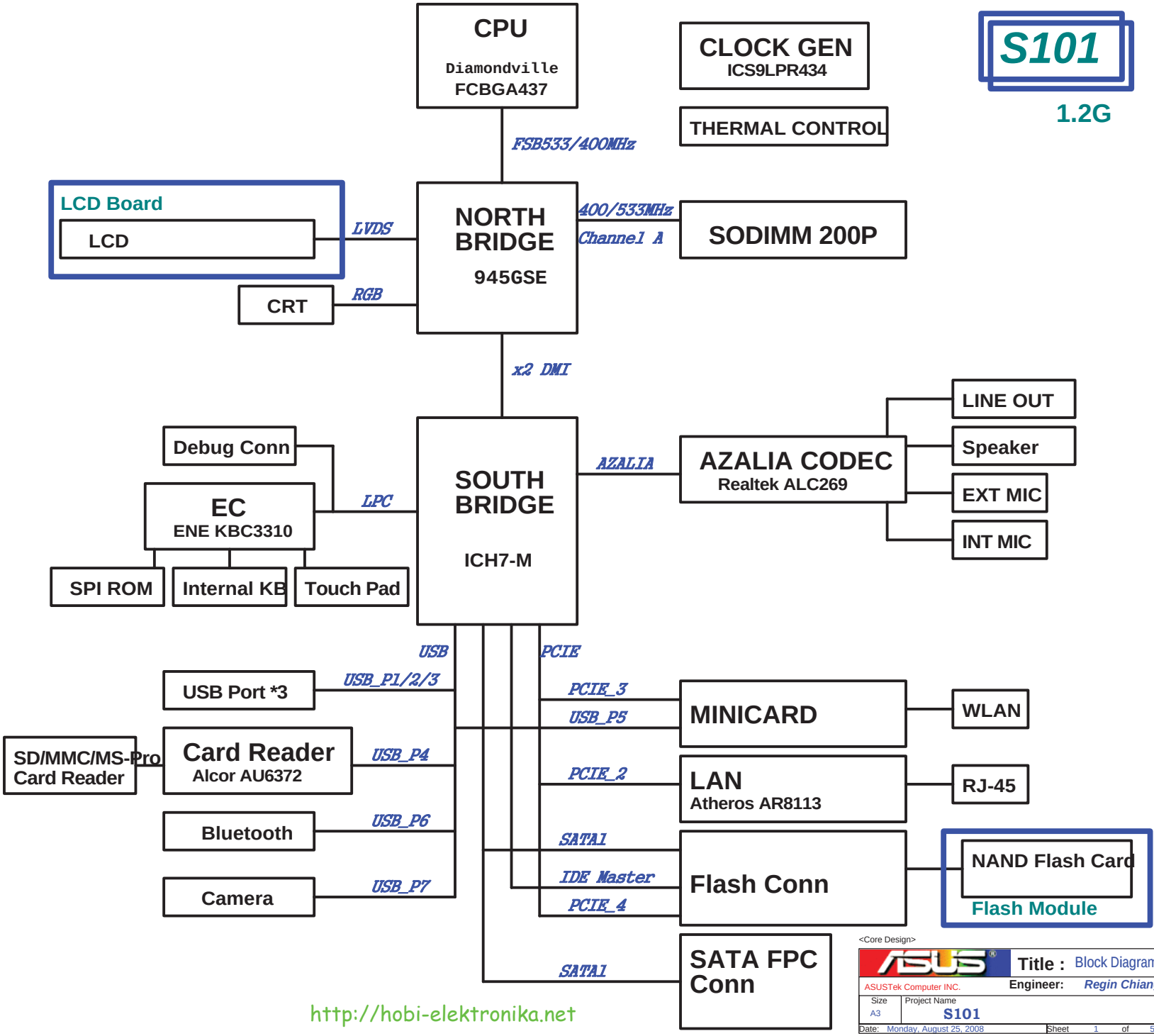


<Core Design>

ASUSTek Computer INC.	Title : Block Diagram	
	Engineer: Regin Chiang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 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	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

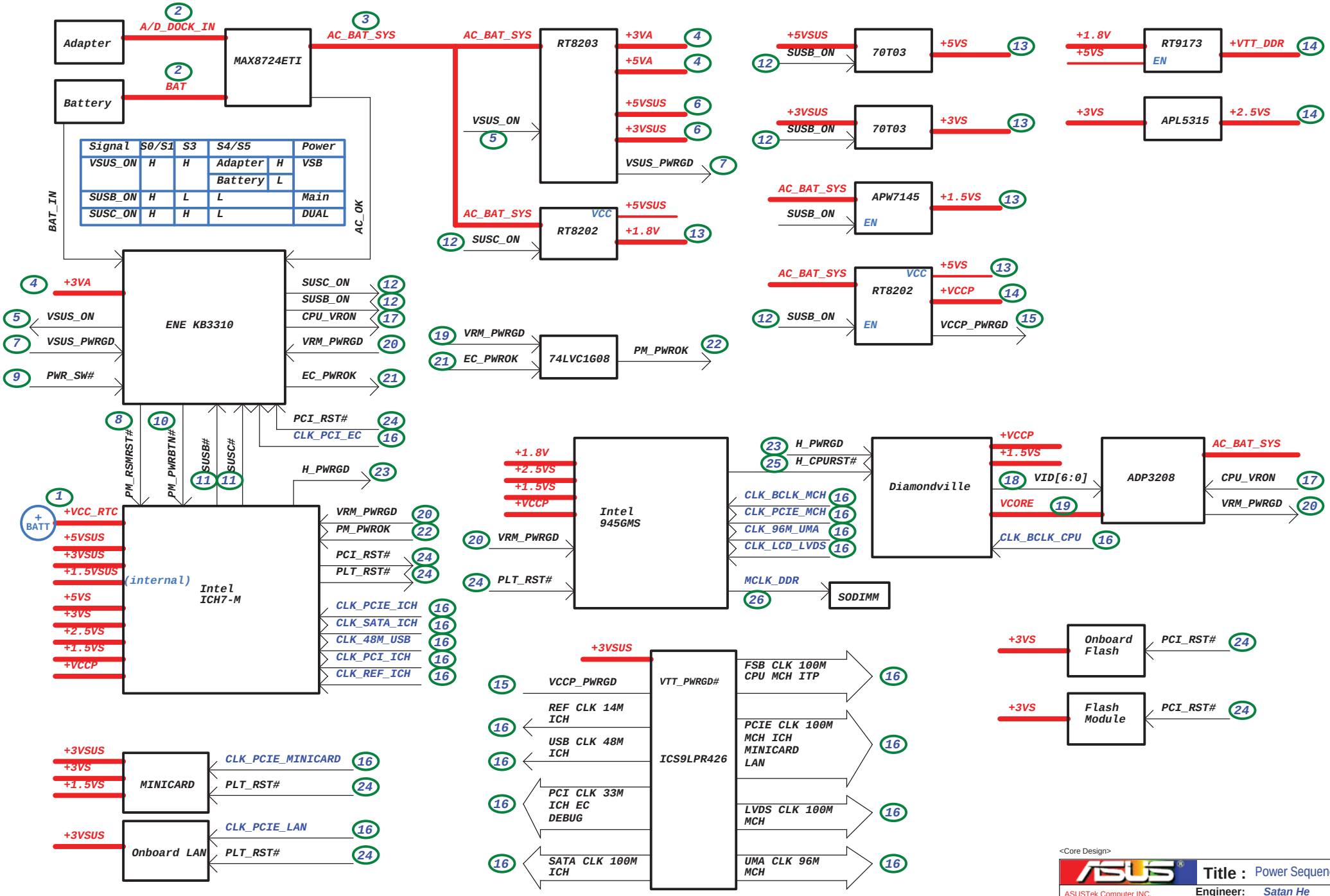
<Core Design>

Title : System Setting

ASUSTek Computer INC. Engineer: Satan_He

Size	Project Name	Rev
A3	S101	1.2G

Date: Monday, August 25, 2008 Sheet 2 of 50



<Core Design>

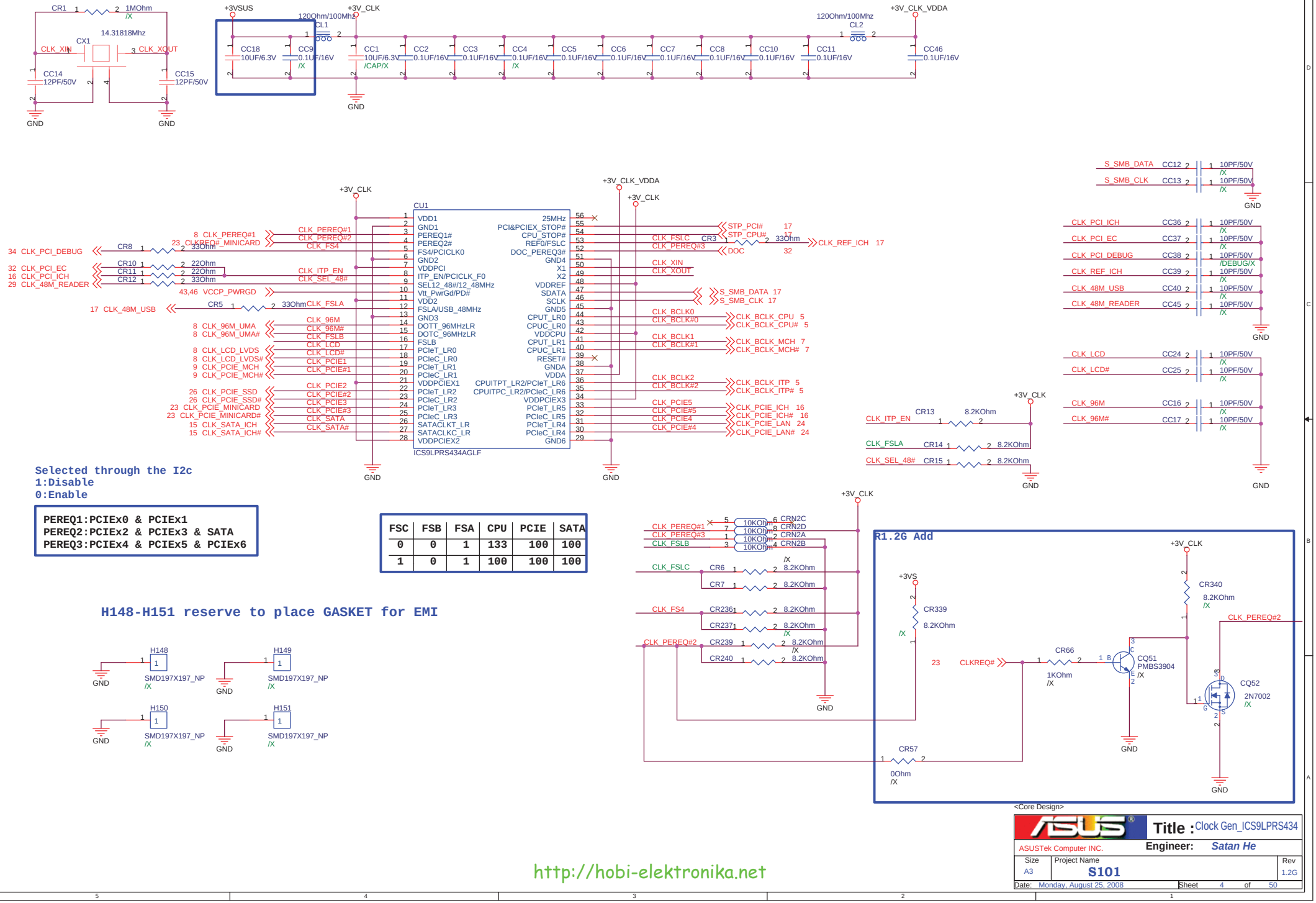
Title : Power Sequence

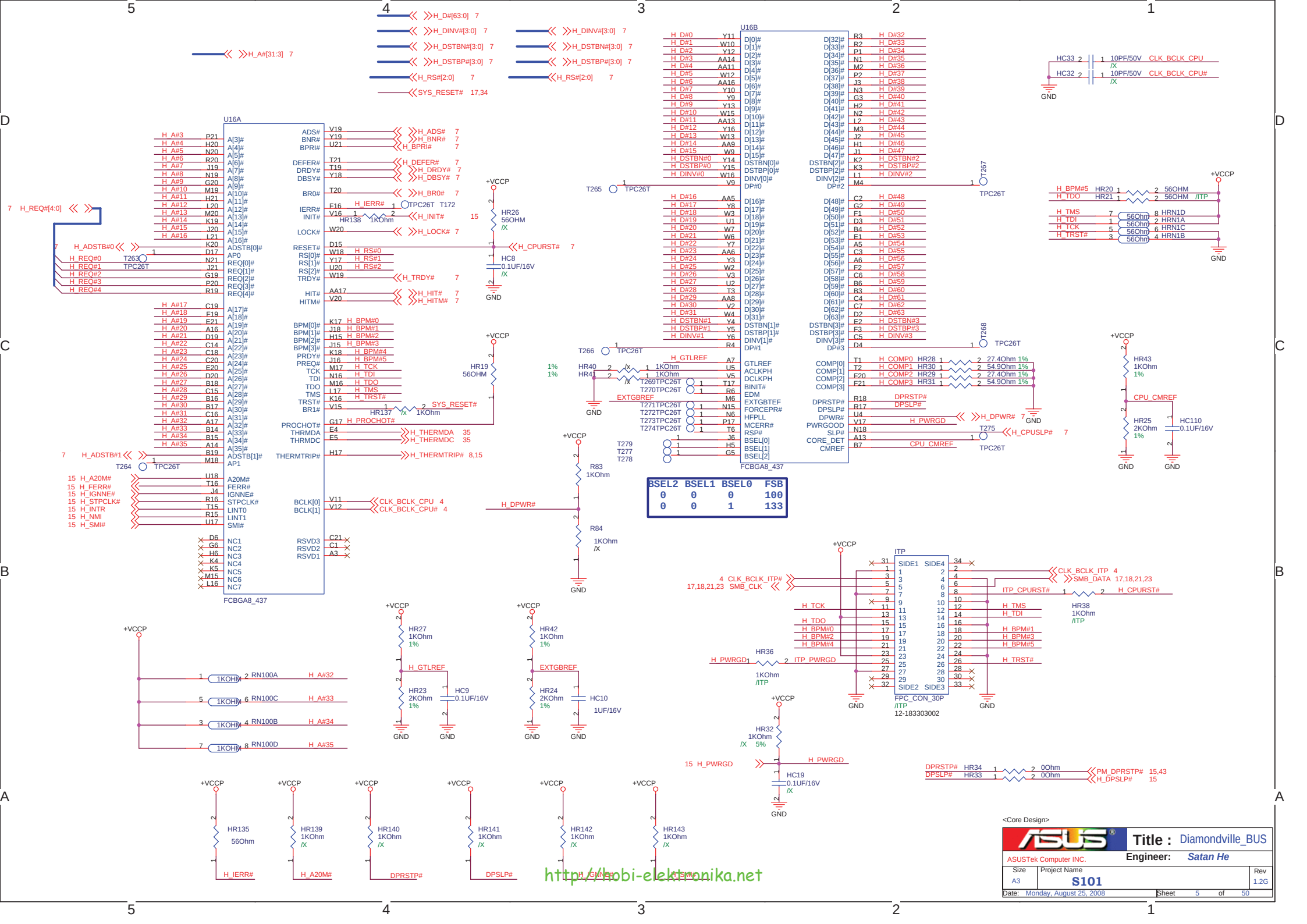
ASUSTek Computer INC.

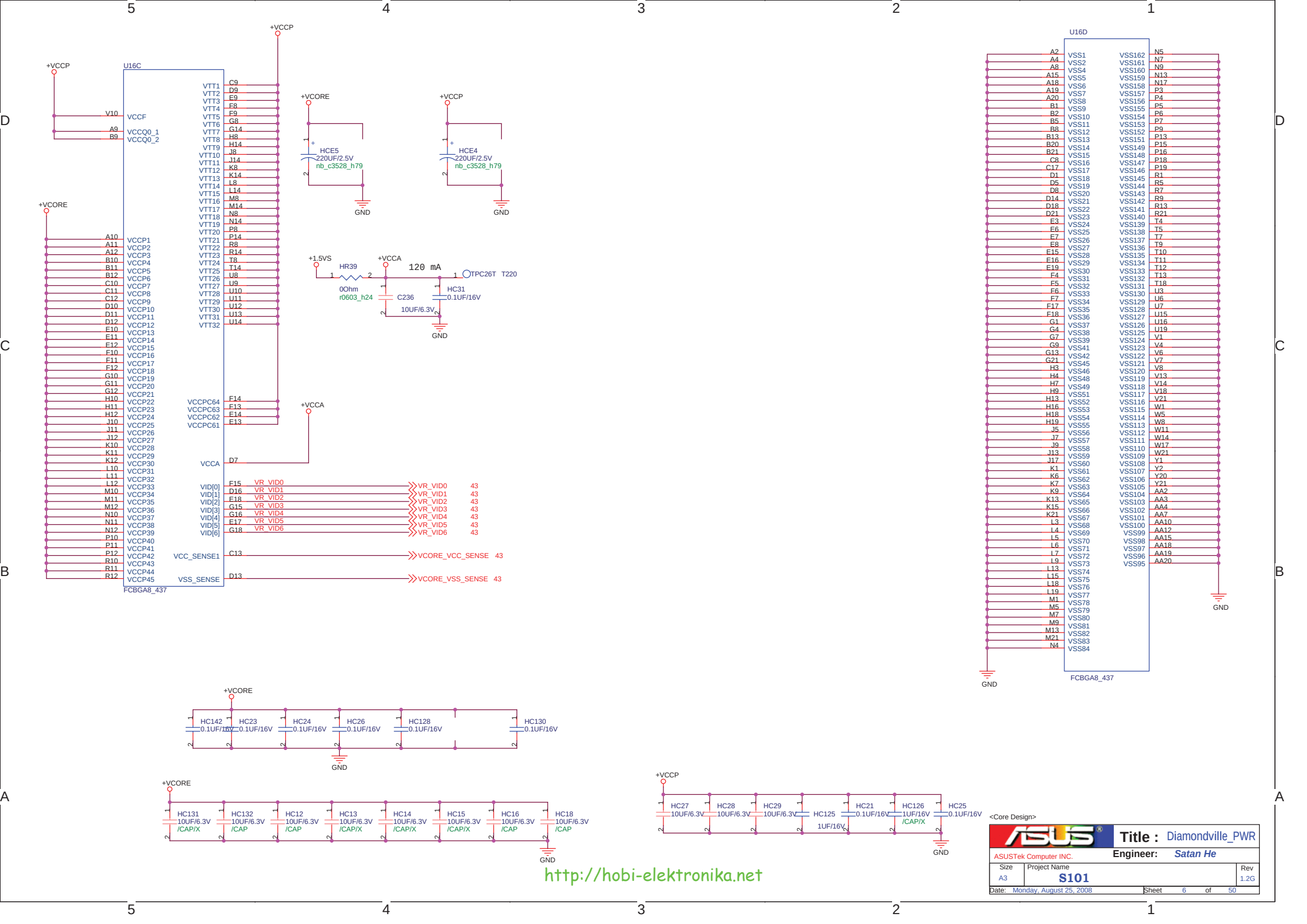
Engineer: Satan He

Size	Project Name	Rev
A3	S101	1.2G

Date: Monday, August 25, 2008 Sheet 3 of 50



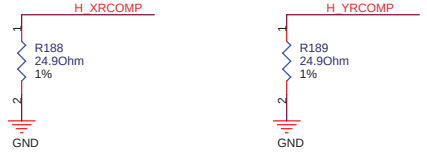

H_A#[31:3] 7
H_D#[63:0] 7
H_DINV#[3:0] 7
H_DSTBN#[3:0] 7
H_DSTBP#[3:0] 7
H_RS#[2:0] 7
SYS_RESET# 17,34
U16A
FCBGA8_437
U16B
FCBGA8_437
H_REQ#[4:0] 7
H_ADSTB#0 7
H_ADSTB#1 7
H_A20M# 15
H_FERR# 15
H_IGNNE# 15
H_STPCLK# 15
H_INTR 15
H_NMI 15
H_SMI# 15
H_ADS# 7
H_BNR# 7
H_BPRI# 7
H_DEFER# 7
H_DRDY# 7
H_DBSY# 7
H_BR0# 7
H_IERR#
H_INIT# 15
H_LOCK# 7
H_CPURST# 7
H_RS#0
H_RS#1
H_RS#2
H_TRDY# 7
H_HIT# 7
H_HITM# 7
H_BPM#0
H_BPM#1
H_BPM#2
H_BPM#3
H_BPM#4
H_BPM#5
H_TCK
H_TDI
H_TDO
H_TMS
H_TRST#
SYS_RESET#
H_PROCHOT#
H_THERMDA 35
H_THERMDC 35
H_THERMTRIP# 8,15
CLK_BCLK_CPU 4
CLK_BCLK_CPU# 4
T263 TPC26T
T264 TPC26T
T265 TPC26T
T266 TPC26T
T267 TPC26T
T268 TPC26T
T275 TPC26T
T269TPC26T
T270TPC26T
T271TPC26T
T272TPC26T
T273TPC26T
T274TPC26T
T279
T277
T278
T172 TPC26T
HR138 1KOhm
HR137 1KOhm /X
HR26 56OHM /X
HC8 0.1UF/16V /X
HR19 56OHM
HR40 1KOhm /X
HR41 1KOhm /X
GTLREF
EXTGBREF
HR83 1KOhm
HR84 1KOhm /X
H_DPWR#
BSEL2 BSEL1 BSEL0 FSB
0 0 0 100
0 0 1 133
HC33 10PF/50V CLK_BCLK_CPU /X
HC32 10PF/50V CLK_BCLK_CPU# /X
H_BPM#5 H_TDO H_TMS H_TDI H_TCK H_TRST#
HR20 HR21 56OHM /ITP
HRN1D HRN1A HRN1C HRN1B 56Ohm
HR43 1KOhm 1%
CPU_CMREF
HR25 2KOhm 1%
HC110 0.1UF/16V
H_COMP0 HR28 27.4Ohm 1%
H_COMP1 HR30 54.9Ohm 1%
H_COMP2 HR29 27.4Ohm 1%
H_COMP3 HR31 54.9Ohm 1%
DPRSTP#
DPSLP#
H_PWRGD
H_DPWR# 7
H_CPUSLP# 7
CPU_CMREF
RN100A H_A#32
RN100C H_A#33
RN100B H_A#34
RN100D H_A#35
HR27 1KOhm 1%
HR23 2KOhm 1%
HC9 0.1UF/16V
HR42 1KOhm 1%
HR24 2KOhm 1%
HC10 1UF/16V
ITP
FPC_CON_30P /ITP 12-183303002
4 CLK_BCLK_ITP#
17,18,21,23 SMB_CLK
CLK_BCLK_ITP 4
SMB_DATA 17,18,21,23
ITP_CPURST#
H_CPURST#
HR38 1KOhm /ITP
HR36 1KOhm /ITP
ITP_PWRGD
HR32 1KOhm /X 5%
HC19 0.1UF/16V /X
15 H_PWRGD
DPRSTP# HR34 0Ohm
DPSLP# HR33 0Ohm
PM_DPRSTP# 15,43
H_DPSLP# 15
HR135 56Ohm
HR139 1KOhm /X
HR140 1KOhm /X
HR141 1KOhm /X
HR142 1KOhm /X
HR143 1KOhm /X
H_IERR#
H_A20M#
DPRSTP#
DPSLP#
+VCCP
GND
<Core Design>
Title : Diamondville_BUS
ASUSTek Computer INC.
Engineer: Satan He
Size A3
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 5 of 50
http://hobi-elektronika.net


U16C
FCBGA8_437
+VCCP
+VCORE
+VCCA
+1.5VS
GND
HCE5
220UF/2.5V
nb_c3528_h79
HCE4
HR39
0Ohm
r0603_h24
C236
10UF/6.3V
HC31
0.1UF/16V
120 mA
TPC26T
T220
VCCF
VCCQ0_1
VCCQ0_2
VCCP1
VCCP2
VCCP3
VCCP4
VCCP5
VCCP6
VCCP7
VCCP8
VCCP9
VCCP10
VCCP11
VCCP12
VCCP13
VCCP14
VCCP15
VCCP16
VCCP17
VCCP18
VCCP19
VCCP20
VCCP21
VCCP22
VCCP23
VCCP24
VCCP25
VCCP26
VCCP27
VCCP28
VCCP29
VCCP30
VCCP31
VCCP32
VCCP33
VCCP34
VCCP35
VCCP36
VCCP37
VCCP38
VCCP39
VCCP40
VCCP41
VCCP42
VCCP43
VCCP44
VCCP45
VTT1
VTT2
VTT3
VTT4
VTT5
VTT6
VTT7
VTT8
VTT9
VTT10
VTT11
VTT12
VTT13
VTT14
VTT15
VTT16
VTT17
VTT18
VTT19
VTT20
VTT21
VTT22
VTT23
VTT24
VTT25
VTT26
VTT27
VTT28
VTT29
VTT30
VTT31
VTT32
VCCPC64
VCCPC63
VCCPC62
VCCPC61
VCCA
VID[0]
VID[1]
VID[2]
VID[3]
VID[4]
VID[5]
VID[6]
VR_VID0
VR_VID1
VR_VID2
VR_VID3
VR_VID4
VR_VID5
VR_VID6
VCC_SENSE1
VSS_SENSE
VCORE_VCC_SENSE
VCORE_VSS_SENSE
U16D
FCBGA8_437
HC142
HC23
HC24
HC26
HC128
HC130
0.1UF/16V
HC131
HC132
HC12
HC13
HC14
HC15
HC16
HC18
10UF/6.3V
/CAP/X
/CAP
HC27
HC28
HC29
HC125
1UF/16V
HC21
HC126
/CAP/X
HC25
<Core Design>
Title : Diamondville_PWR
ASUSTek Computer INC.
Engineer: Satan He
Size A3
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 6 of 50
http://hobi-elektronika.net

