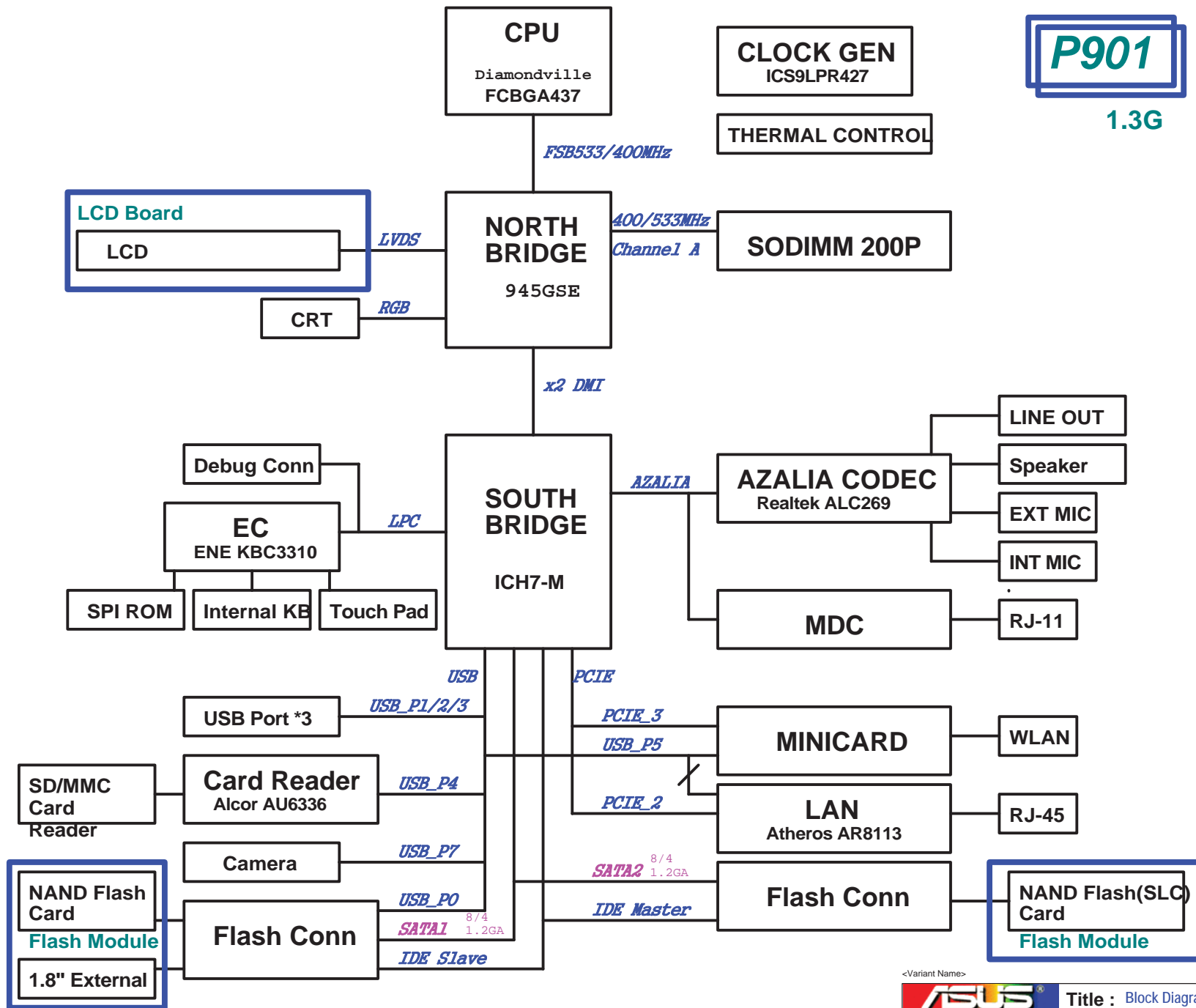


- 01_Block Diagram
- 02_System Setting
- 03_Power Sequence
- 04_Clock Gen_ICS9LPR426
- 05_Diamondville_BUS
- 06_Diamondville_PWR
- 07_NB-945GMS(HOST)
- 08_NB-945GMS(DMI)
- 09_NB-945GMS(GRAPHIC)
- 10_NB-945GMS(DDR2)
- 11_NB-945GMS(PWR)
- 12_NB-945GMS(PWR2)
- 13_NB-945GMS(GND)
- 14_SB-ICH7M(PWR)
- 15_SB-ICH7M(1)
- 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

<http://hobi-elektronika.net>

ASUS		Title : Block Diagram	
ASUSTek Computer INC.		Engineer: Regin Chiang	
Size	Project Name	Rev	
A3	P901	1.1G	
Date: Monday, August 11, 2008	Sheet	1	of 50

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

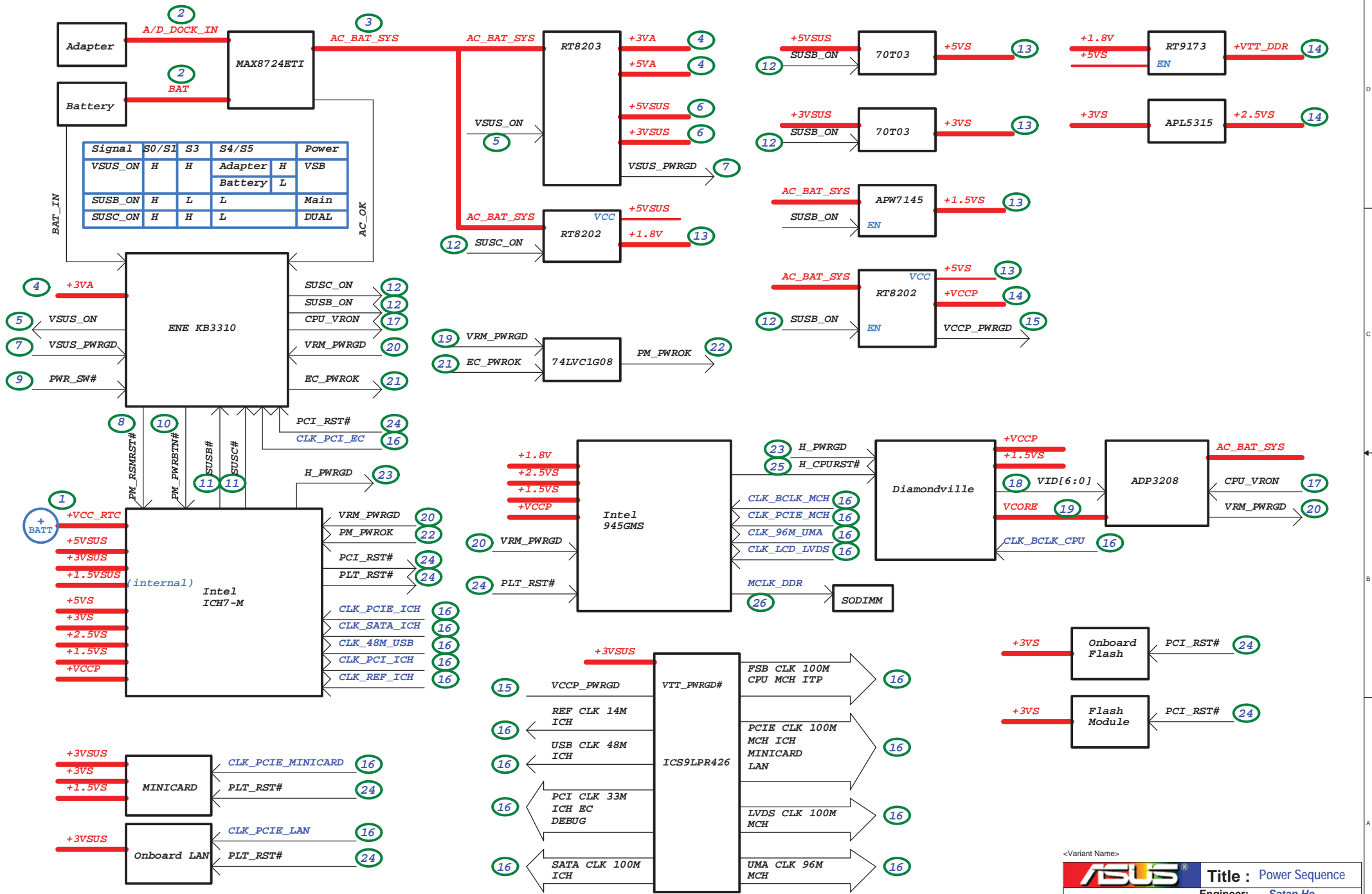
USB 0	Flash Conn
USB 1	USB Conn
USB 2	USB Conn
USB 3	USB Conn
USB 4	Card Reader
USB 5	Minicard
USB 6	NC
USB 7	Camera

PCIE

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

Azalia

ACZ_SDIN0	CODEC
ACZ_SDIN1	MODEM
ACZ_SDIN2	NC



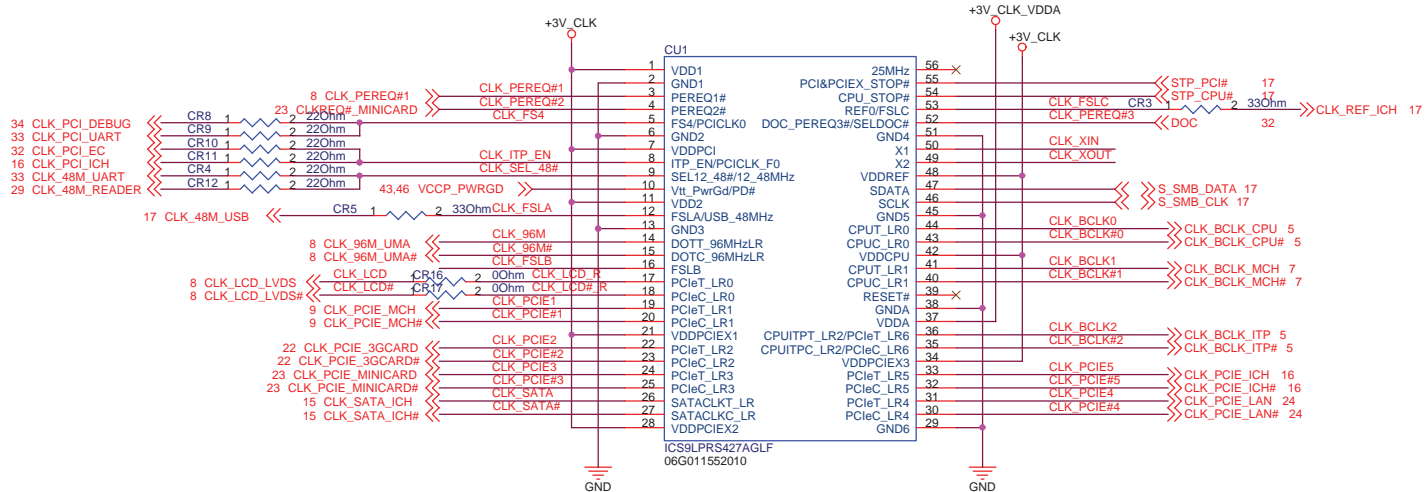
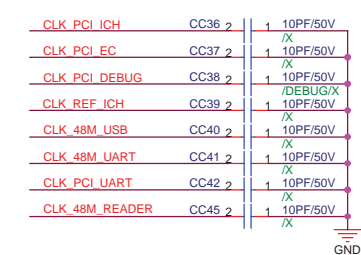
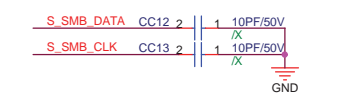
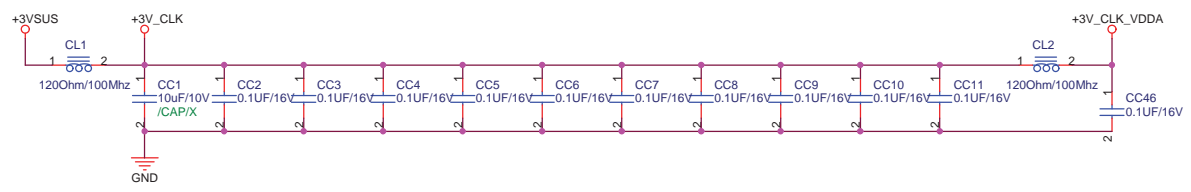
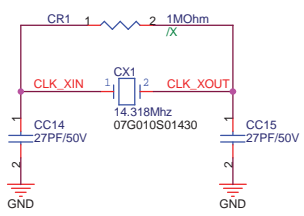
<http://hobi-elektronika.net>

<Variant Name>

ASUS Title : Power Sequence

ASUSTek Computer INC. Engineer: Satan He

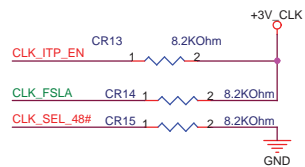
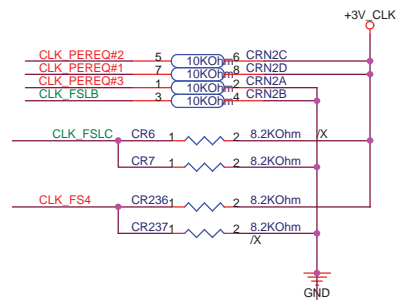
Size	Project Name	Rev
A3	P901	1.1G
Date: Monday, August 11, 2008	Sheet	3 of 50

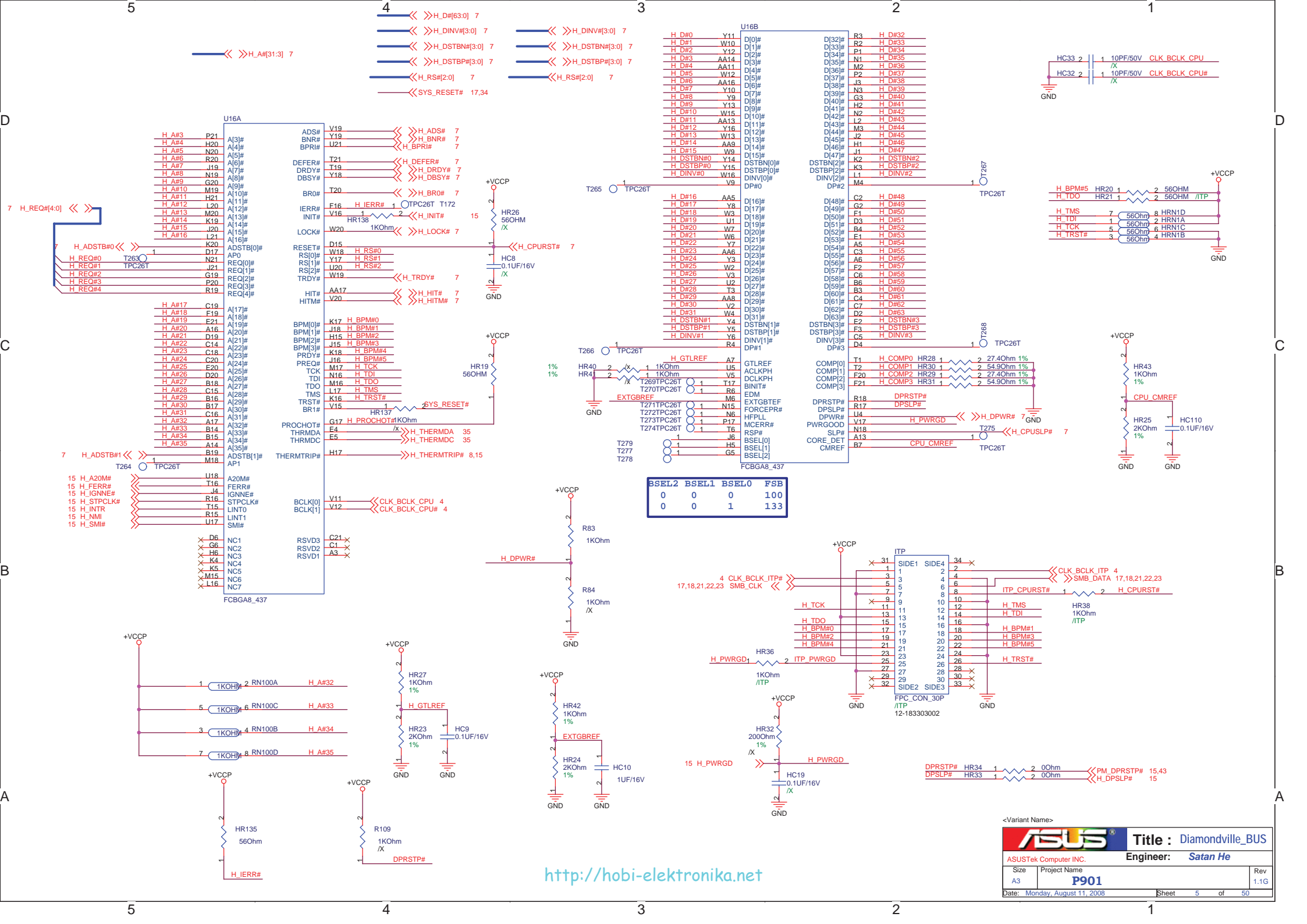


1:Disable
0:Enable

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





U16A

H_A#3	P21	A[3]#
H_A#4	H20	A[4]#
H_A#5	N20	A[5]#
H_A#6	R20	A[6]#
H_A#7	J19	A[7]#
H_A#8	A19	A[8]#
H_A#9	G20	A[9]#
H_A#10	M19	A[10]#
H_A#11	H21	A[11]#
H_A#12	L20	A[12]#
H_A#13	M20	A[13]#
H_A#14	K19	A[14]#
H_A#15	J20	A[15]#
H_A#16	L21	A[16]#
H_A#17	C19	A[17]#
H_A#18	E19	A[18]#
H_A#19	E21	A[19]#
H_A#20	A16	A[20]#
H_A#21	D19	A[21]#
H_A#22	C14	A[22]#
H_A#23	M20	A[23]#
H_A#24	C18	A[24]#
H_A#25	E20	A[25]#
H_A#26	D20	A[26]#
H_A#27	B18	A[27]#
H_A#28	C15	A[28]#
H_A#29	B17	A[29]#
H_A#30	B15	A[30]#
H_A#31	C16	A[31]#
H_A#32	A17	A[32]#
H_A#33	B14	A[33]#
H_A#34	B15	A[34]#
H_A#35	A14	A[35]#
A20M#	U18	A20M#
FERR#	T16	FERR#
IGNNE#	R16	IGNNE#
STPCLK#	T15	STPCLK#
LINT0	R15	LINT0
LINT1	U17	LINT1
SMI#	U17	SMI#
NC1	D6	NC1
NC2	G6	NC2
NC3	H6	NC3
NC4	K4	NC4
NC5	K5	NC5
NC6	M15	NC6
NC7	L16	NC7

BSEL2	BSEL1	BSEL0	FSB
0	0	0	1.00
0	0	1	1.33

<Variant Name>

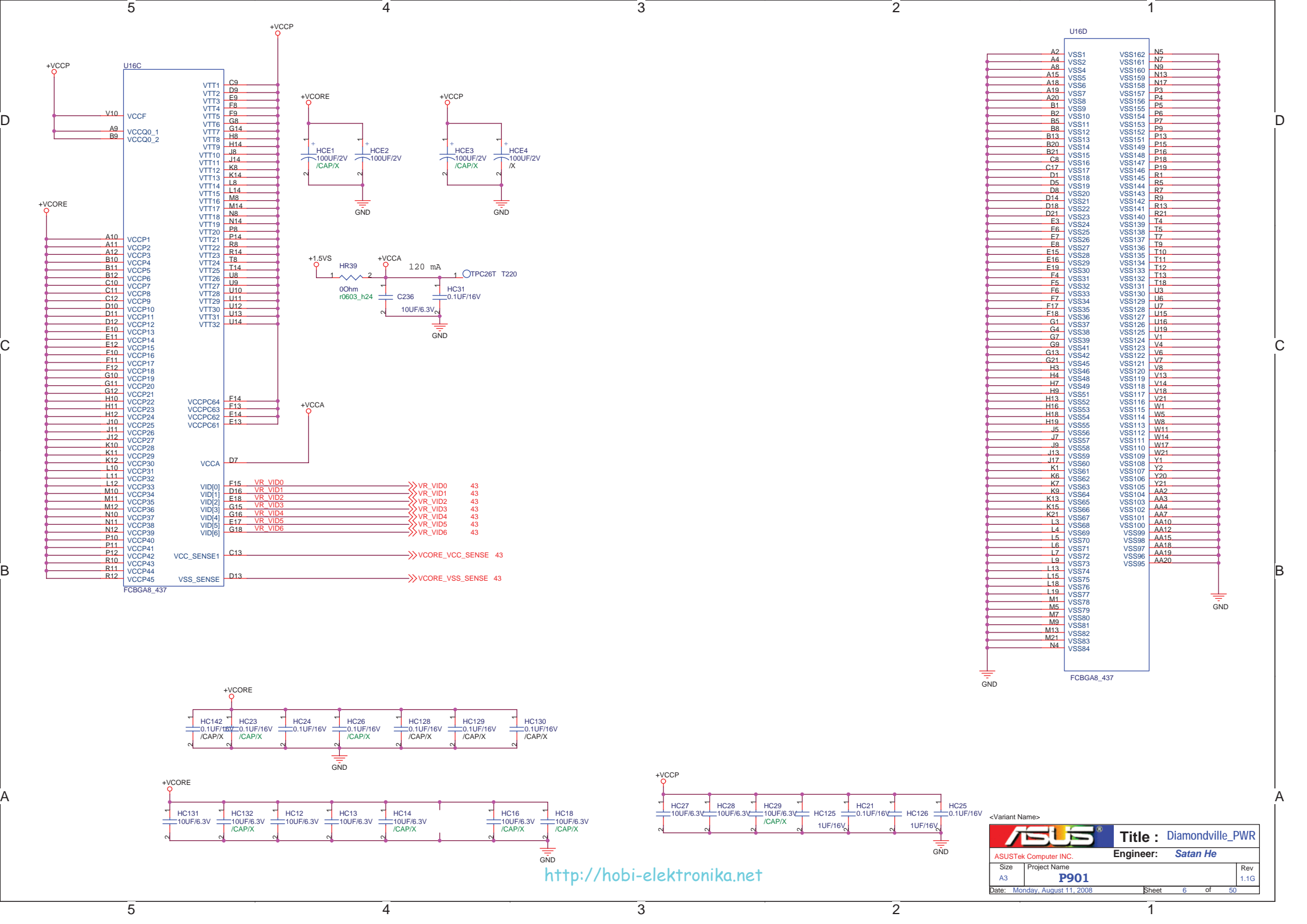
ASUS Title : Diamondville_BUS

ASUSTek Computer INC. Engineer: Satan He

Size	Project Name	Rev
A3	P901	1.1G

Date: Monday, August 11, 2008 Sheet 5 of 50

<http://hobi-elektronika.net>



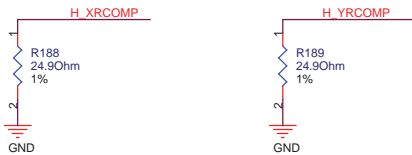
<http://hobi-elektronika.net>

		Title : Diamondville_PWR	
ASUSTek Computer INC.		Engineer: Satan He	
Size	Project Name		Rev
A3	P901		1.1G
Date:	Monday, August 11, 2008	Sheet	6 of 50

**Power :
+VCCP**

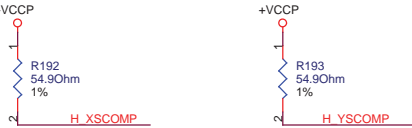
RCOMP

For Calibrating the FSB I/O Buffer



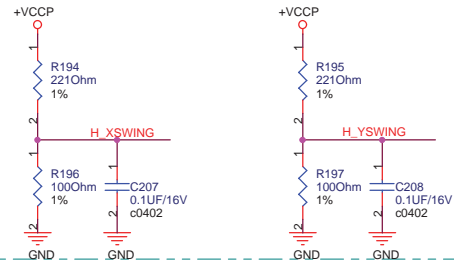
SCOMP

For Slew Rate Compensation on the FSB

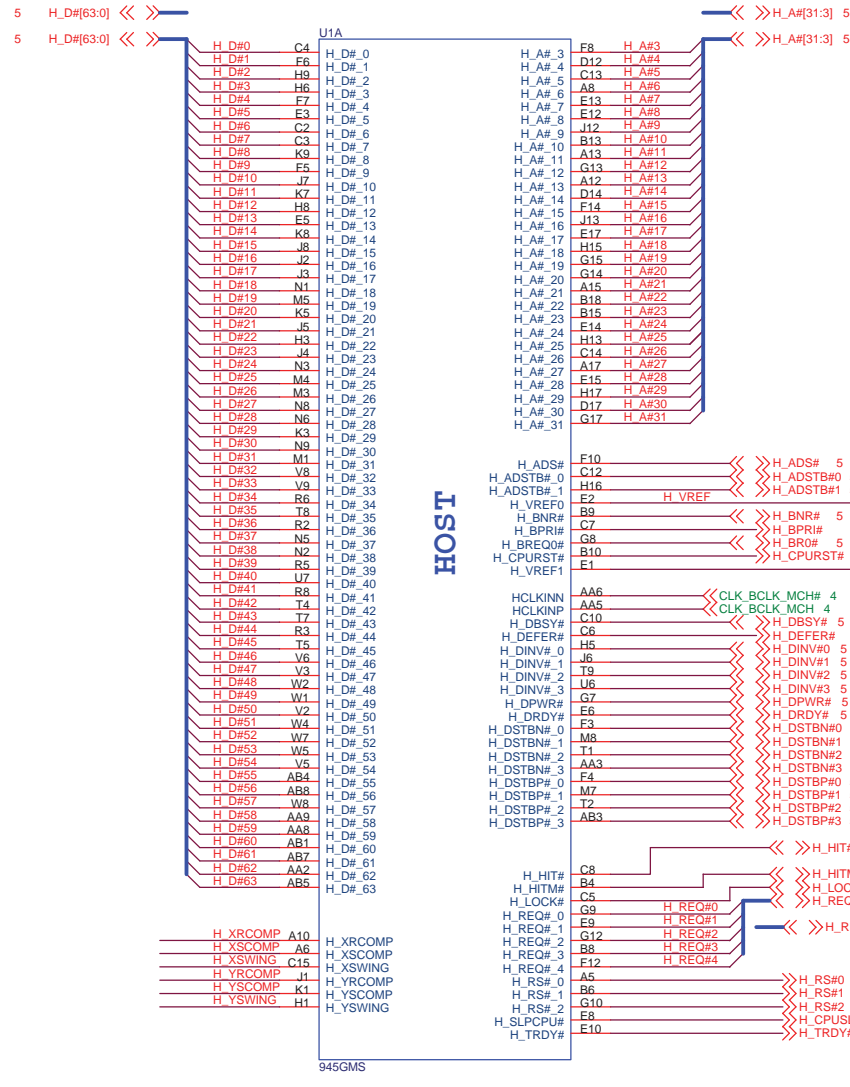


Voltage Swing

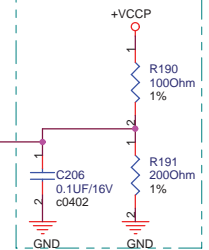
For Providing a Reference Voltage to The FSB RCOMP circuits



