



SERVICE MANUAL

VP-D20/D21/D23/D24/D26/D20i/D21i/D23i/D24i/D26i



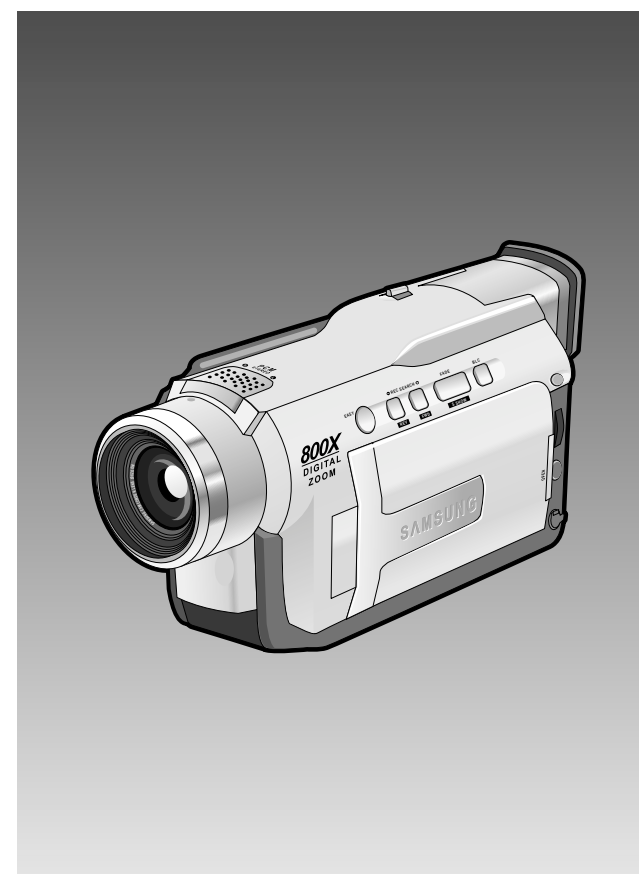
DIGITAL CAMCORDER

VP-D20/D21/D23/D24/D26
D20i/D21i/D23i/D24i/D26i

SERVICE Manual

For mechanical disassembly and adjustment, refer to the "Mechanical Manual"
(CSM2000 → AD68-30200A).

DIGITAL CAMCORDER



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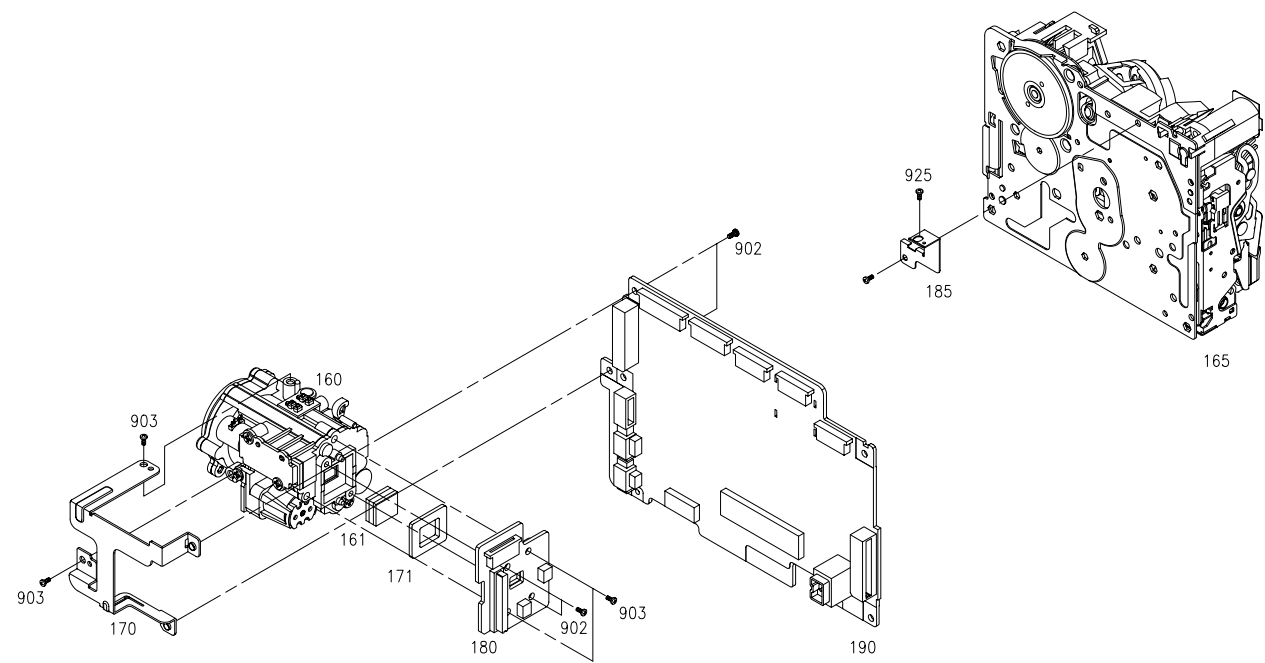
ELECTRONICS

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1. Exploded View and Parts List

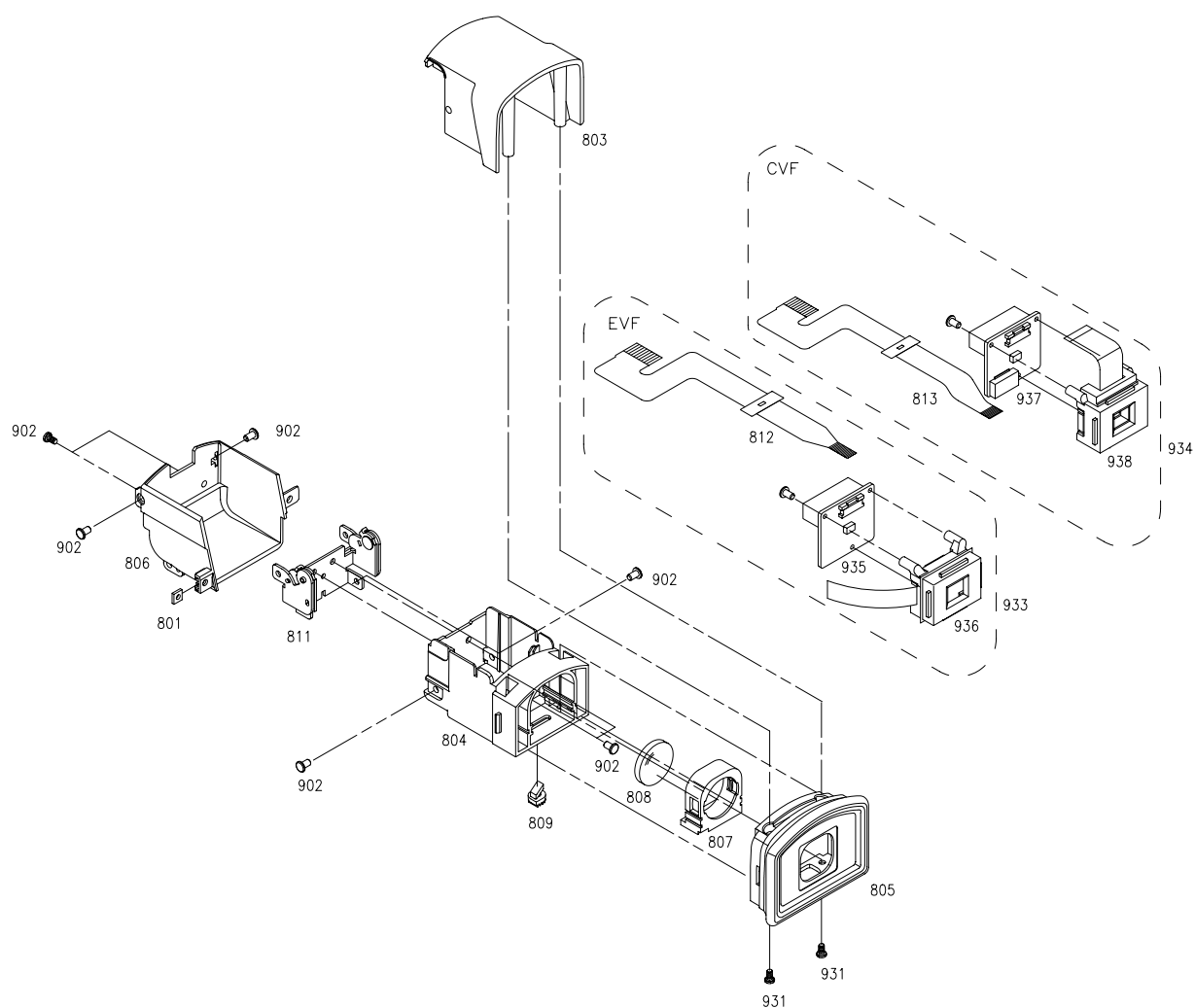
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1-1 Ass'y Lens/Deck



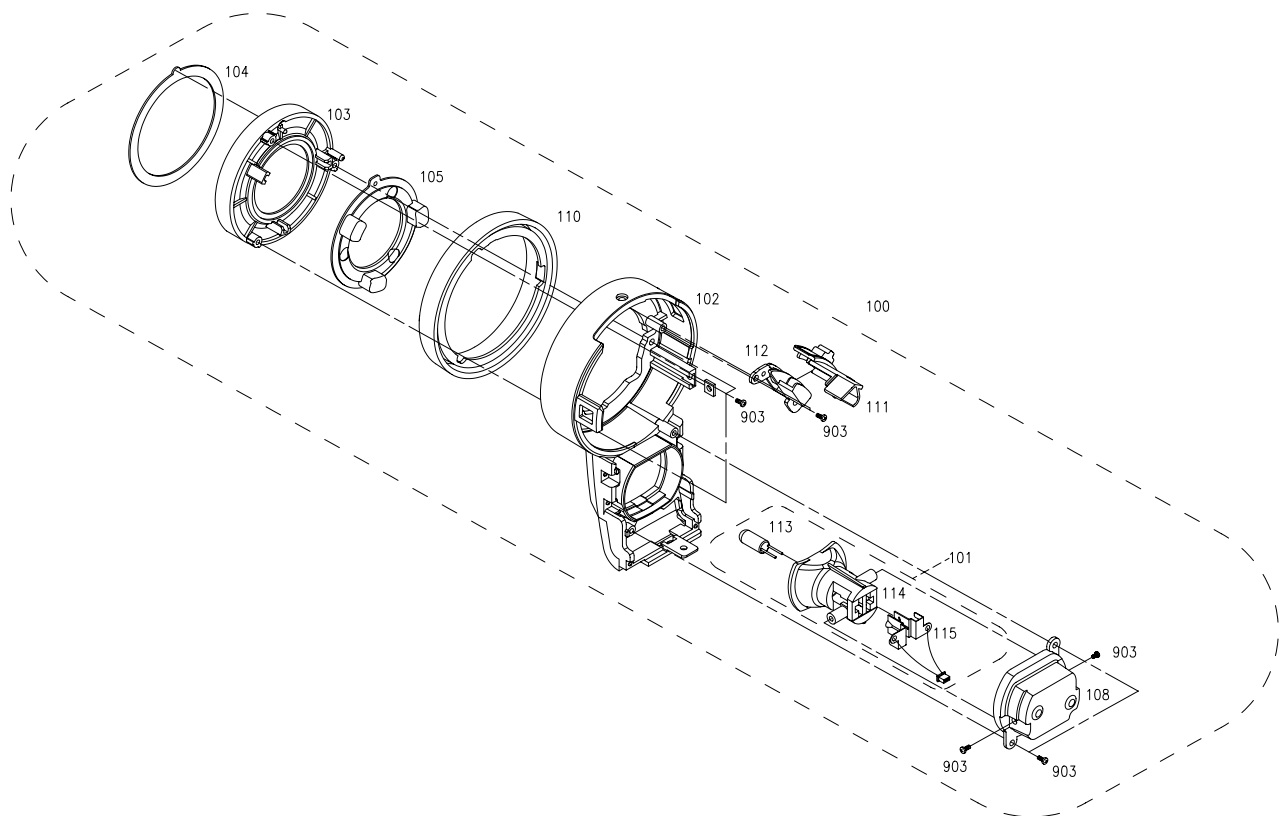
Loc. No	New Part No	Description and Specification	Remark
165	AD97-04896A	ASSY-DECK;- ,CSM2000,ALPA,BETA	
160	AD97-05140A	ASSY-LENS;- ,DVC10X,SUML	
161	AD29-00019A	FILTER-OPTICAL LPF;- ,VP-D73,- ,-,3.4X4.5X	
170	AD61-01114A	BRACKET-LENS;DELTA-PJ,SUS304 1/2H,T0.5,-	
171	AD60-00053A	SPACER-CCD;ALPHA_PJ,SILICON,- ,-,-,BLK,- ,	
180	AD97-06418A	ASSY-CCD;DELTA-PJ, NTSC	NTSC only
180	AD97-06417A	ASSY-CCD;DELTA-PJ, PAL	PAL only
185	AD63-00414A	SHIELD-CASE P/AMP;DELTA-PJ,SUS T0.2,- ,-,	
902	AC60-10028A	SCREW-MACHINE;- ,-,ZPC,FE,+,M1.7,- ,X3,- ,-	
903	AC60-12128A	SCREW-TAP TITE BH;- ,-,-,FE,BH,4 1.7,l4,-	
190	AD97-06532J	ASSY-MAIN BOARD	VP-D20
190	AD97-06532A	ASSY-MAIN BOARD	VP-D21
190	AD97-06532B	ASSY-MAIN BOARD	VP-D23
190	AD97-06532C	ASSY-MAIN BOARD	VP-D24
190	AD97-06532D	ASSY-MAIN BOARD	VP-D26
190	AD97-06532K	ASSY-MAIN BOARD	VP-D20i
190	AD97-06532E	ASSY-MAIN BOARD	VP-D21i
190	AD97-06532F	ASSY-MAIN BOARD	VP-D23i
190	AD97-06532G	ASSY-MAIN BOARD	VP-D24i
190	AD97-06532H	ASSY-MAIN BOARD	VP-D26i

1-2 Ass'y EVF/CVF



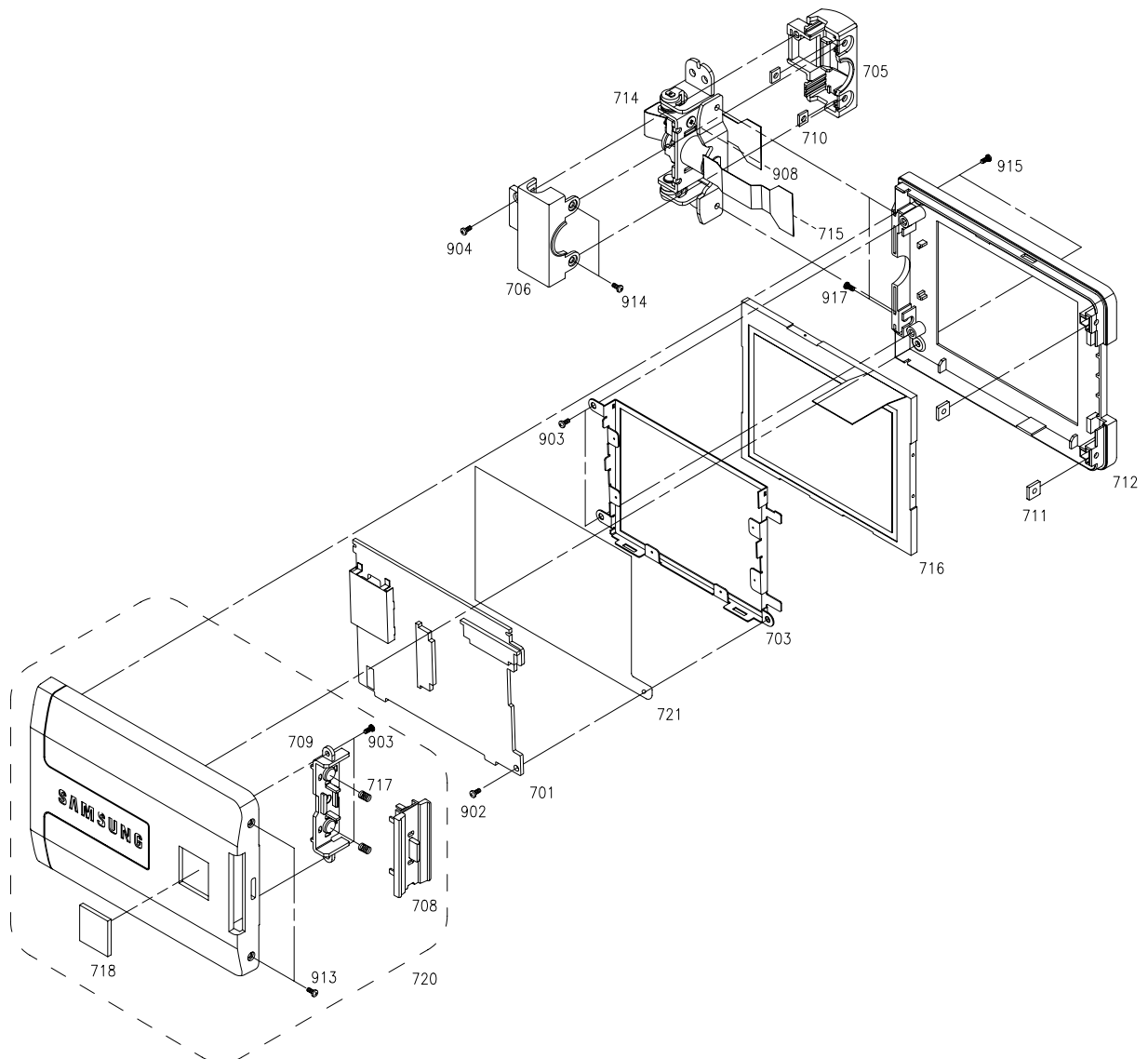
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801	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,T0.8	
803	AD61-01130A	CASE-EVF TOP;DELTA-PJ,ABS 94V0 VE0812,-,	
804	AD61-01129A	CASE-EVF BOTTOM;DELTA-PJ,ABS 94V0 VE0812	
805	AD73-00088A	RUBBER-EYE CUP;DELTA-PJ,SILICON,-,-,-,D/	
806	AD61-01145A	GUIDE-LINK;DELTA-PJ,PC ,-,,-,-	
807	AD61-01113A	HOLDER-EVF LENS;DELTA-PJ,ABS 94HB BLK,-,	
808	AD67-00194A	LENS-EVF 14X G1;DELTA-PJ,OPT PLASTIC PMM	
809	AD64-00939A	KNOB-EVF;DELTA-PJ,POM 94HB BLK,-,-,-,-,	
811	AD97-06450A	ASSY-LINK EVF;,DELTA-PJ,	
812	AD41-00374A	FPC-EVF;DELTA-PJ,-,POLYIMIDE,-,0.3T	
813	AD41-00373A	FPC-CVF;DELTA-PJ	
902	AC60-10028A	SCREW-MACHINE;-,-,ZPC,FE,+,M1.7,-,X3,-,-	
931	6003-001142	SCREW-TAPTITE;CH,+,B,M1.7,L5,NI PLT,SRWC	
933	AD97-07160A	ASSY-UNIT-EVF;0.24NTSC,DELTA-PJ,UNIT-EV	NTSC EVF only
933	AD97-07159A	ASSY-UNIT-EVF;0.24PAL,DELTA-PJ,UNIT-EV	PAL EVF only
934	AD97-06484A	ASSY-UNIT-CVF;0.24,DELTA-PJ,UNIT-CV	CVF only
936	AD07-00009A	LCD-PANNEL;-,,MCVVQ410(320),VP-D50,0.24IN	EVF only
935	AD97-06506A	ASSY-EVF BOARD;DVC,SC-D23,EVF BOARD	EVF only
937	AD97-06616A	ASSY-CVF BOARD;DVC	CVF only
938	AD07-00035A	LCD-PANNEL;-,,LCX042AK	CVF only

1-3 Ass'y Front



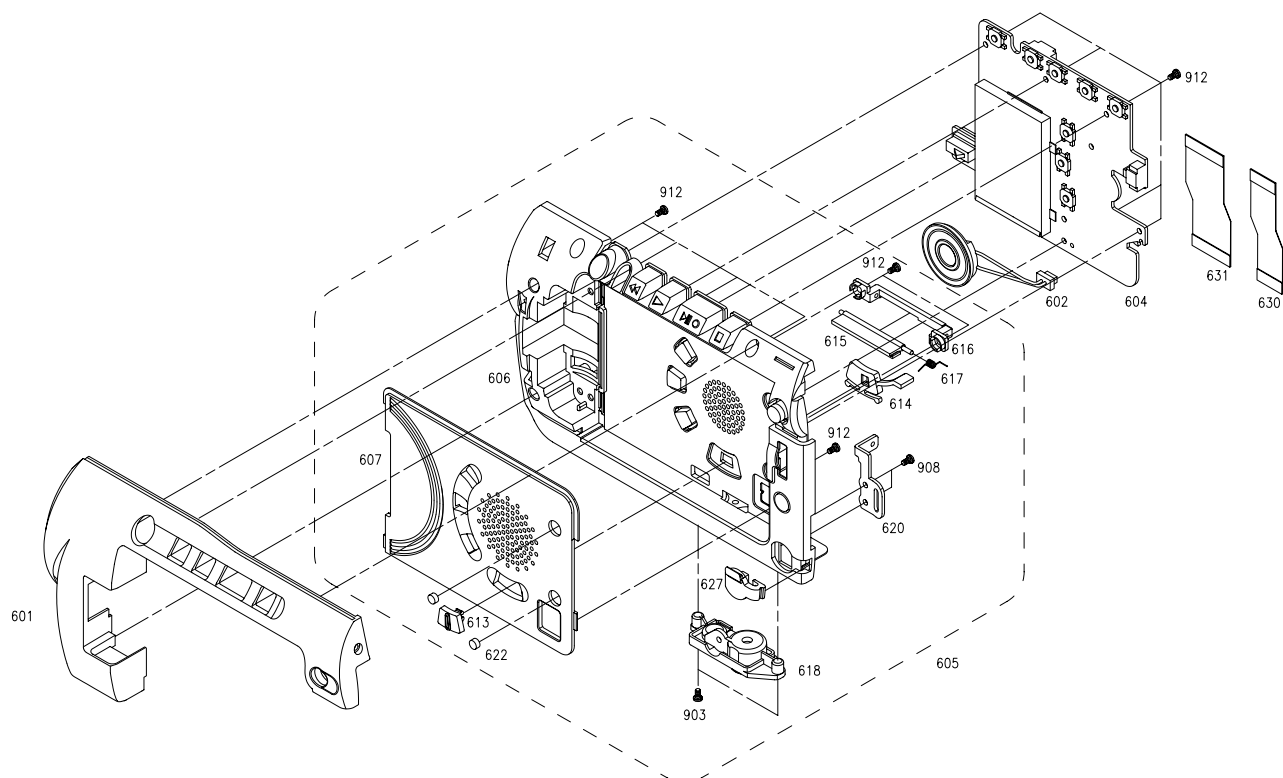
Loc. No	New Part No	Description and Specification	Remark
100	AD97-06482A	ASSY-FRONT;;DELTA,PAL,N/PIX,800X,LIGHT(O)	PAL only, LIGHT (O)
100	AD97-06482B	ASSY-FRONT;;DELTA,NT,N/PIX,800X,LIGHT(O)	NTSC only, LIGHT (O)
100	AD97-06482C	ASSY-FRONT;;DELTA,PAL,N/PIX(X)802X,LIGHT(X)	PAL only, LIGHT (X)
100	AD97-06482D	ASSY-FRONT;;DELTA,NT,N/PIX(X),803X,LIGHT(X)	NTSC only, LIGHT (X)
101	AD97-06488A	ASSY-VIDEO LIGHT;;DELTA-PJ,VIDEO LIGHT	
103	AD61-01122A	HOLDER-LENS HOOD;DELTA-PJ,PC 94HB BLACK,	
104	AD64-00639B	INLAY-LENS;DELTA-PJ,PVC,T0.3,,,BLK,SILK	
105	AD73-00089A	RUBBER-HOOD;DELTA-PJ,SILICON 60,-,-,D/	
110	AD67-00195A	LENS-HOOD;DELTA-PJ,ABS 94HB NATURAL,-,-,	
111	AD64-00941A	KNOB-NITE-PIX;DELTA-PJ,SUS304-WPB.	
112	AD61-01128A	HOLDER-NITE-PIX;DELTA-PJ,ABS 94HB BLACK,	
113	AD47-00008A	LAMP;TXL38H-601F,-,3.8,9.5,-,BOX,50	
903	AC60-12128A	SCREW-TAP TITE BH;-,-,FE,BH,4 1.7,l4,-	

1-4 Ass'y LCD



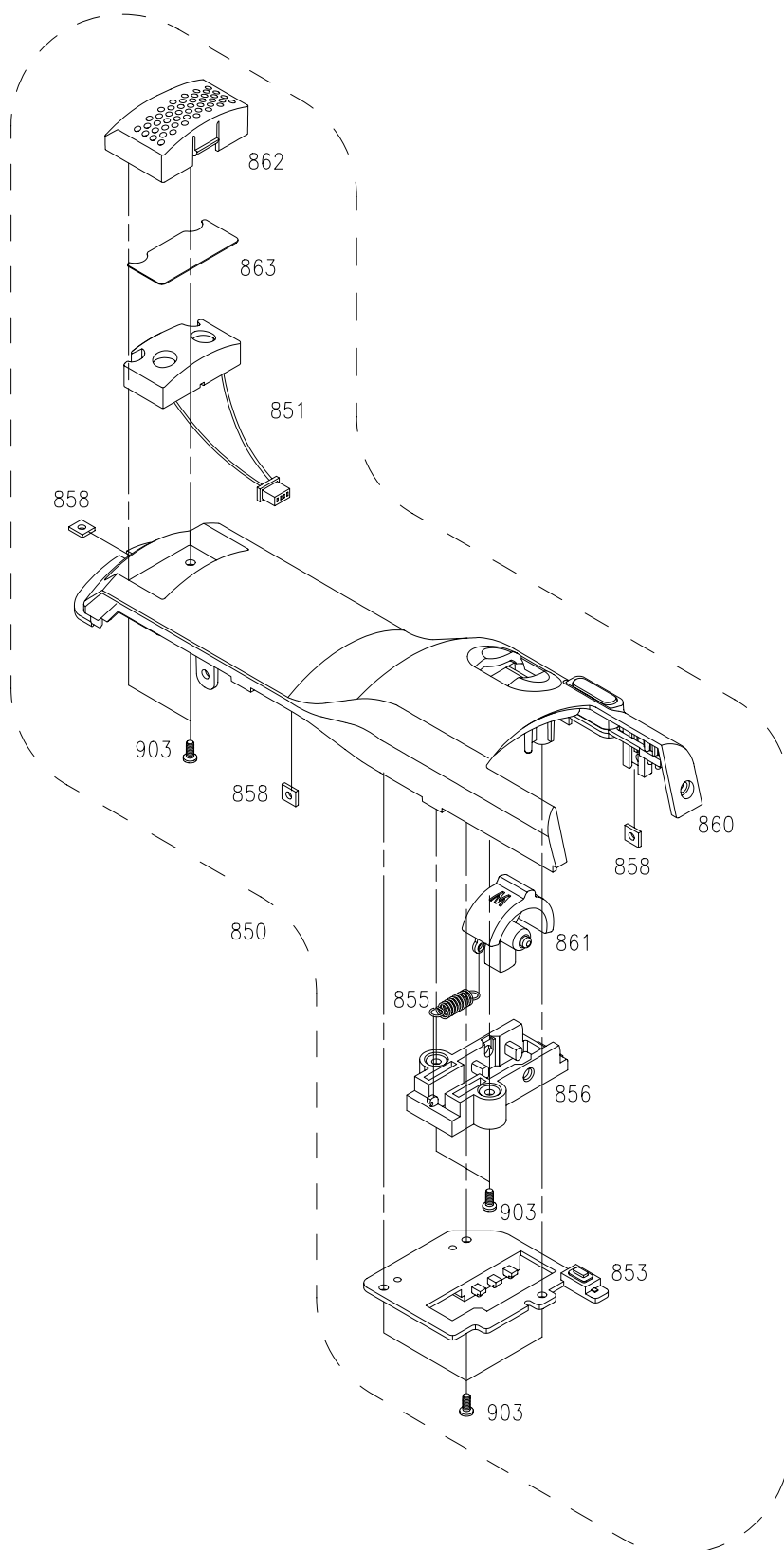
Loc. No	New Part No	Description and Specification	Remark
701	AD97-06158A	ASSY-LCD BOARD;DELTA(PVI2.5" LCD),NTSC	2.5" NTSC only
701	AD97-06545A	ASSY-LCD BOARD;DELTA(PVI2.5" LCD),PAL	2.5" PAL only
701	AD97-06519A	ASSY-LCD BOARD;DELTA(PVI3.5" LCD),NTSC	3.5" NTSC only
701	AD97-06546A	ASSY-LCD BOARD;DELTA(PVI3.5" LCD),PAL	3.5" PAL only
703	AD97-04556A	ASSY-BL;- ,BETA-PJ,2.5",3T,RGBLU25	2.5" only
703	AD97-06358A	ASSY-BL;- ,3.5",	3.5" only
705	AD63-00396A	COVER-HINGE BOTTOM 2.5";DELTA-PJ,ABS 94V	2.5" only
705	AD63-00397A	COVER-HINGE BOTTOM 3.5";DELTA-PJ,ABS 94V	3.5" only
706	AD63-00398A	COVER-HINGE TOP 2.5";DELTA-PJ,ABS 94V0,-	2.5" only
706	AD63-00399A	COVER-HINGE TOP 3.5";DELTA-PJ,ABS 94V0,-	3.5" only
708	AD64-00959A	KNOB-LCD 2.5";DELTA-PJ,ABS 94V0,-,-,-,-	2.5" only
708	AD64-00960A	KNOB-LCD 3.5";DELTA-PJ,ABS 94V0,-,-,-,-	3.5" only
709	AD61-01172A	HOLDER-LCD 2.5";DELTA-PJ,POM,-,-,-,-,-	2.5" only
709	AD61-01173A	HOLDER-LCD 3.5";DELTA-PJ,POM,-,-,-,-,-	3.5" only
710	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,T0.8	
711	AD61-01207A	BRACKET-NUT;DELTA-PJ,SECC,T0.8,4,4,,M1.4	
712	AD61-01132A	CASE-LCD BOTTOM (PVI2.5");DELTA-PJ,ABS 94	2.5" only
712	AD61-01134A	CASE-LCD BOTTOM (PVI3.5");DELTA-PJ,ABS 94	3.5" only
714	AD97-06065A	ASSY-HINGE;- ,DELTA-PJ,ASSY-HINGE	
715	AD97-06489A	ASSY-LCD FPC;,,DELTA-PJ,LCD FPC	2.5" only
715	AD97-06668A	ASSY-LCD FPC;,,DELTA-PJ,LCD FPC	3.5" only
716	AD07-00030A	LCD;PA025XS5-DVC,D4-PJ,-,61.6*49.3	2.5" only
716	AD07-00034A	LCD;PA035XS2	3.5" only
717	AD61-01206A	SPRING ETC-LCD;DELTA-PJ,SUS304,WPB,,,OD4	
718	AD64-01040A	INLAY-MS 2.5";DELTA-PJ,PC,T0.65,W12,	
720	AD97-07208A	ASSY-CASE LCD TOP	2.5" MS(O) NTSC only
720	AD97-07208B	ASSY-CASE LCD TOP	2.5" MS(O)
720	AD97-07208C	ASSY-CASE LCD TOP	2.5" MS(O) PAL only
720	AD97-07208D	ASSY-CASE LCD TOP	2.5" MS(X) NTSC only
720	AD97-07208E	ASSY-CASE LCD TOP	2.5" MS(X)
720	AD97-07208F	ASSY-CASE LCD TOP	2.5" MS(X) PAL only
721	AD62-00027A	INSULATION-BACK LIGHT;BETA-PJ,PVC,-,-,-,-	2.5" only
721	AD62-00030A	INSULATION-BACK LIGHT;BETA-PJ,PVC,-,-,-,-	3.5" only
902	AC60-10028A	SCREW-MACHINE;-,-,ZPC,FE,+,M1.7,-,X3,-,-	
903	AC60-12128A	SCREW-TAP TITE BH;-,-,FE,BH,4 1.7,l4,-	
904	AC60-12128B	SCREW-TAPTITE;-,-,1.7,4,BH,-,TAP,1.7,-,-	
908	6003-001291	SCREW-TAPTITE;CH,+,B,M1.4,L3.0,ZPC(BLK),	
913	6001-001545	SCREW-MACHINE;PH,+,M1.4,L3.0,ZPC(WHT),SW	
914	6001-001659	SCREW-MACHINE;CH,+,M1.7,L2.5,NI PLT,SWRC	
915	6003-001143	SCREW-TAPTITE;PH,+,B,M1.7,L6,NI PLT,SWRC	
917	AD60-00002A	SCREW MACHINE;-,-,-,-,-,A3-PJ,-,M2X4	

