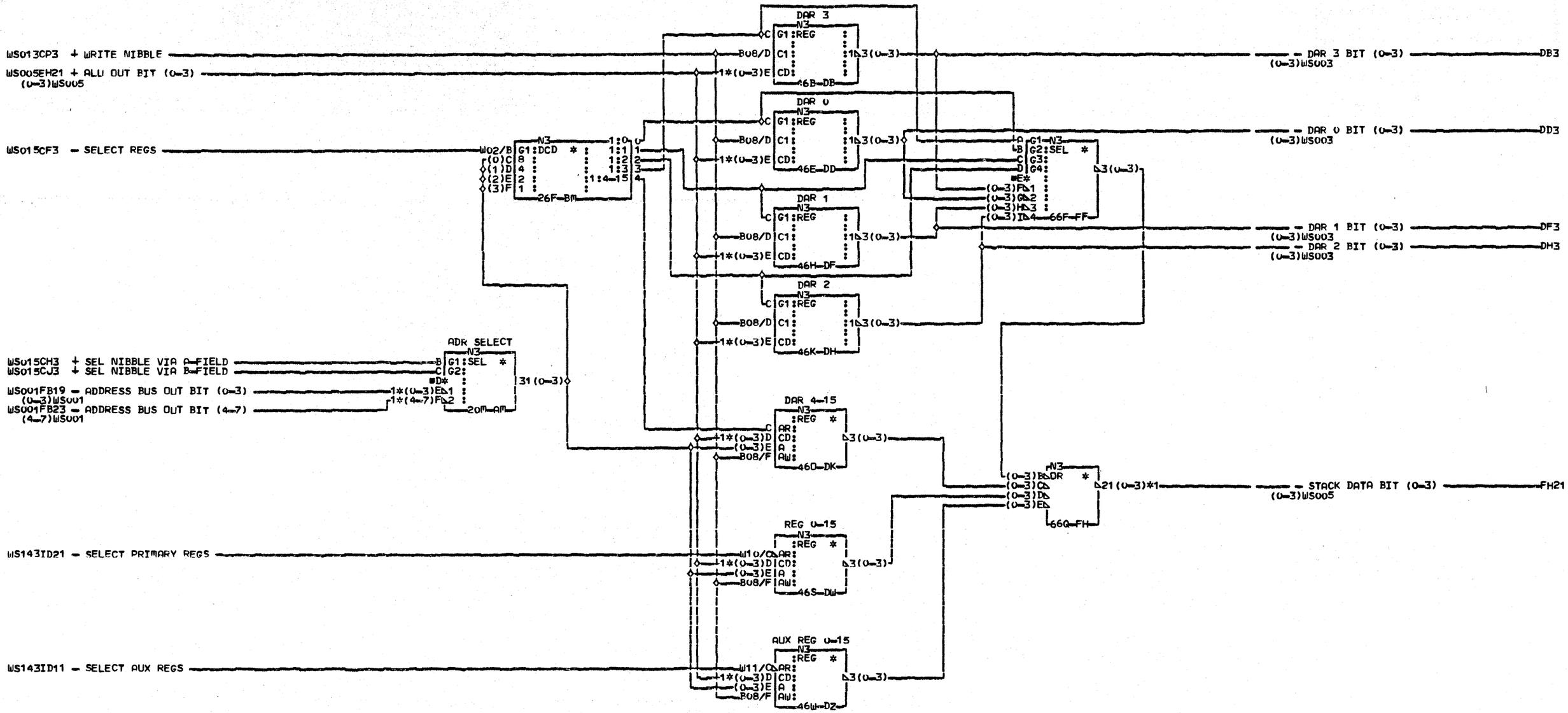
PN4237413 EC834777 PEC832850

LOC=1A-A2N2

USN 00008 PRI=04AUG78 1208

AUC= SEC
PFORM=KSEB NEXTBLK GH

CID PIOFE JOB L6301459



COMMENTS	PINS AM	PINS DD	PINS E3/X07	PINS D2/M04
D1COPYRIGHT IBM CORP. 1978	E0/X28	E0/Y28	DK	D3/X07
	E1/X08	E1/J10	D0/Y28	FH
	E2/X27	E2/M04	D1/J10	21/M02
	E3/X09	E3/X07	D2/M04	22/G13
	F0/W13	DF	D3/X07	23/J12
	F1/W31	E0/Y28	DW	24/G12
	F2/W12	E1/J10	D0/Y28	
	F3/W33	E2/M04	D1/J10	
	DB	E3/X07	D2/M04	
	E0/Y28	DH	D3/X07	
	E1/J10	E0/Y28	DZ	
	E2/M04	E1/J10	D0/Y28	
	E3/X07	E2/M04	D1/J10	

E

WORKSTATION CONTROLLER
LSR

PN4237414 EC832850 PEC832742G

LOC=1A-A2N2

USN 00008 PRI=22SEP77 1845

AUC= SEC
PFORM=KSEB NEXTBLK FI

CID PIOFE JOB K02U1356

WSU07 0001

WS500CA3 + 16 MHZ OSC — J02/C
BBD - CLOCK STEP MODE (TEST POINT) — B04/D
CCD - DIAG CLOCK (TEST POINT)
WS131YD3 - START CONTROLLER=400NS — W27/C

SEE NOTE 1 — N3 A — 16B-BB
SEE NOTE 1 — N3 OR — 26B-CC
N3 OR — 26E-CD
INHIBIT RING ADVANCE — N3 B R :FF * — J04/DNC — 42E-DE
INIT CYCLE THRU T8 — N3 :FL — W29/CPS — D R — 16G-BJ
RING COUNTER — N3 :REG — BP+1 B1 R — P06/C — 56B-EB
WAIT TRIGGER — N3 B R :FF * — W04/DNC — E CD — 36P-BH
N3 OR * — W30/B W28/C W29/D E — 16P-AH
N3 C C :PH — D CD — W29/E R — 16S-AK

WS131BD3 - CONTROLLER SINGLE CYCLE
WS111RD2 - CONTROLLER LOAD
WS111VD2 - CONTROLLER RESET
WS001FR3 + STG OUT EVEN PTY

RING COUNTER outputs:
21/W03 — + RING 1 BD — EB21 — WS015 WS017 WS111 WS131
22/G03 — + RING 2 BD — EB22 — WS003 WS013
23/W04 — + RING 3 BD — EB23 — WS011 WS013
24/G04 — WS015 + RING 4 BD — EB24
25/Y10
26/J04 — + RING [illegible] BD — EB26 — WS013 WS015
*3
31/P05 — + RING 6 T•P• — EB31

+ T3 — FD24 — WS005 WS011 WS013 WS015
+ RING 5 BD — EB25 — WS003 WS013 WS017 WS200 WS300 WS400

SEE TABLE — N3 COM *2
W03/B — 21 — + T0 — FD21 — WS001 WS015
G03/C — 22 — + T1 — FD22
W04/D — 23 — + T2 — FD23
G04/E — 24
Y10/F — 25 — WS015 + T4 — FD25
J04/G — 26 — + T5 — FD26
27 — + T6 — FD27 — WS011 WS013
28 — + T7 — FD28
29 — + T8 — FD29
3 — + T9 — FD3 — WS015 WS017
31 — + T10 — FD31 — WS011 WS013
32 — + T11 — FD32
76J-FD

- INIT CYCLE THRU T8 — BJ5
WS011 WS013 — - CONTROLLER MEM PTY CHK — AK5
WS121 WS131 — + WAIT TRIGGER (TEST POINT) — BH3

N3 N — Y10/C — 3/D09 — 74U-GB — - RING 5 (TEST POINT — GB3

T TIME DECODE TABLE

T-TIME	RING 1	2	3	4	5	6
T11	0	0	0	0	0	0
T0	1	0	0	0	0	0
T1	1	1	0	0	0	0
T2	1	1	1	0	0	0
T3	1	1	1	1	0	0
T4	1	1	1	1	1	0
T5	1	1	1	1	1	1
T6	0	1	1	1	1	1
T7	0	0	1	1	1	1
T8	0	0	0	1	1	1
T9	0	0	0	0	1	1
T10	0	0	0	0	0	1

D — 46V-AZ

COMMENTS
A1 NOTE 1: WS009BBD AND
2 WS009CCD ARE TIED TO +5
3 VOLTS ON THE CARD
D1COPYRIGHT IBM CORP. 1978

WORKSTATION CONTROLLER
T-TIME GENERATION

PN4237415 EC834777 PEC832850

LOC=1A-A2N2

USN 00008 PRI=14NOV78 1620

AUC= SEC
PFORM=KSEB NEXTBLK GC

CID PIOFE JOB L6301459

WS001GB4 + MODE 4

WS009EB23 + RING 3 BD

WS009FD31 + T10

WS003DB26 – SAR BIT 11
(11)WS003

WS001GB7 + MODE 7

WS001GB6 + MODE 6

WS001FB13 – OP REG BIT 2
(2)WS001

WS001FB14 – OP REG BIT 3
(3)WS001

WS001FB23 – ADDRESS BUS OUT BIT (4–7)
(7)WS001

WS001FB15 – OP REG BIT (4–7)
(4)WS001

WS005GG21 – ALU ZERO IND

WS005GG22 – ALU NON–ZERO IND

WS005GG23 – ALU CARRY IND

WS009FD24 + T3

WS009FD27 + T6

WS013CM3 – INITIAL IAR RESET

WS009BJ5 – INIT CYCLE THRU T8

SEE TABLE

BRANCH COND CODES

CONDITION CODE	BRANCH
0	BRANCH AND WAIT
1	BRANCH HIGH/NO CARRY
2	BRANCH LOW/NO CARRY
3	BRANCH UNCONDITIONAL
4	BRANCH AND LINK
5	BRANCH NOT EQUAL/NOT ZERO/TRUE
6	BRANCH EQUAL/ZERO/FALSE
7	OP REG BIT 4= 0 – RETURN VIA LINK
	OP REG BIT 4= 1 – RETURN VIA DAR

WS005 + GATE HI BYTE HI NIBBLE — CB3

WS005 + GATE HI BYTE LO NIBBLE — CD3

WS005 + GATE LO BYTE HI NIBBLE — CF3

WS003 + SAR A PWRD — CP31

WS003 + SELECT HI SAR B — CP32

WS005 + GATE LO BYTE LO NIBBLE — CH3

+ SELECT LO SAR B (TEST POINT) — CP33

WS003 – LOAD BACKUP — CJ3

WS003 – LOAD LINK FROM IAR — CL3

WS003 – LOAD LINK FROM BACKUP — CN3

WS003 – RESET IAR GATED — AM3

WS003 + LOAD IAR GATED DF1–2 — CW3

WS003 + LOAD IAR GATED DF3–4 — CZ3

COMMENTS
D1COPYRIGHT IBM CORP. 1978

WORKSTATION CONTROLLER
CONTROL SIGNALS

PN4237416 EC834777 PEC832850

LOC=1A–A2N2

USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK CO

CID PIOFE JOB L630145

WS009EB22 + RING 2 BD — G03/B
WS009EB25 + RING 5 BD — Y10/C
CBD - MEM RST DEGATE (TEST POINT) — G05/D

SEE NOTE
N3 A
3/Y27
36B-CB
- RESET STG — CB3
WS001 WS200 WS300 WS400

WS015CB3 + MODE 5 2ND CYCLE
WS003DB26 - SAR BIT 11 (11)WS003
(11)B
N3 N
3
16F-AE
N3 A
B
C
36E-CE
3/Y25
+ WRITE STG LO BYTE — CE3
WS001 WS200 WS300 WS400

(11)B
C
N3 A
3/Y06
36H-CG
+ WRITE STG HI BYTE — CG3
WS001 WS200 WS300 WS400

WS009EB23 + RING 3 BD
W04/CPC
N3 FF
WS131PB4 + CONTROLLER U-INT REQUEST — X02/D CD
WS111VD2 - CONTROLLER RESET — W29/EDR
3/P13
16K-AR
W04/CNC
N3 FF
P13/DD CD
W29/EDR
36K-CK
- CONTROLLER U-INT DETECTED — AR3
WS131 WS161
5/W05
WS001 - FORCE BAL INST — CK5

WS009BJ5 - INIT CYCLE THRU T8
WS009EB26 + RING 6 BD — J04/DA
N3 A
3/G09
36N-CM
- INITIAL IAR RESET — CM3
WS011 WS015

WS009FD31 + T10
WS001GB0 + MODE 0
WS001GB1 + MODE 1
WS001GB2 + MODE 2
WS001GB3 + MODE 3
WS009FD27 + T6
WS001GB4 + MODE 4
WS009FD24 + T3
N3 A*OR *
C D E* F G H* I J K* L M N* O P Q* R S T* U V
36Q-CP

3/B08
WS007 + WRITE NIBBLE — CP3
B08/C
N3 N
3
56S-EP
WS005 - SET INDICATORS — EP3

COMMENTS
A1 NOTE 1: NET WS013CBD IS
2 TIED TO +5 VOLTS ON
3 THE CARD
D1COPYRIGHT IBM CORP. 1978

WORKSTATION CONTROLLER
MEMORY CONTROL

PN4237417 EC834777 PEC832850

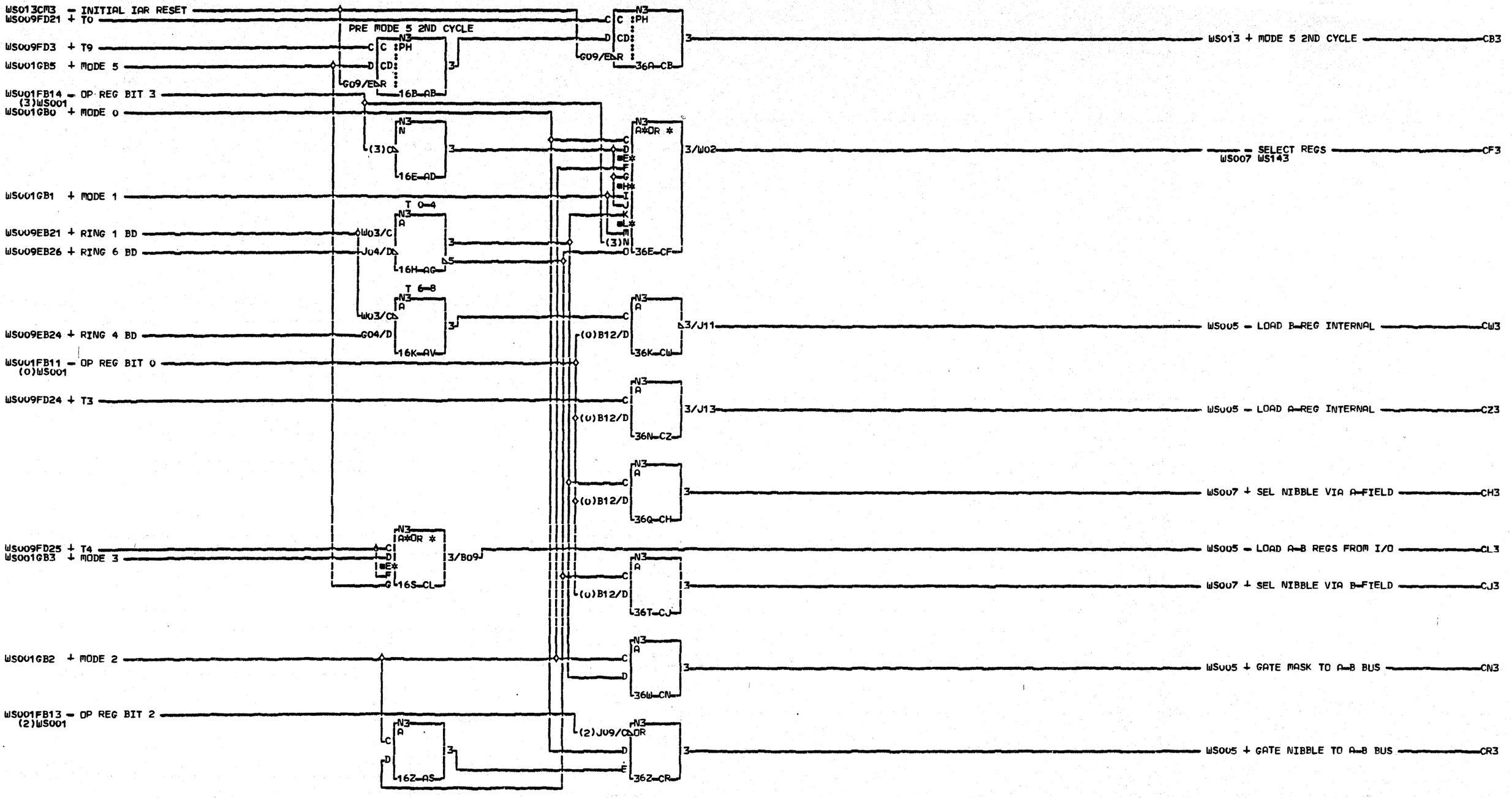
LOC=1A-A2N2

USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK EQ

CID PIOFE JOB L6301459

WS013 0001
WS013 0001



COMMENTS

E

WSC15 0001

WORKSTATION CONTROLLER
A-B REG CONTROL

PN4237418 EC832850 PEC832742G

LOC=1A-A2N2

USN 00008 PRI=22SEP77 1845

AUC= SEC
PFORM=KSEB NEXTBLK CO

CID PIOFE JOB K0201356

WS015 0001

WS001GB3 + MODE 3
WS009FD3 + T9
WS001FB14 - OP REG BIT 3
(3)WS001
WS001GB4 + MODE 4
WS001GB5 + MODE 5
WS009EB21 + RING 1 BD
WS009EB25 + RING 5 BD

N3 N — 16B-AB — 3
(3)C
N3 A*OR * — C D E *F* G H — 36B-CB
3/W25 — WS141 WS143 — CONTROL STROBE — CB3
N3 A*OR * — C D (3)E *F* G H — 36F-CF
3/W26 — WS173 — SENSE STROBE — CF3
T 4-5
N3 A — C — W03/D Y10/E — 36J-CJ
3/D07 — I/O ADDR STROBE (TEST POINT) — CJ3

