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02	System Setting	62	USB CONN
03	*	63	*
04	04_CPU-Merom(HOST)	64	ISA ROM
05	05_CPU-Merom(PWR)	65	SPI ROM
06	*	66	LED
07	07_CRESTLINE(HOST)	67	*
08	08_CRESTLINE(DMI & CFG)	68	DC & BAT IN
09	09_CRESTLINE(GRAPHIC)	69	*
10	10_CRESTLINE(DDR2)	70	Debug CONN.
11	11_CRESTLINE(PWR)	71	*
12	12_CRESTLINE(PWR2)	72	SATA-HDD & ODD
13	13_CRESTLINE(GND)	73	eSATA
14	*	74	SREW HOLE
15	15_SB-ICH8M(1)	75	*
16	16_SB-ICH8M(2)	76	TPM
17	17_SB-ICH8M(3)	77	SPRING_PAD
18	18_SB-ICH8M(PWR)	78	BT
19	*	79	POWER SEQUENCE
20	20_DDR2 SO-DIMM0	80	POWER_VCORE
21	21_DDR2 SO-DIMM1	81	POWER_SYSTEM
22	22_DDR2 TERMINATION	82	POWER_I/O_1.5VS & 1.05VS
23	*	83	POWER_I/O_DDR & VTT
24	VGA_ATI_M82-ME XT_MAIN(1)	84	POWER_I/O_+3VA0 & +2.5VS
25	VGA_ATI_M82-ME XT_Memory(2)	85	POWER_VGA_CORE & +1.25VS
26	VGA_ATI_M82-ME XT_PCI-E(3)	86	N/A
27	VGA_ATI_M82-ME XT_POWER(4)	87	N/A
28	VGA_ATI_M82-ME XT_VRAM_A(5)	88	POWER_CHARGER
29	VGA_ATI_M82-ME XT_VRAM_B(6)	89	N/A
30	*	90	POWER_DETECT
31	FINGER PRINT	91	POWER_LOAD SWITCH
32	CRT	92	POWER_FLOWCHART
33	LVDS & INVERTER CONNECTOR	93	POWER_PROTECT
34	*	94	POWER_SIGNAL
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36	*		
37	THER SENSOR & FAN		
38	*		
39	CLOCK GEN-ICS9LPR363AGLF-T		
40	*		
41	Power on & Reset Freq.		
42	DISCHARGE		
43	*		
44	LAN-L1		
45	MDC & RJ45+11		
46	*		
47	MINI CARD-TV/Windigo		
48	MINI CARD-Robson		
49	MINI CARD-Kedron		
50	*		
51	CARD1394-R5C833(1)		
52	CARD1394-R5C833(2)		
53	4 in 1 CARD READER		
54	NEWCARD		
55	*		
56	CODEC-ALC660		
57	AUDIO AMP & JCAK		
58	Sequence Control Logic		
59	ITS511TE		
60	Touch Pad & KB		

EC_IT8511TE SETTING

Pin	Pin Name	Signal Name	Type
32	PWM0/GPA0	/	
33	PWM1/GPA1	FAN_PWM	O
36	PWM2/GPA2	/	
37	PWM3/GPA3	/	
38	PWM4/GPA4	CHG_LED_UP#	O
39	PWM5/GPA5	PWR_LED_UP#	O
40	PWM6/GPA6	BATSEL_3S#	O
43	PWM7/GPA7	LCD_BACKOFF#	O
153	RXD/GPB0	NUM_LED	O
154	TXD/GPB1	CAP_LED	O
162	GPB2	SCRLED	O
163	SMCLK0/GPB3	SMB0_CLK	I/O
164	SMDAT0/GPB4	SMB0_DAT	I/O
5	GA20/GPB5	A20GATE	O
6	KBRST4/GPB6	RC_IN#	O
165	GPB7	THRO_CPU	O
47	CLKOUT/GPC0	/	
169	SMCLK1/GPC1	SMB1_CLK	I/O
170	SMDAT1/GPC2	SMB1_DAT	I/O
171	GPC3	/	
172	TMR10/WUI2/GPC4	ACIN_OC#	I
175	GPC5	OP_SD#	O
176	TMR11/WUI3/GPC6	BAT_IN_OC#	I
1	CK32KOUT/GPC7	EC_IDE_RST#	O
21	RI1#/WUI0/GPD0	SUSB#	I
29	RI2#/WUI1/GPD1	SUSC#	I
30	LPCRS7#/WUI4/GPD2	BUF_PLT_RST#	I
31	ECSCI#/GPD3	EXT_SCH#	O
41	GPD4	RF_ON_SW#	I
42	GINT/GPD5	/	
62	TACH0/GPD6	FAN0_TACH	I
63	TACH1/GPD7	GAIN_AMP#_K	O
87	ADC4/GPE0	COLOREN#	I
88	ADCS/GPE1	INTERNET#	I
89	ADC6/GPE2	MARATHON#	I
90	ADC7/GPE3	DISTP#	I
2	PWR5W/GPE4	PWR_SW#	I
44	WUI5/GPE5	/	
24	LPCPD#/WUI6/GPE6	LID_EC#	I
25	CLKRUN#/WUI7/GPE7	PM_SLP_M#	I
110	PS2CLK0/GPF0	WALN_SW#	I
111	PS2DAT0/GPF1	ME_ALERT#	I
114	PS2CLK1/GPF2	/	I/O
115	PS2DAT1/GPF3	/	I/O
116	PS2CLK2/GPF4	TP_CLK	I
117	PS2DAT2/GPF5	TP_DAT	I
118	PS2CLK3/GPF6	/	I
119	PS2DAT3/GPF7	INSTANTON#	I
113	FA16/GPG0	FA16	I
112	FA17/GPG1	FA17	I
104	FA18/GPG2	FA18	I
103	FA19/GPG3	FA19	I
3	FA20/GPG4	THRM_CPU#	I
4	FA21/GPG5	/	I
27	LPC0HL/GPG6	PMTHERM#	O
28	LPC0HL/GPG7	AC_APR_UC#	I

Pin	Pin Name	Signal Name	Type	Pin	Pin Name	Signal Name	Type
8	GPL0	PM_S4_STATE#	I	152	GP12	/	
11	GPL1	S4_STATE_ON	O	155	GP13	CHG_EN#	O
12	GPL2	SLP_M_ON	O	168	GP15	EC_CLK_EN	O
20	GPL3	EC_WLAN_PWR	O	85	KS016/GPM2	NETDETECT	O
21	GPL4	MP_PWRGD	I				
48	GPH0	VSUS_ON	O				
54	GPH1	VSUS_GB#	O				
55	GPH2	CPUPWR_GB#	O				
69	GPH3	PM_PWRBTN#	O				
70	GPH4	SUSC_ON	O				
75	GPH5	SUSB_ON	O				
76	GPH6	CPU_VRON	O				
105	GPH7	PM_RSMRST#	O				
148	GP10	ICH8_PWROK	O				
149	GP11	ALL_SYSTEM_PWRGD	I				

ICH8-M GPIO SETTING

Pin	Pin Name	Signal Name	Type	Pin	Pin Name	Signal Name	Type
AG12	GPIO0/BM_BUSY#	PM_BMBUSY#	I	AG16	GPIO40/OC1#	USB_CON_OC01#	I
AJ8	GPIO1/TACH1	EXTSM#	I	AG15	GPIO41/OC2#	USB_CON_OC23#	I
F8	GPIO2/PIROE#	PCL_INTE#	I	AE15	GPIO42/OC3#	USB_CON_OC23#	I
G11	GPIO3/PIROF#	PCL_INTF#	I	E18	GPIO50/REQ1#	PCL_REQ#	I
F12	GPIO4/PIROG#	PCL_INTG#	I	C18	GPIO51/GNT1#	PCL_GNT#1	I
B3	GPIO5/PIROH#	PCL_INTH#	I	B19	GPIO52/REQ2#	PCL_REQ#2	X
AJ9	GPIO6/TACH2	BIOS_REC	I/O	F18	GPIO53/GNT2#	PCL_GNT#2	I
AH9	GPIO7/TACH3	WLAN_LED_EN	I	A11	GPIO54/REQ3#	PCL_REQ#3	I
A616	GPIO8	BT_ON#	O	C10	GPIO55/GNT3#	PCL_GNT#3	I
AG19	GPIO9/WOL_EN	LAN_WOL_EN	I				
AJ24	GPIO10/CLGPIO1	ME_ALERT#	O				
AG22	GPIO11/SMBALERT#	SMB_ALERT#	I				
AC19	GPIO12	KBC_SCI#	I				
AH21	GPIO13/GLAN_DOCK#	/	O				
AF22	GPIO14/CLGPIO2	NETDETECT	O				
AE20	GPIO15/STP_PCI#	STP_PCI#	I/O				
AJ14	GPIO16/DPRSLPVR	PM_DPRSLPVR	O				
AG8	GPIO17/TACH0	WLAN_ON#	O				
AH12	GPIO18	TP_LEDON	O				
AJ10	GPIO19/SATA1GP	PCB_ID0	I				
AE11	GPIO20	BT_LED_ON	O				
AJ12	GPIO21/SATA0GP	CPU_Select	I				
AG10	GPIO22/SLOCK	3G_ON#	I				
E6	GPIO23/LDRQ1#	LPC_DRQ#1	I/O				
AJ27	GPIO24/CLGPIO0	/	O				
AG18	GPIO25/STP_CPU#	STP_CPU#	O				
AH27	GPIO26/S4_STATE#	PM_S4_STATE#	O				
AH25	GPIO27/QRT_STATE0	BT_DET#	I				
AD16	GPIO28/QRT_STATE1	CB_SD#	O				
AG17	GPIO29/OC5#	USB_CON_OC5#	I				
AD12	GPIO30/OC6	USB_OC#6	I				
AJ18	GPIO31/OC7	USB_OC#7	I				
AH11	GPIO32/CLKRUN#	PM_CLKRUN#	O				
AE10	GPIO33/AZ_DOCK_EN#	/	O				
AG14	GPIO34/AZ_DOCK_RST#	/	O				
AG13	GPIO35/SATACLKREQ#	GPO35	O				
AF11	GPIO36/SATA2GP	PCB_ID1	I				
AG11	GPIO37/SATA3GP	PCB_ID2	I/O				
AF9	GPIO38/SLOAD	GP138	I				
AJ11	GPIO39/SDATAOUT0	GP139	I				
AD10	GPIO48/SDATAOUT1	PCL_GNT#4	O				
AG29	GPIO49/CPUPWRGD	H_PWRGD	O				

PCI Device	IDSEL#	REQ/GNT#	Interrupts
CARD READER	AD 7	0	A
394	AD 7	0	B

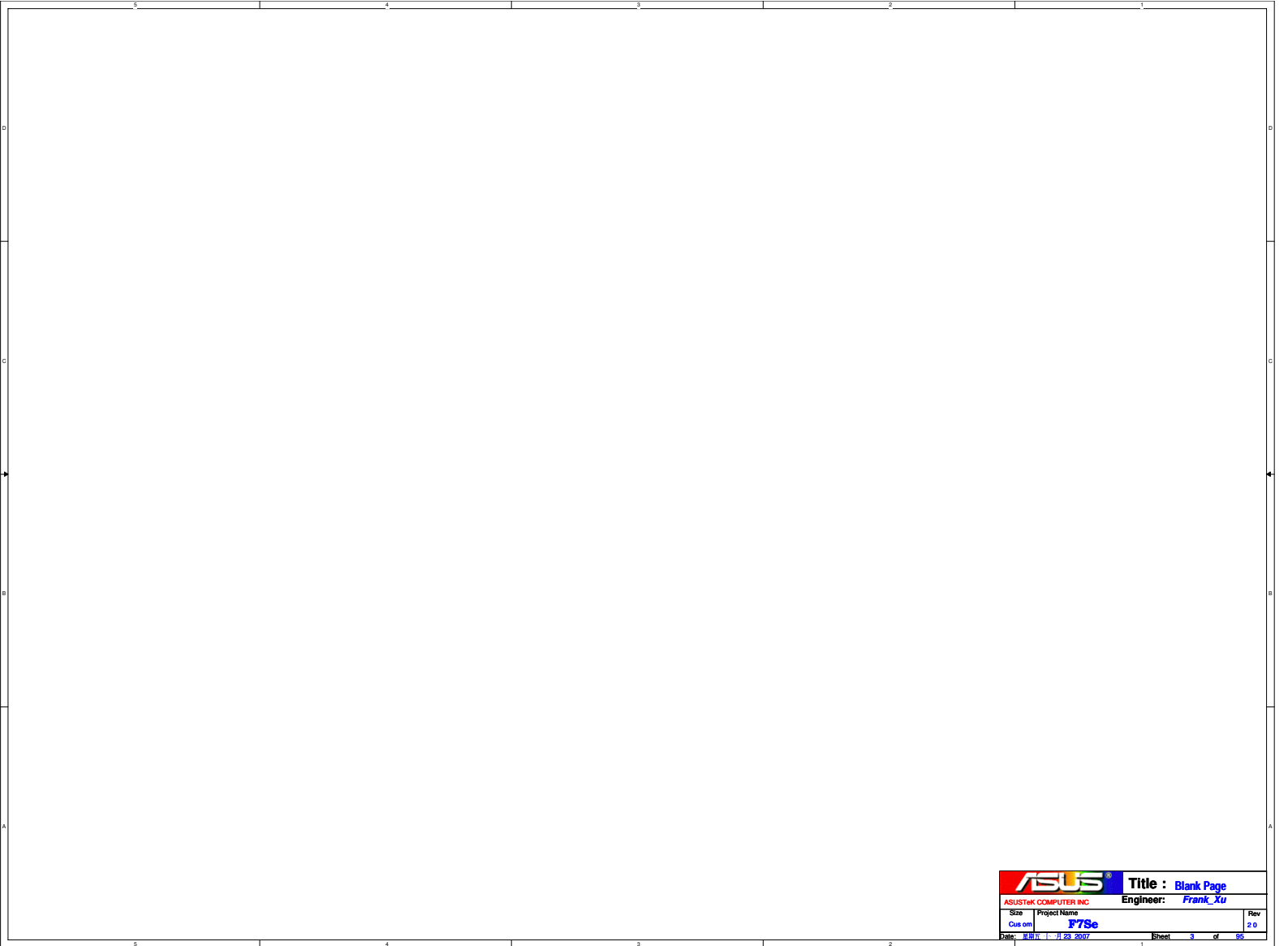
PCIe Device	Bus	PCIe Device	Bus
LAN	PE(T/R)(p/n)	Robson	PE(T/R)(p/n)4
Kedron	PE(T/R)(p/n)2	NEWCARD	PE(T/R)(p/n)5
eSATA	PE(T/R)(p/n)3	GLAN	PE(T/R)(p/n)6

SM Bus Device	SM Bus Address
Clock Generator	0 00 x (D2)
SO DIMM 0	0 0000x (A0)
SO DIMM	0 000 x (A2)
CPU Thermal Sensor(MAX6657)	0 00 0x (4C)
VGA Thermal Sensor(MAX6657)	0 00 0x (4C)

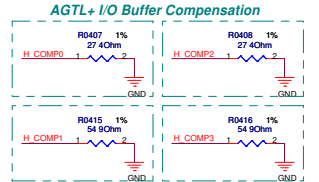
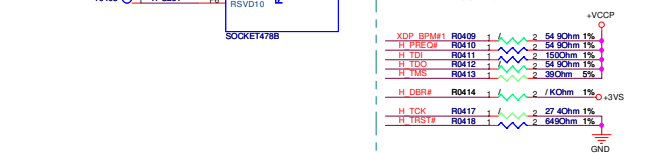
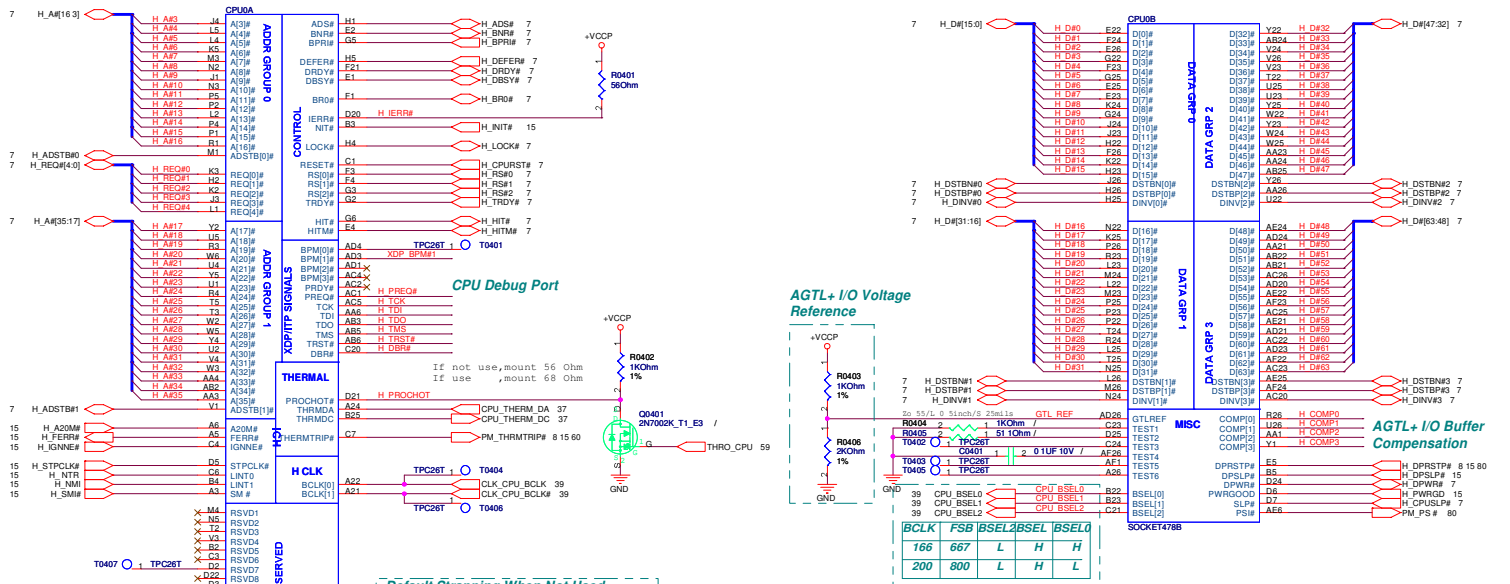
ICS9LPR363AGLF-T SETTING

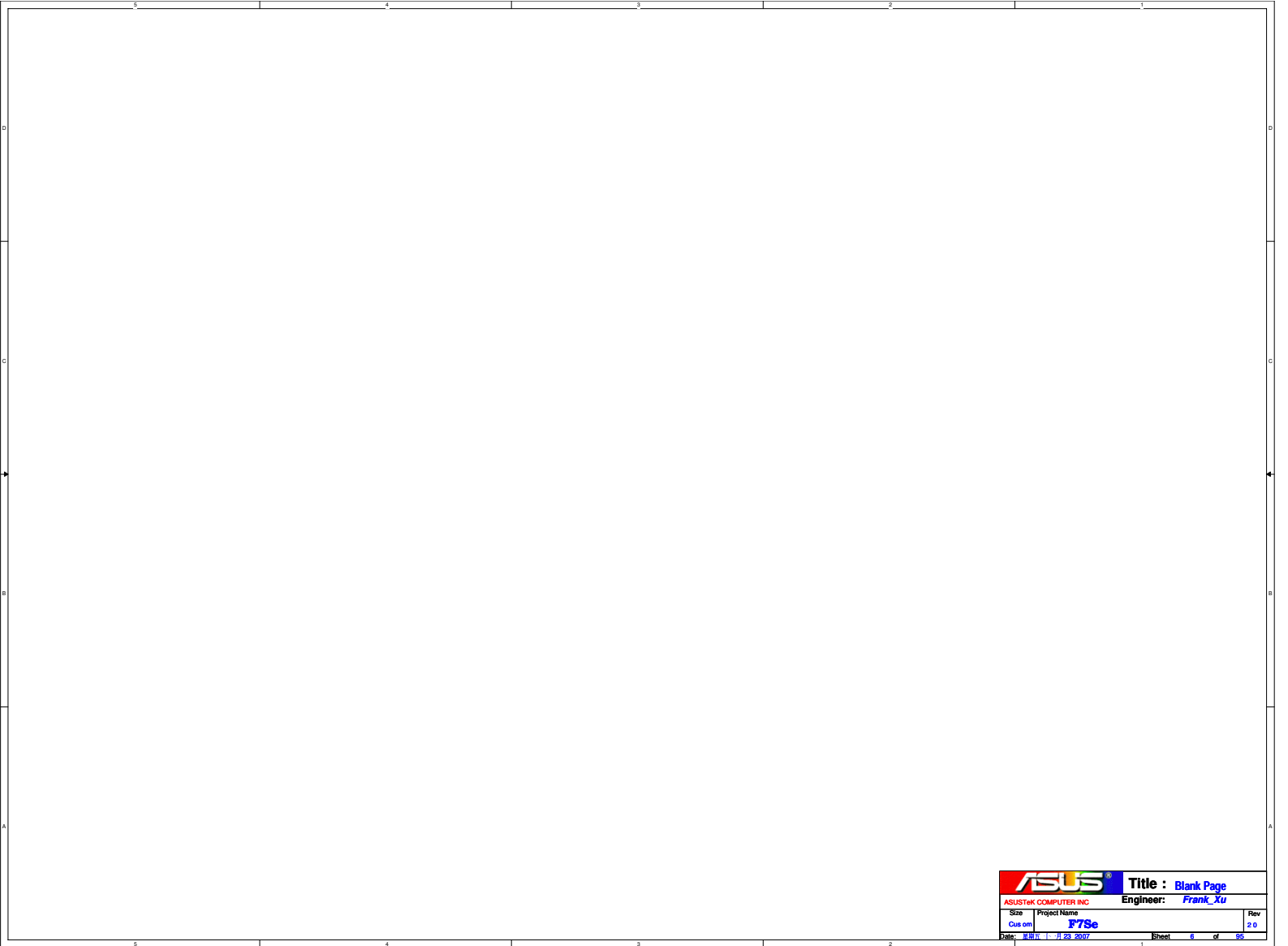
Pin	Pin Name	Device
3	PC1CLK	TPMPC1
4	PC1CLK2	CardBus R5C832
5	SELPC1EX0_LCD#PC1CLK3	EC IT85 E
8	ITP_EN/PC1CLK_F0	ICH8
5	DOTC_96MHzL2	X
4	DOTT_96MHzL2	X
2	FSLA/USB_48MHz	ICH8
9	PC1eT_L	eSATA
20	PC1eC_L	eSATA
36	PC1eT_L5	M82 M XT
35	PC1eC_L5	M82 M XT
39	PC1eT_L6	MiniCard(Rob)
38	PC1eC_L6	MiniCard(Rob)
22	PC1eT_L2	ICH8
23	PC1eC_L2	ICH8
24	PC1eT_L3	MCH
25	PC1eC_L3	MCH
26	SATACLKT_L	ICH8
27	SATACLKC_L	ICH8
44	CPUITPT_L2 / PC1eT_L8	LAN
43	CPUITPC_L2 / PC1eC_L8	LAN
4	27FIX/LCD_SSCGT/PC1eT_L0M72M	
5	DOTC_96MHzL2	M72M
4	PEREQ # / PC1eT_L7	MiniCard
40	PEREQ2# / PC1eC_L7	MiniCard
32	PEREQ3#	NewCard
33	PEREQ4#	MiniCard
30	PC1eT_L4	NewCard
3	PC1eC_L4	NewCard
49	CPUT_L_F	MCH
48	CPUC_L_F	MCH
52	CPUT_LO	CPU
5	CPUC_LO	CPU
57	X2	4 3 8MHz
58	X	4 3 8MHz
60	REF0	ICH8
6	REF /FSLC/TEST_SEL	X

		Title : GPIO setting	
ASUSTek Computer INC NBI		Engineer: Frank_Xu	
Size	Project Name		Rev
Cus on	F7Se		2.0
Date: 2007.11.23		Sheet	2 of 95



		Title : Blank Page	
ASUSTEK COMPUTER INC		Engineer: Frank_Xu	
Size	Project Name		Rev
Cus om	F7Se		2.0
Date: 2007.11.23		Sheet	3 of 95

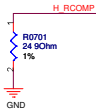




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ASUSTEK COMPUTER INC		Engineer: Frank_Xu	
Size	Project Name		Rev
Cus om	F7Se		2.0
Date:	2007.11.23	Sheet	6 of 95

RCOMP

For Calibrating the FSB I/O Buffer



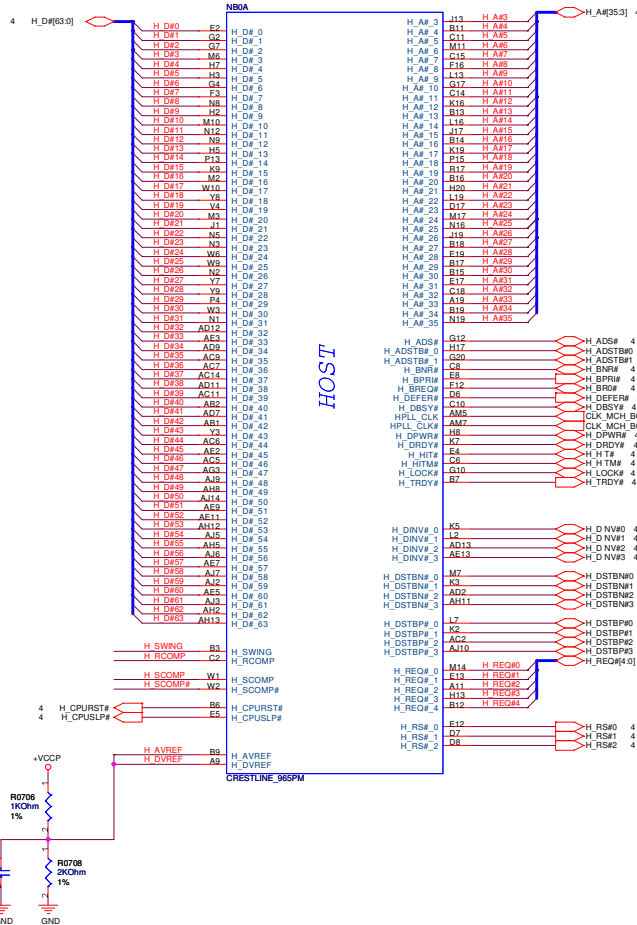
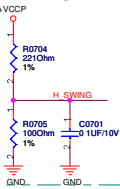
SCOMP

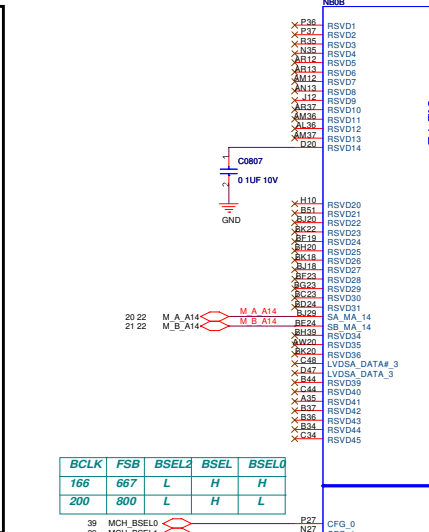
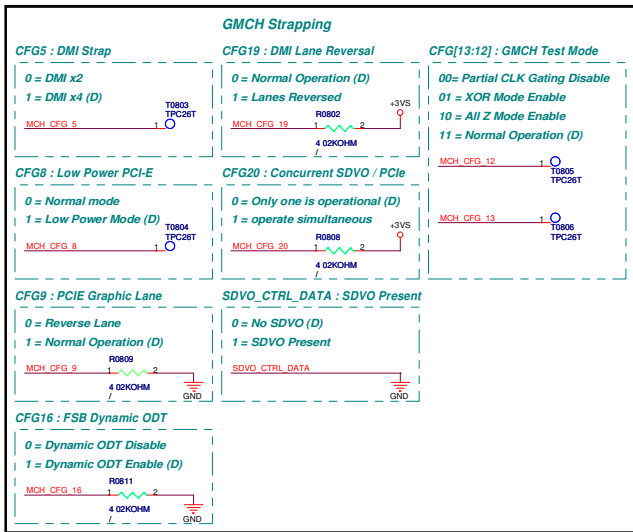
For Slew Rate Compensation on the FSB