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

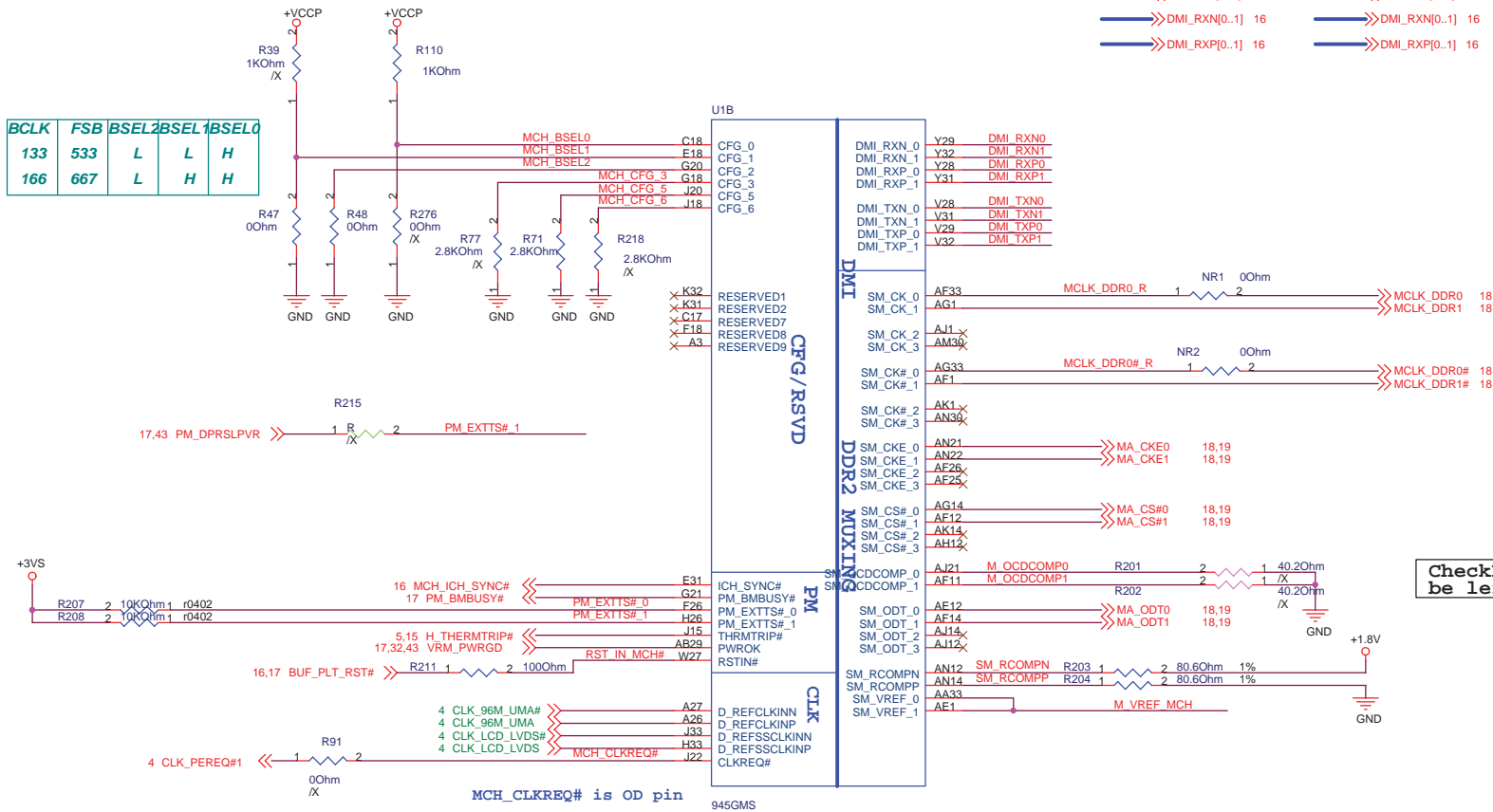


AGTL+ I/O Voltage Reference

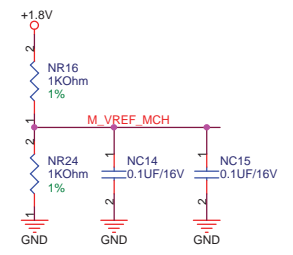


Layout Note:
0.1uF should be placed 100mils or
less from GMCH pin.

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



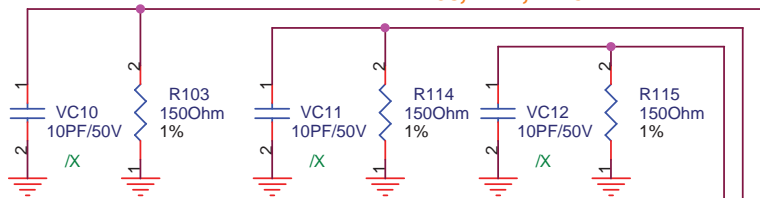
CheckList notes :Can be left as NC



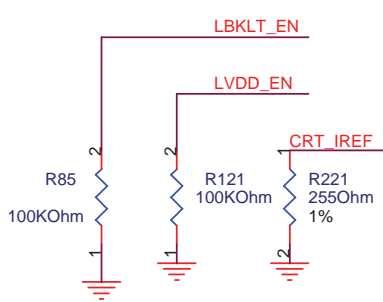
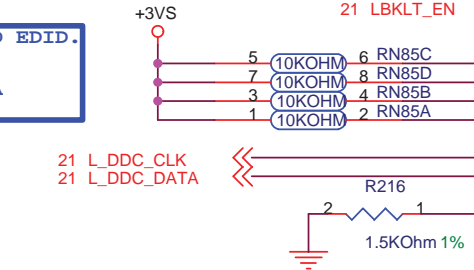
<Variant Name>

ASUS		Title : NB-945GMS(DMI & CFG)
ASUSTeK COMPUTER INC.		Engineer: Satan He
Size A3	Project Name P901	Rev 1.1G
Date: Monday, August 11, 2008	Sheet 8	of 50

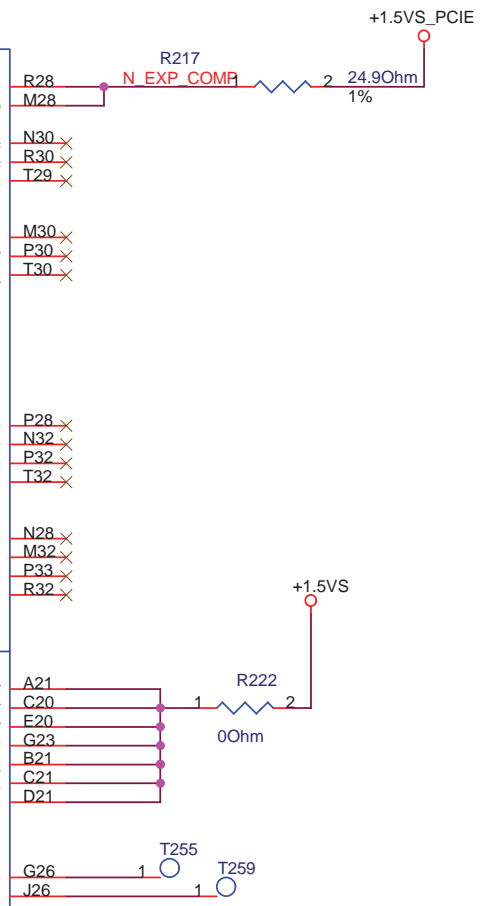
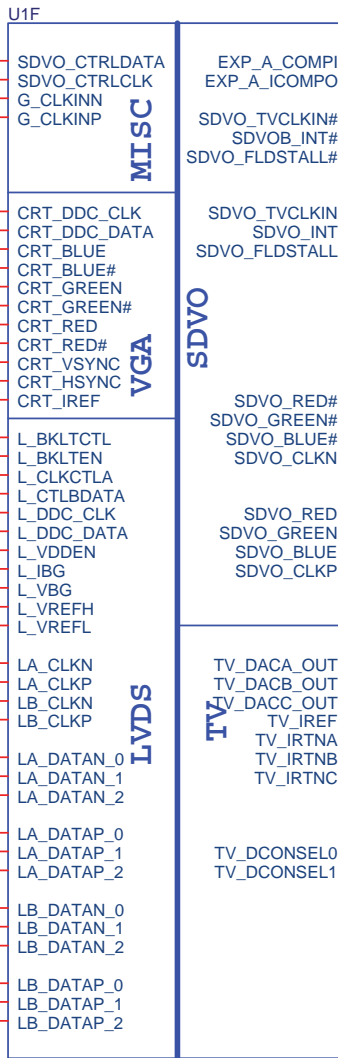
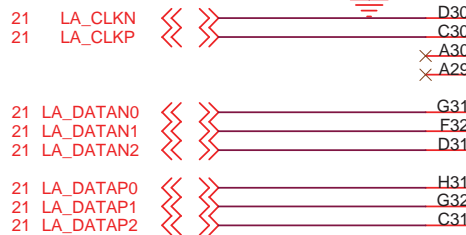
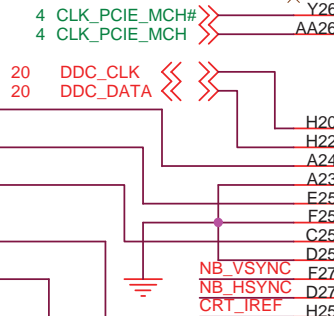
Close to GMCH
R103,R114,R115



IF USE NB READ EDID.
MUST CONNECT
L_DDC_CLK&DATA



Close to GMCH



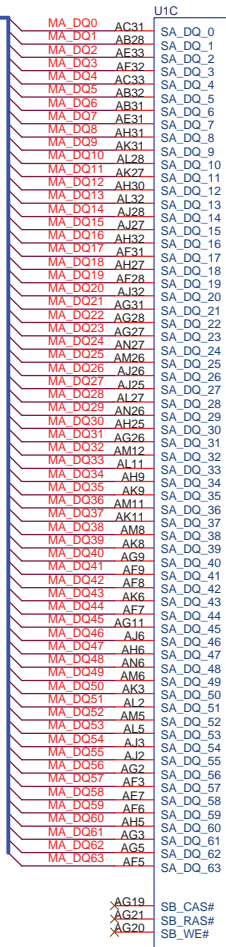
945GMS

<Variant Name>

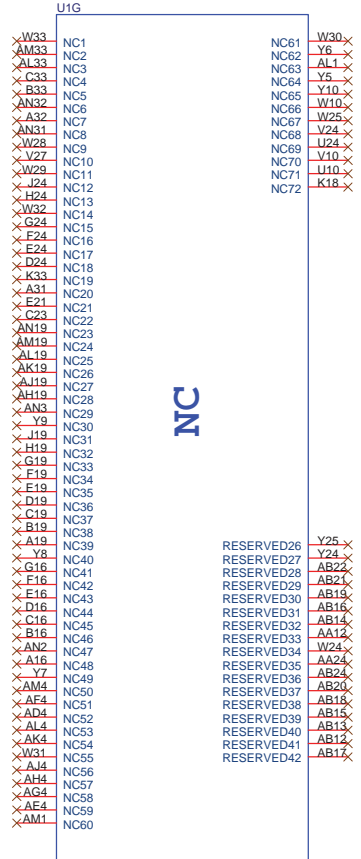
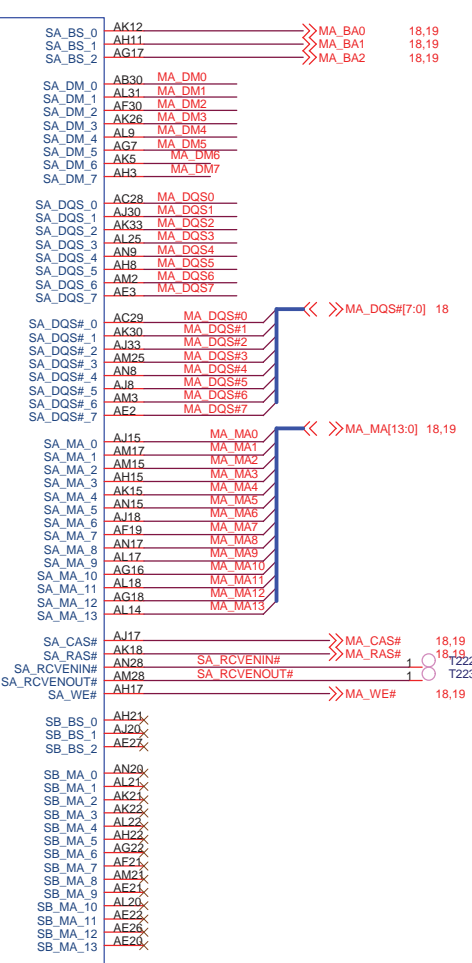
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ASUSTeK COMPUTER INC.		Engineer: <i>Satan_He</i>	
Size A4	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008	Sheet 9 of 50		

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

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



DDR2 SYSTEM MEMORY



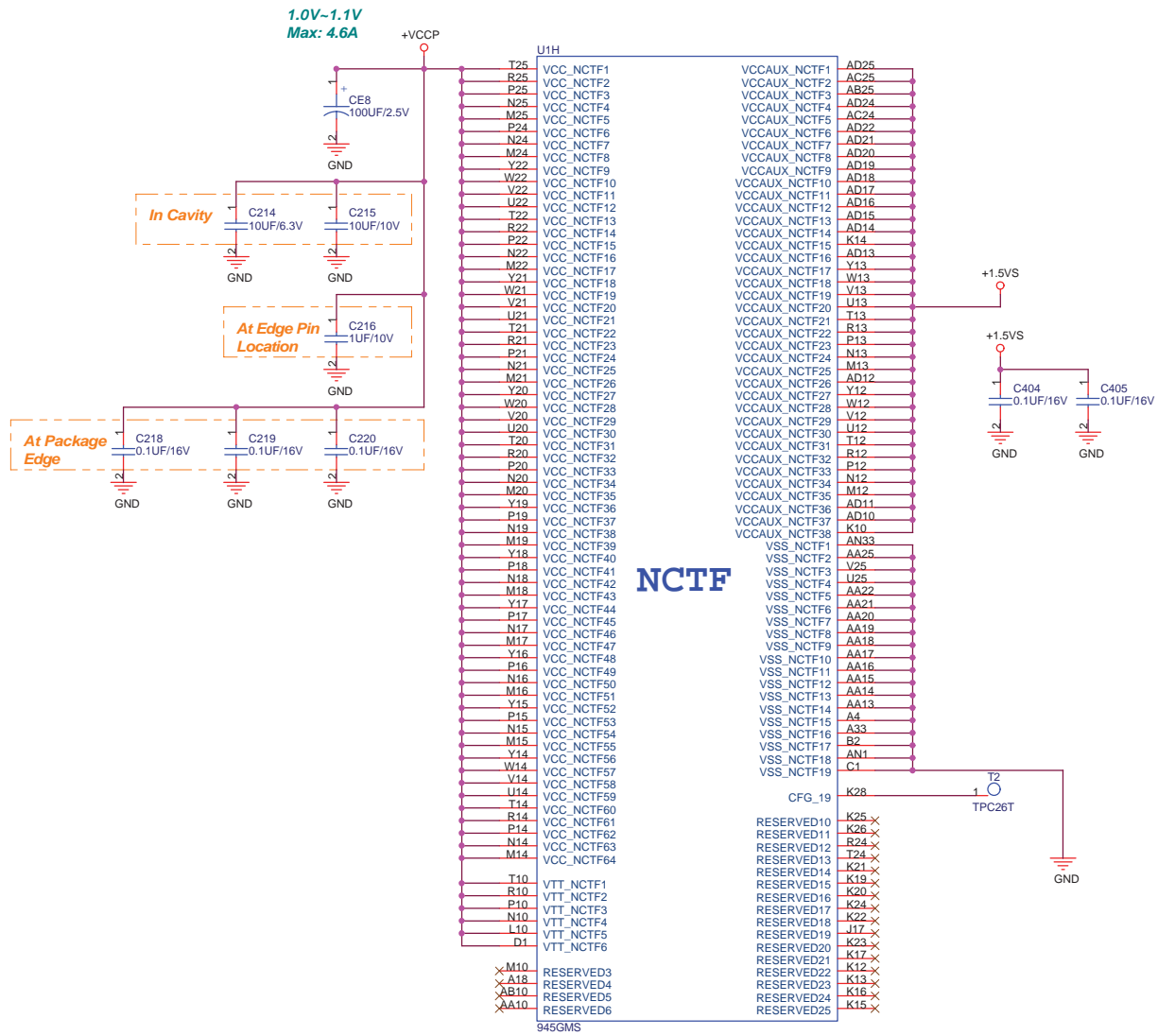
945GMS

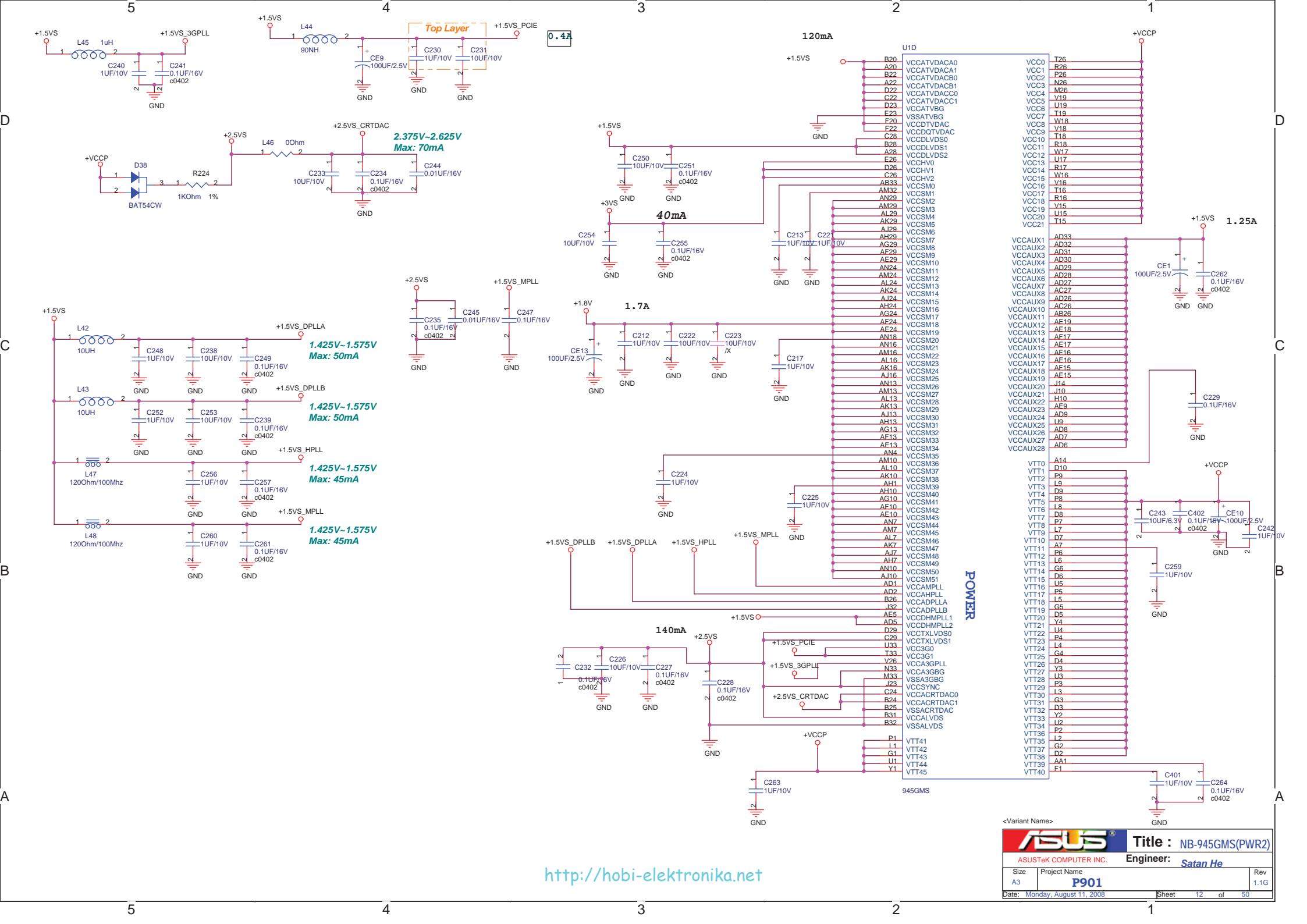
945GMS

<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





0.4A

120mA

40mA

1.7A

1.40mA

1.25A

POWER

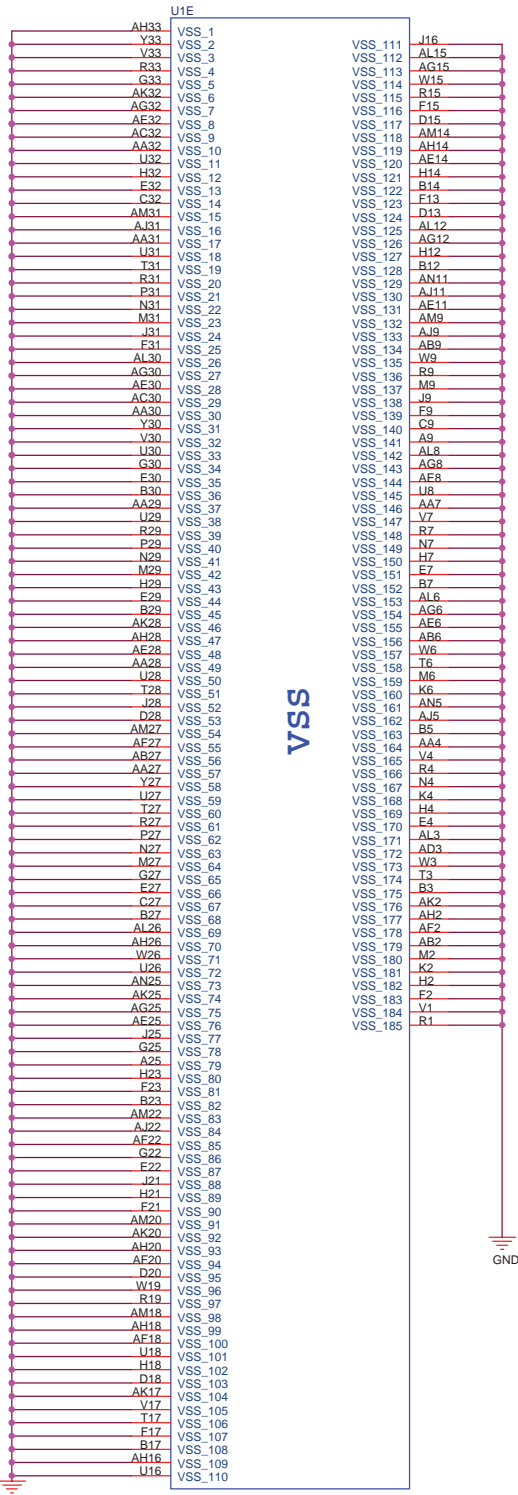
<Variant Name>

ASUS Title : NB-945GMS(PWR2)

