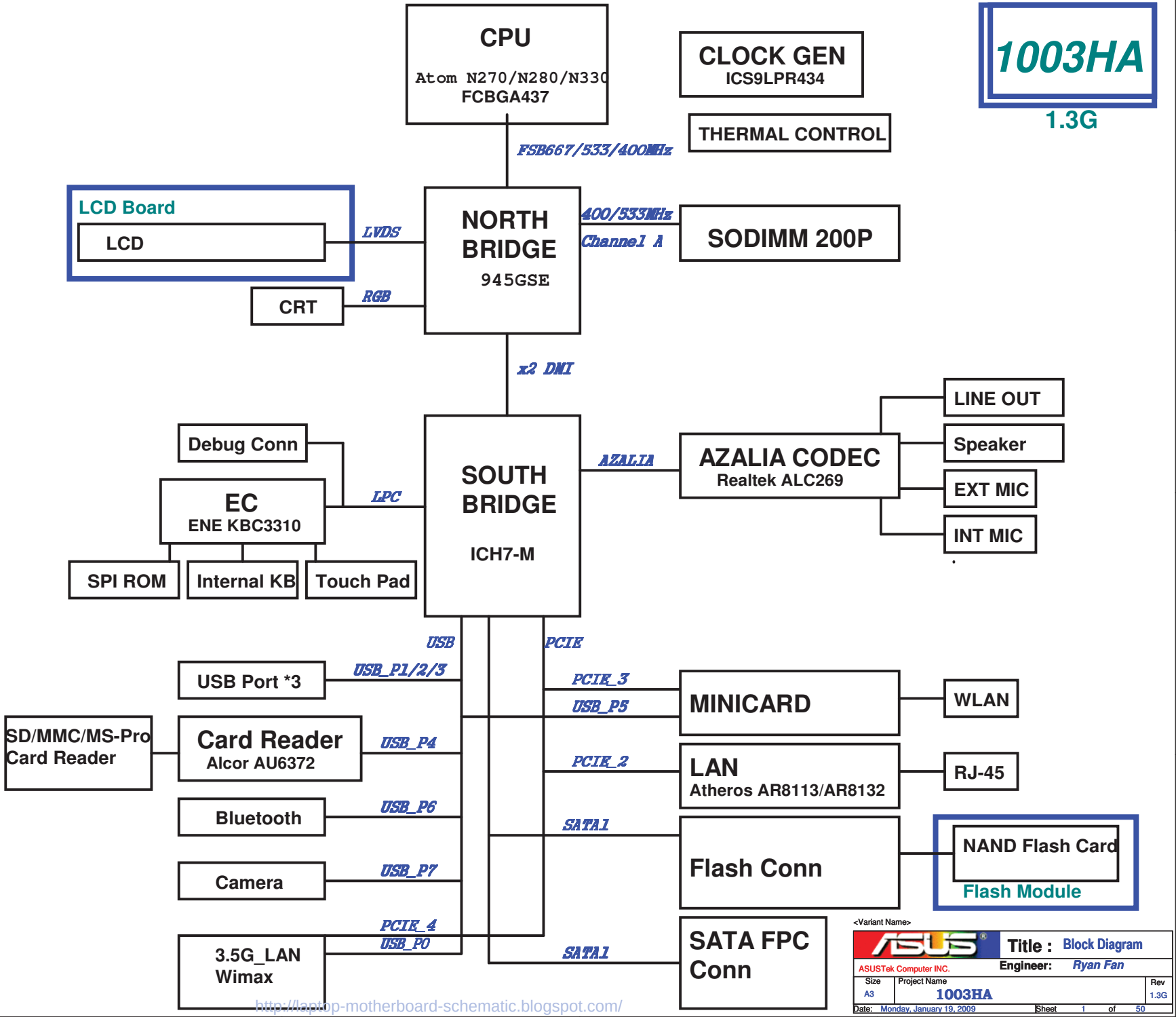


<Variant Name>

ASUSTek Computer INC.