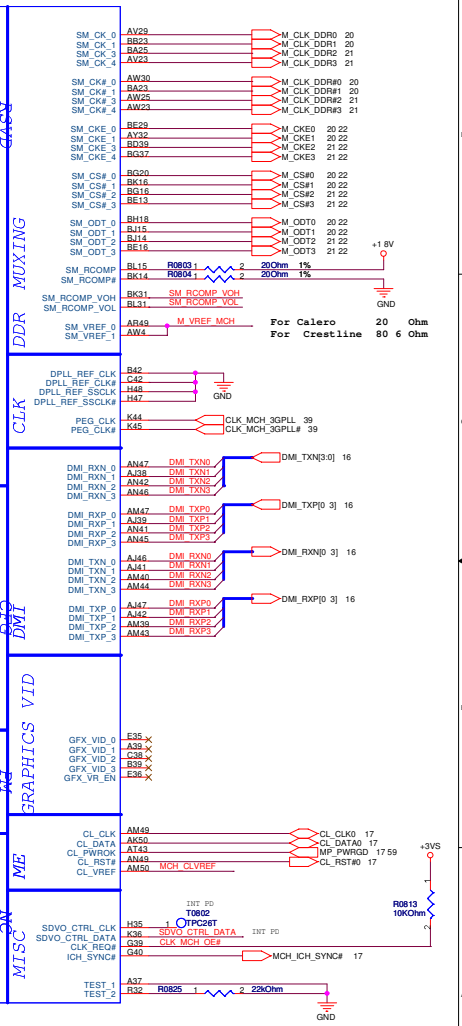
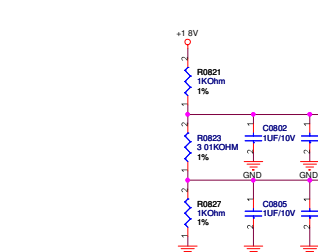
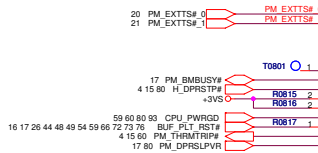
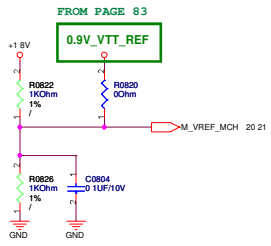
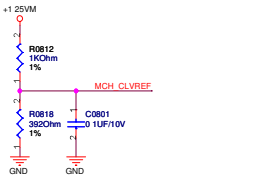
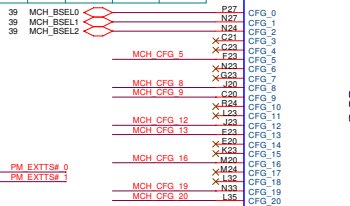
Voltage Swing

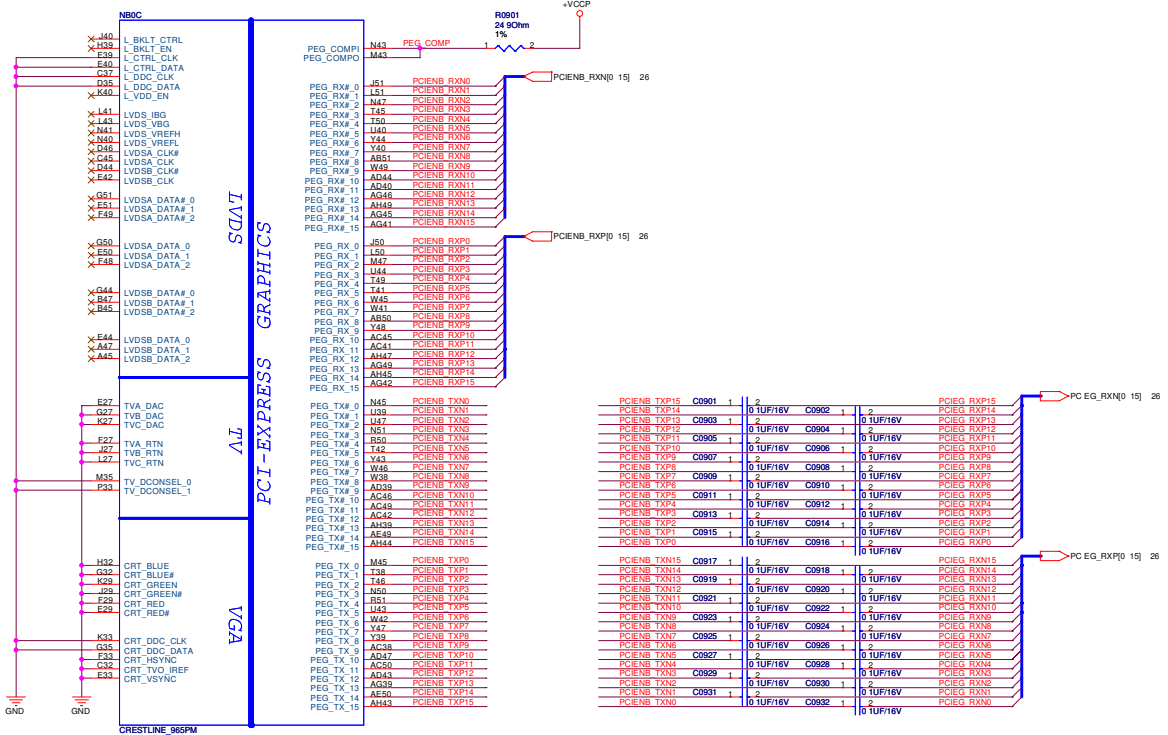
For Providing a Reference Voltage to The FSB RCOMP circuits



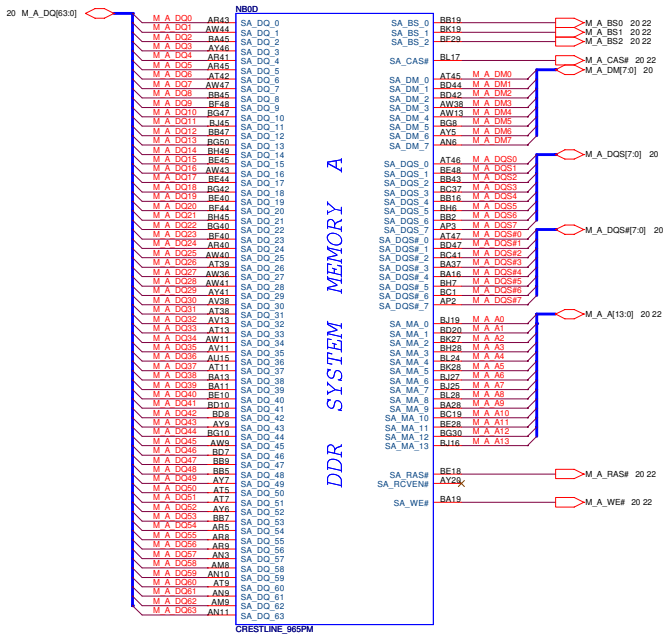


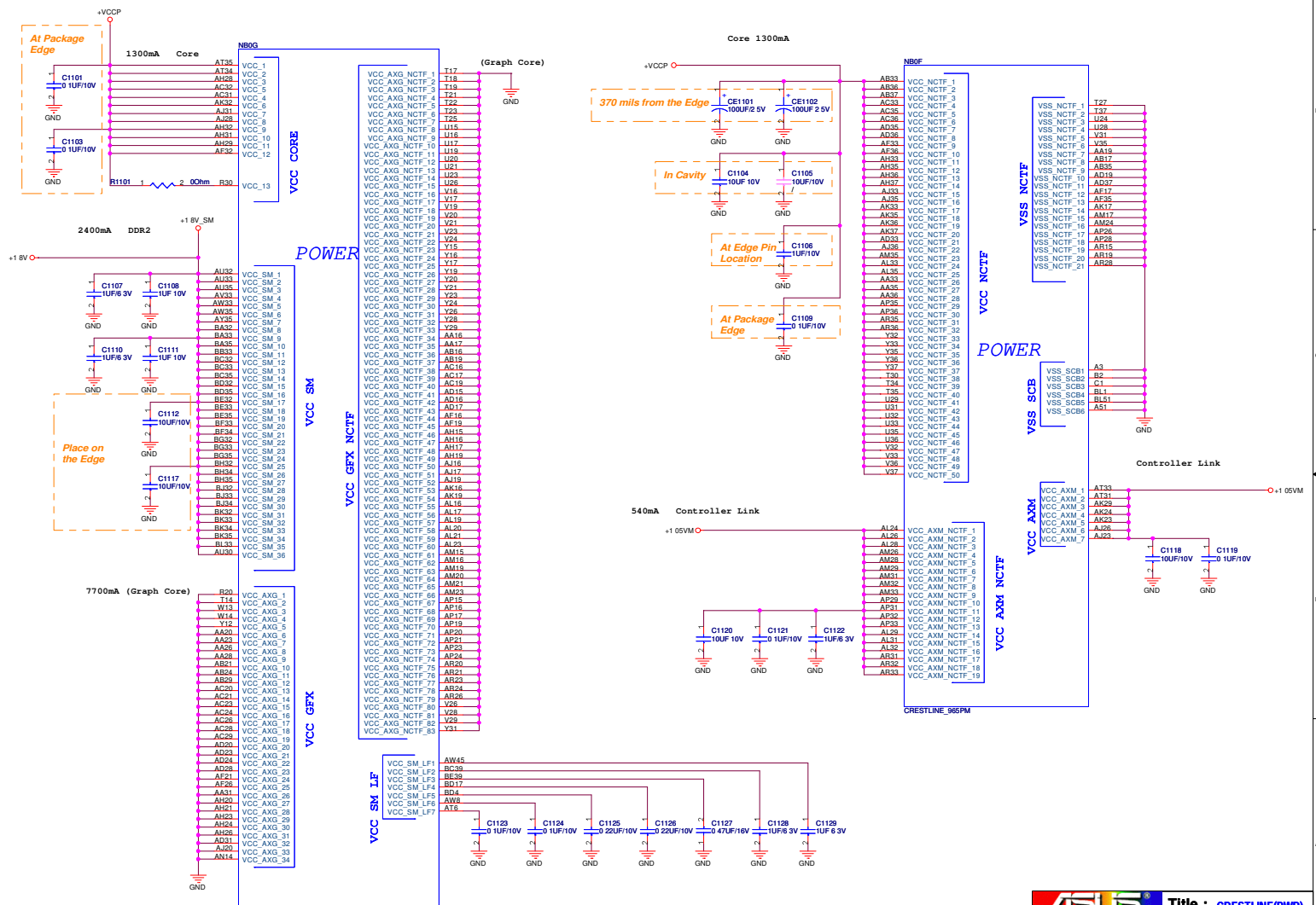
BCLK	FSB	BSEL2	BSEL	BSEL0
166	667	L	H	H
200	800	L	H	L

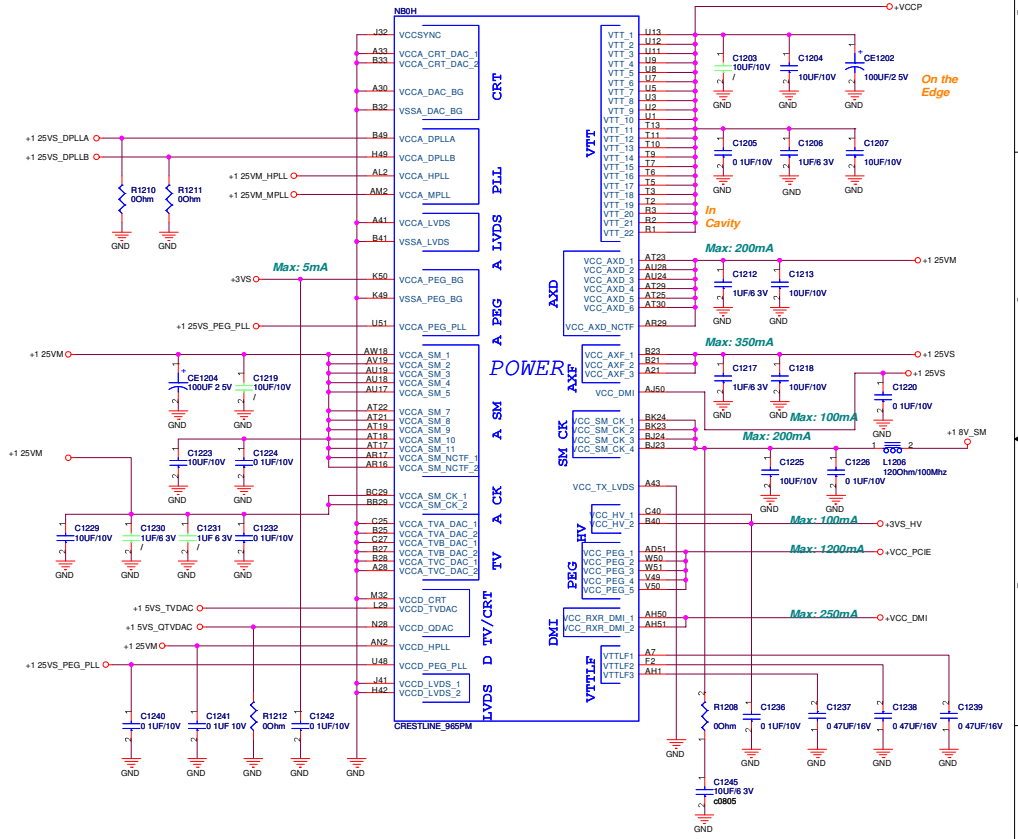
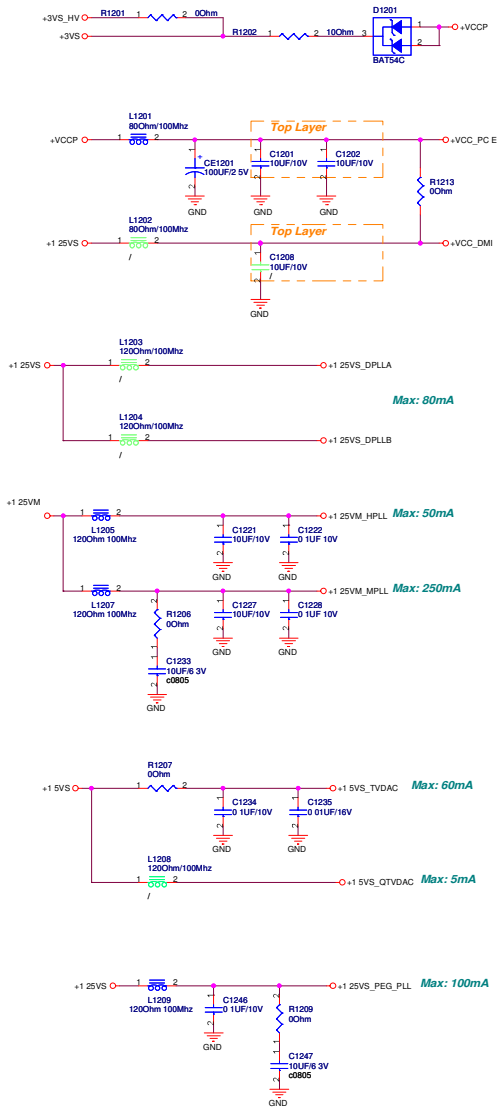




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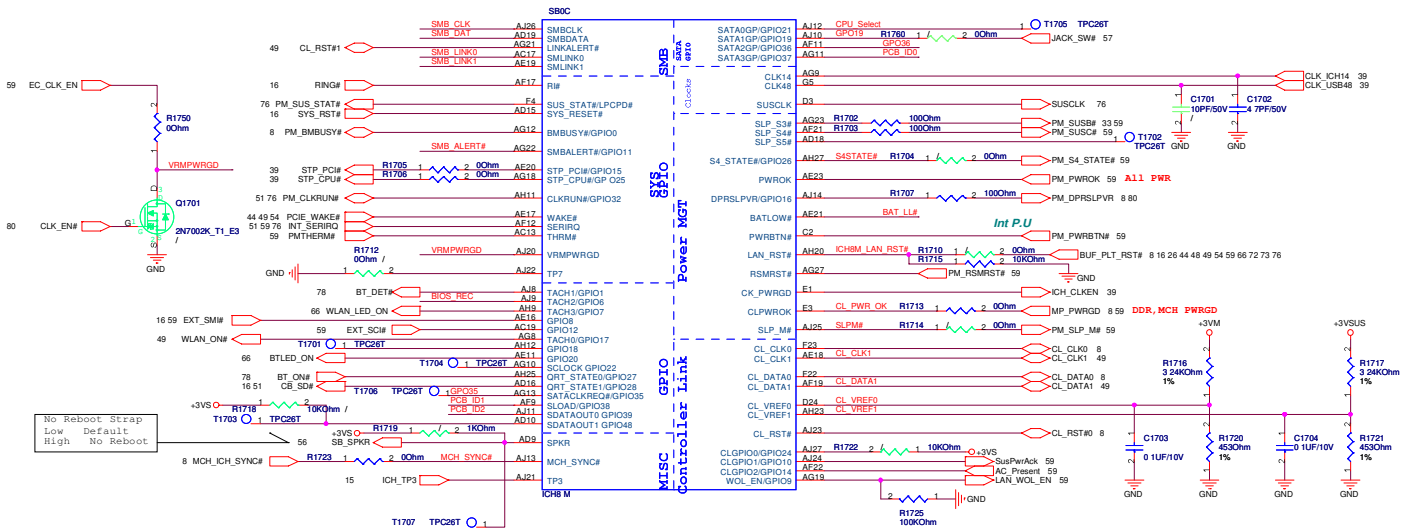


NBO1		
A13	VSS_1	AW24
A15	VSS_2	AW29
A17	VSS_3	AW32
A24	VSS_4	AW5
AA21	VSS_5	AW7
AA24	VSS_6	AW10
AA23	VSS_7	AW24
AB20	VSS_8	AW37
AB23	VSS_9	AW42
AB26	VSS_10	AW43
AB28	VSS_11	AW45
AB31	VSS_12	AW47
AC10	VSS_13	AW50
AC13	VSS_14	B10
AC3	VSS_15	B20
AC38	VSS_16	B24
AC43	VSS_17	B29
AC47	VSS_18	B30
AD1	VSS_19	B35
AD21	VSS_20	B38
AD26	VSS_21	B42
AD23	VSS_22	B46
AD3	VSS_23	B5
AD4	VSS_24	B8
AD45	VSS_25	BA1
AD48	VSS_26	BA7
AD5	VSS_27	BA18
AD50	VSS_28	BA2
AD8	VSS_29	BA24
AE10	VSS_30	BB12
AE14	VSS_31	BB25
AE6	VSS_32	BB40
AF20	VSS_33	BB44
AF23	VSS_34	BB49
AF24	VSS_35	BB8
AF31	VSS_36	BC16
AG2	VSS_37	BC24
AG38	VSS_38	BC25
AG43	VSS_39	BC38
AG47	VSS_40	BC39
AG50	VSS_41	BC51
AH3	VSS_42	BD13
AH40	VSS_43	BD2
AH41	VSS_44	BD28
AH6	VSS_45	BD35
AH8	VSS_46	BD48
AH11	VSS_47	BD5
AH13	VSS_48	BE1
AH21	VSS_49	BE19
AH24	VSS_50	BE24
AH29	VSS_51	BE30
AH32	VSS_52	BE42
AH3	VSS_53	BE51
AH45	VSS_54	BE8
AH48	VSS_55	BE12
AK20	VSS_56	BE16
AK21	VSS_57	BE36
AK28	VSS_58	BE2
AK31	VSS_59	BE24
AK51	VSS_60	BE28
AL1	VSS_61	BE48
AM11	VSS_62	BE49
AM13	VSS_63	BE50
AM3	VSS_64	BE51
AM4	VSS_65	BE64
AM5	VSS_66	BE67
AM41	VSS_67	BH30
AM45	VSS_68	BH44
AN1	VSS_69	BH46
AN38	VSS_70	BH9
AN39	VSS_71	BH11
AN43	VSS_72	BH13
AN5	VSS_73	BH38
AN7	VSS_74	BH4
AP4	VSS_75	BH42
AP48	VSS_76	BH46
AP50	VSS_77	BK15
AR11	VSS_78	BK17
AR2	VSS_79	BK25
AR38	VSS_80	BK28
AR44	VSS_81	BK38
AR47	VSS_82	BK40
AR7	VSS_83	BK44
AT10	VSS_84	BK6
AT14	VSS_85	BL6
AT41	VSS_86	BL11
AT49	VSS_87	BL13
AU1	VSS_88	BL19
AU23	VSS_89	BL22
AU29	VSS_90	BL37
AU3	VSS_91	BL47
AU36	VSS_92	BL1
AU46	VSS_93	BL16
AU51	VSS_94	BL19
AU58	VSS_95	BL28
AV48	VSS_96	BL39
AW1	VSS_97	BL43
AW12	VSS_98	BL48
AW16	VSS_99	BL49
CRESTLINE_965PM		

VSS

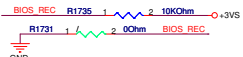
NBO1		
C46	VSS_199	W11
C50	VSS_200	W39
C7	VSS_201	W43
D17	VSS_202	W47
D24	VSS_203	W5
D3	VSS_204	W7
D35	VSS_205	Y13
D39	VSS_206	Y2
D45	VSS_207	Y4
D48	VSS_208	Y5
E10	VSS_209	Y6
E16	VSS_210	Y7
E24	VSS_211	Y9
E28	VSS_212	Y20
E32	VSS_213	Y30
E47	VSS_214	Y32
F18	VSS_215	Y33
F36	VSS_216	Y34
F4	VSS_217	Y35
F40	VSS_218	Y36
F50	VSS_219	Y37
G1	VSS_220	Y38
G13	VSS_221	Y39
G16	VSS_222	Y40
G19	VSS_223	Y41
G24	VSS_224	Y42
G28	VSS_225	Y43
G22	VSS_226	Y44
G33	VSS_227	Y45
G42	VSS_228	Y46
G45	VSS_229	Y47
G48	VSS_230	Y48
G5	VSS_231	Y49
H24	VSS_232	Y50
H28	VSS_233	Y51
H4	VSS_234	Y52
H45	VSS_235	Y53
J16	VSS_236	Y54
J2	VSS_237	Y55
J28	VSS_238	Y56
K24	VSS_239	Y57
K28	VSS_240	Y58
K33	VSS_241	Y59
K35	VSS_242	Y60
K39	VSS_243	Y61
K12	VSS_245	Y62
K47	VSS_246	Y63
K8	VSS_247	Y64
L1	VSS_248	Y65
L17	VSS_249	Y66
L20	VSS_250	Y67
L24	VSS_251	Y68
L28	VSS_252	Y69
L3	VSS_253	Y70
L33	VSS_254	Y71
L48	VSS_255	Y72
M28	VSS_256	Y73
M42	VSS_257	Y74
M46	VSS_258	Y75
M48	VSS_259	Y76
M5	VSS_260	Y77
M50	VSS_261	Y78
M5	VSS_262	Y79
N11	VSS_263	Y80
N14	VSS_264	Y81
N17	VSS_265	Y82
N23	VSS_266	Y83
N26	VSS_267	Y84
N36	VSS_268	Y85
N39	VSS_269	Y86
N44	VSS_270	Y87
N49	VSS_271	Y88
N7	VSS_272	Y89
P19	VSS_273	Y90
P2	VSS_274	Y91
P23	VSS_275	Y92
P3	VSS_276	Y93
P4	VSS_277	Y94
P50	VSS_278	Y95
R48	VSS_279	Y96
R8	VSS_280	Y97
T43	VSS_281	Y98
T47	VSS_282	Y99
U41	VSS_283	Y100
U45	VSS_284	Y101
U50	VSS_285	Y102
V2	VSS_286	Y103
V3	VSS_287	Y104
W39	VSS_288	Y105
W43	VSS_289	Y106
W47	VSS_290	Y107
W5	VSS_291	Y108
W7	VSS_292	Y109
Y13	VSS_293	Y110
Y2	VSS_294	Y111
Y4	VSS_295	Y112
Y5	VSS_296	Y113
Y6	VSS_297	Y114
Y7	VSS_298	Y115
Y9	VSS_299	Y116
Y20	VSS_300	Y117
Y30	VSS_301	Y118
Y32	VSS_302	Y119
Y33	VSS_303	Y120
Y34	VSS_304	Y121
Y35	VSS_305	Y122
CRESTLINE_965PM		

VSS



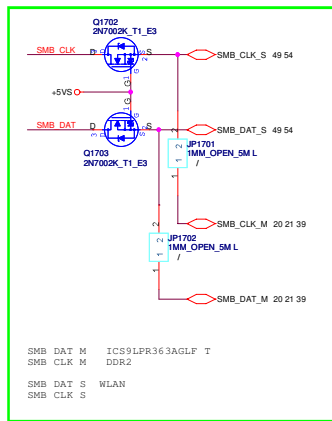
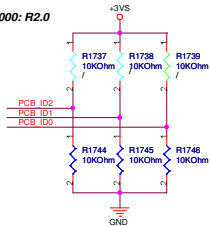
Mount for BIOS Recovery

Place Near the Open Door

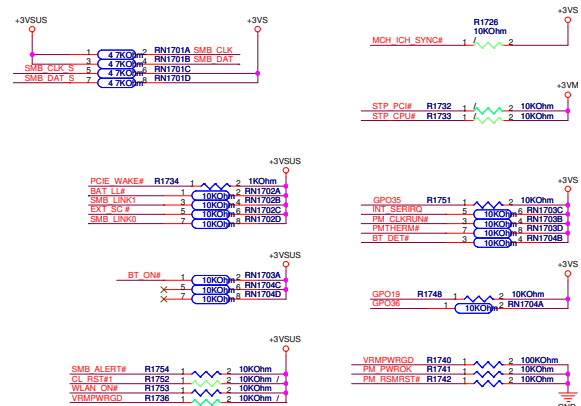


PCB_ID[0:2]

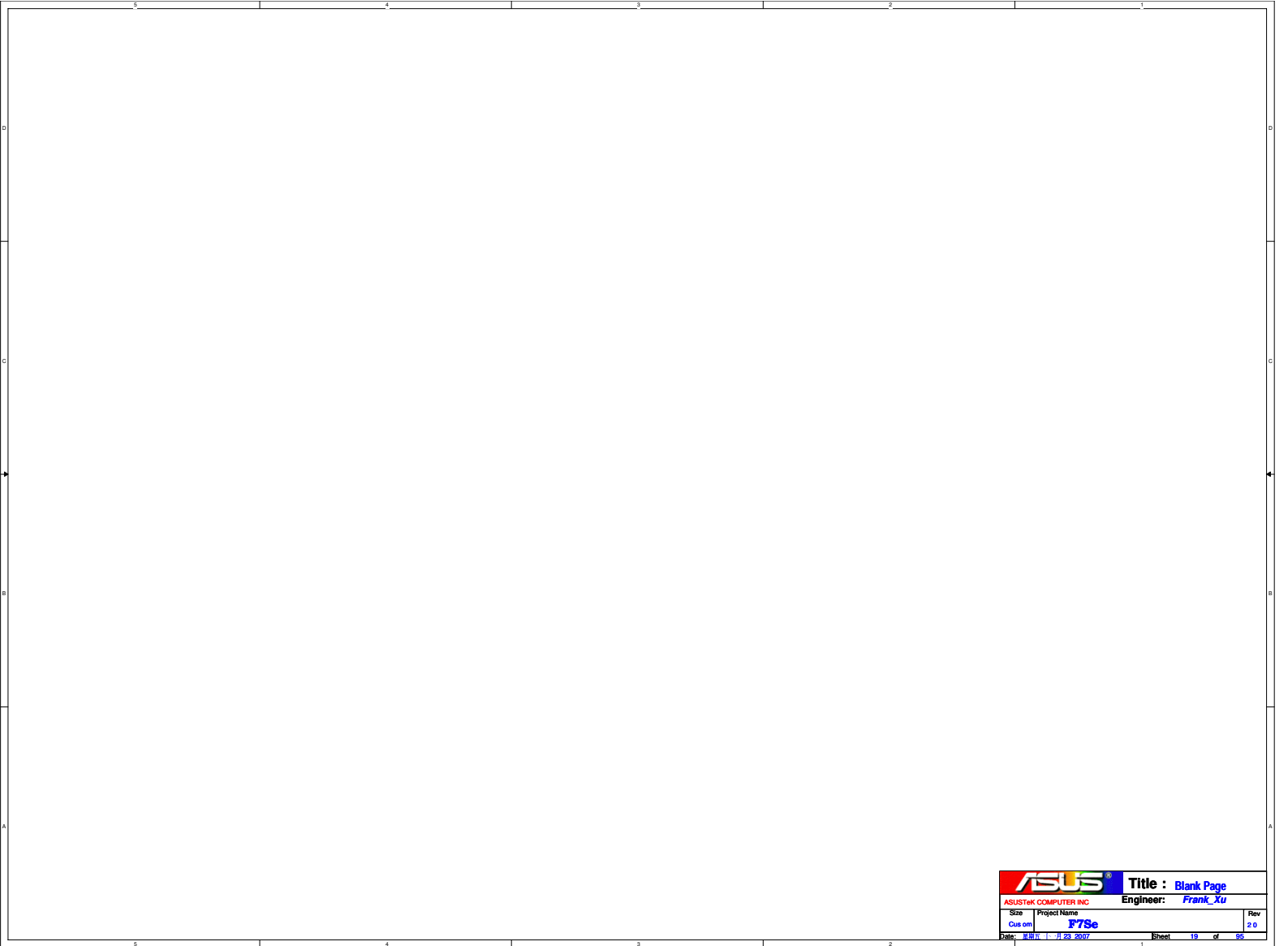
000: R2.0



SMB_CLK M	ICS9LPR363AGL T			
SMB_CLK M	DDR2			
SMB_CLK S	WLAN			
SMB_CLK S				
PM SUSCH#	R1708	2 00Ohm	PM S4 STATE#	
PM SUSBF#	R1709	2 00Ohm	PM SLP_M#	
CL_PWR_OK	R1711	2 00Ohm	PM_PWRROK	
SMB1_CLK	R1758	2 00Ohm	SMB_LINK0	
SMB1_DAT	R1759	2 00Ohm	SMB_LINK1	

