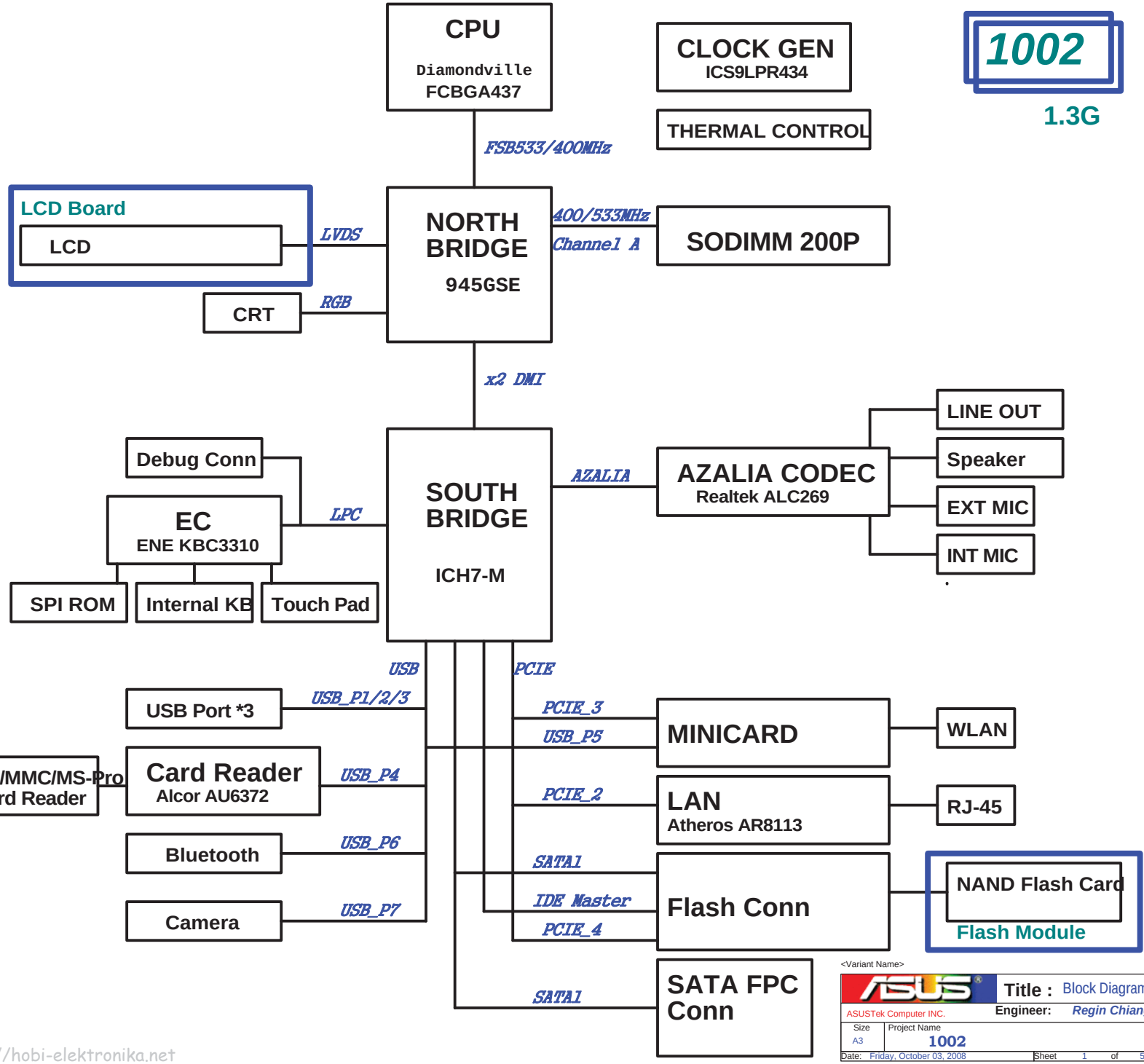


http://hobi-elektronika.net

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

PCIE

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

Azalia

ACZ_SDIN0	CODEC
ACZ_SDIN1	NC
ACZ_SDIN2	NC

<Variant Name>

ASUSTek Computer INC.

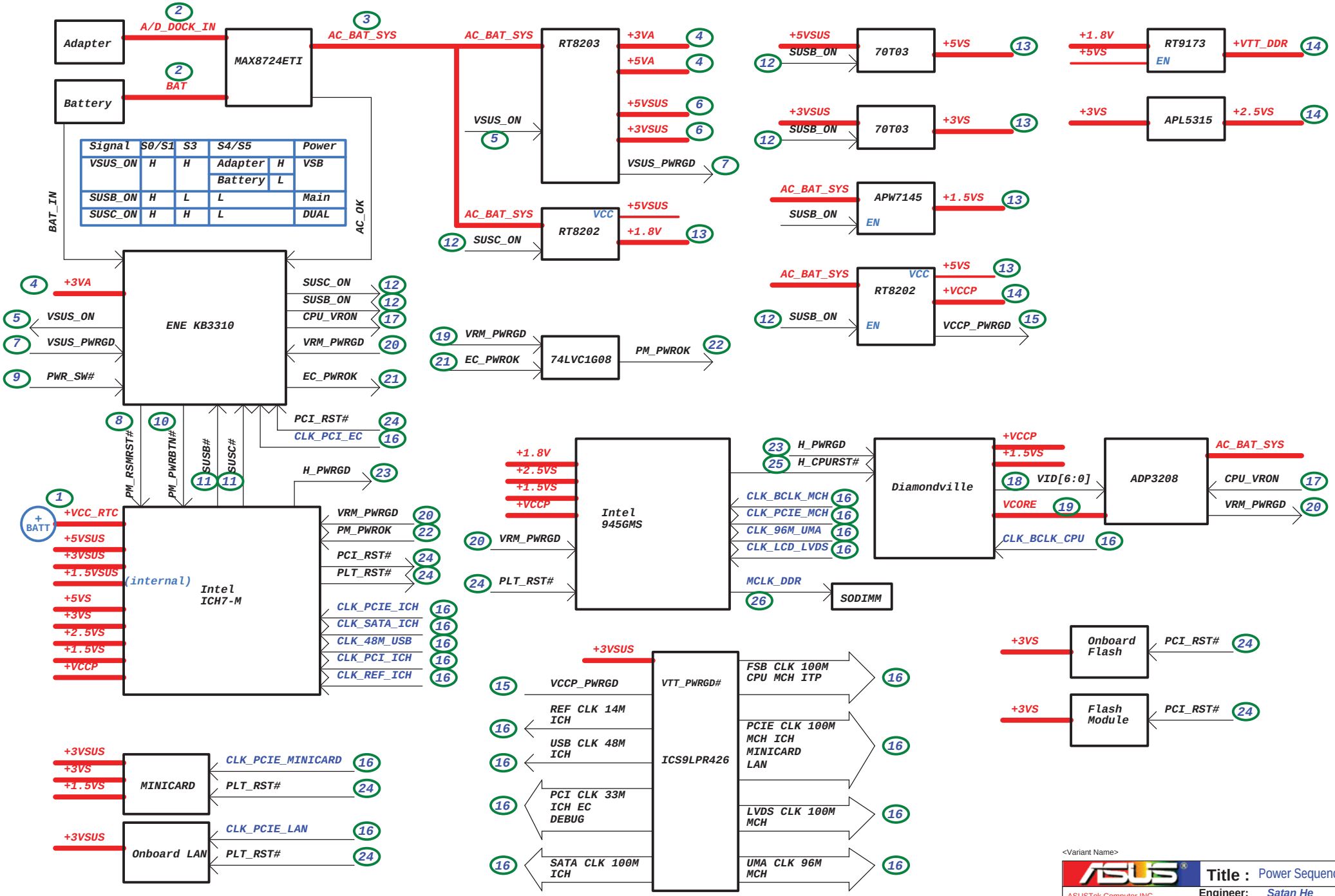
Title : System Setting

Engineer: Satan_He

Size	Project Name	Rev
A3	S101	1.3G

Date: Friday, October 03, 2008 Sheet 2 of 50

http://hobi-elektronika.net



http://hobi-elektronika.net

<Variant Name>

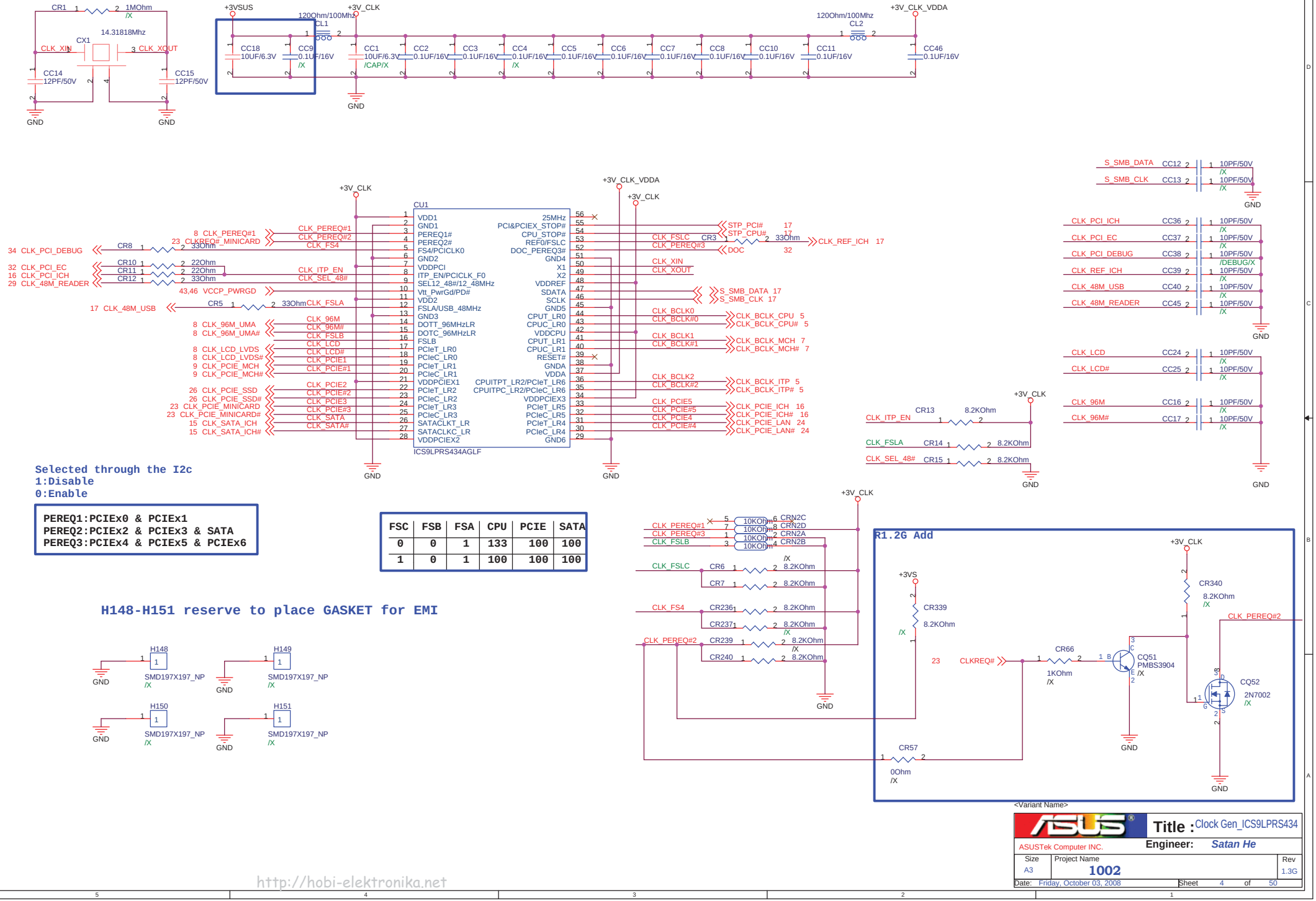
ASUSTek Computer INC.

Title : Power Sequence

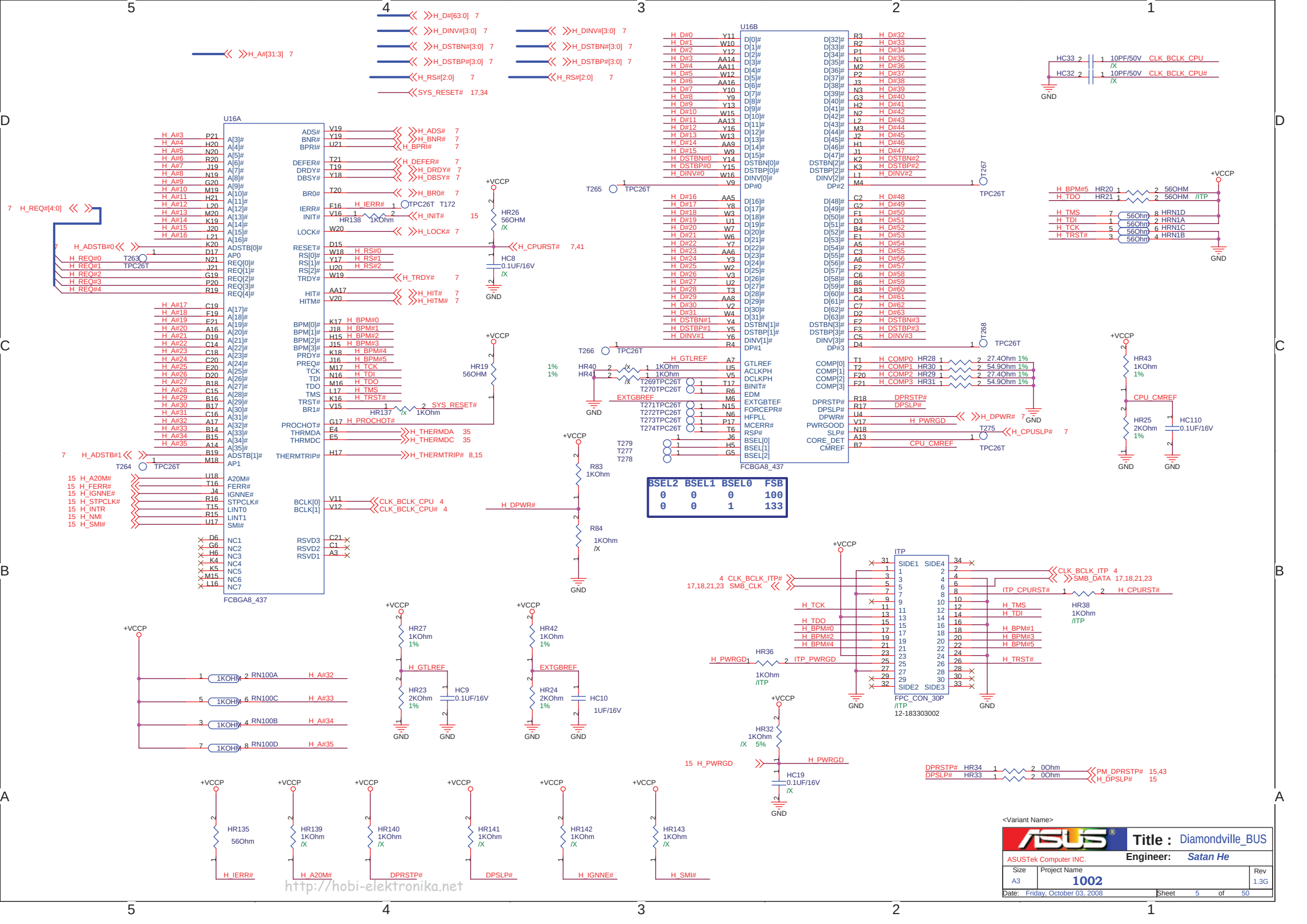
Engineer: Satan He

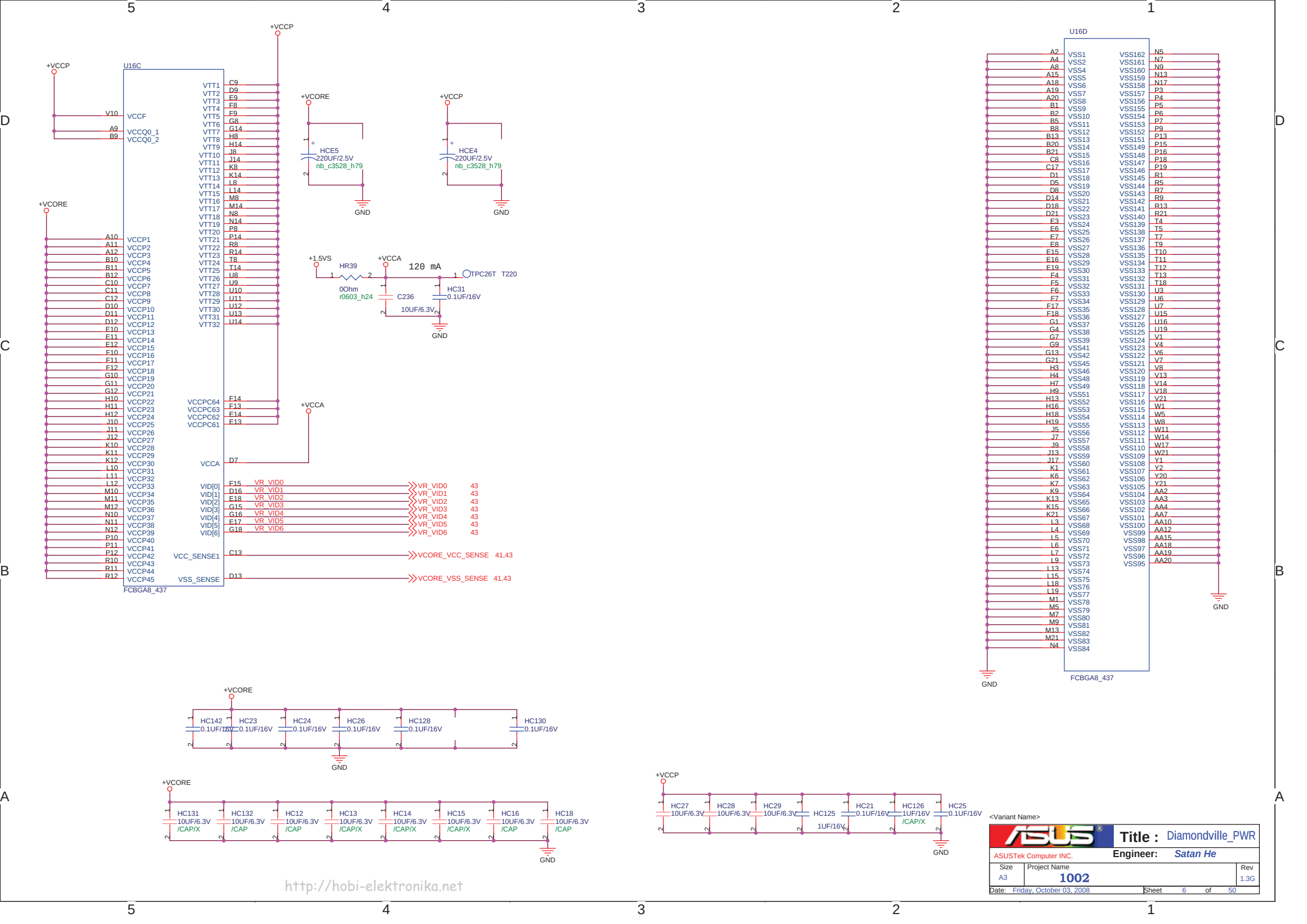
Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 3 of 50



http://hobi-elektronika.net

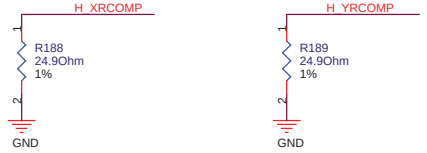

U16A
FCBGA8_437
U16B
FCBGA8_437
BSEL2 BSEL1 BSEL0 FSB
0 0 0 100
0 0 1 133
ITP
FPC_CON_30P
/ITP
12-183303002
Title : Diamondville_BUS
ASUSTek Computer INC.
Engineer: Satan He
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 5 of 50
<Variant Name>
http://hobi-elektronika.net


U16C
FCBGA8_437
+VCCP
+VCORE
+VCCA
+1.5VS
GND
HCE5
220UF/2.5V
nb_c3528_h79
HCE4
220UF/2.5V
nb_c3528_h79
HR39
0Ohm
r0603_h24
C236
10UF/6.3V
HC31
0.1UF/16V
120 mA
TPC26T T220
VR_VID0 43
VR_VID1 43
VR_VID2 43
VR_VID3 43
VR_VID4 43
VR_VID5 43
VR_VID6 43
VCORE_VCC_SENSE 41,43
VCORE_VSS_SENSE 41,43
U16D
FCBGA8_437
HC142 0.1UF/16V
HC23 0.1UF/16V
HC24 0.1UF/16V
HC26 0.1UF/16V
HC128 0.1UF/16V
HC130 0.1UF/16V
HC131 10UF/6.3V /CAP/X
HC132 10UF/6.3V /CAP
HC12 10UF/6.3V /CAP
HC13 10UF/6.3V /CAP/X
HC14 10UF/6.3V /CAP/X
HC15 10UF/6.3V /CAP/X
HC16 10UF/6.3V /CAP
HC18 10UF/6.3V /CAP
HC27 10UF/6.3V
HC28 10UF/6.3V
HC29 10UF/6.3V
HC125 1UF/16V
HC21 0.1UF/16V
HC126 1UF/16V /CAP/X
HC25 0.1UF/16V
<Variant Name>
Title : Diamondville_PWR
ASUSTek Computer INC.
Engineer: Satan He
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 6 of 50
http://hobi-elektronika.net

Power : +VCCP

RCOMP

For Calibrating the FSB I/O Buffer

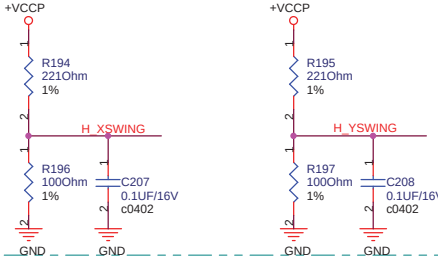


SCOMP

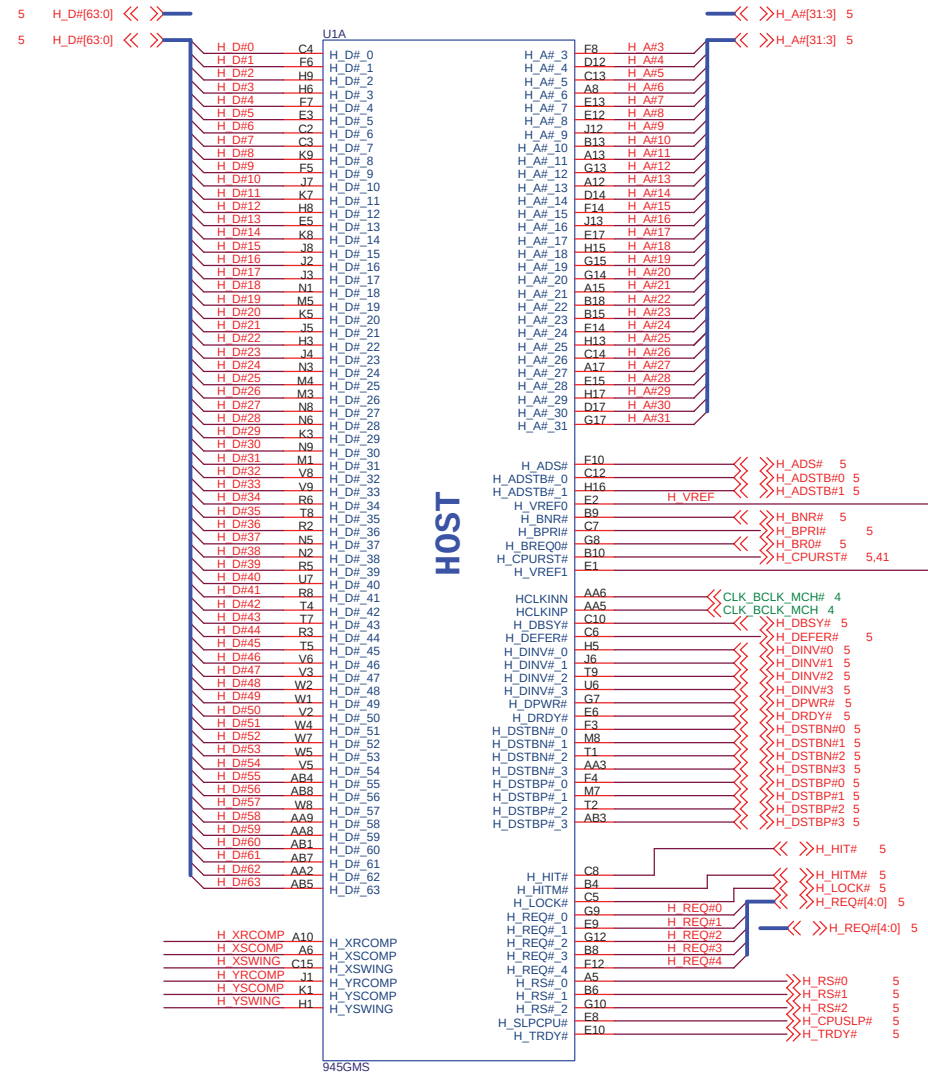
For Slew Rate Compenssation on the FSB

Voltage Swing

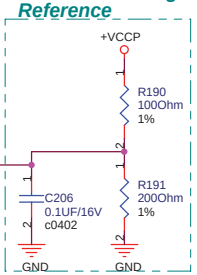
For Providing a Reference Voltage to The FSB RCOMP circuits



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.

