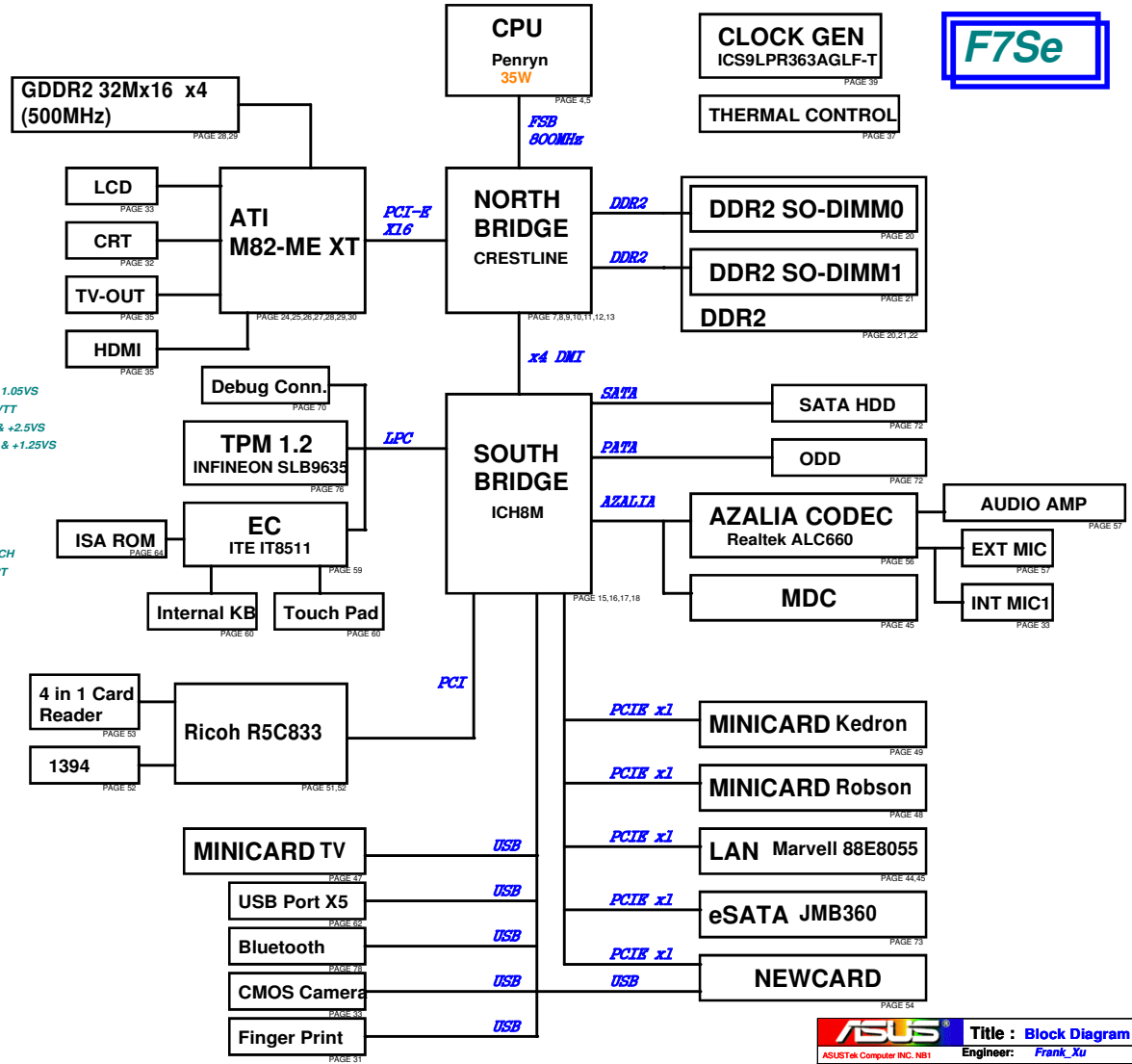


EC_IT8511TE SETTING

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	SCRL_LED	O
163	SMCLK0/GPB3	SMB0_CLK	I/0
164	SMDAT0GPB4	SMB0_DAT	I/0
5	GA20/GPB5	A20GATE	O
6	KBRST#/GPB6	RC_IN#	O
165	GPB7	THRO_CPU	O
47	CLKOUT/GPC0	/	
169	SMCLK1/GPC1	SMB1_CLK	I/0
170	SMDAT1/GPC2	SMB1_DAT	I/0
171	GPC3	/	
172	TMRI0/WUI2/GPC4	ACIN_OC#	I
175	GPC5	OP_SD#	O
176	TMRI1/WUI3/GPC6	BAT_IN_OC#	I
1	CK32KOUT/GPC7	EC_IDE_RST#	O
26	RI1#/WUI0/GPD0	SUSB#	I
29	RI2#/WUI1/GPD1	SUSC#	I
30	LPCRST#/WUI4//GPD2	BUF_PLT_RST#	I
31	ECSCI#/GPD3	EXT_SCI#	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	ADC5/GPE1	INTERNET#	I
89	ADC6/GPE2	MARATHON#	I
90	ADC7/GPE3	DISTP#	I
2	PWRSW/GPE4	PWR_SW#	I
44	WUI5/GPE5	/	
24	LPCPD#/WUI6/GPE6	LID_EC#	I
25	CLKRUN#/WUI7/GPE7	PM_SLP_M#	
110	PS2CLK0/GPF0	WALN_SW#	
111	PS2DAT0/GPF1	ME_ALERT#	
114	PS2CLK1/GPF2	/	I/0
115	PS2DAT1/GPF3	/	I/0
116	PS2CLK2/GPF4	TP_CLK	
117	PS2DAT2/GPF5	TP_DAT	
118	PS2CLK3/GPF6	/	
119	PS2DAT3/GPF7	INSTANTON#	I
113	FA16/GPG0	FA16	
112	FA17/GPG1	FA17	
104	FA18/GPG2	FA18	
103	FA19/GPG3	FA19	
3	FA20/GPG4	THRM_CPU#	I
4	FA21/GPG5	/	
27	LPC80HL/GPG6	PMTHERM#	O
28	LPC80HL/GPG7	AC_APR_UC#	I

Pin	Pin Name	Signal Name	Type
8	GPL0	PM_S4_STATE#	I
11	GPL1	S4_STATE_ON	O
12	GPL2	SLP_M_ON	O
20	GPL3	EC_WLAN_PWR	O
21	GPL4	MP_PWRGD	I
48	GPH0	VSUS_ON	I
54	GPH1	VSUS_GD#	O
55	GPH2	CPUPWR_GD#	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	GPI0	ICH8_PWROK	O
149	GPI1	ALL_SYSTEM_PWRGD	I

Pin	Pin Name	Signal Name	Type
152	GPI2	/	
155	GPI3	CHG_EN#	O
168	GPI5	EC_CLK_EN	O
85	KS016/GPM2	NETDETECT	O

PCI Device	IDSEL#	REQ/GNT#	Interrupts
CARD READER	AD17	0	A
1394	AD17	0	B

PCIE Device	Bus	PCIE Device	Bus
LAN	PE(T/R)(p/n)1	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	1101001x (D2)
SO-DIMM 0	1010000x (A0)
SO-DIMM 1	1010001x (A2)
CPU Thermal Sensor(MAX6657)	0100110x (4C)
VGA Thermal Sensor(MAX6657)	0100110x (4C)

ICH8-M GPIO SETTING

Pin	Pin Name	Signal Name	Type
AG12	GPIO0/BM_BUSY#	PM_BMBUSY#	I
AJ8	GPIO1/TACH1	EXTSMI#	I
F8	GPIO2/PIRQE#	PCI_INTE#	I
G11	GPIO3/PIRQF#	PCI_INTF#	I
F12	GPIO4/PIRQG#	PCI_INTG#	I
B3	GPIO5/PIRQH#	PCI_INTH#	I
AJ9	GPIO6/TACH2	BIOS_REC	I/O
AH9	GPIO7/TACH3	WLAN_LED_EN	I
AE16	GPIO8	BT_ON#	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#		
AF22	GPIO14/CLGPIO2	NETDETECT	
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	BTLED_ON	O
AJ12	GPIO21/SATA0GP	CPU_Select	I
AG10	GPIO22/SCLOCK	3G_ON#	I
E6	GPIO23/LDRQ1#	LPC_DRQ#1	I/O
AJ27	GPIO24/CLGPIO0		
AG18	GPIO25/STP_CPU#	STP_CPU#	
AH27	GPIO26/S4_STATE#	PM_S4_STATE#	
AH25	GPIO27/QRT_STATE0	BT_DET#	I
AD16	GPIO28/QRT_STATE1	CB_SD#	
AG17	GPIO29/OC#5	USB_CON_OC5#	I
AD12	GPIO30/OC#6	USB_OC#6	I
AJ18	GPIO31/OC#7	USB_OC#7	I
AH11	GPIO32/CLKRUN#	PM_CLKRUN#	O
AE10	GPIO33/AZ_DOCK_EN#		O
AG14	GPIO34/AZ_DOCK_RST#		
AG13	GPIO35/SATACLKREQ#	GPO35	O
AF11	GPIO36/SATA2GP	PCB_ID1	
AG11	GPIO37/SATA3GP	PCB_ID2	I/O
AF9	GPIO38/SLOAD	GPI38	I
AJ11	GPIO39/SDATAOUT0	GPI39	I
AD10	GPIO48/SDATAOUT1	PCI_GNT#4	O
AG29	GPIO49/CPUPWRGD	H_PWRGD	O

Pin	Pin Name	Signal Name	Type
AG16	GPIO40/OC#1	USB_CON_OC01#	I
AG15	GPIO41/OC#2	USB_CON_OC23#	I
AE15	GPIO42/OC#3	USB_CON_OC23#	I
E18	GPIO50/REQ1#	PCI_REQ#1	
C18	GPIO51/GNT1#	PCI_GNT#1	
B19	GPIO52/REQ2#	PCI_REQ#2	
F18	GPIO53/GNT2#	PCI_GNT#2	
A11	GPIO54/REQ3#	PCI_REQ#3	
C10	GPIO55/GNT3#	PCI_GNT#3	

ICS9LPR363AGLF-T SETTING

Pins	Pin Name	Device
3	PCICLK1	TPMPCI
4	PCICLK2	CardBus R5C832
5	SELPCIEX0_LCD#PCICLK3	EC IT8511E
8	ITP_EN/PCICLK_F0	ICH8
15	DOTC_96MHzL	X
14	DOTT_96MHzL	X
12	FSLA/USB_48MHz	ICH8
19	PCIeT_L1	eSATA
20	PCIeC_L1	eSATA
36	PCIeT_L5	M82-M XT
35	PCIeC_L5	M82-M XT
39	PCIeT_L6	MiniCard(Rob)
38	PCIeC_L6	MiniCard(Rob)
22	PCIeT_L2	ICH8
23	PCIeC_L2	ICH8
24	PCIeT_L3	MCH
25	PCIeC_L3	MCH
26	SATACLKT_L	ICH8
27	SATACLKC_L	ICH8
44	CPUITPT_L2 / PCIeT_L8	LAN
43	CPUITPC_L2 / PCIeC_L8	LAN
14	27FIX/LCD_SSCGT/PCIeT_L0	M72M
15	DOTC_96MHzL	M72M
41	PEREQ1# / PCIeT_L7	MiniCard
40	PEREQ2# / PCIeC_L7	MiniCard
32	PEREQ3#	NewCard
33	PEREQ4#	MiniCard
30	PCIeT_L4	NewCard
31	PCIeC_L4	NewCard
49	CPUT_L1F	MCH
48	CPUC_L1F	MCH
52	CPUT_L0	CPU
51	CPUC_L0	CPU
57	X2	14.318MHz
58	X1	14.318MHz
60	REF0	ICH8
61	REF1/FSLC/TEST_SEL	X

ASUSTeK Computer INC. NB1

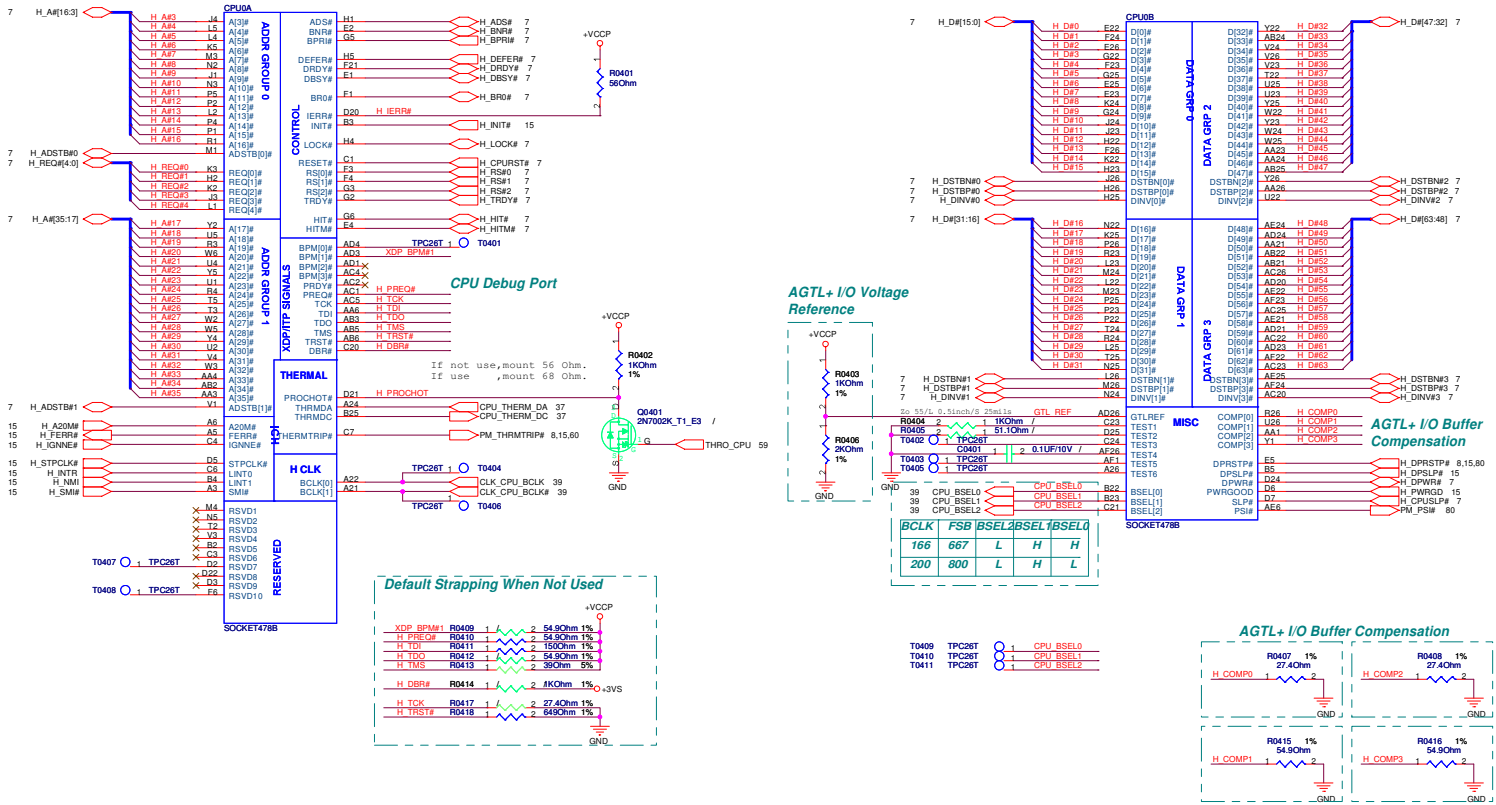
Title : GPIO setting

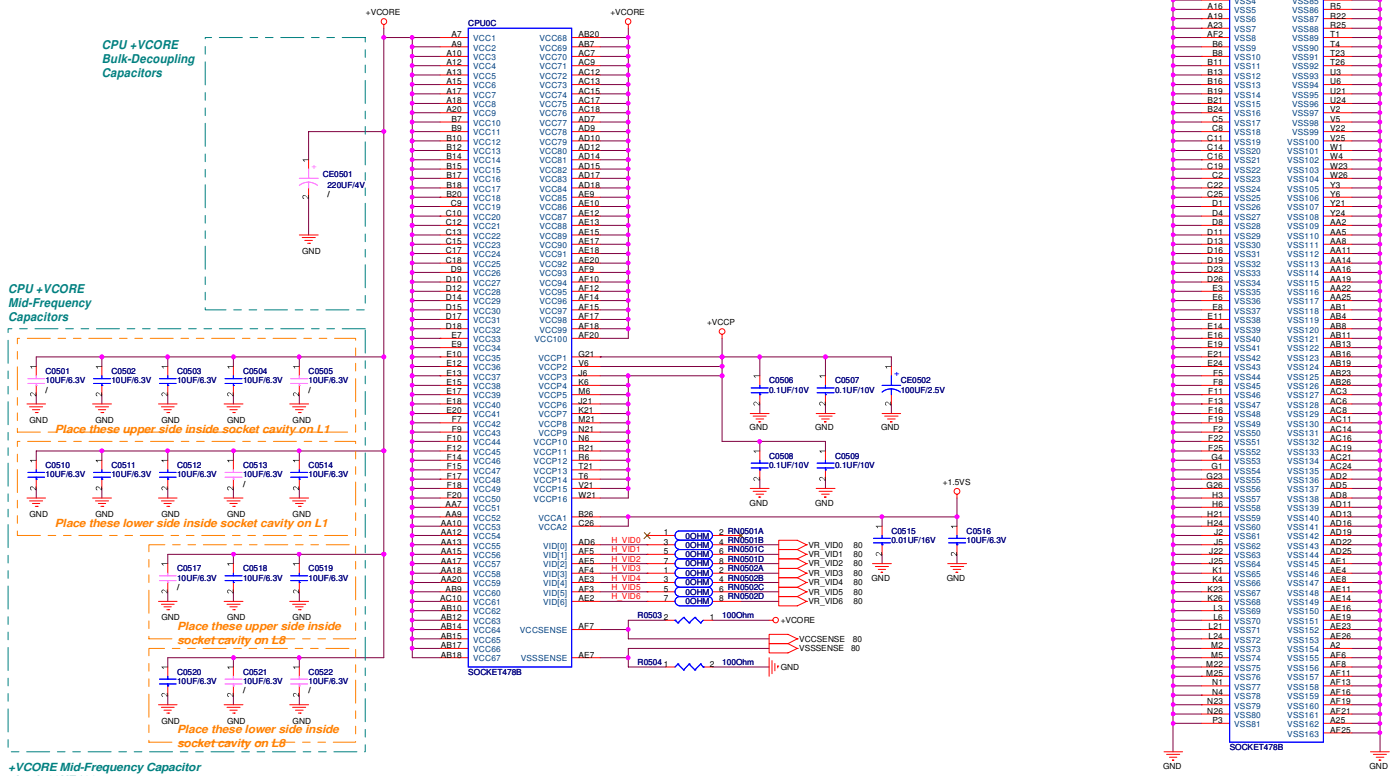
Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期六, 十一月 23, 2007 Sheet 2 of 95

ASUSTeK COMPUTER INC	Title : Blank Page	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 3 of 95	


CPU0A
ADDR GROUP 0
ADDR GROUP 1
CONTROL
XDP/ITP SIGNALS
THERMAL
H CLK
RESERVED
SOCKET478B
CPU Debug Port
If not use,mount 56 Ohm.
If use ,mount 68 Ohm.
Q0401
2N7002K_T1_E3
THRO_CPU
Default Strapping When Not Used
AGTL+ I/O Voltage Reference
CPU0B
DATA GRP 0
DATA GRP 2
DATA GRP 1
DATA GRP 3
MISC
AGTL+ I/O Buffer Compensation
BCLK FSB BSEL2 BSEL1 BSEL0
166 667 L H H
200 800 L H L

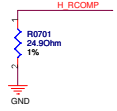


ASUSTeK COMPUTER INC. NB1	Title : CPU_Merom(PWR)		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期五, 十一月 23, 2007		Sheet 5 of 95	

ASUSTeK COMPUTER INC	Title : Blank Page			
	Engineer: Frank_Xu			
Size: Custom	Project Name: F7Se			Rev: 2.0
Date: 星期五, 十一月 23, 2007		Sheet 6	of 95	

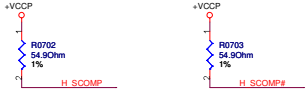
RCOMP

For Calibrating the FSB I/O Buffer



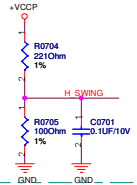
SCOMP

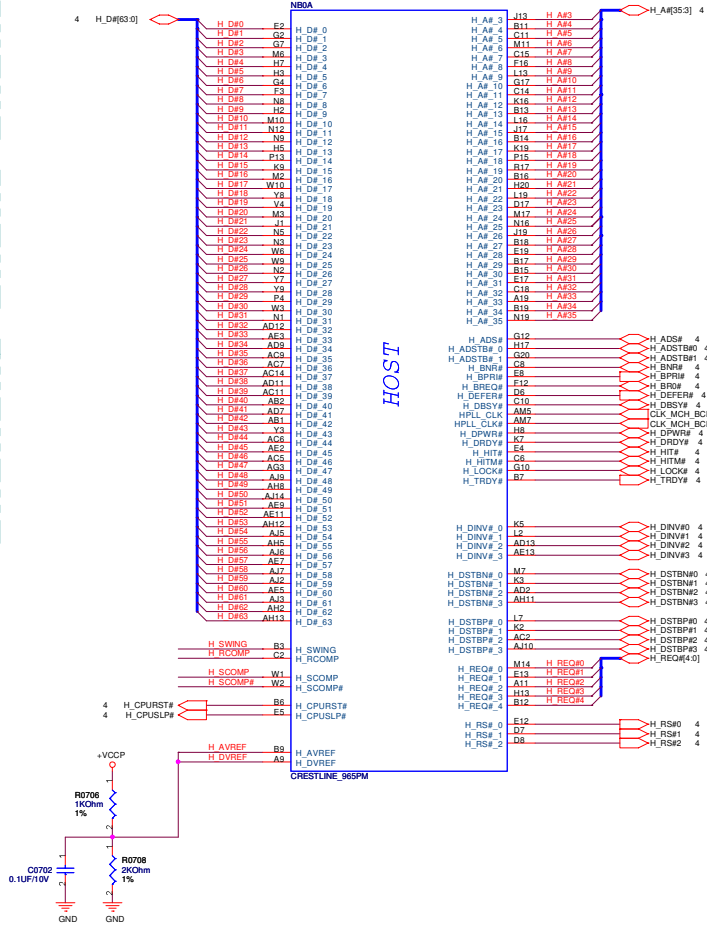
For Slew Rate Compenssation on the FSB



Voltage Swing

For Providing a Reference Voltage to The FSB RCOMP circuits





ASUSTeK COMPUTER INC. NB1	Title : NB-965PM(HOST)		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期五, 十一月 23, 2007		Sheet 7 of 95	

GMCH Strapping

CFG5 : DMI Strap

0 = DMI x2

1 = DMI x4 (D)

MCH_CFG_5 — T0803 TPC26T

CFG19 : DMI Lane Reversal

0 = Normal Operation (D)

1 = Lanes Reversed

MCH_CFG_19 — R0802 4.02KOHM / — +3VS

CFG[13:12] : GMCH Test Mode

00= Partial CLK Gating Disable

01 = XOR Mode Enable

10 = All Z Mode Enable

11 = Normal Operation (D)

MCH_CFG_12 — T0805 TPC26T

MCH_CFG_13 — T0806 TPC26T

CFG8 : Low Power PCI-E

0 = Normal mode

1 = Low Power Mode (D)

MCH_CFG_8 — T0804 TPC26T

CFG20 : Concurrent SDVO / PCIe

0 = Only one is operational (D)

1 = operate simultaneous

MCH_CFG_20 — R0808 4.02KOHM / — +3VS

CFG9 : PCIE Graphic Lane

0 = Reverse Lane

1 = Normal Operation (D)

MCH_CFG_9 — R0809 4.02KOHM / — GND

SDVO_CTRL_DATA : SDVO Present

0 = No SDVO (D)

1 = SDVO Present

SDVO_CTRL_DATA — GND

CFG16 : FSB Dynamic ODT

0 = Dynamic ODT Disable

1 = Dynamic ODT Enable (D)

MCH_CFG_16 — R0811 4.02KOHM / — GND

BCLK	FSB	BSEL2	BSEL1	BSEL0
166	667	L	H	H
200	800	L	H	L

39 MCH_BSEL0
39 MCH_BSEL1
39 MCH_BSEL2

MCH_CFG_5
MCH_CFG_8
MCH_CFG_9
MCH_CFG_12
MCH_CFG_13
MCH_CFG_16
MCH_CFG_19
MCH_CFG_20

20 PM_EXTTS#_0 — PM_EXTTS#_0
21 PM_EXTTS#_1 — PM_EXTTS#_1

17 PM_BMBUSY#
4,15,80 H_DPRSTP#
+3VS
R0815 2 — 1 10KOhm PM_EXTTS#_0
R0816 2 — 1 10KOhm PM_EXTTS#_1

59,60,80,93 CPU_PWRGD
16,17,26,44,48,49,54,59,66,72,73,76 BUF_PLT_RST#
4,15,60 PM_THRMTRIP#
17,80 PM_DPRSLPVR
R0817 1 — 2 100Ohm RST_IN_MCH#

T0801 1 TPC26T

+1.25VM
R0812 1KOhm 1% — MCH_CLVREF
R0818 392Ohm 1% — C0801 0.1UF/10V — GND

FROM PAGE 83
0.9V_VTT_REF

+1.8V
R0822 1KOhm 1% /
R0820 0Ohm — M_VREF_MCH 20,21
R0826 1KOhm 1% / — C0804 0.1UF/10V — GND

+1.8V
R0821 1KOhm 1%
R0823 3.01KOHM 1% — C0802 1UF/10V — GND — C0803 0.01UF/16V — GND — SM_RCOMP_VOH
R0827 1KOHM 1% — C0805 1UF/10V — GND — C0806 0.01UF/16V — GND — SM_RCOMP_VOL

C0807 0.1UF/10V — GND

NB0B

HOST

RSVD1 P36
RSVD2 P37
RSVD3 R35
RSVD4 N35
RSVD5 AB12
RSVD6 AR13
RSVD7 AM12
RSVD8 AN13
RSVD9 J12
RSVD10 AR37
RSVD11 AM36
RSVD12 AL36
RSVD13 AM37
RSVD14 D20

RSVD20 H10
RSVD21 B51
RSVD22 BJ20
RSVD23 BK22
RSVD24 BF19
RSVD25 BH20
RSVD26 BK18
RSVD27 BJ18
RSVD28 BF23
RSVD29 BG23
RSVD30 BG30
RSVD31 BD24
SA_MA_14 BL29
SB_MA_14 BE24
RSVD34 BH39
RSVD35 AW20
RSVD36 BK20
LVDSA_DATA#_3 C48
LVDSA_DATA_3 D47
RSVD39 B44
RSVD40 C44
RSVD41 A35
RSVD42 B37
RSVD43 B36
RSVD44 B34
RSVD45 C34

CFG_0 P27
CFG_1 N27
CFG_2 N24
CFG_3 C21
CFG_4 C23
CFG_5 F23
CFG_6 N23
CFG_7 G23
CFG_8 J20
CFG_9 C20
CFG_10 R24
CFG_11 L23
CFG_12 J23
CFG_13 E23
CFG_14 E20
CFG_15 K23
CFG_16 M20
CFG_17 M24
CFG_18 L32
CFG_19 N33
CFG_20 L35

HOST

PM_BM_BUSY# G41
PM_DPRSTP# L39
PM_EXT_TS#_0 L36
PM_EXT_TS#_1 J36
PWROK AW49
RSTIN# AN20
THERMTRIP# N20
DPRSLPVR G36

HOST

NC_1 BJ51
NC_2 BK51
NC_3 BK50
NC_4 BL50
NC_5 BL49
NC_6 BL3
NC_7 BL2
NC_8 BK1
NC_9 BJ1
NC_10 E1
NC_11 A5
NC_12 C51
NC_13 B50
NC_14 A50
NC_15 A49
NC_16 BK2

CRESTLINE_965PM

DDR MUXING

M_A_A14 — 20,22 M_A_A14
M_B_A14 — 21,22 M_B_A14

SM_0 AV29
SM_1 BB23
SM_2 BA25
SM_3 AV23
SM_4

SM_CK#_0 AW30
SM_CK#_1 BA23
SM_CK#_2 AW25
SM_CK#_3 AW23
SM_CK#_4

SM_CK_0 BE29
SM_CK_1 AY32
SM_CK_2 BD39
SM_CK_3 BG37
SM_CK_4

SM_CS#_0 BG20
SM_CS#_1 BK16
SM_CS#_2 BG16
SM_CS#_3 BE13

SM_ODT_0 BH18
SM_ODT_1 BJ15
SM_ODT_2 BJ14
SM_ODT_3 BE16

SM_RCOMP BL15 — R0803 1 — 2 20Ohm 1%
SM_RCOMP# BK14 — R0804 1 — 2 20Ohm 1% — +1.8V — GND

SM_RCOMP_VOH BK31 — SM_RCOMP_VOH
SM_RCOMP_VOL BL31 — SM_RCOMP_VOL

SM_VREF_0 AR49 — M_VREF_MCH
SM_VREF_1 AW4

For Calero 20 Ohm
For Crestline 80.6 Ohm

CLK

DPLL_REF_CLK R42
DPLL_REF_CLK# C42
DPLL_REF_SSCLK H48
DPLL_REF_SSCLK# H47 — GND

PEG_CLK K44 — CLK_MCH_3GPLL 39
PEG_CLK# K45 — CLK_MCH_3GPLL# 39

DMI

DMI_RXN_0 AN47 — DMI_TXN0
DMI_RXN_1 AJ38 — DMI_TXN1
DMI_RXN_2 AN42 — DMI_TXN2
DMI_RXN_3 AN46 — DMI_TXN3 — DMI_TXN[3:0] 16

DMI_RXP_0 AM47 — DMI_TXP0
DMI_RXP_1 AJ39 — DMI_TXP1
DMI_RXP_2 AN41 — DMI_TXP2
DMI_RXP_3 AN45 — DMI_TXP3 — DMI_TXP[0..3] 16

DMI_TXN_0 AJ46 — DMI_RXN0
DMI_TXN_1 AJ41 — DMI_RXN1
DMI_TXN_2 AM40 — DMI_RXN2
DMI_TXN_3 AM44 — DMI_RXN3 — DMI_RXN[0..3] 16

DMI_TXP_0 AJ47 — DMI_RXP0
DMI_TXP_1 AJ42 — DMI_RXP1
DMI_TXP_2 AM39 — DMI_RXP2
DMI_TXP_3 AM43 — DMI_RXP3 — DMI_RXP[0..3] 16

GRAPHICS VID

GFX_VID_0 E35
GFX_VID_1 A39
GFX_VID_2 C38
GFX_VID_3 B39
GFX_VR_EN E36

MISC

CL_CLK AM49 — CL_CLK0 17
CL_DATA AK50 — CL_DATA0 17
CL_PWROK AT43 — MP_PWRGD 17,59
CL_RST# AN49 — CL_RST#0 17
CL_VREF AM50 — MCH_CLVREF

+3VS — R0813 10KOhm — INT PD — T0802 TPC26T

SDVO_CTRL_CLK H35
SDVO_CTRL_DATA K36 — SDVO_CTRL_DATA — INT PD
CLK_REQ# G39 — CLK_MCH_OE#
ICH_SYNC# G40 — MCH_ICH_SYNC# 17

TEST_1 A37
TEST_2 R32 — R0825 1 — 2 22kOhm — GND

<Variant Name>

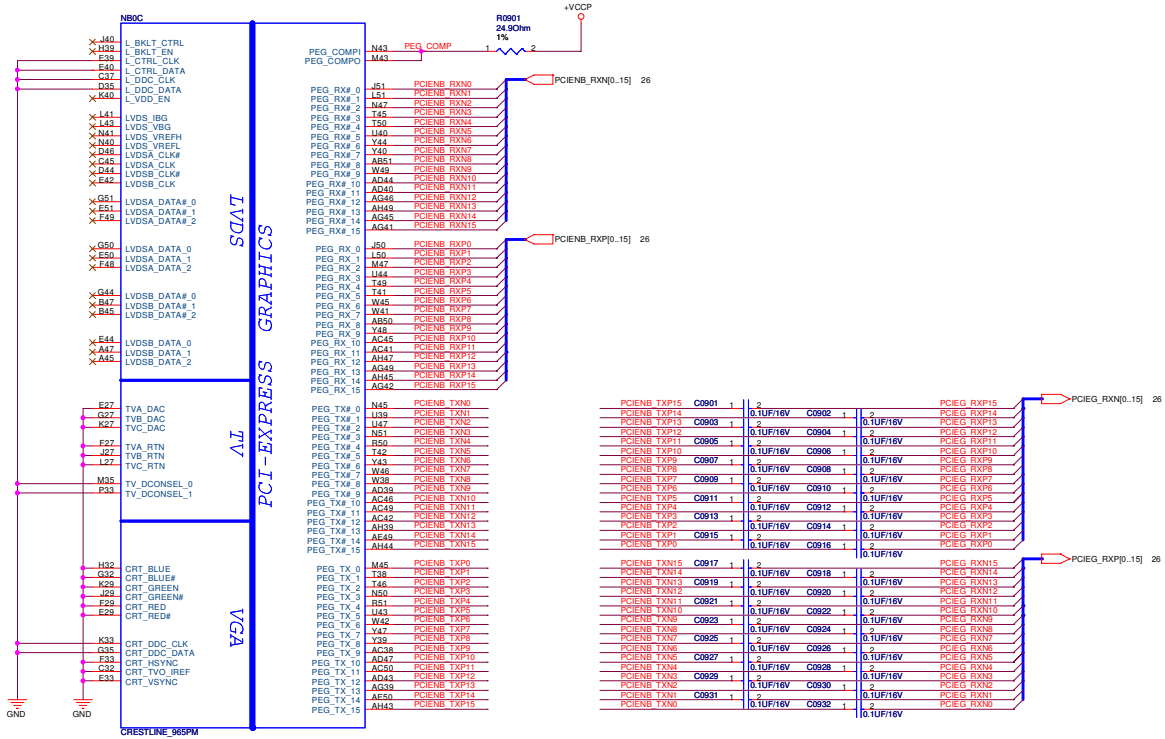
ASUSTeK COMPUTER INC. NB1

Title : NB-965PM(DM & CFG)