SEE TABLE
N3 TEST CNTLS — 16M-AM

AMC1 - CE TEST POINT 2 — D12/C1
AMC2 - CE TEST POINT 1 — D13/C2
AMC3 - TEST POINT RESET 1 — B03/C3
AMC4 + TIEUP CTL 1 — B05/C4
AMC5 + TEST DF4 — P04/C5
AMC6 + TIE UP — M09/C6

N3 SERVICE — 66M-FM
3/Y09 — CONSOLE GND (TEST POINT) — FM3
5/W07 — +5 VOLTS TO CONSOLE (TEST POINT) — FM5

N3 TIEDOWN — 66P-FP
3/D05 — WS131 + CONT CARD UNPLUGGED PT 1 — FP3
5/S02 — WS131 + CONT CARD UNPLUGGED PT 2 — FP5

TEST CONTROLS

PIN	TEST MODE	RUN MODE
D12	DOWN	UP
D13	DOWN	UP
B03	DOWN	UP
B05	DOWN	UP
P04	UP	DOWN
M09	DOWN	UP

16T-AT

CARD VOLTAGE PINS

+5V	D03	J03	P03	U03
+8.5V	G11	S11		
GND	D08	J08	P08	U08

36W-CW

N3 TEST OUTPT — 66T-FT
31/D10 — CE TEST POINT 1 — FT31
32/B07 — CE TEST POINT 2 — FT32
33/D04 — SET 1ST CYCLE TP — FT33
34/D11 — RST TST PT UNUSED — FT34
35/G08 — + FC MULTIPLE TEST POINT — FT35
36/M03 — + SEL B EXPANSION — FT36
37/B10 — - ALU CARRY IN — FT37

COMMENTS
A1 NOTE 1: TEST CONTROLS ARE
2 TIED TO RUN MODE ON CARD
3 OR BOARD
D1

WORKSTATION CONTROLLER
I/O STROBE PULSES

PN4237419 EC834777 PEC832850

LOC=1A-A2N2

USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK FU

CID PIOFE JOB L6301459

WS017 0001

CH002AF01 + SYSTEM RESET
CH002AE05 - MPXPO STROBE OUT
CH002AE01 - CONTROL OUT
CH002AE03 - SERVICE OUT
=WS173ARE - TIE TO GND
CH001AD01 - COMMAND BUS OUT BIT 0
CH001AD03 - COMMAND BUS OUT BIT 1
CH001AD05 - COMMAND BUS OUT BIT 2
CH001AA01 - MPXPO DATA OUT 0
CH001AA03 - MPXPO DATA OUT 1
CH001AA05 - MPXPO DATA OUT 2
CH001AA07 - MPXPO DATA OUT 3
CH001AB01 - MPXPO DATA OUT 4
CH001AB03 - MPXPO DATA OUT 5
CH001AB05 - MPXPO DATA OUT 6
CH001AB07 - MPXPO DATA OUT 7
CH001AC01 - MPXPO DATA OUT P

GATE DBI & DBO
SERVICE IN
BLAST
DEVICE SEL

CH007 + WS MULTIDEVICE RESPONSE — CD2
CH007 - WS SERVICE IN — CD6
WS111 - GATE DBI & CBI — CB2
WS111 - DATA SAMPLE 2 — ID41
WS131 - DATA SAMPLE 1 — ID51
CH008 - WS CHAN DBO PARITY CHK(CBI 5) — HB91
+ GATE CSSB — HB82
WS111 - SYSTEM DBO EVEN PTY — SA5
+ INTERRUPT LEVEL HIT — PA3
+ DEVICE ADDRESS HIT — PA6
- SYSTEM DBO BIT 0 — RB3
+ SYSTEM DBO BIT 0 — RB5
WS111 - CCB 3 — WA31
WS111 - CCB 4 — WA41
- CCB 5 — WA51
- CCB 6 — WA61
WS111 WS131

COMMENTS
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E

WORKSTATION ADAPTER
INTERFACE CONTROLS

PN4237420 EC832850 PEC832742G
LOC=1A-A2M2
USN 00008 PRI=22SEP77 1845
AUC= SEC
PFORM=KSEB NEXTBLK WB
CID PIOFE JOB KU201356

WS101 0001
WS101 0001

WS141DA23 + SET CYCLE STEAL REQUEST
CH003AE01 - XFER ERROR GATED OR JIO ECHO
WS101SA5 - SYSTEM DBO EVEN PTY
WS101ID41 - DATA SAMPLE 2
WS141DA21 + RST CYCLE STEAL XFER ERROR
CH002AF01 + SYSTEM RESET
WS141DA25 + RST COMMAND PENDING
WS009EB21 + RING 1 BD
WS131CC4 + SET U-INT REQUEST
WS141DA33 + RST SERVICE REQUIRED
WS101CB2 - GATE DBI & CBI
CH001AD01 - COMMAND BUS OUT BIT 0
CH001AD03 - COMMAND BUS OUT BIT 1
CH001AD05 - COMMAND BUS OUT BIT 2
WS101WA31 - CCB 3
WS101WA41 - CCB 4
WS101WA51 - CCB 5
WS101WA61 - CCB 6
CH011AB3 - MICROINTERRUPT REQUEST 2

CYC STL REQ
XFER ERR
DIAG MODE
CMND PEND
SERV RQR
U-INT REG
CONSOLE CHK
ENA U-INT
IOL OR IOCL
U-INT, 2
CONTROLLER LOAD
CTRL RST

+ CS GATE CBI — EA3
WS131 + CMND DECODE 3 — EA4
WS121 + GATE DATA BUS IN — BD3
WS131 + CMND DECODE 5 — EA6
- WS BASE CYCLE STEAL REQUEST — CC5 (CH009 WS151)
- CS XFER ERROR — FD3 (WS121 WS151)
+ DIAGNOSITIC MODE — GC5 (WS121 WS171)
WS161 - LOAD SYSTEM DBO BUFFER — HB5
- COMMAND PENDING — JD2 (WS121 WS151)
- SERVICE REQUIRED — KC5 (WS121 WS151)
WS121 - WS U-INT SENSE BIT — ND3
- WS U-INT LEVEL 4 REQUEST — OC5 (CH011 WS131)
- CONTROLLER LOAD — RD2 (WS003 WS009 WS121)
WS121 + ENABLE MICRO INTERRUPT — WC5
WS131 - CONSOLE CHK — SC5
- SYS/ADAP RST — XB5 (WS131 WS143 WS181)
- CONTROLLER RESET — VD2 (WS009 WS013 WS121 WS131)
WS151 - U-INTERRUPT R, LEVEL 2 — WA5
WS131 + START CONTROLLER — QB91
WS131 + CMND MODIFIER 0 — QA0
WS131 + CMND MODIFIER 1 — QA1
WS131 + CMND MODIFIER 4 — QA4

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

WORKSTATION ADAPTER
COMMAND DECODE

PN4237421 EC832999 PEC832850

LOC=1A-A2M2

USN 00008 PRI=03MAY78 1007

AUC= SEC
PFORM=KSEB NEXTBLK XC

CID PIOFE JOB N5101128

WS111 0001

WS131OD2 + SYSTEM SENSE BYTE 1
WS111BD3 + GATE DATA BUS IN
WS111ND3 - WS U-INT SENSE BIT
WS131OD4 + SYSTEM SENSE BYTE 3
WS141DA55 + LOAD SYSTEM DBI BUFFER
WS005FE31 - CONTROLLER DBO BIT (0-7,P)
(0-7)WS005
WS111GC5 + DIAGNOSITIC MODE
WS111RD2 - CONTROLLER LOAD
WS111VD2 - CONTROLLER RESET
WS173ARE - TIE TO GND
WS005GG23 - ALU CARRY IND
WS131GC2 - CONSOLE CHECK
WS005GG21 - ALU ZERO IND
WS005GG22 - ALU NON-ZERO IND
WS131OD1 + SYSTEM SENSE BYTE 0
WS131OD3 + SYSTEM SENSE BYTE 2
WS143MD3 - CONTROLLER BUSY
WS003DB3 - XSAR BIT 2 PWRD
(X2)WS003
WS143RD3 - OP CHECK
DCI4 - CE TEST PIN
WS131YC3 - CONTROLLER CARD UNPLUGGED
WS143TB5 - CONTROLLER DBO/DBI PTY CHK
WS111JD2 - COMMAND PENDING
WS143ED3 - SERIAL XFER ERROR
WS111WC5 + ENABLE MICRO INTERRUPT
WS009AK5 - CONTROLLER MEM PTY CHK
WS111FD3 - CS XFER ERROR
WS171CR5 - PARITY TGR TP
WS111KC5 - SERVICE REQUIRED

N3 OR
16B-AD
REG
(0)X11/C1
(1)X29/E1
W28/F1
(2)X10/G1
W29/H1
(3)X32/I1
M12/J1
(4)X12/K1
W23/L1
(5)X31/M1
N1
(6)X33/O1
W06/P1
(7)X13/Q1
W24/R1
26D-BE
G1-N3 SEL
BIT0
BIT 1
(X2)J13/H4
W22/I5
BIT 2
M12/J3
BIT 3
P04/K3
BIT 4
L1
BIT 5
M1
W08/M3
M12/M4
BIT 6
N1
Y29/N4
BIT 7
O1
O4-480-DC
DOT
OR
72M-GD-3
CH005 - WS DBI BIT 2 - GD3
11/G02 - CH005 - WS DBI BIT 0 - GB11
21/J02 - CH005 - WS DBI BIT 1 - GB21
31/G03
41/G04 - CH005 - WS DBI BIT 3 - GB41
51/J04 - CH006 - WS DBI BIT 4 - GB51
61/G05 - CH006 - WS DBI BIT 5 - GB61
71/J05 - CH006 - WS DBI BIT 6 - GB71
81/J06 - CH006 - WS DBI BIT 7 - GB81
91/J07 - CH006 - WS DBI PTY BIT - GB91
72P-GB
N3 EVEN *
64W-FT

COMMENTS

WORKSTATION ADAPT SYS DBI ASM

PN4237422 EC832850 PEC832742G

LOC=1A-A2M2

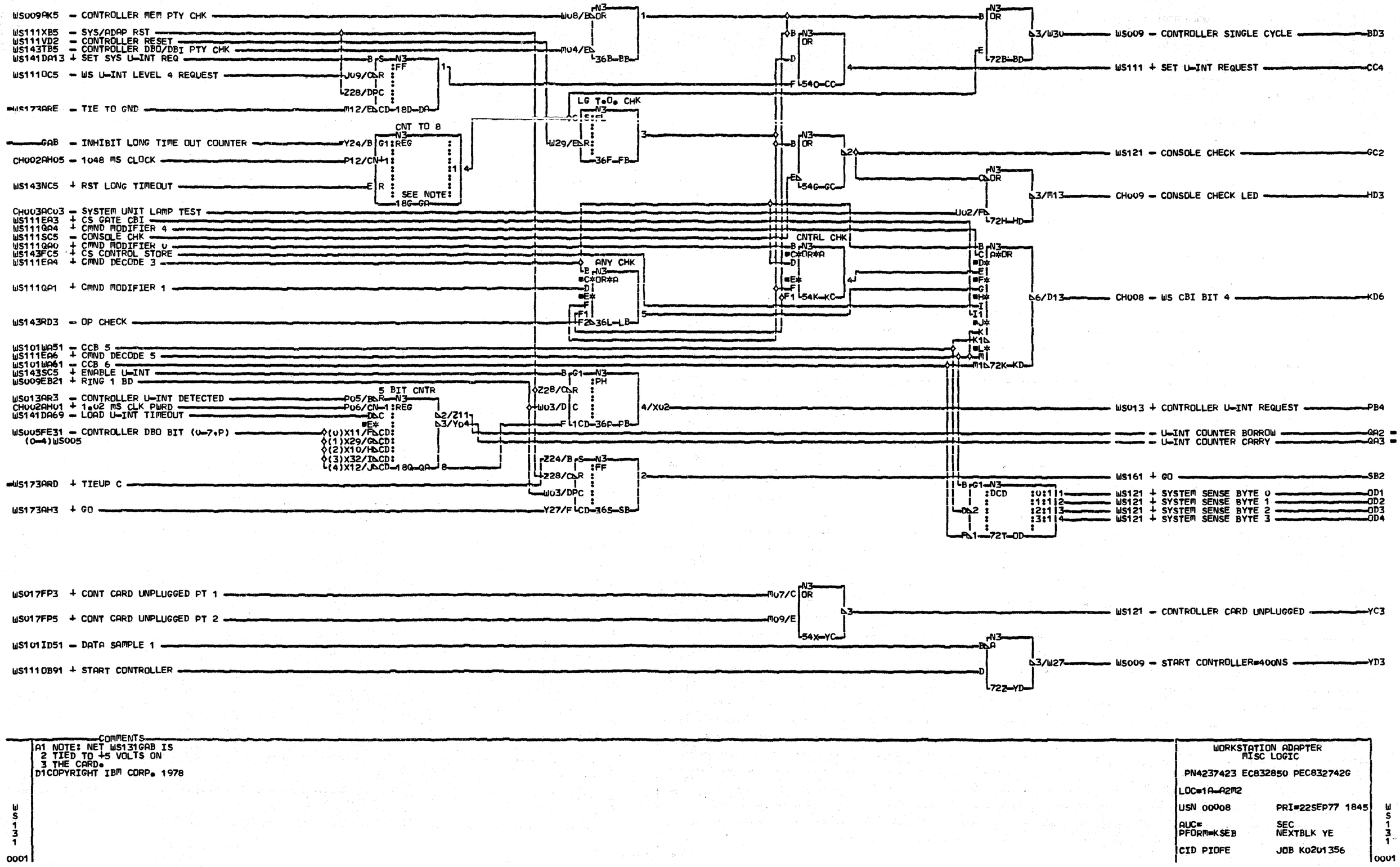
USN 00008 PRI=22SEP77 1845

AUC= SEC

PFORM=KSEB NEXTBLK GE

CID PIOFE JOB K02O1356

WS121 0001



COMMENTS

A1 NOTE: NET WS131GAB IS
2 TIED TO +5 VOLTS ON
3 THE CARD.

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WORKSTATION ADAPTER
MISC LOGIC

PN4237423 EC832850 PEC8327426

LOC=1A-A2M2

USN 00008 PRI=22SEP77 1845

AUC= SEC

PFORM=KSEB NEXTBLK YE

CID PIDFE JOB K02U1356

WS131 0001

WS017CB3 — CONTROL STROBE — W25/CB G1

WS001FB19 — ADDRESS BUS OUT BIT (0-3) (3)WS001 — (3)X09/FB 16

WS001FB23 — ADDRESS BUS OUT BIT (4-7) (4-7)WS001 — (4)W13/I 8

(5)W31/L 4

(6)W12/D 2

(7)W33/R 1

N3 DCD

0:1	*1 11	WS173 + DIAG LOAD SD BUFFER	DA11
1:1	*12 13	WS131 + SET SYS U-INT REQ	DA13
2:1	*14 15/Y11	WS171 + LOAD DATA FIELD	DA15
3:1	*16 17/Y25	+ LOAD COMMAND FIELD	DA17
4:1	*18 19	WS171 WS173 + DIAG CLK SD	DA19
5:1	*2 21	WS143 WS171 WS111 + RST CYCLE STEAL XFER ERROR	DA21
6:1	*22 23	WS111 + SET CYCLE STEAL REQUEST	DA23
7:1	*24 25	WS111 + RST COMMAND PENDING	DA25
8:1	*26 27	WS143 + LOAD CBI/ADR	DA27
9:1	*28 29	WS143 + RST OP CHECK	DA29
A:1	*3 31	WS143 + RST CS CONTROL STORE	DA31
B:1	*32 33	WS111 + RST SERVICE REQUIRED	DA33
C:1	*34 35	WS143 + SET CONTROLLER BUSY	DA35
D:1	*36 37	WS143 + RST CONTR DBO/DBI P CHK	DA37
E:1	*38 39	WS143 + RST SERIAL XFER CHK	DA39
F:1	*4 41	WS143 + RST XMIT ENABLE	DA41
10:1	*42 43	WS143 + SET XMIT ENABLE	DA43
11:1	*44 45	WS143 + SET SELECT AUX REGS	DA45
12:1	*46 47	WS143 + RST SELECT AUX REGS	DA47
13:1	*48 49	WS143 + RST CONTROLLER BUSY	DA49
14:1	*5 51	WS143 + RST RECEIVE ENABLE	DA51
15:1	*52 53	WS143 + SET CS CONTROL STORE	DA53
16:1	*54 55	WS121 + LOAD SYSTEM DBI BUFFER	DA55
17:1	*56 57	WS143 + SET OP CHK	DA57
18:1	*58 59	WS143 + ENABLE LONG TIME OUT	DA59
19:1	*6 61	WS143 + SET RECEIVE ENABLE	DA61
1A:1	*62 63/M02	WS500 — RST DRAR	DA63
1B:1	*64 65	WS143 + DISABLE LONG TIME OUT	DA65
1C:1	*66 67	WS143 + SET CONTROLLER U-INT	DA67
1D:1	*68 69	WS131 — LOAD U-INT TIMEOUT	DA69
1E:1	*7 71	WS143 + RST LONG TIMEOUT	DA71
1F:1	*72 73	WS143 + RST CONTROLLER U-INT	DA73