Power : +VCCP

RCOMP

For Calibrating the FSB I/O Buffer

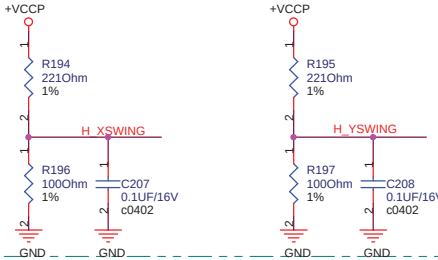


SCOMP

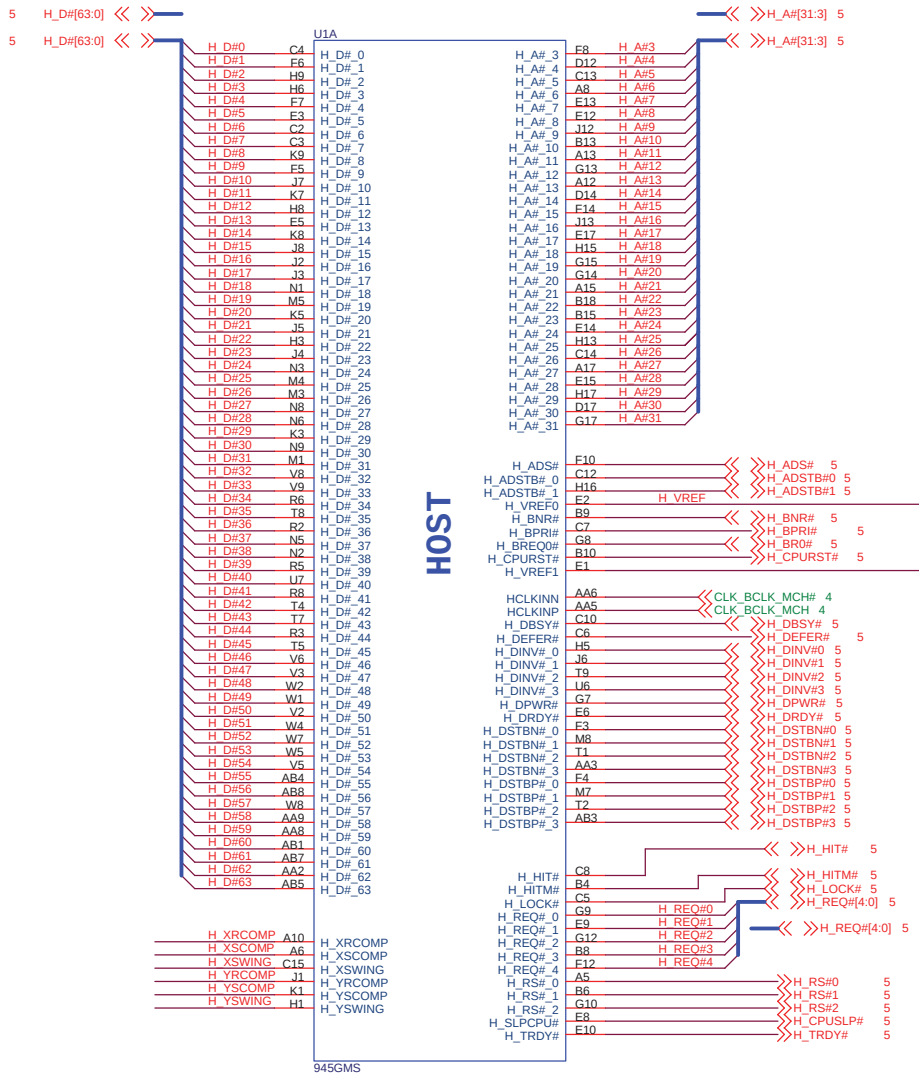
For Slew Rate Compenssation on the FSB

Voltage Swing

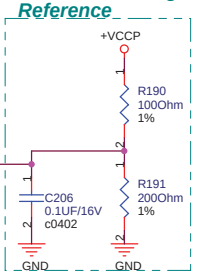
For Providing a Reference Voltage to The FSB RCOMP circuits



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



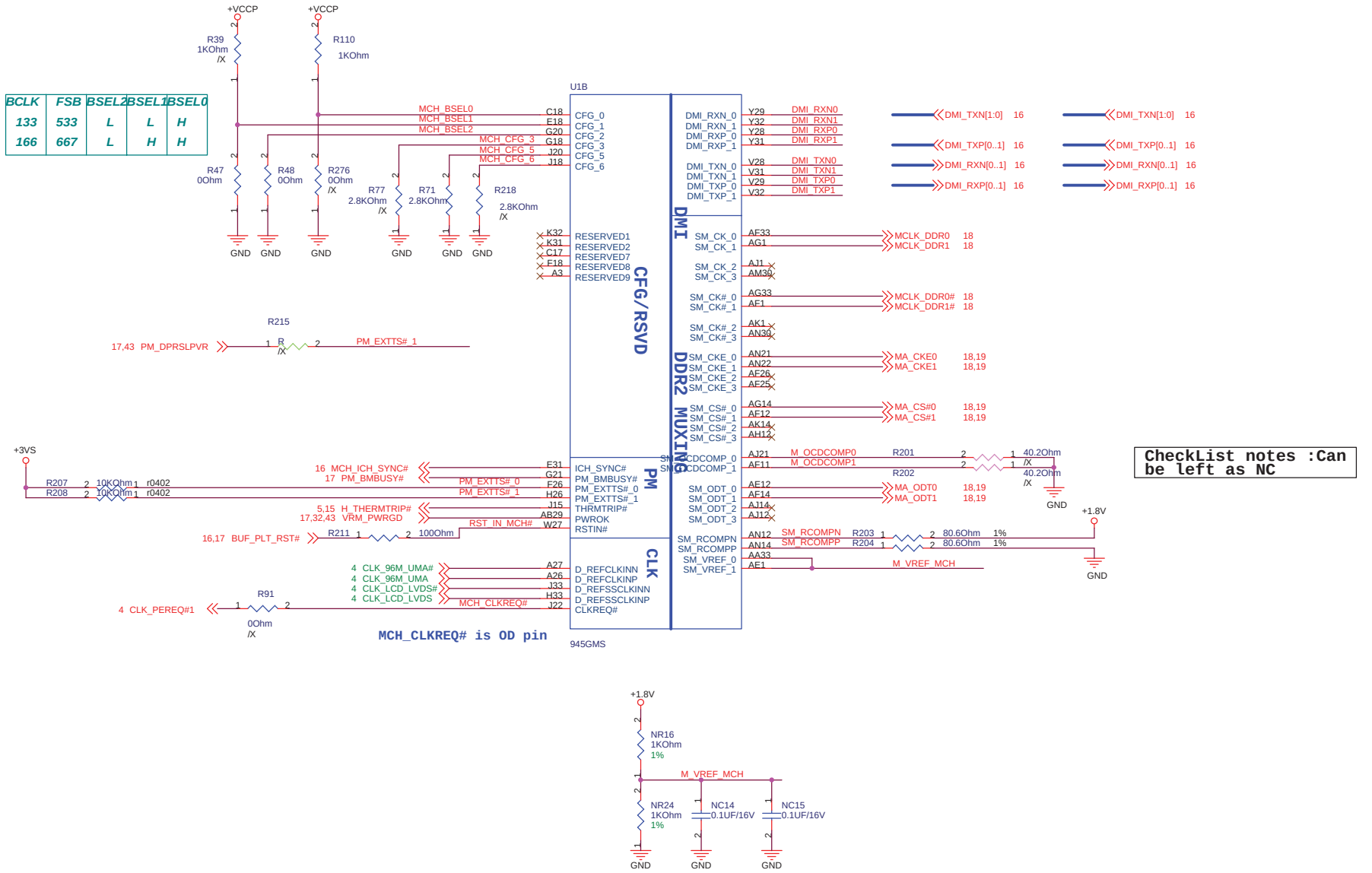
AGTL+ I/O Voltage Reference

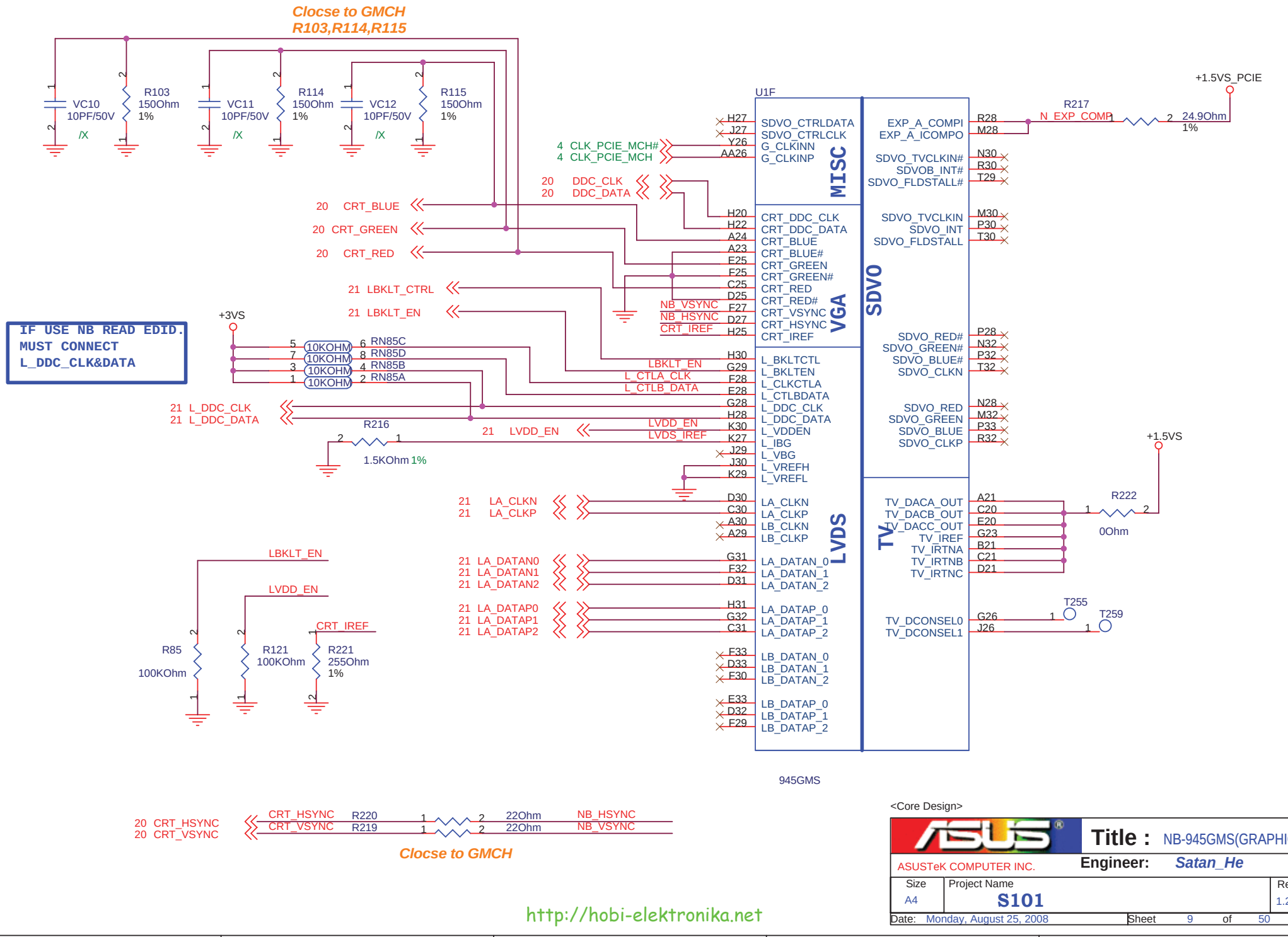


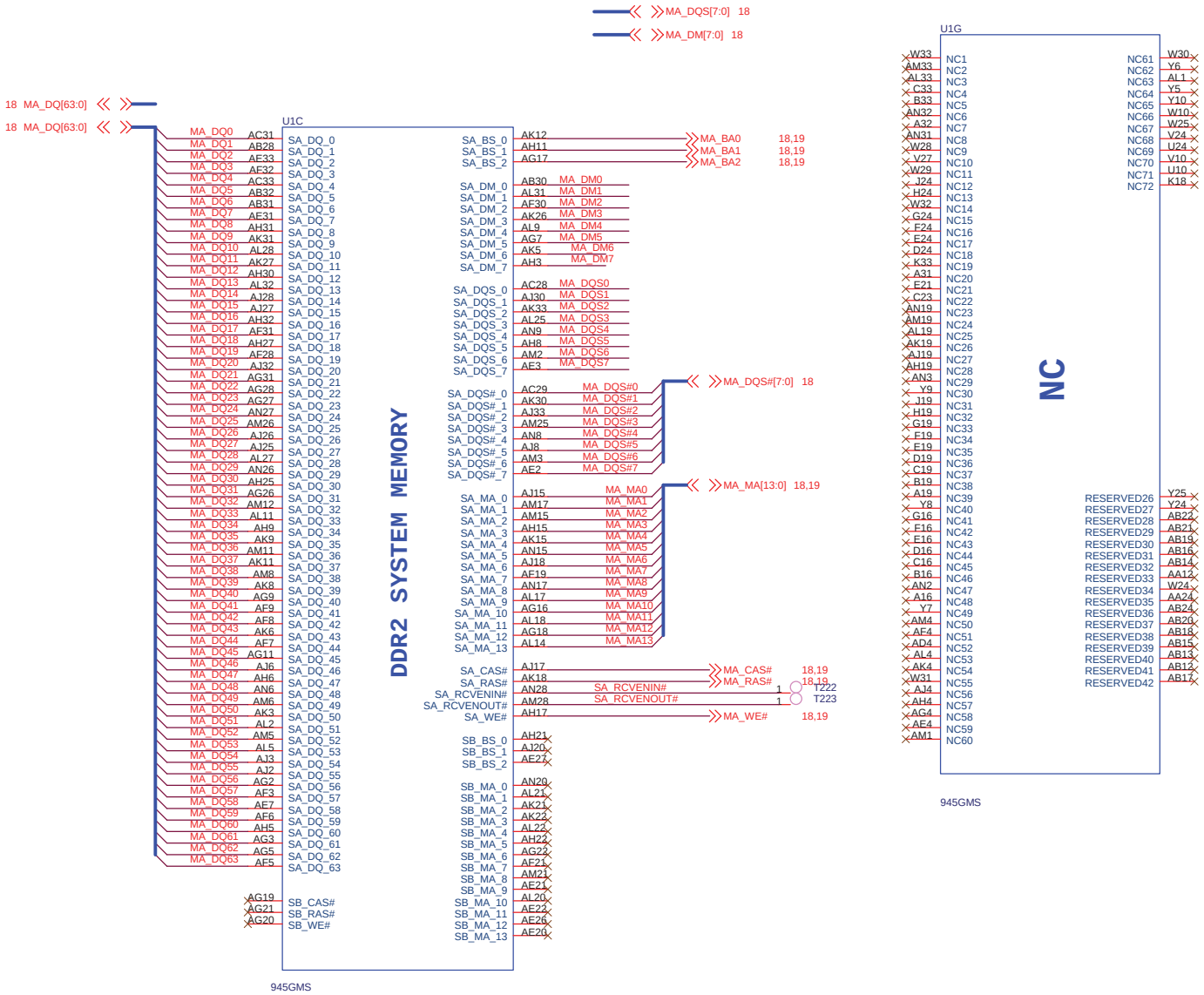
Layout Note:
0.1uF should be placed 100mils or less from GMCH pin.

<Core Design>

ASUSTeK COMPUTER INC.	Title : NB-945GMS(HOST)	
	Engineer: Satan He	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 7 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
NB_VSYNC
NB_HSYNC
CRT_IREF
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
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
+1.5VS_PCIE
R217
N_EXP_COMP
24.9Ohm
1%
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
LVDD_EN
LVDS_IREF
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
LVDS
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
TV
TV_DACA_OUT
TV_DACB_OUT
TV_DACC_OUT
TV_IREF
TV_IRTNA
TV_IRTNB
TV_IRTNC
TV_DCONSEL0
TV_DCONSEL1
R222
0Ohm
+1.5VS
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
<Core Design>
Title : NB-945GMS(GRAPHIC)
ASUSTeK COMPUTER INC.
Engineer: Satan_He
Size A4
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 9 of 50
http://hobi-elektronika.net



<Core Design>

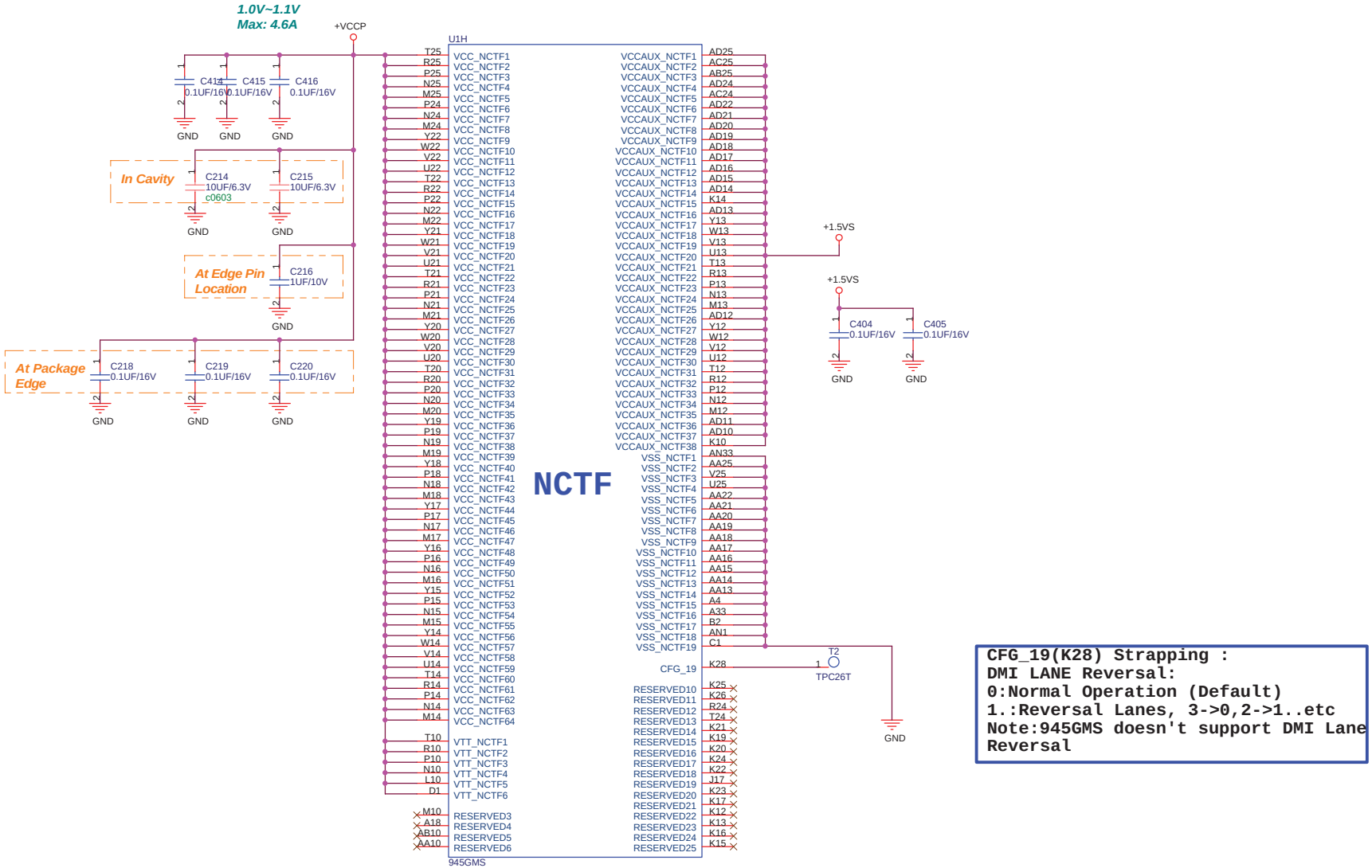
ASUSTeK COMPUTER INC.

Title : NB-945GMS(DDR2)

Engineer: Satan He

Size	Project Name	Rev
A3	S101	1.2G

Date: Monday, August 25, 2008 Sheet 10 of 50



<Core Design>

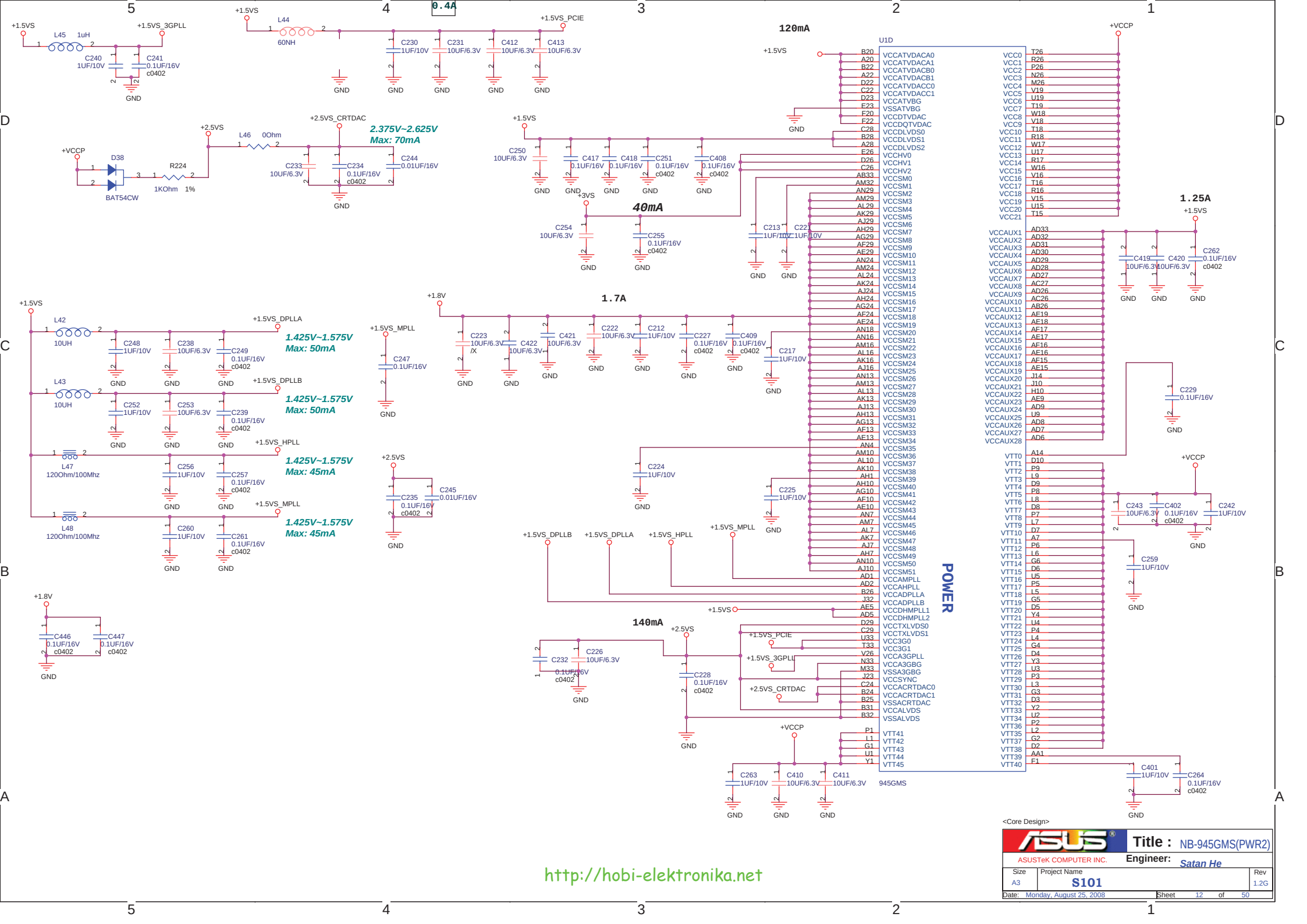
ASUSTeK COMPUTER INC.

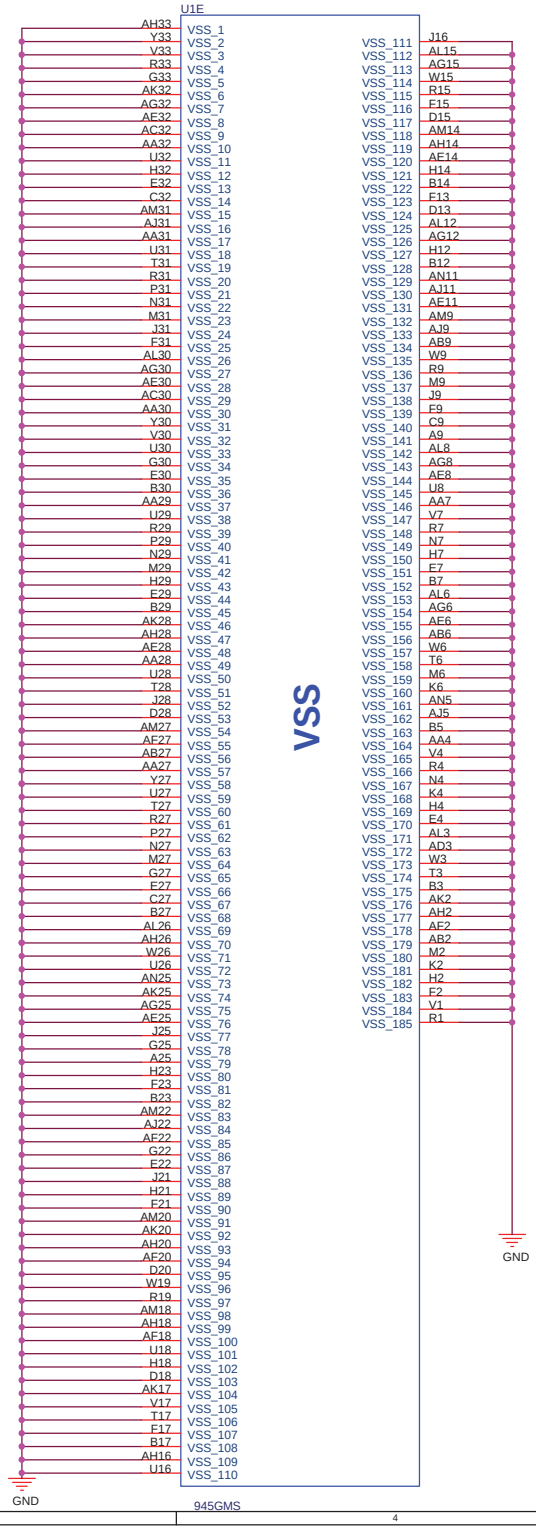
Title : NB-945GMs(PWR)

Engineer: Satan_He

Size	Project Name	Rev
A3	S101	1.2G

Date: Monday, August 25, 2008 Sheet 11 of 50


+1.5VS
L45 1uH
+1.5VS_3GPLL
C240 1UF/10V
C241 0.1UF/16V c0402
GND
0.4A
+1.5VS
L44
60NH
+1.5VS_PCIE
C230 1UF/10V
C231 10UF/6.3V
C412 10UF/6.3V
C413 10UF/6.3V
+2.5VS
+2.5VS_CRTDAC
2.375V~2.625V
Max: 70mA
+VCCP
D38
BAT54CW
R224
1KOhm 1%
L46 0Ohm
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
+VCCP
1.25A
C419 10UF/6.3V
C420 10UF/6.3V
C262 0.1UF/16V c0402
+1.5VS
L42 10UH
+1.5VS_DPLLA
1.425V~1.575V
Max: 50mA
C248 1UF/10V
C238 10UF/6.3V
C249 0.1UF/16V c0402
L43 10UH
+1.5VS_DPLLB
1.425V~1.575V
Max: 50mA
C252 1UF/10V
C253 10UF/6.3V
C239 0.1UF/16V c0402
L47 120Ohm/100Mhz
+1.5VS_HPLL
1.425V~1.575V
Max: 45mA
C256 1UF/10V
C257 0.1UF/16V c0402
L48 120Ohm/100Mhz
+1.5VS_MPLL
1.425V~1.575V
Max: 45mA
C260 1UF/10V
C261 0.1UF/16V c0402
+1.5VS_MPLL
C247 0.1UF/16V
+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
+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
C228 0.1UF/16V c0402
+1.5VS_PCIE
+1.5VS_3GPLL
+2.5VS_CRTDAC
+1.5VS
+VCCP
C263 1UF/10V
C410 10UF/6.3V
C411 10UF/6.3V
945GMS
POWER
+VCCP
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
<Core Design>
ASUSTeK COMPUTER INC.
Title : NB-945GMS(PWR2)
Engineer: Satan He
Size A3
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 12 of 50



<Core Design>

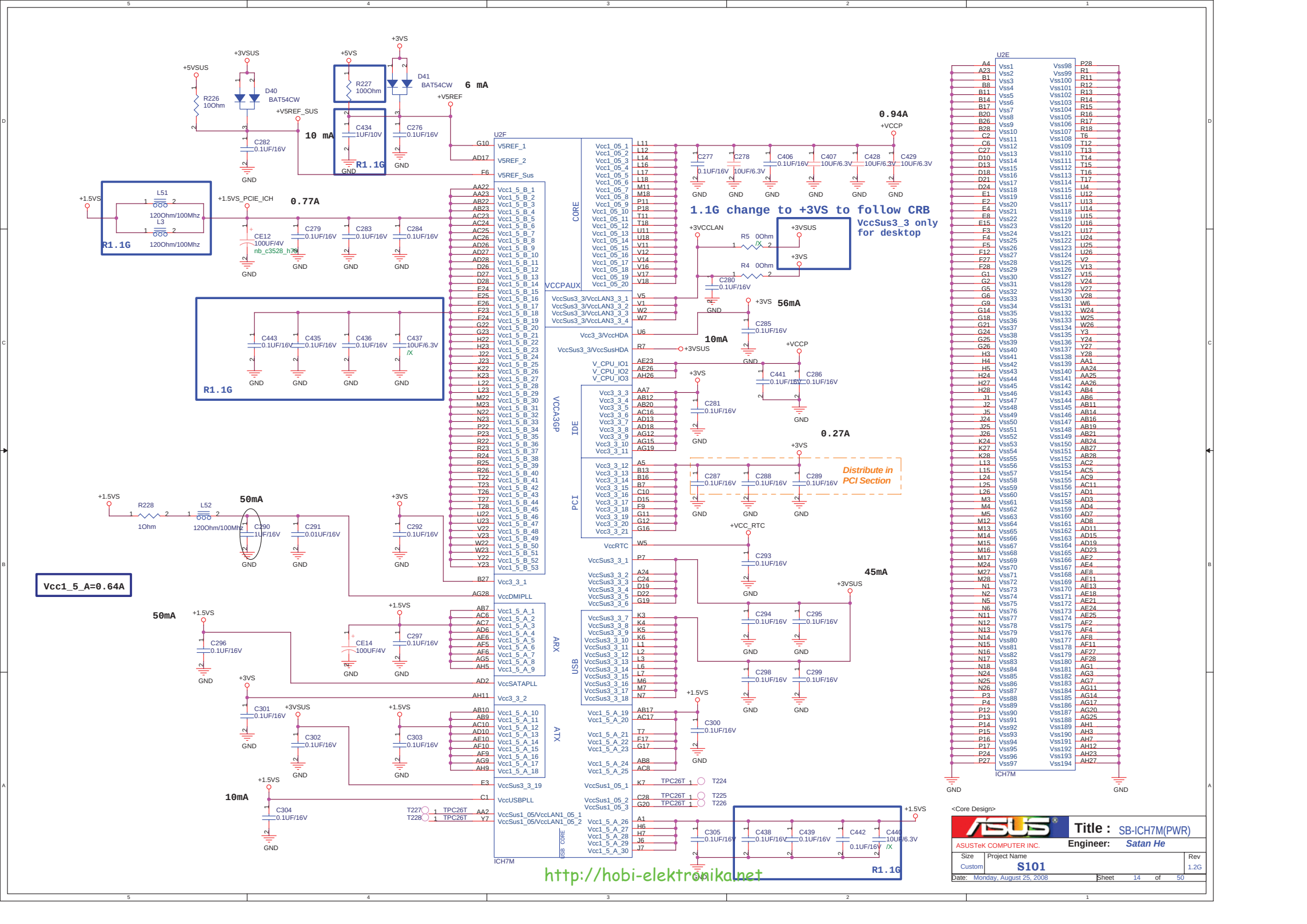
ASUSTeK COMPUTER INC.