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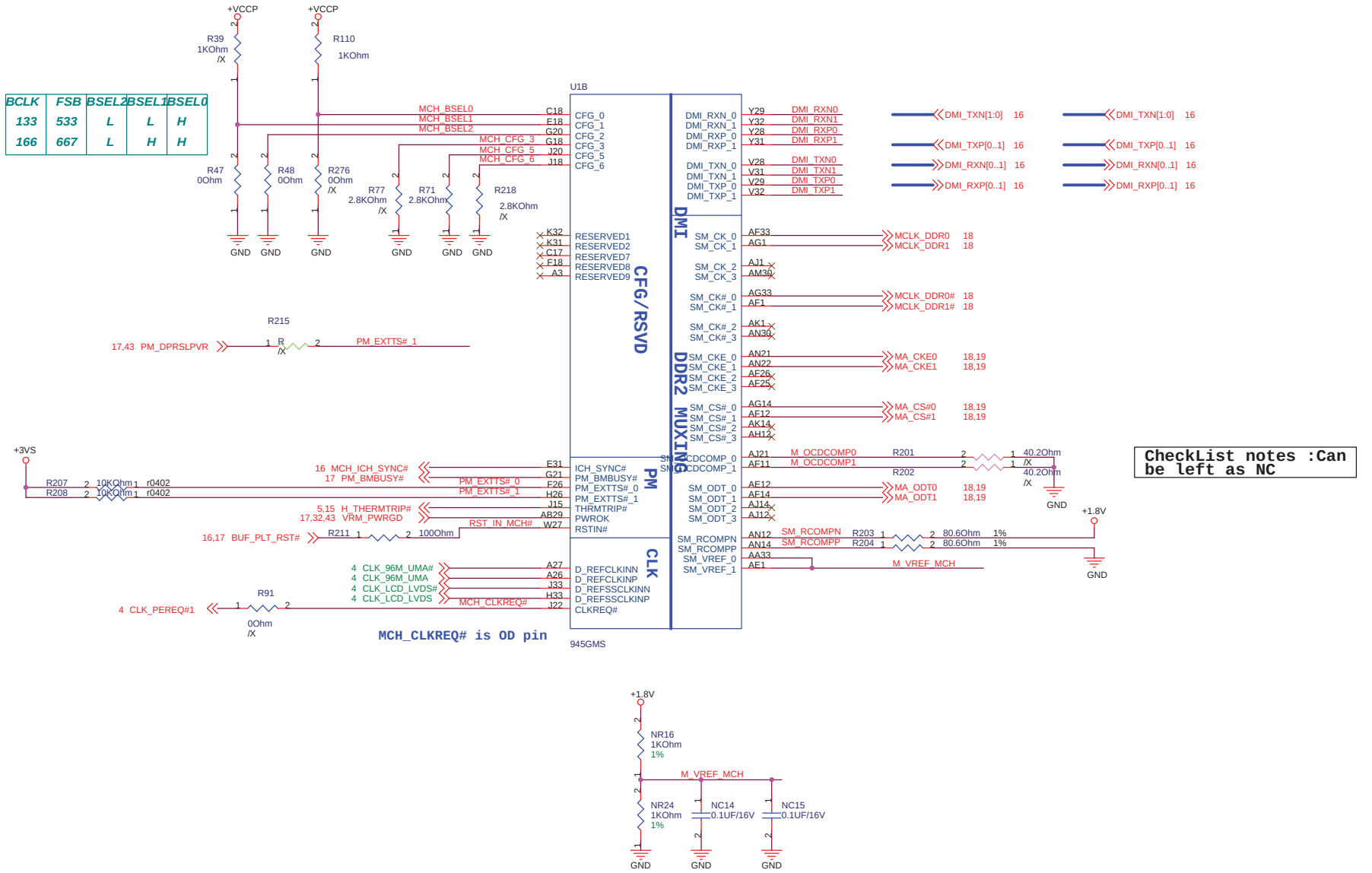
<Variant Name>

ASUSTeK COMPUTER INC.	Title : NB-945GMS(HOST)	
	Engineer: Satan He	
Size: A3	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 7 of 50	



http://hobi-elektronika.net

<Variant Name>

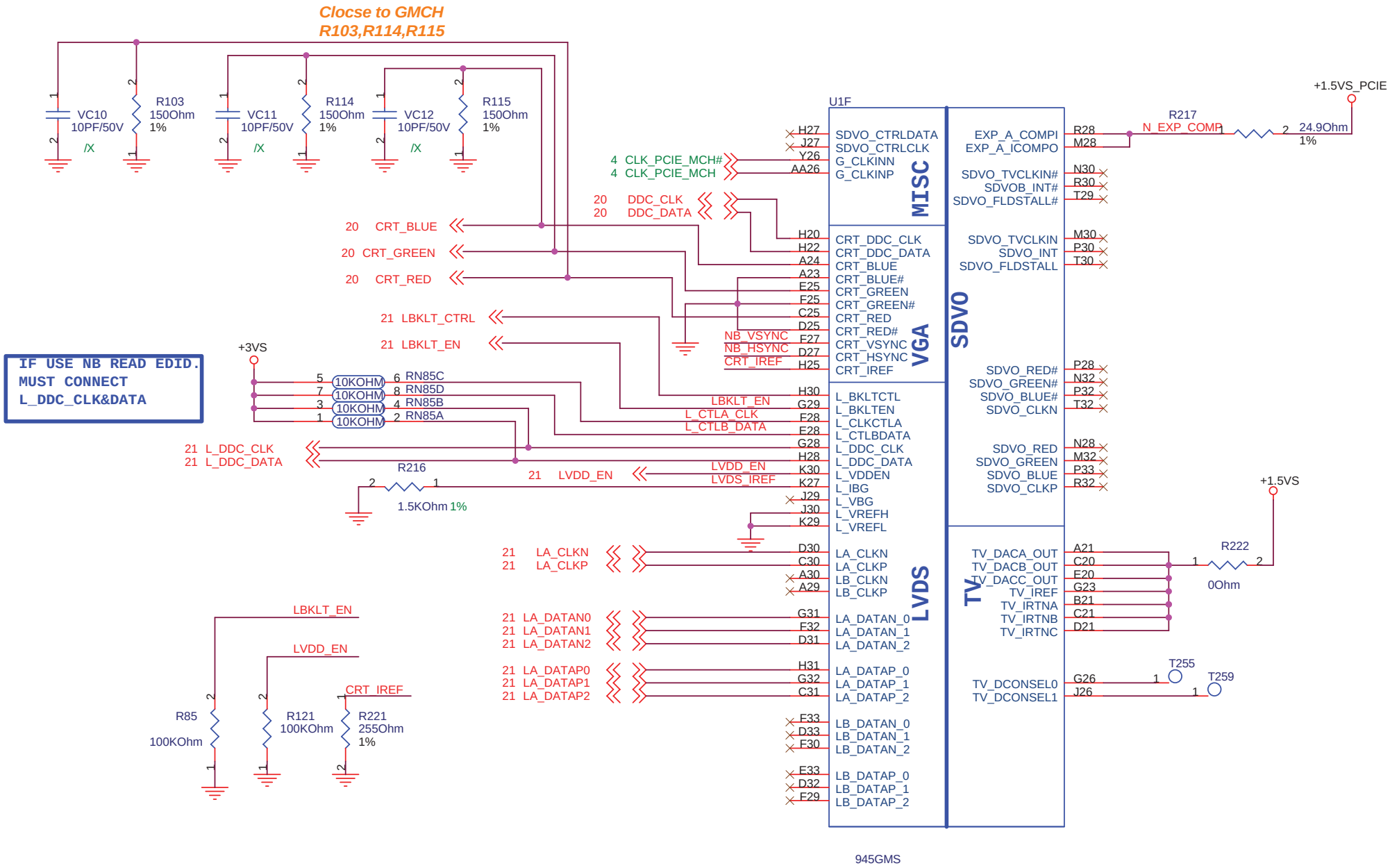
ASUSTeK COMPUTER INC.

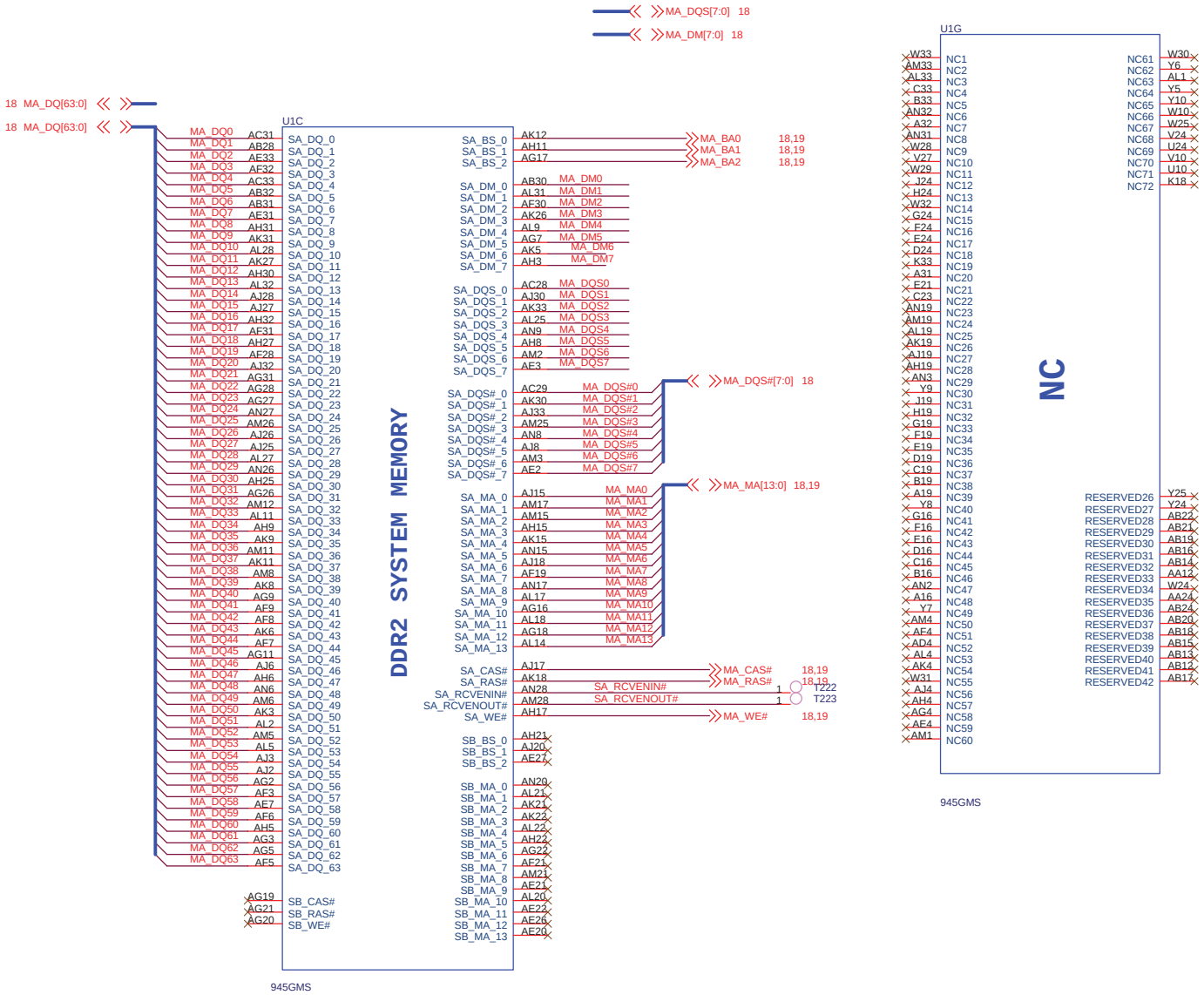
Title : NB-945GMS(DMI & CFG)

Engineer: Satan He

Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 8 of 50

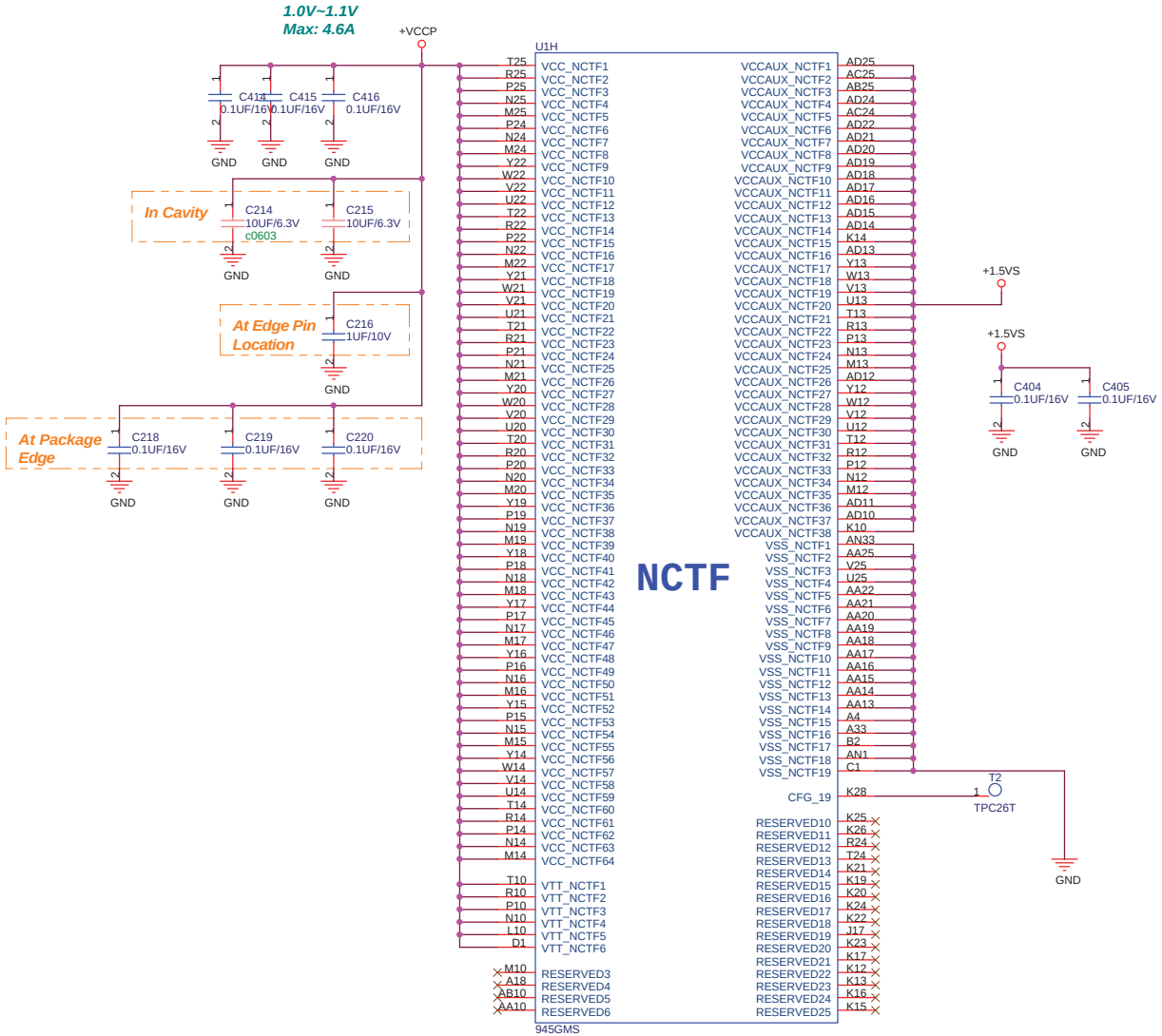

Clocse to GMCH
R103,R114,R115
VC10
10PF/50V
/X
R103
150Ohm
1%
VC11
10PF/50V
/X
R114
150Ohm
1%
VC12
10PF/50V
/X
R115
150Ohm
1%
U1F
SDVO_CTRLDATA
SDVO_CTRLCLK
G_CLKINN
G_CLKINP
MISC
4 CLK_PCIE_MCH#
4 CLK_PCIE_MCH
20 DDC_CLK
20 DDC_DATA
20 CRT_BLUE
20 CRT_GREEN
20 CRT_RED
21 LBKLT_CTRL
21 LBKLT_EN
CRT_DDC_CLK
CRT_DDC_DATA
CRT_BLUE
CRT_BLUE#
CRT_GREEN
CRT_GREEN#
CRT_RED
CRT_RED#
CRT_VSYNC
CRT_HSYNC
CRT_IREF
VGA
NB_VSYNC
NB_HSYNC
CRT_IREF
IF USE NB READ EDID.
MUST CONNECT
L_DDC_CLK&DATA
+3VS
RN85C
RN85D
RN85B
RN85A
10KOHM
21 L_DDC_CLK
21 L_DDC_DATA
R216
1.5KOhm 1%
LBKLT_EN
L_CTLA_CLK
L_CTLB_DATA
L_BKLTCTL
L_BKLTEN
L_CLKCTLA
L_CTLBDATA
L_DDC_CLK
L_DDC_DATA
L_VDDEN
L_IBG
L_VBG
L_VREFH
L_VREFL
21 LVDD_EN
LVDD_EN
LVDS_IREF
21 LA_CLKN
21 LA_CLKP
LA_CLKN
LA_CLKP
LB_CLKN
LB_CLKP
21 LA_DATAN0
21 LA_DATAN1
21 LA_DATAN2
LA_DATAN_0
LA_DATAN_1
LA_DATAN_2
21 LA_DATAP0
21 LA_DATAP1
21 LA_DATAP2
LA_DATAP_0
LA_DATAP_1
LA_DATAP_2
LB_DATAN_0
LB_DATAN_1
LB_DATAN_2
LB_DATAP_0
LB_DATAP_1
LB_DATAP_2
LVDS
SDVO
EXP_A_COMPI
EXP_A_ICOMPO
SDVO_TVCLKIN#
SDVOB_INT#
SDVO_FLDSTALL#
SDVO_TVCLKIN
SDVO_INT
SDVO_FLDSTALL
SDVO_RED#
SDVO_GREEN#
SDVO_BLUE#
SDVO_CLKN
SDVO_RED
SDVO_GREEN
SDVO_BLUE
SDVO_CLKP
TV_DACA_OUT
TV_DACB_OUT
TV_DACC_OUT
TV_IREF
TV_IRTNA
TV_IRTNB
TV_IRTNC
TV_DCONSEL0
TV_DCONSEL1
TV
+1.5VS_PCIE
R217
N_EXP_COMP
24.9Ohm
1%
+1.5VS
R222
0Ohm
T255
T259
LBKLT_EN
LVDD_EN
CRT_IREF
R85
100KOhm
R121
100KOhm
R221
255Ohm
1%
20 CRT_HSYNC
20 CRT_VSYNC
CRT_HSYNC
CRT_VSYNC
R220
R219
22Ohm
22Ohm
NB_HSYNC
NB_VSYNC
Clocse to GMCH
945GMS
<Variant Name>
Title : NB-945GMS(GRAPHIC)
ASUSTeK COMPUTER INC.
Engineer: Satan_He
Size A4
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 9 of 50
http://hobi-elektronika.net



http://hobi-elektronika.net

<Variant Name>

ASUSTeK COMPUTER INC.	Title : NB-945GMS(DDR2)	
	Engineer: Satan He	
Size: A3	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 10 of 50	

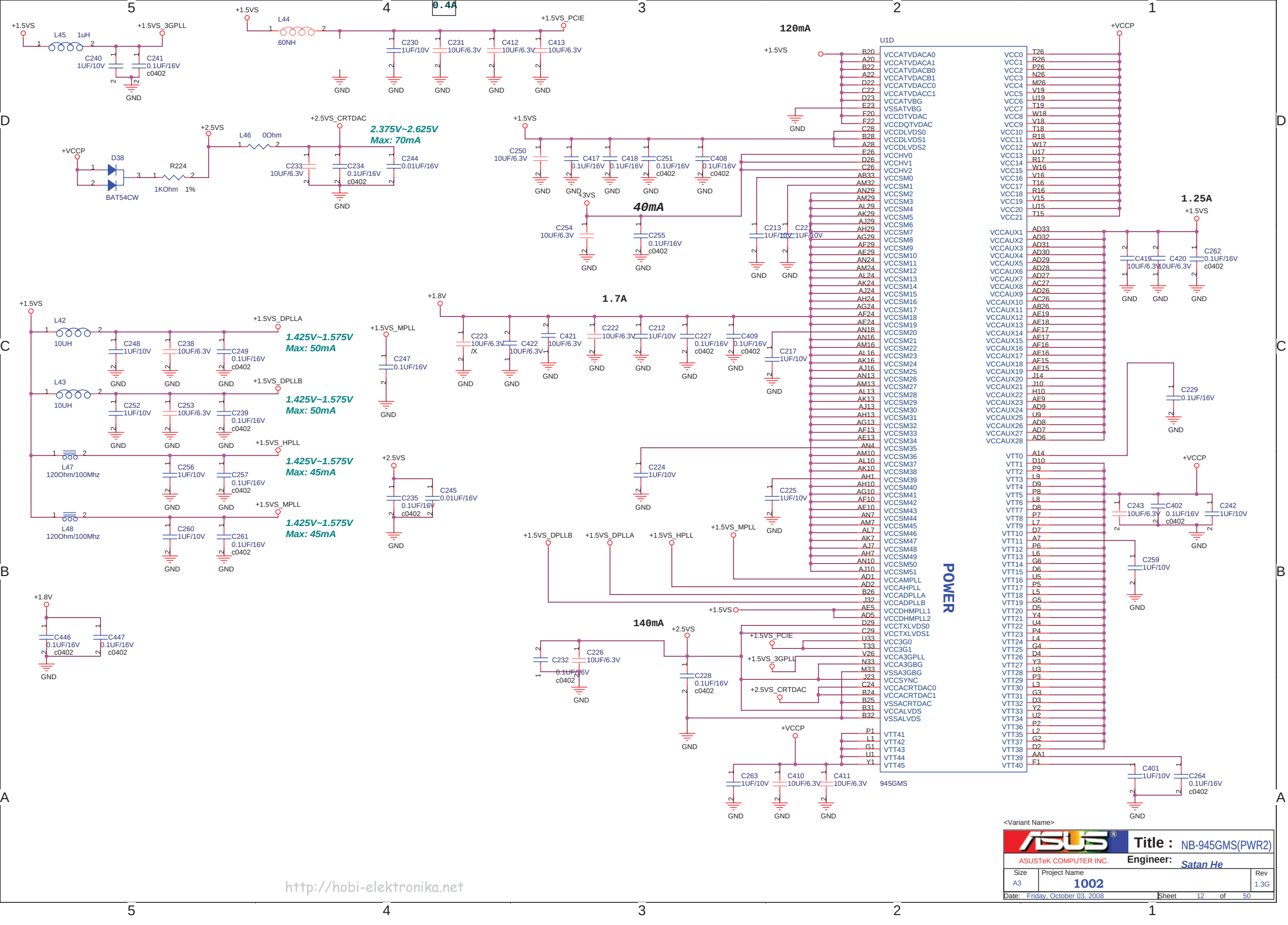


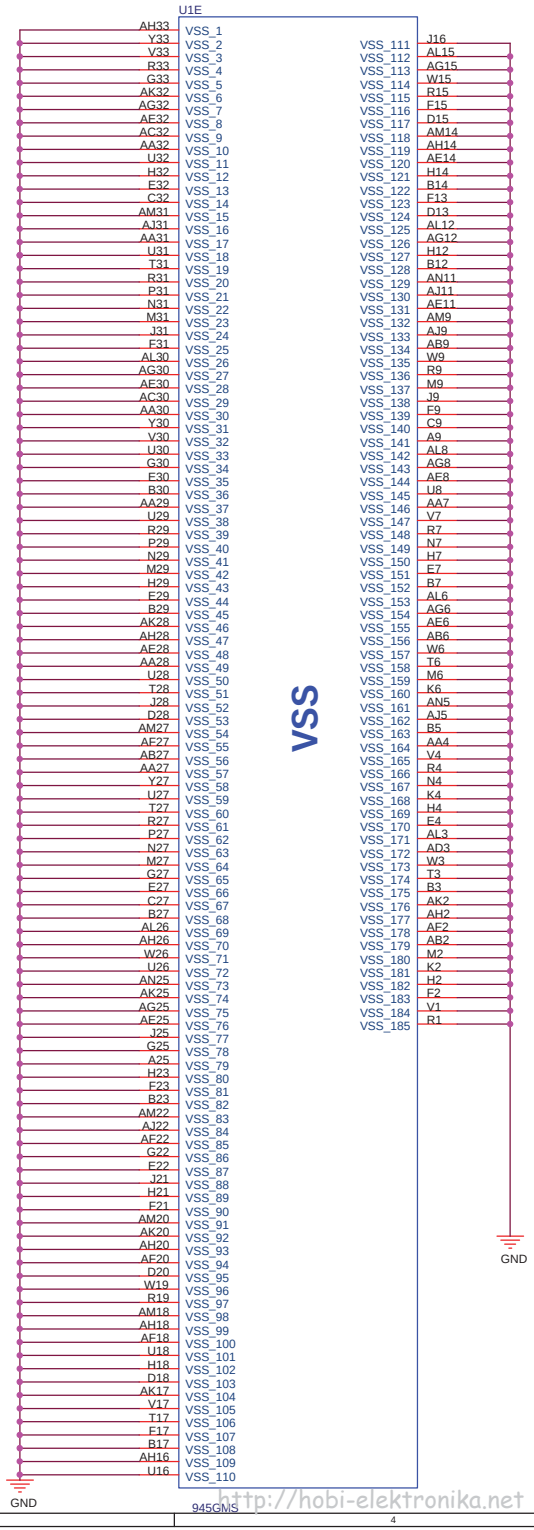

```
CFG_19(K28) Strapping :
DMI LANE Reversal:
0:Normal Operation (Default)
1.:Reversal Lanes, 3->0,2->1..etc
Note:945GMS doesn't support DMI Lane
Reversal
```

<Variant Name>

ASUSTeK COMPUTER INC.	Title : NB-945GMs(PWR)	
	Engineer: Satan_He	
Size: A3	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 11 of 50	

http://hobi-elektronika.net


+1.5VS
L45 1uH
+1.5VS_3GPLL
C240 1UF/10V
C241 0.1UF/16V c0402
GND
+1.5VS
L44
60NH
0.4A
+1.5VS_PCIE
C230 1UF/10V
C231 10UF/6.3V
C412 10UF/6.3V
C413 10UF/6.3V
+VCCP
D38
BAT54CW
R224
1KOhm 1%
+2.5VS
L46 0Ohm
+2.5VS_CRTDAC
2.375V~2.625V
Max: 70mA
C233 10UF/6.3V
C234 0.1UF/16V c0402
C244 0.01UF/16V
120mA
U1D
+1.5VS
C250 10UF/6.3V
C417 0.1UF/16V
C418 0.1UF/16V
C251 0.1UF/16V c0402
C408 0.1UF/16V c0402
+3VS
40mA
C254 10UF/6.3V
C255 0.1UF/16V c0402
C213 1UF/10V
C221 1UF/10V
+1.8V
1.7A
C223 10UF/6.3V /X
C422 10UF/6.3V
C421 10UF/6.3V
C222 10UF/6.3V
C212 1UF/10V
C227 0.1UF/16V c0402
C409 0.1UF/16V c0402
C217 1UF/10V
+1.5VS_MPLL
C247 0.1UF/16V
+1.5VS_DPLLA
1.425V~1.575V
Max: 50mA
L42 10UH
C248 1UF/10V
C238 10UF/6.3V
C249 0.1UF/16V c0402
+1.5VS_DPLLB
L43 10UH
C252 1UF/10V
C253 10UF/6.3V
C239 0.1UF/16V c0402
+1.5VS_HPLL
1.425V~1.575V
Max: 45mA
L47 120Ohm/100Mhz
C256 1UF/10V
C257 0.1UF/16V c0402
+1.5VS_MPLL
1.425V~1.575V
Max: 45mA
L48 120Ohm/100Mhz
C260 1UF/10V
C261 0.1UF/16V c0402
+2.5VS
C235 0.1UF/16V c0402
C245 0.01UF/16V
C224 1UF/10V
C225 1UF/10V
+1.5VS_DPLLB
+1.5VS_DPLLA
+1.5VS_HPLL
+1.5VS_MPLL
+1.8V
C446 0.1UF/16V c0402
C447 0.1UF/16V c0402
140mA
+2.5VS
C232 0.1UF/16V c0402
C226 10UF/6.3V
+1.5VS_PCIE
+1.5VS_3GPLL
+2.5VS_CRTDAC
C228 0.1UF/16V c0402
+VCCP
C263 1UF/10V
C410 10UF/6.3V
C411 10UF/6.3V
945GMS
POWER
1.25A
+1.5VS
C419 10UF/6.3V
C420 10UF/6.3V
C262 0.1UF/16V c0402
C229 0.1UF/16V
+VCCP
C243 10UF/6.3V
C402 0.1UF/16V c0402
C242 1UF/10V
C259 1UF/10V
C401 1UF/10V
C264 0.1UF/16V c0402
GND
http://hobi-elektronika.net
<Variant Name>
Title : NB-945GMS(PWR2)
ASUSTeK COMPUTER INC.
Engineer: Satan He
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 12 of 50



http://hobi-elektronika.net

<Variant Name>

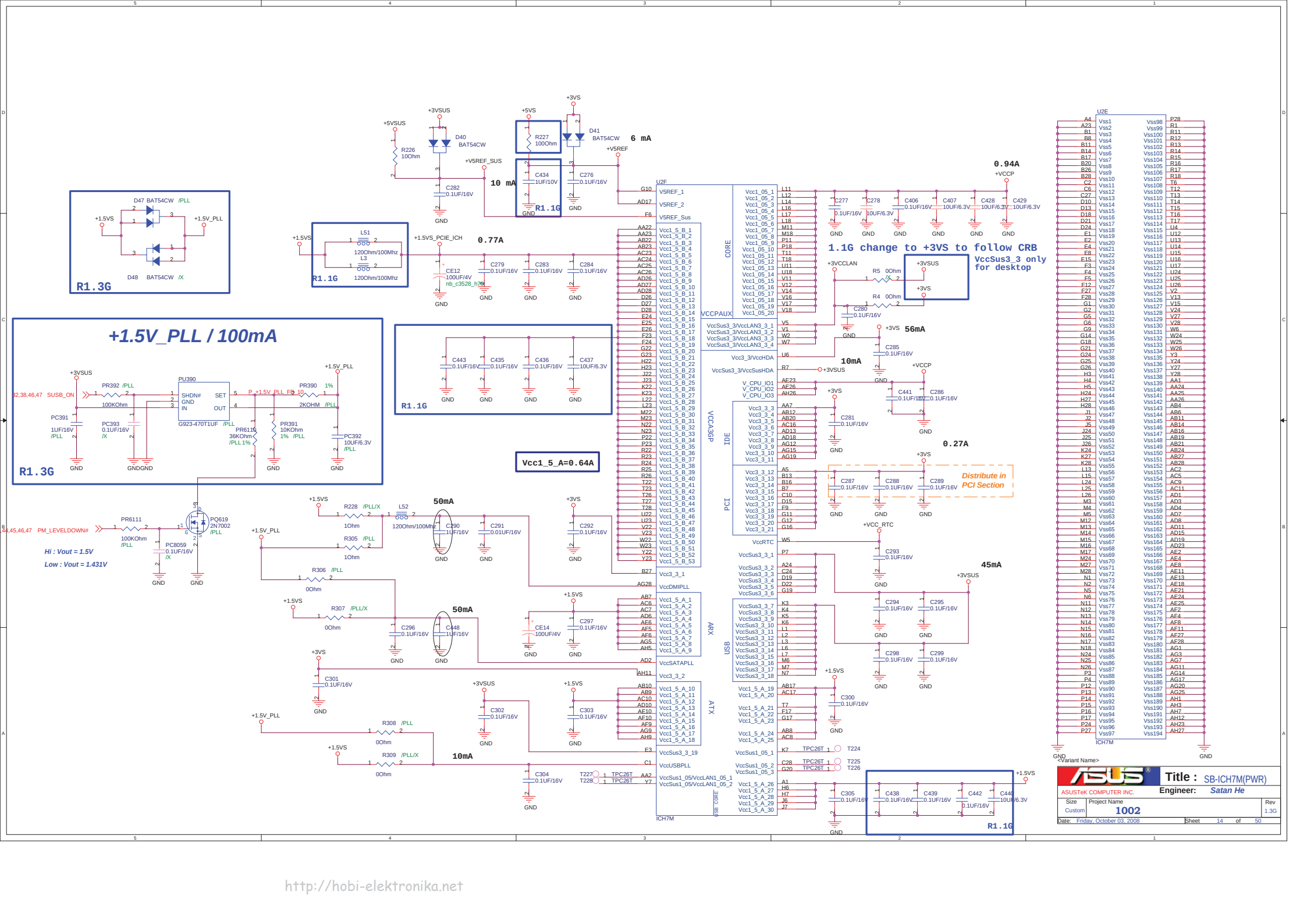
ASUSTeK COMPUTER INC.

