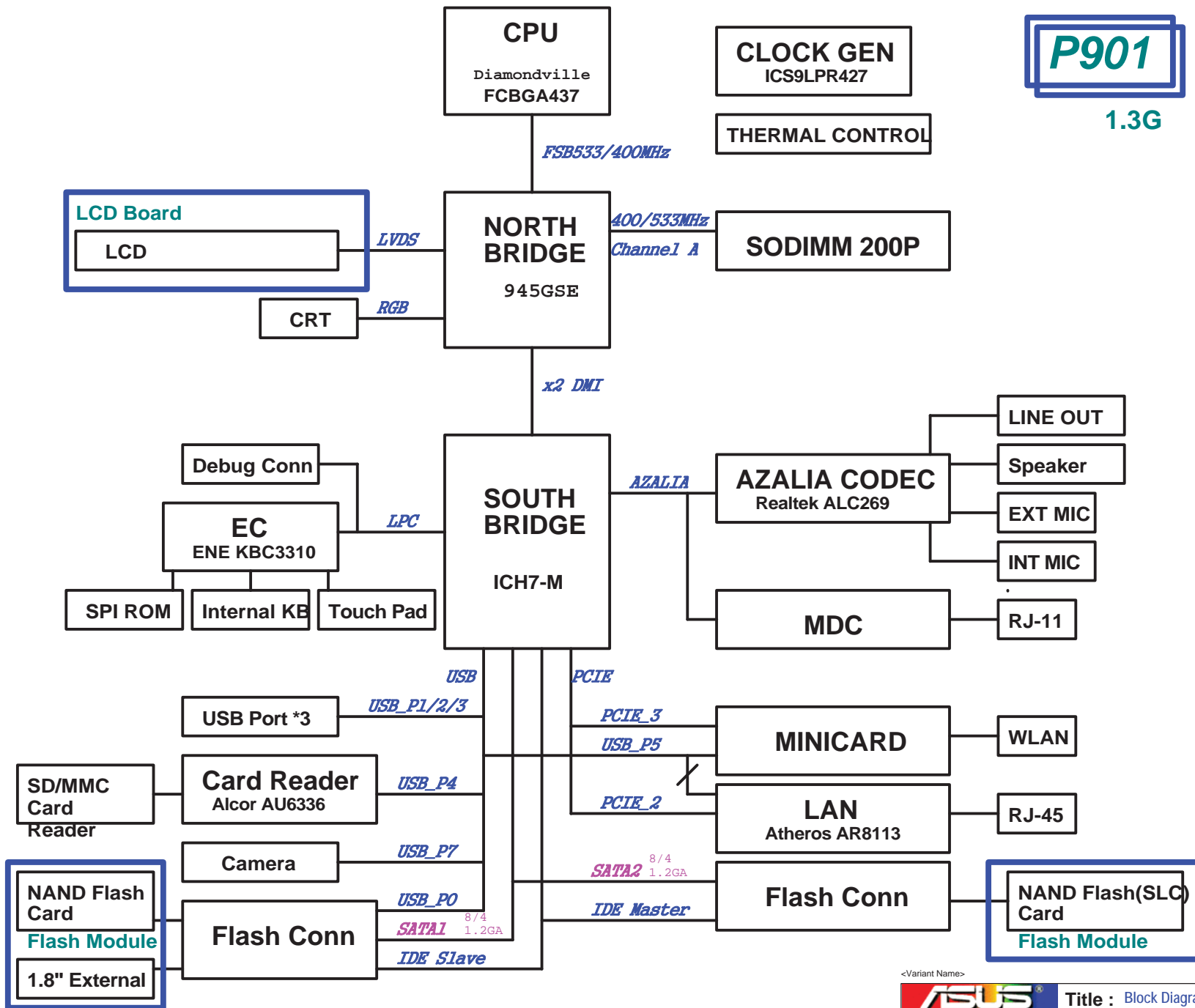


- 01_Block Diagram
- 02_System Setting
- 03_Power Sequence
- 04_Clock Gen_ICS9LPR426
- 05_Diamondville_BUS
- 06_Diamondville_PWR
- 07_NB-945GMS(HOST)
- 08_NB-945GMS(DMI)
- 09_NB-945GMS(GRAPHIC)
- 10_NB-945GMS(DDR2)
- 11_NB-945GMS(PWR)
- 12_NB-945GMS(PWR2)
- 13_NB-945GMS(GND)
- 14_SB-ICH7M(PWR)
- 15_SB-ICH7M(1)
- 16_SB-ICH7M(2)
- 17_SB-ICH7M(3)
- 18_DDR2 SODIMM
- 19_DDR2 Termination
- 20_Onboard VGA
- 21_LCD Conn_LID
- 22_PCIEx 3.5G & Ext. Antenna
- 23_Mini WIFI+ BT
- 24_LAN_Atheros AR8113
- 25_MDC_RJ11_RJ45
- 26_HD + Flash Conn
- 27_USB Port
- 28_Camera Conn
- 29_Card Reader_AU6336C52
- 30_Codec_ALC269
- 31_Audio_AMP_Jack
- 32_EC_ENE KB3310
- 33_EC_UART controller
- 34_Switch_SPI ROM_Debug Conn
- 35_Thermal Sensor_FAN
- 36_KB_Touch Pad
- 37_LED_THERMTRIP
- 38_Discharge
- 39_PWR Jack
- 40_Srew Hole
- 41_EMI
- 42_POWER FLOW
- 43_Vcore
- 44_Power System
- 45_Power_+1.8V & VTTDDR
- 46_Power_VCCP
- 47_Power_+1.5VS & +2.5VS
- 48_Power_Charger
- 49_EC Pin Define
- 49_History



P901

1.3G

EEE PC 701 PCB version

GPI37	GPI38	GPI39	PCB version
0	0	0	
0	0	0	
0	0	1	
0	0	1	
0	1	0	
0	1	0	
0	1	1	
0	1	1	
1	0	0	
1	0	0	
1	0	1	
1	0	1	
1	1	0	
1	1	0	
1	1	1	
1	1	1	

USB

USB 0	Flash Conn
USB 1	USB Conn
USB 2	USB Conn
USB 3	USB Conn
USB 4	Card Reader
USB 5	Minicard
USB 6	NC
USB 7	Camera


PCIE

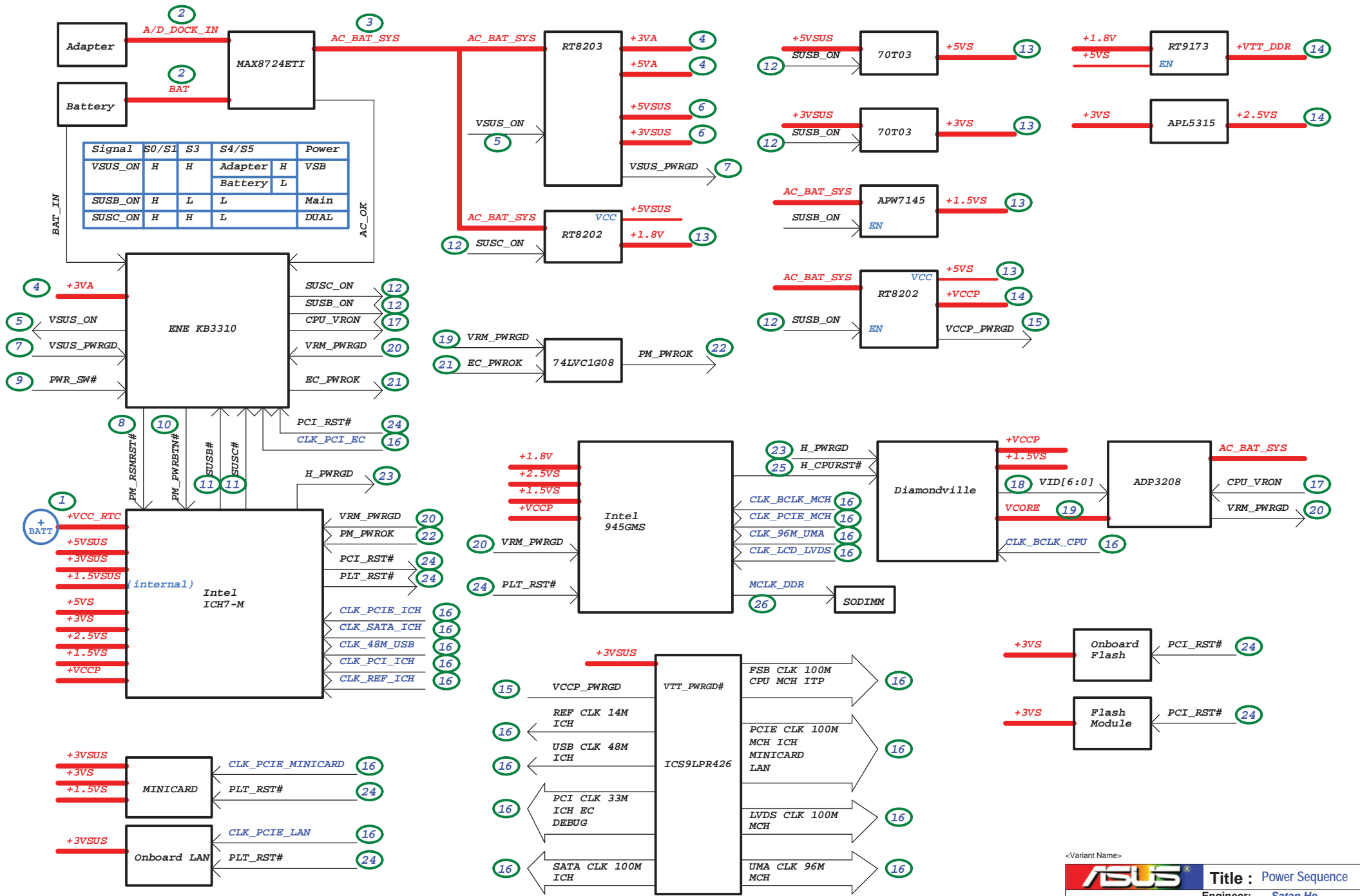
PCIE 1	NC
PCIE 2	LAN
PCIE 3	Minicard
PCIE 4	NC

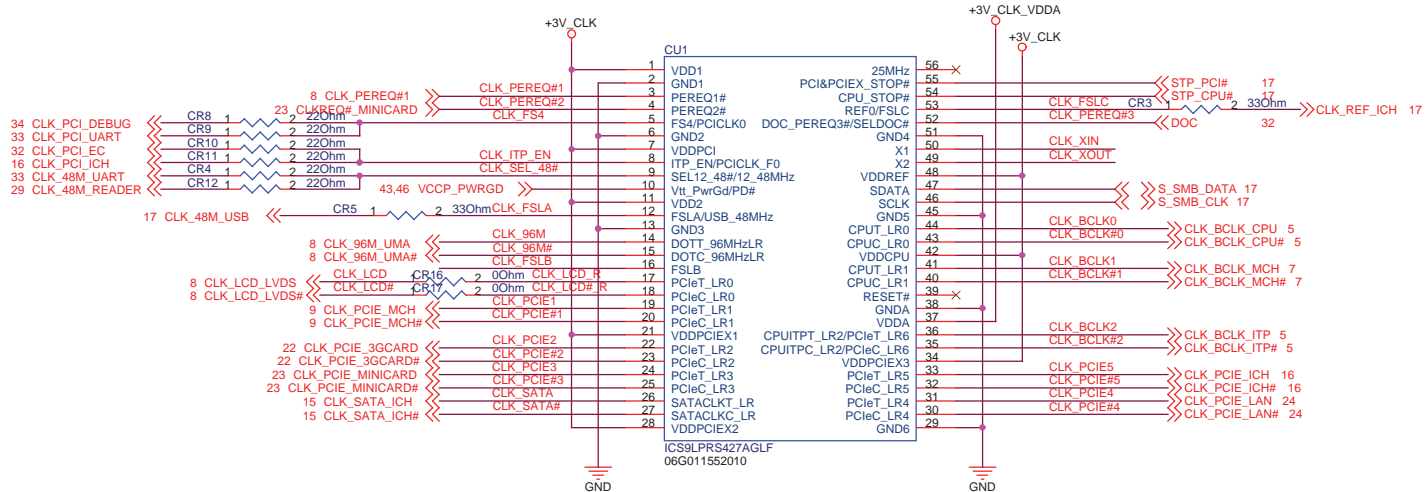
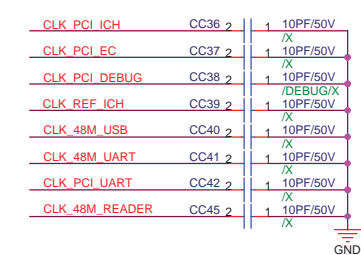
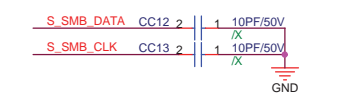
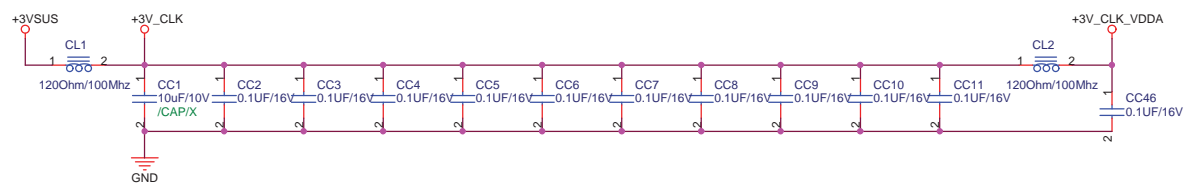
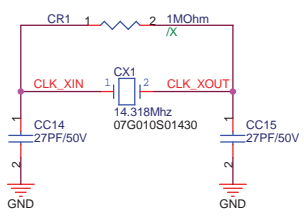
Azalia

ACZ_SDIN0	CODEC
ACZ_SDIN1	MODEM
ACZ_SDIN2	NC

<Variant Name>

		Title : System Setting	
ASUSTek Computer INC.		Engineer: <i>Satan_He</i>	
Size	Project Name		Rev
A3	P901		1.1G
Date: Monday, August 11, 2008		Sheet	2 of 50

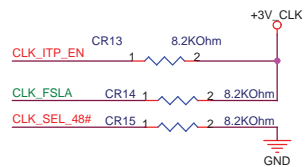
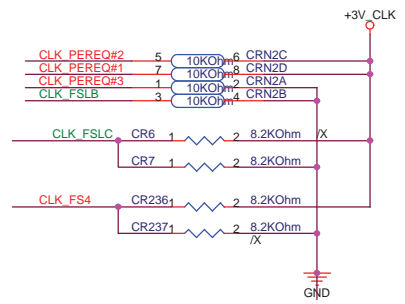


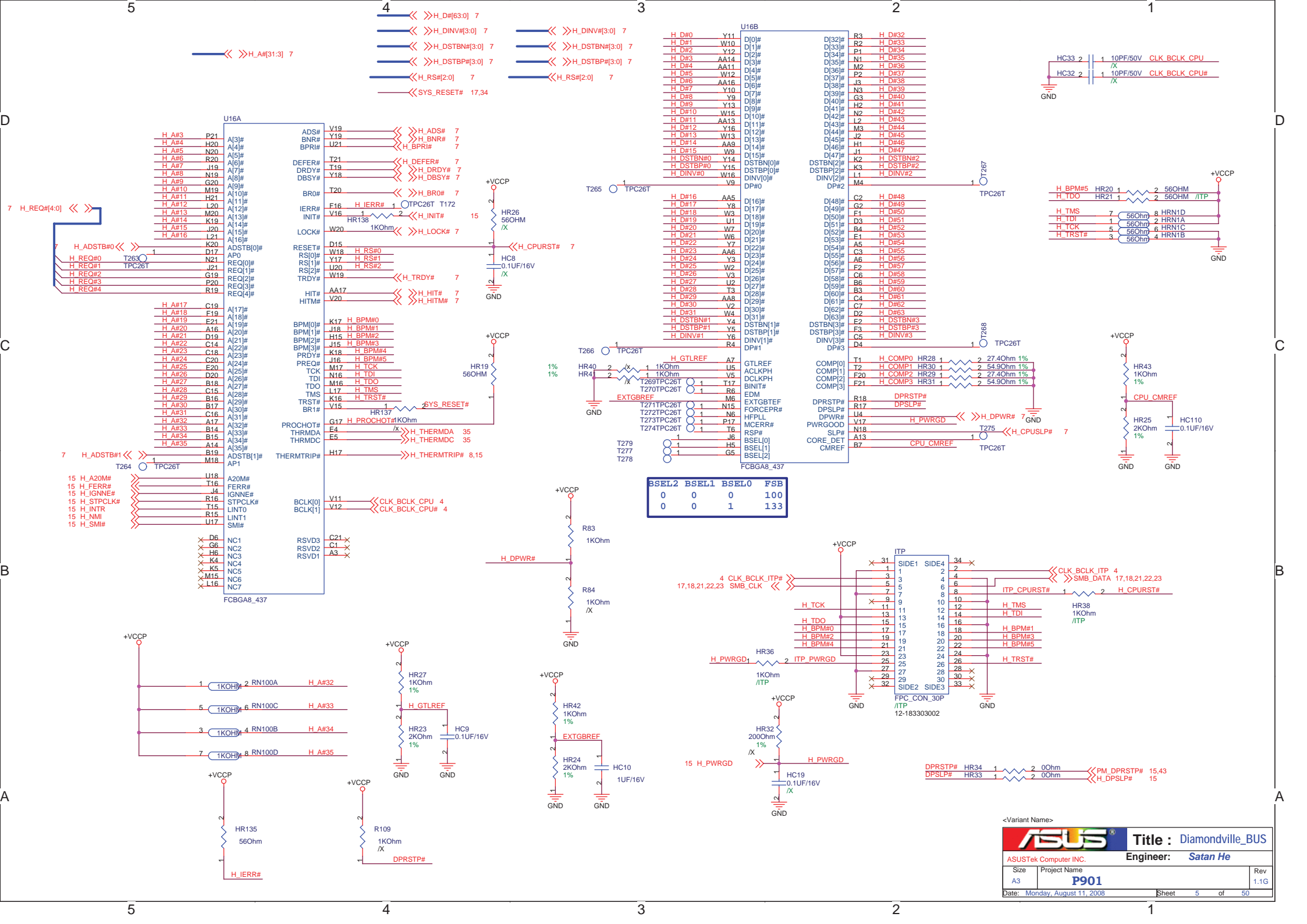


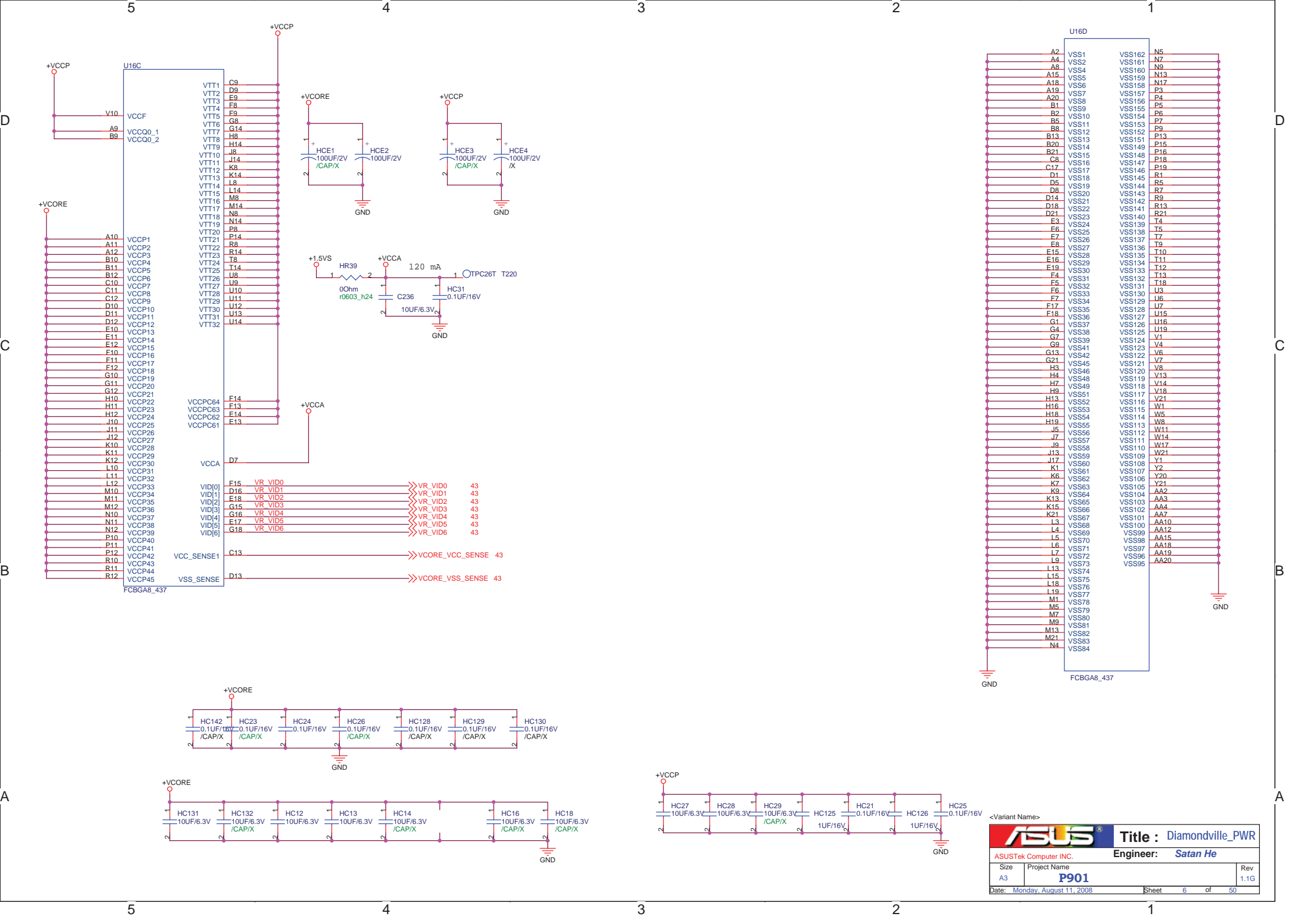
1:Disable
0:Enable

PEREQ1:PCIEx0 & PCIEx1
PEREQ2:PCIEx2 & PCIEx3 & SATA
PEREQ3:PCIEx4 & PCIEx5 & PCIEx6

FSC	FSB	FSA	CPU	PCIE	SATA
0	0	1	133	100	100
1	0	1	100	100	100



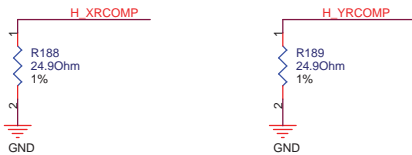




**Power :
+VCCP**

RCOMP

For Calibrating the FSB I/O Buffer



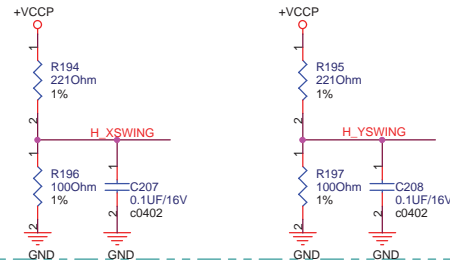
SCOMP

For Slew Rate Compensation on the FSB

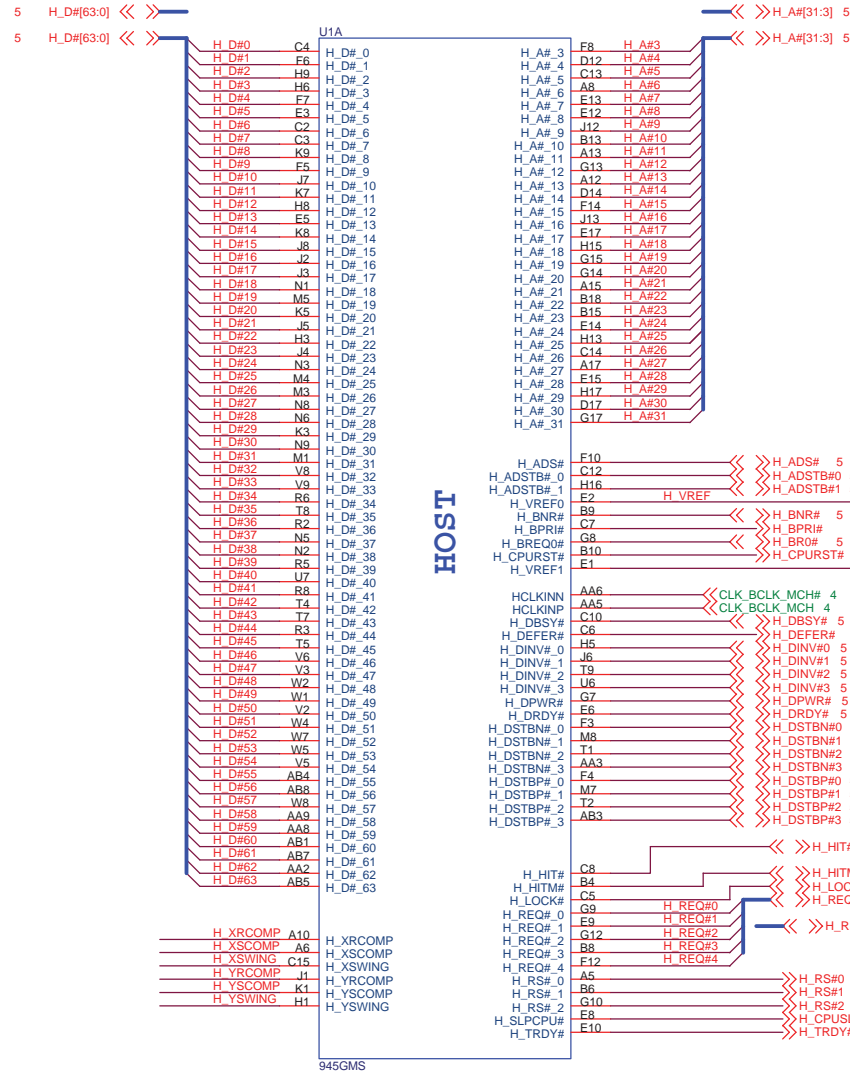


Voltage Swing

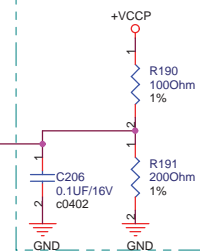
For Providing a Reference Voltage to The FSB RCOMP circuits