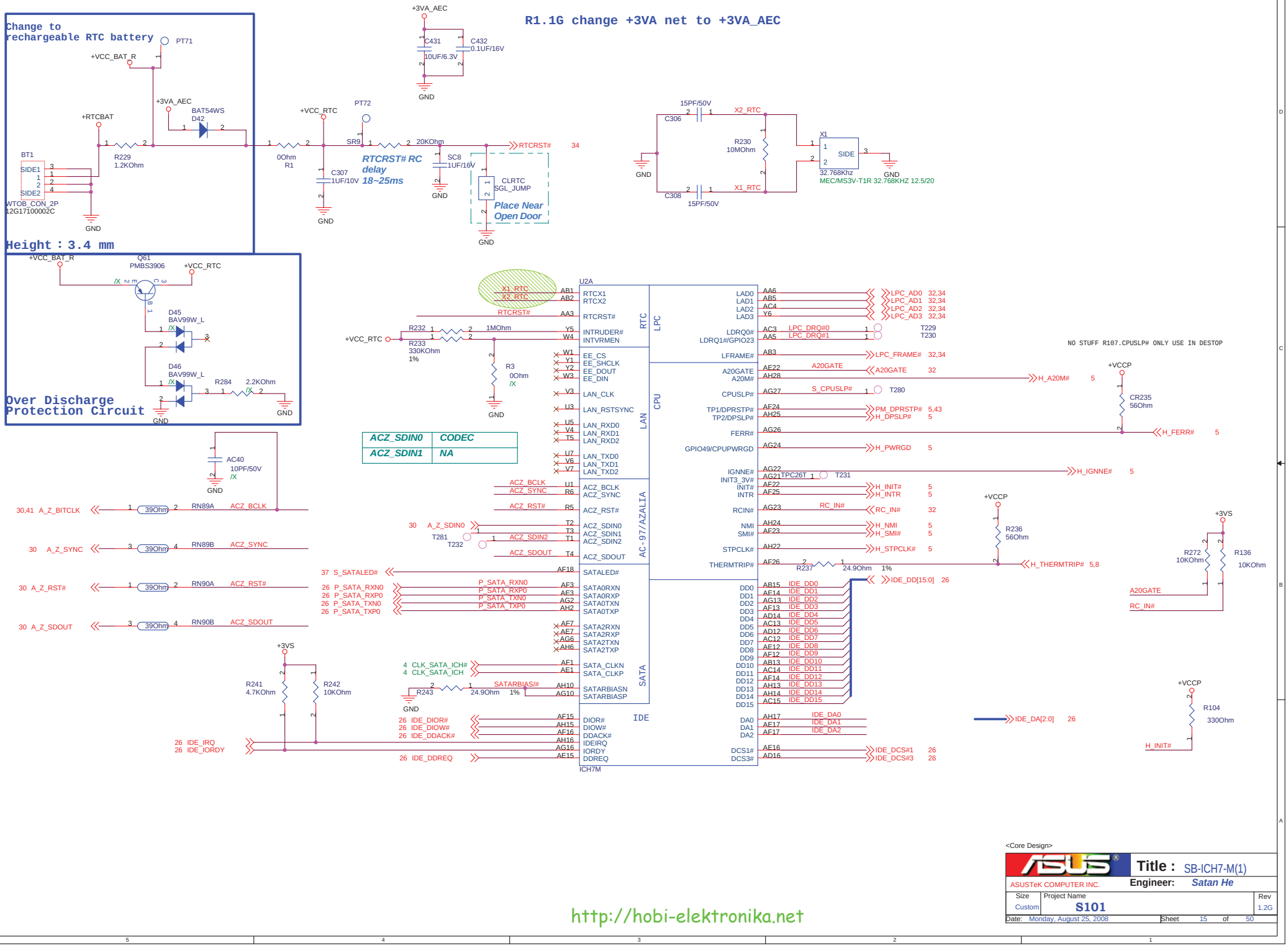
Title : NB-945PMS(GND)

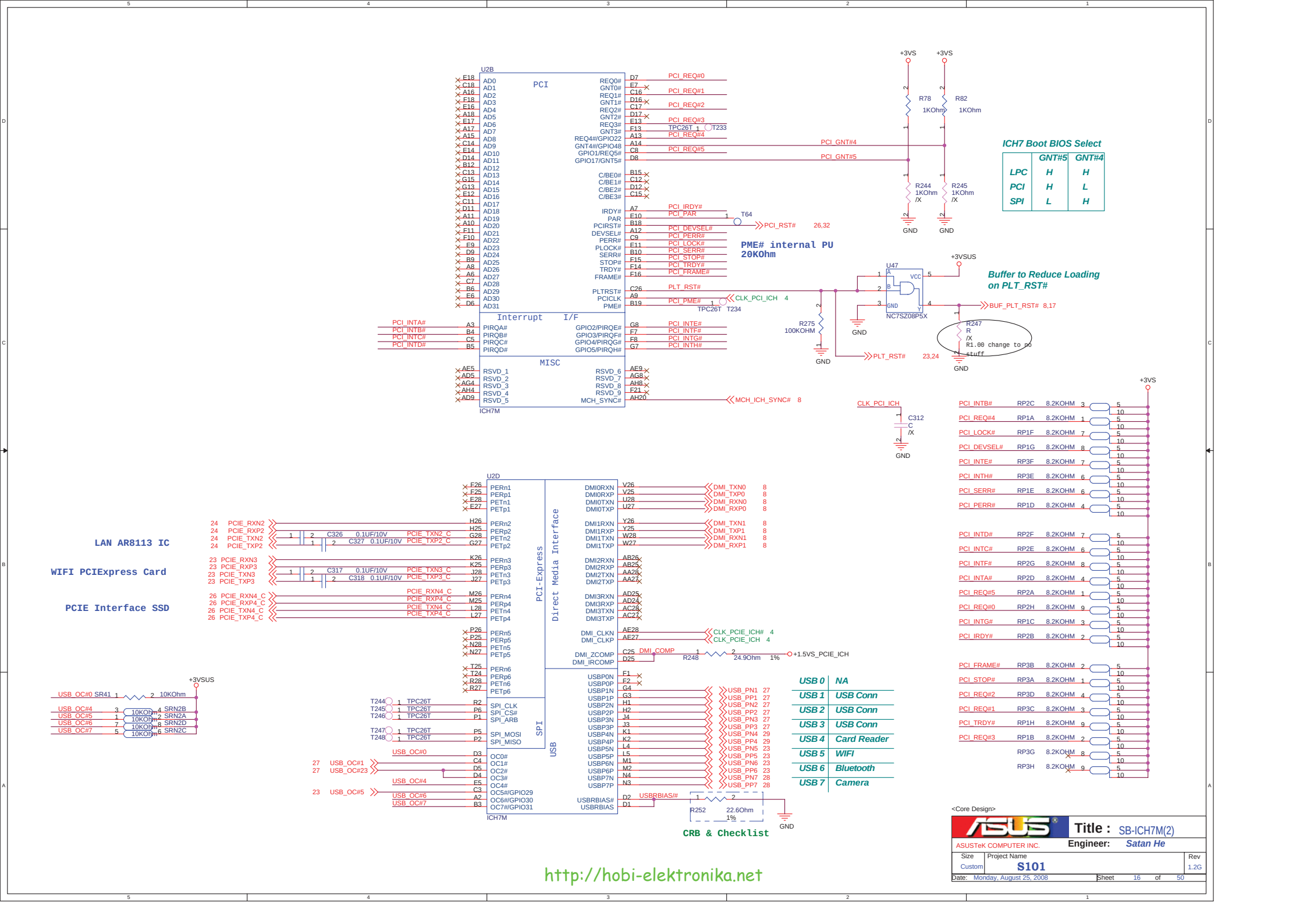
Engineer: Satan_He

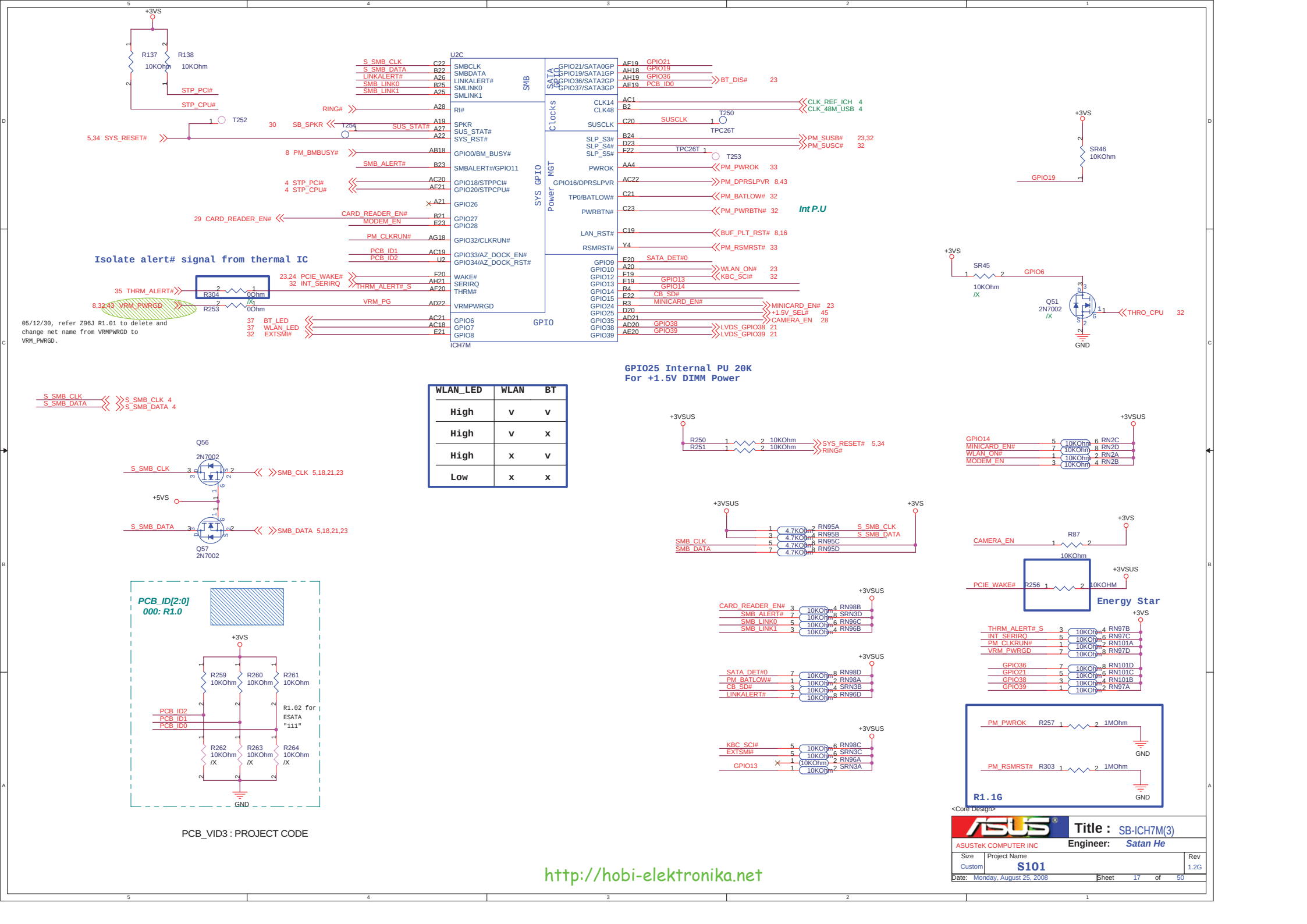
Size	Project Name	Rev
A3	S101	1.2G

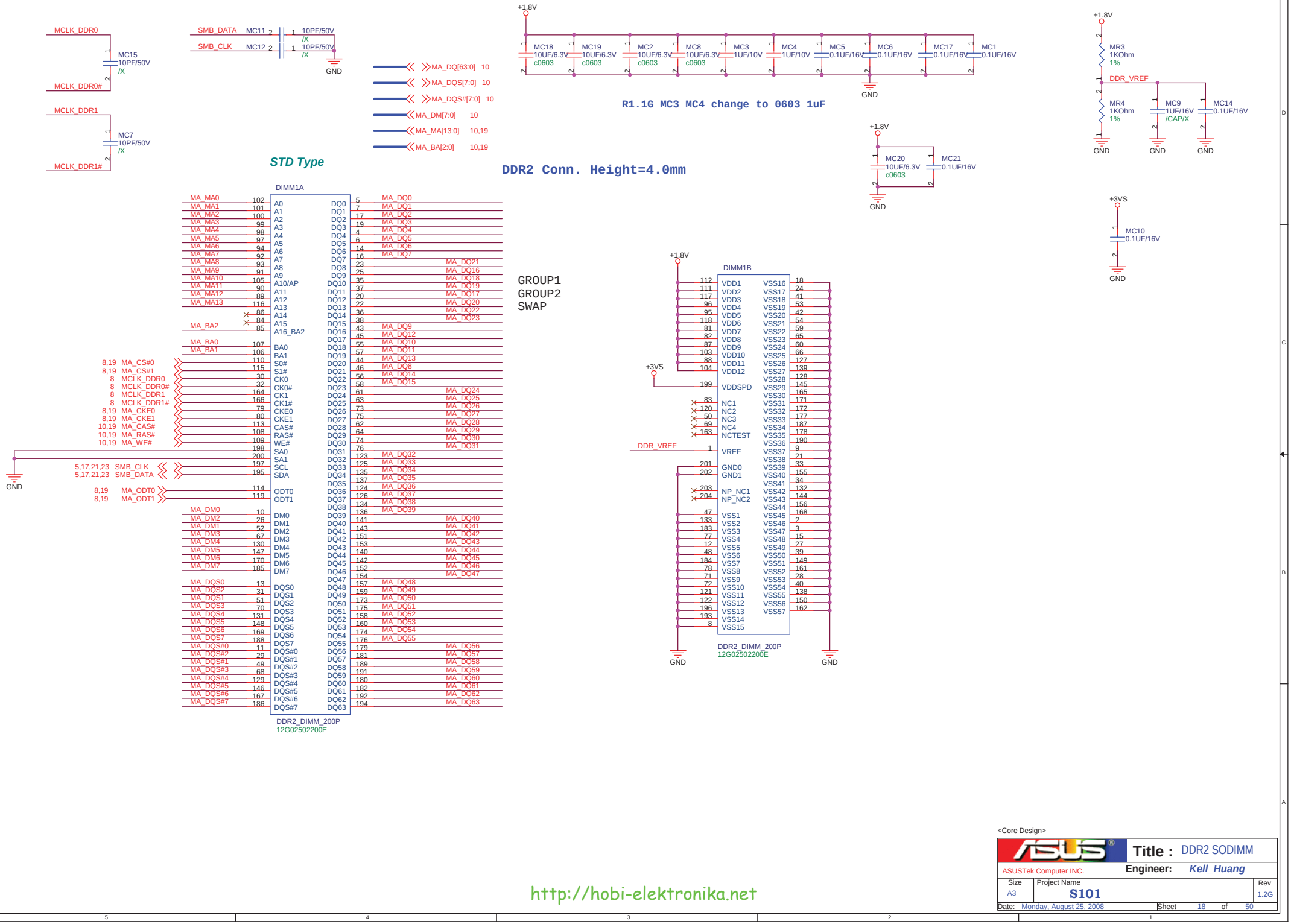
Date: Monday, August 25, 2008 Sheet 13 of 50

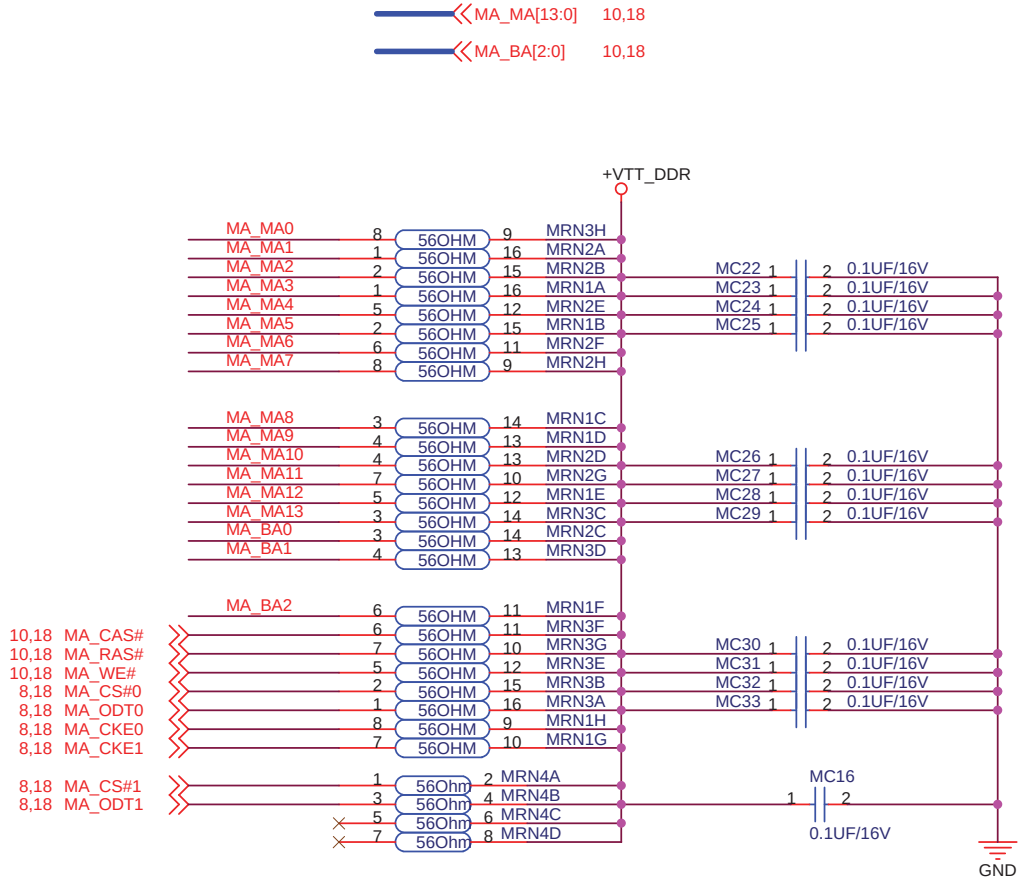

+3VS
+3VSUS
+5VSUS
+5VS
+V5REF
+V5REF_SUS
R226 10Ohm
D40 BAT54CW
R227 100Ohm
D41 BAT54CW
6 mA
10 mA
C282 0.1UF/16V
C434 1UF/10V
C276 0.1UF/16V
R1.1G
GND
U2F
V5REF_1
V5REF_2
V5REF_Sus
+1.5VS
L51 120Ohm/100Mhz
L3 120Ohm/100Mhz
+1.5VS_PCIE_ICH
0.77A
CE12 100UF/4V nb_c3528_h7
C279 0.1UF/16V
C283 0.1UF/16V
C284 0.1UF/16V
C443 0.1UF/16V
C435 0.1UF/16V
C436 0.1UF/16V
C437 10UF/6.3V /X
R228 1Ohm
L52 120Ohm/100Mhz
50mA
C290 1UF/16V
C291 0.01UF/16V
C292 0.1UF/16V
Vcc1_5_A=0.64A
C296 0.1UF/16V
CE14 100UF/4V
C297 0.1UF/16V
C301 0.1UF/16V
C302 0.1UF/16V
C303 0.1UF/16V
10mA
C304 0.1UF/16V
T227 TPC26T
T228 TPC26T
CORE
VCCPAUX
VCCA3GP
IDE
PCI
USB
ARX
ATX
VccSus3_3_19
VccUSBPLL
VccSus1_05/VccLAN1_05_1
VccSus1_05/VccLAN1_05_2
ICH7M
0.94A
+VCCP
1.1G change to +3VS to follow CRB
VccSus3_3 only for desktop
+3VCCLAN
R5 0Ohm /X
R4 0Ohm
C280 0.1UF/16V
56mA
C285 0.1UF/16V
R7
+3VSUS
10mA
C441 0.1UF/16V
C286 0.1UF/16V
C281 0.1UF/16V
0.27A
Distribute in PCI Section
C287 0.1UF/16V
C288 0.1UF/16V
C289 0.1UF/16V
+VCC_RTC
C293 0.1UF/16V
45mA
C294 0.1UF/16V
C295 0.1UF/16V
C298 0.1UF/16V
C299 0.1UF/16V
C300 0.1UF/16V
T224
T225
T226
C305 0.1UF/16V
C438 0.1UF/16V
C439 0.1UF/16V
C442 0.1UF/16V /X
C440 10UF/6.3V
R1.1G
U2E
ICH7M
<Core Design>
ASUSTeK COMPUTER INC.
Title : SB-ICH7M(PWR)
Engineer: Satan He
Size Custom
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 14 of 50
http://hobi-elektronika.net


R1.1G change +3VA net to +3VA_AEC
Change to rechargeable RTC battery
PT71
+VCC_BAT_R
+3VA_AEC
BAT54WS D42
+RTCBAT
BT1
SIDE1
SIDE2
WTOB_CON_2P
12G17100002C
R229 1.2KOhm
0Ohm R1
+VCC_RTC
PT72
SR9
20KOhm
RTCRST#
34
C307 1UF/10V
SC8 1UF/16V
CLRTC
SGL_JUMP
Place Near Open Door
RTCRST# RC delay 18~25ms
GND
C431 10UF/6.3V
C432 0.1UF/16V
15PF/50V
C306
C308
X2_RTC
X1_RTC
R230 10MOhm
X1
SIDE
32.768Khz
MEC/MS3V-T1R 32.768KHZ 12.5/20
Height : 3.4 mm
Q61 PMBS3906
D45 BAV99W_L
D46 BAV99W_L
R284 2.2KOhm
Over Discharge Protection Circuit
U2A
RTCX1
RTCX2
RTCRST#
INTRUDER#
INTVRMEN
R232 1MOhm
R233 330KOhm 1%
R3 0Ohm
EE_CS
EE_SHCLK
EE_DOUT
EE_DIN
LAN_CLK
LAN_RSTSYNC
LAN_RXD0
LAN_RXD1
LAN_RXD2
LAN_TXD0
LAN_TXD1
LAN_TXD2
ACZ_SDIN0 CODEC
ACZ_SDIN1 NA
ACZ_BCLK
ACZ_SYNC
ACZ_RST#
ACZ_SDOUT
SATALED#
SATA0RXN
SATA0RXP
SATA0TXN
SATA0TXP
SATA2RXN
SATA2RXP
SATA2TXN
SATA2TXP
SATA_CLKN
SATA_CLKP
SATARBIASN
SATARBIASP
DIOR#
DIOW#
DDACK#
IDEIRQ
IORDY
DDREQ
ICH7M
RTC
LPC
CPU
LAN
AC-97/AZALIA
SATA
IDE
LAD0
LAD1
LAD2
LAD3
LDRQ0#
LDRQ1#/GPIO23
LFRAME#
A20GATE
A20M#
CPUSLP#
TP1/DPRSTP#
TP2/DPSLP#
FERR#
GPIO49/CPUPWRGD
IGNNE#
INIT3_3V#
INIT#
INTR
RCIN#
NMI
SMI#
STPCLK#
THERMTRIP#
LPC_AD0 32,34
LPC_AD1 32,34
LPC_AD2 32,34
LPC_AD3 32,34
LPC_DRQ#0
LPC_DRQ#1
T229
T230
LPC_FRAME# 32,34
A20GATE 32
H_A20M# 5
S_CPUSLP# 1 T280
PM_DPRSTP# 5,43
H_DPSLP# 5
H_FERR# 5
H_PWRGD 5
H_IGNNE# 5
TPC26T 1 T231
H_INIT# 5
H_INTR 5
RC_IN# 32
H_NMI 5
H_SMI# 5
H_STPCLK# 5
H_THERMTRIP# 5,8
R237 24.9Ohm 1%
IDE_DD[15:0] 26
IDE_DA[2:0] 26
IDE_DCS#1 26
IDE_DCS#3 26
NO STUFF R107.CPUSLP# ONLY USE IN DESTOP
CR235 56Ohm
R236 56Ohm
R272 10KOhm
R136 10KOhm
R104 330Ohm
+VCCP
+3VS
A20GATE
RC_IN#
H_INIT#
AC40 10PF/50V
RN89A ACZ_BCLK
RN89B ACZ_SYNC
RN90A ACZ_RST#
RN90B ACZ_SDOUT
30,41 A_Z_BITCLK
30 A_Z_SYNC
30 A_Z_RST#
30 A_Z_SDOUT
30 A_Z_SDIN0
T281
T232
ACZ_SDIN2
37 S_SATALED#
26 P_SATA_RXN0
26 P_SATA_RXP0
26 P_SATA_TXN0
26 P_SATA_TXP0
P_SATA_RXN0
P_SATA_RXP0
P_SATA_TXN0
P_SATA_TXP0
4 CLK_SATA_ICH#
4 CLK_SATA_ICH
R241 4.7KOhm
R242 10KOhm
R243 24.9Ohm 1%
SATARBIAS#
26 IDE_DIOR#
26 IDE_DIOW#
26 IDE_DDACK#
26 IDE_IRQ
26 IDE_IORDY
26 IDE_DDREQ
IDE_DA0
IDE_DA1
IDE_DA2
http://hobi-elektronika.net
<Core Design>
ASUSTeK COMPUTER INC.
Title : SB-ICH7-M(1)
Engineer: Satan He
Size Custom
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 15 of 50