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期五, 十一月 23, 2007 Sheet 8 of 95



<Variant Name>

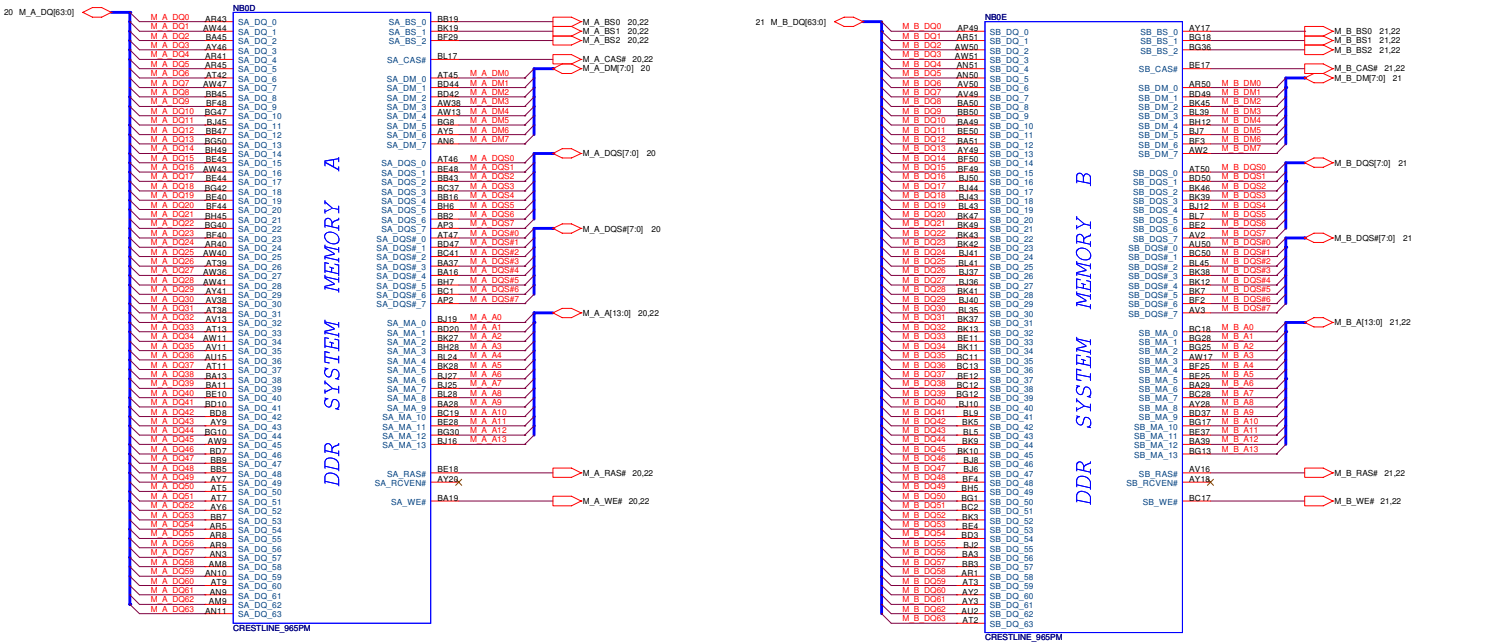
ASUSTeK COMPUTER INC. NB1

Title : NB_965PM(GRAPHIC)

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期 , 一月 26, 2007 Sheet 9 of 95



<Variant Name>

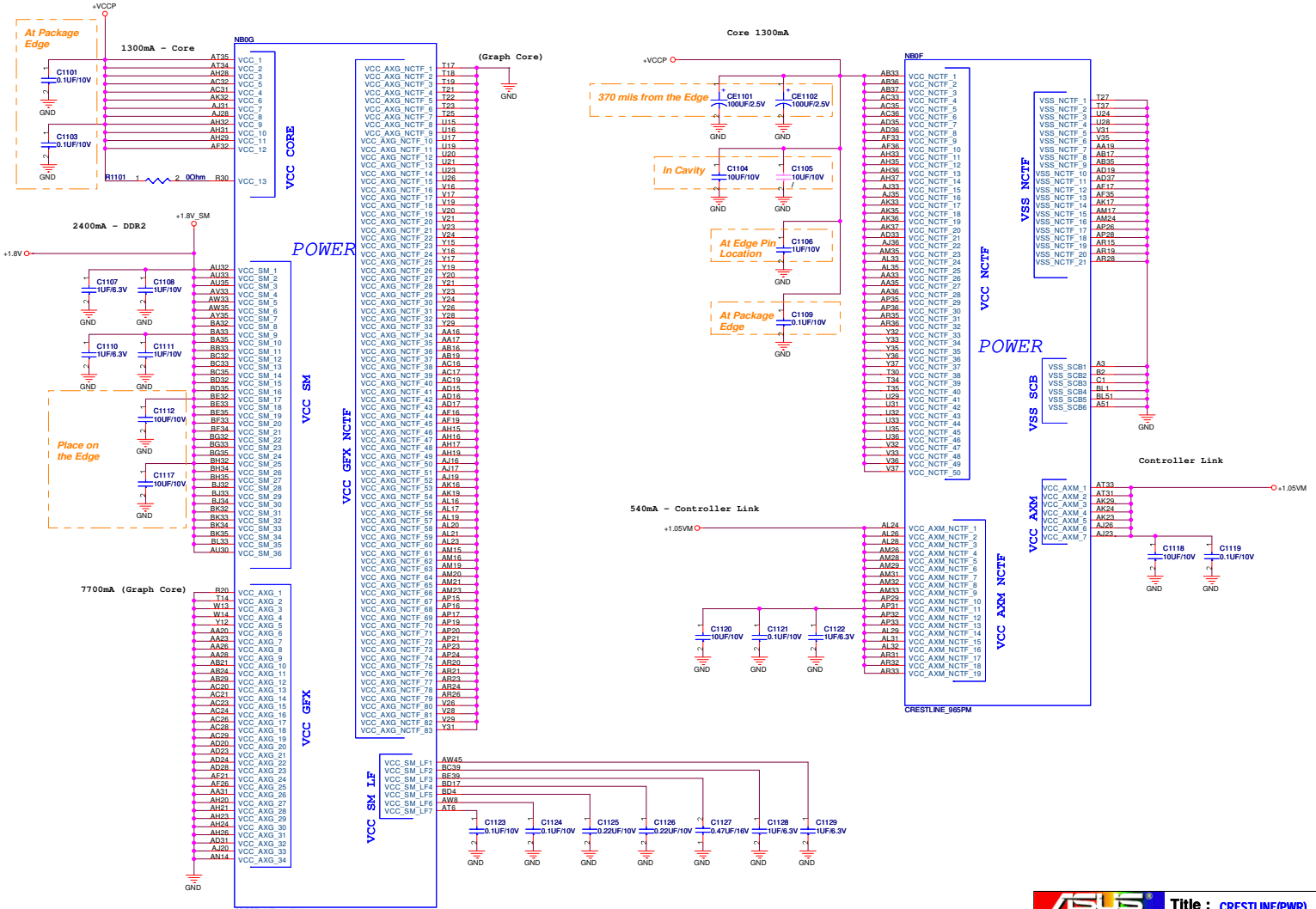
ASUSTeK COMPUTER INC. NB1

Title : NB-965PM(DDR2)

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期五, 十一月 23, 2007 Sheet 10 of 95



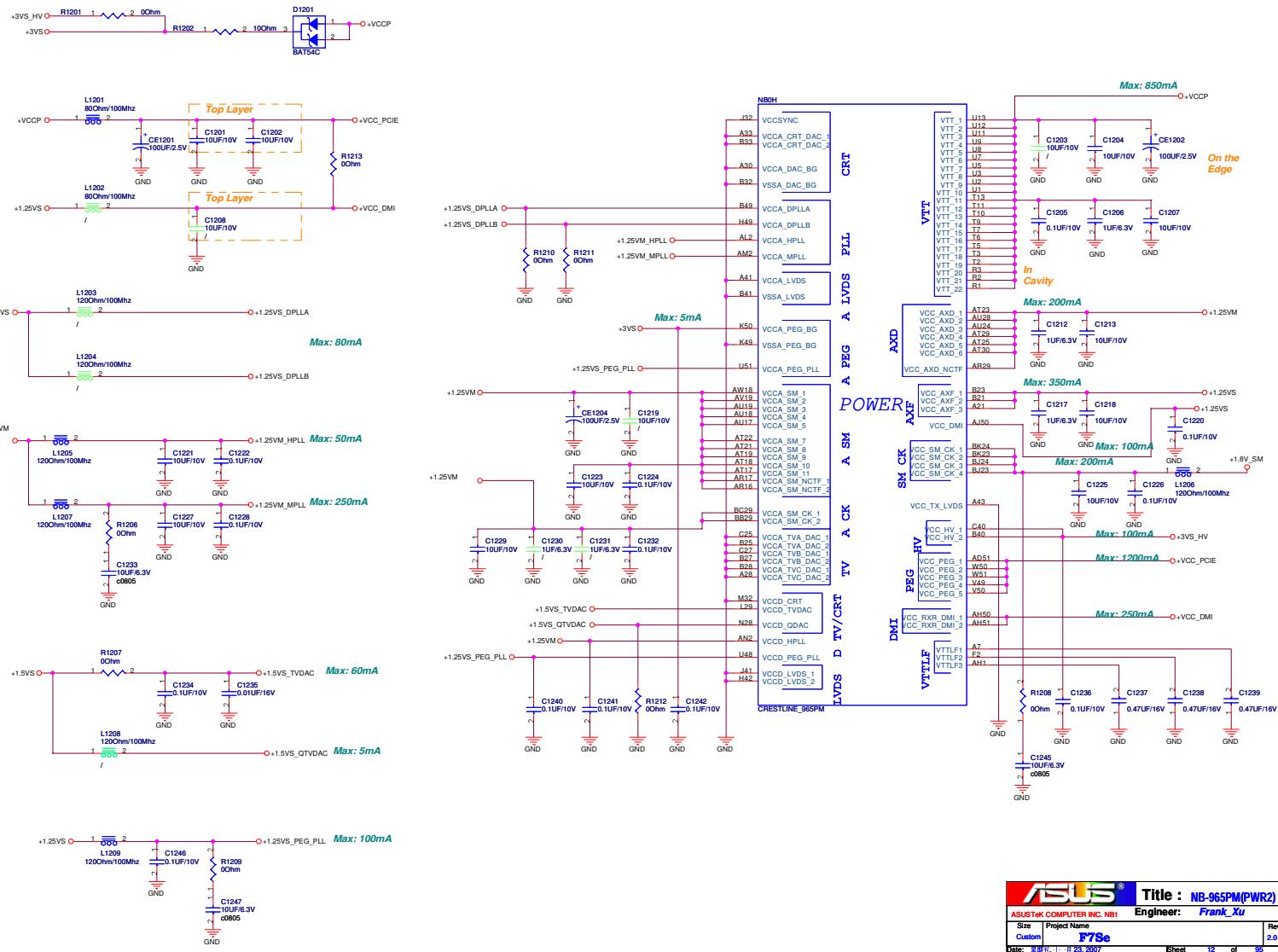
ASUSTeK COMPUTER INC. NB1

Title : CRESTLINE(PWR)

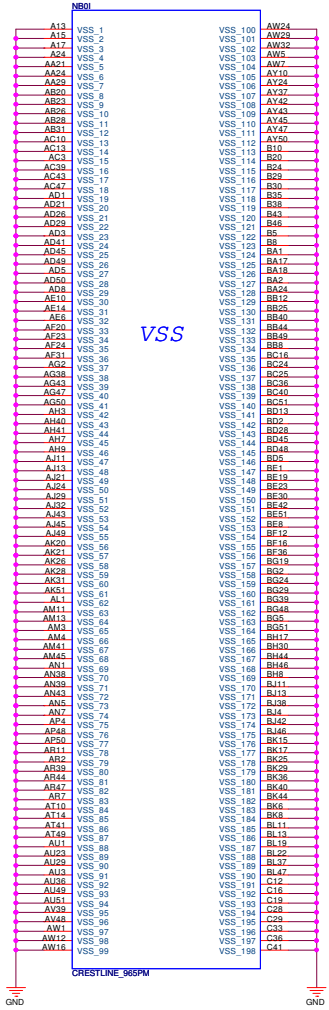
Engineer: Frank_Xu

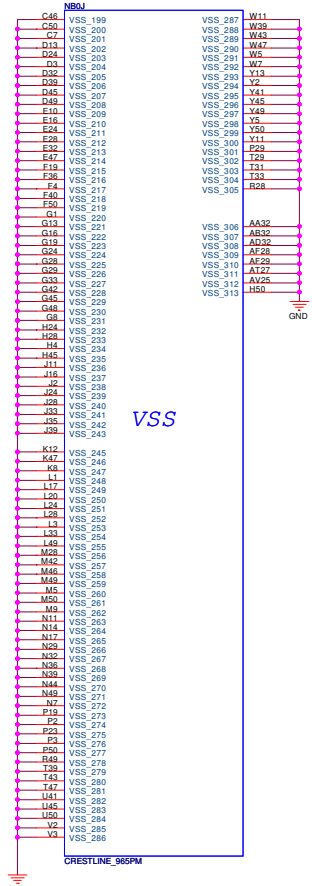
Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期五, 十一月 23, 2007 Sheet 11 of 95



ASUSTeK COMPUTER INC. NB1	Title : NB-965PM(PWR2)		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 12 of 95		





ASUSTeK COMPUTER INC. NB1	Title : CRESTLINE(GND)		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期 , 一月 26, 2007	Sheet 13 of 95		

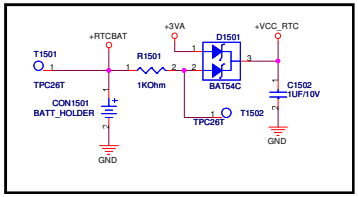
ASUSTeK COMPUTER INC

Title : Blank Page

Engineer: Frank_Xu

Size	Project Name	Rev
C	F7Se	2.0

Date: 日期, 十一月 25, 2007 Sheet 14 of 95



Request of CSC for CMOS clear function

Place Near the Open Door

RTCRST# RC delay should be 18ms~25ms

ICH_INTVRMEN (VCCSUS1_05,VCCSUS1_5,VCCCLI_5)
Low - Disabled Internal VR
High - Enable Internal VR(D)

ICH_LAN100 (VCCLAN1_05,VCCCLI_05)
Low - Disabled Internal VR
High - Enable Internal VR(D)

XOR Chain Entrance Strap

ICH_TP3	ACZ_SDOUT	Description
0	0	RSVD
0	1	Enter XOR Chain
1	0	Normal Operation (D)
1	1	Set PCIe port config bit 1

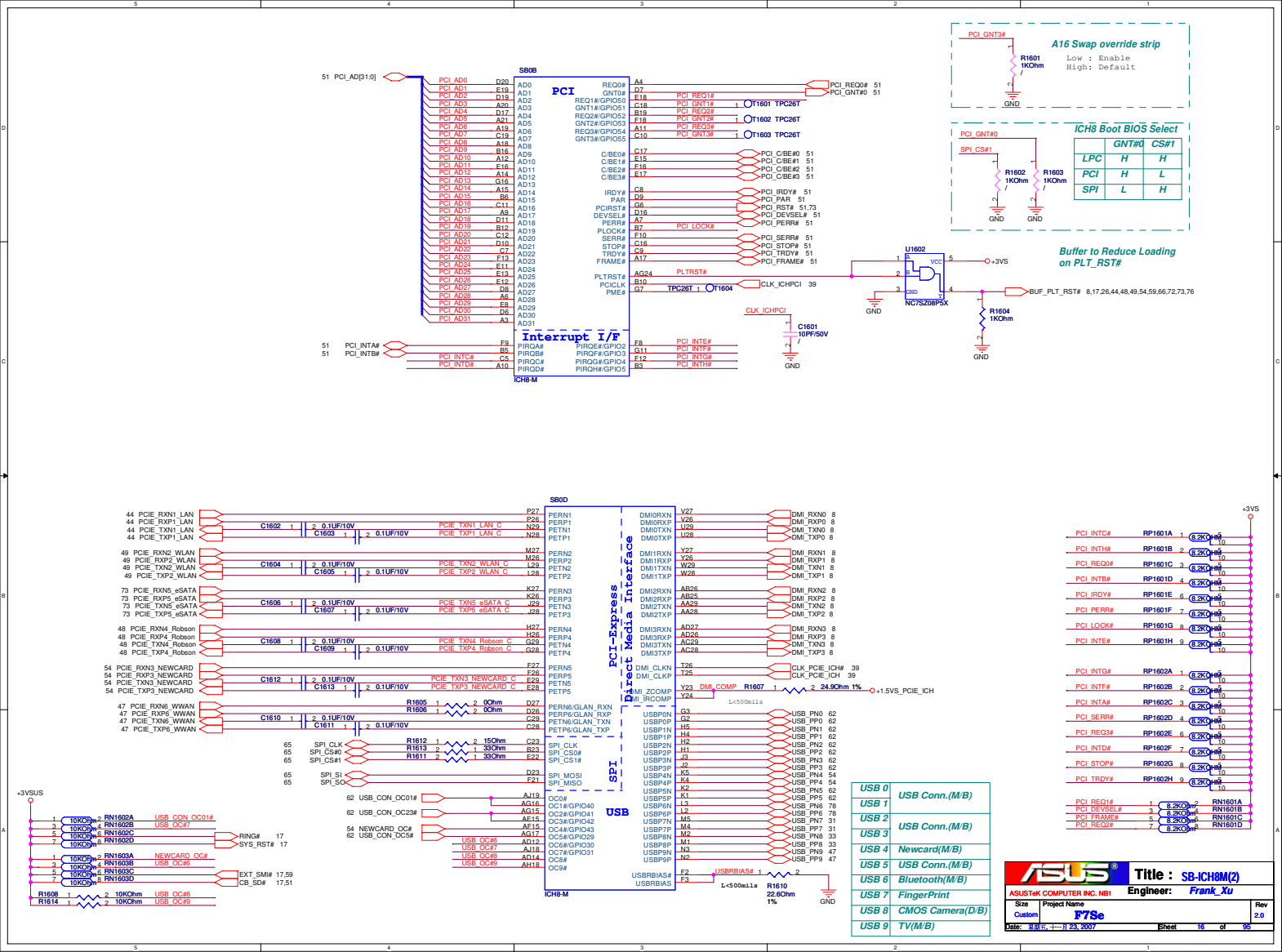
ACZ_SDIN0 CODEC

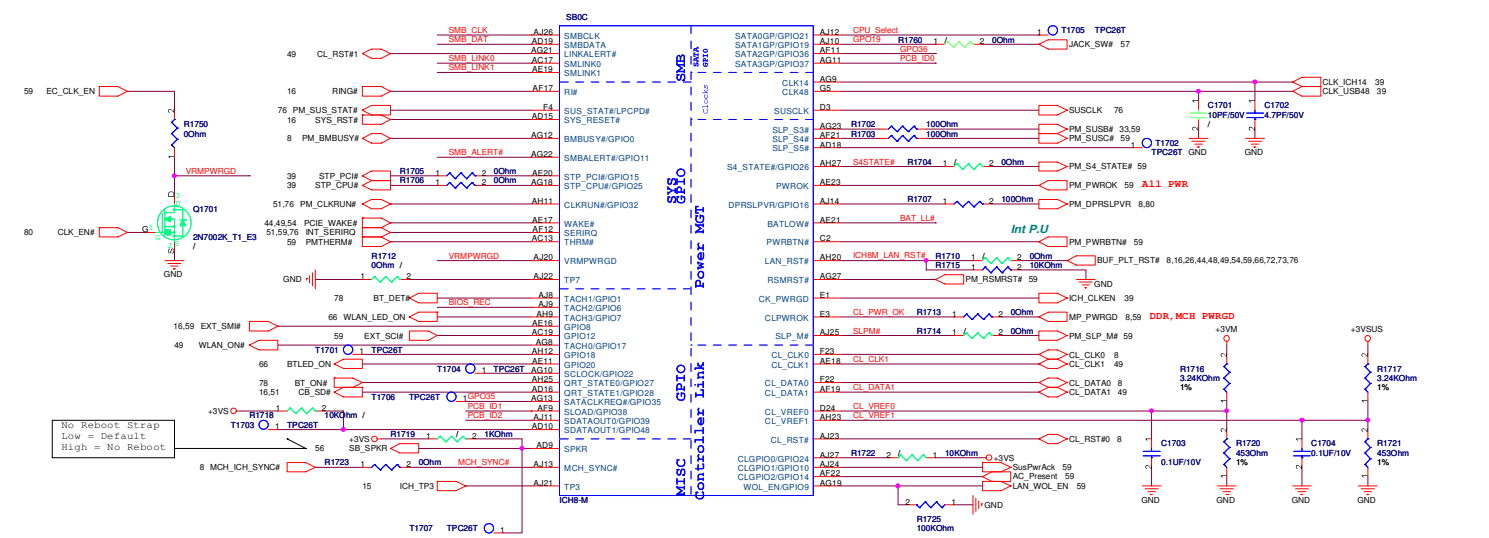
ACZ_SDIN1 MODEM

SB0A

ICH8-M

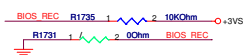
RTC LPC GLAN LAN / CPU IHDA SATA IDE


A16 Swap override strip
Low : Enable
High: Default
PCI_GNT3#
R1601 1KOhm
GND
ICH8 Boot BIOS Select
PCI_GNT#0
SPI_CS#1
R1602 1KOhm
R1603 1KOhm
GND
GND
GNT#0 CS#1
LPC H H
PCI H L
SPI L H
Buffer to Reduce Loading on PLT_RST#
U1602
NC7SZ08P5X
+3VS
BUF_PLT_RST# 8,17,26,44,48,49,54,59,66,72,73,76
R1604 1KOhm
GND
SB0B
PCI
Interrupt I/F
ICH8-M
51 PCI_AD[31:0]
PCI_REQ0# 51
PCI_GNT#0 51
T1601 TPC26T
T1602 TPC26T
T1603 TPC26T
PCI_C/BE#0 51
PCI_C/BE#1 51
PCI_C/BE#2 51
PCI_C/BE#3 51
PCI_IRDY# 51
PCI_PAR 51
PCI_RST# 51,73
PCI_DEVSEL# 51
PCI_PERR# 51
PCI_SERR# 51
PCI_STOP# 51
PCI_TRDY# 51
PCI_FRAME# 51
PCI_LOCK#
PLTRST#
CLK_ICHPCI 39
T1604 TPC26T
CLK_ICHPCI
C1601 10PF/50V
GND
51 PCI_INTA#
51 PCI_INTB#
PCI_INTC#
PCI_INTD#
PCI_INTE#
PCI_INTF#
PCI_INTG#
PCI_INTH#
SB0D
PCI-Express
Direct Media Interface
SPI
USB
ICH8-M
C1602 0.1UF/10V
C1603 0.1UF/10V
PCIE_TXN1_LAN_C
PCIE_TXP1_LAN_C
C1604 0.1UF/10V
C1605 0.1UF/10V
PCIE_TXN2_WLAN_C
PCIE_TXP2_WLAN_C
C1606 0.1UF/10V
C1607 0.1UF/10V
PCIE_TXN5_eSATA_C
PCIE_TXP5_eSATA_C
C1608 0.1UF/10V
C1609 0.1UF/10V
PCIE_TXN4_Robson_C
PCIE_TXP4_Robson_C
C1612 0.1UF/10V
C1613 0.1UF/10V
PCIE_TXN3_NEWCARD_C
PCIE_TXP3_NEWCARD_C
C1610 0.1UF/10V
C1611 0.1UF/10V
R1605 0Ohm
R1606 0Ohm
R1612 15Ohm
R1613 33Ohm
R1611 33Ohm
SPI_CLK
SPI_CS#0
SPI_CS#1
SPI_MOSI
SPI_MISO
R1607 24.9Ohm 1%
DMI_COMP
+1.5VS_PCIE_ICH
R1610 22.6Ohm 1%
USBRBIAS#
L<500mils
USB_CON_OC0#
USB_CON_OC2#
NEWCARD_OC#
USB_OC#6
USB_OC#7
USB_OC#8
USB_OC#9
RING# 17
SYS_RST# 17
EXT_SMI# 17,59
CB_SD# 17,51
+3VSUS
RN1602A 10KOhm
RN1602B 10KOhm
RN1602C 10KOhm
RN1602D 10KOhm
RN1603A 10KOhm
RN1603B 10KOhm
RN1603C 10KOhm
RN1603D 10KOhm
R1608 10KOhm
R1614 10KOhm
RP1601A 8.2KOhm
RP1601B 8.2KOhm
RP1601C 8.2KOhm
RP1601D 8.2KOhm
RP1601E 8.2KOhm
RP1601F 8.2KOhm
RP1601G 8.2KOhm
RP1601H 8.2KOhm
RP1602A 8.2KOhm
RP1602B 8.2KOhm
RP1602C 8.2KOhm
RP1602E 8.2KOhm
RP1602F 8.2KOhm
RP1602G 8.2KOhm
RP1602H 8.2KOhm
RN1601A 8.2KOhm
RN1601B 8.2KOhm
RN1601C 8.2KOhm
RN1601D 8.2KOhm
USB 0 USB Conn.(M/B)
USB 1
USB 2 USB Conn.(M/B)
USB 3
USB 4 Newcard(M/B)
USB 5 USB Conn.(M/B)
USB 6 Bluetooth(M/B)
USB 7 FingerPrint
USB 8 CMOS Camera(D/B)
USB 9 TV(M/B)
ASUSTeK COMPUTER INC. NB1
Title : SB-ICH8M(2)
Engineer: Frank_Xu
Size Custom
Project Name F7Se
Rev 2.0
Date: 8月 23, 2007
Sheet 18 of 95



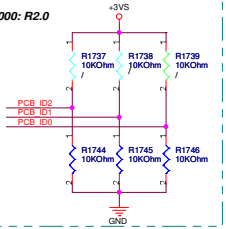
Mount for BIOS Recovery

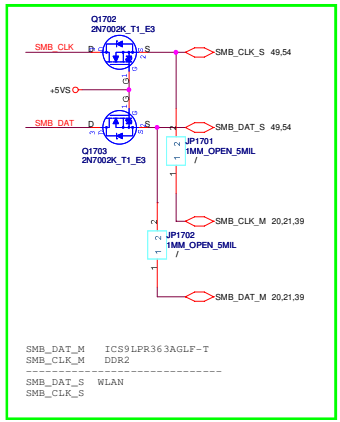
Place Near the Open Door

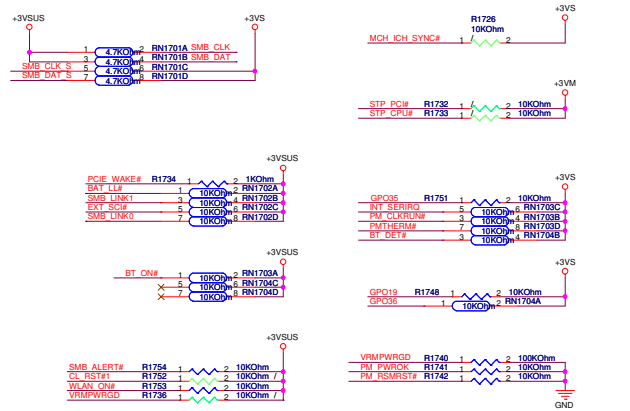


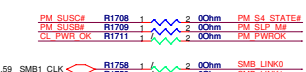
PCB_ID[0:2]

000: R2.0









<variant_name>

ASUSTeK COMPUTER INC. NB1	Title :	SB-ICH8M(3)	
	Engineer:	Frank_Xu	
Size: Custom	Project Name: F7Se		Rev: 1.0
Date: 8月 23, 2007	Sheet 17 of 95		
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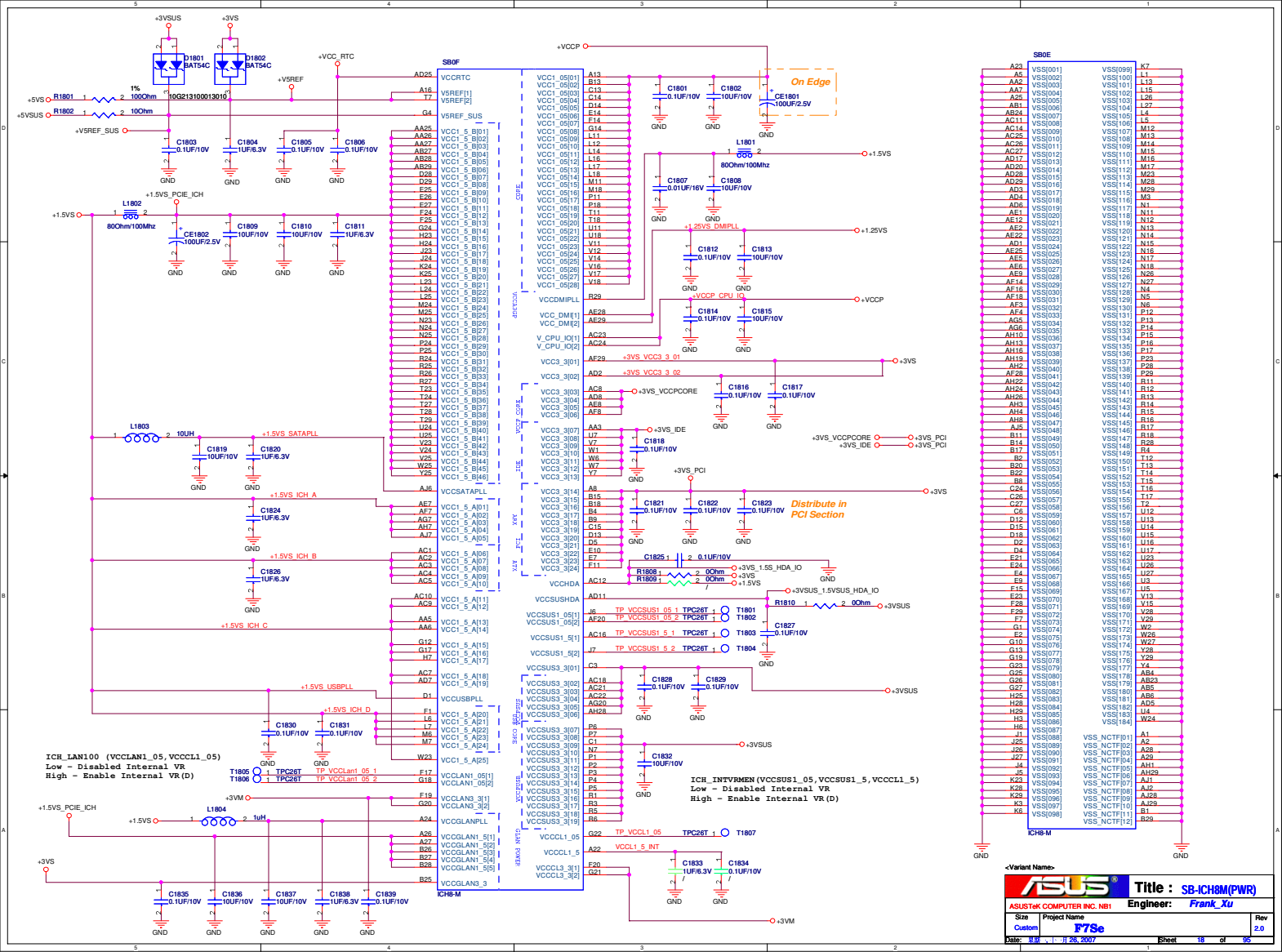

SB0F
ICH8-M
SB0E
ICH8M-M
On Edge
Distribute in PCI Section
ICH_LAN100 (VCCLAN1_05,VCCCL1_05)
Low = Disabled Internal VR
High = Enable Internal VR(D)
ICH_INTVRMEN(VCCSUS1_05,VCCSUS1_5,VCCCL1_5)
Low = Disabled Internal VR
High = Enable Internal VR(D)
Title : SB-ICH8M(PWR)
ASUSTeK COMPUTER INC. NB1
Engineer: Frank_Xu
Size: Custom
Project Name: F7Se
Rev: 2.0
Sheet 18 of 95