Title : Block Diagram

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 1 of 50

EEE PC 1003HA PCB version

GPI37	GPI34	GPI33	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	3GLAN
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	3GLAN

Azalia

ACZ_SDIN0	CODEC
ACZ_SDIN1	NC
ACZ_SDIN2	NC

<Variant Name>

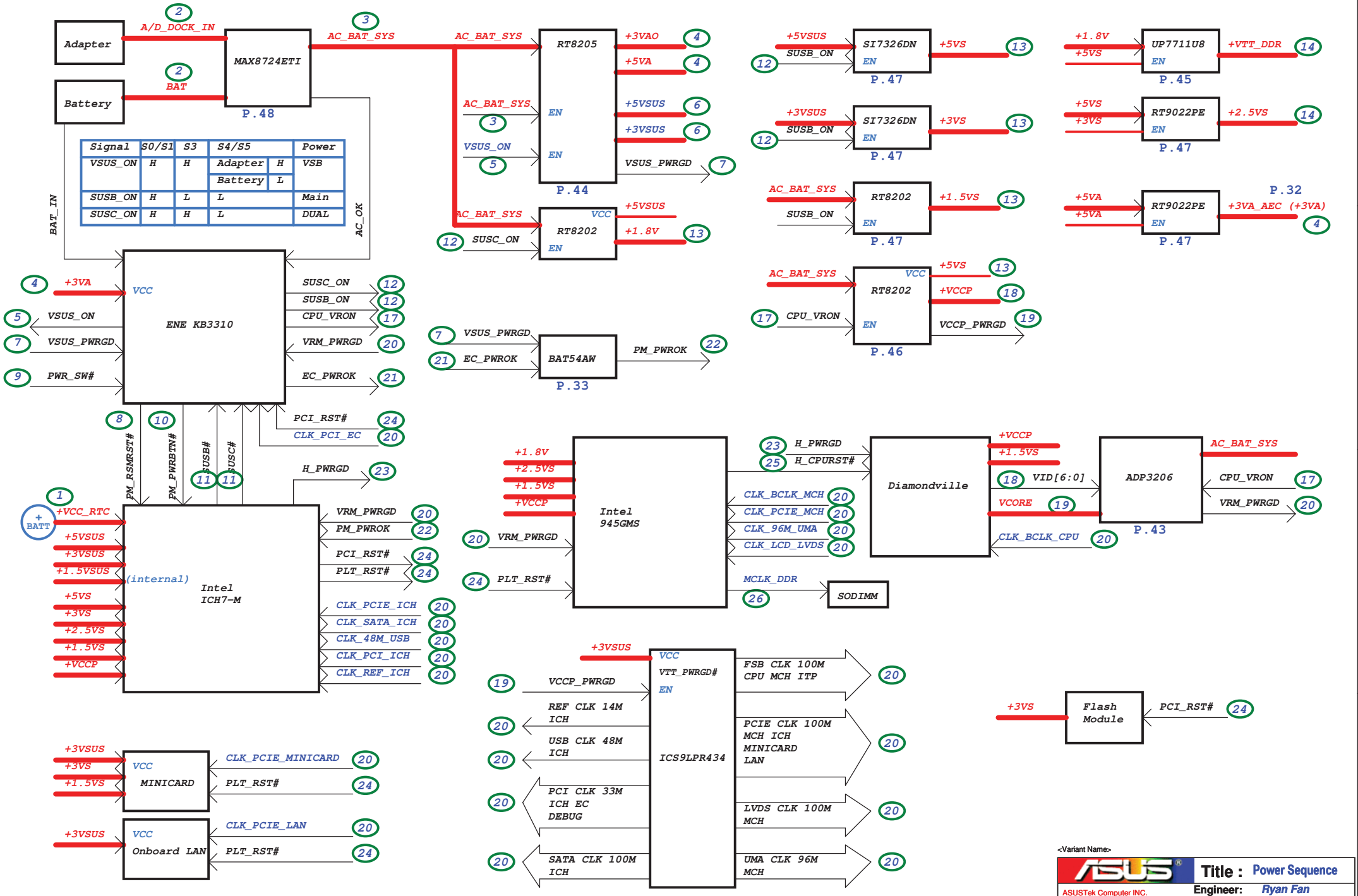
ASUSTek Computer INC.