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
U2D
PCI-Express
Direct Media Interface
USB
SPI
LAN AR8113 IC
WIFI PCIExpress Card
PCIE Interface SSD
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
<Core Design>
ASUSTeK COMPUTER INC.
Title : SB-ICH7M(2)
Engineer: Satan He
Size Custom
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 16 of 50
http://hobi-elektronika.net

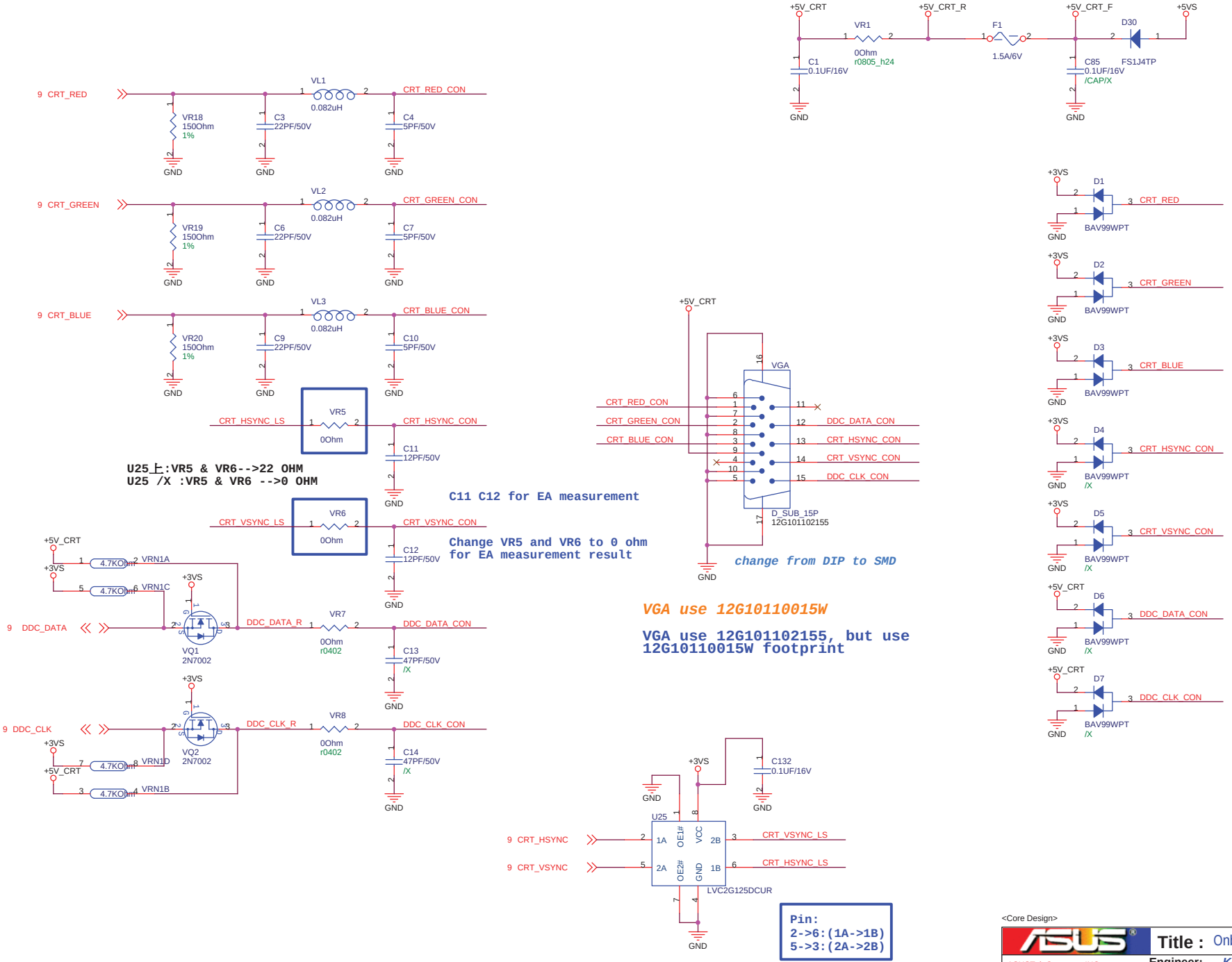

+3VS
R137 10KOhm
R138 10KOhm
STP_PCI#
STP_CPU#
U2C
SMBCLK
SMBDATA
LINKALERT#
SMLINK0
SMLINK1
SMB
S_SMB_CLK C22
S_SMB_DATA B22
LINKALERT# A26
SMB_LINK0 B25
SMB_LINK1 A25
RING# A28
RI#
SPKR A19
SUS_STAT# A27
SYS_RST# A22
SB_SPKR 30
T252
T254
5,34 SYS_RESET#
8 PM_BMBUSY# AB18
GPIO0/BM_BUSY#
SMB_ALERT# B23
SMBALERT#/GPIO11
4 STP_PCI# AC20
4 STP_CPU# AF21
GPIO18/STPPCI#
GPIO20/STPCPU#
A21
GPIO26
29 CARD_READER_EN# B21
MODEM_EN E23
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 /X
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
ICH7M
SATA GPIO
GPIO21/SATA0GP
GPIO19/SATA1GP
GPIO36/SATA2GP
GPIO37/SATA3GP
AE19 GPIO21
AH18 GPIO19
AH19 GPIO36
AE19 PCB_ID0
BT_DIS# 23
Clocks
CLK14 AC1
CLK48 B2
SUSCLK C20
CLK_REF_ICH 4
CLK_48M_USB 4
T250
TPC26T
SUSCLK
Power MGT
SLP_S3# B24
SLP_S4# D23
SLP_S5# F22
PM_SUSB# 23,32
PM_SUSC# 32
TPC26T
T253
PWROK AA4
PM_PWROK 33
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
GPIO9 E20 SATA_DET#0
GPIO10 A20 WLAN_ON# 23
GPIO12 F19 KBC_SCI# 32
GPIO13 E19 GPIO13
GPIO14 R4 GPIO14
GPIO15 E22 CB_SD#
GPIO24 R3 MINICARD_EN#
GPIO25 D20 +1.5V_SEL# 45
GPIO35 AD21 CAMERA_EN 28
GPIO38 AD20 LVDS_GPIO38 21
GPIO39 AE20 LVDS_GPIO39 21
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
SR46 10KOhm
GPIO19
+3VS
SR45 10KOhm /X
GPIO6
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#
+3VSUS
GPIO14
MINICARD_EN#
WLAN_ON#
MODEM_EN
RN2C RN2D RN2A RN2B
+3VSUS
+3VS
SMB_CLK
SMB_DATA
4.7KOhm RN95A RN95B RN95C RN95D
S_SMB_CLK
S_SMB_DATA
+3VS
CAMERA_EN
R87 10KOhm
+3VSUS
PCIE_WAKE#
R256 10KOHM
Energy Star
+3VSUS
CARD_READER_EN#
SMB_ALERT#
SMB_LINK0
SMB_LINK1
10KOhm RN98B SRN3D RN96C RN96B
+3VS
THRM_ALERT#_S
INT_SERIRQ
PM_CLKRUN#
VRM_PWRGD
10KOhm RN97B RN97C RN101A RN97D
GPIO36
GPIO21
GPIO38
GPIO39
10KOhm RN101D RN101C RN101B RN97A
+3VSUS
SATA_DET#0
PM_BATLOW#
CB_SD#
LINKALERT#
10KOhm RN98D RN98A SRN3B RN96D
+3VSUS
KBC_SCI#
EXTSMI#
GPIO13
10KOhm RN98C SRN3C RN96A SRN3A
PM_PWROK R257 1MOhm
PM_RSMRST# R303 1MOhm
GND
GND
R1.1G
PCB_ID[2:0]
000: R1.0
+3VS
R259 10KOhm
R260 10KOhm
R261 10KOhm
PCB_ID2
PCB_ID1
PCB_ID0
R1.02 for ESATA "111"
R262 10KOhm /X
R263 10KOhm /X
R264 10KOhm /X
GND
PCB_VID3 : PROJECT CODE
<Core Design>
Title : SB-ICH7M(3)
ASUSTeK COMPUTER INC
Engineer: Satan He
Size Custom
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 17 of 50
http://hobi-elektronika.net


MCLK_DDR0
MC15
10PF/50V
/X
MCLK_DDR0#
MCLK_DDR1
MC7
10PF/50V
/X
MCLK_DDR1#
SMB_DATA
SMB_CLK
MC11
MC12
10PF/50V
/X
GND
MA_DQ[63:0] 10
MA_DQS[7:0] 10
MA_DQS#[7:0] 10
MA_DM[7:0] 10
MA_MA[13:0] 10,19
MA_BA[2:0] 10,19
+1.8V
MC18 10UF/6.3V c0603
MC19 10UF/6.3V c0603
MC2 10UF/6.3V c0603
MC8 10UF/6.3V c0603
MC3 1UF/10V
MC4 1UF/10V
MC5 0.1UF/16V
MC6 0.1UF/16V
MC17 0.1UF/16V
MC1 0.1UF/16V
R1.1G MC3 MC4 change to 0603 1uF
+1.8V
MR3 1KOhm 1%
DDR_VREF
MR4 1KOhm 1%
MC9 1UF/16V /CAP/X
MC14 0.1UF/16V
GND
GND
GND
STD Type
DDR2 Conn. Height=4.0mm
+1.8V
MC20 10UF/6.3V c0603
MC21 0.1UF/16V
GND
+3VS
MC10 0.1UF/16V
GND
DIMM1A
MA_MA0 MA_MA1 MA_MA2 MA_MA3 MA_MA4 MA_MA5 MA_MA6 MA_MA7 MA_MA8 MA_MA9 MA_MA10 MA_MA11 MA_MA12 MA_MA13
MA_BA2
MA_BA0 MA_BA1
8,19 MA_CS#0
8,19 MA_CS#1
8 MCLK_DDR0
8 MCLK_DDR0#
8 MCLK_DDR1
8 MCLK_DDR1#
8,19 MA_CKE0
8,19 MA_CKE1
10,19 MA_CAS#
10,19 MA_RAS#
10,19 MA_WE#
5,17,21,23 SMB_CLK
5,17,21,23 SMB_DATA
8,19 MA_ODT0
8,19 MA_ODT1
MA_DM0 MA_DM2 MA_DM1 MA_DM3 MA_DM4 MA_DM5 MA_DM6 MA_DM7
MA_DQS0 MA_DQS2 MA_DQS1 MA_DQS3 MA_DQS4 MA_DQS5 MA_DQS6 MA_DQS7
MA_DQS#0 MA_DQS#2 MA_DQS#1 MA_DQS#3 MA_DQS#4 MA_DQS#5 MA_DQS#6 MA_DQS#7
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10/AP A11 A12 A13 A14 A15 A16_BA2
BA0 BA1 S0# S1# CK0 CK0# CK1 CK1# CKE0 CKE1 CAS# RAS# WE# SA0 SA1 SCL SDA
ODT0 ODT1
DM0 DM1 DM2 DM3 DM4 DM5 DM6 DM7
DQS0 DQS1 DQS2 DQS3 DQS4 DQS5 DQS6 DQS7
DQS#0 DQS#1 DQS#2 DQS#3 DQS#4 DQS#5 DQS#6 DQS#7
DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7 DQ8 DQ9 DQ10 DQ11 DQ12 DQ13 DQ14 DQ15 DQ16 DQ17 DQ18 DQ19 DQ20 DQ21 DQ22 DQ23 DQ24 DQ25 DQ26 DQ27 DQ28 DQ29 DQ30 DQ31 DQ32 DQ33 DQ34 DQ35 DQ36 DQ37 DQ38 DQ39 DQ40 DQ41 DQ42 DQ43 DQ44 DQ45 DQ46 DQ47 DQ48 DQ49 DQ50 DQ51 DQ52 DQ53 DQ54 DQ55 DQ56 DQ57 DQ58 DQ59 DQ60 DQ61 DQ62 DQ63
MA_DQ0 MA_DQ1 MA_DQ2 MA_DQ3 MA_DQ4 MA_DQ5 MA_DQ6 MA_DQ7 MA_DQ21 MA_DQ16 MA_DQ18 MA_DQ19 MA_DQ17 MA_DQ20 MA_DQ22 MA_DQ23 MA_DQ9 MA_DQ12 MA_DQ10 MA_DQ11 MA_DQ13 MA_DQ8 MA_DQ14 MA_DQ15 MA_DQ24 MA_DQ25 MA_DQ26 MA_DQ27 MA_DQ28 MA_DQ29 MA_DQ30 MA_DQ31 MA_DQ32 MA_DQ33 MA_DQ34 MA_DQ35 MA_DQ36 MA_DQ37 MA_DQ38 MA_DQ39 MA_DQ40 MA_DQ41 MA_DQ42 MA_DQ43 MA_DQ44 MA_DQ45 MA_DQ46 MA_DQ47 MA_DQ48 MA_DQ49 MA_DQ50 MA_DQ51 MA_DQ52 MA_DQ53 MA_DQ54 MA_DQ55 MA_DQ56 MA_DQ57 MA_DQ58 MA_DQ59 MA_DQ60 MA_DQ61 MA_DQ62 MA_DQ63
DDR2_DIMM_200P
12G02502200E
GND
GROUP1
GROUP2
SWAP
+1.8V
DIMM1B
+3VS
DDR_VREF
VDD1 VDD2 VDD3 VDD4 VDD5 VDD6 VDD7 VDD8 VDD9 VDD10 VDD11 VDD12 VDDSPD
NC1 NC2 NC3 NC4 NCTEST
VREF
GND0 GND1
NP_NC1 NP_NC2
VSS1 VSS2 VSS3 VSS4 VSS5 VSS6 VSS7 VSS8 VSS9 VSS10 VSS11 VSS12 VSS13 VSS14 VSS15
VSS16 VSS17 VSS18 VSS19 VSS20 VSS21 VSS22 VSS23 VSS24 VSS25 VSS26 VSS27 VSS28 VSS29 VSS30 VSS31 VSS32 VSS33 VSS34 VSS35 VSS36 VSS37 VSS38 VSS39 VSS40 VSS41 VSS42 VSS43 VSS44 VSS45 VSS46 VSS47 VSS48 VSS49 VSS50 VSS51 VSS52 VSS53 VSS54 VSS55 VSS56 VSS57
DDR2_DIMM_200P
12G02502200E
GND
GND
http://hobi-elektronika.net
<Core Design>
Title : DDR2 SODIMM
ASUSTek Computer INC.
Engineer: Kell_Huang
Size A3
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 18 of 50



<Core Design>

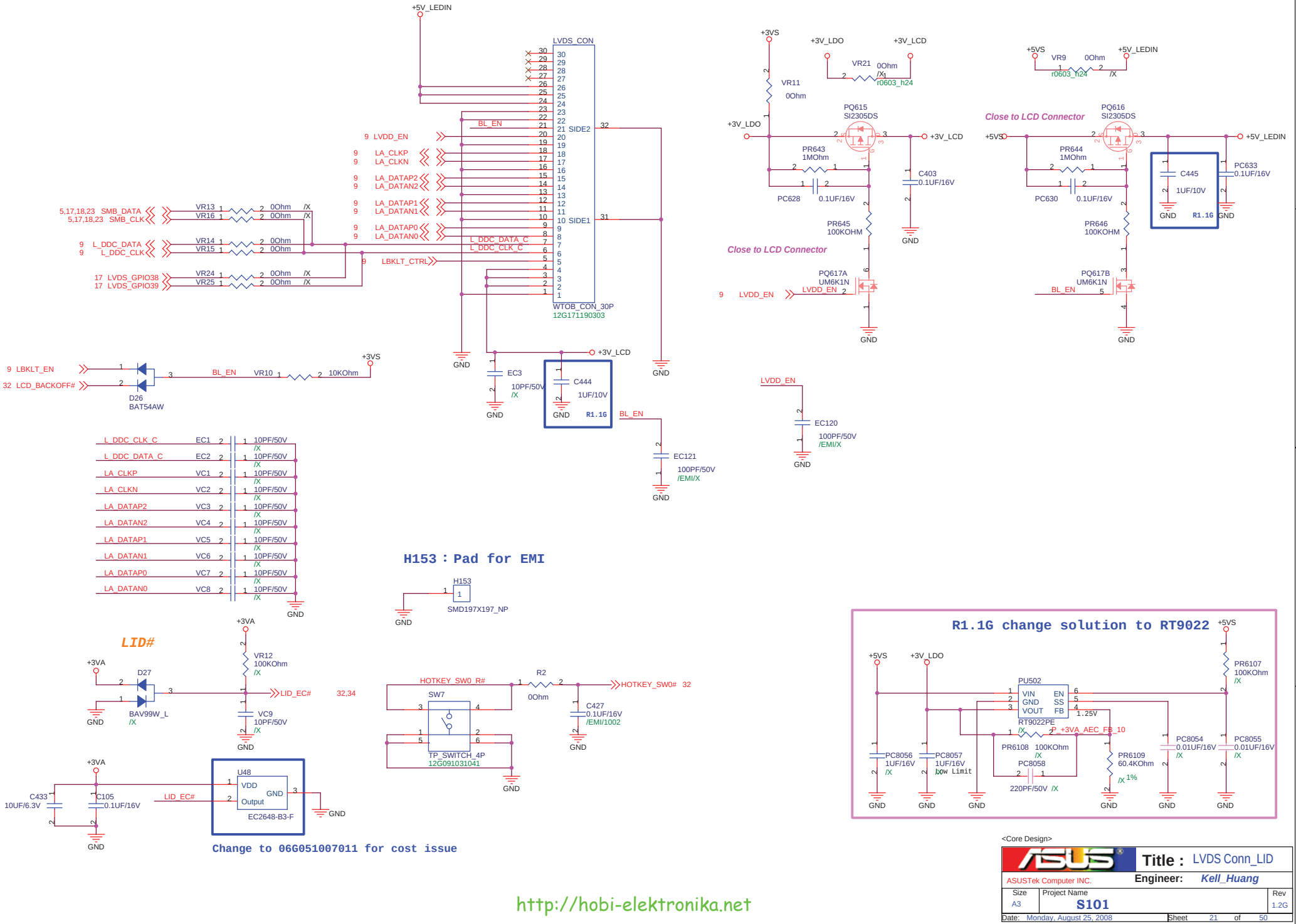
ASUSTek Computer INC.	Title : DDR2_Termination	
	Engineer: Kell_Huang	
Size: A4	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 19 of 50	



http://hobi-elektronika.net

<Core Design>

ASUSTek Computer INC.	Title : Onboard VGA	
	Engineer: Kell_Huang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 20 of 50	

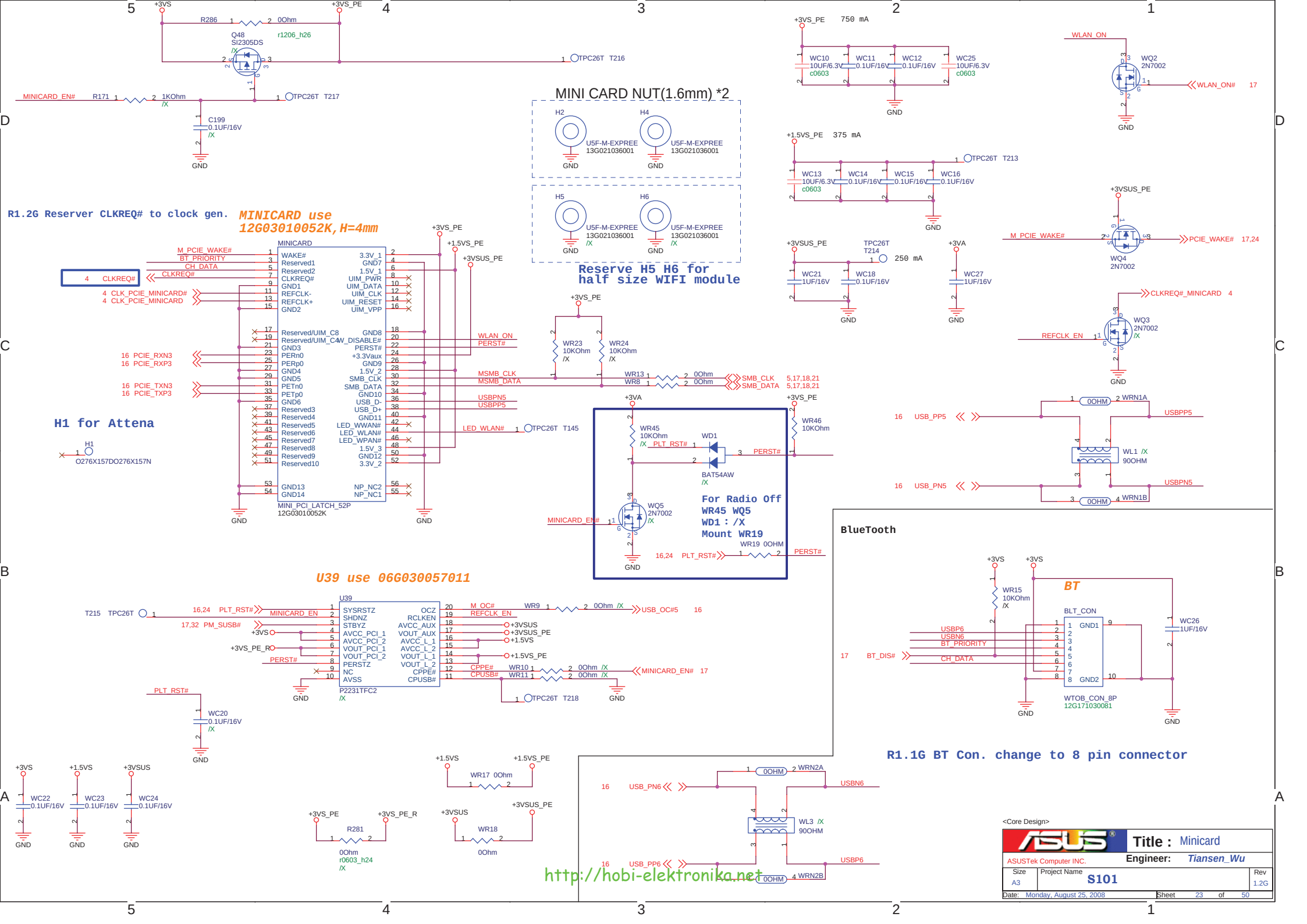


<Core Design>

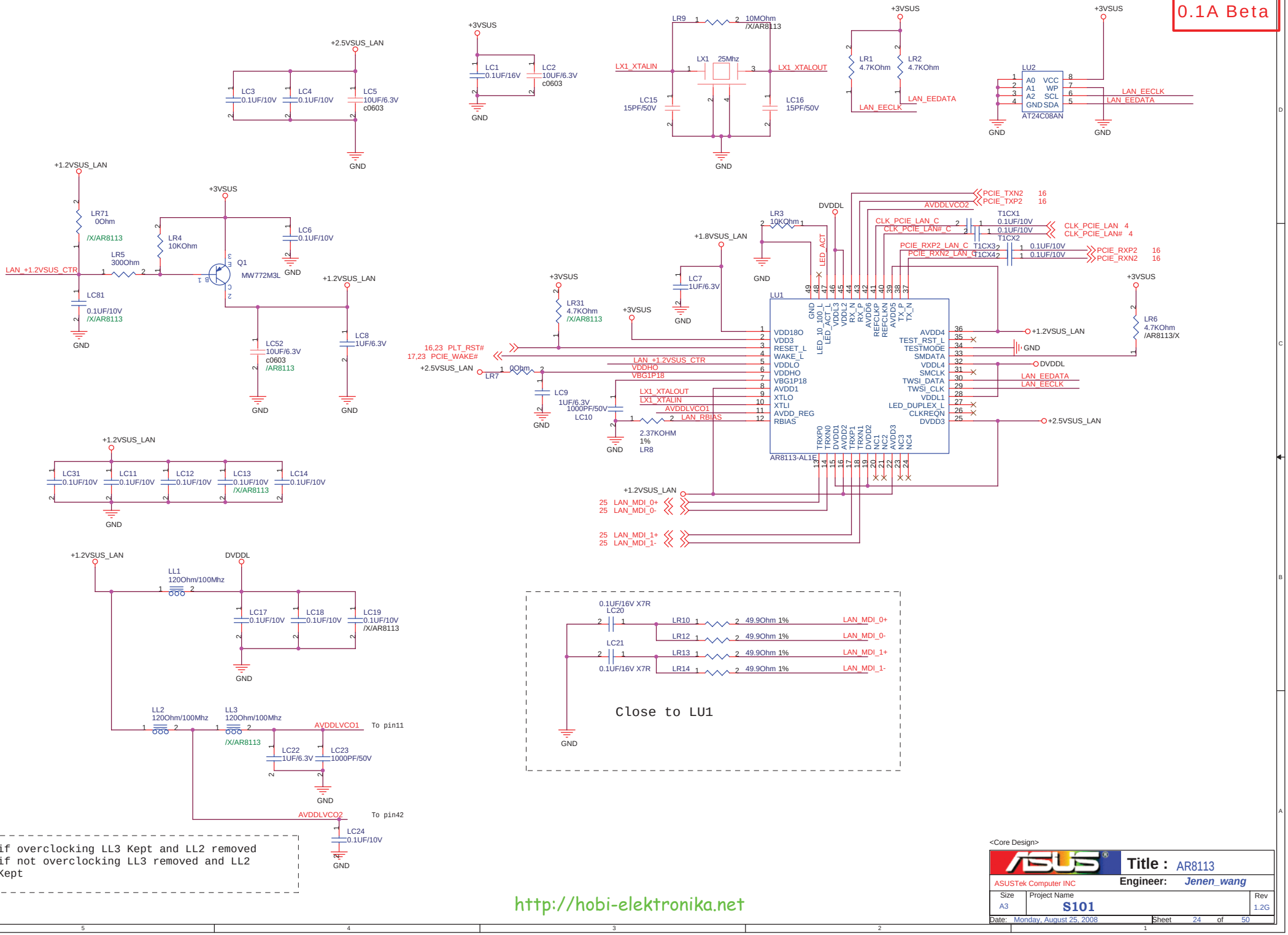
ASUSTek Computer INC.	Title : LVDS Conn_LID	
	Engineer: Kell_Huang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 21 of 50	

<Core Design>

ASUSTek Computer INC.	Title : Blank	
	Engineer: *Kell_Huang*	
Size: A3	Project Name: **S101**	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 22 of 50	


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 S101
Size A3
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 23 of 50
http://hobi-elektronika.net