Signal voltage level =
0.3125*VCCP
Trace should be 10 mil wide
with 20 mil spacing

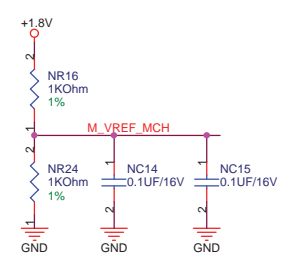
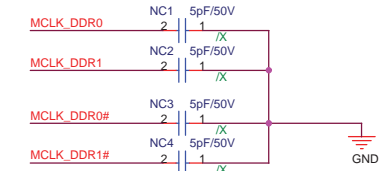
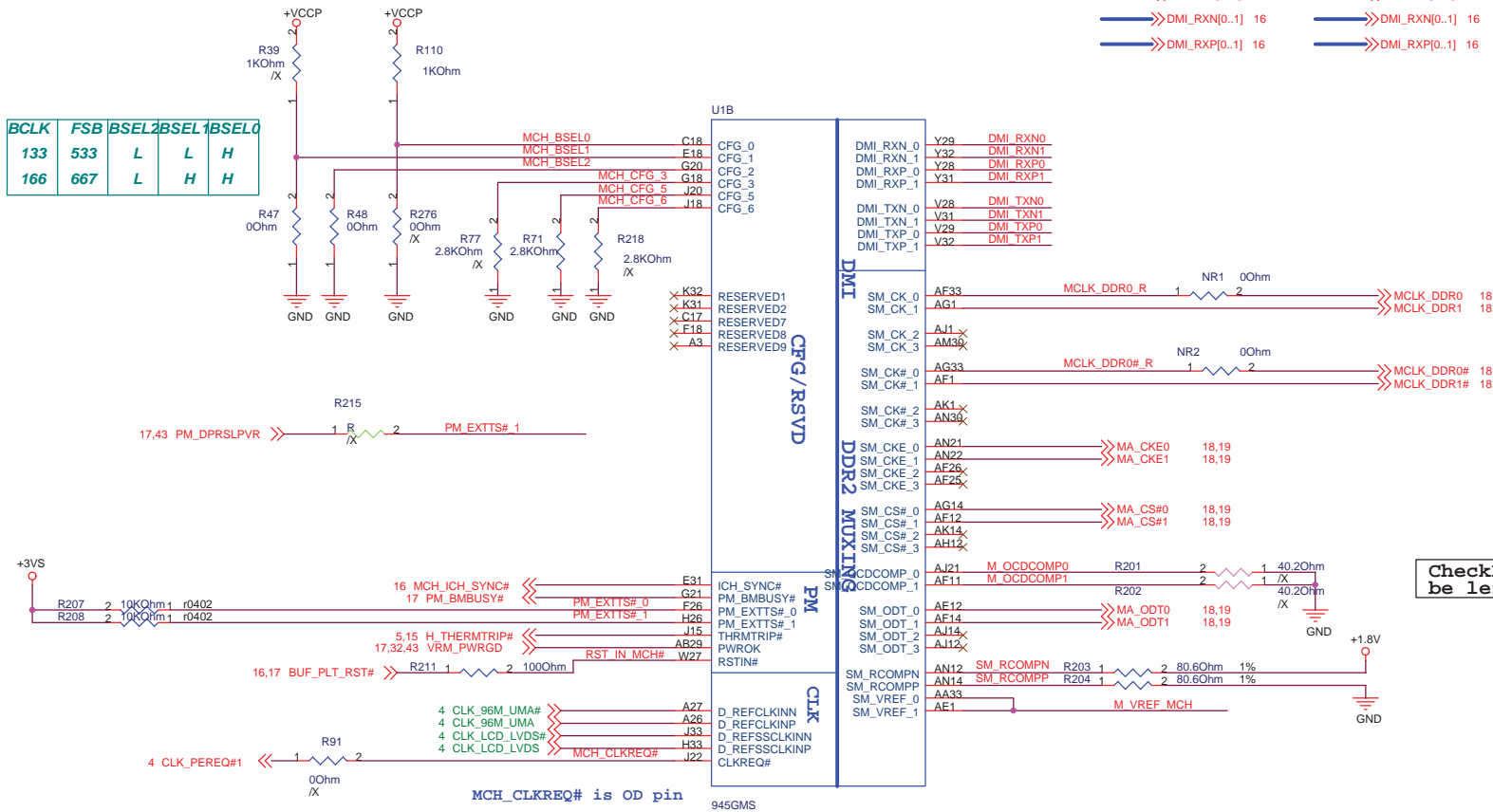


AGTL+ I/O Voltage Reference

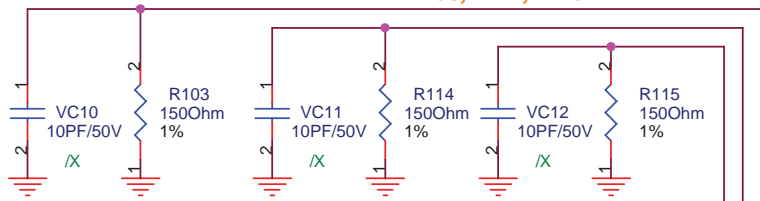


Layout Note:
0.1uF should be placed 100mils or less from GMCH pin.

BCLK	FSB	BSEL2	BSEL1	BSEL0
133	533	L	L	H
166	667	L	H	H

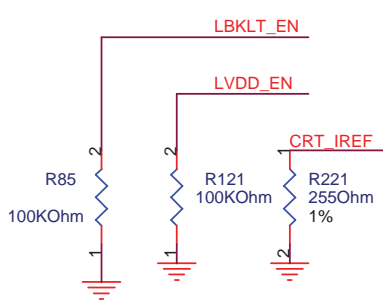
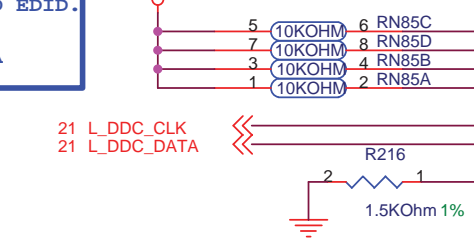


Close to GMCH
R103,R114,R115

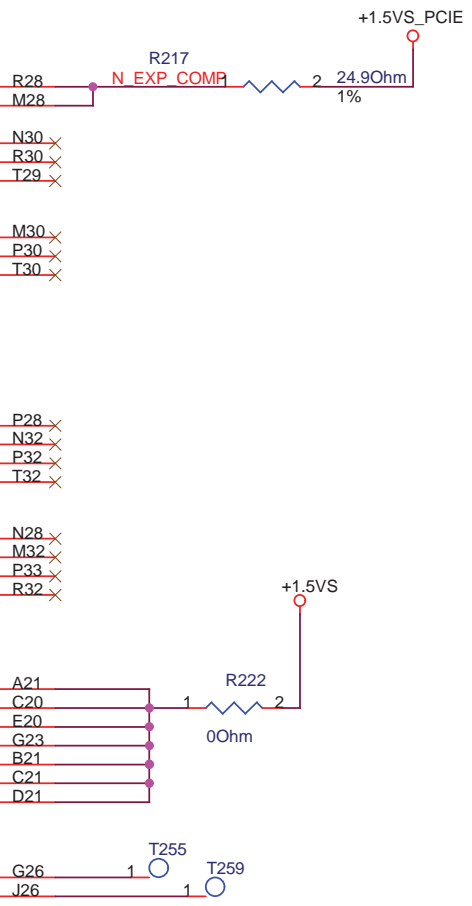
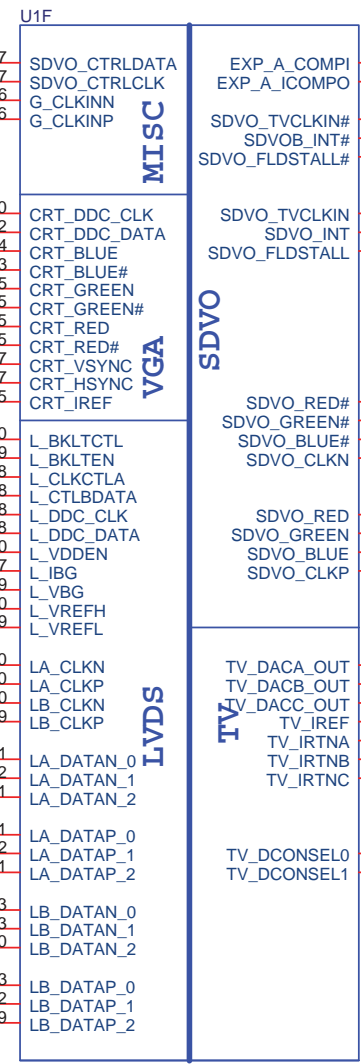
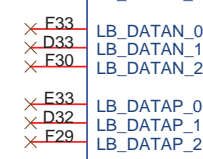


IF USE NB READ EDID.
MUST CONNECT
L_DDC_CLK&DATA

+3VS



Close to GMCH



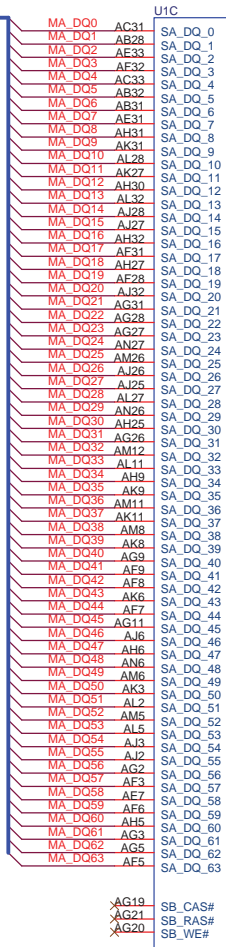
945GMS

<Variant Name>

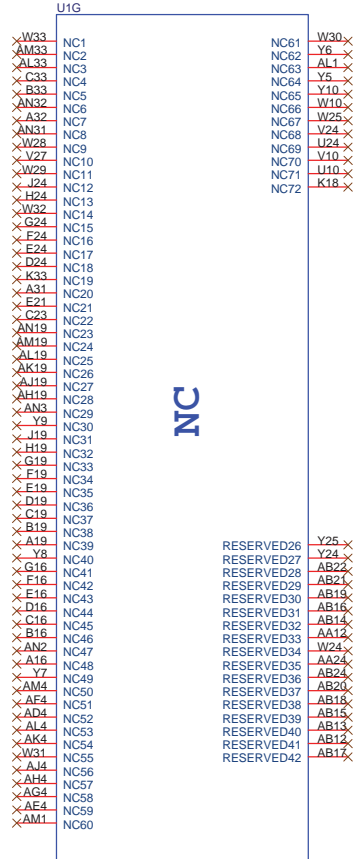
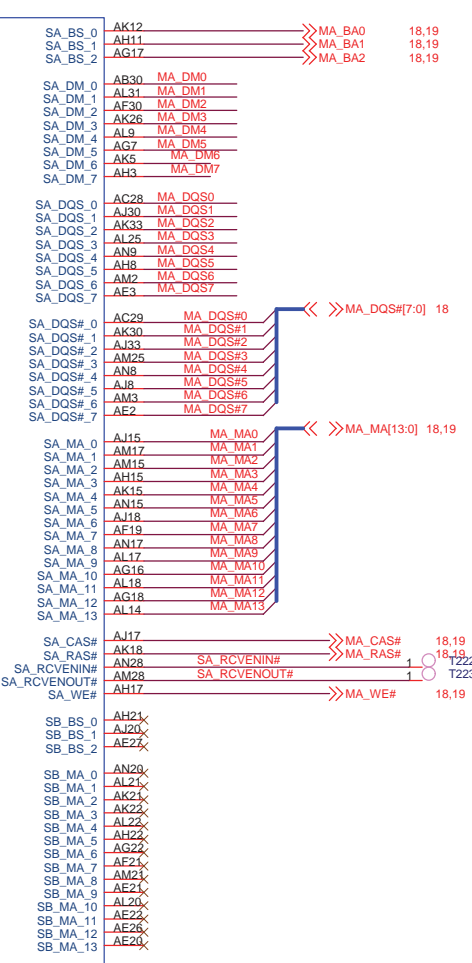
		Title : NB-945GMS(GRAPHIC)	
ASUSTeK COMPUTER INC.		Engineer: <i>Satan_He</i>	
Size A4	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008	Sheet	9	of 50

18 MA_DQ[63:0] << >>
 18 MA_DQ[63:0] << >>

<< >> MA_DQS[7:0] 18
 << >> MA_DM[7:0] 18



DDR2 SYSTEM MEMORY

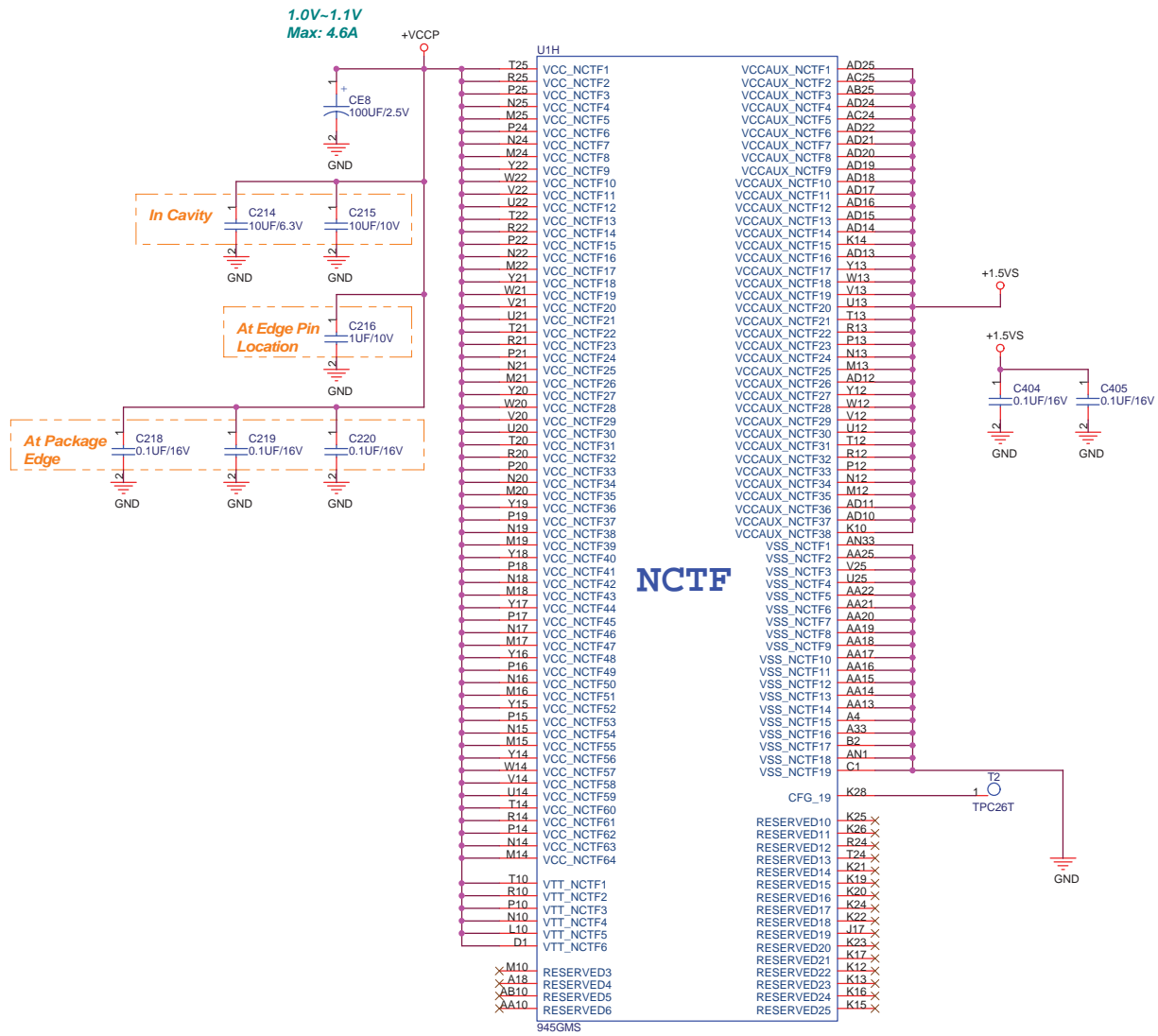


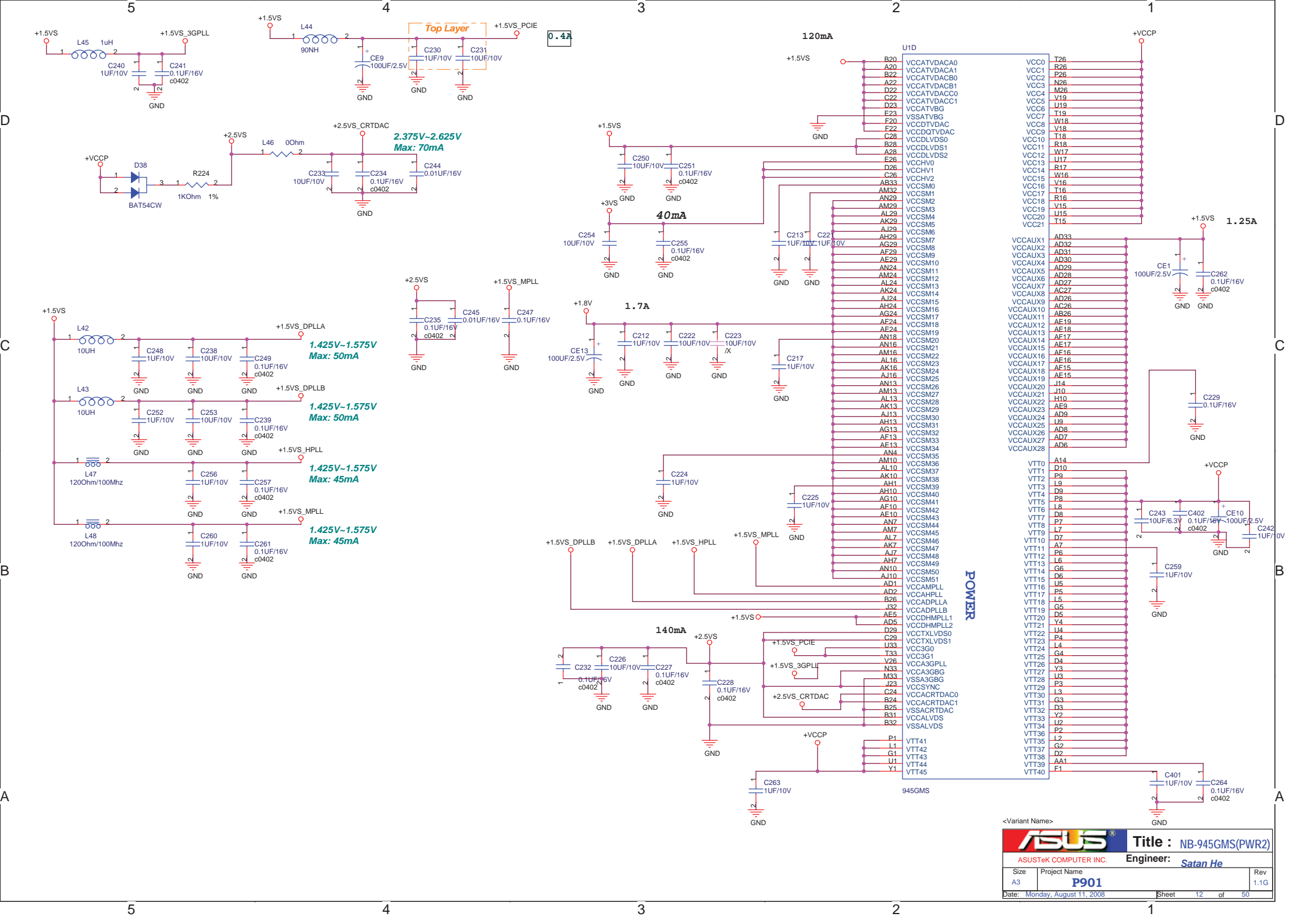
945GMS

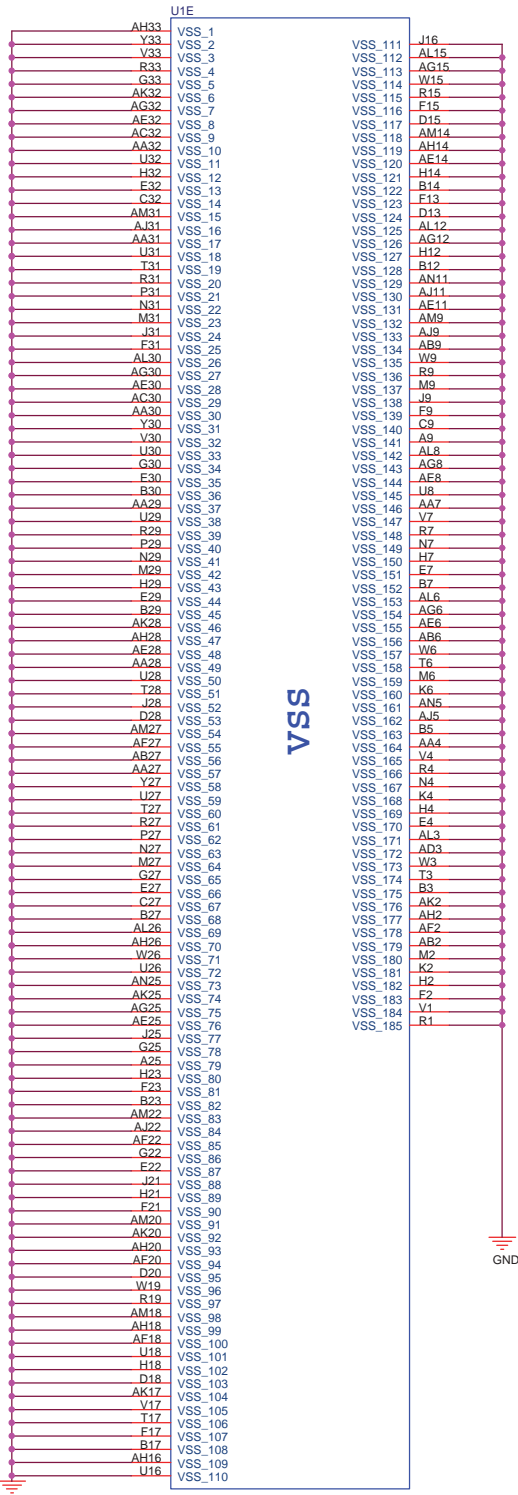
945GMS

<Variant Name>

ASUS		Title : NB-945GMS(DDR2)
ASUSTek COMPUTER INC.		Engineer: Satan He
Size A3	Project Name P901	Rev 1.1G
Date: Monday, August 11, 2008		Sheet 10 of 50