ASUSTeK COMPUTER INC. Engineer: *Satan He*

Size A3	Project Name P901	Rev 1.1G
Date: Monday, August 11, 2008	Sheet 12 of 50	

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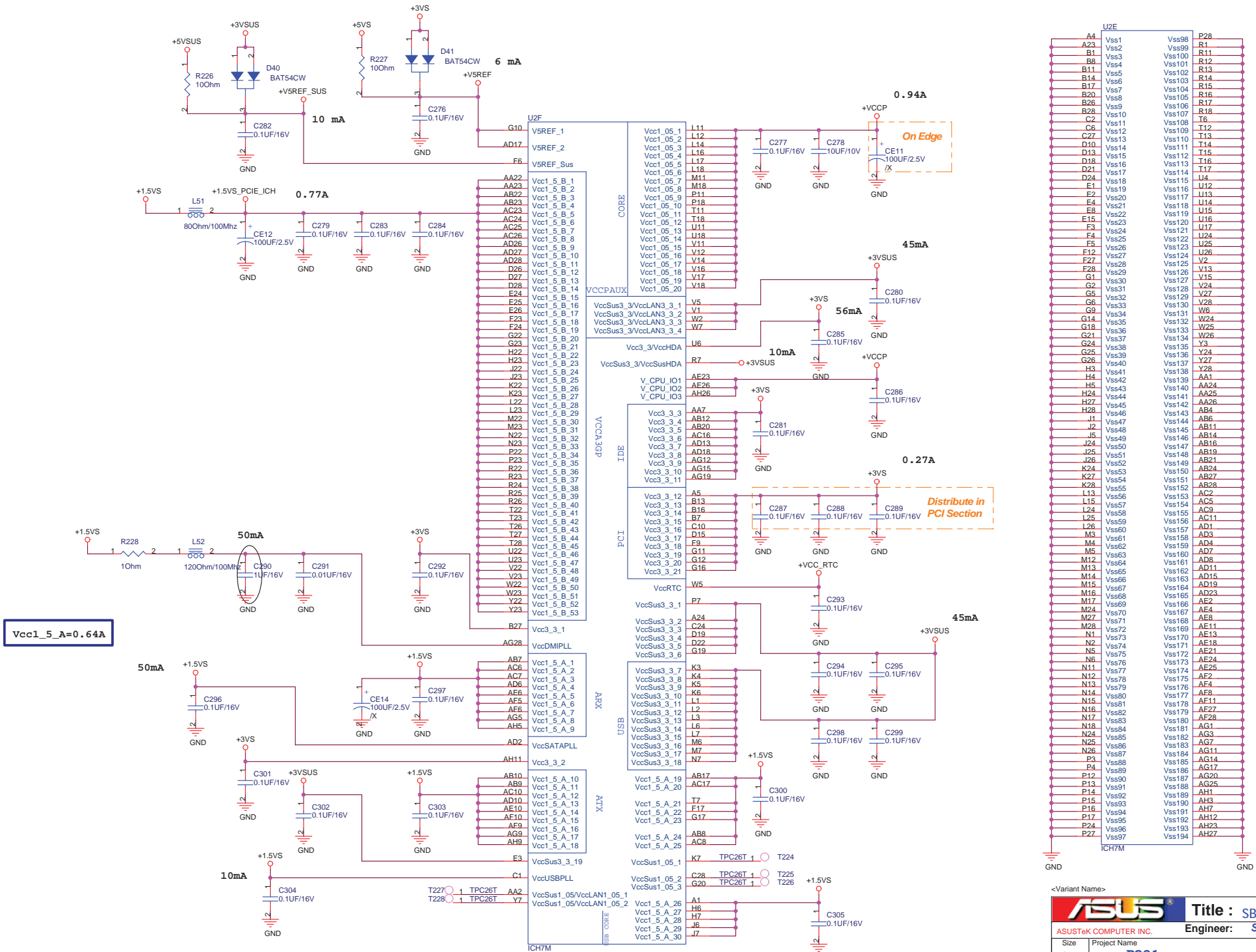
VSS



<http://hobi-elektronika.net>

<Variant Names>

		Title : NB-945PMS(GND)	
ASUSTeK COMPUTER INC.		Engineer: Satan_He	
Size	Project Name	Rev	
A3	P901	1.1G	
Date:	Monday, August 11, 2008	Sheet	13 of 50



U2E		
A4	Vss1	P28
A23	Vss9	R1
B1	Vss3	Vss100
B8	Vss4	R11
B11	Vss101	R12
B14	Vss5	R13
B17	Vss6	R14
B20	Vss7	R15
B26	Vss8	R16
B28	Vss9	R17
C2	Vss10	R18
C6	Vss11	T6
C27	Vss12	T12
D10	Vss13	T13
D18	Vss14	T14
D21	Vss15	T15
D24	Vss16	T16
E1	Vss17	T17
E2	Vss18	U4
E4	Vss19	U12
E8	Vss20	U13
E15	Vss21	U14
F3	Vss22	U15
F4	Vss23	U16
F5	Vss24	U24
F12	Vss25	U25
F26	Vss26	U26
G1	Vss27	U27
G2	Vss28	U28
G5	Vss29	V22
G6	Vss30	V23
G9	Vss31	V24
G14	Vss32	W6
G18	Vss33	W24
G21	Vss34	W25
G24	Vss35	W26
G25	Vss36	Y3
G26	Vss37	Y24
H3	Vss38	Y27
H4	Vss39	AA1
H5	Vss40	AA2
H24	Vss41	AA24
H27	Vss42	AA25
H28	Vss43	AA26
J1	Vss44	AB4
J2	Vss45	AB6
J5	Vss46	AB11
J24	Vss47	AB14
J25	Vss48	AB16
J26	Vss49	AB19
K24	Vss50	AB21
K27	Vss51	AB24
K28	Vss52	AB27
L13	Vss53	AB28
L15	Vss54	AC2
L24	Vss55	AC2
L25	Vss56	AC5
L26	Vss57	AC9
L27	Vss58	AC11
M3	Vss59	AD1
M4	Vss60	AD4
M5	Vss61	AD7
M12	Vss62	AD8
M13	Vss63	AD15
M14	Vss64	AD18
M15	Vss65	AD19
M16	Vss66	AD23
M17	Vss67	AE2
M29	Vss68	AE2
M28	Vss69	AE4
N1	Vss70	AE8
N2	Vss71	AE11
N5	Vss72	AE13
N6	Vss73	AE18
N11	Vss74	AE21
N12	Vss75	AE24
N13	Vss76	AE25
N14	Vss77	AF4
N15	Vss78	AF4
N16	Vss79	AF11
N17	Vss80	AF27
N18	Vss81	AF28
N25	Vss82	AG7
N26	Vss83	AG7
P3	Vss84	AG11
P4	Vss85	AG14
P12	Vss86	AG17
P13	Vss87	AG20
P14	Vss88	AG25
P15	Vss89	AH1
P16	Vss90	AH1
P17	Vss91	AH2
P24	Vss92	AH12
P27	Vss93	AH23
P27	Vss94	AH27
P27	Vss95	AH27
P27	Vss96	AH27
P27	Vss97	AH27

Vcc1_5_A=0.64A

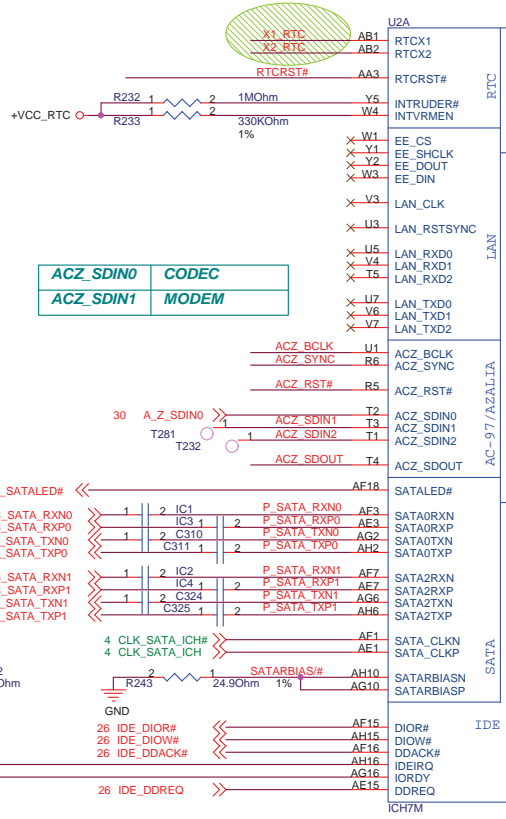
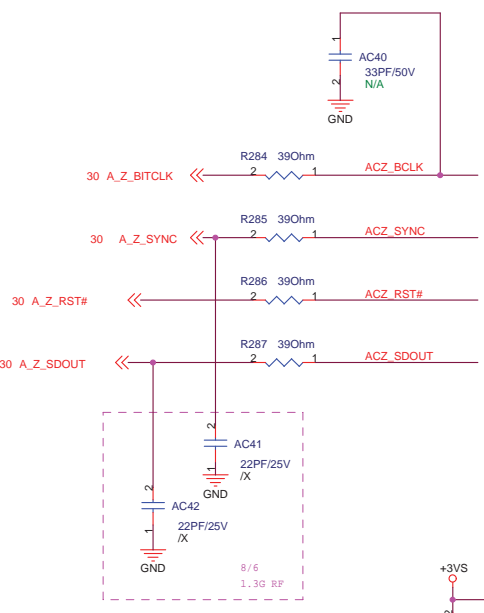
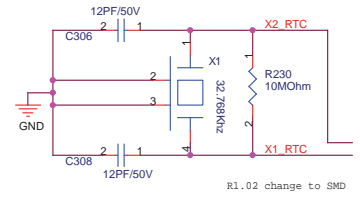
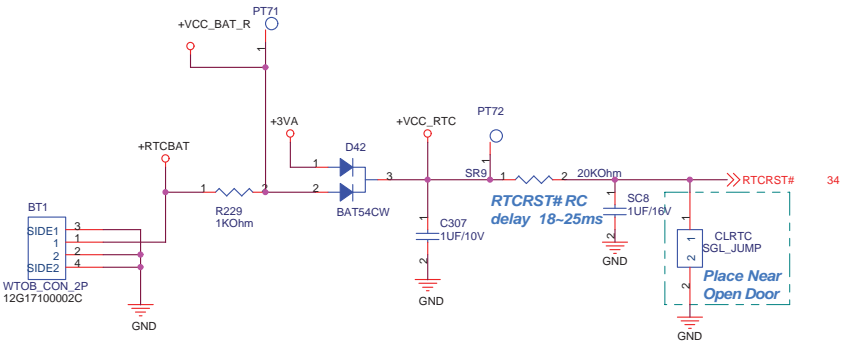
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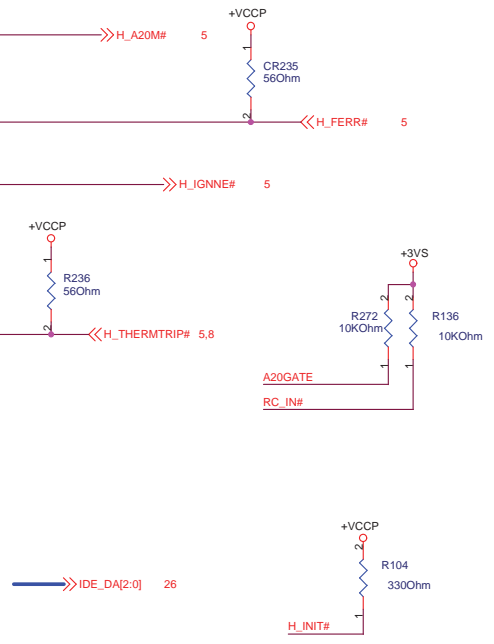
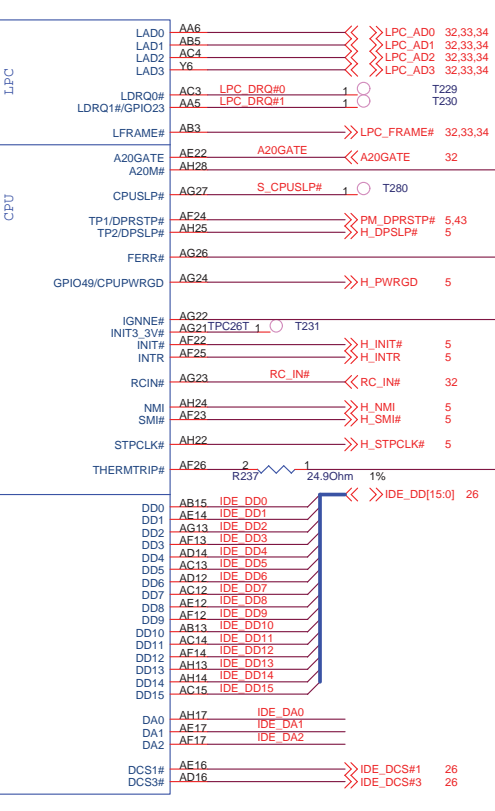
Title : SB-ICH7M(PWR)

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

Size	Project Name	Rev
Custom	P901	1.1G
Date: Monday, August 11, 2008	Sheet 14 of 50	



ACZ_SDIN0	CODEC
ACZ_SDIN1	MODEM

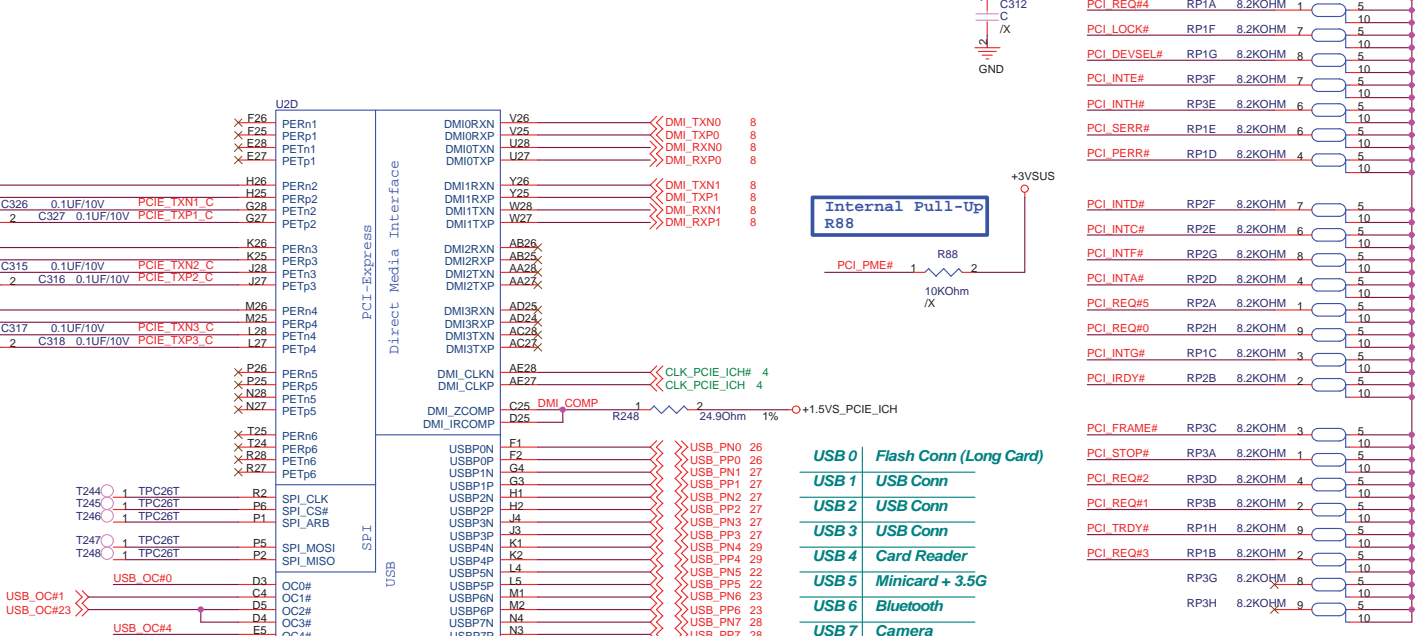
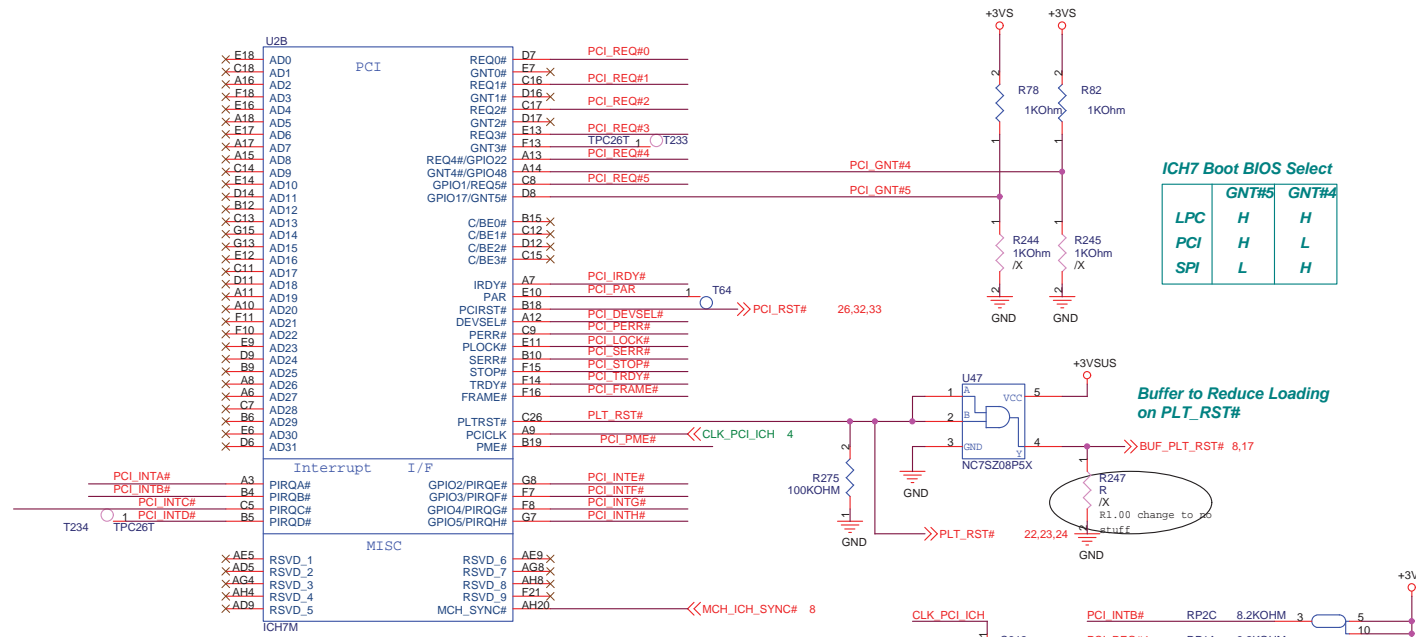


<Variant Name>

ASUS Title : SB-ICH7-M(1)

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

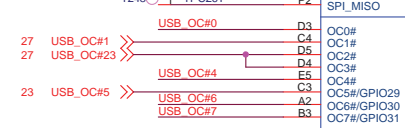
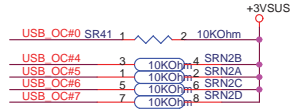
Size	Project Name	Rev
Custom	P901	1.1G
Date: Monday, August 11, 2008	Sheet	15 of 50



LAN AR8113 IC

3.5G PCIExpress Card

WIFI PCIExpress Card



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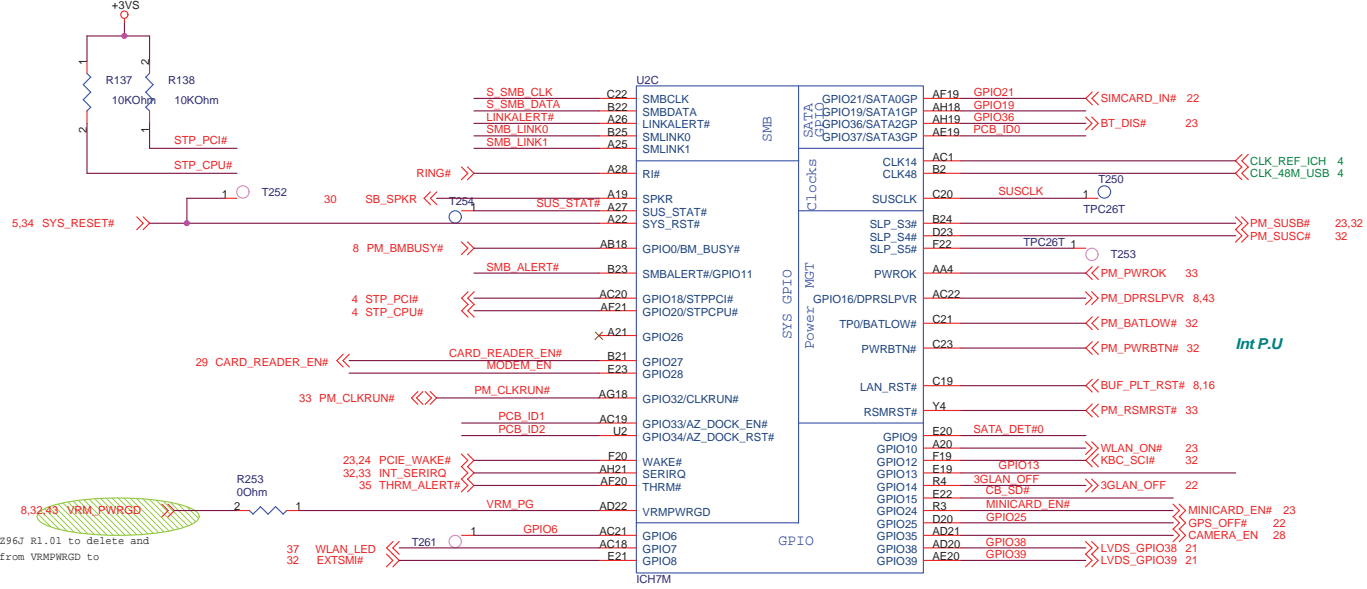
<Variant Name>

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

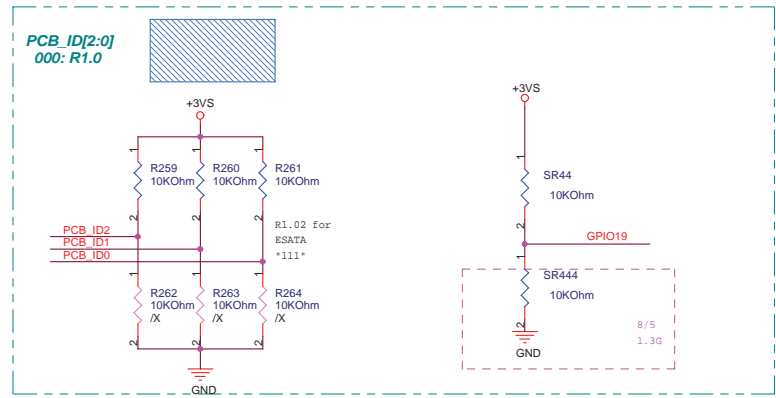
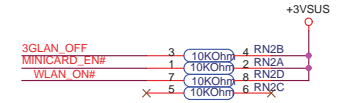
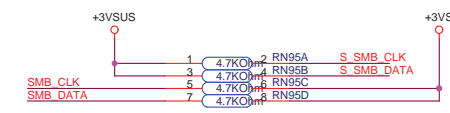
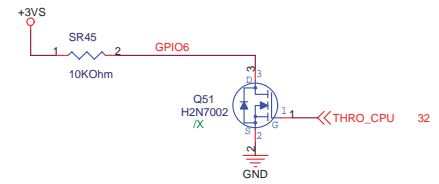
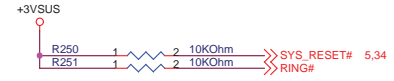
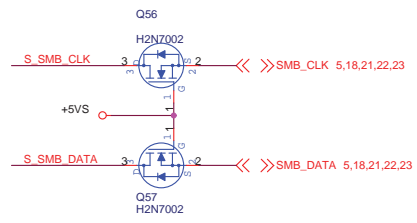


05/12/30, refer Z963 R1.01 to delete and change net name from VRMPWRGD to VRM_PWRGD.