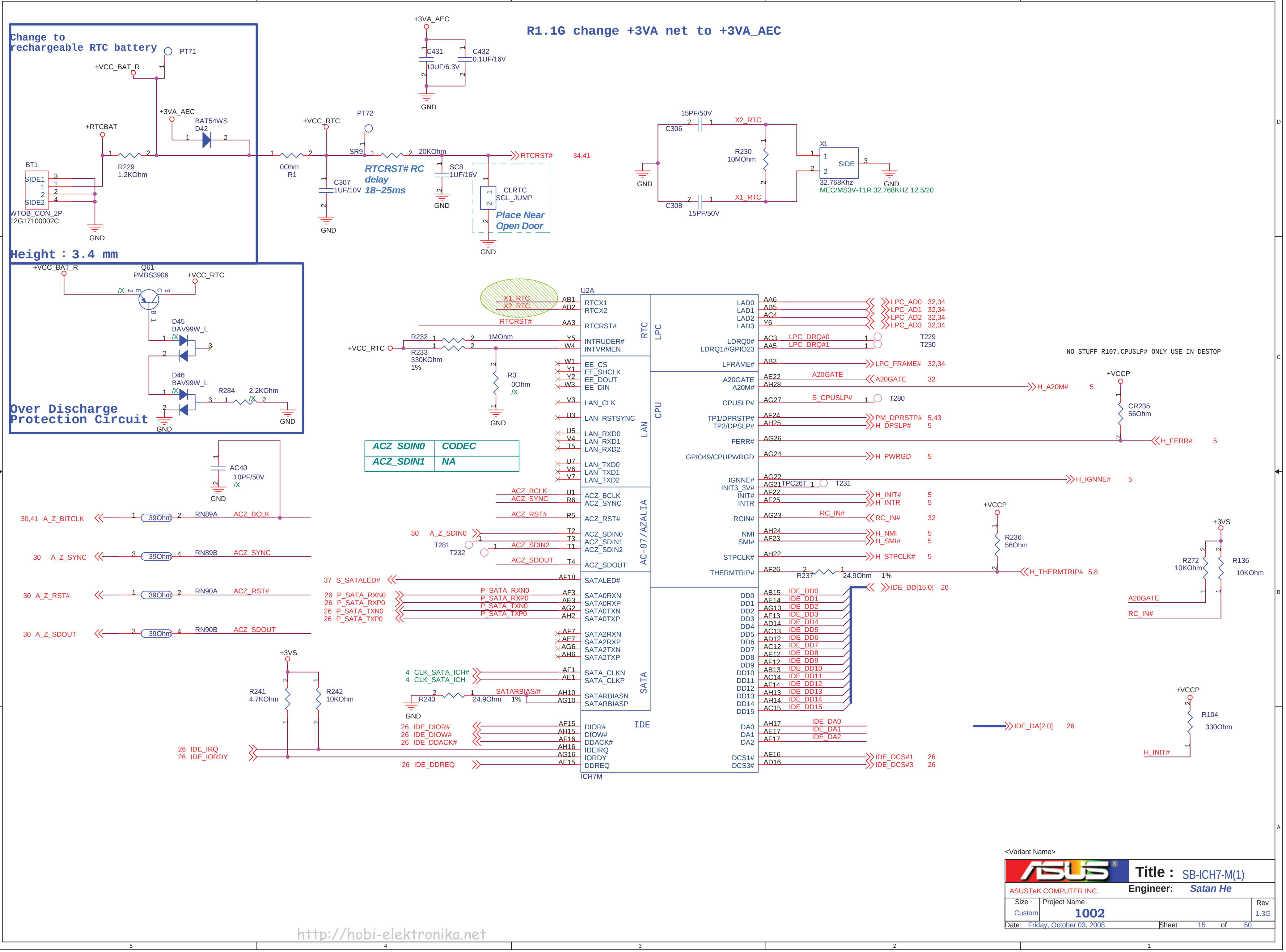
Title : NB-945PMS(GND)

Engineer: Satan_He

Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 13 of 50


+1.5V_PLL / 100mA
R1.3G
R1.1G
0.77A
10 mA
6 mA
50mA
10mA
56mA
0.94A
0.27A
45mA
1.1G change to +3VS to follow CRB
VccSus3_3 only for desktop
Distribute in PCI Section
Vcc1_5_A=0.64A
Hi : Vout = 1.5V
Low : Vout = 1.431V
U2F
ICH7M
U2E
Title : SB-ICH7M(PWR)
ASUSTeK COMPUTER INC.
Engineer: Satan He
Project Name 1002
Date: Friday, October 03, 2008
Sheet 14 of 50
http://hobi-elektronika.net



Title : SB-ICH7-M(1)

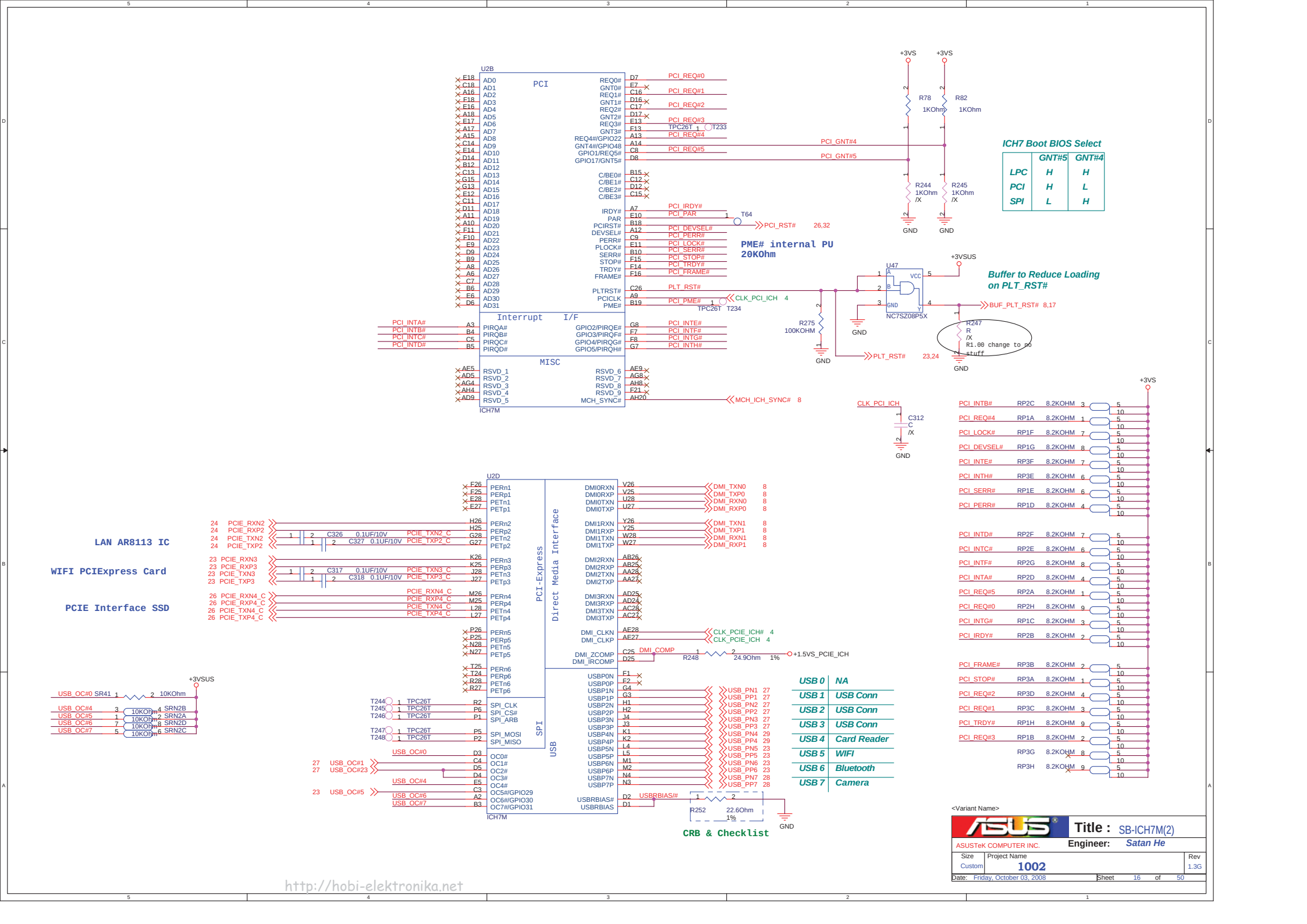
ASUSTeK COMPUTER INC.

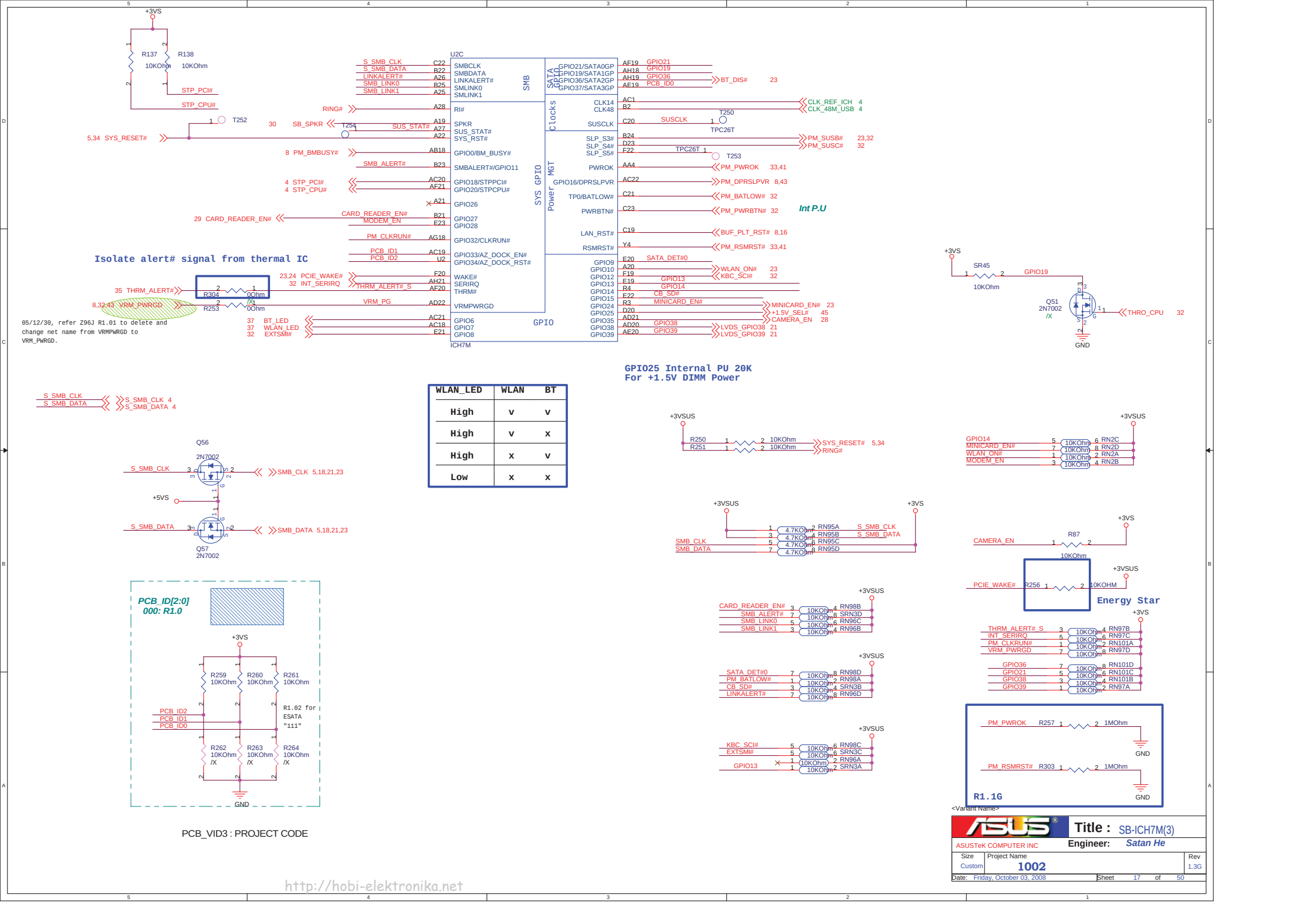
Engineer: Satan He

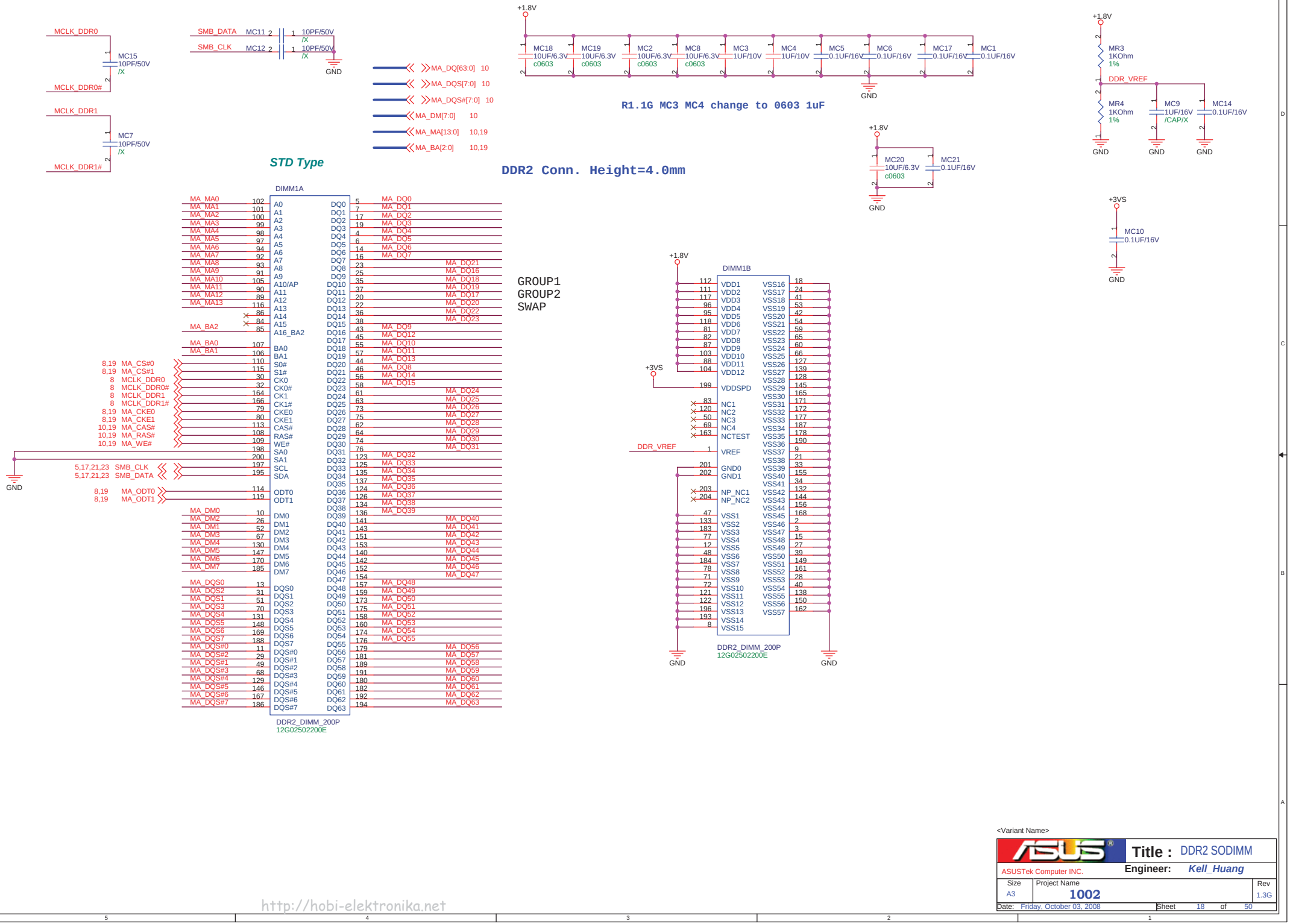
Size	Project Name	Rev
Custom	1002	1.3G

Date: Friday, October 03, 2008 — Sheet 15 of 50

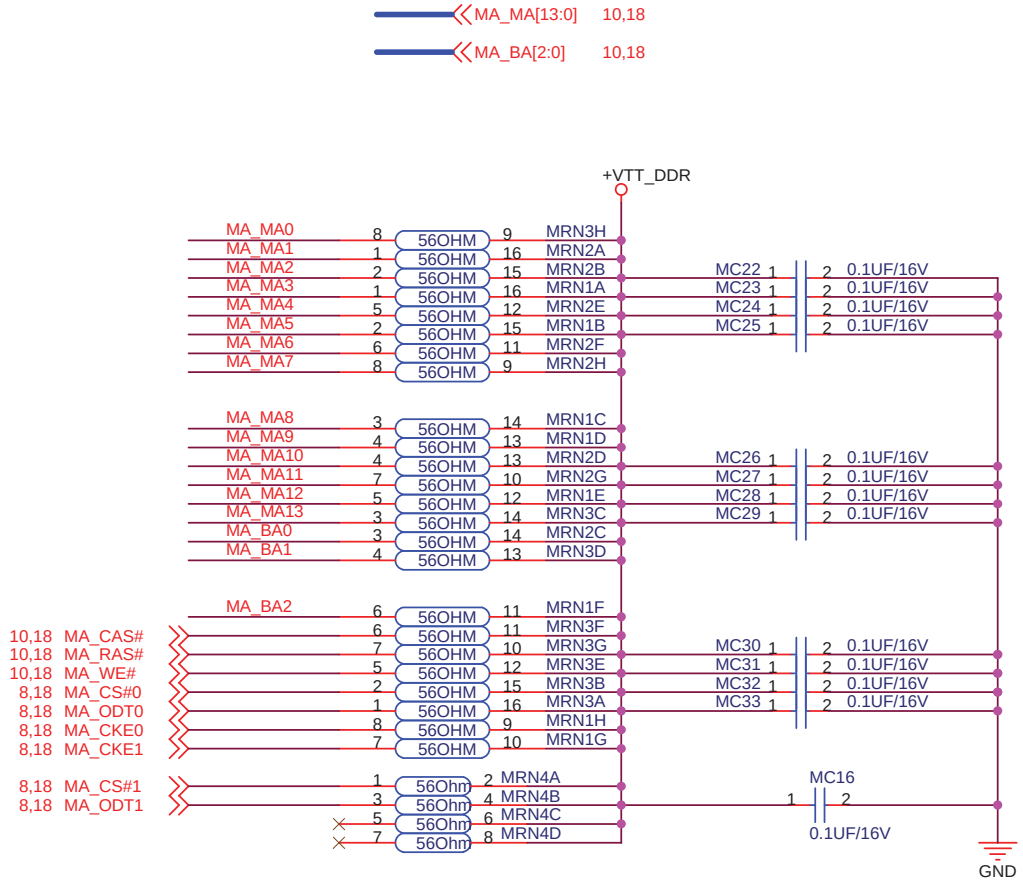
http://hobi-elektronika.net


U2B
PCI
Interrupt I/F
MISC
ICH7M
PME# internal PU 20KOhm
Buffer to Reduce Loading on PLT_RST#
NC7SZ08P5X
R247 R /X R1.00 change to no stuff
ICH7 Boot BIOS Select
LPC H H
PCI H L
SPI L H
LAN AR8113 IC
WIFI PCIExpress Card
PCIE Interface SSD
U2D
PCI-Express
Direct Media Interface
USB
SPI
ICH7M
USB 0 NA
USB 1 USB Conn
USB 2 USB Conn
USB 3 USB Conn
USB 4 Card Reader
USB 5 WIFI
USB 6 Bluetooth
USB 7 Camera
CRB & Checklist
<Variant Name>
Title : SB-ICH7M(2)
ASUSTeK COMPUTER INC.
Engineer: Satan He
Size Custom
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 16 of 50
http://hobi-elektronika.net


+3VS
R137 10KOhm
R138 10KOhm
STP_PCI#
STP_CPU#
U2C
SMBCLK
SMBDATA
LINKALERT#
SMLINK0
SMLINK1
SMB
S_SMB_CLK C22
S_SMB_DATA B22
LINKALERT# A26
SMB_LINK0 B25
SMB_LINK1 A25
RING# A28
RI#
SPKR A19
SUS_STAT# A27
SYS_RST# A22
SB_SPKR 30
T252
T254
5,34 SYS_RESET#
8 PM_BMBUSY# AB18
GPIO0/BM_BUSY#
SMB_ALERT# B23
SMBALERT#/GPIO11
4 STP_PCI# AC20
4 STP_CPU# AF21
GPIO18/STPPCI#
GPIO20/STPCPU#
A21
GPIO26
29 CARD_READER_EN# B21
MODEM_EN F23
GPIO27
GPIO28
PM_CLKRUN# AG18
GPIO32/CLKRUN#
PCB_ID1 AC19
PCB_ID2 U2
GPIO33/AZ_DOCK_EN#
GPIO34/AZ_DOCK_RST#
23,24 PCIE_WAKE# F20
32 INT_SERIRQ AH21
THRM_ALERT#_S AF20
WAKE#
SERIRQ
THRM#
35 THRM_ALERT#
R304 0Ohm /X1
8,32,43 VRM_PWRGD
R253 0Ohm
VRM_PG AD22
VRMPWRGD
37 BT_LED AC21
37 WLAN_LED AC18
32 EXTSMI# E21
GPIO6
GPIO7
GPIO8
GPIO
SYS GPIO
GPIO21/SATA0GP AF19 GPIO21
GPIO19/SATA1GP AH18 GPIO19
GPIO36/SATA2GP AH19 GPIO36
GPIO37/SATA3GP AE19 PCB_ID0
BT_DIS# 23
SATA GPIO
Clocks
CLK14 AC1
CLK48 B2
CLK_REF_ICH 4
CLK_48M_USB 4
SUSCLK C20
T250
TPC26T
SLP_S3# B24
SLP_S4# D23
SLP_S5# F22
PM_SUSB# 23,32
PM_SUSC# 32
PWROK AA4
PM_PWROK 33,41
GPIO16/DPRSLPVR AC22
PM_DPRSLPVR 8,43
TP0/BATLOW# C21
PM_BATLOW# 32
PWRBTN# C23
PM_PWRBTN# 32
Int P.U
LAN_RST# C19
BUF_PLT_RST# 8,16
RSMRST# Y4
PM_RSMRST# 33,41
MGT
Power
GPIO9 E20 SATA_DET#0
GPIO10 A20 WLAN_ON# 23
GPIO12 F19 KBC_SCI# 32
GPIO13 E19 GPIO13
GPIO14 R4 GPIO14
GPIO15 F22 CB_SD#
GPIO24 R3 MINICARD_EN#
GPIO25 D20 +1.5V_SEL# 45
GPIO35 AD21 CAMERA_EN 28
GPIO38 AD20 GPIO38 LVDS_GPIO38 21
GPIO39 AE20 GPIO39 LVDS_GPIO39 21
ICH7M
Isolate alert# signal from thermal IC
05/12/30, refer Z96J R1.01 to delete and change net name from VRMPWRGD to VRM_PWRGD.
+3VS
SR45 10KOhm
GPIO19
Q51 2N7002 /X
THRO_CPU 32
GND
S_SMB_CLK
S_SMB_DATA
S_SMB_CLK 4
S_SMB_DATA 4
Q56 2N7002
S_SMB_CLK
SMB_CLK 5,18,21,23
+5VS
S_SMB_DATA
SMB_DATA 5,18,21,23
Q57 2N7002
WLAN_LED WLAN BT
High v v
High v x
High x v
Low x x
GPIO25 Internal PU 20K
For +1.5V DIMM Power
+3VSUS
R250 10KOhm
R251 10KOhm
SYS_RESET# 5,34
RING#
GPIO14
MINICARD_EN#
WLAN_ON#
MODEM_EN
RN2C
RN2D
RN2A
RN2B
SMB_CLK
SMB_DATA
4.7KOhm
RN95A
RN95B
RN95C
RN95D
S_SMB_CLK
S_SMB_DATA
CARD_READER_EN#
SMB_ALERT#
SMB_LINK0
SMB_LINK1
RN98B
SRN3D
RN96C
RN96B
SATA_DET#0
PM_BATLOW#
CB_SD#
LINKALERT#
RN98D
RN98A
SRN3B
RN96D
KBC_SCI#
EXTSMI#
GPIO13
RN98C
SRN3C
RN96A
SRN3A
CAMERA_EN
R87 10KOhm
PCIE_WAKE#
R256 10KOHM
Energy Star
THRM_ALERT# S
INT_SERIRQ
PM_CLKRUN#
VRM_PWRGD
RN97B
RN97C
RN101A
RN97D
GPIO36
GPIO21
GPIO38
GPIO39
RN101D
RN101C
RN101B
RN97A
PM_PWROK R257 1MOhm
PM_RSMRST# R303 1MOhm
R1.1G
PCB_ID[2:0]
000: R1.0
R259 10KOhm
R260 10KOhm
R261 10KOhm
R262 10KOhm /X
R263 10KOhm /X
R264 10KOhm /X
PCB_ID2
PCB_ID1
PCB_ID0
R1.02 for ESATA "111"
PCB_VID3 : PROJECT CODE
<Variant Name>
Title : SB-ICH7M(3)
ASUSTeK COMPUTER INC
Engineer: Satan He
Size Custom
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 17 of 50
http://hobi-elektronika.net