Title : Blank Page

ASUSTeK COMPUTER INC

Engineer: Frank_Xu

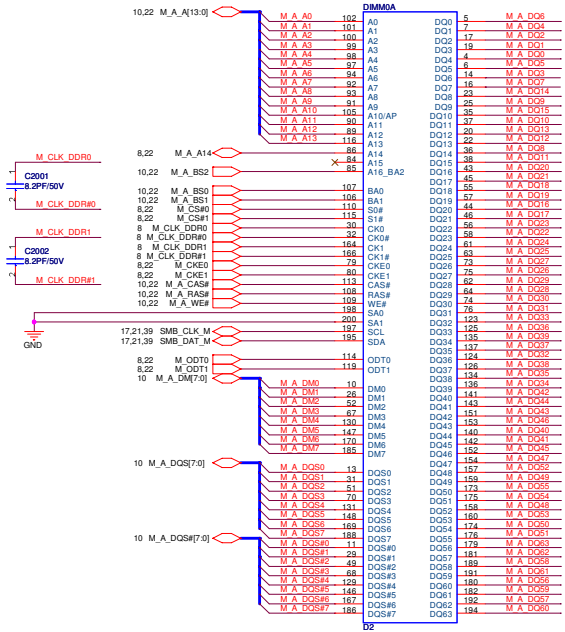
Size	Project Name	Rev
Custom	F7Se	2.0

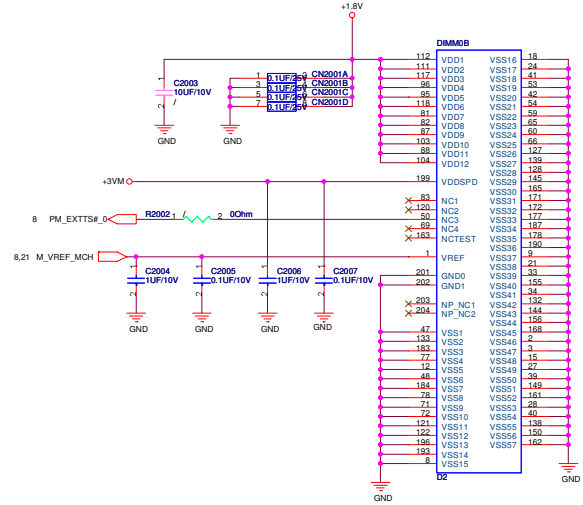
Date: 星期五, 十一月 23, 2007 Sheet 19 of 95

M_A_DQ[63:0] 10

REV Type - 12G025122006

ME - 12G025332003

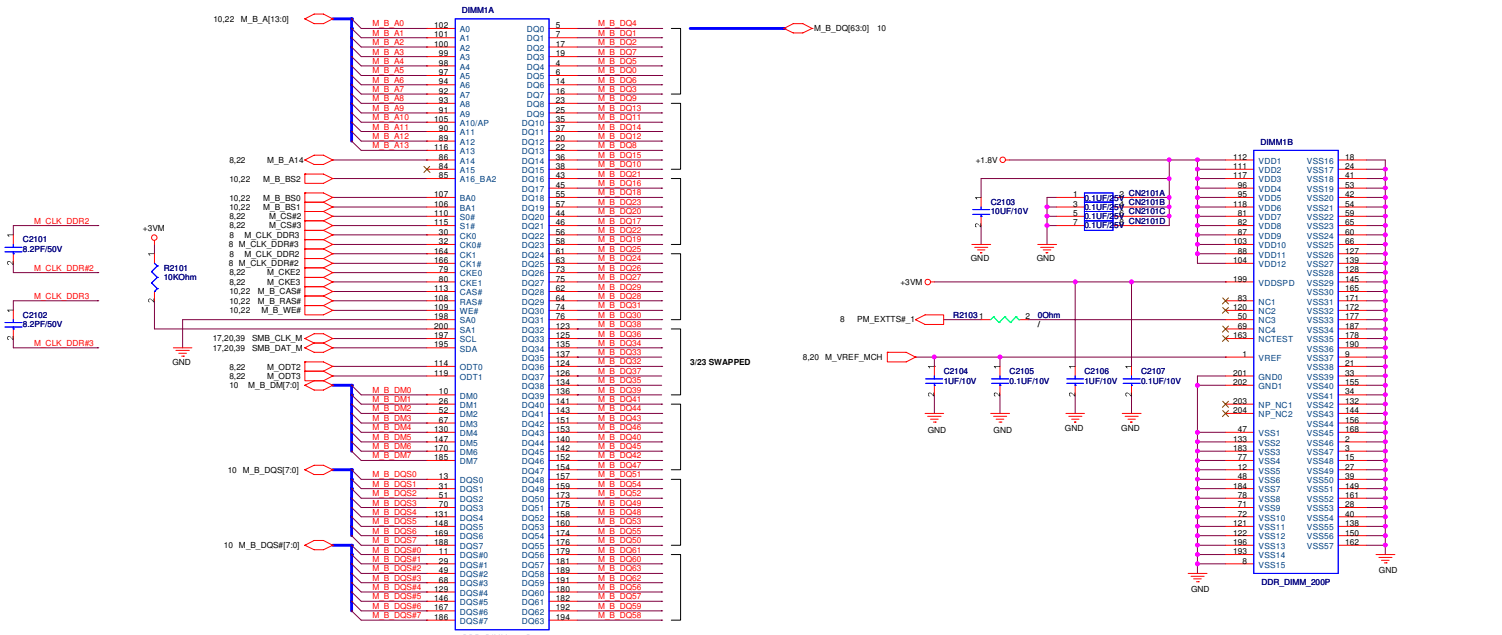




<variant_name>

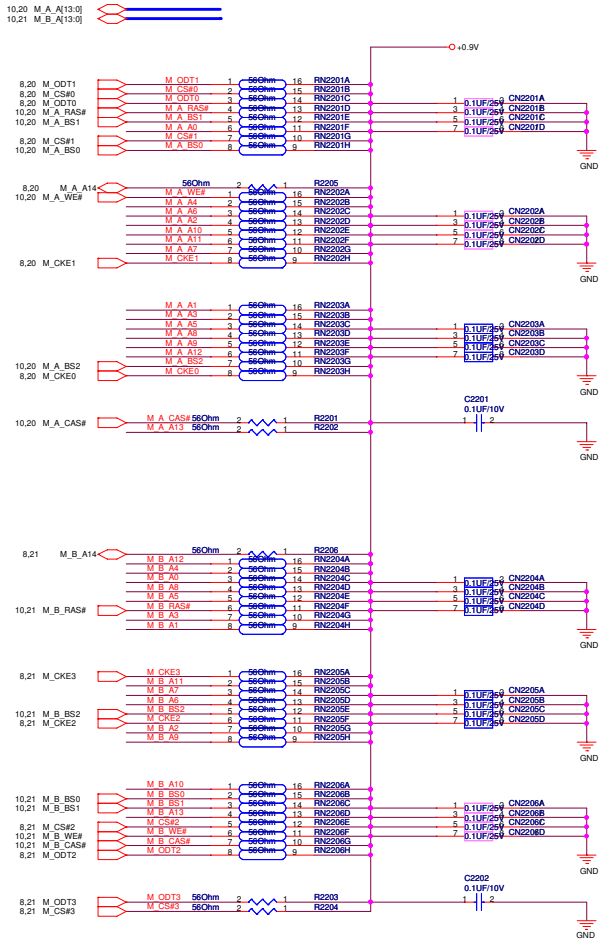
Title : DDR2 SO-DIMM0		
ASUSTeK COMPUTER INC. NB1	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 20 of 95	

STD Type - 12G025122000



<variant_name>

ASUSTeK COMPUTER INC. NB1	Title : DDR2 SO-DIMM1	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 21 of 95	



<Variant Name>

ASUSTeK COMPUTER INC. NB1

Title : DDR2 TERMINATION

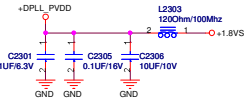
Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

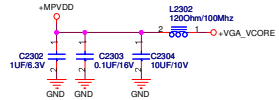
Date: 星期三, 一月 23, 2007 Sheet 22 of 95

M82/M86ME Power

1.8V (? %) @ 120MA DPLL_PVDD M8X-M

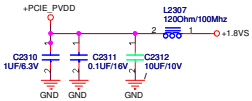


+MPVDD

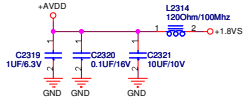


(0.95V-1.1V @ 414MA MPVDD)

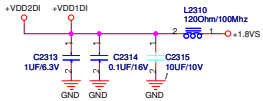
1.8V @ 40mA PCIE_PVDD M8X-M



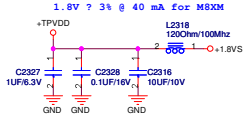
1.8V @ 100MA AVDD FOR M8XM



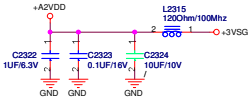
1.8V @ 121MA VDD1DI+VDD2DI FOR M8XM



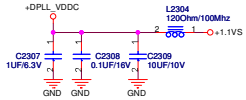
1.8V ? 3% @ 40 mA for M8XM



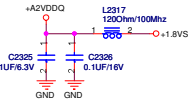
3.3V @ 135MA A2VDD FOR M8XM

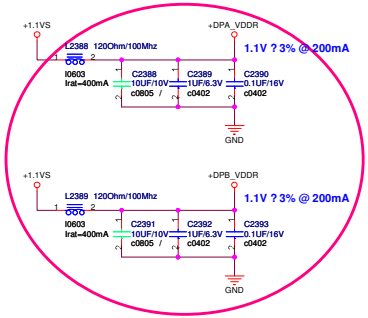


1.1V @ 300MA DPLL_VDDC FOR M8XM



1.8V @ 2MA A2VDDQ FOR M8XM





<Variant Name>

ASUSTeK COMPUTER INC

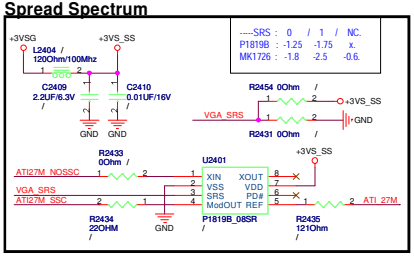
Title : VGA M82-M XT POWER

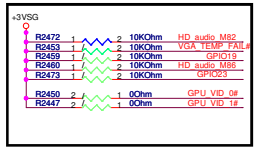
Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

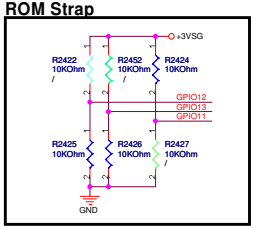
Date: 星期五, 十一月 23, 2007 Sheet 23 of 95

Spread Spectrum



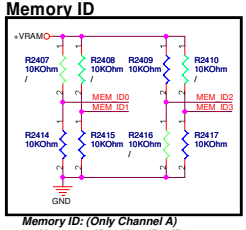


ROM Strap



GPIO[11:13] = 100, 256M memory aperture
GPIO[11:13] = 001, 512M memory aperture

Memory ID



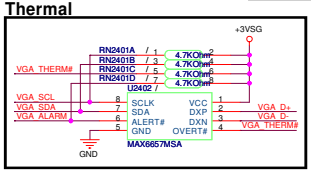
Memory ID: (Only Channel A)

	ID3	ID2	ID1	ID0	
256M					
Samsung MID	*0*	*0*	*0*	*1*	*=>ID1*
Qimonda MID	*0*	*1*	*0*	*0*	*=>ID4*

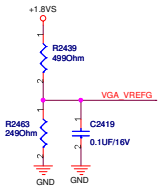
+VGA_VCORE Power

GPU_VID_0#	GPU_VID_1#	+VGA_VCORE
L	L	1.2V
H	L	0.9V
H	H	1.1V

Thermal



FOR M8XM
VREFG VOLTAGE DIVIDER IS VREFG = VDDR4,5 = 1.8V / 3 = 0.6V
R2463=249ohm



INSTALL TERMINATION RESISTORS CLOSE TO ASIC

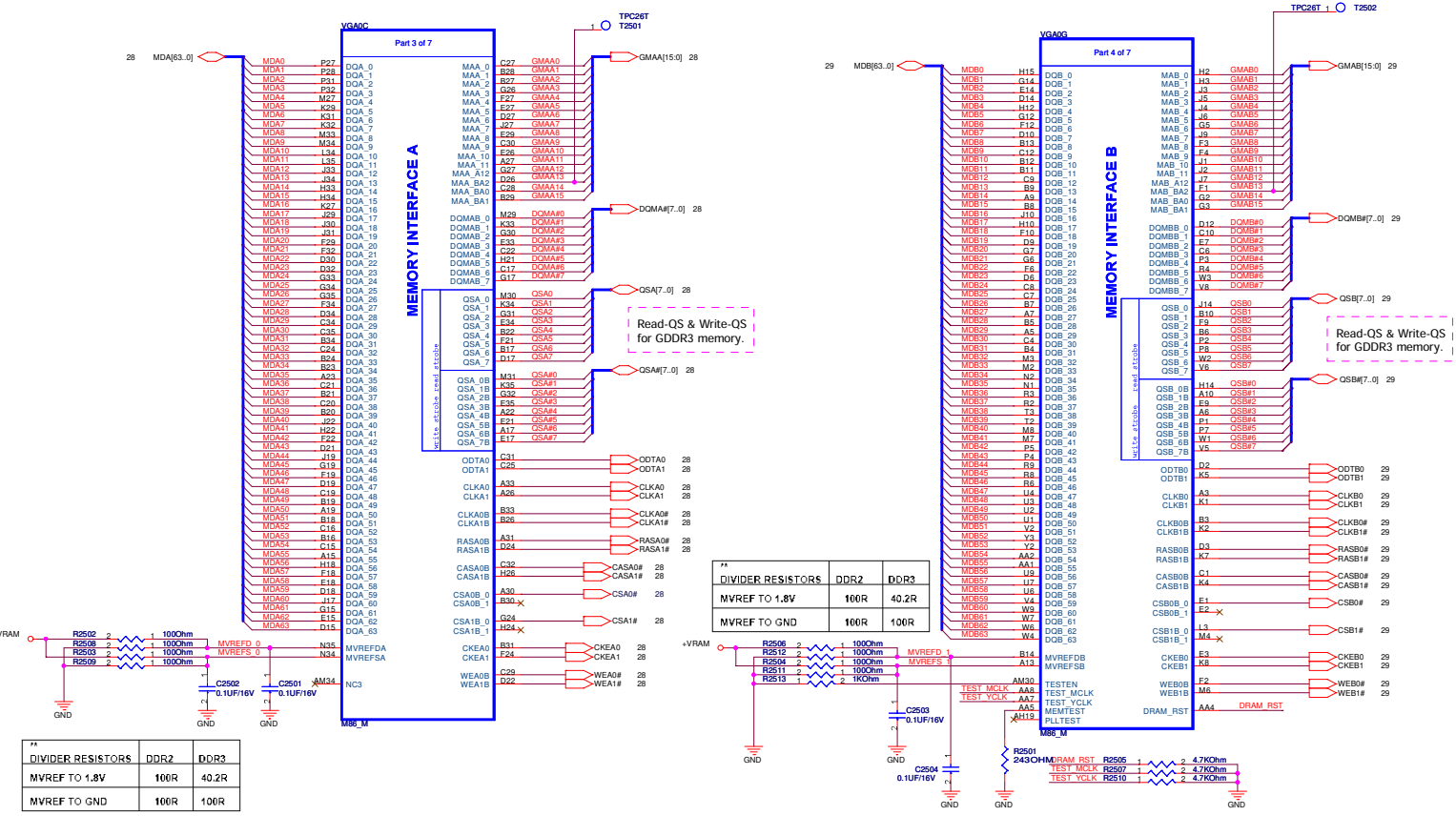
ASUSTeK COMPUTER INC

Title : ATI_M82-M XT_MAIN

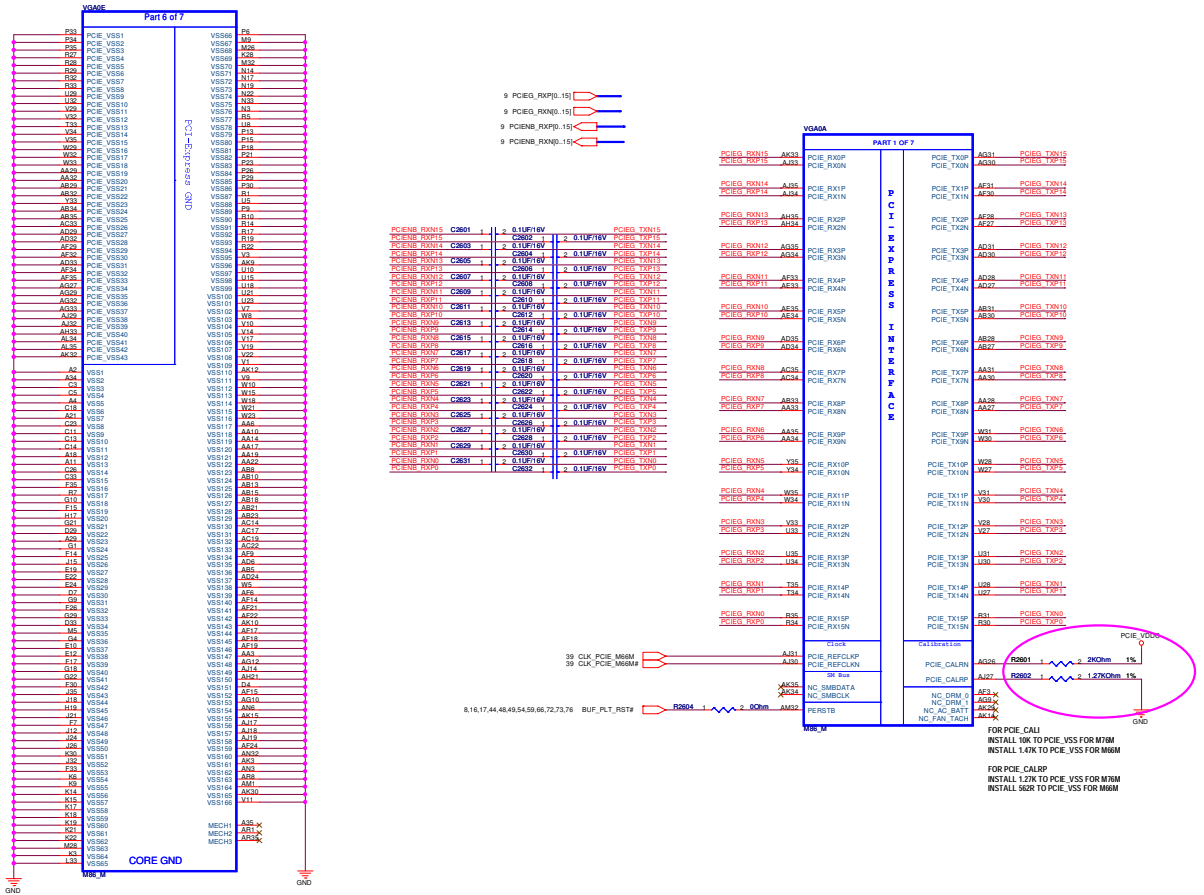
Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

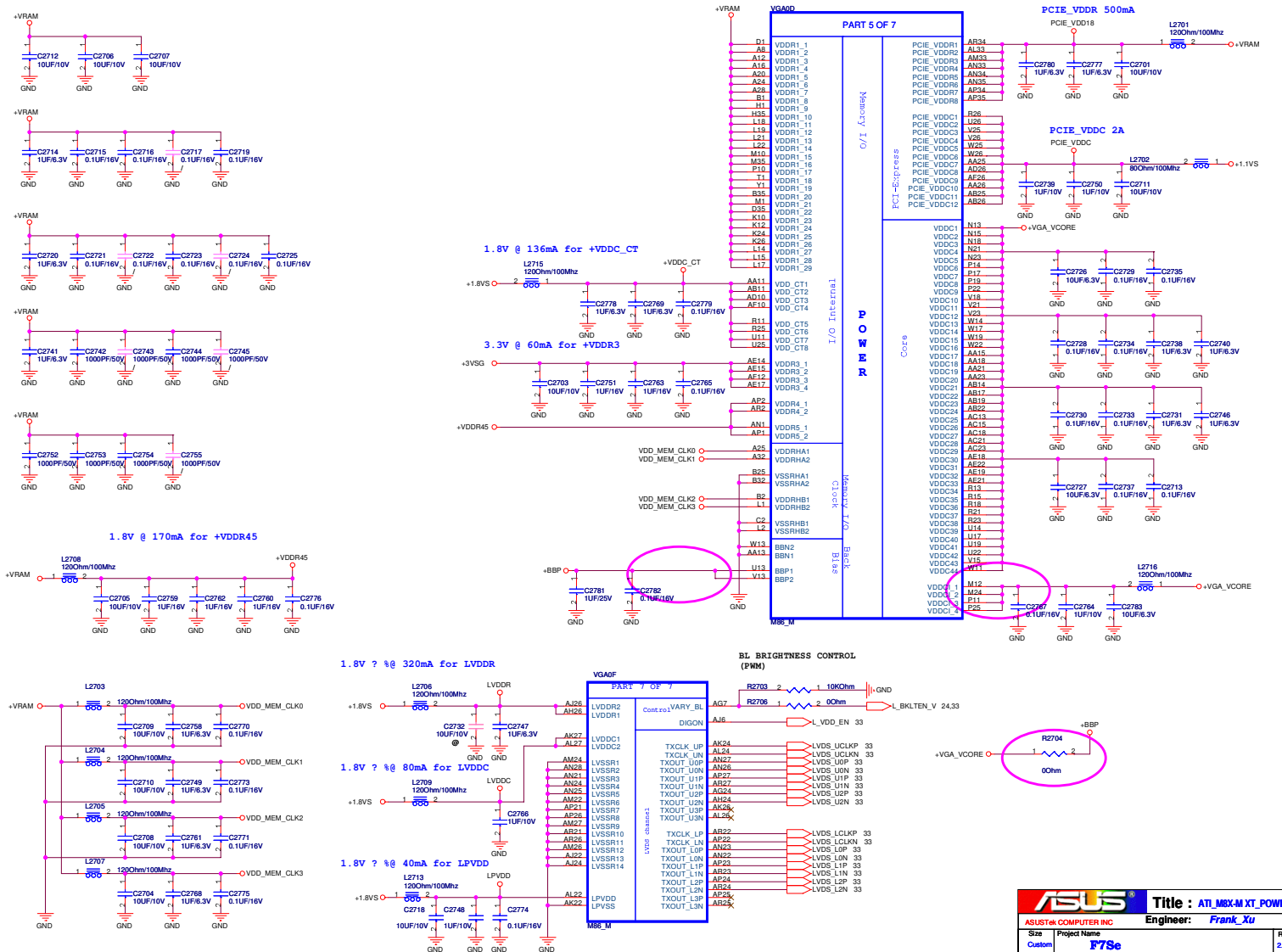
Date: 星期五, 十一月 23, 2007 Sheet 24 of 95



Title :	ATI_M82-M XT_Memory		
ASUSTeK COMPUTER INC	Engineer:	Frank_Xu	
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期 , 十一月 26, 2007	Sheet 25 of 95		



ASUSTeK COMPUTER INC	Title : ATI_M8X-M XT_PCI-E		
	Engineer: Frank_Xu		
Size: C	Project Name: F7Sc		Rev: 2.0
Date: Wed, H 25, 2007	Sheet 26 of 95		


PART 5 OF 7
VGA0D
POWER
Memory I/O
I/O Internal
Memory I/O Clock
Core
PCI-Express
Bank
M86_M
PCIE_VDDR 500mA
PCIE_VDDC 2A
1.8V @ 136mA for +VDDC_CT
3.3V @ 60mA for +VDDR3
1.8V @ 170mA for +VDDR45
1.8V ? %@ 320mA for LVDDR
1.8V ? %@ 80mA for LVDDC
1.8V ? %@ 40mA for LPVDD
BL BRIGHTNESS CONTROL (PWM)
PART 7 OF 7
VGA0F
LVDS channel
ASUSTeK COMPUTER INC
Title : ATI_M8X-M XT_POWER
Engineer: Frank_Xu
Project Name F7Se
Rev 2.0
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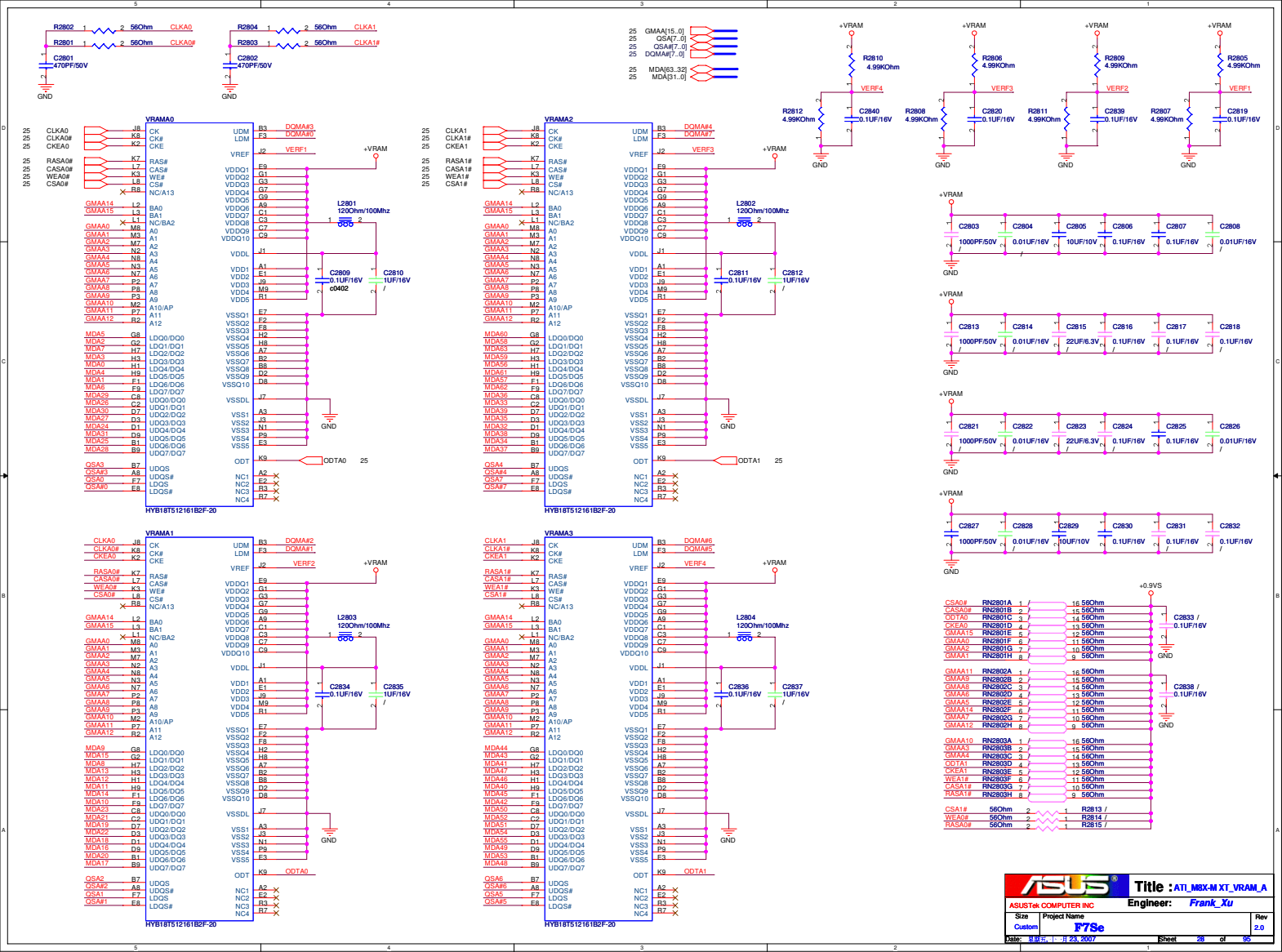
R2802 56Ohm CLKA0
R2801 56Ohm CLKA0#
C2801 470PF/50V
R2804 56Ohm CLKA1
R2803 56Ohm CLKA1#
C2802 470PF/50V
GND
25 GMAA[15..0]
25 QSA[7..0]
25 QSA#[7..0]
25 DQMA#[7..0]
25 MDA[63..32]
25 MDA[31..0]
+VRAM
R2810 4.99KOhm
VERF4
C2840 0.1UF/16V
R2812 4.99KOhm
R2808 4.99KOhm
VERF3
C2820 0.1UF/16V
R2811 4.99KOhm
VERF2
C2839 0.1UF/16V
R2807 4.99KOhm
VERF1
C2819 0.1UF/16V
VRAMA0
VRAMA2
VRAMA1
VRAMA3
HYB18T512161B2F-20
L2801 120Ohm/100Mhz
L2802 120Ohm/100Mhz
L2803 120Ohm/100Mhz
L2804 120Ohm/100Mhz
C2809 0.1UF/16V c0402
C2810 1UF/16V
C2811 0.1UF/16V
C2812 1UF/16V
C2834 0.1UF/16V
C2835 1UF/16V
C2836 0.1UF/16V
C2837 1UF/16V
ODTA0 25
ODTA1 25
C2803 1000PF/50V
C2804 0.01UF/16V
C2805 10UF/10V
C2806 0.1UF/16V
C2807 0.1UF/16V
C2808 0.01UF/16V
C2813 1000PF/50V
C2814 0.01UF/16V
C2815 22UF/6.3V
C2816 0.1UF/16V
C2817 0.1UF/16V
C2818 0.1UF/16V
C2821 1000PF/50V
C2822 0.01UF/16V
C2823 22UF/6.3V
C2824 0.1UF/16V
C2825 0.1UF/16V
C2826 0.01UF/16V
C2827 1000PF/50V
C2828 0.01UF/16V
C2829 10UF/10V
C2830 0.1UF/16V
C2831 0.1UF/16V
C2832 0.1UF/16V
+0.9VS
RN2801A 56Ohm
RN2801B 56Ohm
RN2801C 56Ohm
RN2801D 56Ohm
RN2801E 56Ohm
RN2801F 56Ohm
RN2801G 56Ohm
RN2801H 56Ohm
C2833 / 0.1UF/16V
RN2802A 56Ohm
RN2802B 56Ohm
RN2802C 56Ohm
RN2802D 56Ohm
RN2802E 56Ohm
RN2802F 56Ohm
RN2802G 56Ohm
RN2802H 56Ohm
C2838 / 0.1UF/16V
RN2803A 56Ohm
RN2803B 56Ohm
RN2803C 56Ohm
RN2803D 56Ohm
RN2803E 56Ohm
RN2803F 56Ohm
RN2803G 56Ohm
RN2803H 56Ohm
R2813 / R2814 / R2815 / 56Ohm
ASUSTeK COMPUTER INC
Title : ATI_M8X-M XT_VRAM_A
Engineer: Frank_Xu
Size: Custom
Project Name: F7Se
Rev: 2.0
Date: 星期五, 一月 26, 2007
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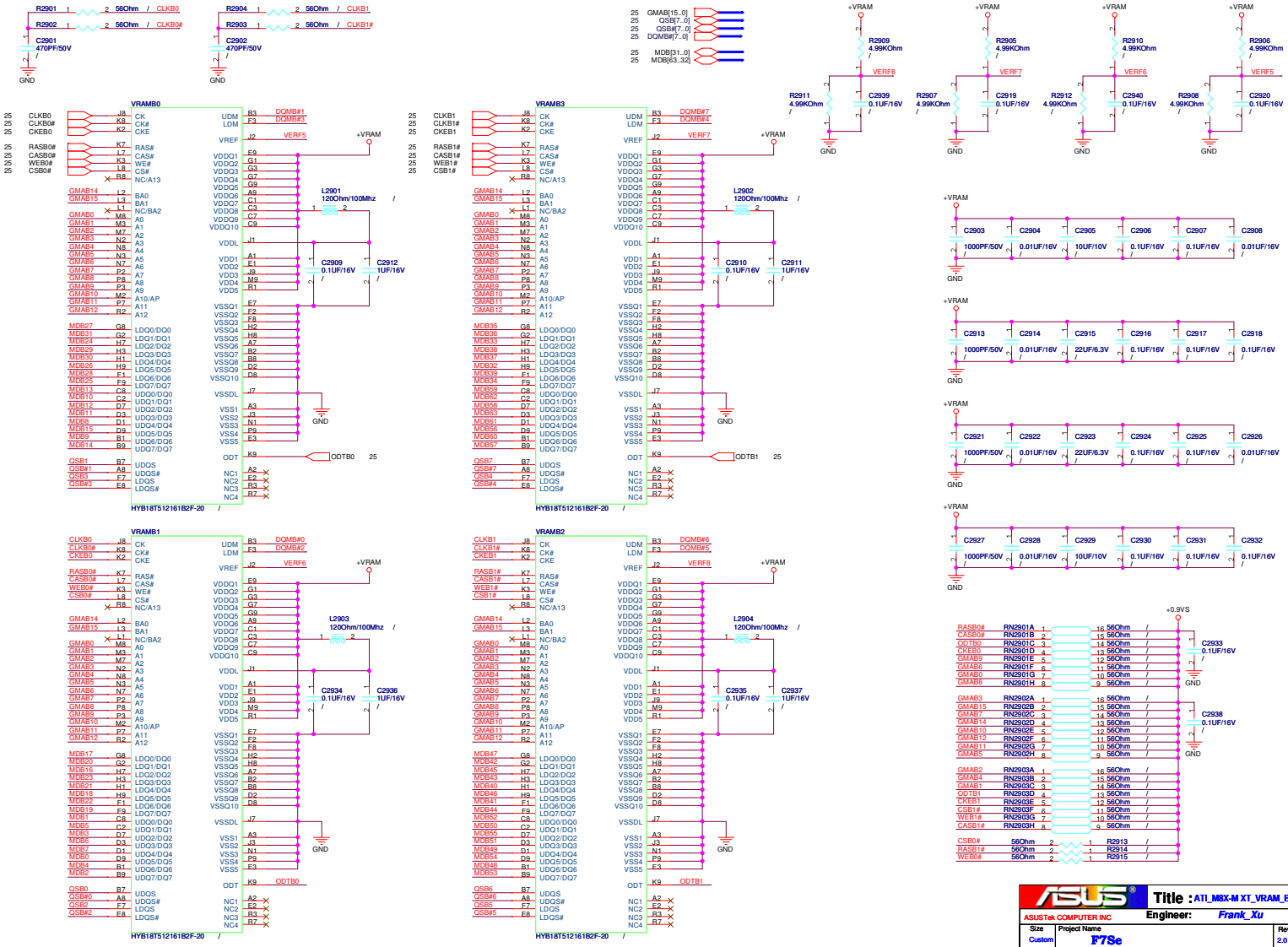
R2901 56Ohm / CLKB0
R2902 56Ohm / CLKB0#
C2901 470PF/50V
R2904 56Ohm / CLKB1
R2903 56Ohm / CLKB1#
C2902 470PF/50V
GND
25 GMAB[15..0]
25 QSB[7..0]
25 QSB#[7..0]
25 DQMB#[7..0]
25 MDB[63..0]
25 MDB[63..32]
+VRAM
R2909 4.99KOhm / VERF8
R2911 4.99KOhm / C2939 0.1UF/16V
R2905 4.99KOhm / VERF7
R2907 4.99KOhm / C2919 0.1UF/16V
R2910 4.99KOhm / VERF6
R2912 4.99KOhm / C2940 0.1UF/16V
R2906 4.99KOhm / VERF5
R2908 4.99KOhm / C2920 0.1UF/16V
VRAMB0
VRAMB3
VRAMB1
VRAMB2
HY18T512161B2F-20
L2901 120Ohm/100Mhz
L2902 120Ohm/100Mhz
L2903 120Ohm/100Mhz
L2904 120Ohm/100Mhz
C2909 0.1UF/16V
C2912 1UF/16V
C2910 0.1UF/16V
C2911 1UF/16V
C2934 0.1UF/16V
C2936 1UF/16V
C2935 0.1UF/16V
C2937 1UF/16V
ODTB0 25
ODTB1 25
C2903 1000PF/50V
C2904 0.01UF/16V
C2905 10UF/10V
C2906 0.1UF/16V
C2907 0.1UF/16V
C2908 0.01UF/16V
C2913 1000PF/50V
C2914 0.01UF/16V
C2915 22UF/6.3V
C2916 0.1UF/16V
C2917 0.1UF/16V
C2918 0.1UF/16V
C2921 1000PF/50V
C2922 0.01UF/16V
C2923 22UF/6.3V
C2924 0.1UF/16V
C2925 0.1UF/16V
C2926 0.01UF/16V
C2927 1000PF/50V
C2928 0.01UF/16V
C2929 10UF/10V
C2930 0.1UF/16V
C2931 0.1UF/16V
C2932 0.1UF/16V
+0.9VS
RN2901A 56Ohm
RN2901B 56Ohm
RN2901C 56Ohm
RN2901D 56Ohm
RN2901E 56Ohm
RN2901F 56Ohm
RN2901G 56Ohm
RN2901H 56Ohm
C2933 0.1UF/16V
RN2902A 56Ohm
RN2902B 56Ohm
RN2902C 56Ohm
RN2902D 56Ohm
RN2902E 56Ohm
RN2902F 56Ohm
RN2902G 56Ohm
RN2902H 56Ohm
C2938 0.1UF/16V
RN2903A 56Ohm
RN2903B 56Ohm
RN2903C 56Ohm
RN2903D 56Ohm
RN2903E 56Ohm
RN2903F 56Ohm
RN2903G 56Ohm
RN2903H 56Ohm
R2913 56Ohm
R2914 56Ohm
R2915 56Ohm
Title : ATI_M8X-M XT_VRAM_B
ASUSTeK COMPUTER INC
Engineer: Frank_Xu
Size Custom
Project Name F7Se
Rev 2.0
Date: 星期五, 十一月 23, 2007
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ASUSTeK COMPUTER INC