40B—DA

(4)W13/B
(5)W31/C
(6)W12/D
(7)W33/E

N3 A

3/Y31 — WS173 — SENSE SD DATA — WB3

4 0X—WB

COMMENTS

D1COPYRIGHT IBM CORP. 1978

WORKSTATION ADAPTER
ABO DECODE

PN4237424 EC832850 PEC832742G

LOC=1A-A2M2

USN 00008 PRI=22SEP77 1845

AUC= SEC
PFORM=KSEB NEXTBLK WD

CID PIOFE JOB K0201356

WS141 0001

WS141 0001

WS015CF3 — SELECT REGS
WS171EW5 — SET SERIAL PTY CHK
WS141DA39 + RST SERIAL XFER CHK
WS141DA31 + RST CS CONTROL STORE
WS141DA53 + SET CS CONTROL STORE
WS141DA61 + SET RECEIVE ENABLE
WS171FD3 — RST RECEIVE ENABLE
WS141DA51 + RST RECEIVE ENABLE
WS141DA45 + SET SELECT AUX REGS
WS141DA47 + RST SELECT AUX REGS
WS141DA43 + SET XMIT ENABLE
WS141DA41 + RST XMIT ENABLE
WS141DA35 + SET CONTROLLER BUSY
WS141DA49 + RST CONTROLLER BUSY
WS141DA71 + RST LONG TIMEOUT
WS141DA59 + ENABLE LONG TIME OUT
WS141DA65 + DISABLE LONG TIME OUT
WS141DA57 + SET OP CHK
WS111XB5 — SYS/ADAP RST
WS141DA29 + RST OP CHECK
WS141DA67 + SET CONTROLLER U-INT
WS141DA73 + RST CONTROLLER U-INT
WS017CB3 — CONTROL STROBE
WS141DA19 + DIAG CLK SD
WS005DJ3 + DBI PARITY ERROR
WS141DA37 + RST CONTR DBO/DBI P CHK
WS111EA3 + CS GATE CBI
WS005FE31 — CONTROLLER DBO BIT (0-7,P) (P,U=7)WS005
WS141DA27 + LOAD CBI/ADR

RCV ENA
CS CONT
S XFER ERR
XMIT ENA
CON BSY
ENABLE LG T.O.
OP CHK
ENA U-INT
PRY CHK

WS121 WS151 — SERIAL XFER ERROR — ED3
WS131 WS161 + CS CONTROL STORE — FC5
WS171 WS173 WS181 + RECEIVE ENABLE — GB5
WS007 — SELECT AUX REGS — ID11
WS007 — SELECT PRIMARY REGS — ID21
WS161 + SELECT AUX REGS — JC5
WS171 WS173 WS181 + XMIT ENABLE — KB5
WS121 — CONTROLLER BUSY — MD3
WS131 + RST LONG TIMEOUT — NC5
WS121 WS131 — OP CHECK — RD3
WS131 + ENABLE U-INT — SC5
WS121 WS131 WS151 WS161 — CONTROLLER DBO/DBI PTY CHK — TB5
WS161 — CABLE ADR 8/+ CBI 0 — WC21
CH007 — WS CBI BIT 0 — WC11
CH008 — WS CBI BIT 1 — WC31
WS161 WS500 — CABLE ADR 4/+ CBI 1 — WC41
CH008 — WS CBI BIT 2 — WC51
WS161 WS500 — CABLE ADR 2/+ CBI 2 — WC61
CH008 — WS CBI BIT 3 — WC71
WS161 WS500 — CABLE ADR 1/+ CBI 3 — WC81
WS161 — + CABLE ADR 8 — VD3

COMMENTS
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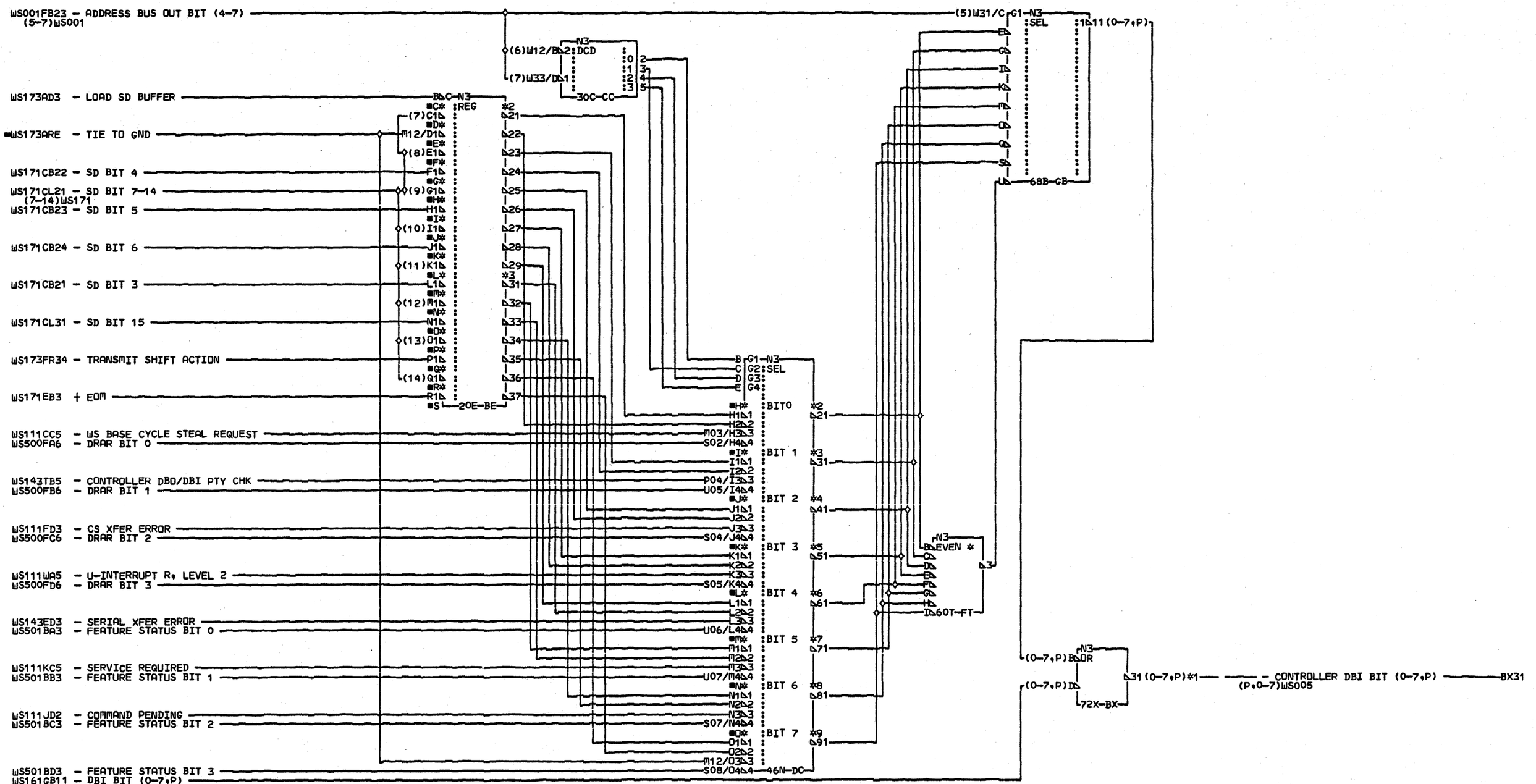
WORKSTATION ADAPTER
ABD DECODE LATCHES

PN4237425 EC832850 PEC832742G
LOC=1A-A2M2
USN 00008 PRI=22SEP77 1845
AUC= SEC
PFORM=KSEB NEXTBLK WD
CID PIOFE JOB K0201356

WS143 0001



COMMENTS	PINS
D1COPYRIGHT IBM CORP. 1978	BX 31/X26 32/X04 33/X25 34/X03 35/X22 36/X06 37/X24 38/X05 39/X23

WORKSTATION ADAPTER
CONTROLLER DBI ASM

PN4237426 EC834777 PEC832850

LOC=1A-A2M2

USN 00008 PRI=01AUG78 1014

AUC= SEC
PFORM=KSEB NEXTBLK GC

CID PIOFE JOB L6301459

WS151 0001

WSUU1FB23 - ADDRESS BUS OUT BIT (4-7)
(4,6-7)WSUU1

WS111HB5 - LOAD SYSTEM DBO BUFFER
WS013AR3 - CONTROLLER U-INT DETECTED
WS200ER4 - STG CARD 1 STATUS BIT U
CHUU1AAU1 - MPXPO DATA OUT U
WS200ER5 - STG CARD 1 STATUS BIT 1
CHUU1AAU3 - MPXPO DATA OUT 1
WS300ER4 - STG CARD 2 STATUS BIT U
CHUU1AAU5 - MPXPO DATA OUT 2
WS300ER5 - STG CARD 2 STATUS BIT 1
CHUU1AAU7 - MPXPO DATA OUT 3
WSUU5GG22 - ALU NON-ZERO IND
CHUU1ABU1 - MPXPO DATA OUT 4
WSUU5GG23 - ALU CARRY IND
CHUU1ABU3 - MPXPO DATA OUT 5
WSUU5GG21 - ALU ZERO IND
CHUU1ABU5 - MPXPO DATA OUT 6
WS143TB5 - CONTROLLER DBO/DBI PTY CHK
CHUU1ABU7 - MPXPO DATA OUT 7

WS143JC5 + SELECT AUX REGS
WS173ARB + TIEUP A
WS173FR27 SRE
WS143FC5 + CS CONTROL STORE
WS181AB3 + DELAYED XMIT ENABLE
WS131SB2 + GO
WS143WC21 - CABLE ADR 8/+ CBI U
WS143WC41 - CABLE ADR 4/+ CBI 1
WS143WC61 - CABLE ADR 2/+ CBI 2
WS143WC81 - CABLE ADR 1/+ CBI 3

(6)W12/B6
(7)W33/D6
26P-CC
N3 OR
16D-AD
N3 :REG
BIT=U
BIT 1
BIT 2
BIT 3
BIT 4
BIT 5
BIT 6
BIT 7
N3 :SEL
(4)W13/C6
N3 EVEN *
ID64U-FT
720-GB
460-DC

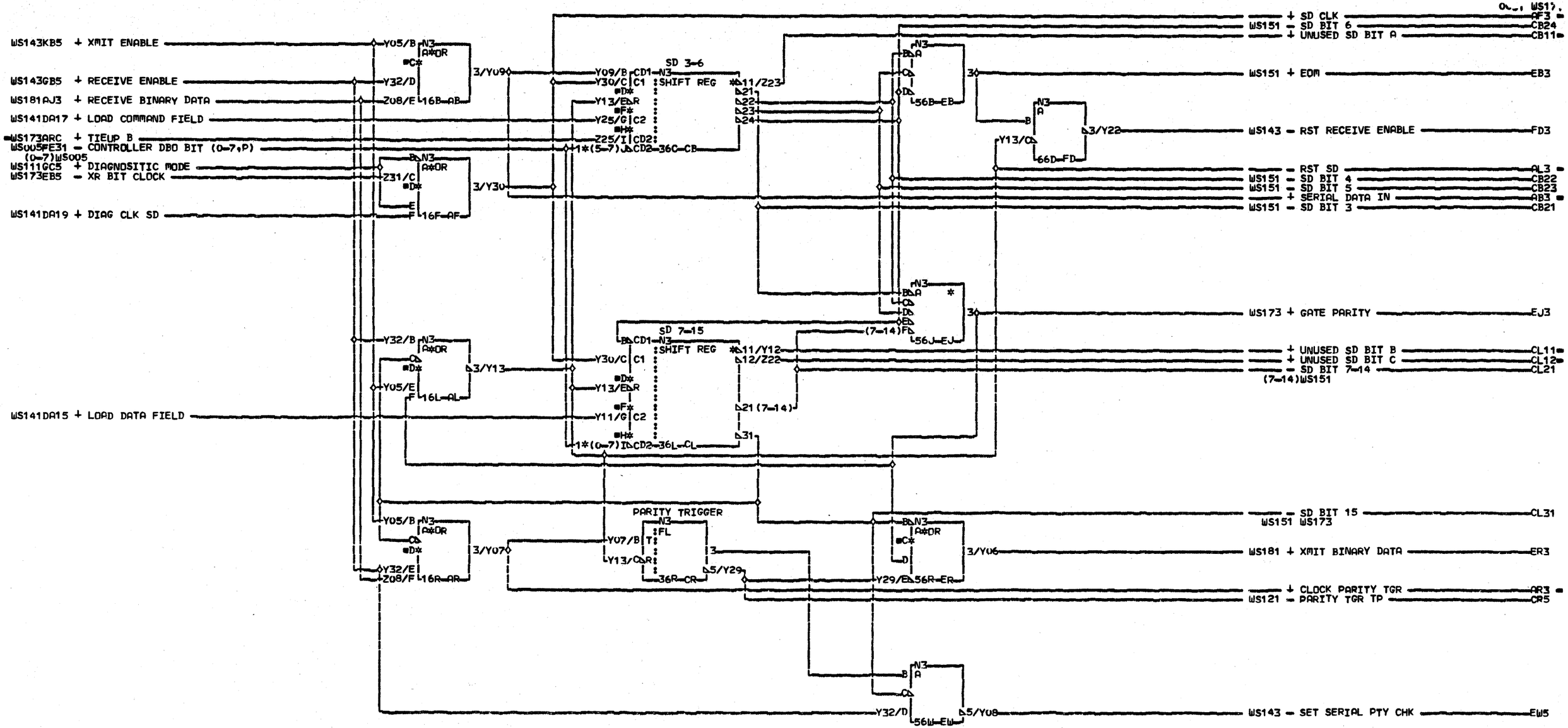
(P+U-7+P) - DBI BIT (U-7+P) - GB11
(P+U-7)WS151

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

WORKSTATION ADAPTER DBI ASM

PN4237427 EC832850 PEC832742G
LOC=1A-A2M2
USN 00008 PRI=22SEP77 1845
AUC= SEC
PFORM=KSEB NEXTBLK GC
CID PIOFE JOB KU2U1356

WS161 0001
WS161 0001



COMMENTS

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PINS

CB
J0/X31
J1/X33
J2/X13
CL
I0/X11
I1/X29
I2/X10
I3/X32
I4/X12
I5/X31
I6/X33
I7/X13

WORKSTATION ADAPTER
SERDES AND SERDES CONTROL

PN4237428 EC832850 PEC832742G

LDC=1A-A2M2

USN 00008 PRI=22SEP77 1845

AUC= SEC
PFORM=KSEB NEXTBLK FE

CID PIOFE JOB K0201356

WS171 p01

WS171 0001

WS143KB5 + XMIT ENABLE

WS500DA3 + RECEIVE CLOCK

WS500CA3 + 16 MHZ OSC

WS143GB5 + RECEIVE ENABLE

WS171CL31 - SD BIT 15

WS141DA11 + DIAG LOAD SD BUFFER

WS171EJ3 + GATE PARITY

WS141DA17 + LOAD COMMAND FIELD
WS141WB3 - SENSE SD DATA
WS017CF3 - SENSE STROBE

Y05/B N3 A*OR U10/C *D* 3
Y32/E S09/F 36B-CB

DIVIDE BY 2: N3 :FL T: 56B-EB
5/Z31 — WS171 - XR BIT CLOCK — EB5

DIV BY 8 OR 16: N3 :FL T: 8 16 16D-AB
U42/B
3/U10
5/Z13

WS181 - XMIT CLOCK — AB3
+ 1 MHZ OSC — AB5
WS500 + XMIT CLOCK — BC3

U10/C N3 36E-BC
3/P07

DIVIDE BY 2: N3 :FL T: 56F-BB
P07/C
3/Z04 — + XFO — BB3

DIVIDE BY 2: N3 :FL T: 36H-DB
S09/C
3/Z02 — + RFO — DB3

Y32/B N3 A*OR C *D* E 16J-AD
3

WS151 - LOAD SD BUFFER — AD3

B S1 N3 C S2 :FL *D* R1 R2 1G1 20M-AH
3/Y27

WS131 + GO — AH3

SEE TABLE

N3 TEST CONTROLS 16R-AR

ARB	+ TIEUP A	Z30/B
ARC	+ TIEUP B	Z25/C
ARD	+ TIEUP C	Z24/D
ARE	- TIE TO GND	M12/E
ARF	- 6 FO CLOCK	U04/F

D

PIN	RUN MODE	TEST MODE
Z30	UP	DOWN
Z25	UP	DOWN
Z24	UP	DOWN
M12	DOWN	UP
U04	DOWN	UP

26R-BR

N3 TEST OUTPUTS 66R-FR

21/Z06		Q0	FR21
22/Z05		Q1	FR22
23/Z12		Q2	FR23
24/Z32		Q3	FR24
25/Z27		Q4	FR25
26/Z29		Q5	FR26
27/Z26	WS161	SRE	FR27
28/Z10		B B MARKER	FR28
29/Y33		- INITIALIZE	FR29
3/Y28		+ SAMPLED COMMAND	FR3
31/Y10		+ STOP CLOCK	FR31
32/Y26		- RST PARITY	FR32
33/Z03		+ SERIAL DATA IN TP	FR33
34	WS151	- TRANSMIT SHIFT ACTION	FR34