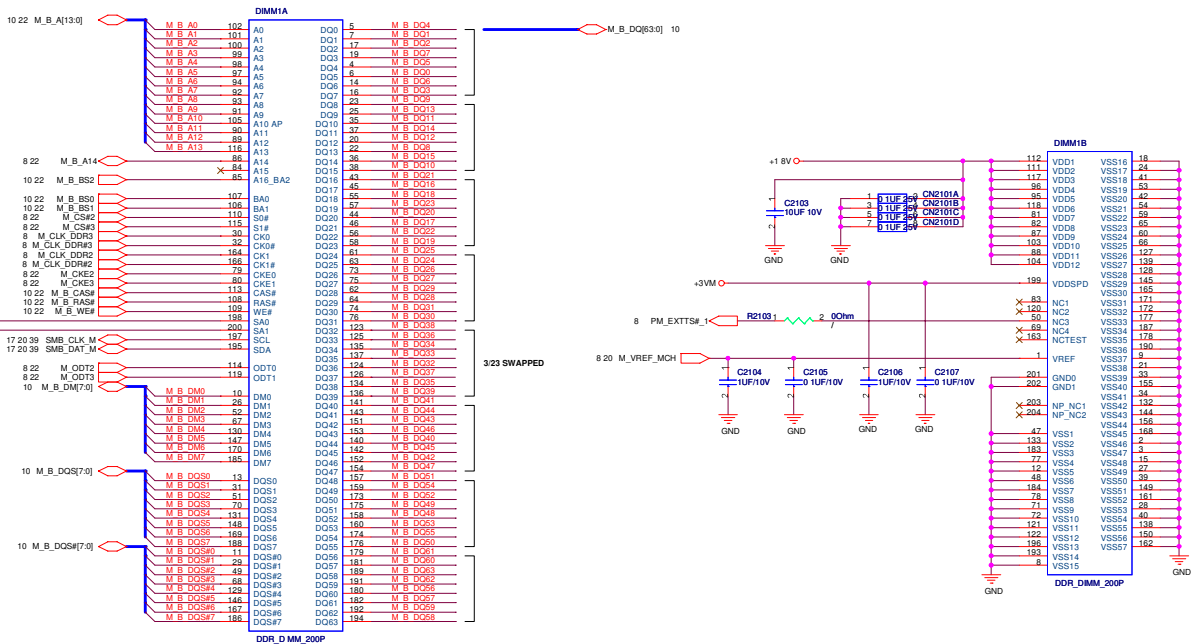


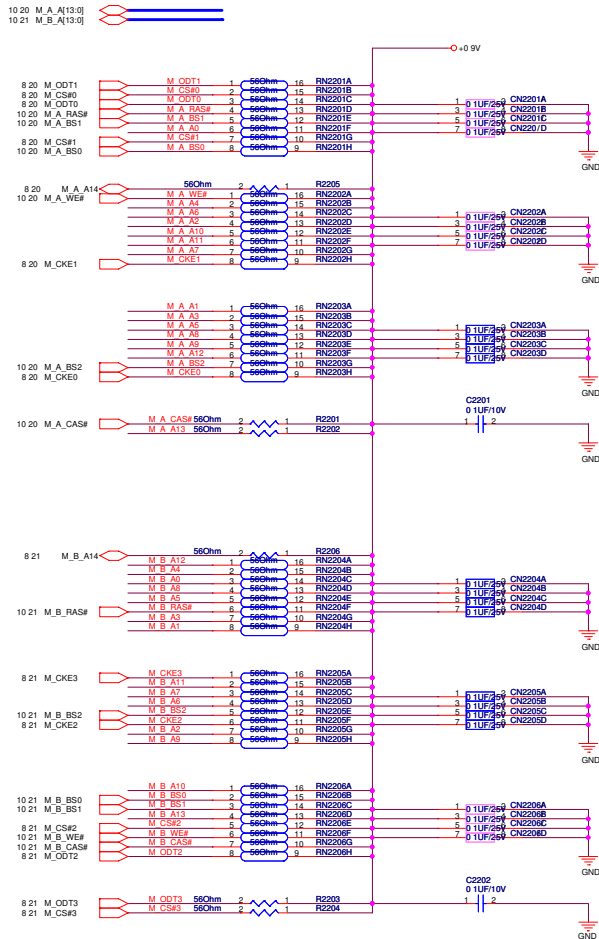
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STD Type - 12G025122000

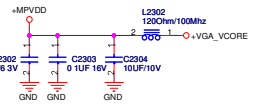
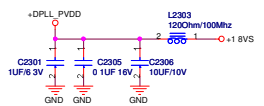




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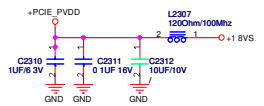
M82/M86ME Power

1 8V (7%) @ 120mA DPLL PVDD MSX M

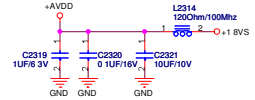


(0.95V 1.1V @ 414mA MPVDD)

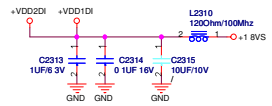
1 8V @ 40mA PCIE PVDD MSX M



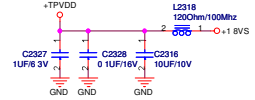
1 8V @ 100mA AVDD FOR MSXM



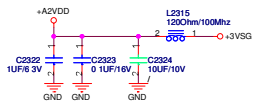
1 8V @ 121mA VDD1DI+VDD2DI FOR MSXM



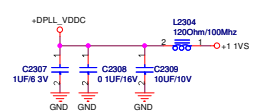
1 8V ? 3% @ 40 mA for MSXM



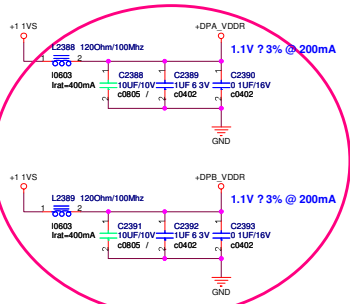
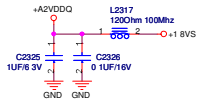
3 3V @ 135mA A2VDD FOR MSXM



1 1V @ 300mA DPLL VDDC FOR MSXM

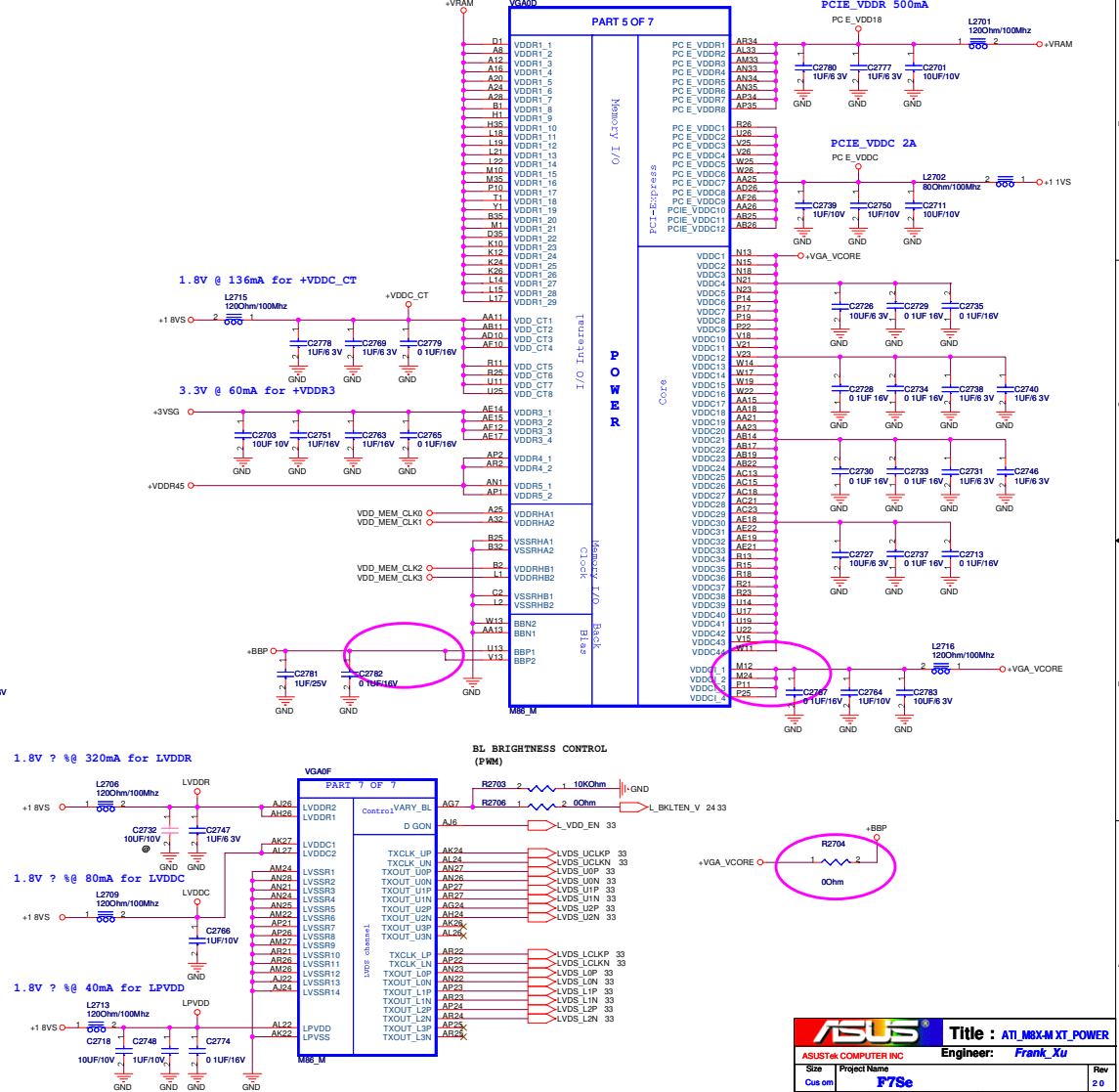
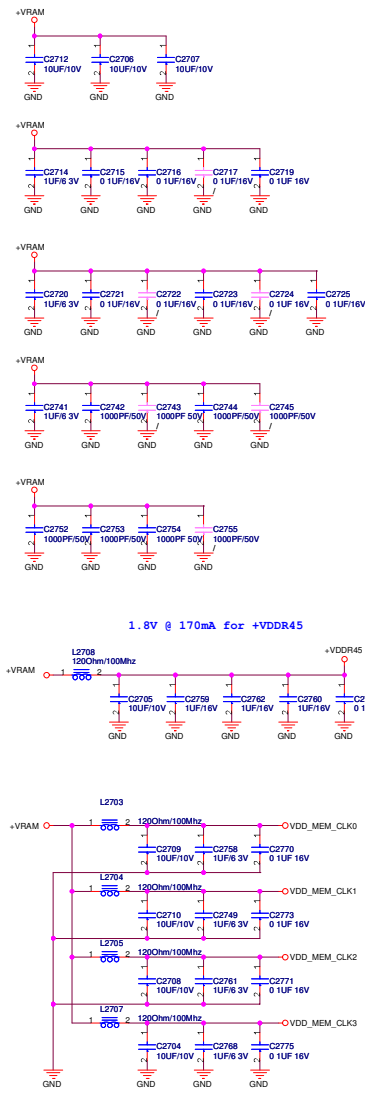


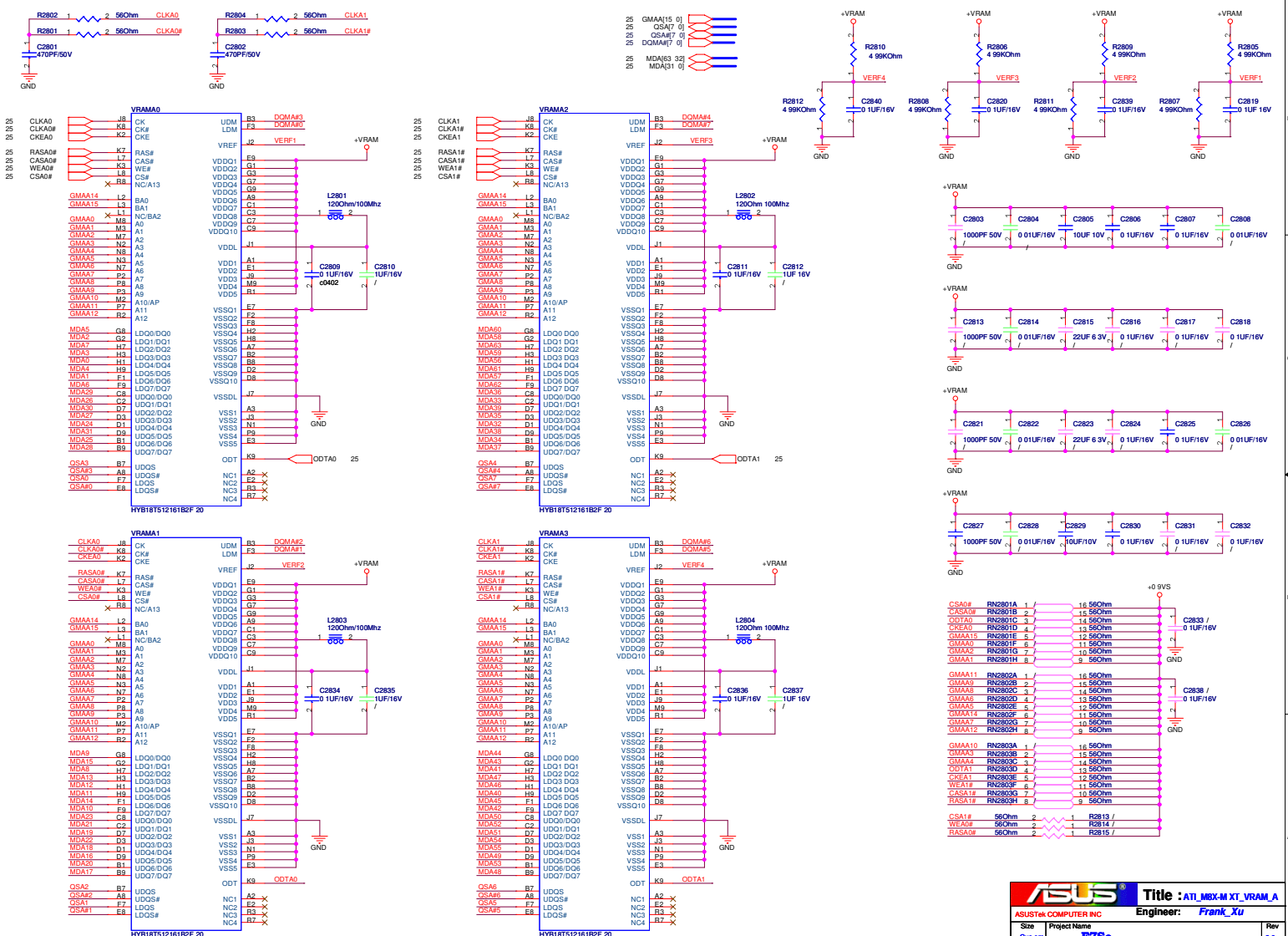
1 8V @ 2MA A2VDDQ FOR MSXM

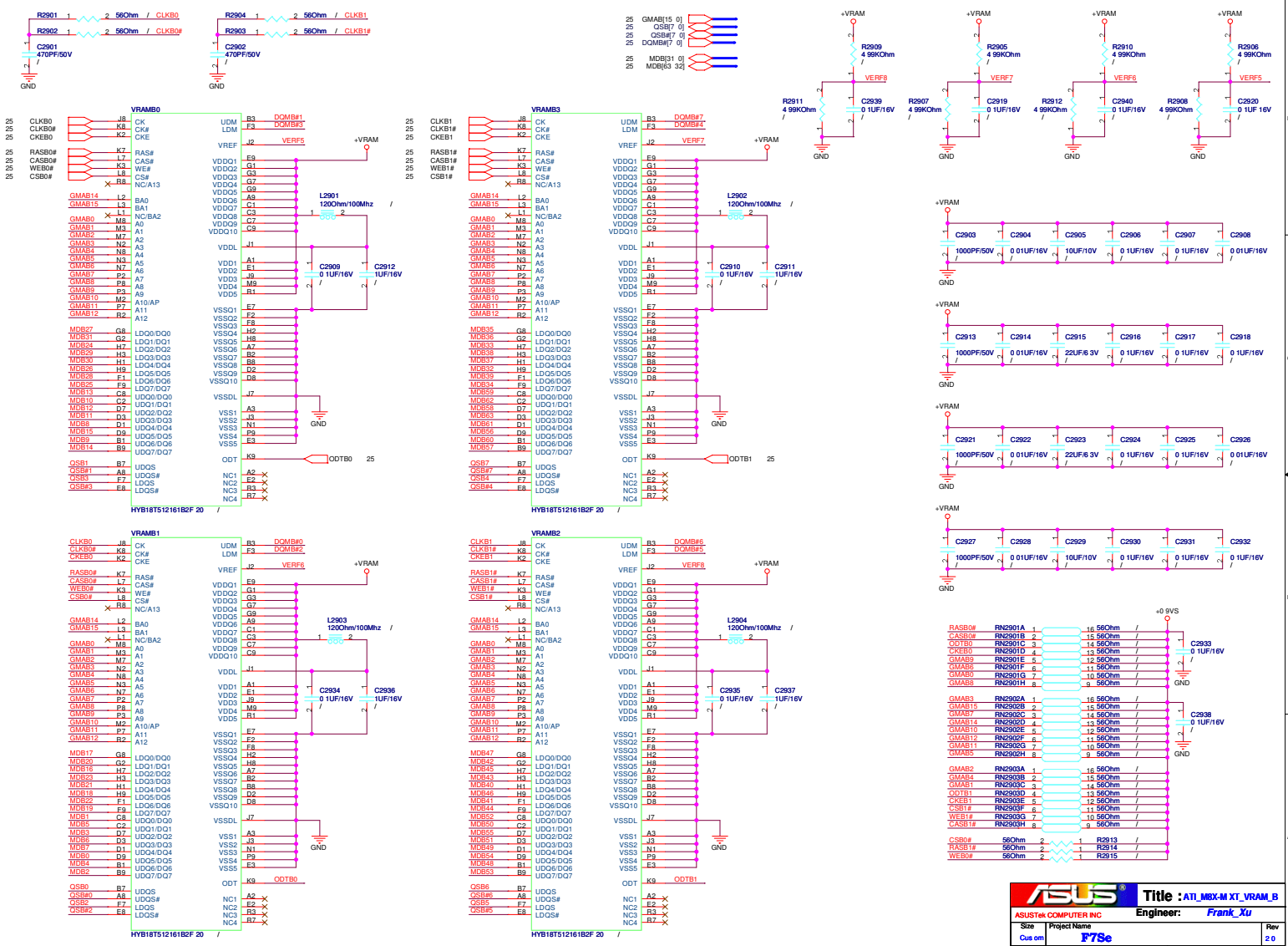


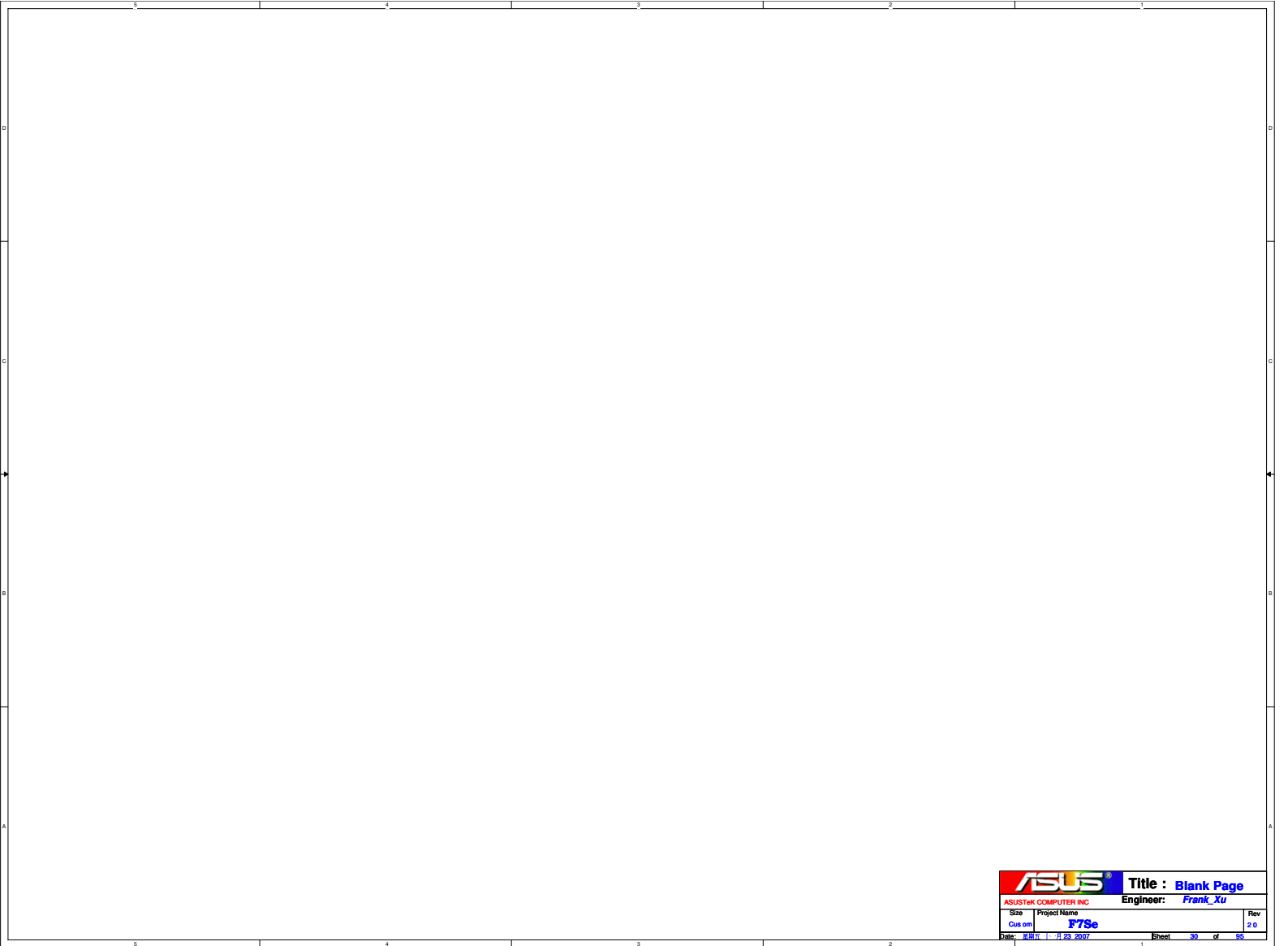
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ASUS		Title : VGA M82-M XT POWER	
ASUSTEK COMPUTER INC		Engineer: Frank_Xu	
Size	Project Name	Rev	
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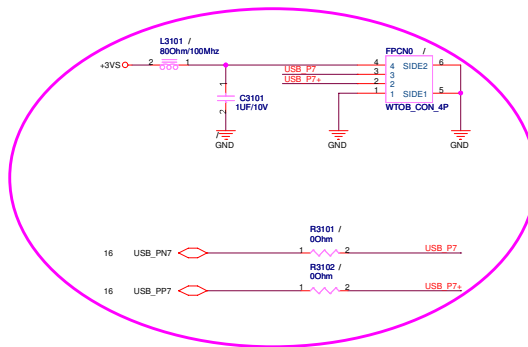


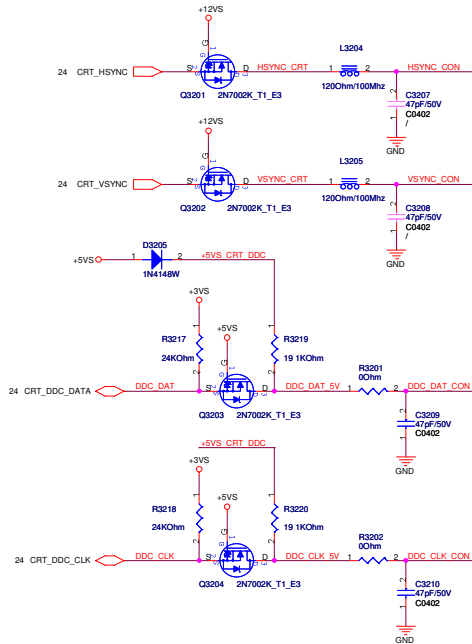
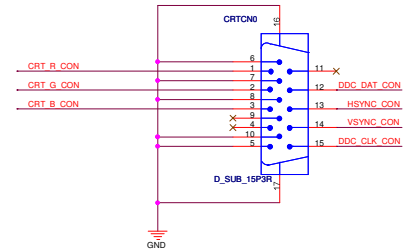
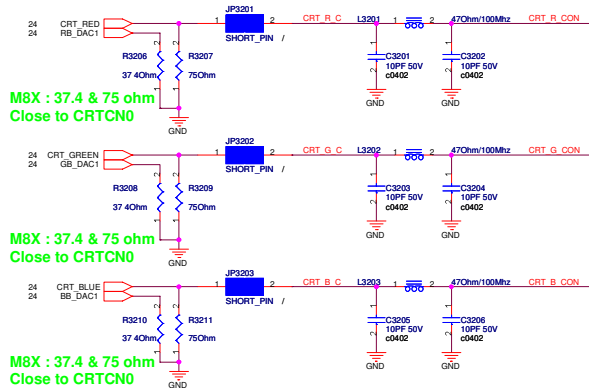




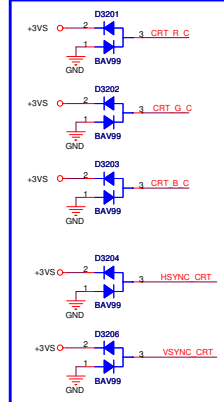


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ASUSTEK COMPUTER INC		Engineer: Frank_Xu	
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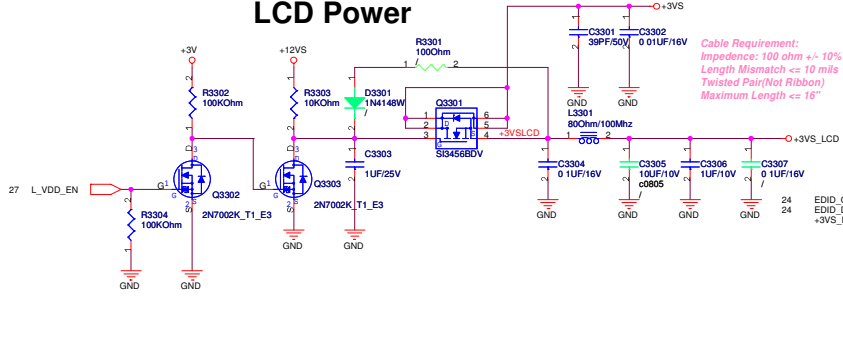