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

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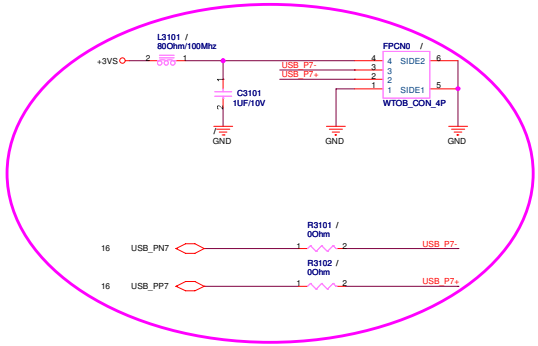
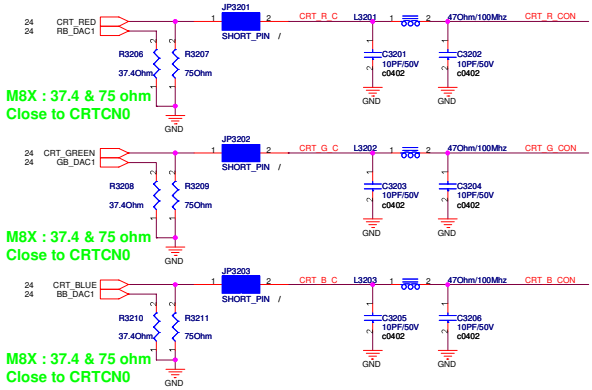
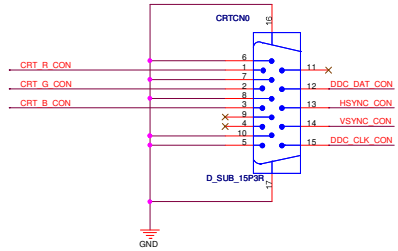
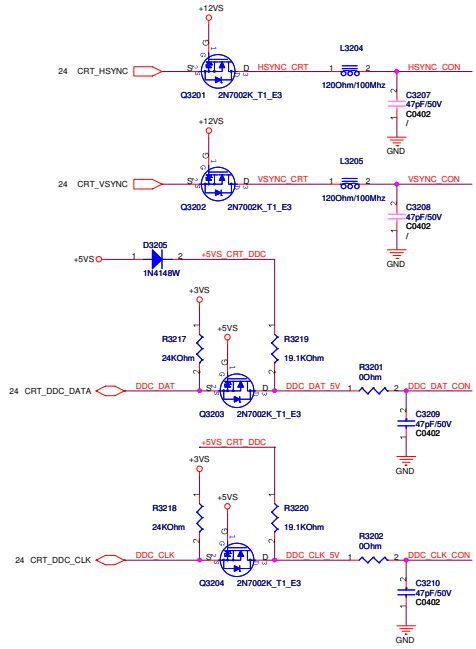


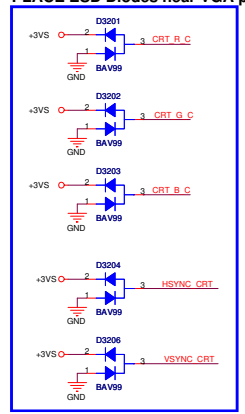
ASUSTeK COMPUTER INC	Title : FINGER PRINT	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期 , 一月 26, 2007	Sheet 31 of 95	







PLACE ESD Diodes near VGA port

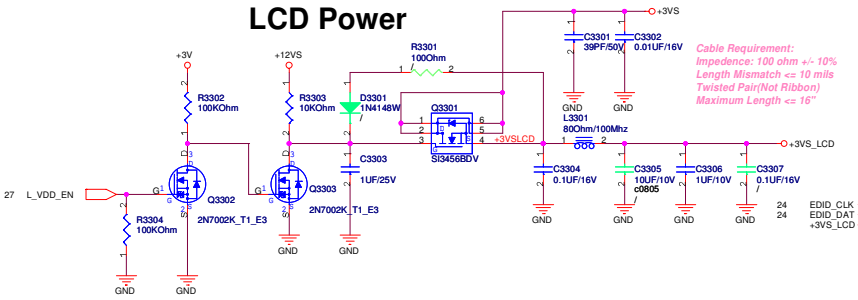


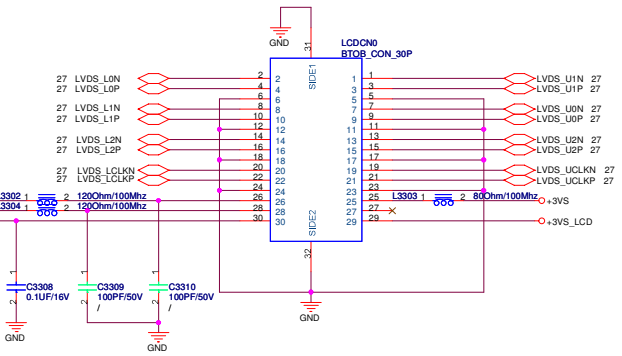
ASUSTeK COMPUTER INC	Title : CRT		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 32 of 95		

LCD Backlight Control

LCD LVDS Interface

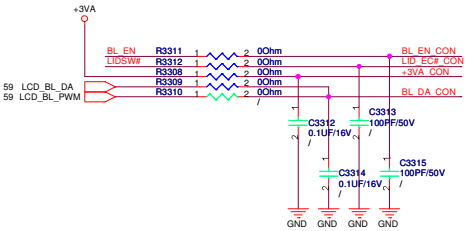
LCD Power

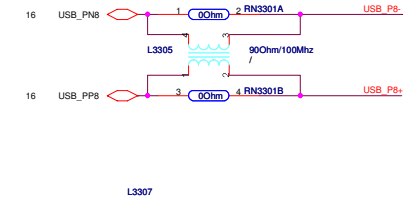


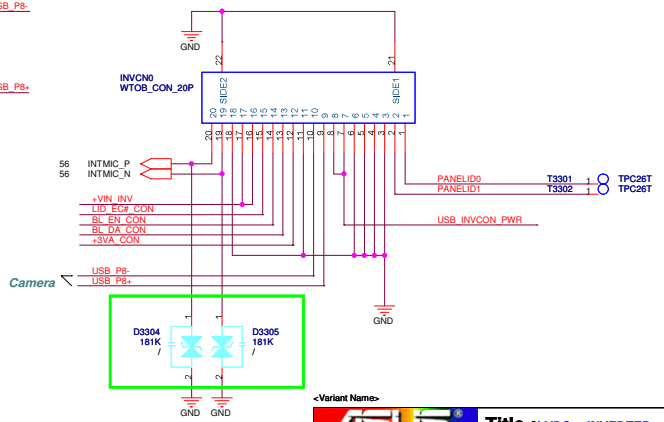


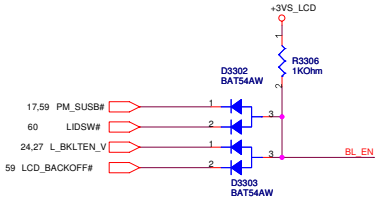
INVERTER

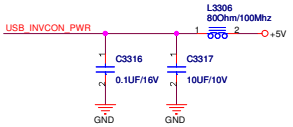
Interface/Speaker CONN.











EMI REQUEST

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ASUSTeK COMPUTER INC

Engineer: Frank_Xu

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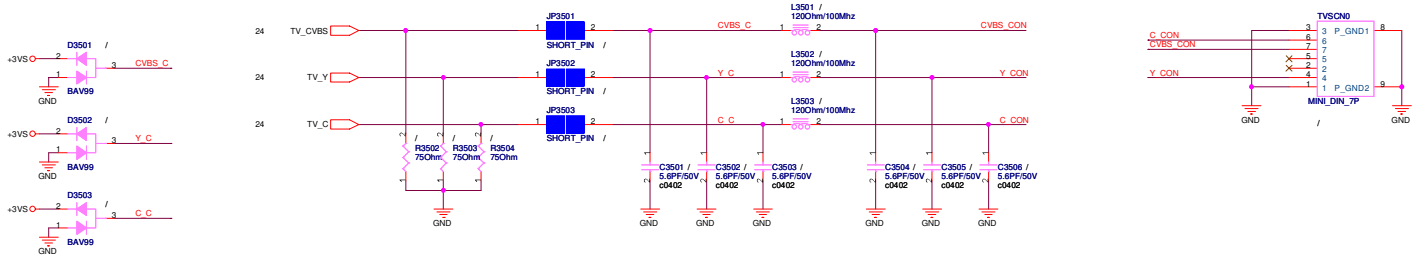
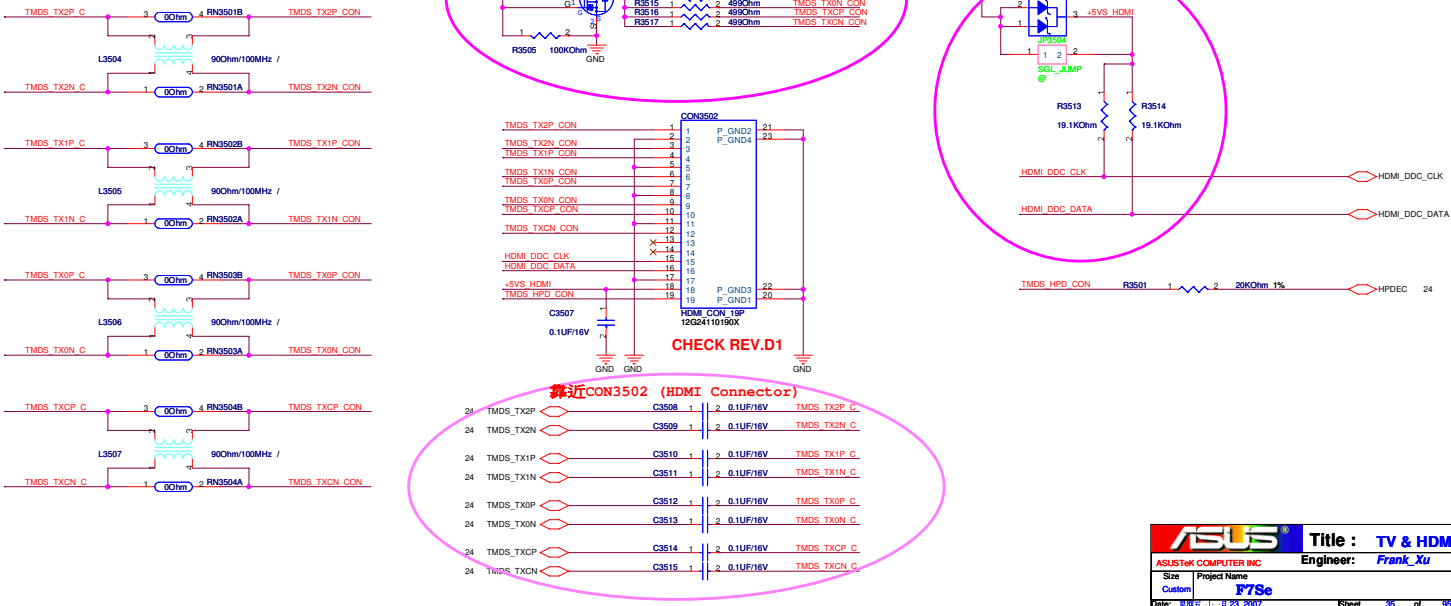
TV OUT



HDMI



ASUSTeK COMPUTER INC	Title : TV & HDMI		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
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ASUSTeK COMPUTER INC

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

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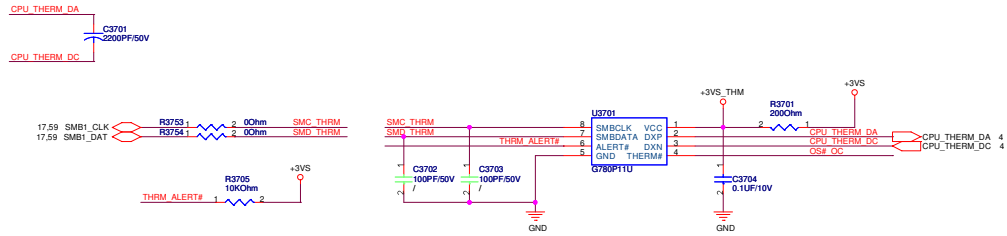
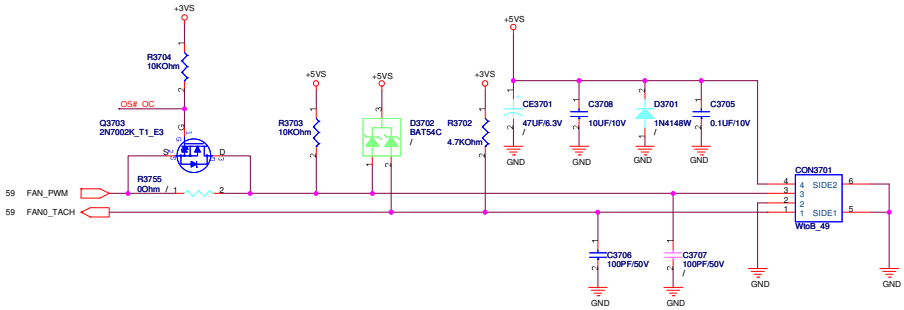
Thermal Sensor



DC FAN Control



ASUSTeK COMPUTER INC. NB1	Title : THER SENSOR & FAN		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
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ASUSTeK COMPUTER INC

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

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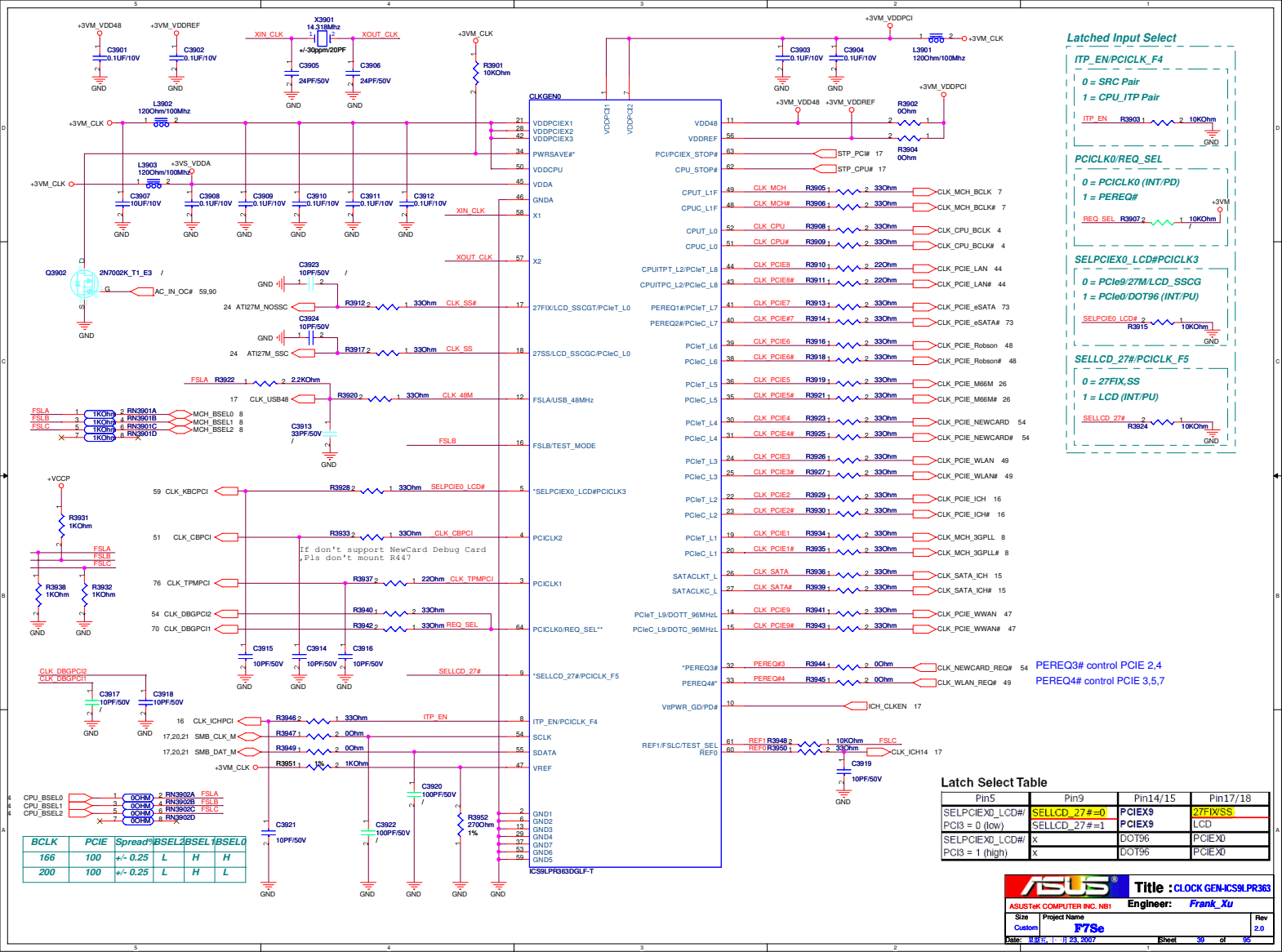

Title	CLOCK GEN-ICS9LPR363
ASUSTeK COMPUTER INC. NB1	Engineer: Frank_Xu
Size: Custom	Project Name: F7Se
Rev: 2.0	
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ASUSTeK COMPUTER INC

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

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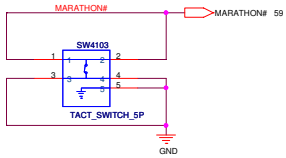
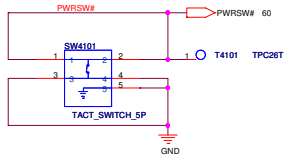
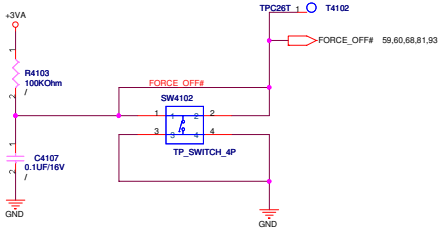




SHUT_DOWN#



ASUSTeK COMPUTER INC	Title : Power on & Res Freq	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
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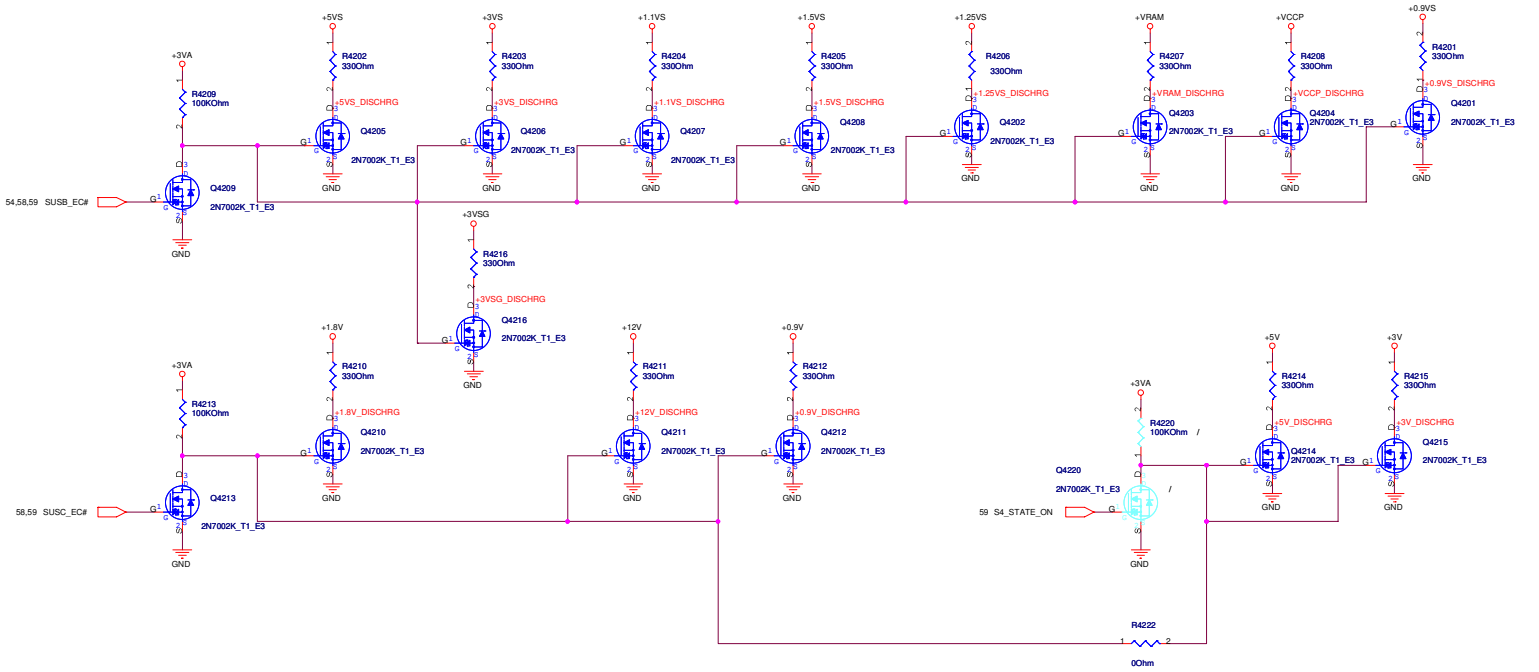

<Variant Name>

ASUSTeK COMPUTER INC. NB1	Title : DISCHARGE & EMI CAP	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
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ASUSTeK COMPUTER INC

Engineer: Frank_Xu

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Custom	F7Se	2.0

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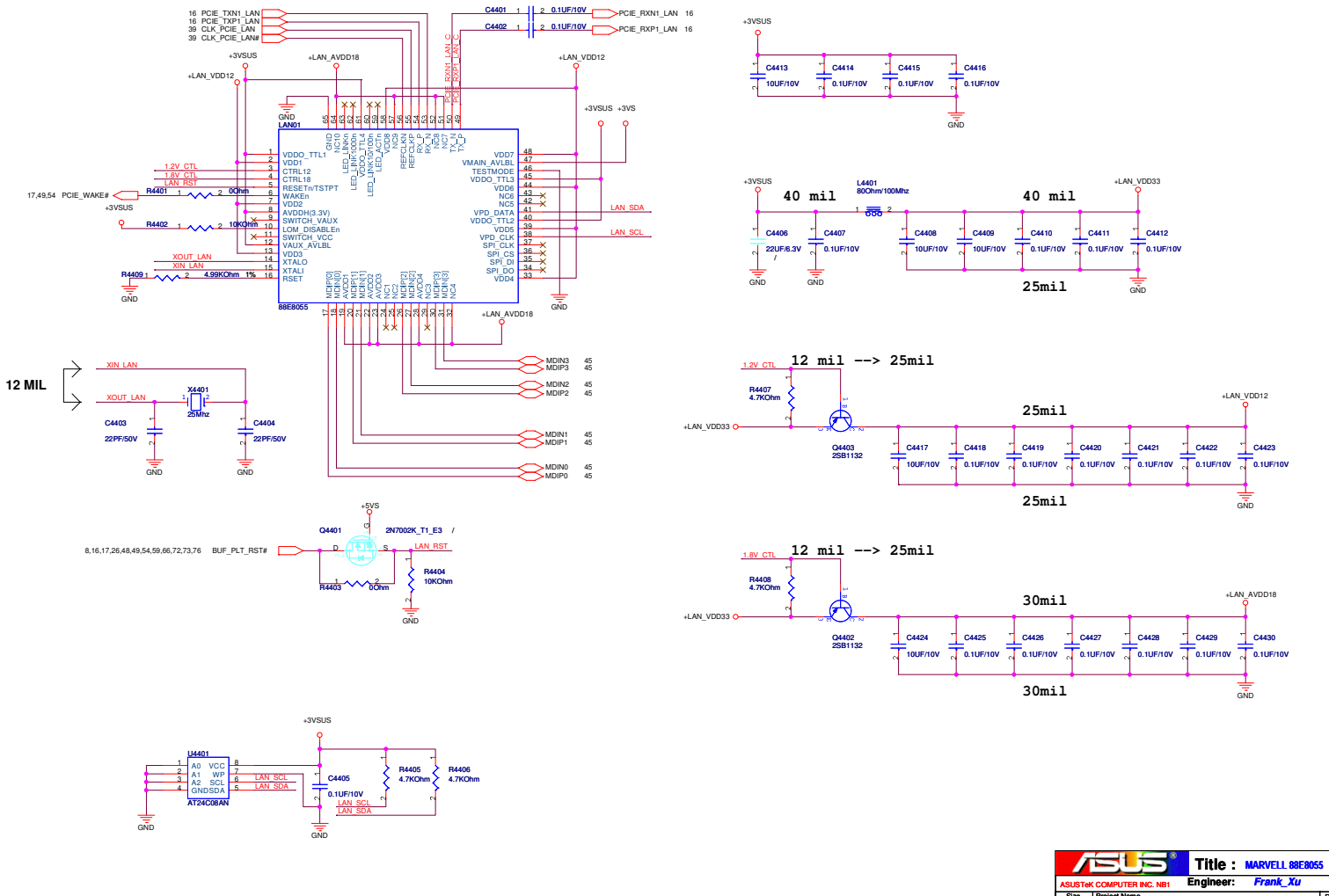
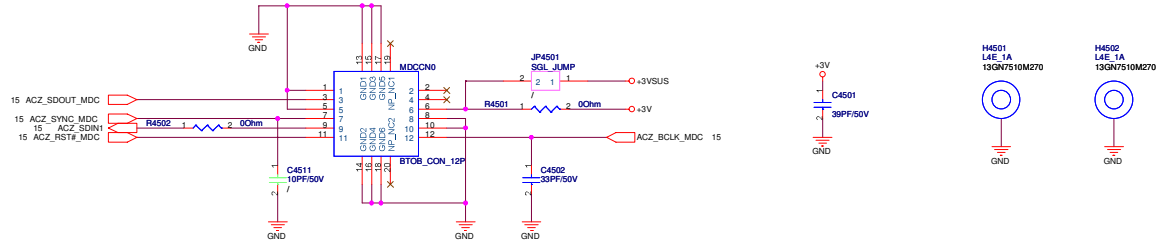


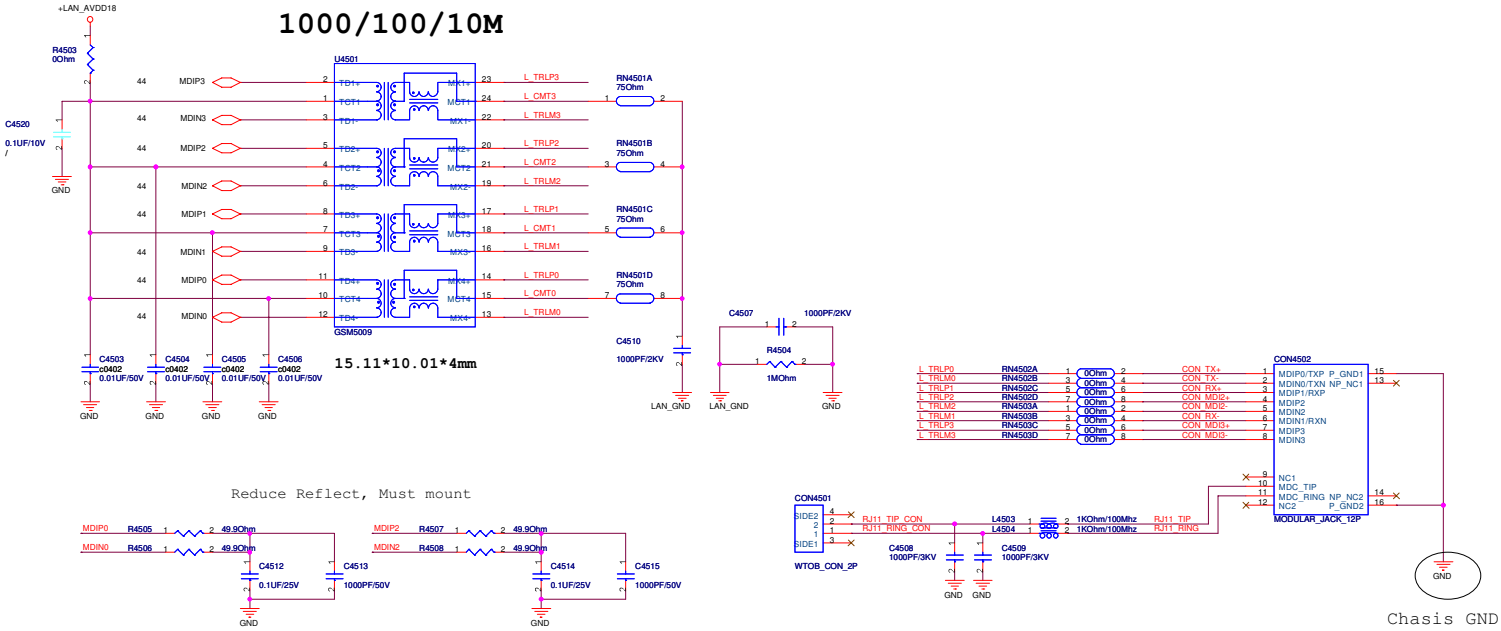
ASUSTeK COMPUTER INC. NB1	Title : MARVELL 88E8055	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 8 月 23, 2007	Sheet 44 of 95	

Change to
13GN7510M270

MDC CONN.