1-5 Ass'y Left



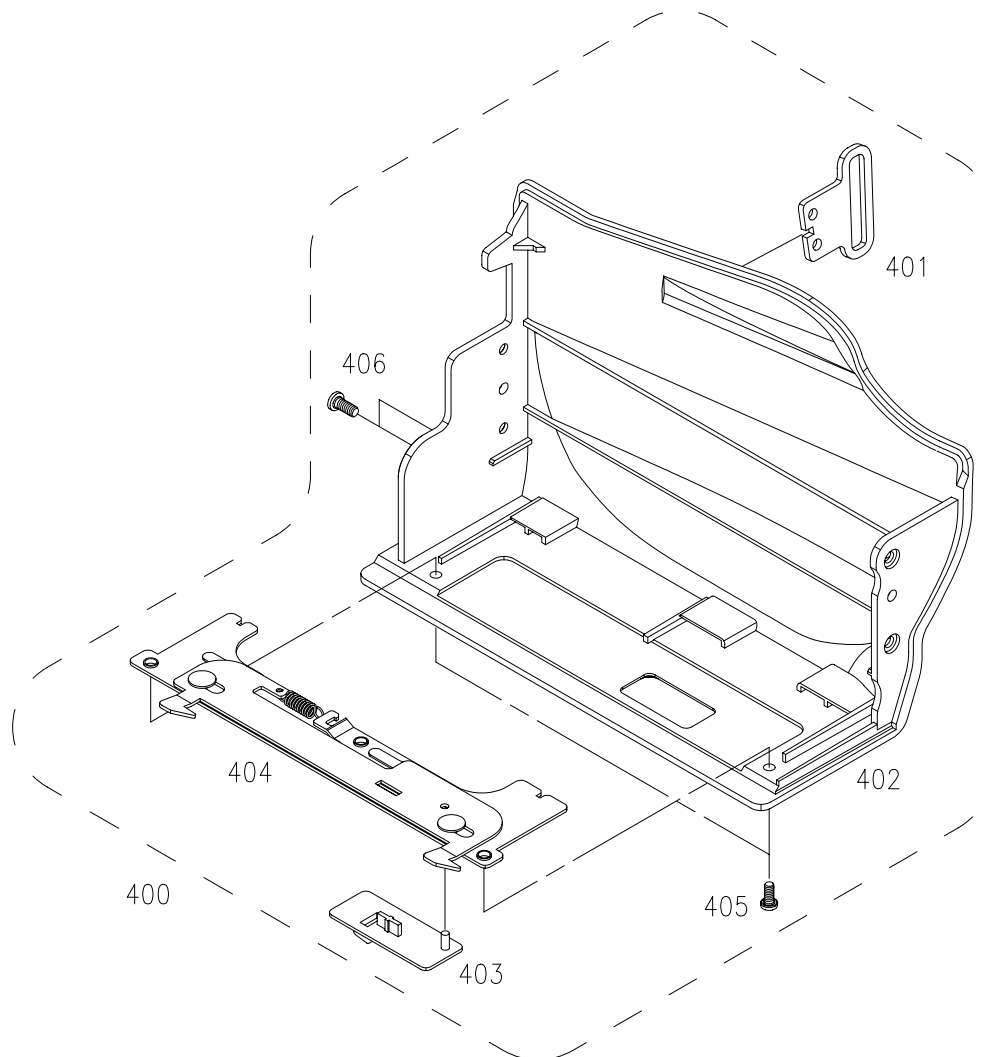
Loc. No	New Part No	Description and Specification	Remark
601	AD63-00403A	COVER-LEFT 2.5";DELTA-PJ,ABS 94HB,-,-,-	2.5"
601	AD63-00403B	COVER-LEFT 2.5";DELTA-PJ,ABS 94HB,-,-,-	2.5"
601	AD63-00410A	COVER-LEFT 3.5";DELTA-PJ,ABS 94HB,-,-,-	3.5"
601	AD63-00410B	COVER-LEFT 3.5";DELTA-PJ,ABS 94HB,-,-,-	3.5"
602	AD97-02047A	ASSY-SPEAKER;-;VP-D65,ASSY-SPEAKER	
604	AD97-06444A	ASSY-LEFT BOARD;DELTA-PJ,SC-D23,ASSY LEF	
605	AD97-06479B	ASSY-UNIT CASE LEFT;;DELTA,	VP-D20/21
605	AD97-06479E	ASSY-UNIT CASE LEFT;;DELTA,	VP-D23/24
605	AD97-06479H	ASSY-UNIT CASE LEFT;;DELTA,	VP-D26
605	AD97-06479L	ASSY-UNIT CASE LEFT;;DELTA,	VP-D20
607	AD63-00395A	COVER-DUMMY 2.5";DELTA-PJ,ABS 94HB,-,-,-	VP-D23/24
607	AD63-00395C	COVER-DUMMY 2.5";DELTA-PJ,ABS 94HB,-,-,-	VP-D21
607	AD63-00395F	COVER-DUMMY 2.5";DELTA-PJ,ABS 94HB,-,-,-	VP-D20
607	AD63-00411C	COVER-DUMMY 3.5";DELTA-PJ,ABS 94HB,-,-,-	
607	AD63-00411D	COVER-DUMMY 3.5";DELTA-PJ,ABS 94HB,-,-,-	
613	AD64-00943A	KNOB-SELECT;DELTA-PJ,ABS 94HB,-,-,-,BL	
614	AD61-01138A	HOLDER-SELECT;DELTA-PJ,ABS 94HB,-,-,-,-	2.5"
614	AD61-01240A		3.5"
615	AD63-00394A	COVER-DOOR M/S;DELTA-PJ,ABS 94HB,-,-,-,-	
616	AD61-01100A	HOLDER-DOOR M/S;DELTA-PJ,ABS 94HB,-,-,-,-	2.5"
616	AD61-01241A		3.5"
617	AD61-01028A	SPRING ETC-DOOR M/S;BETA-PJ,SUS304 WPB,-	
618	AD61-01170A	BRACKET-TRIPOD;DELTA-PJ,PC,-,-,-,-	
620	AD61-01118A	BRACKET-SHOULDER;DELTA-PJ,SUS304,T1,-,-,-	
621	AD63-00393A	COVER-DC JACK;DELTA-PJ,TPE,-,-,-,-,-?	
622	AD69-00045B	PAD-LCD;DELTA-PJ,PORON,T1.5,-,-,-,L-GR	
630	3809-001435	FFC CABLE-FLAT;-,-,100MM,10P,0.5MM,-	
631	3809-001438	FFC CABLE-FLAT;-,-,100MM,45P,0.5MM,-	
903	AC60-12128A	SCREW-TAP TITE BH;-,-,-,FE,BH,4 1.7,I4,-	
908	6003-001291	SCREW-TAPTITE;CH,+,B,M1.4,L3.0,ZPC(BLK),	

1-6 Ass'y TOP



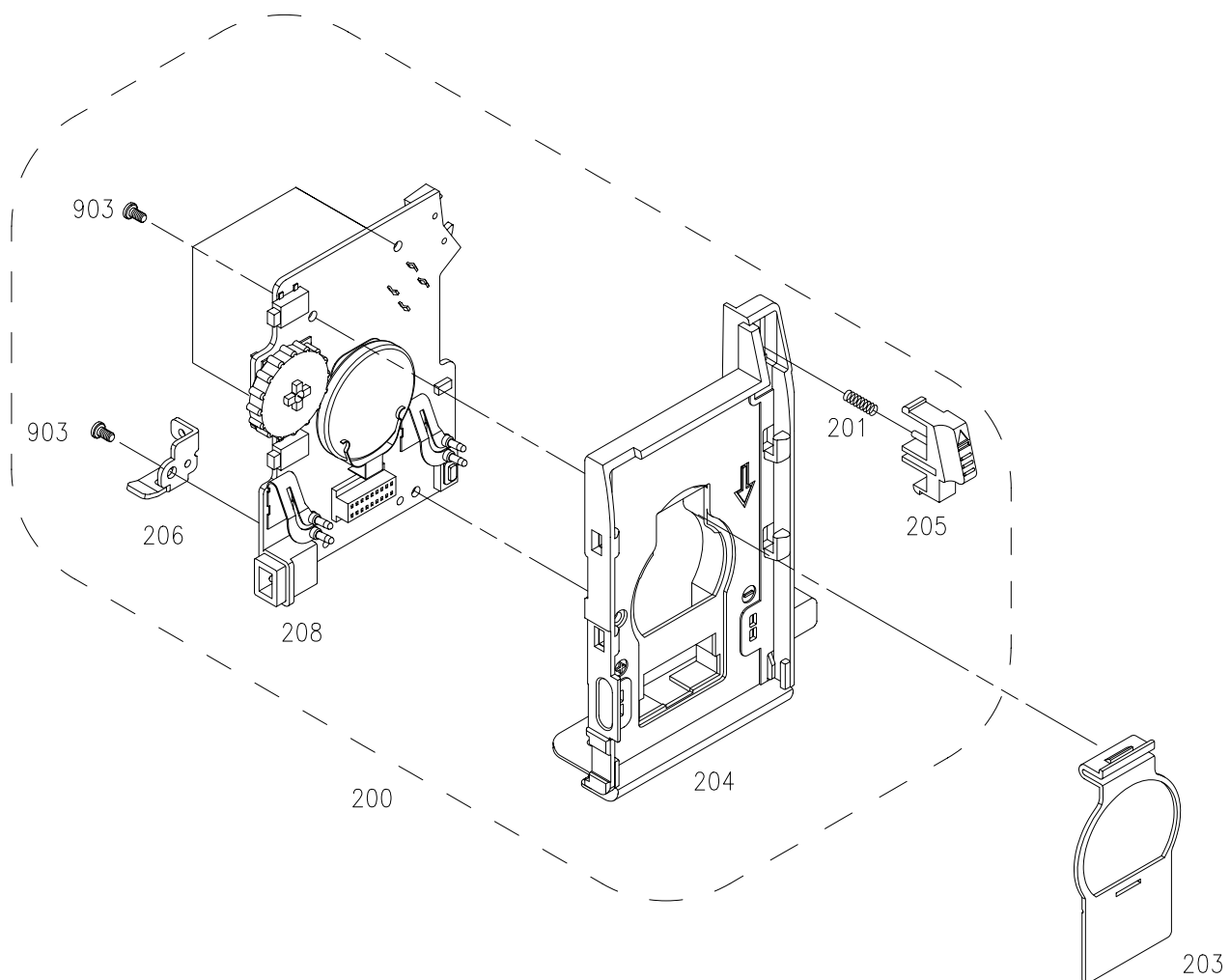
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850	AD97-06485A	ASSY-TOP;,,DELTA-PJ,EXP	
851	AD97-06477A	ASSY-MIC;,,DELTA-PJ,ASSY MIC	
853	AD97-06439A	ASSY-TOP BOARD;,,SC-D23,ASSY TOP BOARD	
855	AD61-01032A	SPRING ETC-ZOOM;BETA-PJ,SUS,-,-,-,-,-,-,-,-,-,-	
856	AD61-01140A	HOLDER-ZOOM;DELTA-PJ,POM,NAT,-,-,-,-,-,-,-,-,-,-	
858	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,-,-,-,-,-,-T0.8	
860	AD61-01143A	CASE-TOP;DELTA-PJ,ABS 94HB,-,-,-,-,-,-,-,-,-,-	
861	AD64-00944A	KNOB-ZOOM;DELTA-PJ,ABS,NAT,-,-,-,-,-,-,-,-,-,-BLK,-	
862	AD64-00945A	GRILLE-MIC LEFT;DELTA-PJ,WIRE MASHI,T0.3	
863	AD63-00422A	SHEET-MIC	
903	AC60-12128A	SCREW-TAP TITE BH;-,-,-,-,-,-,-,-,-,-FE,BH,4 1.7,l4,-	

1-7 Ass'y Cover Housing



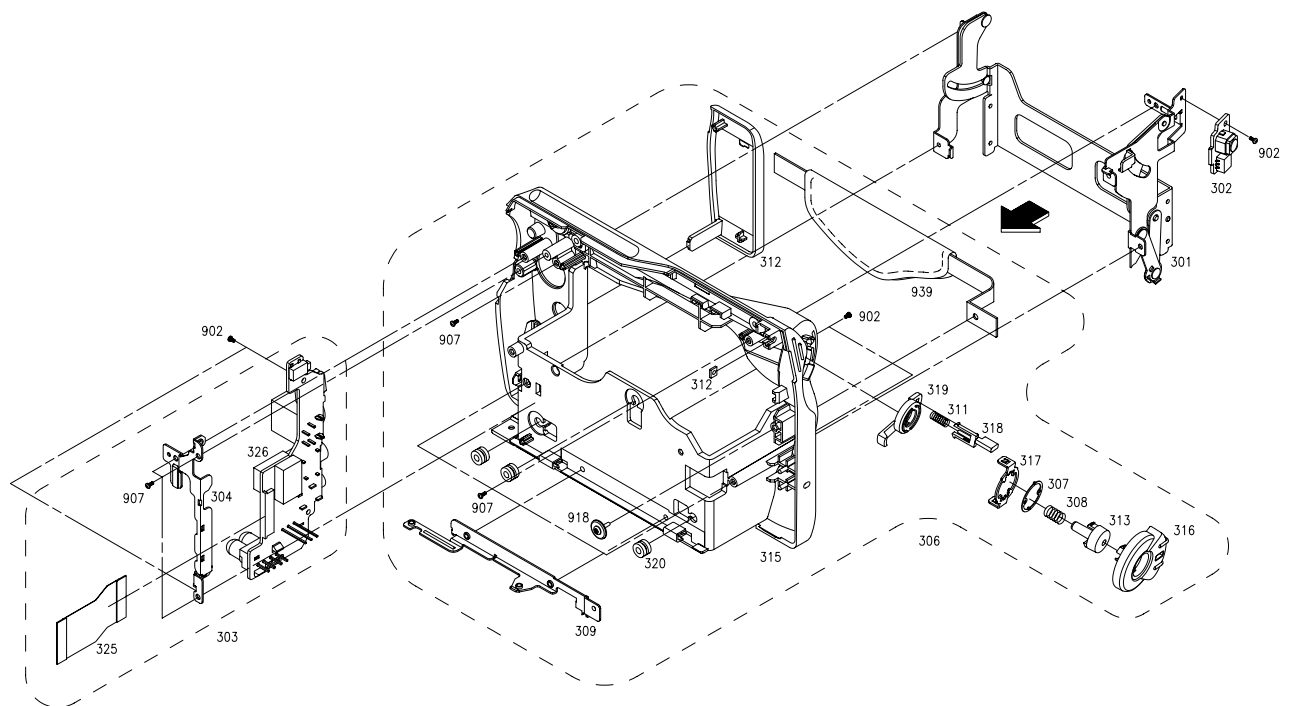
Loc. No	New Part No	Description and Specification	Remark
400	AD97-06480A	ASSY-COVER HOUSING;.,DELTA-PJ,EXP	
400	AD97-06480B	ASSY-COVER HOUSING;.,DELTA-PJ,DOM	
401	AD61-01001A	BRACKET-GRIP-FRONT;BETA-PJ,SUS304,T1.0,-	
402	AD63-00401A	COVER-HOUSING;DELTA-PJ,ABS 94HB,-,-,-,-,	
402	AD63-00401B	COVER-HOUSING;DELTA-PJ,ABS 94HB,-,-,-,-,	
403	AD64-00858B	KNOB-TAPE EJECT;DELTA-PJ,ABS 94HB,,,,,D/	
404	AD97-04814A	ASSY-TAPE EJECT;SUS,BETA-PJ,-	
405	6001-000805	SCREW-MACHINE;CH,+,M1.7,L3,NI PLT,SWRCH1	
406	6003-001143	SCREW-TAPTITE;PH,+,B,M1.7,L6,NI PLT,SWRC	

1-8 Ass'y Rear



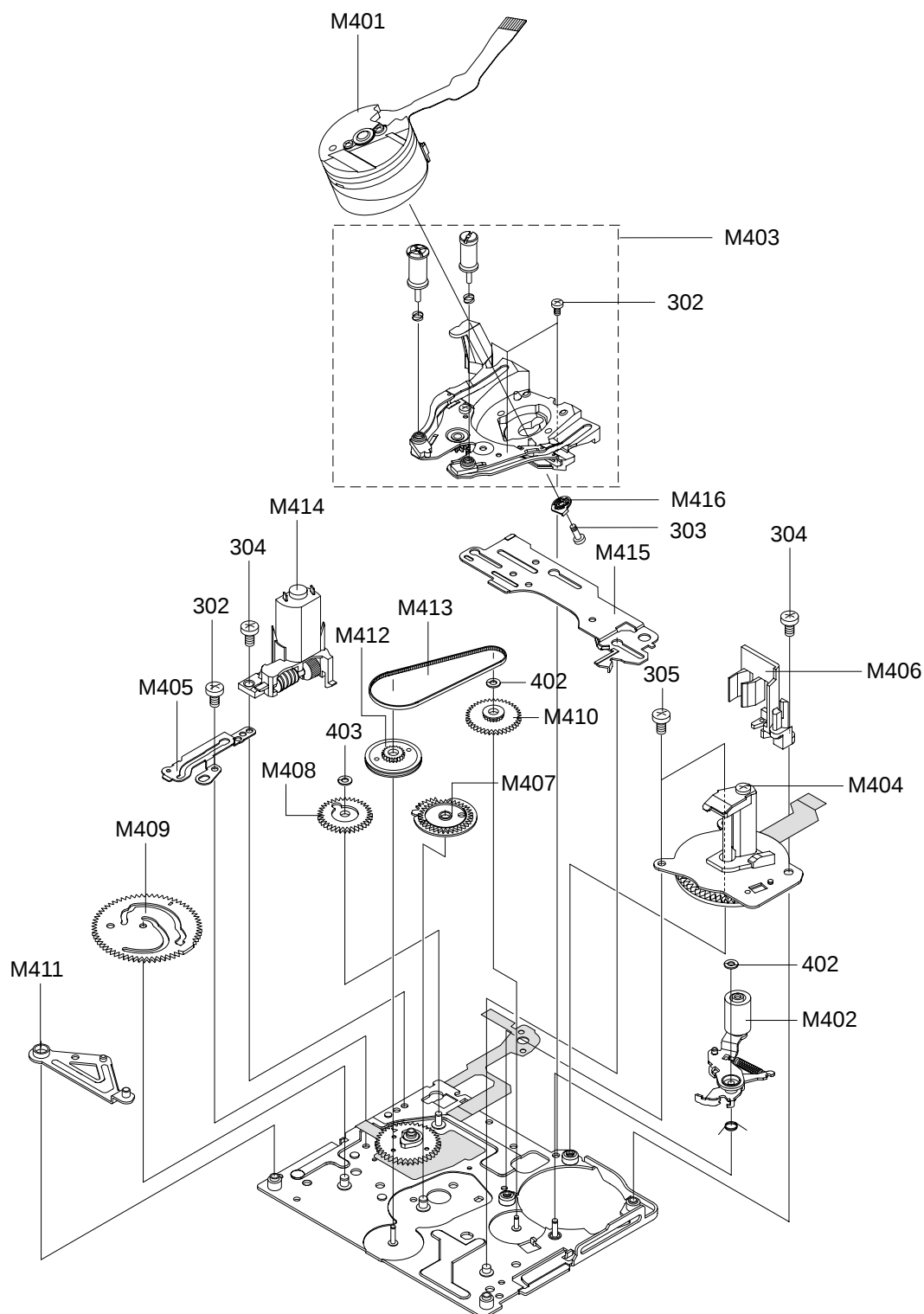
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200	AD97-06486A	ASSY-REAR;.,DELTA-PJ,EXP	
201	AD61-00798A	SPRING-BATTERY EJECT;D5-PJ,SWPB T0.2,-,-	
203	AD63-00418A	COVER-LITHIUM BATTERY;DELTA-PJ,PP,-,-,-	
204	AD61-01141A	CASE-REAR;DELTA-PJ,ABS 94HB HF06601,G353	
205	AD64-00962A	KNOB-BATTERY EJECT;DELTA-PJ,ABS 94HB,-,-	
206	AD61-01112A	BRACKET-JOINT;DELTA-PJ,SECC,T0.8,-,-,-	
208	AD97-06507A	ASSY-REAR BOARD;DVC,SC-D23,REAR BOARD	
903	AC60-12128A	SCREW-TAP TITE BH;-,-,-FE,BH,4 1.7,l4,-	

1-9 Ass'y Right



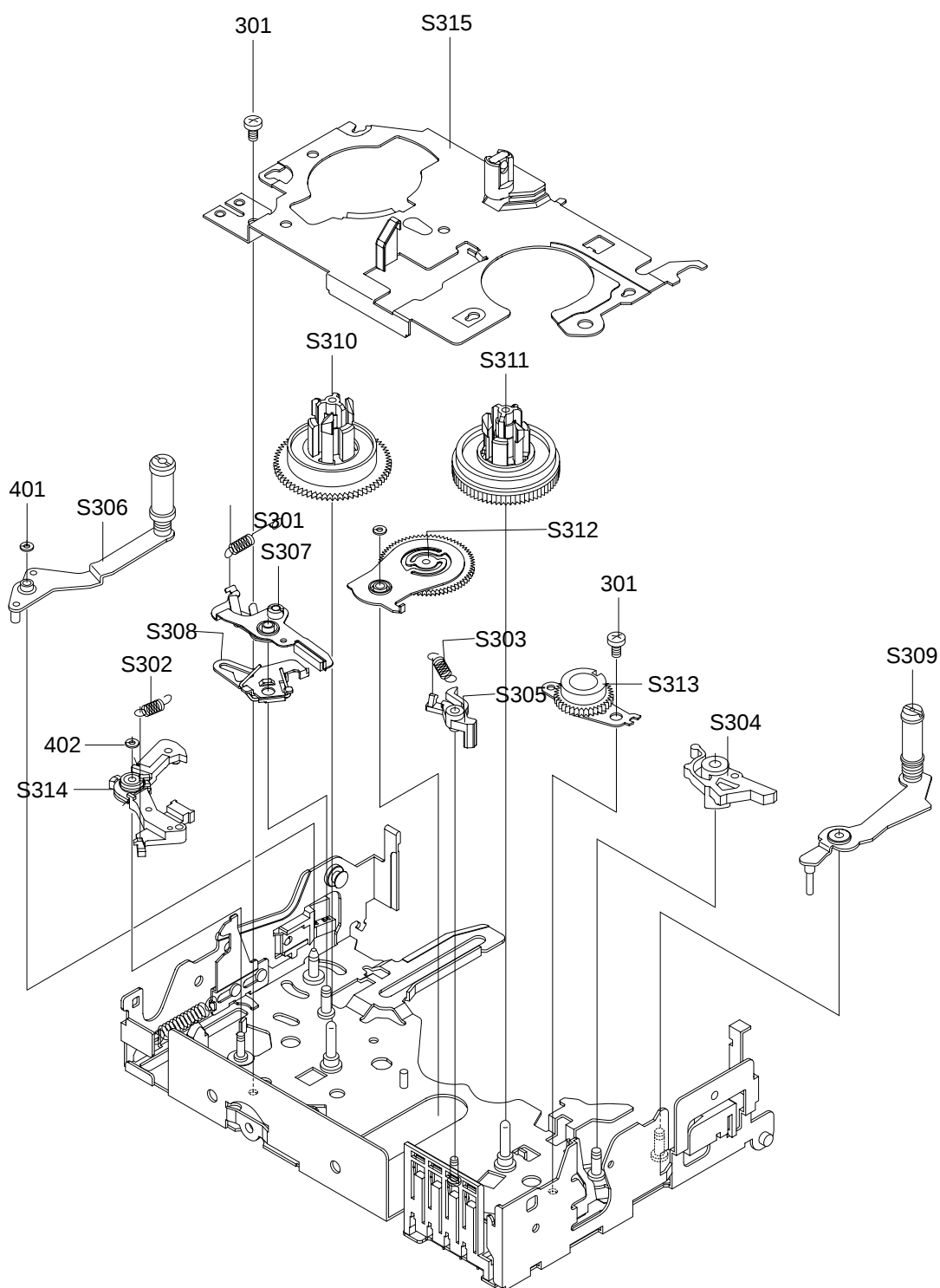
Loc. No	New Part No	Description and Specification	Remark
301	AD97-06066A	ASSY-LINK;- ,DELTA-PJ,-	
302	AD97-06499A	ASSY-START/STOP;DVC,SC-D23,POWER	
303	AD97-06487A	ASSY-JACK;.,DELTA-PJ,ASSY JACK	
306	AD97-06481A	ASSY-CASE RIGHT;.,DELTA-PJ,EXP	
307	AD61-01169A	SPRING ETC-PLATE RECORD;DELTA-PJ,SUS 1/2	
308	AD61-60521A	SPRING-REC;SC-80,SWPB,4.3,-,-,-,-,-,-,-,	
309	AD61-01116A	BRACKET-RIGHT;DELTA-PJ,SUS,T0.8,-,-,-,-	
311	AD61-60601A	SPRING-KNOB POWER;- ,SUS304 WPB,-,-,-,-,-	
312	AD63-00402A	COVER-JACK;DELTA-PJ,TPH,-,-,-,-,-,-,-	
313	AD64-00936A	BUTTON-POWER RECORD;DELTA-PJ,ABS 94HB,-,	
316	AD64-00942A	KNOB-POWER;DELTA-PJ,ABS 94HB,-,-,-,-,BLK	
317	AD61-01146A	PLATE-POWER;DELTA-PJ,SUS T0.5,T0.2,-,-,-	
318	AD64-00947A	LOCKER-SAFETY POWER;DELTA-PJ,ABS 94HB,-,	
319	AD66-00190A	SLIDER-POWER;DELTA-PJ,POM,-,-,-,NAT,-	
320	AD73-00006A	RUBBER—GUIDE DECK;BUTHYL RUB,-,VP-D50,-	
321	AD61-12033A	BRACKET-NUT;SV-D10,T0.8,-,-,-,-,T0.8	
323	AD97-06064A	ASSY-BELT GRIP;LEATHER,DELTA-PJ,-	
325	3809-001448	FPC CABLE FLAT, 24P	
902	AC60-10028A	SCREW-MACHINE;-,-,ZPC,FE,+,M1.7,-,X3,-,-	
907	6002-001085	SCREW-TAPPING;CH,+,2,M1.7,L5,ZPC(BLK),SW	
918	AD60-10509A	SCREW-TAP TITE;- ,FE-ZN,M2X5,5,PWH,+,,-,-	

1-10 Mechanical Parts (1) (MAIN CHASSIS)



Loc. No	New Part No	Description and Specification	Remark
302	6001-001452	SCREW-MACHINE;BH,+,M1.4,L2.5,BLK,SWRCH18	
303	6001-001451	SCREW-MACHINE;TH,+,M1.4,L4.12,ZPC(YEL),S	
304	6001-001331	SCREW-MACHINE;BH,+,M1.4,L3.0,BLK(LOCK),S	
305	AC60-12113A	SCREW;- ,BLK,L2.2,S45C-HC,BH,+,-,M1.4	
402	6031-001417	WASHER-PLAIN;POLYSLIDE,-,ID0.8,D3.0,T0.2	
403	6031-001419	WASHER-PLAIN;LUMINA,CUT,ID1.1,OD2.8,T0.2	
M401	AD97-02552A	ASSY-DRUM REV02;AHS+R/T+MOT+PBT,DD-3,ASS	
M402	AD97-02928A	ASSY-ARM-PINCH-FULL;- ,DD-3,-	
M403	AD97-02931A	ASSY-DRUM BASE RAIL;- ,DD-3,-	
M404	AD31-00028A	MOTOR-CAPSTAN;- ,DD-3,-,-,-,-,-,-,-,-	
M405	AD61-00490A	GUIDE-TENSION CAM;DD-3,SUS430 CP,T0.3,-,	
M406	AD61-00496A	HOLDER-FPC SUB;DD-3,DURACON,-,-,-,-	
M407	AD66-00061A	GEAR-CONNECT;DD-3,POM,0.4/0.5,8.5/23,-,-	
M408	AD66-00064A	GEAR-WHEEL;DD-3,POM,0.3/05,30/8,-,-,PCD	
M409	AD66-00065A	GEAR CAM-MAIN;DD-3,SECC,0.5,50,-,-,PCD 2	
M410	AD66-00069A	GEAR-CAPSTAN;DD-3,DYAMID,0.4,28,-,-,PCD	
M411	AD66-00085A	LEVER-CAM;DD-3,SUS430 CP,T0.5,-,-,-,-,-	
M412	AD66-00098A	GEAR-PULLEY ASSY;DD-3,POM+MAGNET,-,-,-,-	
M413	AD66-62001A	BELT-TIMING;DD-C2R,POLYURETHAN,-,L84,-,-	
M414	AD97-02935A	ASSY-LOADING-MOTOR;- ,DD-3,-	
M415	AD97-02987A	ASSY-SLIDE-MAIN;- ,DD-3,-	
M416	AD61-00558A	PLATE-S/P BASE;DD-3,SUS632 CSP ,T0.15,-,	

1-11 Mechanical Parts (2) (SUB CHASSIS)



Loc. No	New Part No	Description and Specification	Remark
301	6001-001513	SCREW;BH,+,M1.4,D3.0 , WH	
401	6031-001430	WASHER-PLAIN;POLYSLIDER,-,ID0.8,D2.5,T0.	
402	6031-001417	WASHER-PLAIN;POLYSLIDE,-,ID0.8,D3.0,T0.2	
S301	AD61-00509A	SPRING-TENSION;DD-3,SUS304-WPB,•0.12,-,	
S302	AD61-00513A	SPRING-BRAKE S;DD-3,SUS304-WPB,•0.18,-,	
S303	AD61-00659A	SPRING-MAIN BRAKE T;DD-3,SWP-B,•0.16,-,	
S304	AD66-00090A	LEVER-EJECT;DD-3,POM,-,-,-,-,-	
S305	AD66-00093A	BRAKE-MAIN T;DD-33,NYLON,-,-,-,-	
S306	AD66-00108A	ARM-TENSION-ASSY;DD-3,SUS304 CP+ETC,-,-,	
S307	AD97-02932A	ASSY-BRAKE-TENSION;-,DD-3,-	
S308	AD97-02933A	ASSY-RELEASE-T;-,DD-3,-	
S309	AD97-02934A	ASSY-REVIEW-ARM;-,DD-3,-	
S310	AD97-02938A	ASSY-REEL-DISK-S;-,DD-3,-	
S311	AD97-02939A	ASSY-REEL-DISK-T;-,DD-3,-	
S312	AD97-02940A	ASSY-IDLER;-,DD-3,-	
S313	AD97-02941A	ASSY-BRAKE-PULLEY;-,DD-3,-	
S314	AD97-02942A	ASSY-BRAKE-S;-,DD-3,-	
S315	AD97-05350A	ASSY-COVER REEL;SUS+ETC,CSM2000	