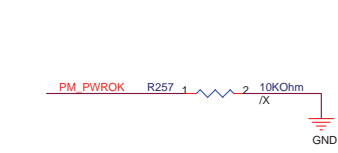
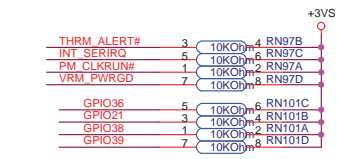
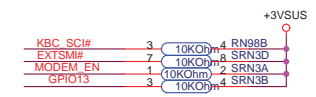
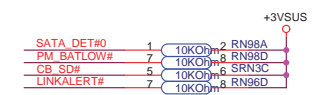
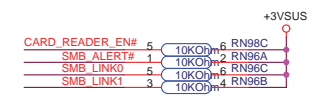
8,32,43 VRM_PWRGD

S SMB_CLK <<< S SMB_CLK 4
S SMB_DATA <<< S SMB_DATA 4

WLAN_LED	WLAN	BT
High	v	v
High	v	x
High	x	v
Low	x	x

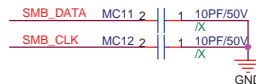
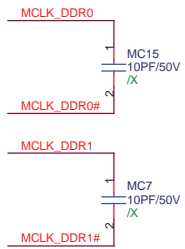


PCB VID3 : PROJECT CODE



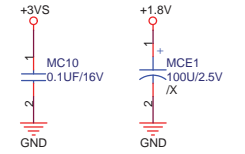
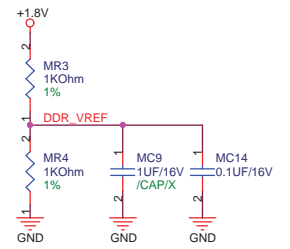
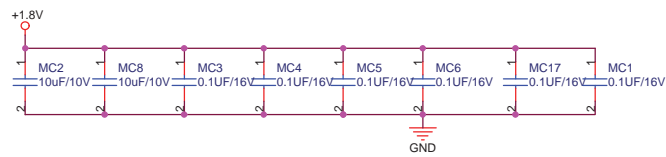
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ASUSTek COMPUTER INC		Engineer: Satan He	
Size	Project Name	Rev	
Custom	P901	1.1G	
Date: Monday, August 11, 2008	Sheet	17	of 50



STD Type

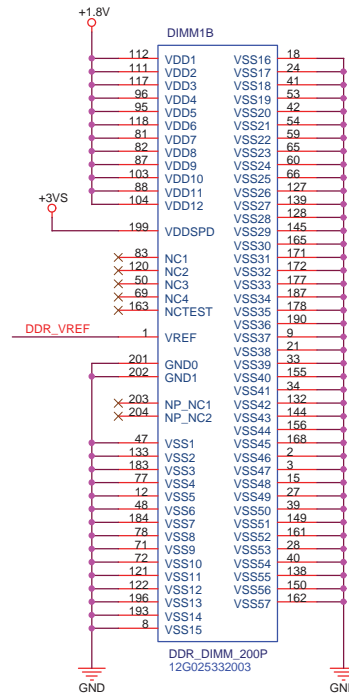
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- << >> MA_DQS[7:0] 10
- << >> MA_DQS#[7:0] 10
- << >> MA_DM[7:0] 10
- << >> MA_MA[13:0] 10,19
- << >> MA_BA[2:0] 10,19



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	A6	DQ6
MA_MA8	92	A7	DQ7
MA_MA9	91	A8	DQ8
MA_MA10	105	A9	DQ9
MA_MA11	90	A10/AP	DQ10
MA_MA12	89	A11	DQ11
MA_MA13	89	A12	DQ12
	116	A13	DQ13
	86	A14	DQ14
	85	A15	DQ15
MA_BA2	85	A16_BA2	DQ16
MA_BA0	107	BA0	DQ17
MA_BA1	106	BA1	DQ18
	110	BA2	DQ19
	115	S0#	DQ20
	30	S1#	DQ21
	32	CK0#	DQ22
	164	CK1#	DQ23
	166	CK2#	DQ24
	79	CKE0	DQ25
	80	CKE1	DQ26
	113	CAS#	DQ27
	108	RAS#	DQ28
	109	WE#	DQ29
	200	SA0	DQ30
	197	SA1	DQ31
	195	SCL	DQ32
		SDA	DQ33
		DQ34	DQ34
		DQ35	DQ35
		DQ36	DQ36
		DQ37	DQ37
		DQ38	DQ38
		DQ39	DQ39
		DQ40	DQ40
		DQ41	DQ41
		DQ42	DQ42
		DQ43	DQ43
		DQ44	DQ44
		DQ45	DQ45
		DQ46	DQ46
		DQ47	DQ47
		DQ48	DQ48
		DQ49	DQ49
		DQ50	DQ50
		DQ51	DQ51
		DQ52	DQ52
		DQ53	DQ53
		DQ54	DQ54
		DQ55	DQ55
		DQ56	DQ56
		DQ57	DQ57
		DQ58	DQ58
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		DQ63	DQ63



DDR_DIMM_200P
12G025332003

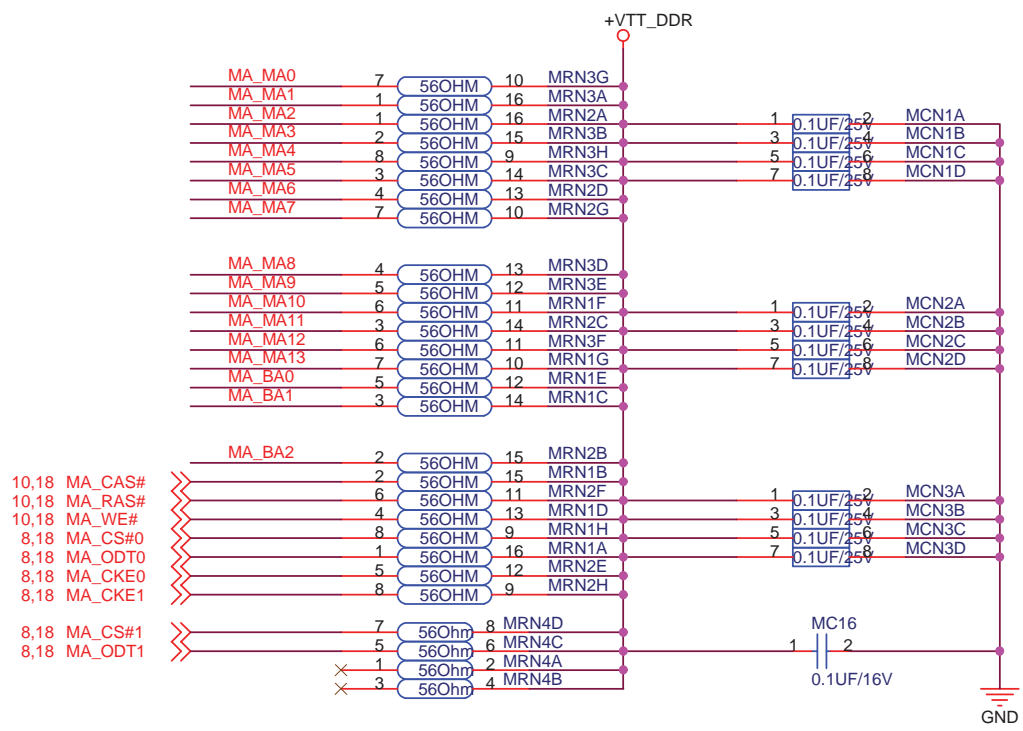
GROUP1
GROUP2
SWAP




<Variant Name>

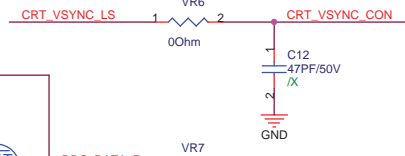
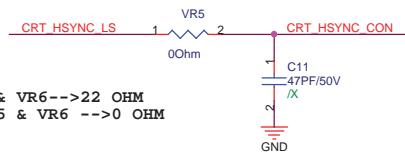
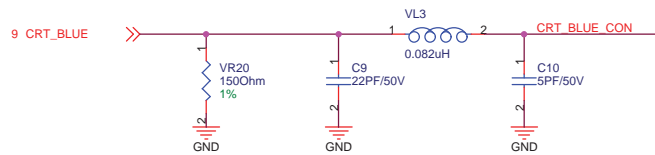
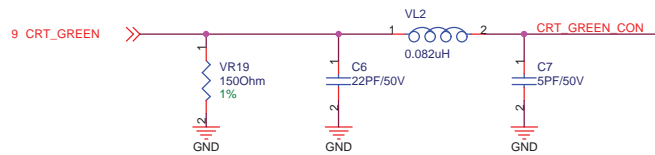
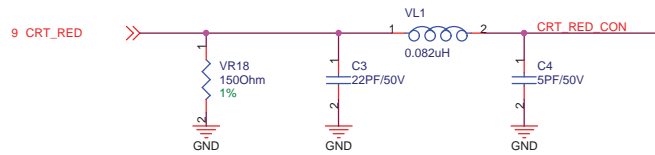
ASUS		Title : DDR2 SODIMM	
ASUSTek Computer INC.		Engineer: <i>Keil_Huang</i>	
Size	Project Name	Rev	
A3	P901		1.1G
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 << MA_MA[13:0] 10,18
 << MA_BA[2:0] 10,18

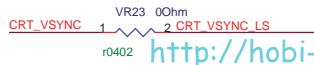
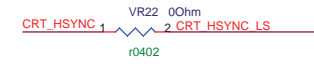
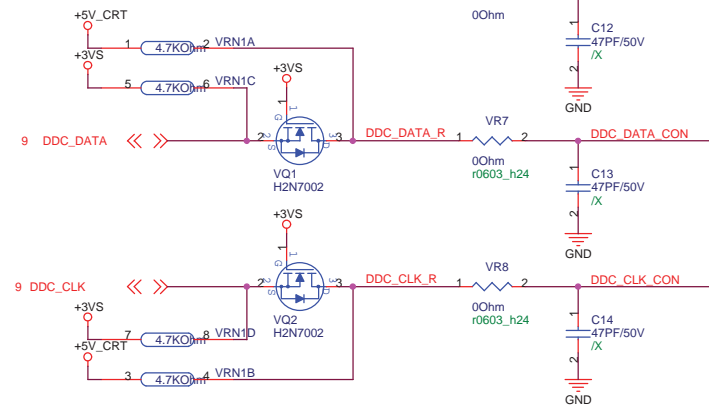


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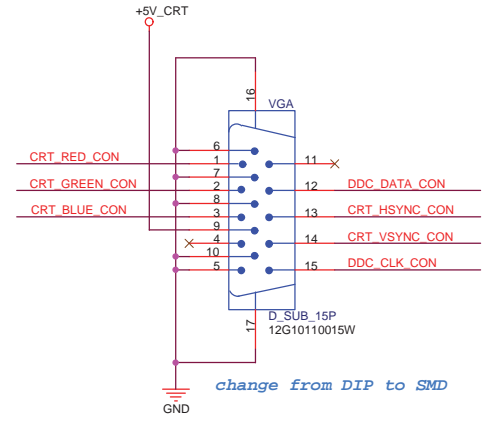
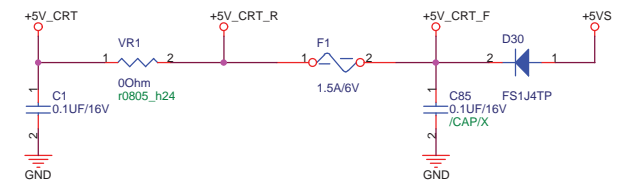
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ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size A4	Project Name P901		Rev 1.1G
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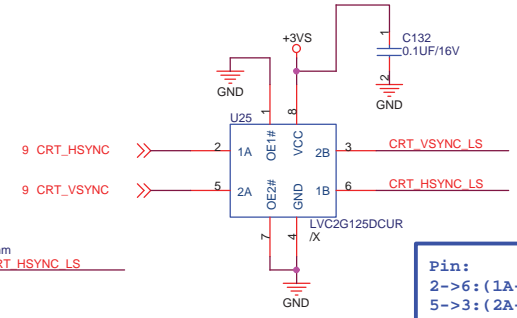
U25上:VR5 & VR6-->22 OHM
U25 /X :VR5 & VR6 -->0 OHM



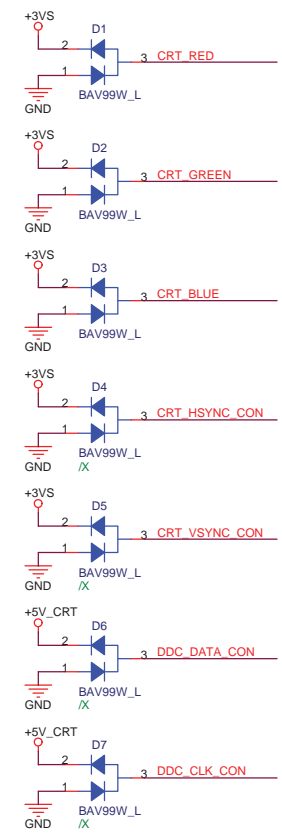
<http://hobi-elektronika.net>



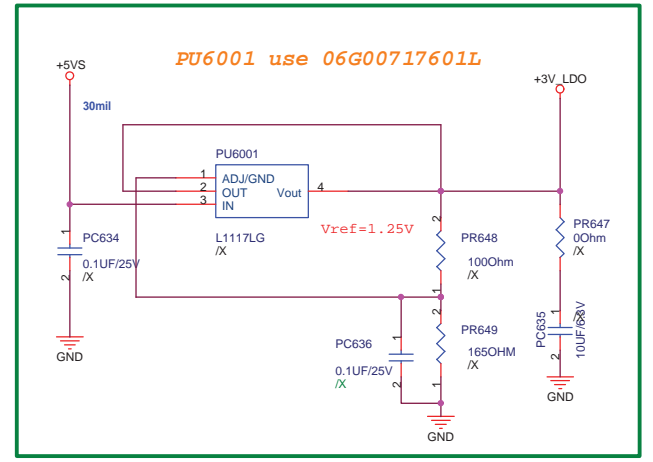
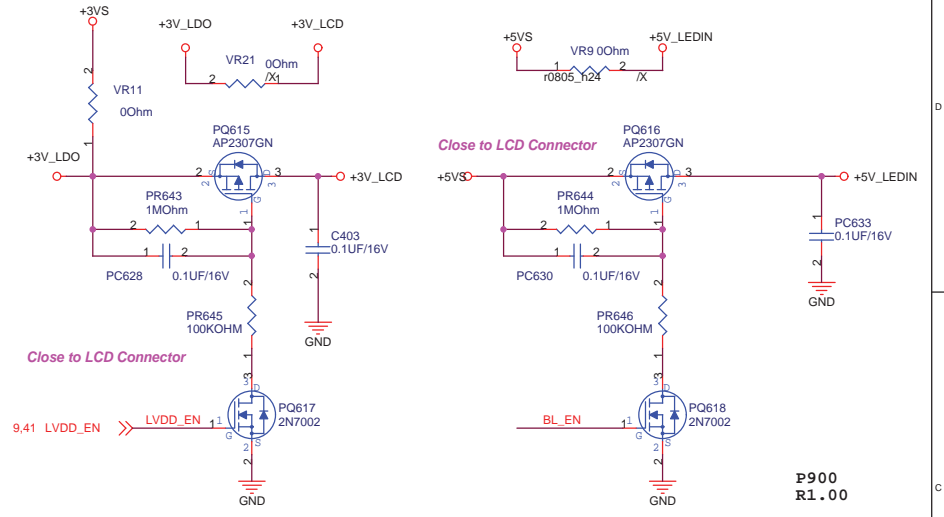
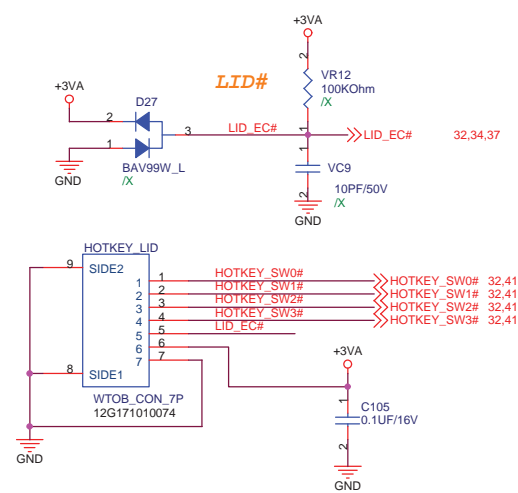
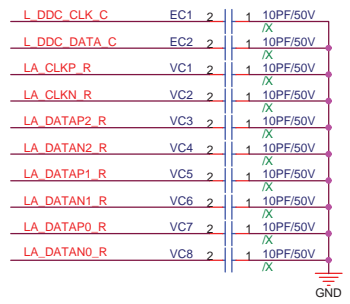
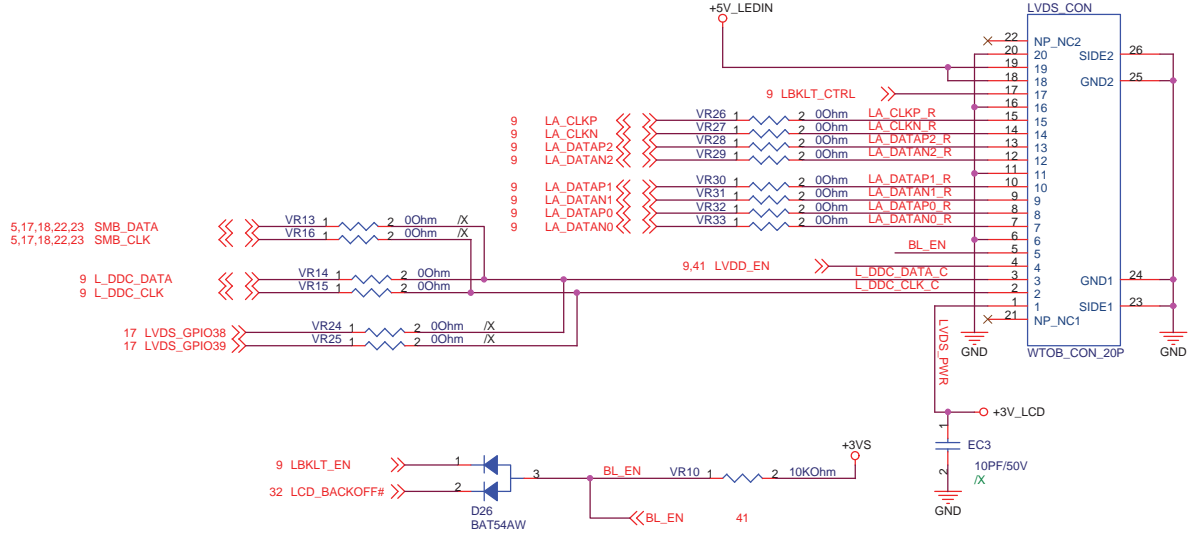
VGA use 12G10110015W & 12G10110015N

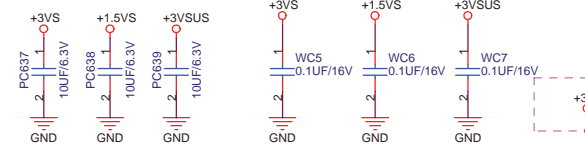
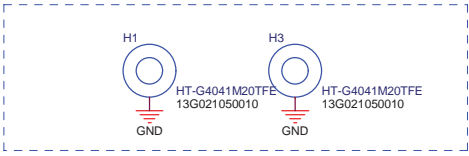
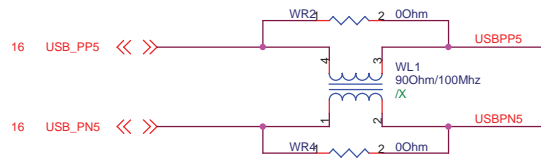


Pin:
2->6: (1A->1B)
5->3: (2A->2B)

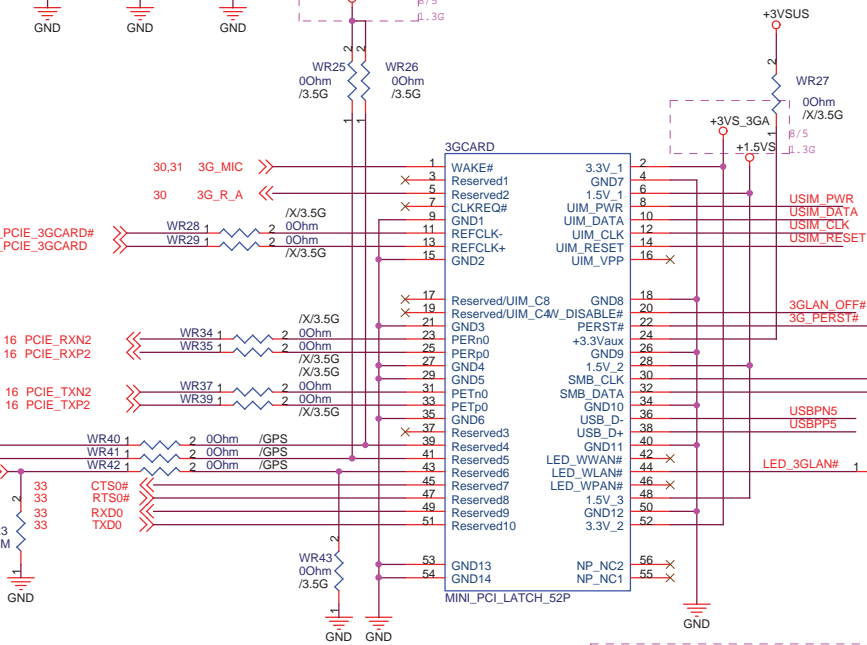
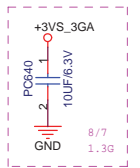


ASUS		Title : Onboard VGA	
ASUSTek Computer INC.		Engineer: Keli_Huang	
Size	Project Name		Rev
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Date:	Monday, August 11, 2008	Sheet	20 of 47

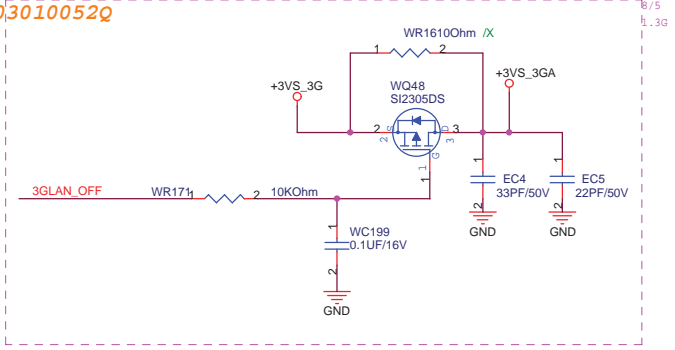
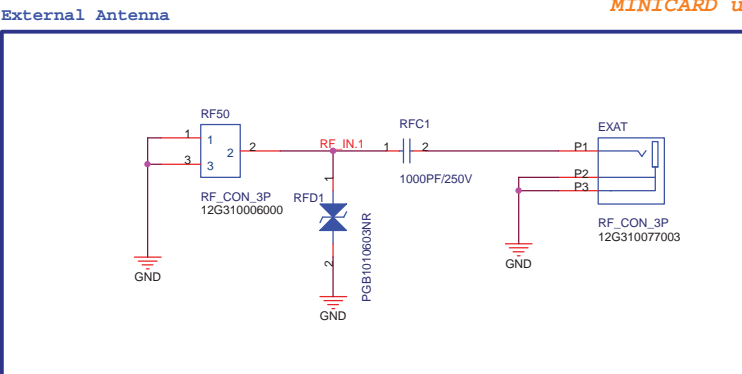




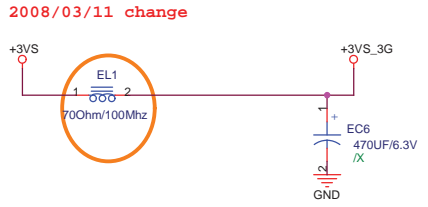
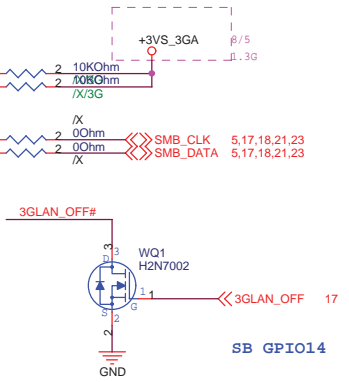
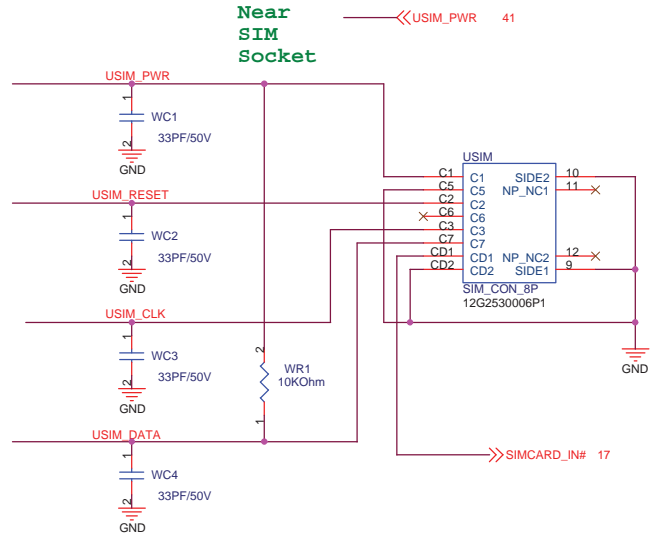
MINI CARD NUT(1.6mm) *2



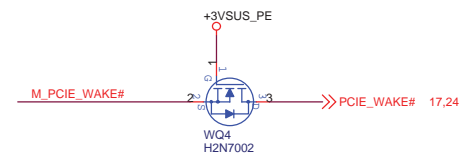
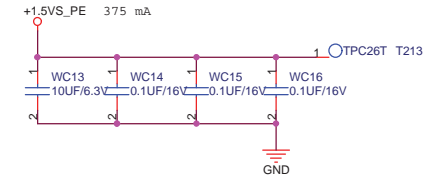
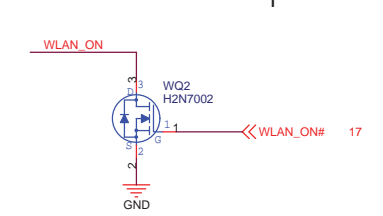
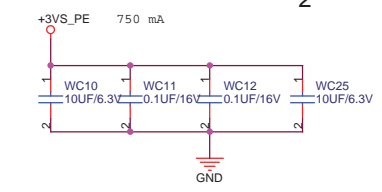
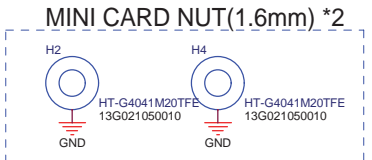
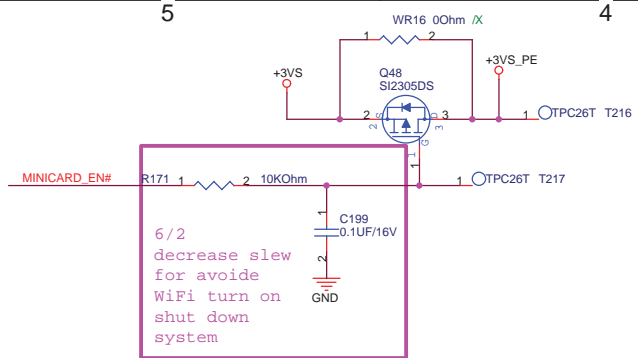
MINICARD use 12G03010052Q



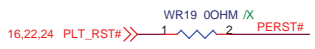
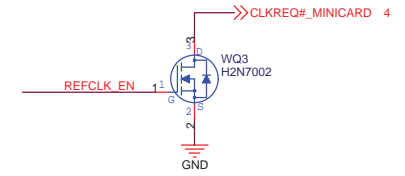
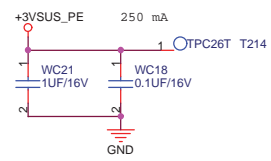
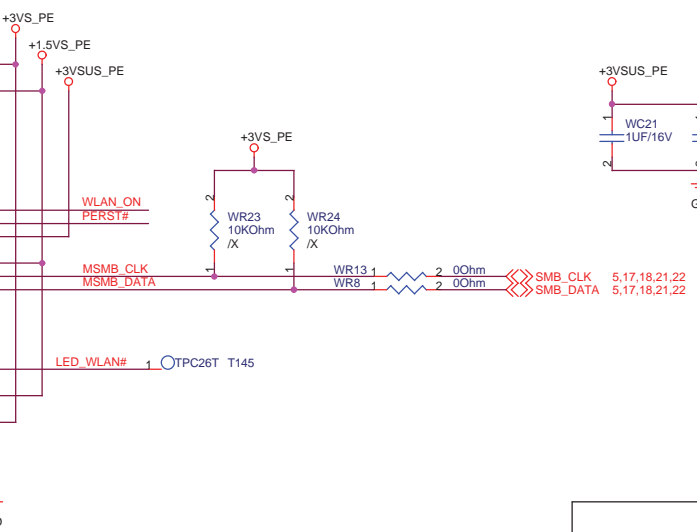
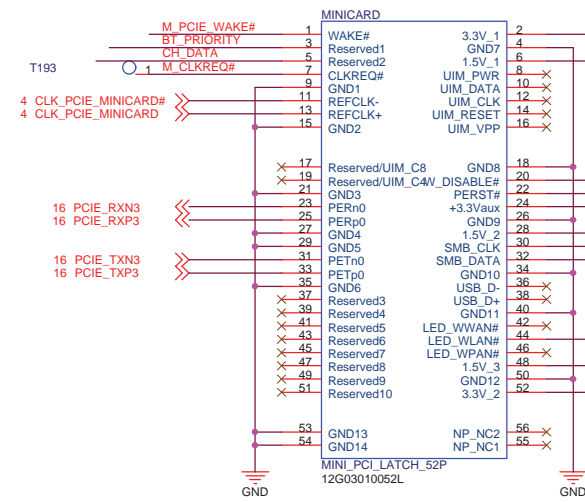
CAP Near SIM Socket