LAN CONN.



ASUSTeK COMPUTER INC. NB1	Title : MDC & RJ45+11		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
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Title : Blank Page

ASUSTeK COMPUTER INC

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

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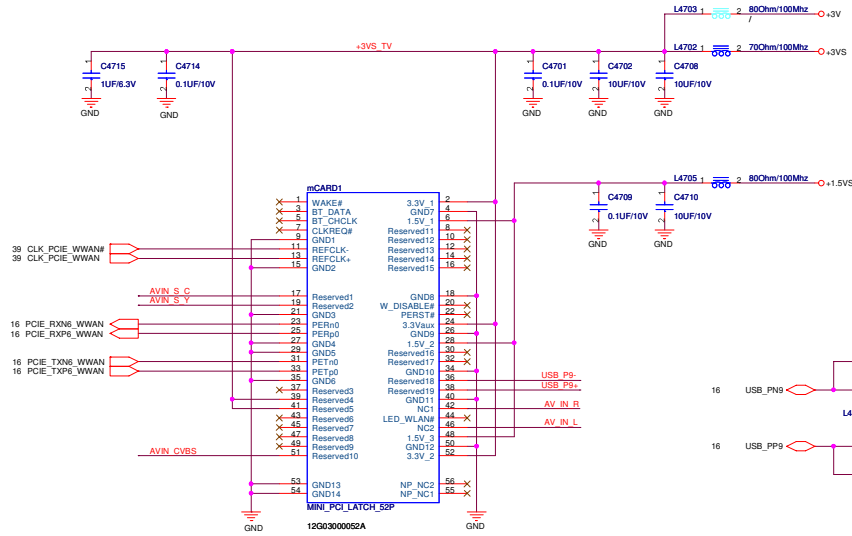
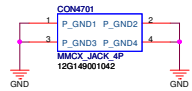


H = 5.2mm

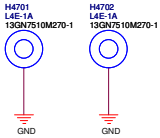
FOR TV TUNER

(UWB OPTION)

TV Conn.



ME P/N : 14G152075000



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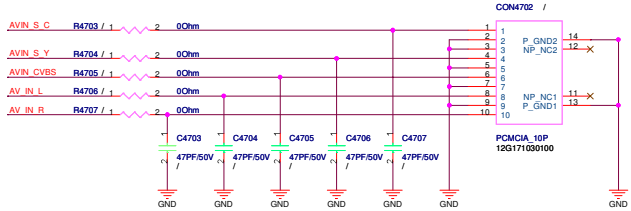

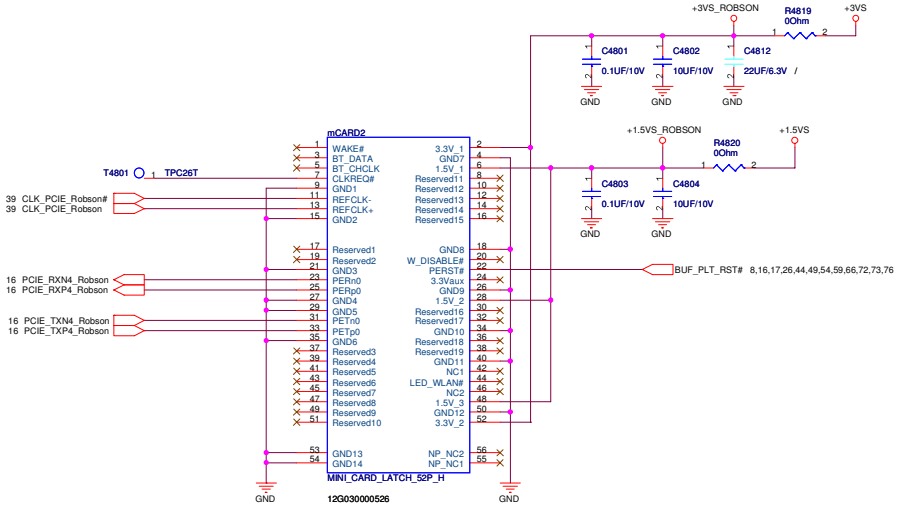

FOR ROBSON

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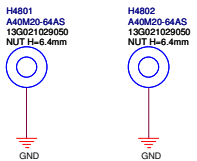
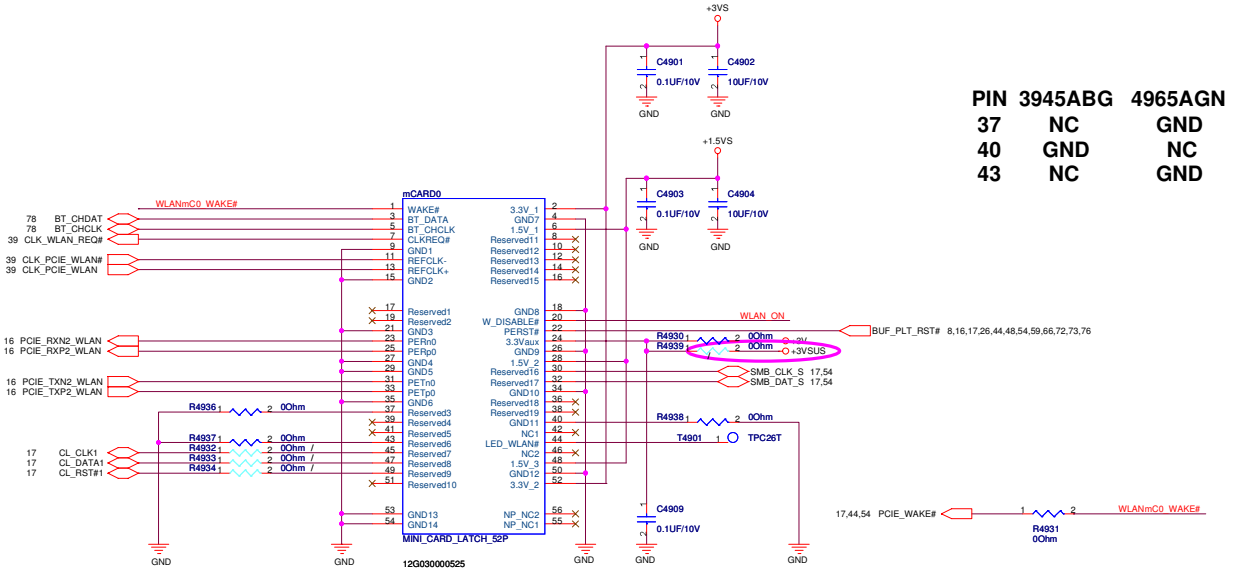


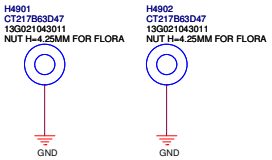
ASUSTeK COMPUTER INC. NB1	Title : MINI CARD-Robson	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 48 of 95	

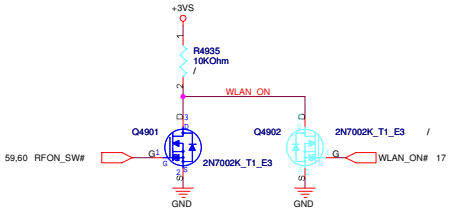


PIN	3945ABG	4965AGN
37	NC	GND
40	GND	NC
43	NC	GND

H = 6.75mm

FOR WLAN





ASUSTeK COMPUTER INC. NB1	Title : MINI CARD-Kedron		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 49 of 95		

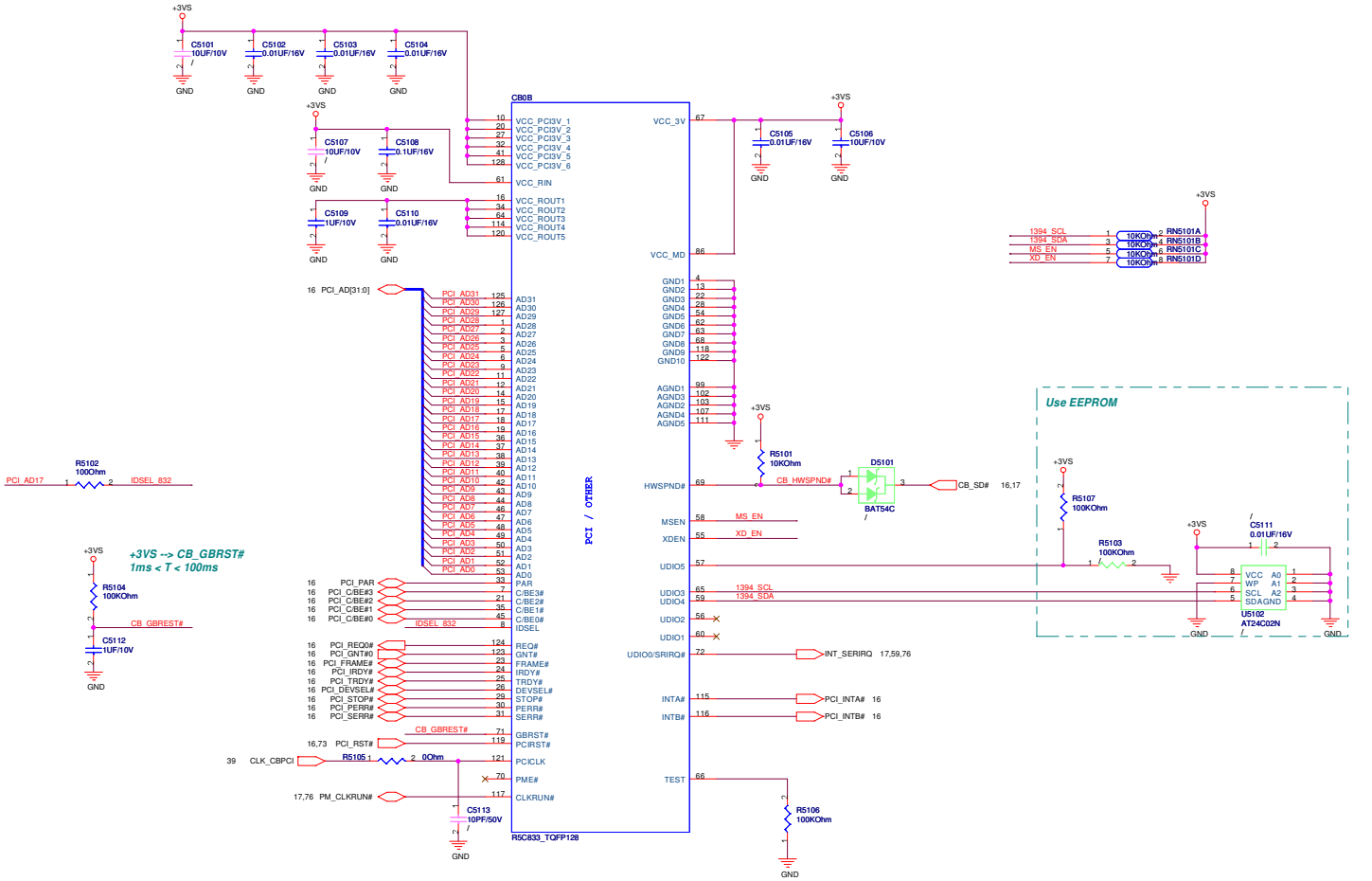
ASUSTeK COMPUTER INC

Title : Blank Page

Engineer: Frank_Xu

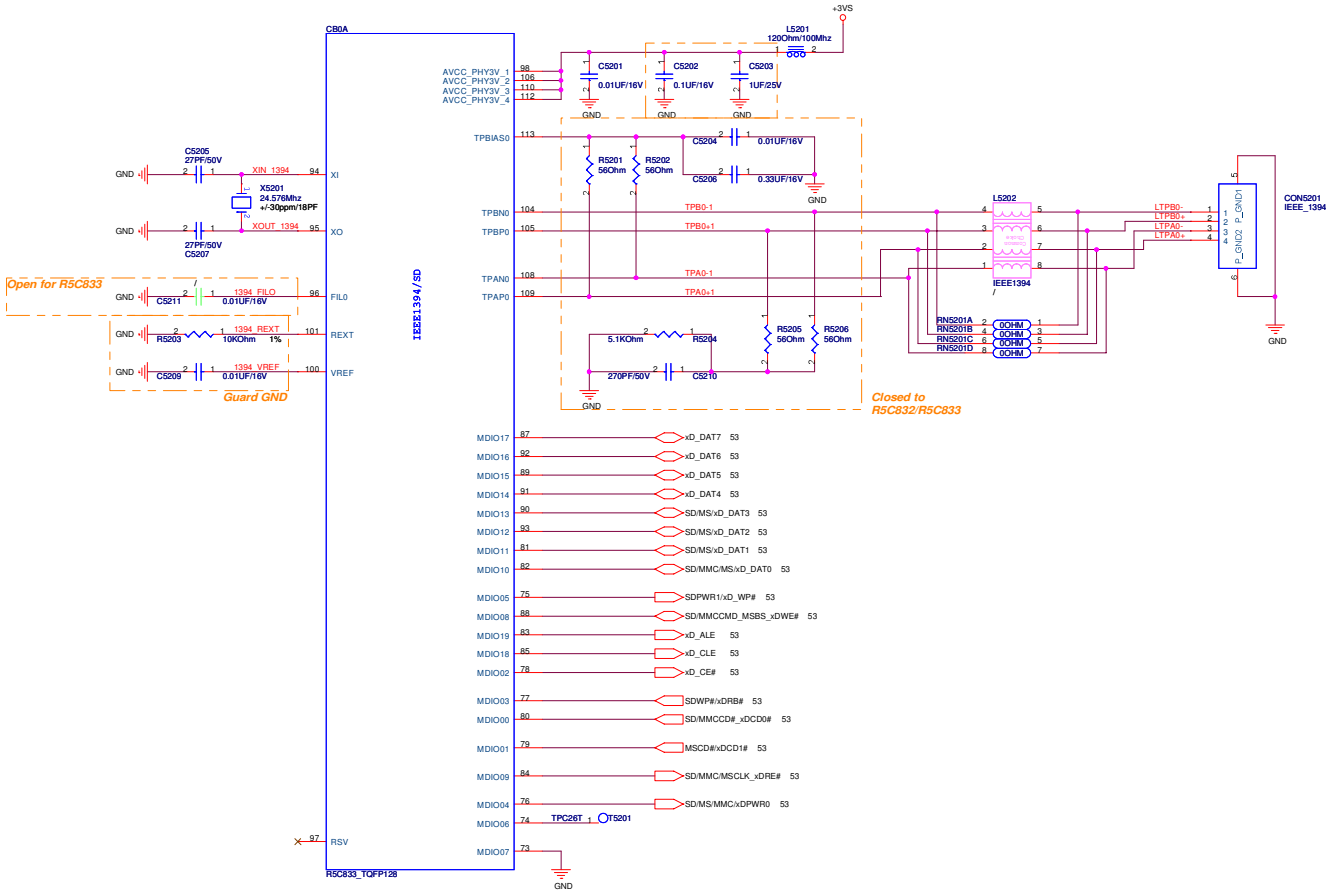
Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期六, 十一月 23, 2007 Sheet 50 of 95



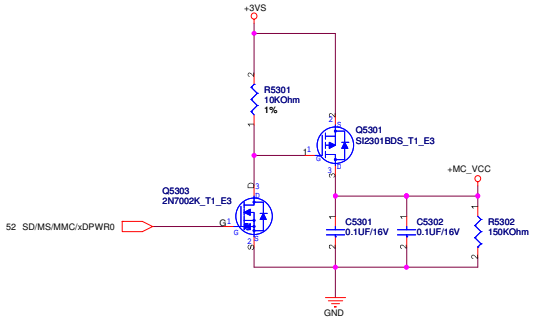
<Variant Name>

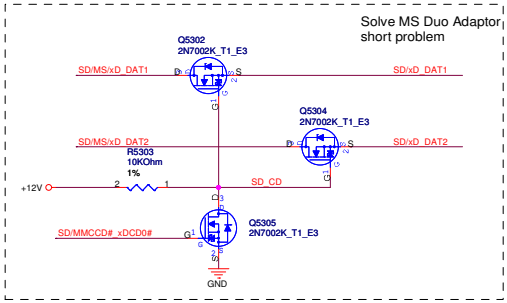
ASUSTeK COMPUTER INC. NB1	Title : CARD1394-R5C833(1)	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 51 of 95	

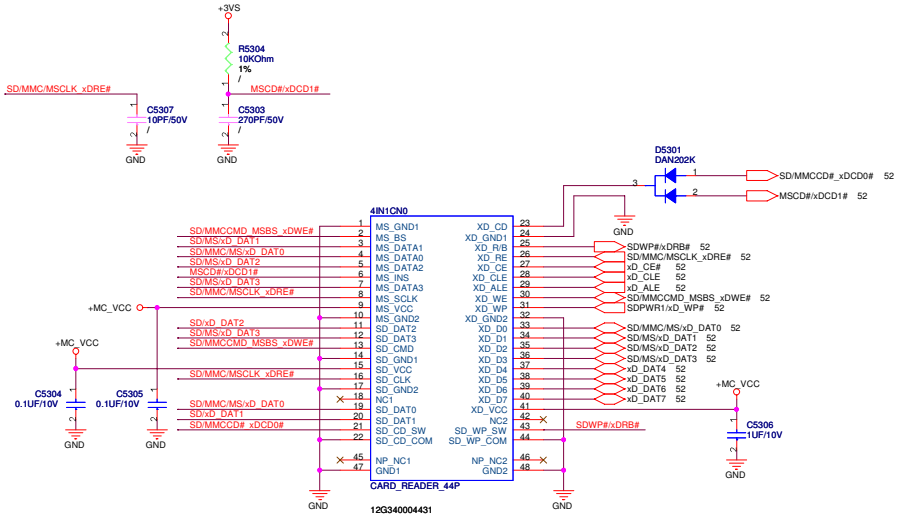


<Variant Name>

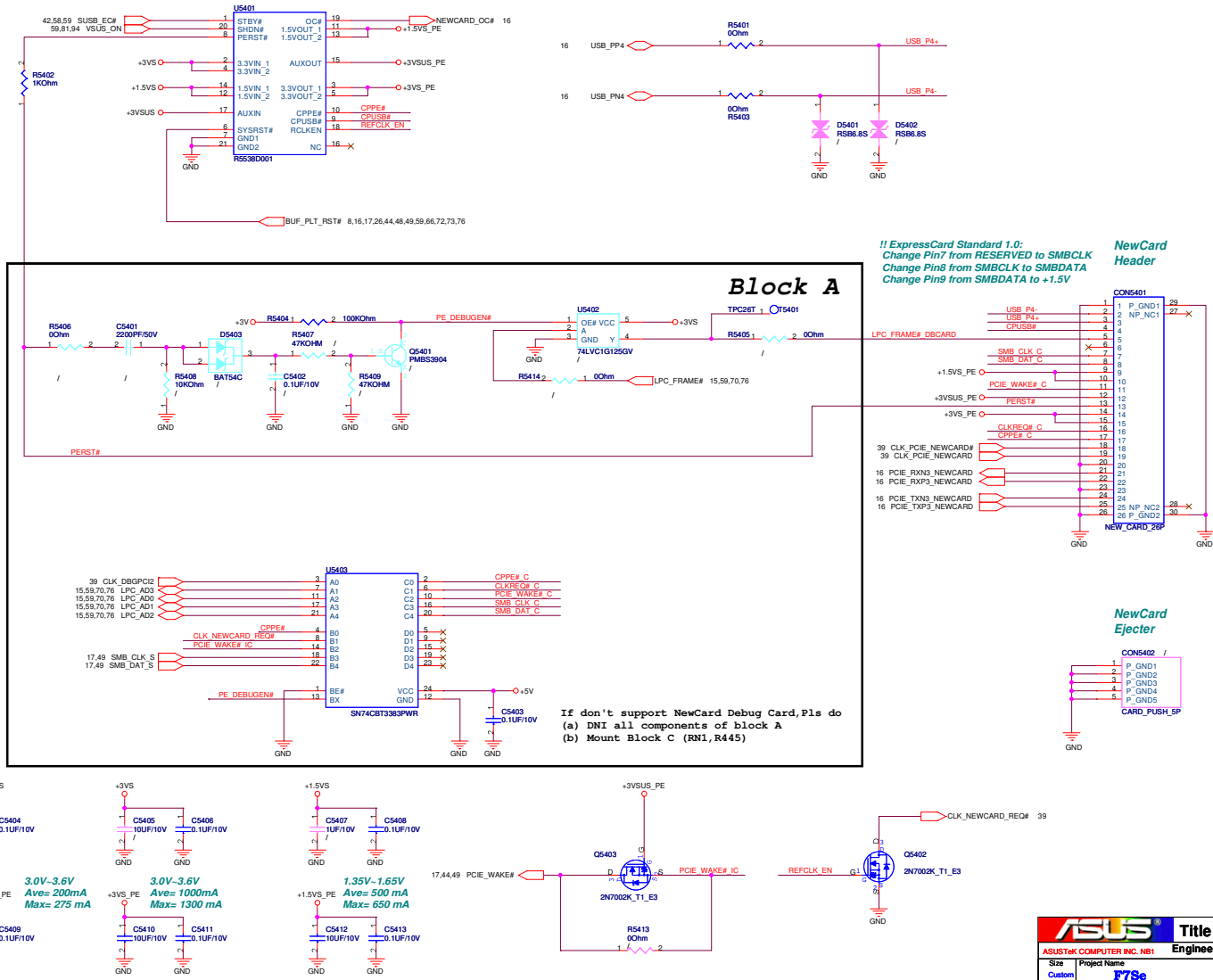
ASUSTeK COMPUTER INC. NB1	Title : CARD1394-R5C833(2)	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 52 of 95	







ASUSTeK COMPUTER INC	Title: 4 in 1 CARD READER		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 53 of 95		


U5401
42,58,59 SUSB_EC#
59,81,94 VSUS_ON
STBY#
SHDN#
PERST#
OC#
1.5VOUT_1
1.5VOUT_2
NEWCARD_OC# 16
+1.5VS_PE
+3VS
3.3VIN_1
3.3VIN_2
AUXOUT
+3VSUS_PE
+1.5VS
1.5VIN_1
1.5VIN_2
3.3VOUT_1
3.3VOUT_2
+3VS_PE
+3VSUS
AUXIN
CPPE#
CPUSB#
RCLKEN
SYSRST#
GND1
GND2
NC
R5538D001
R5402
1KOhm
GND
BUF_PLT_RST# 8,16,17,26,44,48,49,59,66,72,73,76
16 USB_PP4
USB_P4+
R5401
0Ohm
16 USB_PN4
USB_P4-
R5403
0Ohm
D5401
RSB6.8S
D5402
RSB6.8S
Block A
R5406
0Ohm
C5401
2200PF/50V
D5403
BAT54C
R5408
10KOhm
+3V
R5404
100KOhm
R5407
47KOHM
C5402
0.1UF/10V
R5409
47KOHM
Q5401
PMBS3904
PE_DEBUGEN#
PERST#
U5402
OE# VCC
A
GND Y
74LVC1G125GV
R5414
0Ohm
LPC_FRAME# 15,59,70,76
TPC26T
T5401
+3VS
R5405
0Ohm
LPC_FRAME# DBCARD
!! 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
CON5401
P_GND1
NP_NC1
USB_P4-
USB_P4+
CPUSB#
SMB_CLK_C
SMB_DAT_C
+1.5VS_PE
PCIE_WAKE#_C
+3VSUS_PE
PERST#
+3VS_PE
CLKREQ#_C
CPPE#_C
39 CLK_PCIE_NEWCARD#
39 CLK_PCIE_NEWCARD
16 PCIE_RXN3_NEWCARD
16 PCIE_RXP3_NEWCARD
16 PCIE_TXN3_NEWCARD
16 PCIE_TXP3_NEWCARD
P_GND2
NC_NC2
NEW_CARD_26P
U5403
39 CLK_DBGPCI2
15,59,70,76 LPC_AD3
15,59,70,76 LPC_AD4
15,59,70,76 LPC_AD1
15,59,70,76 LPC_AD2
CPPE#
CLK_NEWCARD_REQ#
PCIE_WAKE#_IC
17,49 SMB_CLK_S
17,49 SMB_DAT_S
A0
A1
A2
A3
A4
B0
B1
B2
B3
B4
BE#
BX
C0
C1
C2
C3
C4
D0
D1
D2
D3
D4
VCC
GND
CPPE#_C
CLKREQ#_C
PCIE_WAKE#_C
SMB_CLK_C
SMB_DAT_C
SN74CBT3383PWR
C5403
0.1UF/10V
+5V
If don't support NewCard Debug Card,Pls do
(a) DNI all components of block A
(b) Mount Block C (RN1,R445)
NewCard Ejecter
CON5402
P_GND1
P_GND2
P_GND3
P_GND4
P_GND5
CARD_PUSH_5P
+3VSUS
C5404
0.1UF/10V
+3VS
C5405
10UF/10V
C5406
0.1UF/10V
+1.5VS
C5407
1UF/10V
C5408
0.1UF/10V
3.0V~3.6V
Ave= 200mA
Max= 275 mA
3.0V~3.6V
Ave= 1000mA
Max= 1300 mA
1.35V~1.65V
Ave= 500 mA
Max= 650 mA
+3VSUS_PE
C5409
0.1UF/10V
+3VS_PE
C5410
10UF/10V
C5411
0.1UF/10V
+1.5VS_PE
C5412
10UF/10V
C5413
0.1UF/10V
+3VSUS_PE
Q5403
2N7002K_T1_E3
17,44,49 PCIE_WAKE#
PCIE_WAKE# IC
R5413
0Ohm
REFCLK_EN
Q5402
2N7002K_T1_E3
CLK_NEWCARD_REQ# 39
ASUSTeK COMPUTER INC. NB1
Title : NEWCARD
Engineer: Frank_Xu
Size
Custom
Project Name
F7Se
Rev
2.0
Date:
Sheet 54 of 95

<Variant Name>

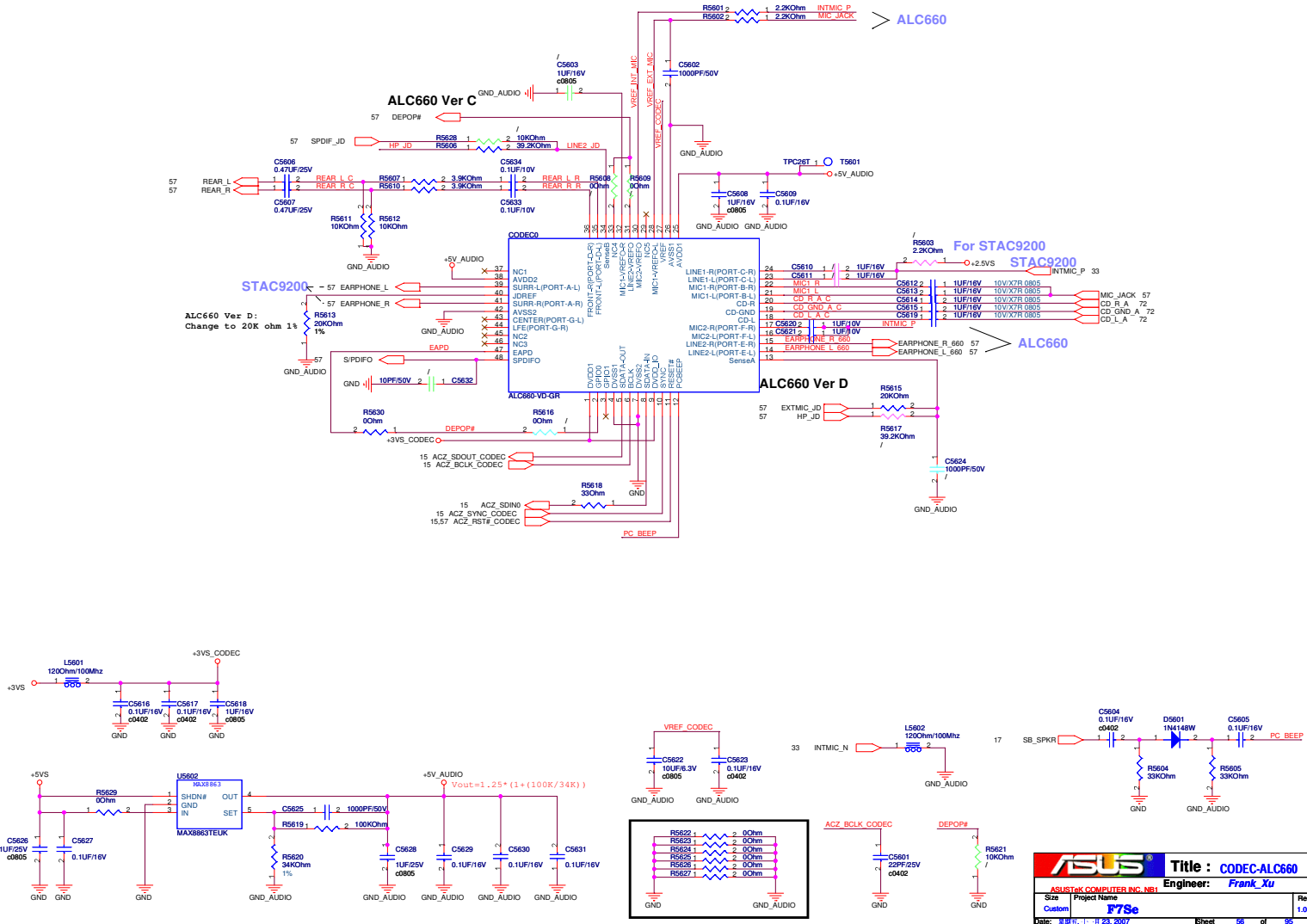
Title : Blank Page

ASUSTeK COMPUTER INC

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

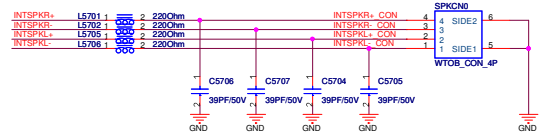
Date: 星期五, 十一月 23, 2007 Sheet 55 of 95

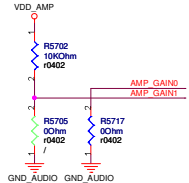


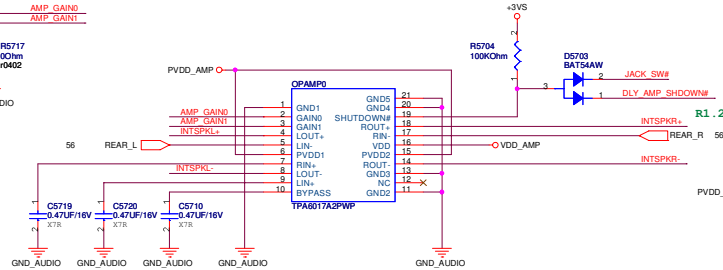
ASUSTeK COMPUTER INC. NB1	Title : CODEC-ALC660		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 1.0
Date: 星期五, 十一月 23, 2007		Sheet 56 of 95	