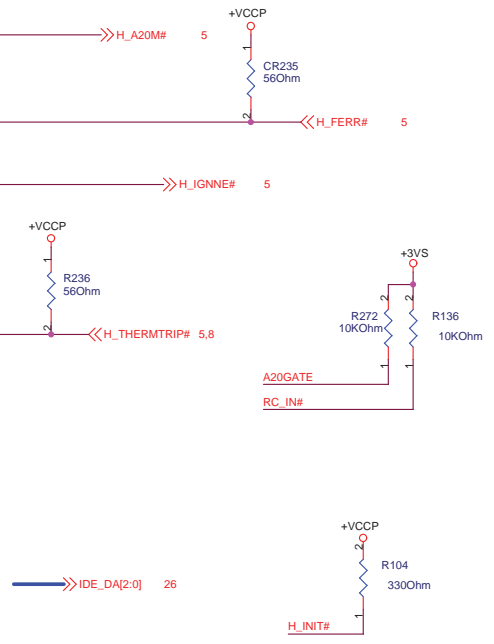
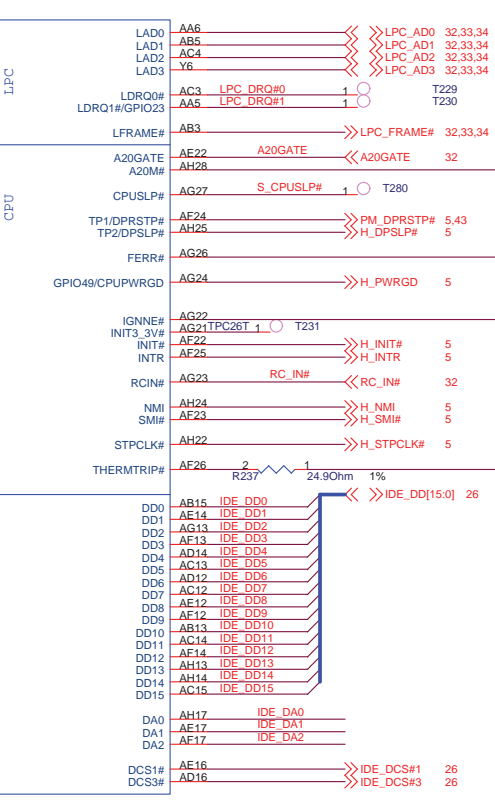
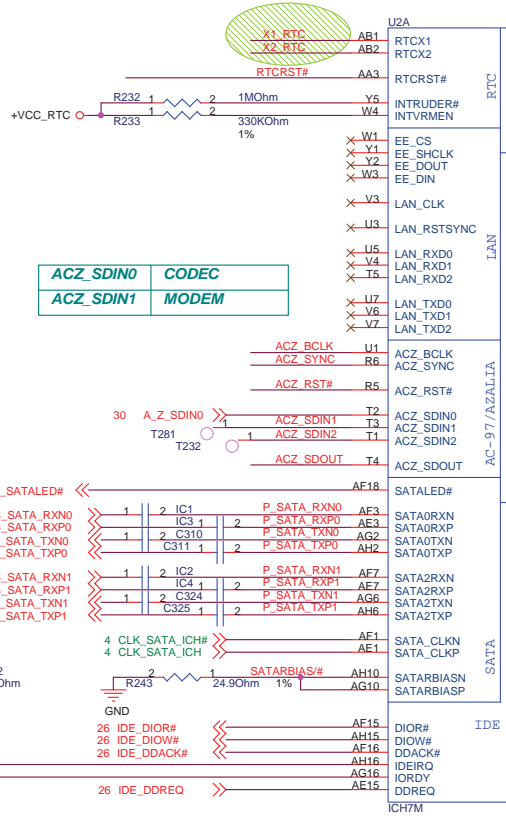
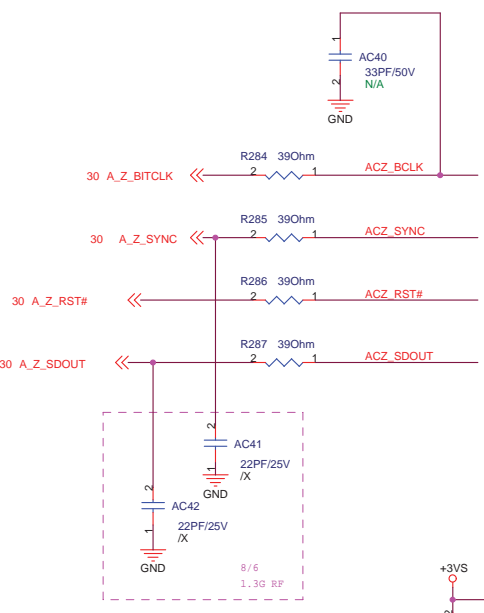
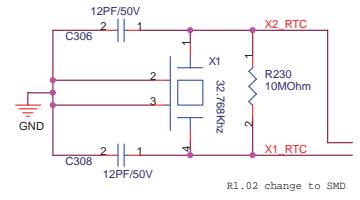
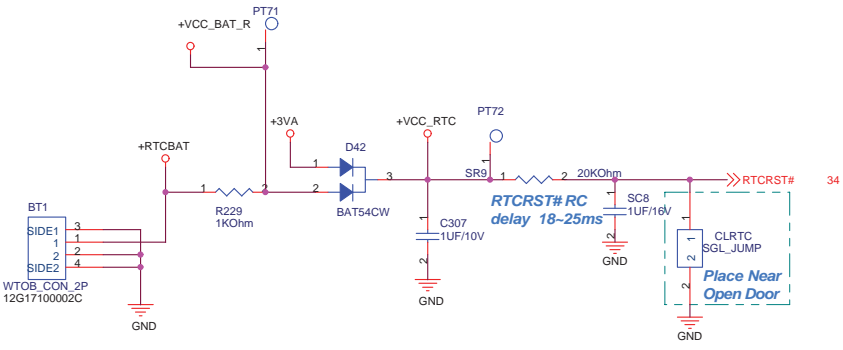


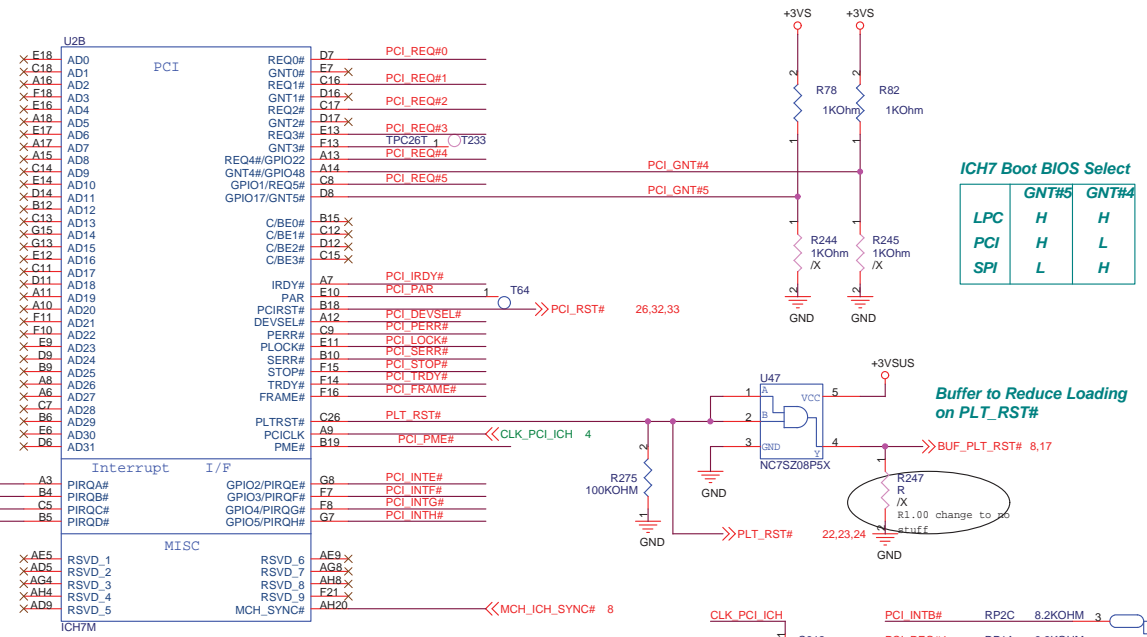




<Variant Names>

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ASUSTeK COMPUTER INC.		Engineer: Satan_He	
Size	Project Name	Rev	
A3	P901	1.1G	
Date:	Monday, August 11, 2008	Sheet	13 of 50

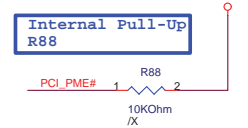
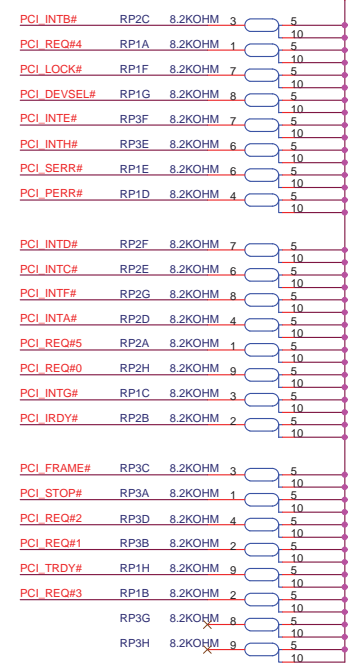
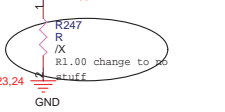




ICH7 Boot BIOS Select

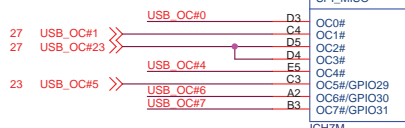
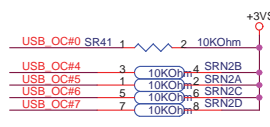
	GNT#5	GNT#4
LPC	H	H
PCI	H	L
SPI	L	H

Buffer to Reduce Loading on PLT_RST#



- USB 0 Flash Conn (Long Card)
- USB 1 USB Conn
- USB 2 USB Conn
- USB 3 USB Conn
- USB 4 Card Reader
- USB 5 Minicard + 3.5G
- USB 6 Bluetooth
- USB 7 Camera

- LAN AR8113 IC
- 3.5G PCIExpress Card
- WIFI PCIExpress Card



CRB & Checklist

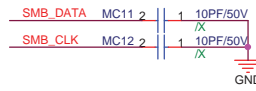
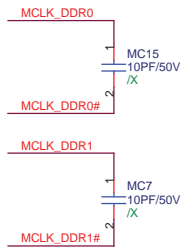
<Variant Name>

Title : SB-ICH7M(2)

ASUSTek COMPUTER INC. **Engineer: Satan He**

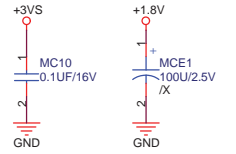
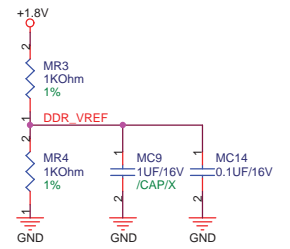
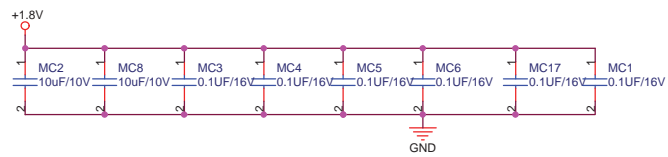
Size	Project Name	Rev
Custom	P901	1.1G

Date: Monday, August 11, 2008 Sheet 16 of 50



STD Type

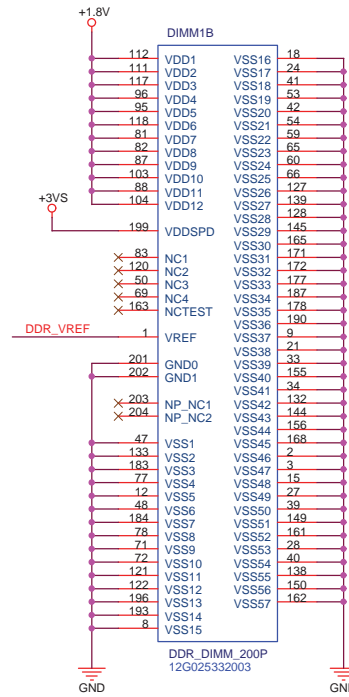
- MA_DQ[63:0] 10
- MA_DQS[7:0] 10
- MA_DQS#[7:0] 10
- MA_DM[7:0] 10
- MA_MA[13:0] 10,19
- MA_BA[2:0] 10,19



DIMM1A		DIMM1B	
MA_MA0	102	A0	DQ0
MA_MA1	101	A1	DQ1
MA_MA2	100	A2	DQ2
MA_MA3	99	A3	DQ3
MA_MA4	98	A4	DQ4
MA_MA5	97	A5	DQ5
MA_MA6	94	A6	DQ6
MA_MA7	94	A7	DQ7
MA_MA8	92	A8	DQ8
MA_MA9	91	A9	DQ9
MA_MA10	105	A10/AP	DQ10
MA_MA11	90	A11	DQ11
MA_MA12	89	A12	DQ12
MA_MA13	88	A13	DQ13
	86	A14	DQ14
	84	A15	DQ15
	85	A16_BA2	DQ16
MA_BA2			DQ17
MA_BA0	107	BA0	DQ18
MA_BA1	106	BA1	DQ19
	110	S0#	DQ20
	115	S1#	DQ21
	30	CK0	DQ22
	32	CK0#	DQ23
	164	CK1	DQ24
	166	CK1#	DQ25
	79	CKE0	DQ26
	80	CKE1	DQ27
	113	CAS#	DQ28
	108	RAS#	DQ29
	109	WE#	DQ30
	198	SA0	DQ31
	200	SA1	DQ32
	197	SCL	DQ33
	195	SDA	DQ34
		DQ35	DQ35
		DQ36	DQ36
		DQ37	DQ37
		DQ38	DQ38
		DQ39	DQ39
		DQ40	DQ40
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DDR_DIMM_200P
12G025332003

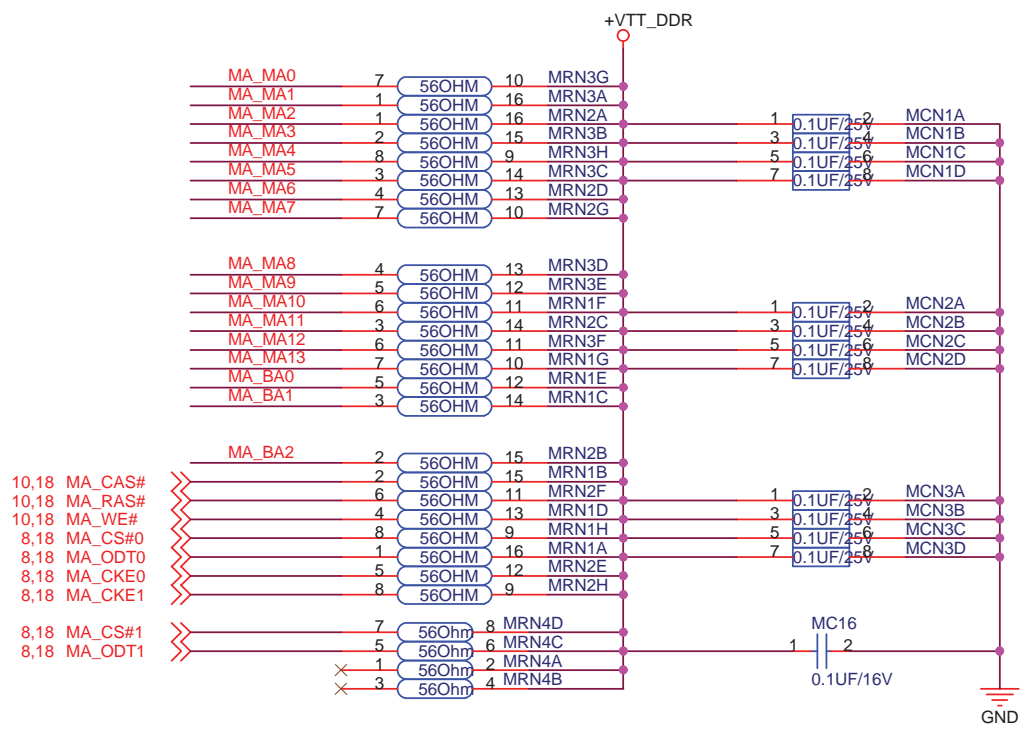
GROUP1
GROUP2
SWAP




<Variant Name>

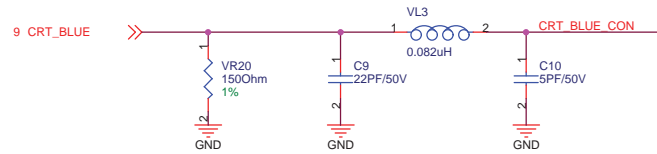
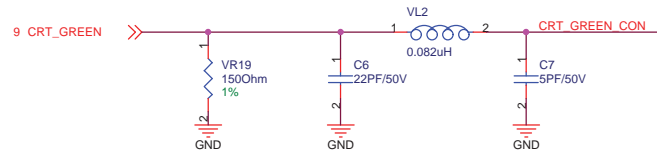
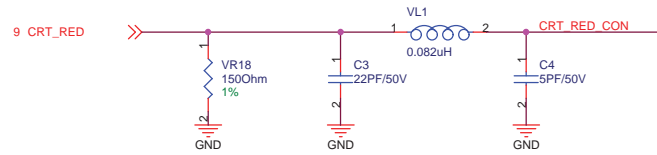
ASUS		Title : DDR2 SODIMM	
ASUSTek Computer INC.		Engineer: <i>Keil_Huang</i>	
Size	Project Name		Rev
A3	P901		1.1G
Date:	Monday, August 11, 2008	Sheet	18 of 47

 << MA_MA[13:0] 10,18
 << MA_BA[2:0] 10,18

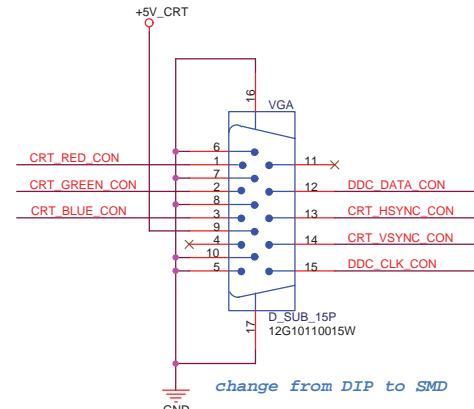
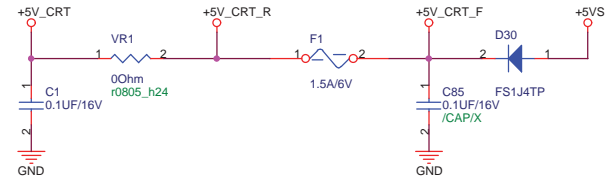
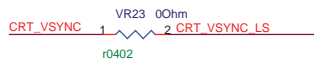
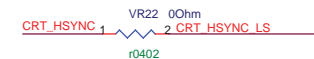
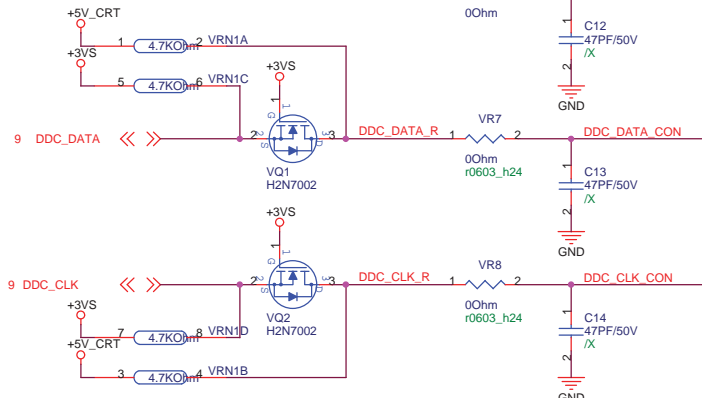


<Variant Name>

		Title : DDR2_Termination	
ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size A4	Project Name P901		Rev 1.1G
Date: Monday, August 11, 2008		Sheet 19 of 47	

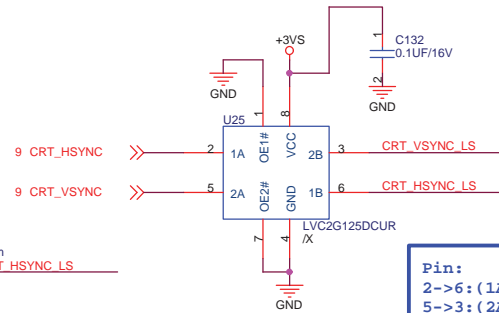


U25上:VR5 & VR6-->22 OHM
 U25 /X :VR5 & VR6 -->0 OHM

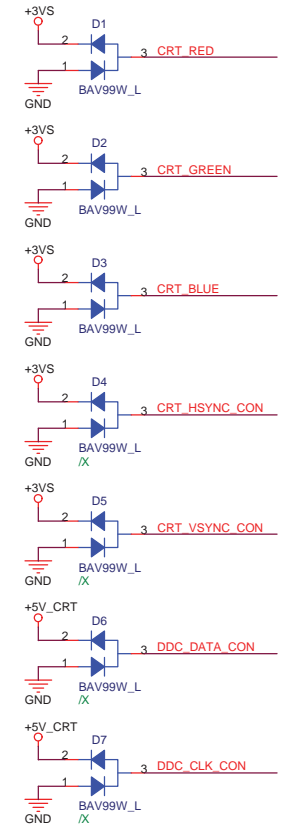


VGA use 12G10110015W & 12G10110015N

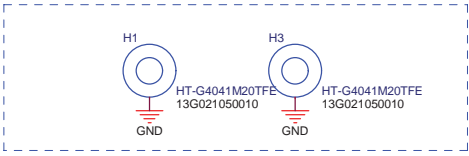
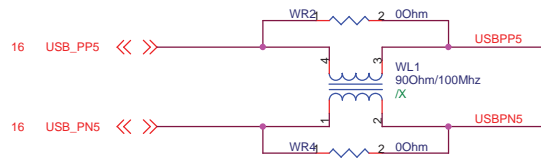
change from DIP to SMD



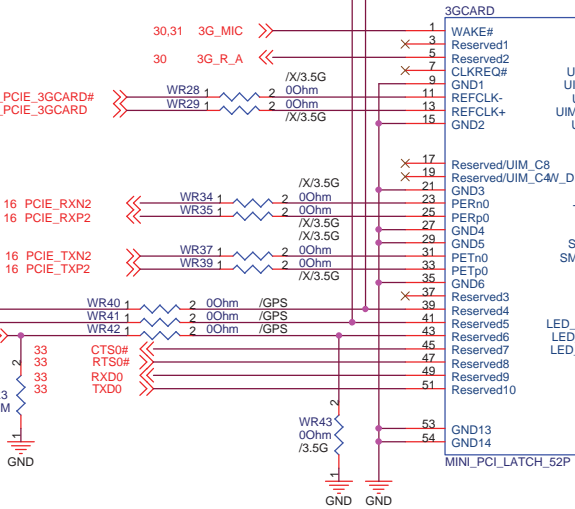
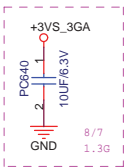
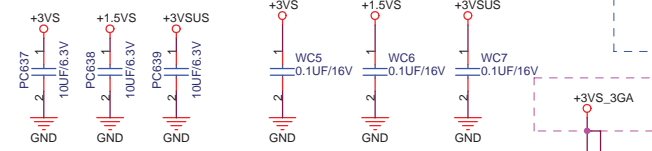
Pin:
 2->6: (1A->1B)
 5->3: (2A->2B)



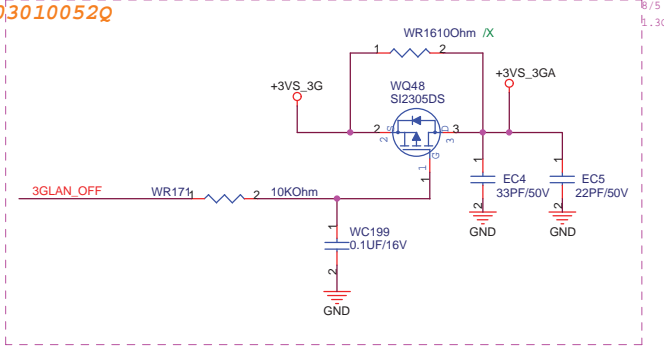
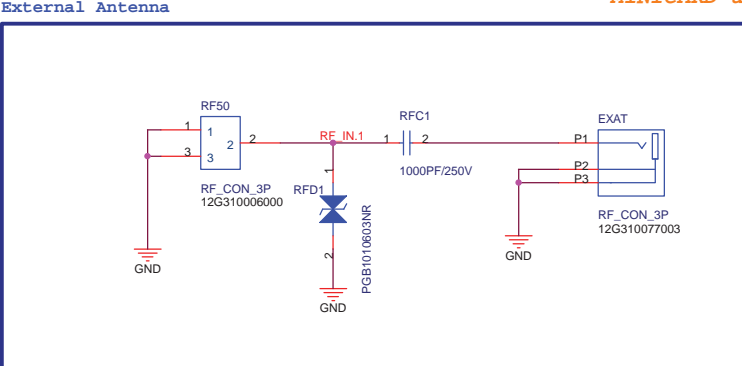
ASUS		Title : Onboard VGA	
ASUSTek Computer INC.		Engineer: Kell_Huang	
Size	Project Name		Rev
A3	P901		1.1G
Date: Monday, August 11, 2008		Sheet	20 of 47