0.1A Beta



http://hobi-elektronika.net

<Core Design>

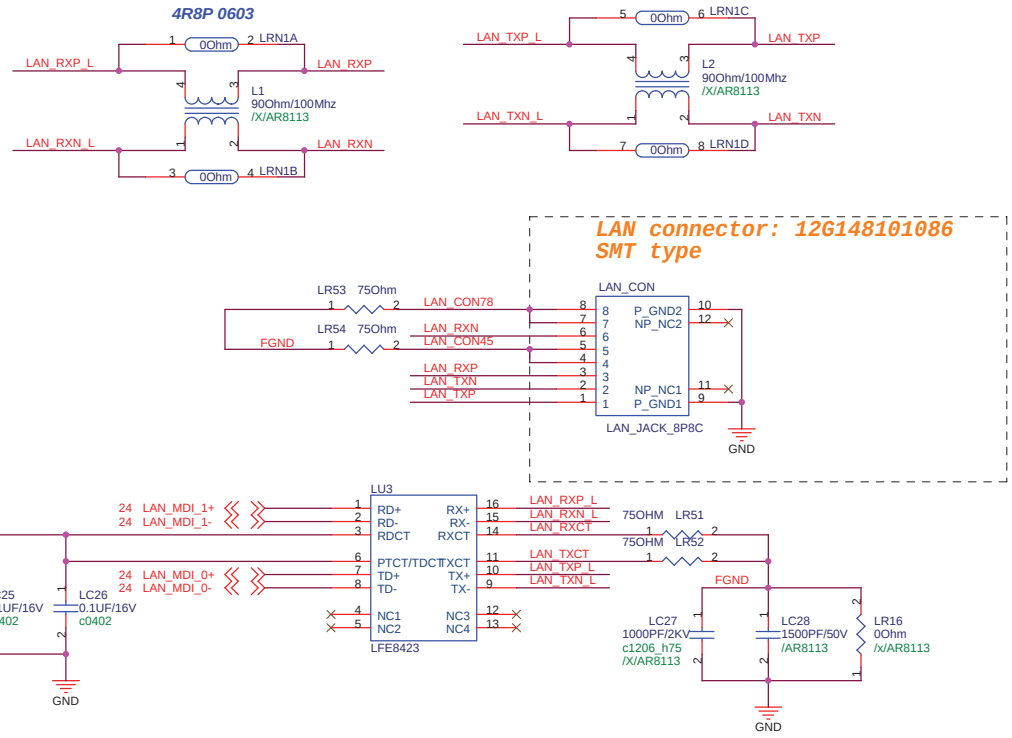
Title : AR8113

ASUSTek Computer INC

Engineer: Jenen_wang

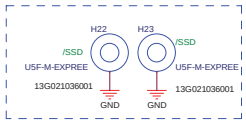
Size	Project Name	Rev
A3	S101	1.2G

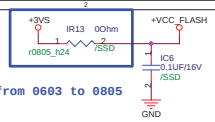
Date: Monday, August 25, 2008 Sheet 24 of 50



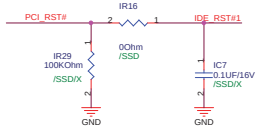
<Core Design>

ASUSTek Computer INC.	Title : RJ45	
	Engineer: Kell_Huang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 25 of 50	

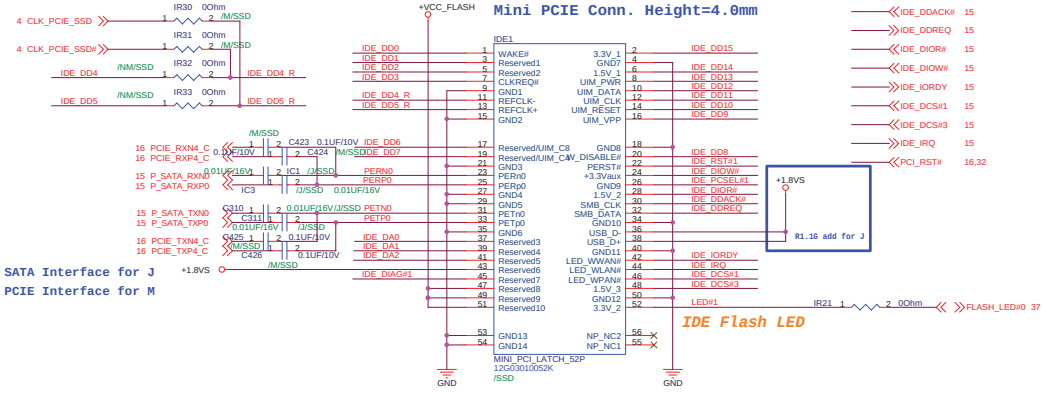




R1.2G Change from 0603 to 0805



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

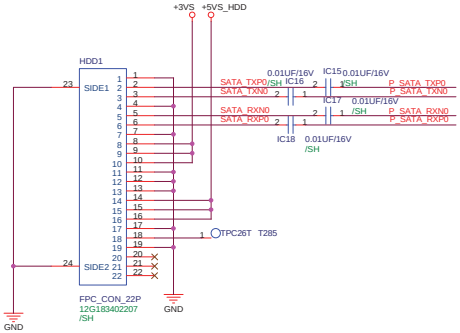


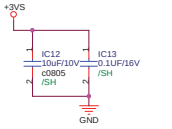
SATA Interface for J
PCIE Interface for M

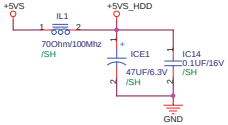
SATA HDD Connector

FPC Connector with Mylar

/SH for SATA HDD



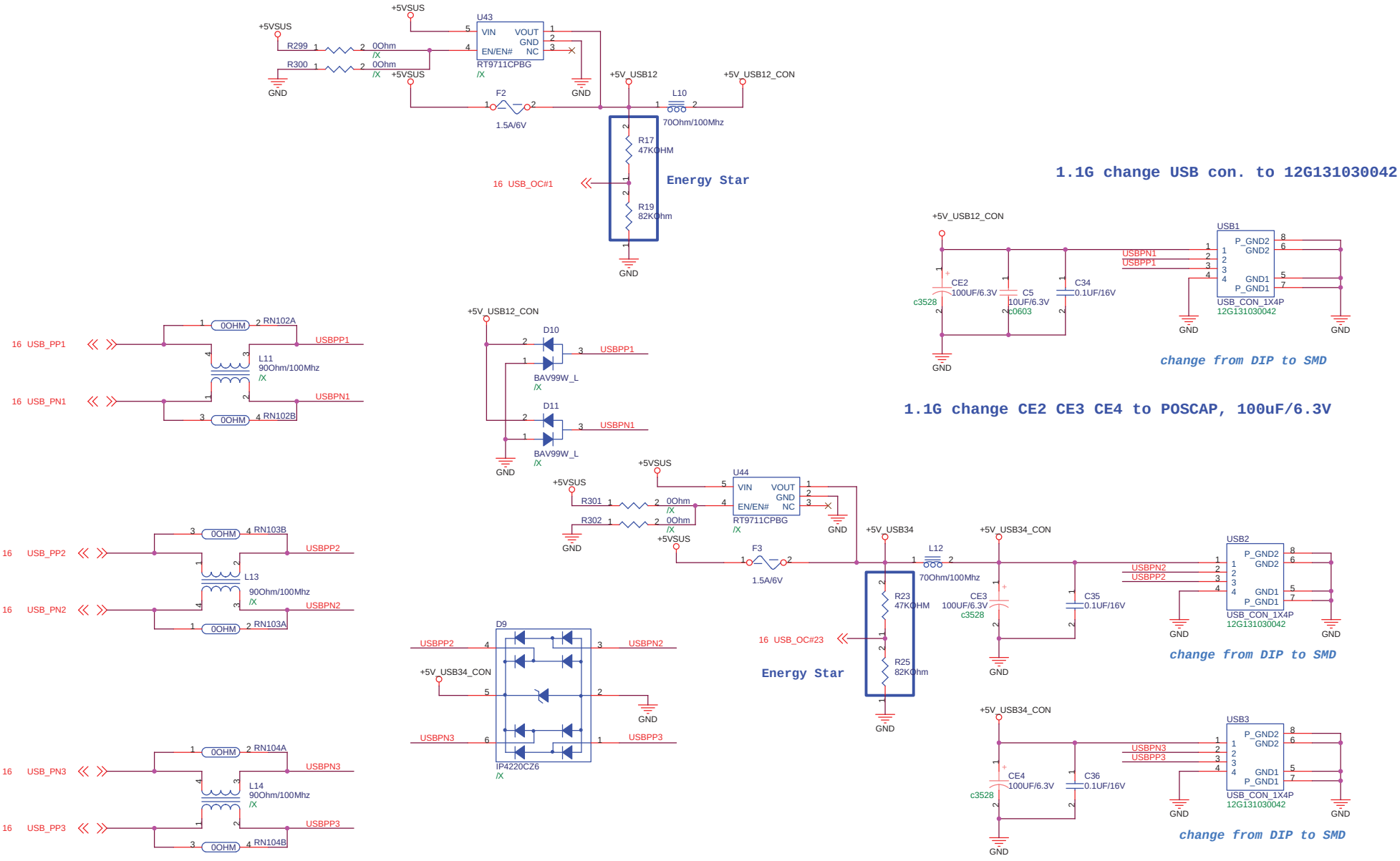




Naming Rule:
IC:IU?
R:IR?
C:IC?
L:IL?

<Core Design>

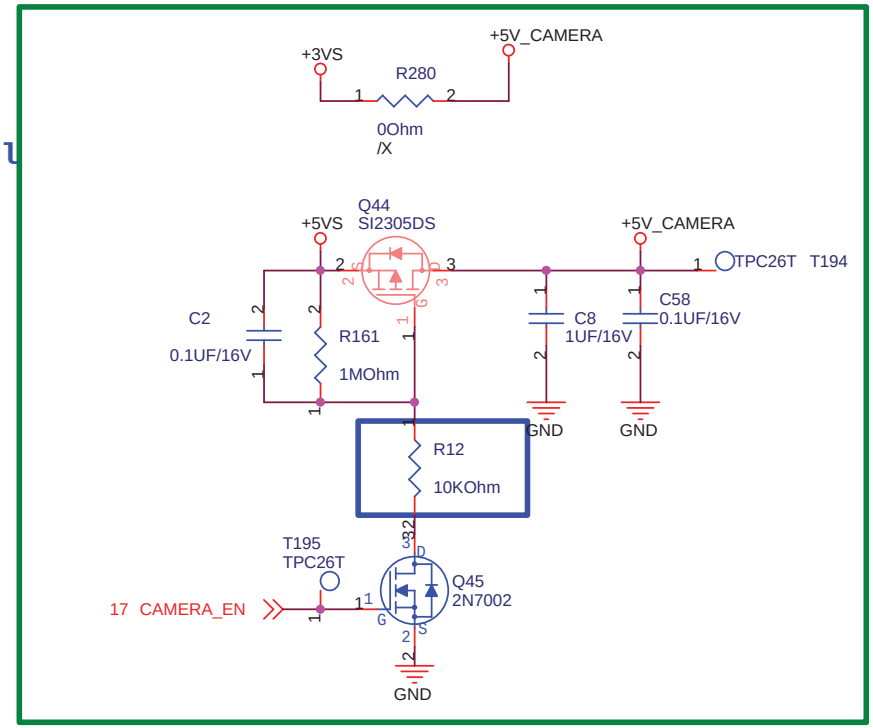
ASUSTek Computer INC.	Title : HD + Flash Conn	
	Engineer: Kell_Huang	
Size: A2	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 26 of 50	

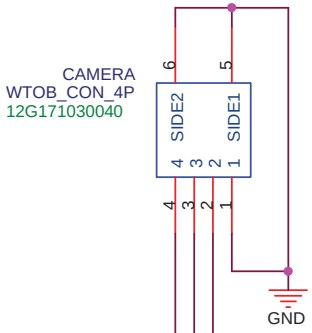


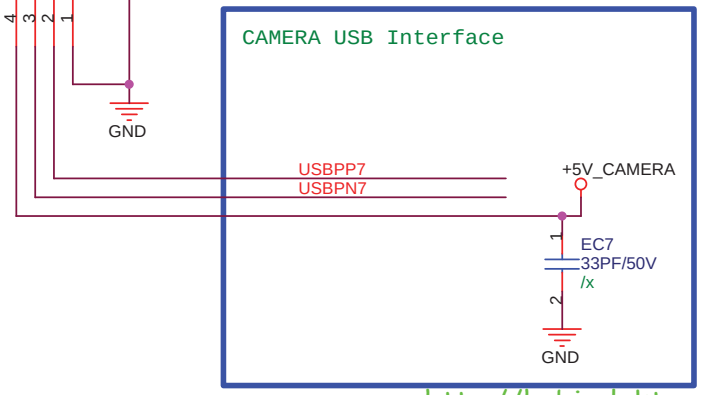
<Core Design>

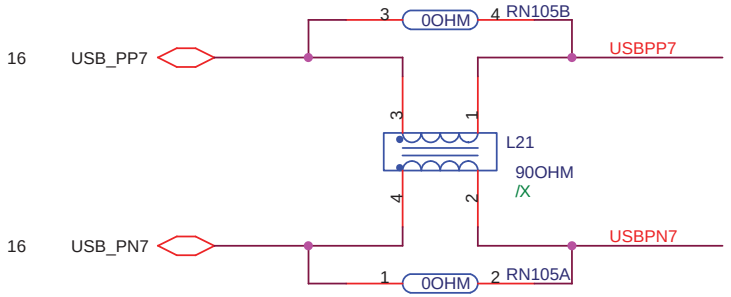
ASUSTek Computer INC.	Title : USB Port	
	Engineer: Kell_Huang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 27 of 50	

Power Control



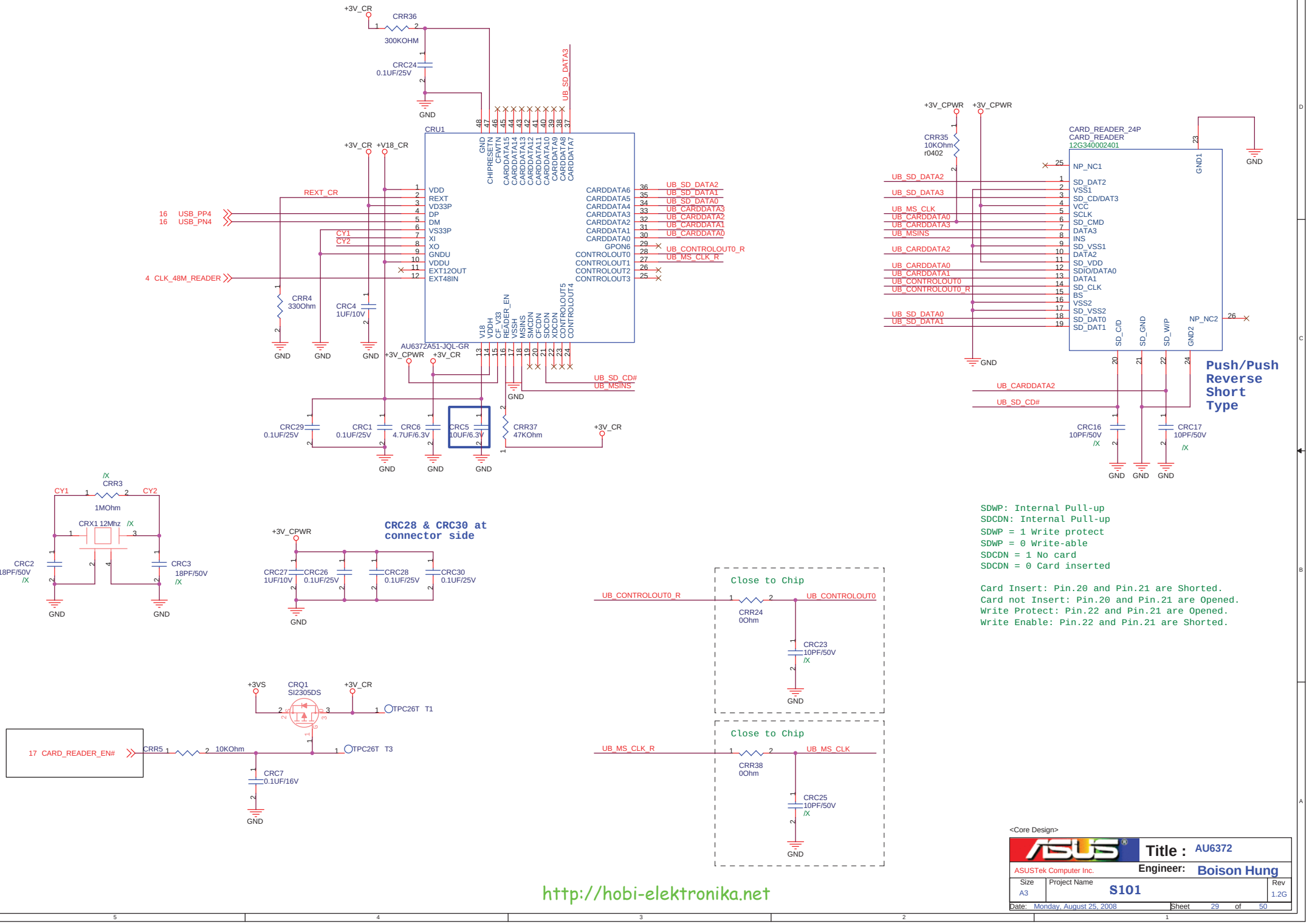


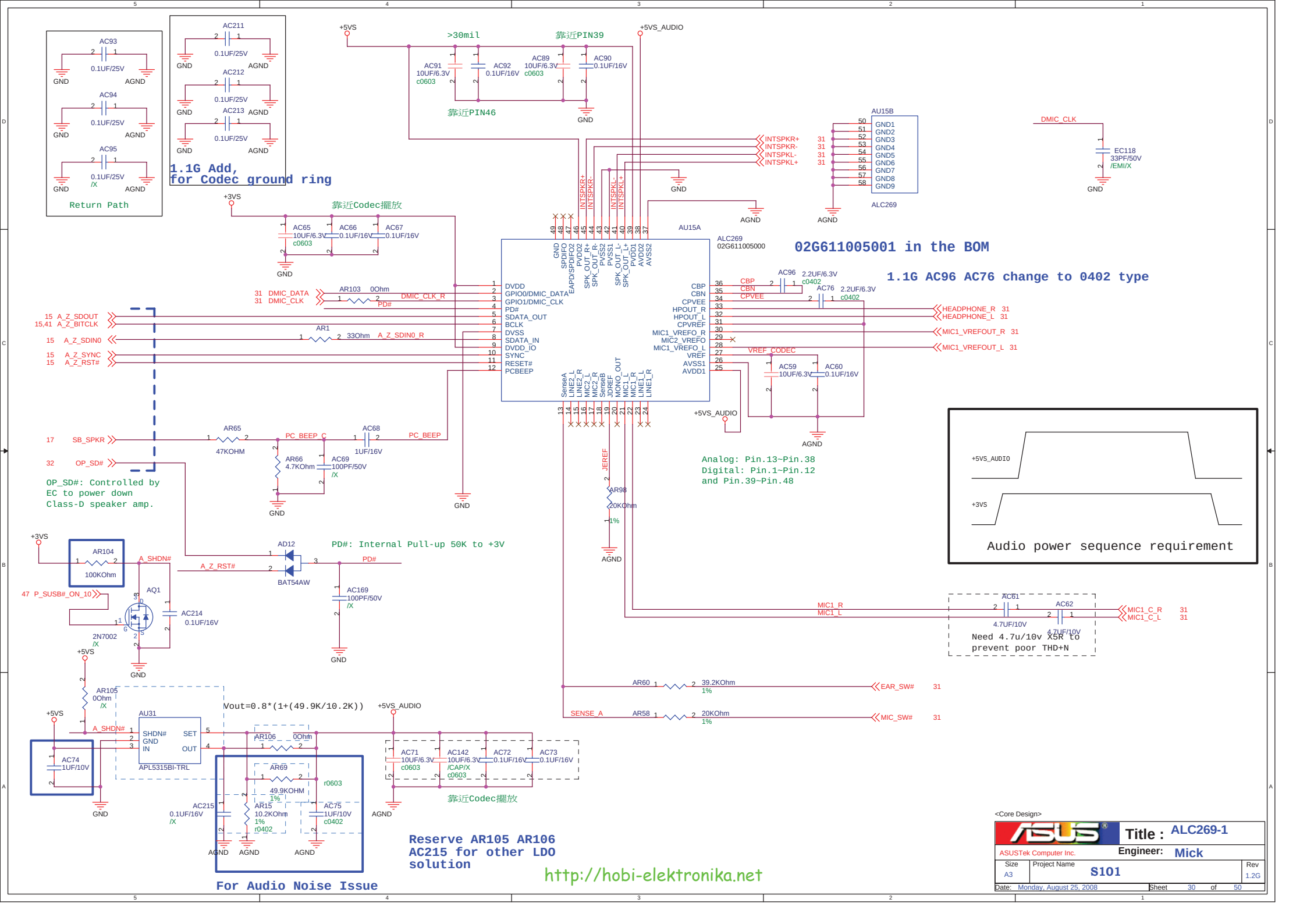




<Core Design>

ASUSTek Computer INC.	Title : Camera Power	
	Engineer: Kell_Huang	
Size: A4	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 28 of 50	

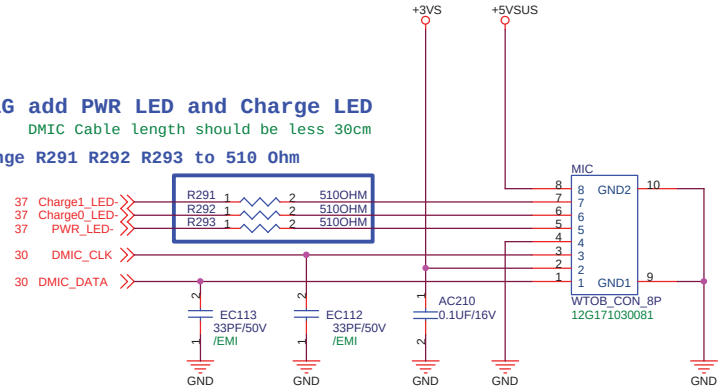

+3V_CR
CRR36
300KOHM
CRC24
0.1UF/25V
GND
UB_SD_DATA3
CRU1
+3V_CR +V18_CR
REXT_CR
16 USB_PP4
16 USB_PN4
CY1
CY2
4 CLK_48M_READER
CRR4
330Ohm
CRC4
1UF/10V
GND
GND
GND
AU6372A51-JQL-GR
+3V_CPWR
+3V_CR
CARDDATA6
CARDDATA5
CARDDATA4
CARDDATA3
CARDDATA2
CARDDATA1
CARDDATA0
GPON6
CONTROLOUT0
CONTROLOUT1
CONTROLOUT2
CONTROLOUT3
UB_SD_DATA2
UB_SD_DATA1
UB_SD_DATA0
UB_CARDDATA3
UB_CARDDATA2
UB_CARDDATA1
UB_CARDDATA0
UB_CONTROLOUT0_R
UB_MS_CLK_R
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
GND
GND
GND
+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
GND
UB_CARDDATA2
UB_SD_CD#
CRC16
10PF/50V
/X
CRC17
10PF/50V
/X
Push/Push
Reverse
Short
Type
/X
CRR3
CY1
CY2
1MOhm
CRX1 12Mhz /X
CRC2
18PF/50V
/X
CRC3
18PF/50V
/X
GND
GND
+3V_CPWR
CRC27
1UF/10V
CRC26
0.1UF/25V
CRC28
0.1UF/25V
CRC30
0.1UF/25V
GND
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
GND
UB_CONTROLOUT0_R
Close to Chip
CRR24
0Ohm
UB_CONTROLOUT0
CRC23
10PF/50V
/X
GND
UB_MS_CLK_R
Close to Chip
CRR38
0Ohm
UB_MS_CLK
CRC25
10PF/50V
/X
GND
http://hobi-elektronika.net
<Core Design>
Title : AU6372
ASUSTek Computer Inc.
Engineer: Boison Hung
Size A3
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 29 of 50


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
GND1 GND2 GND3 GND4 GND5 GND6 GND7 GND8 GND9
ALC269
INTSPKR+ INTSPKR- INTSPKL- INTSPKL+
DMIC_CLK
EC118 33PF/50V /EMI/X
+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
DVDD GPIO0/DMIC_DATA GPIO1/DMIC_CLK PD# SDATA_OUT BCLK DVSS SDATA_IN DVDD_IO SYNC RESET# PCBEEP
CBP CBN CPVEE HPOUT_R HPOUT_L CPVREF MIC1_VREFO_R MIC2_VREFO MIC1_VREFO_L VREF AVSS1 AVDD1
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
15 A_Z_SYNC
15 A_Z_RST#
AR1 33Ohm A_Z_SDIN0_R
17 SB_SPKR
32 OP_SD#
AR65 47KOHM
PC_BEEP_C
PC_BEEP
AC68 1UF/16V
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
+5VS_AUDIO
+3VS
AR104 100KOhm
A_SHDN#
AD12 BAT54AW
A_Z_RST#
PD#: Internal Pull-up 50K to +3V
AC169 100PF/50V /X
47 P_SUSB#_ON_10
AQ1 2N7002 /X
AC214 0.1UF/16V
MIC1_R
MIC1_L
AC61
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
Vout=0.8*(1+(49.9K/10.2K))
AU31
SHDN# GND IN SET OUT
APL5315BI-TRL
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
http://hobi-elektronika.net
<Core Design>
Title : ALC269-1
ASUSTek Computer Inc.
Engineer: Mick
Size A3
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 30 of 50

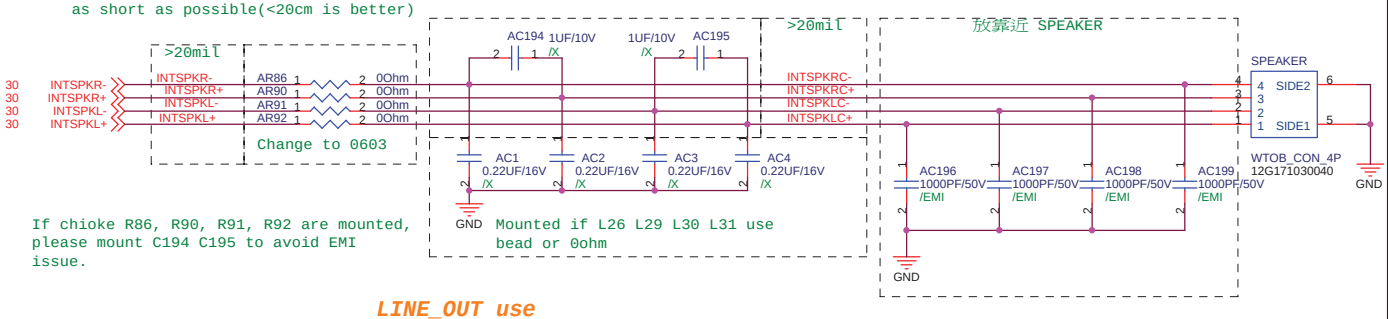
1.1G add PWR LED and Charge LED

DMIC Cable length should be less 30cm

Change R291 R292 R293 to 510 Ohm



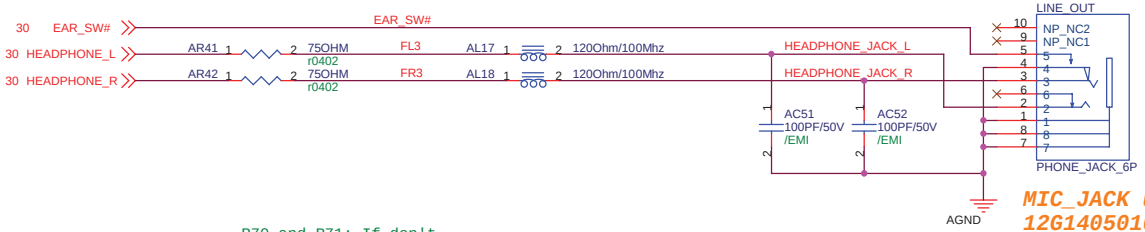
Total length from speakerR+- L+-(pin40 41 44 45) to internal speaker please as short as possible(<20cm is better)