COMMENTS
A1 NOTE 1: TEST CONTROLS
2 TIED TO RUN MODE ON
3 BOARD OR CARD.
D1

WS173 0001

WORKSTATION ADAPTER
SERDES CLOCK GENERATION

PN4237429 EC832850 PEC832742G

LOC=1A-A2M2

USN 00008 PRI=22SEP77 1845

AUC= SEC
PFORM=KSEB NEXTBLK FS

CID PIOFE JOB K0201356

WS173 0001

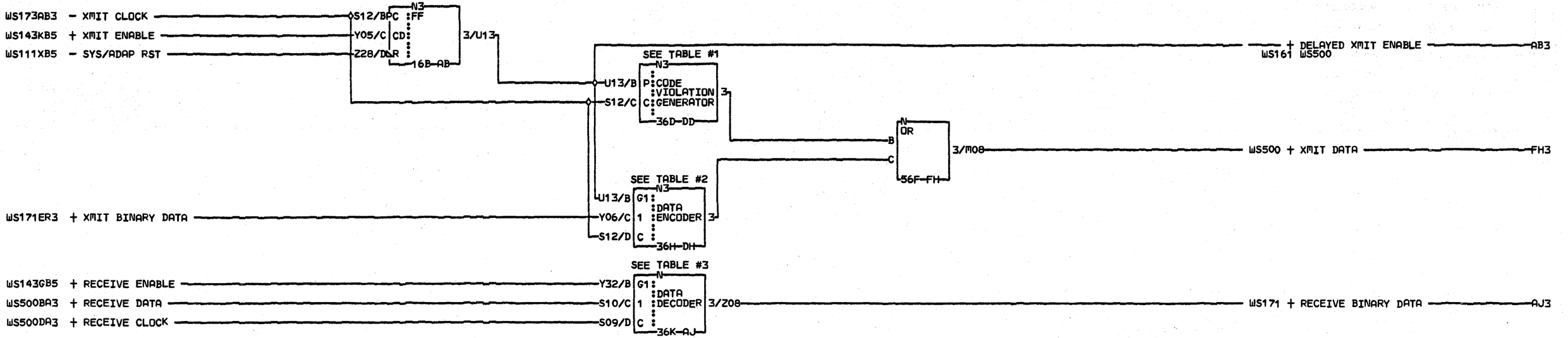


TABLE #1

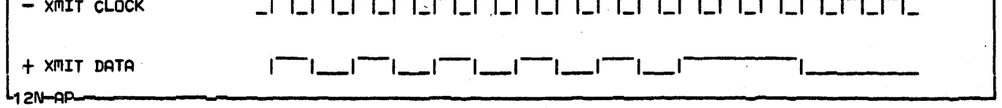


TABLE #2

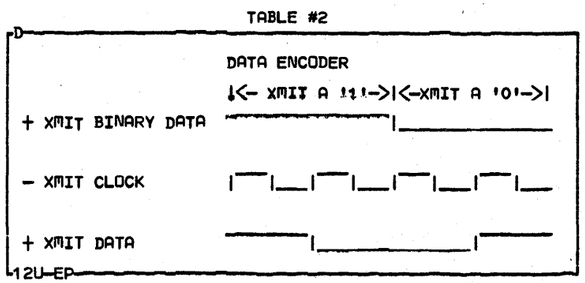
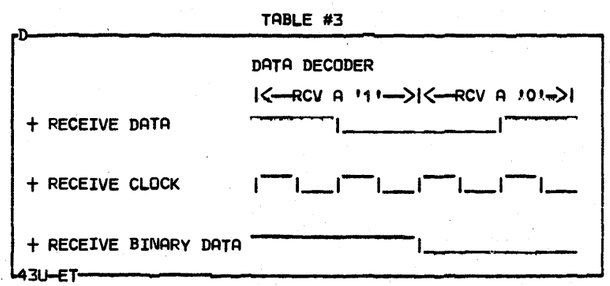


TABLE #3



CARD VOLTAGES

+5V	D03, J03, P03, U03	
GND	D08, J08, P08, U08	

120-AX

COMMENTS

D1COPYRIGHT IBM CORP. 1978

WORKSTATION ADAPTER
LINK CONTROL

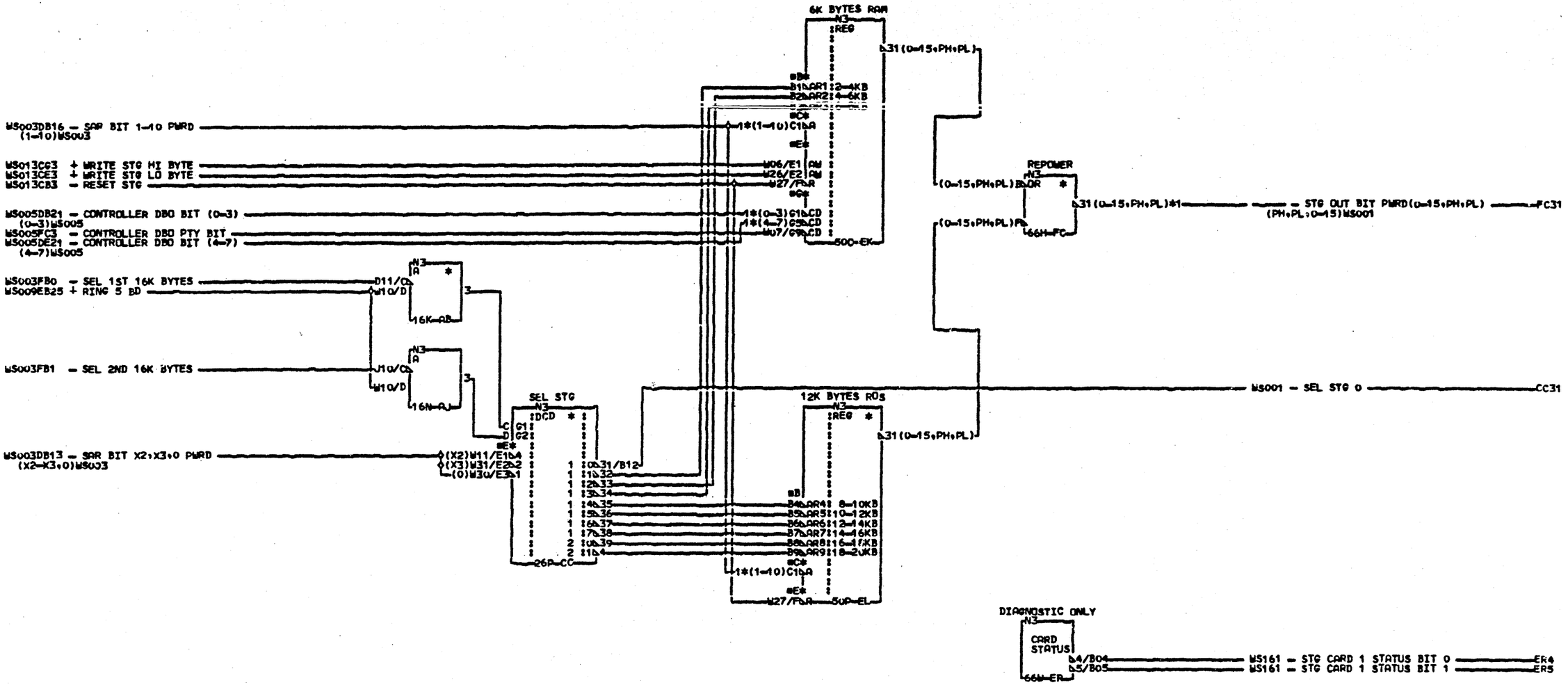
PN4237430 EC834777 PEC832850

LOC=1A-A2M2

USN 00008 PRI=08NOV78 1747

AUC= SEC
PFORM=KSEB NEXTBLK GC

CID PIOFE JOB L6301459



CARD VOLTAGE PINS

+5V	D03,J03
+8.5V	B11,G11
GND	D08,J08

62-BA

COMMENTS	PINS	PINS	PINS	PINS
D1COPYRIGHT IBM CORP. 1978	EK	G4/W03	C9/X13	42/G03
	C1/W13	G5/W25	D0/W12	43/J04
	C2/X22	G6/W24	FC	44/G04
	C3/X08	G7/W23	31/D09	45/J05
	C4/W33	G8/W02	32/D07	46/J02
	C5/X27	EL	33/B09	47/B10
	C6/X07	C1/W13	34/D10	48/G02
	C7/W32	C2/X22	35/J06	
	C8/X33	C3/X08	36/J07	
	C9/X13	C4/W33	37/C08	
	D0/W12	C5/X27	38/G07	
	G1/W05	C6/X07	39/D06	
	G2/W04	C7/W32	40/D13	
	G3/W22	C8/X33	41/D12	

WSSCN 0001

STG CARD 1
6K BYTES RAM
12K BYTES ROS
PN4237431 EC832850 PEC832742G

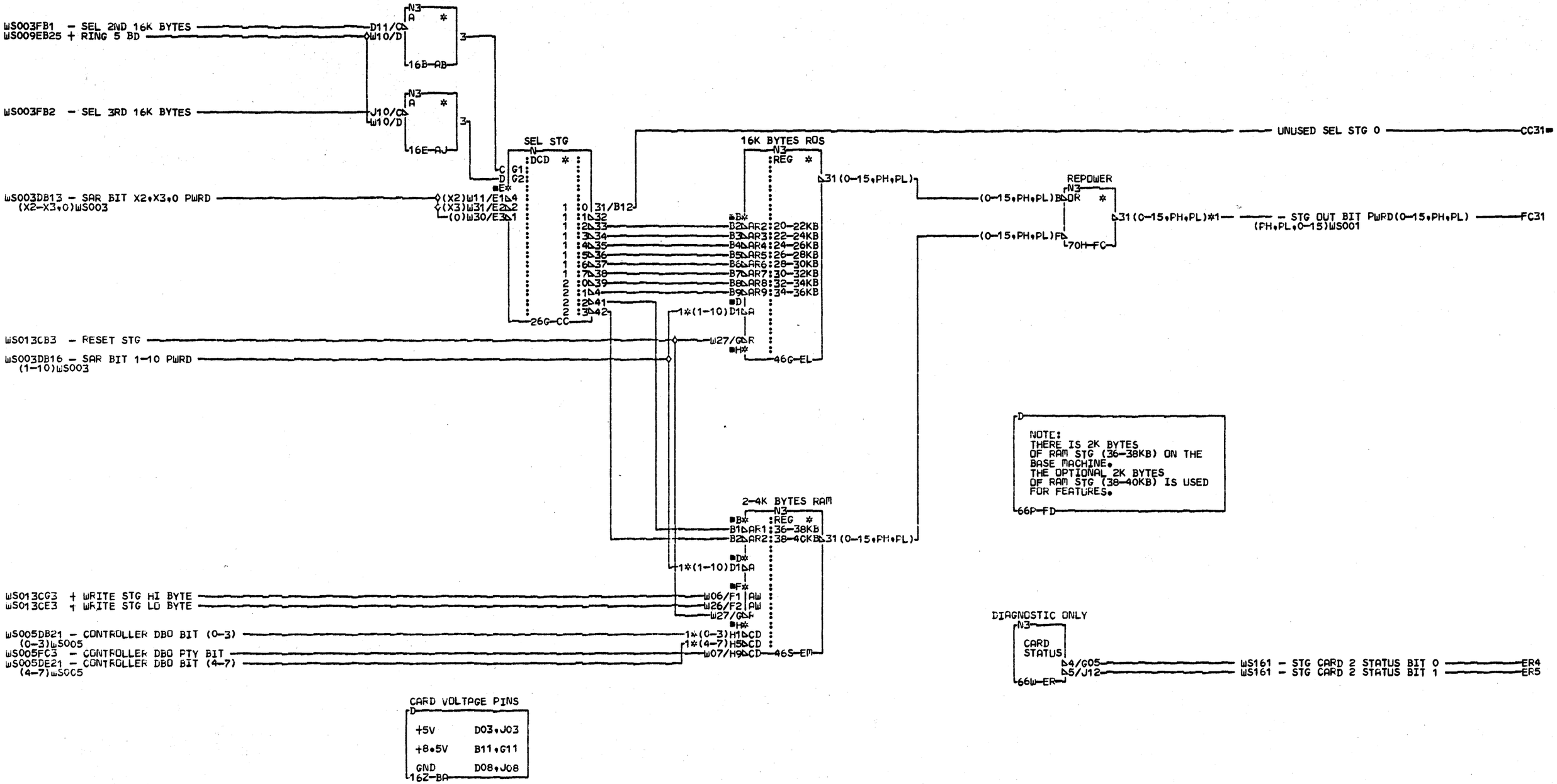
LOC=1A-A2P4

USN 00C08 PRI=22SEP77 1845

ALC= SEC
PFORM=KSEB NEXTBLK FD

CID PIOFE JOB Ku201356

WSSCN 0001



COMMENTS

D1COPYRIGHT IBM CORP• 1978

PINS	PINS	PINS	PINS
EL	D3/X08	H7/W23	42/G03
D1/W13	D4/W33	H8/W02	43/J04
D2/X22	D5/X27	FC	44/G04
D3/X08	D6/X07	31/D09	45/J05
D4/W33	D7/W32	32/D07	46/J02
D5/X27	D8/X33	33/B09	47/B10
D6/X07	D9/X13	34/D10	48/G02
D7/W32	E0/W12	35/J06	
D8/X33	H1/W05	36/J07	
D9/X13	H2/W04	37/G08	
E0/W12	H3/W22	38/G07	
EM	H4/W03	39/D06	
D1/W13	H5/W25	40/D13	
2/X22	6/W24	/D12	

STG CARD 2

16K BYTES ROS• 2-4K BYTES RAM
PN4237432 EC834824 PEC834777

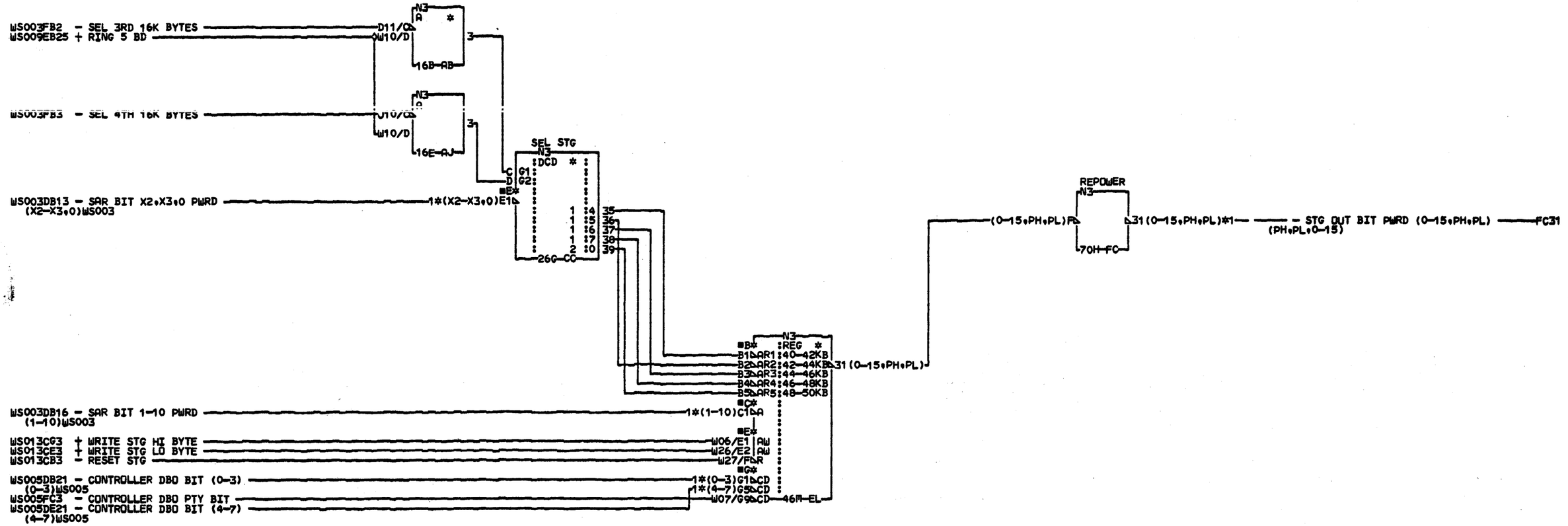
LOC=1A-A2Q4

USN 00008 PRI=21MAY79 1423

AUC= SEC
PFORM=KSEB NEXTBLK FE

CID PIOFE JOB T4301503

SMS3000 0001



D

THERE ARE TWO VERSIONS OF THE FEATURE STORAGE CARD. ONE VERSION HAS 4K BYTES OF RAM STORAGE. THE OTHER HAS 10K BYTES OF RAM STORAGE.

36T-DA

DIAGNOSTIC ONLY

N3
CARD STATUS

B2/J13	WS501 - FEATURE STG STATUS BIT 0	ER2
B3/J12	WS501 - FEATURE STG STATUS BIT 1	ER3
B4/G10	WS501 - FEATURE STG STATUS BIT 2	ER4
B5/G13	WS501 - FEATURE STG STATUS BIT 3	ER5

66W-ER

CARD VOLTAGE PINS

D

+ 5	D03,J03
+ 8.5	B11,G11
GND	D08,J08

16Z-BA

COMMENTS	PINS	PINS	PINS
D1 COPYRIGHT IBM CORP. 1978	CC	D0/W12	35/J06
	E1/W11	G1/W05	36/J07
	E2/W31	G2/W04	37/G08
	E3/W30	G3/W22	38/G07
	EL	G4/W03	39/D06
	C1/W13	G5/W25	40/D13
	C2/X22	G6/W24	41/D12
	C3/X08	G7/W23	42/G03
	C4/W33	G8/W02	43/J04
	C5/X27	FC	44/G04
	C6/X07	31/D09	45/J05
	C7/W32	32/D07	46/J02
	C8/X33	33/B09	47/B10
	C9/X13	34/D10	48/G02

WS400 0001

FEATURE STG

4K OR 10K BYTES RAM
PN 4238227 EC 834926 PEC 834777

LOC=1A-A2R4

USN 00008 PRI=26OCT79 0744

AUC= SEC
PFORM=KSEB NEXTBLK FD

CID PIOFE JOB N5800928

WS400 0001

WS181AB3 + DELAYED XMIT ENABLE

NOTE 1

WS181FH3 + XMIT DATA
WS173BC3 + XMIT CLOCK
WS501AA3 CABLE 0Y
WS501AA6 CABLE 0B
WS141DA63 - RST DRAR

N3 DVR/RCVR G1 0 — 20D-EA
D10/A, D11/B, B06/C, D02/D, B02/E

N3 FF * — 40D-FA
D12/C CD, EPC, G13/F RST

WS151 - DRAR BIT 0 — FA6
+ SELECT DRIVER 0 — AA0

WS501AB3 CABLE 1Y
WS501AB6 CABLE 1B

N3 DVR/RCVR G1 1 — 20G-EB
D10/A, D11/B, J09/C, D07/D, B07/E

N3 FF * — 40G-FB
D12/C CD, EPC, G13/F RST

WS151 - DRAR BIT 1 — FB6
+ SELECT DRIVER 1 — AA1

WS501AC3 CABLE 2Y
WS501AC6 CABLE 2B

N3 DVR/RCVR G1 2 — 20J-EC
D10/A, D11/B, J11/C, D09/D, B09/E

N3 FF * — 40J-FC
D12/C CD, EPC, G13/F RST

WS151 - DRAR BIT 2 — FC6

WS501AD3 CABLE 3Y
WS501AD6 CABLE 3B

N3 DVR/RCVR G1 3 — 20M-ED
D10/A, D11/B, J13/C, J02/D, G02/E

N3 FF * — 40M-FD
D12/C CD, EPC, G13/F RST

WS151 - DRAR BIT 3 — FD6
+ SELECT DRIVER 2 — AA2
+ SELECT DRIVER 3 — AA3

3 TO 8 DECODE

N3 DCD *
B12/C, B11/E, B10/G, D12/J G1
0/B06, 1/J09, 2/J11, 3/J13, 4/B04, 5/D05, 6/B05, 7/J04
42Q-AA

WS143WC41 - CABLE ADR 4./+ CBI 1
WS143WC61 - CABLE ADR 2/+ CBI 2
WS143WC81 - CABLE ADR 1/+ CBI 3

N3 TIEUP TIUP — 66Q-FQ
2/G04, 3/G08, 4/G09, 5/G11

WS501 - UNUSED DRAR BIT 4 — FQ2
WS501 - UNUSED DRAR BIT 5 — FQ3
WS501 - UNUSED DRAR BIT 6 — FQ4
WS501 - UNUSED DRAR BIT 7 — FQ5