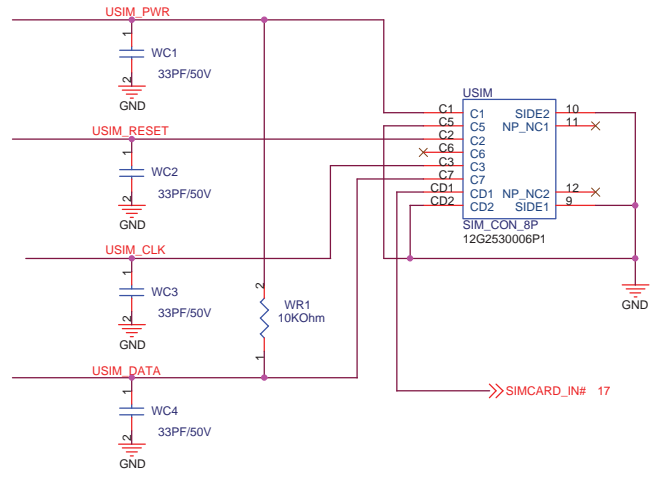
MINI CARD NUT(1.6mm) *2



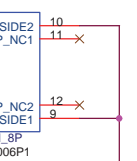
MINICARD use 12G03010052Q



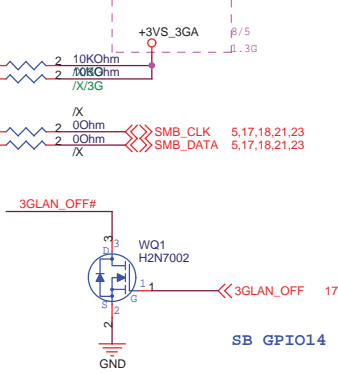
CAP Near SIM Socket



USIM_PWR 41

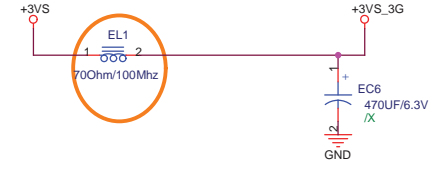


SIMCARD_IN# 17



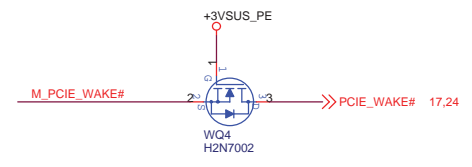
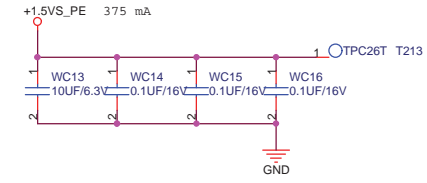
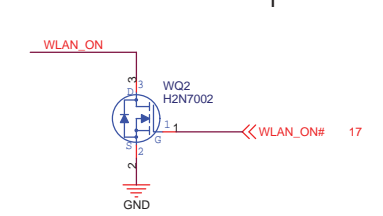
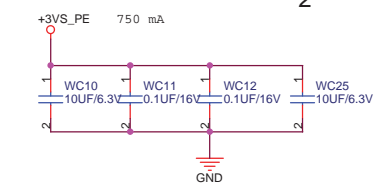
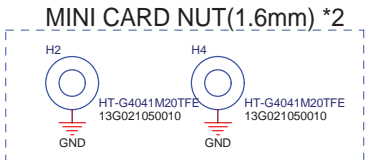
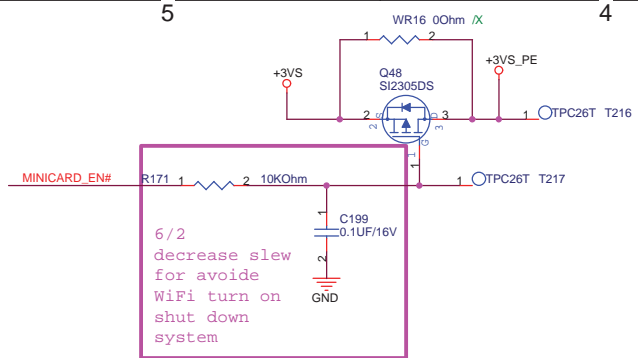
SB GPIO14

2008/03/11 change

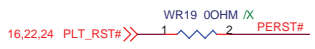
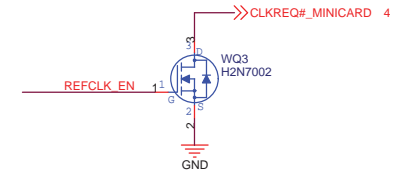
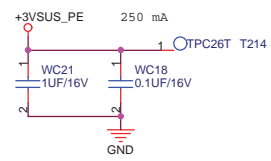
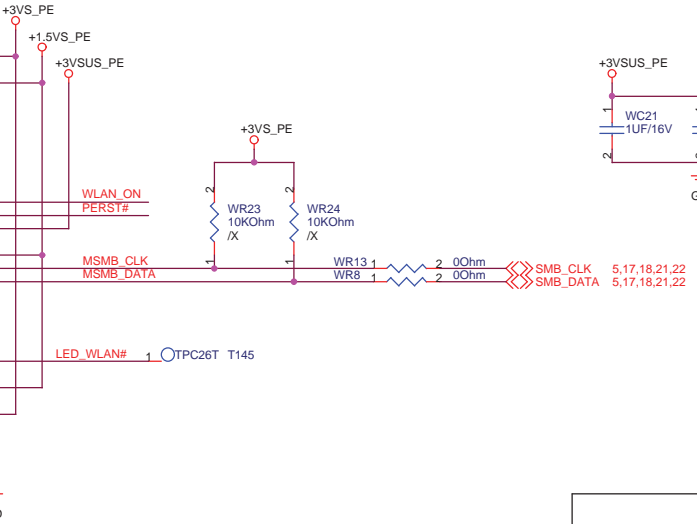
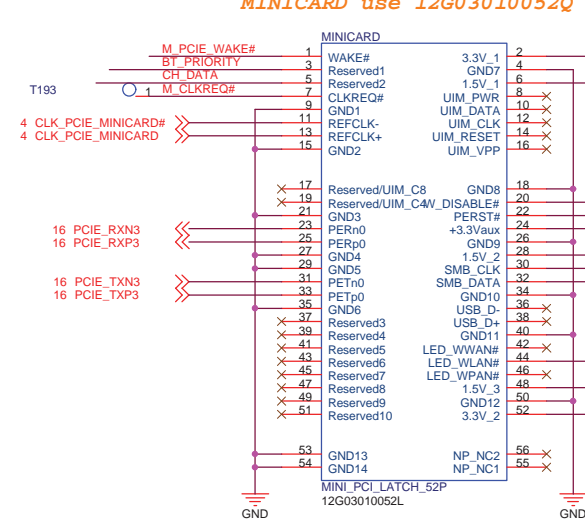


<Variant Name> 3.5G Module & External Antenna

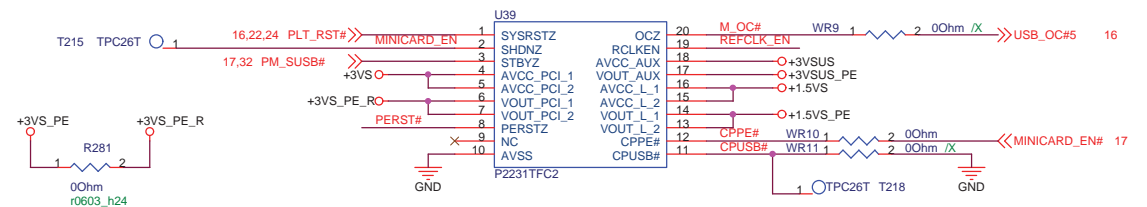
ASUS Title :	
ASUSTek Computer INC.	Engineer: <i>Kell Huang</i>
Size: A3	Project Name: P901
Date: Monday, August 11, 2008	Sheet 22 of 47



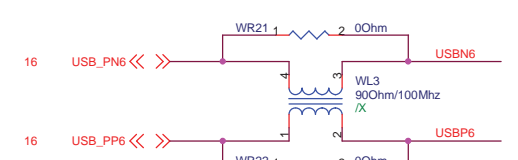
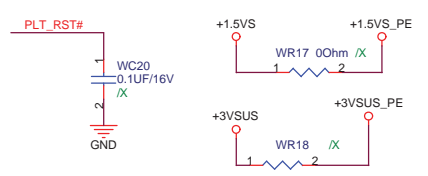
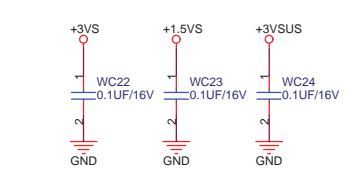
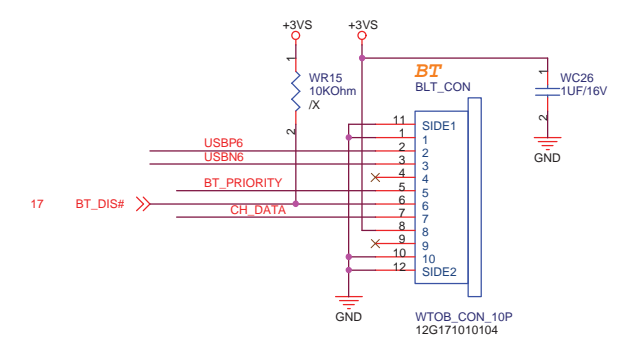
MINICARD use 12G03010052Q

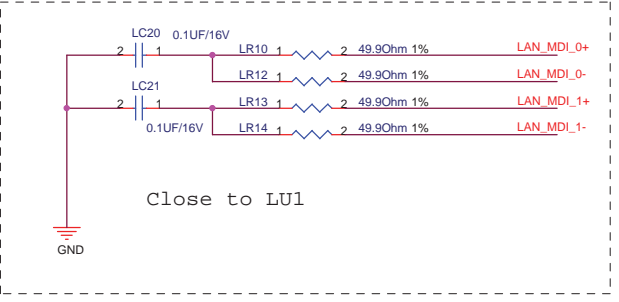
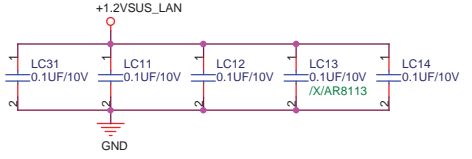
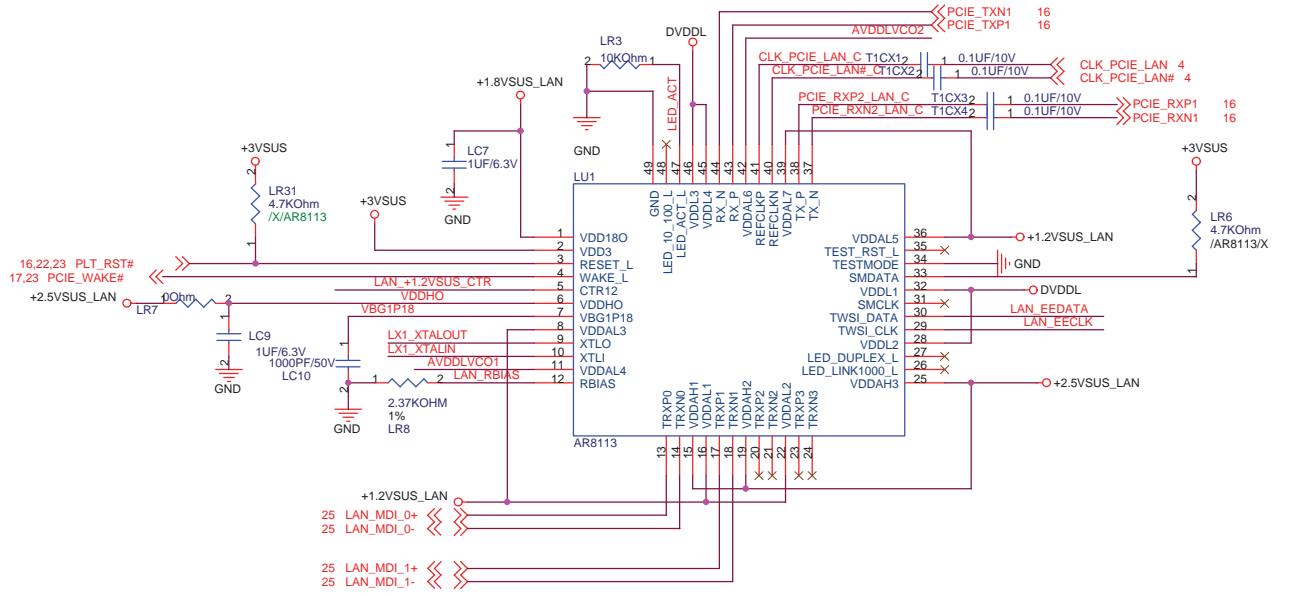
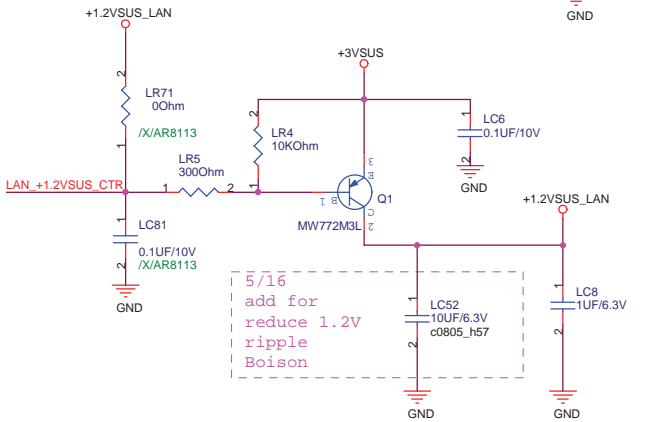
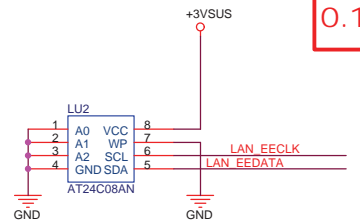
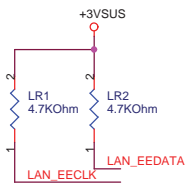
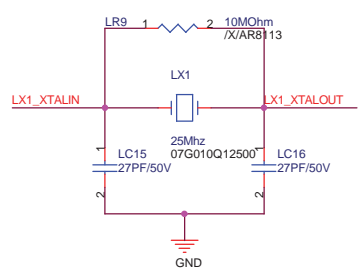
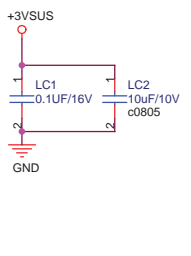
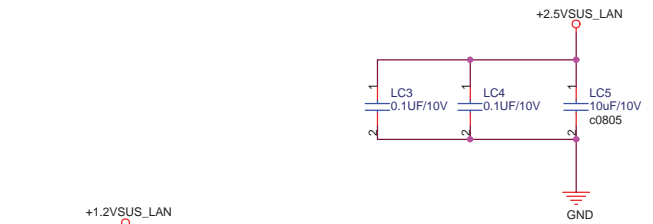


U39 use 06G030057011

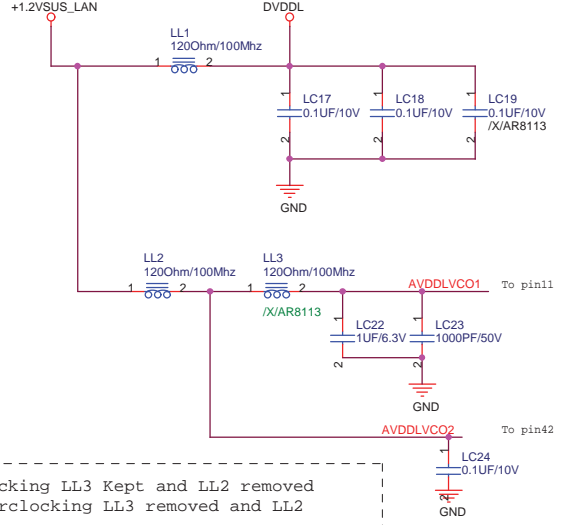


BlueTooth

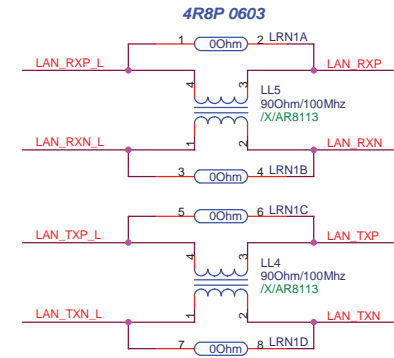
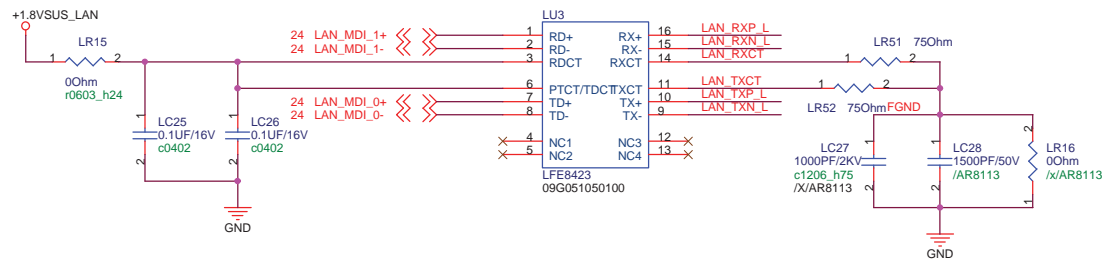




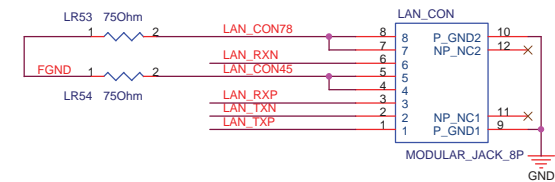
Close to LU1



if overclocking LL3 Kept and LL2 removed
if not overclocking LL3 removed and LL2 Kept

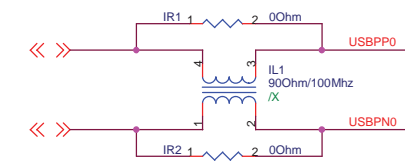
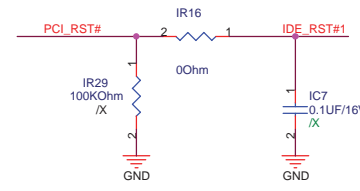
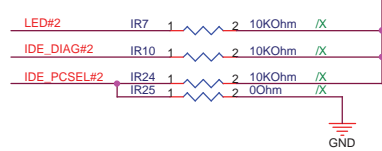
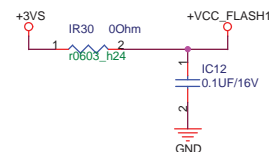
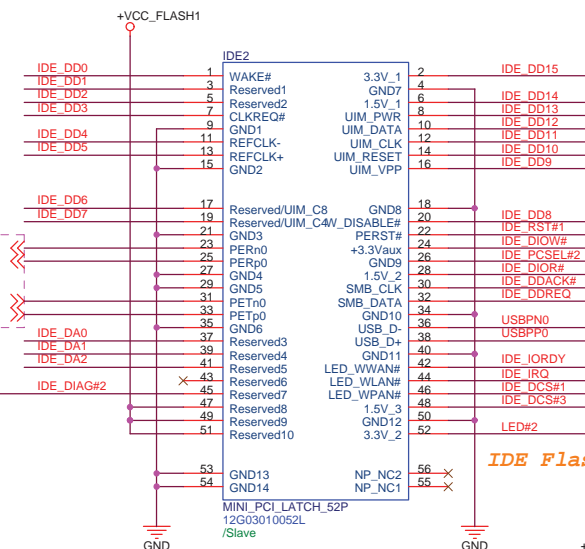
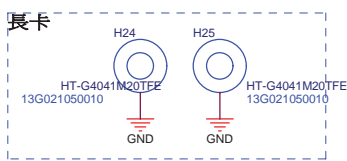
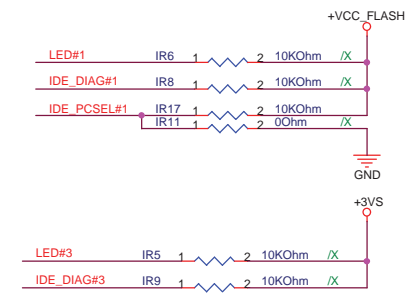
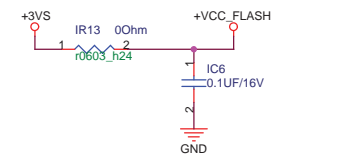
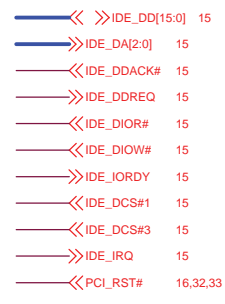
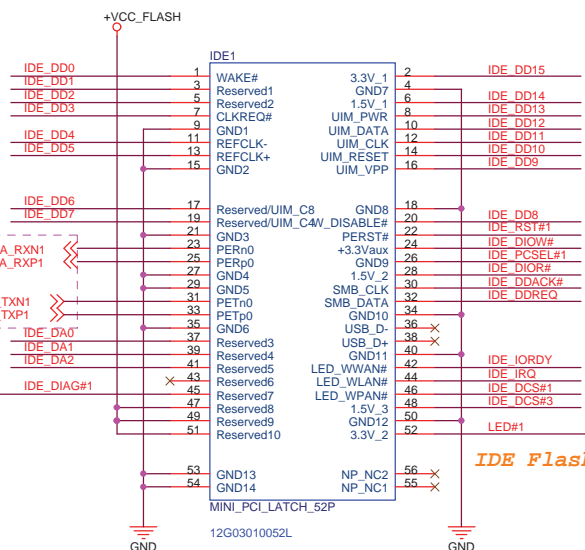
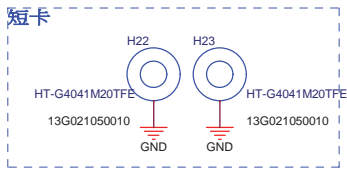


LAN connector: 12G148301086

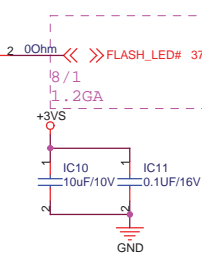
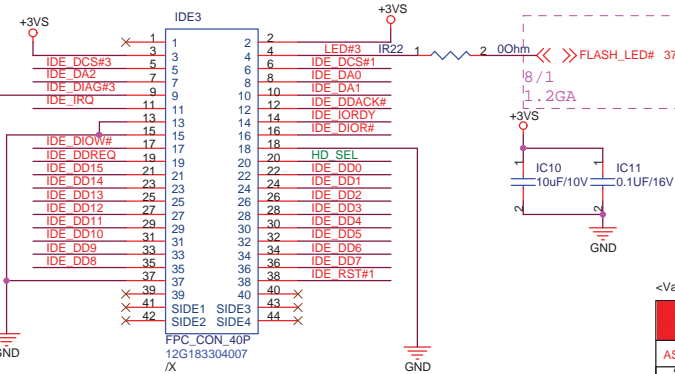
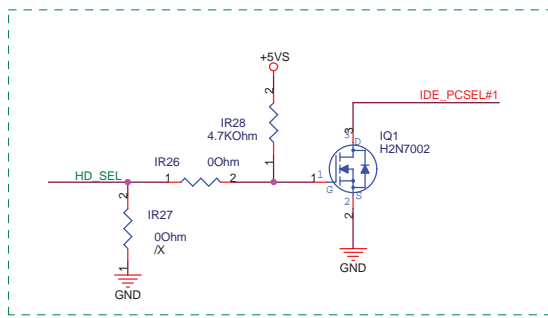


<Variant Name>

ASUS		Title : RJ11_RJ45	
ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size A3	Project Name P901	Date: Monday, August 11, 2008	Rev 1.1G
Date: Monday, August 11, 2008		Sheet	25 of 47



HD Master/Slave:
Master:Low
Slave :NC or High
Default :High



Naming Rule:
IC: IU?
R: IR?
C: IC?
L: IL?