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

Mounted if L26 L29 L30 L31 use bead or 0ohm

LINE_OUT use 12G14050106P(SINGATRON) Black

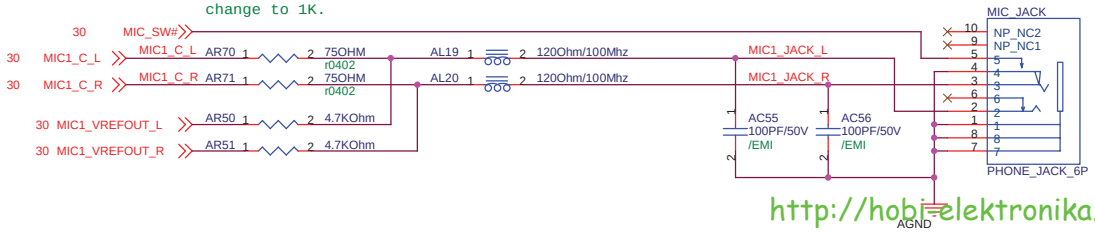


1.1G Change audio con. to black

change from DIP to SMD

MIC_JACK use 12G14050106P(SINGATRON) Black

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

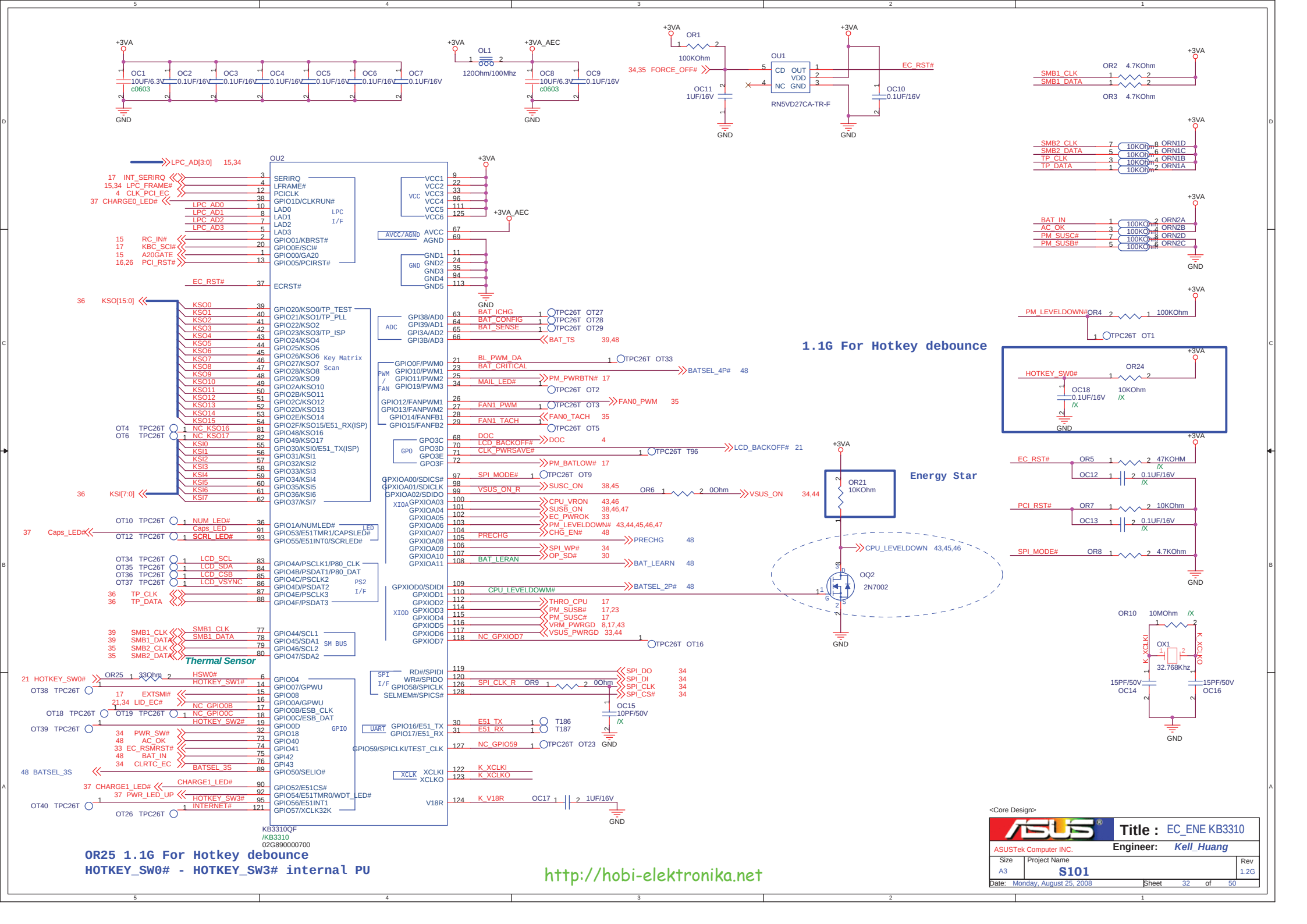


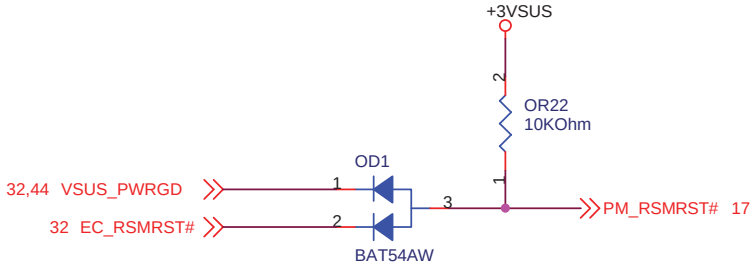
1.1G Change audio con. to black

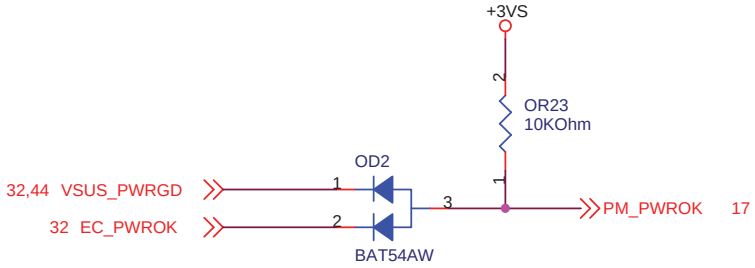
change from DIP to SMD

<Core Design>

ASUSTek Computer Inc.	Title : ALC269-2	
	Engineer: MICK	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 31 of 50	

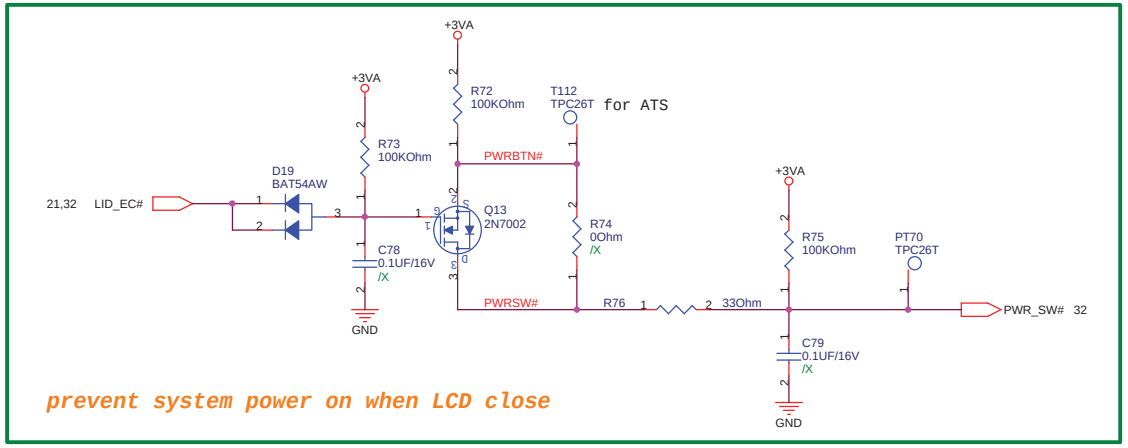

OC1 10UF/6.3V c0603
OC2 0.1UF/16V
OC3 0.1UF/16V
OC4 0.1UF/16V
OC5 0.1UF/16V
OC6 0.1UF/16V
OC7 0.1UF/16V
OL1 120Ohm/100Mhz
OC8 10UF/6.3V c0603
OC9 0.1UF/16V
OR1 100KOhm
OC11 1UF/16V
OU1 RN5VD27CA-TR-F
OC10 0.1UF/16V
34,35 FORCE_OFF#
EC_RST#
OR2 4.7KOhm
OR3 4.7KOhm
SMB1_CLK
SMB1_DATA
SMB2_CLK
SMB2_DATA
TP_CLK
TP_DATA
10KOhm
ORN1D
ORN1C
ORN1B
ORN1A
BAT_IN
AC_OK
PM_SUSC#
PM_SUSB#
100KOhm
ORN2A
ORN2B
ORN2D
ORN2C
PM_LEVELDOWN#
OR4 100KOhm
TPC26T OT1
1.1G For Hotkey debounce
HOTKEY_SW0#
OR24
OC18 0.1UF/16V
10KOhm
/X
OU2
LPC_AD[3:0] 15,34
SERIRQ
LFRAME#
PCICLK
GPIO1D/CLKRUN#
LAD0
LAD1
LAD2
LAD3
LPC I/F
GPIO01/KBRST#
GPIO0E/SCI#
GPIO00/GA20
GPIO05/PCIRST#
ECRST#
VCC1
VCC2
VCC3
VCC4
VCC5
VCC6
VCC
AVCC/AGND
AVCC
AGND
GND1
GND2
GND3
GND4
GND5
GND
+3VA
+3VA_AEC
KSO[15:0]
KSI[7:0]
Key Matrix Scan
GPIO20/KSO0/TP_TEST
GPIO21/KSO1/TP_PLL
GPIO22/KSO2
GPIO23/KSO3/TP_ISP
GPIO24/KSO4
GPIO25/KSO5
GPIO26/KSO6
GPIO27/KSO7
GPIO28/KSO8
GPIO29/KSO9
GPIO2A/KSO10
GPIO2B/KSO11
GPIO2C/KSO12
GPIO2D/KSO13
GPIO2E/KSO14
GPIO2F/KSO15/E51_RX(ISP)
GPIO48/KSO16
GPIO49/KSO17
GPIO30/KSI0/E51_TX(ISP)
GPIO31/KSI1
GPIO32/KSI2
GPIO33/KSI3
GPIO34/KSI4
GPIO35/KSI5
GPIO36/KSI6
GPIO37/KSI7
ADC
GPI38/AD0
GPI39/AD1
GPI3A/AD2
GPI3B/AD3
BAT_ICHG
BAT_CONFIG
BAT_SENSE
BAT_TS 39,48
PWM / FAN
GPIO0F/PWM0
GPIO10/PWM1
GPIO11/PWM2
GPIO19/PWM3
BL_PWM_DA
BAT_CRITICAL
MAIL_LED#
PM_PWRBTN# 17
FAN1_PWM
FAN1_TACH
FAN0_PWM 35
FAN0_TACH 35
GPIO12/FANPWM1
GPIO13/FANPWM2
GPIO14/FANFB1
GPIO15/FANFB2
GPO
GPO3C
GPO3D
GPO3E
GPO3F
DOC
LCD_BACKOFF#
CLK_PWRSAVE#
PM_BATLOW# 17
LCD_BACKOFF# 21
SPI_MODE#
SUSC_ON 38,45
VSUS_ON_R
VSUS_ON 34,44
XIOA
GPIXIOA00/SDICS#
GPIXIOA01/SDICLK
GPIXIOA02/SDIDO
GPIXIOA03
GPIXIOA04
GPIXIOA05
GPIXIOA06
GPIXIOA07
GPIXIOA08
GPIXIOA09
GPIXIOA10
GPIXIOA11
CPU_VRON 43,46
SUSB_ON 38,46,47
EC_PWROK 33
PM_LEVELDOWN# 43,44,45,46,47
CHG_EN# 48
PRECHG
PRECHG 48
SPI_WP# 34
OP_SD# 30
BAT_LERAN
BAT_LEARN 48
CPU_LEVELDOWN 43,45,46
Energy Star
OR21 10KOhm
OQ2 2N7002
XIOD
GPXIOD0/SDIDI
GPXIOD1
GPXIOD2
GPXIOD3
GPXIOD4
GPXIOD5
GPXIOD6
GPXIOD7
CPU_LEVELDOWM#
BATSEL_2P# 48
THRO_CPU 17
PM_SUSB# 17,23
PM_SUSC# 17
VRM_PWRGD 8,17,43
VSUS_PWRGD 33,44
NC_GPXIOD7
TPC26T OT16
LED
NUM_LED#
Caps_LED
SCRL_LED#
Caps_LED#
PS2 I/F
LCD_SCL
LCD_SDA
LCD_CSB
LCD_VSYNC
TP_CLK
TP_DATA
SM BUS
SMB1_CLK
SMB1_DATA
SMB2_CLK
SMB2_DATA
Thermal Sensor
SPI I/F
RD#/SPIDI
WR#/SPIDO
GPIO58/SPICLK
SELMEM#/SPICS#
SPI_DO 34
SPI_DI 34
SPI_CLK 34
SPI_CS# 34
SPI_CLK_R
OR9 0Ohm
OC15 10PF/50V
/X
UART
GPIO16/E51_TX
GPIO17/E51_RX
E51_TX
E51_RX
T186
T187
GPIO59/SPICLKI/TEST_CLK
NC_GPIO59
TPC26T OT23
XCLK
XCLKI
XCLKO
K_XCLKI
K_XCLKO
V18R
K_V18R
OC17 1UF/16V
OR25 33Ohm
HSW0#
HOTKEY_SW1#
EXTSMI#
LID_EC#
NC_GPIO0B
NC_GPIO0C
HOTKEY_SW2#
PWR_SW#
AC_OK
EC_RSMRST#
BAT_IN
CLRTC_EC
BATSEL_3S
CHARGE1_LED#
PWR_LED_UP
HOTKEY_SW3#
INTERNET#
GPIO04
GPIO07/GPWU
GPIO08
GPIO0A/GPWU
GPIO0B/ESB_CLK
GPIO0C/ESB_DAT
GPIO0D
GPIO18
GPIO40
GPIO41
GPI42
GPI43
GPIO50/SELIO#
GPIO52/E51CS#
GPIO54/E51TMR0/WDT_LED#
GPIO56/E51INT1
GPIO57/XCLK32K
GPIO44/SCL1
GPIO45/SDA1
GPIO46/SCL2
GPIO47/SDA2
GPIO1A/NUMLED#
GPIO53/E51TMR1/CAPSLED#
GPIO55/E51INT0/SCRLED#
GPIO4A/PSCLK1/P80_CLK
GPIO4B/PSDAT1/P80_DAT
GPIO4C/PSCLK2
GPIO4D/PSDAT2
GPIO4E/PSCLK3
GPIO4F/PSDAT3
OX1 32.768khz
15PF/50V OC14
15PF/50V OC16
OR10 10MOhm /X
OR5 47KOHM /X
OC12 0.1UF/16V /X
OR7 10KOhm
OC13 0.1UF/16V /X
OR8 4.7KOhm
PCI_RST#
KB3310QF
/KB3310
02G890000700
OR25 1.1G For Hotkey debounce
HOTKEY_SW0# - HOTKEY_SW3# internal PU
http://hobi-elektronika.net
<Core Design>
Title : EC_ENE KB3310
ASUSTek Computer INC.
Engineer: Kell_Huang
Size A3
Project Name S101
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 32 of 50

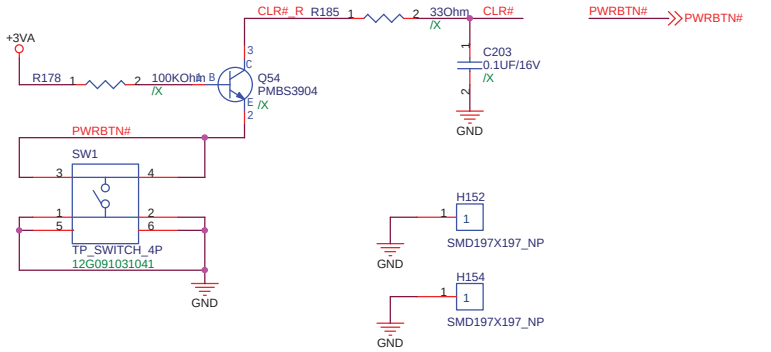


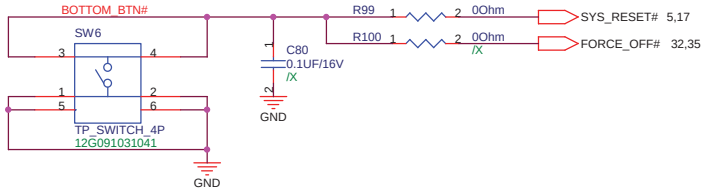


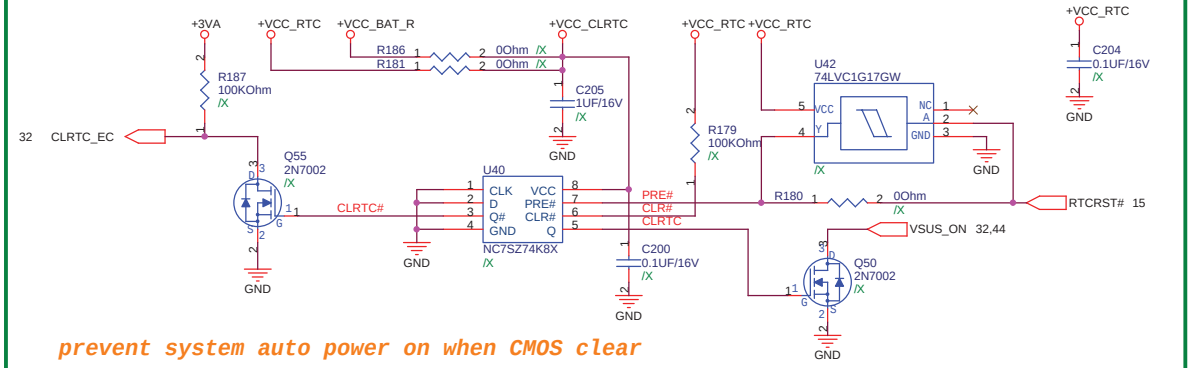
<Core Design>

ASUSTek Computer INC.	Title : EC_UART_KC3820	
	Engineer: Kell_Huang	
Size: A4	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 33 of 50	

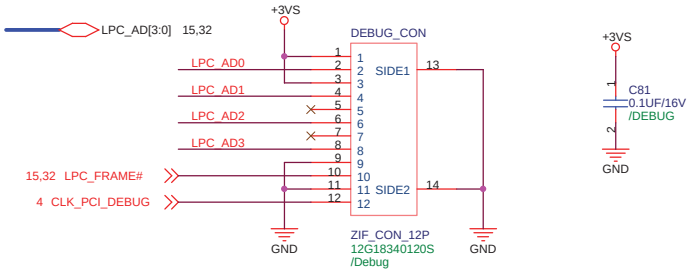




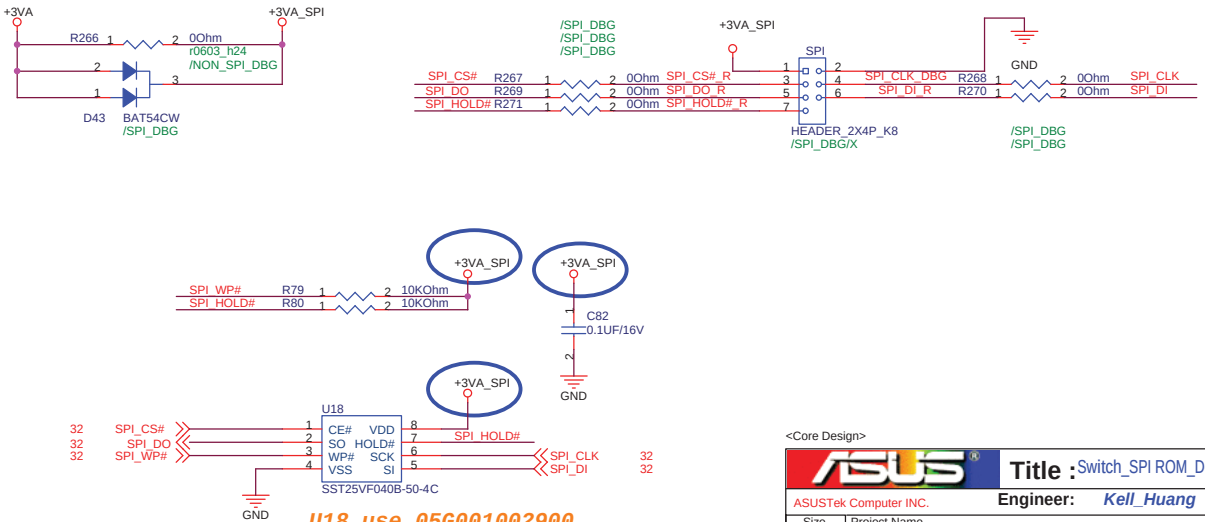


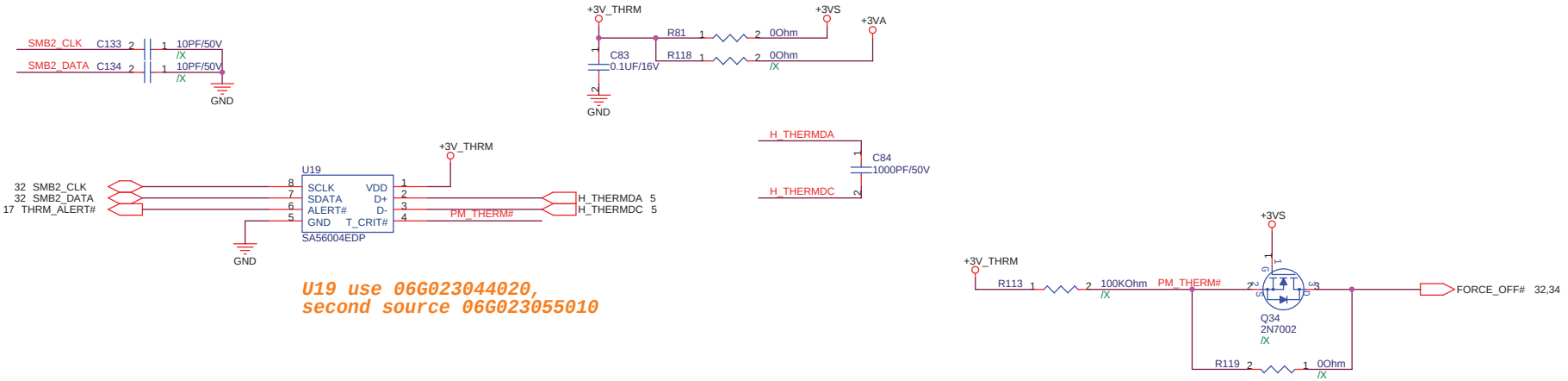


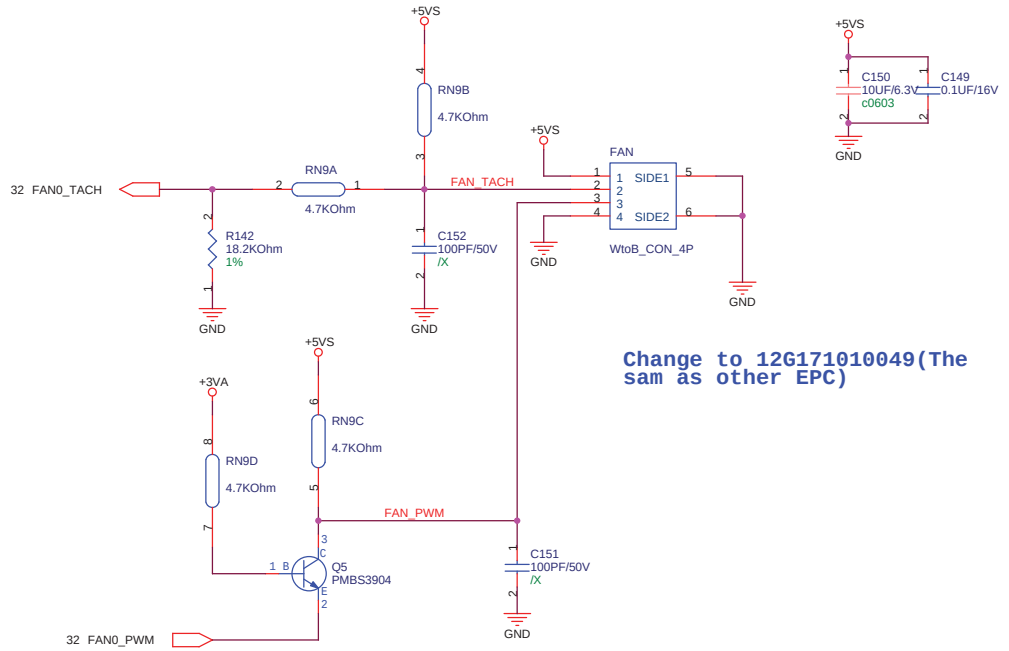
For Debug



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







<Core Design>

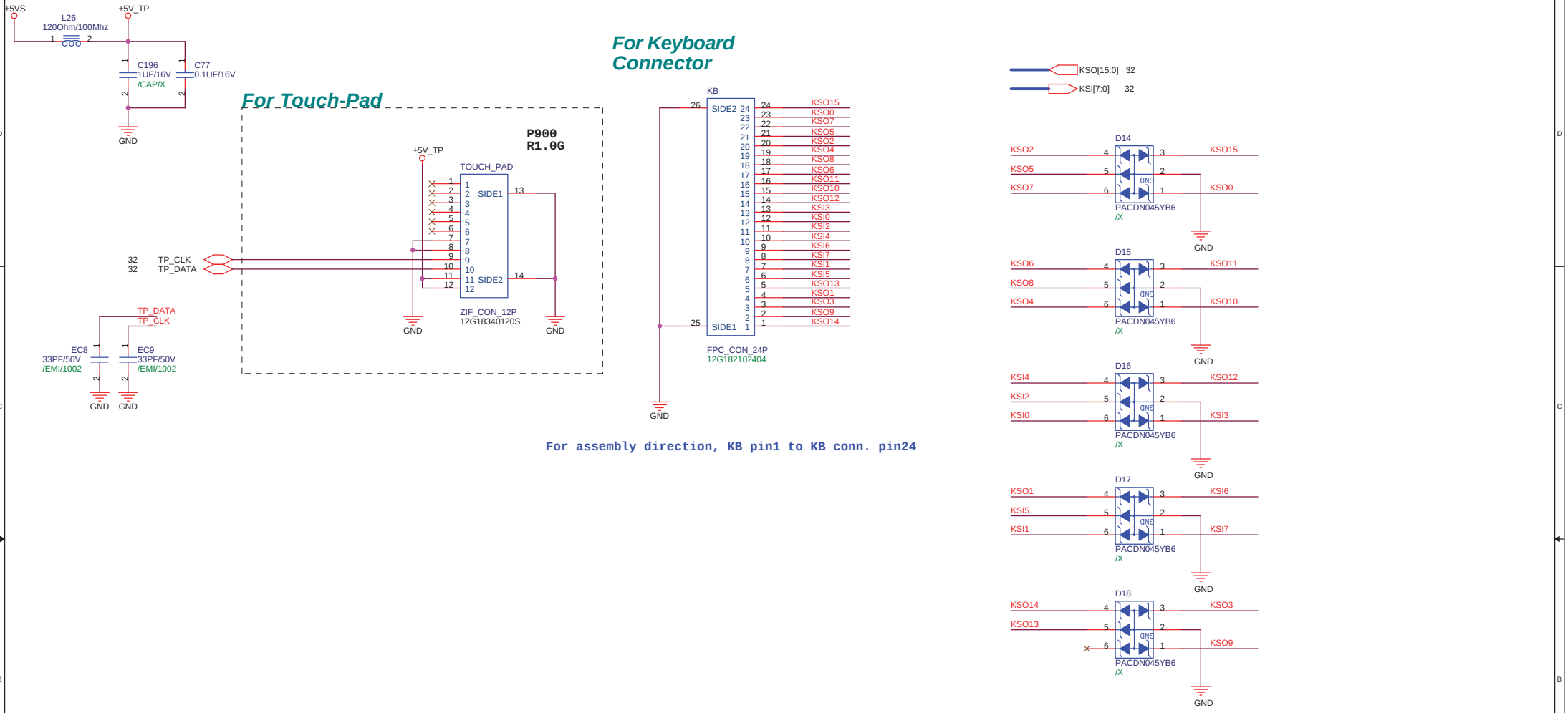
Title : Thermal Sensor_FAN

ASUSTek Computer INC.