UNUSED — AA4
UNUSED — AA5
UNUSED — AA6
UNUSED — AA7

TABLE 1

B12	B11	B10	RCVR SELECTED
UP	UP	UP	SEL RCVR 0
UP	UP	DOWN	SEL RCVR 1
UP	DOWN	UP	SEL RCVR 2
UP	DOWN	DOWN	SEL RCVR 3

16U-FJ

4 TO 1 ASSEMBLER

B12/A, B11/B, B10/C, D/* — N3 SEL SEE TABLE 1 — 45W-BA
E 0, F 1, G 2, H 3

3/D13

WS181 + RECEIVE DATA — BA3

N3 RECIEVE CLOCK GEN — 66W-DA
D13/C

3/B13 — + RECEIVE CLOCK — DA3
WS173 WS181

CARD VOLTAGE PINS

+5V	D03	J03
-5V	J06	
GND	D08	J08

16Z-FK

N3 OSC GEN — 66Z-CA

3/D04 — + 16 MHZ OSC — CA3
PS009 WS009 WS173

COMMENTS

A1 NOTE 1: + XMIT CLOCK IS
2 CLOCK FOR XMIT DATA WHEN
3 DRVR/RCVR IS SELECT FROM
4 3 TO 8 DECODE RCVR
5 OUTPUT IS ALWAYS ENABLED.
B1 NOTE 2: CABLE INPUTS ARE
2 BIDIRECTIONAL - USED FOR
3 BOTH XMIT AND RCV
4 OPERATIONS.
D1

WORKSTATION
DRIVER/RECEIVER CARD

PN4237843 EC834777 PEC832850

LOC=1A-A2R2

USN 00008 PRI=01AUG78 1014

AUC= SEC 03AUG78 1152
PFORM=KSEB NEXTBLK FR

CID PIOFE JOB L6301459

WS500 0001

N3 ENTER CABLE TOWER — 3/D02 — WS500 CABLE 0Y — AA3
56B-AA — 6/B02 — WS500 CABLE 0B — AA6

N3 ENTER CABLE TOWER — 3/D04 — WS500 CABLE 1Y — AB3
56E-AB — 6/B04 — WS500 CABLE 1B — AB6

N3 ENTER CABLE TOWER — 3/D05 — WS500 CABLE 2Y — AC3
56H-AC — 6/B05 — WS500 CABLE 2B — AC6

N3 ENTER CABLE TOWER — 3/D07 — WS500 CABLE 3Y — AD3
56K-AD — 6/B07 — WS500 CABLE 3B — AD6

WS500FQ2 - UNUSED DRAR BIT 4
WS400ER2 - FEATURE STG STATUS BIT 0
A▷T
B▷DOT*OR
46N-BA-▷3 — WS151 - FEATURE STATUS BIT 0 — BA3

WS500FQ3 - UNUSED DRAR BIT 5
WS400ER3 - FEATURE STG STATUS BIT 1
A▷T
B▷DOT*OR
46Q-BB-▷3 — WS151 - FEATURE STATUS BIT 1 — BB3

WS500FQ4 - UNUSED DRAR BIT 6
WS400ER4 - FEATURE STG STATUS BIT 2
A▷T
B▷DOT*OR
46T-BC-▷3 — WS151 - FEATURE STATUS BIT 2 — BC3

WS500FQ5 - UNUSED DRAR BIT 7
WS400ER5 - FEATURE STG STATUS BIT 3
A▷T
B▷DOT*OR
46X-BD-▷3 — WS151 - FEATURE STATUS BIT 3 — BD3

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

WORKSTATION CABLE
FROM 1A-A2V2 TO
CABLE ENTRY TOWER
PN4237844 EC834777 PEC832850

LOC=1A-A2V2

USN 00008 — PRI=04AUG78 0800
AUC= — SEC
PFORM=KSEB — NEXTBLK BE
CID PIOFE — JOB L6301459

WS501 0001

YA000

YA020, YA040, YA100, YA120, YA130 — SHIELD GND (50HZ) (GREEN / YELLOW) — SGI

YA020 — AC1 — TB21

YA020 — AC2 — TB22

YA020 — GND — TB23

AC FRAME GROUND PLATE

YA100 — GND — GD1

YA120 — GND — GD2

DX010, DX020, FX110, FX120 FX142, GF400, HH003, YA040 YA700 — GND — GD6

ACA — LINE VOLTAGE — LF1 — R1

ACB — LF2 — R2

GND — GND

L2 — CB1 — T2

L1 — T1

ACTB2

F302

F301

ACTB1

16 — DISK GF400 GV100 HH003 — AC1 — TA16

15 — DISK GF400 GV100 HH003 — AC2 — TA15

14 — AC2 — TA14

13 — AC2 — TA13

12 — AC2 — TA12

11 — DX010, DX020, FX110, FX120, FX142 — AC2 — TA11

10 — HH003 YA700 — AC2 — TA10

9 — YA040 — AC2 FUSED — TA09

8 — DX010, DX020, FX110, FX120, FX142 — AC1 — TA08

7 — HH003 YA700 — AC1 — TA07

6 — YA040 — AC1 — TA06

5 — YA100 YA120 — AC1 — TA05

4

3

2 — YA120 — AC2 FUSED — TA02

1 — YA100 — AC2 FUSED — TA01

F202

F201

K1 RC-1

K2 RC-3 (SEE NOTE)

RC-2

RC-4

IPO SWITCH

YA020 JJ13 — +24V TO IPO

(SEE NOTE)

K1 CR1 K2

YA301 DA4 — −K1

YA301 DC4 — −K2

YA020 KK3 — K3 COIL (50HZ)

K3

F401

(50HZ ONLY)

NOTE:

AN ALTERNATE K-2 AND DIODE ASSEMBLY IS USED IN SOME COUNTRIES (SEE 05-310). NUMBERS IN PARENTHESES IDENTIFY THE TERMINALS ON THE ALTERNATE K2.

EC HISTORY		DRAWING TITLE
06APR78	832974	AC BOX AND LINE FILTER
13DEC78	834777	MACH 5340
25JUL79	834824	PART NO 4237845
C		CLASSIFICATION 04/04/77 JMT

IBM CORP

Rel for Asm	Qty

Technical Approval		
Electrical		
Material		

	Date	EC No.
	28OCT 77	832855
RED	02DEC 77	832850
	06APR 78	832974
	25 JUL 79	834824

	Date	EC No.

Part No. 4237846

Development No. | Q/M

YA020

5565113 (60 HZ)
** 4119630 (50 HZ)

YA000 TB21 TBIO-1 COMMON 1

TBIO-2 200 VAC 2

YA000 TB22 TBIO-3 208/220VAC 3

TBIO-4 230/235 VAC 4

TIO

J20

8(7) 1 — WN CR1 — CR3 WN

9(8) 2 — WN CR4 — CR2 WN

10(9) 3

(5)6

5252837 (60HZ)
5252850 (50 HZ) C5

(6)7

YA000 SG1 ** (16)

11(10) 4 — LD CR5

12(11) 5

13(12) 6 — LD CR6

INPUT VOLTAGES
200/208/230 VAC (60 HZ)
200/220/235 VAC (50 HZ)

14(13) 7 — WN CR7

15(14) 8

16(15) 9 — WN CR8

YA000 TB23 TBIO-5 (17) 5

C1 8.4KUF

R1 1.6KΩ 1W

C2 .3KUF

R2 3KΩ .5W

R5 10Ω .5W

C3 84KUF

R3 62Ω 1W

C4 11KUF

R4 82Ω .5W

1.0 AMP FIO1 — YA132 YA200 J21-4 — +24V — JJ04

1.0 AMP FIO4 — YA132, YA200 J21-8 — -5V — JJ08

0.3 AMP FIO2 — YA132 YA200 J21-12 — -24V — JJ12

4.0 AMP FIO3

YA200 J21-1 — PLD SENSE 1 — JJ01

YA000 J21-13 — +24V TO IPO — JJ13

YA320 J21-5 — GND — JJ05

YA320 J21-6 — GND — JJ06

YA320 J21-7 — GND — JJ07

YA000 — K3 COIL(50HZ)-KK3

YA200 J21-3 — PLD SENSE 2 — JJ03

YA320 J21-9 — +5V — JJ09

YA320 J21-10 — +5V — JJ10

YA320 J21-11 — +5V — JJ11

** THE LEAD NUMBERS IN PARENTHESIS APPLY TO FERRO P/N 4119630 ONLY.
SHEILD LEAD NUMBER (16) EXISTS ON P/N 4119630 ONLY

YA020

CONNECTORS	CONNECTORS	CONNECTORS
JJ01	JJ07	JJ12
01/1C-A1/A3B12	06/1C-A1/A3B13	11/1C-A1/A3B07
JJ03	JJ08	
02/1C-A1/A3B10	07/1C-A1/A3D06	
JJ04	JJ09	
03/1C-A1/A3B05	08/1C-A1/A3B02	
JJ05	JJ10	
04/1C-A1/A3B08	09/1C-A1/A3D02	
JJ06	JJ11	
05/1C-A1/A3D08	10/1C-A1/A3B03	

IBM Material	No.
Matl Alternate	No.
Case Depth	
Hardness	
Surface Treatment	Code No.

Must Conform to Eng Spec:		
Tolerances Unless Noted		
Linear ±		
Angles ±		
Radii Unless Noted		
Edge/Corner Breaks	Outside Max	
	Inside Max	

SI metric A1

Scale: NONE

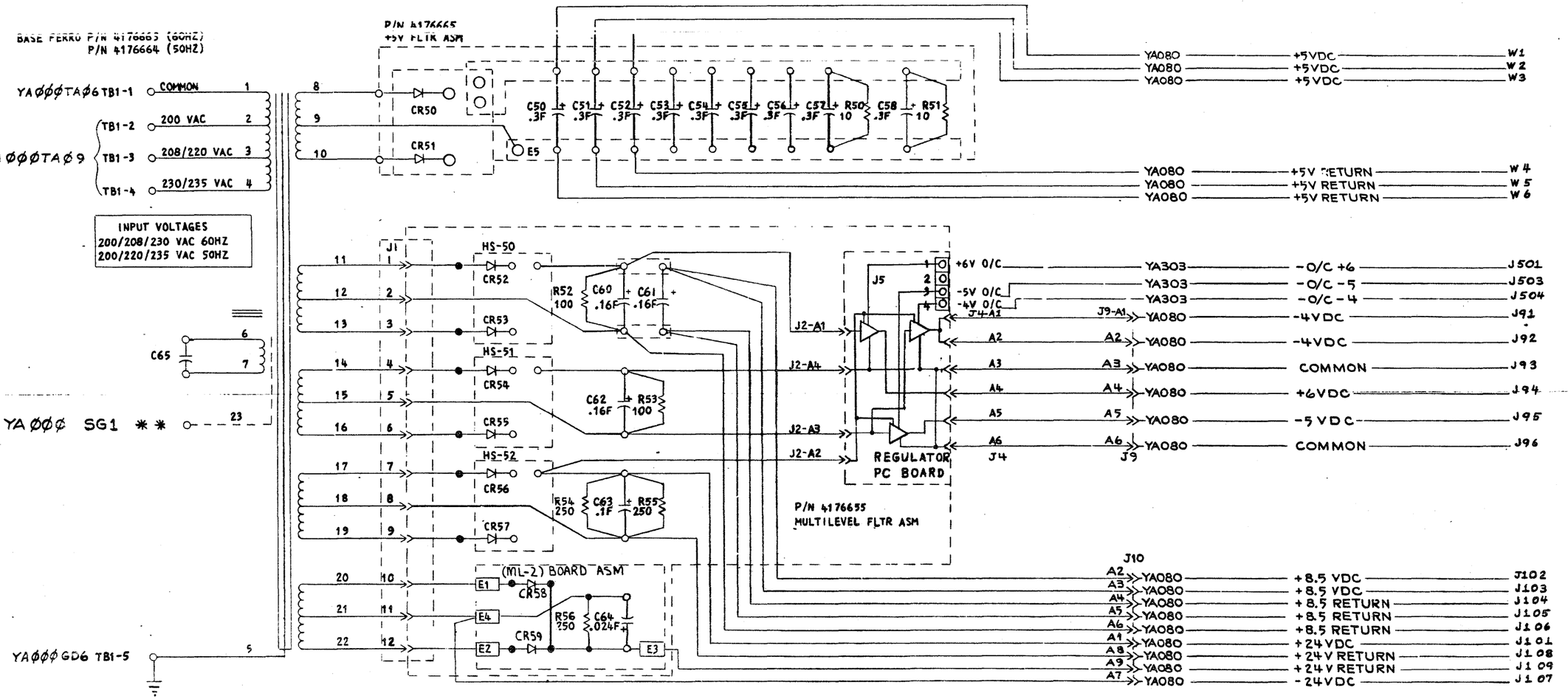
0 25 mm

Third Angle Projection

Title	MACH 5340	
CONTROL SUPPLY		
Designer	JMT	09/09/77
Checked	JMT	09/09/77
Approved	JLC	09/08/77
Classification	JMT	04/18/77

4237847

YAØ4Ø



YAØ4Ø

CONNECTORS

—J5Ø1
Ø1/1C-A1/A3BØ4
—J5Ø3
Ø2/1C-A1/A3DØ5
—J5Ø.
Ø3/1C-A1/A3DØ4

**LEAD 23 IS A SHIELD LEAD AND EXISTS ON P/N 4176664 ONLY

EC HISTORY		DRAWING TITLE
28OCT77	832855	BASE DC POWER
02DEC77	832850	MACH 5340
13DEC78	834777	PART NO 4237847
25JUL79	834824	CLASSIFICATION
		04/18/77 JMT

D

IBM CORP

YAØ4Ø

4237848

YA080

YA040W4 +5V RETURN
YA040W5 +5V RETURN
YA040W6 +5V RETURN

O/C SENSE PLATE

R59 .006
R60 .006
R61 .006
R62 .006
R63 .006
R64 .006

GND PLATE

R68 .012 | R69 .012 | R70 .012 | R71 .012 | R65 .006 | R66 .012 | R67 .1

YA040W1 +5 VDC
YA040W2 +5 VDC
YA040W3 +5 VDC

YA620DA1-BRAKE APPLIED B NOTE [2]
YA610DA1-BRAKE APPLIED A
YA301CD4 +SYSTEM POR > J6 D02

J7
YA120J74 > +5V RETURN
YA120J73 >
YA120J72 > +5 VDC
YA120J71 >

J8
YA100J84 > -12V RETURN
YA100J83 > +12 V RETURN
YA100J81 > +12 VDC
YA100J82 > -12 VDC

J9
YA040J93 > COMMON
YA040J96 >
YA040J91 >
YA040J92 > -4 VDC
YA040J94 > +6 VDC
YA040J95 > -5 VDC

J10
YA040J104 > +8.5 V RETURN
YA040J105 >
YA040J106 >
YA040J102 >
YA040J103 > +8.5 VDC
YA040J108 > +24 V RETURN
YA040J101 > +24 VDC
YA040J109 > -24 V RETURN
YA040J107 > -24 VDC

+5V PLATE

E10

+5VDC — VP01
FX110 FX120 FX150 YA410 YA420 DX010 DX020 — VP05
+5VDC — YA430
GROUND — GP01
FX110 FX120 FX150 YA410 YA420 YA430 YA510 DX010 DX020 YA090

J6 YA200 D04 +5V SENSE — DD04
YA200 B08 GND REF O/C SENSE — BB08
YA220 YA240 YA320 D11 GND REF O/C SENSE — DD11
D08 GND — DD08
YA200 D03 GND REF +5V O/C SENSE — DD03
(O TO -120 MV) YA200 D07 +5V O/C SENSE — DD07
(O TO +150 MV) YA200 B06 -24V O/C SENSE — BB06
(O TO -150 MV) YA200 D06 +24V O/C SENSE — DD06
(O TO -100 MV) YA200 D05 +8.5V O/C SENSE — DD05
(O TO + 75 MV) YA220 B12 -12V O/C SENSE — BB12
(O TO - 90 MV) YA220 B10 +12V O/C SENSE — BB10
(O TO -150 MV) YA240 D13 +5 V O/C SENSE — DD13
YA200 D12 -24V SENSE/SUPPLY — DD12
YA200 D09 +24V SENSE — DD09
YA200 D10 +8.5V SENSE — DD10
YA200 B04 -5V SENSE — BB04
YA200 B07 +6V SENSE — BB07
YA200 B05 -4V SENSE — BB05
YA301 B03+BREAK FAULT B — BB03
YA301 B02+BREAK FAULT A — BB02

E13
E12
E11

YA220 YA230 B13-12V SENSE/SUPPLY — BB13 NOTE [1]
YA220 YA302 B11+12V SENSE — BB11
YA240 YA302 B09+5 V SENSE — BB09
YA610, YA620 POWER GOOD — EE11