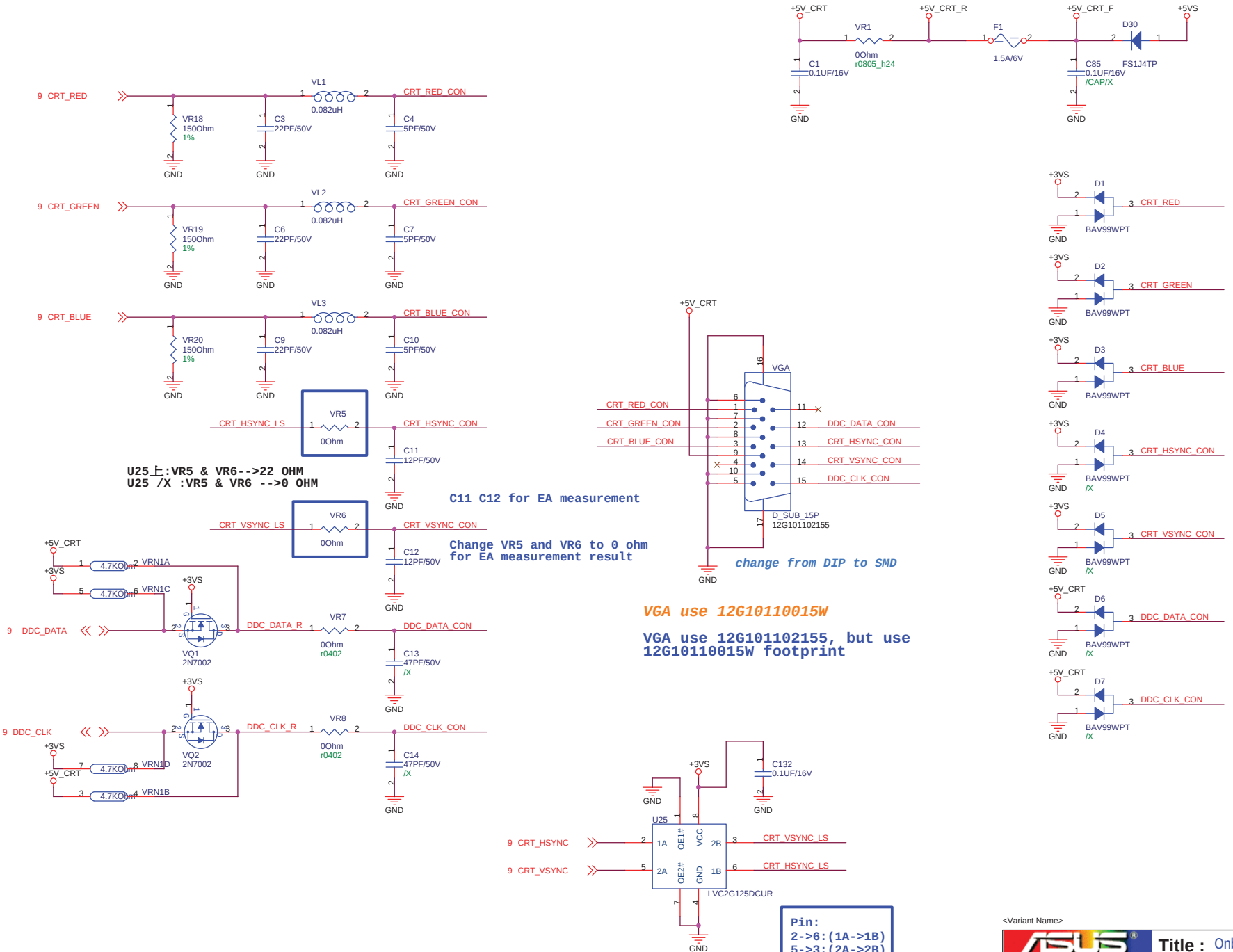
http://hobi-elektronika.net



http://hobi-elektronika.net

<Variant Name>

ASUSTek Computer INC.	Title : DDR2_Termination	
	Engineer: Kell_Huang	
Size: A4	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 19 of 50	



<Variant Name>

ASUSTek Computer INC.

Title : Onboard VGA

Engineer: Kell_Huang

Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 20 of 50

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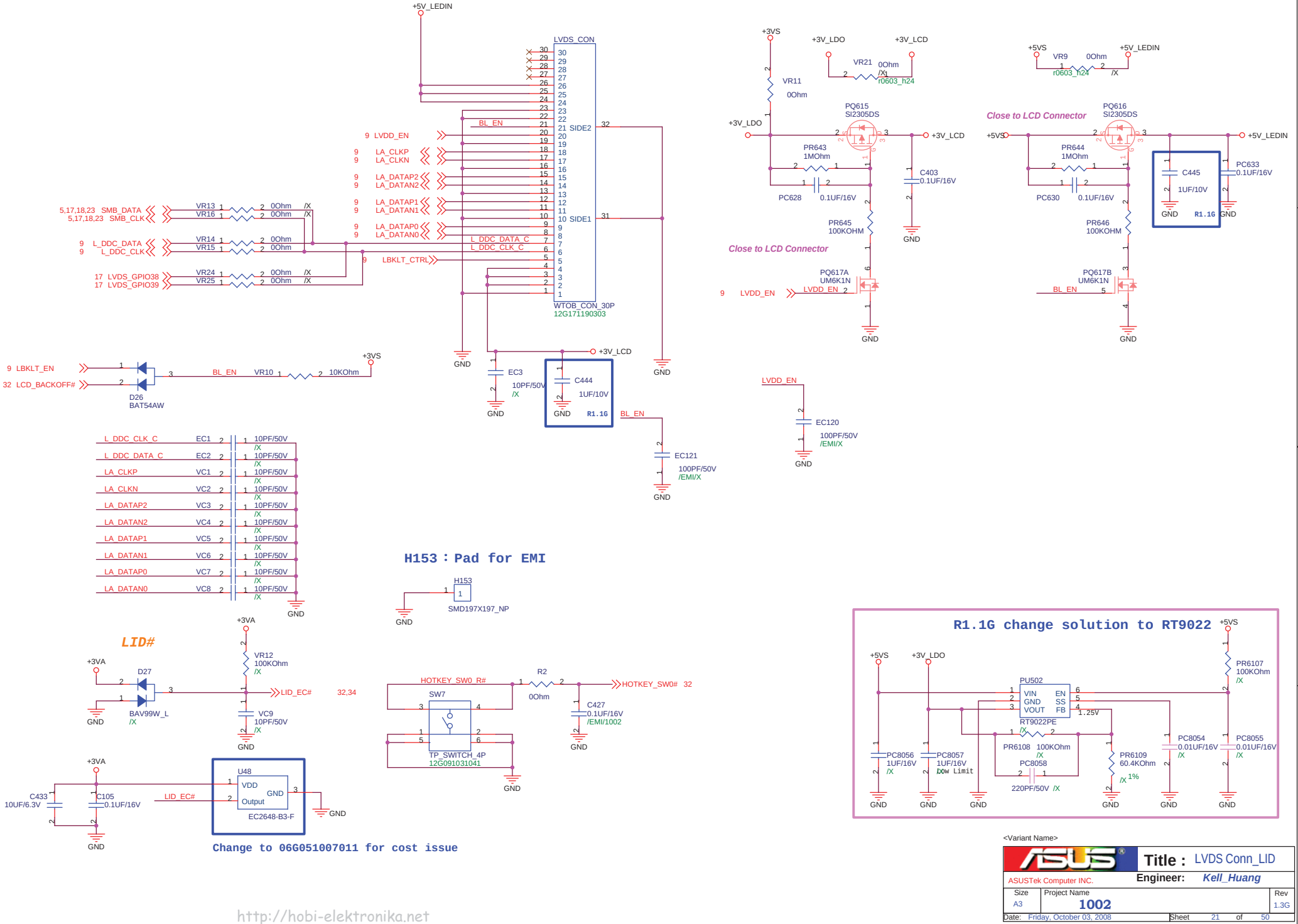

<Variant Name>

ASUSTek Computer INC.

Title : LVDS Conn_LID

Engineer: Kell_Huang

Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 21 of 50

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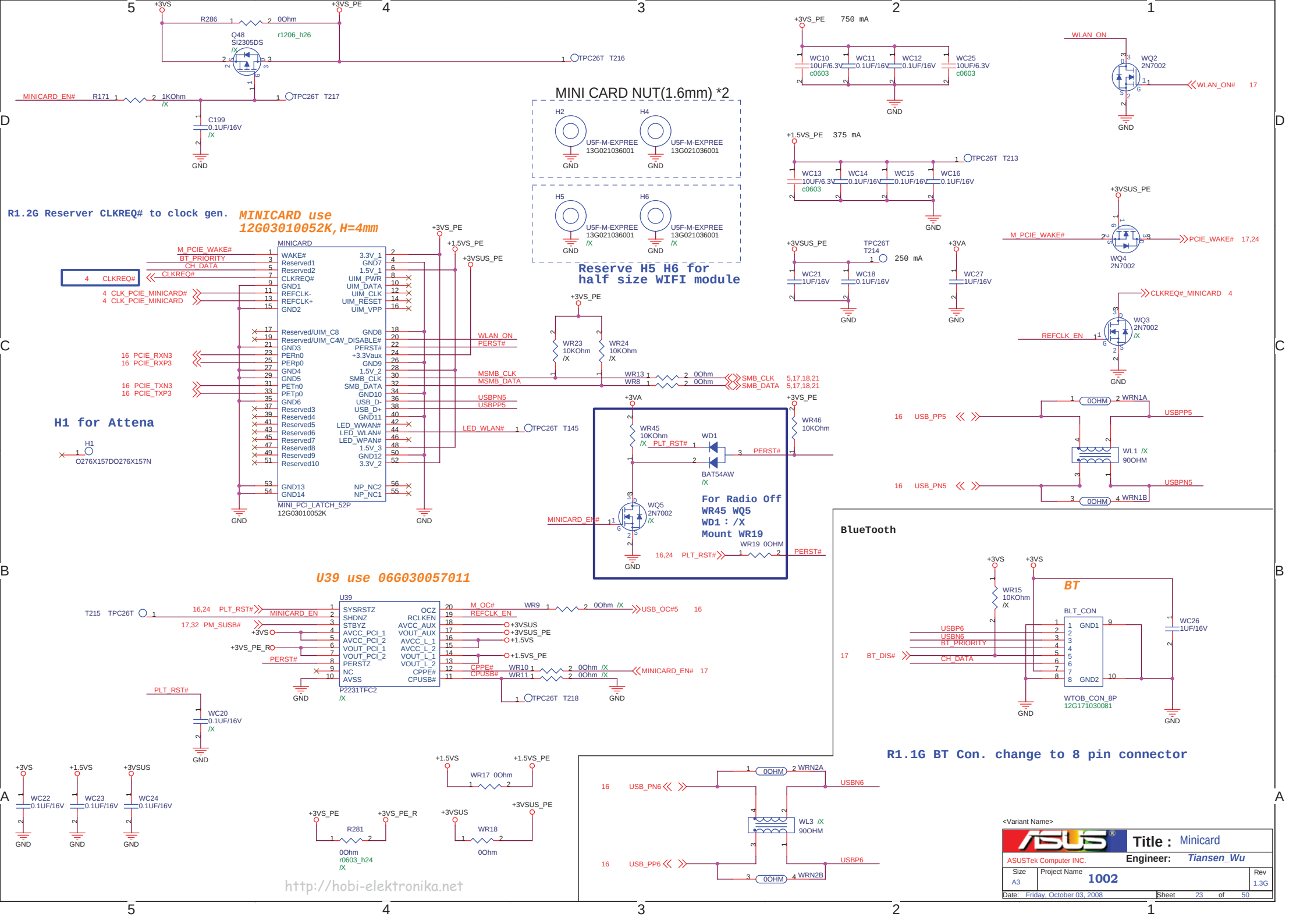
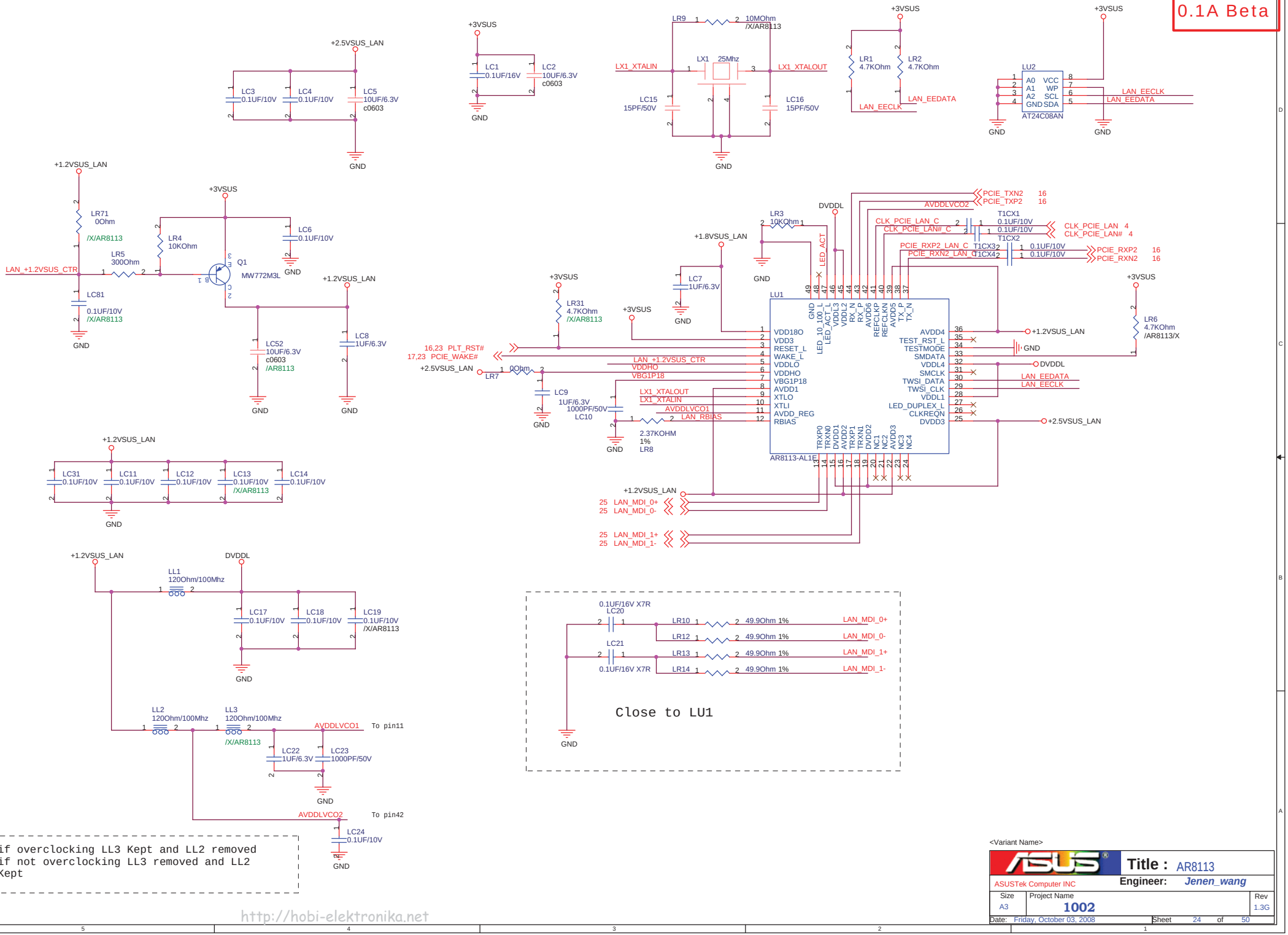
<Variant Name>

ASUSTek Computer INC.	Title : Blank	
	Engineer: *Kell_Huang*	
Size: A3	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 22 of 50	

http://hobi-elektronika.net


R1.2G Reserver CLKREQ# to clock gen.
MINICARD use 12G03010052K,H=4mm
MINI CARD NUT(1.6mm) *2
Reserve H5 H6 for half size WIFI module
H1 for Attena
U39 use 06G030057011
For Radio Off
WR45 WQ5
WD1 : /X
Mount WR19
BlueTooth
BT
R1.1G BT Con. change to 8 pin connector
MINICARD
MINI_PCI_LATCH_52P
12G03010052K
P2231TFC2
WTOB_CON_8P
12G171030081
Title : Minicard
ASUSTek Computer INC.
Engineer: Tiansen_Wu
Project Name 1002
Size A3
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 23 of 50
http://hobi-elektronika.net

0.1A Beta



http://hobi-elektronika.net

<Variant Name>

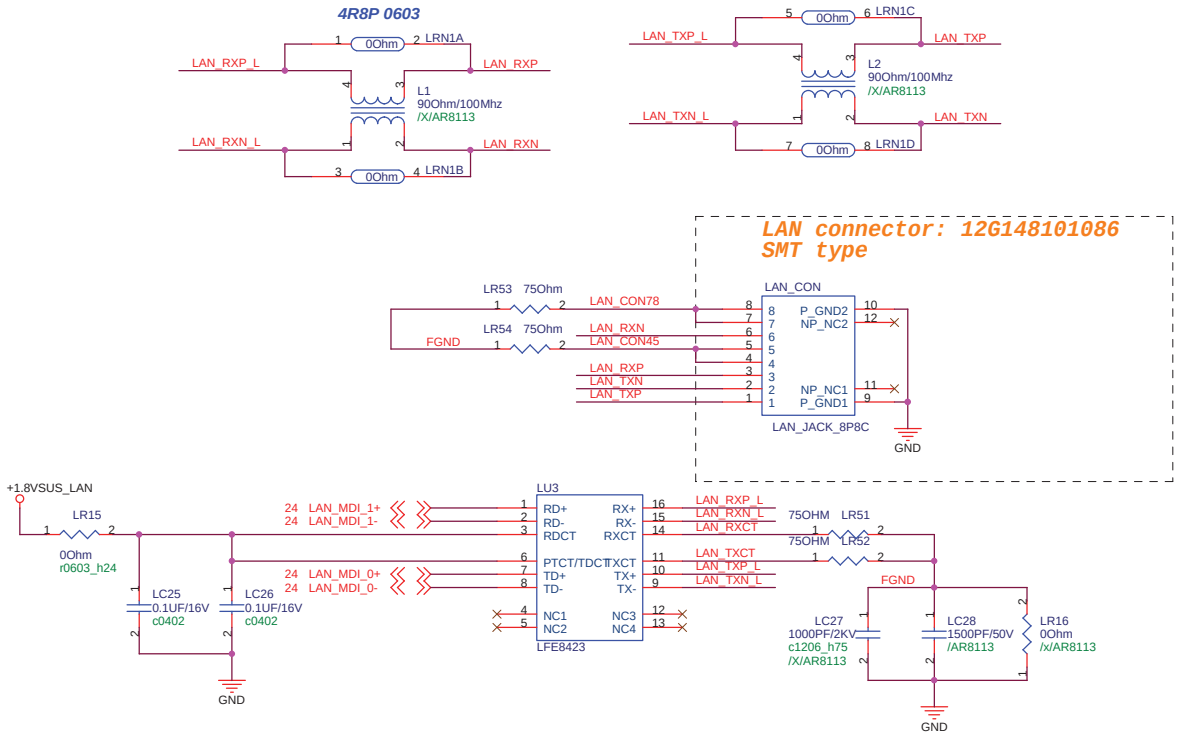
ASUSTek Computer INC

Title : AR8113

Engineer: Jenen_wang

Size	Project Name	Rev
A3	1002	1.3G

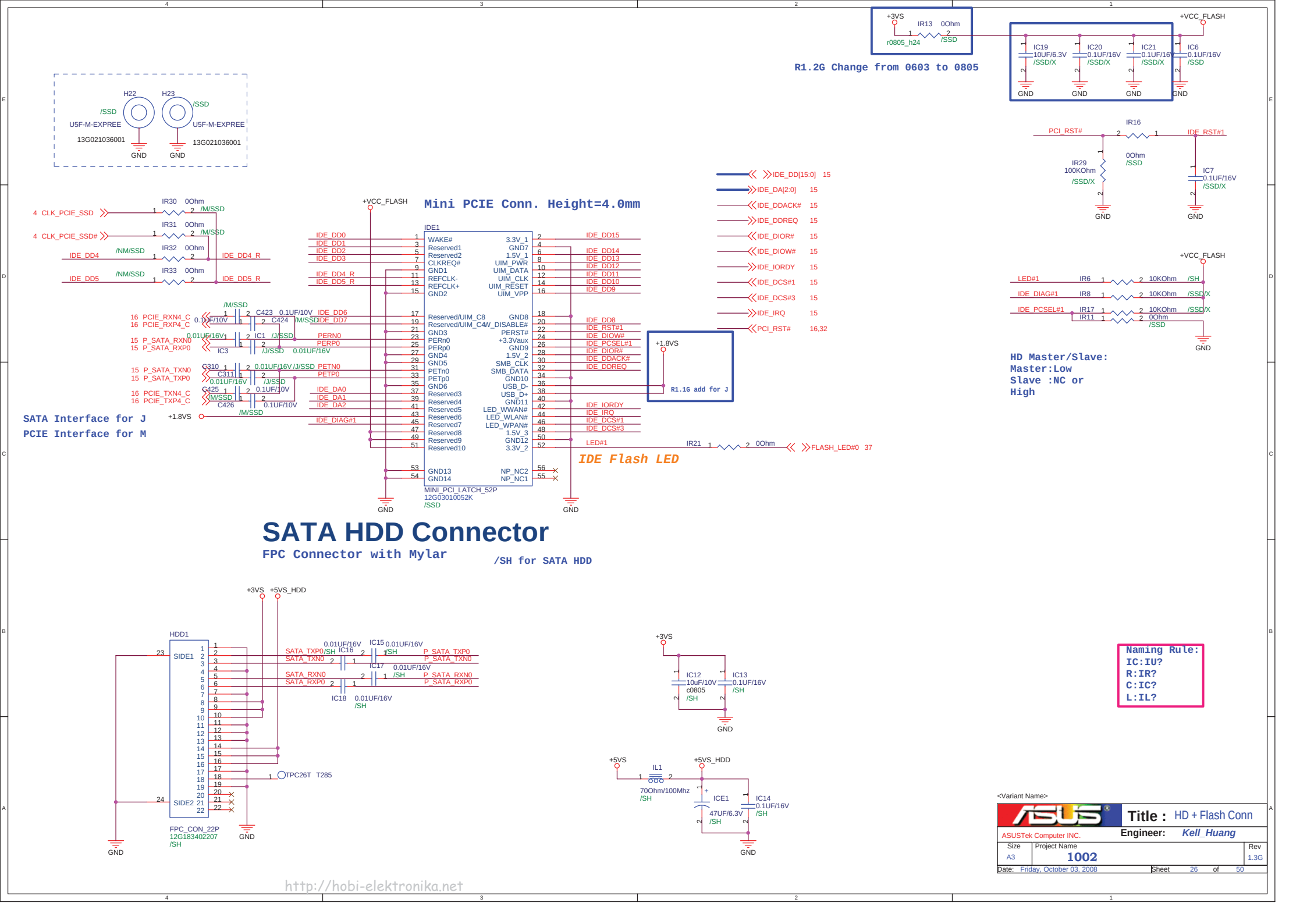
Date: Friday, October 03, 2008 Sheet 24 of 50



http://hobi-elektronika.net

<Variant Name>

ASUSTek Computer INC.	Title : RJ45	
	Engineer: Kell_Huang	
Size: A3	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 25 of 50	