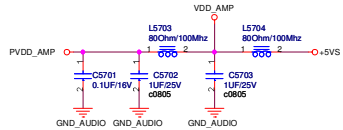
1->-6 V/V
0->NORMAL

To Internal Speaker Connector

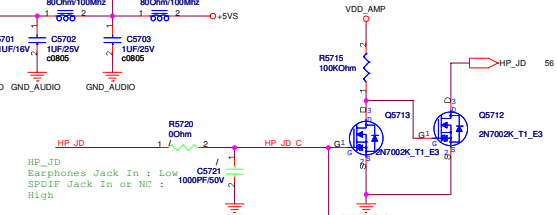


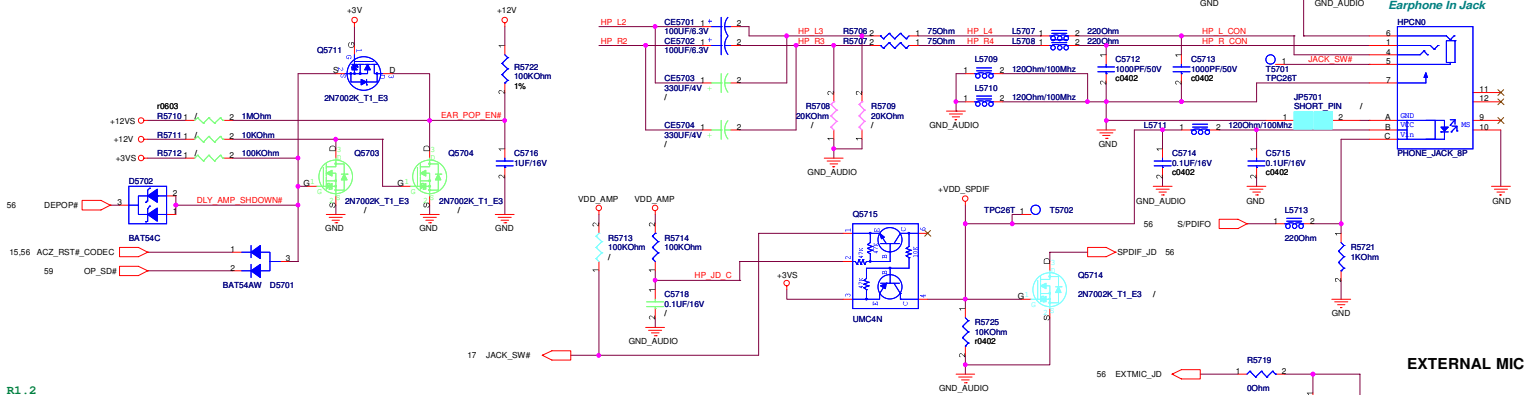




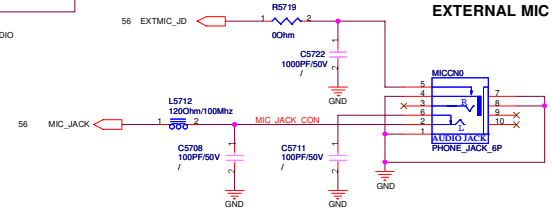


TYPE	LINE_OUT	S/PDIF_OUT	NC
HP_JD	L	H	H
JACK_SW#	L	L	H

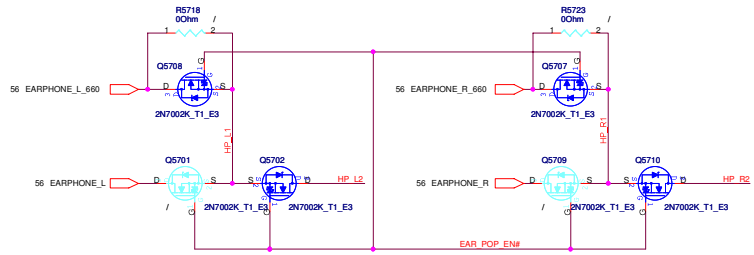




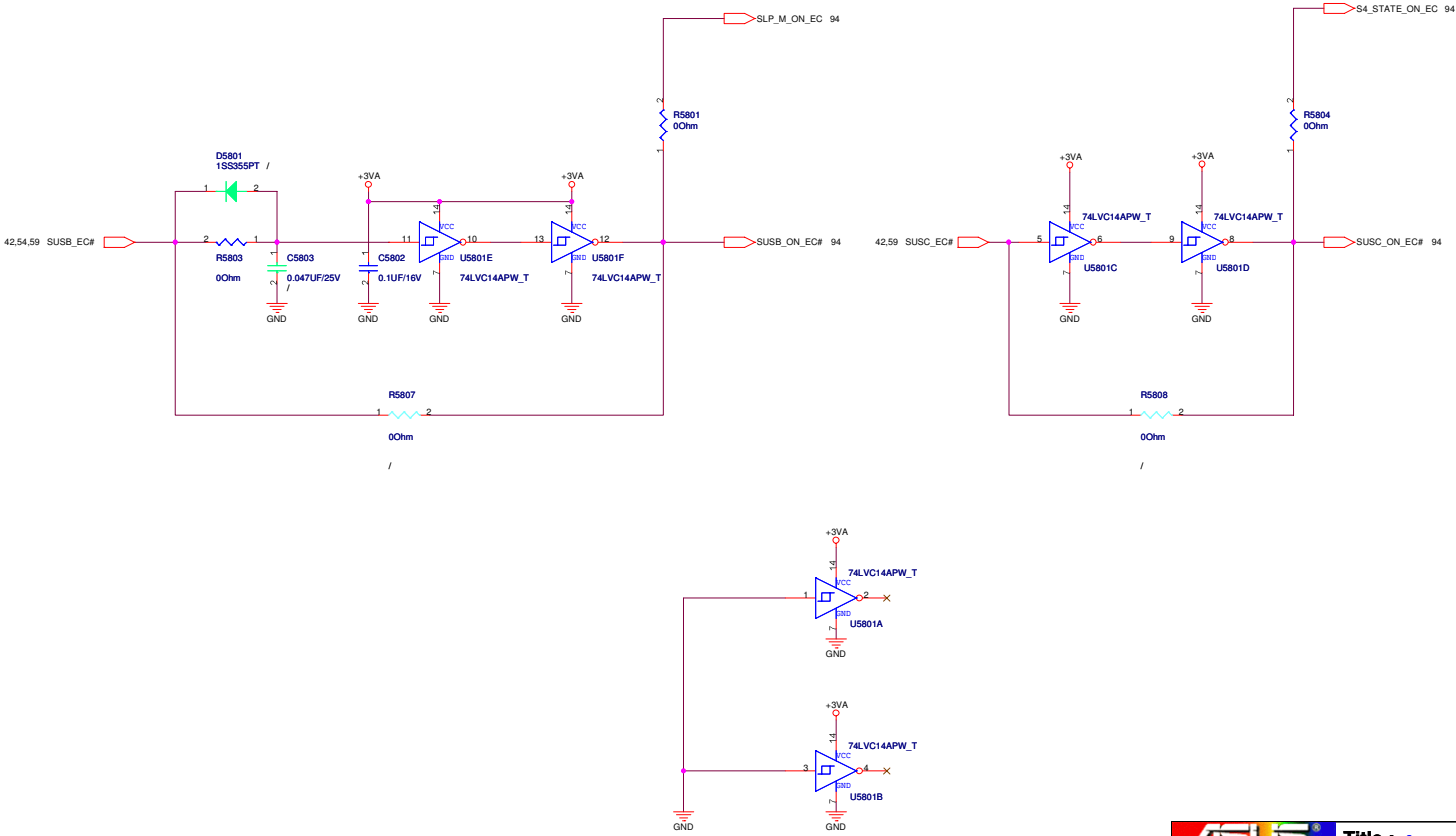
EXTERNAL MIC



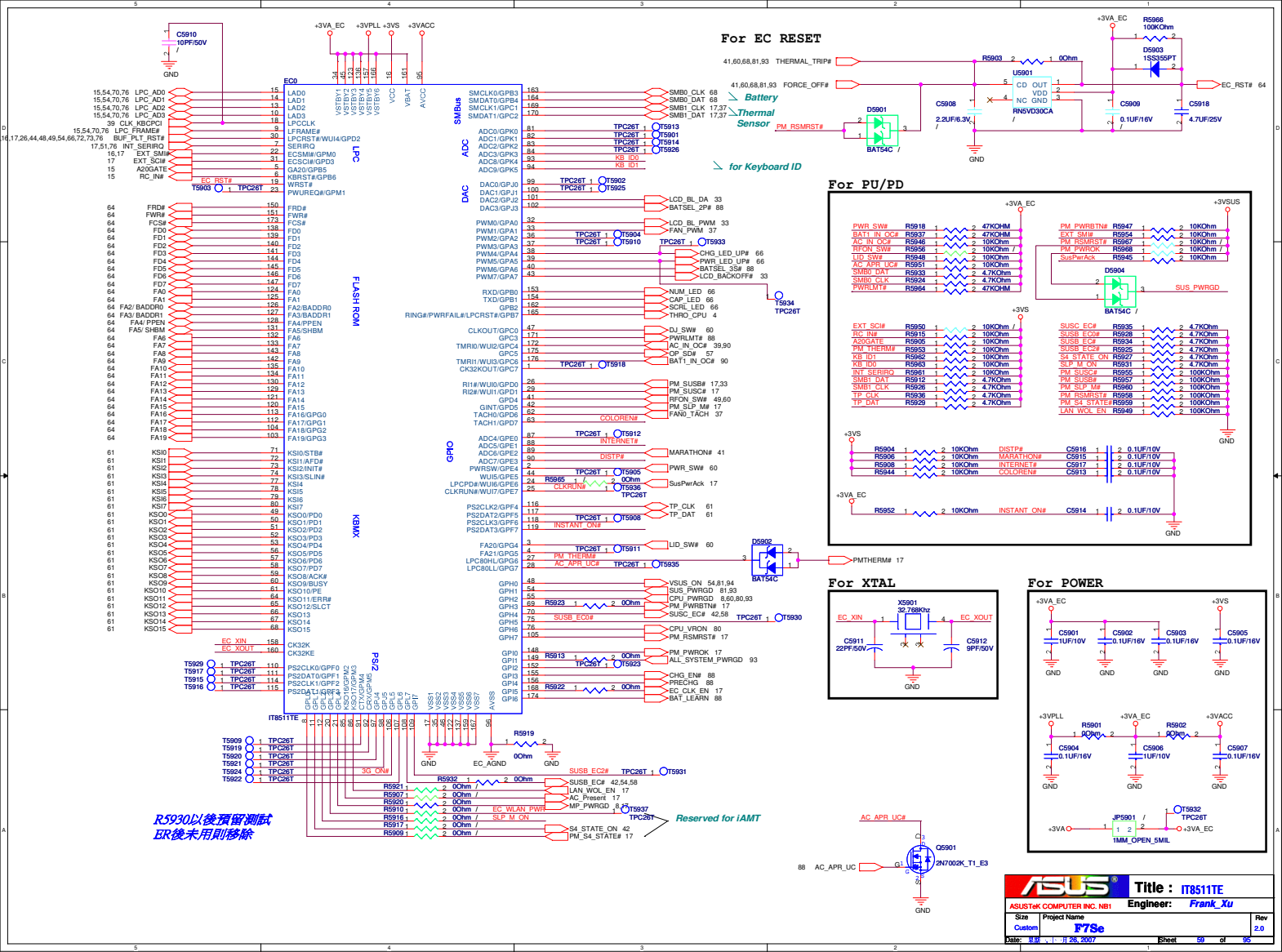
R1.2



ASUSTeK COMPUTER INC. NB1	Title : AUDIO AMP & JACK		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 57 of 95		

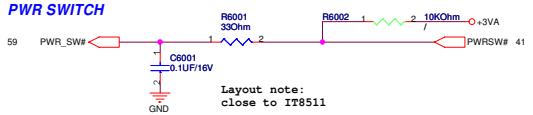


ASUSTeK COMPUTER INC	Title : Sequence Control		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 58 of 95		


For EC RESET
For PU/PD
For XTAL
For POWER
EC0
IT8511TE
KBMX
PS2
LPC
FLASH ROM
SMBus
ADC
DAC
GPIO
Battery
Thermal Sensor
for Keyboard ID
Reserved for iAMT
R5930以後預留測試
ER後未用則移除
ASUSTeK COMPUTER INC. NB1
Title : IT8511TE
Engineer: Frank_Xu
Project Name F7Se
Rev 2.0
Size Custom
Sheet 59 of 95

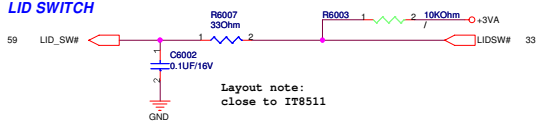
For Switch

PWR SWITCH



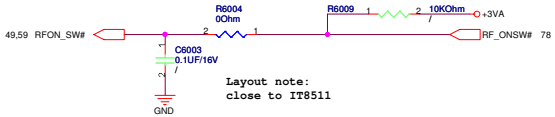
Layout note:
close to IT8511

LID SWITCH



Layout note:
close to IT8511

RF ON SWITCH

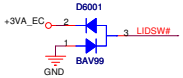


Layout note:
close to IT8511

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

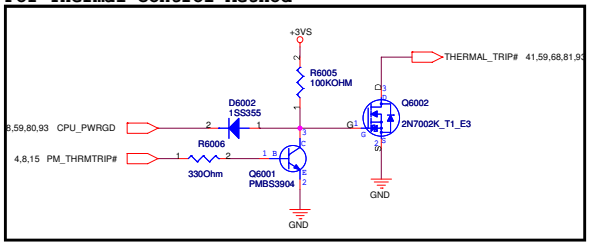
Note:

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.



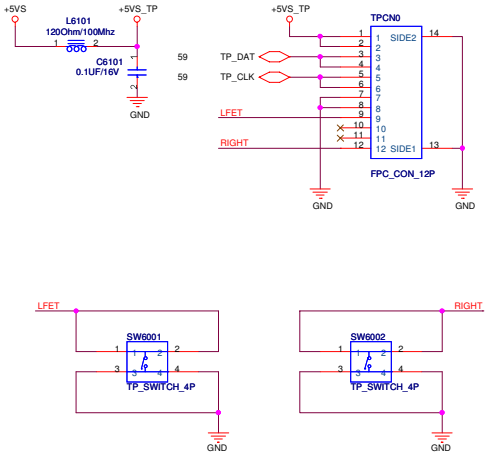
Layout note:
close to connector

For Thermal Control Method

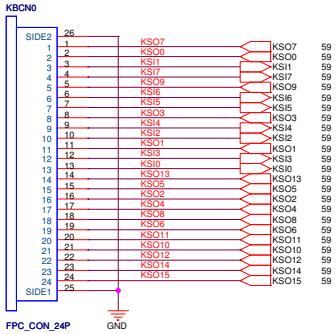


ASUSTeK COMPUTER INC	Title : Switches	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 60 of 95	

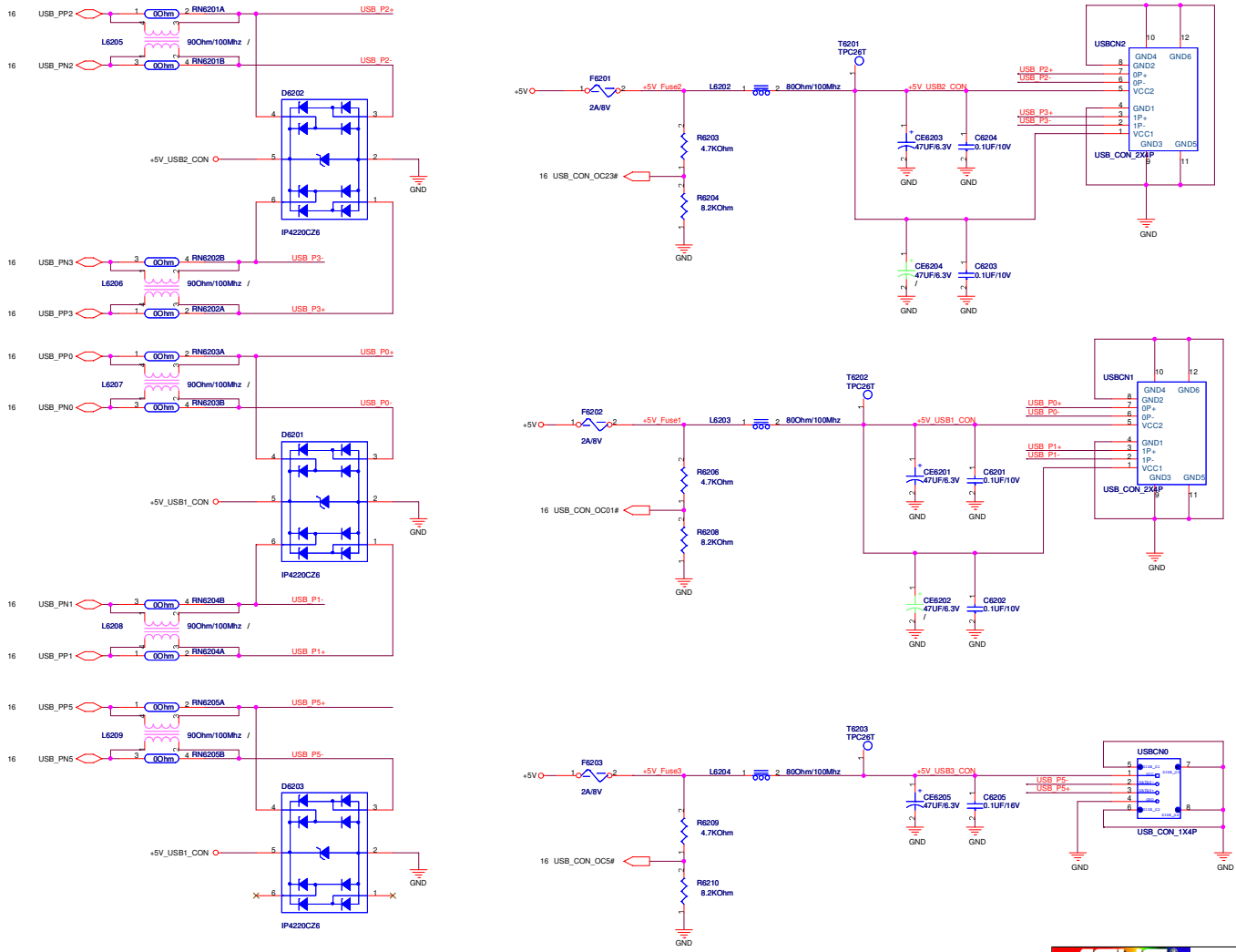
For Touch-Pad



FOR A7 K/B , Matrix B



ASUSTeK COMPUTER INC. NB1	Title : Touch Pad & KB	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 61 of 95	



ASUSTeK COMPUTER INC	Title : USB CONN		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 62 of 95		

Title : Blank Page

ASUSTeK COMPUTER INC

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期六, 十一月 23, 2007 Sheet 63 of 95

ISA ROM

EC Hardware Strapping

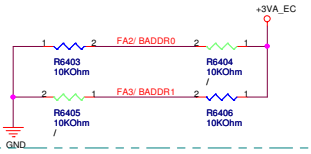
FA2/ BADDR0 & FA3/ BADDR1

00: PNPCNG Access Register Pair Are 002Eh and 002Fh

10: PNPCNG Access Register Pair Are 004Eh and 004Fh

01: PNPCNG Access Register Pair Are Determined by EC Domain Registers SWCBALR and SWCBAHR.

11: Reserved



FA4/ PPEN

0: Normal

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

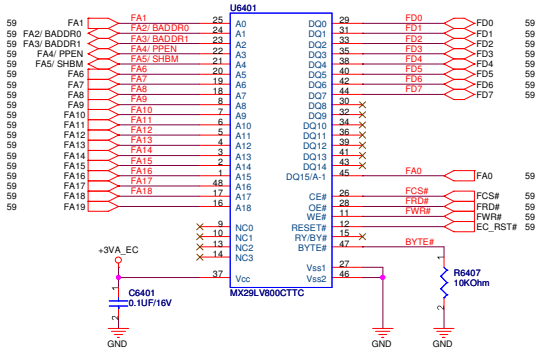
FA5/ SHBM

0: Disable Shared Memory with Host BIOS

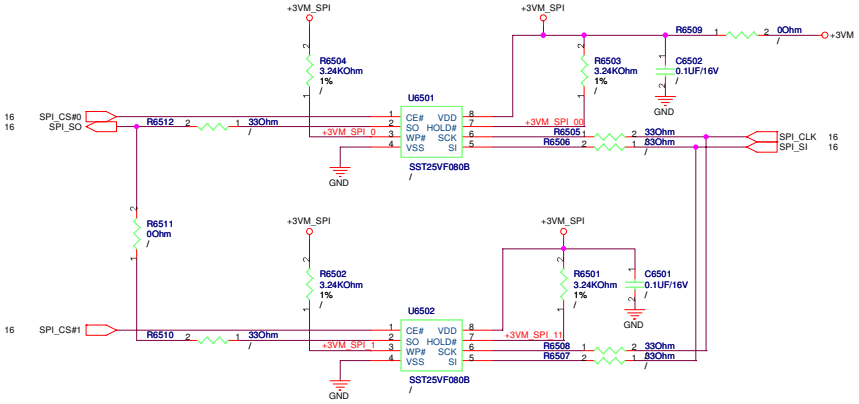
1: Enable Shared Memory with Host BIOS

Note: Sampled at VSTBY Power Up Reset

8M TSOP

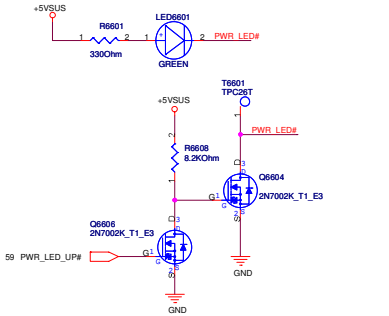


ASUSTeK COMPUTER INC. NB1	Title : ISA ROM	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 64 of 95	

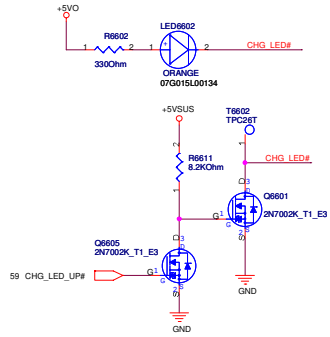


ASUSTeK COMPUTER INC. NB1	Title : SPI ROM	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 65 of 95	

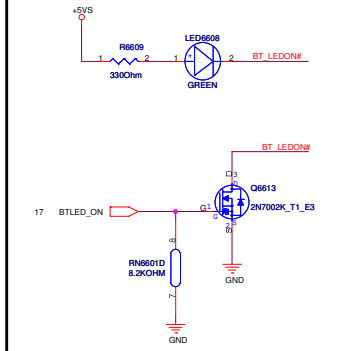
For Power LED



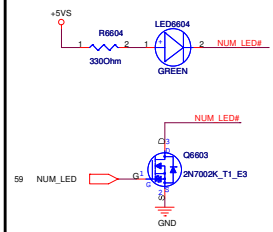
For Battery LED



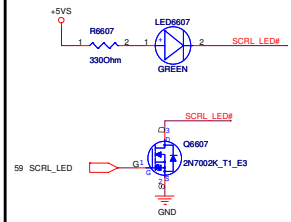
For BT LED



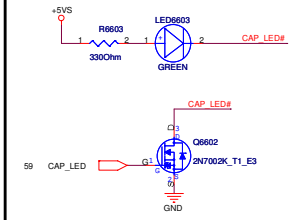
For Number Lock



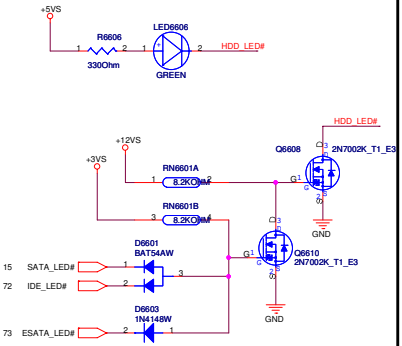
For Scroll Lock



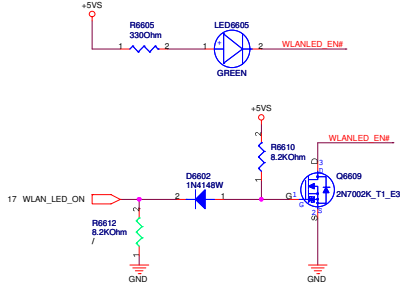
For Caps. Lock



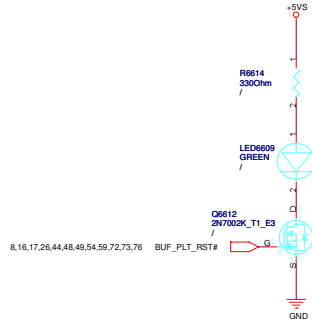
For SATA/IDE LED



For WireLess LED



Reserved LED

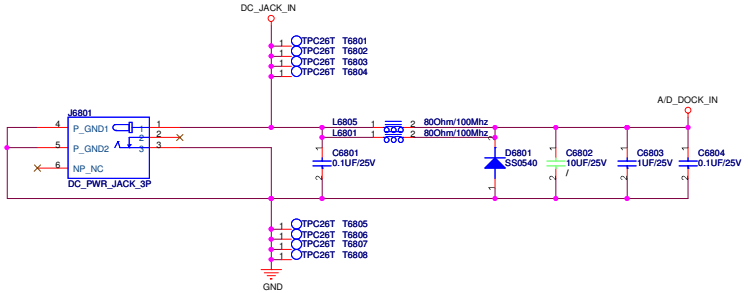


RN6601C
8.2KOhm

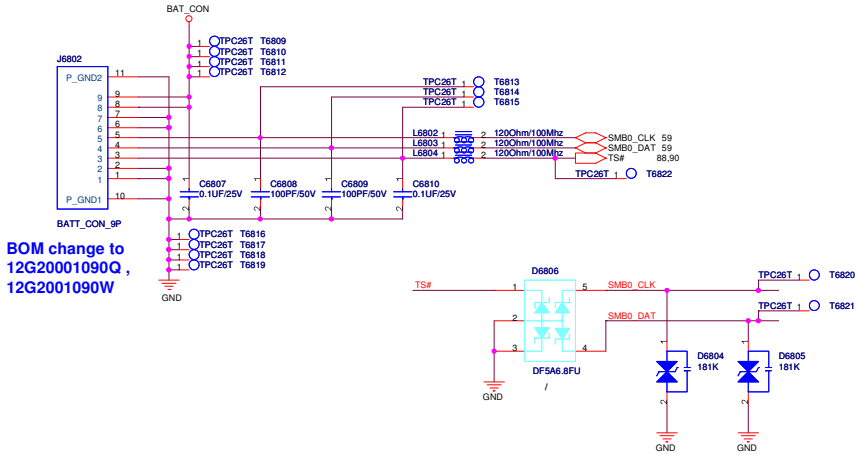
ASUSTeK COMPUTER INC	Title : LED		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 1.0
Date: 星期六, 十一月 23, 2007	Sheet 66 of 95		

Title :	Blank Page
ASUSTeK COMPUTER INC	Engineer: Frank_Xu
Size: Custom	Project Name: F7Se
Rev: 2.0	
Date: 星期五, 十一月 23, 2007	Sheet 67 of 95

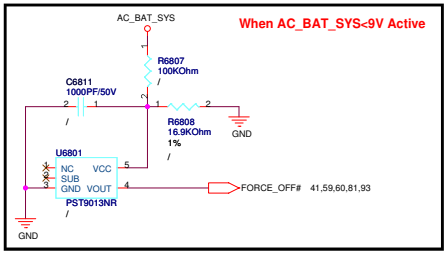
DC IN



BAT IN



Without Battery & Pull out Adapter

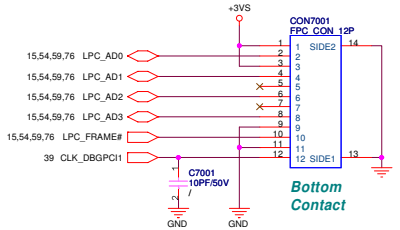


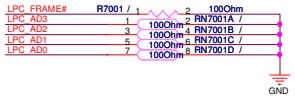
ASUSTeK COMPUTER INC. NB1	Title : DC & BAT IN		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Sc		Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 68 of 95		

Title :	Blank Page
ASUSTeK COMPUTER INC	Engineer: Frank_Xu
Size: Custom	Project Name: F7Se
Rev: 2.0	
Date: 星期五, 十一月 23, 2007	Sheet 69 of 95

For Debug

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

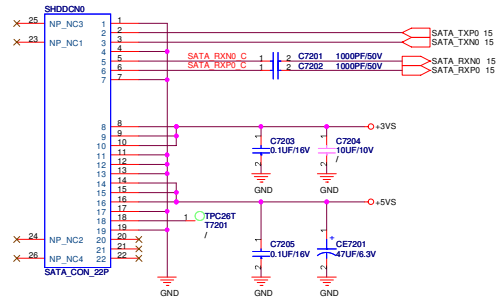




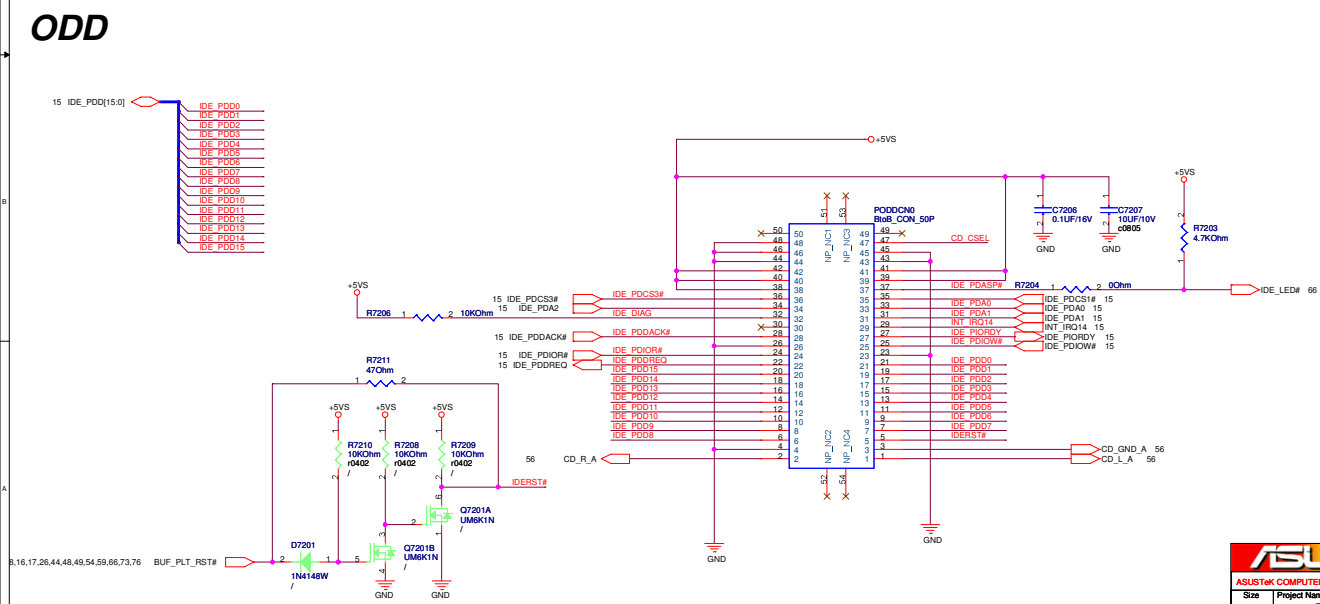
ASUSTeK COMPUTER INC	Title : Debug CONN.	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 70 of 95	

Title :	Blank Page
ASUSTeK COMPUTER INC	Engineer: Frank_Xu
Size: Custom	Project Name: F7Se
Rev: 2.0	
Date: 星期五, 十一月 23, 2007	Sheet 71 of 95

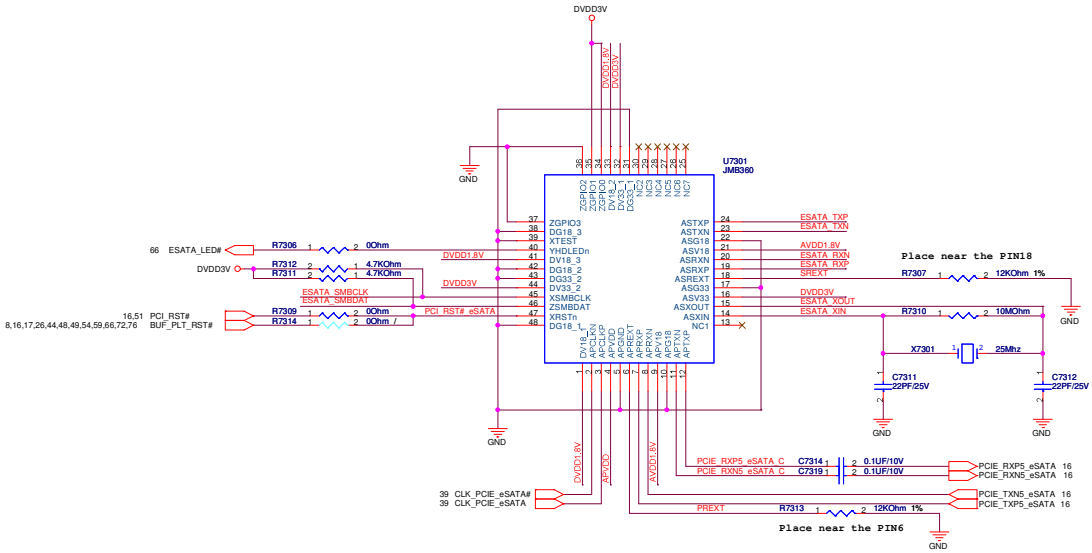
SATA HDD



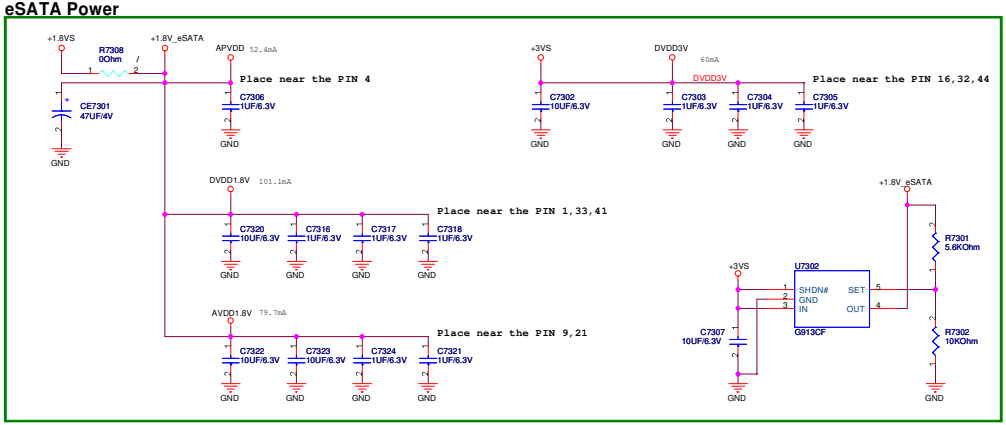
ODD



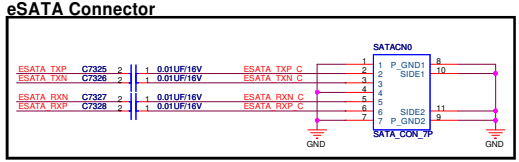
ASUSTeK COMPUTER INC. NB1	Title : SATA-HDD & ODD		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期五, 一月 23, 2007	Sheet 72 of 95		



eSATA Power

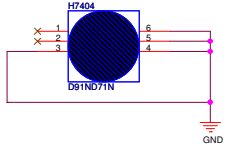


eSATA Connector

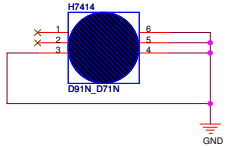


ASUSTeK COMPUTER INC. NB1	Title : eSATA		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Se		Rev: 2.0
Date: 星期五, 十一月 23, 2007	Sheet 73 of 95		