YA430 PDTB1 1 +5VDC (OPTIONAL) — VP05
2 +12VDC — PD02
YA510 3 +12VDC — PD03
YA420, YA510 4 -12VDC — PD04
5 -12VDC — PD05
6 -4VDC — PD06
YA420, YA430 7 -4VDC — PD07
YA420 YA430 8 +6VDC — PD08
9 -5VDC — PD09
10 -5VDC — PD10
YA410, DX010, DX020 YA420, YA430, YA510 FX110, FX120, FX150 11 -5VDC — PD11
YA420, YA430, YA510, DX010, DX020 YA410 12 +8.5VDC — PD12
13 +8.5VDC — PD13
FX110, FX120, FX150 YA420, YA430, DX010, DX020 14 +24VDC — PD14
15 +24VDC — PD15
YA420, YA430 16 -24VDC — PD16

YA080

CONNECTORS	CONNECTORS	CONNECTORS	CONNECTORS	CONNECTORS	CONNECTORS
—BB02	—BB06	—BB10	—DD03	—DD07	—DD11
01/1C-A1/A1B13	05/1C-A1/B1A13	09/1C-A1/B1E13	13/1C-A1/A1C11	17/1C-A1/B1B11	21/1C-A1/C1A11
—BB03	—BB07	—BB11	—DD04	—DD08	—DD12
02/1C-A1/A1C13	06/1C-A1/B1B13	10/1C-A1/C1A13	14/1C-A1/A1D11	18/1C-A1/B1C11	22/1C-A1/C1B11
—BB04	—BB08	—BB12	—DD05	—DD09	—DD13
03/1C-A1/A1D13	07/1C-A1/B1C13	11/1C-A1/C1B13	15/1C-A1/A1E11	19/1C-A1/B1D11	23/1C-A1/C1C11
—BB05	—BB09	—BB13	—DD06	—DD10	
04/1C-A1/A1E13	08/1C-A1/B1D13	12/1C-A1/C1C13	16/1C-A1/B1A11	20/1C-A1/B1E11	

NOTE
[1] THIS IS AN INPUT LINE IF THE FEATURE REGULATOR CARD IS INSTALLED (SEE YA230) OR
THIS IS AN OUTPUT LINE IF FEATURE POWER SUPPLY "A" IS INSTALLED (SEE YA220)
[2] IF ONLY ONE 62 PC DRIVE IS INSTALLED THEN E12 AND E13 HAVE TO BE JUMPERED TOGETHER

EC HISTORY		DRAWING TITLE
13DEC 78	834777	BASE DC POWER
25 JUL 79	834824	MACH 5340
12 DEC 79	834926	PART NO 4237848
		CLASSIFICATION
		JMT 04/18/77 IBM CORP

D

YA080

Rel for Asm	Qty

Technical Approval		
Electrical		
Material		

	Date	EC No.
	28OCT77	832855
RED	02 DEC 77	832850
	25 JUL 79	834824

	Date	EC No.

Part No.	
4237849	
Development No.	Q/M

YA100

FERRO
P/N 4176673 (60 HZ)
P/N 4176674 (50 HZ)

T3

YA000 TA05 TB5-1 COMMON 1
TB5-2 200 VAC 2
YA000 TA01 TB5-3 208/220 VAC 3
TB5-4 230/235 VAC 4

8
9
10
11
12
13
6
7
14
5

YA000 SJ1 **
YA000 GD1 TB5-5

(A1)
CR1
CR2
A

(A2)
CR3
CR4
A

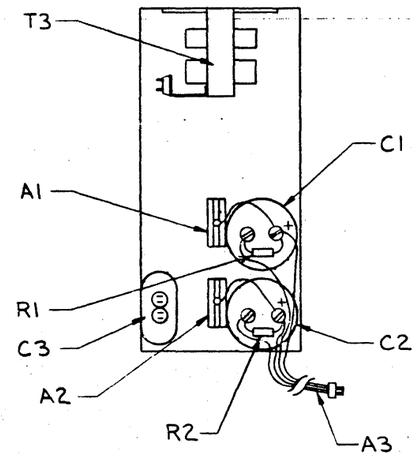
C1 R1
C2 R2
C3

+12 VDC
+12 V RETURN
-12 V RETURN
-12 VDC

(A3)

J8
A1 B1 YA080 J81
A3 B3 YA080 J83
A4 B4 YA080 J84
A2 B2 YA080 J82

INPUT VOLTAGES
200/208/230 VAC 60 HZ
200/220/235 VAC 50 HZ



YA100

YA100

** LEAD 14 IS A SHIELD LEAD AND EXISTS ON P/N 4176674 ONLY

IBM Material	No.
Matl Alternate	No.
Case Depth	
Hardness	
Surface Treatment	Code No.

Must Conform to Eng Spec:		
Tolerances Unless Noted		
Linear ±		
Angles ±		
Radii Unless Noted		
Edge/Corner Breaks	Outside Max	
	Inside Max	

SI metric A1

Scale: NONE

0 25 mm

Third Angle Projection

Title	MACH 5340	
FEATURE POWER SUPPLY A		
Designer	GJK	09/09/77
Checked	GJK	09/09/77
Approved	GJK	09/09/77
Classification	JMT	04/18/77

Rel for Asm	Qty
4237839	1

Technical Approval		
Electrical		
Material		

	Date	EC No.
	02 DEC 77	832850
	25 JUL 79	834824

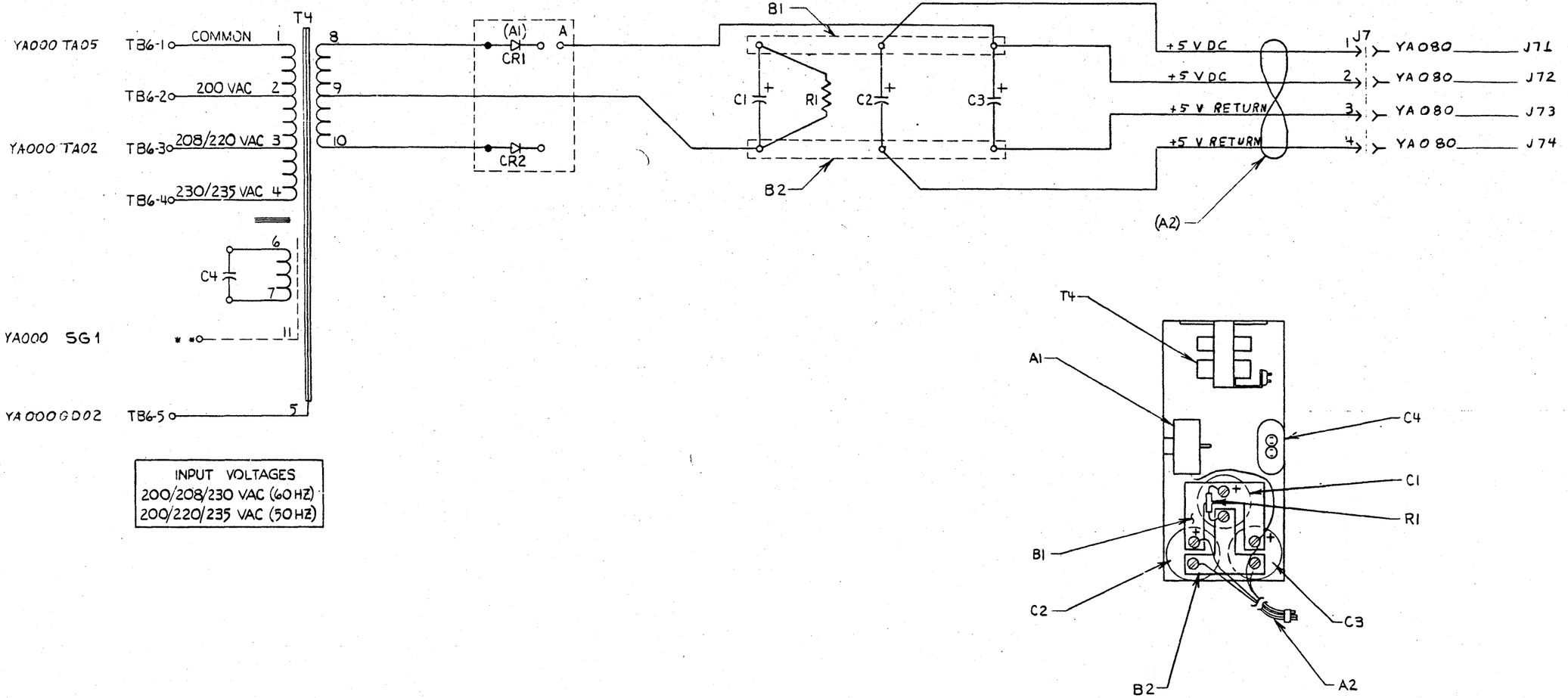
	Date	EC No.

Part No. 4238217

Development No. | Q/M

YA120

FERRO
P/N 4176683 (60 HZ)
P/N 4176684 (50 HZ)



INPUT VOLTAGES
200/208/230 VAC (60 HZ)
200/220/235 VAC (50 HZ)

* * LEAD 11 IS A SHIELD LEAD AND EXISTS ON P/N 4176684 ONLY

YA120

IBM Material	No.
Matl Alternate	No.
Case Depth	
Hardness	
Surface Treatment	Code No.

Must Conform to Eng Spec:		
Tolerances Unless Noted		
Linear ±		
Angles ±		
Radii Unless Noted		
Edge/Corner Breaks	Outside Max	
	Inside Max	

SI metric A1

Scale: NONE

0 25 mm

Third Angle Projection

Title	MACH 5340	
	FEATURE POWER SUPPLY B	
Designer	GJK	09/06/77
Checked	GJK	09/06/77
Approved	GJK	09/06/77
Classification	JLC	09/08/77

4238217

=YA080DD04 +5 V SENSE — B09/A — N3 N — 16A-BN — 3/B03*2 — CH003 - PRINTER ON — BN3

=YA080DD04 +5 V SENSE — D04/A — NOTE 1 N3 AVDS — 1/B02 — + MPOR/PPF (YA301 YA302) — AA1

YA320AA03 +5 VOLT C•S• — G12/B

=YA020JJ01 PLD SENSE 1 — G11/B1 — 56B-AA

=YA020JJ03 PLD SENSE 2

YA303BC3 + LAMPTEST (+5V) — B06/A — NOTE 3 N3 CSSI — 36E-AC

=YA020JJ08 - 5V — G13/C

B13/D — D11/E — J11/A

=YA020JJ12 - 24V — D06/A — NOTE 2 N3 VREF — 1/G13 — 16F-AE

NOTE 2 N3 VREF — 1/B13 — 46F-AD

+ 6 VOLT REF (YA220 YA230 YA240) — AD1

=YA080DD1 +8•5 V SENSE — B05/A — NOTE 1 N3 AVDS — 1/J09 — YA303 - UV +8•5 — AF1

=YA020JJ04 + 24V — D09/B — 2/G04 — YA303 - OV +6 — AF2

=YA080BB07 +6 V SENSE — G13/C — 3/G03 — YA303 - UV +6 — AF3

4/G08 — YA303 - OV +5 — AF4

=YA080DD09 +24 V SENSE — B09/D — 5/J10 — YA303 - UV +5 — AF5

D02/E — 56H-AF — 6/G09 — YA303 - UV +24 — AF6

- 6 VOLT REF (YA220 YA240) — AE1

=YA080BB06 - 24 V O/C SENSE — D12/A — NOTE 1 N3 AVDS — 1/G05 — YA303 - OC -24 — AG1

=YA080BB08 GND REF O/C SENSE — B04/B — G13/C — 56K-AG

=YA080DD05 +8•5 V O/C SENSE — B12/A — NOTE 1 N3 AVDS — 1/J02 — YA303 - OC +8•5 — AH1

=YA080DD06 +24 V O/C SENSE — D10/B — 2/J05 — YA303 - OC +24 — AH2

B04/C — B13/D — 56N-AH

=YA080DD07 + 5V O/C SENSE — B11/A — NOTE 1 N3 AVDS — 1/G02 — YA303 - OC +5 — AJ1

=YA080DD03 GND REF +5V O/C SENSE — J12/B — B13/C — 56Q-AJ

B13/A — NOTE 1 N3 AVDS — 1/G06 — YA303 - OV -4 — AK1

=YA080BB05 -4 V SENSE — D13/B — 2/J07 — YA303 - UV -4 — AK2

=YA080BB04 -5 V SENSE — B08/C — 3/J04 — YA303 - OV -5 — AK3

=YA080DD12 -24 V SENSE/SUPPLY — D05/D — 4/G07 — YA303 - UV -5 — AK4

5/G10 — YA303 - UV -24 — AK5

56T-AK

NOTE 1

AVDS IS ANALOG VOLTAGE TO DIGITAL SIGNAL

16W-BA

+5V	D03	J03	D04
-24V	D06		
-5V	J06		
GND	D08	J08	J13
+24V	D11	J11	

36W-BB

NOTE 2

VREF CREATES A REFERENCE VOLTAGE LEVEL

56W-BC

NOTE 3

CSSI IS THE CIRCUIT THAT TURNS ON THE CONTROL SUPPLY STATUS INDICATOR

56Z-BD

COMMENTS

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CONNECTORS

BN3

0001/1A-A1/B1 D11

0002/1A-A1/N6 D02

0003/1C-A1/A2 D07

BASE SENSE

PN4237850 EC834777 PEC832999

LOC=C-A1C2

USN 00008 PRI=02OCT78 0942

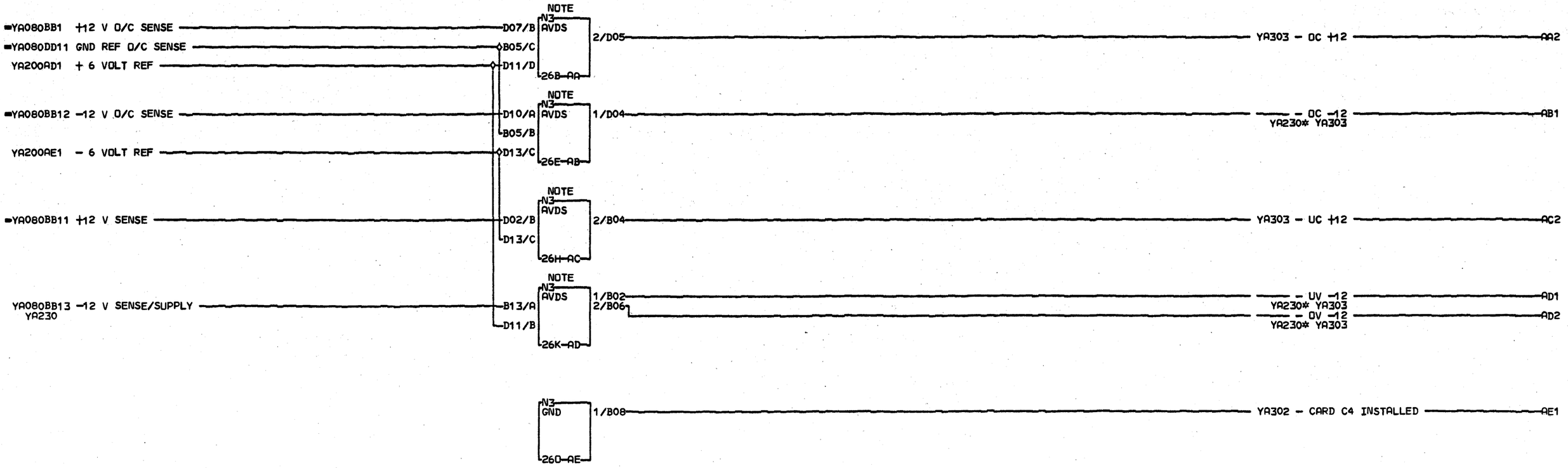
AUC= SEC

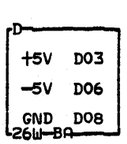
PFORM=KSEB NEXTBLK BO

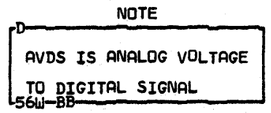
CID PIOFE JOB L6301459

YA200 0001

YA200 0001







COMMENTS

FEATURE A SENSE CARD

PN4237851 EC834777 PEC832999

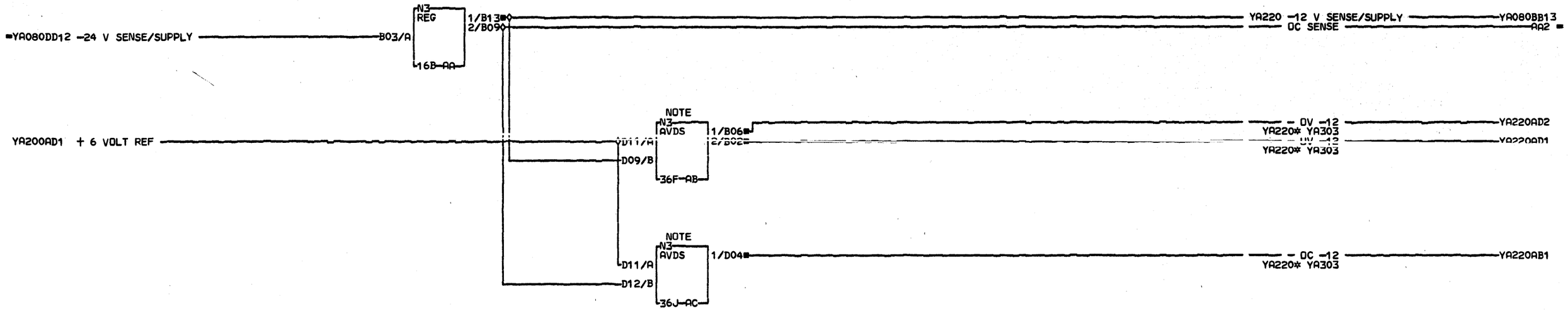
LOC=C-A1C4

USN 00008 PRI=02OCT78 0942

AUC= SEC
PFORM=KSEB NEXTBLK BC

CID PIOFE JOB L6301459

YA220 0001



NOTE

D

AVDS IS ANALOG VOLTAGE

TO DIGITAL SIGNAL

26W-BA

D

+5V D03

-5V D06

GND D08

56W-BB

COMMENTS

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FEATURE REGULATOR CARD
-12 VOLT REGULATED
SUPPLY
PN4237852 EC834777 PEC832999