+3VS
IR13 0Ohm
r0805_h24
/SSD
+VCC_FLASH
IC19 10UF/6.3V /SSD/X
IC20 0.1UF/16V /SSD/X
IC21 0.1UF/16V /SSD/X
IC6 0.1UF/16V /SSD
GND
R1.2G Change from 0603 to 0805
H22
H23
/SSD
U5F-M-EXPREE
13G021036001
PCI_RST#
IR16
IR29 100KOhm /SSD/X
0Ohm /SSD
IDE_RST#1
IC7 0.1UF/16V /SSD/X
Mini PCIE Conn. Height=4.0mm
IDE1
WAKE#
Reserved1
Reserved2
CLKREQ#
GND1
REFCLK-
REFCLK+
GND2
3.3V_1
GND7
1.5V_1
UIM_PWR
UIM_DATA
UIM_CLK
UIM_RESET
UIM_VPP
Reserved/UIM_C8
Reserved/UIM_C4
GND3
PERn0
PERp0
GND4
GND5
PETn0
PETp0
GND6
Reserved3
Reserved4
Reserved5
Reserved6
Reserved7
Reserved8
Reserved9
Reserved10
GND8
W_DISABLE#
PERST#
+3.3Vaux
GND9
1.5V_2
SMB_CLK
SMB_DATA
GND10
USB_D-
USB_D+
GND11
LED_WWAN#
LED_WLAN#
LED_WPAN#
1.5V_3
GND12
3.3V_2
GND13
GND14
NP_NC2
NP_NC1
MINI_PCI_LATCH_52P
12G03010052K
/SSD
IDE_DD[15:0] 15
IDE_DA[2:0] 15
IDE_DDACK# 15
IDE_DDREQ 15
IDE_DIOR# 15
IDE_DIOW# 15
IDE_IORDY 15
IDE_DCS#1 15
IDE_DCS#3 15
IDE_IRQ 15
PCI_RST# 16,32
+1.8VS
R1.1G add for J
IR30 0Ohm /M/SSD
IR31 0Ohm /M/SSD
IR32 0Ohm /NM/SSD
IR33 0Ohm /NM/SSD
CLK_PCIE_SSD
CLK_PCIE_SSD#
IDE_DD4
IDE_DD5
IDE_DD4_R
IDE_DD5_R
PCIE_RXN4_C
PCIE_RXP4_C
PCIE_TXN4_C
PCIE_TXP4_C
P_SATA_RXN0
P_SATA_RXP0
P_SATA_TXN0
P_SATA_TXP0
C423 0.1UF/10V
C424 0.01UF/16V
C425 0.1UF/10V
C426 0.1UF/10V
C310 0.01UF/16V
C311 0.01UF/16V
IC1 /J/SSD
IC3 /J/SSD 0.01UF/16V
PERN0
PERP0
PETN0
PETP0
IDE_DD0
IDE_DD1
IDE_DD2
IDE_DD3
IDE_DD6
IDE_DD7
IDE_DA0
IDE_DA1
IDE_DA2
IDE_DIAG#1
IDE_DD15
IDE_DD14
IDE_DD13
IDE_DD12
IDE_DD11
IDE_DD10
IDE_DD9
IDE_DD8
IDE_RST#1
IDE_DIOW#
IDE_PCSEL#1
IDE_DIOR#
IDE_DDACK#
IDE_DDREQ
IDE_IORDY
IDE_IRQ
IDE_DCS#1
IDE_DCS#3
LED#1
IR21 0Ohm
FLASH_LED#0 37
IDE Flash LED
SATA Interface for J
PCIE Interface for M
+VCC_FLASH
LED#1 IR6 10KOhm /SH
IDE_DIAG#1 IR8 10KOhm /SSD/X
IDE_PCSEL#1 IR17 10KOhm /SSD/X
IR11 0Ohm /SSD
HD Master/Slave:
Master:Low
Slave :NC or
High
SATA HDD Connector
FPC Connector with Mylar
/SH for SATA HDD
+3VS
+5VS_HDD
HDD1
SIDE1
SIDE2
FPC_CON_22P
12G183402207
/SH
SATA_TXP0
SATA_TXN0
SATA_RXN0
SATA_RXP0
P_SATA_TXP0
P_SATA_TXN0
P_SATA_RXN0
P_SATA_RXP0
IC15 0.01UF/16V /SH
IC16 0.01UF/16V /SH
IC17 0.01UF/16V /SH
IC18 0.01UF/16V /SH
TPC26T T285
IC12 10uF/10V c0805 /SH
IC13 0.1UF/16V /SH
+5VS
IL1 70Ohm/100Mhz /SH
ICE1 47UF/6.3V /SH
IC14 0.1UF/16V /SH
Naming Rule:
IC:IU?
R:IR?
C:IC?
L:IL?
<Variant Name>
ASUSTek Computer INC.
Title : HD + Flash Conn
Engineer: Kell_Huang
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
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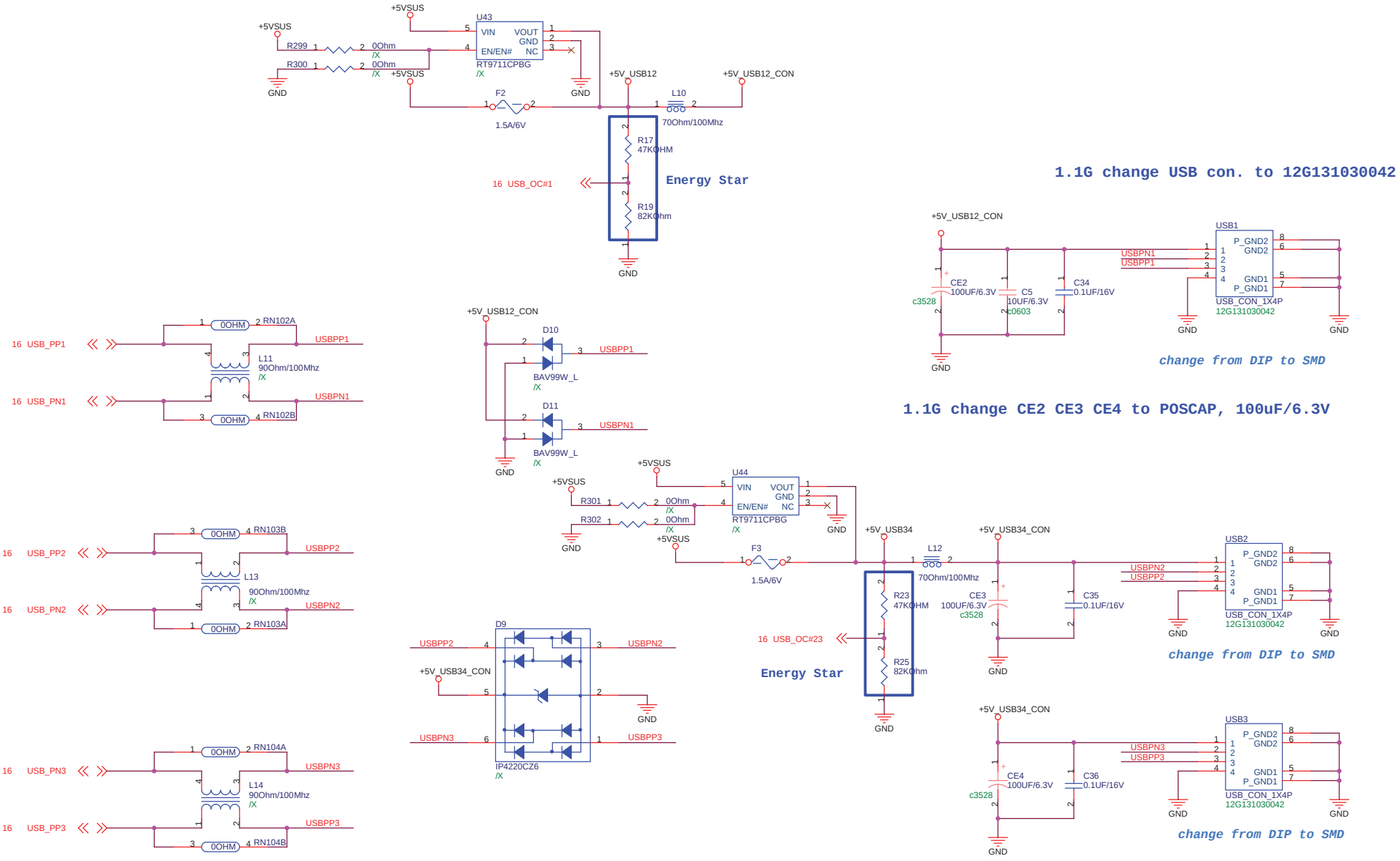
http://hobi-elektronika.net

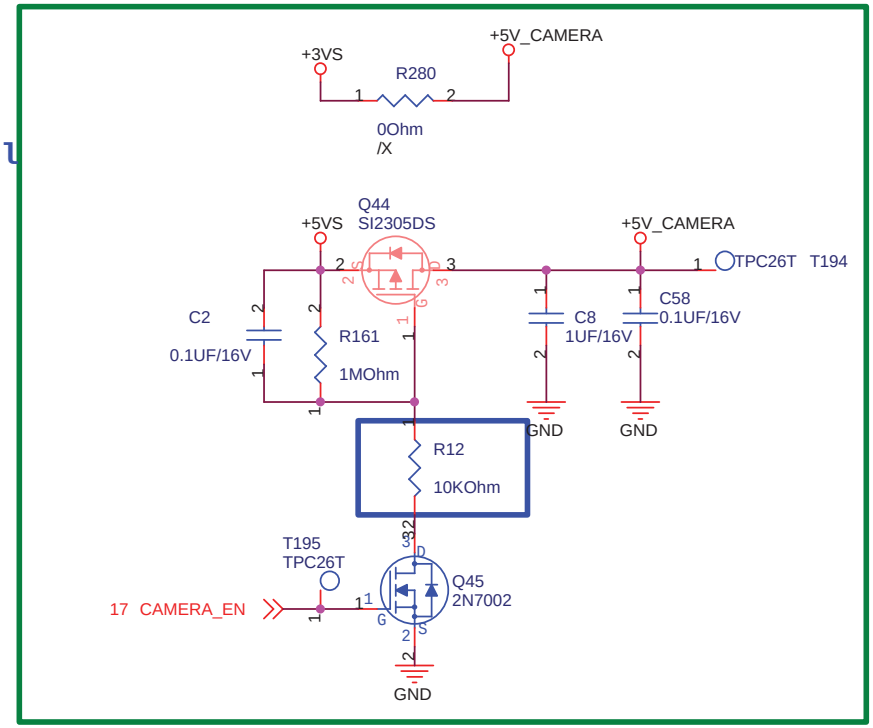


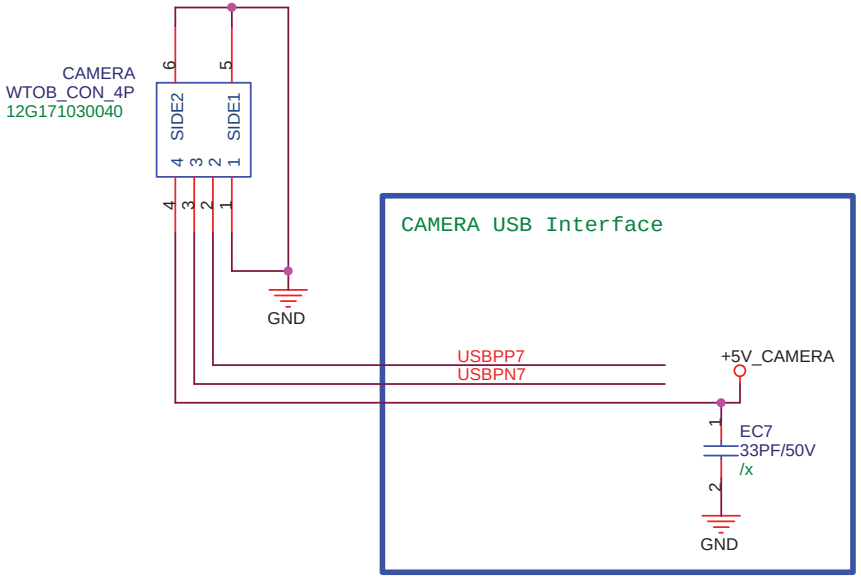
http://hobi-elektronika.net

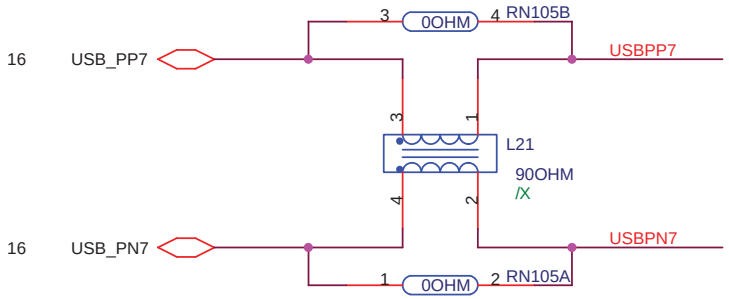
<Variant Name>

ASUSTek Computer INC.	Title : USB Port	
	Engineer: Kell_Huang	
Size: A3	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 27 of 50	

Power Control







<Variant Name>

ASUSTek Computer INC.

Title : Camera Power

Engineer: Kell_Huang

Size	Project Name	Rev
A4	1002	1.3G

Date: Friday, October 03, 2008 Sheet 28 of 50

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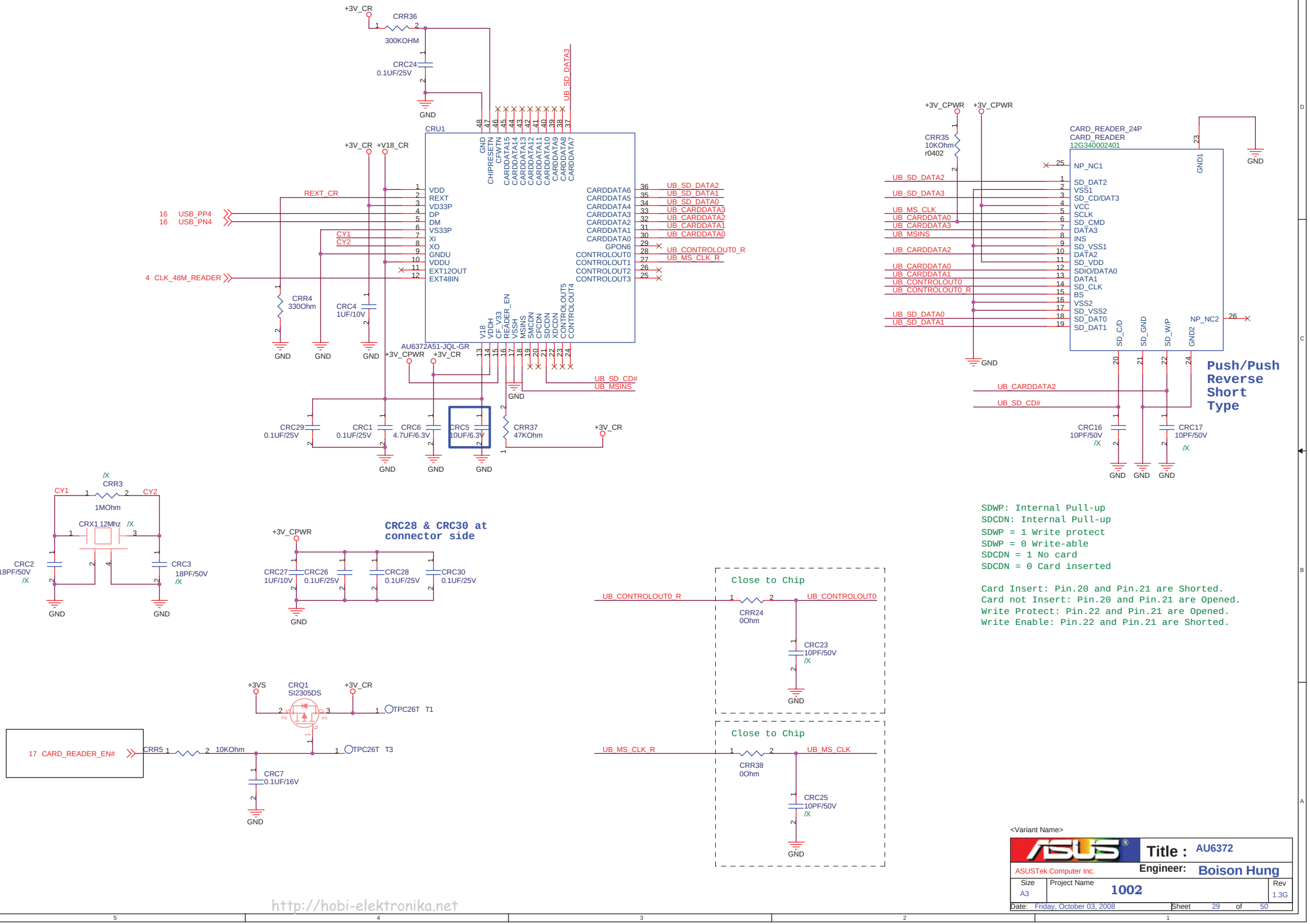
+3V_CR
CRR36
300KOHM
CRC24
0.1UF/25V
GND
UB_SD_DATA3
CRU1
+3V_CR +V18_CR
REXT_CR
16 USB_PP4
16 USB_PN4
CY1
CY2
4 CLK_48M_READER
CRR4
330Ohm
CRC4
1UF/10V
AU6372A51-JQL-GR
+3V_CPWR +3V_CR
UB_SD_CD#
UB_MSINS
CRC29
0.1UF/25V
CRC1
0.1UF/25V
CRC6
4.7UF/6.3V
CRC5
10UF/6.3V
CRR37
47KOhm
+3V_CR
CARDDATA6 UB_SD_DATA2
CARDDATA5 UB_SD_DATA1
CARDDATA4 UB_SD_DATA0
CARDDATA3 UB_CARDDATA3
CARDDATA2 UB_CARDDATA2
CARDDATA1 UB_CARDDATA1
CARDDATA0 UB_CARDDATA0
GPON6 UB_CONTROLOUT0_R
CONTROLOUT0 UB_MS_CLK_R
CONTROLOUT1
CONTROLOUT2
CONTROLOUT3
+3V_CPWR +3V_CPWR
CRR35
10KOhm
r0402
CARD_READER_24P
CARD_READER
12G340002401
NP_NC1
SD_DAT2
VSS1
SD_CD/DAT3
VCC
SCLK
SD_CMD
DATA3
INS
SD_VSS1
DATA2
SD_VDD
SDIO/DATA0
DATA1
SD_CLK
BS
VSS2
SD_VSS2
SD_DAT0
SD_DAT1
NP_NC2
GND1
GND2
SD_C/D
SD_GND
SD_W/P
UB_CARDDATA2
UB_SD_CD#
CRC16
10PF/50V
/X
CRC17
10PF/50V
/X
Push/Push
Reverse
Short
Type
/X
CY1
CRR3
1MOhm
CY2
CRX1 12Mhz /X
CRC2
18PF/50V
/X
CRC3
18PF/50V
/X
+3V_CPWR
CRC27
1UF/10V
CRC26
0.1UF/25V
CRC28
0.1UF/25V
CRC30
0.1UF/25V
CRC28 & CRC30 at
connector side
SDWP: Internal Pull-up
SDCDN: Internal Pull-up
SDWP = 1 Write protect
SDWP = 0 Write-able
SDCDN = 1 No card
SDCDN = 0 Card inserted
Card Insert: Pin.20 and Pin.21 are Shorted.
Card not Insert: Pin.20 and Pin.21 are Opened.
Write Protect: Pin.22 and Pin.21 are Opened.
Write Enable: Pin.22 and Pin.21 are Shorted.
+3VS
CRQ1
SI2305DS
+3V_CR
TPC26T T1
17 CARD_READER_EN#
CRR5
10KOhm
TPC26T T3
CRC7
0.1UF/16V
UB_CONTROLOUT0_R
Close to Chip
CRR24
0Ohm
UB_CONTROLOUT0
CRC23
10PF/50V
/X
UB_MS_CLK_R
Close to Chip
CRR38
0Ohm
UB_MS_CLK
CRC25
10PF/50V
/X
<Variant Name>
Title : AU6372
ASUSTek Computer Inc.
Engineer: Boison Hung
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
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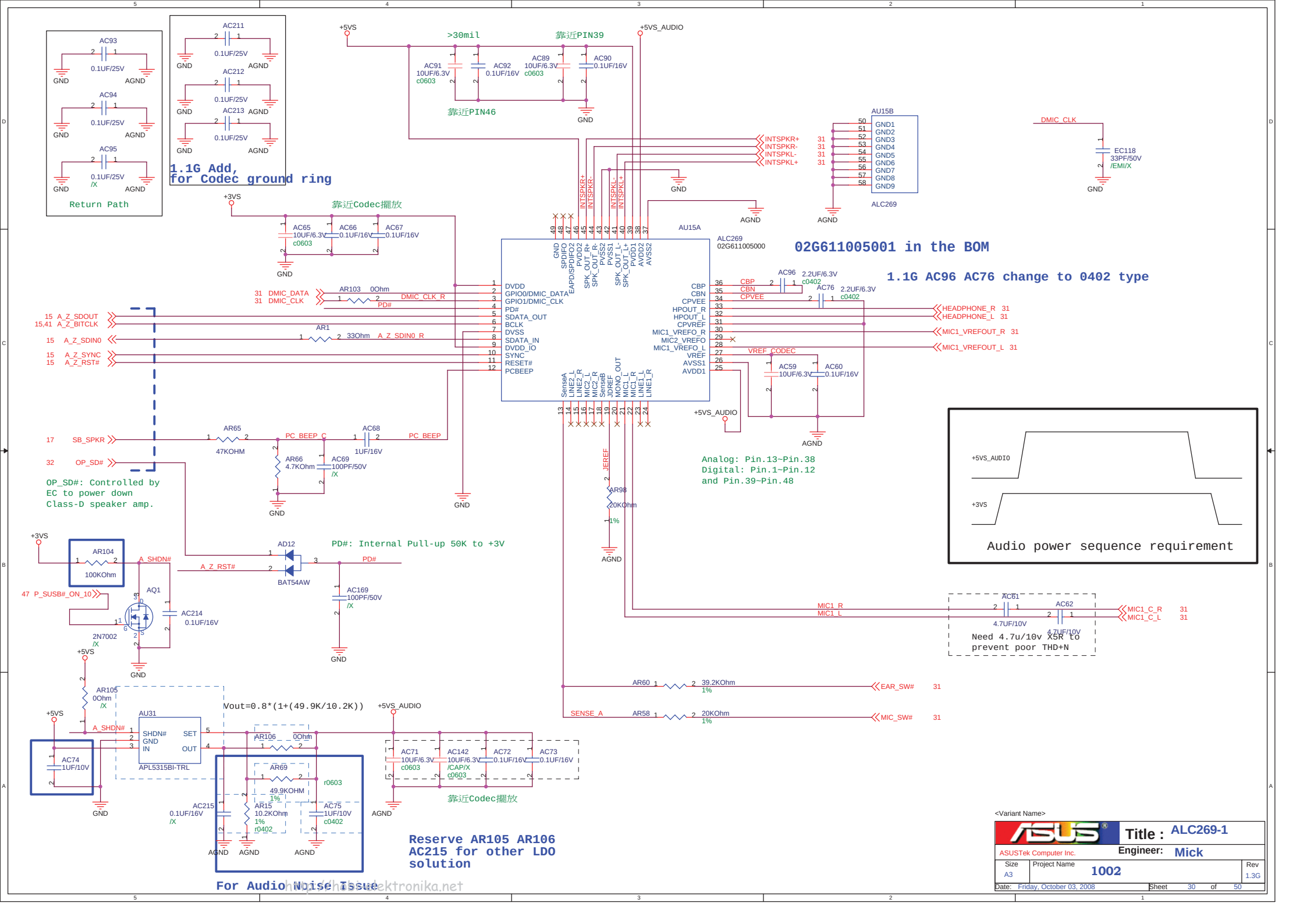
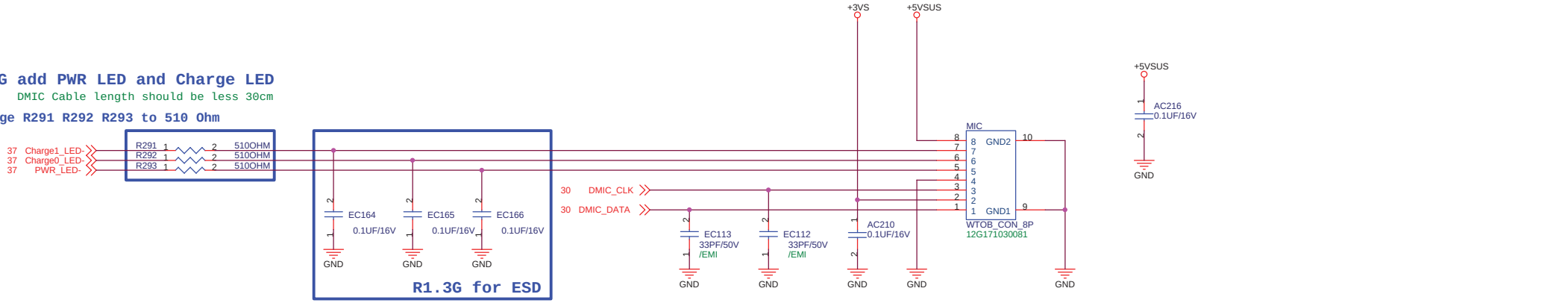

AC93 0.1UF/25V
AC94 0.1UF/25V
AC95 0.1UF/25V /X
Return Path
AC211 0.1UF/25V
AC212 0.1UF/25V
AC213 0.1UF/25V
1.1G Add, for Codec ground ring
+5VS
>30mil
靠近PIN39
+5VS_AUDIO
AC91 10UF/6.3V c0603
AC92 0.1UF/16V
AC89 10UF/6.3V c0603
AC90 0.1UF/16V
靠近PIN46
AU15B
ALC269
DMIC_CLK
EC118 33PF/50V /EMI/X
INTSPKR+
INTSPKR-
INTSPKL-
INTSPKL+
+3VS
靠近Codec擺放
AC65 10UF/6.3V c0603
AC66 0.1UF/16V
AC67 0.1UF/16V
AU15A
ALC269 02G611005000
02G611005001 in the BOM
1.1G AC96 AC76 change to 0402 type
AC96 2.2UF/6.3V c0402
AC76 2.2UF/6.3V c0402
HEADPHONE_R 31
HEADPHONE_L 31
MIC1_VREFOUT_R 31
MIC1_VREFOUT_L 31
VREF_CODEC
AC59 10UF/6.3V
AC60 0.1UF/16V
DMIC_DATA 31
DMIC_CLK 31
AR103 0Ohm
DMIC_CLK_R
PD#
15 A_Z_SDOUT
15,41 A_Z_BITCLK
15 A_Z_SDIN0
AR1 33Ohm A_Z_SDIN0_R
15 A_Z_SYNC
15 A_Z_RST#
17 SB_SPKR
32 OP_SD#
AR65 47KOHM
PC_BEEP_C
AC68 1UF/16V
PC_BEEP
AR66 4.7KOhm
AC69 100PF/50V /X
OP_SD#: Controlled by EC to power down Class-D speaker amp.
Analog: Pin.13~Pin.38
Digital: Pin.1~Pin.12
and Pin.39~Pin.48
JEREF
AR98 20KOhm 1%
Audio power sequence requirement
AR104 100KOhm
A_SHDN#
AD12 BAT54AW
PD#: Internal Pull-up 50K to +3V
A_Z_RST#
AC169 100PF/50V /X
47 P_SUSB#_ON_10
AQ1 2N7002 /X
AC214 0.1UF/16V
MIC1_R
MIC1_L
AC61 4.7UF/10V
AC62 4.7UF/10V
MIC1_C_R 31
MIC1_C_L 31
Need 4.7u/10v X5R to prevent poor THD+N
AR60 39.2KOhm 1%
EAR_SW# 31
SENSE_A
AR58 20KOhm 1%
MIC_SW# 31
AR105 0Ohm /X
AU31
APL5315BI-TRL
Vout=0.8*(1+(49.9K/10.2K))
AR106 0Ohm
AR69 49.9KOHM 1% r0603
AR15 10.2KOhm 1% r0402
AC74 1UF/10V
AC215 0.1UF/16V /X
AC75 1UF/10V c0402
AC71 10UF/6.3V c0603
AC142 10UF/6.3V /CAP/X c0603
AC72 0.1UF/16V
AC73 0.1UF/16V
靠近Codec擺放
Reserve AR105 AR106 AC215 for other LDO solution
For Audio Noise Issue
<Variant Name>
Title : ALC269-1
ASUSTek Computer Inc.
Engineer: Mick
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 30 of 50