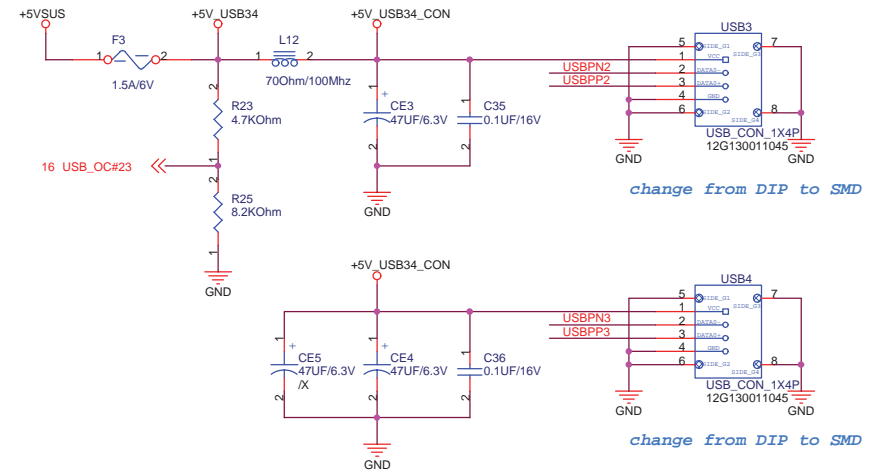
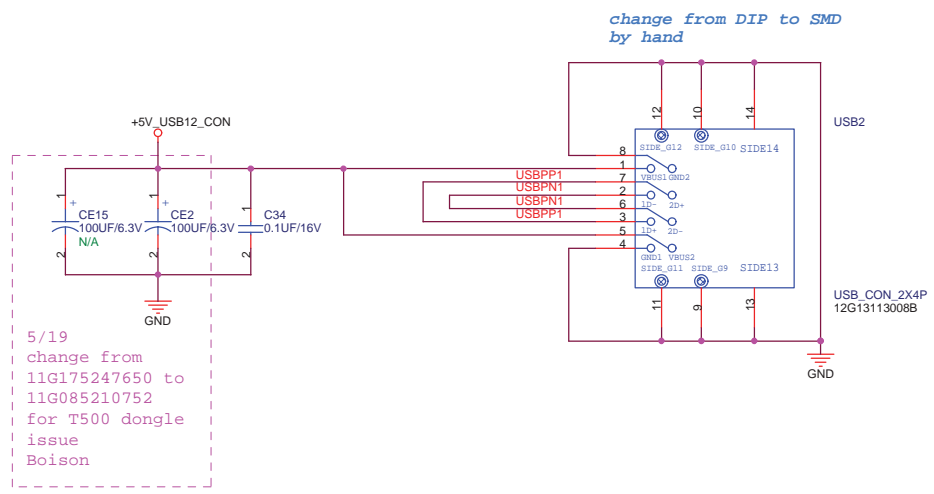
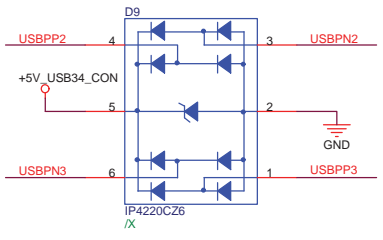
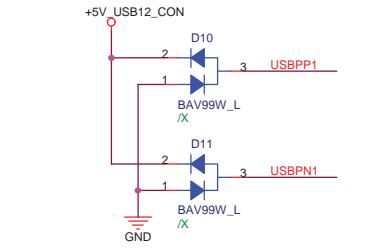
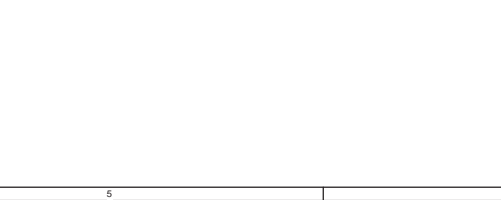
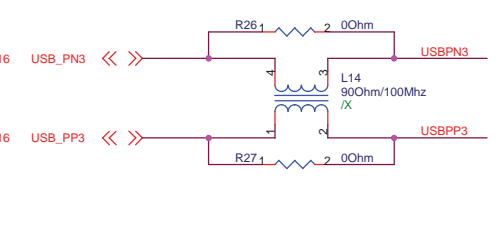
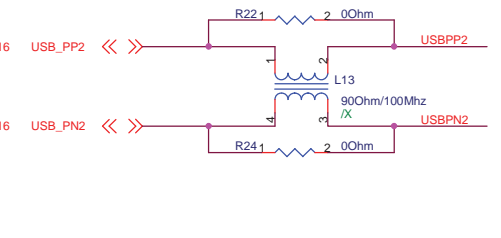
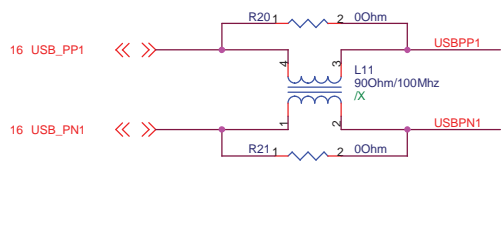
<Variant Name>

Title : HD + Flash Conn

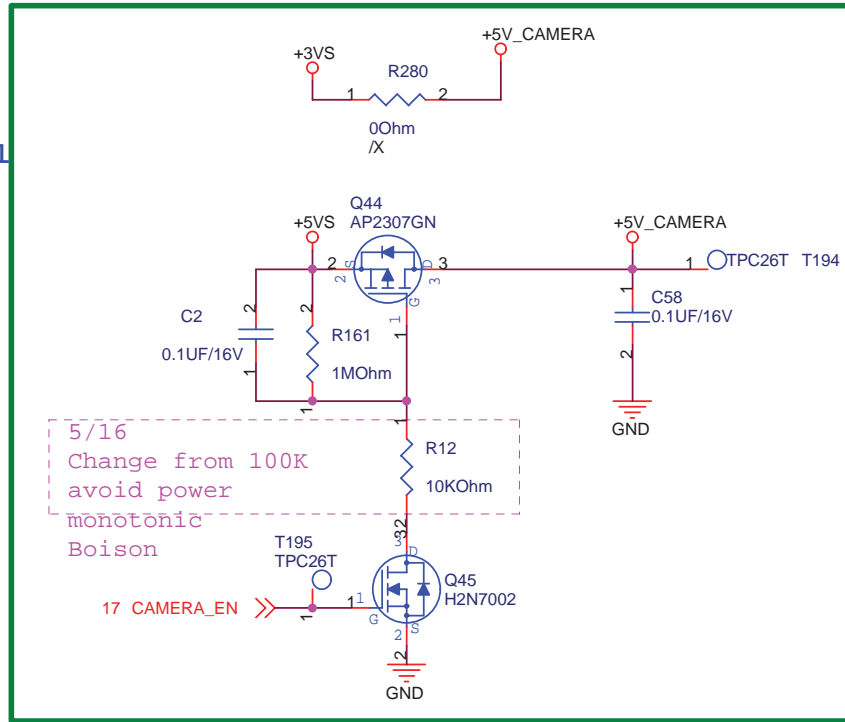
ASUSTek Computer INC. **Engineer: Kell Huang**

Size	Project Name	Rev
A3	P901	1.1G

Date: Monday, August 11, 2008 Sheet 26 of 47

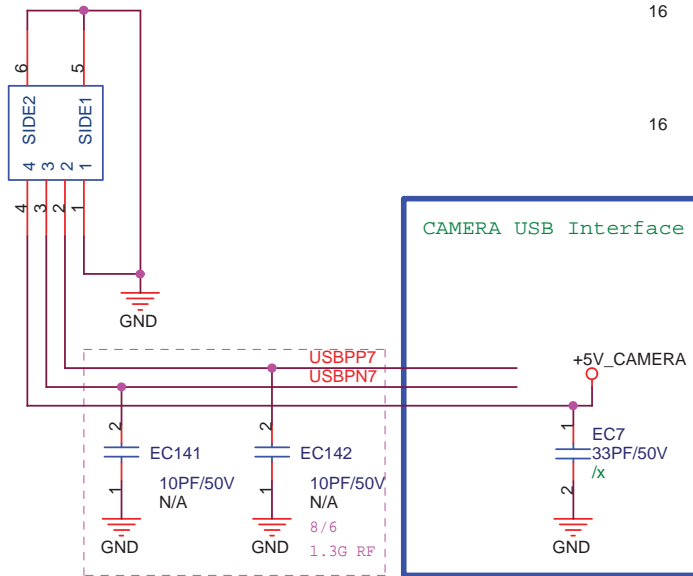


Power Control

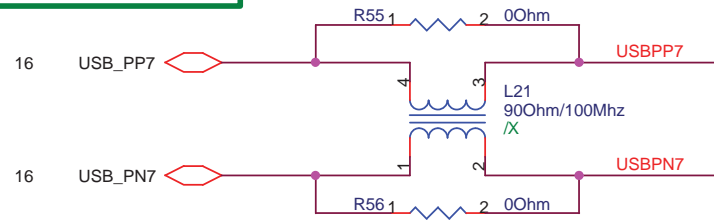


5/16
Change from 100K
avoid power
monotonic
Boison

CAMERA
WtoB_CON_4P

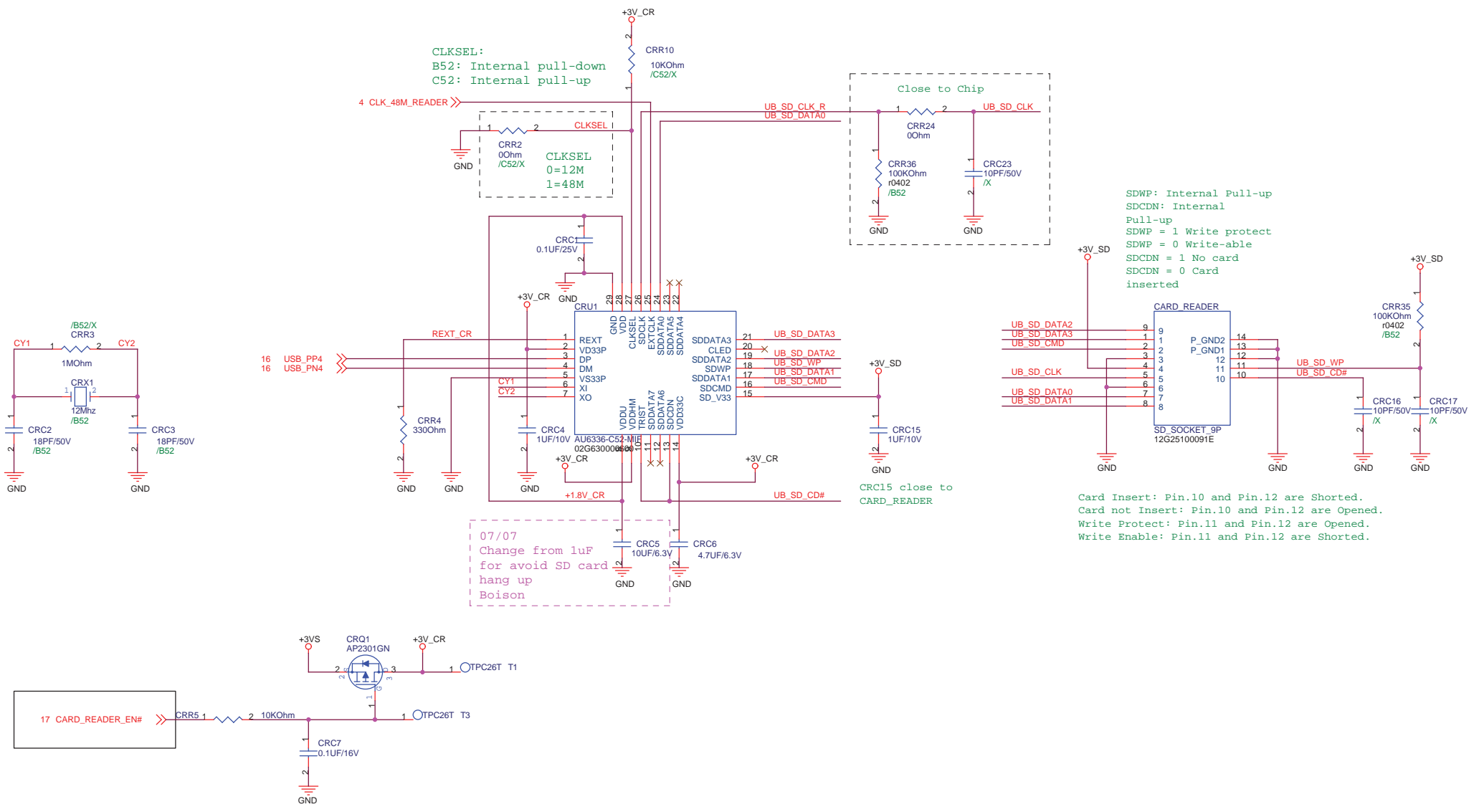


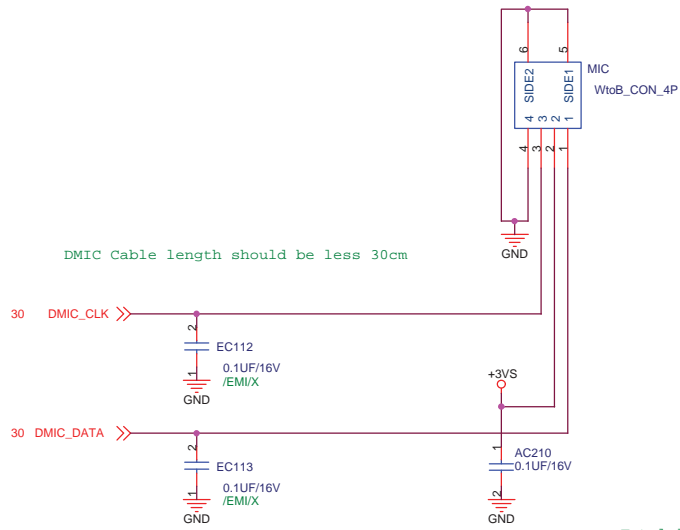
CAMERA USB Interface



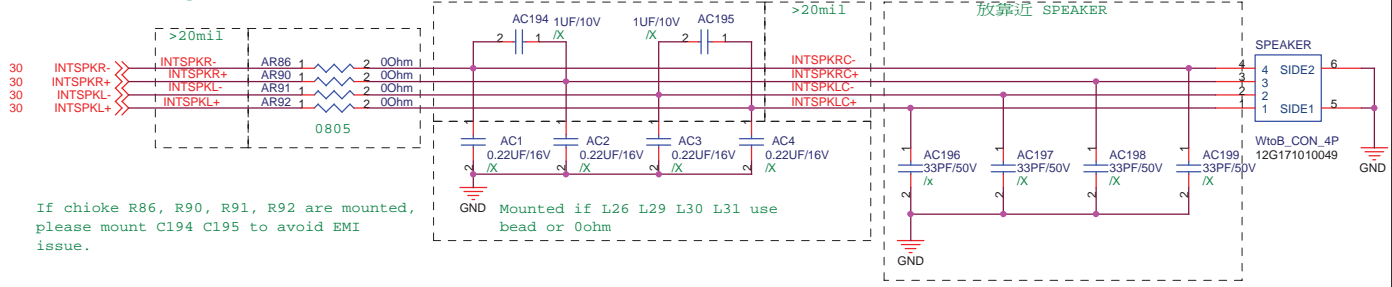
<Variant Name>

ASUS		Title : Camera Power	
ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size A4	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008		Sheet 28 of 47	

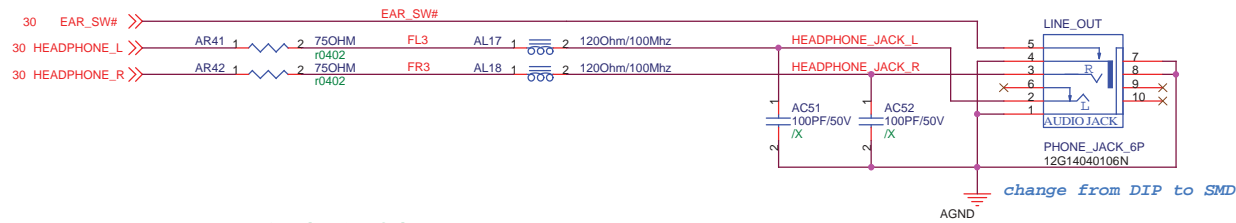




Total length from speakerR+- L+- (pin40 41 44 45) to internal speaker please as short as possible (<20cm is better)

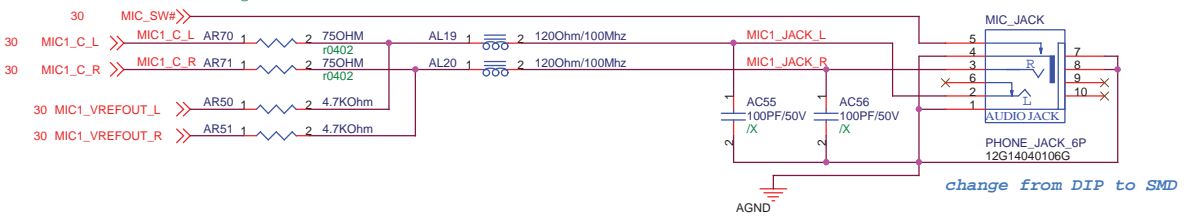


LINE_OUT use 12G14040106N

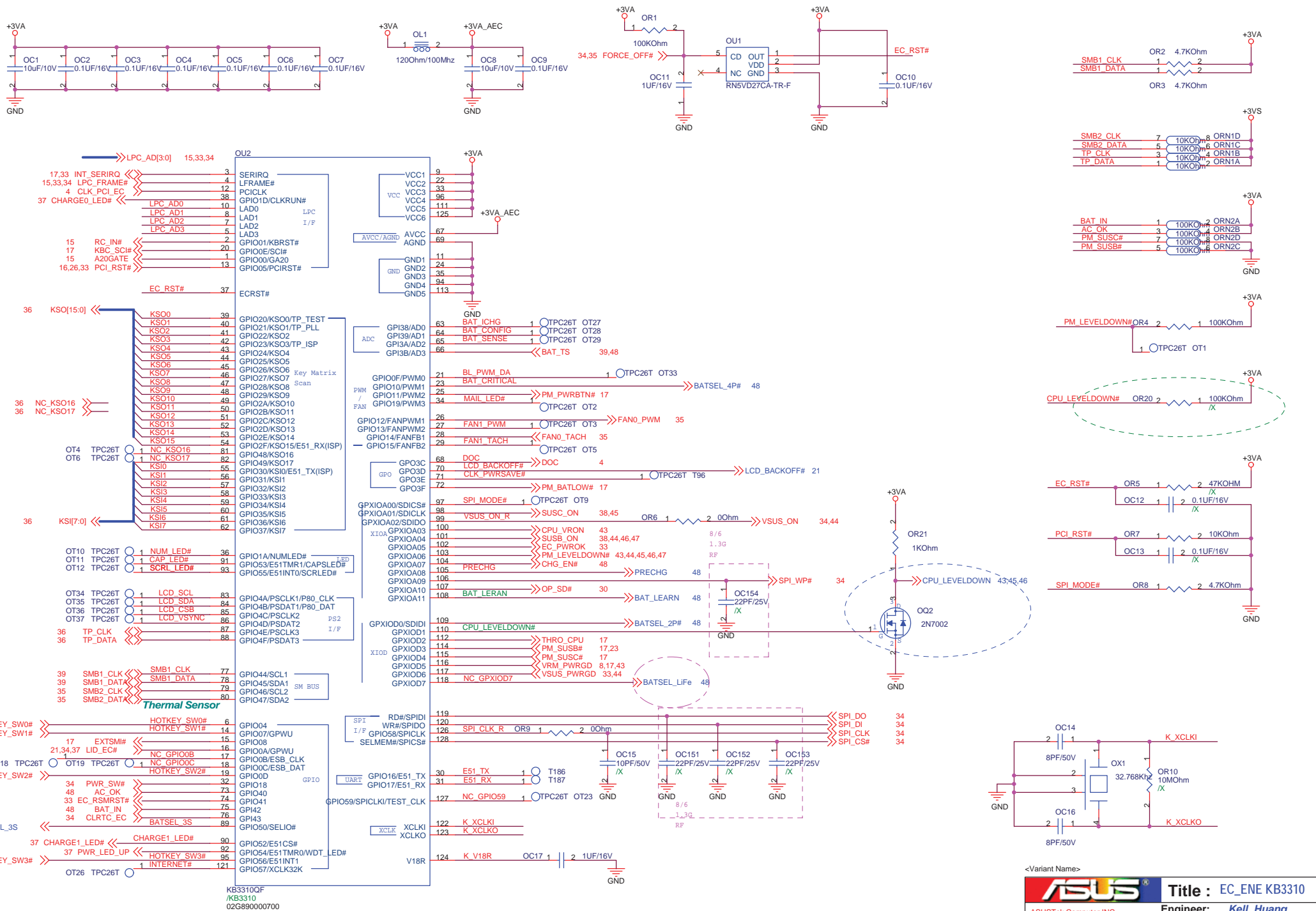


R70 and R71: If don't need retasking function, change to 1K.

MIC_JACK use 12G14040106G



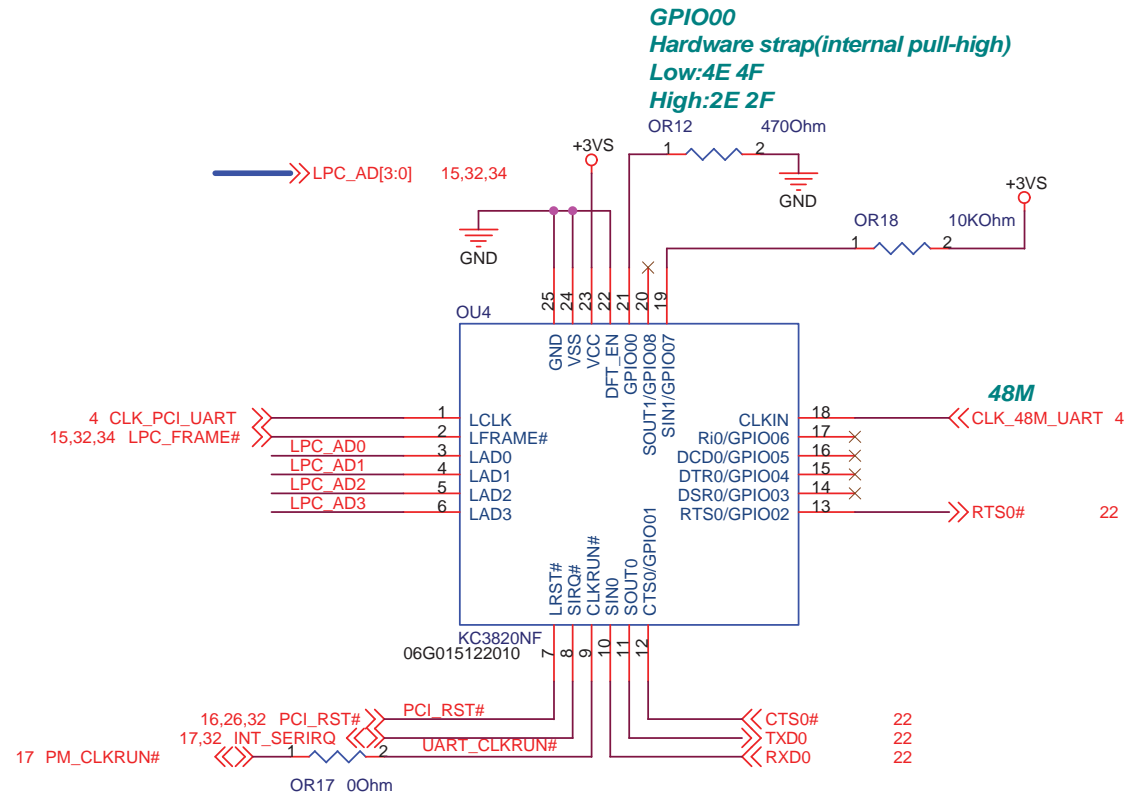
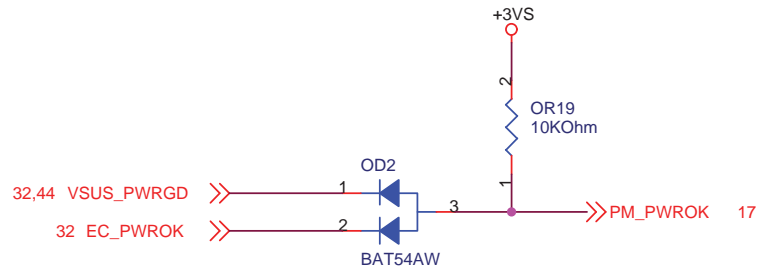
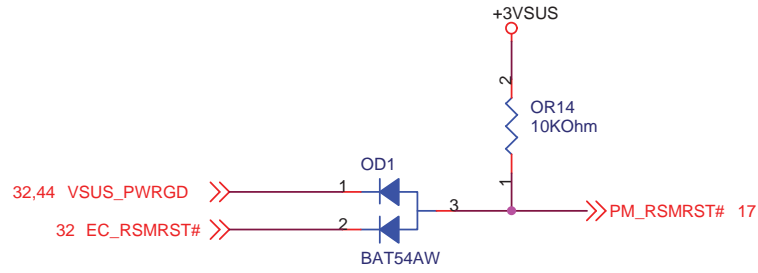
<Variant Name>		ASUS		Title : ALC269-2	
ASUSTek Computer Inc.		Engineer: MICK			
Size	Project Name		Rev		
A3	P901		1.1G		
Date: Monday, August 11, 2008		Sheet		31 of 50	