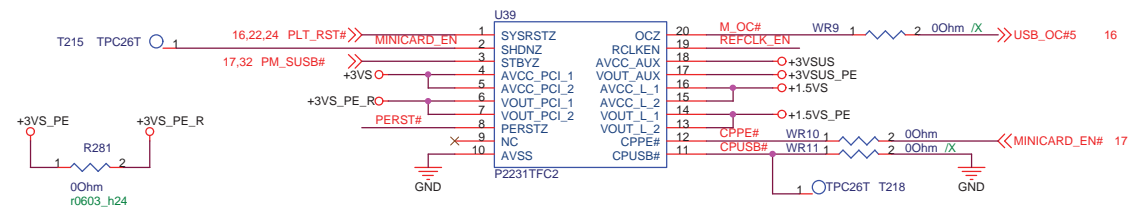
ASUS		Title : 3.5G Module & External Antenna	
ASUSTek Computer INC.		Engineer: Kell Huang	
Size: A3	Project Name: P901	Date: Monday, August 11, 2008	Rev: 1.1G
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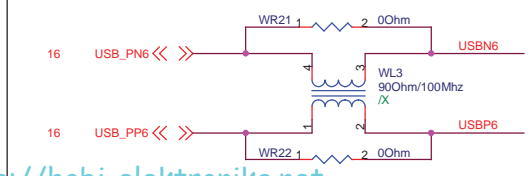
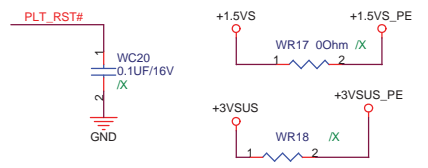
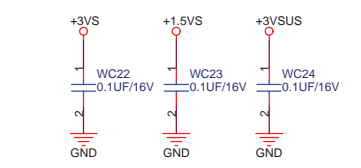
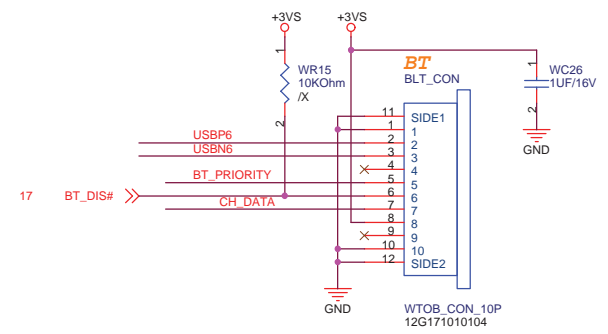
MINICARD use 12G03010052Q



U39 use 06G030057011



BlueTooth

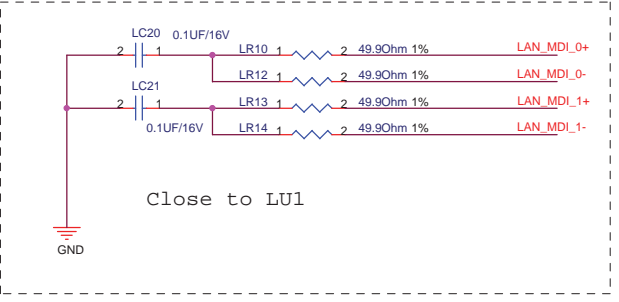
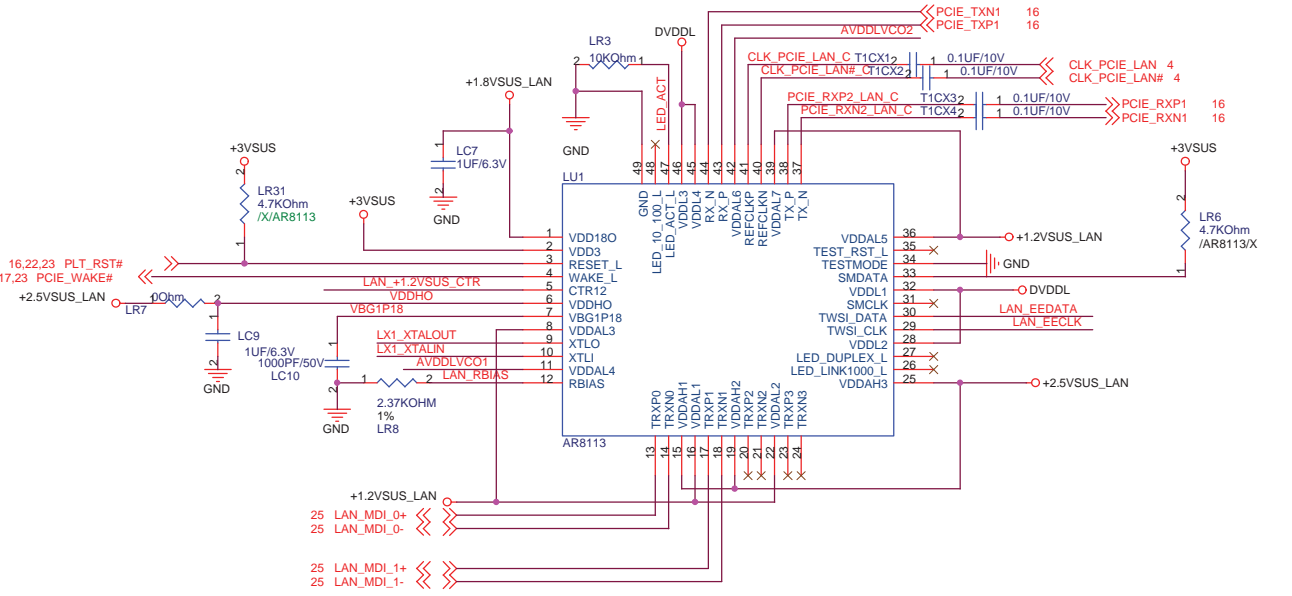
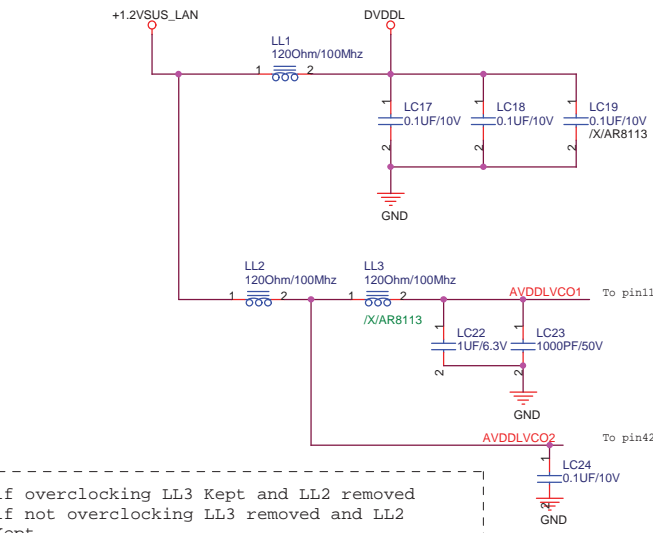
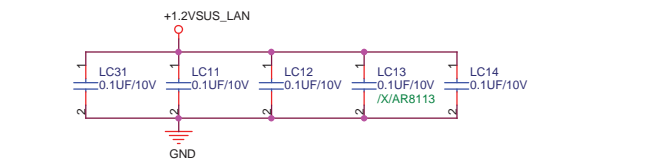
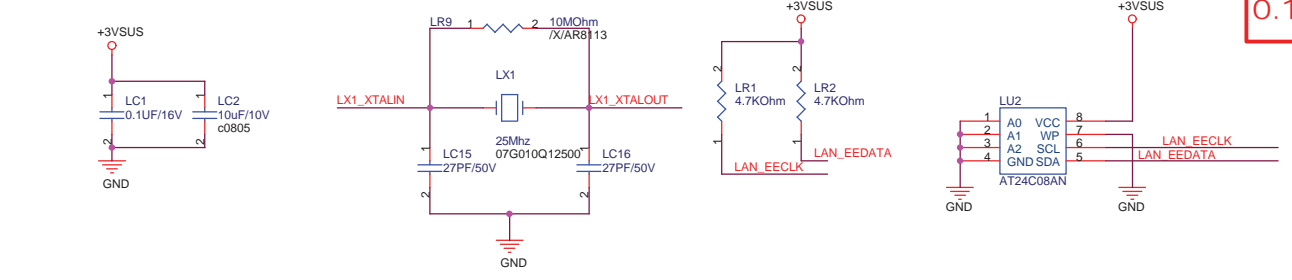
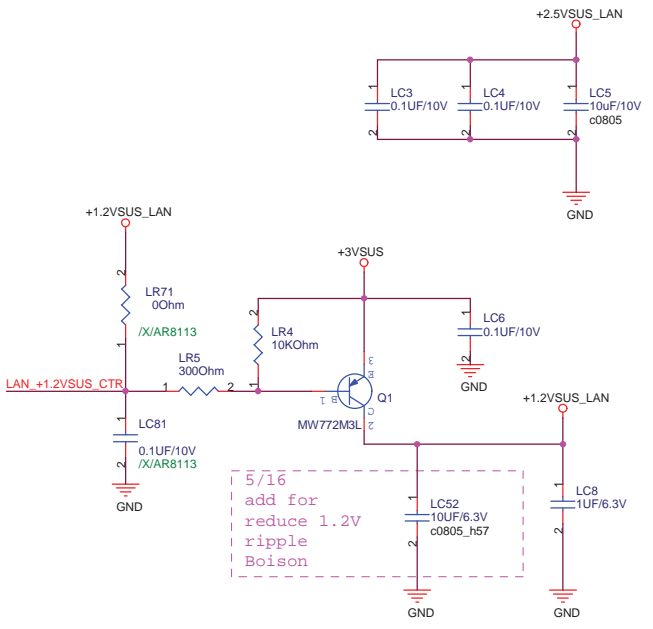


<http://hobi-elektronika.net>

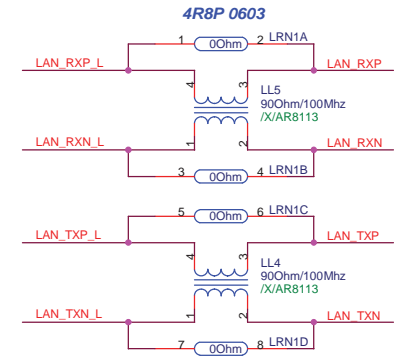
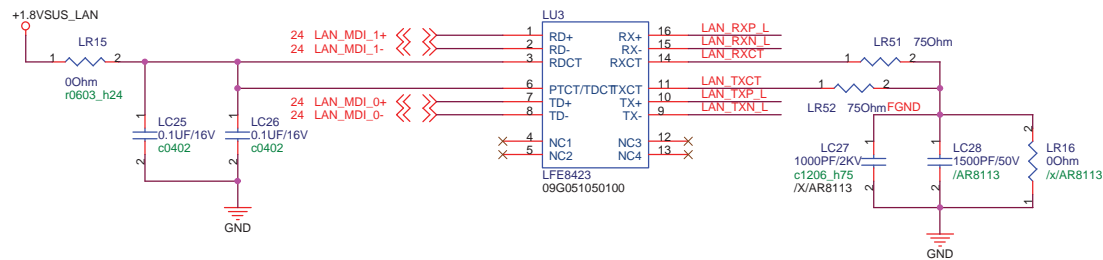
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Title : Minicard
ASUSTek Computer INC. Engineer: Tiansen_Wu

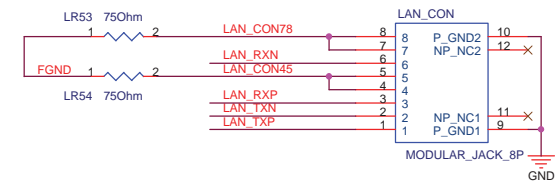
Size A3	Project Name P901	Rev 1.1G
Date: Monday, August 11, 2008	Sheet 23 of 50	

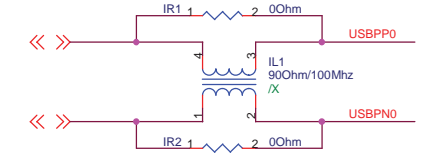
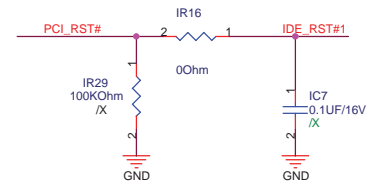
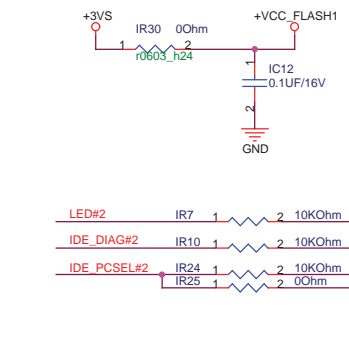
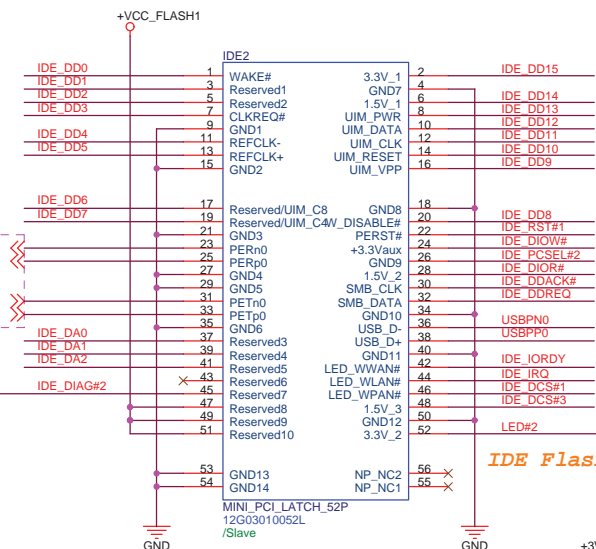
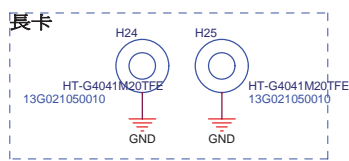
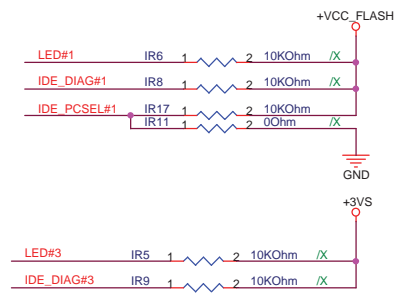
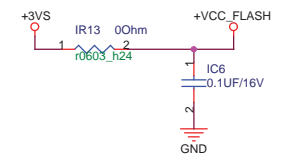
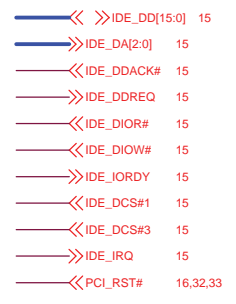
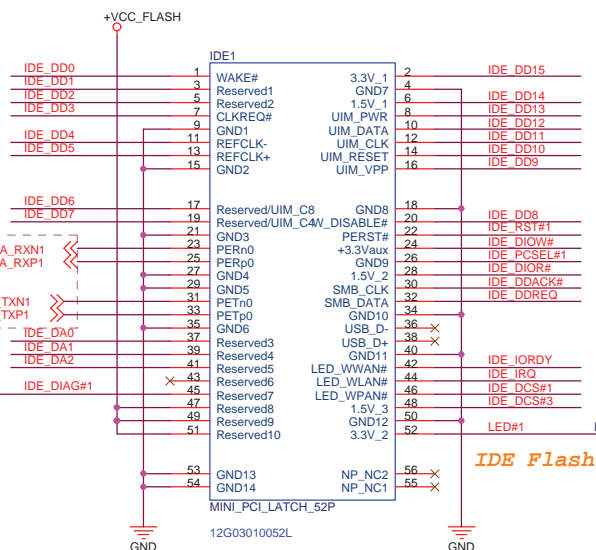
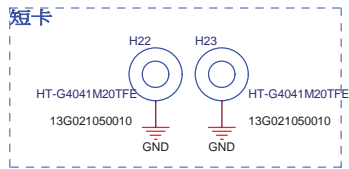


ASUS		Title : AR8113	
ASUSTek Computer INC		Engineer: Jenen_wang	
Size	Project Name	Rev	
A3	P901	1.1G	
Date: Monday, August 11, 2008		Sheet	24 of 50

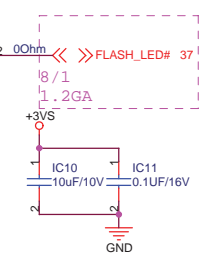
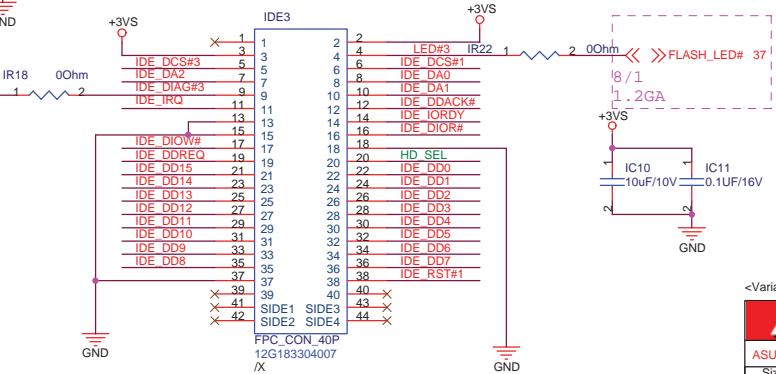
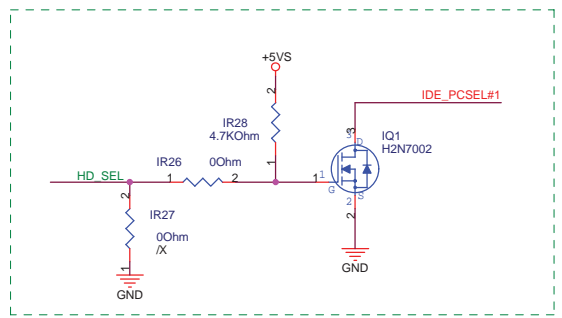


LAN connector: 12G148301086





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



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

<http://hobi-elektronika.net>

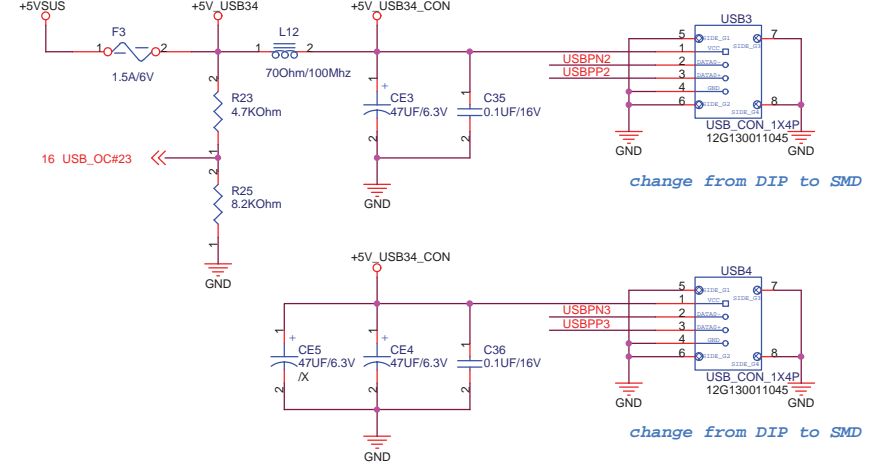
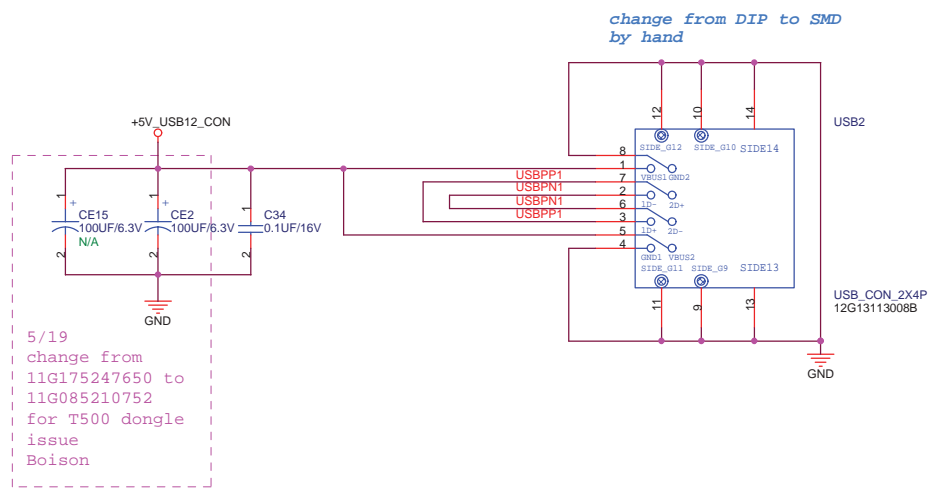
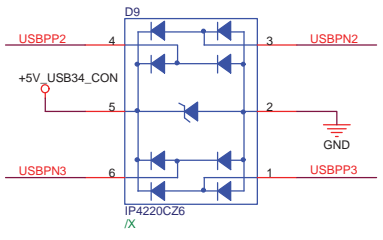
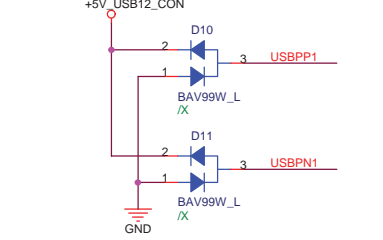
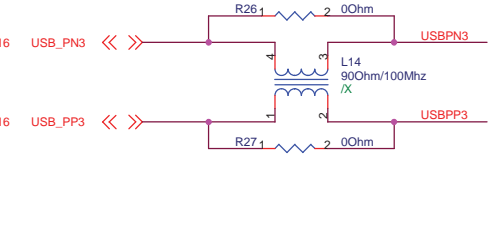
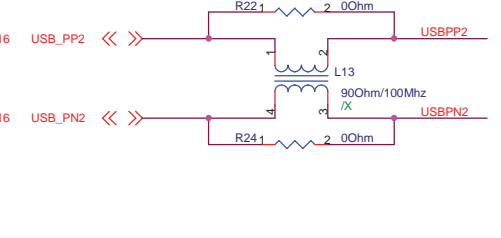
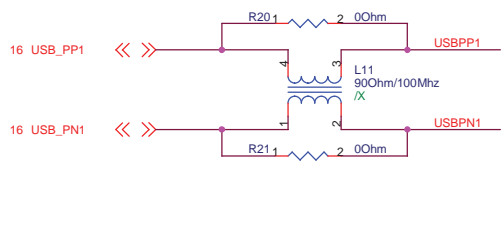
<Variant Name>

Title : HD + Flash Conn

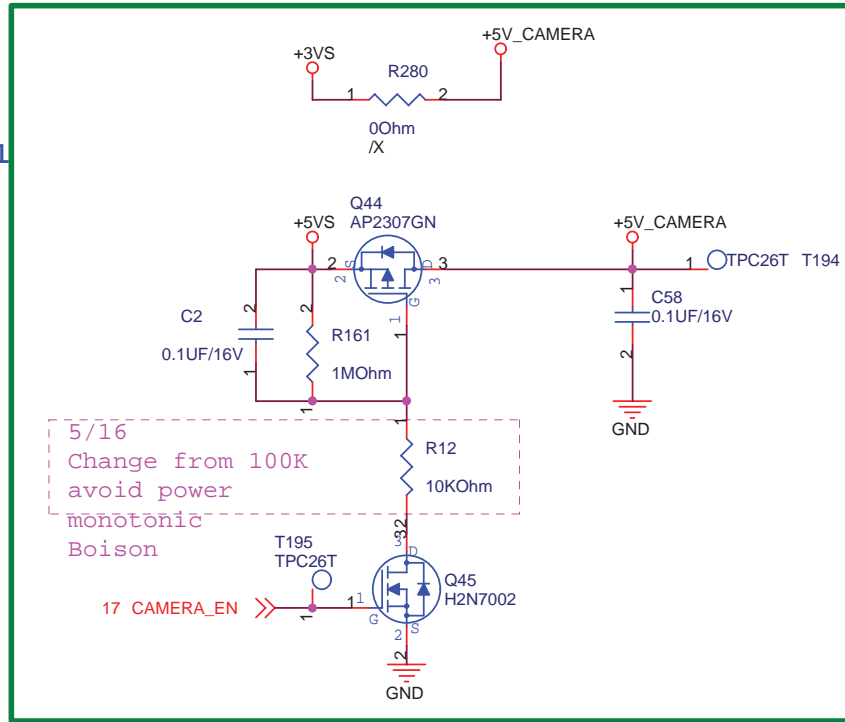
ASUSTek Computer INC. Engineer: **Kell Huang**

Size A3	Project Name P901	Rev 1.1G
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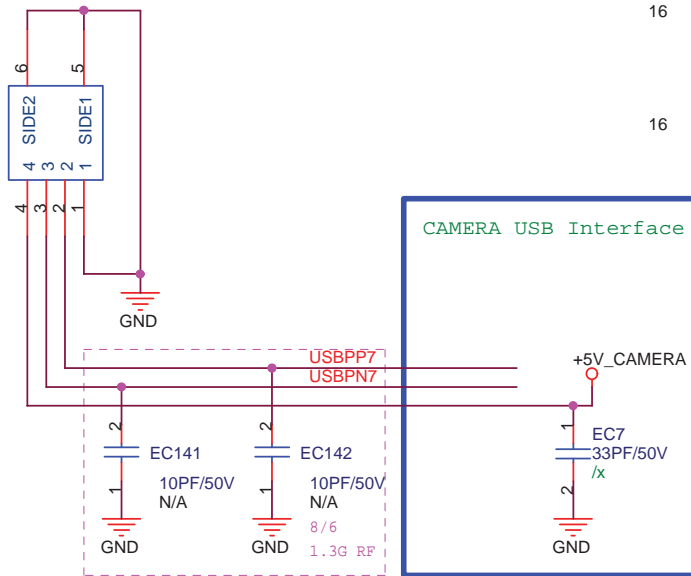