2. Electrical Parts List

Loc. No	Part No	Desc & Spec	Remark
		ASSY-START/STOP BOARD	
CNS01	3711-005146	CONNECTOR-HEADER;BOX,3P,1R,1MM,SMD-A,SN,	
SWS01	3404-001171	SWITCH-TACT;12V DC,50MA,200GF,6.6X6X5MM,	
		ASSY-JACK BOARD	
BJ01	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BJ02	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BJ03	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BJ04	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BJ05	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BJ06	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BJ07	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BJ08	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BJ09	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
CJ01	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CN01	3708-001340	CONNECTOR-FPC/FFC/PIC;24P,0.5mm,SMD-A,SN	
JN303	3722-001741	JACK-MINI USB;5P,-,AU30U,BLK,-	
QI01	0501-000546	TR-SMALL SIGNAL;KSA1298,PNP,200mW,SOT-23	
QI02	0504-001037	TR-DIGITAL;KRC401,NPN,100MW,4.7K/4.7K,SO	
QI03	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
RI50	2007-000781	R-CHIP;33OHM,5%,1/10W,DA,TP,2012	
RI51	2007-000094	R-CHIP;22Kohm,5%,1/16W,DA,TP,1608	
RI52	2007-000087	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1608	
RJ01	2007-000458	R-CHIP;18Kohm,5%,1/16W,DA,TP,1608	
RJ02	2007-000134	R-CHIP;33Kohm,5%,1/16W,DA,TP,1608	
RJ03	2007-000130	R-CHIP;39Kohm,5%,1/16W,DA,TP,1608	
RJ04	2007-000097	R-CHIP;47Kohm,5%,1/16W,DA,TP,1608	
RJ05	2007-000863	R-CHIP;4.3OHM,5%,1/10W,DA,TP,2012	
SWJ01	3404-001034	SWITCH-TACT;12V,50mA,160gf,4x7.4x1.8mm,S	
JN301	3722-001202	JACK-PHONE;7P,3.6PI,AG,YEL,NO	
JN302	3722-001435	JACK-PHONE;4P,3.6PI,AG,RED,-	
JN304	3722-000458	JACK-DIN;4P/2C,-,SN,BLK,-	
LED01	0601-001626	LED-IR;ROUND,5MM,140MW,4V,880NM,-	
LED02	0601-001626	LED-IR;ROUND,5MM,140MW,4V,880NM,-	
REM01	AD32-00007A	MODULE REMOCON;- ,KSM-603TM,37.9KHz,940nm	
		ASSY-LEFT BOARD	
CLF01	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CLF02	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CLF05	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CNLF01	3708-001813	CONNECTOR-FPC/FFC/PIC;45P,0.5MM,SMD-A,SN	
CNLF02	3708-001236	CONNECTOR-FPC/FFC/PIC;10P,0.5mm,SMD-A,SN	
CNLF03	3708-001112	CONNECTOR-FPC/FFC/PIC;26P,0.5mm,SMD-A,SN	

Loc. No	Part No	Desc & Spec	Remark
CNLF04	3708-001022	CONNECTOR-FPC/FFC/PIC;18P,0.5mm,ANGLE,SN	
CNLF05	3711-000541	CONNECTOR-HEADER;BOX,2P,1R,1.25MM,SMD-A,	
CNLF06	3711-000922	CONNECTOR-HEADER;BOX,4P,1R,1.25mm,SMD-A,	
RLF01	2007-000651	R-CHIP;27Kohm,1%,1/16W,DA,TP,1608	
RLF02	2007-000828	R-CHIP;39Kohm,1%,1/16W,DA,TP,1608	
RLF03	2007-001206	R-CHIP;82Kohm,1%,1/16W,DA,TP,1608	
RLF04	2007-000633	R-CHIP;270Kohm,1%,1/16W,DA,TP,1608	
RLF05	2007-000651	R-CHIP;27Kohm,1%,1/16W,DA,TP,1608	
RLF06	2007-000828	R-CHIP;39Kohm,1%,1/16W,DA,TP,1608	
RLF10	2007-000102	R-CHIP;100Kohm,5%,1/16W,DA,TP,1608	
RLF11	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF12	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF14	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF15	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF16	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF20	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF21	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF22	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF23	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF24	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF25	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF26	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF27	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF28	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF29	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF30	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF31	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF32	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF33	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF34	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF35	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF36	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF37	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF38	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF39	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RLF40	2007-000402	R-CHIP;150ohm,5%,1/16W,DA,TP,1608	
RLF41	2007-000309	R-CHIP;10ohm,5%,1/16W,DA,TP,1608	
RLF42	2007-000606	R-CHIP;240ohm,1%,1/16W,DA,TP,1608	
RLF43	2007-000402	R-CHIP;150ohm,5%,1/16W,DA,TP,1608	
RLF44	2007-000309	R-CHIP;10ohm,5%,1/16W,DA,TP,1608	
SOC01	3709-001214	CONNECTOR-CARD EDGE;10P,1.5MM,SMD-A,AUF	
SWLF01	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	

Electrical Parts List

Loc. No	Part No	Desc & Spec	Remark
SWLF02	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWLF03	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWLF04	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWLF05	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWLF06	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWLF07	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWLF08	3404-000119	SWITCH-TACT;12V,50mA,100gf,5.2x5.2x0.8mm	
SWLF10	3409-001036	SWITCH-DETECTOR;3~5V,50uA~10mA,2,30gf,LE	
ASSY-LCD BOARD(2.5)			
CL101	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL102	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL104	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL107	2404-000212	C-TA,CHIP;3.3uF,20%,25V,-,TP,3528,-	
CL110	2404-000212	C-TA,CHIP;3.3uF,20%,25V,-,TP,3528,-	
CL111	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL137	2404-001131	C-TA,CHIP;22UF,10%,10V,GP,TP,3528	
CL138	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL148	2301-001108	C-FILM,CHIP;22nF,5%,50V,TP,3.2x2.5x1.4,3	
CL150	2203-005040	C-CERAMIC,CHIP;0.012nF,5%,3kV,NP0,TP,452	
CL157	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL158	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL160	2404-001131	C-TA,CHIP;22UF,10%,10V,GP,TP,3528	
CL161	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL208	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL209	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL210	2404-000232	C-TA,CHIP;4.7uF,20%,10V,-,TP,3216,-	
CL211	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL231	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL232	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL302	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL303	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL316	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL317	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL318	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL319	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL331	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-	
CL332	2404-000335	C-TA,CHIP;3.3uF,20%,16V,GP,TP,3216	
CL344	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CL401	2404-001269	C-TA,CHIP;10UF,20%,20V,-,TP,3528	
CL412	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
CL415	2203-000140	C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,TP,1608	
CL416	2404-000167	C-TA,CHIP;2.2uF,20%,16V,-,TP,3216,-	
CL417	2404-000167	C-TA,CHIP;2.2uF,20%,16V,-,TP,3216,-	
CL418	2404-000167	C-TA,CHIP;2.2uF,20%,16V,-,TP,3216,-	

Loc. No	Part No	Desc & Spec	Remark
CL419	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CL421	2404-000167	C-TA,CHIP;2.2uF,20%,16V,-,TP,3216,-	
CL422	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CNL301	3708-001829	CONNECTOR-FPC/FFC/PIC;28P,0.5mm,SMD-A,TI	
CNL302	3708-001749	CONNECTOR-FPC/FFC/PIC;26P,0.5MM,SMD-A,SN	
DL303	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323	
ICL01	1003-001474	IC-LCD DRIVER;AN2545NFHQ,LQFP,48P,49MIL,	
ICL202	1103-001133	IC-EEPROM;24C020,256x8BIT,SOP,8P,150MIL,	
ICL301	1201-001086	IC-OP AMP;75S558,SOP,5P,62.9MIL,DUAL,100	
LED01	0601-001097	LED;CHIP,GRN,1.6x1.4mm,560nm	
LL102	2703-000407	INDUCTOR-SMD;330uH,10%,3.2x2.5x2.2mm	
LL104	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
LL105	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
LL109	2703-002271	INDUCTOR-SMD;100uH,-,5.5X5.5X2MM	
LL115	2703-000398	INDUCTOR-SMD;10uH,10%,3.2x2.5x2.2mm	
LL201	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
LL304	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
LL307	2703-000407	INDUCTOR-SMD;330uH,10%,3.2x2.5x2.2mm	
LL401	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
QL103	0504-001037	TR-DIGITAL;KRC401,NPN,100MW,4.7K/4.7K,SO	
QL108	0502-001221	TR-POWER;CPH3209,NPN,900MW,CPH3,TP,200-	
QL109	0502-001221	TR-POWER;CPH3209,NPN,900MW,CPH3,TP,200-	
QL110	0501-002311	TR-SMALL SIGNAL;HN2A01FU,PNP,200mW,UMD6,	
QL306	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
RL136	2007-000516	R-CHIP;2.7Kohm,1%,1/16W,DA,TP,1608	
RL137	2007-000516	R-CHIP;2.7Kohm,1%,1/16W,DA,TP,1608	
RL140	2007-000124	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1608	
RL141	2007-000116	R-CHIP;120ohm,5%,1/16W,DA,TP,1608	
RL142	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
RL201	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RL202	2007-000097	R-CHIP;47Kohm,5%,1/16W,DA,TP,1608	
RL203	2007-000097	R-CHIP;47Kohm,5%,1/16W,DA,TP,1608	
RL204	2007-000092	R-CHIP;15Kohm,5%,1/16W,DA,TP,1608	
RL205	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RL301	2007-000458	R-CHIP;18Kohm,5%,1/16W,DA,TP,1608	
RL302	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
RL303	2007-000086	R-CHIP;5.6Kohm,5%,1/16W,DA,TP,1608	
RL304	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
RL305	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
RL306	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
RL307	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
RL308	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
RL309	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
RL310	2007-001179	R-CHIP;8.2Kohm,5%,1/16W,DA,TP,1608	
RL311	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608	

Loc. No	Part No	Desc & Spec	Remark	Loc. No	Part No	Desc & Spec	Remark
RL312	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608		QE02	0501-002310	TR-SMALL SIGNAL;HN1B04FU,PNP/NPN,200mW,U	
RL313	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608		RE01	2007-001125	R-CHIP;68Kohm,1%,1/16W,DA,TP,1608	
RL314	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608		RE02	2007-001068	R-CHIP;6.8Kohm,1%,1/16W,DA,TP,1608	
RL315	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608		RE05	2007-000772	R-CHIP;33Kohm,1%,1/16W,DA,TP,1608	
RL316	2007-000092	R-CHIP;15Kohm,5%,1/16W,DA,TP,1608		RE06	2007-000828	R-CHIP;39Kohm,1%,1/16W,DA,TP,1608	
RL317	2007-000091	R-CHIP;12Kohm,5%,1/16W,DA,TP,1608		RE07	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
RL319	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608		RE16	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RL320	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608		RE17	2007-000082	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1608	
RL321	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608		RE19	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
RL322	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608		RE21	2007-000091	R-CHIP;12Kohm,5%,1/16W,DA,TP,1608	
RL323	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608		RE22	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
RL428	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608		RE24	2007-000084	R-CHIP;4.7Kohm,5%,1/16W,DA,TP,1608	
RL430	2007-000082	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1608		RE25	2007-000097	R-CHIP;47Kohm,5%,1/16W,DA,TP,1608	
RL431	2007-000082	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1608		RE26	2007-000125	R-CHIP;3.9Kohm,5%,1/16W,DA,TP,1608	
RL432	2007-000082	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1608		RE29	2007-000091	R-CHIP;12Kohm,5%,1/16W,DA,TP,1608	
TL103	2601-001090	TRANS-SMD,PULSE;100MH,760,-,10.1X10.1X2.		RE30	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608	
		ASSY-EVF BOARD(PAL)		RE31	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608	
CE01	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		VRE02	2104-001007	VR-SMD;10Kohm,25%,0.15W,TOP	
CE02	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,				ASSY-TOP BOARD	
CE03	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,		CNT01	3711-000922	CONNECTOR-HEADER;BOX,4P,1R,1.25mm,SMD-A,	
CE04	2203-000440	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1608,-		RT01	2007-000077	R-CHIP;470ohm,5%,1/16W,DA,TP,1608	
CE05	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-		RT02	2007-000309	R-CHIP;10ohm,5%,1/16W,DA,TP,1608	
CE07	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		SWT01	2102-001019	VR-SLIDE;10Kohm,30%,1/20W,SLIDE	
CE08	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,		SWT02	3404-001130	SWITCH-TACT;12VDC,50mA,160gf,6.1x3.7x2.5	
CE10	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,				ASSY-REAR BOARD	
CE11	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,		CNR01	3710-001106	CONNECTOR-SOCKET;40P,2R,0.8mm,SMD-S,SN	
CE12	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,		CNR02	3710-001478	CONNECTOR-SOCKET;18P,2R,1MM,SMD-S,SN	
CE13	2203-000975	C-CERAMIC,CHIP;47nF,10%,25V,X7R,TP,1608,		CNR03	3711-000862	CONNECTOR-HEADER;BOX,3P,1R,1.25mm,SMD-A,	
CE14	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		CR10	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CE15	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		CR20	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
CE16	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		FER01	0505-001726	FET-SILICON;ECH8603,P,-20V,-4A,37MOHM,1.	
CE17	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,		ICR01	AC14-12012T	IC-OP AMP;TA75S01F(TE85L),QFP,-	
CE18	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,		LDR01	0601-001006	LED;CHIP,Y-GRN,1.3x2.9mm,570nm	
CE19	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,		QR01	0504-001102	TR-DIGITAL;EMD3,NPN/PNP,150MW,10K/10K,EM	
CE20	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		QR02	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
CNE01	3708-001680	CONNECTOR-FPC/FFC/PIC;6P,0.5MM,SMD-A,SN		QR03	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,	
CNE02	3708-001076	CONNECTOR-FPC/FFC/PIC;20P,0.5MM,SMD-S,SN		QR04	0504-001032	TR-DIGITAL;KRC404,NPN,100MW,47K/47K,SOT-	
DE02	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323		RR01	2007-000102	R-CHIP;100Kohm,5%,1/16W,DA,TP,1608	
DE03	0404-000110	DIODE-SCHOTTKY;RB411D,20V,500mA,SOT-23,T		RR02	2007-000109	R-CHIP;1Mohm,5%,1/16W,DA,TP,1608	
DE04	0403-001421	DIODE-ZENER;KDZ2.7V,2.5-2.9V,150MW,SOD-3		RR03	2007-008596	R-CHIP;0.1OHM,1%,1/2W,TP,3216	
ICE01	1003-001373	IC-LCD DRIVER;MCVVQ111FB,LQFP,48P,276MIL		RR04	2007-000043	R-CHIP;1Kohm,1%,1/16W,DA,TP,1608	
LE01	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm		RR05	2007-000067	R-CHIP;15Kohm,1%,1/16W,DA,TP,1608	
LE03	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm		RR06	2007-000043	R-CHIP;1Kohm,1%,1/16W,DA,TP,1608	
LED01	0601-001586	LED;CHIP,WHT,-,470NM		RR07	2007-000651	R-CHIP;27Kohm,1%,1/16W,DA,TP,1608	

Electrical Parts List

Loc. No	Part No	Desc & Spec	Remark
RR08	2007-000102	R-CHIP;100Kohm,5%,1/16W,DA,TP,1608	
RR09	2007-000072	R-CHIP;470ohm,5%,1/16W,DA,TP,1608	
RR10	2007-000923	R-CHIP;470Kohm,1%,1/16W,DA,TP,1608	
RR11	2007-000563	R-CHIP;220Kohm,1%,1/16W,DA,TP,1608	
RR20	2007-000043	R-CHIP;1Kohm,1%,1/16W,DA,TP,1608	
RR21	2007-000102	R-CHIP;100Kohm,5%,1/16W,DA,TP,1608	
RR30	2007-000077	R-CHIP;470ohm,5%,1/16W,DA,TP,1608	
RR31	2007-000077	R-CHIP;470ohm,5%,1/16W,DA,TP,1608	
RR32	2007-000076	R-CHIP;330ohm,5%,1/16W,DA,TP,1608	
RR33	2007-000076	R-CHIP;330ohm,5%,1/16W,DA,TP,1608	
RR34	2007-000076	R-CHIP;330ohm,5%,1/16W,DA,TP,1608	
RR35	2007-000076	R-CHIP;330ohm,5%,1/16W,DA,TP,1608	
RR36	2007-000077	R-CHIP;470ohm,5%,1/16W,DA,TP,1608	
SWR01	3409-001036	SWITCH-DETECTOR;3-5V,50uA-10mA,2,30gf,LE	
SWR03	3409-001035	SWITCH-DETECTOR;3-5V,50uA-10mA,2,30gf,LE	
SWR05	3404-001034	SWITCH-TACT;12V,50mA,160gf,4x7.4x1.8mm,S	
SWR06	3404-001034	SWITCH-TACT;12V,50mA,160gf,4x7.4x1.8mm,S	
SWR08	3404-001130	SWITCH-TACT;12VDC,50mA,160gf,6.1x3.7x2.5	
VRR01	3406-001005	SWITCH-ROTARY;5V,0.1mA,DPST,-	
BTR01	AD65-00019A	TERMINAL-PLATE BATTERY B;-;C5210R-H, T0.	
BTR02	AD65-00019A	TERMINAL-PLATE BATTERY B;-;C5210R-H, T0.	
JR01	AD97-04964A	ASSY-DC JACK;3P,ALPHA-PJ,DDAE-0174	
LBTR01	AD63-00074A	TERMINAL—LI BATT(+);M1-PJ,C5210R-H,T0.2	
LBTR02	AD63-00075A	TERMINAL—LI BATT(-);M1-PJ,C5210R-H,T0.2	
SWR07	3403-001084	SWITCH-PUSH;DC5V,1 MA,-,ON-OFF,-	
ASSY-MAIN BOARD			
B301	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
B302	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
B303	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
B401	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
B402	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
B403	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
B404	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
BA01	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BA02	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BA03	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
BA04	2901-001022	FILTER-EMI SMD;10V,200mA,-,-,1.6x0.8x0.8	
C111	2203-005344	C-CERAMIC,CHIP;22nF,10%,25V,X7R,TP,1005,	
C112	2203-005344	C-CERAMIC,CHIP;22nF,10%,25V,X7R,TP,1005,	
C113	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C114	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C115	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C116	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C117	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C118	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	

Loc. No	Part No	Desc & Spec	Remark
C119	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	
C120	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C121	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C122	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C123	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C124	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C201	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C203	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C206	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C208	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C209	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C210	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C211	2203-005627	C-CERAMIC,CHIP;470NF,10%,10V,X5R,TP,1608	
C212	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C213	2203-006006	C-CERAMIC,CHIP;0.005NF;±0.25PF,50V,C0G,	
C214	2203-006006	C-CERAMIC,CHIP;0.005NF;±0.25PF,50V,C0G,	
C215	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C216	2203-000812	C-CERAMIC,CHIP;0.033NF,5%,50V,C0G,TP,100	
C217	2203-000278	C-CERAMIC,CHIP;0.01NF,0.5PF,50V,C0G,TP,1	
C218	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C219	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C220	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C221	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C222	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C223	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C224	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C225	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C227	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C228	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C229	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C230	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C231	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C232	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C233	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C234	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C235	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C310	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
C311	2404-001254	C-TA,CHIP;220UF,20%,2.5V,-,TP,3.5(L)X2.8	
C312	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C313	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
C314	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C315	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C316	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
C317	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C318	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	

Loc. No	Part No	Desc & Spec	Remark	Loc. No	Part No	Desc & Spec	Remark
C319	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,		C611	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-	
C320	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,		C612	2404-000284	C-TA,CHIP;10uF,20%,16V,-,TP,3528,-	
C321	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		C613	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C322	2404-001254	C-TA,CHIP;220UF,20%,2.5V,-,TP,3.5(L)X2.8		C616	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C323	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216		C617	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C324	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C618	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	
C325	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		C619	2203-005481	C-CERAMIC,CHIP;47nF,10%,10V,X7R,TP,1005,	
C327	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		C620	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C328	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C621	2203-005923	C-CERAMIC,CHIP;1000NF,20%,6.3V,X5R,TP,16	
C401	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C622	2203-000234	C-CERAMIC,CHIP;0.1nF,5%,50V,C0G,TP,1005	
C402	2404-001039	C-TA,CHIP;47uF,20%,6.3V,GP,TP,3528,-		C623	2203-000234	C-CERAMIC,CHIP;0.1nF,5%,50V,C0G,TP,1005	
C404	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C624	2203-000234	C-CERAMIC,CHIP;0.1nF,5%,50V,C0G,TP,1005	
C406	2203-005481	C-CERAMIC,CHIP;47nF,10%,10V,X7R,TP,1005,		C625	2203-006047	C-CERAMIC,CHIP;33nF,10%,16V,X7R,TP,1005	
C407	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C626	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C408	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C627	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C409	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C628	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C410	2203-005481	C-CERAMIC,CHIP;47nF,10%,10V,X7R,TP,1005,		C629	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C411	2203-005481	C-CERAMIC,CHIP;47nF,10%,10V,X7R,TP,1005,		C630	2203-000489	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1005	
C412	2203-005481	C-CERAMIC,CHIP;47nF,10%,10V,X7R,TP,1005,		C631	2203-000489	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1005	
C413	2203-005481	C-CERAMIC,CHIP;47nF,10%,10V,X7R,TP,1005,		C701	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C414	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C702	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C501	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-		C703	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C502	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C704	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C503	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-		C705	2203-000714	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,1005	
C504	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C706	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C505	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		C707	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C506	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2		C708	2203-002982	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,1005	
C507	2203-000585	C-CERAMIC,CHIP;220pF,10%,50V,X7R,TP,1005		C709	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C508	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		C710	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C509	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C711	2203-002982	C-CERAMIC,CHIP;6.8nF,10%,50V,X7R,TP,1005	
C510	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-		C712	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C511	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C713	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C512	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C714	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C513	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C715	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C514	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C716	2203-006006	C-CERAMIC,CHIP;0.005nF,±0.25PF,50V,C0G,	
C517	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-		C717	2203-000278	C-CERAMIC,CHIP;0.01nF,0.5PF,50V,C0G,TP,1	
C601	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C718	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C602	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C719	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C603	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C720	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C605	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-		C721	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C606	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C722	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C607	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C723	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C608	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C724	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C609	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C801	2404-000275	C-TA,CHIP;100UF,10%,10V,GP,TP,7343	
C610	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		C802	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	

Electrical Parts List

Loc. No	Part No	Desc & Spec	Remark
C803	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C804	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C805	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C806	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C807	2203-005496	C-CERAMIC,CHIP;220nF,+80-20%,10V,Y5V,TP,	
C808	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-	
C809	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C810	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C812	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C813	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C814	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
C815	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C816	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C817	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C818	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C819	2404-000167	C-TA,CHIP;2.2uF,20%,16V,-,TP,3216,-	
C820	2404-000167	C-TA,CHIP;2.2uF,20%,16V,-,TP,3216,-	
C821	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C822	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C823	2404-000232	C-TA,CHIP;4.7uF,20%,10V,-,TP,3216,-	
C824	2404-000157	C-TA,CHIP;1uF,20%,35V,-,TP,3216,-	
C825	2404-000157	C-TA,CHIP;1uF,20%,35V,-,TP,3216,-	
C826	2404-000157	C-TA,CHIP;1uF,20%,35V,-,TP,3216,-	
C827	2404-000157	C-TA,CHIP;1uF,20%,35V,-,TP,3216,-	
C828	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	
C829	2203-002487	C-CERAMIC,CHIP;4.7nF,10%,25V,X7R,TP,1005	
C831	2203-005496	C-CERAMIC,CHIP;220nF,+80-20%,10V,Y5V,TP,	
C832	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C833	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C834	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C835	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C836	2203-005496	C-CERAMIC,CHIP;220nF,+80-20%,10V,Y5V,TP,	
C837	2203-005496	C-CERAMIC,CHIP;220nF,+80-20%,10V,Y5V,TP,	
C838	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C901	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C902	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C903	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C904	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C905	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C906	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C907	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C908	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C909	2203-000234	C-CERAMIC,CHIP;0.1NF,5%,50V,C0G,TP,1005	
C910	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C911	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	

Loc. No	Part No	Desc & Spec	Remark
C912	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C913	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C914	2203-000438	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,1005,-	
C915	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,	
C919	2203-006078	C-CERAMIC,CHIP;1000NF,20%,16V,X5R,TP,32	
C920	2404-000335	C-TA,CHIP;3.3uF,20%,16V,GP,TP,3216	
C921	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C923	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C924	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C925	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C926	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C927	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C928	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C929	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C930	2203-005922	C-CERAMIC,CHIP;4700NF,20%,6.3V,X5R,TP,20	
C931	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C933	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C934	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C936	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C937	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C938	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C940	2203-005921	C-CERAMIC,CHIP;10000NF,20%,4V,X5R,TP,201	
C941	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
C942	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C946	2203-005921	C-CERAMIC,CHIP;10000NF,20%,4V,X5R,TP,201	
C947	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
C949	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C950	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C951	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C952	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C954	2203-005922	C-CERAMIC,CHIP;4700NF,20%,6.3V,X5R,TP,20	
C955	2404-001251	C-TA,CHIP;22UF,20%,7V,-,TP,3216	
C956	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C957	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C958	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C959	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C961	2203-005922	C-CERAMIC,CHIP;4700NF,20%,6.3V,X5R,TP,20	
C962	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
C964	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C965	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C966	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C969	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C971	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C976	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	
C977	2203-005686	C-CERAMIC,CHIP;2200nF,20%,10V,X5R,TP,201	

Loc. No	Part No	Desc & Spec	Remark	Loc. No	Part No	Desc & Spec	Remark
C986	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP		CN801	3711-000456	CONNECTOR-HEADER;BOX,4P,1R,1.25MM,SMD-S,	
C988	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP		CN901	3710-000554	CONNECTOR-SOCKET;40P,2R,0.8mm,SMD-A,SN	
C989	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP		CN902	3711-000541	CONNECTOR-HEADER;BOX,2P,1R,1.25MM,SMD-A,	
C990	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP		CNA01	3708-001662	CONNECTOR-FPC/FFC/PIC;10P,0.5MM,SMD-A-ZI	
C992	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP		CNP01	3710-000554	CONNECTOR-SOCKET;40P,2R,0.8mm,SMD-A,SN	
C994	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP		CP01	2404-000157	C-TA,CHIP;1uF,20%,35V,-,TP,3216,-	
C995	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP		CP02	2404-000212	C-TA,CHIP;3.3uF,20%,25V,-,TP,3528,-	
C996	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP		CP03	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
C997	2404-001251	C-TA,CHIP;22uF,20%,7V,-,TP,3216		CP04	2404-000212	C-TA,CHIP;3.3uF,20%,25V,-,TP,3528,-	
CA01	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP05	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA02	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP06	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CA03	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP07	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA04	2404-001250	C-TA,CHIP;47uF,20%,4V,-,TP,3216		CP08	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CA05	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP09	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA06	2404-001250	C-TA,CHIP;47uF,20%,4V,-,TP,3216		CP10	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CA07	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP11	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CA08	2404-001251	C-TA,CHIP;22uF,20%,7V,-,TP,3216		CP12	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CA09	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP13	2203-000815	C-CERAMIC,CHIP;0.033NF,5%,50V,C0G,TP,160	
CA12	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP14	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
CA13	2203-000812	C-CERAMIC,CHIP;0.033NF,5%,50V,C0G,TP,100		CP15	2404-001131	C-TA,CHIP;22uF,10%,10V,GP,TP,3528	
CA14	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP16	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA15	2203-000254	C-CERAMIC,CHIP;10nF,10%,16V,X7R,TP,1005,		CP17	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA16	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP18	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA17	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP19	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA18	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP21	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA19	2203-002443	C-CERAMIC,CHIP;0.33nF,10%,50V,X7R,TP,100		CP22	2203-005065	C-CERAMIC,CHIP;1000nF,+80-20%,10V,Y5V,TP	
CA20	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP23	2404-001251	C-TA,CHIP;22uF,20%,7V,-,TP,3216	
CA21	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP24	2203-001405	C-CERAMIC,CHIP;22nF,+80-20%,25V,Y5V,TP,1	
CA22	2404-001251	C-TA,CHIP;22uF,20%,7V,-,TP,3216		CP25	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA23	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP26	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA24	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP27	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA30	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP28	2203-006047	C-CERAMIC,CHIP;33NF,10%,16V,X7R,TP,1005	
CA31	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP30	2203-006047	C-CERAMIC,CHIP;33NF,10%,16V,X7R,TP,1005	
CA32	2404-001251	C-TA,CHIP;22uF,20%,7V,-,TP,3216		CP33	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA33	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP34	2404-001020	C-TA,CHIP;10uF,20%,10V,GP,TP,3216,3.2	
CA34	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP35	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CA35	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005		CP36	2404-001251	C-TA,CHIP;22uF,20%,7V,-,TP,3216	
CN101	3708-001235	CONNECTOR-FPC/FFC/PIC;10P,0.5mm,SMD-A,SN		CP37	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CN301	3708-001813	CONNECTOR-FPC/FFC/PIC;45P,0.5MM,SMD-A,SN		CP38	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CN401	3708-001340	CONNECTOR-FPC/FFC/PIC;24P,0.5mm,SMD-A,SN		CP39	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CN601	3708-001022	CONNECTOR-FPC/FFC/PIC;18P,0.5mm,ANGLE,SN		CP40	2203-000359	C-CERAMIC,CHIP;0.15NF,5%,50V,C0G,TP,1005	
CN602	3708-001598	CONNECTOR-FPC/FFC/PIC;19P,0.5MM,SMD-A-T,		CP41	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CN603	3708-001235	CONNECTOR-FPC/FFC/PIC;10P,0.5mm,SMD-A,SN		CP42	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CN604	3708-001134	CONNECTOR-FPC/FFC/PIC;11P,0.5mm,SMD-A,SN		CP43	2203-006048	C-CERAMIC,CHIP;100NF,10%,10V,X7R,TP,1005	
CN701	3710-001215	CONNECTOR-SOCKET;10P,2R,0.8mm,SMD-S,SN		D701	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323	

Electrical Parts List

Loc. No	Part No	Desc & Spec	Remark
D702	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323	
D902	0401-001059	DIODE-SWITCHING;1SS362,80V,80mA,SC-75,TP	
D905	0401-001059	DIODE-SWITCHING;1SS362,80V,80mA,SC-75,TP	
D906	0401-001059	DIODE-SWITCHING;1SS362,80V,80mA,SC-75,TP	
DP01	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
DP02	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323	
F901	3601-001331	FUSE-SURFACE MOUNT;32V,1.25A,SLOW BLOW,,	
F902	3601-001331	FUSE-SURFACE MOUNT;32V,1.25A,SLOW BLOW,,	
F903	3601-001331	FUSE-SURFACE MOUNT;32V,1.25A,SLOW BLOW,,	
IC101	AD13-00019A	IC ASIC-LDV5000,PRML;LDV5000,DELTA-PJ,64	
IC102	1201-001511	IC-PREAMP;370250,VSOP,14P,-,DUAL,500V/V,	
IC201	AD13-00021A	IC ASIC;- ,DV 1 CHIP(REV0.1),320,+1.8V,	
IC202	1105-001035	IC-DRAM;416S1120,1Mx16Bit,TSOP,50P,400	
IC301	1201-001322	IC-VIDEO AMP;NJM2538V,SOP,20P,175MIL,-,-	
IC303	1204-001946	IC-OSD PROCESSOR;UPD6467GR,SSOP,20P,173M	
IC401	1204-001573	IC-VIDEO PROCESS;SAA7113H,QFP,44P,393MIL	
IC501	1205-001988	IC-DATA COMM./GEN.;TSB41AB1-PAP,QFP,64P,	
IC601	1003-001241	IC-MOTOR DRIVER;LB11990W,SQPF,64P,-,-,1A	
IC602	AD14-10001C	IC-AMP;NJM2904V,SSOP,OP-AMP	
IC603	AC14-12012T	IC-OP AMP;TA75S01F(TE85L),QFP,-	
IC701	AD09-00187A	IC MICOM;UPD70F3166Y,DELTA,257,3,2/2.5V	
IC702	0909-001013	IC-REAL TIME CLOCK;5C372,8BIT,SOP,8P,-,3	
IC703	1203-002807	IC-VOLTAGE REGULATOR;XC6413FY01MR,SOT-25	
IC705	1103-001218	IC-EEPROM;524AB0X91,4Kx8Bit,SOP,8P,156MI	
IC706	1203-002184	IC-VOLTAGE REGULATOR;71725,SOT-23-5,5P,6	
IC708	0801-002800	IC-CMOS LOGIC;NC7SV08,AND GATE,SC70,5P,4	
IC801	1205-002247	IC-CODEC;AK4564VQ,LQFP,48P,7X7MM,PLASTI	
IC802	AD09-00122A	IC-MOC-VOICE;ML2201,-,8PIN,2V-5.5V,4.096	
IC803	0801-002417	IC-CMOS LOGIC;7SHU04,INVERTER,SSOP,5P,49	
IC901	1203-002323	IC-PWM CONTROLLER;MB3881,LQFP,64P,-,PLAS	
ICA01	AD13-00018A	IC HYBRID-DSP5;SSC7375X,DELTA-PJ,232,0 T	
ICA02	1105-001424	IC-DRAM;K4S643232E,4X512KX32BIT,TSOP(I	
ICA03	1107-001365	IC-FLASH MEMORY;K8D1616UBA,1MX16BIT,TBGA	
ICA04	0801-002349	IC-CMOS LOGIC;7S66,BILATERAL SWITCH,SOP,	
ICP01	1003-001065	IC-CLOCK DRIVER;KS7221D,SOP,20P,225MIL,Q	
ICP02	1002-001270	IC-A/D CONVERTER;TLV990BPFB,10,TQFP,48P,	
ICP03	1003-001530	IC-MOTOR DRIVER;UPD16877MA-6A5,TSSOP,24P	
ICP05	1201-001667	IC-OP AMP;12902,SSOP,TP,14P,173MIL,QUAD,	
ICP06	0801-002417	IC-CMOS LOGIC;7SHU04,INVERTER,SSOP,5P,49	
ICP07	0801-002417	IC-CMOS LOGIC;7SHU04,INVERTER,SSOP,5P,49	
ICP08	AC14-12012T	IC-OP AMP;TA75S01F(TE85L),QFP,-	
J501	3722-001967	JACK-IEEE1394;4P,-,AU,-,-	
L112	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
L113	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
L203	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	