Title : System Setting

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003	1.3G

Date: Monday, January 19, 2009 Sheet 2 of 50



<Variant Name>

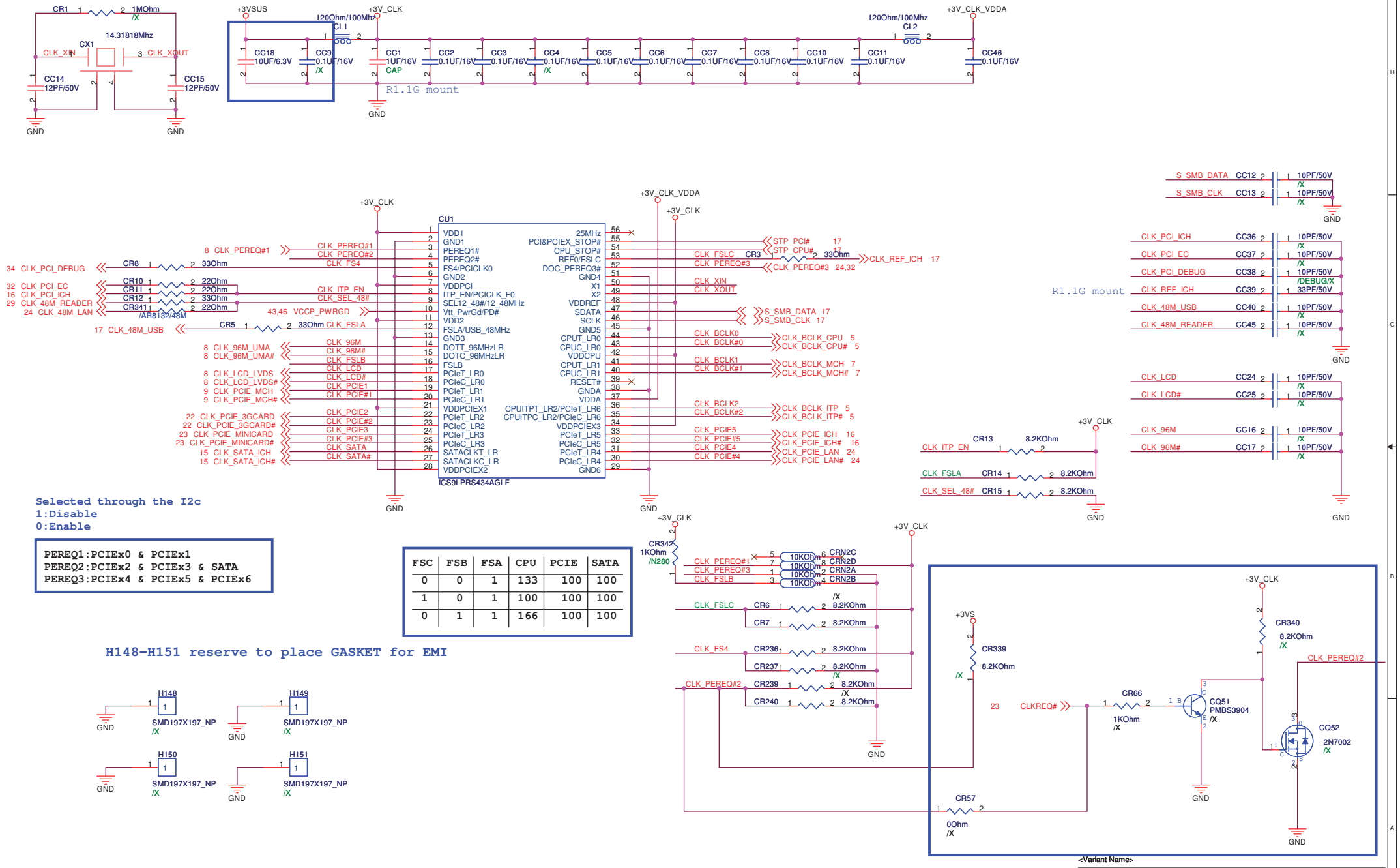
ASUSTek Computer INC.