Power Control

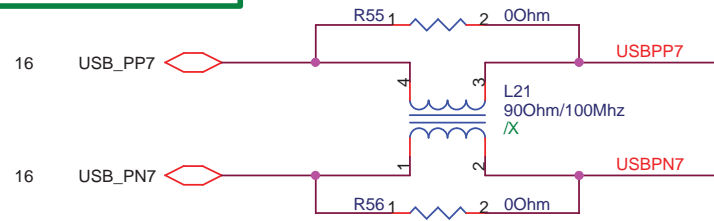


5/16
Change from 100K
avoid power
monotonic
Boison

CAMERA
WtoB_CON_4P



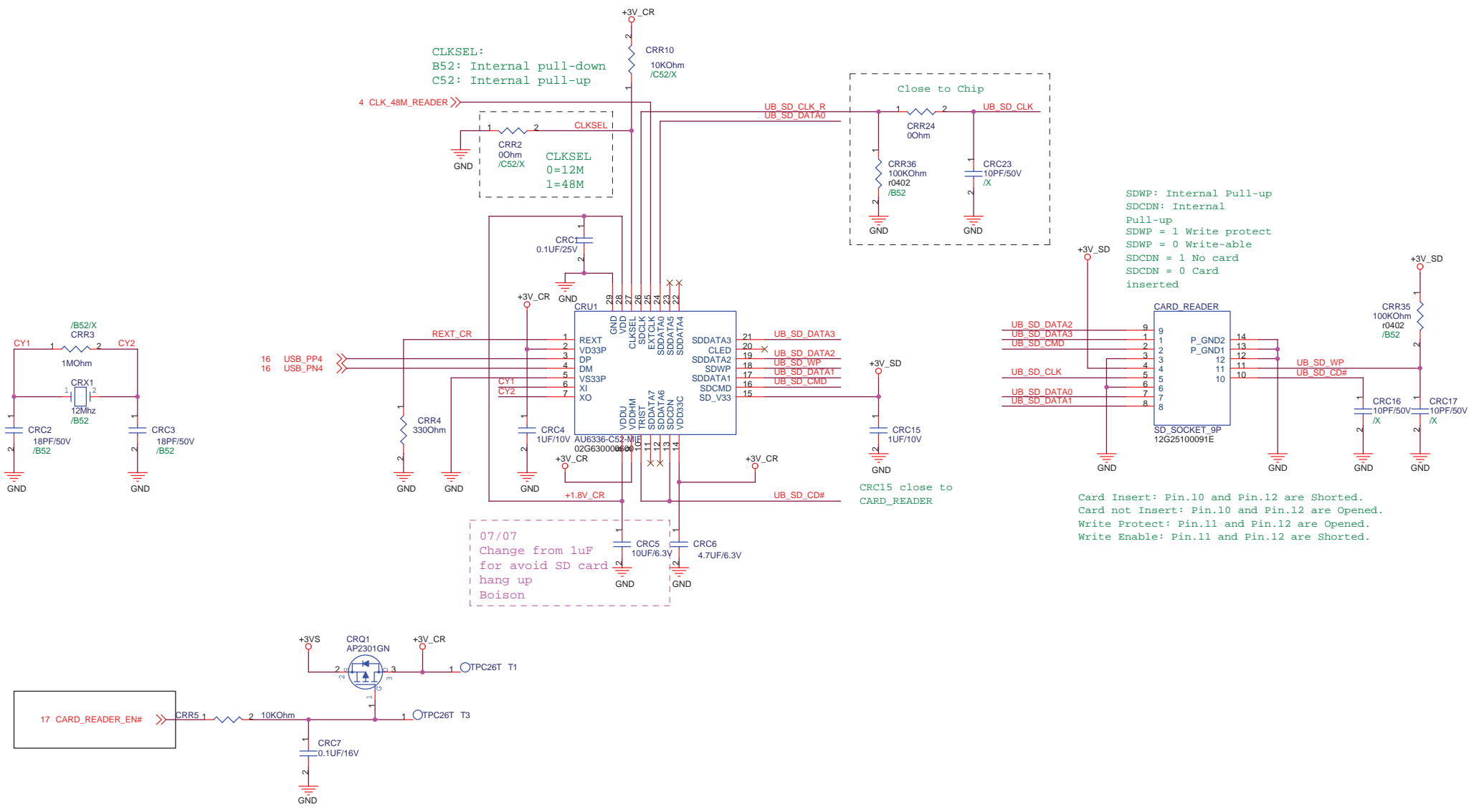
CAMERA USB Interface



<http://hobi-elektronika.net>

<Variant Name>

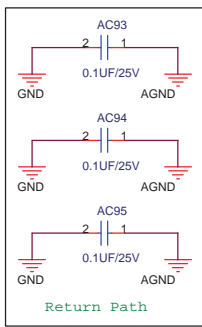
ASUS		Title : Camera Power	
ASUSTek Computer INC.		Engineer: Kell_Huang	
Size A4	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008		Sheet 28 of 47	



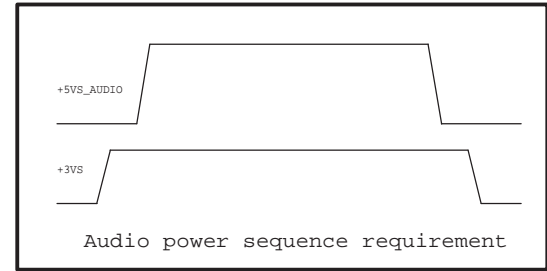
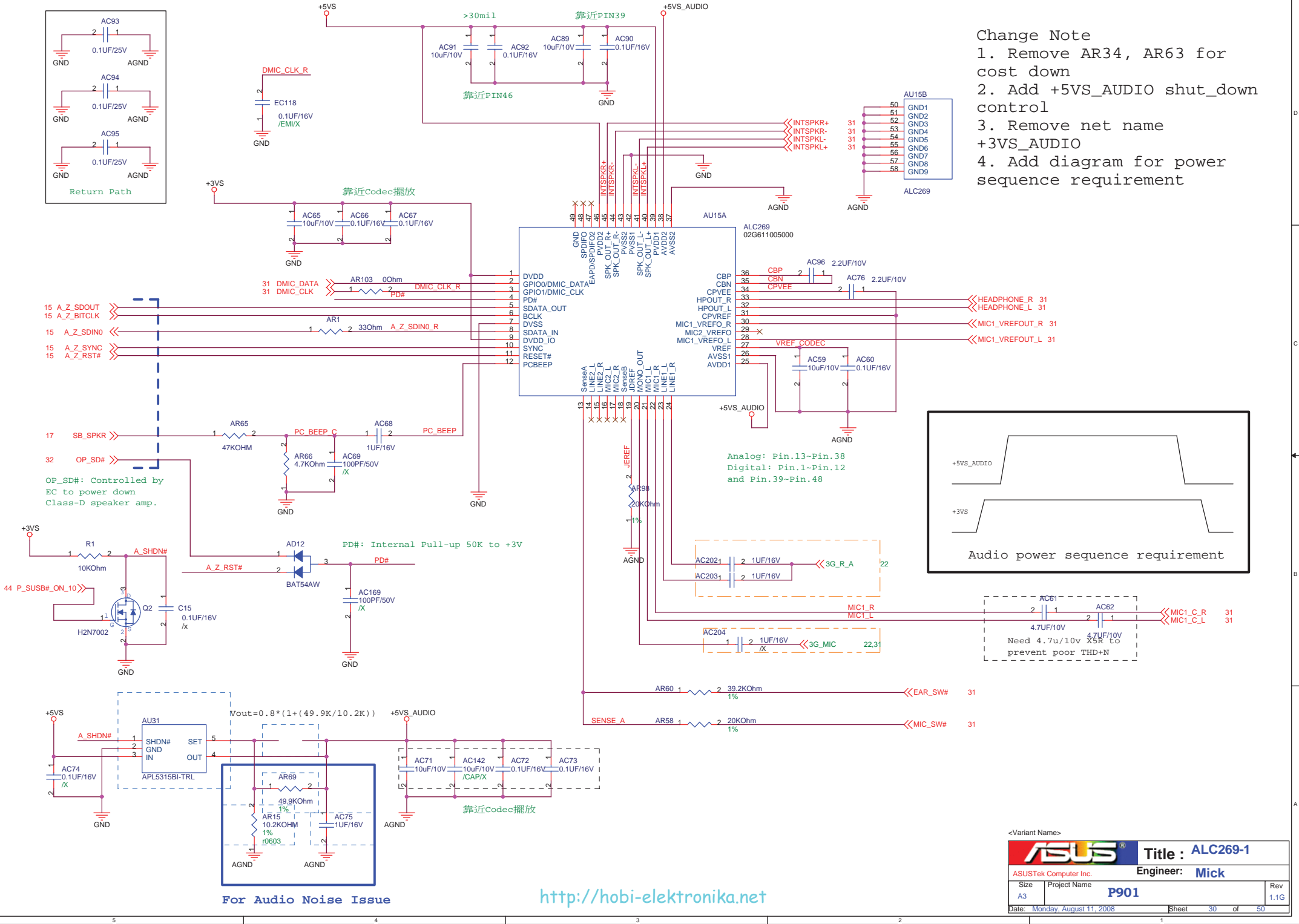
<http://hobi-elektronika.net>

<Variant Name>

ASUS		Title : AU6336-C52	
ASUSTek Computer Inc.		Engineer: Boison Hung	
Size A3	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008	Sheet	29	of 50

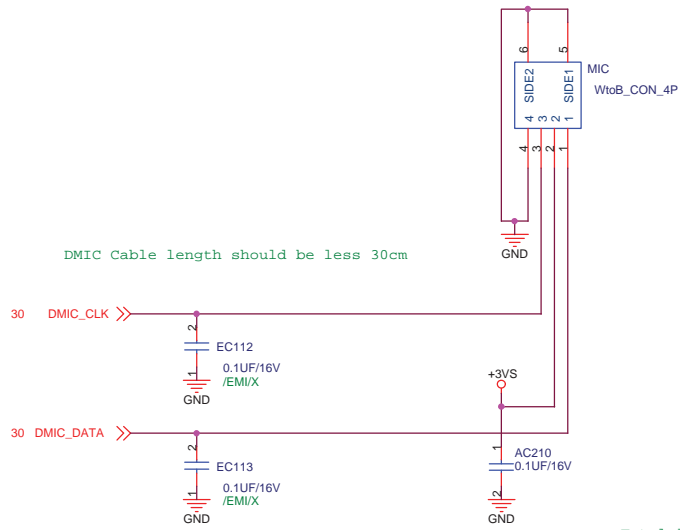


- Change Note
1. Remove AR34, AR63 for cost down
 2. Add +5VS_AUDIO shut_down control
 3. Remove net name +3VS_AUDIO
 4. Add diagram for power sequence requirement

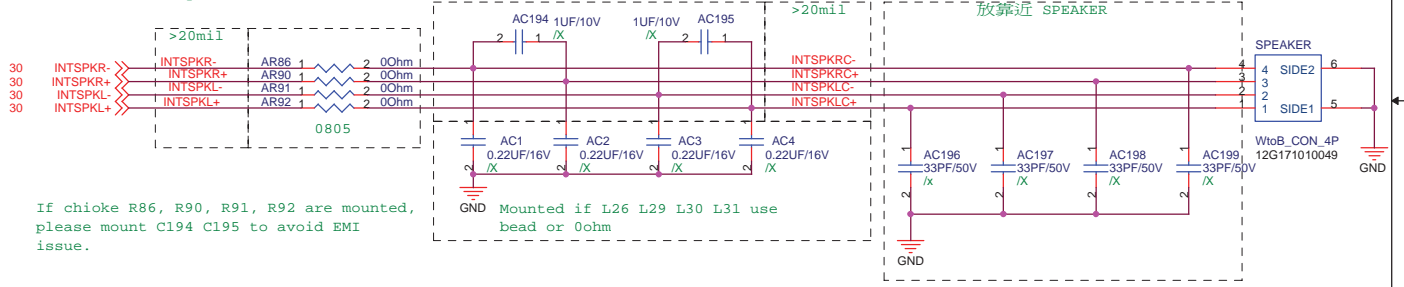


Need 4.7u/10V X5R to prevent poor THD+N

ASUS		Title : ALC269-1	
ASUSTek Computer Inc.		Engineer: Mick	
Size	Project Name		Rev
A3	P901		1.1G
Date: Monday, August 11, 2008	Sheet	30 of 50	

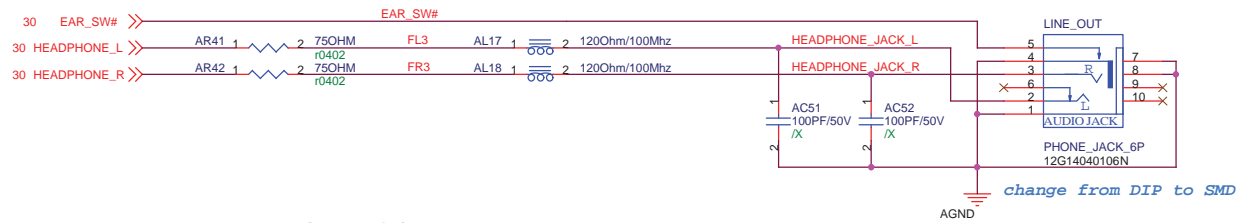


Total length from speakerR+- L+- (pin40 41 44 45) to internal speaker please as short as possible (<20cm is better)



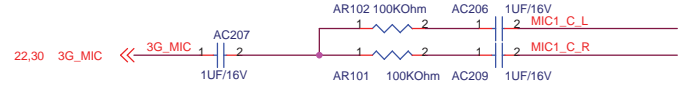
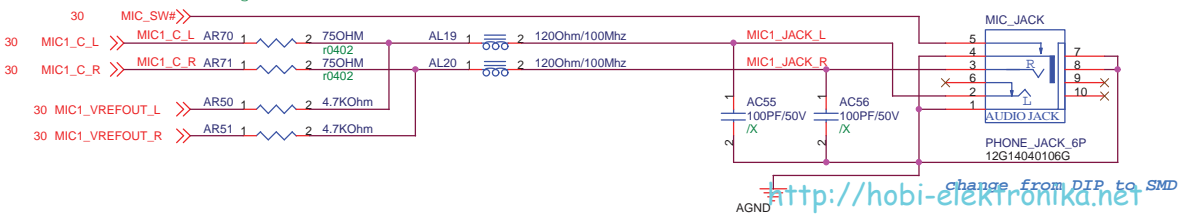
If choke R86, R90, R91, R92 are mounted, please mount C194 C195 to avoid EMI issue.

LINE_OUT use 12G14040106N



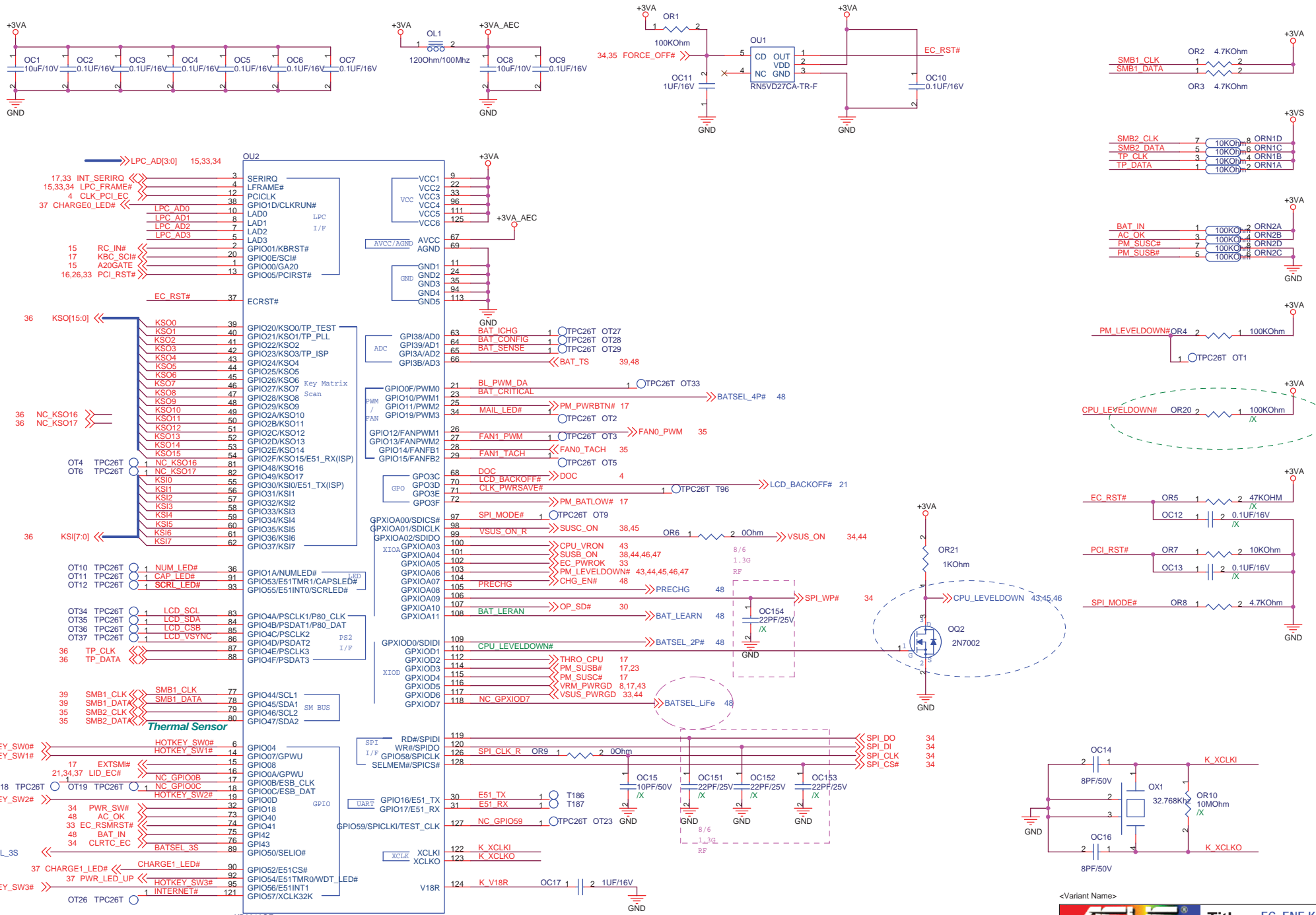
R70 and R71: If don't need retasking function, change to 1K.

MIC_JACK use 12G14040106G



<http://hobi-elektronika.net>

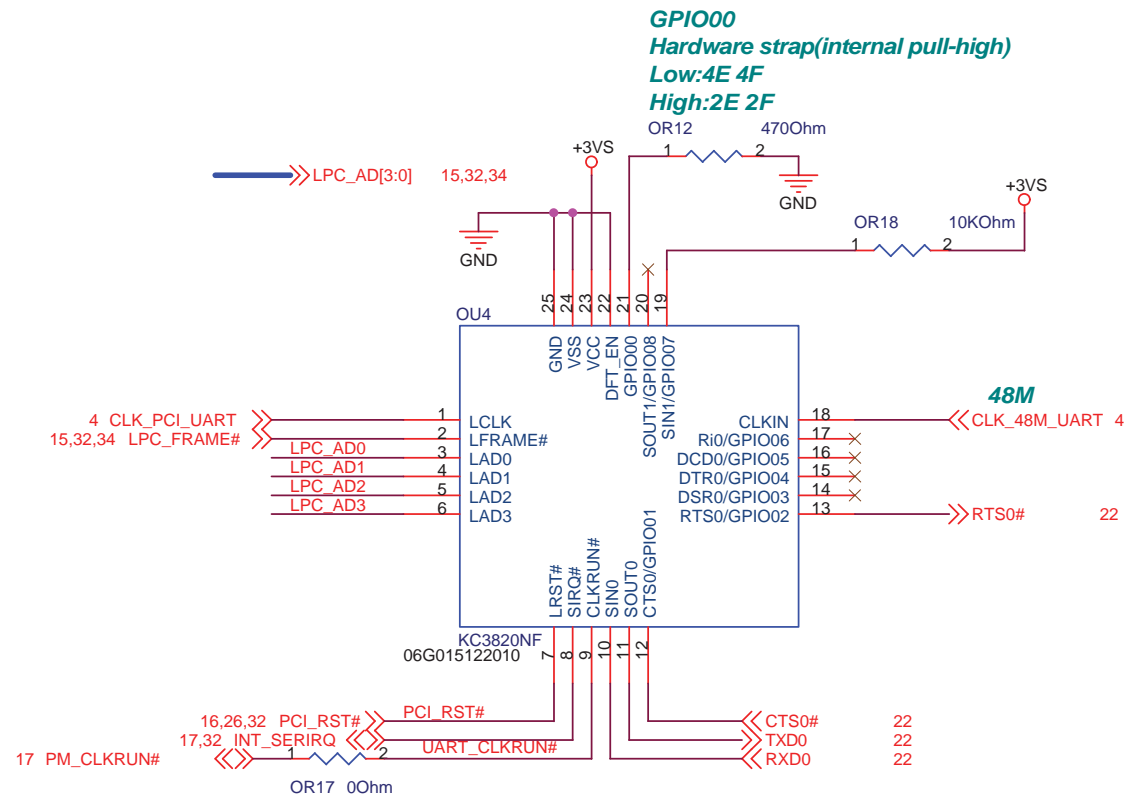
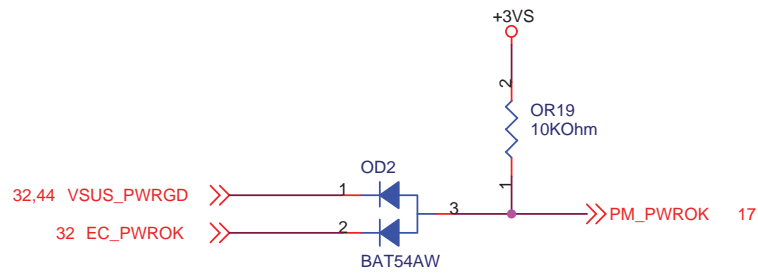
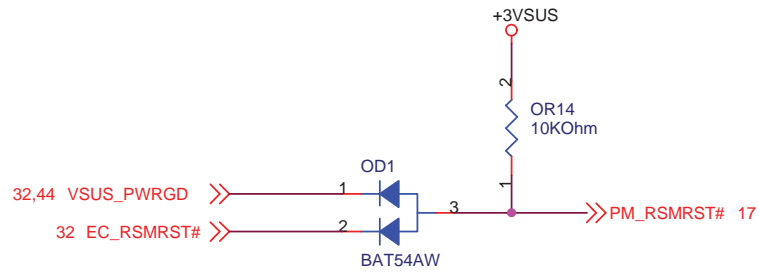
ASUS		Title : ALC269-2	
ASUSTek Computer Inc.		Engineer: MICK	
Size A3	Project Name P901	Rev 1.1G	
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		Title : EC_ENE KB3310	
ASUSTek Computer INC.		Engineer: Keil_Huang	
Size A3	Project Name P901	Rev 1.1G	
Date: Monday, August 11, 2008	Sheet	32	of 50

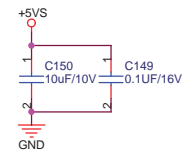
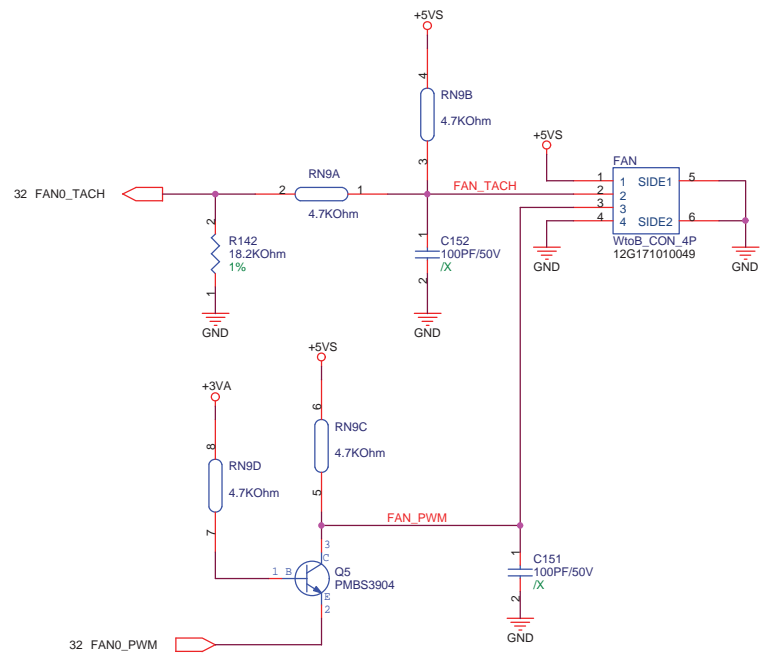
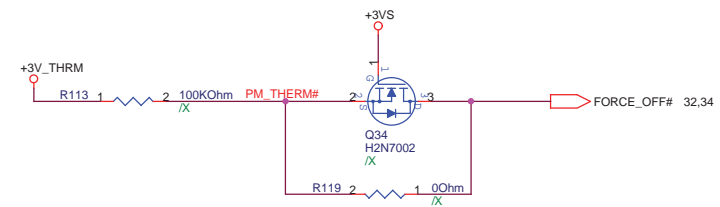
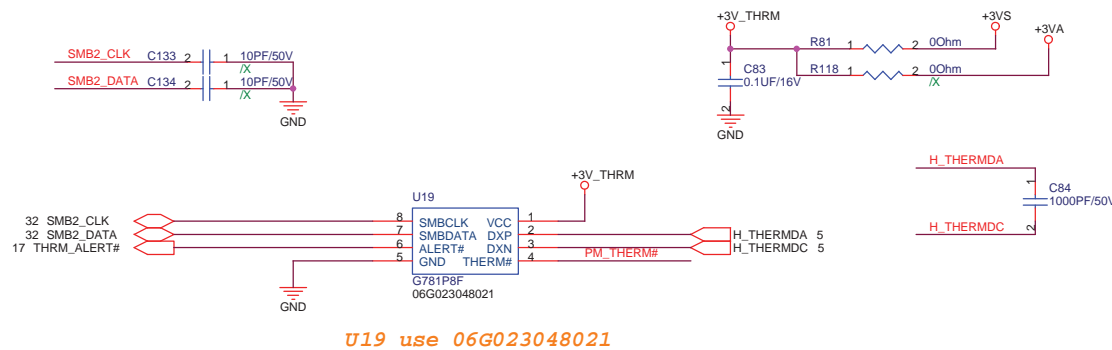
R1.2G to resolve auto-boot issue