<Variant Name>

ASUS		Title : EC_ENE KB3310	
ASUSTek Computer INC.		Engineer: Keil_Huang	
Size A3	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008	Sheet	32	of 50

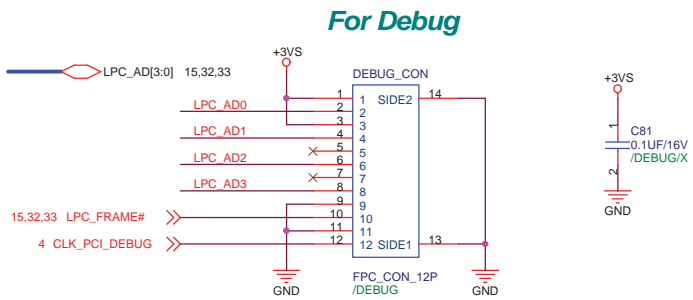
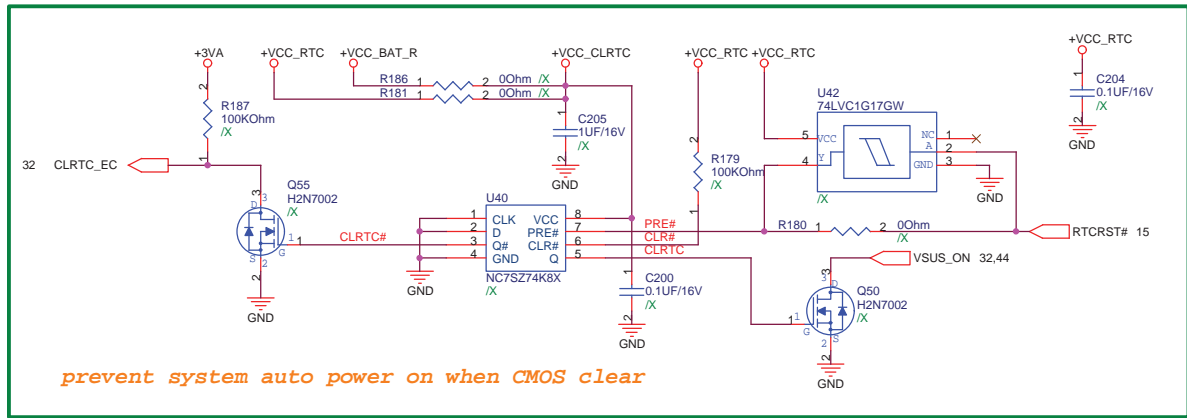
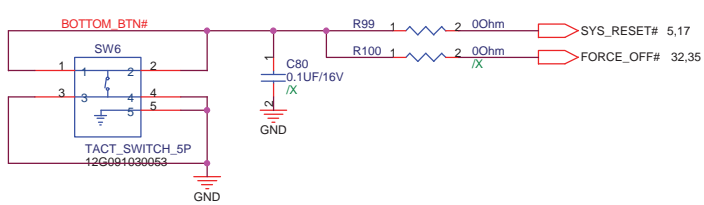
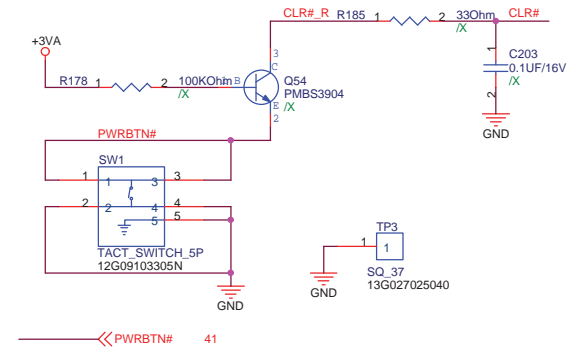
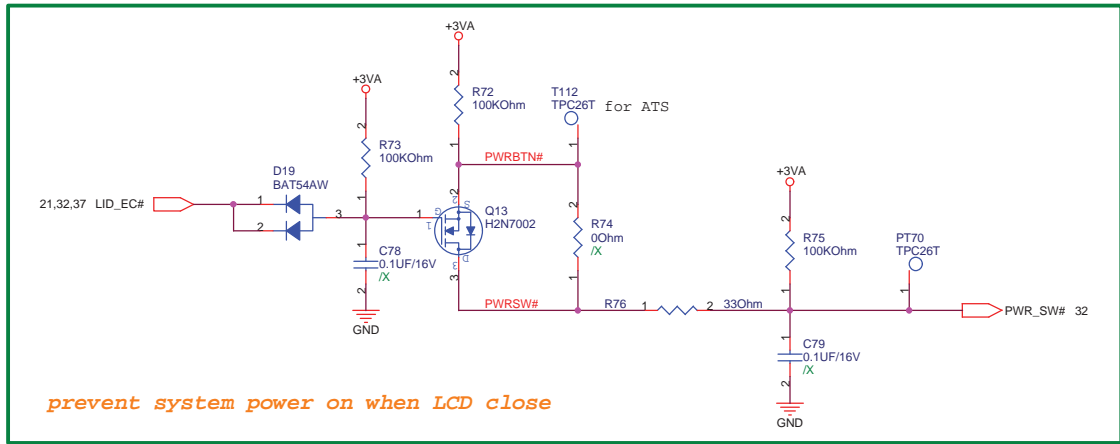
R1.2G to resolve auto-boot issue



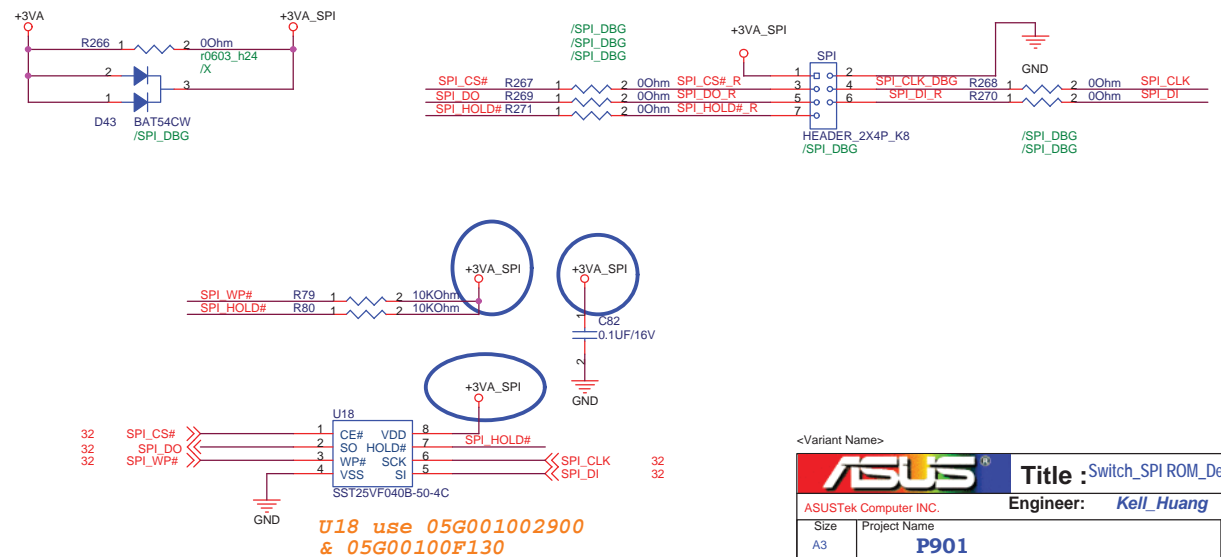
UART Control IC for using GPS module due to no UART on ENE EC

<Variant Name>

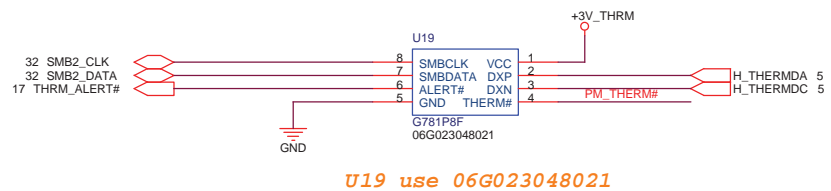
ASUS		Title : EC_UART_KC3820	
ASUSTek Computer INC.		Engineer: Kell Huang	
Size A4	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008		Sheet 33 of 50	



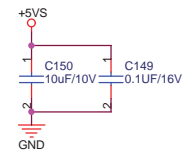
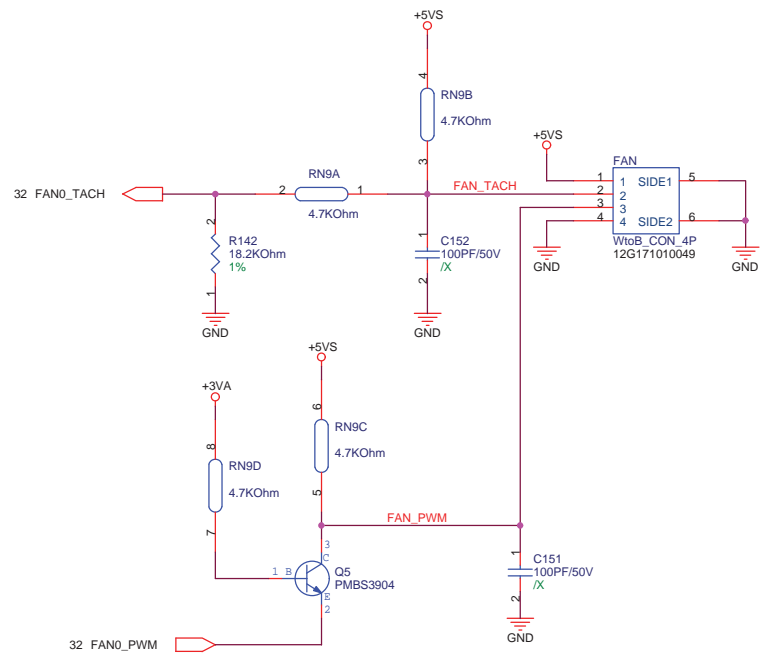
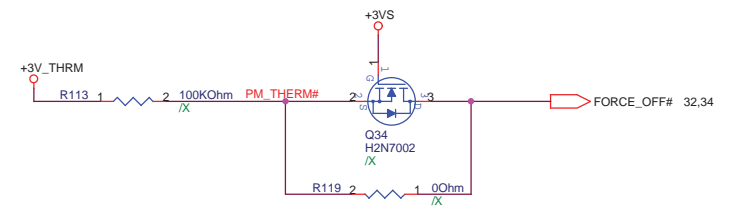
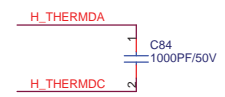
Debug Card cable use Z96 Touch Pad cable, P/N:
 14G124110126, 14G124110120, 14G124110121
 14G124110124, 14G124110125



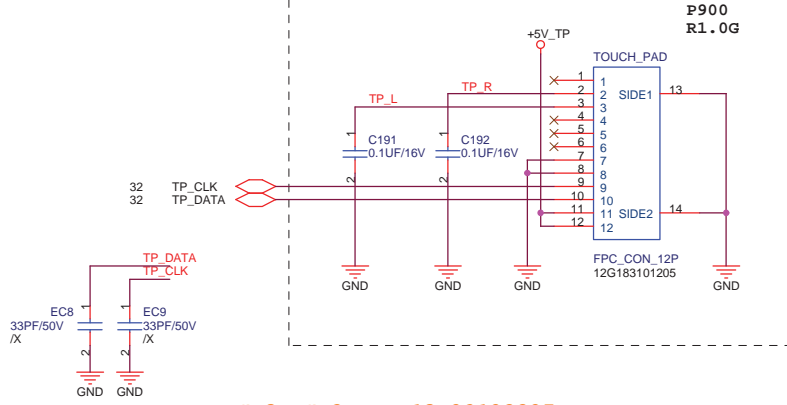
ASUS		Title : Switch_SPI ROM_Debug	
ASUSTek Computer INC.		Engineer: Kel_Huang	
Size	Project Name		Rev
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Date: Monday, August 11, 2008	Sheet	34 of 47	



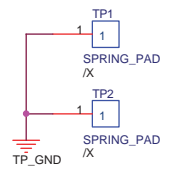
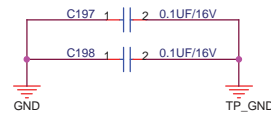
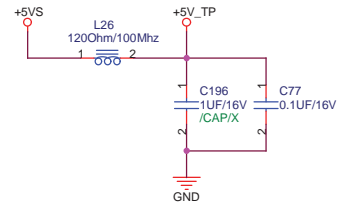
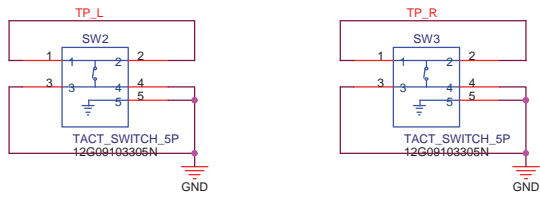
U19 use 06G023048021



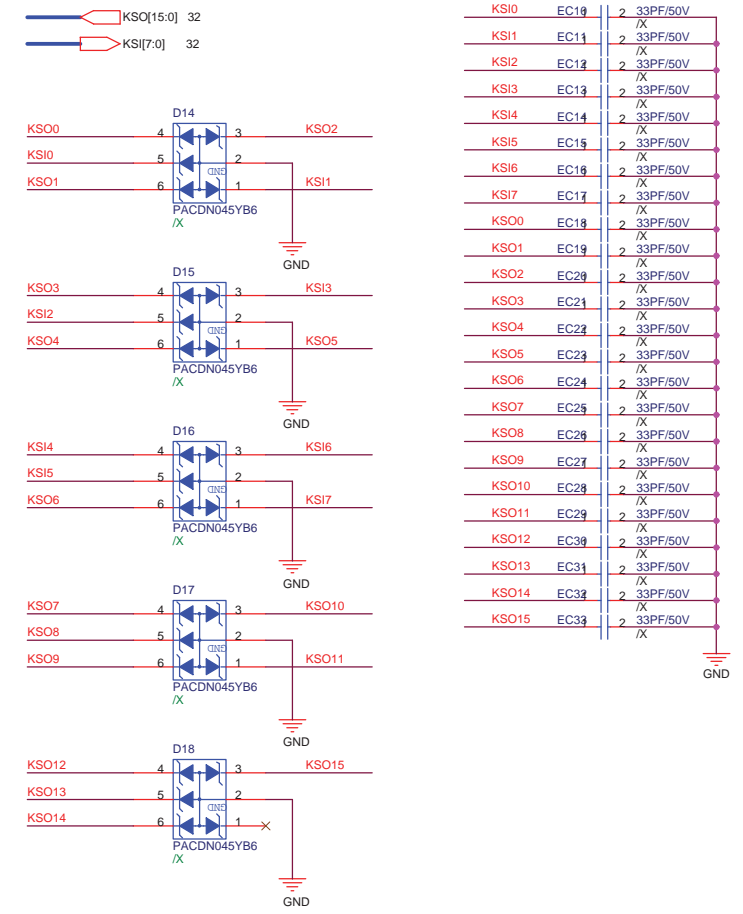
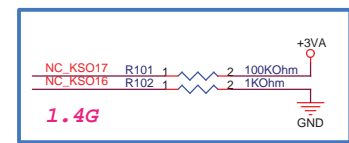
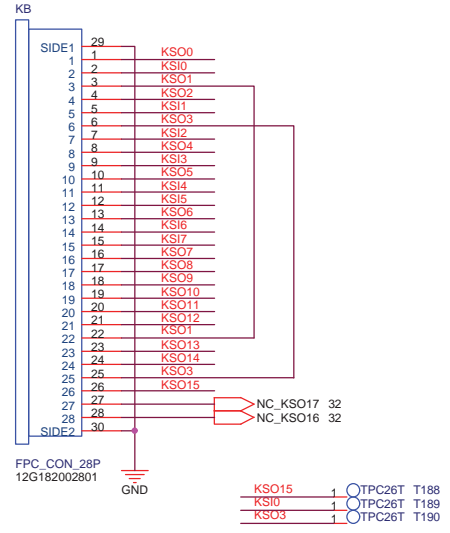
For Touch-Pad



SW2, SW3 use 12G09103305N

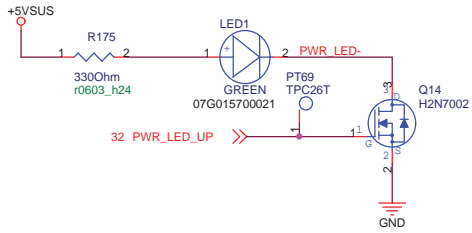


For Keyboard Connector

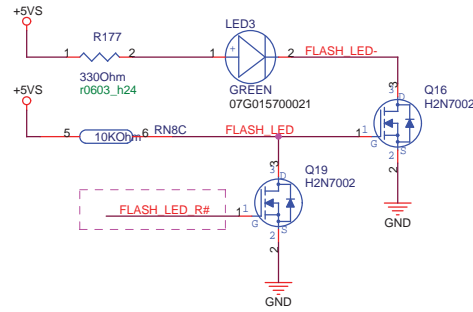


KSI0	EC19	2	33PF/50V
KSI1	EC11	2	33PF/50V
KSI2	EC12	2	33PF/50V
KSI3	EC13	2	33PF/50V
KSI4	EC14	2	33PF/50V
KSI5	EC15	2	33PF/50V
KSI6	EC16	2	33PF/50V
KSI7	EC17	2	33PF/50V
KSO0	EC18	2	33PF/50V
KSO1	EC19	2	33PF/50V
KSO2	EC20	2	33PF/50V
KSO3	EC21	2	33PF/50V
KSO4	EC22	2	33PF/50V
KSO5	EC23	2	33PF/50V
KSO6	EC24	2	33PF/50V
KSO7	EC25	2	33PF/50V
KSO8	EC26	2	33PF/50V
KSO9	EC27	2	33PF/50V
KSO10	EC28	2	33PF/50V
KSO11	EC29	2	33PF/50V
KSO12	EC30	2	33PF/50V
KSO13	EC31	2	33PF/50V
KSO14	EC32	2	33PF/50V
KSO15	EC33	2	33PF/50V

for POWER LED

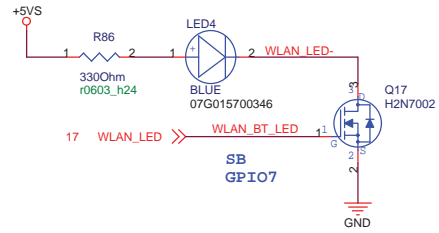


for FLASH LED

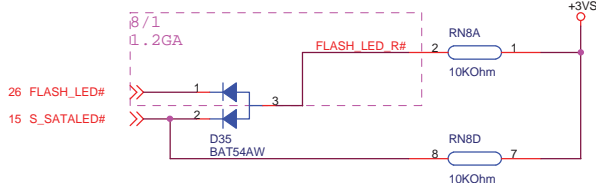
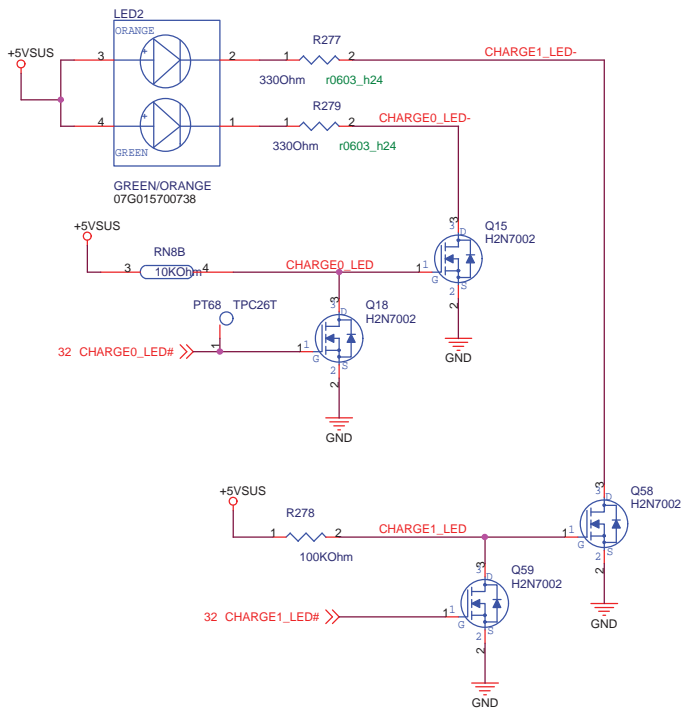