Engineer: Kell_Huang

Size	Project Name	Rev
A3	S101	1.2G

Date: Monday, August 25, 2008 Sheet 35 of 50

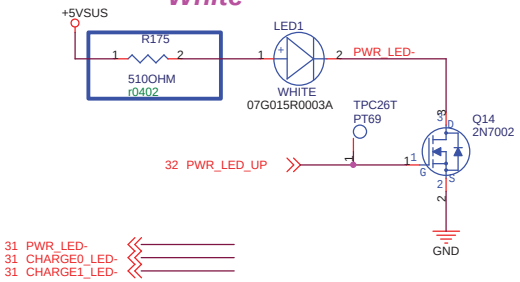


For assembly direction, KB pin1 to KB conn. pin24

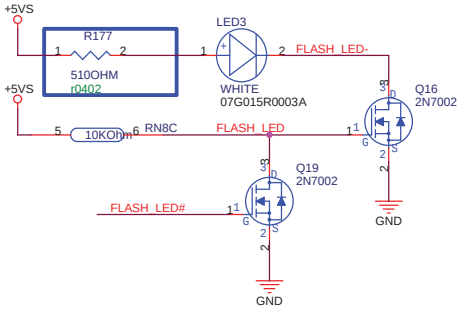
<Core Design>

ASUSTek Computer INC.	Title : KB_Touch Pad	
	Engineer: Kell_Huang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 36 of 50	

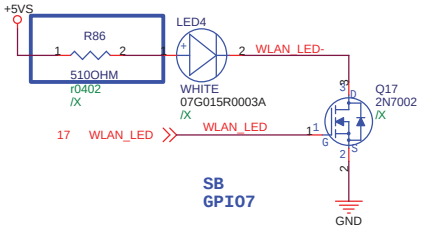
for POWER LED White



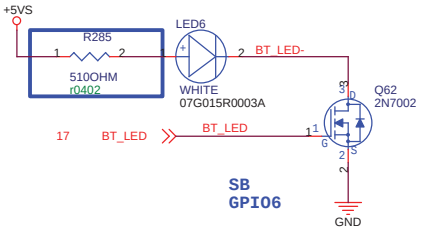
for FLASH LED White



White /X

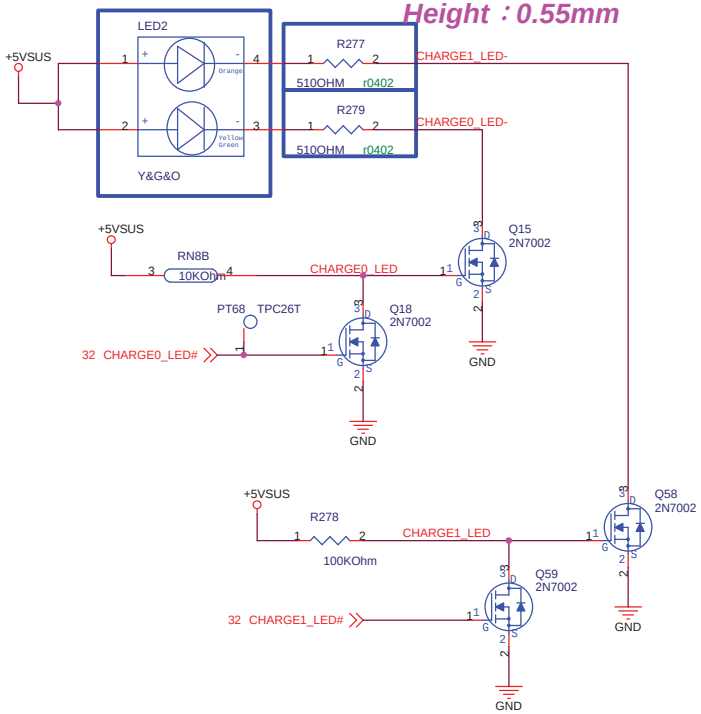


for WIFI/BlueTooth LED White

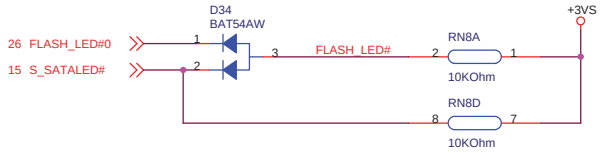


1.1G change to EVERLIGHT

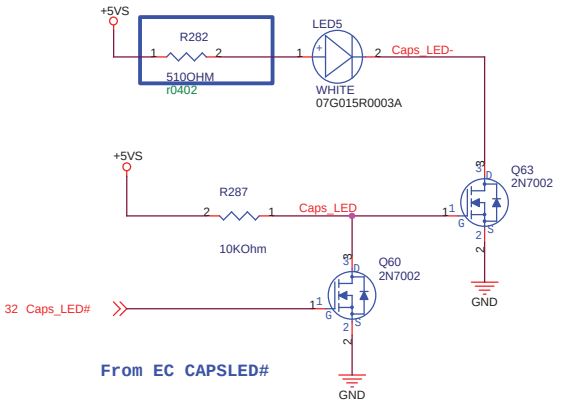
for CHARGE LED Height：0.55mm



Change LED resistor to 510 Ohm, about 4mA



for Caps Lock LED White



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.

<Core Design>

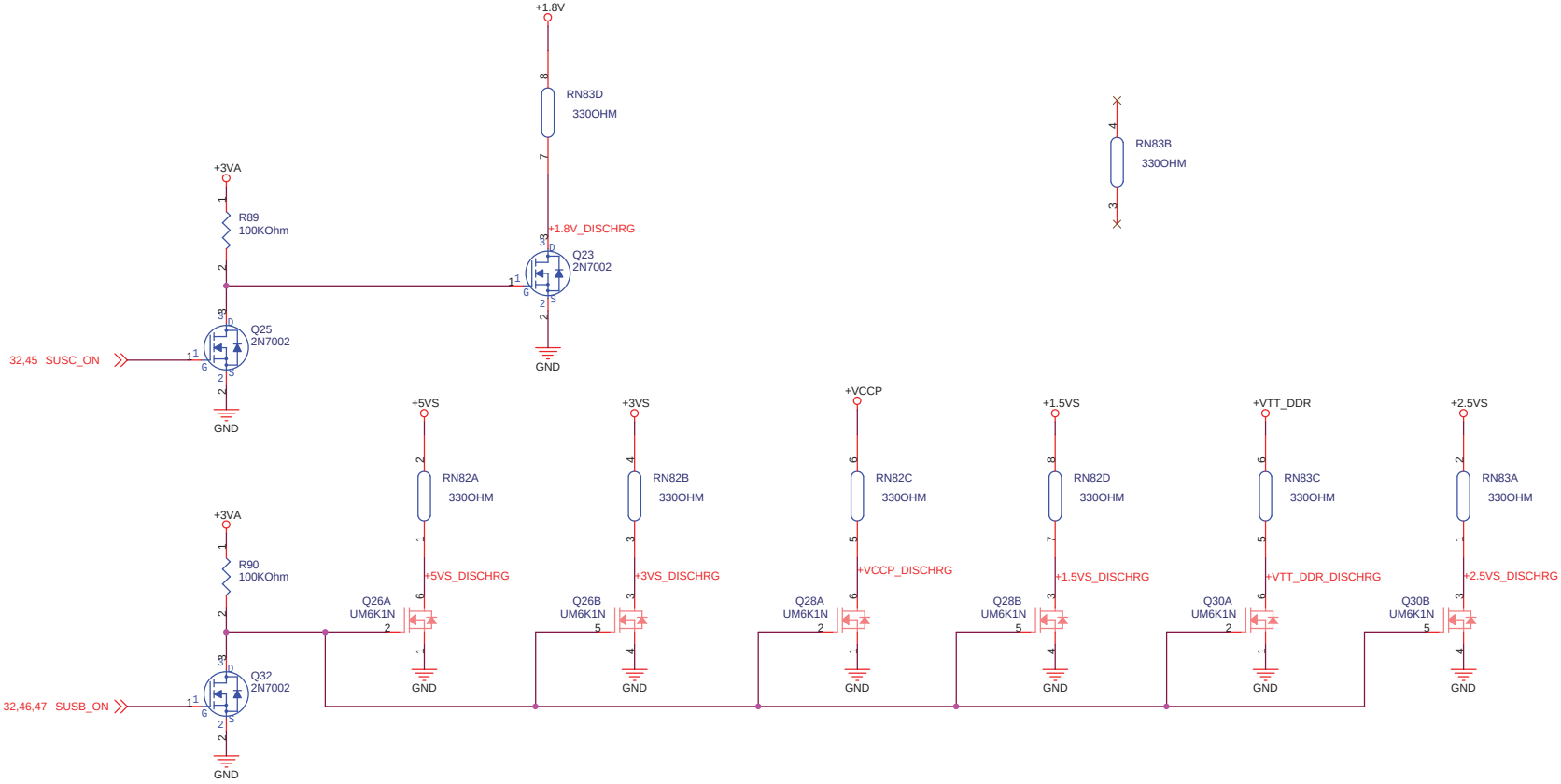
ASUSTek Computer INC.

Title : LED

Engineer: Kell_Huang

Size	Project Name	Rev
A3	S101	1.2G

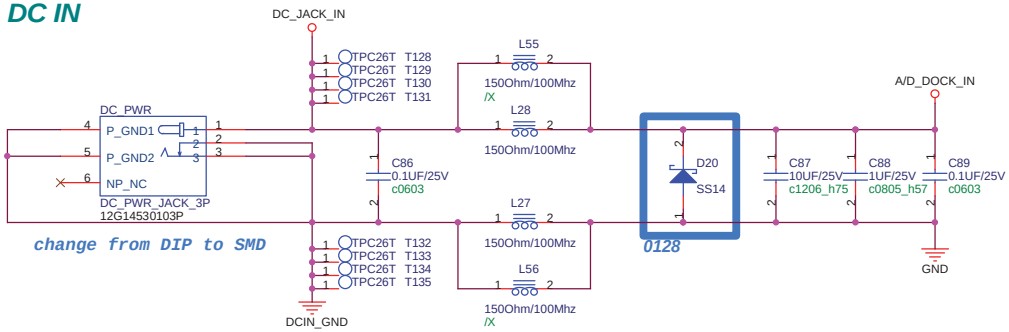
Date: Monday, August 25, 2008 Sheet 37 of 50



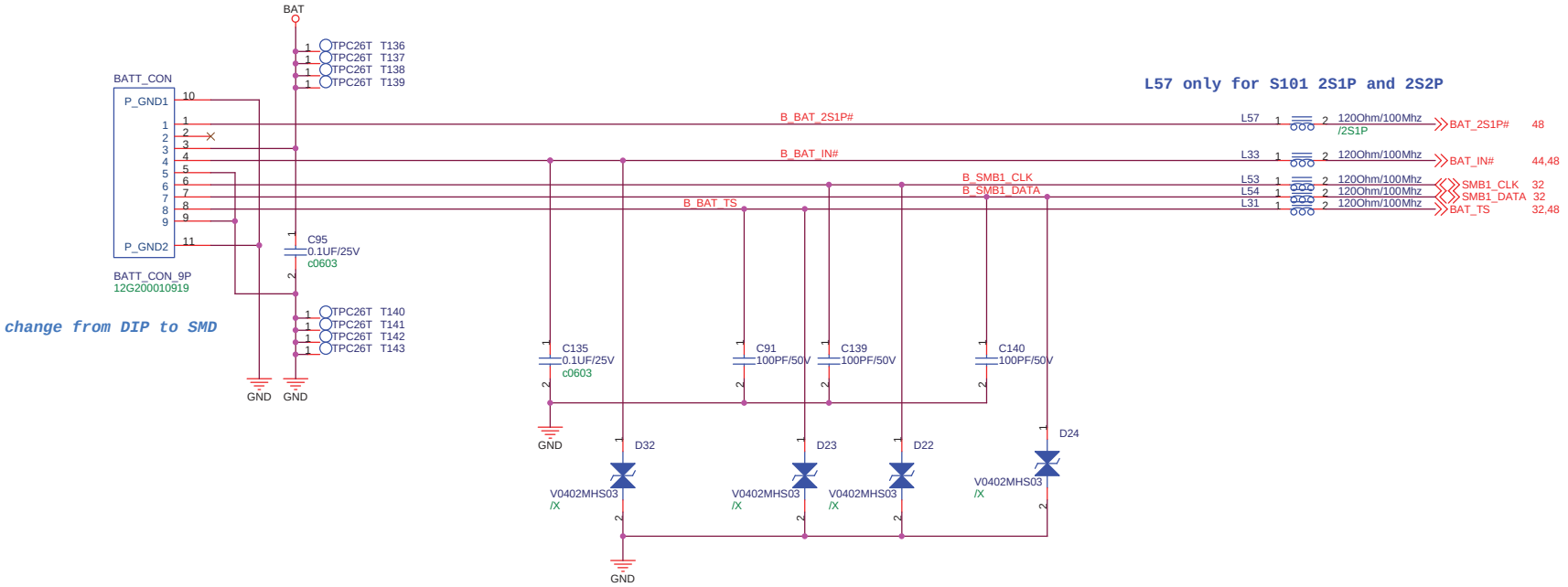
<Core Design>

ASUSTek Computer INC.	Title : Discharge	
	Engineer: Kell_Huang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 38 of 50	

DC IN

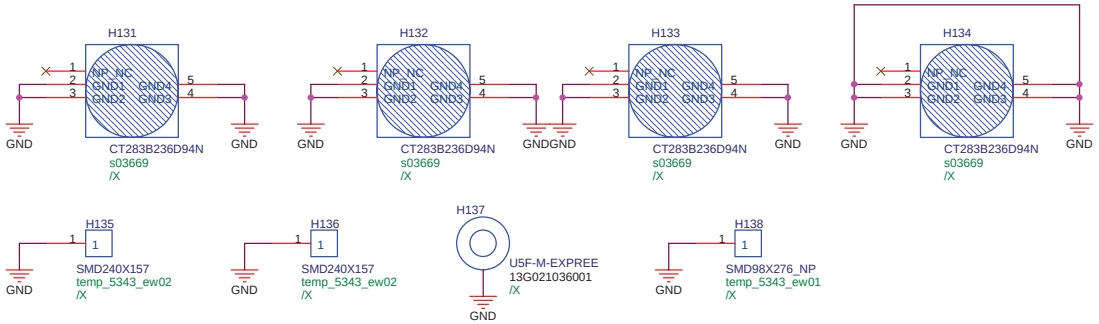


BAT IN



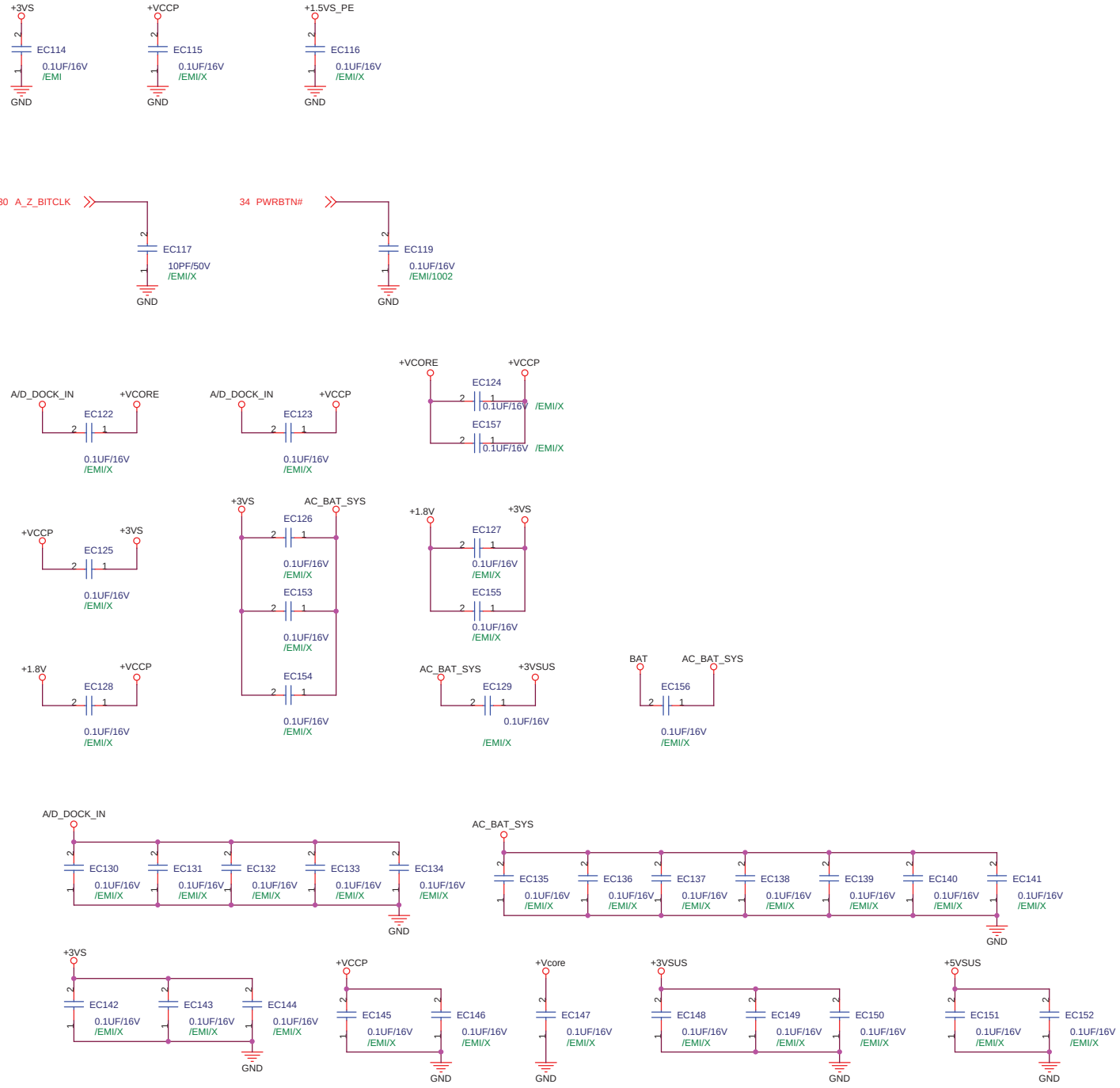
<Core Design>

ASUSTek Computer INC.	Title : PWR Jack	
	Engineer: Kell_Huang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 39 of 50	



<Core Design>

ASUSTek Computer INC.	Title : Srew Hole	
	Engineer: Kell_Huang	
Size: A3	Project Name: S101	Rev: 1.2G
Date: Monday, August 25, 2008	Sheet 40 of 50	



<Core Design>

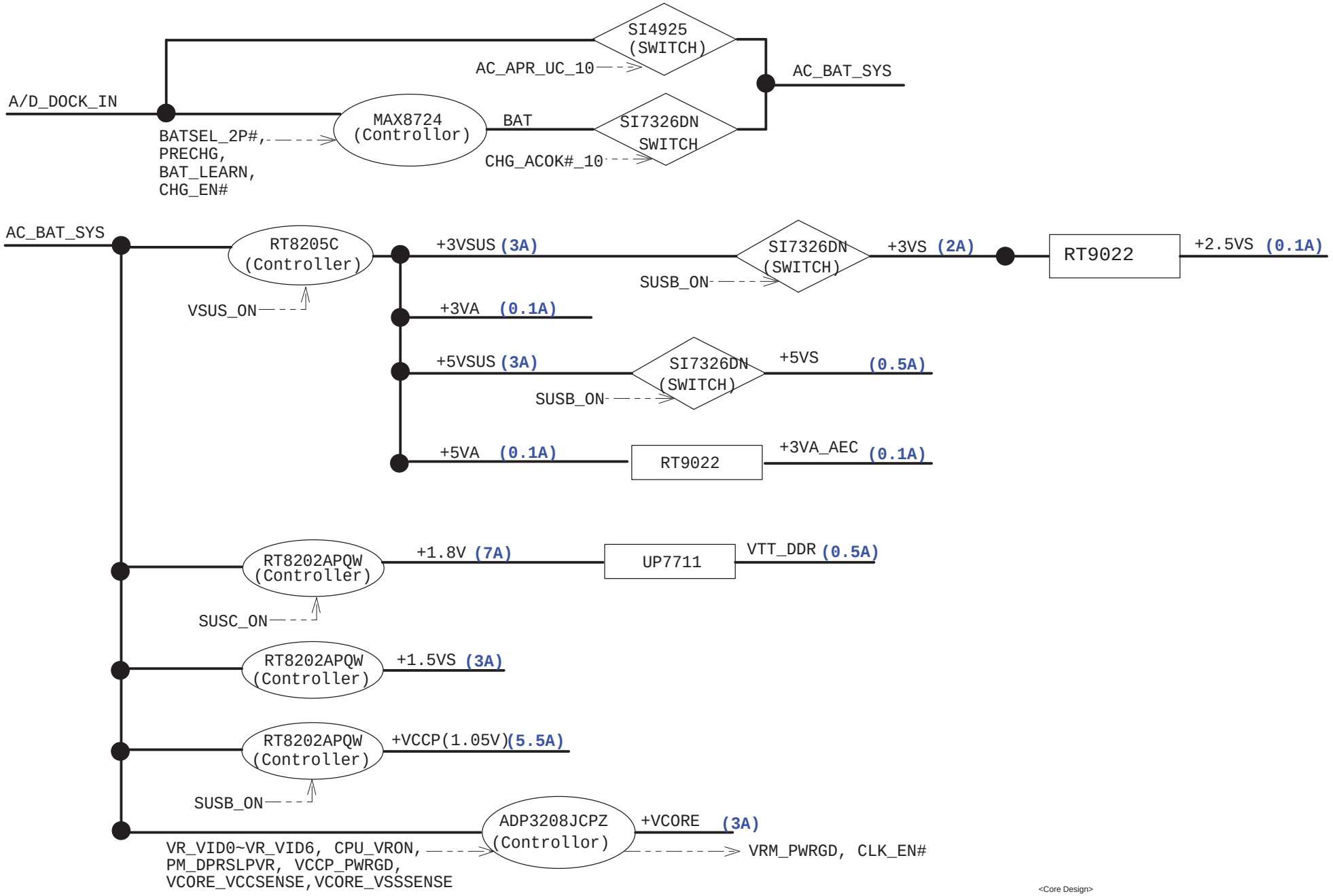
Title : EMI

ASUSTek Computer INC.

Engineer: Kell_Huang

Size	Project Name	Rev
A3	S101	1.2G

Date: Monday, August 25, 2008 Sheet 41 of 50



<Core Design>

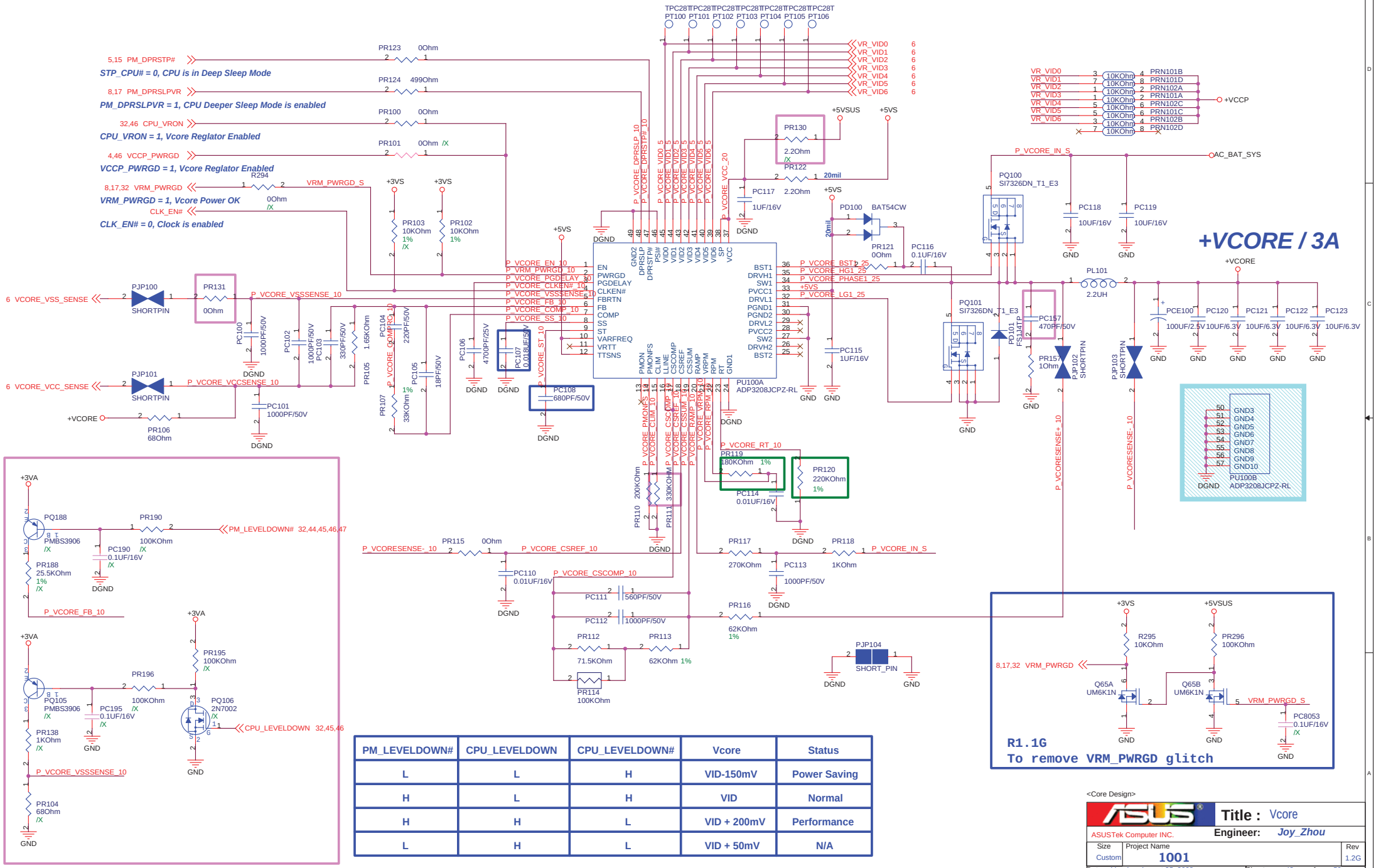
ASUSTek Computer INC.