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	
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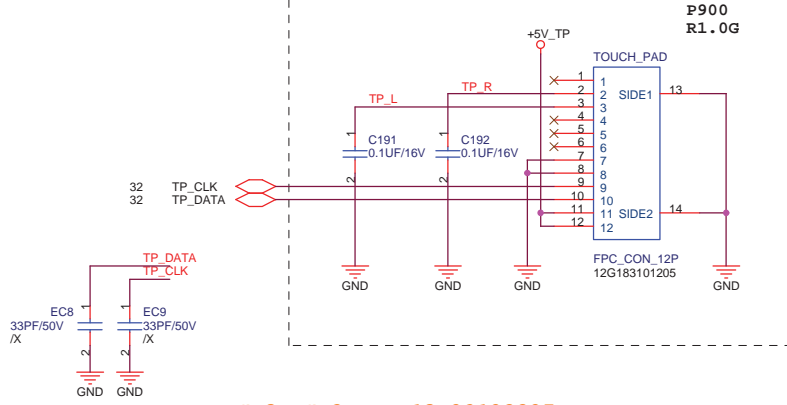


<http://hobi-elektronika.net>

<Variant Name>

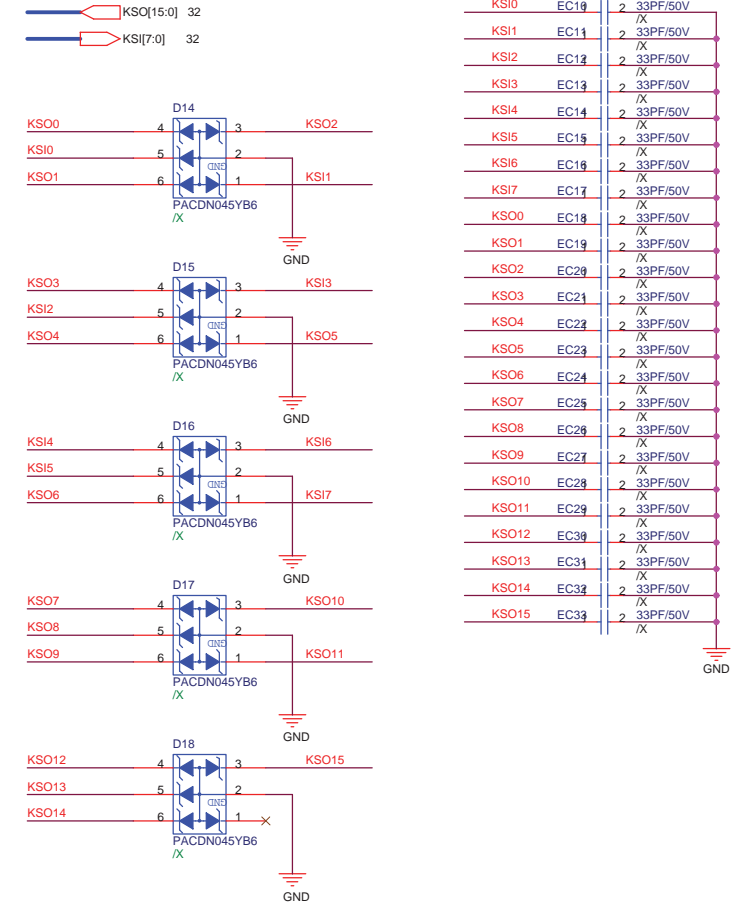
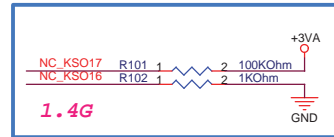
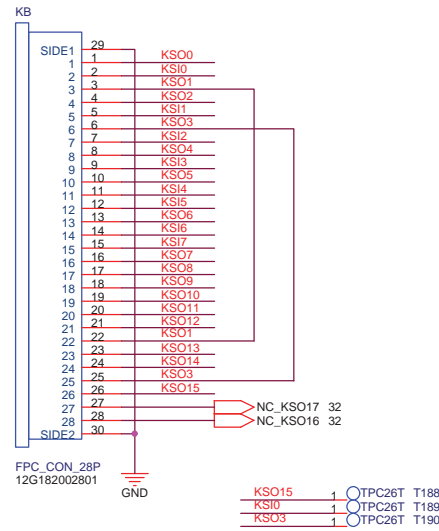
ASUS		Title : Thermal Sensor_FAN	
ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size	Project Name		Rev
A3	P901		1.1G
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For Touch-Pad



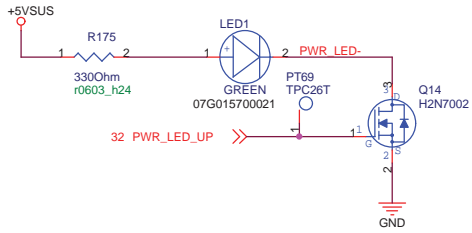
SW2, SW3 use 12G09103305N

For Keyboard Connector

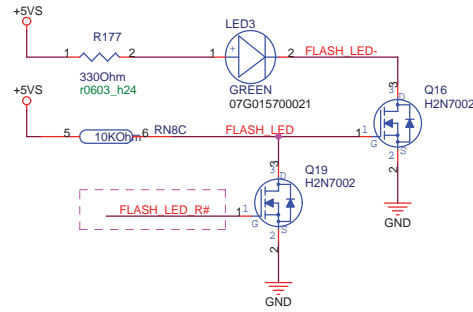


ASUS		Title : KB_Touch Pad	
ASUSTek Computer INC.		Engineer: Kell_Huang	
Size	Project Name		Rev
A3	P901		1.1G
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for POWER LED

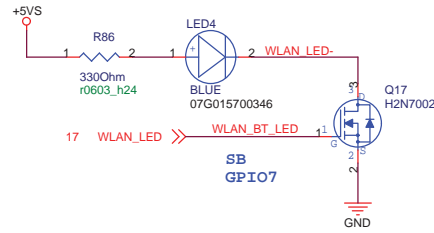


for FLASH LED

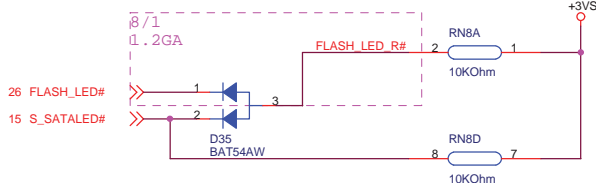
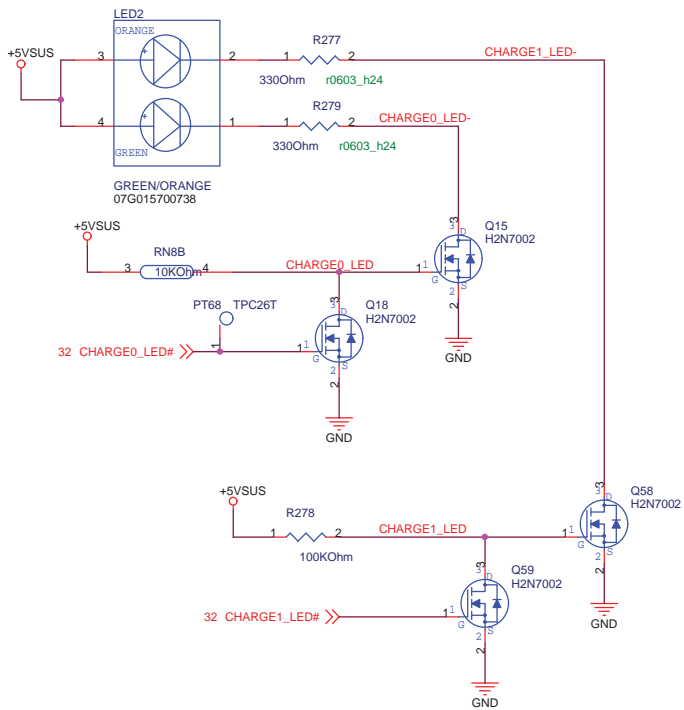


for WLAN/BlueTooth LED

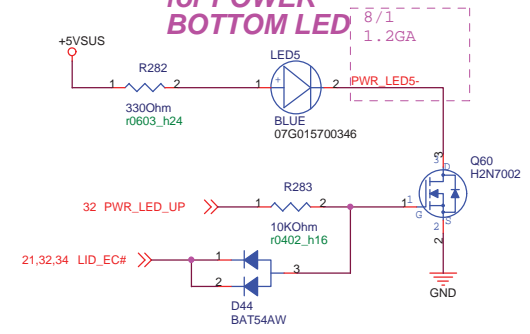
R86 use 4.7K OHm 10G213472003030



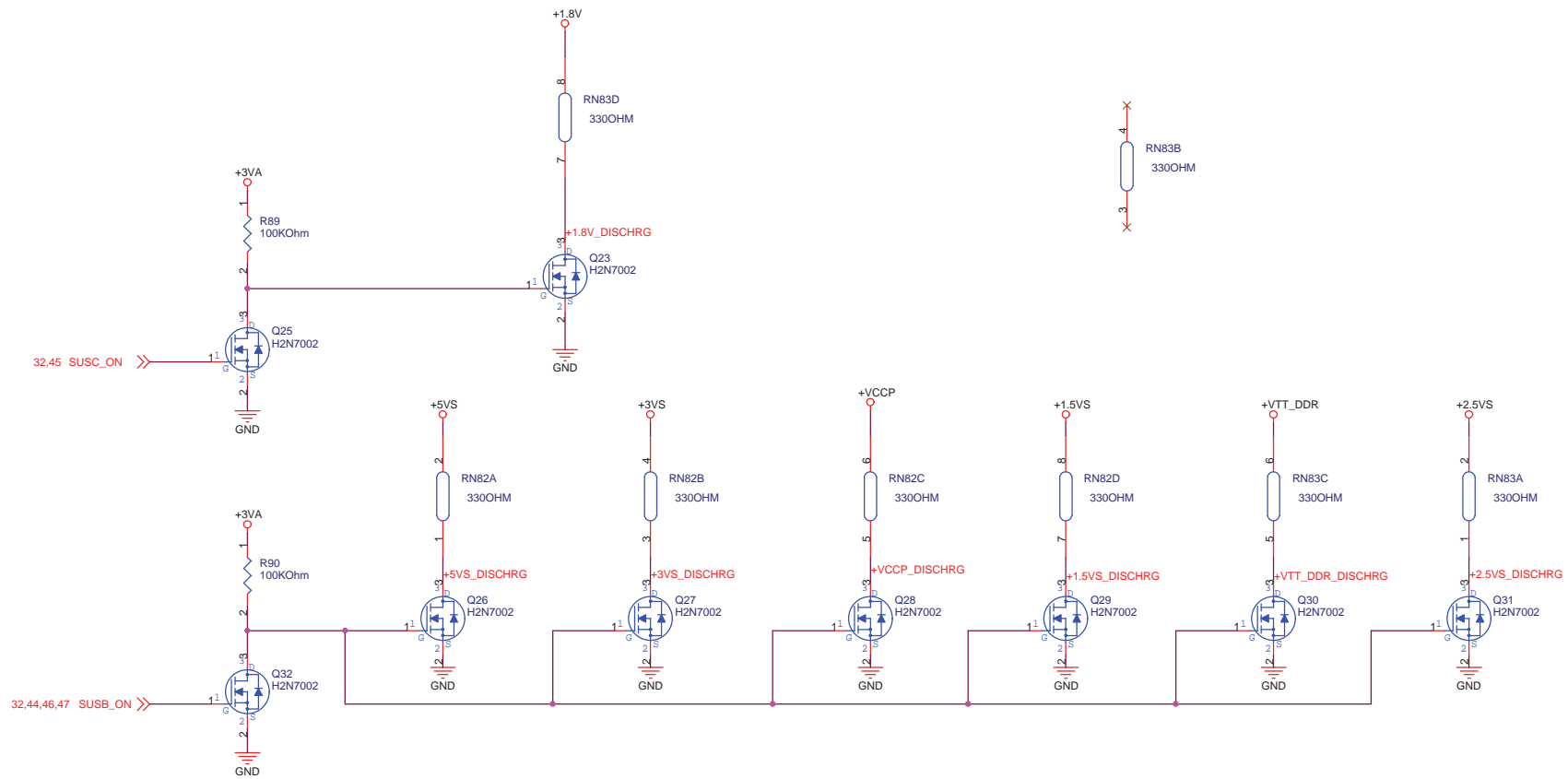
for CHARGE LED



for POWER BOTTOM LED



<Variant Name>		ASUS Title : LED	
ASUSTek Computer INC.		Engineer: Kell_Huang	
Size A3	Project Name P901	Date: Monday, August 11, 2008	Rev 1.1G
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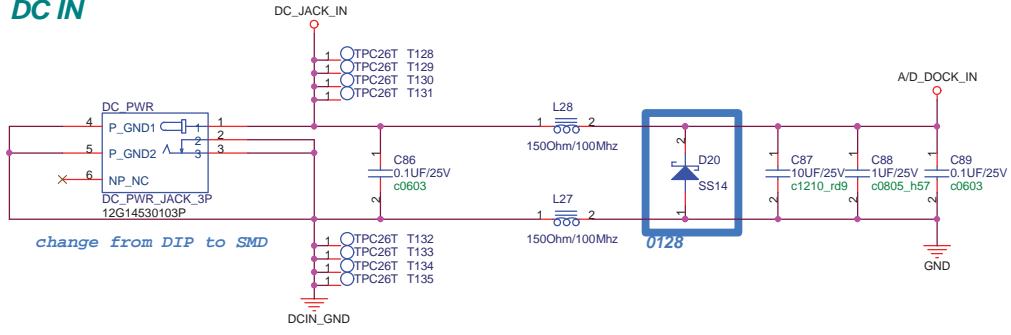


<http://hobi-elektronika.net>

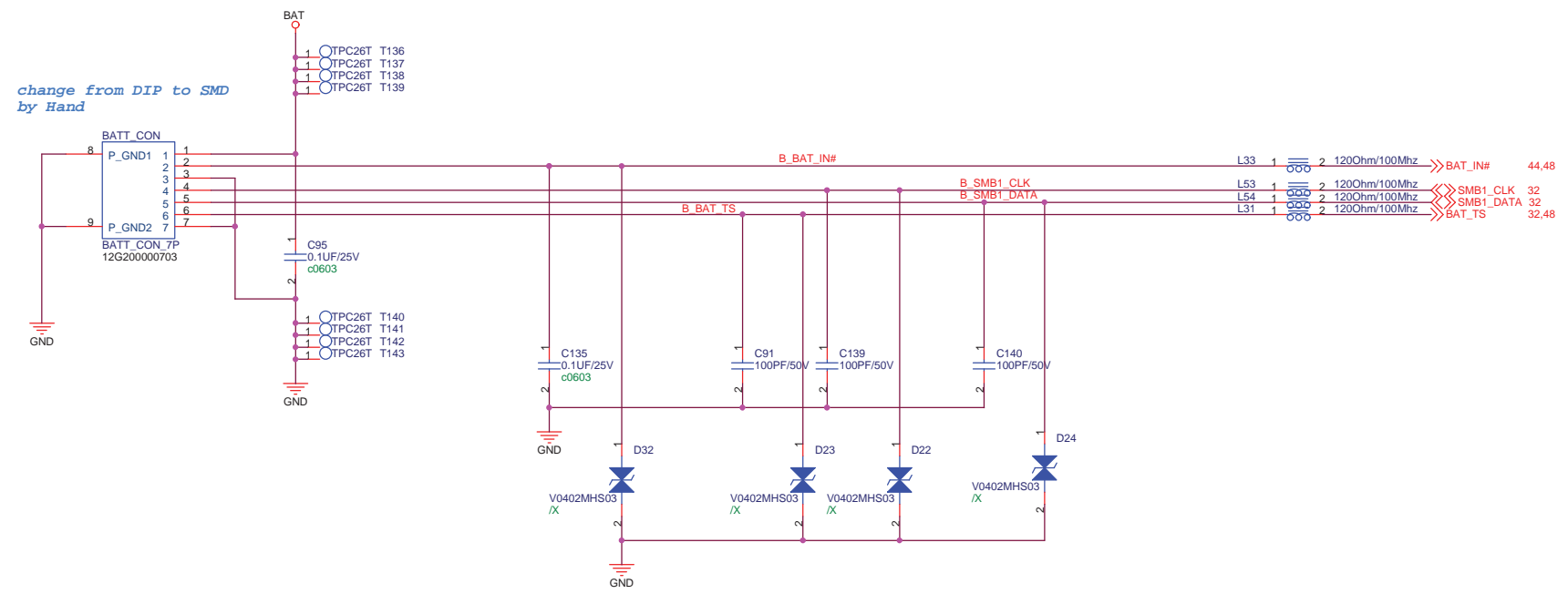
<Variant Name>

ASUS		Title : Discharge	
ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size	Project Name	Date	Rev
A3	P901	Monday, August 11, 2008	1.1G
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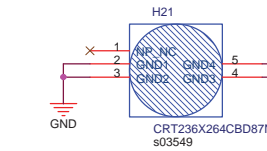
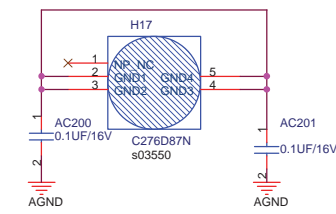
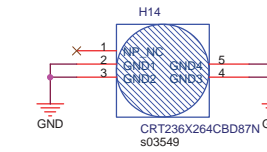
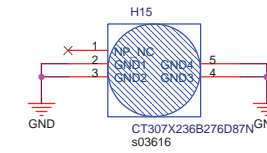
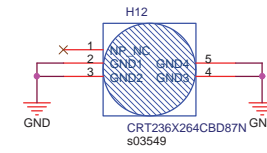
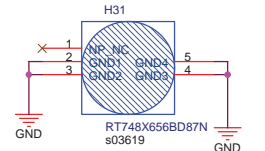
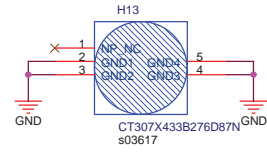
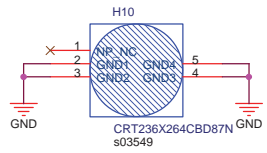
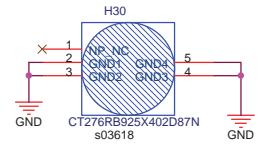
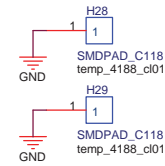
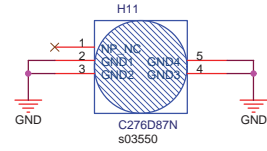
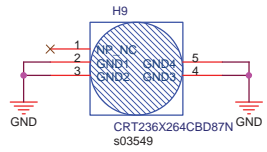
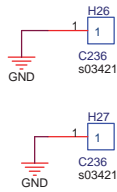
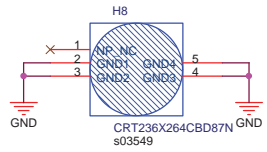
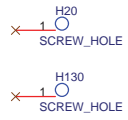
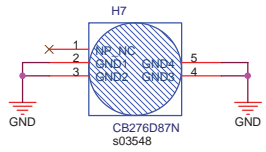
DC IN

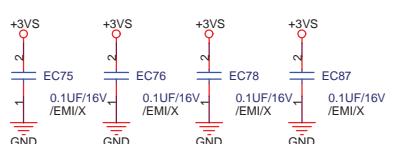
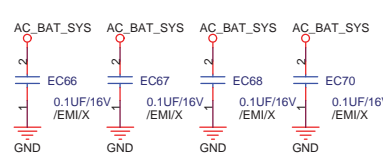
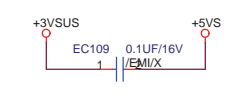
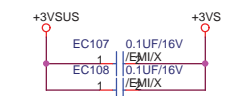
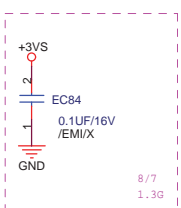
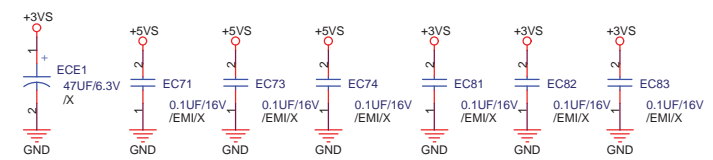
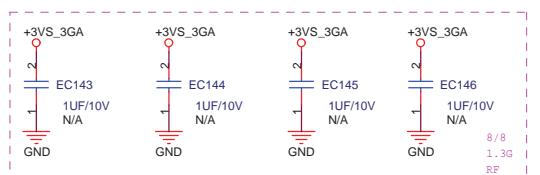
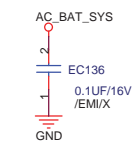
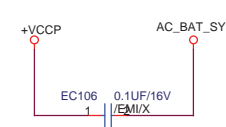
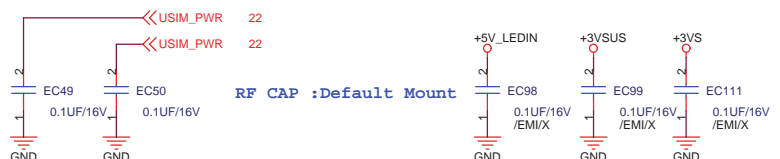
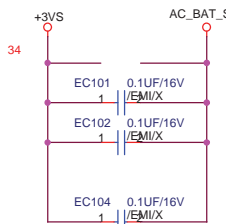
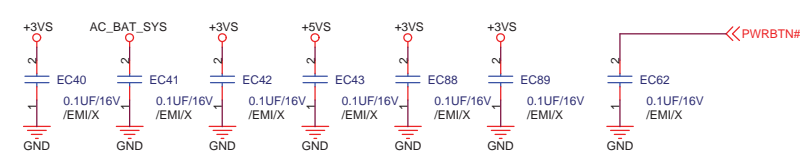
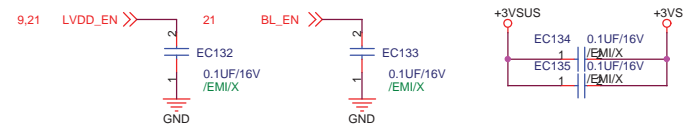
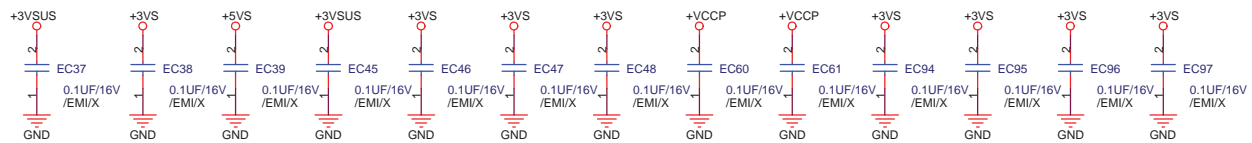
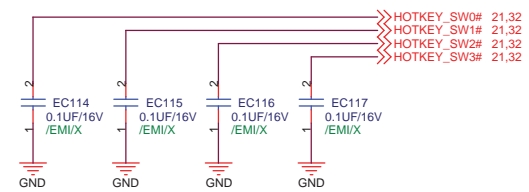
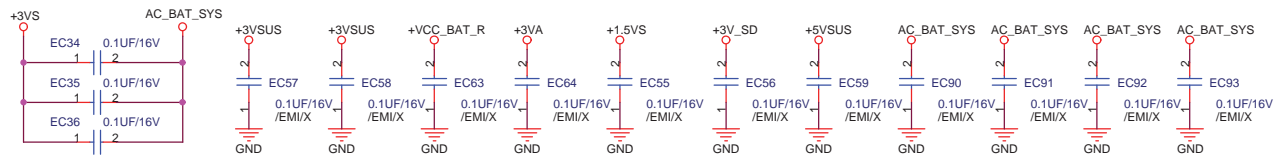