LOC=C-A1C4

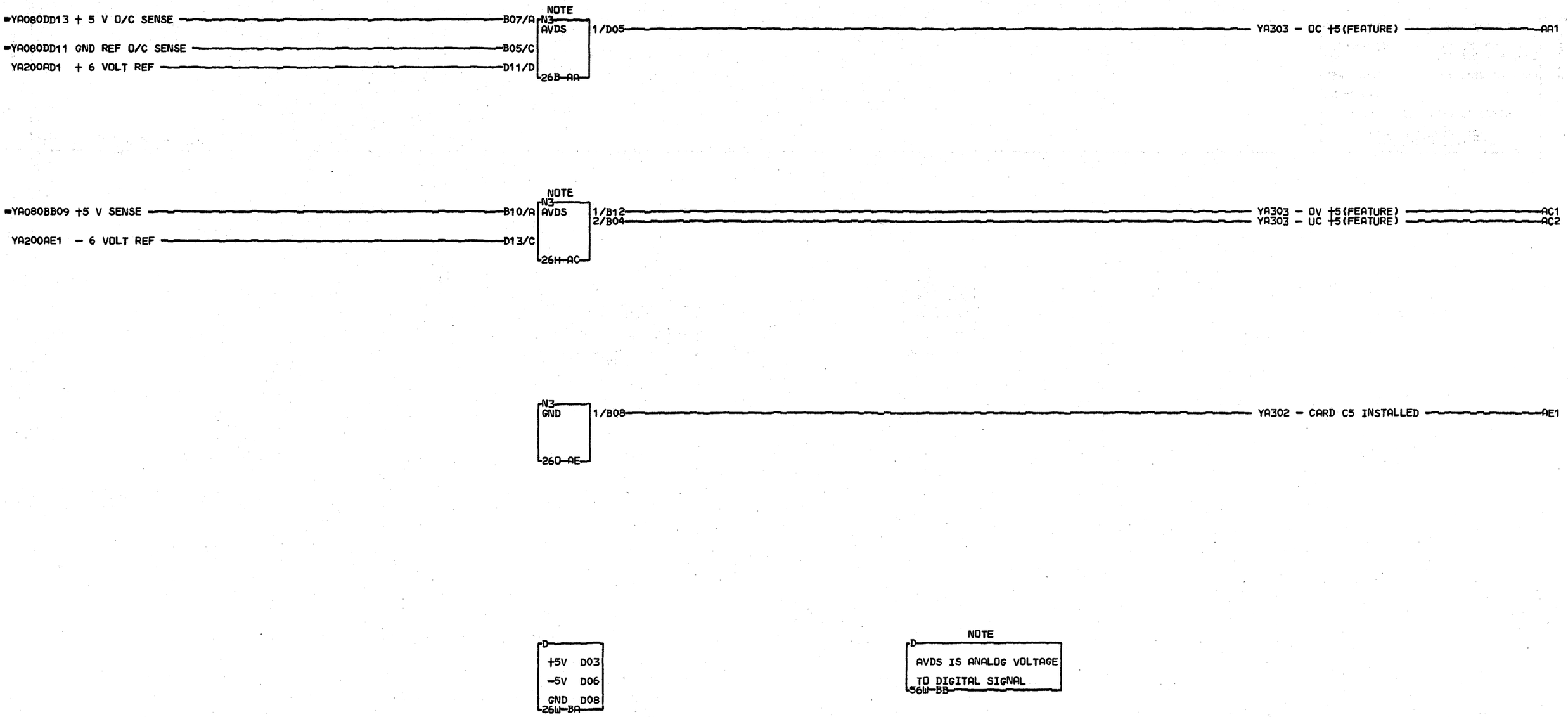
USN 00008 PRI=27SEP78 1444

AUC= SEC 02OCT78 0942
PFORM=KSEB NEXTBLK CL

CID PIOFE JOB L6301459

YA23O
0001

YA23O
0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

FEATURE B SENSE CARD

PN4238218 EC834777 PEC832999

LOC=C-A1C5

USN 00008 PRI=02OCT78 0942

AUC= SEC

PFORM=KSEB NEXTBLK BC

CID PIOFE JOB L6301459

YA240 0001

YA240 0001

OP110AA32 - POWER ON SW
OP110AA31 - POWER OFF SW
B13/A
D10/B
N3 FL R 3
16B-AA

L0: T 960MS
N3 TD A 3
26D-BA

A S-N3 FL C R D R R 3
46B-CA

0 TO +24V
N3 AR A
66B-DA
4/G13*2 — YA000 - K1 — DA4

=YA080BB03 + BRAKE FAULT B
=YA080BB02 + BRAKE FAULT A
U09/A
S09/B
N3 A 3
16G-AB

L320: T 0MS
N3 TD A 3
26G-BB

APS-N3 FL BNS CNR R 3
DPR-46G-CB
YA303 + GATE UV — CB3

N3 OR A B 3
16J-AC

CH009AG3 + DISK BRAKE FAULT
J10/B

L960: T 0MS
N3 TD A 3
26L-BC

A S-N3 FL C R D R R 3
46L-CC

0 TO +24V
N3 A A B
66L-DC
4/G11*2 — YA000 - K2 — DC4

FOR TD & SS BLOCKS
N CLOCK
16M-AD

YA302EG3 203 KHZ OSC
B03/A

N3 OR A B 3
16P-AE

YA303FC3 + ANY FAULT
YA200AA1 + MPOR/PPF
J06/B

1280MS
N3 TD A 3
26R-BD

N3 OR A B
46P-CD
4/G12*2 — + SYSTEM POR CH002 YA080 — CD4

N3 OR A B
D10/B
46T-CE
4/J07*2 — CH002 - DATA PROTECT — CE4

5 USEC
N3 SS A 3
26W-BF

N3 OR A B
J06/B
46X-CF
3 — + ERROR RESET YA302 YA303 — CF3

COMMENTS
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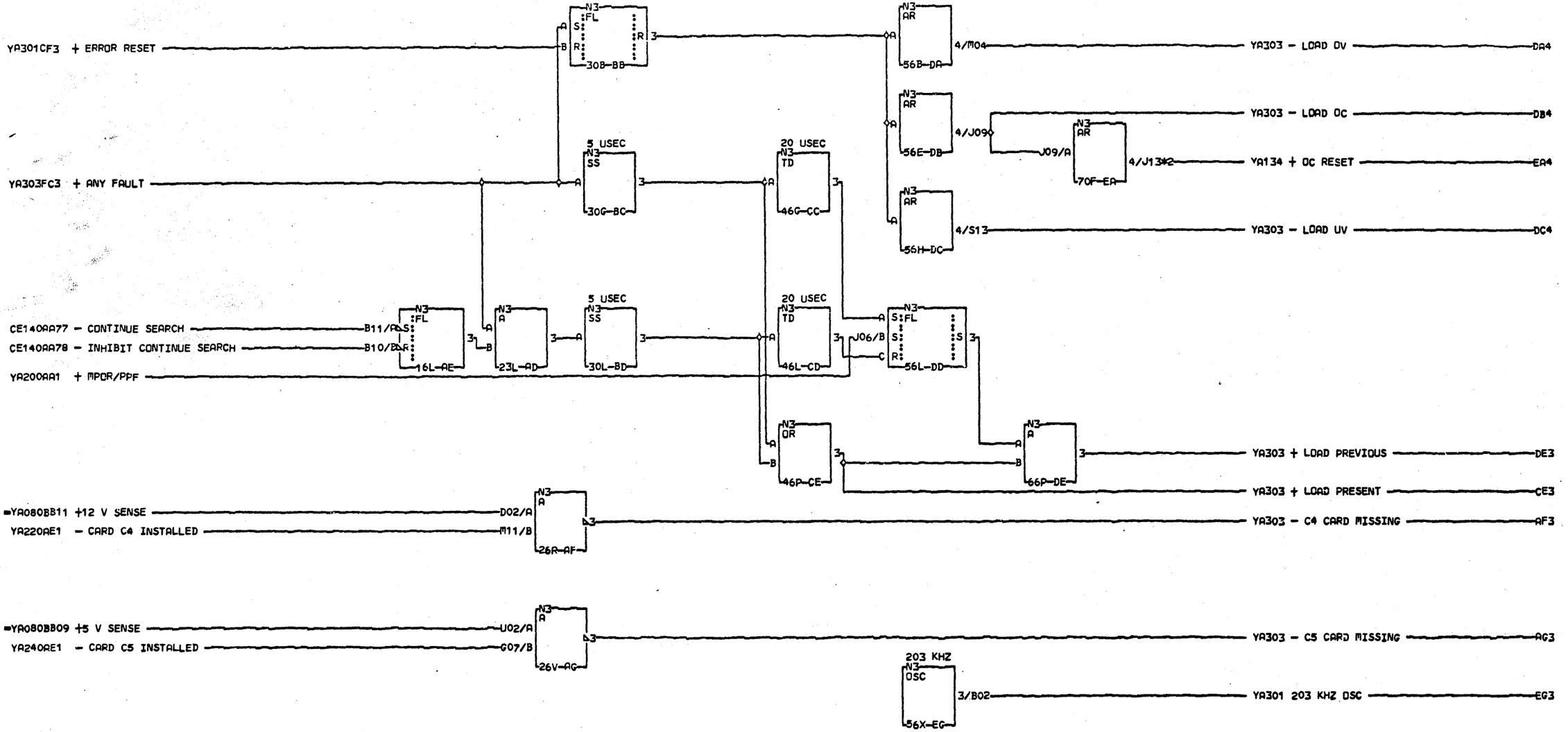
CONNECTORS
CD4
0009/1A-A1/B1A11
0010/1A-A1/M6A04
0011/1C-A1/A1B11
0012/1C-A1/A2D04
CE4
0013/1A-A1/B1B11
0014/1C-A1/A2D05
DB4
0001/1C-A1/A3D12
DC4
0002/1C-A1/A3D13

PROTECT CARD
SEQUENCING CONTROL

PN 4238264 EC 834926 PEC 834824
LOC=1C-A1.B2
USM 00000 PRI=24OCT79 1054
AUCR PFORM=NSEB SEC NEXTBLK 00
CID PIDFE JOB N5800928

YA301 0001



COMMENTS
D1 COPYRIGHT IBM CORP. 1978

CONNECTORS
EA4
0001/1C-A1/A4B04

PROTECT CARD
DIAGNOSTIC CONTROL

PN4238265 EC834824 PEC834777

LOC=1C-A1B2

USN 00008 PRI=16MAY79 2152

AUC= SEC
PFORM=KSEB NEXTBLK EH

CID PIOFE JOB T4301503

YA302 0001

YA302 0001

YA302CE3 + LOAD PRESENT
CE140AA83 - POWER DISPLAY INHIBIT
YA302DC4 - LOAD UV
YA301CB3 + GATE UV
YA302AF3 - C4 CARD MISSING
YA302AG3 - C5 CARD MISSING
CE140AA36 - PREVIOUS PWR FAULT DISPLAY
YA302DE3 + LOAD PREVIOUS
YA200AF5 - UV +5
YA200AF1 - UV +8.5
YA200AF6 - UV +24
YA200AK5 - UV -24
YA200AF3 - UV +6
YA200AK2 - UV -4
YA200AK4 - UV -5
YA240AC2 - UC +5(FEATURE)
YA220AC2 - UC +12
YA220AD1 - UV -12
YA220 YA230
YA302DA4 - LOAD OV
YA200AF4 - OV +5
YA200AF2 - OV +6
YA200AK1 - OV -4
YA200AK3 - OV -5
YA240AC1 - OV +5(FEATURE)
YA220AD2 - OV -12
YA220 YA230
CE140AA72 + POWER LAMP TEST
YA302DB4 - LOAD OC
YA320AD01 + THERMAL SENSE
YA301CF3 + ERROR RESET
YA200AJ1 - OC +5
YA200AH1 - OC +8.5
YA200AH2 - OC +24
YA200AG1 - OC -24
YA040J501 - OC +6
YA040J504 - OC -4
YA040J503 - OC -5
YA240AA1 - OC +5(FEATURE)
YA220AA2 - OC +12
YA220AB1 - OC -12
YA220 YA230

9X
EY
AX
FF
CX
PRESENT
PREVIOUS
DCD
REG
SEL
OR
AR
FL

PA120 - DISPLAY PWR CK BIT 0 — FA3
PA120 - DISPLAY PWR CK BIT 1 — FA31
PA120 - DISPLAY PWR CK BIT 2 — FA32
PA120 - DISPLAY PWR CK BIT 3 — FA33
PA120 - DISPLAY PWR CK BIT 4 — FA34
PA120 - DISPLAY PWR CK BIT 5 — FA35
PA120 - DISPLAY PWR CK BIT 6 — FA36
PA120 - DISPLAY PWR CK BIT 7 — FA37
OP110 - DISPLAY POWER CHECK LED — FB3
YA200 + LAMPTEST (+5V) — BC3
+ ANY FAULT YA301 YA302 — FC3
OP110 - DISPLAY TERMAL CHECK LED — FD3

D
+5V D03 J03 P03 U03
GND D08 J08 P08 U08
SPECIAL GND G02
66W-GA

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

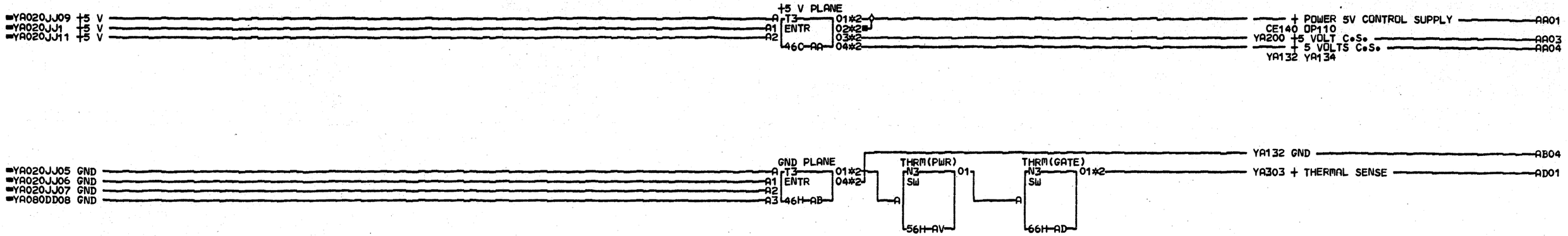
CONNECTORS
FA3
0007/1A-A1/C1E11
0008/1C-A1/A2D13
FA31
0009/1A-A1/C1E13
0010/1C-A1/A2B13
FA32
0011/1A-A1/C1D11
0012/1C-A1/A2D12
FA33
0013/1A-A1/C1D13
0014/1C-A1/A2B12
FA34
0015/1A-A1/C1C11

CONNECTORS
0016/1C-A1/A2D11
FA35
0017/1A-A1/C1B11
0018/1C-A1/A2D10
FA36
0019/1A-A1/C1B13
0020/1C-A1/A2B10
FA37
0021/1A-A1/C1A11
0022/1C-A1/A2D09
FB3
0001/1A-A1/A2D13
0002/1A-A1/B1D13
0003/1C-A1/A2B07

CONNECTORS
FD3
0004/1A-A1/A2B13
0005/1A-A1/B1C13
0006/1C-A1/A2B06

PROTECT CARD
DIAGNOSTIC DATA
PN4238266 EC834824 PEC834777
LOC=1C-A1B2
USN 00008 PRI=16MAY79 2152
AUC= SEC
PFORM=KSEB NEXTBLK GB
CID PIDFE JOB T4301503

YA303 0001



COMMENTS
D1COPYRIGHT IBM CORP. 1978

CONNECTORS
AA01
0003/1A-A1/A1E11
0004/1A-A1/A1E13
0005/1A-A1/A2B02
0006/1A-A1/A5B02
0001/1C-A1/A2B03
0002/1C-A1/A2D03
AA03
0007/1C-A1/C2D03
AA04
0011/1C-A1/A4D03
AB01
0008/1C-A1/A3D08
0009/1C-A1/A3D09

CONNECTIONS
AB04
0012/1C-A1/A4C02
0013/1C-A1/A4D02
AD01
0010/1C-A1/A3B09

POWER LOGIC BOARD

PN4237854 EC834824 PEC834777

LOC=1C-A1

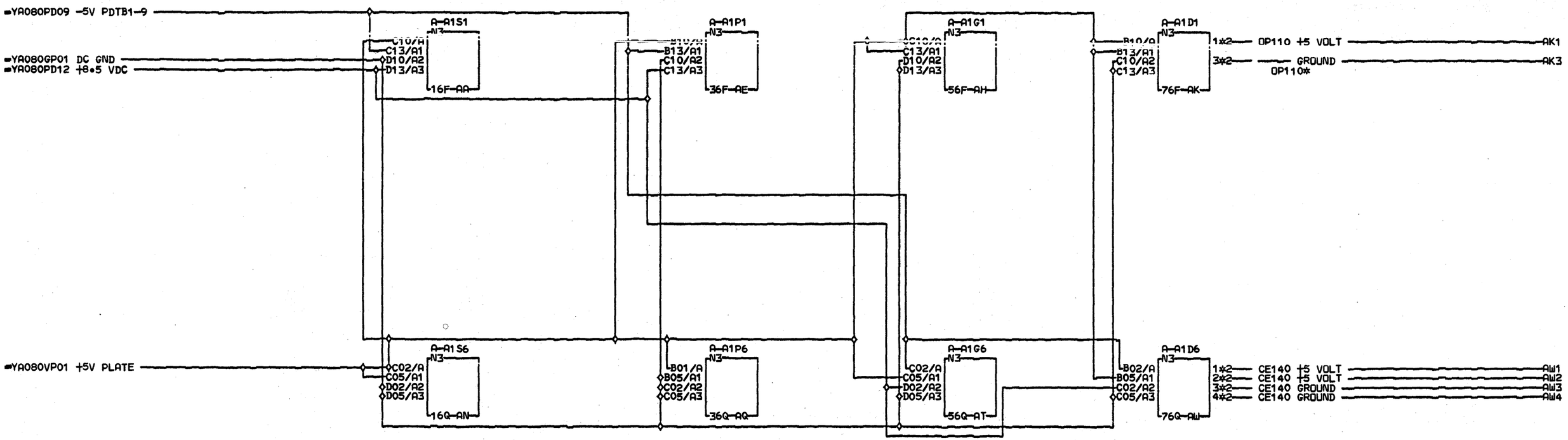
USN 00008 PRI=16MAY79 2152

AUC=
PFORM=KSEB SEC
NEXTBLK AW

CID PIOFE JOB T4301503

YA020 0001

YA020 0001



D

NOTE:
EACH MINI BUS IS SHOWN AS ONE BLOCK AS VIEWED FROM THE PIN SIDE OF THE BOARD

16U-DB

COMMENTS

D1 COPYRIGHT IBM CORP. 1978

CONNECTORS

AK1
0001/1A-A1/A2D03
AK3
0002/1A-A1/A2D08
AW1
0003/1A-A1/A5D04
AW2
0004/1A-A1/A5B03
AW3
0005/1A-A1/A3D08
0006/1A-A1/A4D08
0007/1A-A1/A5D08
AW4
0008/1A-A1/A5D02