Title : Power Sequence

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 3 of 50



<Variant Name>

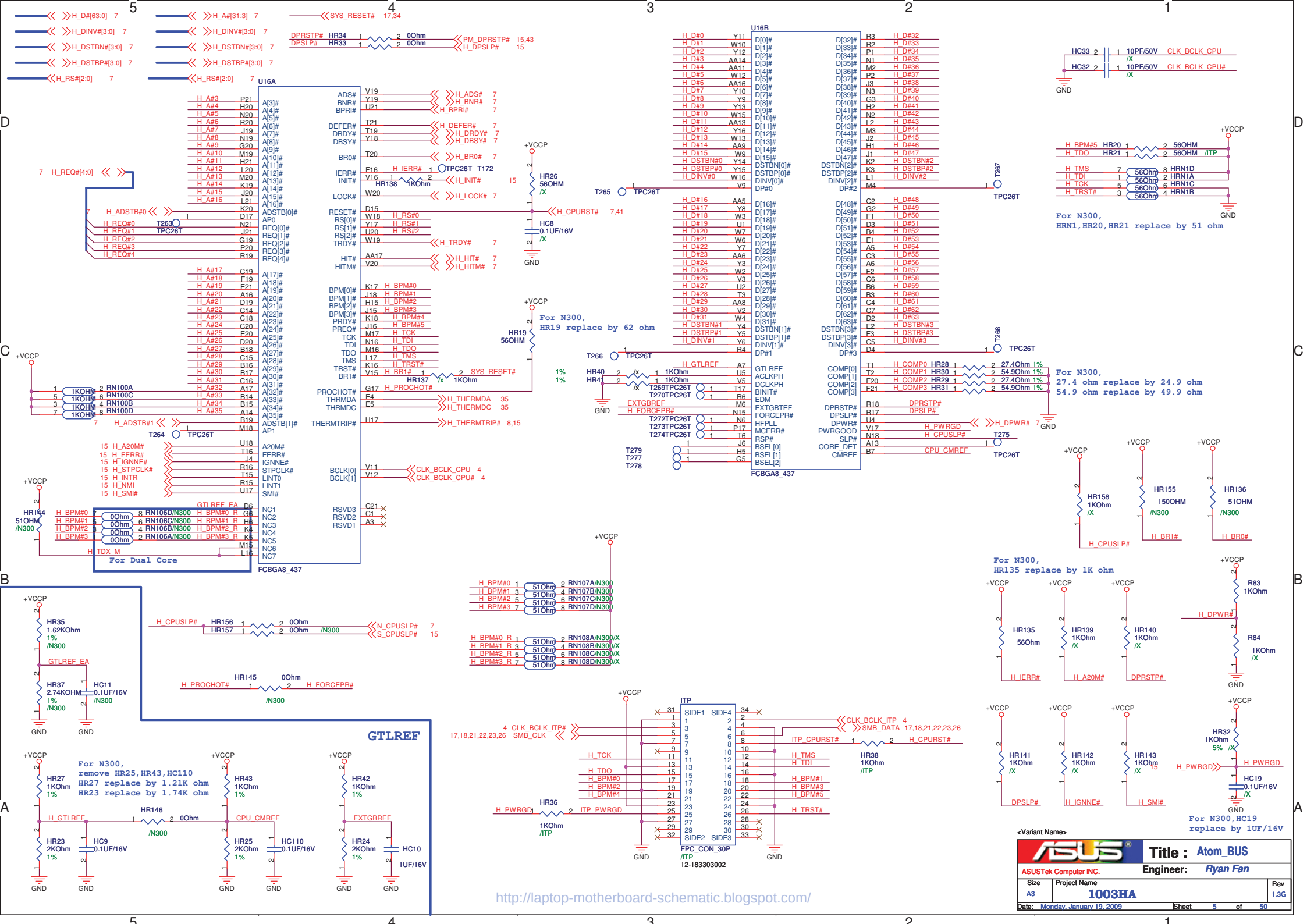
ASUSTek Computer INC.