BAT IN



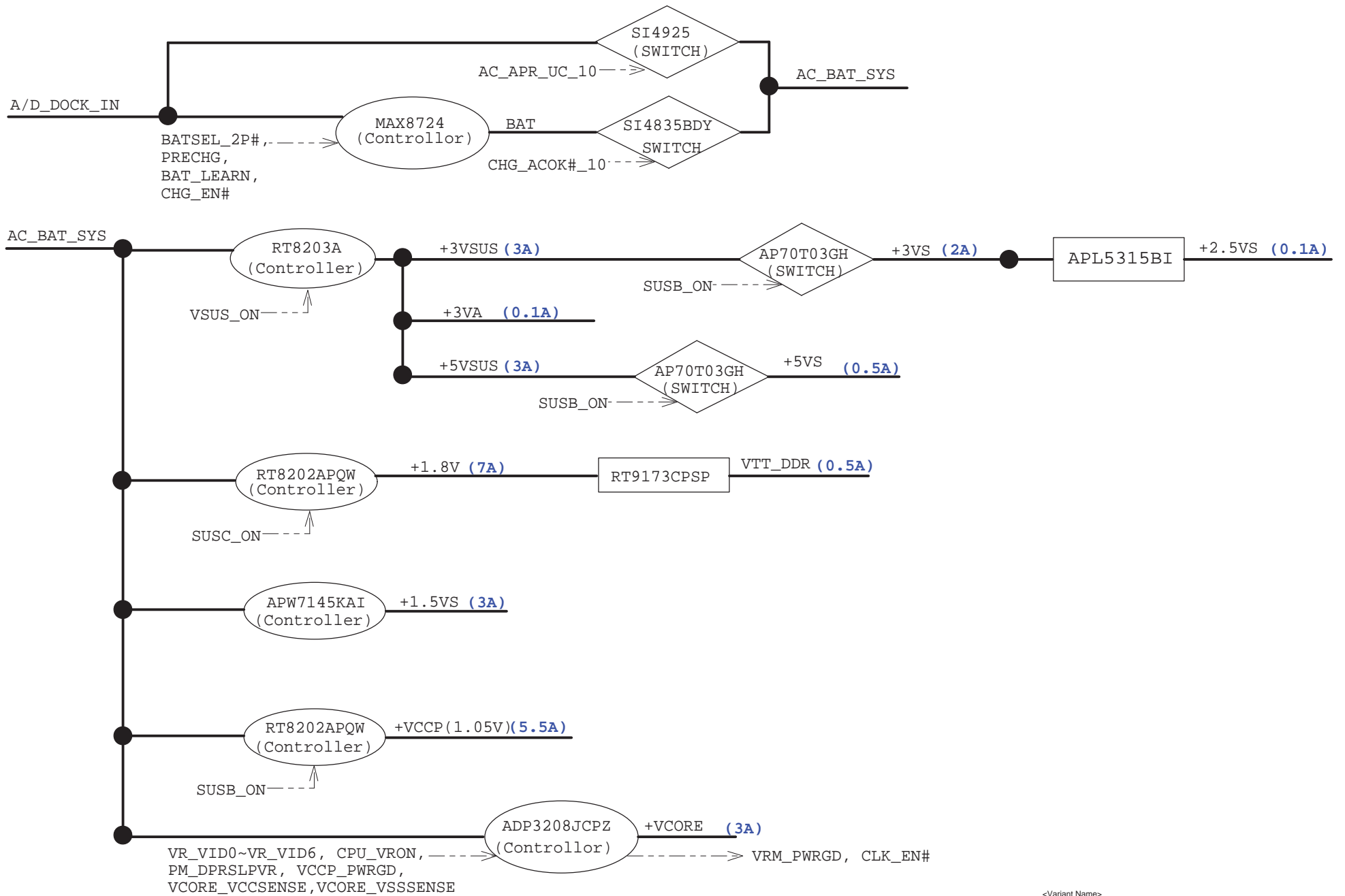
ASUS		Title : PWR Jack	
ASUSTek Computer INC.		Engineer: Keli_Huang	
Size	Project Name		Rev
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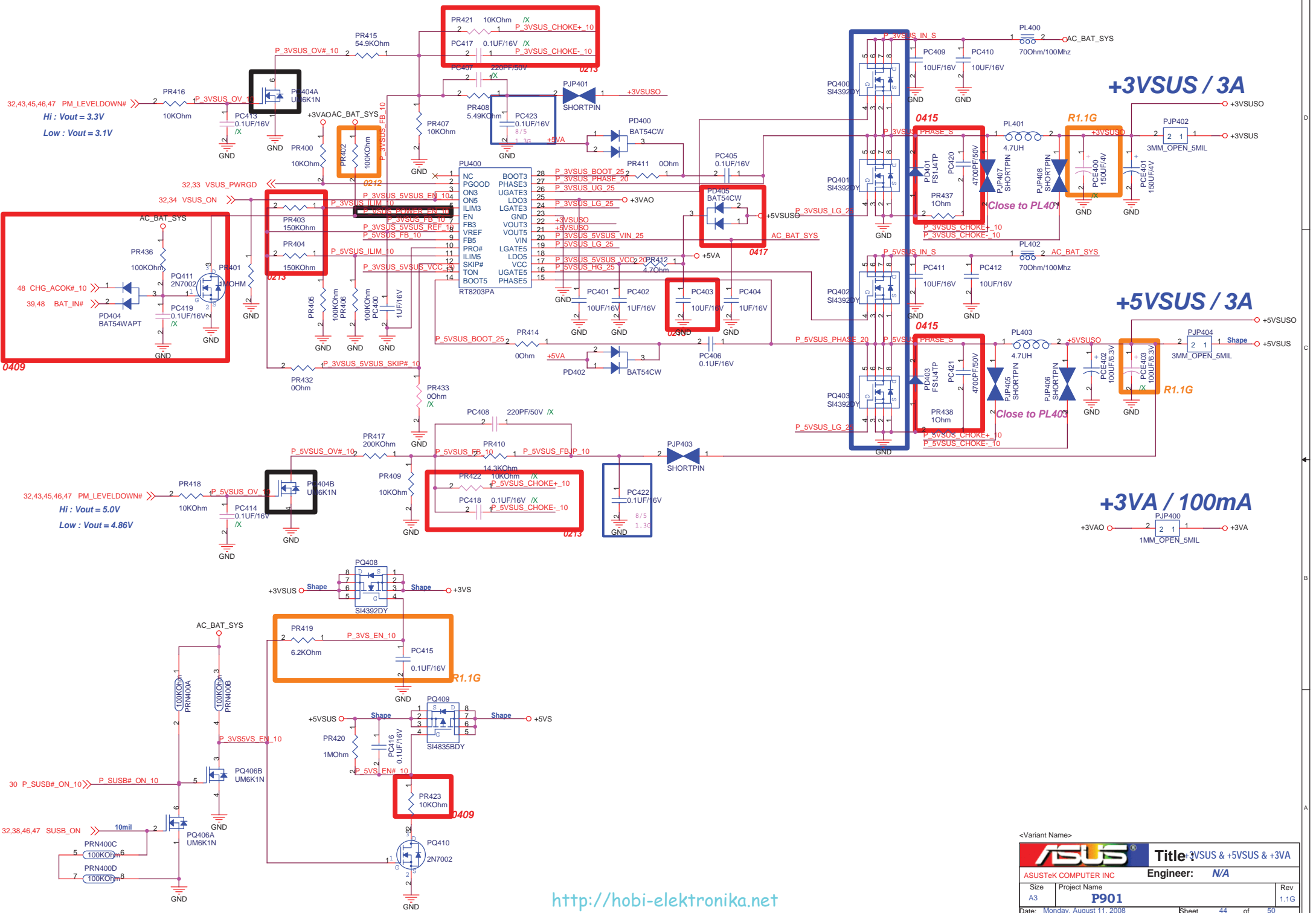




<Variant Name>

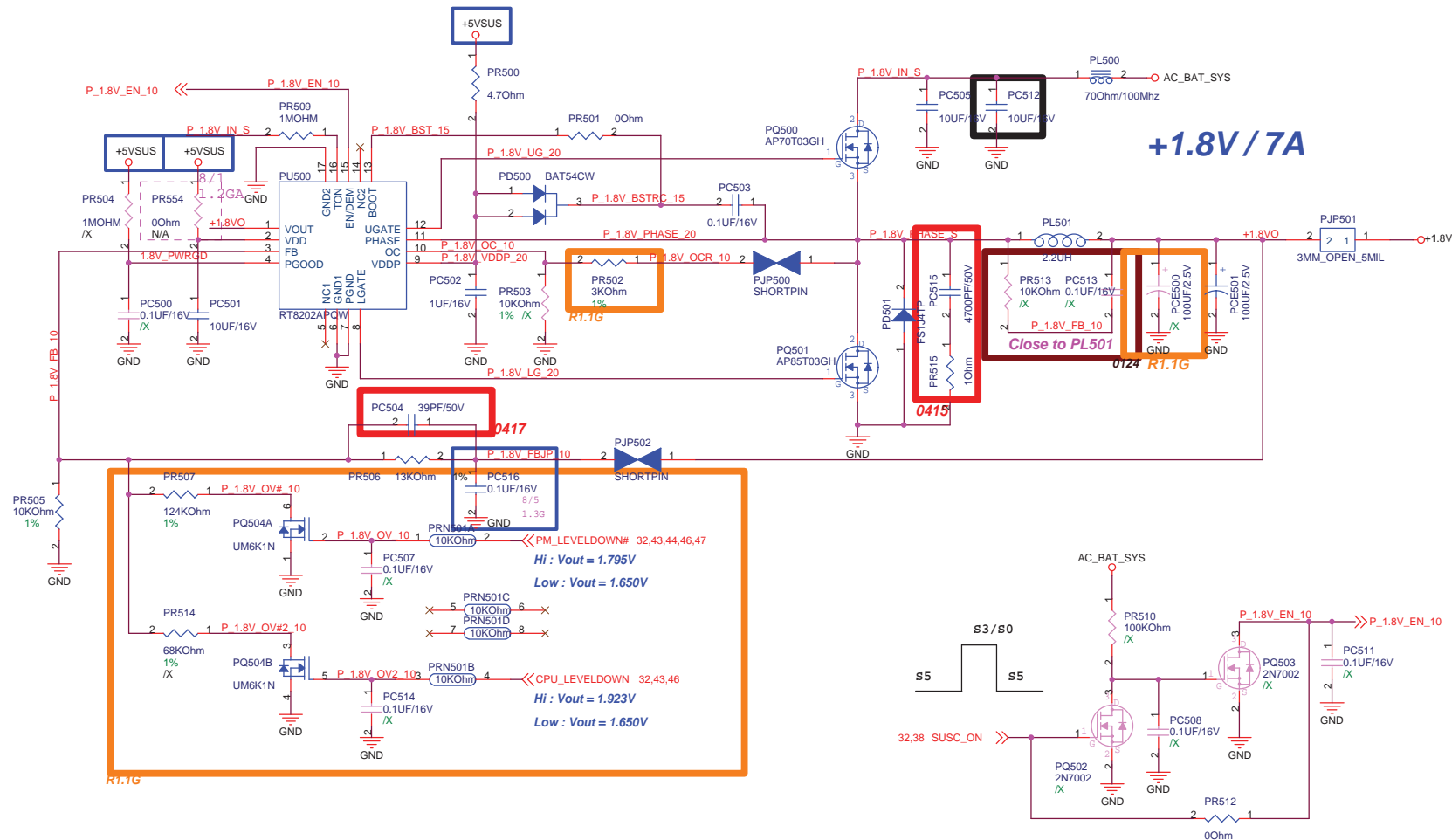
ASUS		Title : EMI	
ASUSTek Computer INC.		Engineer: <i>Kell_Huang</i>	
Size A3	Project Name P901	Rev 1.1G	
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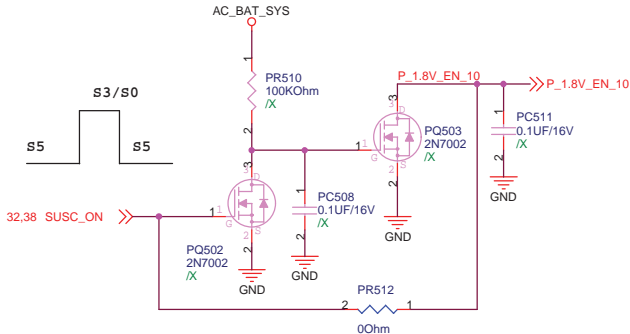


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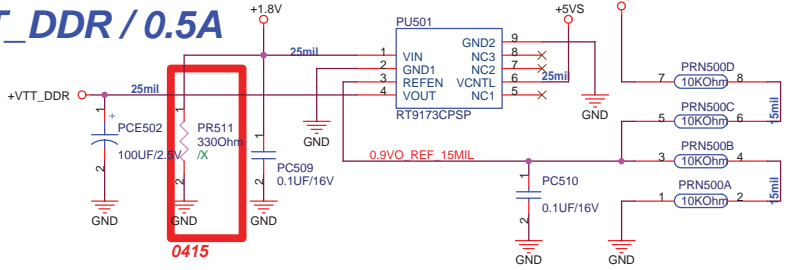
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ASUSTeK COMPUTER INC		Engineer:		N/A	
Size	Project Name		Rev		
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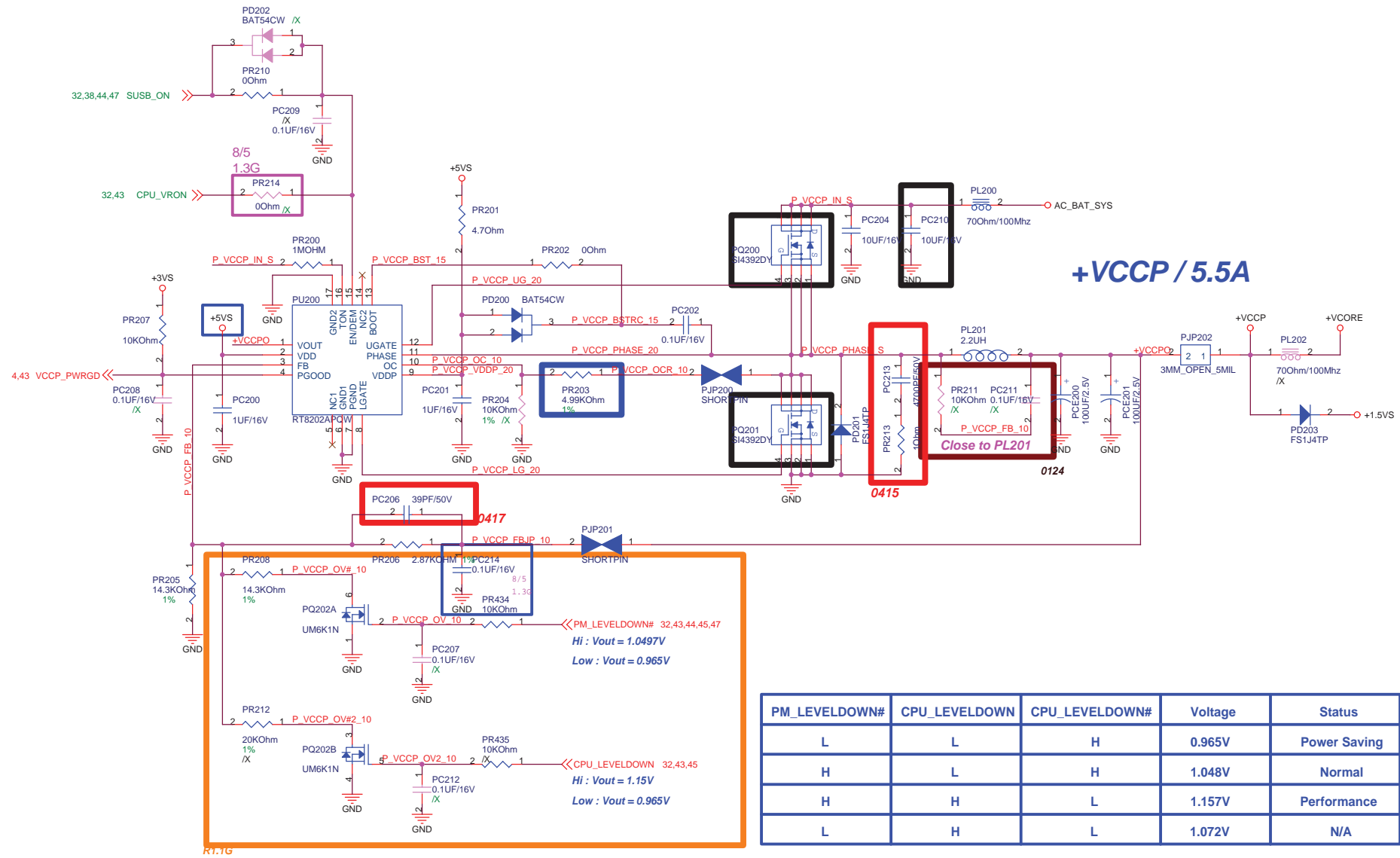
+1.8V / 7A



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

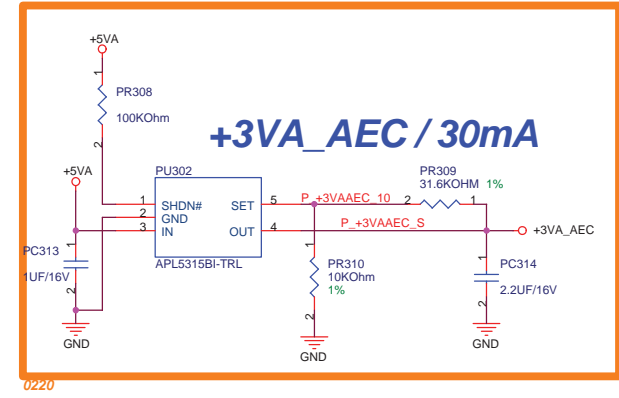
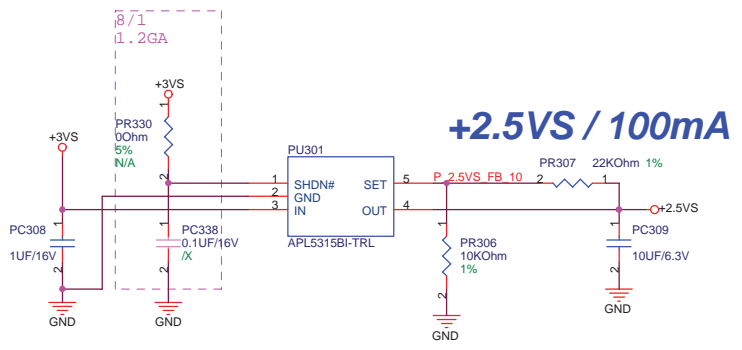
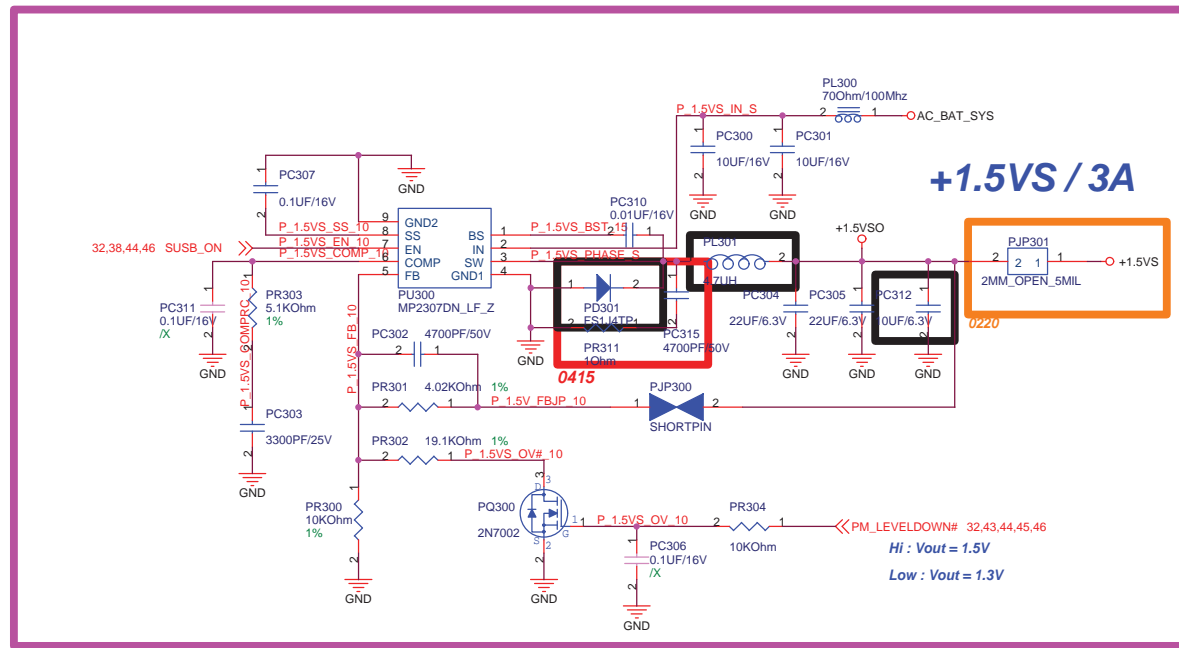


+VCCP / 5.5A

PM_LEVELDOWN#	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

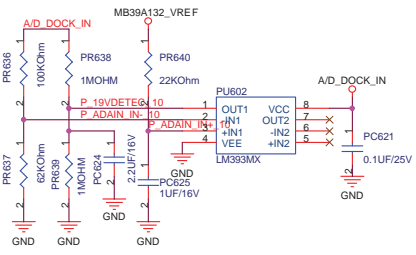
<Variant Name>

		Title : VCCP	
ASUSTek Computer INC.		Engineer: Joy_Zhou	
Size A3	Project Name P901	Rev 1.1G	
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ASUS®		Title : +1.5VS & +2.5VS	
ASUSTek Computer INC.		Engineer: Joy_Zhou	
Size	Project Name		Rev
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VREF = 5.0V
 $f_{osc}(KHz) = 17000 / RT (KOhm)$
 Soft start: $t_s(s) = 0.13 * CS (\mu F)$

VTH of -IN1: $5V / 62 * (100+62) = 13.06V$

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

Pre-Charging Mode :
 Precharging current = 150mA
 $V_{adj2} = 168.75mV$

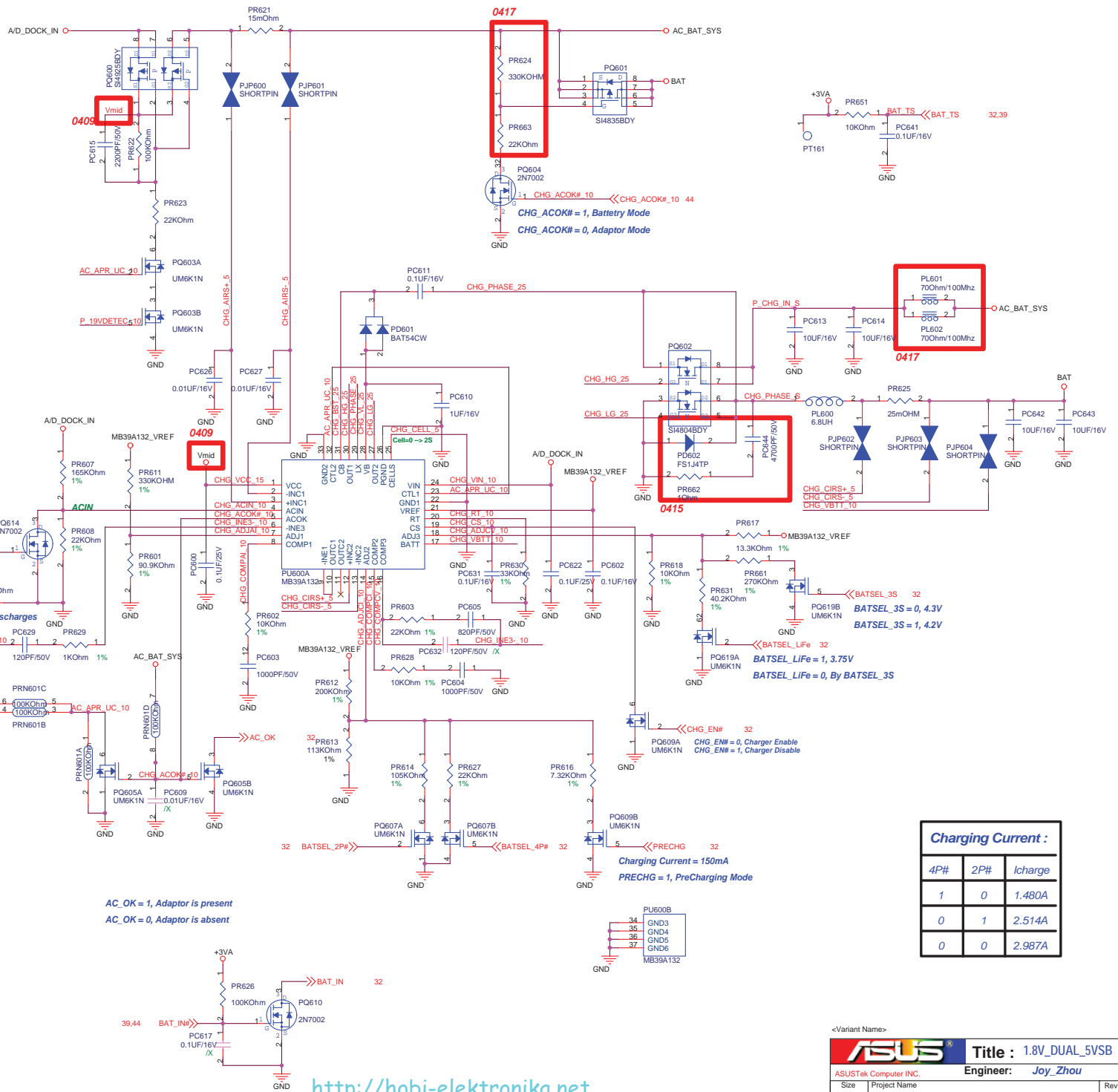
Adaptor Max. Current :
 $PR600 \sim 235.8K; I_{limit} = 2.170A; 20.615W (9.5V/22W)$
 $PR600 \sim 185.3K; I_{limit} = 2.677A; 32.124W (12V/36W)$

ACIN Threshold = 1.25V
 Adaptor > 10.5V, System Powered by Adaptor
 Adaptor < 10.5V, System Powered by Battery

Battery Charging Voltage :
 $V_{adj3} > 4.1V \Rightarrow V_{bat} = 4.2V / cell$
 $2.2V > V_{adj3} > 1.1V \Rightarrow V_{bat} = 2 * V_{adj3}$

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

<Variant Name>

ASUS Title : 1.8V_DUAL_5VSB
 ASUSTek Computer INC. Engineer: Joy Zhou

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Custom	P901	1.1G

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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	EXTSMIH#	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

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	

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#	SPI_CE#	O	


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<Variant Name>

		Title : EC Pin Define	
ASUSTek Computer INC.		Engineer: Satan He	
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<Variant Name>

		Title : History	
ASUSTek Computer INC.		Engineer: <i>Satan He</i>	
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