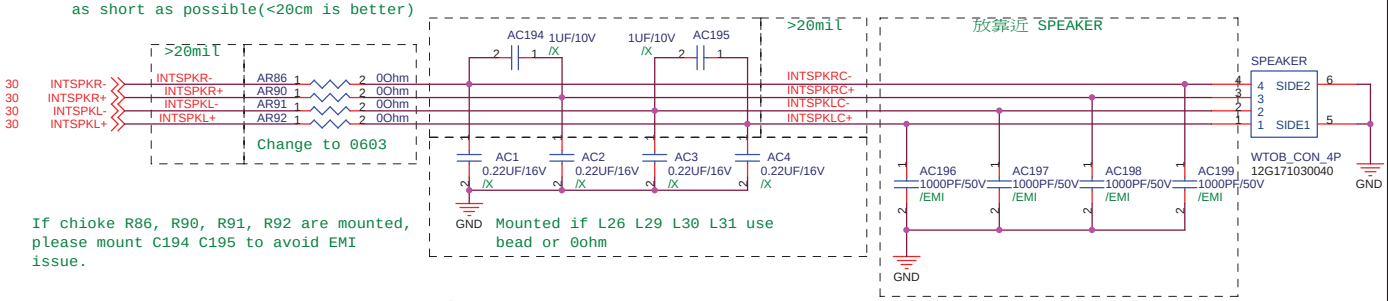
1.1G add PWR LED and Charge LED

DMIC Cable length should be less 30cm

Change R291 R292 R293 to 510 Ohm

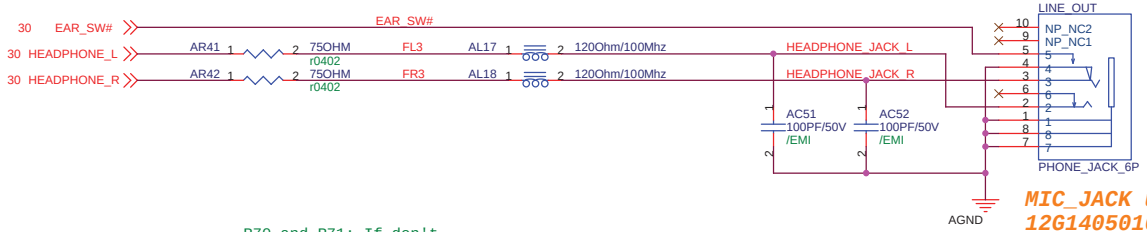


Total length from speakerR+- L+-(pin40 41 44 45) to internal speaker please as short as possible(<20cm is better)



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

LINE_OUT use 12G14050106P(SINGATRON) Black



1.1G Change audio con. to black

change from DIP to SMD

MIC_JACK use 12G14050106P(SINGATRON) Black

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

1.1G Change audio con. to black

change from DIP to SMD

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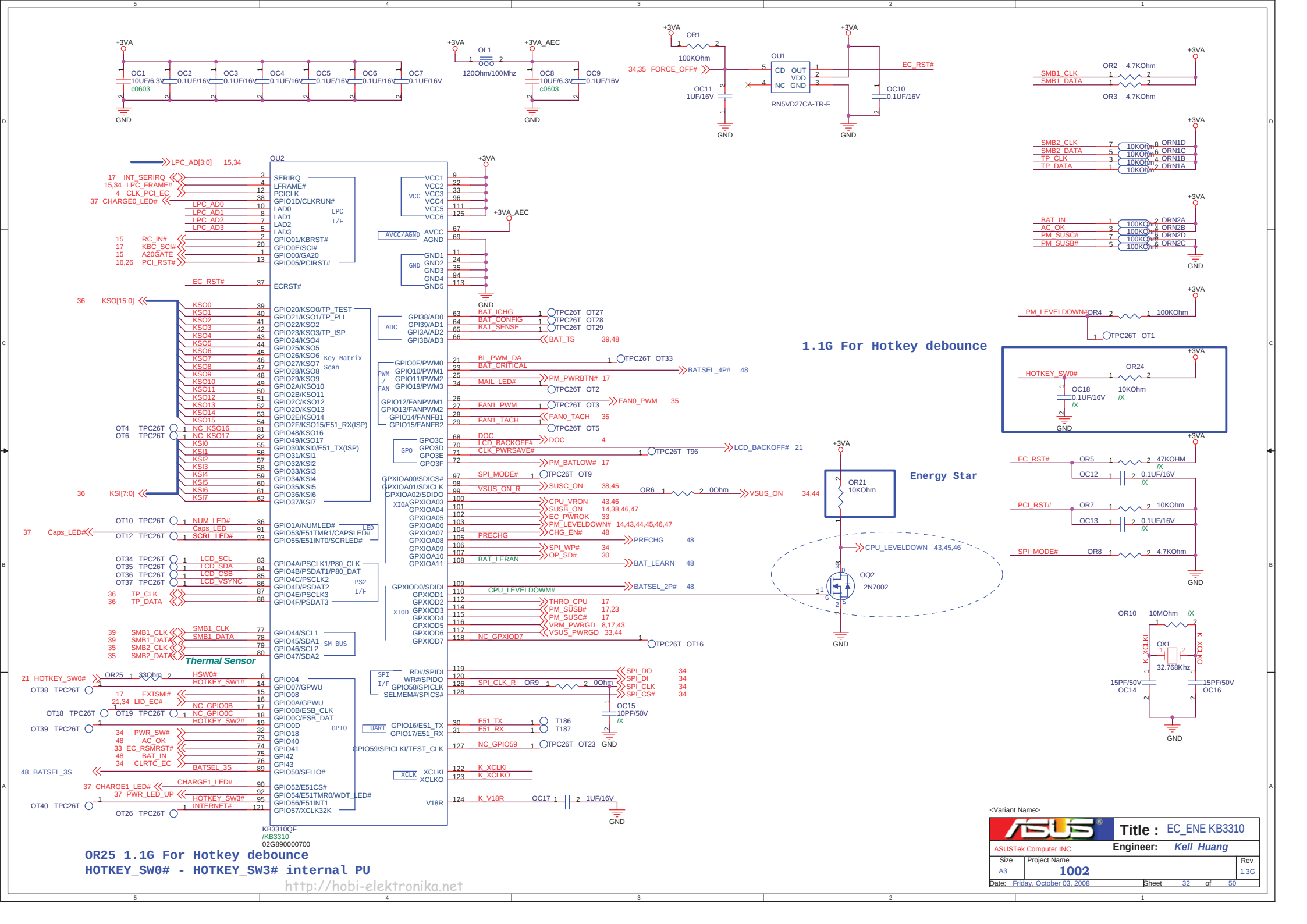
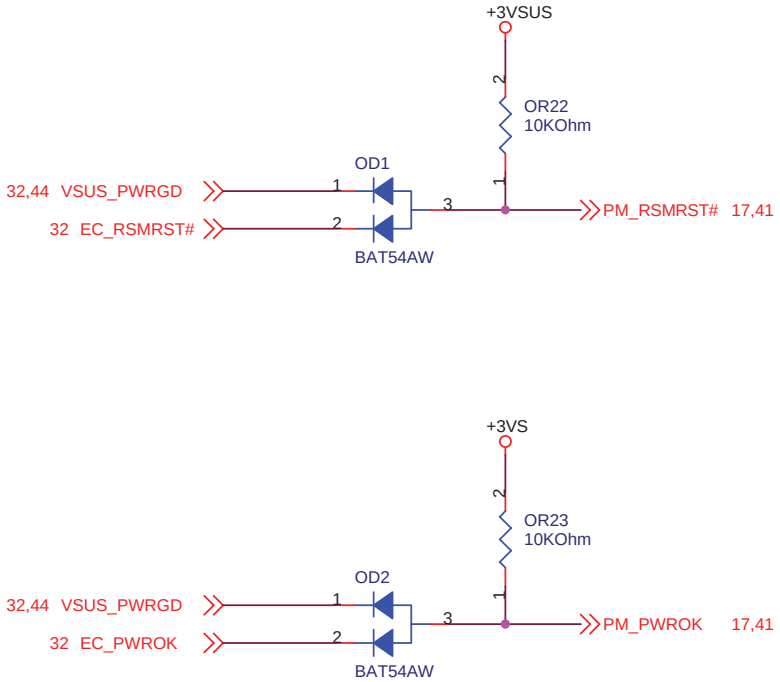
<Variant Name>

ASUSTek Computer Inc.	Title : ALC269-2	
	Engineer: MICK	
Size: A3	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 31 of 50	

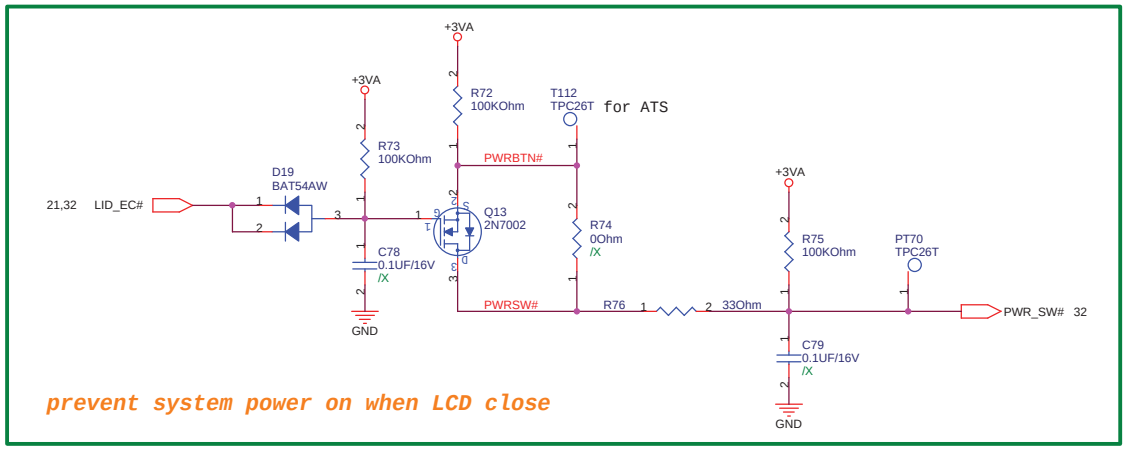

OU2
KB3310QF
/KB3310
02G890000700
1.1G For Hotkey debounce
Energy Star
Thermal Sensor
OR25 1.1G For Hotkey debounce
HOTKEY_SW0# - HOTKEY_SW3# internal PU
http://hobi-elektronika.net
<Variant Name>
Title : EC_ENE KB3310
ASUSTek Computer INC.
Engineer: Kell_Huang
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 32 of 50

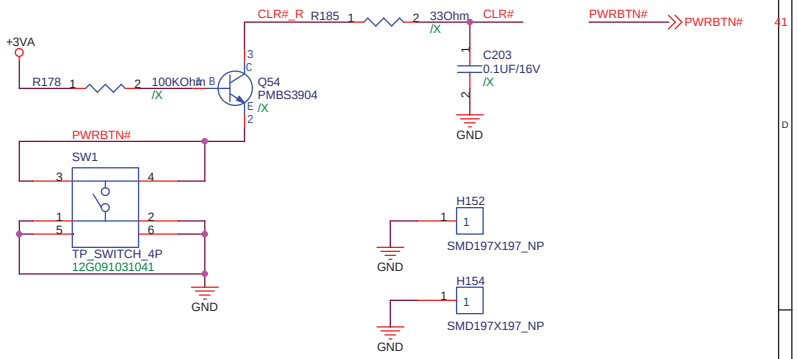


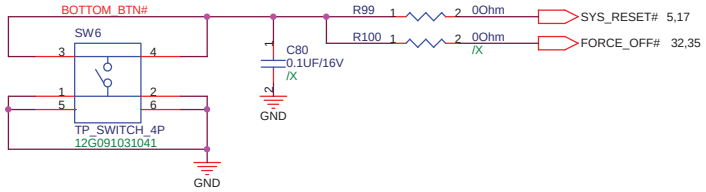
http://hobi-elektronika.net

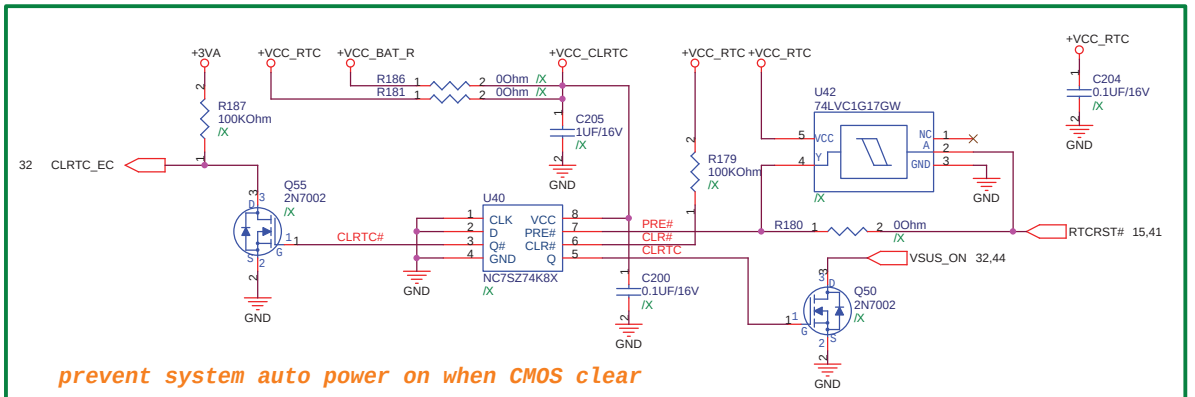
<Variant Name>

ASUSTek Computer INC.	Title : EC_UART_KC3820	
	Engineer: Kell_Huang	
Size: A4	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 33 of 50	

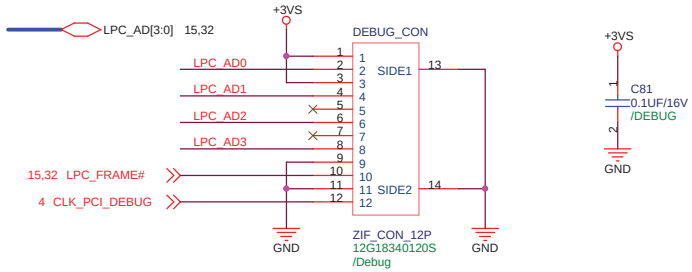








For Debug



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

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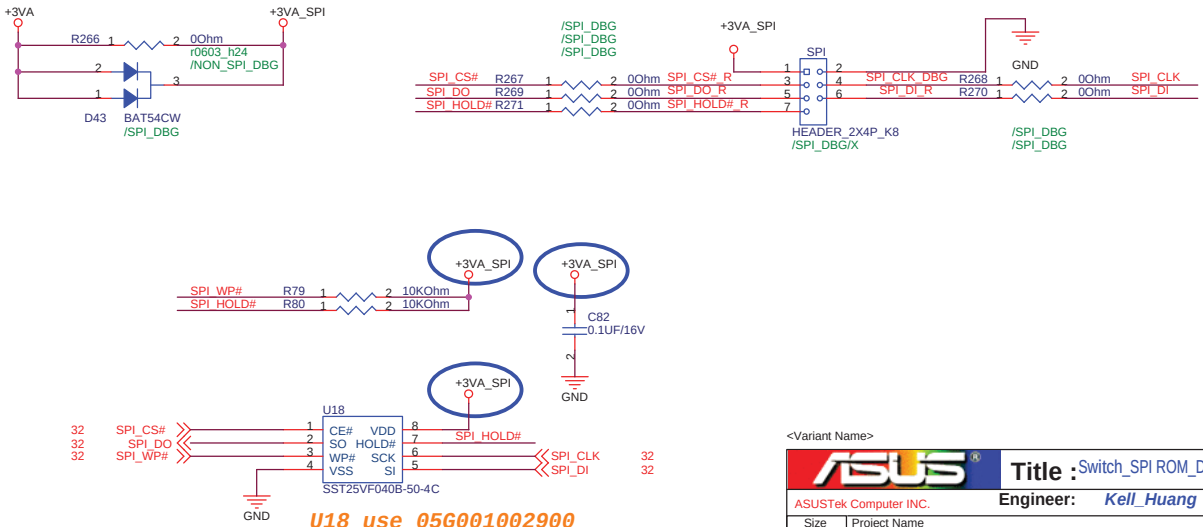
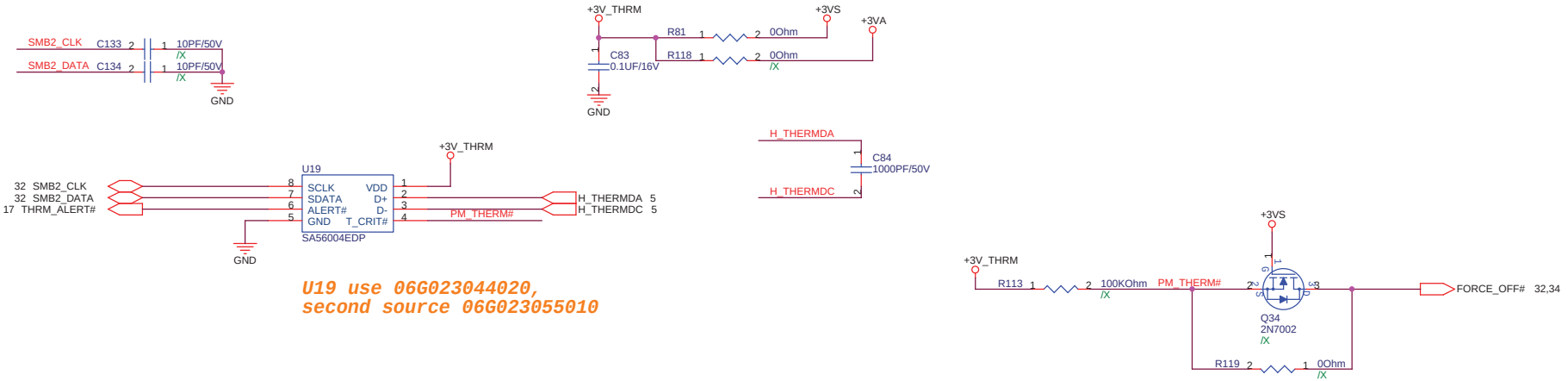
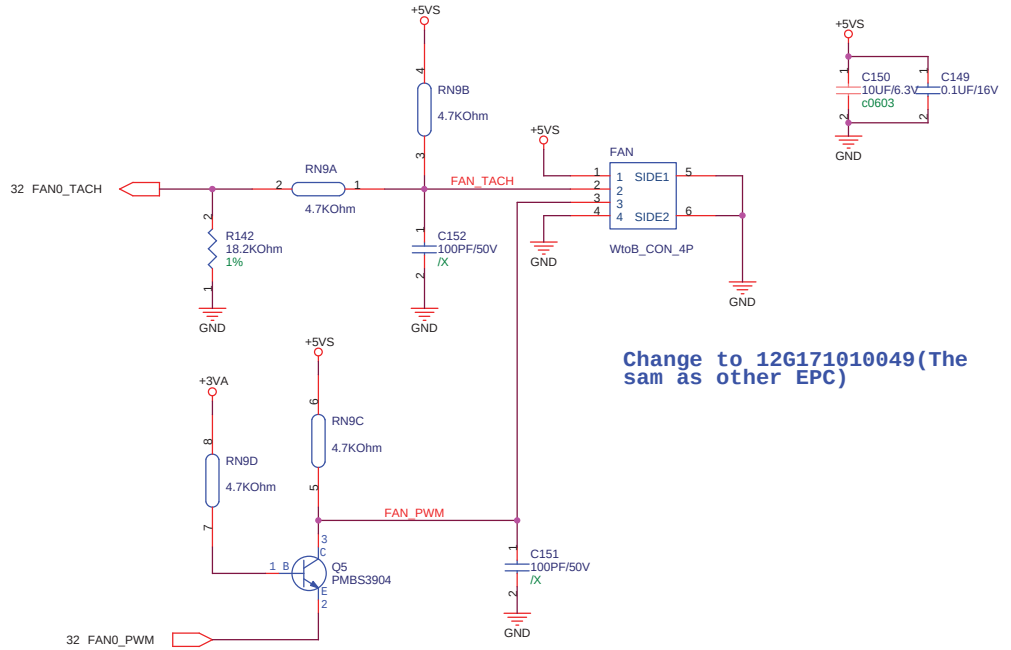


<Variant Name>
ASUSTek Computer INC.
Title : Switch_SPI ROM_Debug
Engineer: Kell_Huang
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 34 of 50



U19 use 06G023044020, second source 06G023055010

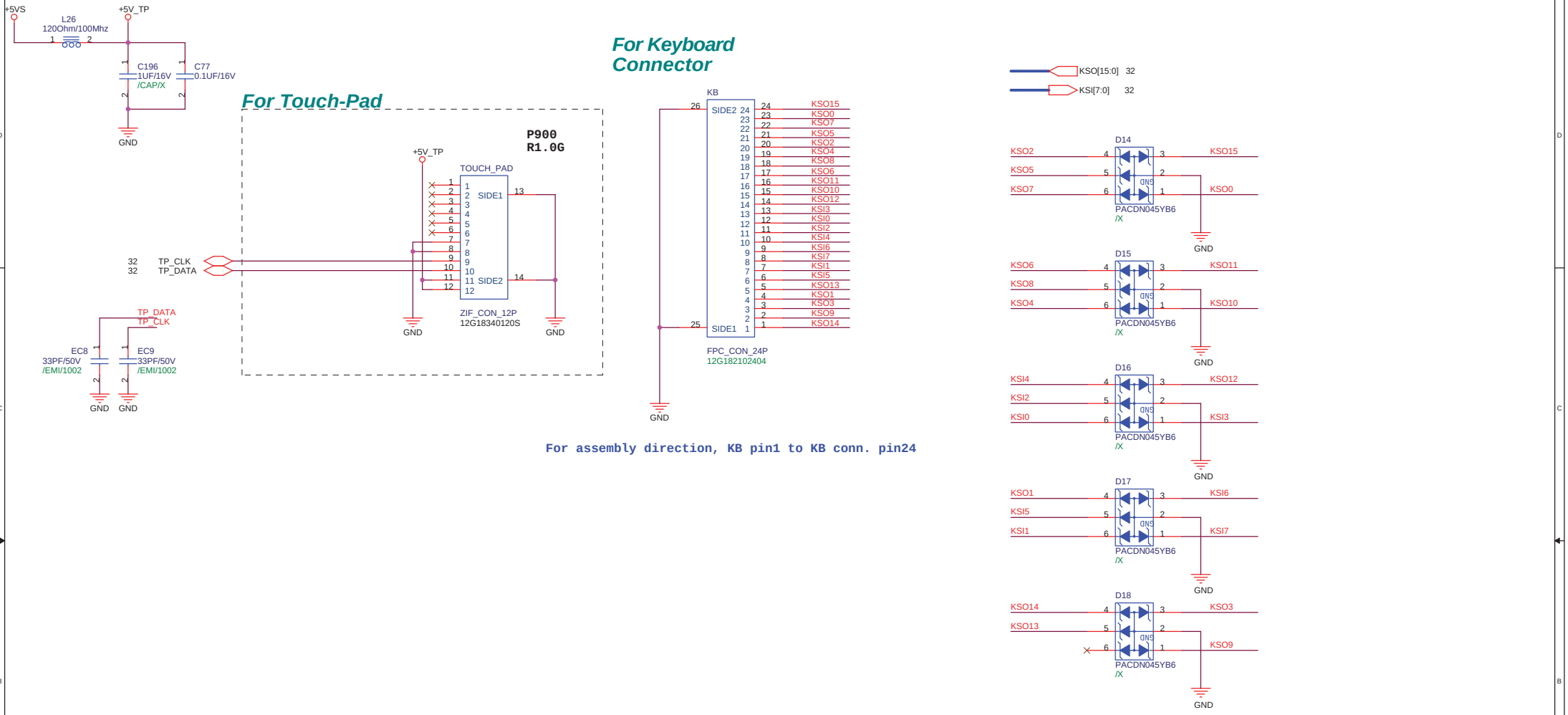


Change to 12G171010049(The sam as other EPC)

http://hobi-elektronika.net

<Variant Name>

ASUSTek Computer INC.	Title : Thermal Sensor_FAN	
	Engineer: Kell_Huang	
Size: A3	Project Name: 1002	Rev: 1.3G
Date: Friday, October 03, 2008	Sheet 35 of 50	



http://hobi-elektronika.net

<Variant Name>

ASUSTek Computer INC.

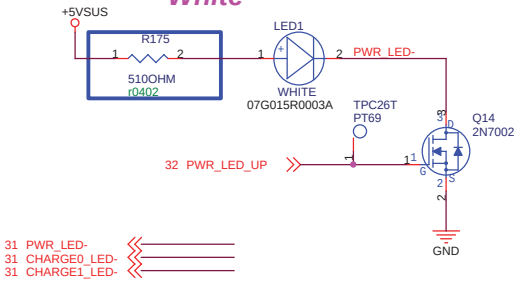
Title : KB_Touch Pad

Engineer: Kell_Huang

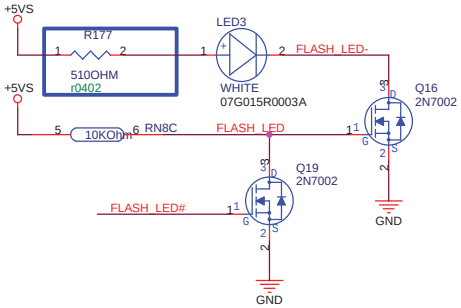
Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 36 of 50

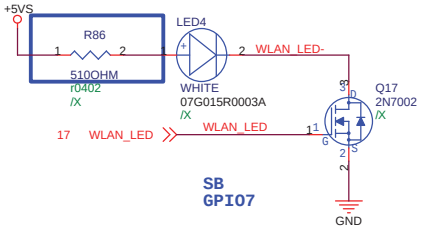
for POWER LED White



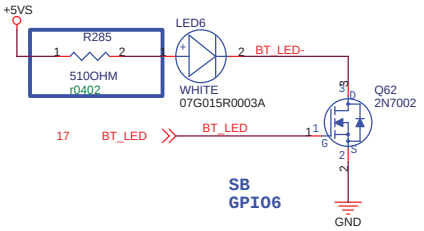
for FLASH LED White



White /X

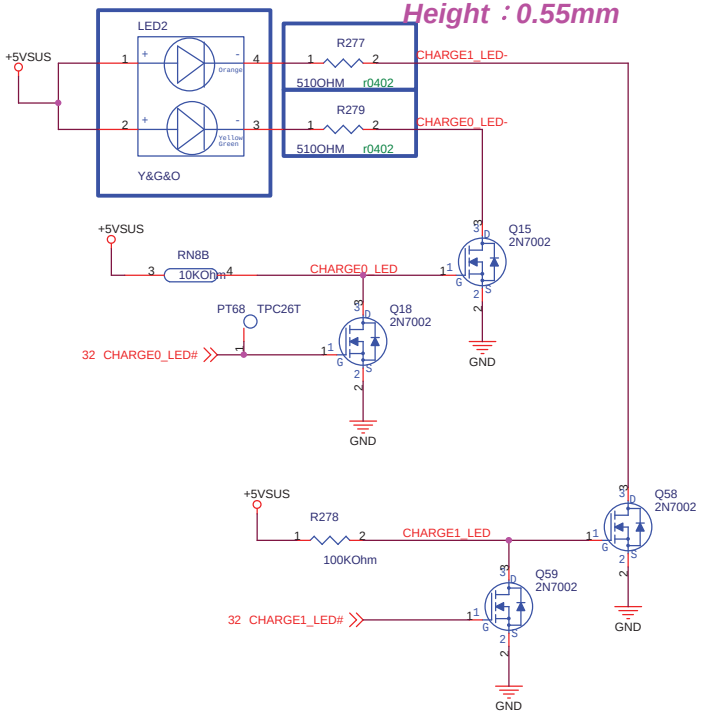


for WIFI/BlueTooth LED White

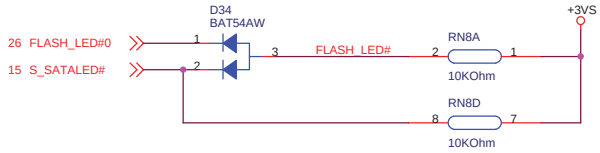


1.1G change to EVERLIGHT

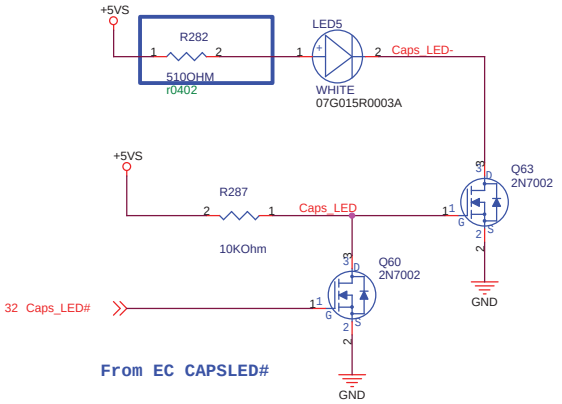
for CHARGE LED Height：0.55mm



Change LED resistor to 510 Ohm, about 4mA



for Caps Lock LED White



From EC CAPSLED#

The battery charge indicator (LED) shows the status of the battery' s power as follows:

cenario	Adapter mode	Battery mode
Battery power is between 100%~80%	Orange ON	Green ON
Battery power is between 80%~10%	Orange Blinking Slowly	Green Blinking Slowly
Battery power is less than 10%	Orange Blinking Quickly	Green Blinking Quickly
S3/S5 Mode	Scenario the same as above	Off

Note: The BATTERY LED should be off when the machine has no battery attached.