Loc. No	Part No	Desc & Spec	Remark
L204	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
L205	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
L206	2007-000643	R-CHIP;270ohm,5%,1/16W,DA,TP,1608	
L303	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L304	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L305	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L401	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
L501	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
L502	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM	
L601	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L701	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L702	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L801	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L802	2703-002175	INDUCTOR-SMD;100UH,10%,2.5X2.0X1.8MM	
L803	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L804	2703-000396	INDUCTOR-SMD;10uH,10%,2.5x2x1.8mm	
L805	2703-001867	INDUCTOR-SMD;1UH,20%,2.5X2X1.8MM	
L806	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L807	2703-001867	INDUCTOR-SMD;1UH,20%,2.5X2X1.8MM	
L808	2703-001867	INDUCTOR-SMD;1UH,20%,2.5X2X1.8MM	
L902	2703-000408	INDUCTOR-SMD;3.3uH,20%,3.2x2.5x2.2mm	
L903	2703-002570	INDUCTOR-SMD;33UH,20%,4.0X4.0X1.9MM	
L904	2703-000375	INDUCTOR-SMD;82uH,5%,2.5x2x1.8mm	
L905	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L906	2703-001865	INDUCTOR-SMD;33UH,20%,6X6X2.8MM	
L907	2703-001910	INDUCTOR-SMD;68uH,20%,6x6x2.8mm	
L908	2703-001910	INDUCTOR-SMD;68uH,20%,6x6x2.8mm	
L909	2703-000408	INDUCTOR-SMD;3.3uH,20%,3.2x2.5x2.2mm	
L910	2703-001865	INDUCTOR-SMD;33UH,20%,6X6X2.8MM	
L913	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L914	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L915	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
L917	2703-001865	INDUCTOR-SMD;33UH,20%,6X6X2.8MM	
L918	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012	
L919	2703-001867	INDUCTOR-SMD;1UH,20%,2.5X2X1.8MM	
L922	2703-001865	INDUCTOR-SMD;33UH,20%,6X6X2.8MM	
L924	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L925	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L926	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	
L928	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L929	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L930	2703-001865	INDUCTOR-SMD;33UH,20%,6X6X2.8MM	
L934	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L940	2703-000397	INDUCTOR-SMD;33uH,10%,2.5x2x1.8mm	
L941	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM	

Loc. No	Part No	Desc & Spec	Remark	Loc. No	Part No	Desc & Spec	Remark
L950	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		Q941	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
LA01	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM		Q942	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
LA02	2703-001883	INDUCTOR-SMD;22uH,10%,2.5x2x1.8mm		QP01	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
LA03	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM		QP02	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
LA05	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM		QP03	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
LA06	2703-001863	INDUCTOR-SMD;6.8UH,20%,2.5X2X1.8MM		QP05	0504-001025	TR-DIGITAL;DTC143EE,NPN,150MW,4.7K,EMT3,	
LP01	2703-001883	INDUCTOR-SMD;22uH,10%,2.5x2x1.8mm		QP06	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP	
LP02	2703-001883	INDUCTOR-SMD;22uH,10%,2.5x2x1.8mm		QP07	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,	
LP03	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM		R111	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
LP04	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM		R112	2007-007318	R-CHIP;1Kohm,1%,1/16W,DA,TP,1005	
LP05	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM		R113	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
LP06	2703-002174	INDUCTOR-SMD;10UH,10%,2.5X2.0X1.8MM		R115	2007-000151	R-CHIP;15Kohm,5%,1/16W,DA,TP,1005	
MD01	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608		R116	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
MD04	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608		R117	2007-007318	R-CHIP;1Kohm,1%,1/16W,DA,TP,1005	
Q111	0501-002128	TR-SMALL SIGNAL;KTC4075,NPN,100mW,USM,TP		R118	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
Q112	0501-002128	TR-SMALL SIGNAL;KTC4075,NPN,100mW,USM,TP		R119	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
Q301	0504-001032	TR-DIGITAL;KRC404,NPN,100MW,47K/47K,SOT-		R120	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
Q302	0504-001032	TR-DIGITAL;KRC404,NPN,100MW,47K/47K,SOT-		R121	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
Q401	0501-002374	TR-SMALL SIGNAL;EMZ1,NPN/PNP,150MW,EMT6,		R122	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
Q402	0501-002374	TR-SMALL SIGNAL;EMZ1,NPN/PNP,150MW,EMT6,		R123	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
Q403	0501-002374	TR-SMALL SIGNAL;EMZ1,NPN/PNP,150MW,EMT6,		R124	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
Q404	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,		R125	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
Q601	0504-000167	TR-DIGITAL;RN1102,NPN,100MW,10K/10K,SSM,		R126	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
Q604	0504-000167	TR-DIGITAL;RN1102,NPN,100MW,10K/10K,SSM,		R127	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
Q605	0501-000172	TR-SMALL SIGNAL;2SB1121,PNP,500mW,PCP,TP		R128	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
Q701	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,		R129	2007-001313	R-CHIP;330ohm,5%,1/16W,DA,TP,1005	
Q901	0505-001646	FET-SILICON;MCH5803,N,30V,1.4A,370MOHM,0		R130	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,DA,TP,1005	
Q906	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM		R131	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
Q907	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM		R132	2007-000155	R-CHIP;27Kohm,5%,1/16W,DA,TP,1005	
Q908	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM		R133	2007-000159	R-CHIP;56Kohm,5%,1/16W,DA,TP,1005	
Q909	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM		R134	2007-000139	R-CHIP;220ohm,5%,1/16W,DA,TP,1005	
Q910	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM		R135	2007-007095	R-CHIP;390OHM,5%,1/16W,DA,TP,1005	
Q912	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM		R136	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
Q913	0506-001066	TR-ARRAY;UMF5,NPN/PNP,2,150MW,SC-88,TP,		R137	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,DA,TP,1005	
Q914	0506-001066	TR-ARRAY;UMF5,NPN/PNP,2,150MW,SC-88,TP,		R138	2007-007095	R-CHIP;390OHM,5%,1/16W,DA,TP,1005	
Q915	0505-001725	FET-SILICON;MCH5818,P,-12V,-1.5A,200MOHM		R139	2007-007095	R-CHIP;390OHM,5%,1/16W,DA,TP,1005	
Q917	0506-001066	TR-ARRAY;UMF5,NPN/PNP,2,150MW,SC-88,TP,		R201	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
Q918	0506-001066	TR-ARRAY;UMF5,NPN/PNP,2,150MW,SC-88,TP,		R202	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
Q920	0504-000168	TR-DIGITAL;RN1104,NPN,100MW,47K/47K,SSM,		R205	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
Q925	0504-001101	TR-DIGITAL;EMD2,NPN/PNP,150MW,22K/22K,EM		R206	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
Q930	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,		R208	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
Q931	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,		R211	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
Q932	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP		R212	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
Q933	0501-000225	TR-SMALL SIGNAL;2SC4617,NPN,200mW,EM3,TP		R213	2007-000142	R-CHIP;2.7Kohm,5%,1/16W,DA,TP,1005	
Q940	0501-000552	TR-SMALL SIGNAL;2SA1774-Q,PNP,150mW,EM3,		R214	2007-001333	R-CHIP;18Kohm,5%,1/16W,DA,TP,1005	

Electrical Parts List

Loc. No	Part No	Desc & Spec	Remark
R215	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R216	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R217	2007-000142	R-CHIP;2.7Kohm,5%,1/16W,DA,TP,1005	
R218	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
R219	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R220	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R222	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R225	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R226	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R227	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
R228	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R229	2007-000142	R-CHIP;2.7Kohm,5%,1/16W,DA,TP,1005	
R230	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R235	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R236	2007-000173	R-CHIP;22ohm,5%,1/16W,DA,TP,1005	
R238	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R239	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R240	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R241	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R242	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R244	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R245	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R262	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R263	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R264	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R265	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R269	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R278	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R281	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R282	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R291	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R292	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R293	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R294	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R301	2007-008015	R-CHIP;75ohm,1%,1/16W,DA,TP,1005	
R302	2007-008015	R-CHIP;75ohm,1%,1/16W,DA,TP,1005	
R308	2007-002970	R-CHIP;56OHM,5%,1/16W,DA,TP,1005	
R309	2007-001305	R-CHIP;120ohm,5%,1/16W,DA,TP,1005	
R310	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R311	2007-003029	R-CHIP;820KOHM,5%,1/16W,DA,TP,1005	
R312	2007-001305	R-CHIP;120ohm,5%,1/16W,DA,TP,1005	
R313	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R314	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R315	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R316	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	

Loc. No	Part No	Desc & Spec	Remark
R317	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R318	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R403	2007-003006	R-CHIP;16OHM,5%,1/16W,DA,TP,1005	
R404	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R405	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R406	2007-003006	R-CHIP;16OHM,5%,1/16W,DA,TP,1005	
R407	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R408	2007-003006	R-CHIP;16OHM,5%,1/16W,DA,TP,1005	
R409	2007-001306	R-CHIP;150ohm,5%,1/16W,DA,TP,1005	
R410	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R411	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R412	2007-000932	R-CHIP;470ohm,5%,1/16W,DA,TP,1005	
R413	2007-000932	R-CHIP;470ohm,5%,1/16W,DA,TP,1005	
R414	2007-000932	R-CHIP;470ohm,5%,1/16W,DA,TP,1005	
R415	2007-000160	R-CHIP;68Kohm,5%,1/16W,DA,TP,1005	
R416	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R417	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
R524	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R526	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R527	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R529	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R531	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R532	2007-008301	R-CHIP;56.2OHM,1%,1/16W,DA,TP,1005	
R533	2007-008301	R-CHIP;56.2OHM,1%,1/16W,DA,TP,1005	
R534	2007-008300	R-CHIP;5.11KOHM,1%,1/16W,DA,TP,1005	
R535	2007-008301	R-CHIP;56.2OHM,1%,1/16W,DA,TP,1005	
R536	2007-008301	R-CHIP;56.2OHM,1%,1/16W,DA,TP,1005	
R537	2007-008391	R-CHIP;6.34KOHM,1%,1/16W,DA,TP,1005	
R542	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R601	2007-000161	R-CHIP;82Kohm,5%,1/16W,DA,TP,1005	
R602	2007-001311	R-CHIP;270ohm,5%,1/16W,DA,TP,1005	
R603	2007-001217	R-CHIP;82ohm,5%,1/16W,DA,TP,1005	
R604	2007-001311	R-CHIP;270ohm,5%,1/16W,DA,TP,1005	
R605	2007-000161	R-CHIP;82Kohm,5%,1/16W,DA,TP,1005	
R606	2007-007573	R-CHIP;330Kohm,1%,1/16W,DA,TP,1005	
R607	2007-007573	R-CHIP;330Kohm,1%,1/16W,DA,TP,1005	
R609	2007-007134	R-CHIP;39Kohm,1%,1/16W,DA,TP,1005	
R610	2007-007107	R-CHIP;100Kohm,1%,1/16W,DA,TP,1005	
R611	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005	
R612	2007-007313	R-CHIP;6.8Kohm,1%,1/16W,DA,TP,1005	
R613	2007-000160	R-CHIP;68Kohm,5%,1/16W,DA,TP,1005	
R614	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R615	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R616	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R617	2007-000160	R-CHIP;68Kohm,5%,1/16W,DA,TP,1005	

Loc. No	Part No	Desc & Spec	Remark	Loc. No	Part No	Desc & Spec	Remark
R618	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005		R7112	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R619	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005		R7113	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R620	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005		R7114	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
R622	2007-000159	R-CHIP;56Kohm,5%,1/16W,DA,TP,1005		R7115	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R623	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005		R7116	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R624	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005		R7117	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R625	2007-000155	R-CHIP;27Kohm,5%,1/16W,DA,TP,1005		R7118	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R626	2007-000483	R-CHIP;1OHM,5%,1/10W,DA,TP,2012		R7119	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R627	2007-000483	R-CHIP;1OHM,5%,1/10W,DA,TP,2012		R712	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R628	2007-000483	R-CHIP;1OHM,5%,1/10W,DA,TP,2012		R7120	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R629	2007-000483	R-CHIP;1OHM,5%,1/10W,DA,TP,2012		R7121	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R630	2007-000483	R-CHIP;1OHM,5%,1/10W,DA,TP,2012		R7122	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R636	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005		R7123	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R637	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005		R7124	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R643	2007-000156	R-CHIP;30Kohm,5%,1/16W,DA,TP,1005		R7126	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R644	2007-000156	R-CHIP;30Kohm,5%,1/16W,DA,TP,1005		R7127	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R649	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005		R7128	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R650	2007-001341	R-CHIP;680Kohm,5%,1/16W,DA,TP,1005		R7129	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R652	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005		R713	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R653	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005		R7130	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R654	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005		R7131	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R656	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R7132	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R657	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005		R7133	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R658	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005		R7134	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R701	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005		R7135	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R702	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005		R7136	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R703	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R7137	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R704	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R714	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R705	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R715	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R706	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005		R716	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R707	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R717	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R708	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R718	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R709	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005		R719	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R710	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R720	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7101	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005		R721	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7102	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R722	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7103	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R723	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7104	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R724	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R7105	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005		R725	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R7106	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R726	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7108	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R727	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7109	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R728	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R711	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R729	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R7110	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005		R730	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R7111	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		R731	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	

Electrical Parts List

Loc. No	Part No	Desc & Spec	Remark
R732	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R733	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R734	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R735	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R736	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005	
R737	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R738	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R739	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R740	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R741	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R742	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R743	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R744	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R745	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R746	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R747	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R748	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R749	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R750	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R751	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R752	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R753	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R754	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R755	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R757	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R758	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R759	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R760	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R761	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R762	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R763	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R765	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R766	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R767	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R768	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R769	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R770	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R771	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R772	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R773	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R774	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R775	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R776	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R777	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R778	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	

Loc. No	Part No	Desc & Spec	Remark
R779	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R780	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R781	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R782	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R783	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R784	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R786	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R787	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R788	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R790	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R791	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R792	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R793	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R794	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R795	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R796	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R797	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R798	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R799	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R801	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R802	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R803	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R804	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R805	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R806	2007-000120	R-CHIP;680ohm,5%,1/16W,DA,TP,1608	
R807	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R808	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R809	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R810	2007-000120	R-CHIP;680ohm,5%,1/16W,DA,TP,1608	
R811	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R812	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R813	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R814	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R815	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R816	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R817	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R824	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R825	2007-000146	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1005	
R826	2007-000146	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1005	
R827	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R828	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R829	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R830	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R831	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R832	2007-001319	R-CHIP;1.2Kohm,5%,1/16W,DA,TP,1005	

Loc. No	Part No	Desc & Spec	Remark	Loc. No	Part No	Desc & Spec	Remark
R833	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005		R971	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R838	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005		R972	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R901	2007-007134	R-CHIP;39Kohm,1%,1/16W,DA,TP,1005		R973	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R902	2007-007132	R-CHIP;15Kohm,1%,1/16W,DA,TP,1005		R976	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
R903	2007-007588	R-CHIP;1.8Kohm,1%,1/16W,DA,TP,1005		R979	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,DA,TP,1005	
R904	2007-007134	R-CHIP;39Kohm,1%,1/16W,DA,TP,1005		R982	2007-000151	R-CHIP;15Kohm,5%,1/16W,DA,TP,1005	
R905	2007-000154	R-CHIP;24Kohm,5%,1/16W,DA,TP,1005		R983	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005	
R906	2007-000091	R-CHIP;12Kohm,5%,1/16W,DA,TP,1608		R984	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R907	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005		R985	2007-008417	R-CHIP;34KOHM,1%,1/16W,DA,TP,1005	
R908	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005		R986	2007-007309	R-CHIP;12Kohm,1%,1/16W,DA,TP,1005	
R909	2007-008275	R-CHIP;30KOHM,1%,1/16W,DA,TP,1005		R987	2007-000146	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1005	
R910	2007-007132	R-CHIP;15Kohm,5%,1/16W,DA,TP,1005		R990	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R911	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005		R992	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
R912	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005		R994	2007-000146	R-CHIP;6.8Kohm,5%,1/16W,DA,TP,1005	
R913	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005		R995	2007-007138	R-CHIP;27KOHM,1%,1/16W,DA,TP,1005	
R914	2007-007309	R-CHIP;12Kohm,1%,1/16W,DA,TP,1005		R996	2007-007312	R-CHIP;20Kohm,1%,1/16W,DA,TP,1005	
R915	2007-007142	R-CHIP;10Kohm,1%,1/16W,DA,TP,1005		R997	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R916	2007-000151	R-CHIP;15Kohm,5%,1/16W,DA,TP,1005		R998	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R917	2007-001333	R-CHIP;18Kohm,5%,1/16W,DA,TP,1005		R999	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R918	2007-001333	R-CHIP;18Kohm,5%,1/16W,DA,TP,1005		RA01	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R919	2007-000152	R-CHIP;20Kohm,5%,1/16W,DA,TP,1005		RA02	2007-003112	R-CHIP;27OHM,5%,1/16W,DA,TP,1005	
R920	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005		RA03	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R921	2007-007310	R-CHIP;8.2Kohm,1%,1/16W,DA,TP,1005		RA06	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R922	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005		RA07	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R923	2007-007470	R-CHIP;7.5Kohm,1%,1/16W,DA,TP,1005		RA11	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R924	2007-007311	R-CHIP;22Kohm,1%,1/16W,DA,TP,1005		RA12	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R925	2007-007312	R-CHIP;20Kohm,1%,1/16W,DA,TP,1005		RA16	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
R926	2007-008275	R-CHIP;30KOHM,1%,1/16W,DA,TP,1005		RA17	2007-000170	R-CHIP;1Mohm,5%,1/16W,DA,TP,1005	
R928	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005		RA18	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R929	2007-007470	R-CHIP;7.5Kohm,1%,1/16W,DA,TP,1005		RA20	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R930	2007-000154	R-CHIP;24Kohm,5%,1/16W,DA,TP,1005		RA26	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R932	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005		RA30	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R933	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005		RA31	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R934	2007-007311	R-CHIP;22Kohm,1%,1/16W,DA,TP,1005		RA40	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
R935	2007-007310	R-CHIP;8.2Kohm,1%,1/16W,DA,TP,1005		RA41	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
R946	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005		RA43	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R947	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005		RA50	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R948	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005		RA51	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
R949	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005		RA52	2007-000157	R-CHIP;47Kohm,5%,1/16W,DA,TP,1005	
R951	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005		RA53	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
R952	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005		RA56	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
R953	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005		RA58	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
R954	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,DA,TP,1005		RA64	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R961	2007-007138	R-CHIP;27KOHM,1%,1/16W,DA,TP,1005		RA65	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
R970	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005		RA66	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	

Electrical Parts List

Loc. No	Part No	Desc & Spec	Remark
RA67	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RA71	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA72	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RA73	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RA75	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RA76	2007-003112	R-CHIP;270HM,5%,1/16W,DA,TP,1005	
RA77	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
RA78	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
RA79	2007-003112	R-CHIP;270HM,5%,1/16W,DA,TP,1005	
RA80	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA82	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RA83	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RA84	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA85	2007-000242	R-CHIP;1.5Kohm,5%,1/16W,DA,TP,1005	
RA87	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA88	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RA91	2007-000138	R-CHIP;100ohm,5%,1/16W,DA,TP,1005	
RA93	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
RP01	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP02	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,DA,TP,1005	
RP05	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
RP06	2007-000636	R-CHIP;270Kohm,5%,1/16W,DA,TP,1005	
RP08	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
RP09	2007-000156	R-CHIP;30Kohm,5%,1/16W,DA,TP,1005	
RP10	2007-000162	R-CHIP;100Kohm,5%,1/16W,DA,TP,1005	
RP11	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
RP12	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP13	2007-000139	R-CHIP;220ohm,5%,1/16W,DA,TP,1005	
RP15	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RP16	2007-000171	R-CHIP;0ohm,5%,1/16W,DA,TP,1005	
RP17	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	
RP18	2007-007001	R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1005	
RP19	2007-007001	R-CHIP;3.9KOHM,5%,1/16W,DA,TP,1005	
RP20	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005	
RP21	2007-000153	R-CHIP;22Kohm,5%,1/16W,DA,TP,1005	
RP23	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP25	2007-000140	R-CHIP;1Kohm,5%,1/16W,DA,TP,1005	
RP28	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP29	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP30	2007-001307	R-CHIP;180ohm,5%,1/16W,DA,TP,1005	
RP31	2007-001307	R-CHIP;180ohm,5%,1/16W,DA,TP,1005	
RP32	2007-000159	R-CHIP;56Kohm,5%,1/16W,DA,TP,1005	
RP33	2007-000159	R-CHIP;56Kohm,5%,1/16W,DA,TP,1005	
RP34	2007-000775	R-CHIP;33Kohm,5%,1/16W,DA,TP,1005	
RP36	2007-000164	R-CHIP;150Kohm,5%,1/16W,DA,TP,1005	

Loc. No	Part No	Desc & Spec	Remark
RP37	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP38	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP40	2007-000172	R-CHIP;10ohm,5%,1/16W,DA,TP,1005	
RP41	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
RP42	2007-000148	R-CHIP;10Kohm,5%,1/16W,DA,TP,1005	
X201	2801-003703	CRYSTAL-SMD;24.576MHz,50ppm,28-ACI,12pF,	
X202	2801-003424	CRYSTAL-SMD;41.85MHZ,50ppm,28-ACC,12pF,-	
X701	2801-004237	CRYSTAL-SMD;12.5MHZ,50PPM,28-ABV,13PF,60	
X702	2801-000258	CRYSTAL-UNIT;32.768KHz,20ppm,28-AAW,12.5	
XA01	2804-001309	OSCILLATOR-CLOCK;54MHZ,20PPM,10TTL & CMO	
		ASSY-CCD BOARD	
CC01	2404-000212	C-TA,CHIP;3.3uF,20%,25V,-,TP,3528,-	
CC02	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CC03	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CC04	2203-000491	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1608	
CC05	2203-000189	C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP,	
CC06	2404-000212	C-TA,CHIP;3.3uF,20%,25V,-,TP,3528,-	
CNC01	3710-001106	CONNECTOR-SOCKET;40P;2R,0.8mm,SMD-S,SN	
CNC02	3708-001687	CONNECTOR-FPC/FFC/PIC;27,0.3MM,SMD-A,SN	
DC01	0401-001054	DIODE-SWITCHING;KDS160,85V,300mA,SOD-323	
QC01	0505-000180	FET-SILICON;2SK1070,N,-,50mA,-,150mW,SOT	
RC01	2007-000072	R-CHIP;47ohm,5%,1/16W,DA,TP,1608	
RC02	2007-000079	R-CHIP;1.8Kohm,5%,1/16W,DA,TP,1608	
RC03	2007-000102	R-CHIP;100Kohm,5%,1/16W,DA,TP,1608	
		ADAPTOR-AC POWER;100/240V,50HZ/60HZ,-,-,	
C10	2203-000455	C-CERAMIC,CHIP;1nF,5%,50V,C0G,TP,2012	
C11	2301-001092	C-FILM,MPEF;100nF,20%,275V,BK,18x6x12,15	
C12	2401-003302	C-AL;47uF,20%,400V,GP,TP,18X31.5,7.	
C13	2401-003046	C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5	
C14	2203-000716	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,2012	
C15	2203-000716	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,2012	
C16	2203-000716	C-CERAMIC,CHIP;3.3nF,10%,50V,X7R,TP,2012	
C30	2201-000828	C-CERAMIC,DISC;3.3NF,20%,400V,Y5U,TP,15X	
C50	2401-000133	C-AL;1000uF,20%,16V,GP,TP,10x20,5	
C51	2401-000037	C-AL;470uF,20%,16V,GP,TP,8x11.5,5	
C55	2203-000239	C-CERAMIC,CHIP;0.1nF,5%,50V,C0G,TP,2012	
C57	2203-002793	C-CERAMIC,CHIP;1000nF,+80-20%,25V,Y5V,TP	
C58	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C59	2203-000938	C-CERAMIC,CHIP;0.47NF,5%,50V,C0G,TP,2012	
C61	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,	
C62	2401-000438	C-AL;10uF,20%,25V,GP,-,5x11,2mm	
C63	2203-000455	C-CERAMIC,CHIP;1nF,5%,50V,C0G,TP,2012	
CON1	3721-001034	PLUG-AC POWER;2P,-,-,NI	
CON2	3711-000900	CONNECTOR-HEADER;BOX,3P,1R,2.5mm,STRAIGH	

Loc. No	Part No	Desc & Spec	Remark	Loc. No	Part No	Desc & Spec	Remark
D10	0402-000137	DIODE-RECTIFIER;1N4007,1000V,1A,DO-41,TP		R51	2007-000472	R-CHIP;1KOHM,5%,1/8W,DA,TP,3216	
D11	0402-000137	DIODE-RECTIFIER;1N4007,1000V,1A,DO-41,TP		R53	2007-000868	R-CHIP;4.7KOHM,1%,1/10W,DA,TP,2012	
D12	0402-000137	DIODE-RECTIFIER;1N4007,1000V,1A,DO-41,TP		R54	2007-000868	R-CHIP;4.7KOHM,1%,1/10W,DA,TP,2012	
D13	0402-000137	DIODE-RECTIFIER;1N4007,1000V,1A,DO-41,TP		R55	2007-000312	R-CHIP;100HM,5%,1/8W,DA,TP,3216	
D14	0402-001041	DIODE-RECTIFIER;ERA22-10,1000V,500mA,MSR		R57	2007-000938	R-CHIP;47KOHM,1%,1/10W,DA,TP,2012	
D15	0402-001041	DIODE-RECTIFIER;ERA22-10,1000V,500mA,MSR		R58	2007-001205	R-CHIP;82KOHM,1%,1/10W,DA,TP,2012	
D50	0402-001062	DIODE-RECTIFIER;SF10SC9,90V,10A,FTO-220,		R59	2007-000868	R-CHIP;4.7KOHM,1%,1/10W,DA,TP,2012	
D52	0407-000116	DIODE-ARRAY;DAP202K,80V,100mA,CK2-3,SOT-		R60	2007-000771	R-CHIP;33KOHM,1%,1/10W,DA,TP,2012	
D53	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-		R61	2007-000395	R-CHIP;150KOHM,5%,1/10W,DA,TP,2012	
D54	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-		R62	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012	
D55	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-		R63	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012	
F10	3601-000207	FUSE-CARTRIDGE;250V,1A,TIME-LAG,GLASS,5.		R64	2007-001205	R-CHIP;82KOHM,1%,1/10W,DA,TP,2012	
IC10	1203-002180	IC-PWM CONTROLLER;5M0265,TO220F-4L,4P,39		R65	2007-000868	R-CHIP;4.7KOHM,1%,1/10W,DA,TP,2012	
IC50	AC14-12006D	IC;KA431Z,TO-92,TAPING		R66	2007-000406	R-CHIP;15KOHM,1%,1/10W,DA,TP,2012	
IC51	AC14-12001K	IC;KA324,-,-		R68	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012	
J10	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M		R70	2007-000546	R-CHIP;20KOHM,5%,1/10W,DA,TP,2012	
J11	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M		R71	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012	
J50	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		R72	2007-000582	R-CHIP;22KOHM,1%,1/10W,DA,TP,2012	
J51	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M		R74	2007-001205	R-CHIP;82KOHM,1%,1/10W,DA,TP,2012	
J52	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M		R76	2005-000102	R-WIRE WOUND;0.1ohm,1%,1W,AA,TP,4.5x11mm	
J53	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		R77	2007-000068	R-CHIP;470KOHM,5%,1/10W,DA,TP,2012	
J55	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M		R79	2007-001067	R-CHIP;6.8KOHM,1%,1/10W,DA,TP,2012	
J56	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M		R80	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012	
J57	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M		T10	AD26-00026A	TRANS POWER;AA-E6,AA-E6,1.4mH,6P,100-260	
J61	AC38-12001U	WIRE-JUMPER(H-WRAP);1007#26,120M/M		VR50	2101-001049	VR-ROTARY;500ohm,-,-,-	
L50	AC27-12001N	COIL CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-					
LF10	AC27-32001F	COIL-LINE FILTER;BSF-2123,20MH,2OHM,ST,-					
PC10	0604-000119	PHOTO-COUPLER;TR,200-400%,200mW,DIL-4,ST					
Q52	0501-000457	TR-SMALL SIGNAL;MMBT2222A,NPN,350MW,SOT-					
R00	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012					
R10	2007-000481	R-CHIP;1MOHM,5%,1/8W,DA,TP,3216					
R11	2007-000481	R-CHIP;1MOHM,5%,1/8W,DA,TP,3216					
R13	2003-000771	R-METAL OXIDE(S);68Kohm,5%,2W,AA,TP,4x12					
R14	2007-000598	R-CHIP;22OHM,5%,1/8W,DA,TP,3216					
R15	2007-000768	R-CHIP;330OHM,5%,1/8W,DA,TP,3216					
R16	2007-000768	R-CHIP;330OHM,5%,1/8W,DA,TP,3216					
R17	2007-001212	R-CHIP;82KOHM,5%,1/8W,DA,TP,3216					
R18	2007-001212	R-CHIP;82KOHM,5%,1/8W,DA,TP,3216					
R19	2007-001212	R-CHIP;82KOHM,5%,1/8W,DA,TP,3216					
R20	2007-001212	R-CHIP;82KOHM,5%,1/8W,DA,TP,3216					
R21	2001-000374	R-CARBON;15OHM,5%,1/4W,AA,TP,2.4X6.4MM					
R30	2001-000739	R-CARBON;4.7MOHM,5%,1/8W,AA,TP,1.8X3.2M					
R30	2201-001005	C-CERAMIC,DISC;2.2NF,20%,400V,Y5U,TP,11X					
R30A	2201-001005	C-CERAMIC,DISC;2.2NF,20%,400V,Y5U,TP,11X					
R50	2007-000472	R-CHIP;1KOHM,5%,1/8W,DA,TP,3216					

Samsung Electronics



3. Schematic Diagrams

3-1 DC/DC Converter (Main) - - - - - 3-2

3-2 System Control (Main) - - - - - 3-3

3-3 Video I/F (Main) - - - - - 3-4

3-4 Pre-Amp PRML. (Main) - - - - - 3-5

3-5 DV-1chip - - - - - 3-6

3-6 Line-IN - - - - - 3-7

3-7 PHY (IEEE1394) - - - - - 3-8

3-8 Servo - - - - - 3-9

3-9 Audio - - - - - 3-10

3-10 Camera Process - - - - - 3-11

3-11 Camera DSP - - - - - 3-12

3-12 Camera Memory Block - - - - - 3-13

3-13 LCD - - - - - 3-14

3-14 EVF - - - - - 3-15

3-15 Front - - - - - 3-16

3-16 Left - - - - - 3-17

3-17 Rear - - - - - 3-18

3-18 Top - - - - - 3-19

Note

For schematic Diagram

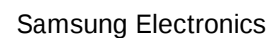
- Resistors are in ohms, 1/8W unless otherwise noted.
- Circled numbers refer to waveforms.

Special note :
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the “electrostatically sensitive (ES) devices” section of this service manual.