for WLAN/BlueTooth LED

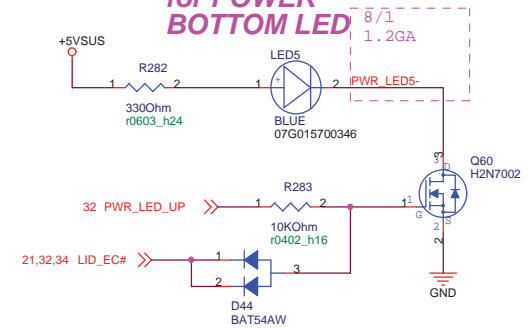
R86 use 4.7K OHm 10G213472003030



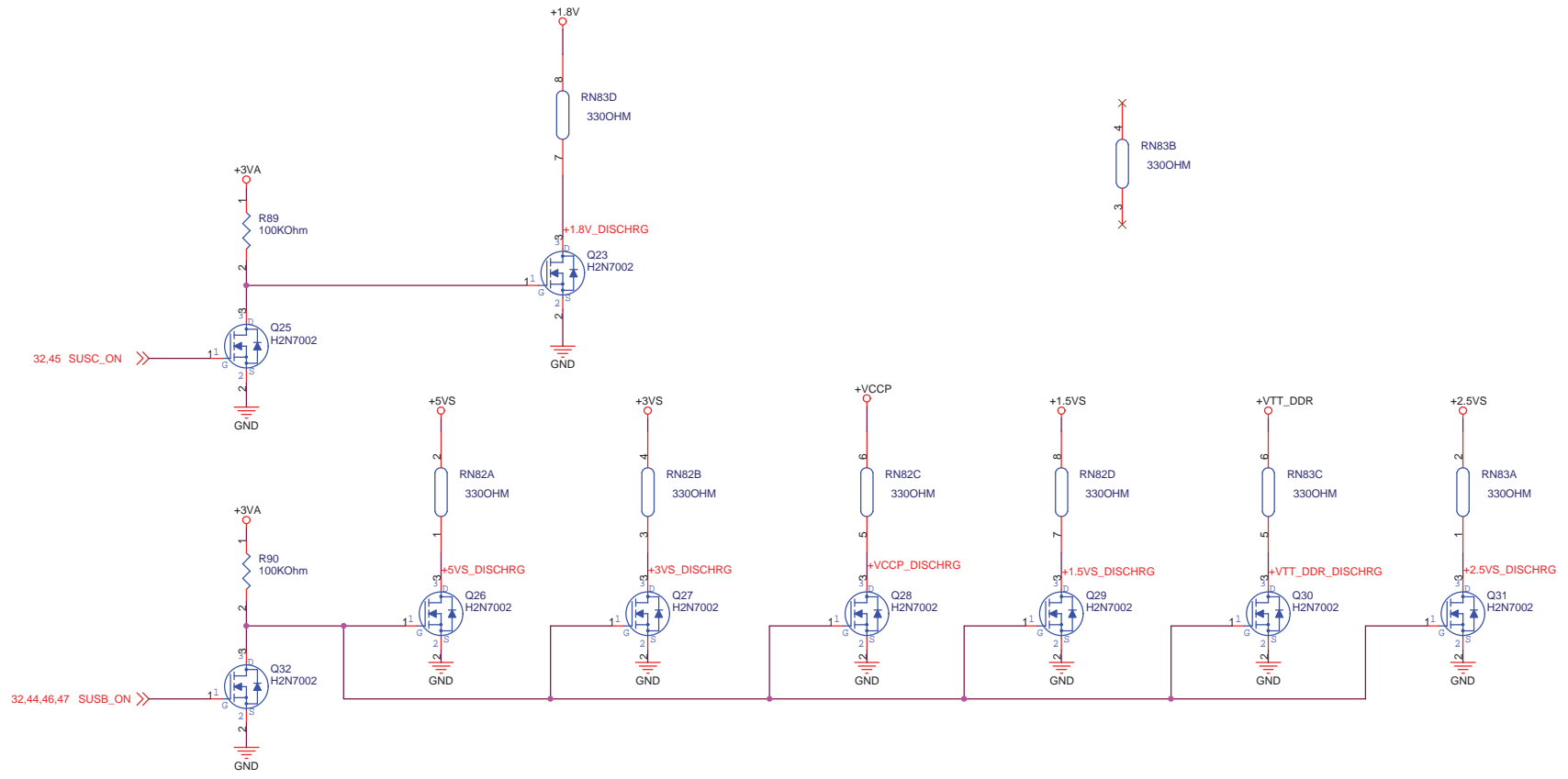
for CHARGE LED



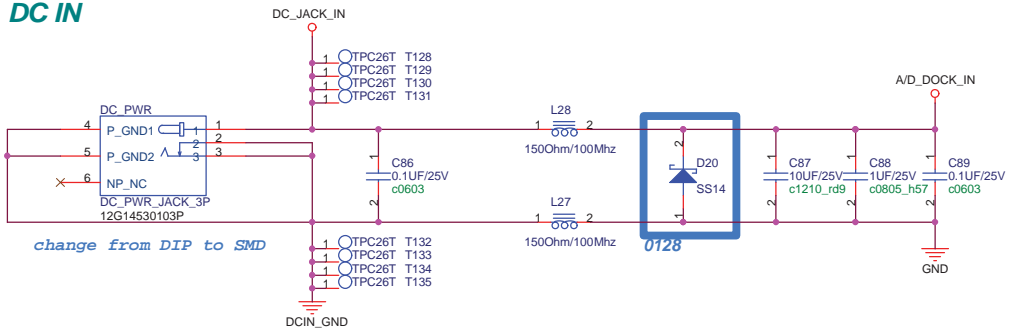
for POWER BOTTOM LED



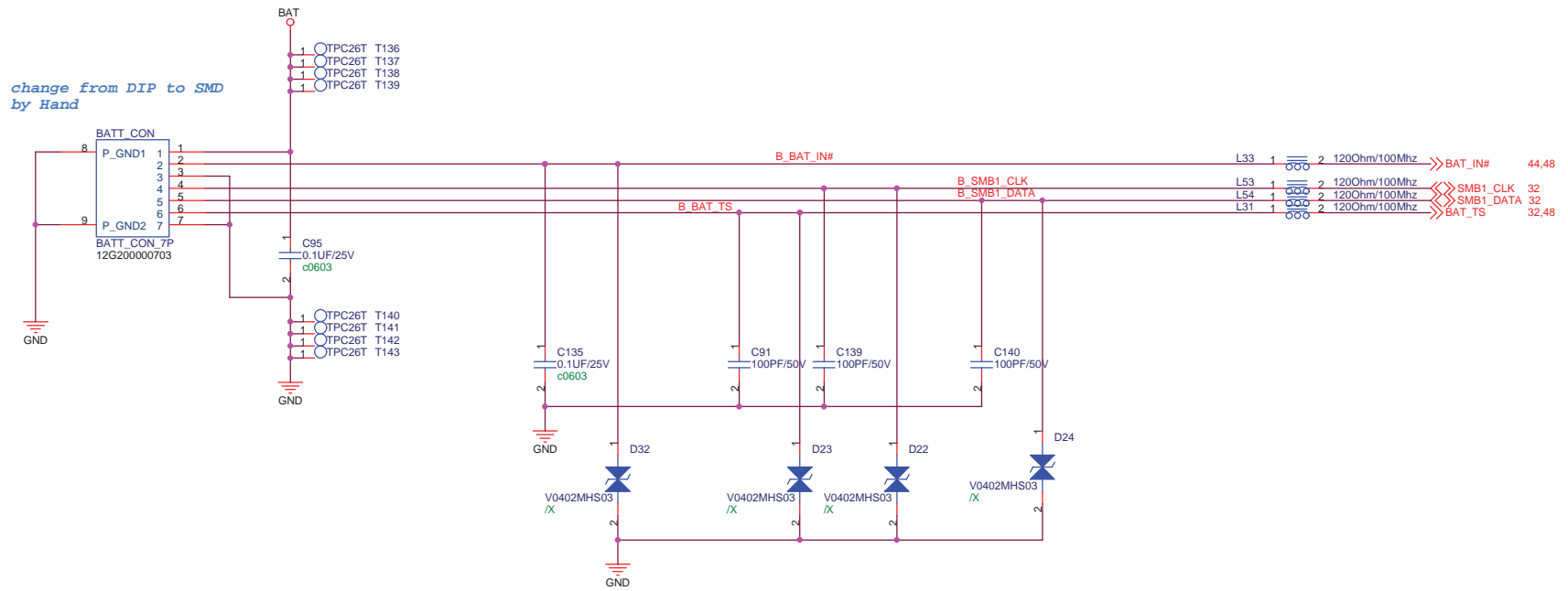
ASUS		Title : LED	
ASUSTek Computer INC.		Engineer: Kell_Huang	
Size	Project Name	Date	Rev
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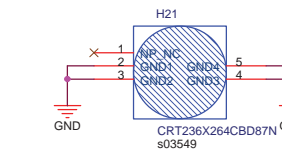
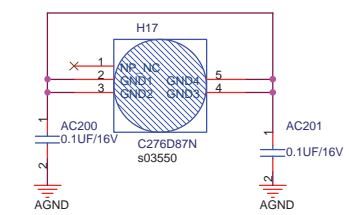
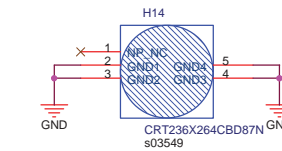
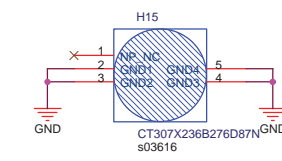
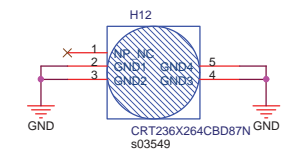
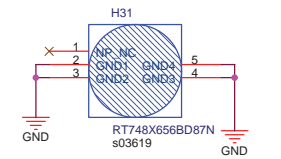
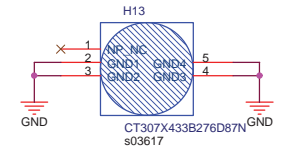
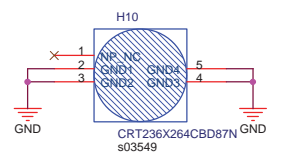
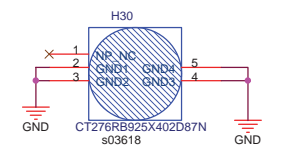
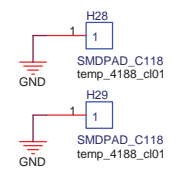
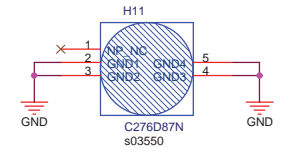
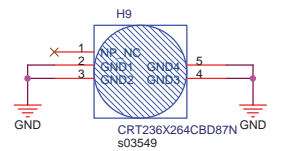
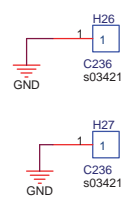
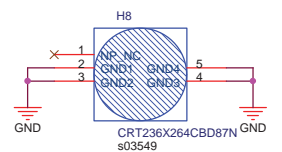
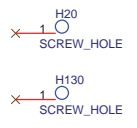
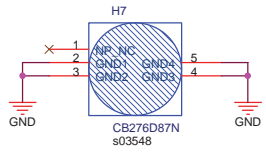
DC IN



BAT IN

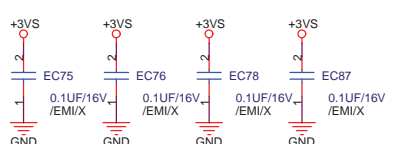
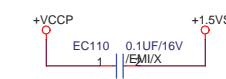
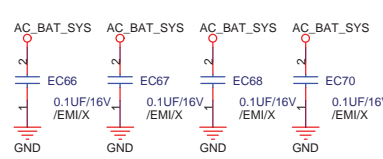
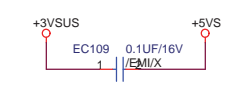
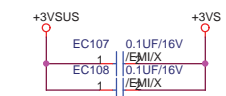
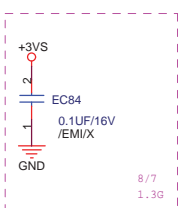
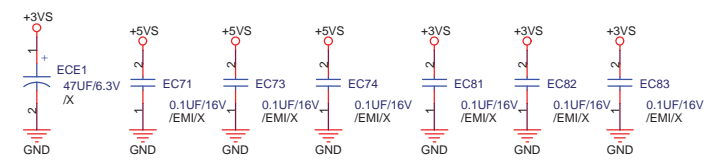
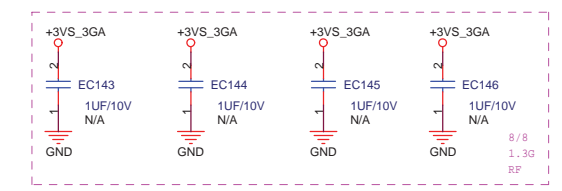
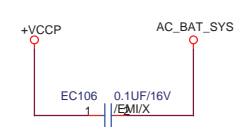
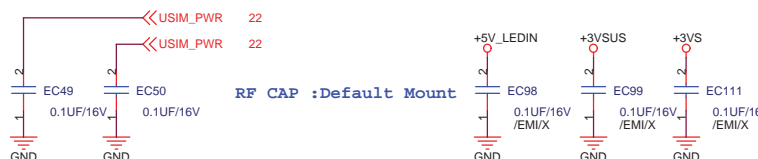
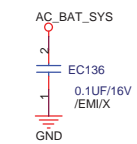
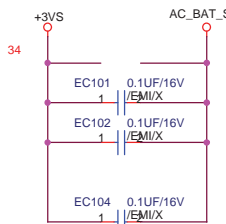
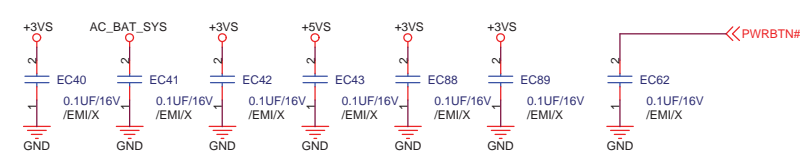
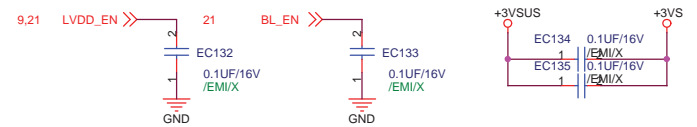
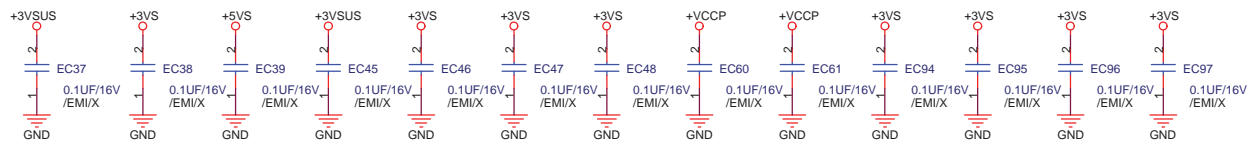
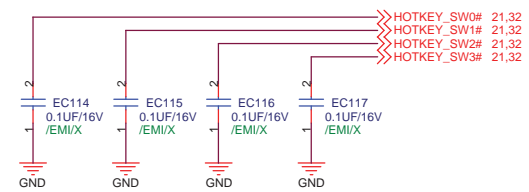
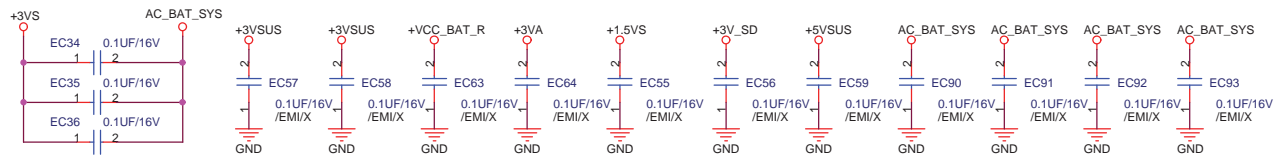


ASUS		Title : PWR Jack	
ASUSTek Computer INC.		Engineer: Keli_Huang	
Size	Project Name		Rev
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Date: Monday, August 11, 2008		Sheet	39 of 47



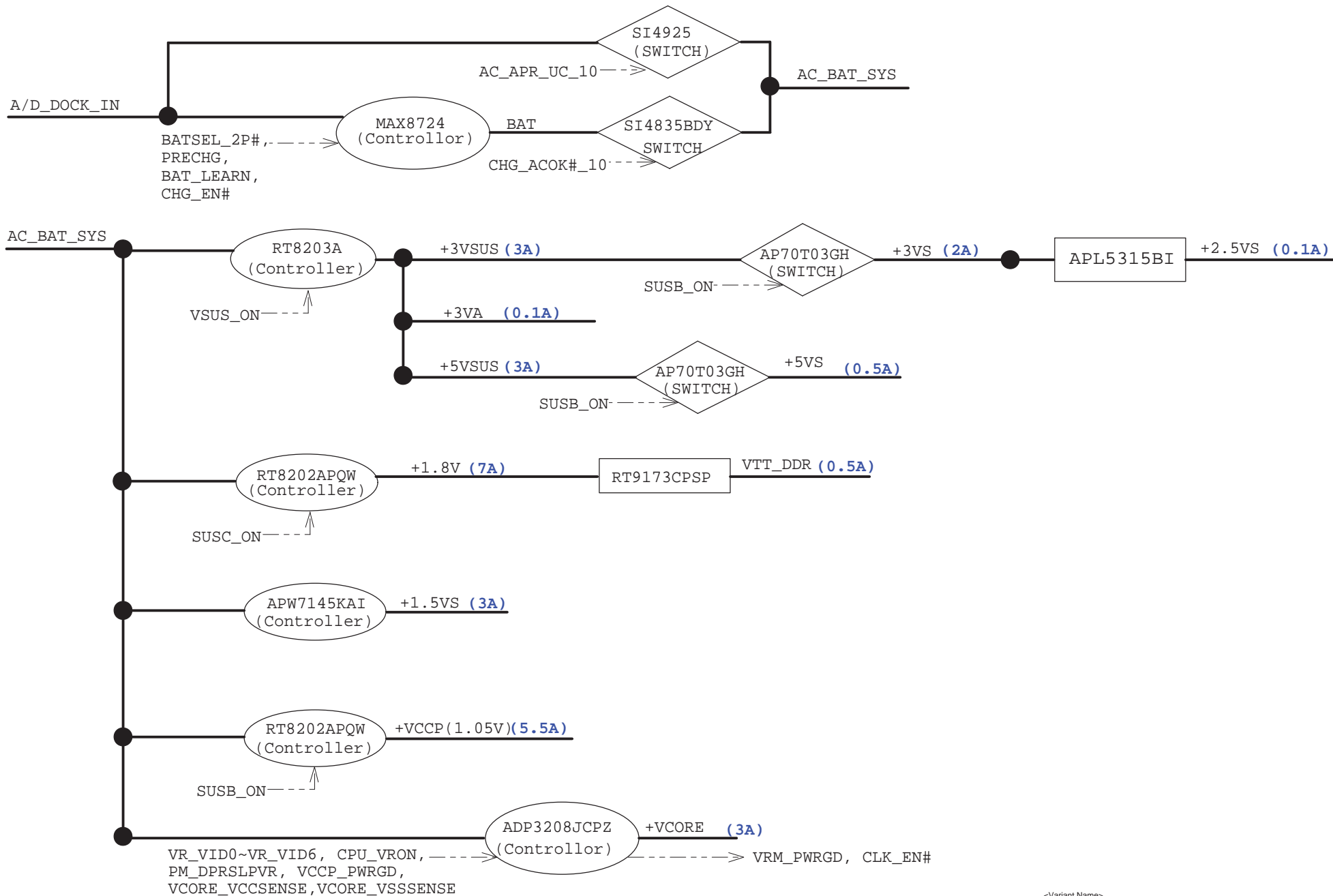
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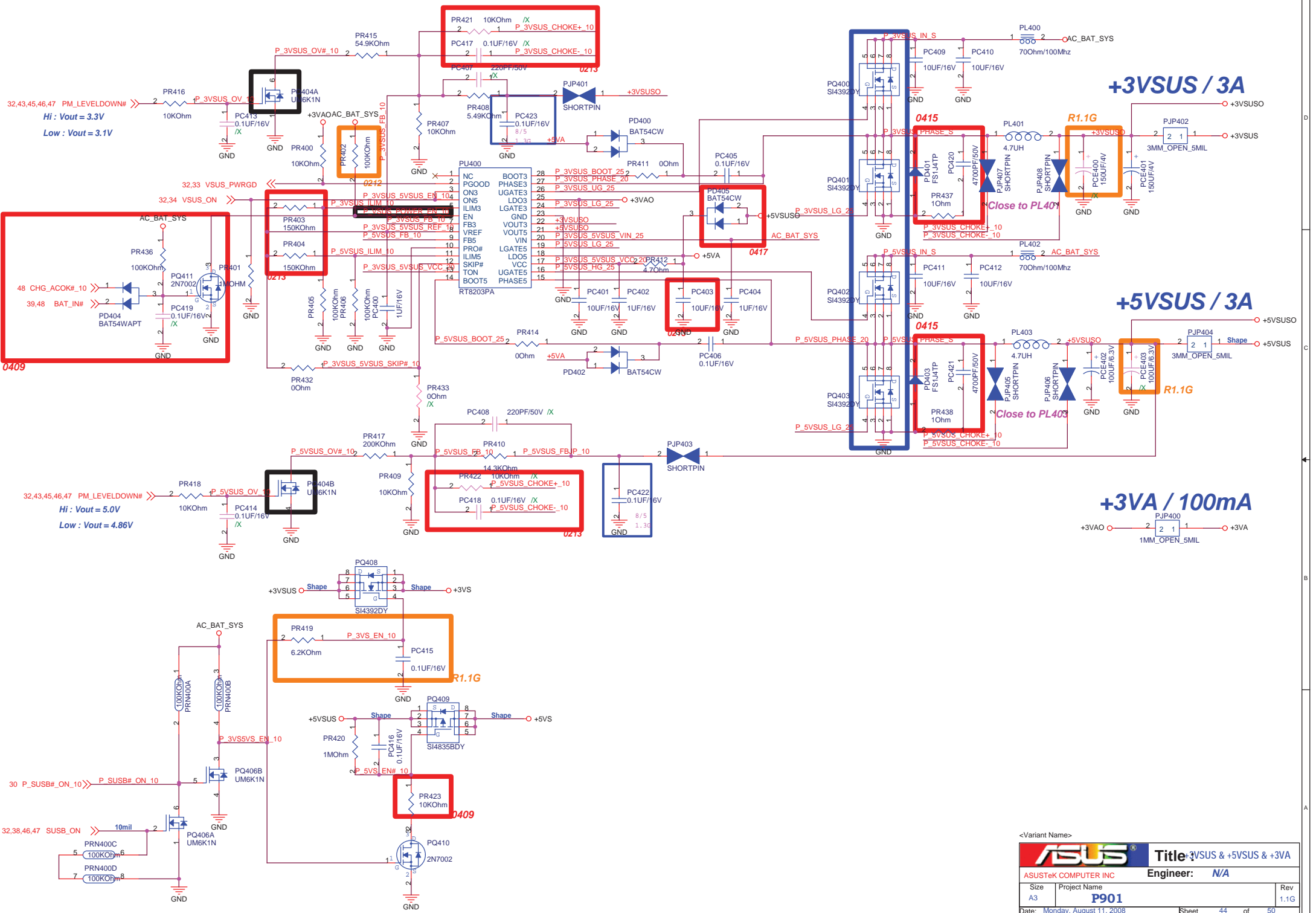
ASUS		Title : Srew Hole	
ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size	Project Name	Rev	
A3	P901	1.1G	
Date: Monday, August 11, 2008	Sheet	40 of 47	



<Variant Name>

ASUS		Title : EMI	
ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size	Project Name		Rev
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Date: Monday, August 11, 2008	Sheet	41 of 47	





Hi : Vout = 3.3V
Low : Vout = 3.1V

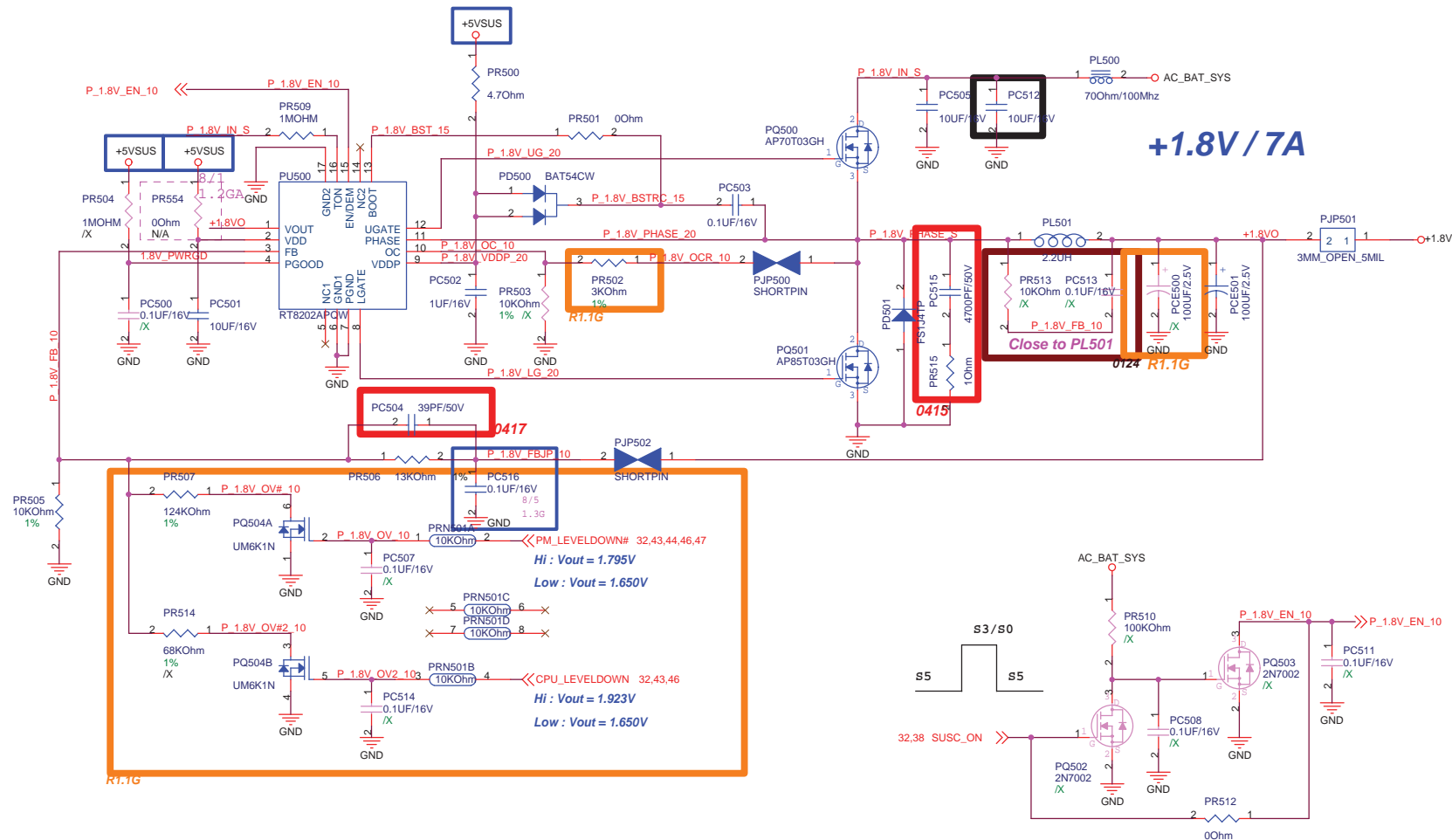
+3VSUS / 3A

+5VSUS / 3A

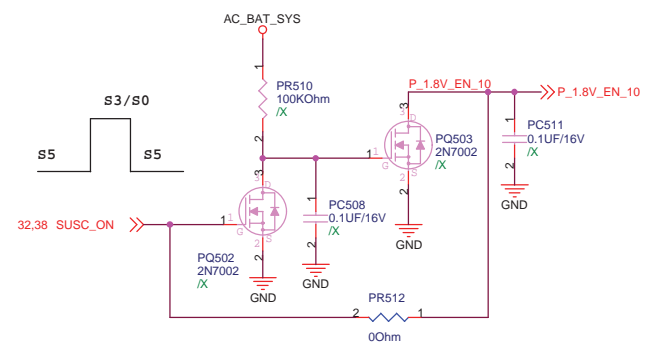
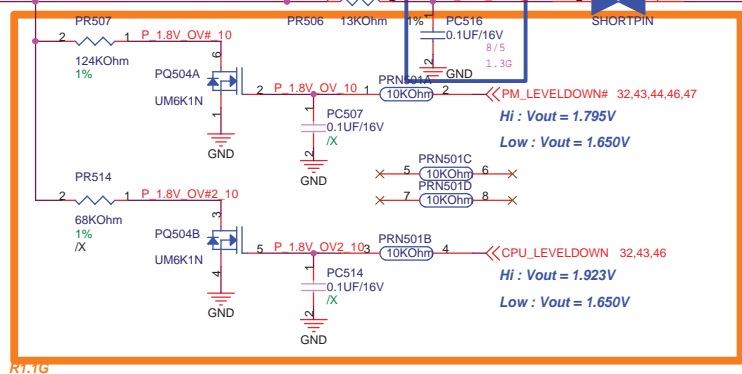
+3VA / 100mA