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<Variant Name>

ASUSTek Computer INC.

Title : LED

Engineer: Kell_Huang

Size	Project Name	Rev
A3	1002	1.3G

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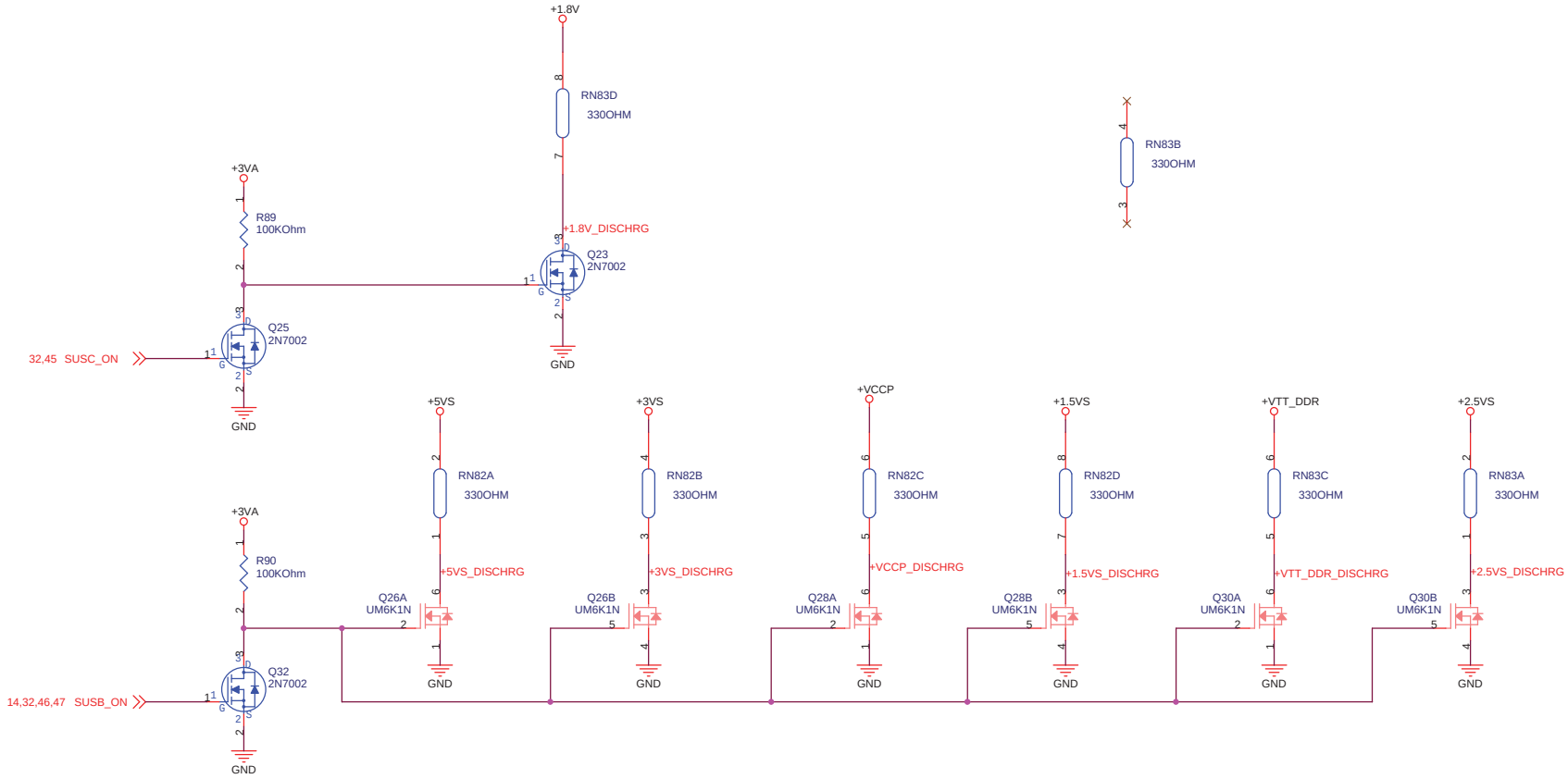


<Variant Name>

ASUSTek Computer INC.

Title : Discharge

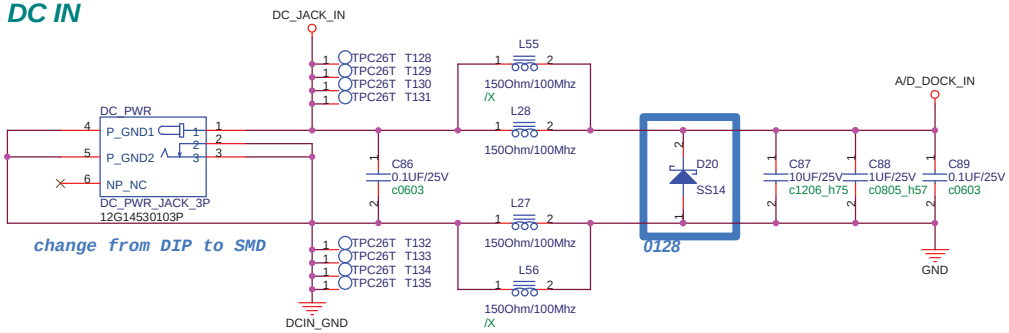
Engineer: Kell_Huang

Size	Project Name	Rev
A3	1002	1.3G

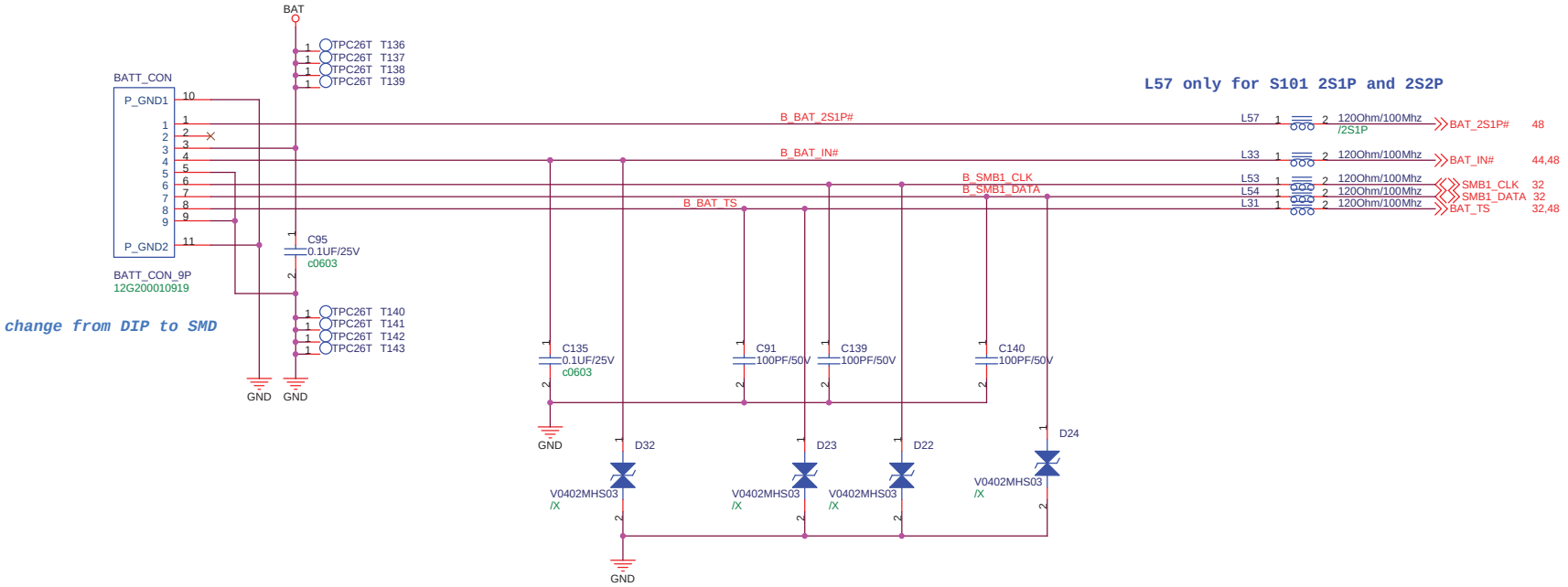
Date: Friday, October 03, 2008 Sheet 38 of 50

http://hobi-elektronika.net

DC IN



BAT IN



<Variant Name>

ASUSTek Computer INC.

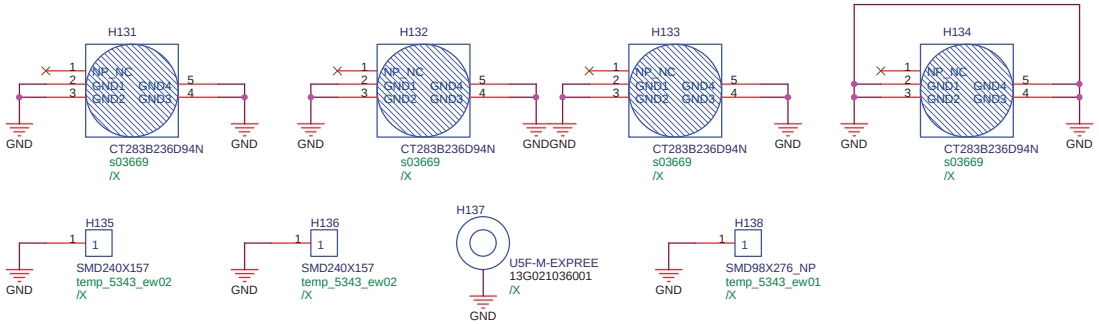
Title : PWR Jack

Engineer: Kell_Huang

Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 39 of 50

http://hobi-elektronika.net



http://hobi-elektronika.net

<Variant Name>

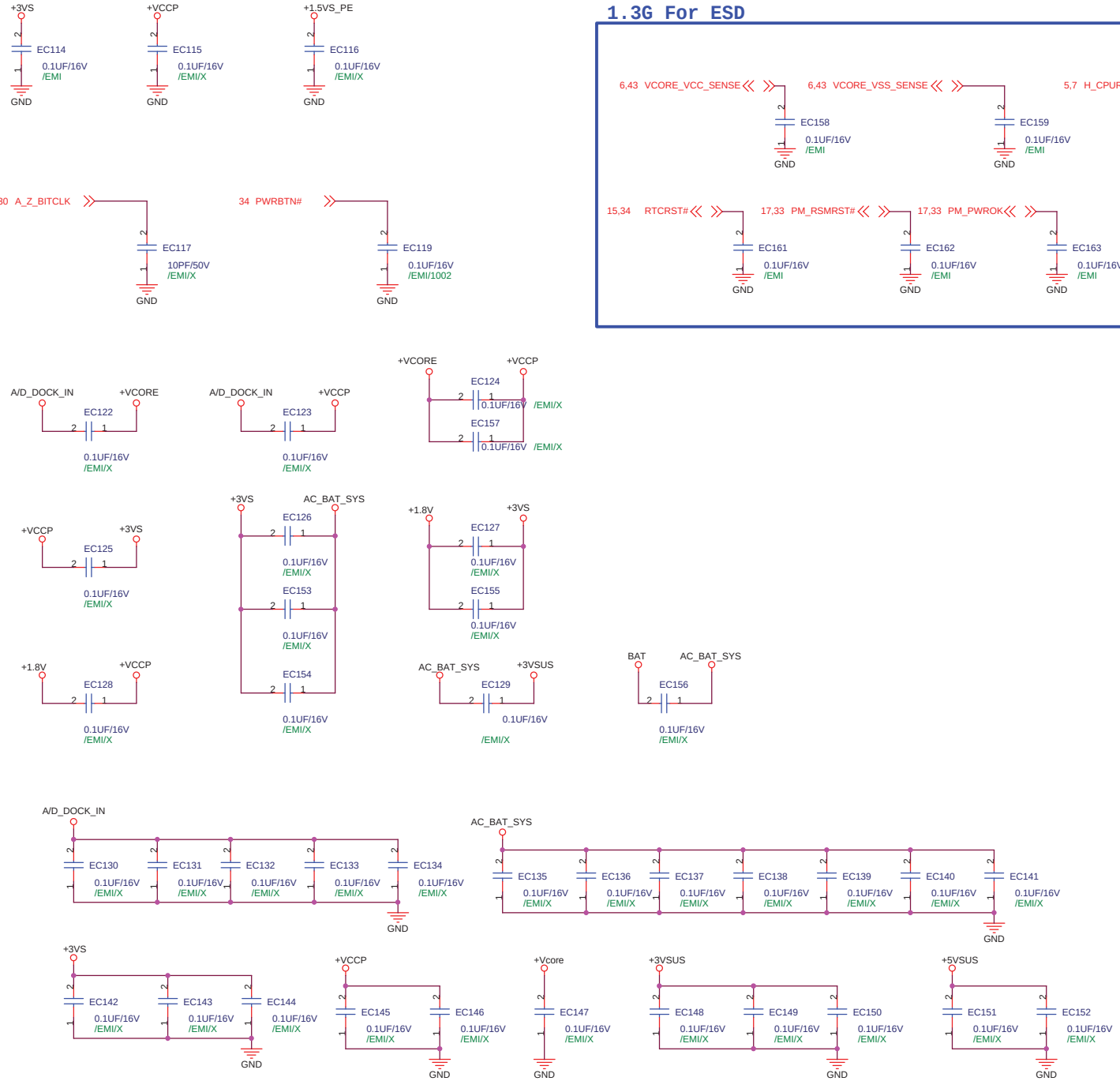
ASUSTek Computer INC.

Title : Srew Hole

Engineer: Kell_Huang

Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 40 of 50



http://hobi-elektronika.net

<Variant Name>

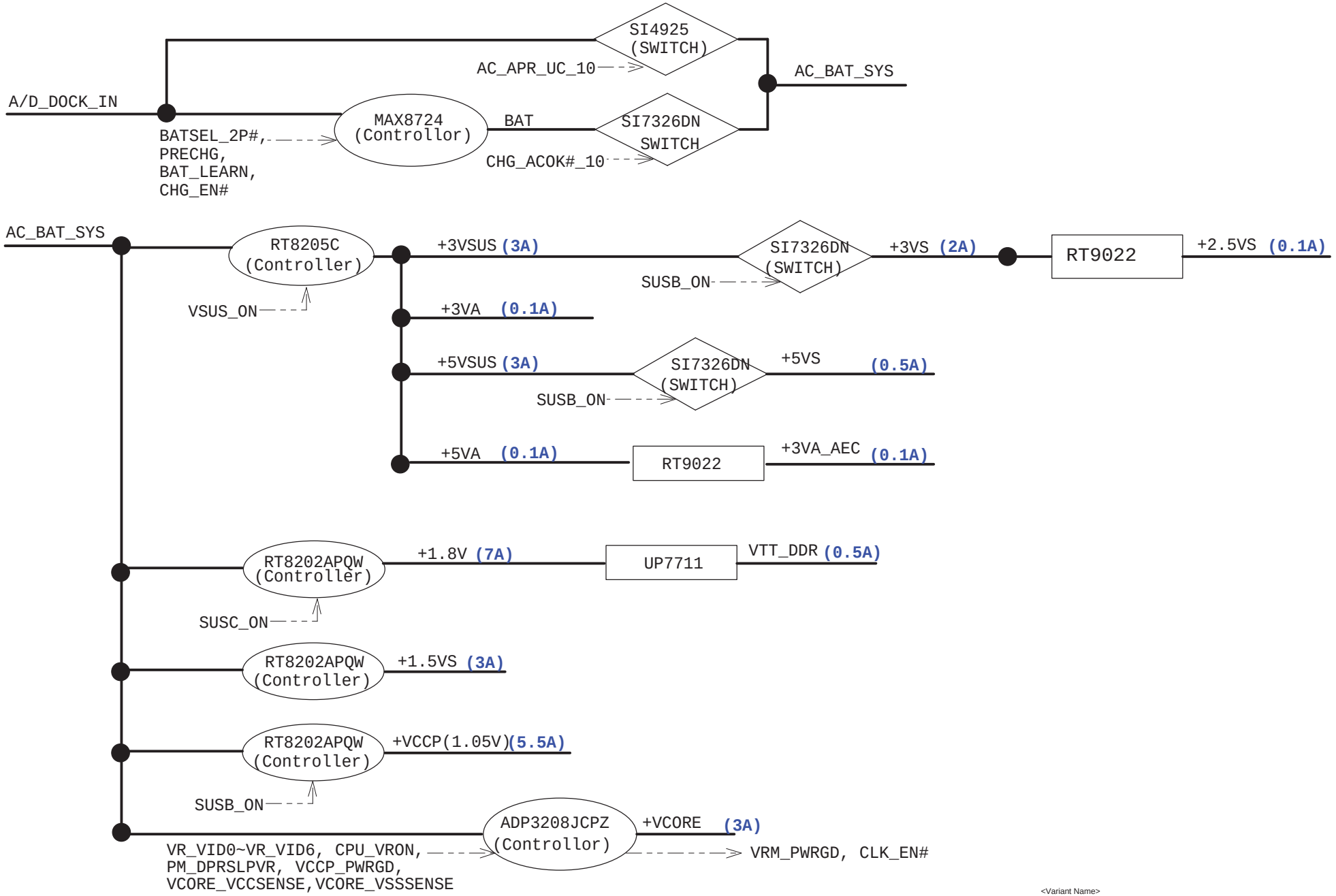
ASUSTek Computer INC.

Title : EMI

Engineer: Kell_Huang

Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 41 of 50



<Variant Name>

ASUSTek Computer INC.

Title : Power Flow

Engineer: Joy_Zhou

Size	Project Name	Rev
A3	1002	1.3G

Date: Friday, October 03, 2008 Sheet 42 of 50

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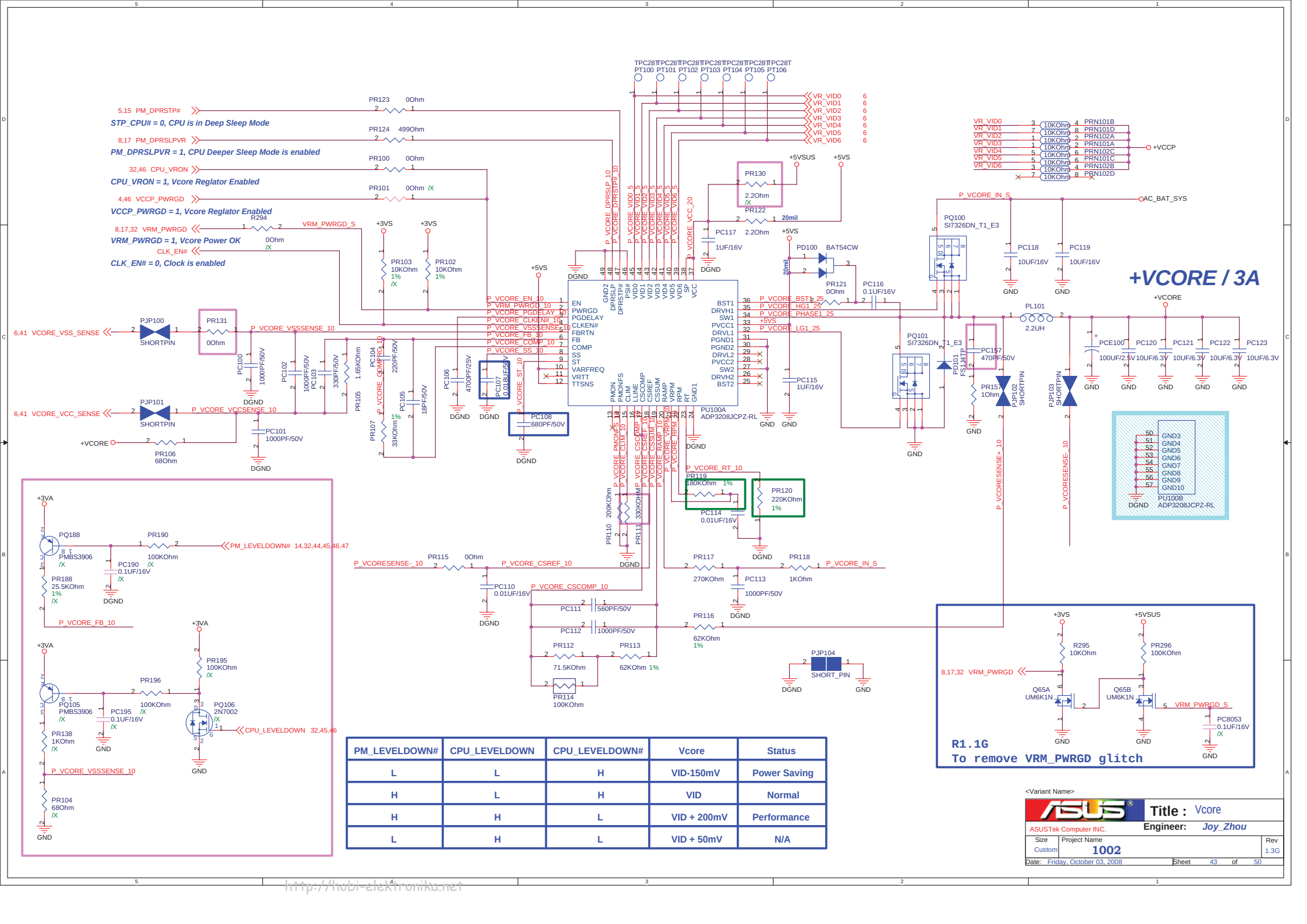


PM_LEVELDOWN#	CPU_LEVELDOWN	CPU_LEVELDOWN#	Vcore	Status
L	L	H	VID-150mV	Power Saving
H	L	H	VID	Normal
H	H	L	VID + 200mV	Performance
L	H	L	VID + 50mV	N/A

http://hobi-elektronika.net

<Variant Name>

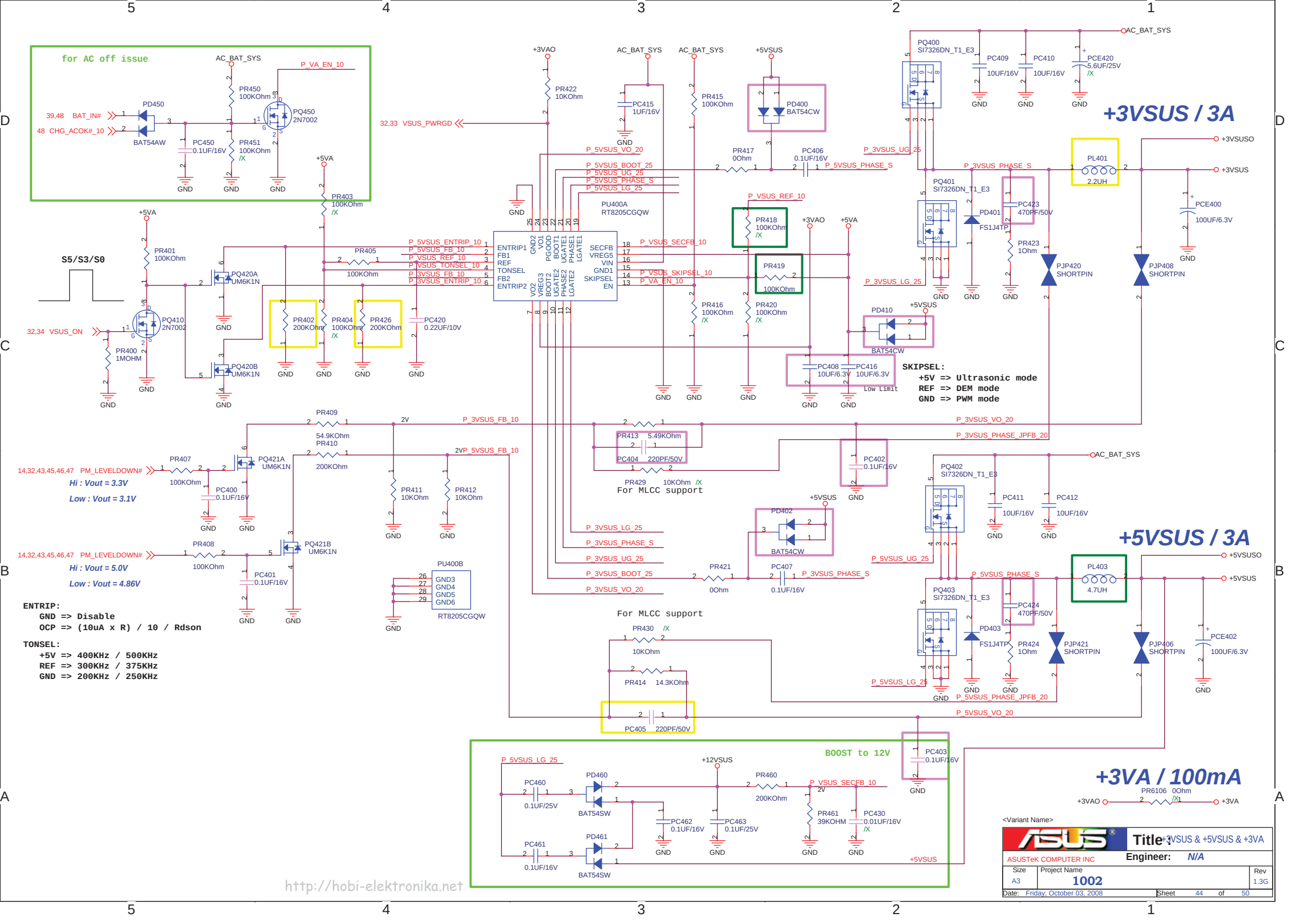
ASUSTek Computer INC.