Note :
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

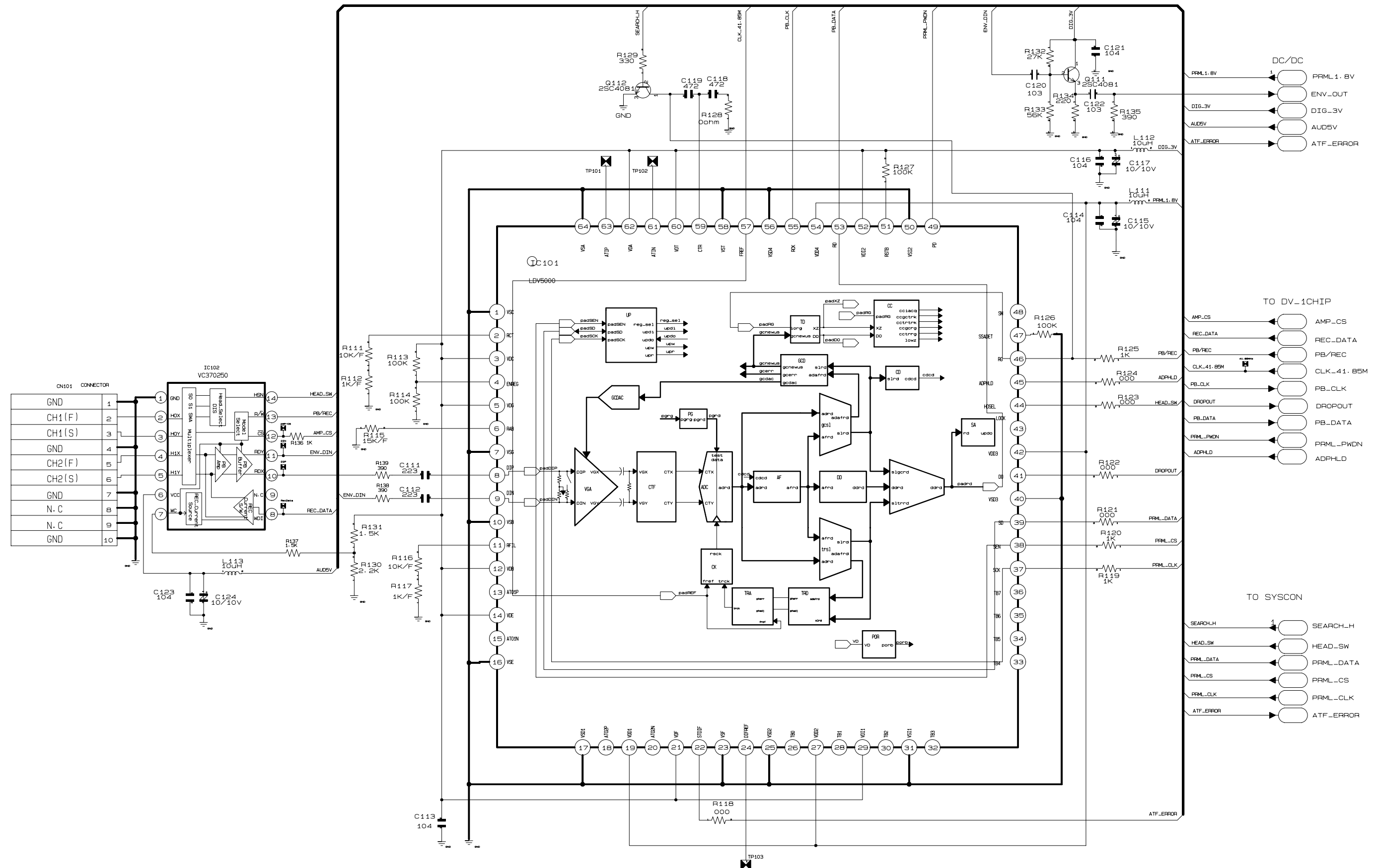
Important safety notices :
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components. Use only the same type.





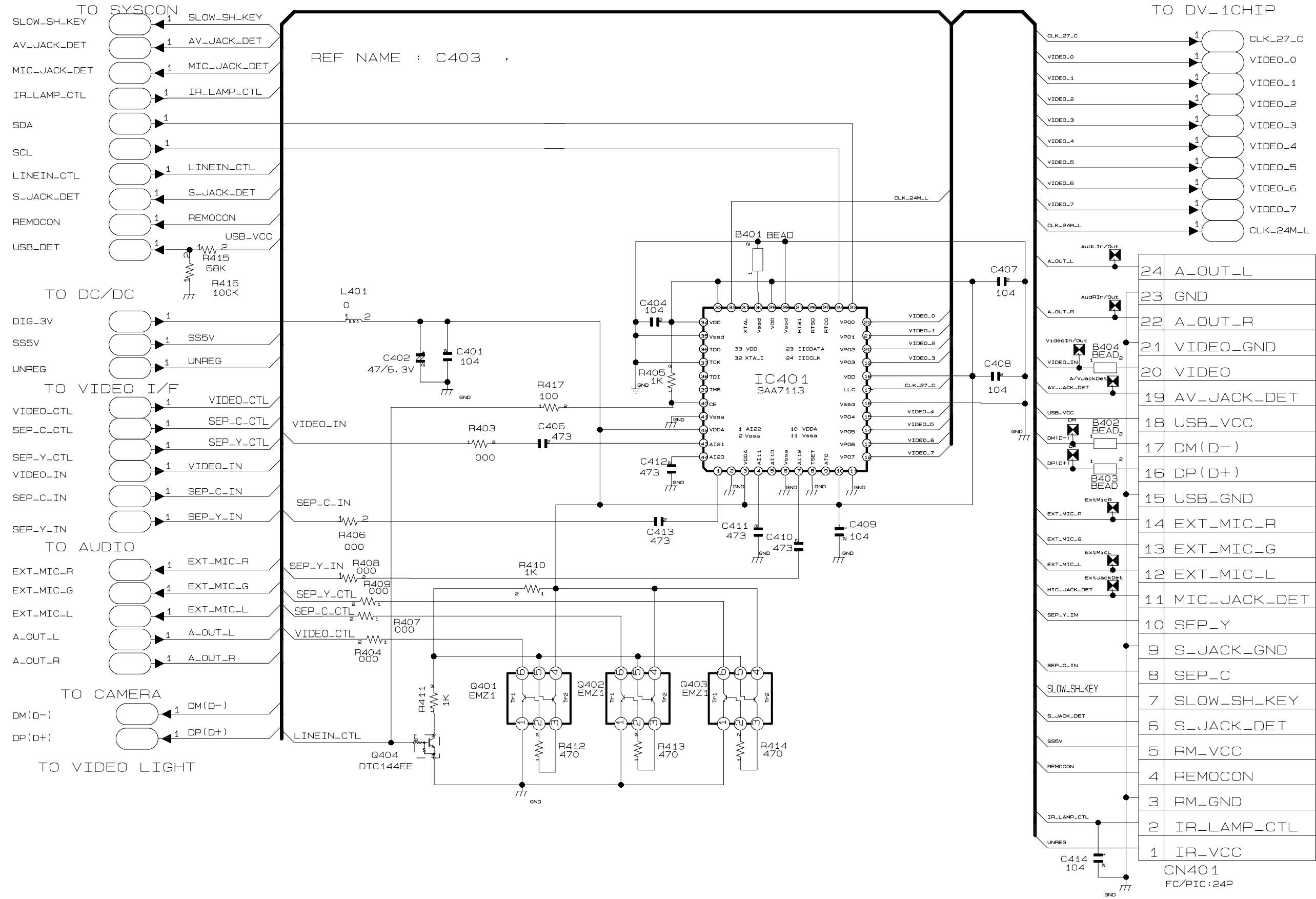


3-4 Pre-Amp PRML. (Main)

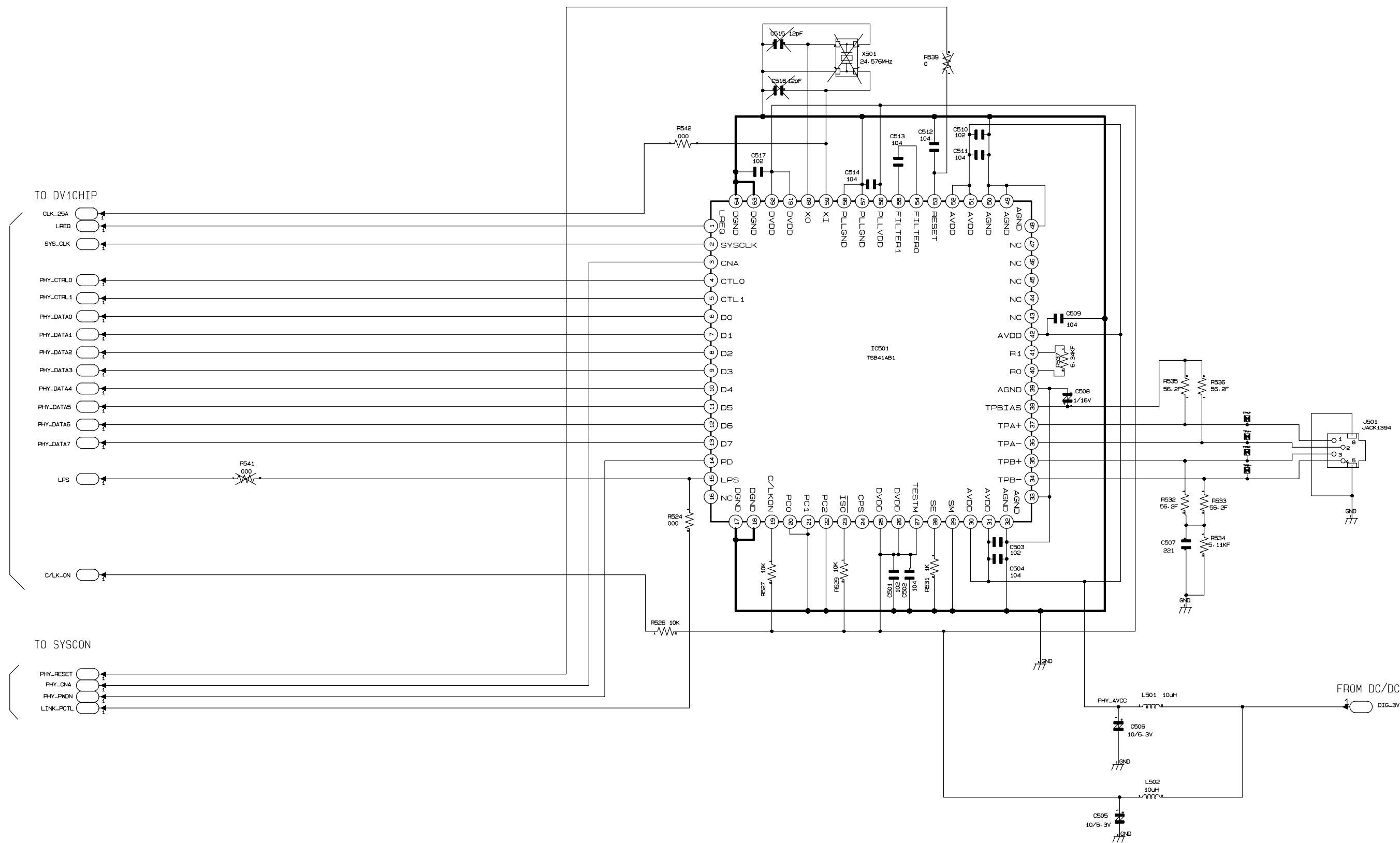




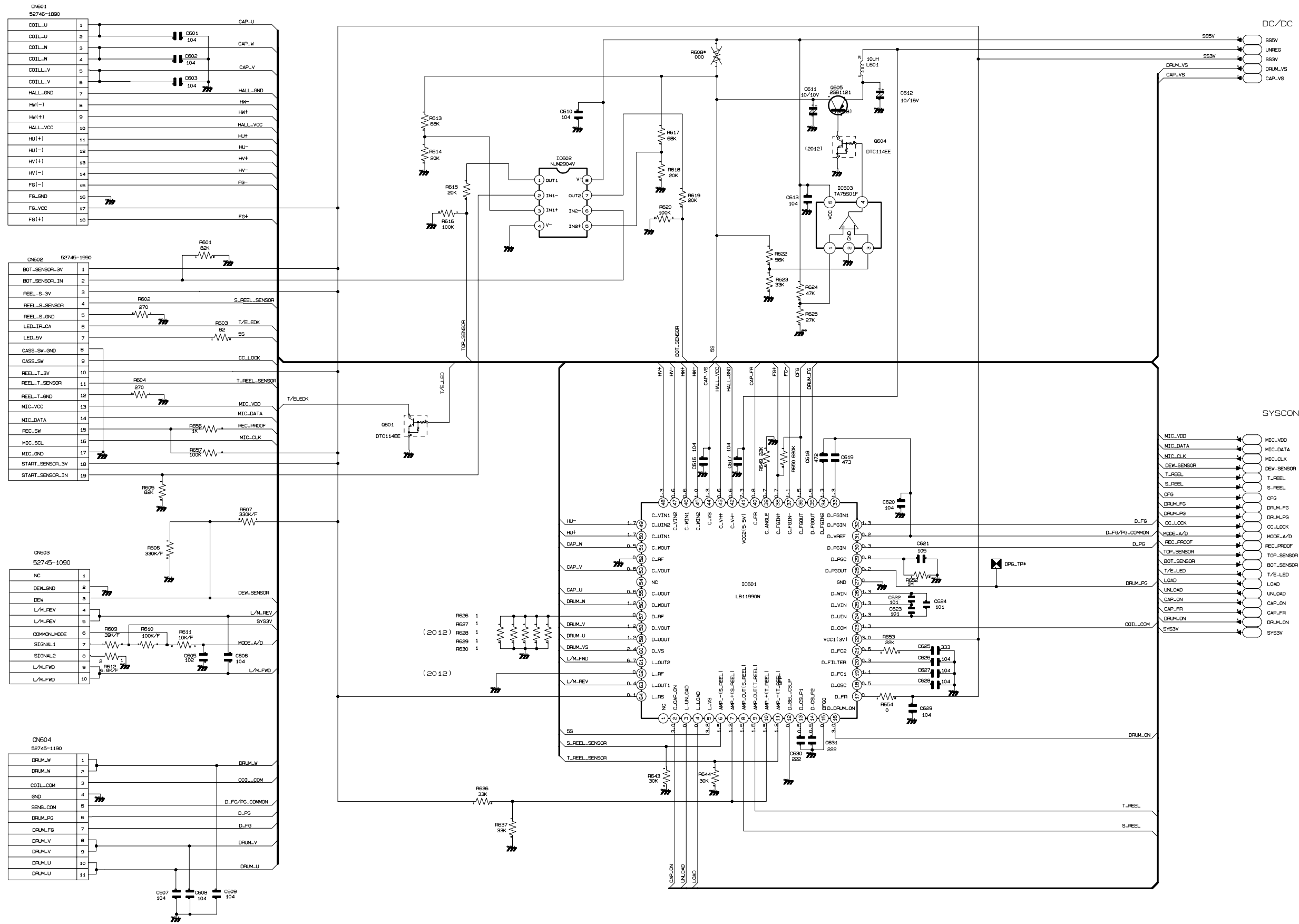
3-6 Line-In



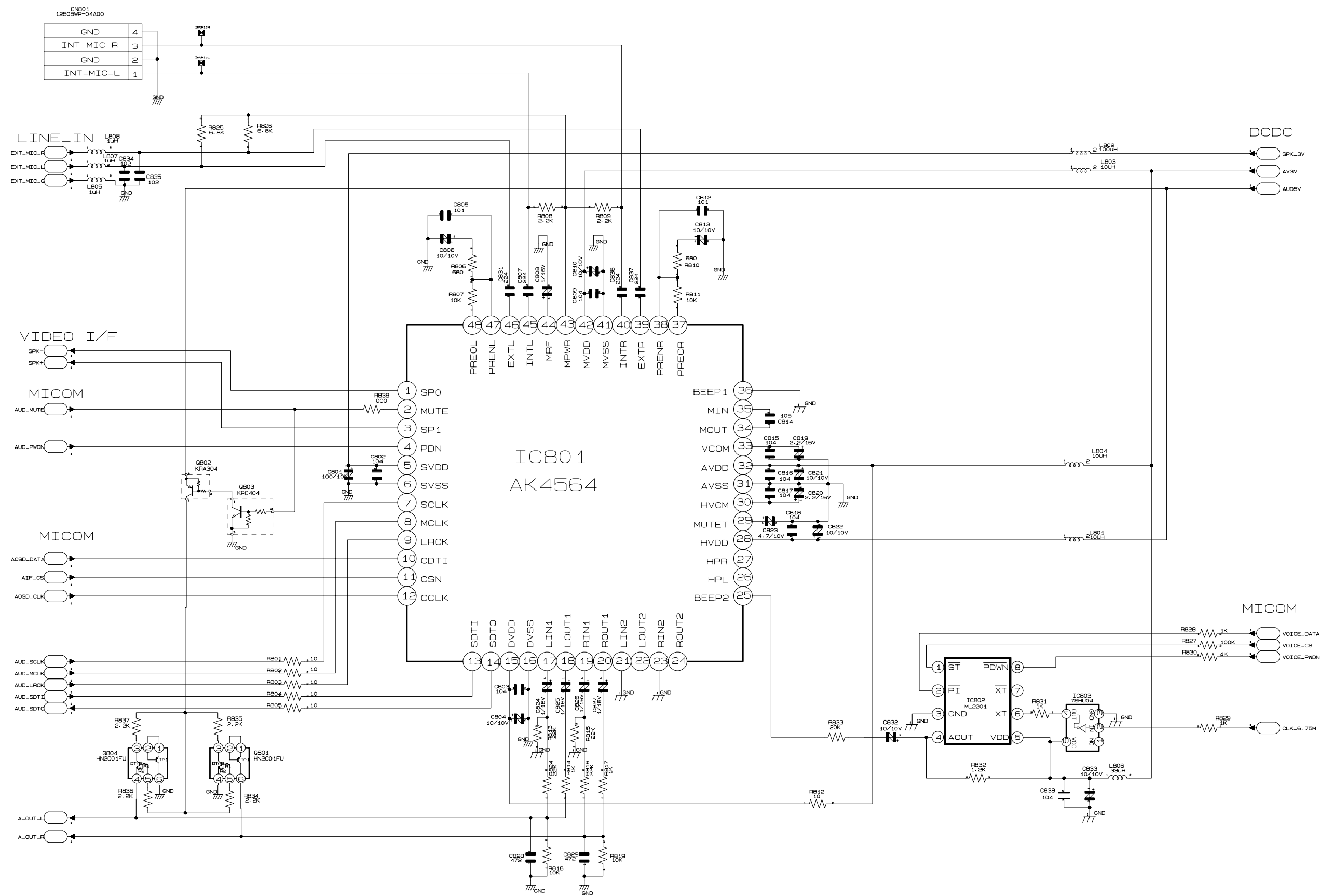
3-7 PHY (IEEE 1394)