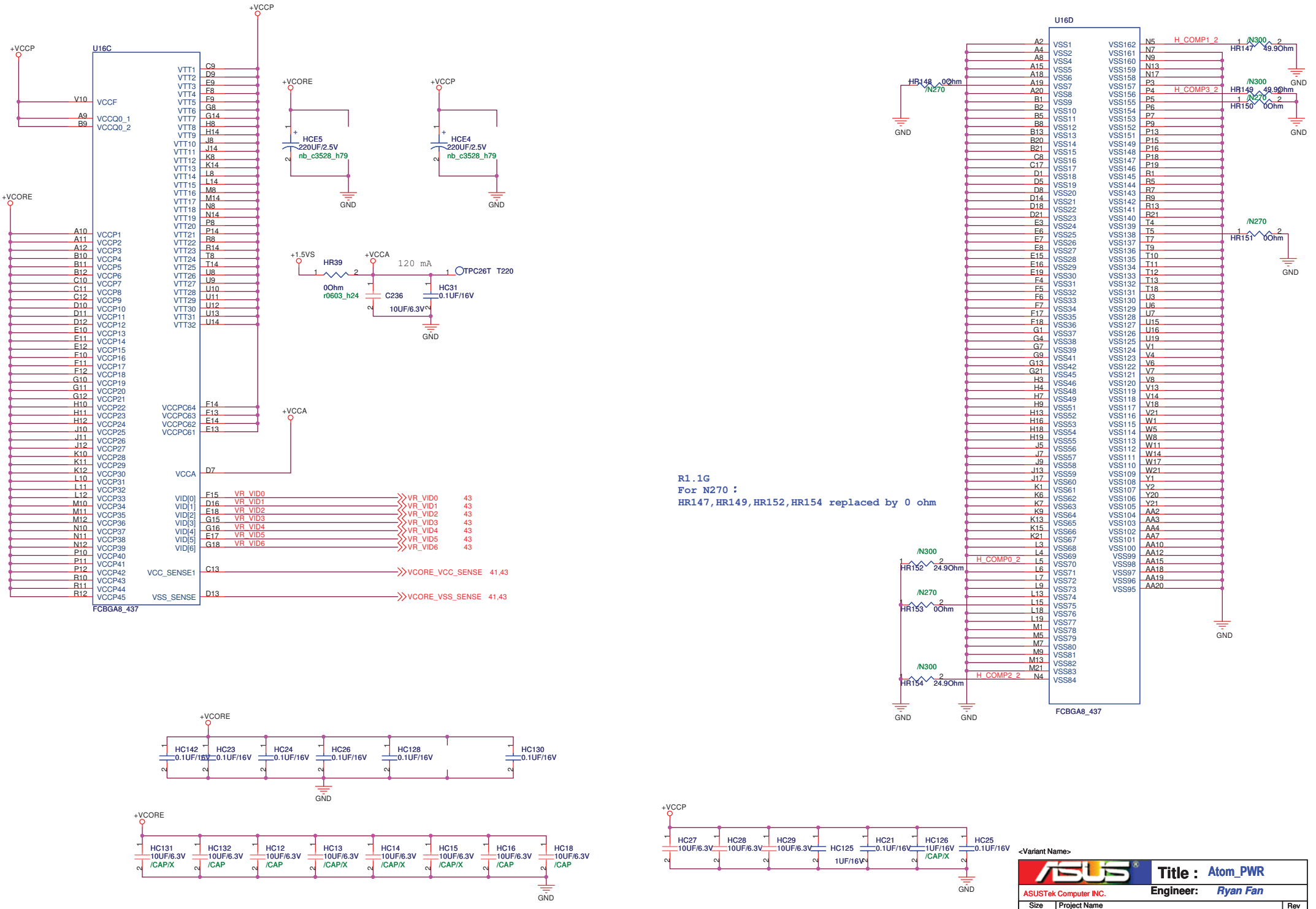
Title : Clock Gen_ICS9LPRS434

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 4 of 50


U16A
FCBGA8_437
U16B
FCBGA8_437
GTLREF
For Dual Core
For N300,
remove HR25,HR43,HC110
HR27 replace by 1.21K ohm
HR23 replace by 1.74K ohm
For N300,
HR19 replace by 62 ohm
For N300,
HRN1,HR20,HR21 replace by 51 ohm
For N300,
27.4 ohm replace by 24.9 ohm
54.9 ohm replace by 49.9 ohm
For N300,
HR135 replace by 1K ohm
For N300,HC19
replace by 1UF/16V
ITP
FPC_CON_30P
/ITP
12-183303002
Title : Atom_BUS
ASUSTek Computer INC.
Engineer: Ryan Fan
Project Name
1003HA
Size
A3
Rev
1.3G
Date: Monday, January 19, 2009
Sheet 5 of 50
<Variant Name>
http://laptop-motherboard-schematic.blogspot.com/



R1.1G
For N270 :
HR147,HR149,HR152,HR154 replaced by 0 ohm

<Variant Name>

ASUSTek Computer INC.	Title : Atom_PWR	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 6 of 50	