PLACE ESD Diodes near VGA port

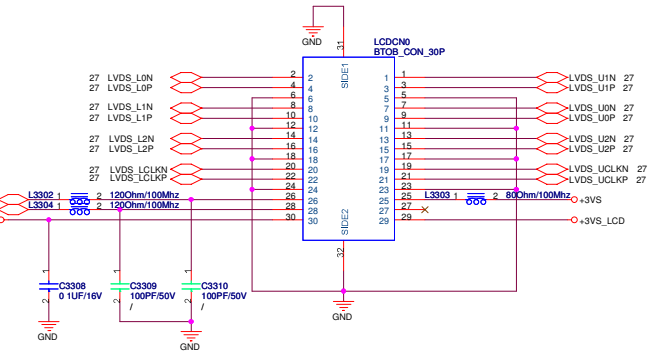


LCD Backlight Control

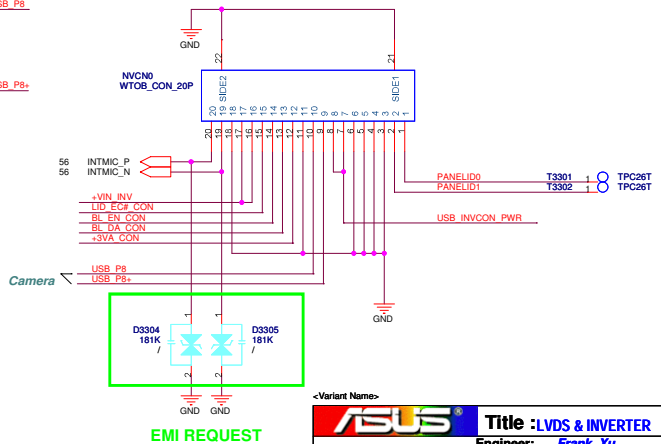
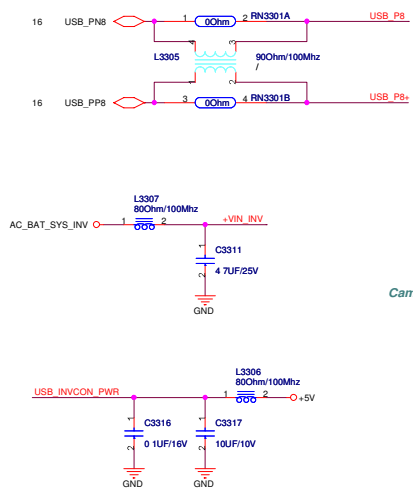
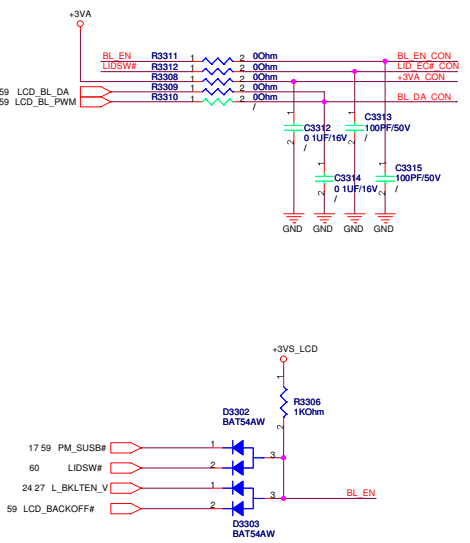
LCD Power

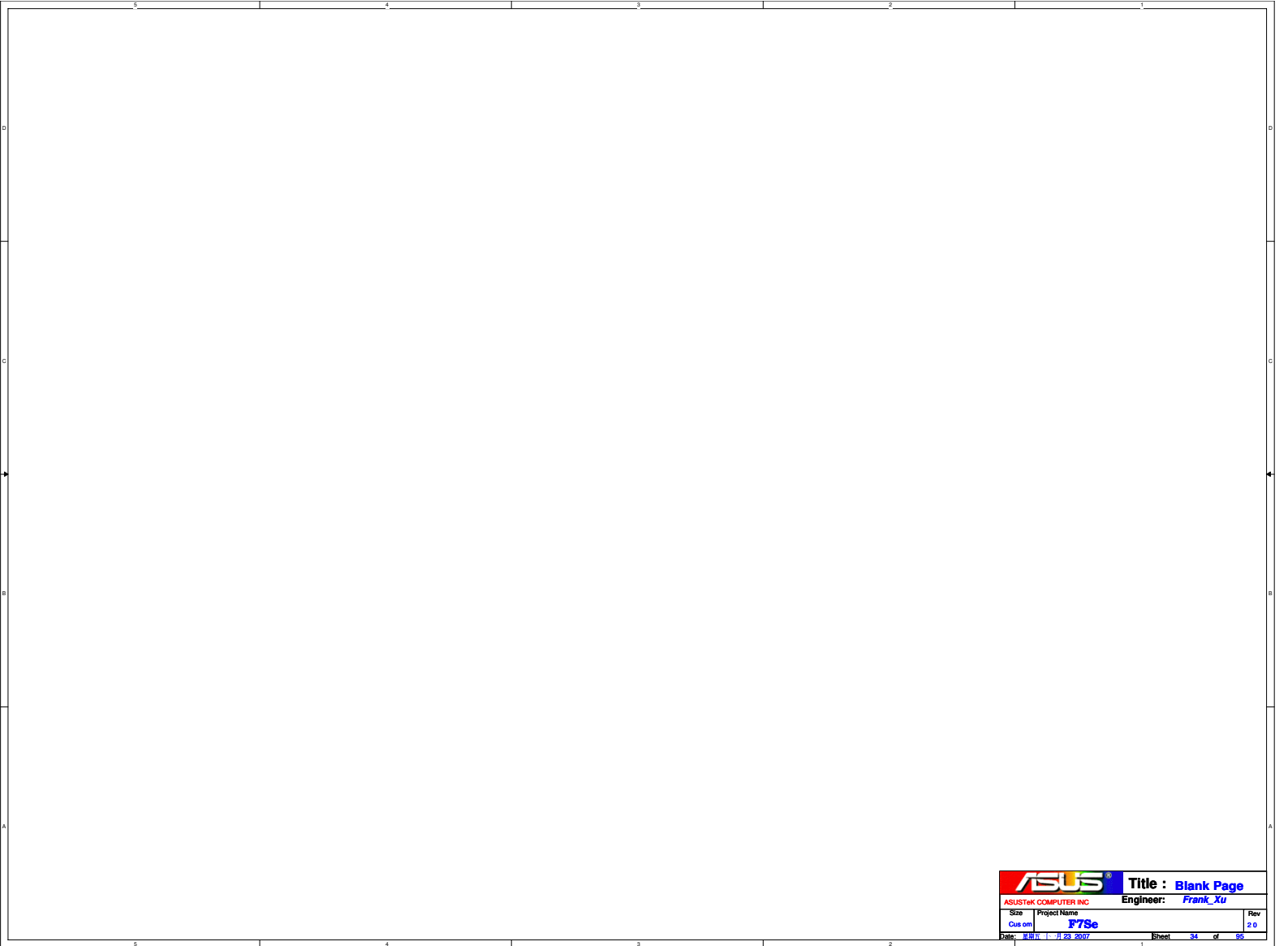


LCD LVDS Interface

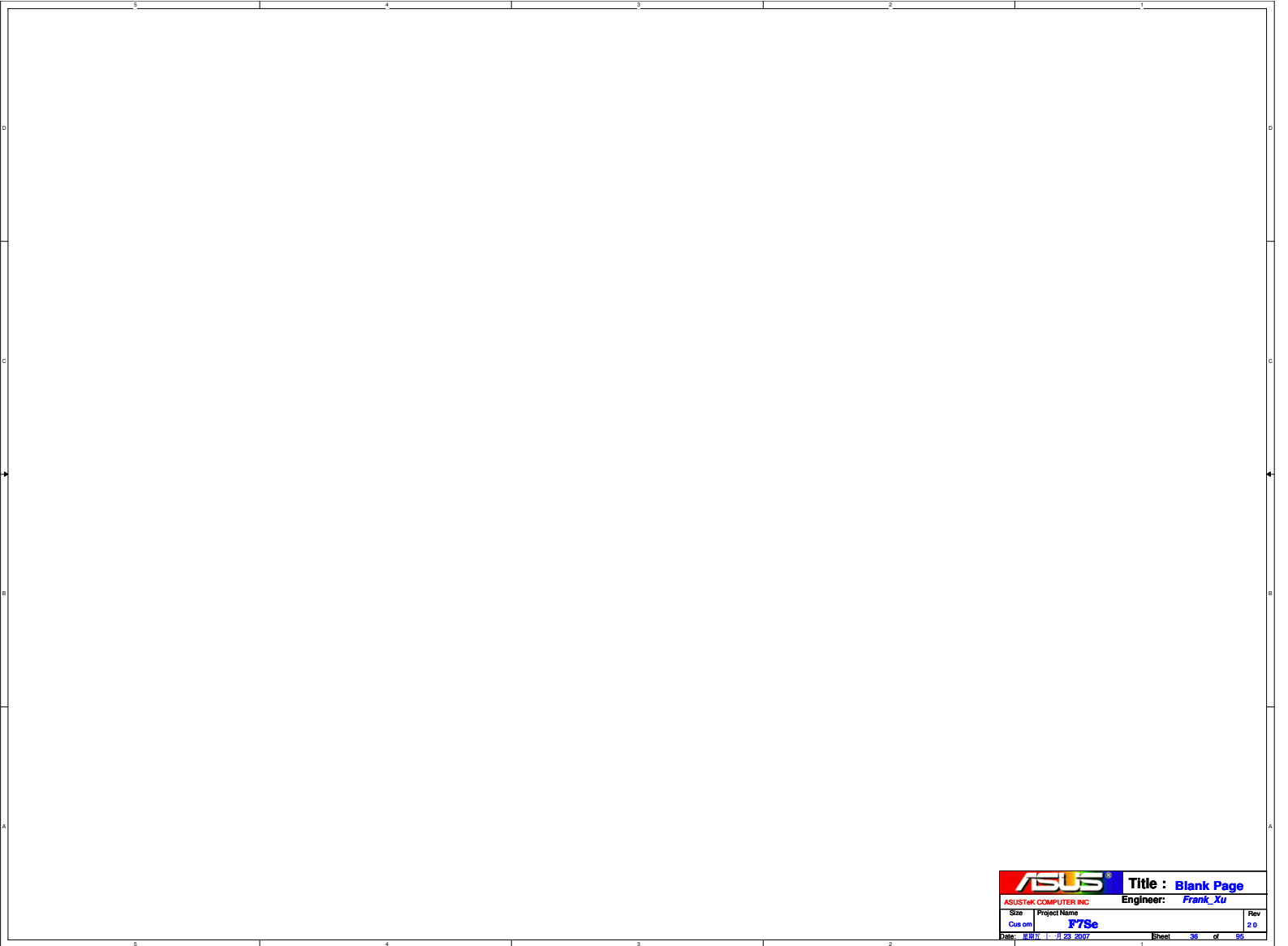


INVERTER Interface/Speaker CONN.



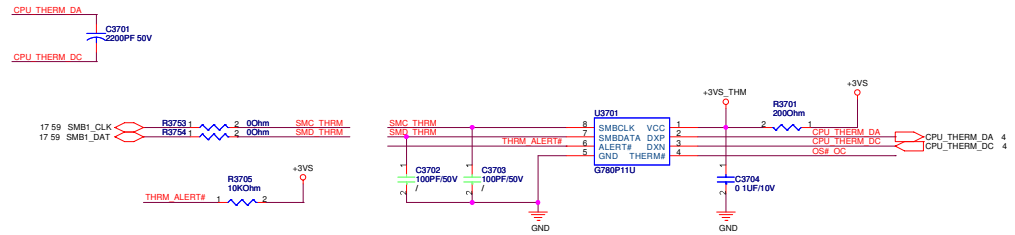


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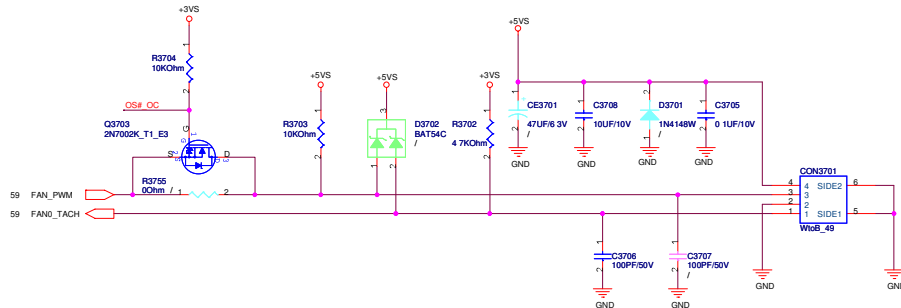


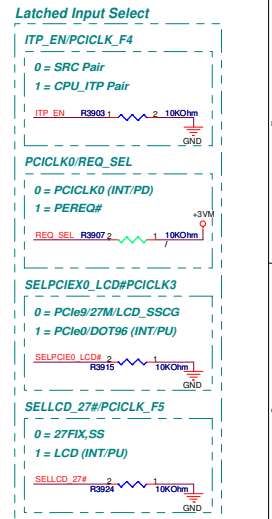
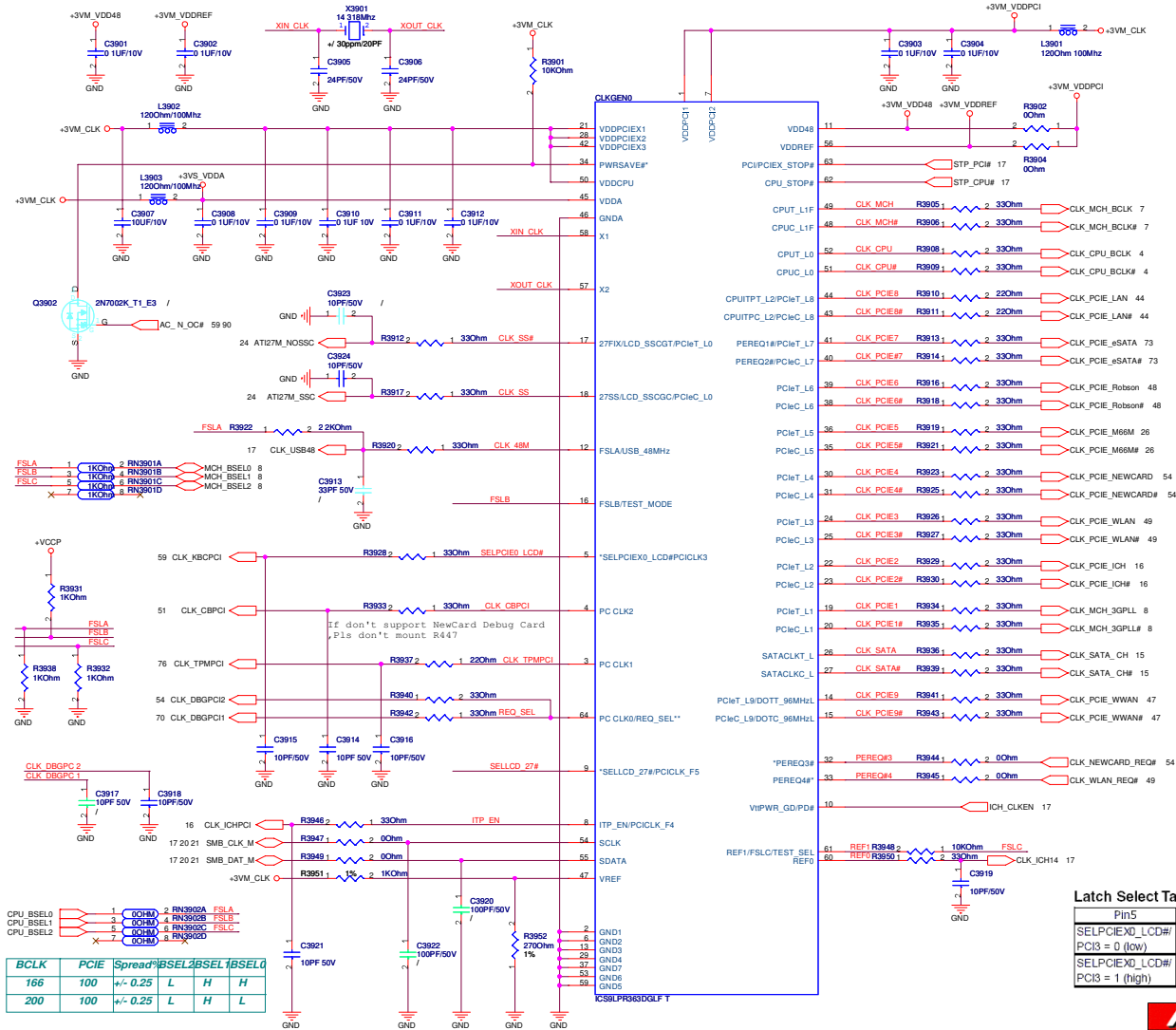
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Thermal Sensor



DC FAN Control



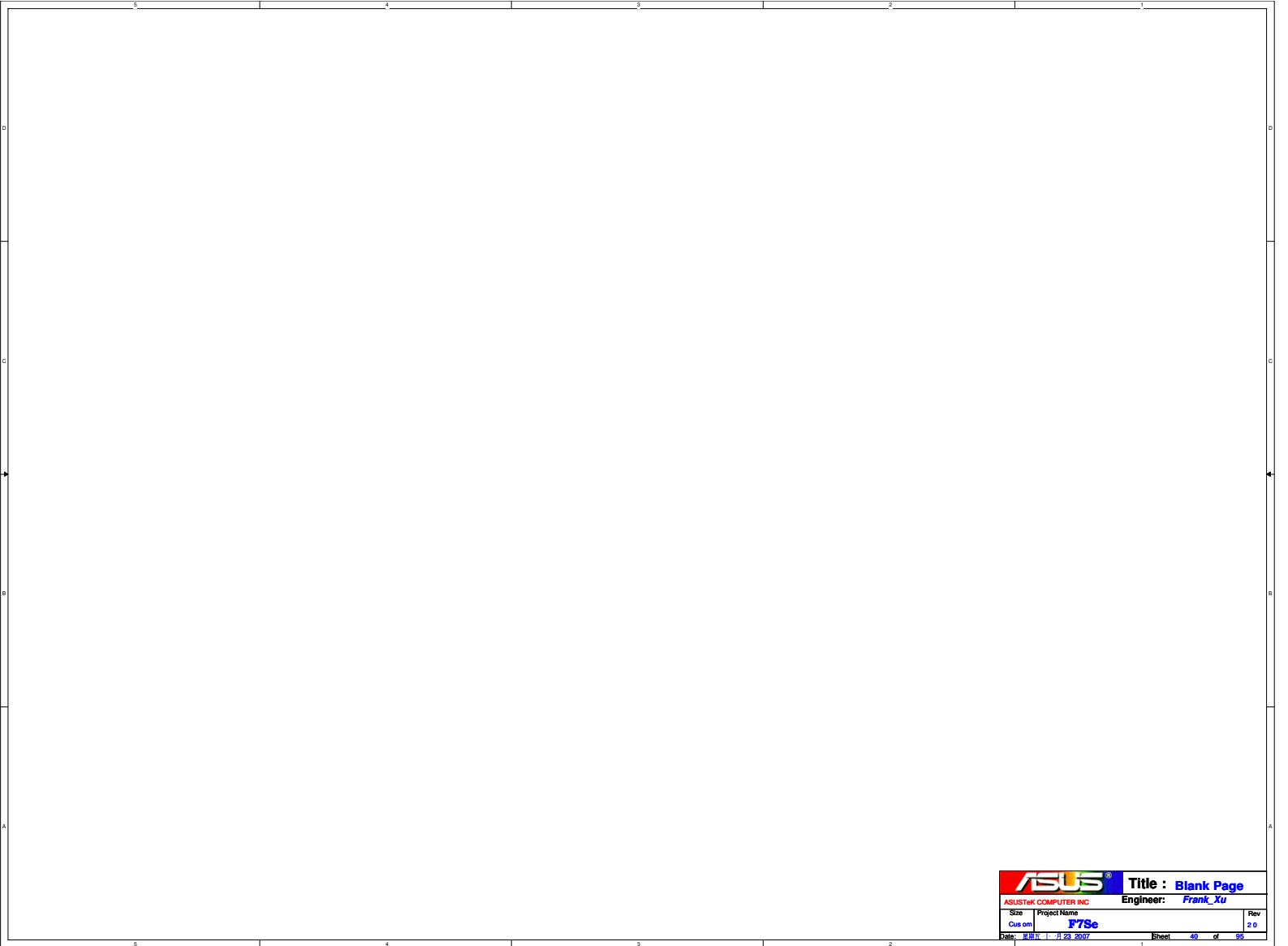


Latch Select Table

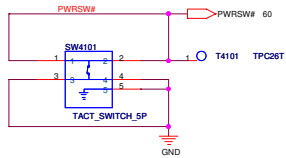
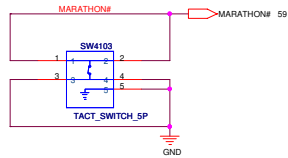
	Pin5	Pin9	Pin14/15	Pin17/18
SELPCIE0_LCD#	PCIE9	SELLCD_27#=#0	PCIE9	27FIX/SS
PC13 = 0 (low)	PCIE9	SELLCD_27#=#1	PCIE9	LCD
SELPCIE0_LCD#	X		DOT96	PCIE0
PC13 = 1 (high)	X		DOT96	PCIE0

BCLK	PCIE	Spread	SMB_L	SMB_H	SMB_SEL
166	100	+/- 0.25	L	H	H
200	100	+/- 0.25	L	H	L

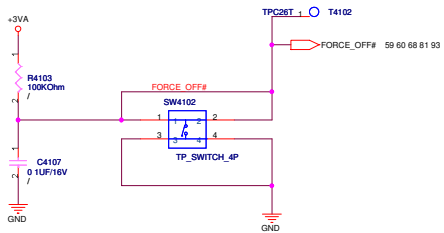
*PEREQ3# control PCIE 2.4
 *PEREQ4# control PCIE 3,5,7

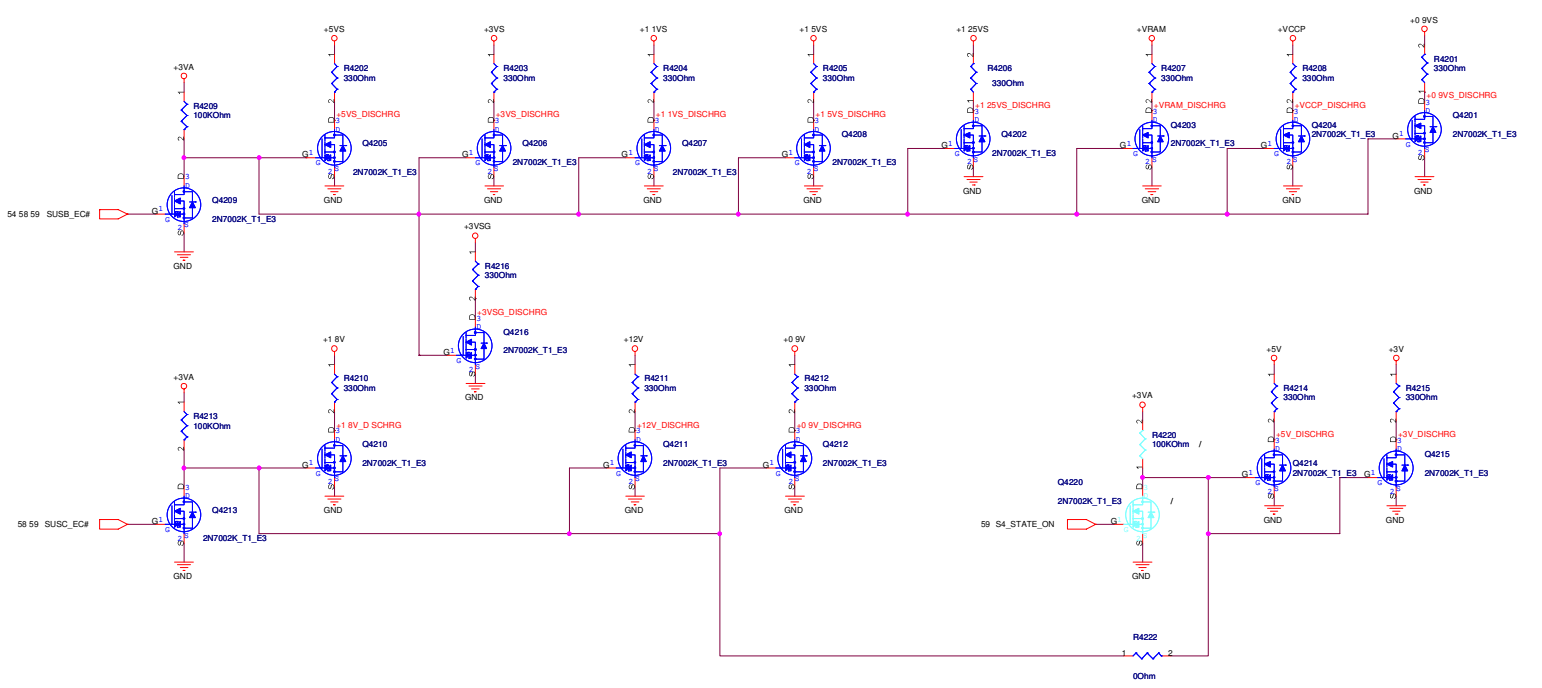


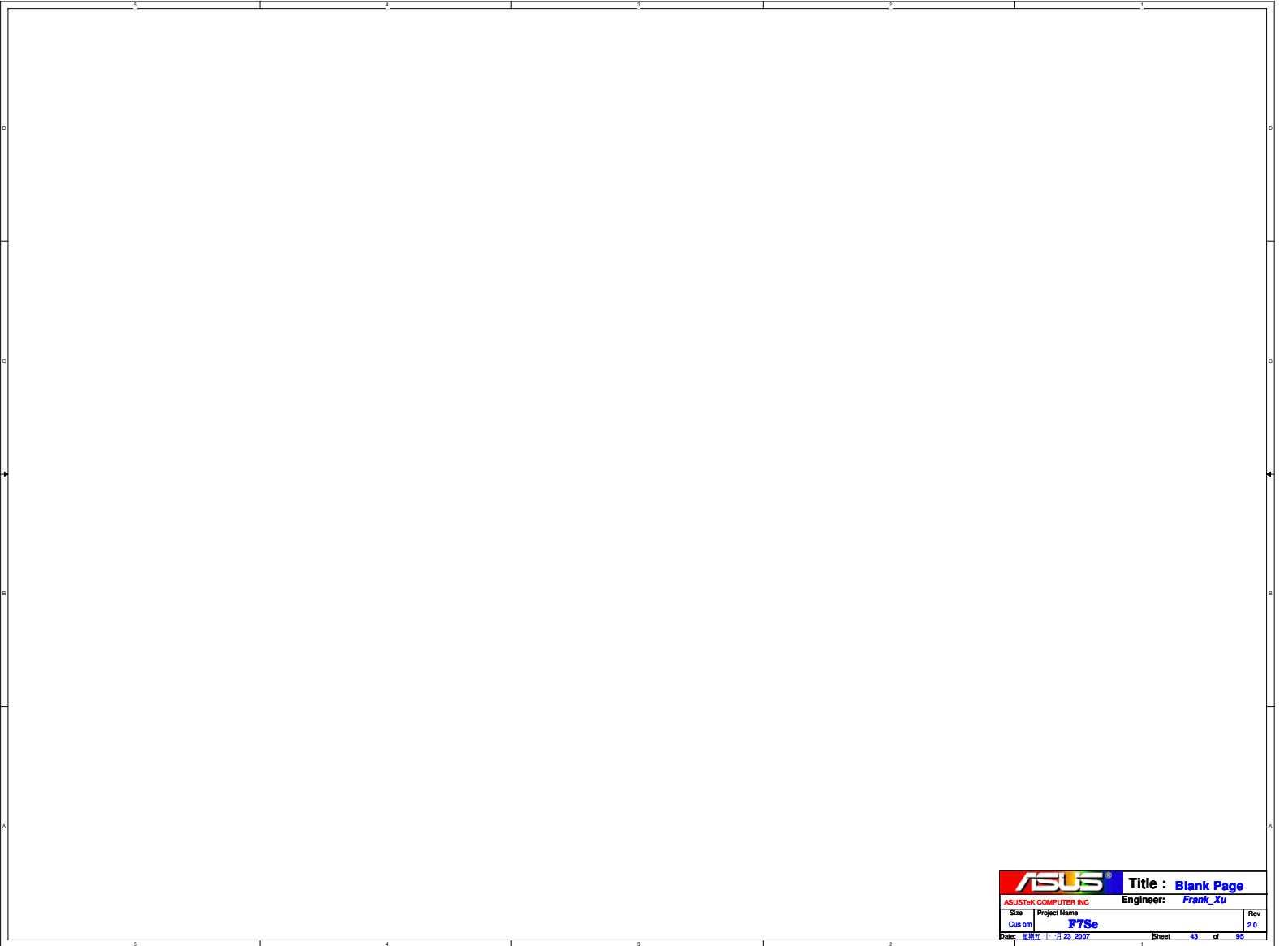
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ASUSTEK COMPUTER INC		Engineer: Frank_Xu	
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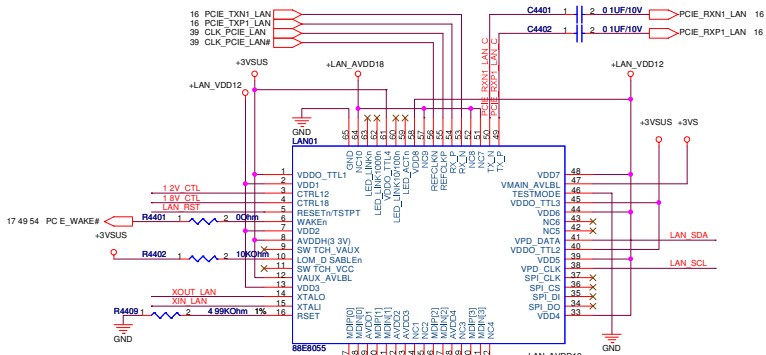
SHUT_DOWN#