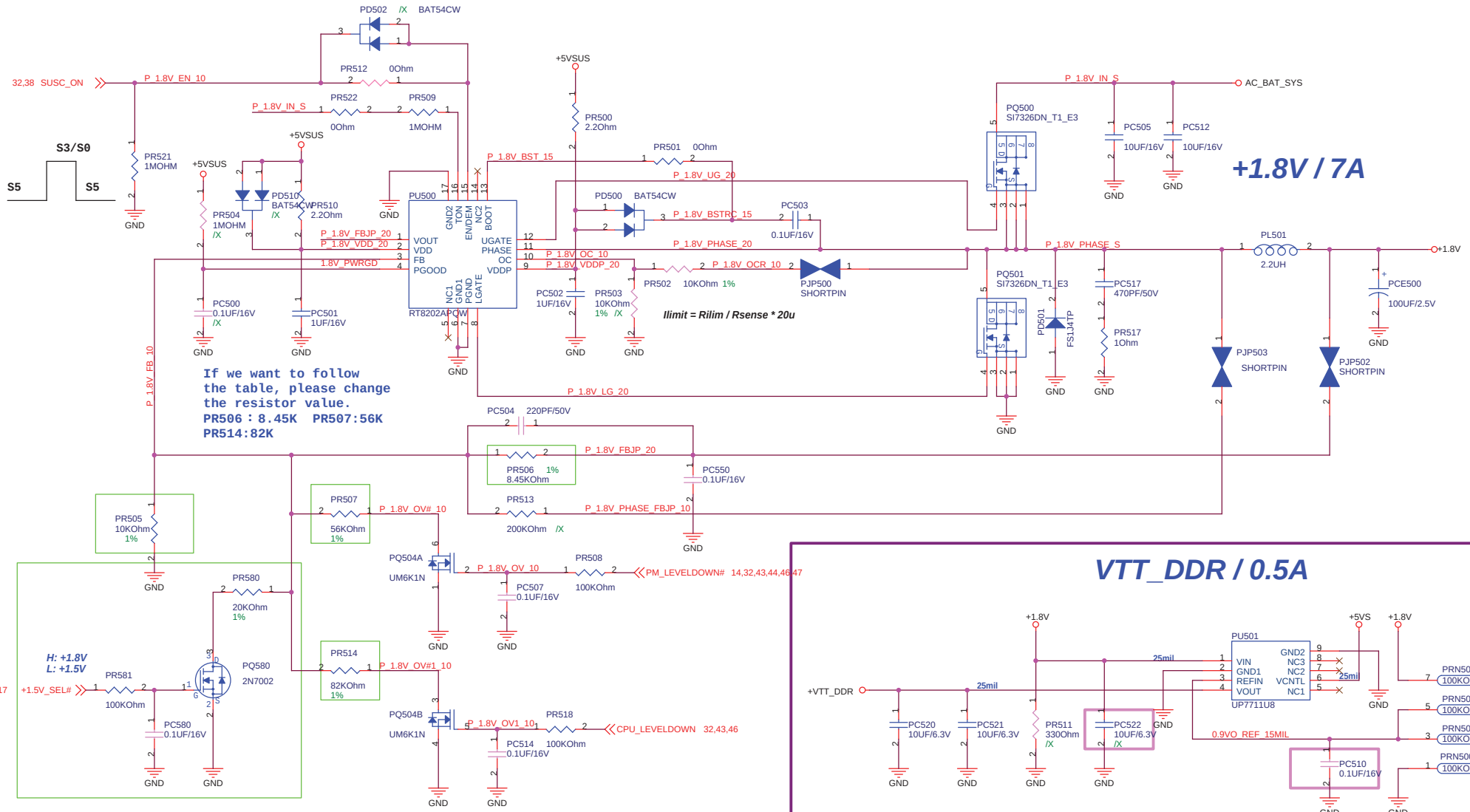
Title : Vcore

Engineer: Joy_Zhou

Size	Project Name	Rev
Custom	1002	1.3G

Date: Friday, October 03, 2008 Sheet 43 of 50


for AC off issue
AC_BAT_SYS
P_VA_EN_10
PD450
39,48 BAT_IN#
48 CHG_ACOK#_10
BAT54AW
PR450 100KOhm
PQ450 2N7002
PC450 0.1UF/16V
PR451 100KOhm /X
GND
+5VA
PR403 100KOhm /X
+3VAO
PR422 10KOhm
32,33 VSUS_PWRGD
PC415 1UF/16V
PR415 100KOhm
PD400 BAT54CW
+5VSUS
P_5VSUS_VO_20
P_5VSUS_BOOT_25
P_5VSUS_UG_25
P_5VSUS_PHASE_S
P_5VSUS_LG_25
PR417 0Ohm
PC406 0.1UF/16V
P_5VSUS_PHASE_S
PU400A RT8205CGQW
P_VSUS_REF_10
PR418 100KOhm /X
PR419 100KOhm
PR401 100KOhm
PQ420A UM6K1N
PQ420B UM6K1N
PQ410 2N7002
32,34 VSUS_ON
PR400 1MOHM
S5/S3/S0
P_5VSUS_ENTRIP_10
P_5VSUS_FB_10
P_VSUS_REF_10
P_VSUS_TONSEL_10
P_3VSUS_FB_10
P_3VSUS_ENTRIP_10
PR405 100KOhm
PR402 200KOhm
PR404 100KOhm /X
PR426 200KOhm
PC420 0.22UF/10V
ENTRIP1
FB1
REF
TONSEL
FB2
ENTRIP2
GND2
VO1
PGOOD
BOOT1
UGATE1
PHASE1
LGATE1
SECFB
VREG5
VIN
GND1
SKIPSEL
EN
P_VSUS_SECFB_10
P_VSUS_SKIPSEL_10
P_VA_EN_10
PR416 100KOhm /X
PR420 100KOhm /X
PD410 BAT54CW
PC408 10UF/6.3V
PC416 10UF/6.3V
Low Limit
SKIPSEL:
+5V => Ultrasonic mode
REF => DEM mode
GND => PWM mode
PQ400 SI7326DN_T1_E3
PC409 10UF/16V
PC410 10UF/16V
PCE420 5.6UF/25V /X
AC_BAT_SYS
+3VSUS / 3A
PQ401 SI7326DN_T1_E3
PD401 FS1J4TP
PC423 470PF/50V
PR423 1Ohm
PJP420 SHORTPIN
PJP408 SHORTPIN
PL401 2.2UH
PCE400 100UF/6.3V
+3VSUSO
+3VSUS
P_3VSUS_UG_25
P_3VSUS_PHASE_S
P_3VSUS_LG_25
PR409 54.9KOhm
PR410 200KOhm
2V
2VP_5VSUS_FB_10
P_3VSUS_FB_10
PR407 100KOhm
PQ421A UM6K1N
PC400 0.1UF/16V
PR411 10KOhm
PR412 10KOhm
14,32,43,45,46,47 PM_LEVELDOWN#
Hi : Vout = 3.3V
Low : Vout = 3.1V
PR413 5.49KOhm
PC404 220PF/50V
PR429 10KOhm /X
For MLCC support
P_3VSUS_VO_20
P_3VSUS_PHASE_JPFB_20
PC402 0.1UF/16V
PQ402 SI7326DN_T1_E3
PC411 10UF/16V
PC412 10UF/16V
+5VSUS / 3A
PD402 BAT54CW
PR421 0Ohm
PC407 0.1UF/16V
P_5VSUS_UG_25
P_5VSUS_PHASE_S
P_5VSUS_LG_25
P_5VSUS_PHASE_JPFB_20
P_5VSUS_VO_20
PQ403 SI7326DN_T1_E3
PD403 FS1J4TP
PC424 470PF/50V
PR424 1Ohm
PJP421 SHORTPIN
PJP406 SHORTPIN
PL403 4.7UH
PCE402 100UF/6.3V
+5VSUSO
+5VSUS
PR408 100KOhm
PQ421B UM6K1N
PC401 0.1UF/16V
PU400B RT8205CGQW
GND3
GND4
GND5
GND6
ENTRIP:
GND => Disable
OCP => (10uA x R) / 10 / Rdson
TONSEL:
+5V => 400KHz / 500KHz
REF => 300KHz / 375KHz
GND => 200KHz / 250KHz
For MLCC support
PR430 /X
10KOhm
PR414 14.3KOhm
PC405 220PF/50V
BOOST to 12V
+12VSUS
PC460 0.1UF/25V
PD460 BAT54SW
PC461 0.1UF/16V
PD461 BAT54SW
PC462 0.1UF/16V
PC463 0.1UF/25V
PR460 200KOhm
PR461 39KOHM
PC430 0.01UF/16V /X
PC403 0.1UF/16V
+3VA / 100mA
PR6106 0Ohm /X
+3VAO
+3VA
<Variant Name>
ASUSTeK COMPUTER INC
Title: +3VSUS & +5VSUS & +3VA
Engineer: N/A
Size A3
Project Name 1002
Rev 1.3G
Date: Friday, October 03, 2008
Sheet 44 of 50
http://hobi-elektronika.net



+1.5V_SEL#	PM_LEVELDOWN#	CPU_LEVELDOWN	CPU_LEVELDOWN#	Voltage	Status
H	L	L	H	1.72V	Power Saving
H	H	L	H	1.82V	Normal
H	H	H	L	1.9V	Performance
H	L	H	L	1.782V	N/A
L	L	L	H	1.4V	Power Saving
L	H	L	H	1.5V	Normal
L	H	H	L	1.58V	Performance

http://hobi-elektronika.net

<Variant Name>

ASUSTek Computer INC.

Title : +1.8V & VTTDDR

Engineer: Joy_Zhou

Size	Project Name	Rev
A3	1002	1.3G

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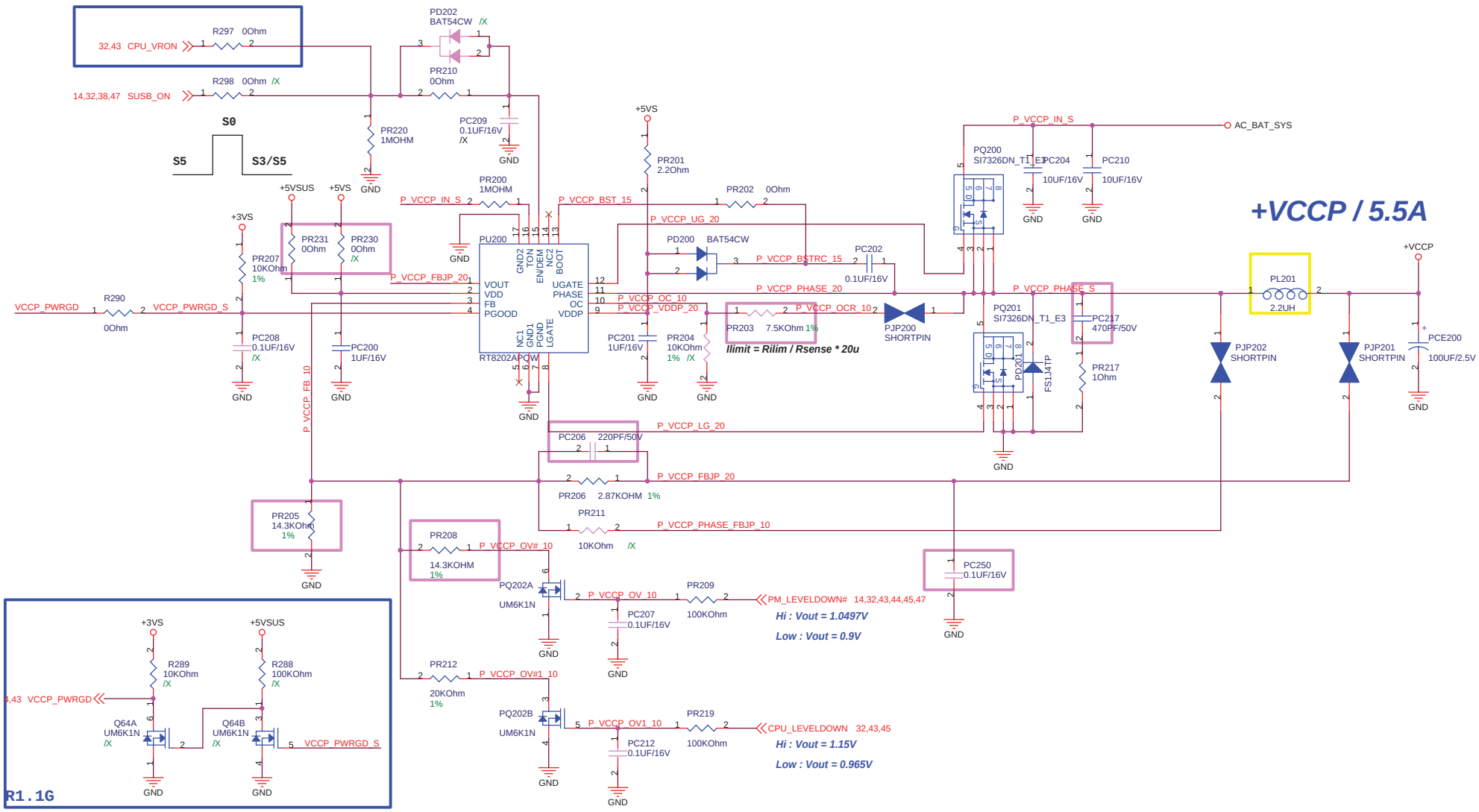
1.1G change Enable signal from CPU_VRON



To remove VCCP_PWRGD glitch

PM_LEVELDOWN#	CPU_LEVELDOWN	CPU_LEVELDOWN#	Voltage	Status
L	L	H	0.9V	Power Saving
H	L	H	1.048V	Normal
H	H	L	1.157V	Performance
L	H	L	1.072V	N/A

<Variant Name>

ASUSTek Computer INC.

Title : VCCP

Engineer: Joy_Zhou

Size	Project Name	Rev
A3	1002	1.3G

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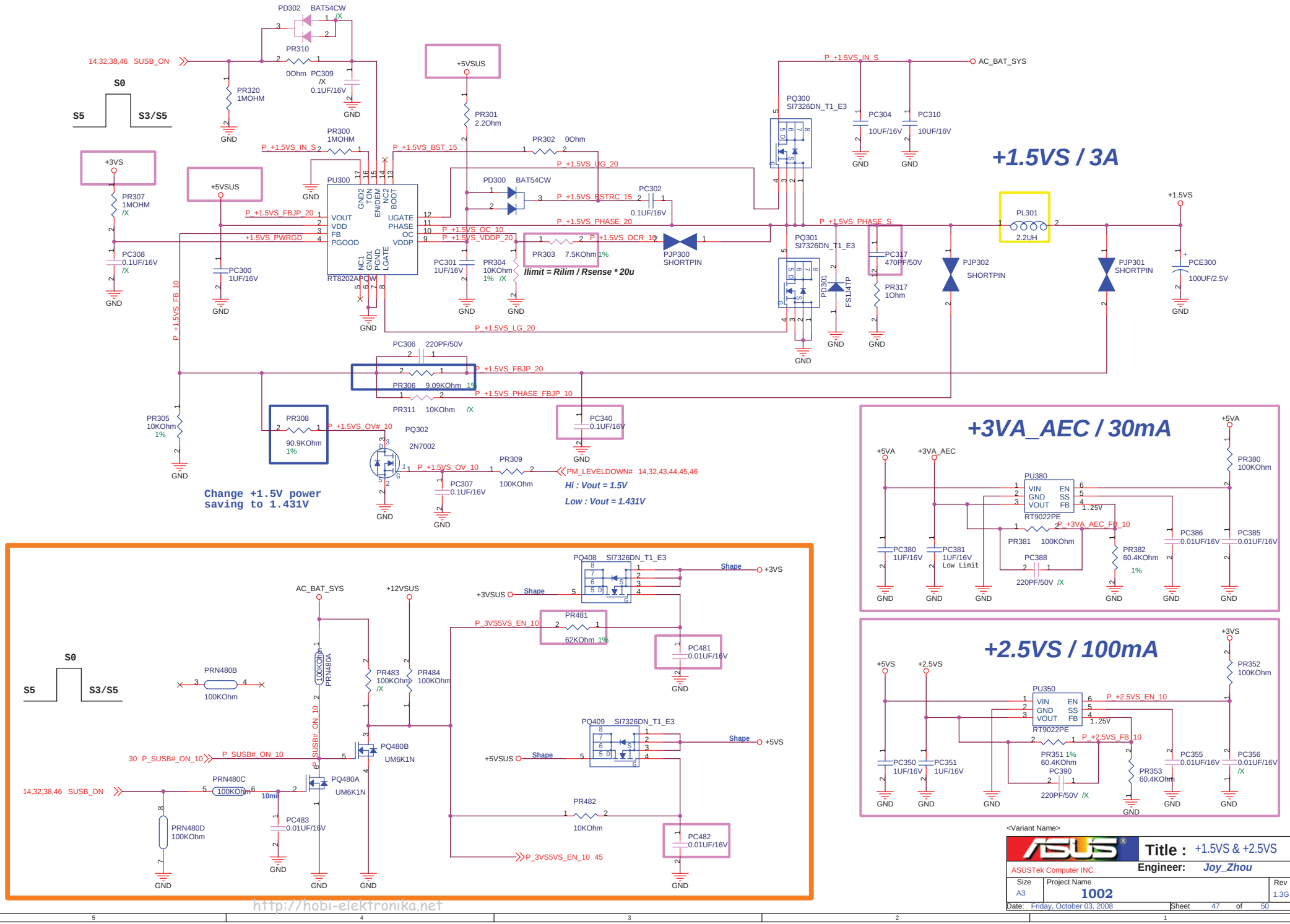
+1.5VS / 3A
+3VA_AEC / 30mA
+2.5VS / 100mA
S0
S5
S3/S5
14,32,38,46 SUSB_ON
AC_BAT_SYS
+5VSUS
+3VS
+1.5VS
+5VA
+3VA_AEC
+12VSUS
PU300
RT8202APQW
PU380
RT9022PE
PU350
PQ300 SI7326DN_T1_E3
PQ301 SI7326DN_T1_E3
PQ408 SI7326DN_T1_E3
PQ409 SI7326DN_T1_E3
PQ480A UM6K1N
PQ480B UM6K1N
PQ302 2N7002
PD300 BAT54CW
PD302 BAT54CW
PD301 FS1L4TP
PJP300 SHORTPIN
PJP301 SHORTPIN
PJP302 SHORTPIN
PL301 2.2UH
PCE300 100UF/2.5V
PR310 0Ohm
PR320 1MOHM
PR300 1MOHM
PR301 2.2Ohm
PR302 0Ohm
PR303 7.5KOhm 1%
PR304 10KOhm 1% /X
PR305 10KOhm 1%
PR306 9.09KOhm 1%
PR307 1MOHM /X
PR308 90.9KOhm 1%
PR309 100KOhm
PR311 10KOhm /X
PR317 10Ohm
PR380 100KOhm
PR381 100KOhm
PR382 60.4KOhm 1%
PR352 100KOhm
PR351 1% 60.4KOhm
PR353 60.4KOhm
PR481 62KOhm 1%
PR482 10KOhm
PR483 100KOhm /X
PR484 100KOhm
PRN480B 100KOhm
PRN480C 100KOhm
PRN480D 100KOhm
PC300 1UF/16V
PC301 1UF/16V
PC302 0.1UF/16V
PC304 10UF/16V
PC306 220PF/50V
PC307 0.1UF/16V
PC308 0.1UF/16V /X
PC309 0.1UF/16V /X
PC310 10UF/16V
PC317 470PF/50V
PC340 0.1UF/16V
PC380 1UF/16V
PC381 1UF/16V Low Limit
PC385 0.01UF/16V
PC386 0.01UF/16V
PC388 220PF/50V /X
PC390 220PF/50V /X
PC481 0.01UF/16V
PC482 0.01UF/16V
PC483 0.01UF/16V
PC350 1UF/16V
PC351 1UF/16V
PC355 0.01UF/16V
PC356 0.01UF/16V /X
P +1.5VS_IN_S
P +1.5VS_BST_15
P +1.5VS_UG_20
P +1.5VS_BSTRC_15
P +1.5VS_PHASE_20
P +1.5VS_PHASE_S
P +1.5VS_OC_10
P +1.5VS_VDDP_20
P +1.5VS_OCR_10
P +1.5VS_FBJP_20
+1.5VS_PWRGD
P +1.5VS_FB_10
P +1.5VS_LG_20
P +1.5VS_OV# 10
P +1.5VS_OV_10
PM_LEVELDOWN# 14,32,43,44,45,46
P +1.5VS_PHASE_FBJP_10
P_3VS5VS_EN_10
P_3VS5VS_EN_10 45
P_SUSB#_ON_10
30 P_SUSB#_ON_10
P +3VA_AEC_FB_10
P +2.5VS_EN_10
P +2.5VS_FB_10
Ilimit = Rilim / Rsense * 20u
Hi : Vout = 1.5V
Low : Vout = 1.431V
Change +1.5V power saving to 1.431V
GND
Shape
10mil
http://hobi-elektronika.net
<Variant Name>
Title : +1.5VS & +2.5VS
ASUSTek Computer INC.
Engineer: Joy_Zhou
Size A3
Project Name 1002
Rev 1.3G
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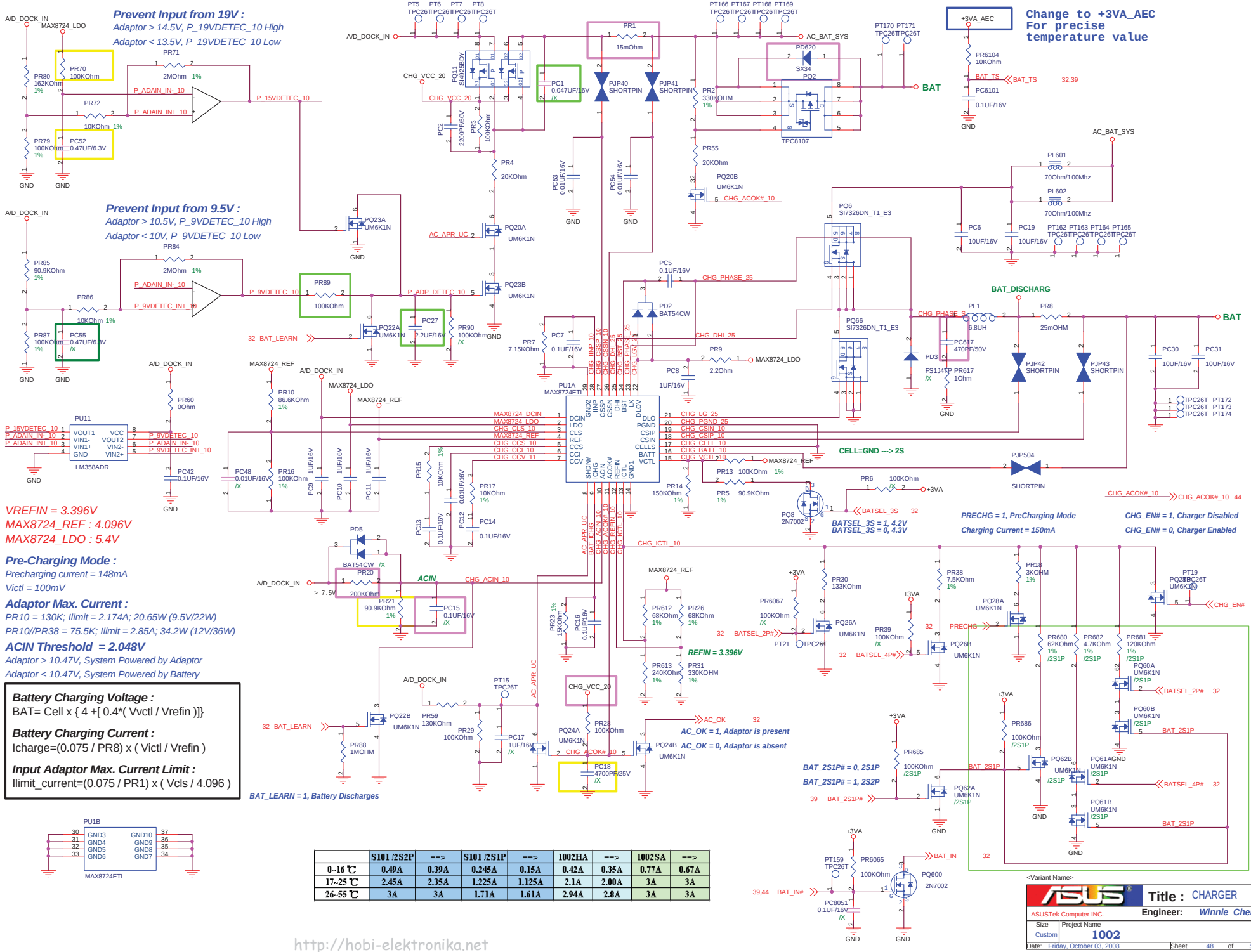

	S101 /2S2P	==>	S101 /2S1P	==>	1002HA	==>	1002SA	==>
0~16 ℃	0.49A	0.39A	0.245A	0.15A	0.42A	0.35A	0.77A	0.67A
17~25 ℃	2.45A	2.35A	1.225A	1.125A	2.1A	2.00A	3A	3A
26~55 ℃	3A	3A	1.71A	1.61A	2.94A	2.8A	3A	3A

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EC KB3310 GPIO SETTING

Pin	Pin Name	Signal Name	Type	Note
1	GPIO00/GA20	A20GATE	O	
2	GPIO01/KBRST#	RC_IN#	O	
6	GPIO04	HOTKEY_SW0#	I	Internal pull high
13	GPIO05/PCIRST#	PCI_RST#	I	
14	GPIO07	HOTKEY_SW1#	I	Internal Pull Up
15	GPIO08	EXTSMI#	OD	10K ohm Pull Up to +3VSU
16	GPIO0A	LID_EC#	I	Internal pull high
17	GPIO0B/ESB_CLK	NC	O	
18	GPIO0C/ESB_DAT	NC	O	
19	GPIO0D	HOTKEY_SW2#	I	Internal pull high
20	GPIO0E/SCI#	KBC_SCI#	OD	10K ohm Pull Up to +3VSUS
21	GPIO0F/PWM0	BL_PWM_DA	O	
23	GPIO10/PWM1	BATSEL_4P#	O	Battery charging current setting
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	O	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 configureation
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_PWRSAVE#	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/OD	4.7K pull high to +3VA_EC
78	GPIO45/SDA1	SMB0_DAT	I/OD	4.7K pull high to +3VA_EC
79	GPIO46/SCL2	SMB1_CLK	I/OD	10K pull high to +3V
80	GPIO47/SDA2	SMB1_DAT	I/OD	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/OD	10K pull high to +3V
88	GPIO4F/PSDAT3	TP_DAT	I/OD	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	SCRL_LED#	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	GPX0A10	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/OD	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_PCI_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	SPI_SO	I	
120	WR#/SPIDO	SPI_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	

<Variant Name>

ASUSTek Computer INC.

Title : EC Pin Define

Engineer: Satan He

Size	Project Name	Rev
A3	1002	1.3G

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<Variant Name>

ASUSTek Computer INC.	Title : History	
	Engineer: *Satan He*	
Size: A3	Project Name: 1002	Rev: 1.3G
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