Power:
+VCCP

RCOMP

For N300
R188 and R189 replaced by 16.9 ohm

For Calibrating the FSB I/O Buffer

H_XRCOMP — R188 24.9Ohm 1% — GND
H_YRCOMP — R189 24.9Ohm 1% — GND

SCOMP

For N300
R192 and R193 replaced by 60.4 ohm

For Slew Rate Compenssation on the FSB

+VCCP — R192 54.9Ohm 1% — H_XSCOMP
+VCCP — R193 54.9Ohm 1% — H_YSCOMP

Voltage Swing

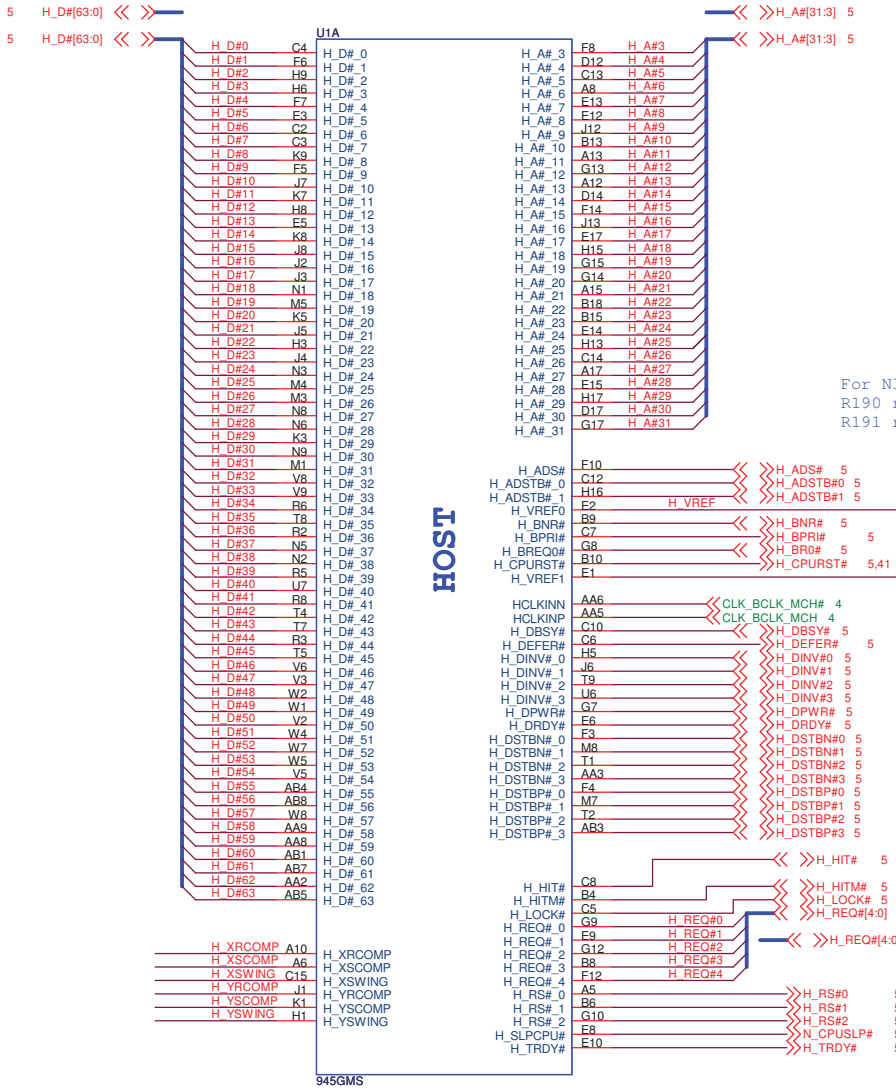
For N300
R194 and R195 replaced by 301 ohm
R196 and R197 replaced by 84.5 ohm

For Providing a Reference Voltage to The FSB RCOMP circuits

+VCCP — R194 221Ohm 1% — H_XSWING — R196 100Ohm 1% — GND; C207 0.1UF/16V c0402 — GND
+VCCP — R195 221Ohm 1% — H_YSWING — R197 100Ohm 1% — GND; C208 0.1UF/16V c0402 — GND