Title : Power Flow

Engineer: Joy_Zhou

Size	Project Name	Rev
A3	S101	1.2G

Date: Monday, August 25, 2008 Sheet 42 of 50



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

<Core Design>

Title : Vcore

ASUSTek Computer INC. Engineer: Joy_Zhou

Size	Project Name	Rev
Custom	1001	1.2G

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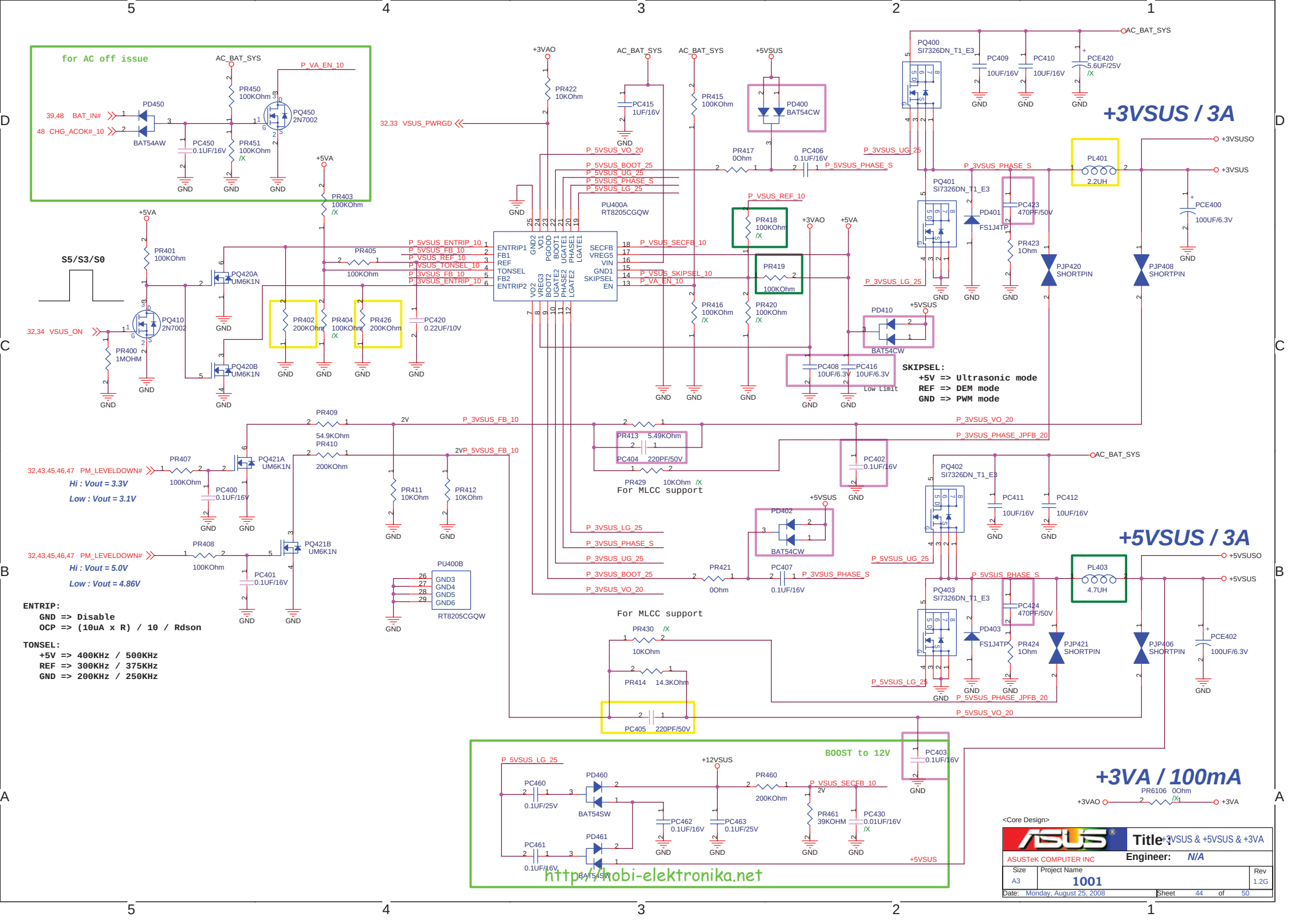
for AC off issue
AC_BAT_SYS
P_VA_EN_10
PD450
39,48 BAT_IN#
48 CHG_ACOK#_10
BAT54AW
PR450 100KOhm
PQ450 2N7002
PC450 0.1UF/16V
PR451 100KOhm /X
GND
+5VA
PR403 100KOhm /X
S5/S3/S0
PR401 100KOhm
PQ420A UM6K1N
PQ420B UM6K1N
PQ410 2N7002
32,34 VSUS_ON
PR400 1MOHM
PR402 200KOhm
PR404 100KOhm /X
PR426 200KOhm
PC420 0.22UF/10V
PR405 100KOhm
+3VAO
PR422 10KOhm
32,33 VSUS_PWRGD
PC415 1UF/16V
PR415 100KOhm
+5VSUS
PD400 BAT54CW
PR417 0Ohm
PC406 0.1UF/16V
P_5VSUS_VO_20
P_5VSUS_BOOT_25
P_5VSUS_UG_25
P_5VSUS_PHASE_S
P_5VSUS_LG_25
P_5VSUS_ENTRIP_10
P_5VSUS_FB_10
P_VSUS_REF_10
P_VSUS_TONSEL_10
P_3VSUS_FB_10
P_3VSUS_ENTRIP_10
PU400A RT8205CGQW
ENTRIP1
FB1
REF
TONSEL
FB2
ENTRIP2
VO2
VREG3
BOOT2
UGATE2
PHASE2
LGATE2
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
PR418 100KOhm /X
PR419 100KOhm
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
PR409 54.9KOhm
PR410 200KOhm
2V
P_3VSUS_FB_10
2VP_5VSUS_FB_10
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
32,43,45,46,47 PM_LEVELDOWN#
Hi : Vout = 3.3V
Low : Vout = 3.1V
PR407 100KOhm
PQ421A UM6K1N
PC400 0.1UF/16V
PR411 10KOhm
PR412 10KOhm
PD402 BAT54CW
P_3VSUS_LG_25
P_3VSUS_PHASE_S
P_3VSUS_UG_25
P_3VSUS_BOOT_25
P_3VSUS_VO_20
PR421 0Ohm
PC407 0.1UF/16V
P_3VSUS_PHASE_S
32,43,45,46,47 PM_LEVELDOWN#
Hi : Vout = 5.0V
Low : Vout = 4.86V
PR408 100KOhm
PQ421B UM6K1N
PC401 0.1UF/16V
PU400B
GND3
GND4
GND5
GND6
RT8205CGQW
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
PD460 BAT54SW
PD461 BAT54SW
PC460 0.1UF/25V
PC461 0.1UF/16V
PC462 0.1UF/16V
PC463 0.1UF/25V
PR460 200KOhm
P_VSUS_SECFB_10
PR461 39KOHM
PC430 0.01UF/16V /X
PC403 0.1UF/16V
+5VSUS
http://hobi-elektronika.net
PQ400 SI7326DN_T1_E3
PC409 10UF/16V
PC410 10UF/16V
PCE420 5.6UF/25V /X
AC_BAT_SYS
+3VSUS / 3A
PL401 2.2UH
+3VSUSO
+3VSUS
PQ401 SI7326DN_T1_E3
PD401 FS1J4TP
PC423 470PF/50V
PR423 1Ohm
PCE400 100UF/6.3V
PJP420 SHORTPIN
PJP408 SHORTPIN
PQ402 SI7326DN_T1_E3
PC411 10UF/16V
PC412 10UF/16V
+5VSUS / 3A
PL403 4.7UH
+5VSUSO
+5VSUS
PQ403 SI7326DN_T1_E3
PD403 FS1J4TP
PC424 470PF/50V
PR424 1Ohm
PJP421 SHORTPIN
PJP406 SHORTPIN
PCE402 100UF/6.3V
+3VA / 100mA
PR6106 0Ohm /X
+3VAO
+3VA
<Core Design>
ASUSTeK COMPUTER INC
Title: +3VSUS & +5VSUS & +3VA
Engineer: N/A
Size A3
Project Name 1001
Rev 1.2G
Date: Monday, August 25, 2008
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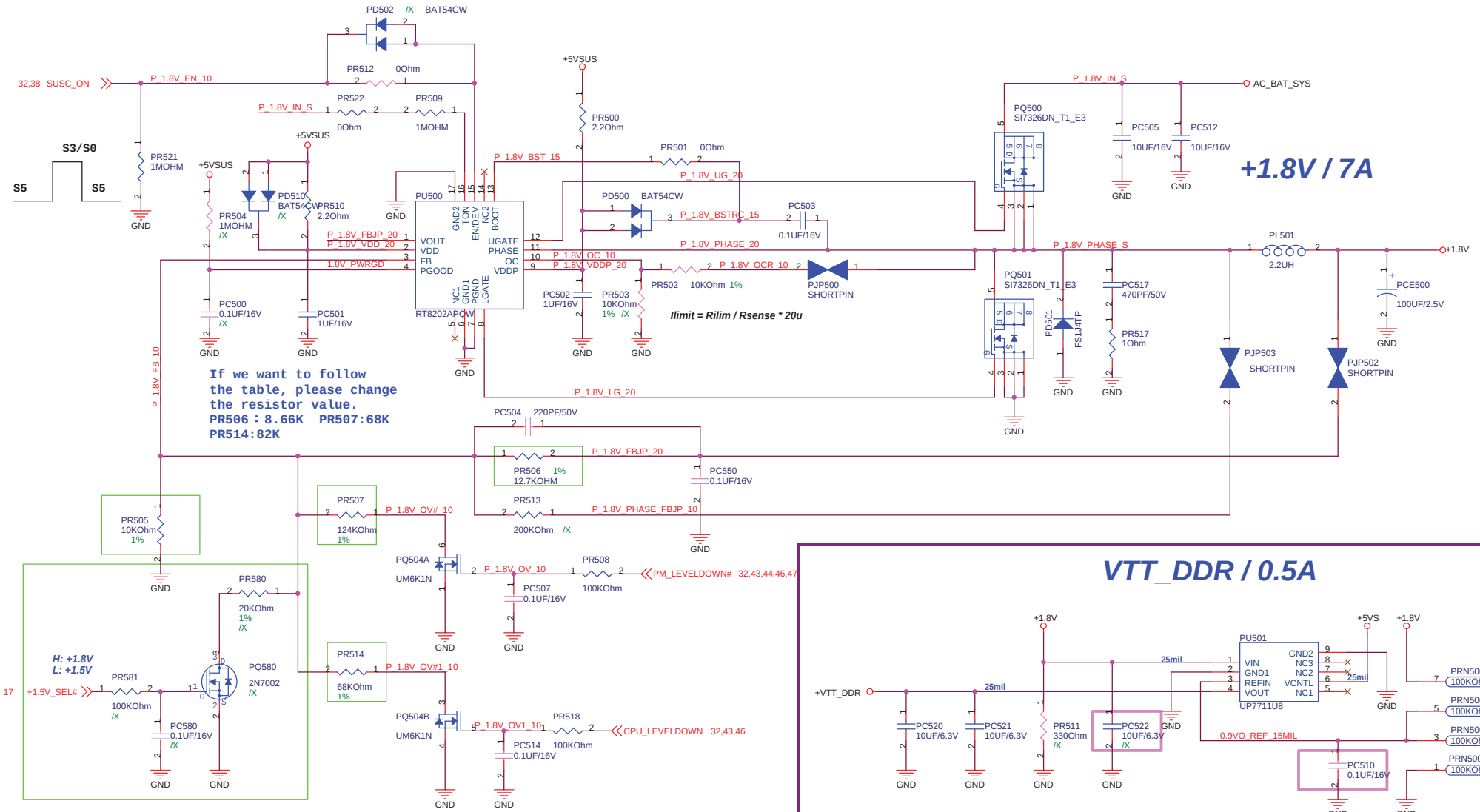


+1.5V_SEL#	PM_LEVELDOWN#	CPU_LEVELDOWN	CPU_LEVELDOWN#	Voltage	Status
H	L	L	H	1.72V	Power Saving
H	H	L	H	1.82V	Normal
H	H	H	L	1.9V	Performance
H	L	H	L	1.782V	N/A
L	L	L	H	1.4V	Power Saving
L	H	L	H	1.5V	Normal
L	H	H	L	1.58V	Performance

<Core Design>

ASUSTek Computer INC.

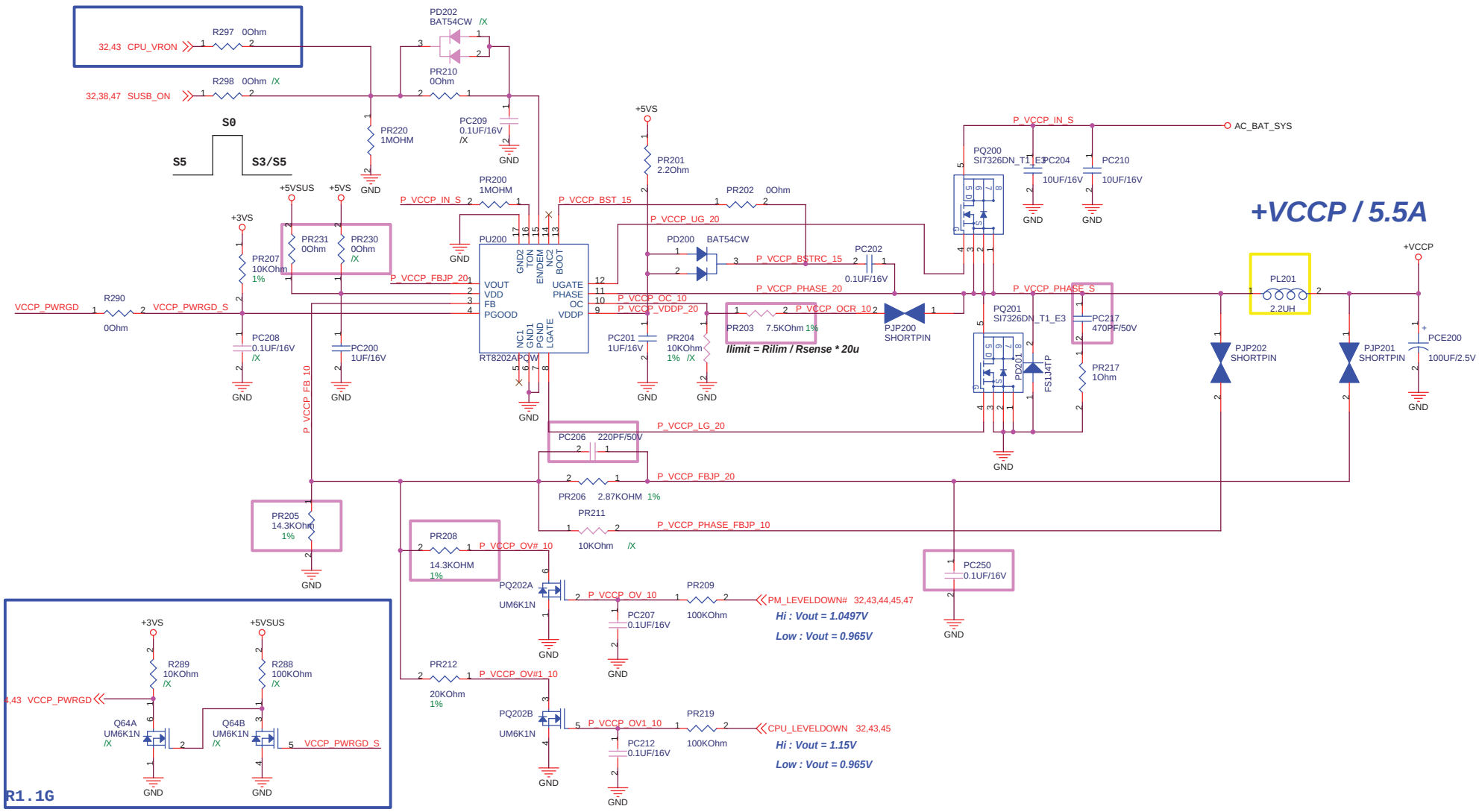
Title : +1.8V & VTTDDR

Engineer: Joy_Zhou

Size	Project Name	Rev
A3	1001	1.2G

Date: Monday, August 25, 2008 Sheet 45 of 50

1.1G change Enable signal from CPU_VRON



To remove VCCP_PWRGD glitch

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

<Core Design>

Title : VCCP

ASUSTek Computer INC. Engineer: Joy_Zhou

Size	Project Name	Rev
A3	1001	1.2G

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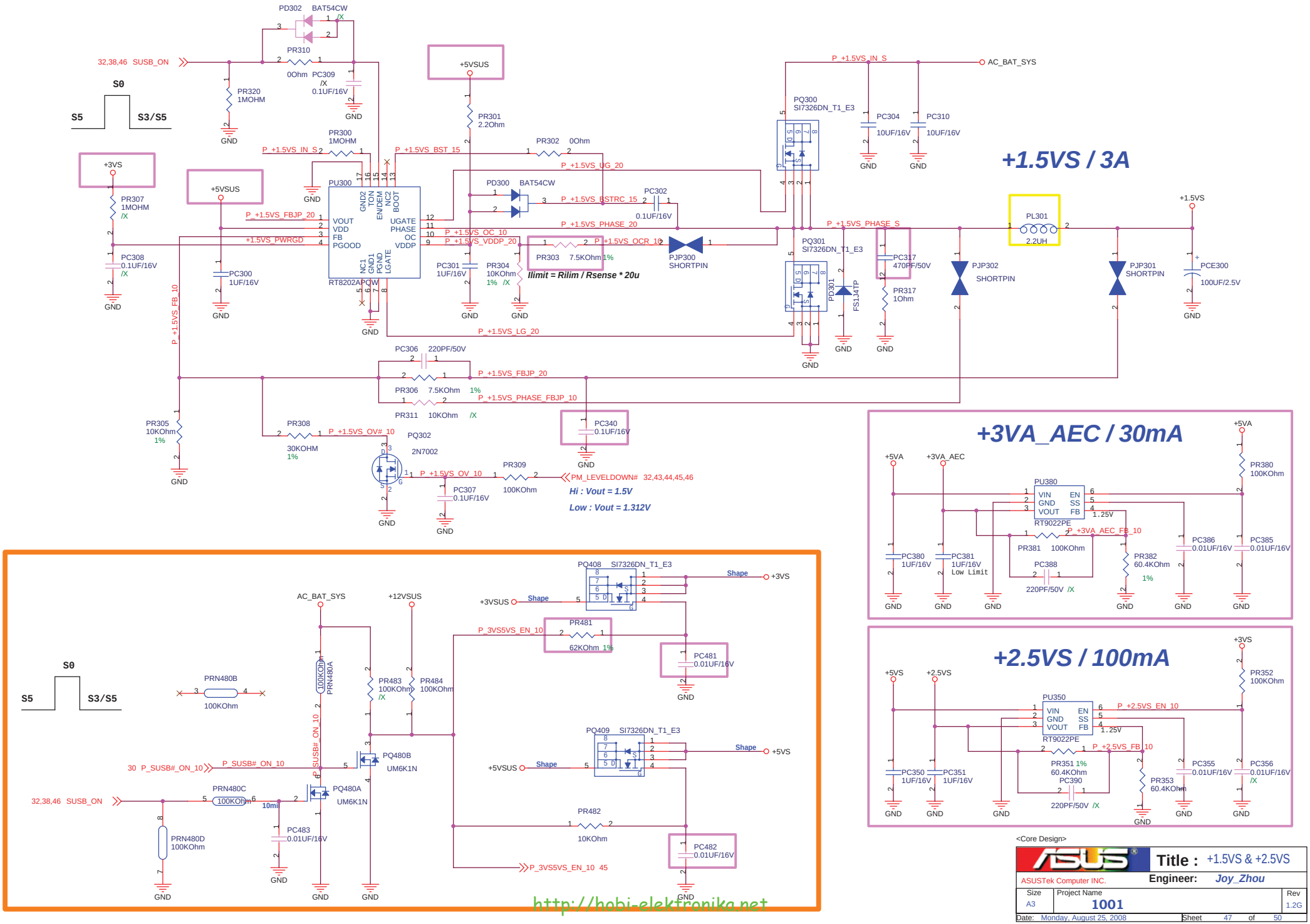
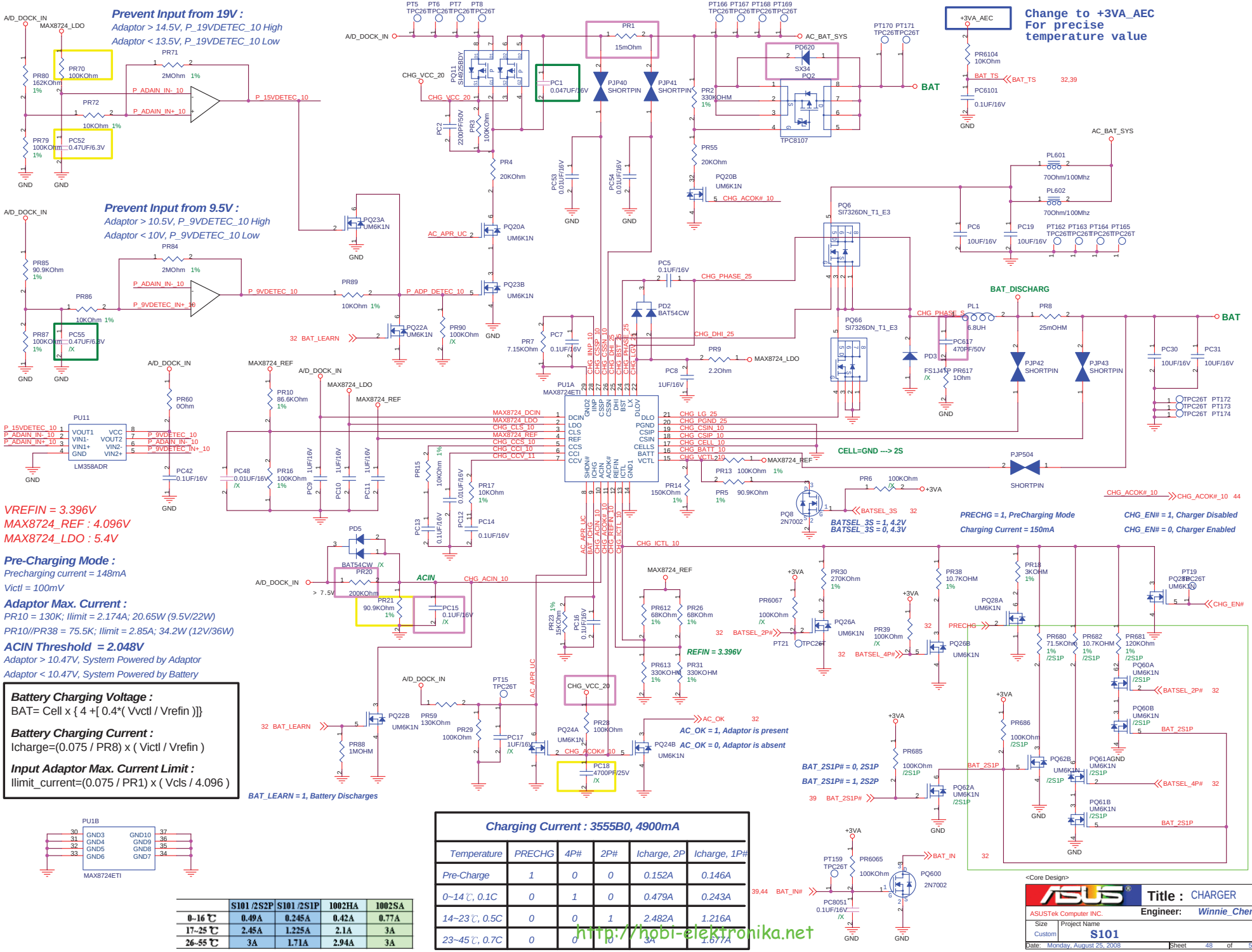

+1.5VS / 3A
+3VA_AEC / 30mA
+2.5VS / 100mA
S0
S5
S3/S5
PU300
RT8202APQW
PQ300 SI7326DN_T1_E3
PQ301 SI7326DN_T1_E3
PQ302 2N7002
PQ408 SI7326DN_T1_E3
PQ409 SI7326DN_T1_E3
PQ480A UM6K1N
PQ480B UM6K1N
PU380 RT9022PE
PU350 RT9022PE
PJP300 SHORTPIN
PJP301 SHORTPIN
PJP302 SHORTPIN
PD300 BAT54CW
PD301 FS1L4TP
PL301 2.2UH
PCE300 100UF/2.5V
PD302 BAT54CW
Ilimit = Rilim / Rsense * 20u
Hi : Vout = 1.5V
Low : Vout = 1.312V
AC_BAT_SYS
+12VSUS
+5VSUS
+3VS
+5VA
+3VA_AEC
+2.5VS
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_OC_10
P_+1.5VS_VDDP_20
P_+1.5VS_FBJP_20
P_+1.5VS_LG_20
P_+1.5VS_PHASE_S
P_+1.5VS_FB_10
P_+1.5VS_OV#_10
P_+1.5VS_OV_10
P_+1.5VS_PHASE_FBJP_10
P_3VS5VS_EN_10
P_+3VA_AEC_FB_10
P_+2.5VS_EN_10
P_+2.5VS_FB_10
P_SUSB#_ON_10
PM_LEVELDOWN# 32,43,44,45,46
32,38,46 SUSB_ON
30 P_SUSB#_ON_10
P_3VS5VS_EN_10 45
+1.5VS_PWRGD
Shape
<Core Design>
Title : +1.5VS & +2.5VS
ASUSTek Computer INC.
Engineer: Joy_Zhou
Size A3
Project Name 1001
Rev 1.2G
Date: Monday, August 25, 2008
Sheet 47 of 50
http://hobi-elektronika.net


Prevent Input from 19V :
Adaptor > 14.5V, P_19VDETEC_10 High
Adaptor < 13.5V, P_19VDETEC_10 Low
Prevent Input from 9.5V :
Adaptor > 10.5V, P_9VDETEC_10 High
Adaptor < 10V, P_9VDETEC_10 Low
VREFIN = 3.396V
MAX8724_REF : 4.096V
MAX8724_LDO : 5.4V
Pre-Charging Mode :
Precharging current = 148mA
Victl = 100mV
Adaptor Max. Current :
PR10 = 130K; Ilimit = 2.174A; 20.65W (9.5V/22W)
PR10//PR38 = 75.5K; Ilimit = 2.85A; 34.2W (12V/36W)
ACIN Threshold = 2.048V
Adaptor > 10.47V, System Powered by Adaptor
Adaptor < 10.47V, System Powered by Battery
Battery Charging Voltage :
BAT= Cell x { 4 +[0.4*(Vvctl / Vrefin)]}
Battery Charging Current :
Icharge=(0.075 / PR8) x (Victl / Vrefin)
Input Adaptor Max. Current Limit :
Ilimit_current=(0.075 / PR1) x (Vcls / 4.096)
Change to +3VA_AEC
For precise
temperature value
CELL=GND ---> 2S
BAT_DISCHARG
PRECHG = 1, PreCharging Mode
Charging Current = 150mA
CHG_EN# = 1, Charger Disabled
CHG_EN# = 0, Charger Enabled
BATSEL_3S = 1, 4.2V
BATSEL_3S = 0, 4.3V
AC_OK = 1, Adaptor is present
AC_OK = 0, Adaptor is absent
BAT_2S1P# = 0, 2S1P
BAT_2S1P# = 1, 2S2P
BAT_LEARN = 1, Battery Discharges
Charging Current : 3555B0, 4900mA
Temperature | PRECHG | 4P# | 2P# | Icharge, 2P | Icharge, 1P#
Pre-Charge | 1 | 0 | 0 | 0.152A | 0.146A
0~14℃, 0.1C | 0 | 1 | 0 | 0.479A | 0.243A
14~23℃, 0.5C | 0 | 0 | 1 | 2.482A | 1.216A
23~45℃, 0.7C | 0 | 0 | 0 | 3A | 1.677A
S101 /2S2P | S101 /2S1P | 1002HA | 1002SA
0~16℃ | 0.49A | 0.245A | 0.42A | 0.77A
17~25℃ | 2.45A | 1.225A | 2.1A | 3A
26~55℃ | 3A | 1.71A | 2.94A | 3A
Title : CHARGER
ASUSTek Computer INC.
Engineer: Winnie_Chen
Project Name S101
Rev 1.2G
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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	

<Core Design>

ASUSTek Computer INC.

Title : EC Pin Define

Engineer: Satan He

Size	Project Name	Rev
A3	S101	1.2G

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<Core Design>

ASUSTek Computer INC.	Title : History	
	Engineer: *Satan He*	
Size: A3	Project Name: **S101**	Rev: 1.2G
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