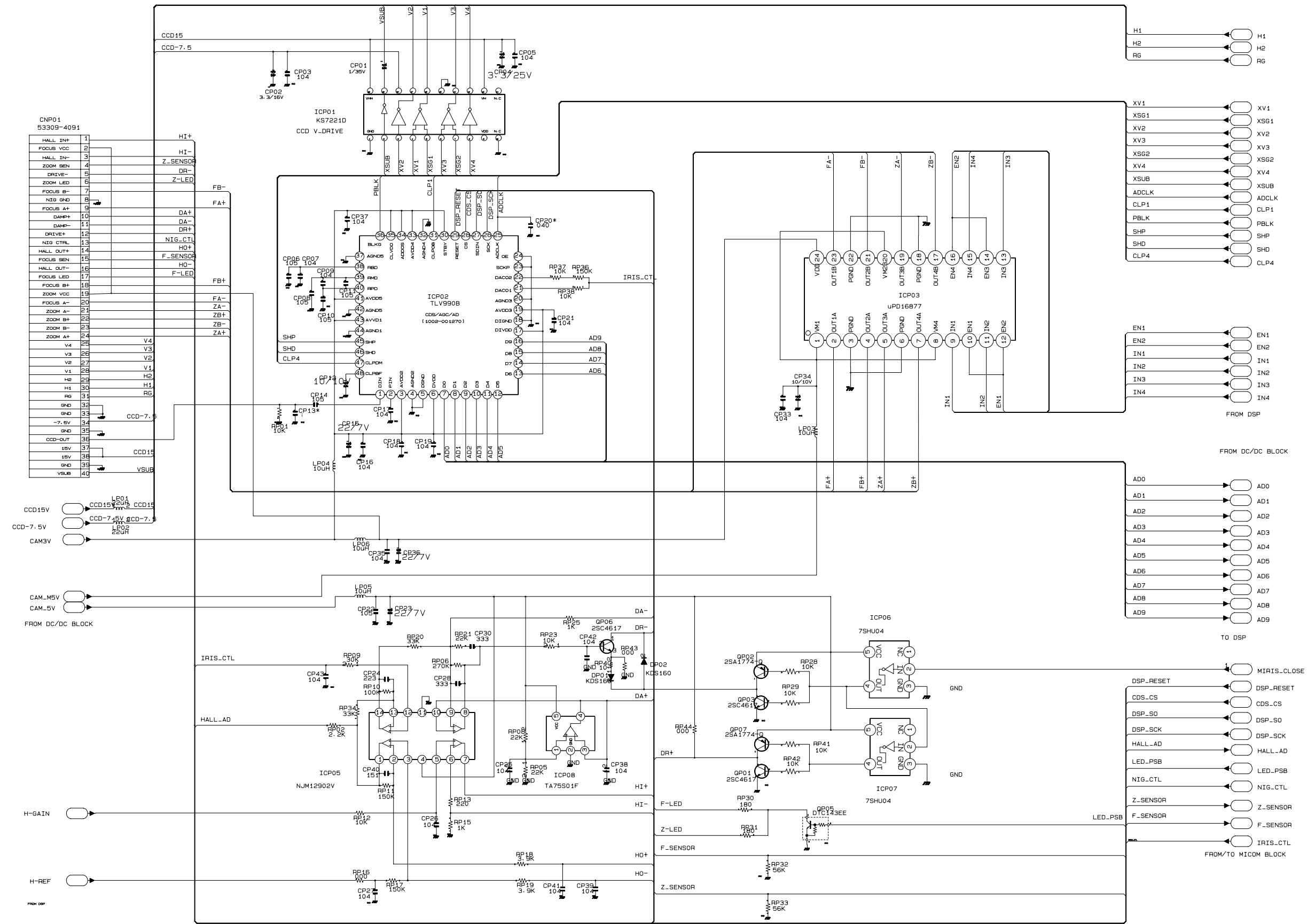
3-8 Servo



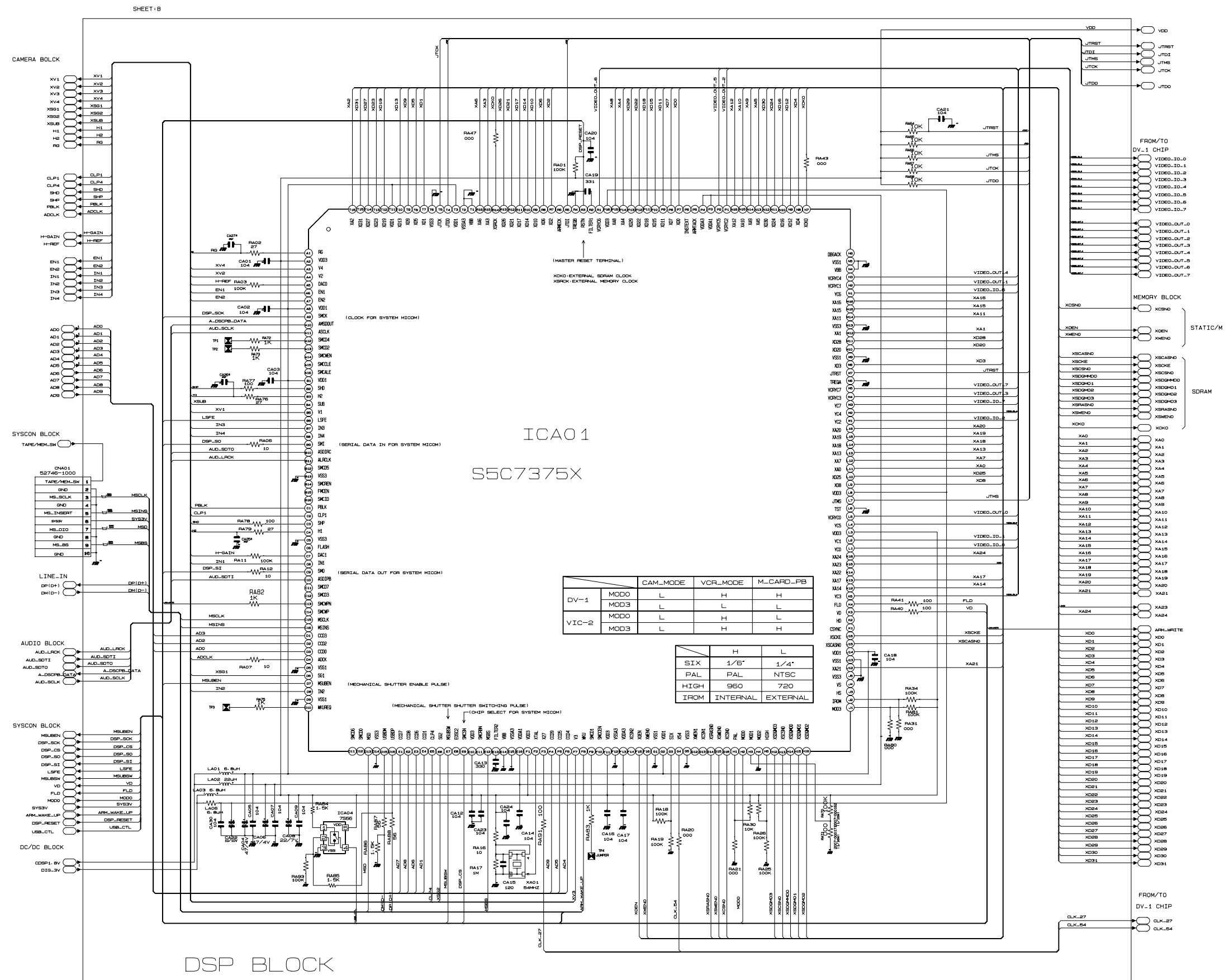
3-9 Audio

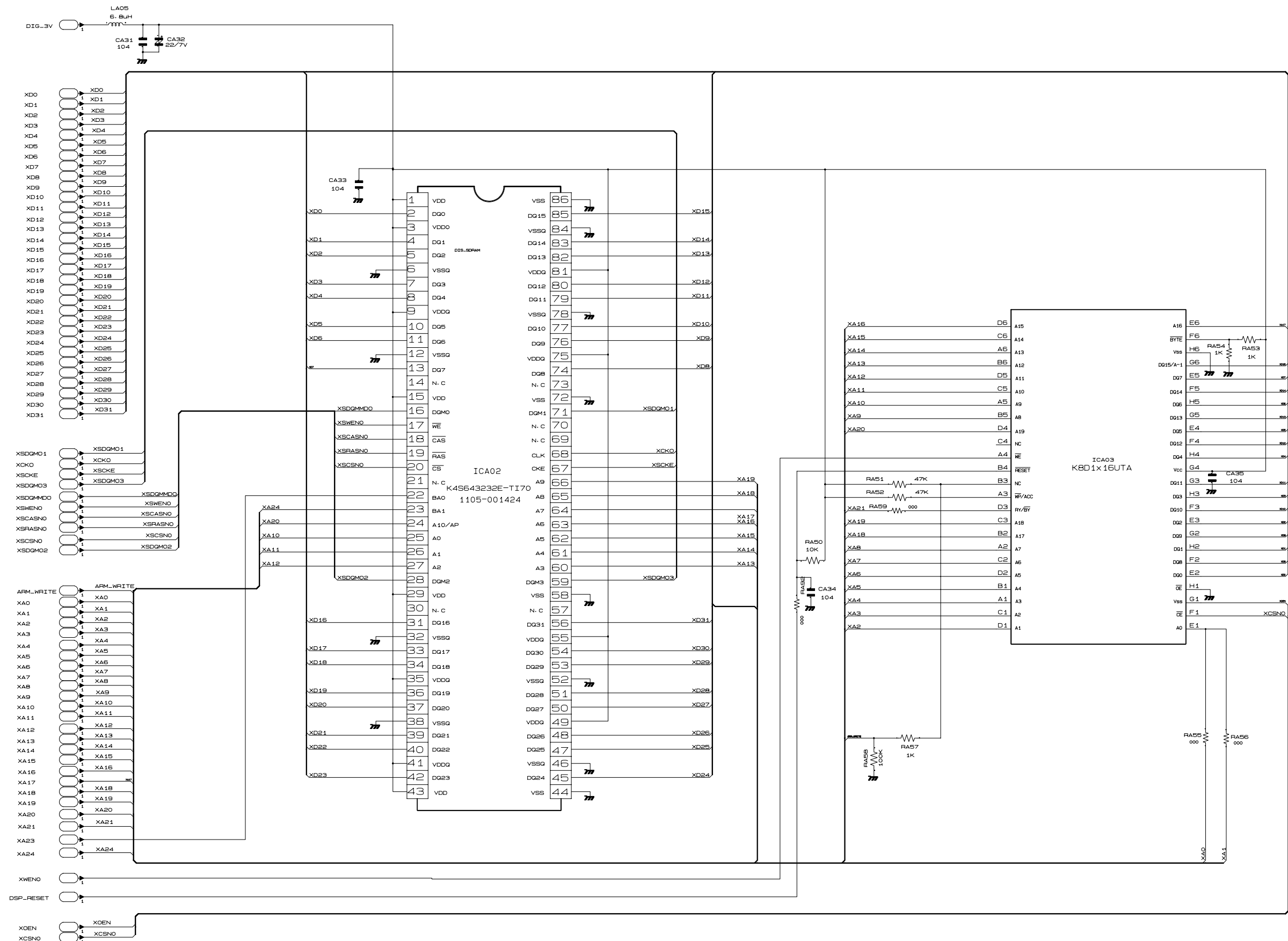


3-10 Camera Process



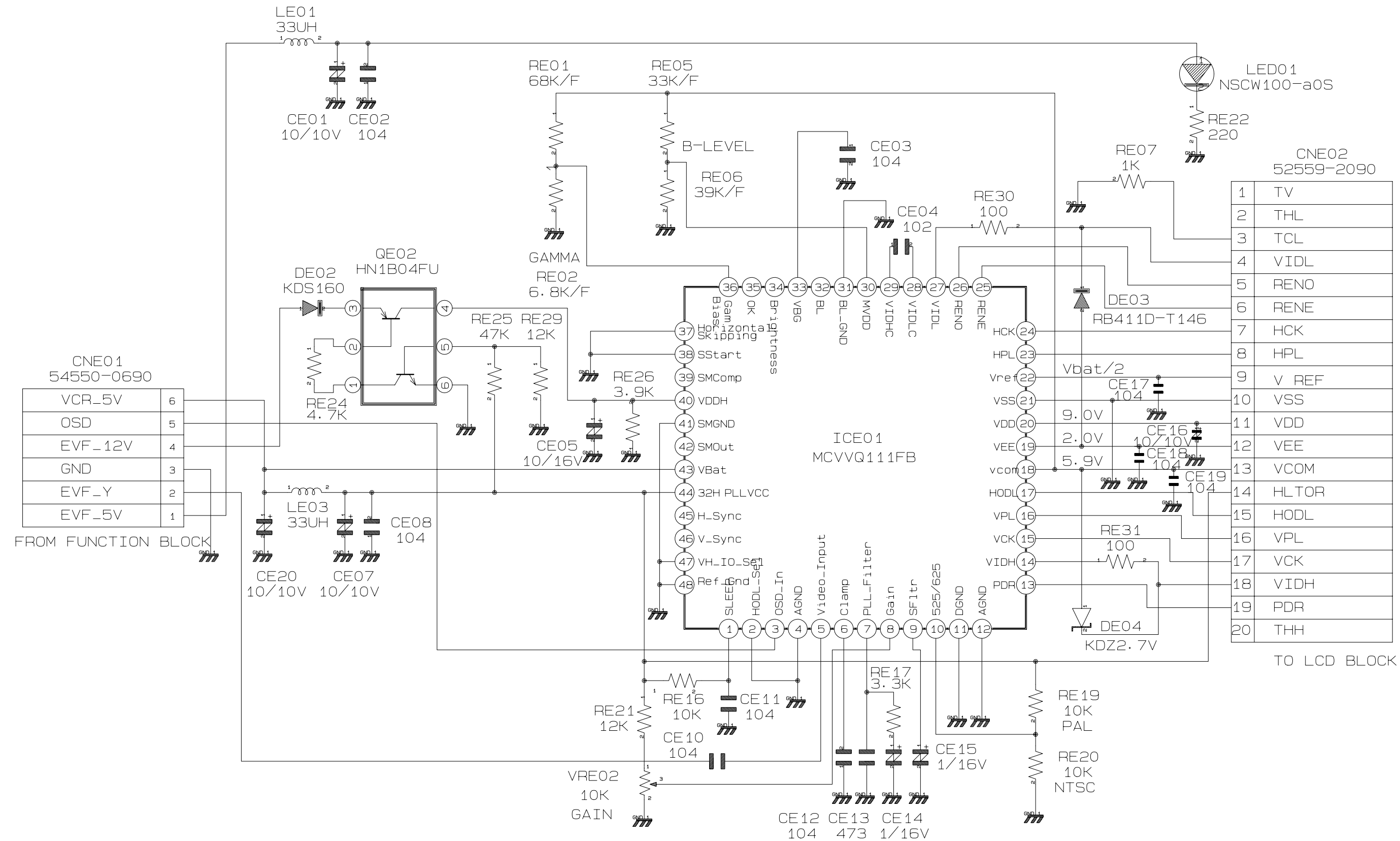
3-11 Camera DSP



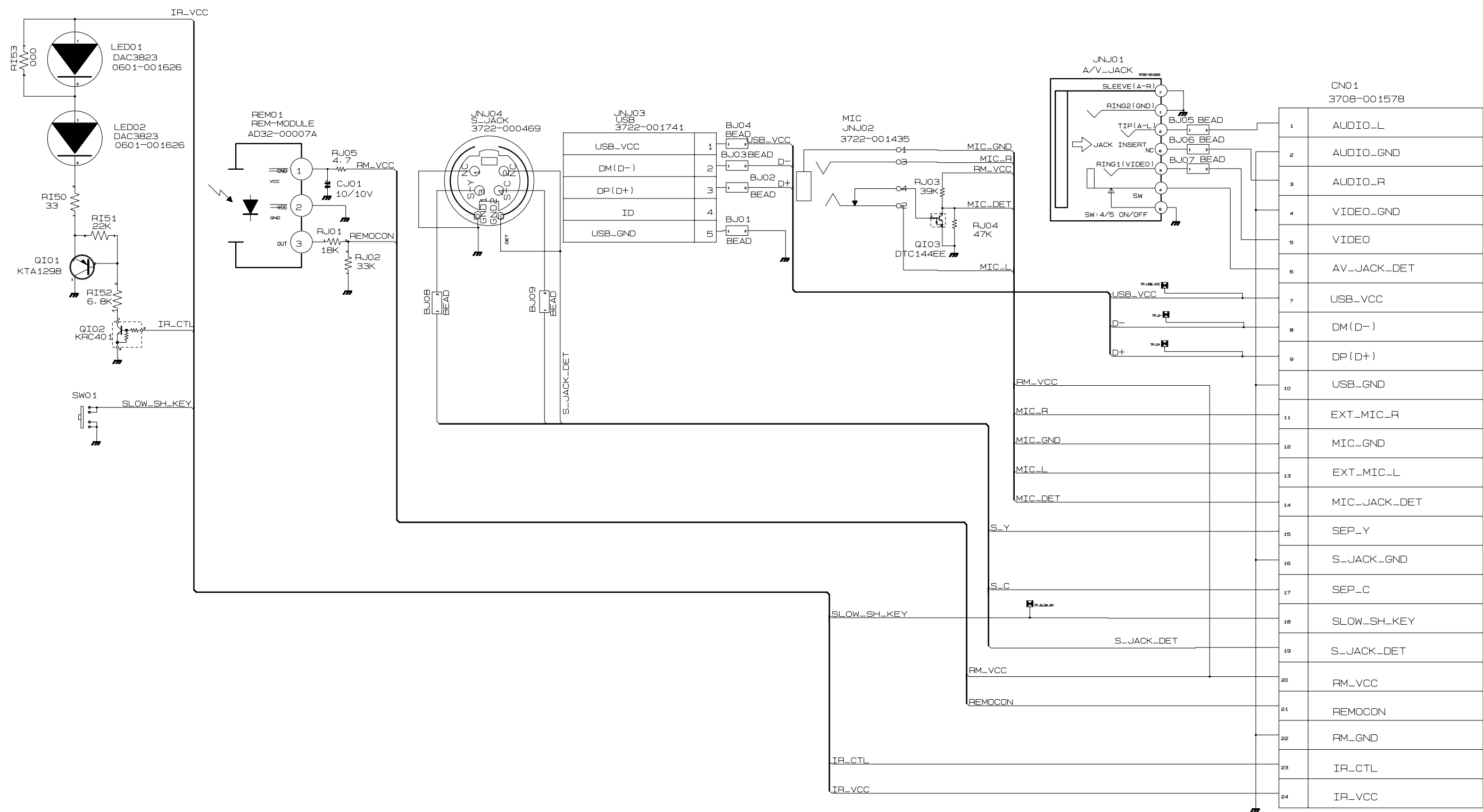




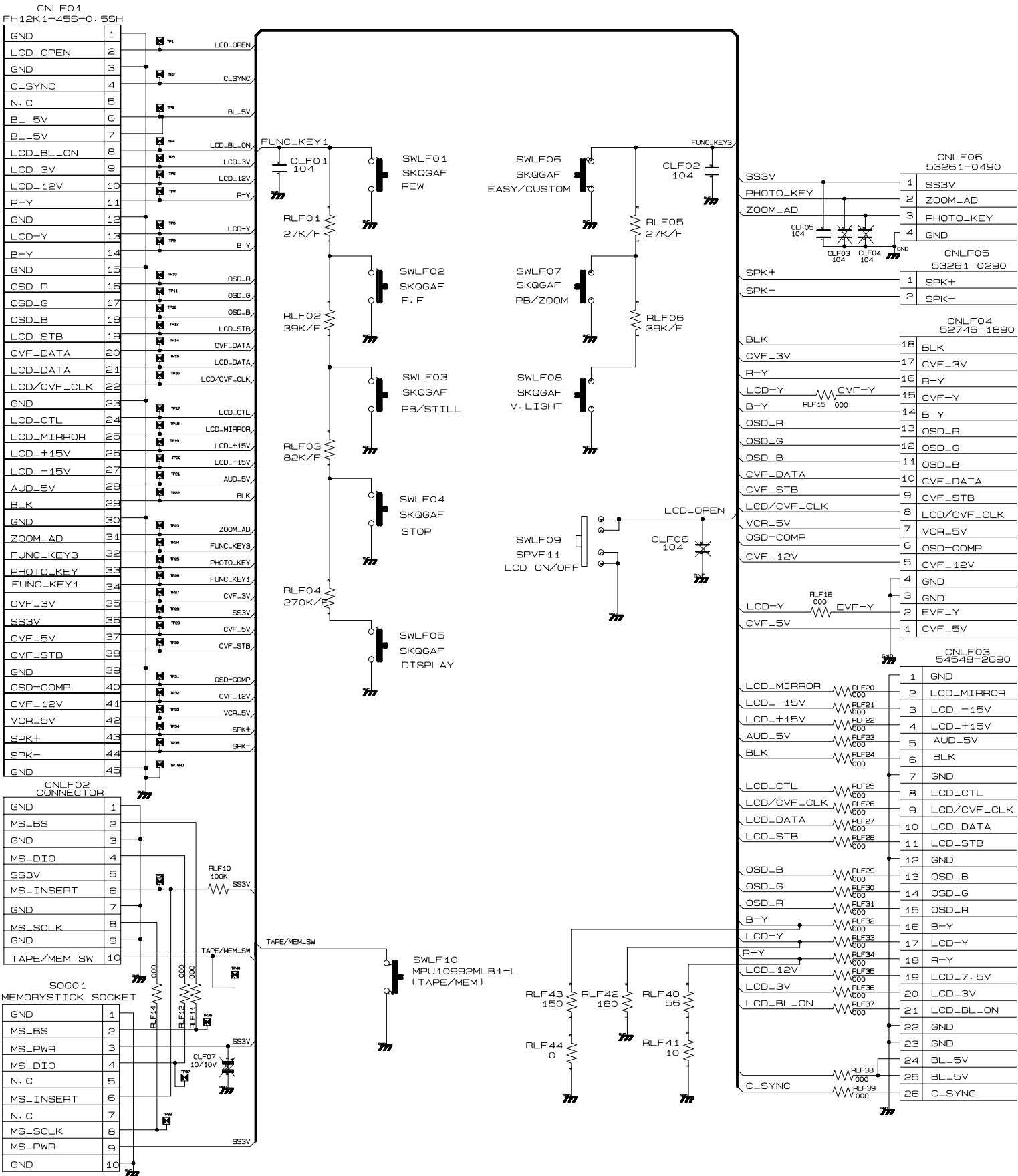
3-14 EVF



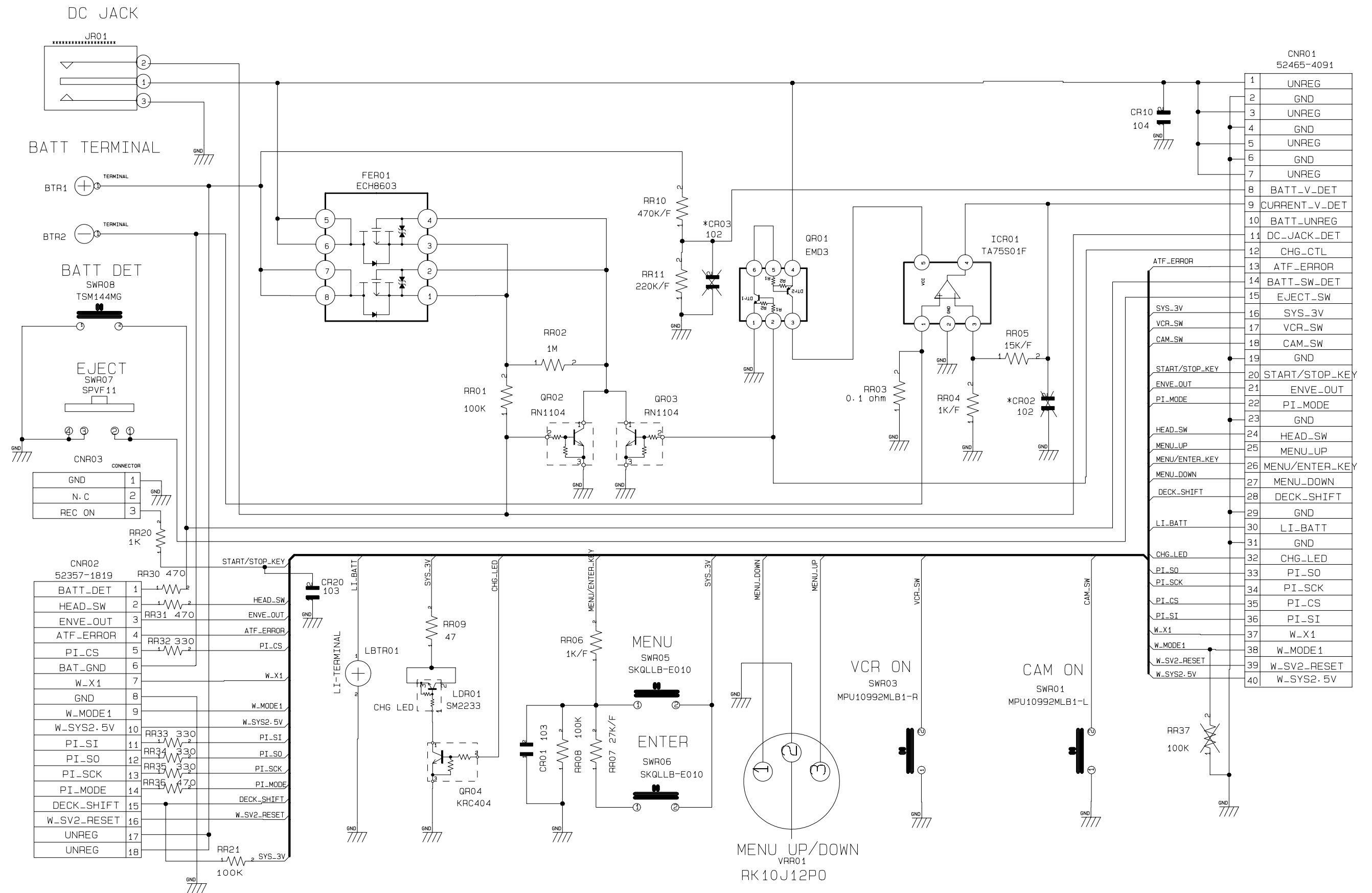
3-15 Front



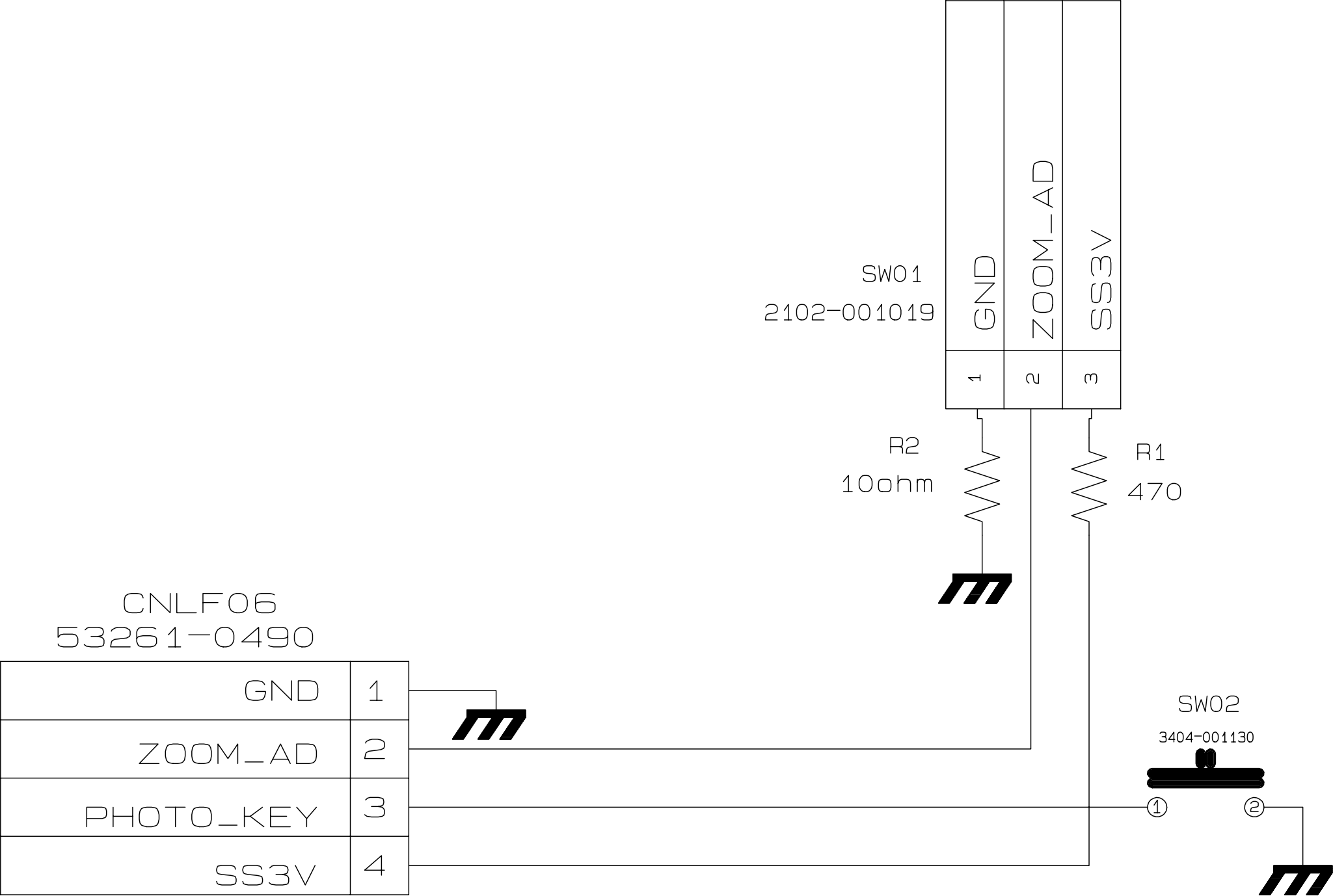
3-16 Left



3-17 Rear



3-18 Top

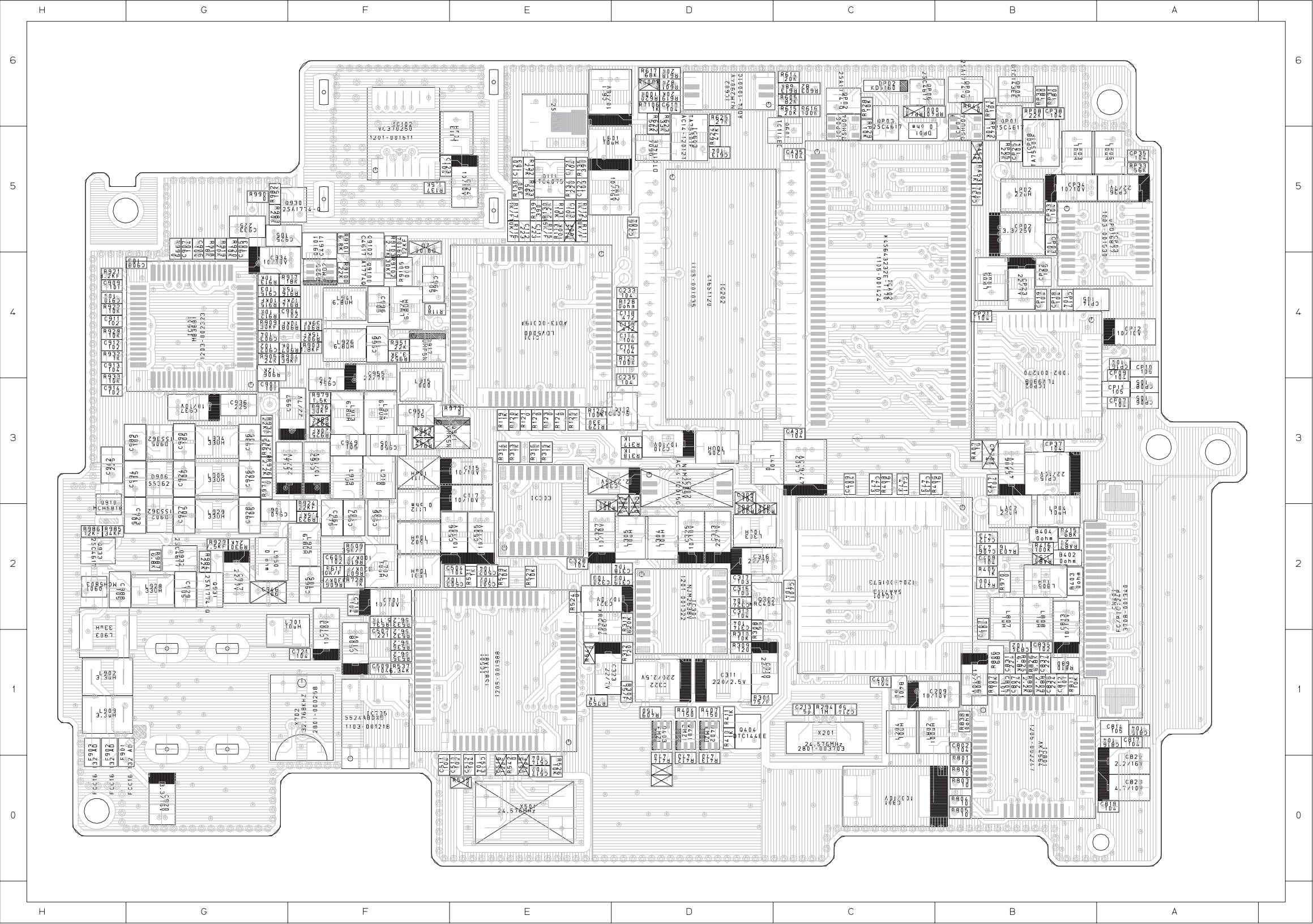


1. PCB Diagrams

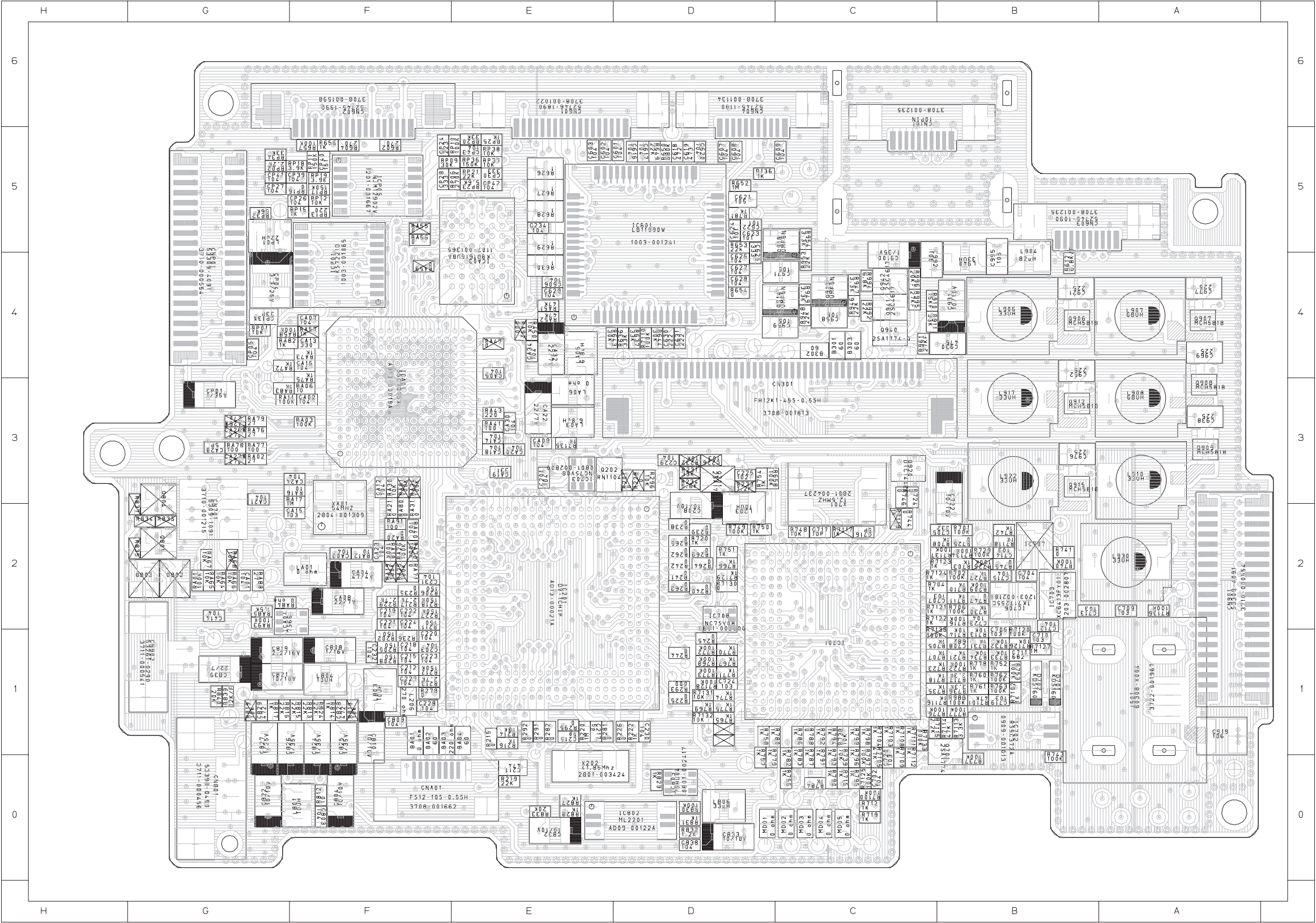
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1-1 Main PCB

COMPONENT SIDE

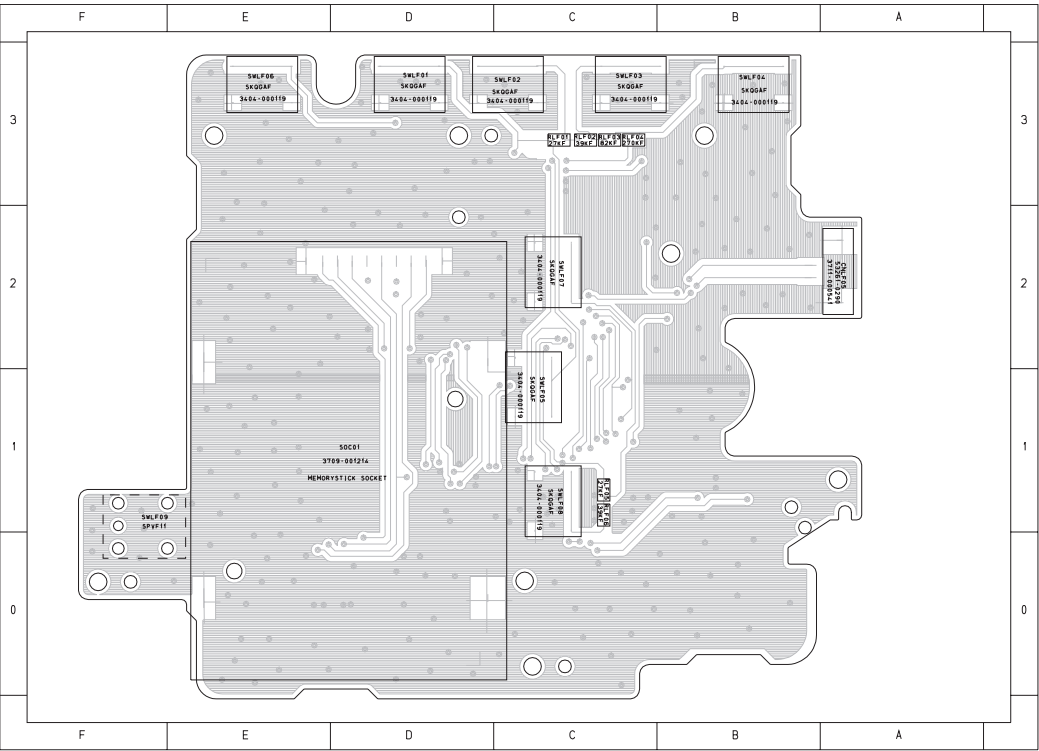


CONDUCTOR SIDE

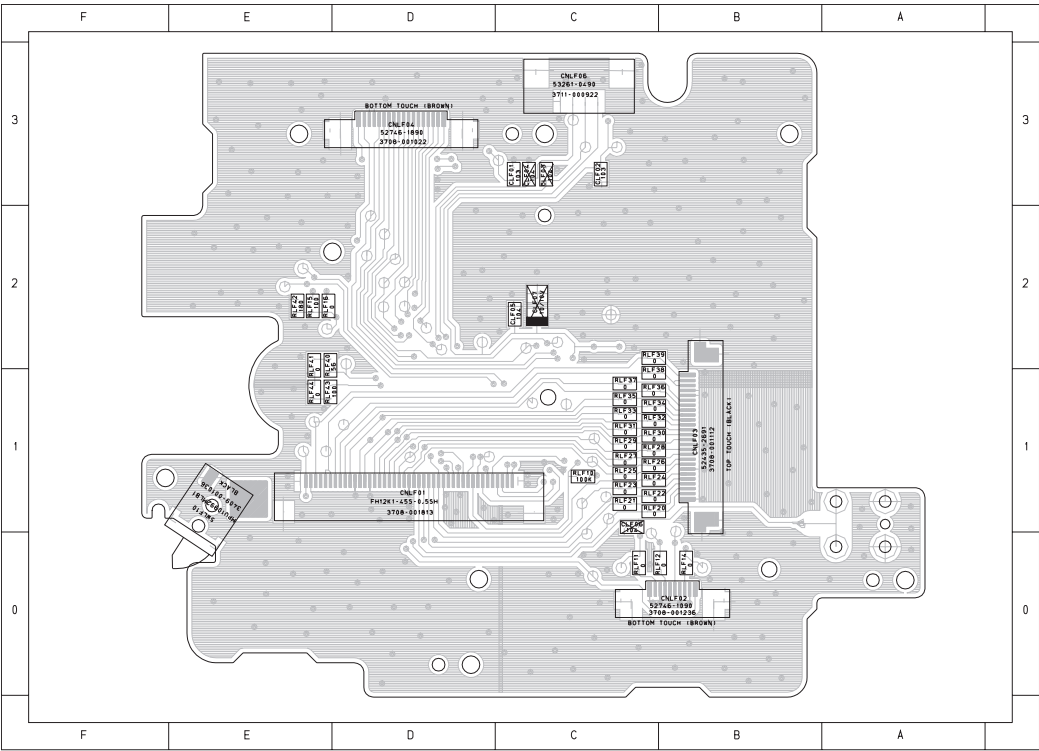


1-2 Left PCB

COMPONENT SIDE

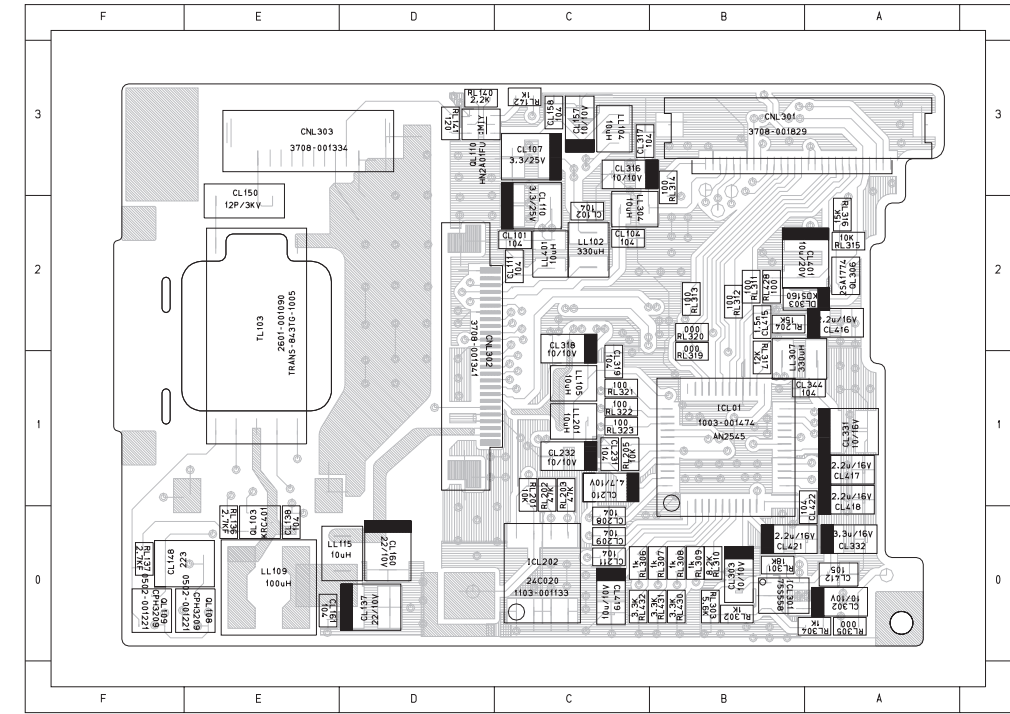


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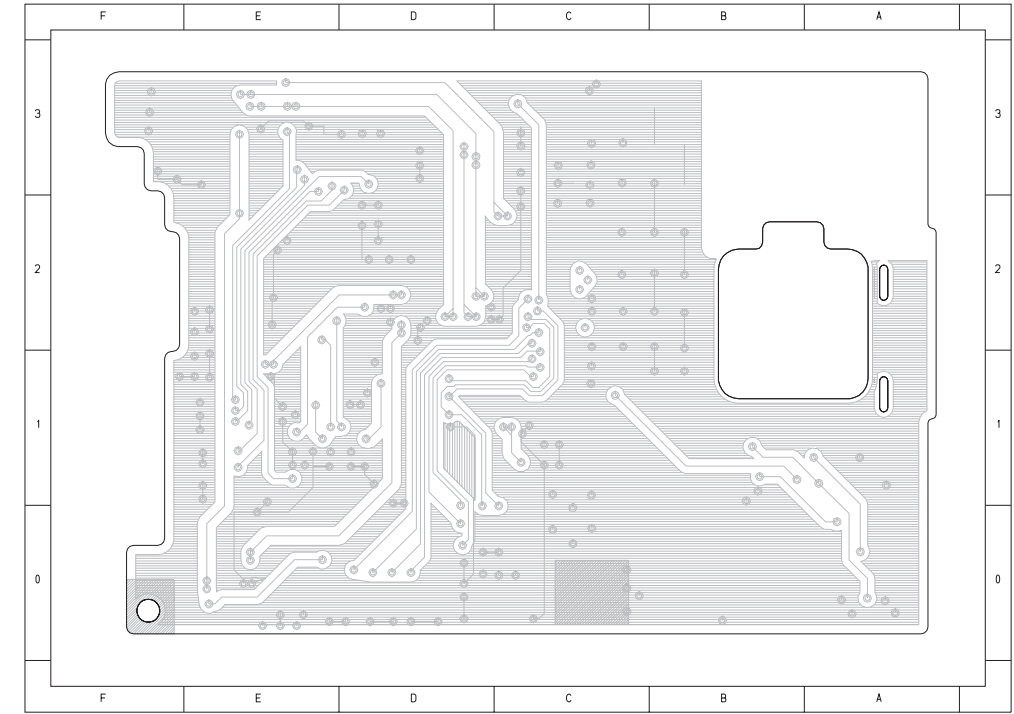