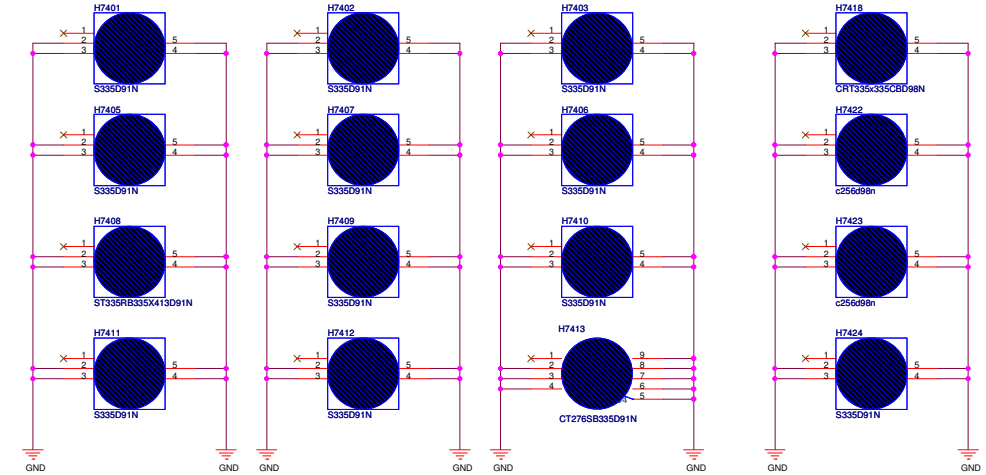
FOR LEFT UNDER



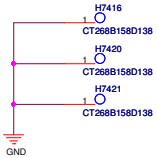
FOR RIGHT UP



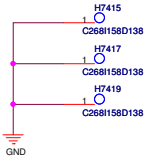
FOR SCREW HOLE

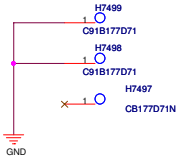


FOR CPU



FOR VGA





ASUSTeK COMPUTER INC	Title : SCREW HOLE	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 74 of 95	

Title : Blank Page

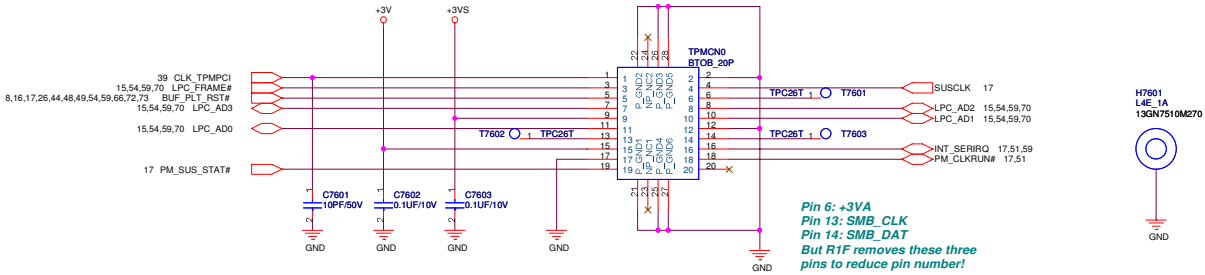
ASUSTeK COMPUTER INC

Engineer: Frank_Xu

Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期五, 十一月 23, 2007 Sheet 75 of 95

For TPM module



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

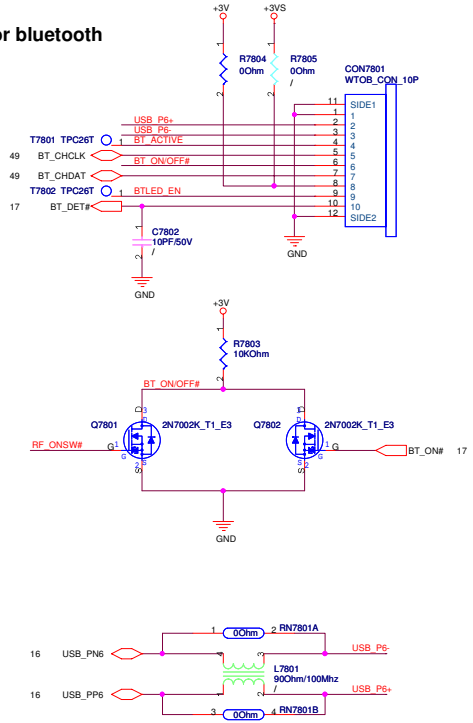
H7601
L4E_1A
13GN7510M270

GND

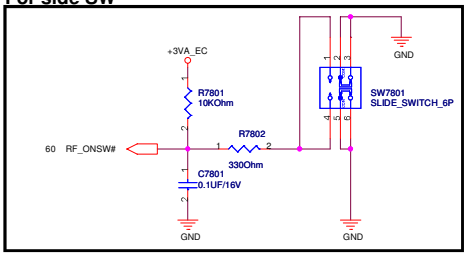
ASUSTeK COMPUTER INC	Title : TPM	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 76 of 95	

ASUSTeK COMPUTER INC	Title : SPRING	
	Engineer: Frank_Xu	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 77 of 95	

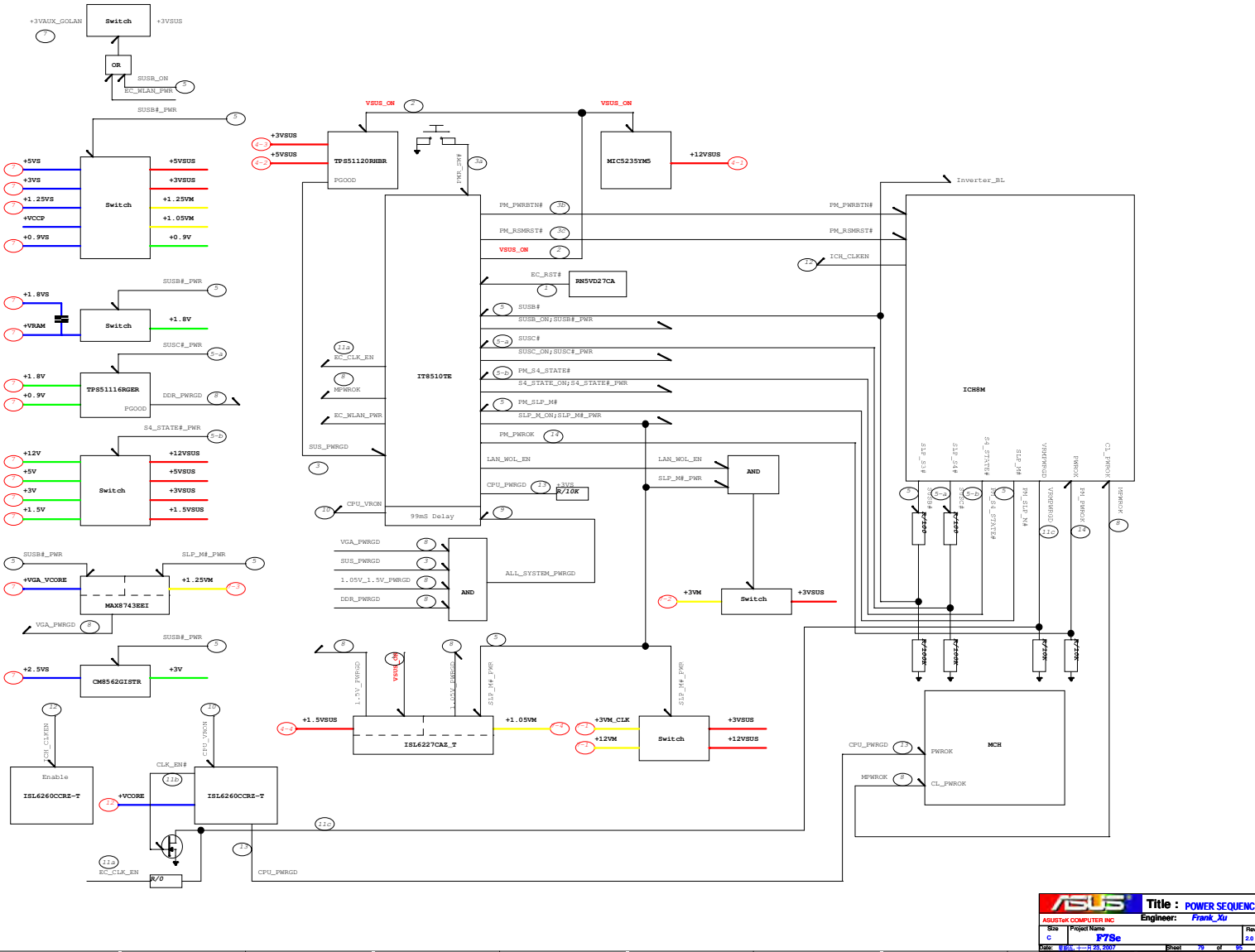
For bluetooth



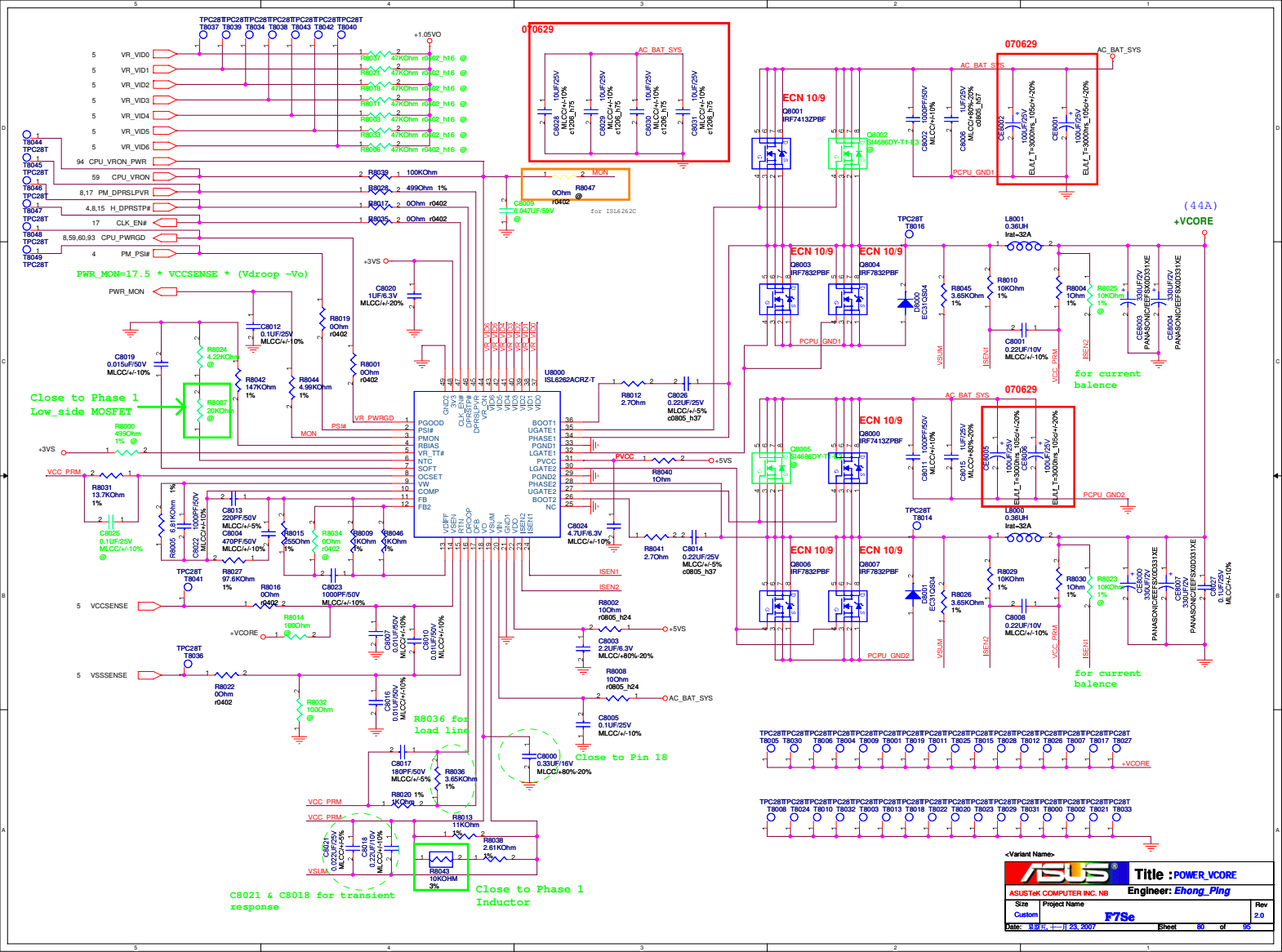
For side SW



ASUSTeK COMPUTER INC	Title : Bluetooth		
	Engineer: Frank_Xu		
Size: Custom	Project Name: F7Sc		Rev: 2.0
Date: 星期六, 十一月 23, 2007	Sheet 78 of 95		



ASUSTeK COMPUTER INC	Title : POWER SEQUENCE		
	Engineer: Frank_Xu		
Size: C	Project Name: F7Se		Rev: 2.0
Date: Wed, Jan 31, 2007	Sheet 79 of 95		


PWR_MON=17.5 * VCCSENSE * (Vdroop –Vo)
Close to Phase 1
Low_side MOSFET
R8036 for
load line
C8021 & C8018 for transient
response
Close to Phase 1
Inductor
Close to Pin 18
for current
balence
for current
balence
ECN 10/9
070629
(44A)
+VCORE
U8000
ISL6262ACRZ-T
Title : POWER_VCORE
Engineer: Ehong_Ping
ASUSTeK COMPUTER INC. NB
F7Se
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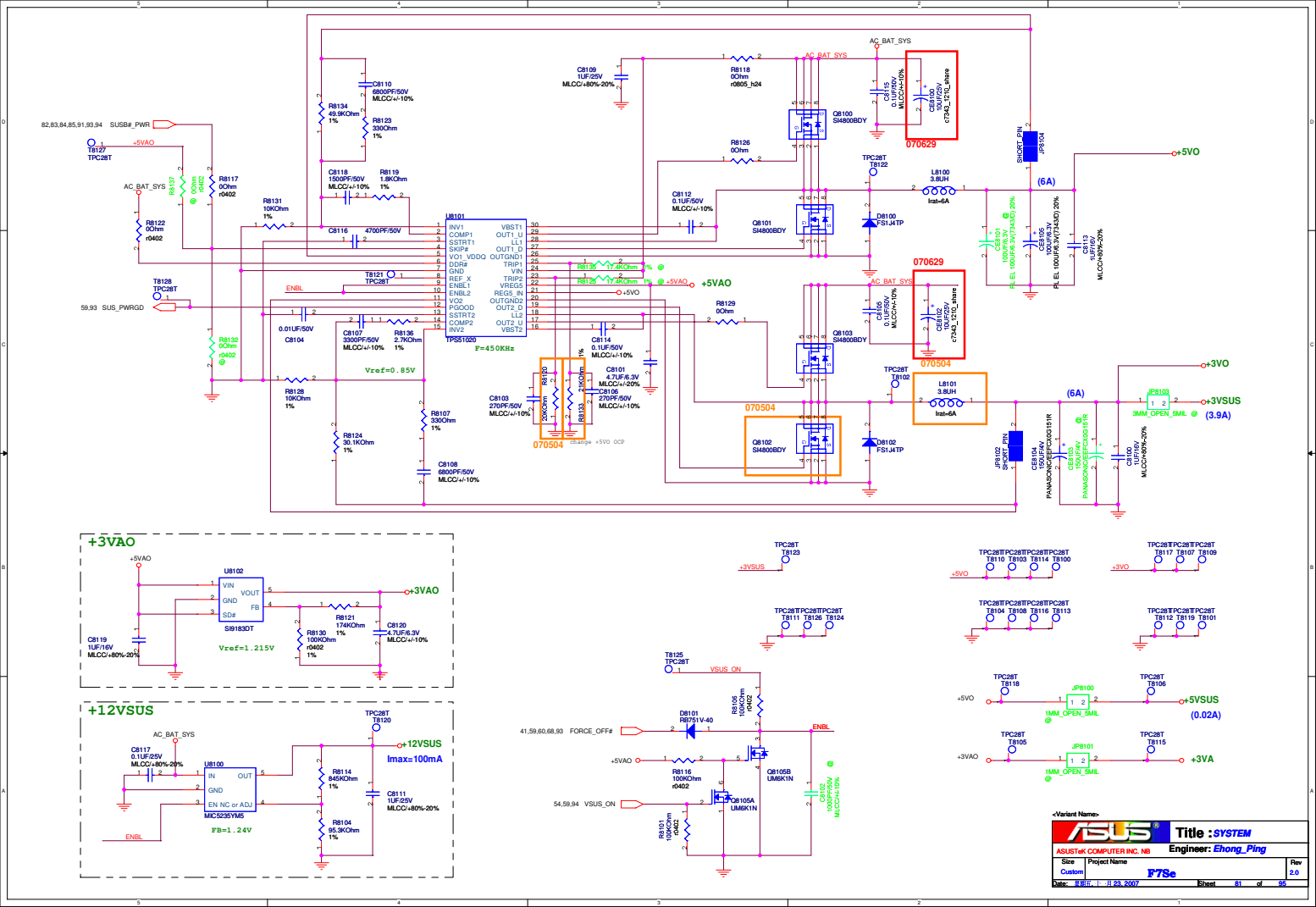
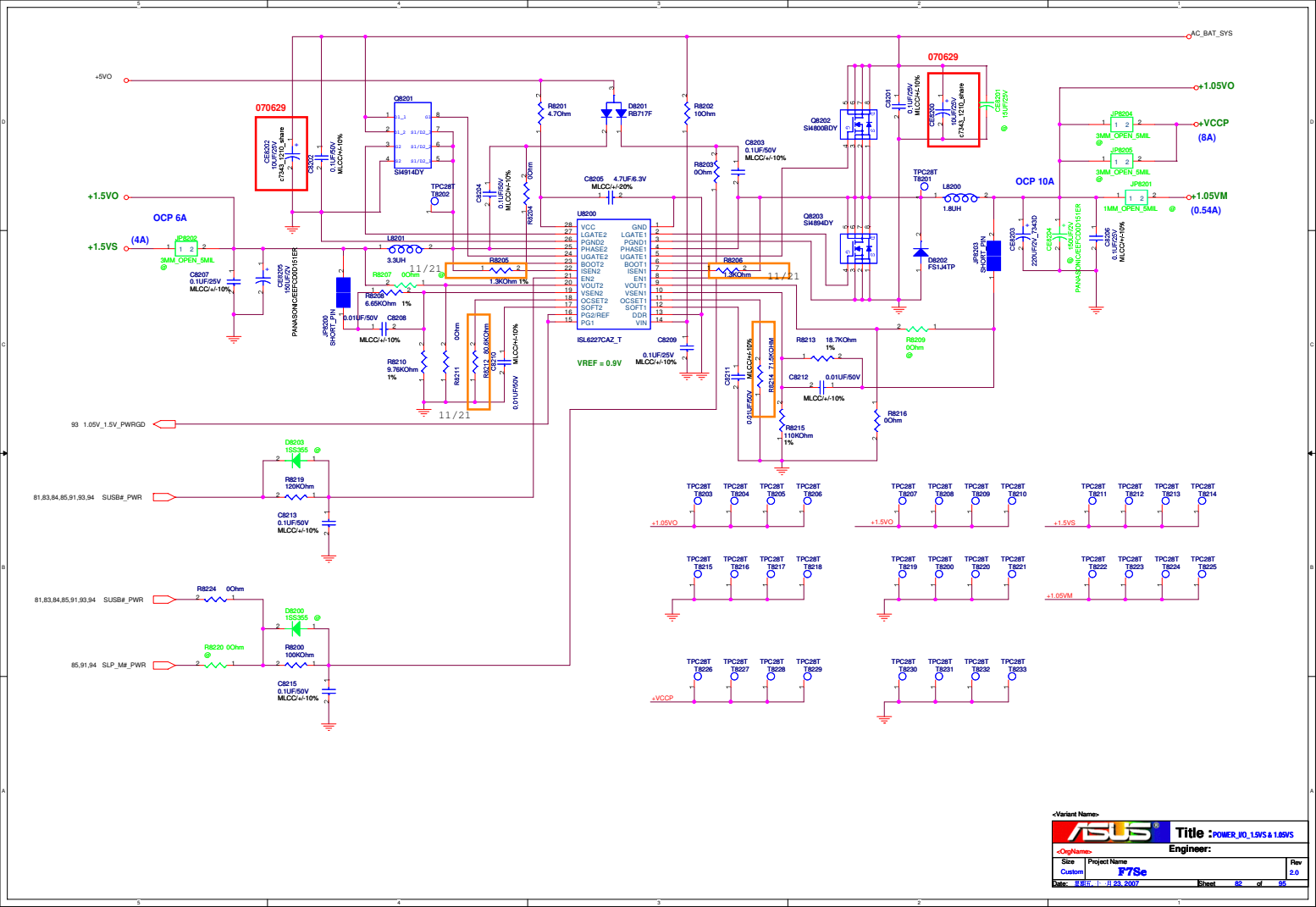

+3VAO
+5VAO
U8102
VIN
VOUT
GND
FB
SD#
SI9183DT
C8119
1UF/16V
MLCC/+80%-20%
Vref=1.215V
R8130
100KOhm
r0402
1%
R8121
174KOhm
1%
C8120
4.7UF/6.3V
MLCC/+/-10%
+12VSUS
Imax=100mA
AC_BAT_SYS
C8117
0.1UF/25V
MLCC/+80%-20%
U8100
IN
OUT
GND
EN NC or ADJ
MIC5235YM5
FB=1.24V
ENBL
R8114
845KOhm
1%
R8104
95.3KOhm
1%
C8111
1UF/25V
MLCC/+80%-20%
TPC28T
T8120
+12VSUS
TPC28T
T8123
+3VSUS
TPC28TPC28TPC28T
T8111 T8126 T8124
T8125
TPC28T
VSUS_ON
DB101
RB751V-40
R8106
100KOhm
R402
ENBL
41,59,60,68,93 FORCE_OFF#
+5VAO
R8115
100KOhm
r0402
Q8105B
UM6K1N
Q8105A
UM6K1N
54,59,94 VSUS_ON
R8101
100KOhm
0402
C8102
1000PF/50V
MLCC/+/-10%
TPC28TPC28TPC28TPC28T
T8110 T8103 T8114 T8100
+5VO
TPC28TPC28TPC28TPC28T
T8104 T8108 T8116 T8113
TPC28TPC28TPC28T
T8117 T8107 T8109
+3VO
TPC28TPC28TPC28T
T8112 T8119 T8101
TPC28T
T8118
JP8100
+5VSUS
(0.02A)
1MM_OPEN_5MIL
TPC28T
T8106
TPC28T
T8105
JP8101
+3VA
TPC28T
T8115
1MM_OPEN_5MIL
82,83,84,85,91,93,94 SUSB#_PWR
T8127
TPC28T
+5VAO
AC_BAT_SYS
R9137
0Ohm
r0402
R8117
0Ohm
r0402
R8122
0Ohm
r0402
R8131
10KOhm
1%
R8134
49.9KOhm
1%
C8110
6800PF/50V
MLCC/+/-10%
R8123
330Ohm
1%
C8118
1500PF/50V
MLCC/+/-10%
R8119
1.8KOhm
1%
C8116
4700PF/50V
T8128
TPC28T
59,93 SUS_PWRGD
ENBL
T8121
TPC28T
0.01UF/50V
C8104
R8132
0Ohm
r0402
C8107
3300PF/50V
MLCC/+/-10%
R8136
2.7KOhm
1%
Vref=0.85V
R8128
10KOhm
1%
R8124
30.1KOhm
1%
R8107
330Ohm
1%
C8108
680PF/50V
MLCC/+/-10%
U8101
INV1
COMP1
SSTRT1
SKIP#
VOI_VDDQ
DDR#
GND
REF_X
ENBL1
ENBL2
VO2
PGOOD
SSTRT2
COMP2
INV2
VBST1
OUT1_U
LL1
OUT1_D
OUTGND1
TRIP1
VIN
TRIP2
VREG5
REG5_IN
OUTGND2
OUT2_D
LL2
OUT2_U
VBST2
TPS51020
F=450KHz
C8109
1UF/25V
MLCC/+80%-20%
R8118
0Ohm
r0805_h24
R8126
0Ohm
C8112
0.1UF/50V
MLCC/+/-10%
R8136 1%
R8129 1%
R8129
0Ohm
R8107
250KOhm
R8133
115KOhm
1%
C8103
270PF/50V
MLCC/+/-10%
C8114
0.1UF/50V
MLCC/+/-10%
C8101
4.7UF/6.3V
MLCC/+/-20%
C8106
270PF/50V
MLCC/+/-10%
change +5VO OCP
070504
AC_BAT_SYS
C8115
0.1UF/50V
MLCC/+/-10%
CE8100
470UF/25V
c7343_12TL_share
070629
Q8100
SI4800BDY
Q8101
SI4800BDY
Q8103
SI4800BDY
Q8102
SI4800BDY
D8100
FSIJ4TP
D8102
FSIJ4TP
TPC28T
T8122
TPC28T
T8102
L8100
3.8UH
Irat=6A
L8101
3.8UH
Irat=6A
(6A)
JP8102
SHORT PIN
JP8104
SHORT PIN
+5VO
+3VO
+3VSUS
(3.9A)
JP8103
3MM_OPEN_5MIL
CE8101
100UF/6.3V(7343D) 20%
CE8105
100UF/6.3V
PL EL 100UF/6.3V(7343D) 20%
CE8113
100UF/6.3V
MLCC/+80%-20%
CE8102
150UF/16V
PANASONICEEFCX0G151R
CE8103
150UF/16V
PANASONICEEFCX0G151R
C8100
0.1UF/50V
MLCC/+80%-20%

<Variant Name>
ASUSTeK COMPUTER INC. NB
Title : SYSTEM
Engineer: Ehong_Ping
Size
Custom
Project Name
F7Se
Rev
2.0
Date: 星期五, 六月 23, 2007
Sheet 81 of 95



<Variant Name>

ASUS

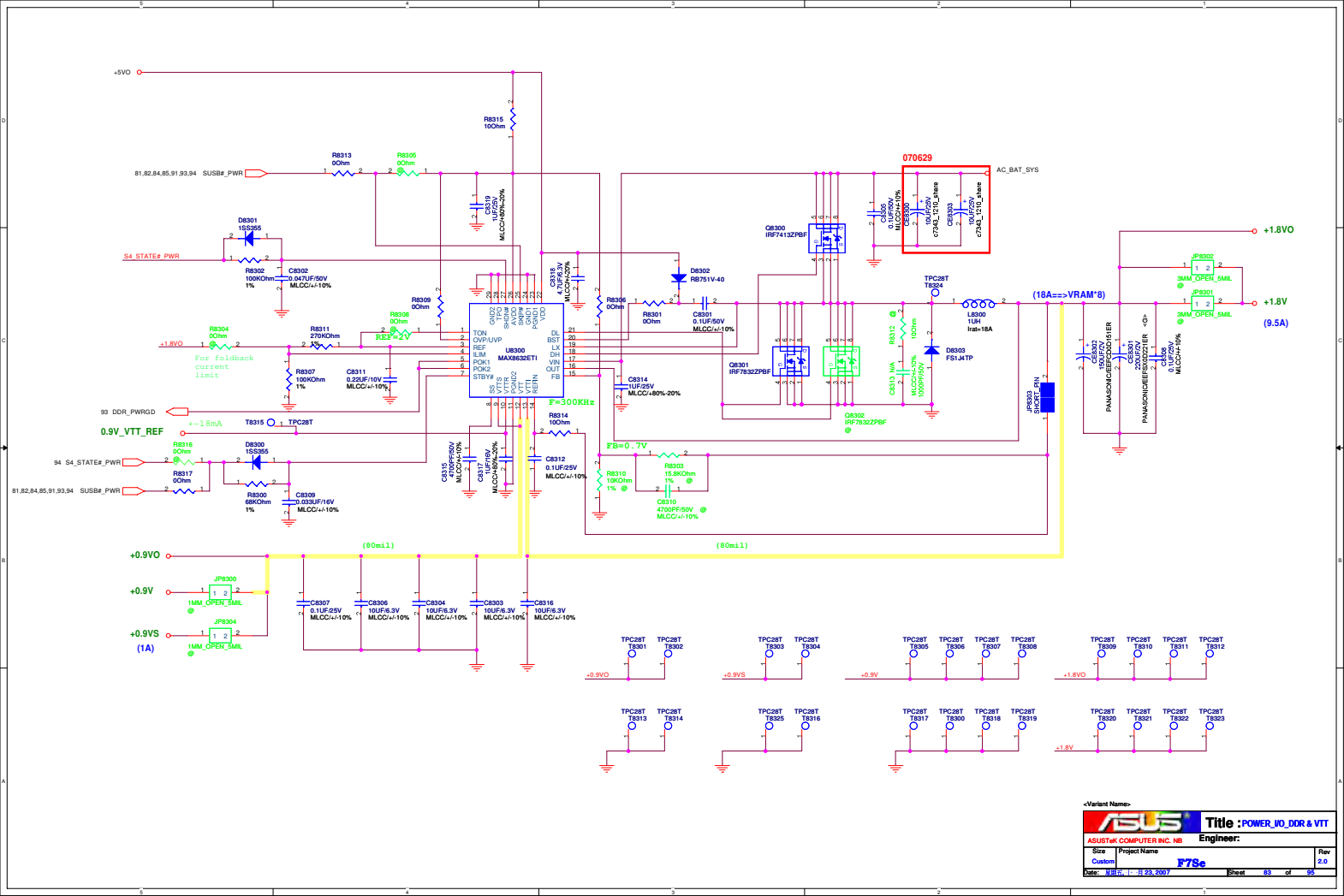
Title : POWER_I/O_1.5VS & 1.05VS

<OrgName>

Engineer:

Size	Project Name	Rev
Custom	F7Se	2.0

Date: 星期五, 十一月 23, 2007 Sheet 82 of 95


+5VO
R8315 10Ohm
R8313 0Ohm
R8305 0Ohm
81,82,84,85,91,93,94 SUSB#_PWR
C8319 1UF/25V MLCC/+/-10%
070629
AC_BAT_SYS
D8301 1SS355
S4_STATE#_PWR
R8302 100KOhm 1%
C8302 0.047UF/50V MLCC/+/-10%
Q8300 IRF7413ZPBF
C8305 0.1UF/50V MLCC/+/-10%
C8300 10uF/25V c7343_1210_short
C8303 10uF/25V c7343_1210_short
C8307 10uF/25V c7343_1210_short
+1.8VO
JP8302 3MM_OPEN_5MIL
JP8301 3MM_OPEN_5MIL
+1.8V
(9.5A)
R8309 0Ohm
R8308 0Ohm
REF=2V
R8304 0Ohm
R8311 270KOhm
For foldback current limit
R8307 100KOhm 1%
C8311 0.22UF/10V MLCC/+/-10%
U8300 MAX8632ETI
TON OVP/UVP REF ILIM POK1 POK2 STBY#
GND TPC SHDN# VCC SKIP# PGND1 PGND2 VDD
DL BST LX DH VIN OUT FB
C8315 4.7UF/6.3V MLCC/+/-20%
D8302 RB751V-40
R8306 0Ohm
R8301 0Ohm
C8301 0.1UF/50V MLCC/+/-10%
C8314 1UF/25V MLCC/+80%-20%
F=300KHz
Q8301 IRF7832ZPBF
Q8302 IRF7832ZPBF
TPC28T TS324
L8300 1UH Irat=18A
D8303 FS1J4TP
R8312 10Ohm
C8313 N/A
(18A==>VRAM*8)
JP8303 SHORT_PIN
C8302 PANASONICEEFSX0D221ER
C8301 PANASONICEEFSX0D221ER
C8304 0.1UF/25V MLCC/+/-10%
93 DDR_PWRGD
+-18mA
T8315 TPC28T
0.9V_VTT_REF
R8316 0Ohm
D8300 1SS355
94 S4_STATE#_PWR
R8317 0Ohm
81,82,84,85,91,93,94 SUSB#_PWR
R8300 68KOhm 1%
C8309 0.033UF/16V MLCC/+/-10%
C8315 4700PF/50V MLCC/+/-10%
C8312 0.1UF/25V MLCC/+/-10%
R8314 10Ohm
C8317 1UF/16V MLCC/+80%-20%
FB=0.7V
R8310 10KOhm 1%
R8303 15.8KOhm 1%
C8310 4700PF/50V MLCC/+/-10%
(80mil)
(80mil)
+0.9VO
+0.9V
JP8300 1MM_OPEN_5MIL
+0.9VS
(1A)
JP8304 1MM_OPEN_5MIL
C8307 0.1UF/25V MLCC/+/-10%
C8306 10UF/6.3V MLCC/+/-10%
C8304 10UF/6.3V MLCC/+/-10%
C8303 10UF/6.3V MLCC/+/-10%
C8316 10UF/6.3V MLCC/+/-10%
TPC28T T8301
TPC28T T8302
TPC28T T8303
TPC28T T8304
TPC28T T8305
TPC28T T8306
TPC28T T8307
TPC28T T8308
TPC28T T8309
TPC28T T8310
TPC28T T8311
TPC28T T8312
TPC28T T8313
TPC28T T8314
TPC28T T8315
TPC28T T8316
TPC28T T8317
TPC28T T8318
TPC28T T8319
TPC28T T8320
TPC28T T8321
TPC28T T8322
TPC28T T8323
+1.8VO
+0.9VO
+0.9VS
+0.9V
+1.8V
<Variant Name>
ASUSTeK COMPUTER INC. NB
Title : POWER_I/O_DDR & VTT
Engineer:
Size Custom
Project Name F7Se
Rev 2.0
Date: 年/月/日 - 十月 23, 2007
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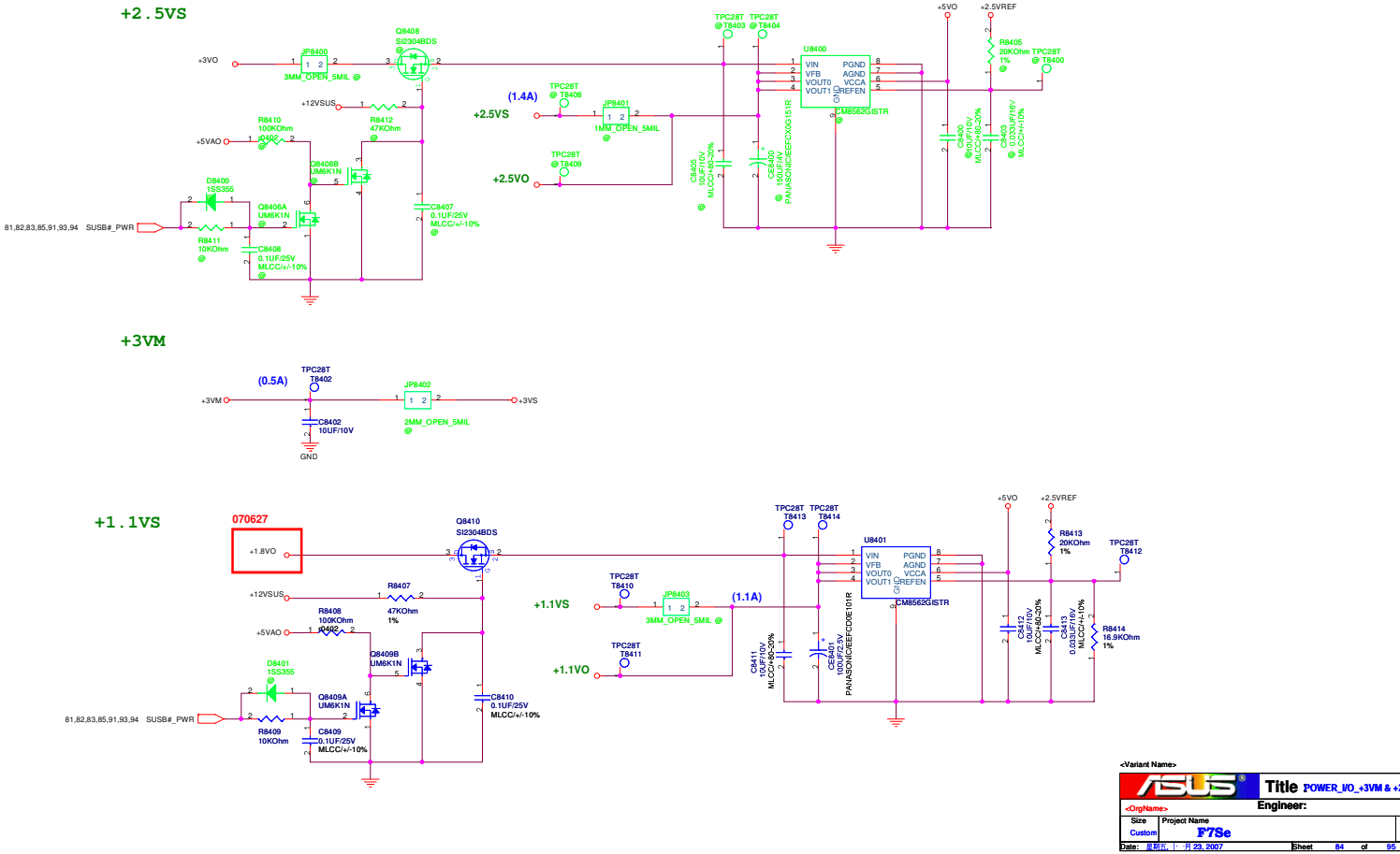
+2.5VS
+3VO
JP8400
3MM_OPEN_5MIL @
Q8408
SI2304BDS
+12VSUS
R8410
100KOhm
R8412
47KOhm
+5VAO
Q8408B
UM6K1N
D8400
1SS355
Q8408A
UM6K1N
81,82,83,85,91,93,94 SUSB#_PWR
R8411
10KOhm
C8408
0.1UF/25V
MLCC/+/-10%
C8407
0.1UF/25V
MLCC/+/-10%
(1.4A)
+2.5VO
TPC28T
@ T8408
JP8401
1MM_OPEN_5MIL
TPC28T
@ T8409
TPC28T
@ T8403
TPC28T
@ T8404
U8400
VIN
VFB
VOUT0
VOUT1
PGND
AGND
VCCA
VREFIN
CM8562GISTR
C8405
10UF/10V
MLCC/+/-20%
C8406
1000UF/2.5V
PANASONIC/EEFCX0G151R
+5VO
+2.5VREF
R8405
20KOhm
1%
TPC28T
@ T8400
C8402
0.1UF/10V
MLCC/+/-20%
C8403
0.033UF/16V
MLCC/+/-10%
+3VM
(0.5A)
+3VM
TPC28T
T8402
JP8402
2MM_OPEN_5MIL
+3VS
C8402
10UF/10V
GND
+1.1VS
070627
+1.8VO
Q8410
SI2304BDS
+12VSUS
R8407
47KOhm
1%
R8408
100KOhm
+5VAO
Q8409B
UM6K1N
D8401
1SS355
Q8409A
UM6K1N
81,82,83,85,91,93,94 SUSB#_PWR
R8409
10KOhm
C8409
0.1UF/25V
MLCC/+/-10%
C8410
0.1UF/25V
MLCC/+/-10%
TPC28T
T8410
JP8403
3MM_OPEN_5MIL @
(1.1A)
+1.1VO
TPC28T
T8411
TPC28T
T8413
TPC28T
T8414
U8401
VIN
VFB
VOUT0
VOUT1
PGND
AGND
VCCA
VREFIN
CM8562GISTR
C8411
10UF/10V
MLCC/+/-20%
C8412
10UF/10V
MLCC/+/-20%
C8413
0.033UF/16V
MLCC/+/-10%
R8413
20KOhm
1%
TPC28T
T8412
R8414
16.9KOhm
1%
<Variant Name>
Title POWER_I/O_+3VM & +2.5VS
<OrgName>
Engineer:
Size
Custom
Project Name
F7Se
Rev
2.0
Date: 星期六, 十一月 03, 2007
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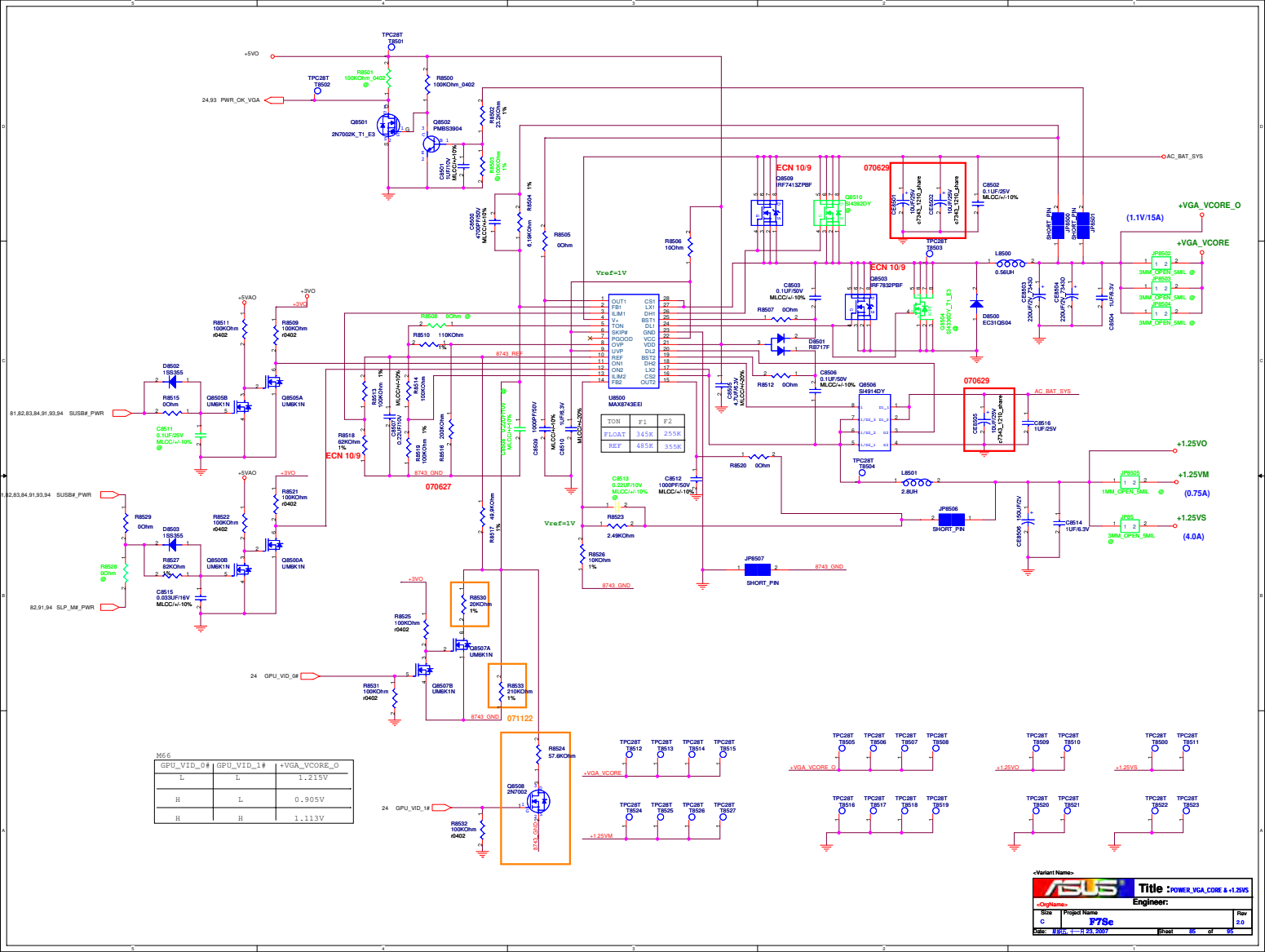

<Variant Name>

ASUS Title : POWER_VGA_CORE & +1.25VS

<OrgName> Engineer:

Size	Project Name	Rev
C	F7Se	2.0

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<Variant Name>

Title : N/A

<OrgName>

Engineer:

Size	Project Name	Rev
A	F7Se	2.0

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<Variant Name>

Title : N/A

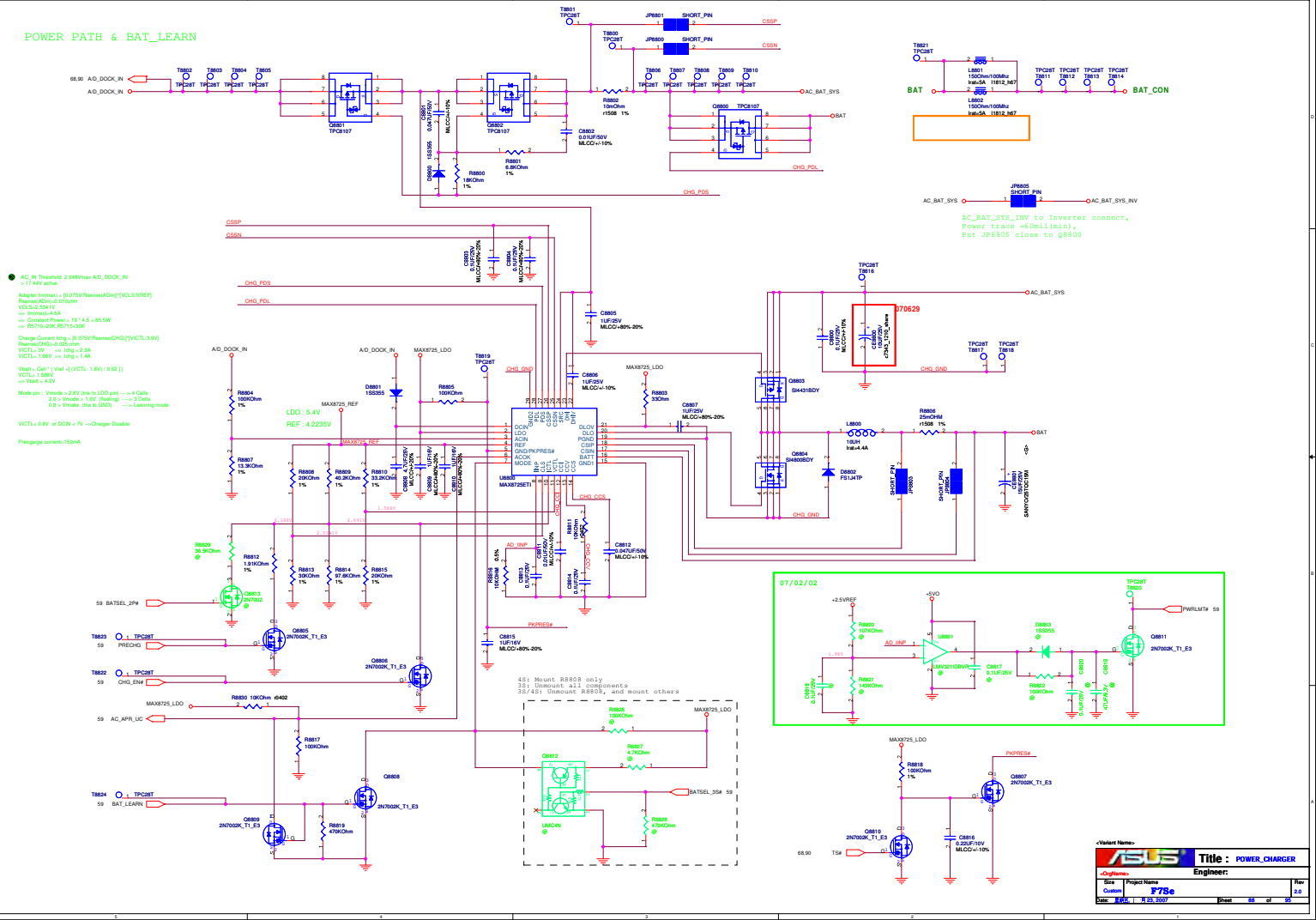
<OrgName>

Engineer:

Size	Project Name	Rev
C	F7Se	2.0

Date: 星期二 十一月 25, 2007 Sheet 87 of 95

POWER PATH & BAT_LEARN



<Variant Name>

Title : N/A

<OrgName> Engineer:

Size	Project Name	Rev
Custom	F7Se	2.0

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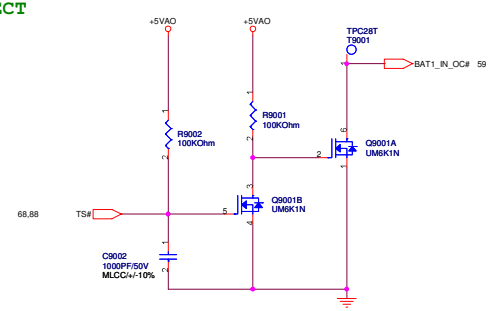
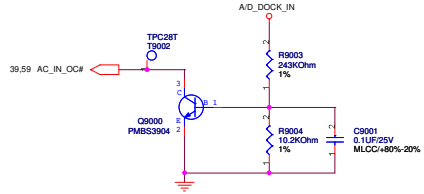
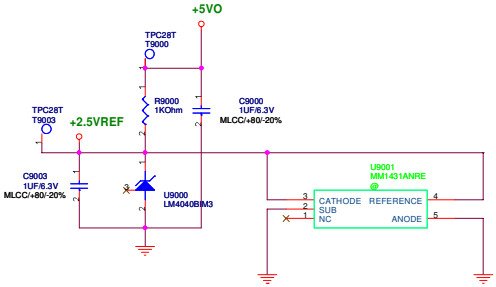
BATTERY IN DETECT



ADAPTER IN DETECT



+2.5VREF

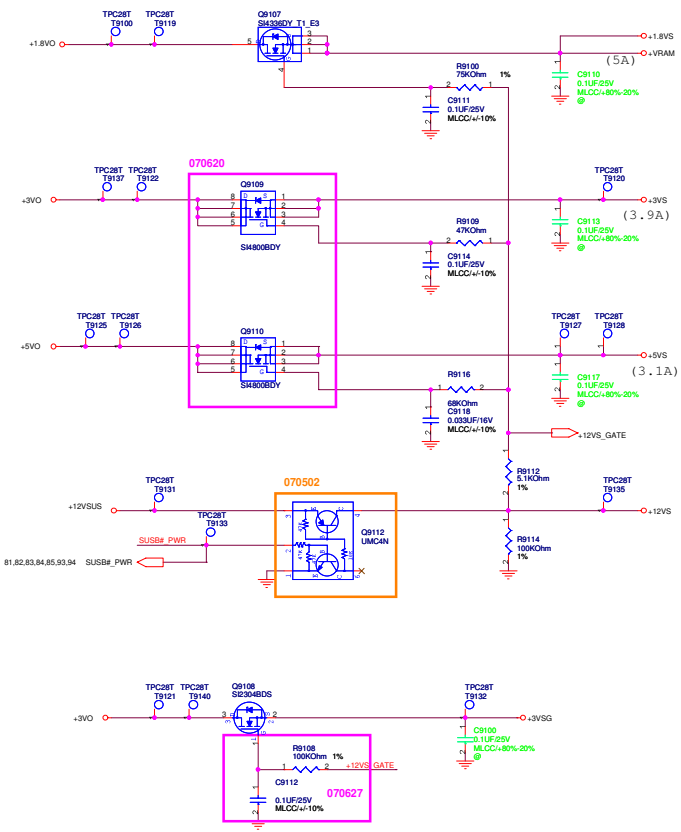


U9000 & U9001 colay

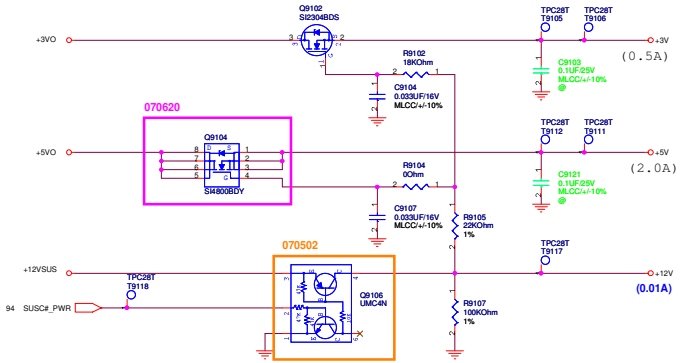
<Variant Name>

<OrgName>	Title : POWER_DETECT	
	Engineer:	
Size: Custom	Project Name: F7Se	Rev: 2.0
Date: 8月 23, 2007	Sheet 90 of 95	

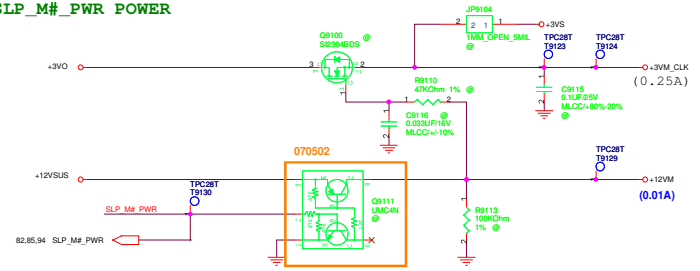
SUSB#_PWR POWER



SUSC#_PWR POWER



SLP_M#_PWR POWER



<Variant Name>

ASUS Title : POWER_LOAD SWITCH

<OrgName> Engineer:

Size	Project Name	Rev
Custom	F7Se	2.0

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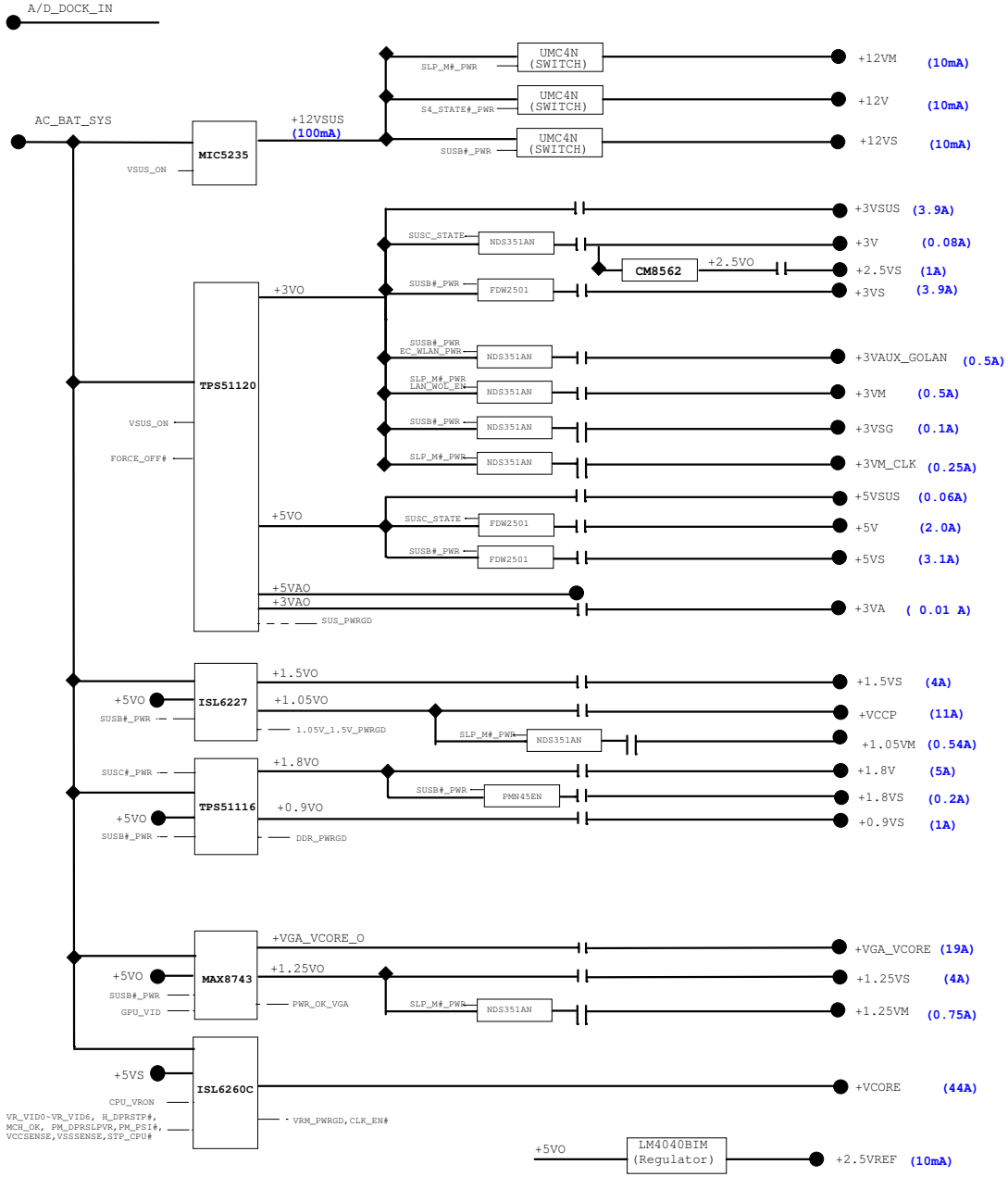

<Variant Name>

Title : POWER_VCORE

<OrgName> Engineer:

Size	Project Name	Rev
Custom	F7Sc	2.0

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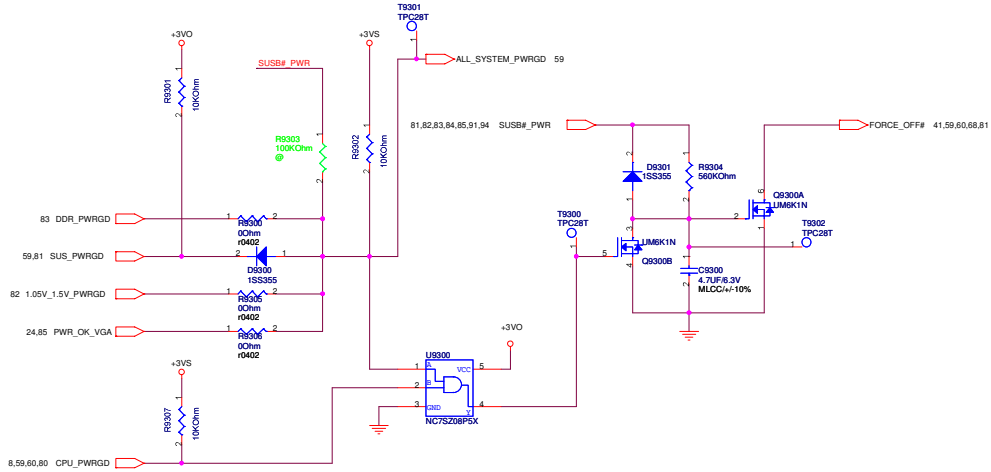
POWER GOOD DETECTER



<Variant Name>

Title : POWER_PROTECT		
<OrgName>	Engineer:	
Size: Custom	Project Name: F7Se	Rev: 2.0
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FOR POWER TEST

AC_BAT_SYS	AC_BAT_SYS	68,80,81,82,83,85,88
+3VA	+3VA	15,33,41,42,58,59,60,81
+5VO	+5VO	66,81,82,83,84,85,88,90,91
+3VO	+3VO	81,84,85,91,93
+3VSUS	+3VSUS	16,17,18,44,45,49,54,59,81
+5VSUS	+5VSUS	18,66,81
+3V	+3V	33,42,45,47,49,54,57,76,78,91
+3VS	+3VS	4,8,12,15,16,17,18,31,32,33,35,37,42,44,47,48,49,51,52,53,54,56,57,59,60,66,70,72,73,76,78,80,84,91,93
+3VM	+3VM	17,18,20,21,39,65,84
+3VM_CLK	+3VM_CLK	39,91
+12VSUS	+12VSUS	81,84,91
+12V	+12V	42,53,57,91
+12VS	+12VS	32,33,57,66,91
+5V	+5V	33,42,54,62,91
+5VS	+5VS	17,18,32,35,37,42,44,56,57,61,66,72,80,91
+2.5VO	+2.5VO	84
+2.5VS	+2.5VS	56,84
+1.8VO	+1.8VO	83,84,91
+1.8V	+1.8V	8,11,12,20,21,42,83
+VCCP	+VCCP	4,5,7,9,11,12,15,18,39,42,82
+1.05VM	+1.05VM	11,82
+0.9VO	+0.9VO	83
+0.9V	+0.9V	22,42,83
+0.9VS	+0.9VS	28,29,42,83
BAT	BAT	88
+2.5VREF	+2.5VREF	84,88,90
+VCORE	+VCORE	5,80
+VGA_VCORE	+VGA_VCORE	23,27,85
+VRAM	+VRAM	23,24,25,27,28,29,42,73,91
+1.25VS	+1.25VS	12,18,42,85
+1.25VM	+1.25VM	8,12,85
BAT_CON	BAT_CON	68,88
+1.1VS	+1.1VS	23,27,42,84

+3VAO

JP9401	SGL_JUMP @	CPU_VRON_PWR 80
JP9402	SGL_JUMP @	SUSB#_PWR SUSB#_PWR 81,82,83,84,85,91,93
JP9403	SGL_JUMP @	SUSC#_PWR SUSC#_PWR 91
JP9404	SGL_JUMP @	VSUS_ON VSUS_ON 54,59,81
JP9400	SGL_JUMP @	S4_STATE#_PWR S4_STATE#_PWR 83

58 S4_STATE_ON_EC	TPC28T T9400	R9400 1KOhm	TPC28T T9401
83 S4_STATE#_PWR			
58 SUSB_ON_EC#	TPC28T T9404	R9401 1KOhm	TPC28T T9405
81,82,83,84,85,91,93 SUSB#_PWR			SUSB#_PWR
58 SUSC_ON_EC#	TPC28T T9402	R9402 1KOhm	TPC28T T9403
91 SUSC#_PWR			
58 SLP_M_ON_EC	TPC28T T9406	R9403 1KOhm	TPC28T T9407
82,85,91 SLP_M#_PWR			

<Variant Name>

Title : POWER_SIGNAL

<OrgName> Engineer:

Size	Project Name	Rev
Custom	F7Se	2.0

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Sub system	Reference Circuit	Reason for Change if Any	Page	BOM change		
				Descripiton	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 RN3701 CE3701 D3701
NB_	F7SR R1.1		7-13			
SB_	F7SR R1.1	P15 : 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	P15 : 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 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 connctor 2. Change R3313 , R3314 to RN3301	LCDCN0 RN3301	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 IT8511 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	Q5708 Q5707 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 27pF to 22pF 2. Change R4504 from 5% to 1% 3. Change CON4502 P/N to 12G142121120	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 54 : DNI all debug card related components	51 54	Page 52 : Change C5205 , C5207 from 30pF to 27pF Page 54 : DNI R5406 , C5401 , R5408 , D5403 , C5402 , R5407 , R5409 , R5404 , Q5401 , U5402 , R5414 , R5405 , U5403 , C5403	C5205 C5207	C5205 C5207 R5406 C5401 R5408 D5403 C5402 R5407 R5404 R5409 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 fail 3. Change CE6205 to 3528 type for cost down.	62	1. Change R6211 , R6214 , R6212 , R6213 , R6201 , R6202 , R6205 , R6207 , R6215 , R6218 to RN6201~RN6205 2. Change F6201~F6203 to 1812 type (2A/8V) 3. Change CE6205 to 3528 type.	RN6201 RN6202 RN6203 RN6204 RN6205 F6201 F6202 F6203 CE6205	R6211 R6214 R6212 R6213 R6201 R6202 R6205 R6207 R6215 R6218 F6201 F6202 F6203 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	R4931	R4817 R4818
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	RN3201
DC_	1. Remove L6806 , L6807 , C6805 , C6806 for mechanical issue and cost down 2. Change J6802 P/N for manufacture request 3. Add D6806 (reserved) to follow ASUS IT8511 EC Common Pin Assignment V2.03 4. DNI U6801 related components for cost down	68	1. Delete L6806 , L6807 , C6805 , C6806 2. Change J6802 P/N 3. DNI R6807 , C6811 , R6808 , U6801	J6802	L6806 L6807 C6805 C6806 J6802 R6807 C6811 R6808 U6801
BT_	Change USB 0 ohm resistor to 2R4P	78	Change R7804 , R7805 to RN7801	RN7801	R7804 R7805
TPM		76				
FP_						
TUN	Change USB 0 ohm resistor to 2R4P	47	Change R4729 , R4720 to RN4701	RN4701	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 P24 : 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 R2408 , mount R2415	C2306 C2304 C2309 L2302 C2321 R2415	L2302 R2408 R2603
VGA	DNI PCIE_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 , C2753 2. Add C2740 , C2746 3. Add C2718 4. Add R2709 , DNI Q2705 , D2701 , R2705 , R2710 , Q2704 , C2772	C2715 C2721 C2723 C2742 C2753 C2740 C2746 C2718 R2709	Q2705 D2701 R2705 R2710 Q2704 C2772

ECN : 7/30 - Remove R5914 to solve system can not power on

ECN : 8/2 - Add U5403 , C5403 , R5404 back to solve new card didn't work

ECN : 10/9 - change main source of CPU and VGA core power.

1. H-side si4392 change to IRF7413
2. L-side si4336 change to IRF7832
3. Change R8518 form 49.9K to 62K

<Variant Name>

ASUSTeK COMPUTER INC

Title : History

Engineer: Frank_Xu

Size	Project Name	Rev
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