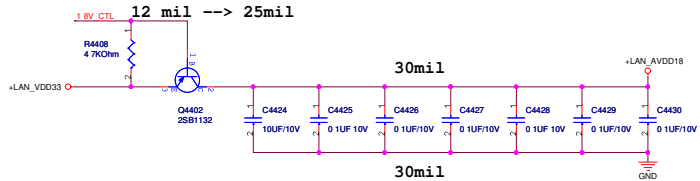
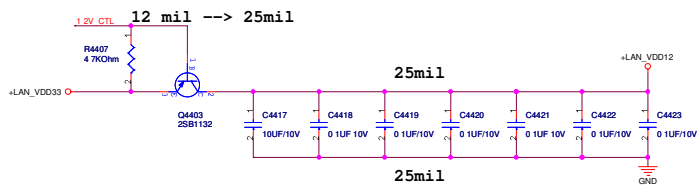
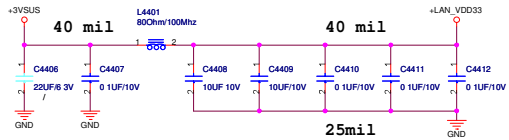
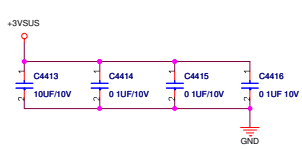
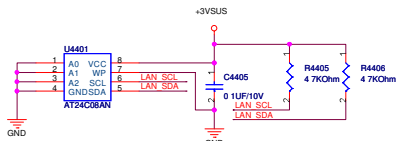
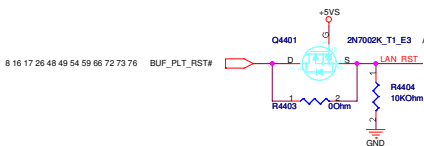
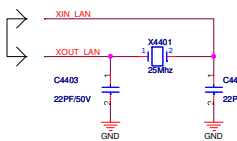




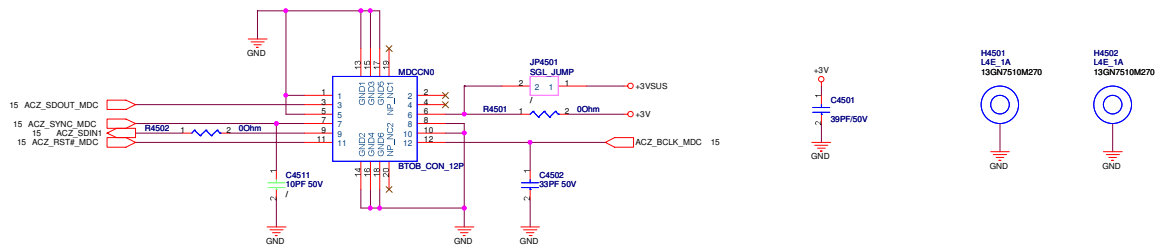
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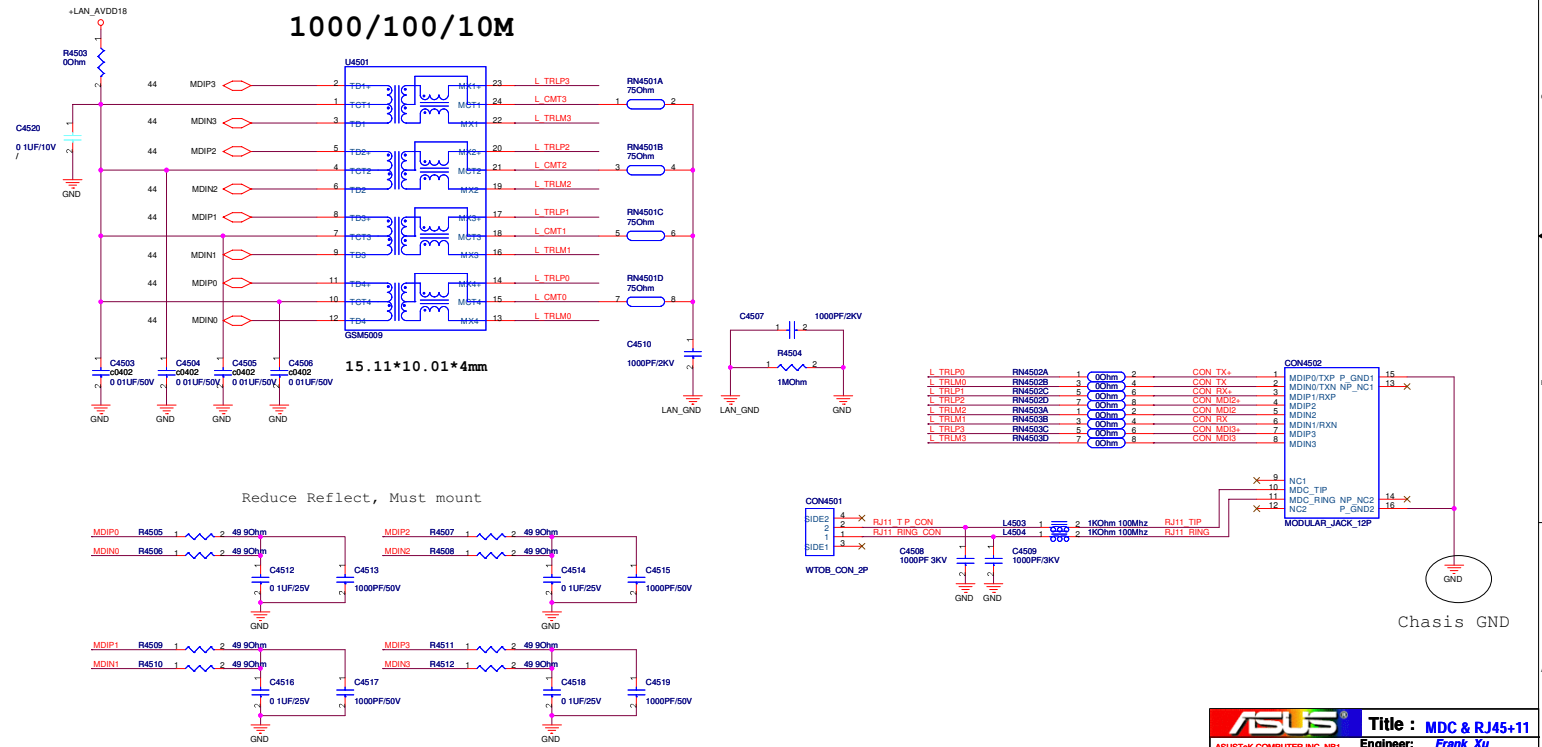
12 MIL



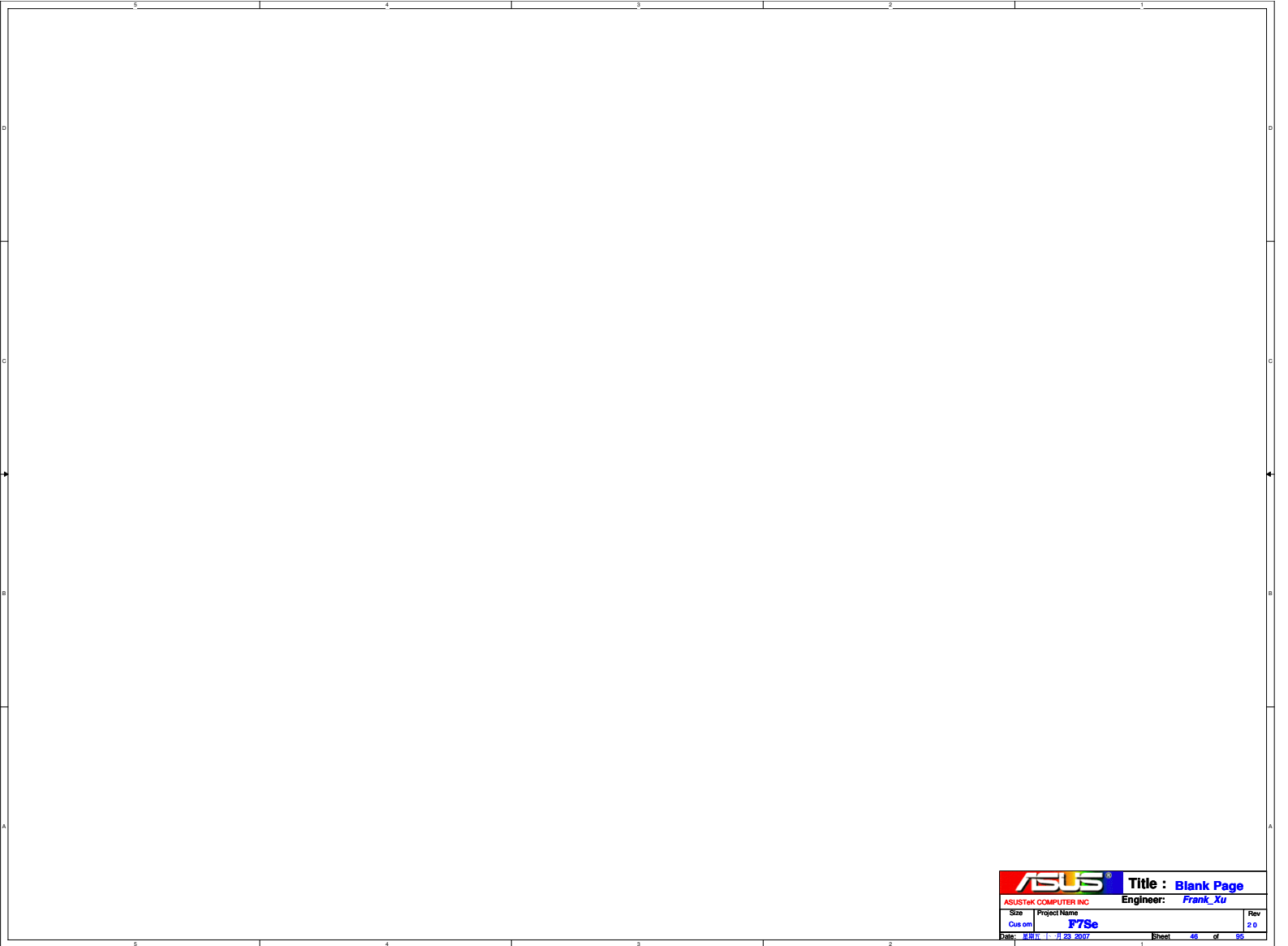
MDC CONN.



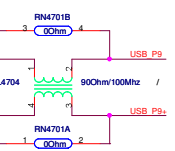
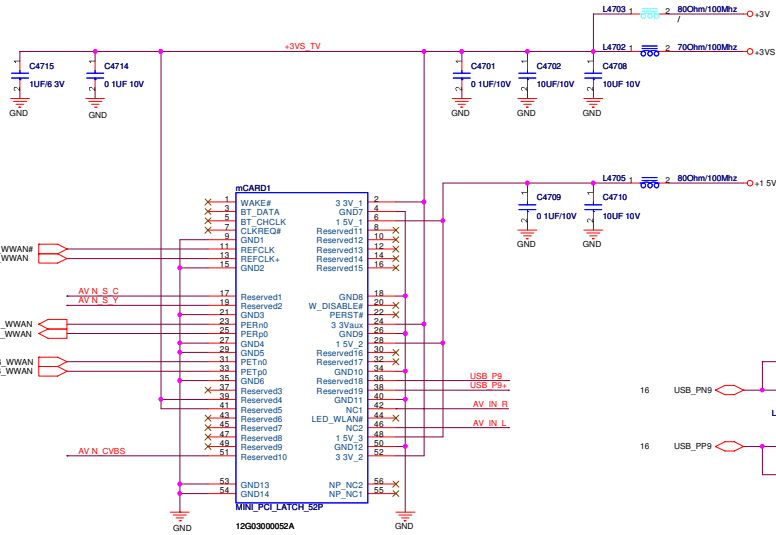
LAN CONN.



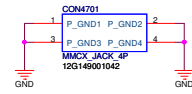
Chassis GND



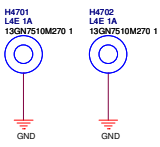
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TV Conn.

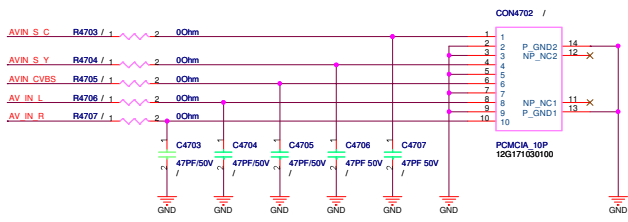


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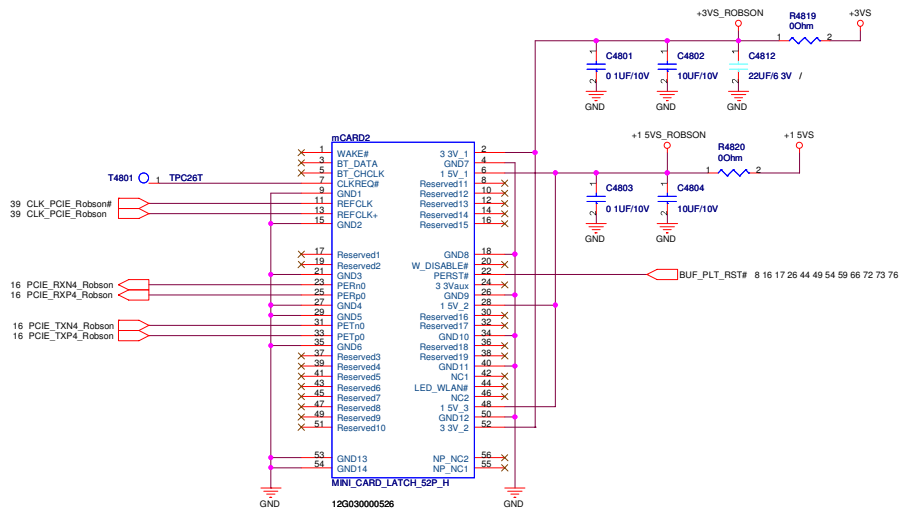


H = 3.0mm

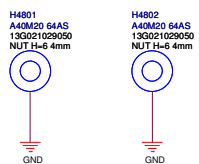
H = 5.2mm
FOR TV TUNER
(UWB OPTION)

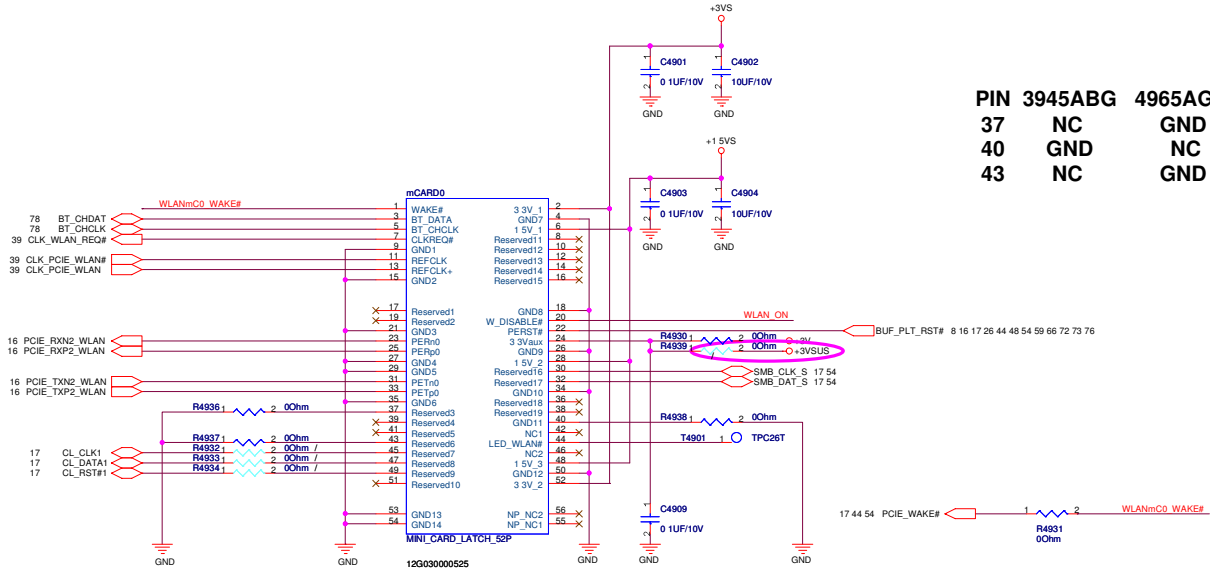


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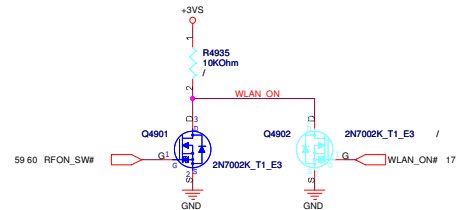
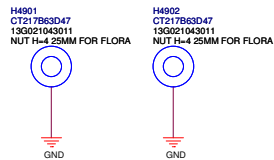


FOR ROBSON
H=9.0mm





H = 6.75mm
FOR WLAN



5

4

3

2

1

D

D

C

C

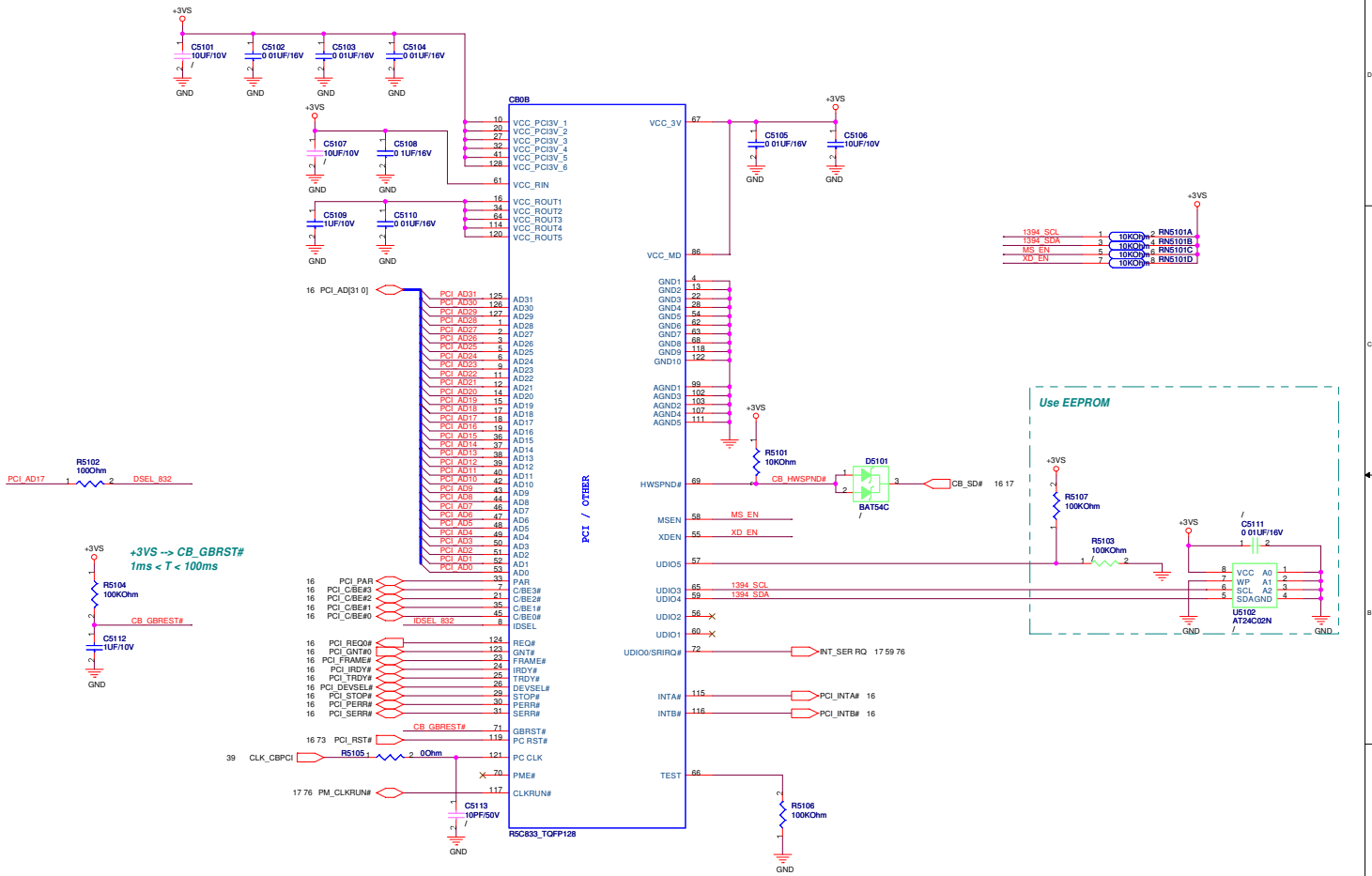
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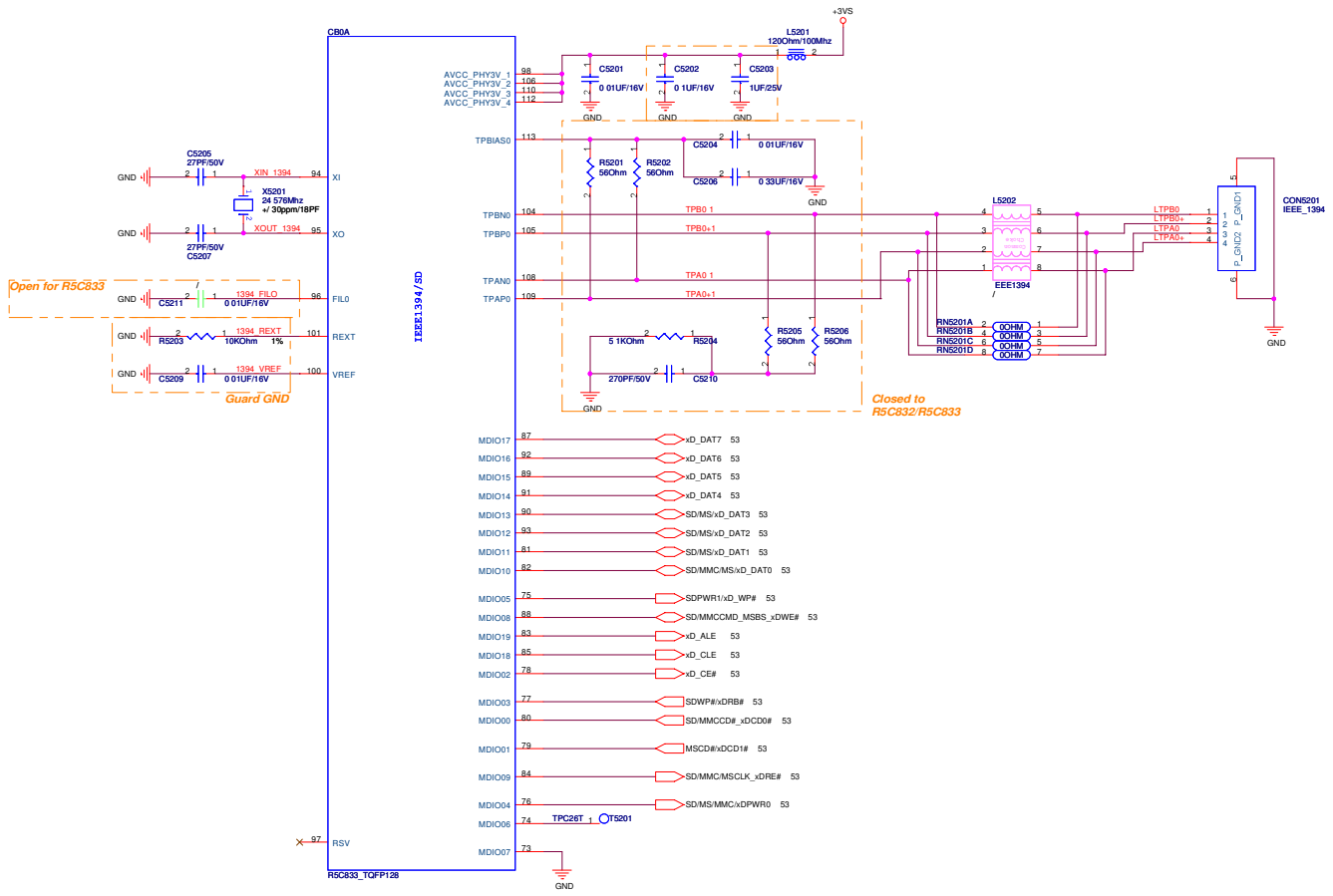
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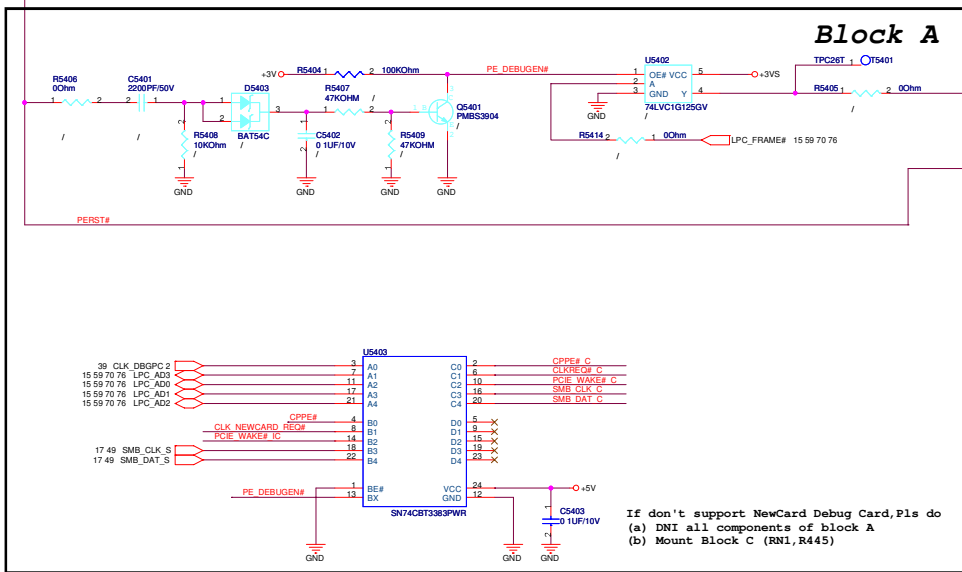
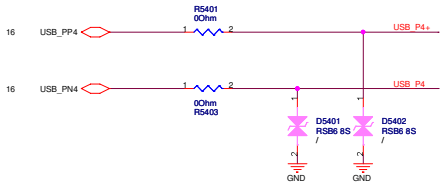
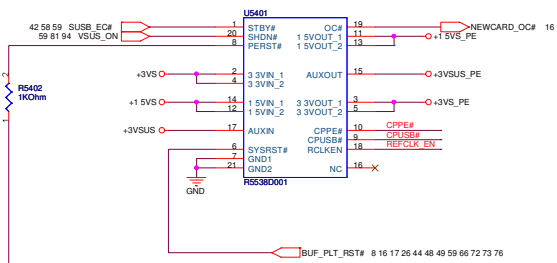
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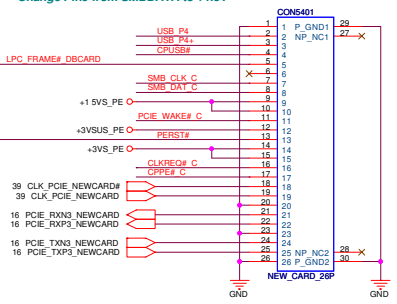




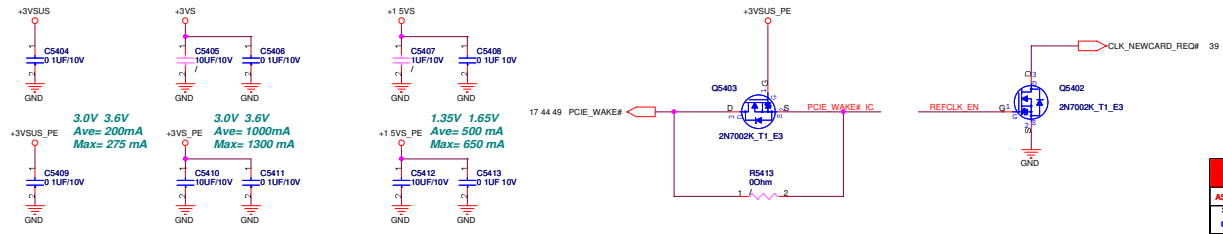
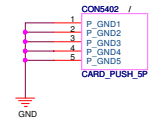