1-3 LCD PCB

COMPONENT SIDE

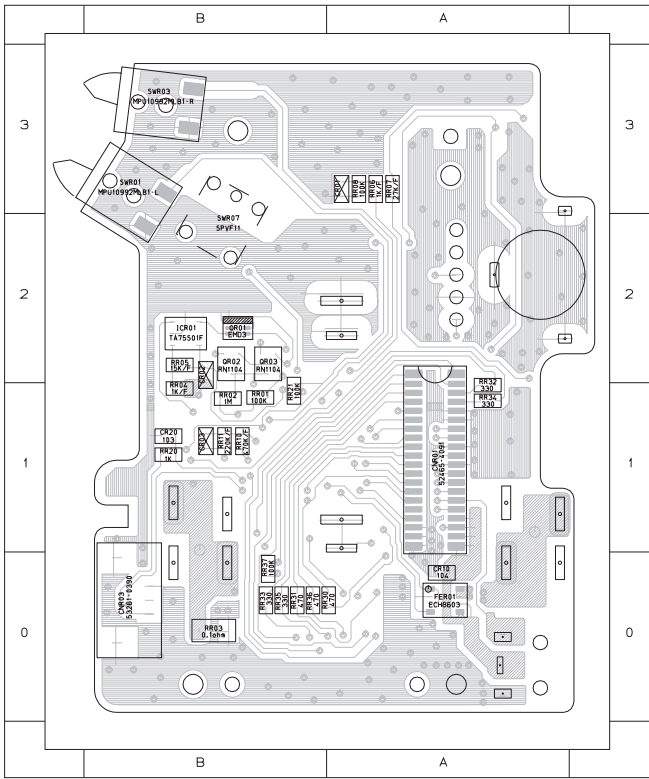


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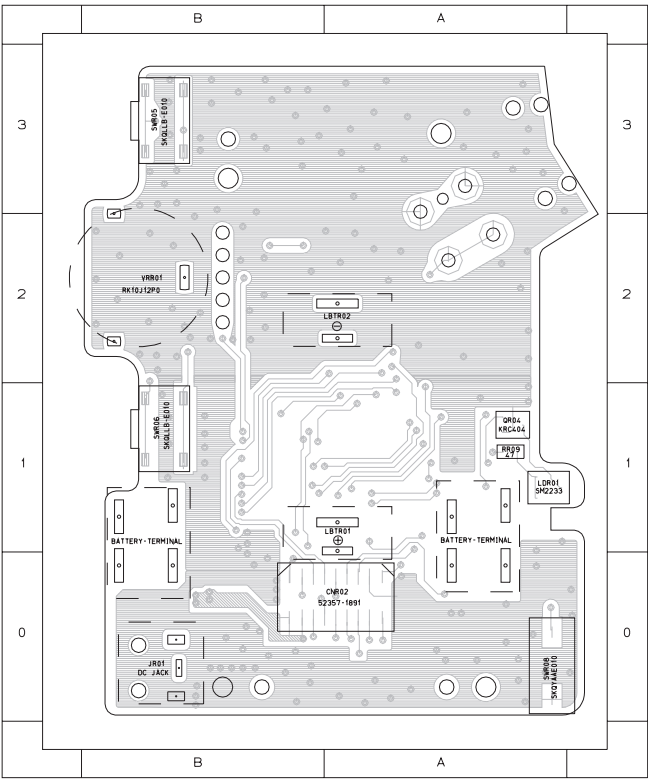


1-4 Rear PCB

COMPONENT SIDE

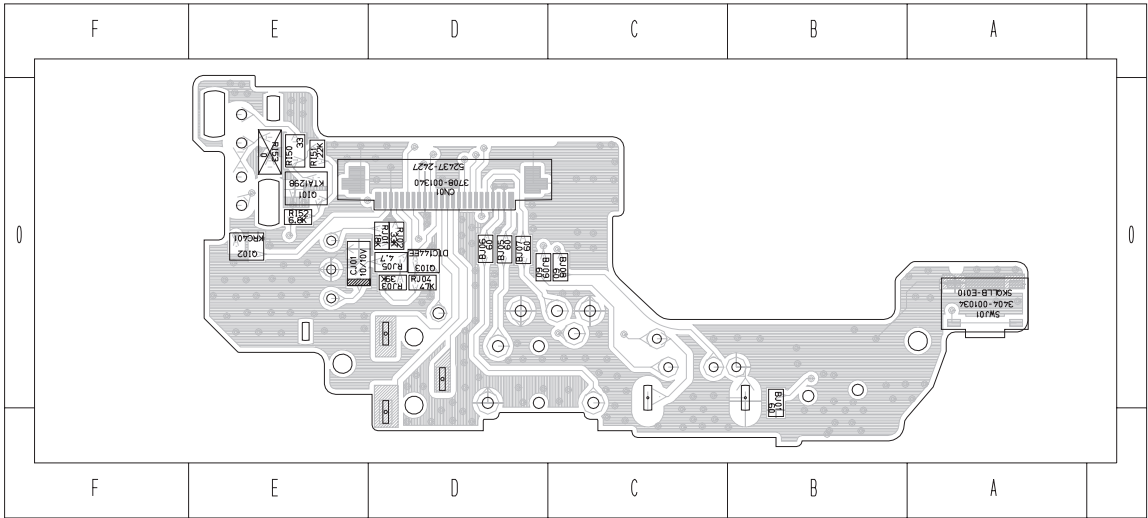


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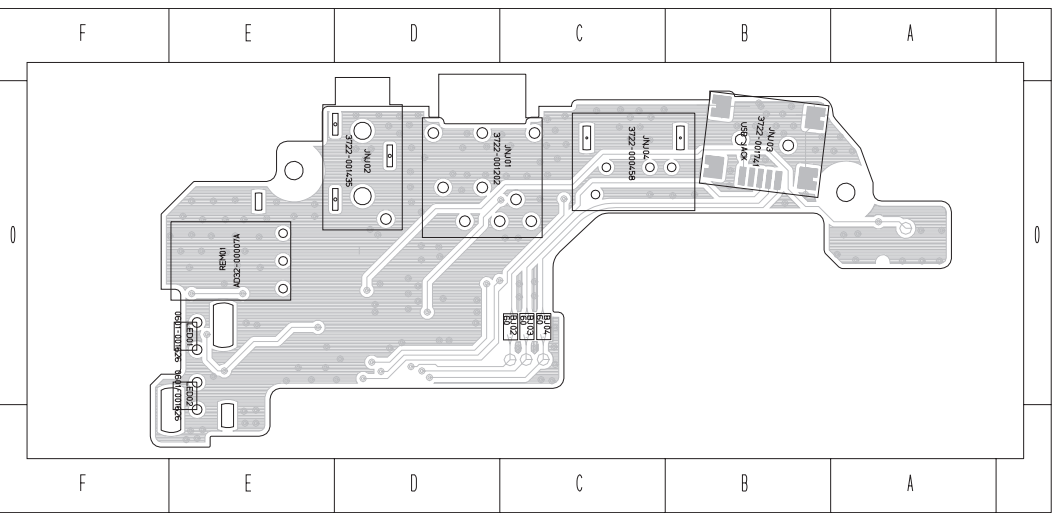


1-5 Jack PCB

COMPONENT SIDE

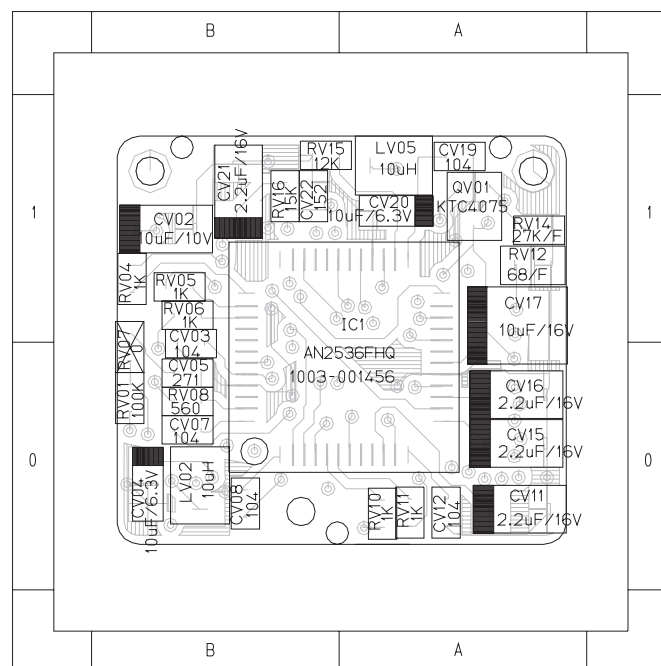


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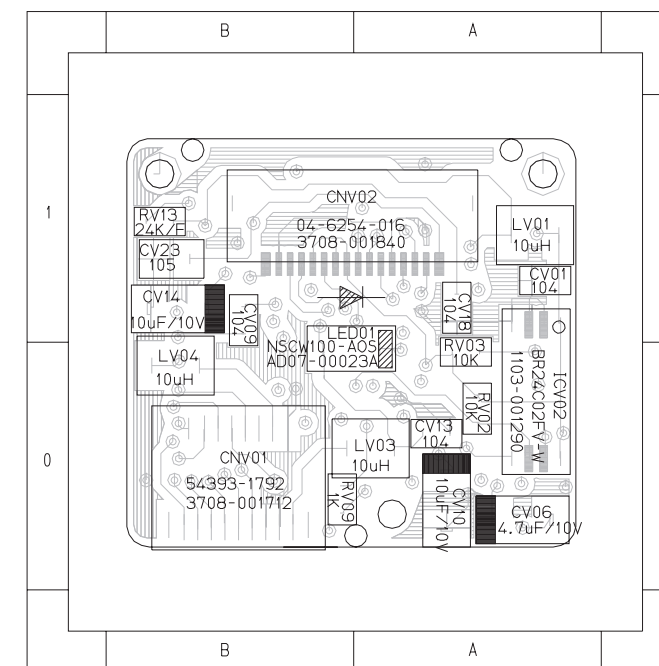


1-6 CVF PCB

COMPONENT SIDE

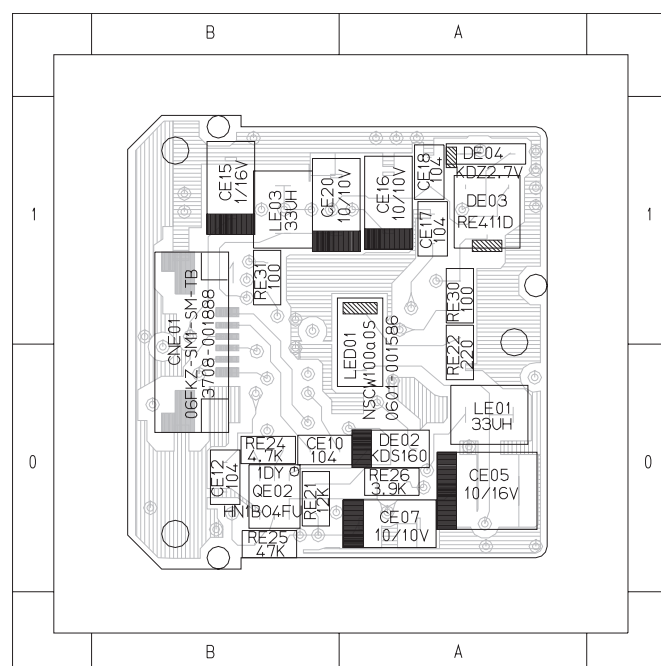


CONDUCTOR SIDE

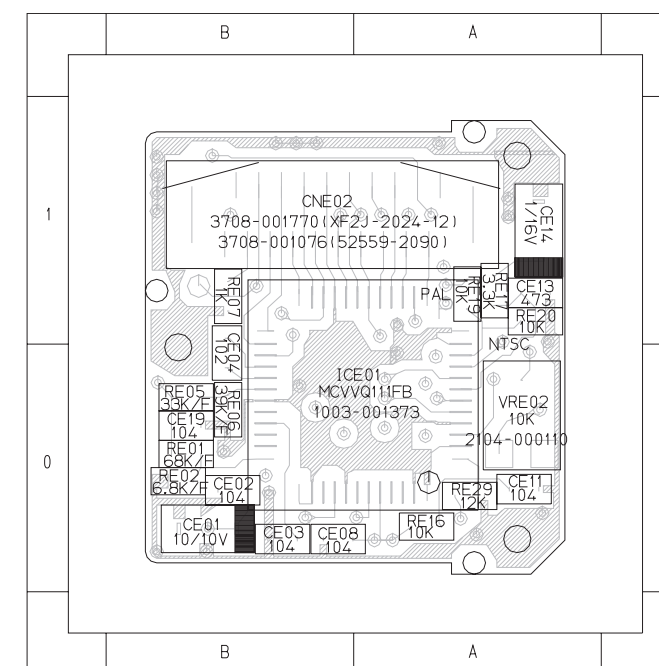


1-7 EVF PCB

COMPONENT SIDE

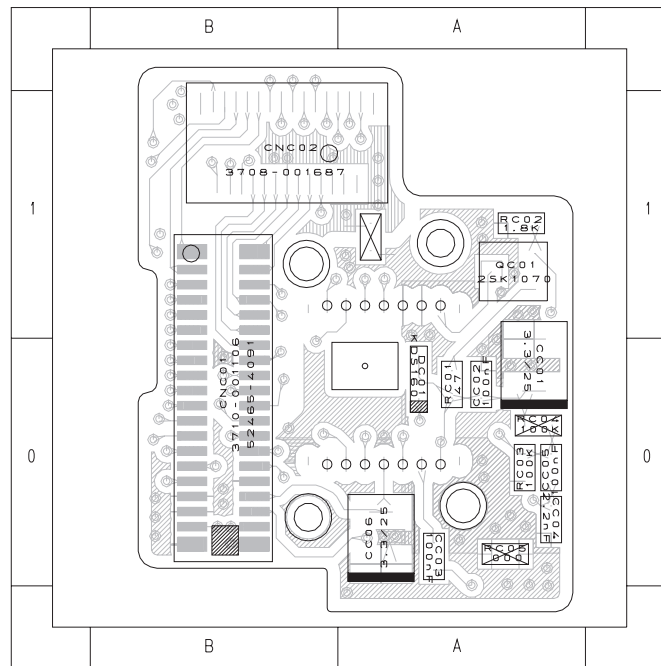


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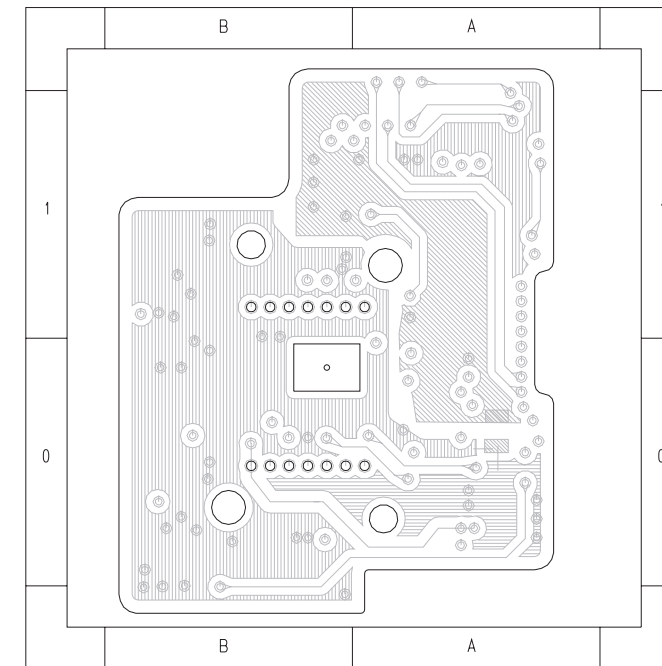


1-8 CCD PCB

COMPONENT SIDE

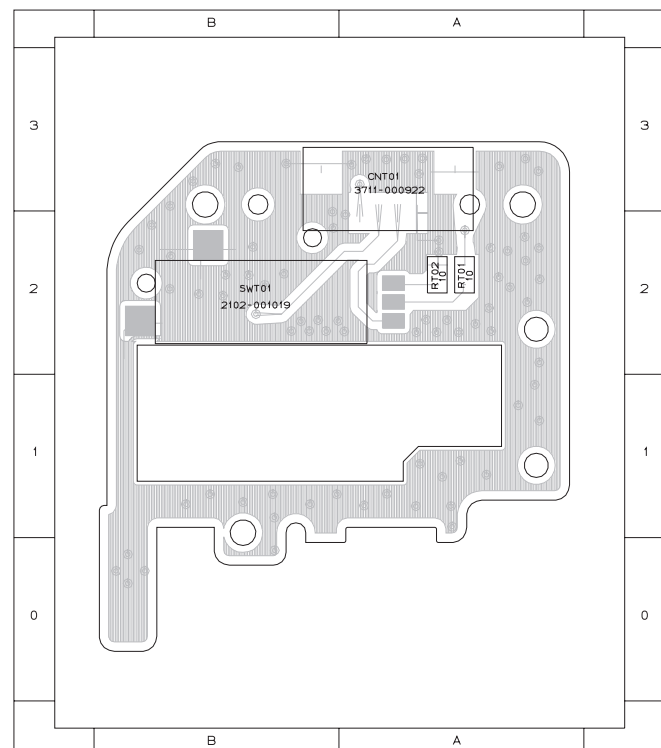


CONDUCTOR SIDE

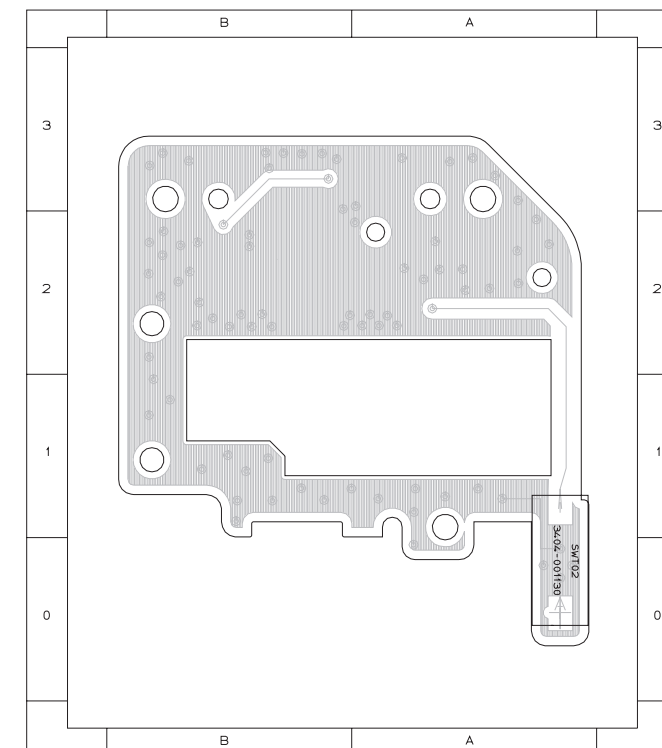


1-9 TOP PCB

COMPONENT SIDE



CONDUCTOR SIDE



MEMO



DIGITAL VIDEO CAMCORDER

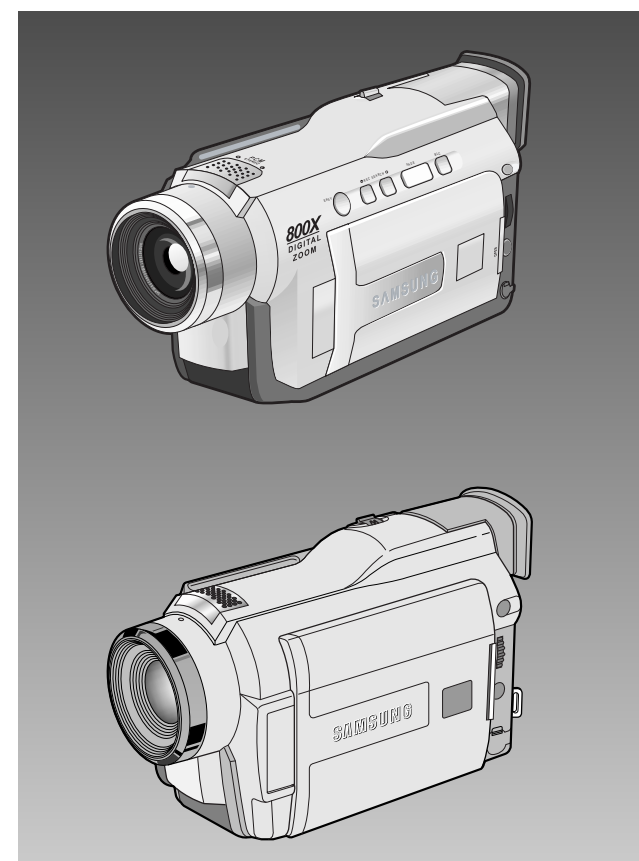
Chassis : Delta
SCD20/SCD21/SCD22/SCD23/SCD24
SCD27/SCD29
VP-D20/D21/D23/D24/D26
VP-D20i/D21i/D23i/D24i/D26i

ADJUST *Manual*

- ◆ This Manual is for only Alignment and Adjustment method of "Delta" Chassis.
- ◆ File with the Service Manual.



DIGITAL VIDEO CAMCORDER



CONTENTS

1. VCR Adjustment
2. Camera Adjustment
3. LCD Adjustment
4. Deck Adjustment

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AD82-00013A

1. VCR Adjustment

1-1 VCR Adjustment Preparation

1) How to get into the VCR adjust mode

STEP 1

- 1 Connect the power source.
- 2 Set the power switch to "TAPE" position.

STEP 2

- 1 Press and hold the "STOP" and "EASY" buttons on the video camera at the same time for more than 5 seconds.
- 2 When monitor OSD appears as shown Fig. 1-2, the adjustment mode has been activated successfully.
- 3 Move the "MENU Dial" to highlight VCR ADJ and push the "ENTER". (See Fig. 1-3)
- 4 When changing the adjustment item, please press the "EASY" and "DISPLAY" buttons on the video camera.
- 5 You can change the adjustment value to move the "MENU Dial" Up or Down.
- 6 After setting adjustment value, please push the "ENTER" to confirm Data.

STEP 3

If you want to finish the adjustment mode, you have to do Power Reset.

The Power Reset means that you pull out the power source and pull in it again.

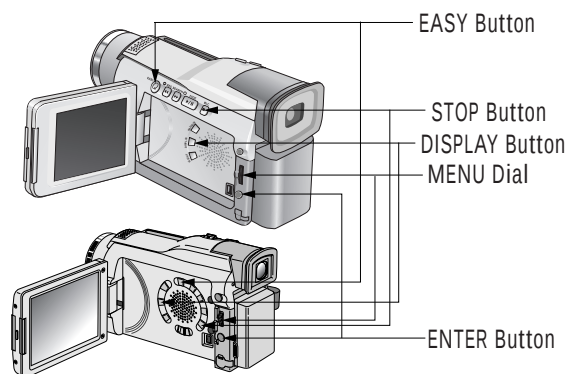


Fig. 1-1

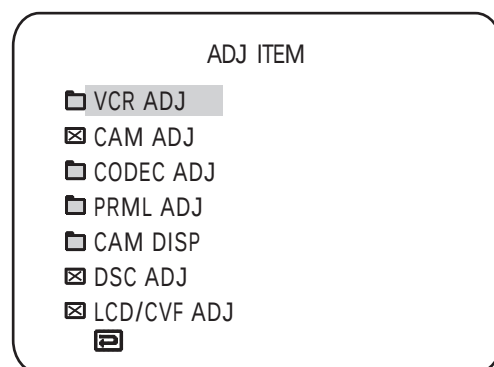


Fig. 1-2

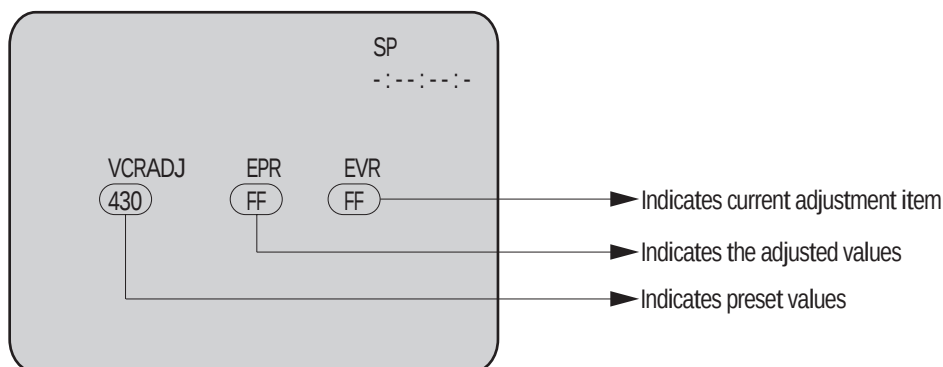


Fig. 1-3

2) Function of each buttons on the SET Key

<Table 1-1>

Buttons	Description
ENTER push (Confirm)	Stores changed value in the adjustment and auto adjustment mode.
MENU Dial down (Data Down)	Changes data in the adjustment state.
MENU Dial up (Data Up)	
EASY (Mode Up)	Changes mode.
DISPLAY (Mode Down)	

1-2 VCR Adjustment

<Table 1-2>

Model(Address)	Name	Value	Description
437	SWP Position	80	Head Switching Position Adjust

1) How to adjust Head Switching Position

- ❶ Get into VCR ADJUST mode.
- ❷ Move to the VCR ADJUST address "437".
- ❸ Play standard tape, and "Head Switching Position" will be adjusted automatically.

2. Camera Adjustment

Note : How to adjust the camera system.

- 1) EEPROM stores confirmed adjustment value of each adjustment step.
- 2) DSP (Digital Signal Process : ICA01-Camera Main PCB) digitalizes the camera signal.
- 3) When changing IC705-Main PCB of EEPROM, readjust Main PCB.
While changing LCD PCB and CVF PCB- always readjust each part.
Since EEPROM stores confirmed adjustment value of each adjustment step, readjusting must be performed in order to store the changed data.
- 4) Adjust the following items after changing LENS Ass'y.
 - ① Lens Zoom Track
 - ② Auto HALL
 - ③ Auto IRIS
- 5) Adjust the following items after changing EEPROM and Main PCB.
 - ① Lens Zoom Track
 - ② Zoom VR Center
 - ③ Auto HALL
 - ④ Auto IRIS
 - ⑤ Auto White Balance (indoor)
 - ⑥ Auto White Balance (outdoor)

2-1 Adjustment Preparation

1) Measuring Instrument

- ① DC power supply
- ② Oscilloscope
- ③ NTSC Vectorscope, PAL vectorscope
- ④ NTSC wave form monitor, PAL wave form monitor
- ⑤ NTSC TV or Monitor, PAL TV or Monitor
- ⑥ Color bar chart
Gray scale chart

2) Camera PCB configuration

- ① Main PCB
- ② CCD PCB
- ③ LCD PCB
- ④ CVF PCB

3) Before you start

- ① Use the buttons on the SET key when adjusting camera.
- ② Press the push the "ENTER" when storing confirmed adjustment value of each adjustment step in EEPROM.
- ③ The OSD shows "OK" after finishing each adjustment step.
- ④ To clear the adjustment mode, pull out the power source.

4) Function of each buttons on the SET Key

<Table 2-1>

Buttons	Description
ENTER push (Confirm)	Stores changed value in the adjustment and auto adjustment mode.
MENU Dial down (Data Down)	Changes data in the adjustment state.
MENU Dial up (Data Up)	
EASY (Mode Up)	Changes mode.
DISPLAY (Mode Down)	

5) How to set up the camera adjustment mode

STEP 1

- ❶ Connect the power source (battery /DC cable).
- ❷ Set the power switch to "CAMERA" position.
- ❸ The OSD appears.

STEP 2

- ❶ Press and hold the "STOP" and "EASY" buttons on the video camera at the same time for more than 5 seconds.
- ❷ When monitor OSD appears as shown Fig. 2-2, the adjustment mode has been activated successfully.
- ❸ Move the "MENU Dial" to highlight CAM ADJ and push the "ENTER".
- ❹ When changing the adjustment item, please press the "EASY" button on the Camera.
- ❺ You can change the adjustment value to move the "MENU Dial" Up or Down.
- ❻ After setting adjustment value, please push the "ENTER" to confirm Data.

STEP 3

Monitor OSD shows " CAMERA EPR EVR "

Then camera adjustment mode has been activated successfully.

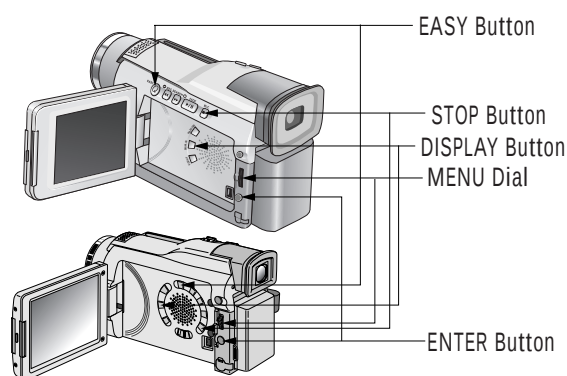


Fig. 2-1

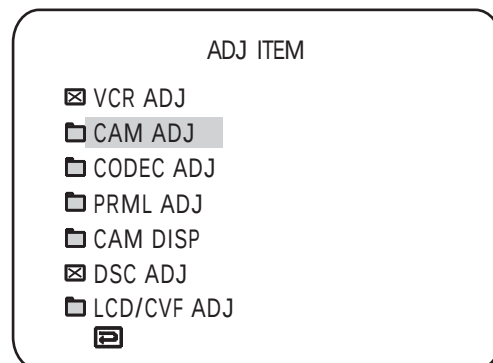


Fig. 2-2

2-2 Camera Adjustment

Note : "XX XX" indicate the previous preset value and adjusted value.
Press the "ENTER" (Confirm) to store the adjusted value.

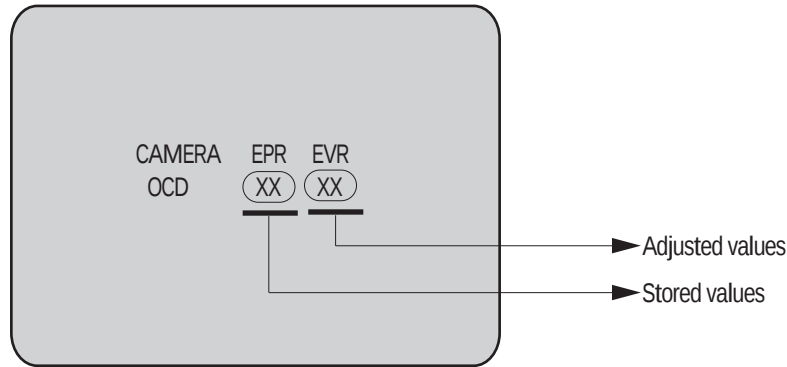


Fig. 2-3

1) EEPROM Data Initialize

Caution : This adjustment must do following items changing new EEPROM (IC705) or Main PCB.

- ❶ Press the "EASY"(Mode Up)/"DISPLAY"(Mode Down) buttons so that OSD shows "ODF XX XX".
- ❷ Using "MENU Dial"(Data Up/Down) so that display data of EVR is "A0"
- ❸ Press the "ENTER" (Confirm).
- ❹ The OSD shows "OK" after huithing the initalize.

2) Lens Zoom Track

Caution : For whole zoom range, it shall be in focus.

The location of a focus lens is moving depending on the location of Zoom Lens.

During adjusting, micom measures the focus location from a near distance to a long.