<Variant Name>

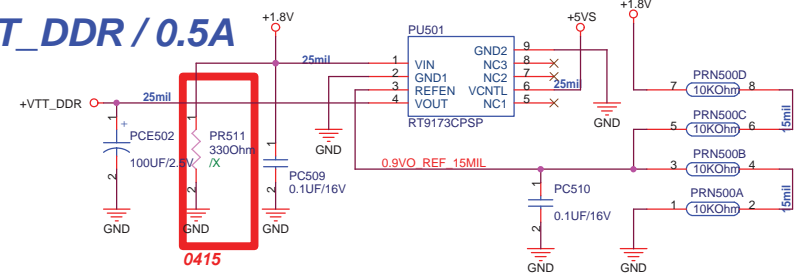
ASUS		Title: 3VSUS & +5VSUS & +3VA	
ASUSTeK COMPUTER INC		Engineer: N/A	
Size	Project Name		Rev
A3	P901		1.1G
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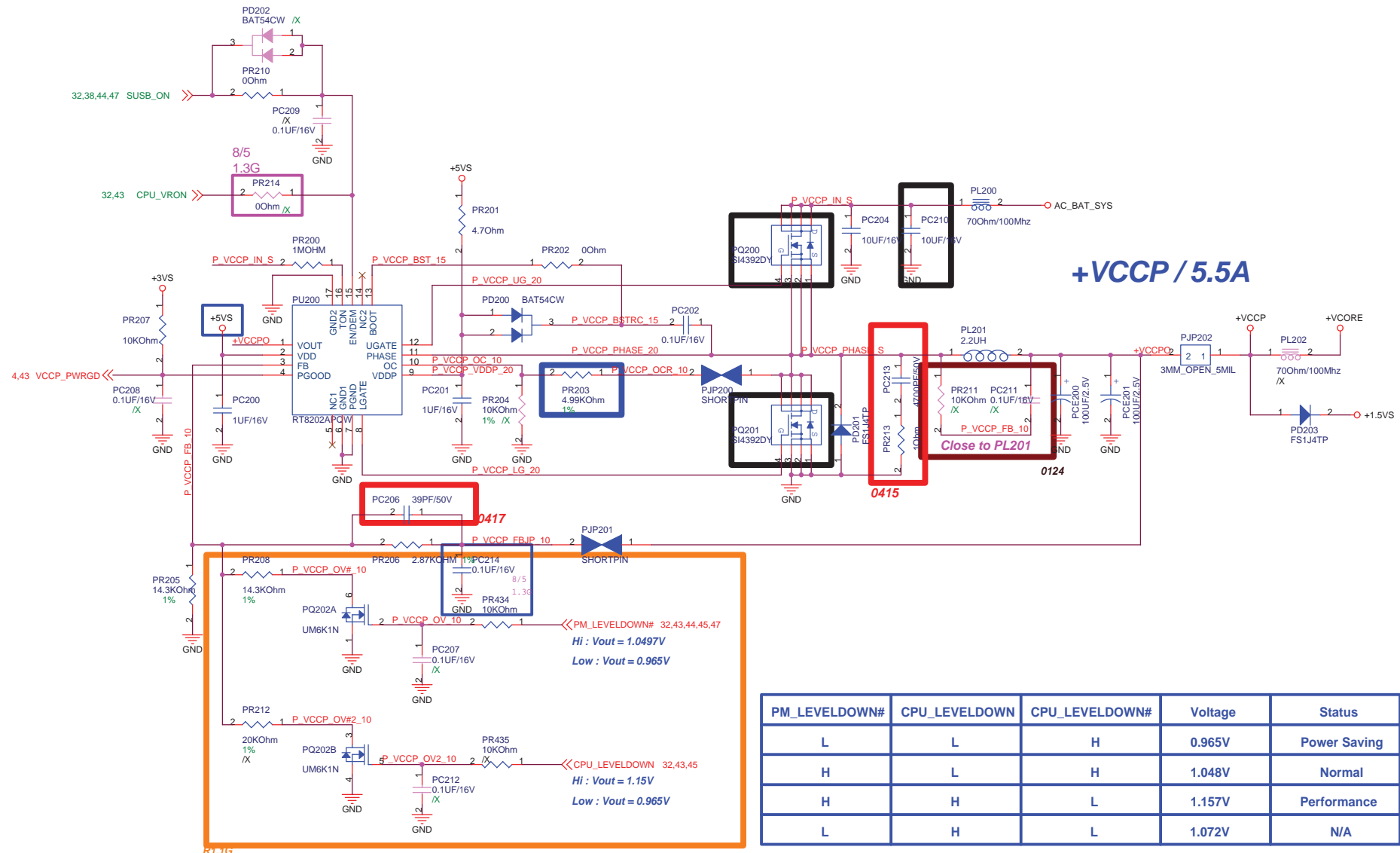
+1.8V / 7A



VTT_DDR / 0.5A



PM_LEVELDOWN#	CPU_LEVELDOWN	CPU_LEVELDOWN#	Voltage	Status
L	L	H	1.650V	Power Saving
H	L	H	1.795V	Normal
H	H	L	1.927V	Performance
L	H	L	1.782V	N/A



+VCCP / 5.5A

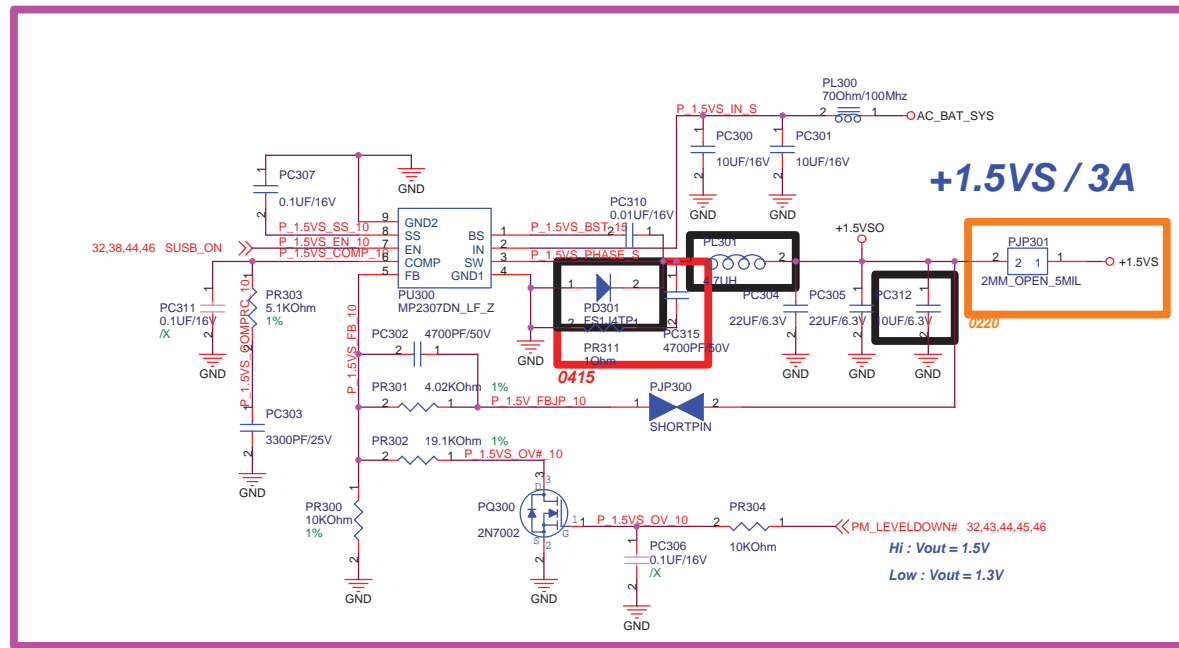
PM_LEVELDOWN# 32,43,44,45,47
Hi : Vout = 1.0497V
Low : Vout = 0.965V

CPU_LEVELDOWN# 32,43,45
Hi : Vout = 1.15V
Low : Vout = 0.965V

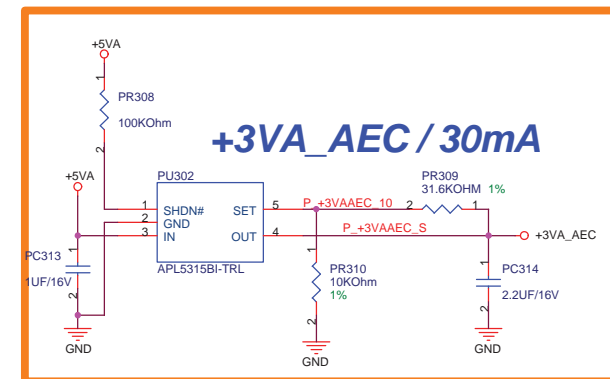
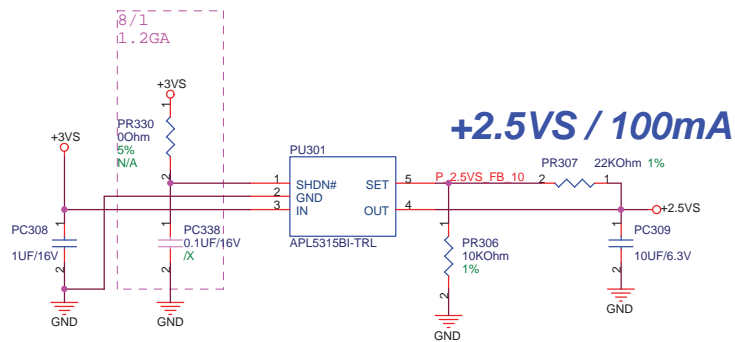
PM_LEVELDOWN#	CPU_LEVELDOWN	CPU_LEVELDOWN#	Voltage	Status
L	L	H	0.965V	Power Saving
H	L	H	1.048V	Normal
H	H	L	1.157V	Performance
L	H	L	1.072V	N/A

<Variant Name>

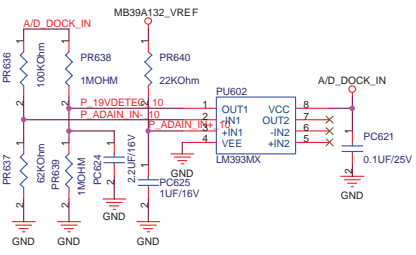
		Title : VCCP	
ASUSTek Computer INC.		Engineer: Joy_Zhou	
Size A3	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008		Sheet 46 of 50	



0115



0220



VREF = 5.0V
 $f_{osc}(KHz) = 17000 / RT (KOhm)$
 Soft start: $t_s(s) = 0.13 * CS (\mu F)$
 $V_{TH} \text{ of } -IN1: 5V / 62 * (100+62) = 13.06V$
 $V_{TH} \text{ of } ACIN: 1.25V / 25 * (185+25) = 10.5V$
 Change PR607 and PR608 value

Prevent Input from 19V :

Adaptor > 13.06V, PQ603B Turn-off
 Adaptor < 13.06V, PQ603B Turn-on

Battery Cell Selection :

$BAT_ID = 1, 2 \text{ Cells; } V_{adj2} = 0.998V$
 $\Rightarrow I_{charge} = 1.477A$
 $BAT_ID = 0, 4/6 \text{ Cells; } V_{adj2} = 1.648V$
 $\Rightarrow I_{charge} = 2.517A$

Pre-Charging Mode :

Precharging current = 150mA
 $V_{adj2} = 168.75mV$

Adaptor Max. Current :

PR600=235.8K; $I_{limit} = 2.170A; 20.615W (9.5V/22W)$
 PR600=185.3K; $I_{limit} = 2.677A; 32.124W (12V/36W)$

ACIN Threshold = 1.25V

Adaptor > 10.5V, System Powered by Adaptor
 Adaptor < 10.5V, System Powered by Battery

Battery Charging Voltage :

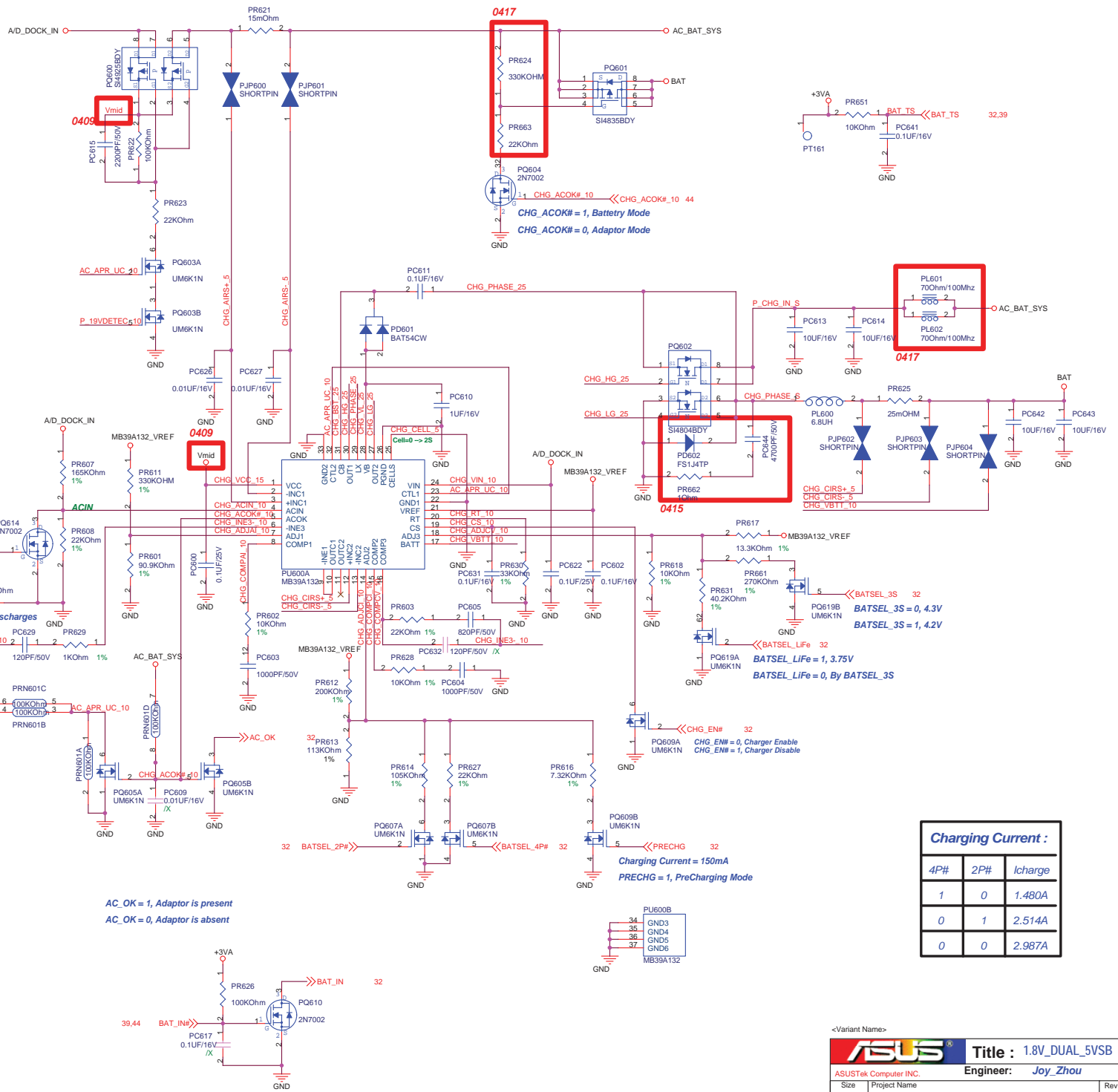
$V_{adj3} > 4.1V \Rightarrow V_{bat} = 4.2V / \text{cell}$
 $2.2V > V_{adj3} > 1.1V \Rightarrow V_{bat} = 2 * V_{adj3}$

Battery Charging Current :

$4.4V > V_{adj2} > 0V \Rightarrow$
 $I_{chg} =$
 $V_{adj2} * 0.075V / (25 * R_s)$

Input Adaptor Max. Current Limit :

$I_{limit_current} = (V_{adj1} - 0.075) / (25 * R_s)$



Charging Current :

4P#	2P#	Icharge
1	0	1.480A
0	1	2.514A
0	0	2.987A

EC KB3310 GPIO SETTING

Pin	Pin Name	Signal Name	Type	Note
1	GPIO0/GA20	A20GATE	O	
2	GPIO01/KBRST#	RC_IN#	O	
6	GPIO4	EMAIL_SW#	I	Internal pull high
13	GPIO05/PCIRST#	PCI_RST#	I	
14	GPIO07	BAT_OTP	I	Battery over temperature
15	GPIO08	EXTSMH#	OD	10K pull high to +3VSB
16	GPIO0A	LID_EC#	I	Internal pull high
17	GPIO0B/ESB_CLK	NC	O	
18	GPIO0C/ESB_DAT	NC	O	
19	GPIO0D	DISTP_SW#	I	Internal pull high
20	GPIO0E/SC#	EXT_SC#	O	10K pull high to +3VSB
21	GPIO0F/PWM0	BL_PWM_DA	O	
23	GPIO10/PWM1	BAT_CRITICAL	I	Battery critical capacity
25	GPIO11/PWM2	PM_PWRBTN#	OD	Internal pull high in ICH
26	GPIO12/FANPWM1	FAN0_PWM	O	CPU Fan
27	GPIO13/FANPWM2	FAN1_PWM	O	VGA Fan
28	GPIO14/FANFB1	FAN0_TACH	I	CPU FanTach
29	GPIO15/FANFB2	FAN1_TACH	I	VGA FanTach
30	GPIO16/E51_TX	E51_TX	O	RS232 debug port
31	GPIO17/E51_RX	E51_RX	I	RS232 debug port
32	GPIO18	PWR_SW#	I	Internal pull high
34	GPIO19/PWM3	MAIL_LED#	O	
36	GPIO1A/NUMLED	NUM_LED#	O	
38	GPIO1D/CLKRUN#	NC	O	
39	GPIO20/KSO0/TP_TEST	KSO0	O	
40	GPIO21/KSO1/TP_PLL	KSO1	O	
41	GPIO22/KSO2	KSO2	O	
42	GPIO23/KSO3	KSO3	O	
43	GPIO24/KSO4	KSO4	O	
44	GPIO25/KSO5	KSO5	O	
45	GPIO26/KSO6	KSO6	O	
46	GPIO27/KSO7	KSO7	O	
47	GPIO28/KSO8	KSO8	O	
48	GPIO29/KSO9	KSO9	O	
49	GPIO2A/KSO10	KSO10	O	
50	GPIO2B/KSO11	KSO11	O	
51	GPIO2C/KSO12	KSO12	O	
52	GPIO2D/KSO13	KSO13	O	
53	GPIO2E/KSO14	KSO14	O	
54	GPIO2F/KSO15	KSO15	O	
55	GPIO30/KSI0	KSI0	I	Internal pull high
56	GPIO31/KSI1	KSI1	I	Internal pull high
57	GPIO32/KSI2	KSI2	I	Internal pull high
58	GPIO33/KSI3	KSI3	I	Internal pull high
59	GPIO34/KSI4	KSI4	I	Internal pull high
60	GPIO35/KSI5	KSI5	I	Internal pull high
61	GPIO36/KSI6	KSI6	I	Internal pull high
62	GPIO37/KSI7	KSI7	I	Internal pull high
63	GPI38/AD0	BAT_ICHG	I	
64	GPI39/AD1	BAT_CONFIG	I	Battery configuration
65	GPIO3A/AD2	BAT_SENSE	I	Battery Voltage Sensor
66	GPIO3B/AD3	BAT_TS	I	Battery Thermal Sensor
68	GPO3C/DA0	DOC	O	Trigger Clock Gen

EC KB3310 Other Pin SETTING

Pin	Pin Name	Signal Name	Type	Note
3	SERIRQ	INT_SERIRQ	I/O	10K pull high to +3V
4	LFRAME#	LPC_FRAME#	I	
5	LAD3	LPC_AD3	I/O	
7	LAD2	LPC_AD2	I/O	
8	LAD1	LPC_AD1	I/O	
9	VCC	+3VA_EC	P	
10	LAD0	LPC_AD0	I/O	
11	GND	GND	P	
12	PCICLK	CLK_PCL_EC	I	
22	VCC	+3VA_EC	P	
24	GND	GND	P	
33	VCC	+3VA_EC	P	
35	GND	GND	P	
37	ECRST#	EC_RST#	I	100K pull high to +3VA_EC
67	AVCC	+3VACC	P	
69	AGND	AGND	P	
94	GND	GND	P	
96	VCC	+3VA_EC	P	
111	VCC	+3VA_EC	P	
113	GND	GND	P	
119	RD#/SPIDI	SPL_SO	I	
120	WR#/SPIDO	SPL_SI	O	
112	XCLKI	32KXCLKI	I	
123	XCLKO	32KXCLKO	O	
124	V18R	V18R	P	Reserved 1uF to GND
125	VCC	+3VA_EC	P	
128	SPICS#/SELMEM#	SPL_CE#	O	

Pin	Pin Name	Signal Name	Type	Note
70	GPO3D/DA1	LCD_BACKOFF#	O	
71	GPO3E/DA2	CLK_PWRSERVE#	O	
72	GPO3F/DA3	BAT_LL#	O	Battery Low Low
73	GPIO40	AC_OK	I	AC Adaptor Plug in
74	GPIO41	PM_RSMRST#	O	10K pull down to GND
75	GPI42	BAT_IN	I	
76	GPI43	CLRTC_EC	I	
77	GPIO44/SCL1	SMB0_CLK	I/O	4.7K pull high to +3VA_EC
78	GPIO45/SDA1	SMB0_DAT	I/O	4.7K pull high to +3VA_EC
79	GPIO46/SCL2	SMB1_CLK	I/O	10K pull high to +3V
80	GPIO47/SDA2	SMB1_DAT	I/O	10K pull high to +3V
81	GPIO48/KSO16	KB pin 28	I	for KB type detection
82	GPIO49/KSO17	KB pin 27	I	for KB type detection
83	GPIO4A/PSCLK1	AUO_SCL	O	for AUO, default H at S0
84	GPIO4B/PSDAT1	AUO_SDA	O	for AUO, default L at S0
85	GPIO4C/PSCLK2	AUO_CSB	O	for AUO, default H at S0
86	GPIO4D/PSDAT2	LVDD_EN	I	for AUO 7" Panel
87	GPIO4E/PSCLK3	TP_CLK	I/O	10K pull high to +3V
88	GPIO4F/PSDAT3	TP_DAT	I/O	10K pull high to +3V
89	GPIO50/SELIO#	BATSEL_3S	O	Battery series, H:3S, L:4S
90	GPIO52/E51_CS#	CHG_LED_UP#	O	
91	GPIO53/CAPLED	CAP_LED#	O	
92	GPIO54	PWR_LED_UP	O	
93	GPIO55/SCRLED	SCRLED#	O	
95	GPIO56	PWR4G_SW#	I	Internal pull high
97	GPXOA00/SDICS#	SPI_MODE#	O	4.7K pull down to GND
98	GPXOA01/SDICLK	SUSC_ON	O	
99	GPXOA02/SDIDO	VSUS_ON	O	
100	GPXOA03	CPU_VRON	O	
101	GPXOA04	SUSB_ON	O	
102	GPXOA05	ICH_PWROK	O	
103	GPXOA06	VOLT_CTRL	O	
104	GPXOA07	CHG_EN#	O	Battery charging enabled
105	GPXOA08	PRECHG	O	
106	GPXOA09	SPI_WP#	O	
107	GPXOA10	OP_SD#	O	Audio OP
108	GPXOA11	BAT_LEARN	O	
109	GPXID0/SDIDI	BATSEL_2P#	O	Battery parallel, H:1P, L:2P~3P
110	GPXID1	NC	O	
112	GPXID2	THRO_CPU	O	Active if CPU temperature over spec
114	GPXID3	SUSB#	I	100K pull down to GND
115	GPXID4	SUSC#	I	100K pull down to GND
116	GPXID5	CPUPWR_GD	I	Pull high to +3V
117	GPXID6	VSUS_GD	I	
118	GPXID7	NC	O	
121	GPIO57	INTERNET#	I	Internal pull high
126	GPIO57/SPICLK	SPI_CLK	O	
127	GPIO59/TEST_CLK	NC	O	

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