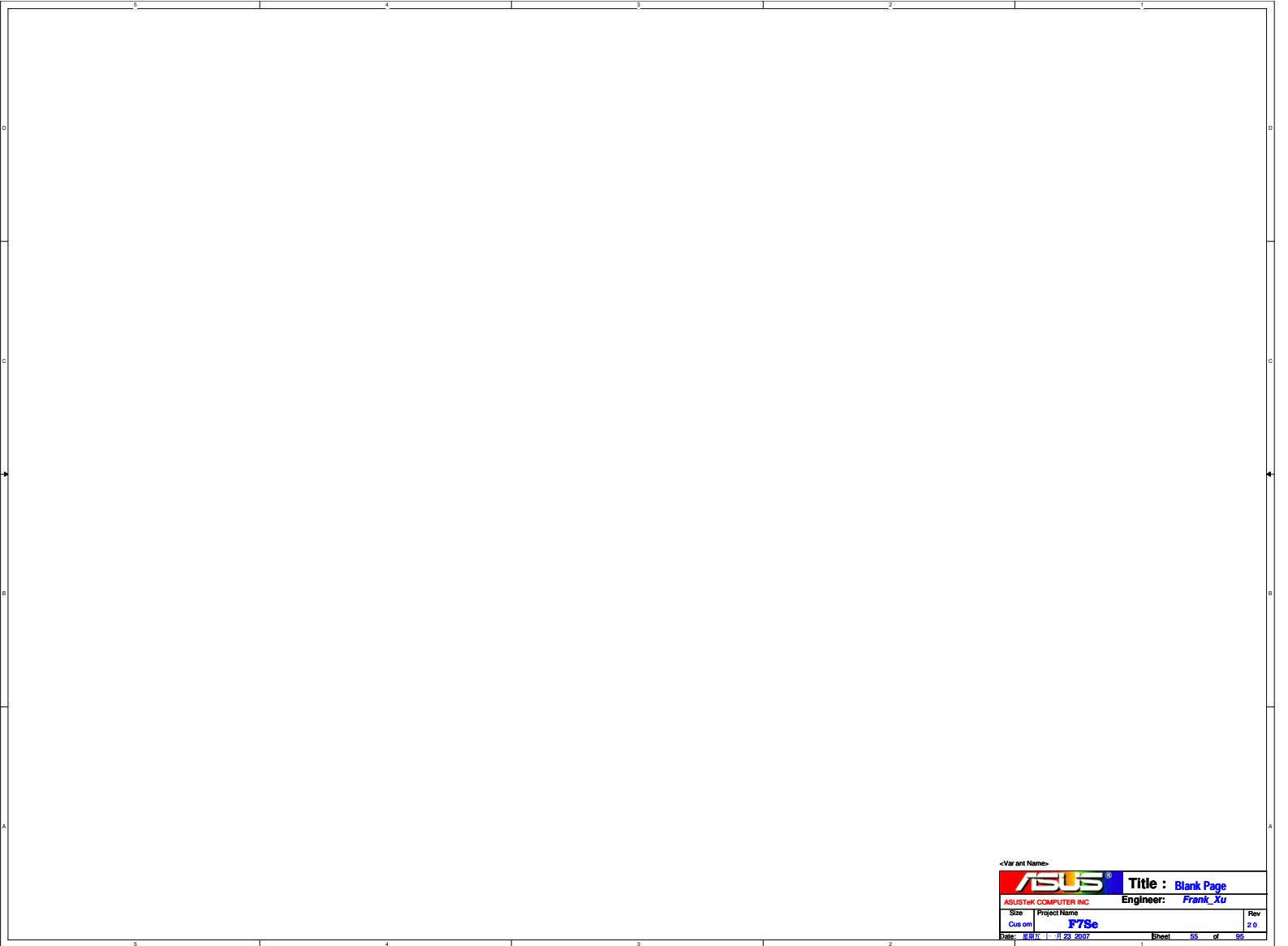
*!! ExpressCard Standard 1.0:
 Change Pin7 from RESERVED to SMBCLK
 Change Pin8 from SMBCLK to SMBDATA
 Change Pin9 from SMBDATA to +1.5V*

NewCard Header




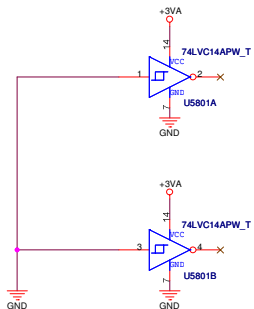
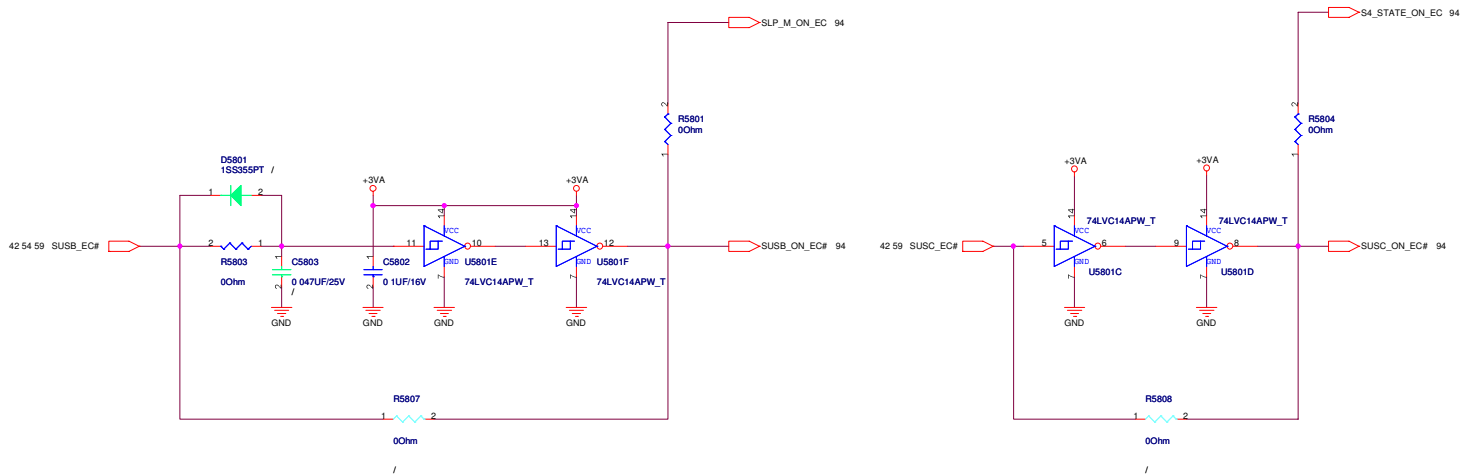
NewCard Ejecter





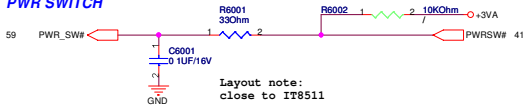
<Variant Name>

		Title : Blank Page	
ASUSTEK COMPUTER INC		Engineer: Frank_Xu	
Size	Project Name	Rev	
Cus om	F7Se	2.0	
Date:	星期五 11:23 2007	Sheet	55 of 95

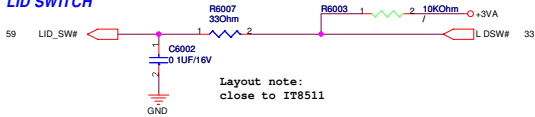


For Switch

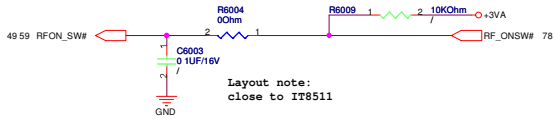
PWR SWITCH



LID SWITCH



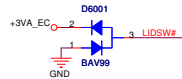
RF ON SWITCH



If you don't use Audio DJ function, please use this schematics

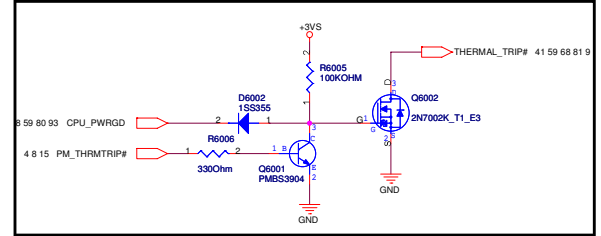
Note:

This LID_EC# is a signal from inverter board, it is easy to cause high voltage damage when plugging inverter board connector to M/B with AC present. It needed to add bidirectional diode to protect this pin.

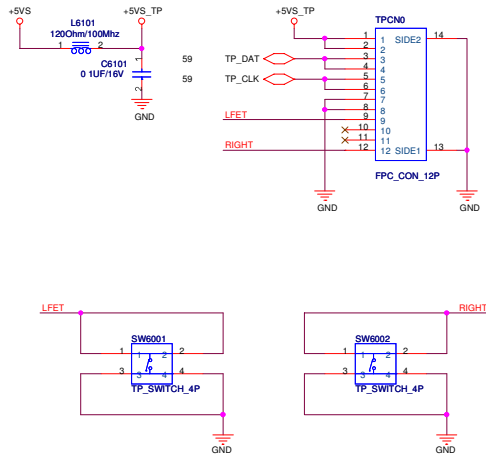


Layout note:
close to connector

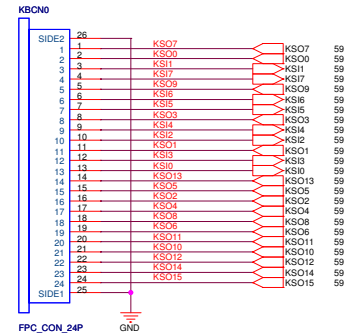
For Thermal Control Method

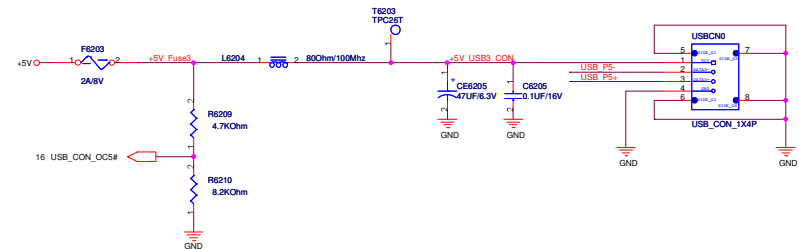
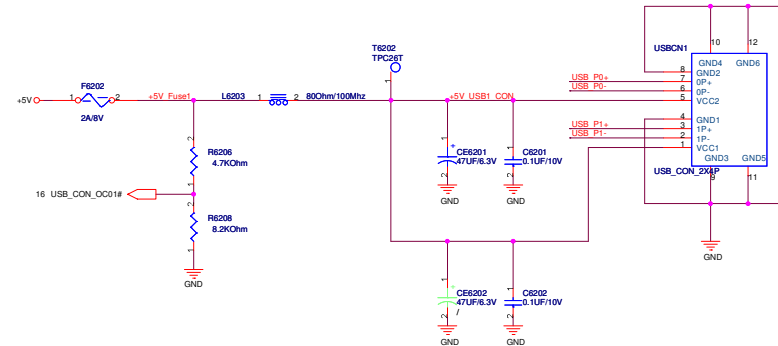
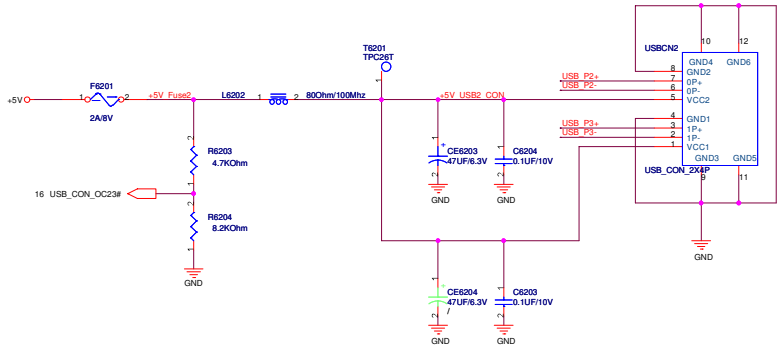
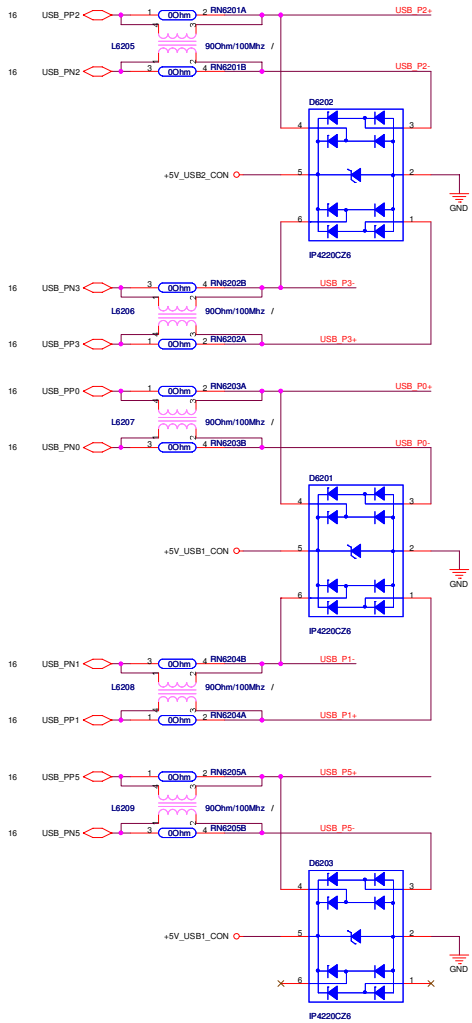


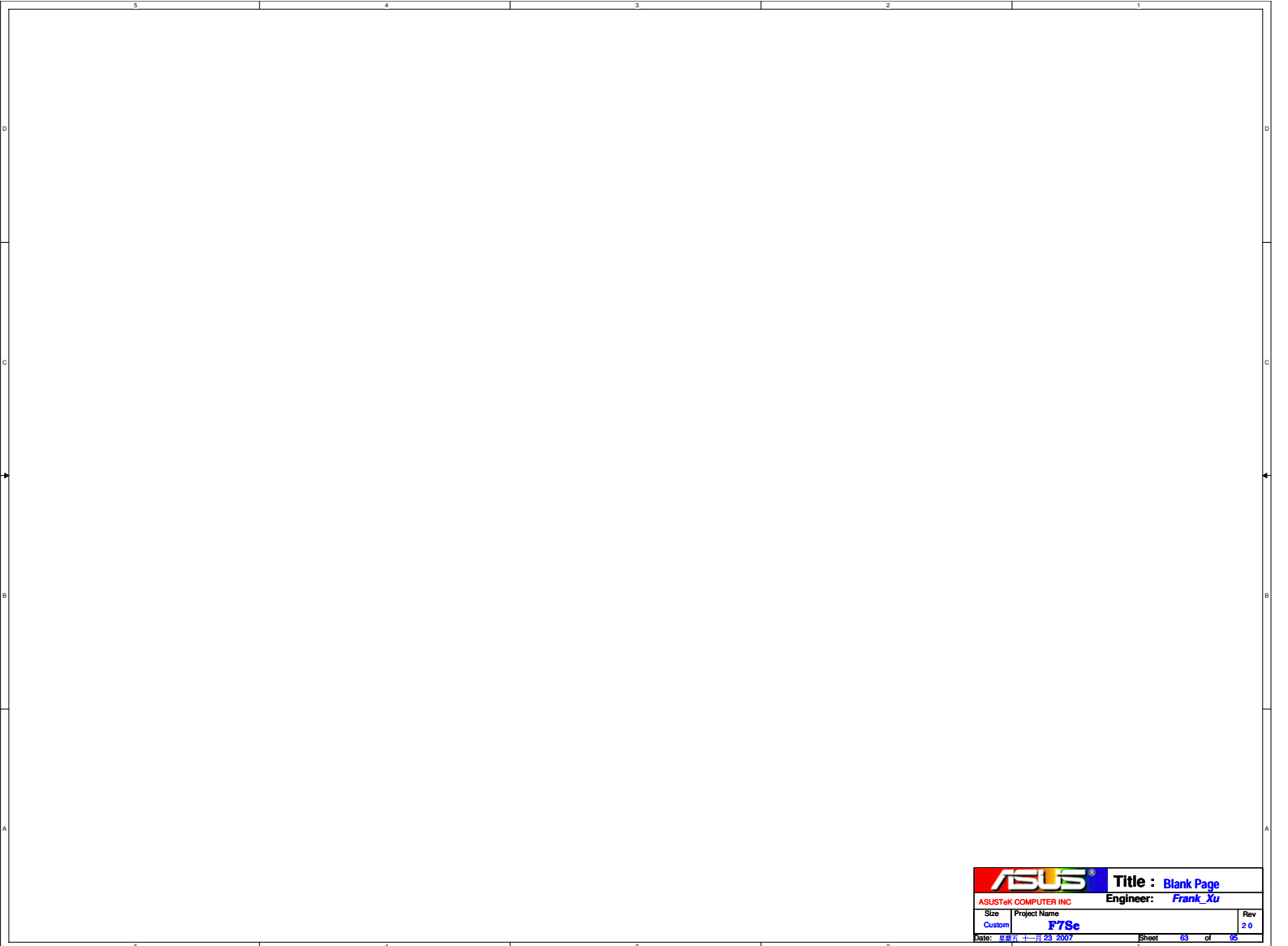
For Touch-Pad




FOR A7 K/B , Matrix B







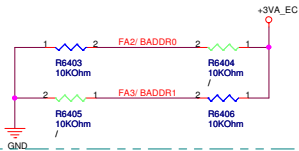
		Title : Blank Page	
ASUSTek COMPUTER INC		Engineer: Frank_Xu	
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ISA ROM

EC Hardware Strapping

FA2/ BADDR0 & FA3/ BADDR1

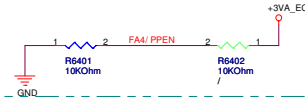
- 00: PNPNG Access Register Pair Are 002Eh and 002Fh
- 10: PNPNG Access Register Pair Are 004Eh and 004Fh
- 01: PNPNG Access Register Pair Are Determined by EC Domain Registers SWCBALR and SWCBAHR.
- 11: Reserved



Note: Sampled at VSTBY Power Up Reset

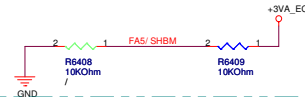
FA4/ PPEN

- 0: Normal
- 1: KBS Interface Pins Are Switched to Parallel Port Interface for In-System Programming

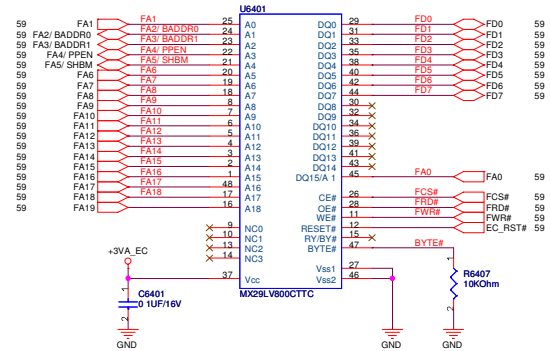


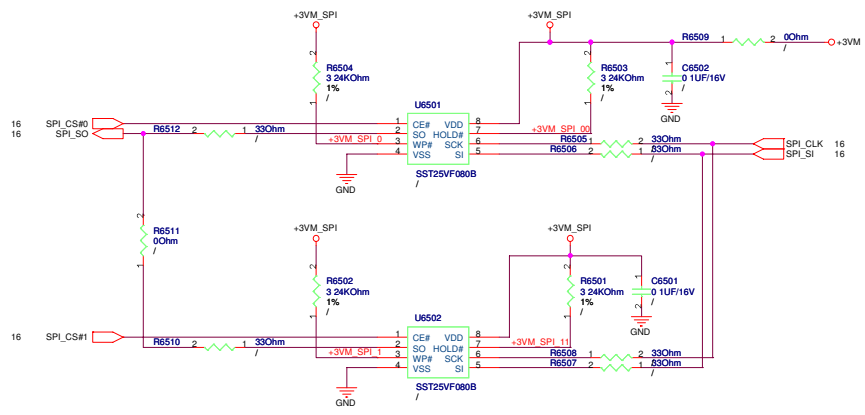
FA5/ SHBM

- 0: Disable Shared Memory with Host BIOS
- 1: Enable Shared Memory with Host BIOS

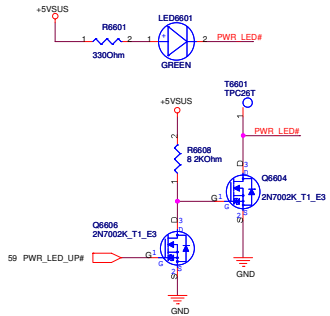


8M TSOP

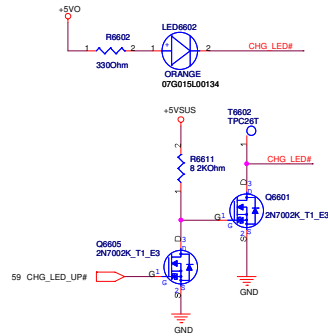




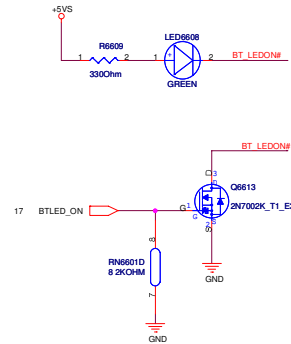
For Power LED



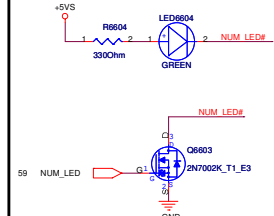
For Battery LED



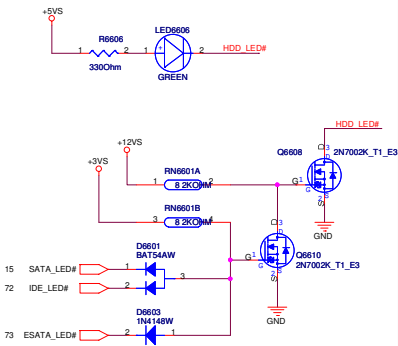
For BT LED



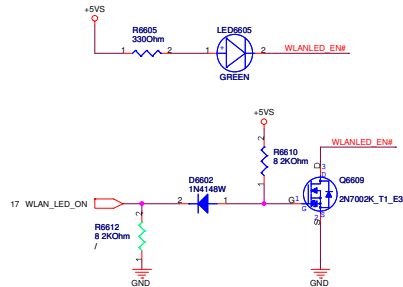
For Number Lock



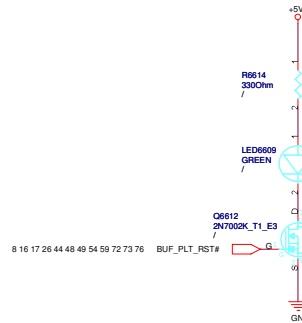
For SATA/IDE LED



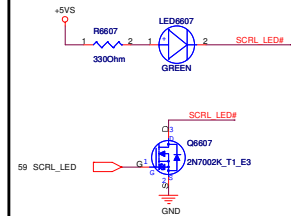
For WireLess LED



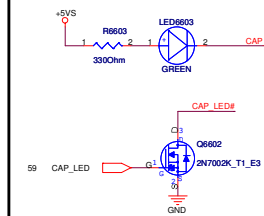
Reserved LED

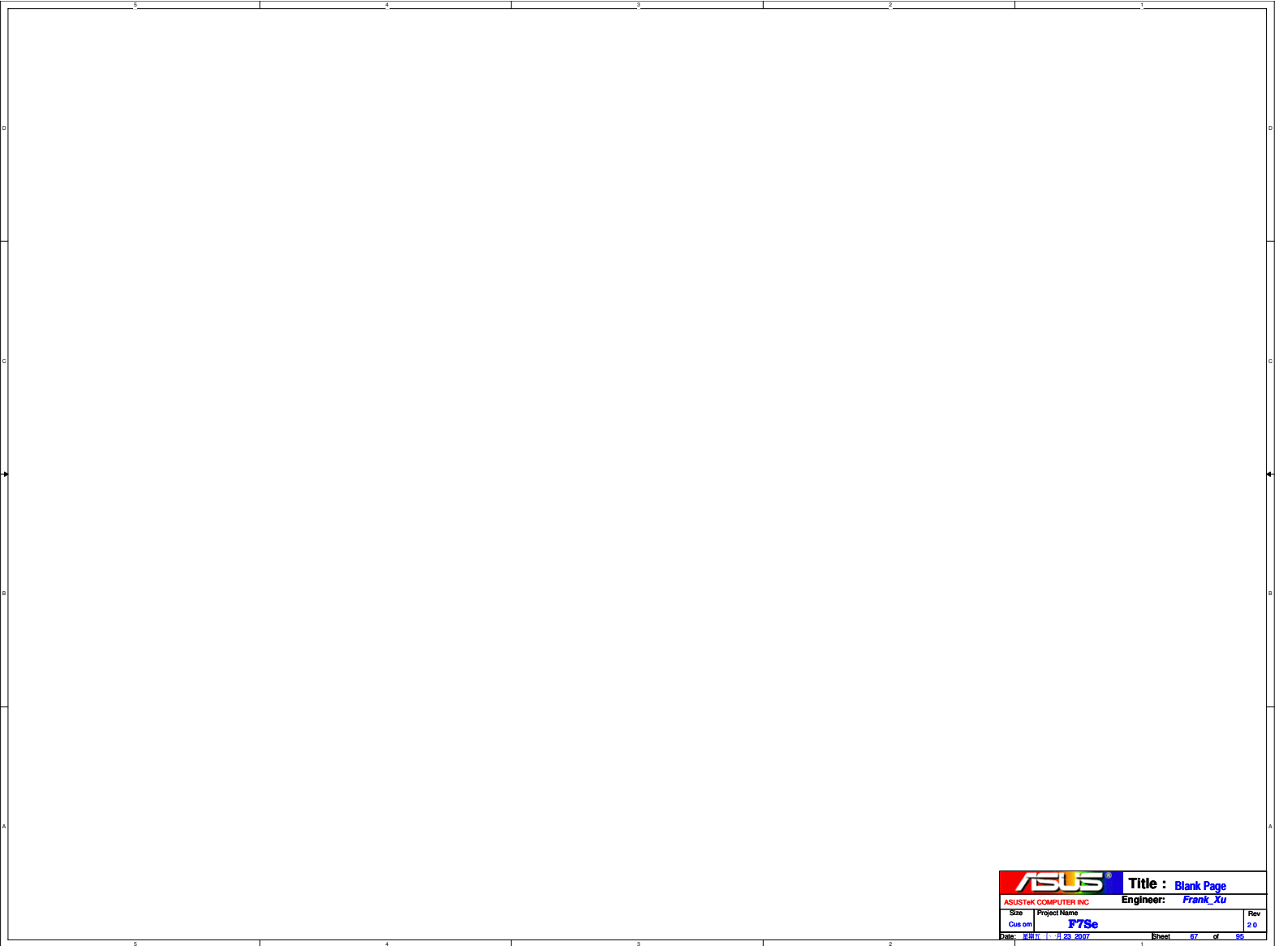


For Scroll Lock



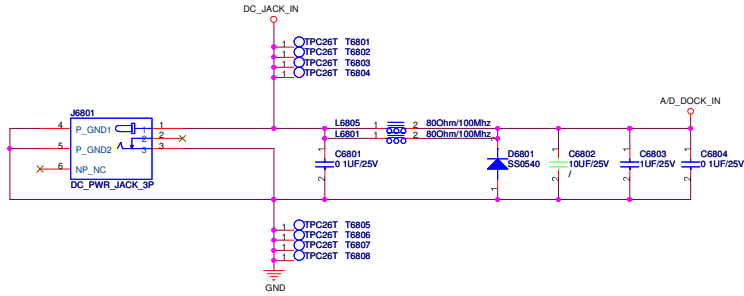
For Caps. Lock



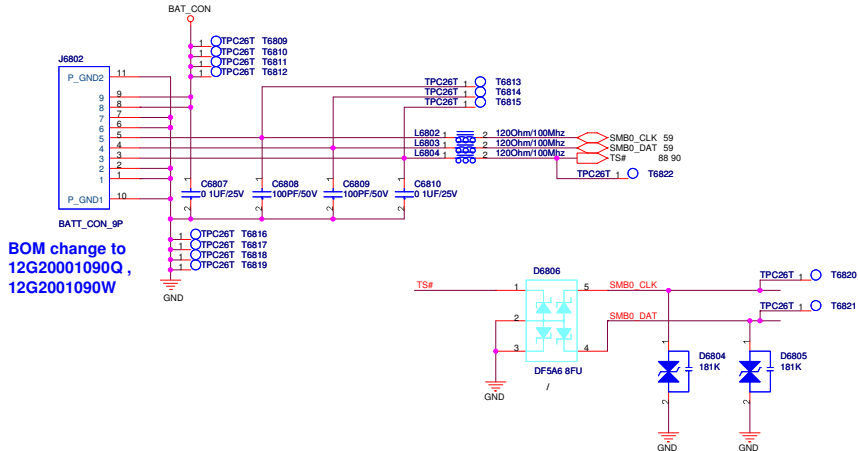


		Title : Blank Page	
ASUSTEK COMPUTER INC		Engineer: Frank_Xu	
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Date:	2007.11.23	Sheet	67 of 95