For N270
Signal voltage level = 0.3125*VCCP
Trace should be 10 mil wide with 20 mil spacing

For N300
Signal voltage level = 0.22*VCCP



AGTL+ I/O Voltage Reference

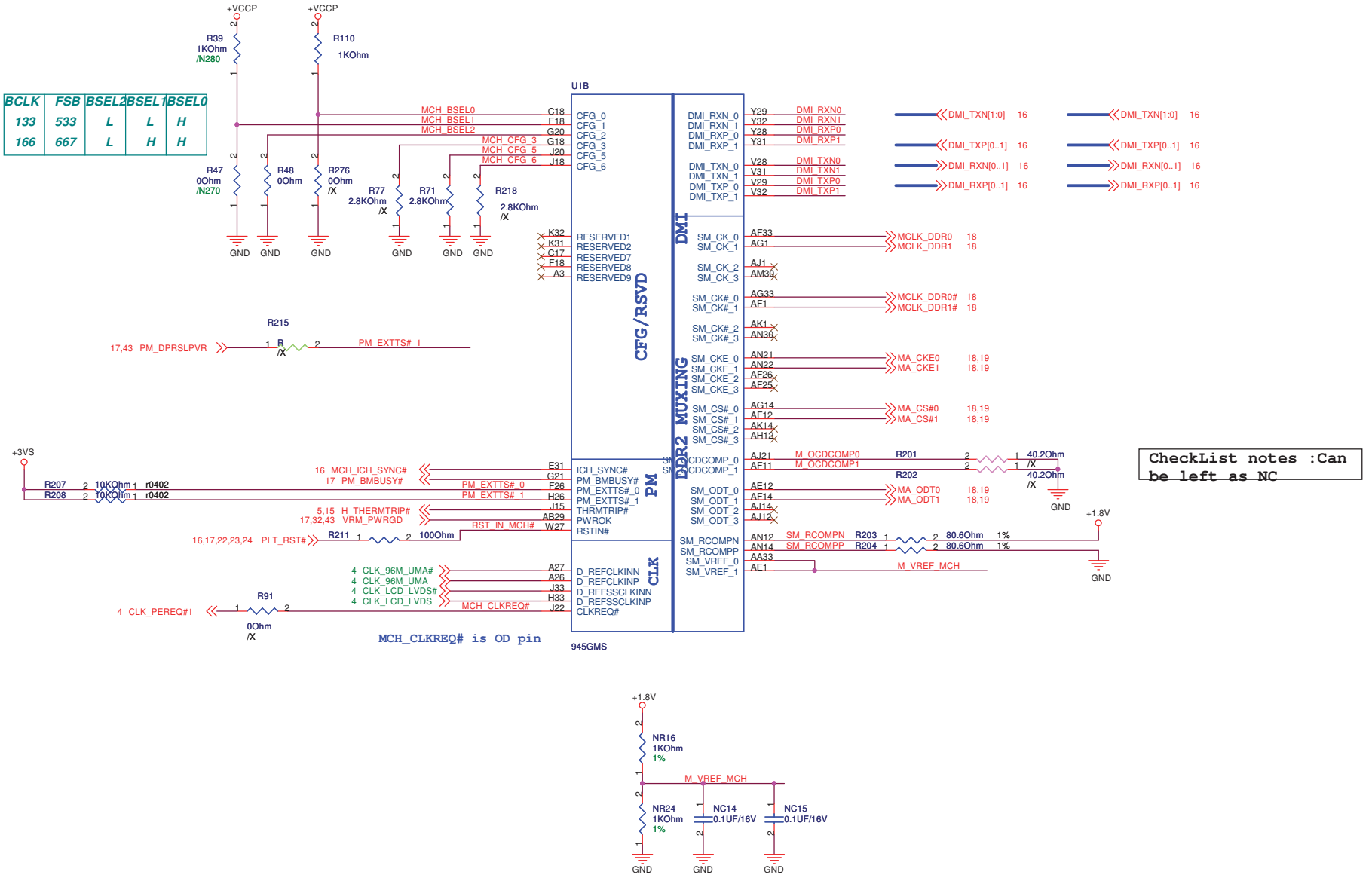
For N300
R190 replaced by 124 ohm
R191 replaced by 210 ohm