- ❶ Camera is set to E-E mode.
- ❷ Focus chart photo.
- ❸ Ensure that camera is left an about 3m distance from a focus chart and the focus of lens is placed vertically.
Attach a focus chart to white or gray wall of a flat surface.
- ❹ Connect a video output terminal to a TV.
- ❺ Press the "EASY"(Mode Up)/"DISPLAY"(Mode Down) buttons so that OSD shows "ODE XX XX".
- ❻ Press the "ENTER" (Confirm).

Never impact on the lens when adjusting zoom and focus Lens.

The OSD shows "OK" after finishing the adjustment.

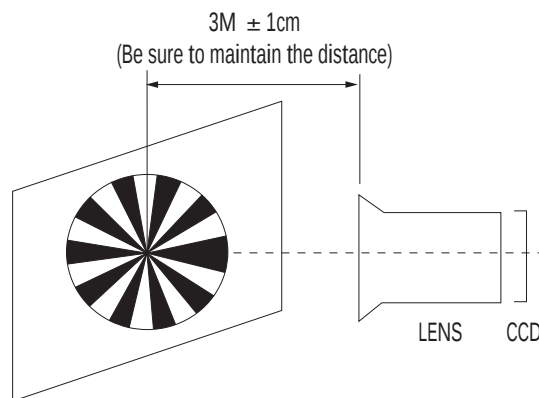


Fig. 2-4

3) Zoom VR Center

- ❶ Connect a video output terminal to a TV.
- ❷ Press the "EASY"(Mode Up) / "DISPLAY"(Mode Down) buttons so that OSD shows "OD6 XX XX".
- ❸ Press the "ENTER" (Confirm).
- ❹ Then Micom finds out Zoom VR center position.
Store Zoom VR center value in OB7.

4) Auto HALL

- ❶ Connect a video output terminal to a TV.
- ❷ Press the "EASY"(Mode Up) / "DISPLAY"(Mode Down) buttons so that OSD shows "OCD XX XX".
- ❸ Press the "ENTER" (Confirm).
- ❹ Then micom finds out max. Hall value with an iris opened and min. Hall value with an iris closed.
Store max. and min. value of Hall in OAD and OAC respectively.
- ❺ The OSD shows "OK" after finishing the adjustment.

5) Auto IRIS Level

- ❶ Connect a video output terminal to a wave form monitor and a TV.
- ❷ Press the "EASY"(Mode Up) / "DISPLAY"(Mode Down) buttons so that OSD shows "OCE XX XX".
- ❸ Press the "ENTER" (Confirm).
- ❹ Then micom finds out max. Hall value with an iris opened and min. Hall value with an iris closed. Store max. and min. value of in OBC, OBD and OBB respectively.
- ❺ The OSD shows "OK" after finishing the adjustment.

6) Auto White Balance (indoor)

- ❶ Camera mode & 3100° K / 5100° K gray scale chart.
- ❷ Connect a video output terminal to a vectorscope and a TV.
- ❸ Press the "EASY"(Mode Up) / "DISPLAY"(Mode Down) buttons so that OSD shows "OD4 XX XX".
- ❹ Ensure that camera picks up image 40 μ s on 3100°K gray scale chart precisely and the illumination is 1500~2000 Lux.
- ❺ Press the "ENTER" (Confirm) to ensure that white spot on a vectorscope is moving in the middle of screen.
- ❻ The OSD shows "OK" after finishing the adjustment.

7) Auto White Balance (outdoor)

- ❶ Camera mode & 3100° K / 5100° K gray scale chart.
- ❷ Connect a video output terminal to a vectorscope and a TV.
- ❸ Press the "EASY"(Mode Up) / "DISPLAY"(Mode Down) buttons so that OSD shows "OD5 XX XX".
- ❹ Ensure that camera picks up image 40 μ s on 5100 gray scale chart (3100 gray scale chart + C16 filter) precisely and the illumination is 1500~2000 Lux.
- ❺ Press the "ENTER" (Confirm) to ensure that white spot on a vectorscope is moving in the middle of screen.
- ❻ The OSD shows "OK" after finishing the adjustment.

3. LCD Adjustment

Note : For LCD adjustment, use the buttons on the video camera and the SET key.
 After each adjustment step is completed, OSD shows "OK".
 EEPROM(ICL202) stores confirmed adjustment value of each adjustment step.
 After finishing the adjustment, turn power off.

3-1 How to get into the LCD adjust mode

STEP 1

- ❶ Connect the power source (battery /DC cable).
- ❷ Set the power switch to "REC" position.
- ❸ Set the Lens to CAMCORDER.
- ❹ Camera screen and OSD appears.
- ❺ Open housing of the video camera and remove tape.
- ❻ Open the LCD.

STEP 2

- ❶ Press and hold the "STOP" and "EASY" buttons on the video camera at the same time for more than 5 seconds.
- ❷ When monitor OSD appears as shown Fig. 3-2, the adjustment mode has been activated successfully.
- ❸ Move the "MENU Dial" to highlight LCD /CVF ADJ and push the "ENTER".
- ❹ When changing the adjustment item, please press the "EASY" / "DISPLAY" buttons on the camera.
- ❺ You can change the adjustment value to move the "MENU Dial" Up or Down.
- ❻ After setting adjustment value, please push the "ENTER" to confirm Data.

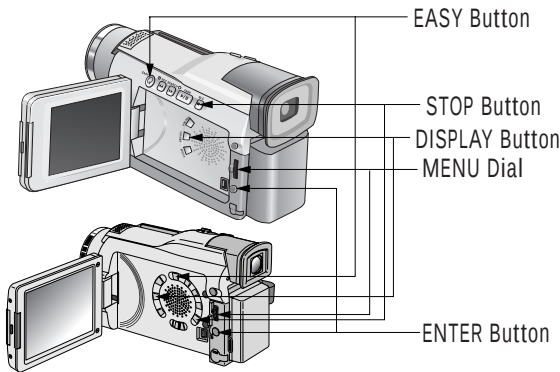


Fig. 3-1

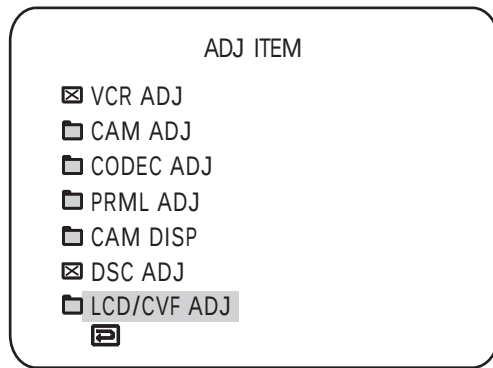


Fig. 3-2

3-2 Function of each buttons on the SET Key

<Table 3-1>

Buttons	Description
ENTER push (Confirm)	Stores changed value in the adjustment and auto adjustment mode.
EASY (Mode Up)	Shift adjustment address to left.
DISPLAY (Mode Down)	Shift adjustment address to right.
MENU Dial up (Data Up)	Up value.
MENU Dial down (Data Down)	Down value.

Note : In service adjustment mode, button names are different from those in customer function control mode.

3-3 Adjust Mode

<Table 3-2>

Mode	NTSC		PAL	
	TRANSMISSION	TRANS-Reflective	TRANSMISSION	TRANS-Reflective
00	55	55	55	55
01	80	80	80	80
02	A0	A0	A0	A0
03	4F	4F	4F	4F
04	80	80	80	80
05	C6	C6	C6	C6
06	B5	B5	B5	B5
07	80	80	80	80
08	80	80	80	80
09	70	70	70	70
0A	95	95	95	95
0B	80	80	80	80
0C	76	76	76	76
0D	60	60	60	60
0E	D0	D0	D0	D0
0F	15	15	15	15
10	52	52	52	52
11	CD	CD	CD	CD
12	C0	C0	80	80
13	80	80	93	93
14	00	00	00	00
15	00	00	00	00

4. Deck Adjustment

4-1 Operation Without Housing Assembly

- 1) Remove the Housing Ass'y from the recorder unit.
- 2) Connect the mechanical chassis to the recorder circuit to supply voltage.
- 3) Set to Unload mode.

- 4) Press the S/W Push(Keep ON status)to start loading, and push the PLAY Key.
(Cover the Top/End sensor with black tape, because they do not operate.)

Note : For the removal of the Housing Ass'y.

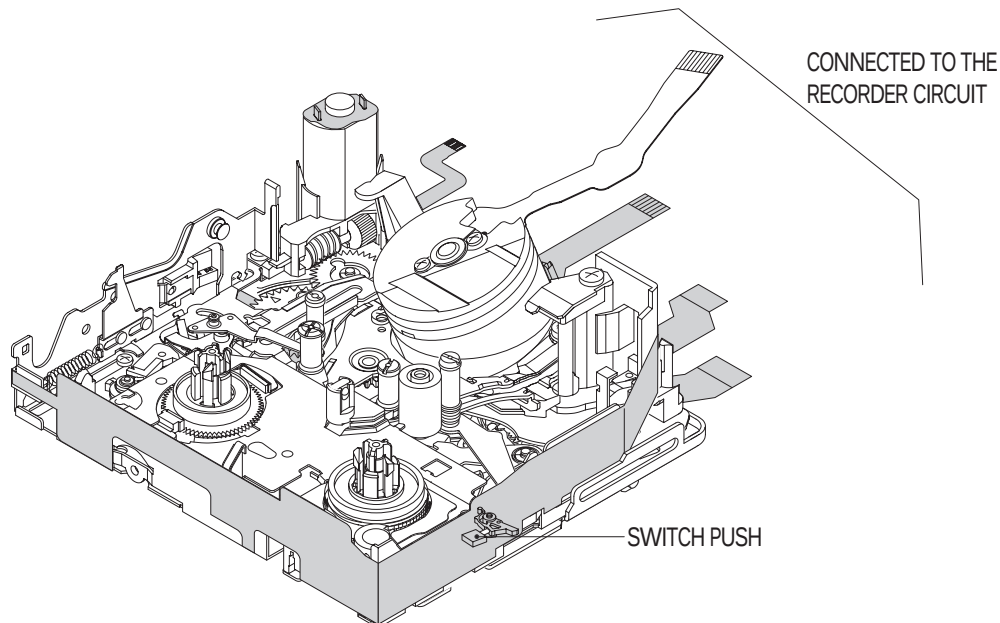


Fig. 4-1

4-2 Setting Mechanical Mode (Without Recorder Circuit)

- 1) Set the power-supply output to approx.3V.
- 2) Choose the polarity (depending on whether loading or unloading).
- 3) Supply the voltage to the Motor Loading, and set to the desired mode.

<Table 4-1>

A	B	Movement of chassis
+	-	Loading
-	+	Unloading

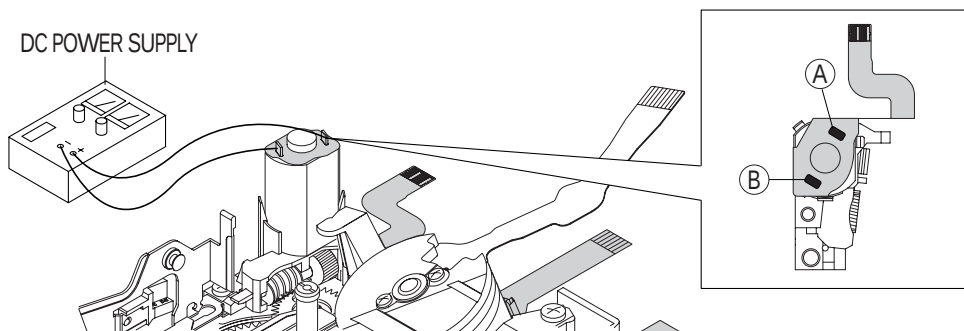


Fig. 4-2

4-3 Maintenance

Carry out the following periodic maintenance checks in order to fully exercise all functions, operations and tape. After repairing, service the set as follows:

1) Cleaning of Drum Assembly

- ① Gently apply lens tissue soaked in ethyl alcohol to the Drum assembly.
Clean the Upper Drum assembly while rotating it slowly counterclockwise(by hand).

Note : Do not rotate the motor by power or rotate the Upper Drum assembly clockwise.
Also, the Head tip will be damaged if the lens tissue is moved in a perpendicular direction.
Be sure to follow these instructions when cleaning the Drum Ass'y

2) Cleaning of Tape Path

- ① In EJECT mode, clean the tape path system(from Pole Tension P1 through Pole Review P7, Pinch Roller and Capstan Shaft) and the Lower Drum. Using the lens tissue soaked in ethyl alcohol.

Note : Make sure that no oil or grease adheres to the lens tissue.

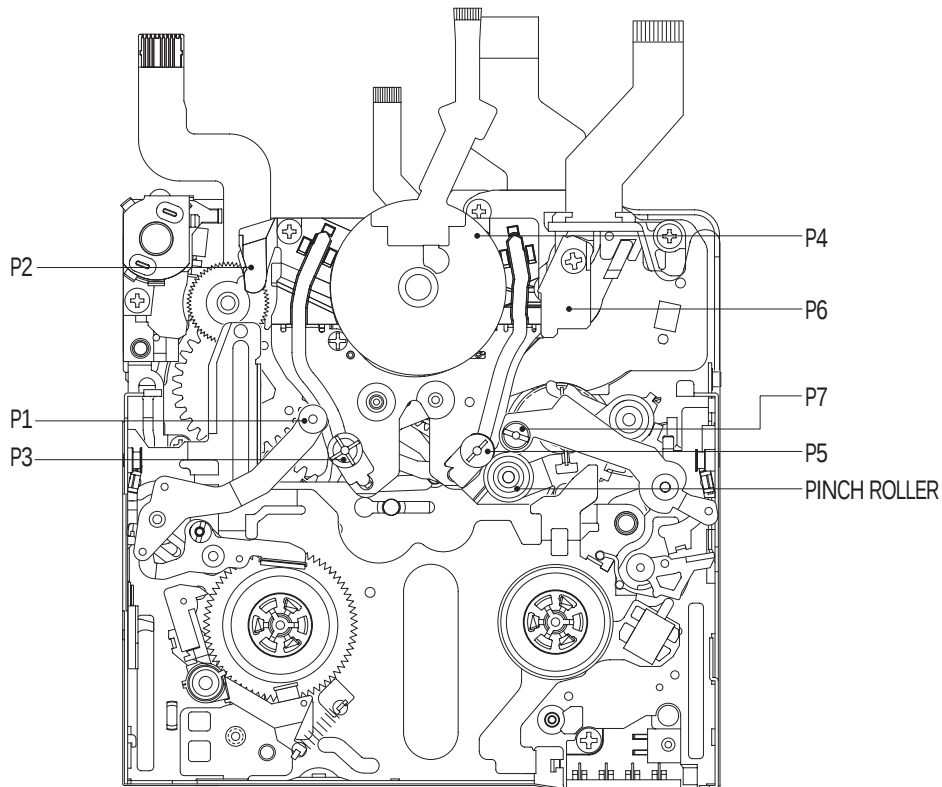


Fig. 4-3

3) Periodic Maintenance and Check List

When overhauling, refer to the following table.

<Table 4-2>

Maintenance checks		Hours of use (H)										Remark
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000	
Tape path system	Cleaning of tape path	O	O	O	O	O	O	O	O	O	O	
	Cleaning and degaussing of drum ass'y	O	O	O	O	O	O	O	O	O	O	
D R I V I N G	Capstan Shaft		Δ		Δ		Δ		Δ		Δ	- Never let oil get on to the tape path surface.
	Gear Capstan		Δ		Δ		Δ		Δ		Δ	
	Gear Pully Shaft		Δ		Δ		Δ		Δ		Δ	
	Belt Timing		◆		◆		◆		◆		◆	
	Motor Loading		◆		◆		◆		◆		◆	
Performance	Abnormal Noise		◆	◆	◆	◆	◆	◆	◆	◆	◆	
Confirmation	Back Tension		◆		◆		◆		◆		◆	
	Brake System		◆		◆		◆		◆		◆	
	PB, REV Torque Measurement		◆		◆		◆		◆		◆	

O : Cleaning Δ : COil ◆ : Confirmation

- ◆ When lubrication bearings, be sure to keep the oil free of dust. (Oil contaminated with dust might cause the bearings to wear out or seize.)
- ◆ A “drop” of oil is defined as the amount attached to the tip of a Ø 2mm stick as shown in Fig. 4-4.

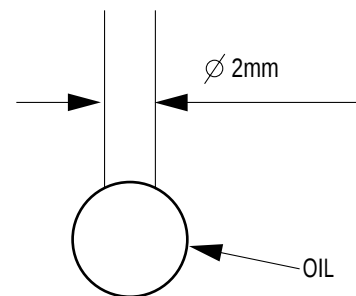


Fig. 4-4

4-4 Mechanical Check and Adjustment

4-4(a) Tension Regulator Adjustment

1) Disassembly

- 1 For the removal of the Housing Ass'y.

2) Adjustment

- 1 Set to PLAY mode (without cassette tape).
- 2 Check that the distance between external surface of Holder Loading and center of Arm Tension is 0~1mm. (Fig. 4-5)
- 3 If necessary, proceed to step 4.
- 4 If the Arm Tension is located inside the position specified, adjust the Band Adjust Tension toward arrow A. (If it is located outside, adjust toward arrow B.)

Note : Check if the Arm Tension can be moved toward arrow C in PB mode.

3) Reassembly

- 1 For the removal of the Housing Ass'y.

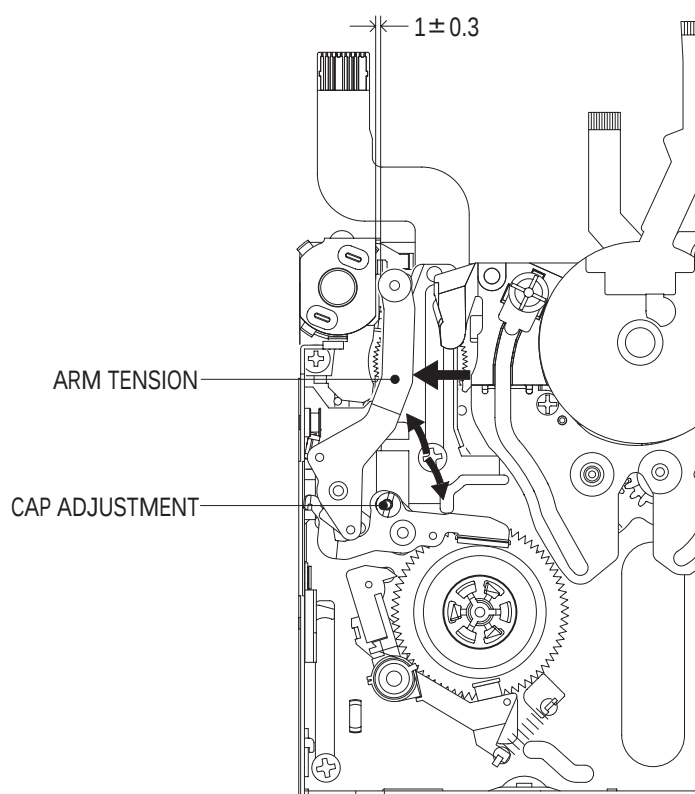


Fig. 4-5

4-4(b) Back Tension Confirmation

- 1) Set up the cassette-torque tape.
- 2) Set to CAMERA mode, push the EDIT(+) KEY and check that the torque value of Reel S is $4.5 \pm 0.5 \text{ g.cm}$.

4-4(c) PB/REV Torque check

- 1) Set up the cassette torque tape.
- 2) Set to CAMERA mode, Push the EDIT(+)Key and check that the torque value of Reel T is $7.5 \pm 3 \text{ g.cm}$.
- 3) Push the EDIT(-) Key and check that the torque value of Reel S is $12.5 \pm 3 \text{ g.cm}$.
- 4) If necessary, replace the defective Gear pulley Ass'y.

4-4(d) Reel Table Height Check**1) Removal**

- ❶ For the removal of the Housing Ass'y.
- ❷ For the removal of the Idler Ass'y.

2) Check

- ❶ Using vernier calipers, check the following distances : From the upper surface of the PCB Reel to the resting surfaces of Reel S, T table should each be $3.9 \pm 0.1 \text{ mm}$.

3) Mounting

- ❶ For the removal of the Idler Ass'y.
- ❷ For the removal of the Housing Ass'y.

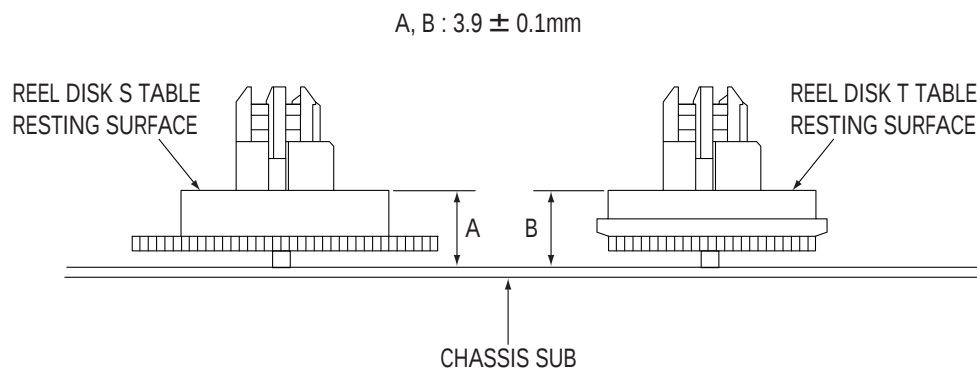


Fig. 4-6

4-5 Tape Path Adjustment

4-5(a) Preparation for Adjustment

- ❶ Clean the tape running surface(Poles, Drum, Capstan Shaft, Pinch Roller).
- ❷ Observe the PB RF signal and Head Switching Pulse on an oscilloscope.
- ❸ Play back the alignment tape.
- ❹ Check that the waveform of the RF signal is flat at both inlet and outlet(A in Fig. 4-7).
If not flat (B or C in Fig. 4-7), do adjustments 4-5(b) through 4-5(d).

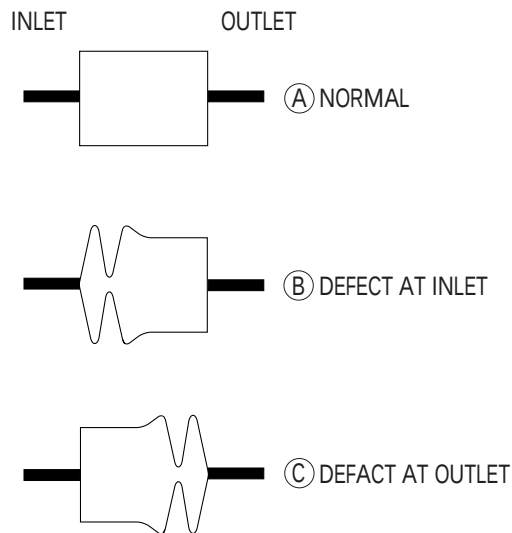


Fig. 4-7

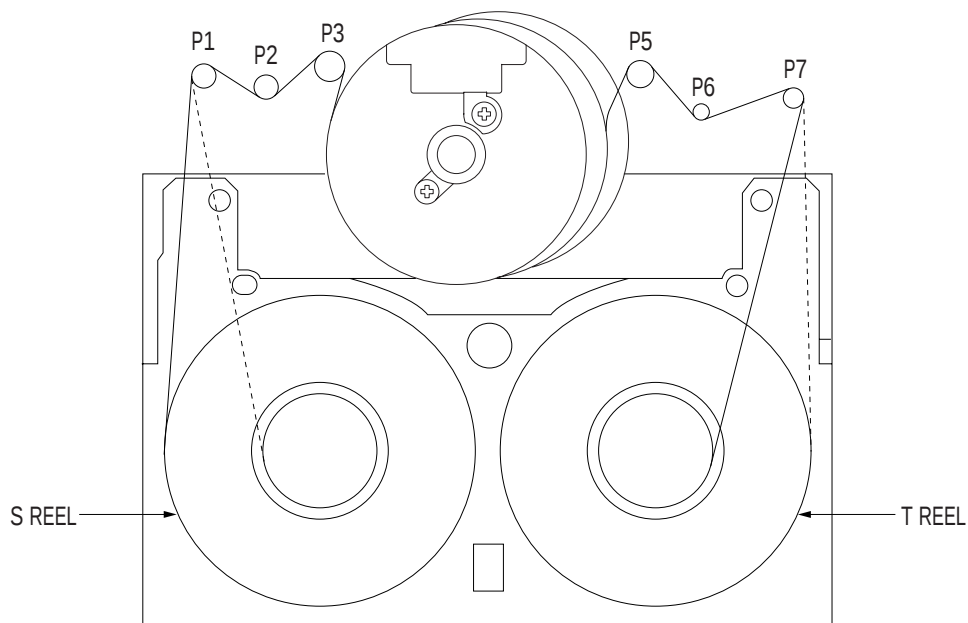


Fig. 4-8

4-5(b) Tracking adjustment

- ❶ Play Back the alignment tape.
- ❷ Turn P3 to flatten the waveform at the inlet.
- ❸ Turn P5 to flatten the waveform at the outlet.

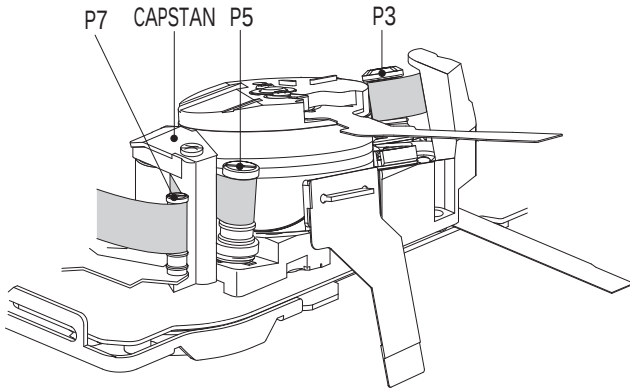


Fig. 4-9

4-5(c) P7 Adjustment

- ❶ Play back the alignment tape, and confirm that the tape is not twisted between the Guide Roller T and Capstan. (If the tape is twisted, turn P7, Fig. 4-10)
- ❷ Set to REV mode and observe the outlet waveform of PB RF signal. (Fig. 4-11)
- ❸ If the outlet waveform is out-of-spec, turn P7 counterclockwise, and redo steps 1 and 2.

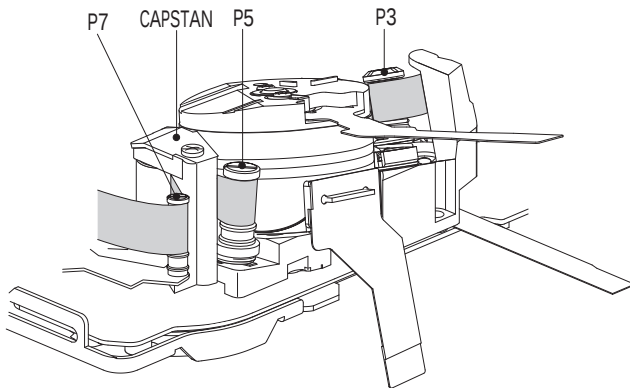


Fig. 4-10

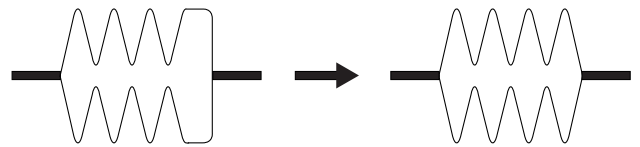


Fig. 4-11

4-5(d) Check After Adjustment

1) Tracking Check

- ❶ Play back the alignment tape.
- ❷ Confirm that the minimum amplitude value(E min.)is 80% of the maximum value(E max.) or larger. (Fig. 4-12)
- ❸ Confirm that no large fluctuation occur on the waveform. (Fig. 4-13)

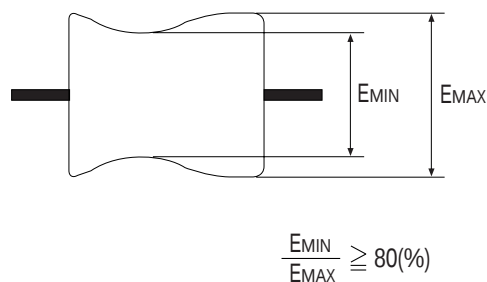


Fig. 4-12

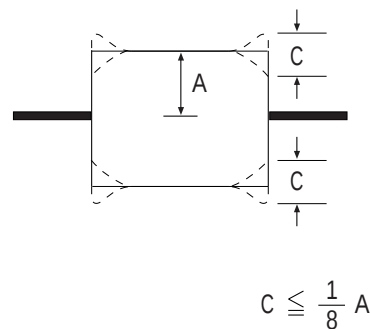


Fig. 4-13

2) CUE and REV Check

- ❶ Play back the alignment tape, and set to REV mode.
Confirm that the waveform peaks have a uniform Pitch.(Fig. 4-14 A)
If the track pitch is not uniform, do section 4-5(b) (Tracking adjustment) and 4-5(c) (P7 adjustment).
- ❷ Set to CUE mode.
Confirm that the waveform peaks still have a uniform pitch. (Fig. 4-14 B)
If the track pitch is not uniform, do section 4-5(b) (Tracking Adjustment).

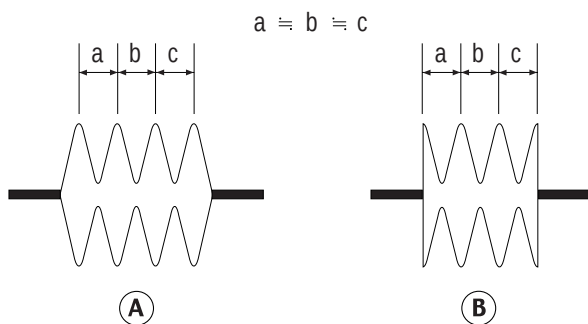


Fig. 4-14

3) Rise Time Check

- ❶ Play back the alignment tape.
- ❷ Set to playback mode, and confirm that the waveform of PB RF signal rises flat within 3 seconds.
Also confirm that the tape is not twisted or curled around the Pinch Roller. (Fig. 4-15)
- ❸ Run the tape in CUE/REV and FF/REW modes, then playback.
Confirm the waveform of PB RF signal rises flat within 3 seconds. Also confirm that the tape is not twisted or curled around the Pinch Roller.
- ❹ Repeat steps 2. and 3.

4) Tape Path Check

- ❶ In CUE and REV modes, check that the tape is not curled around the P1, P3, P5 upper flange and P7 upper/Lower flanges.

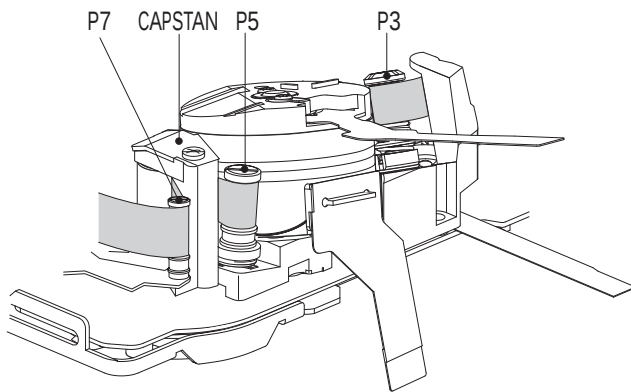


Fig. 4-15

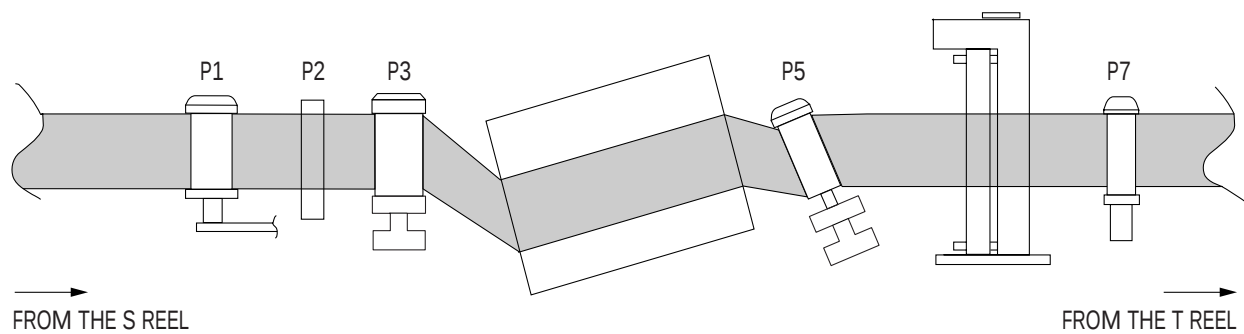


Fig. 4-16

MEMO