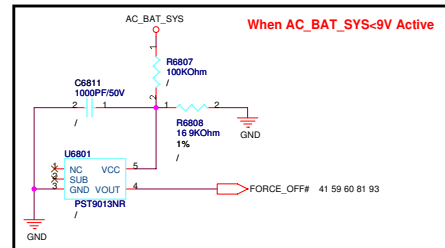
DC IN



BAT IN

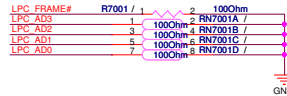
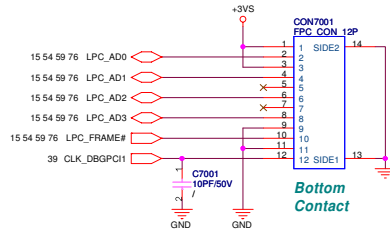


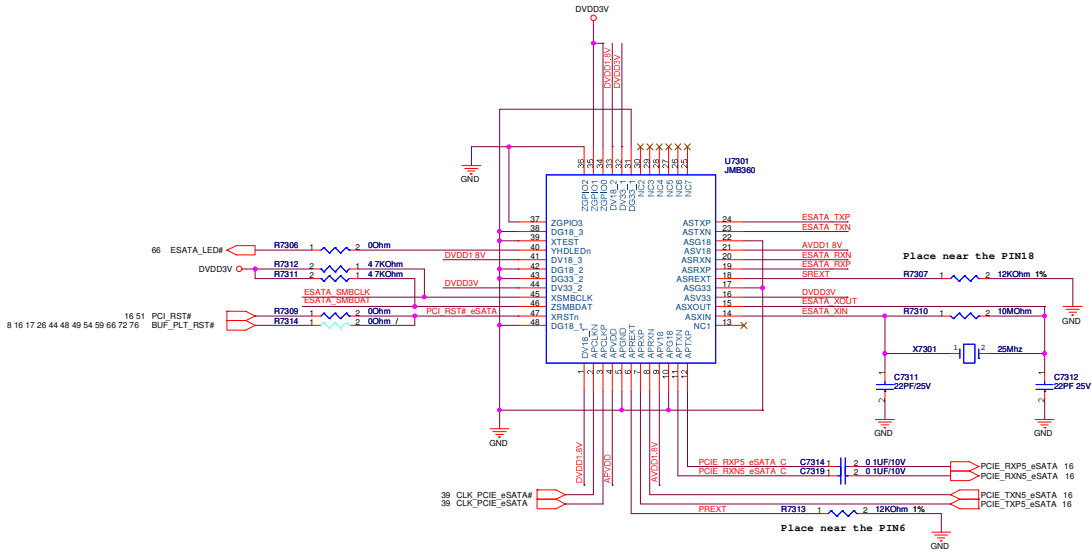
Without Battery & Pull out Adapter



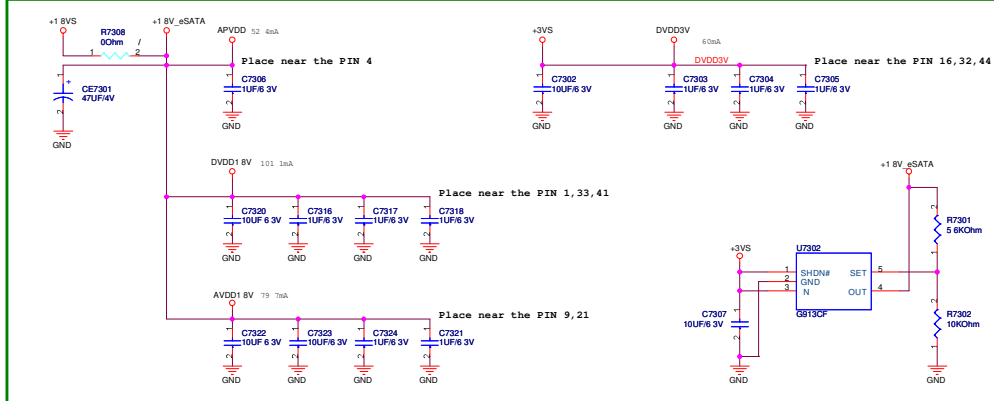
For Debug

If support NewCard Debug Card,
Pls don't mount all components.

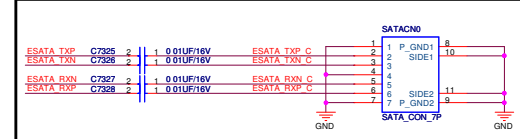


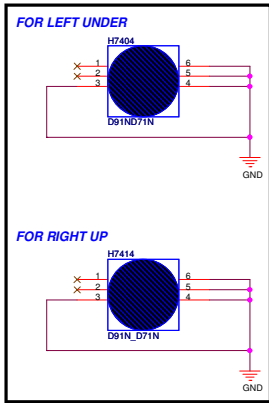


eSATA Power

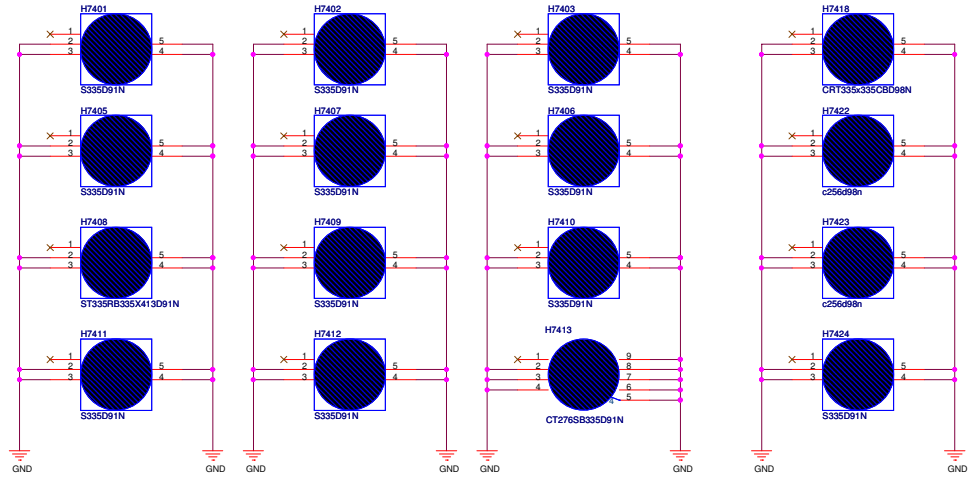


eSATA Connector

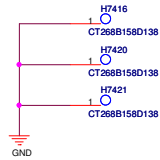




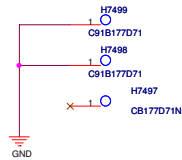
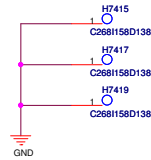
FOR SCREW HOLE

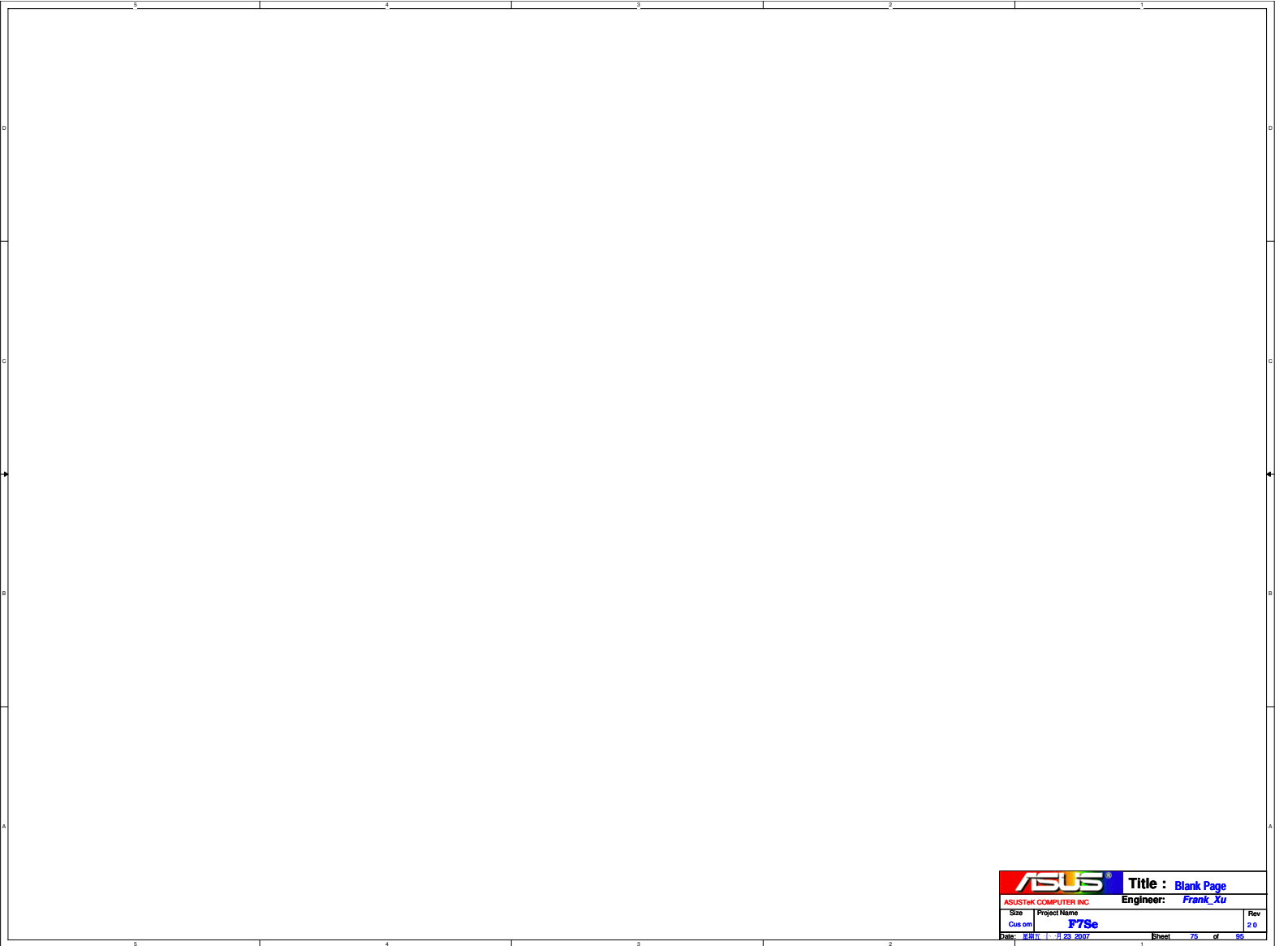


FOR CPU



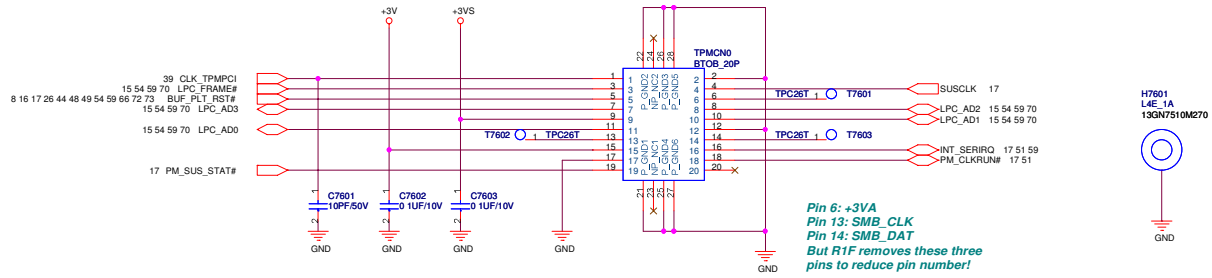
FOR VGA





		Title : Blank Page	
ASUSTEK COMPUTER INC		Engineer: Frank_Xu	
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For TPM module



Pin 6: +3VA
 Pin 13: SMB_CLK
 Pin 14: SMB_DAT
 But R1F removes these three pins to reduce pin number!

5

4

3

2

1

D

D

C

C

B

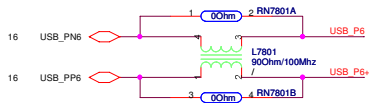
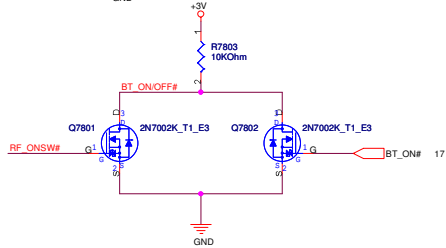
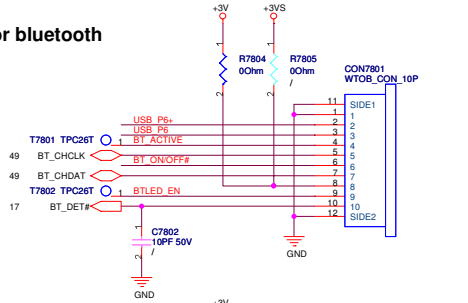
B

A

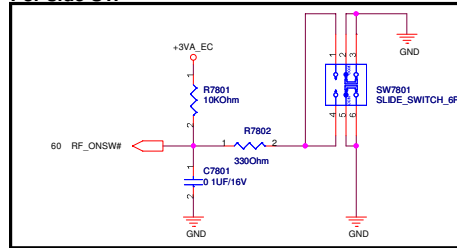
A

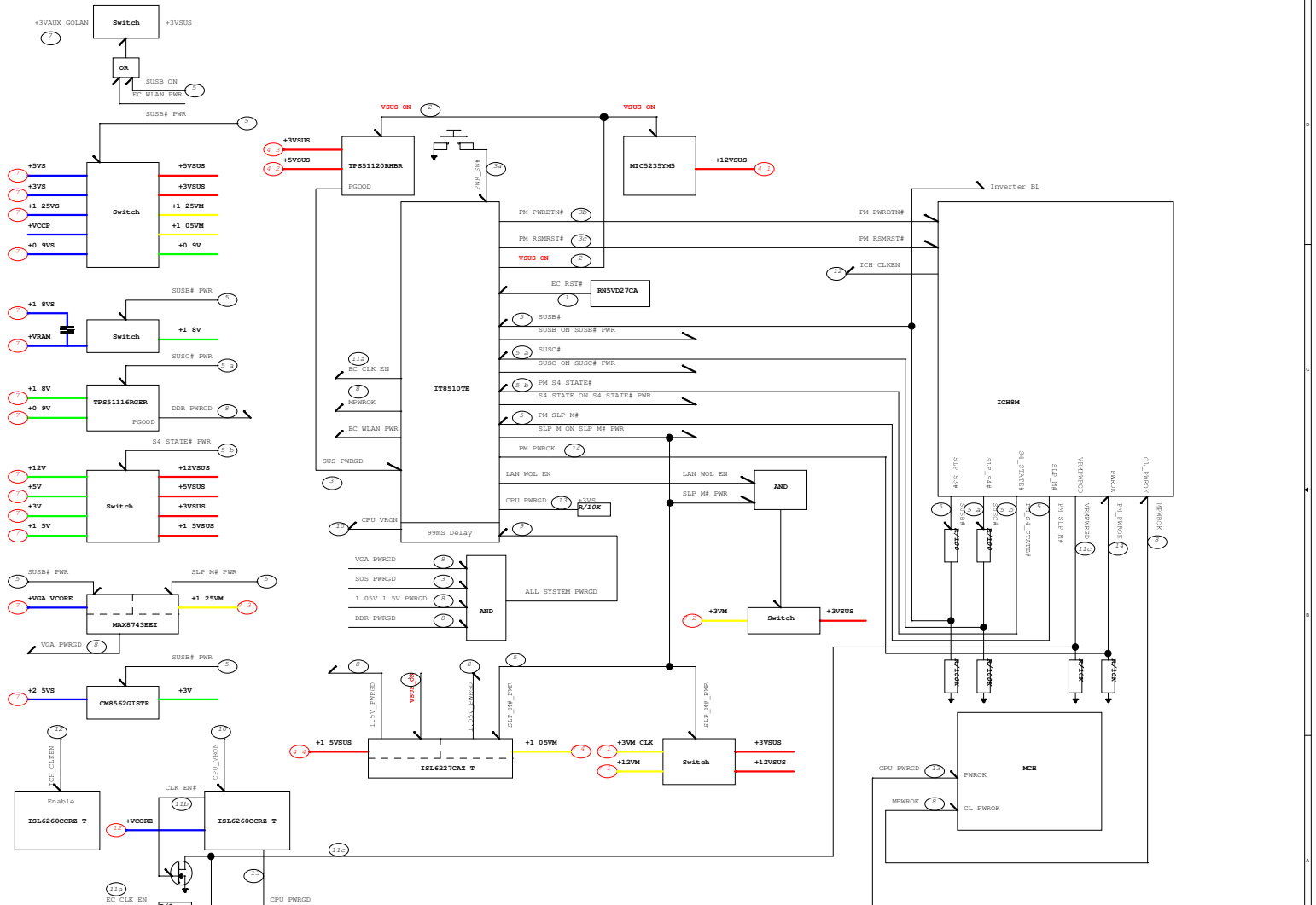
		Title : SPRING	
ASUSTek COMPUTER INC		Engineer: Frank_Xu	
Size	Project Name		Rev
Custom	F7Se		2.0
Date: 2007年11月23日		Sheet	77 of 95

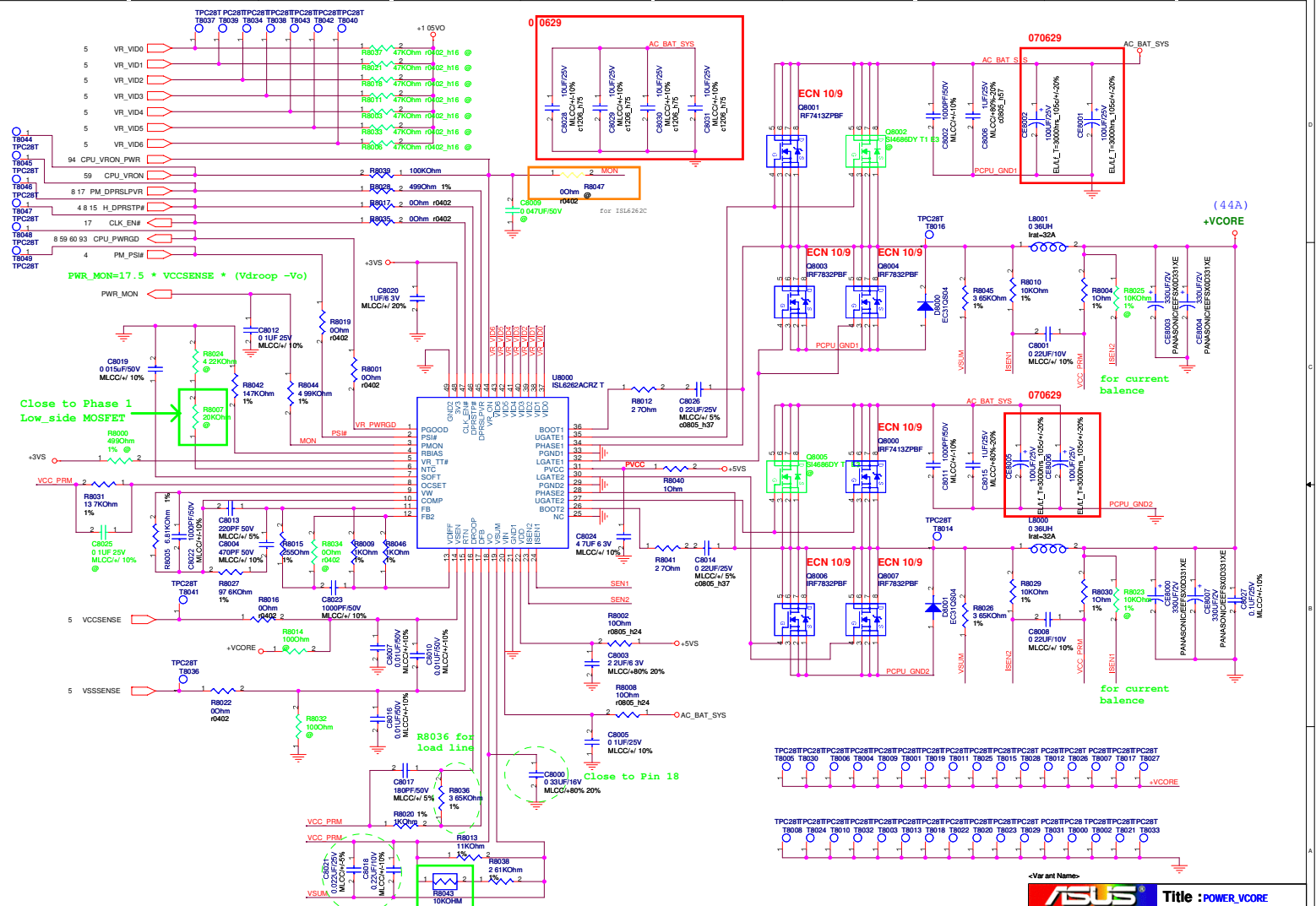
For bluetooth

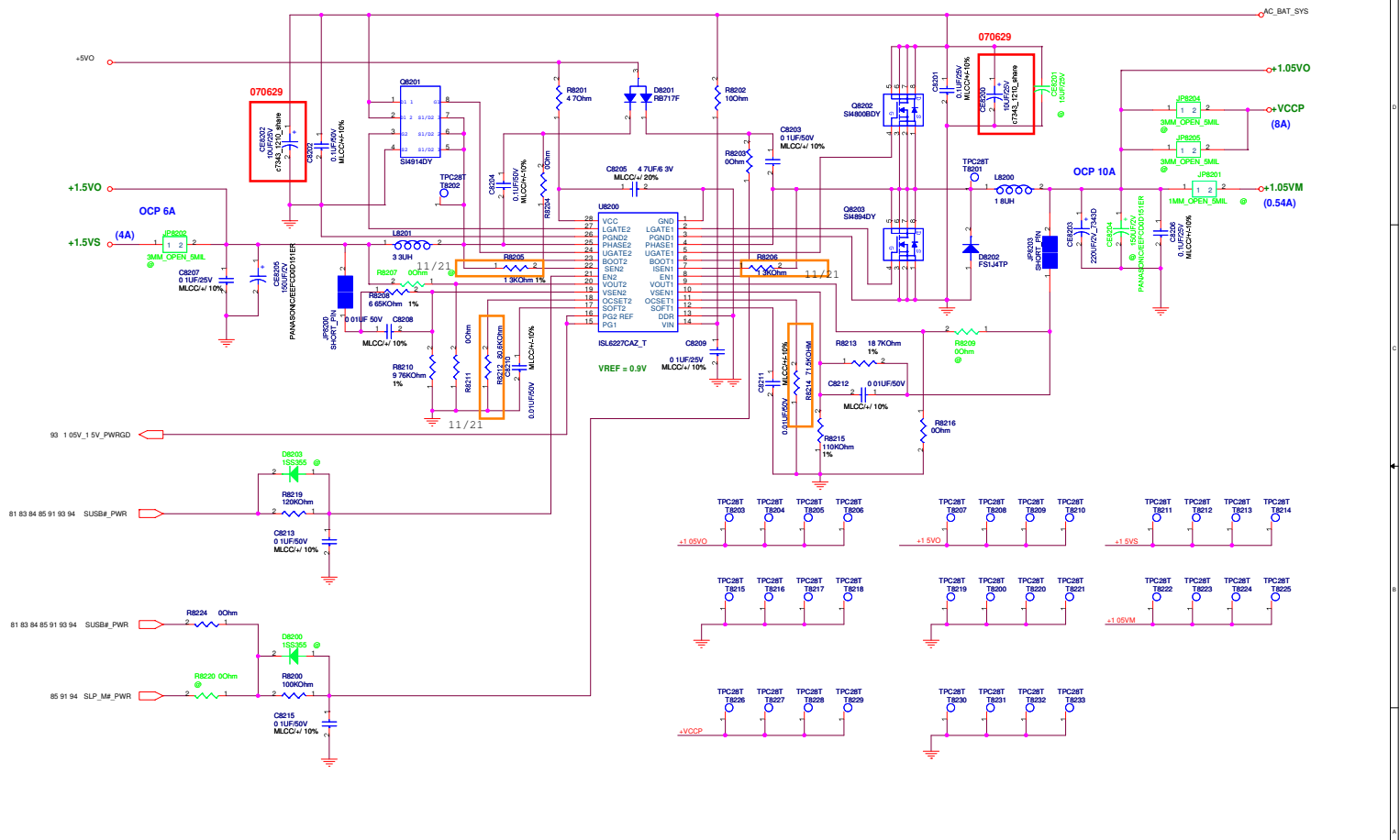


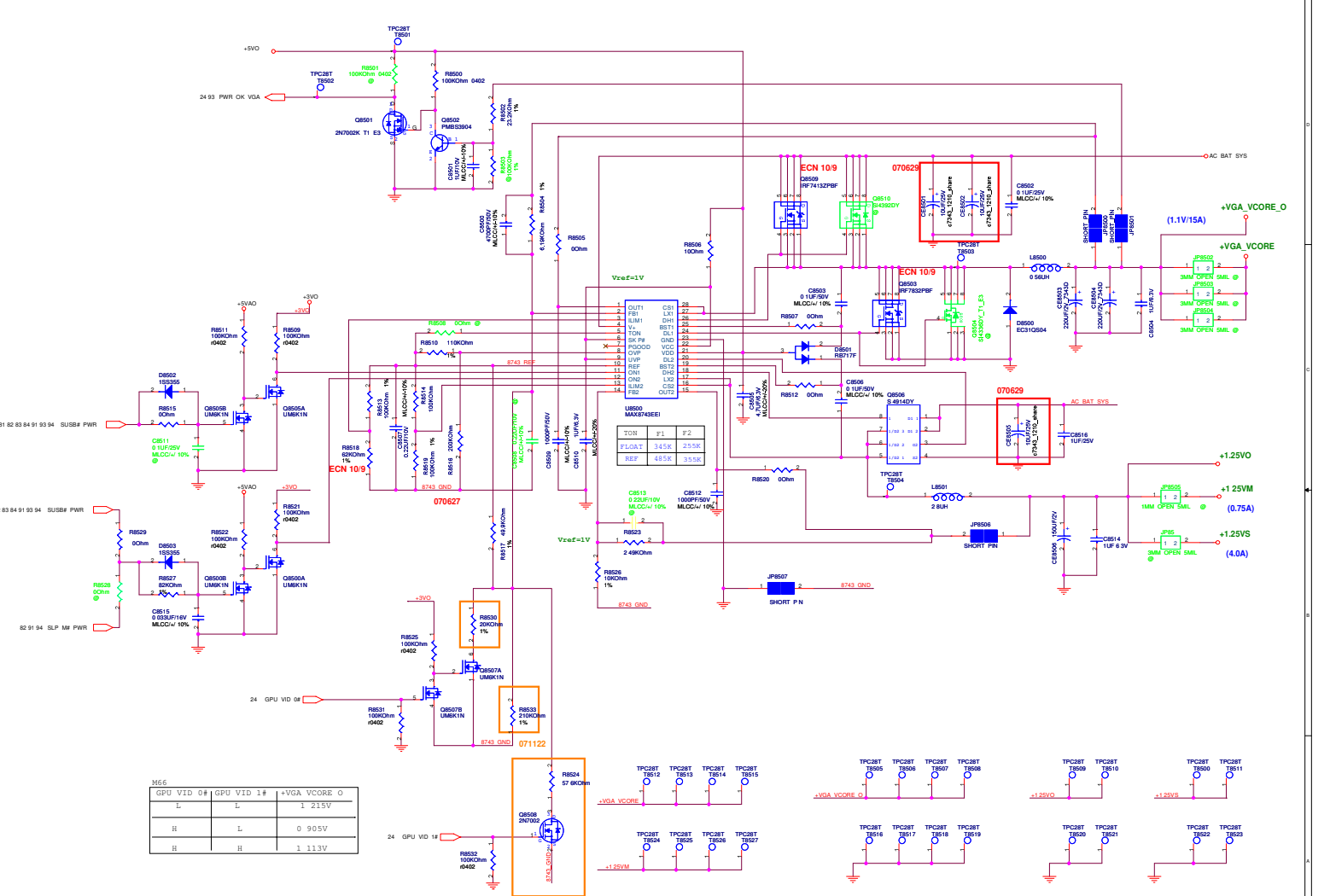
For side SW











M66

GPU VID 0#	GPU VID 1#	+VGA_VCORE_O
L	L	1 215V
H	L	0 905V
H	H	1 113V

5

4

3

2

1

D

D

C

C

B

B

A

A

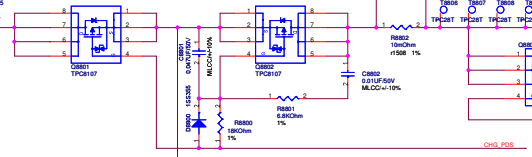
<Variant Name>

		Title : N/A
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<OrgName>		Engineer:
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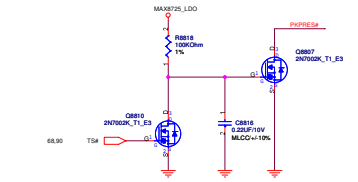
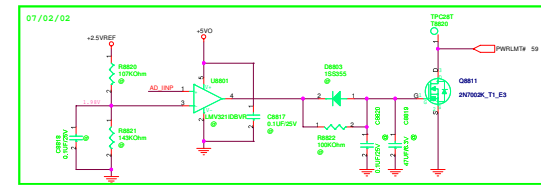
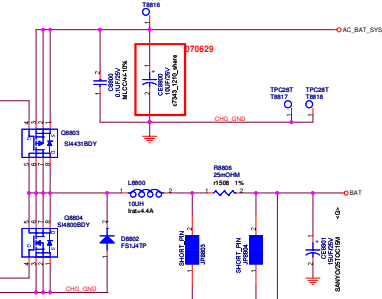
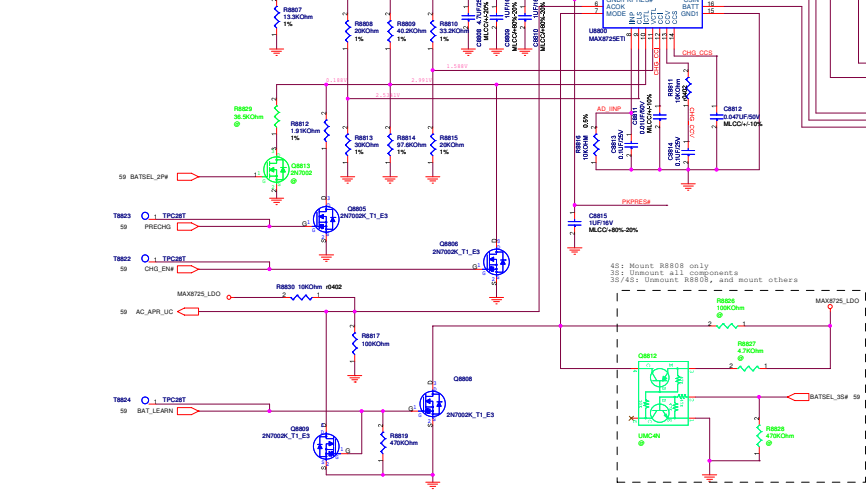
Size	Project Name	Rev
A	F7Se	2.0