MINI BUSS CONNECTORS

PN4237855 EC834777 PEC832850

LOC=A-A1

USN 00008 PRI=02OCT78 0942

AUC= SEC 08NOV78 1747

PFORM=KSEB NEXTBLK DC

CID PIOFE JOB L6301459

YA410 0001

=YA080PD11 -5 VDC
=YA080GP01 DC GND

A-A2U2 N3 — A14/A E14/A1 — 26B-AA

=YA080VP01 +5V PLATE
=YA080PD12 +8.5 VDC

A-A2U3 N3 — A01/A E01/A1 — 26E-AB

=YA080PD14 + 24 VDC
=YA080PD08 +6 VDC

=YA080PD07 -4 VDC

=YA080PD05 -12 VDC

A-A2U3 N3 — A14/A E14/A1 — 26L-BA — 3

A-A2U4 N3 — A01/A E01/A1 — 26D-BB — 5

=YA080PD16 -24 VDC

A-A2U4 N3 — A14/A E14/A1 — 26W-CA — 3

A-A2U5 N3 — A01/A E01/A1 — 26Z-CB

D

NOTE:
EACH MINI BUS IS SHOWN AS TWO BLOCKS AS VIEWED FROM THE PIN SIDE OF THE BOARD

40B-EZ

A-A2B2 N3 — A14/A E14/A1 — 66B-DA
3 — + 5 VOLT LINE — DA3
FA801 GV100 HA005 HC005 HD015 HD015
5 — GROUND — DA5
FA188* FA488 GV100 HA005 HC005 HD015 HD015

A-A2B3 N3 — A01/A E01/A1 — 66E-DB
3 — GV100 + 24 VOLT LINE — DB3

A-A2C3 N3 — D08/A — 56H-GA
3 — GV100 D.E.GROUND — GA3

A-A2B3 N3 — A14/A E14/A1 — 66L-EA
3 — GV100 - 4 VOLT LINE — EA3

3 — - 12 VOLTS — BA3
FA101 FA801

A-A2B4 N3 — A01/A E01/A1 — 66D-EB
3 — GV100 + 6 VOLT LINE — EB3

5 — + 8.5 VOLT LINE — BB5
FA801 GV100 HC005 HD015 HD015

A-A2B4 N3 — A14/A E14/A1 — 66W-FA
3 — GV100 - 24 VOLT LINE — FA3

A-A2B5 N3 — A01/A E01/A1 — 66Z-FB

-5 VOLTS — CA3
HC005 HD015 HD015

COMMENTS
D1 COPYRIGHT IBM CORP. 1978

MINI BUSS CONNECTORS

PN4237856 EC834777 PEC832976

LOC=A-A2

USN 00008 — PRI=02OCT78 0942

AUC= — SEC 09NOV78 0842

PFORM=KSEB — NEXTBLK GB

CID PIOFE — JOB L6301459

YA420 0001

YA420 0001

NOTE:
EACH MINI BUS IS SHOWN AS TWO BLOCKS AS VIEWED FROM THE PIN SIDE OF THE BOARD

=YA080PD11 -5 VDC
=YA080GP01 DC GND
=YA080VP05 +5 VDC
=YA080PD15 +24V PDTB1-15
=YA080PD08 +6 VDC
=YA080PD07 -4 VDC
=YA080PD16 -24 VDC

A-A3U2 N3 — A14/A E14/A1 — 26B-AA — 3
A-A3U3 N3 — A01/A — 26E-AB
A-A3U3 N3 — A14/A E14/A1 — 26L-BA
A-A3U4 N3 — A01/A E01/A1 — 26D-BB — 5
A-A3U4 N3 — A14/A E14/A1 — 26W-CA
A-A3U5 N3 — A01/A E01/A1 — 26Z-CB
A-A3C3 N3 — D08/A — 56H-GA — 3

A-A3B2 N3 — A14/A E14/A1 — 66B-DA
3 — GF400 + 5V — DA3
5 — GF400 GROUND — DA5
A-A3B3 N3 — A01/A — 66E-DB
3 — GF400 + 24V — DB3
GF400 D•E•GROUND — GA3
A-A3B3 N3 — A14/A E14/A1 — 66L-EA
3 — GF400 - 4V — EA3
A-A3B4 N3 — A01/A E01/A1 — 66D-EB
3 — GF400 +6V — EB3
GF400 +8.5 VOLT — BB5
A-A3B4 N3 — A14/A E14/A1 — 66W-FA
3 — GF400 - 24V — FA3
A-A3B5 N3 — A01/A E01/A1 — 66Z-FB

GF400 - 5V — AA3

COMMENTS

MINI BUSS CONNECTORS

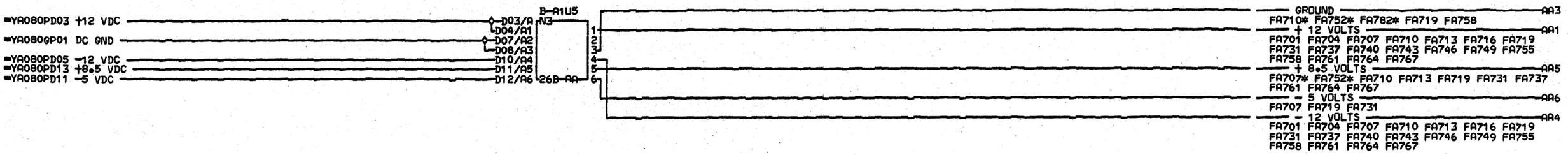
PN4237857 EC834777 PEC832999

LOC=A-A3

USN 00008 PRI=20NOV78 1159

AUC= SEC
PFORM=KSEB NEXTBLK GB

CID PIOFE JOB L6301459



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

POWER CABLE CONNECTORS

PN4237858 EC834777 PEC832976

LOC=B-A1U5

USN 00008 PRI=02OCT78 0942

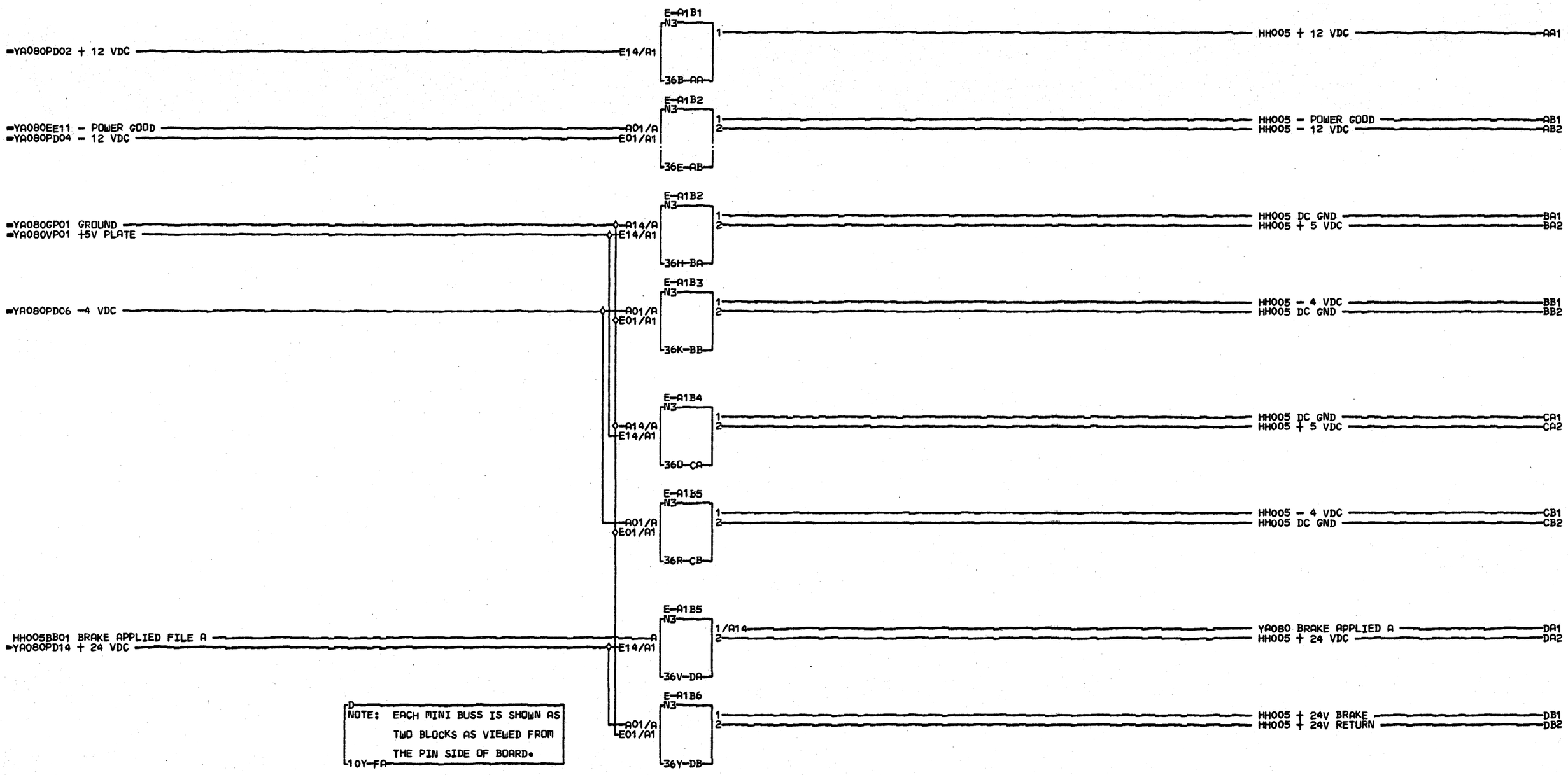
AUC= SEC 21NOV78 1202

PFORM=KSEB NEXTBLK AB

CID PIOFE JOB L6301459

YA510 0001

YA510 0001



COMMENTS

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MINI BUSS CONNECTORS

PN4238268 EC834824 PEC834777

LOC=E-A1

USN 00008 PRI=18MAY79 2041

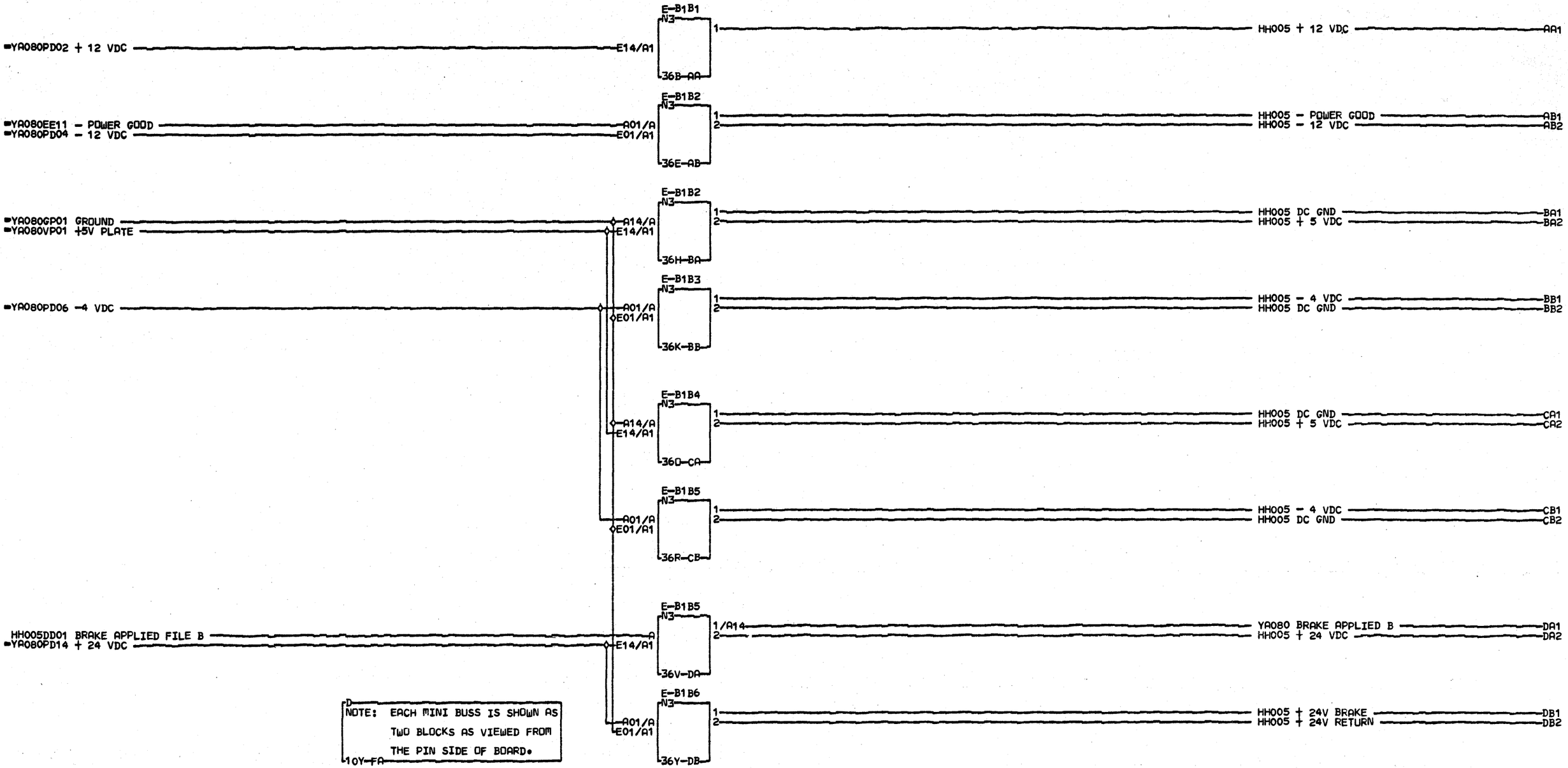
AUC= SEC

PFORM=KSEB NEXTBLK FB

CID PIOFE JOB T4301503

YA610 0001

YA610 0001



COMMENTS

D1 COPYRIGHT IBM CORP. 1978

MINI BUSS CONNECTORS

PN4238269 EC834824 PEC834777

LOC=E-B1

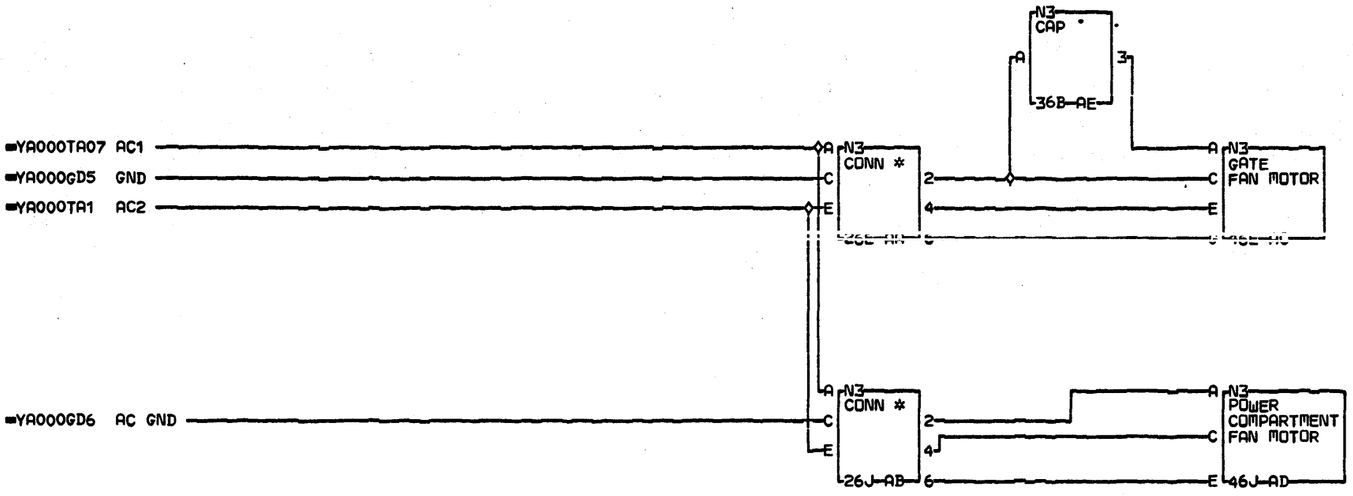
USN 00008 PRI=18MAY79 2041

AUC= SEC

PFORM=KSEB NEXTBLK FB

CID PIOFE JOB T4301503

YA620 0001



COMMENTS

AC FAN CONNECTIONS

PN4238272 EC834777

LOC=1A

USN 00008 PRI=20NOV78 1159

AUC= SEC 04DEC78 1951

PFORM=KSEB NEXTBLK AF

CID PIOFE JOB L6301459

YA700 0001