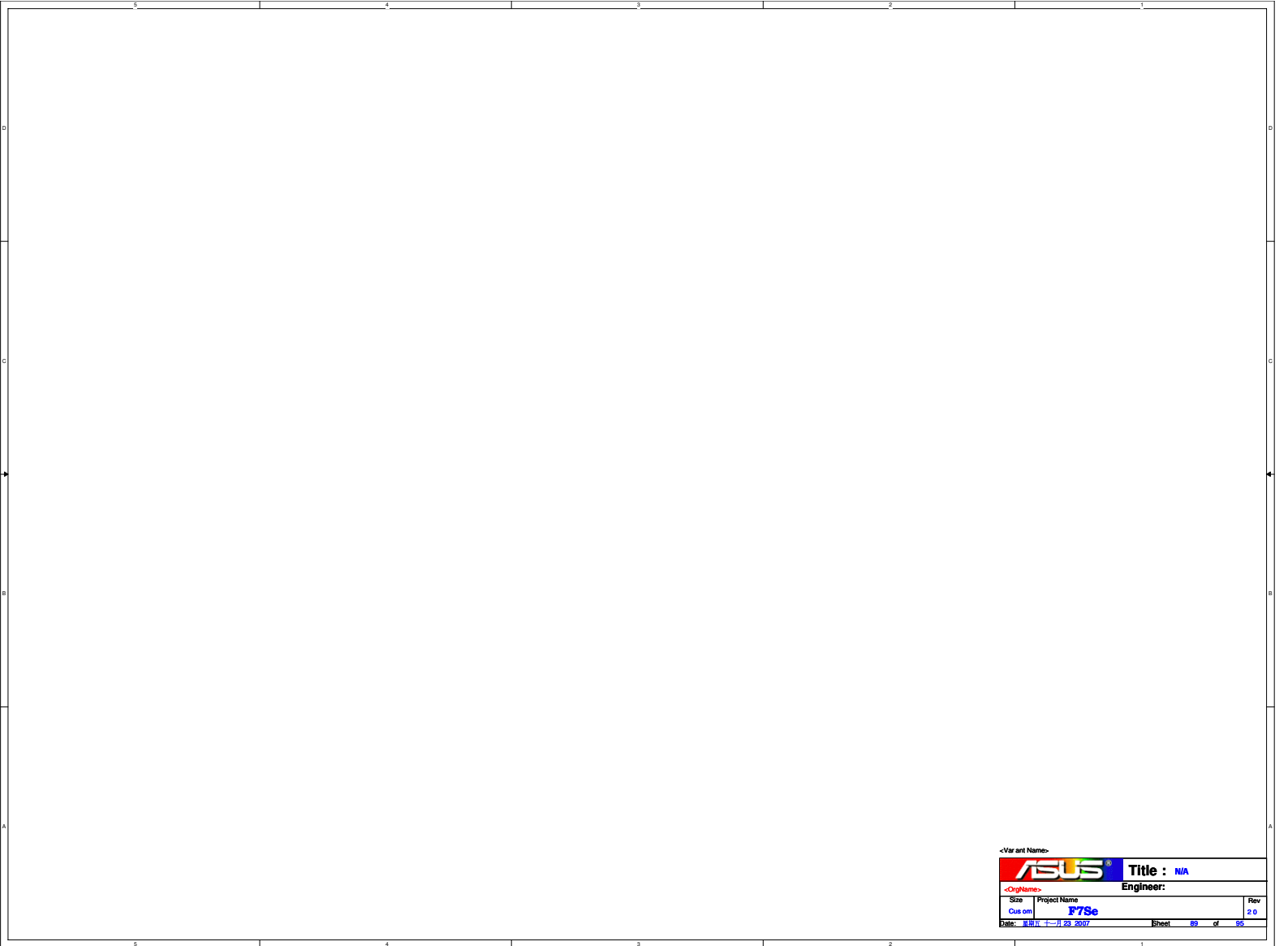
POWER PATH & BAT_LEARN



AC_BAT_SYS_INV to Inverter connect,
Power trace =60mil(min),
Put J8805 close to Q860

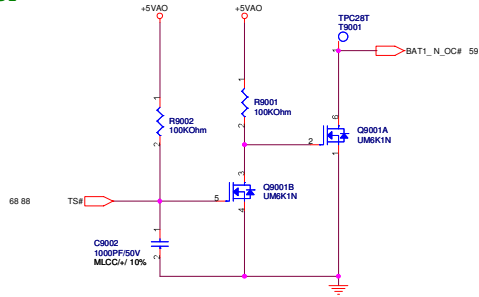
- AC_IN Threshold 2.048Vmax AD_DOCK_IN > 11.44V active
- Adapter Inputmax = 0.075V(Rsense)AD(TVCL5V)REF
- Rsense=0.020ohm
- TVCL=2.54V
- => Icharge=4.5A
- => Constant Power = 19.45 + 85.5W
- => P0=7500W, P07=500W
- Charge Current Ichg = 0.075V(Rsense)CHG(TVCL5.6V)
- Rsense=0.020ohm
- TVCL=5V => Ichg = 2.5A
- TVCL=1.6V => Ichg = 1.4A
- Vbat = Cell * N + (VCL - 1.5V) / 0.52 []
- TVCL = 1.52V => Vbat = 4.2V
- Mode pin : Vmode > 2.5V (Pin to LDO pin) => 4 Cells
- 2.5 > Vmode > 1.0V (Pin) => 2 Cells
- 0.8 > Vmode (Pin to GND) => Learning mode
- TVCL = 0.8V or DCK = 7V => Charger Disable
- Percentage current 150mA



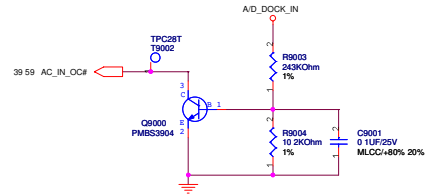


<Variant Name>		Title : N/A	
		Engineer:	
<OrigName>		Rev	
Size	Project Name		
Cus om	F7Se		2.0
Date: 星期日 十一月 23, 2007		Sheet	89 of 95

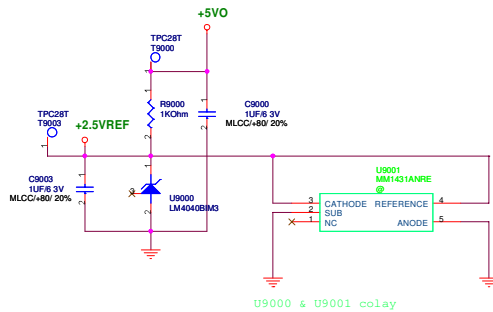
BATTERY IN DETECT



ADAPTER IN DETECT



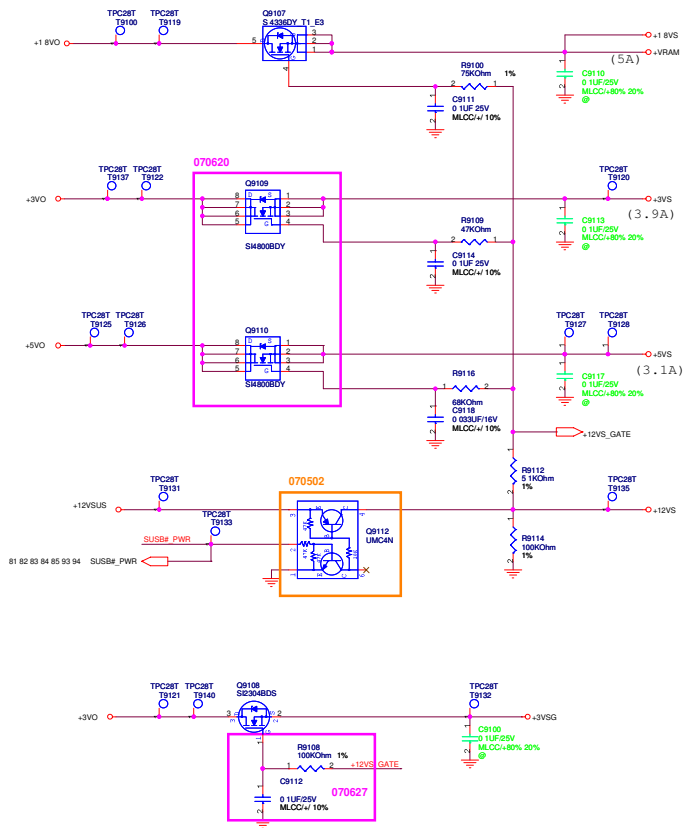
+2.5VREF



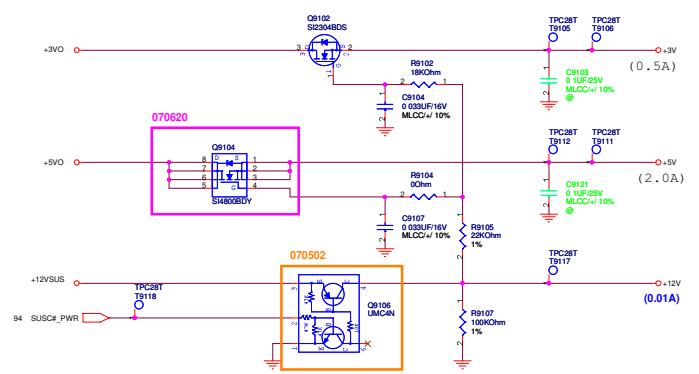
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ASUS		Title : POWER_DETECT	
--OrigName--		Engineer:	
Size	Project Name	Rev	
Cus om	F7Se	2.0	
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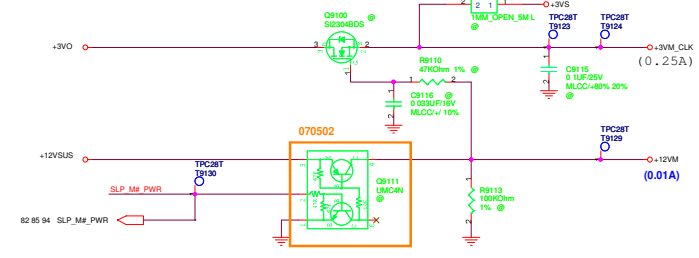
SUSB#_PWR POWER



SUSC#_PWR POWER



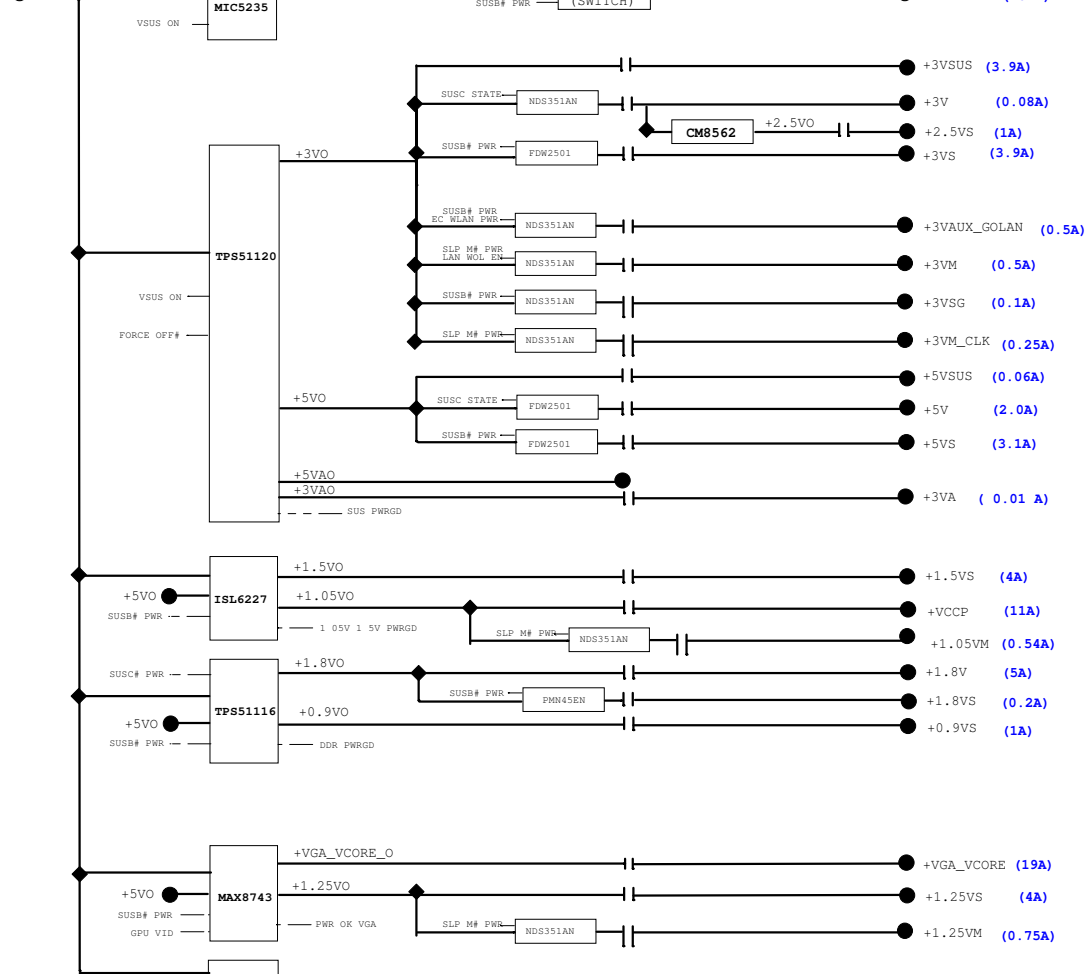
SLP_M#_PWR POWER



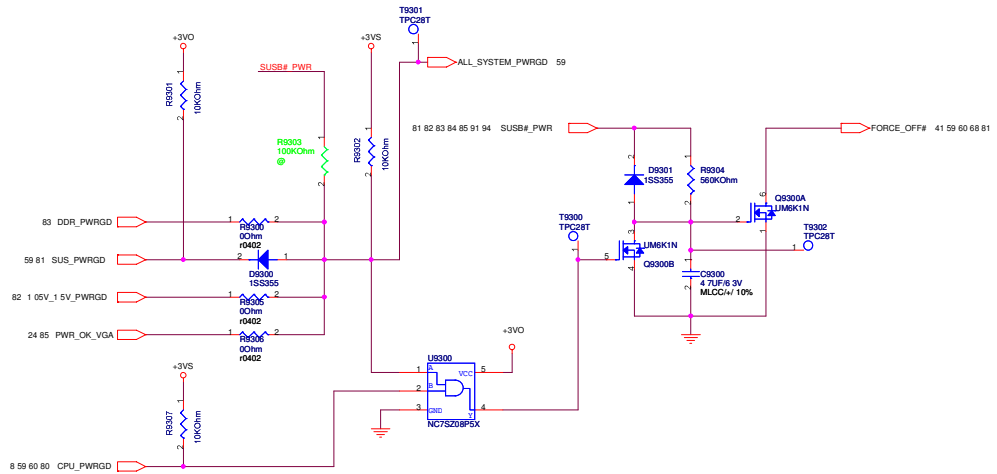
-Variant Name-		Title : POWER_LOAD SWITCH	
-Orig Name-		Engineer:	
Size	Project Name		Rev
Custom	F7Se		2.0
Date: 11/13/2007		Sheet 81 of 85	

A/D_DOCK_IN

AC_BAT_SYS

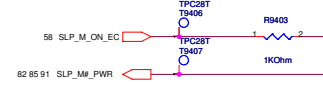
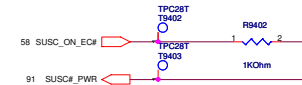
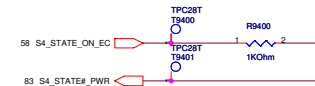
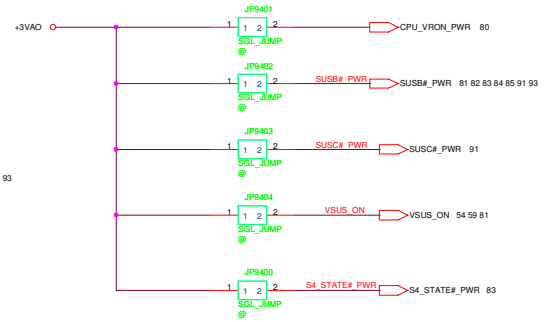
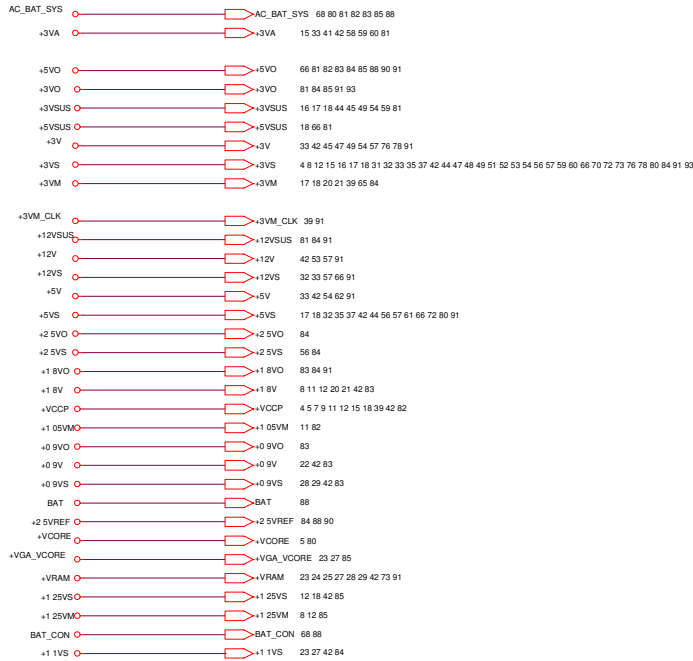


POWER GOOD DETECTOR



<Var ant Name>

FOR POWER TEST



<Var ant Name>

ASUS		Title : POWER_SIGNAL	
Engineer:		Rev	
Size	Project Name	2 0	
Cus om	F7Se		
Date: 8/18/11	23 2007	Sheet	84 of 95

Sub system	Reference Circuit	Reason for Change if Any	Page	BOM change		
				Description	Add	Delete
CPU	F7SR.R1.1		4-5			
FAN	F7SR.R1.1	1. Change Q3701, Q3702 to R3753, R3754 for cost down 2. Change RN3701 to R3705 for unnecessary pull-ups 3. Modify FAN circuit for cost down	37	1. Change Q3701, Q3702 to R3753, R3754 2. Change RN3701 to R3705 3. DNI CE3701, D3701, add C3708, R3703, R3704, Q3703	R3753 R3754 R3705 R3704 Q3703 R3703 C3708	Q3701 Q3702 RH3701 CE3701 D3701
NB	F7SR.R1.1		7-13			
SB_	F7SR.R1.1	P16 : change C1501, C1503 value for XTAL accuracy P16 : exchange USB port 4 & port 6 connection for bluetooth and USB wake-up device issue. P17 : change PCB_ID P17 : Delete SM-Bus related components which is not used any more P18 : change V5REF bypass	15-18	P16 : change C1501, C1503 from 12pF to 15pF. P17 : change PCB_ID from 001 to 011 P17 : delete Q1704, Q1706, R1728, R1729, R1730 P18 : change C1804 from 0.1uF to 1uF	C1501 C1503 C1503 R1738 C1804	C1501 C1503 R1745 R1728 R1729 R1730 C1804
TV_	F7SR.R1.1	Change USB 0 ohm resistor to 2R4P	35	Change R3505-R3512 to RN3501-RN3504	RN3501 RN3502 RN3503 RN3504	RN3505 RN3506 RN3507 RN3508 RN3509 RN3510 RN3511 RN3512
LVDS	F7SR.R1.1	1. Change LVDS connector 2. Change USB 0 ohm resistor to 2R4P	33	1. Change LVDS connector 2. Change R3313, R3314 to RH3301	LCDCN0 RH3301	LCDCN0 R3313 R3314
MEM	F7SR.R1.1		20-22			
CLK	F7SR.R1.1	1. Change C3905, C3906 to 24pF for XTAL accuracy 2. DNI Q3902 for cost down	39	1. Change C3905, C3906 from 22pF to 24pF 2. DNI Q3902	C3905 C3906	C3905 C3906 Q3902
KBC	F7SR.R1.1	1. Add R5967, R5968, D5904 (reserved) to follow ASUS I18511 EC Common Pin Assignment V2.03 2. Change C5911, C5912 value for XTAL accuracy 3. Rename Q3001 to Q5901 for design rule	59	1. Change C5911, C5912 from 5pF to 15pF 2. Delete Q3001 and add Q5901	C5911 C5912 Q5901	C5911 C5912 Q3001
ROM	F7SR.R1.1		64			
AUD	F7SR.R1.1	1. DNI R5718, R5723, Q5701, Q5709, mount Q5708, Q5707 for POP noise 2. Change L5713 from 330 to 220 ohm for single source issue	56-57	1. DNI R5718, R5723, Q5701, Q5709, mount Q5708, Q5707 2. Change L5713 from 330 to 220 ohm	O5708 O5707 L5713	R5718 R5723 Q5701 Q5709
LAN_SIO	F7SR.R1.1	1. Change C4403, C4404 value for XTAL accuracy 2. Change R4504 to 1% for single source issue 3. Change CON4502 P/N for manufacture request	44-45	1. Change C4403, C4404 from 22pF to 22pF 2. Change R4504 from 5% to 1% 3. Change CON4502 P/N to 12G14212120	C4403 C4404 R4504 CON4502	C4403 C4404 R4504 CON4502
HUB	F7SR.R1.1					
CB_	F7SR.R1.1	Page 52 : Change C5205, C5207 for XTAL accuracy Page 64 : DNI all debug card related components	61-64	Page 52 : Change C5205, C5207 from 30pF to 27pF Page 54 : DNI R5406, C5401, R5408, R5403, C5402, R5407, R5409, R5404, Q5401, U5402, R5414, R5405, U5403, C5403	C5205 C5207 R5406 C5401 R5408 D5403 C5402 R5407 R5409 R5404 Q5401 U5402 R5414 R5405 U5403 C5403	C5205 C5207 R5406 C5401 R5408 D5403 C5402 R5407 R5409 R5404 Q5401 U5402 R5414 R5405 U5403 C5403
XDD	F7SR.R1.1		72			

USB		1. Change USB 0 ohm resistors to 2R4P 2. Change polyswitch for droop fall 3. Change CE6205 to 3528 type for cost down.	62			RN6201 RN6202 RN6203 RN6204 RN6205 RN6207 RN6215 F6202 F6201 CE6205
SW			41			
DSG						
TP			61			
LED		Change LED6602 P/N for light issue	66	Change LED6602 P/N		LED6602 LED6602
OTH		Page 48 : DNI R4817, R4818 for cost down Page 49 : mount R4931 for WLAN wake-up function Page 74 : change H7499, H7498 to PTH	48 49 74		Page 48 : DNI R4817, R4818 Page 49 : mount R4931	R4817 R4818 R4931
PB						
CRT		Modify CRT DDC pull up values for ATI suggestion (M72 Revision A13 Errata)	32	Change RN3201 to R3217, R3218, R3219, R3220		R3217 R3218 R3219 R3220
DC_		1. Remove I 6806, I 6807, C6805, C6806 for mechanical issue and cost down 2. Change J6802 P/N for manufacture request 3. Add D6806 (reserved) to follow ASUS I18511 EC Common Pin Assignment V2.03 4. DNI U6801 related components for cost down	68		1. Delete L6806, L6807, C6805, C6806 3. DNI R6807, C6811, R6808, U6801	J6802
BT_		Change USB 0 ohm resistor to 2R4P	78	Change R7804, R7805 to RH7801		R7804 R7805
TPM			76			
FP_						
TUN		Change USB 0 ohm resistor to 2R4P	47	Change R4729, R4720 to RH4701		R4729 R4720
ME						
ESA			73			
VGA		P23 : add C2306, C2304, C2309 back for ATI suggestion P23 : change L2302 from 400mA to 600mA rating for ATI suggestion P23 : add C2321 back for CRT NIR fail P23 : change memory ID to 0000 for 32M*16 500MHz VRAM P24 : add R2469 for VGA BBEN option	23-24		P23 : add C2306, C2304, C2309 P23 : change L2302 from 400mA to 600mA P23 : add C2321 P24 : DNI R2406, mount R2415	C2306 C2304 L2302 C2309 L2302 R2406 R2603 R2415
VGA		DNI FCIE_CALI pull-down resistor for ATI suggestion.	25-26	DNI R2603		R2603
VGA		P27 : mount 5 capacitors for +VRAM power P27 : add two 1uF capacitors for +VGA_VCORE power P27 : add 10uF on LPVDD power for ATI suggestion P27 : connect +3VSG and +3VSG_DELAY with 0 ohm. DNI +3VSG_DELAY related components	27-30		1. Mount C2715, C2721, C2723, C2742, C2763 2. Add C2740, C2746 3. Add C2718 4. Add R2709, DNI Q2705, D2701, R2705, R2710, Q2704, C2772	C2715 C2721 C2723 D2701 C2742 D2705 C2753 C2740 C2746 C2718 R2709

ECN : 730 Remove R5914 to solve system can not power on

ECN : 82 Add U5403, C5403, R5404 back to solve new card didn't work

ECN : 109 change main source of CPU and VGA core power.

1. H side s14352 change to IRF7413
2. L side s14356 change to IRF7832
3. Change R8518 form 49.9K to 62K

-Var ant Name-

ASUS		Title : History	
ASUSTek COMPUTER INC		Engineer: Frank_Xu	
Size	Project Name		Rev
Cus on	F7Se		2.0
Date: 2007.11.23		Sheet	95 of 95