+VCCP — R190 100Ohm 1% — R191 200Ohm 1% — GND
C206 0.1UF/16V c0402 — GND

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

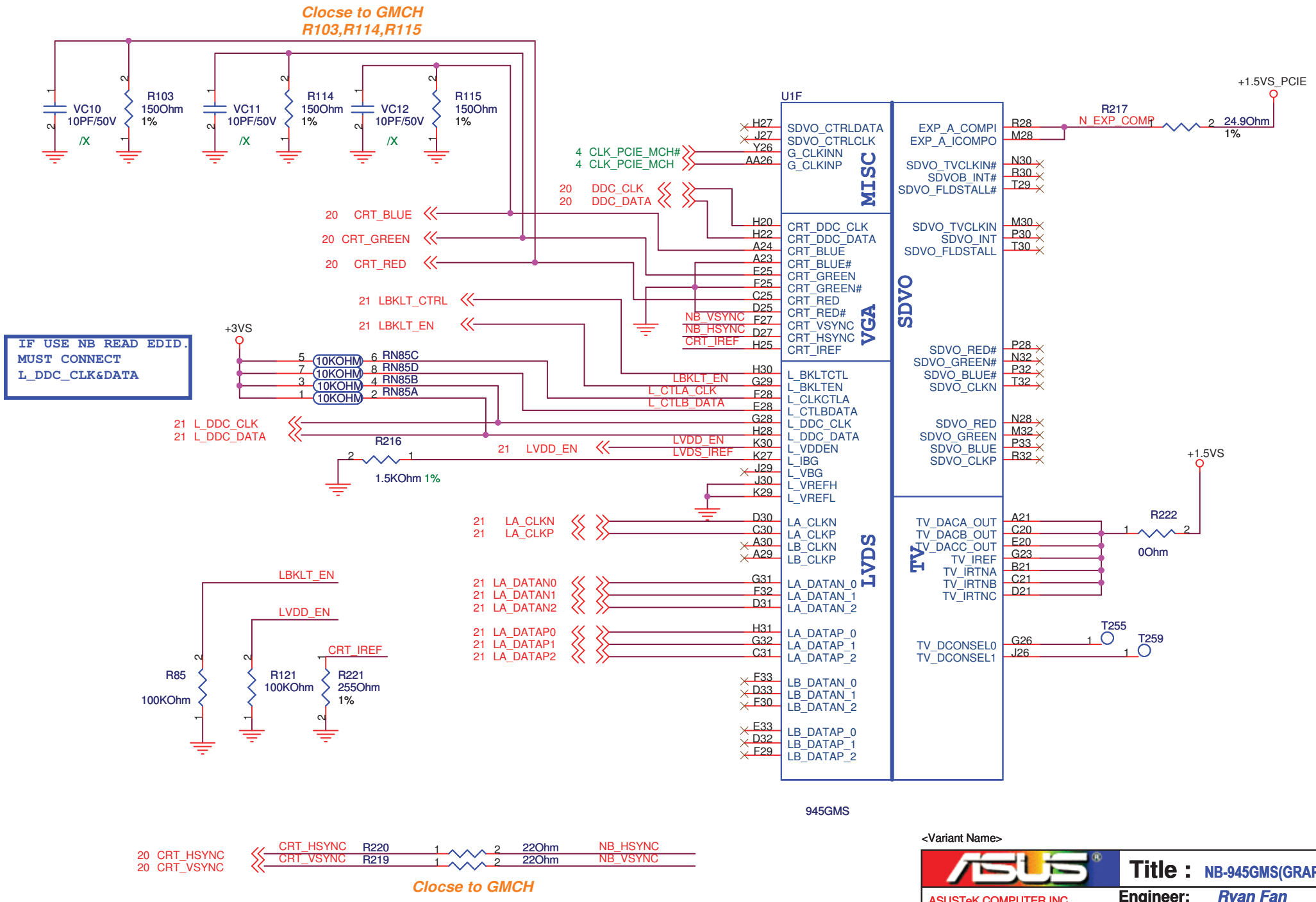
<Variant Name>

ASUSTeK COMPUTER INC.	Title : NB-945GMS(HOST)	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 7 of 50	



<Variant Name>

ASUSTeK COMPUTER INC.	Title : NB-945GMS(DMI & CFG)	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 8 of 50	



<Variant Name>

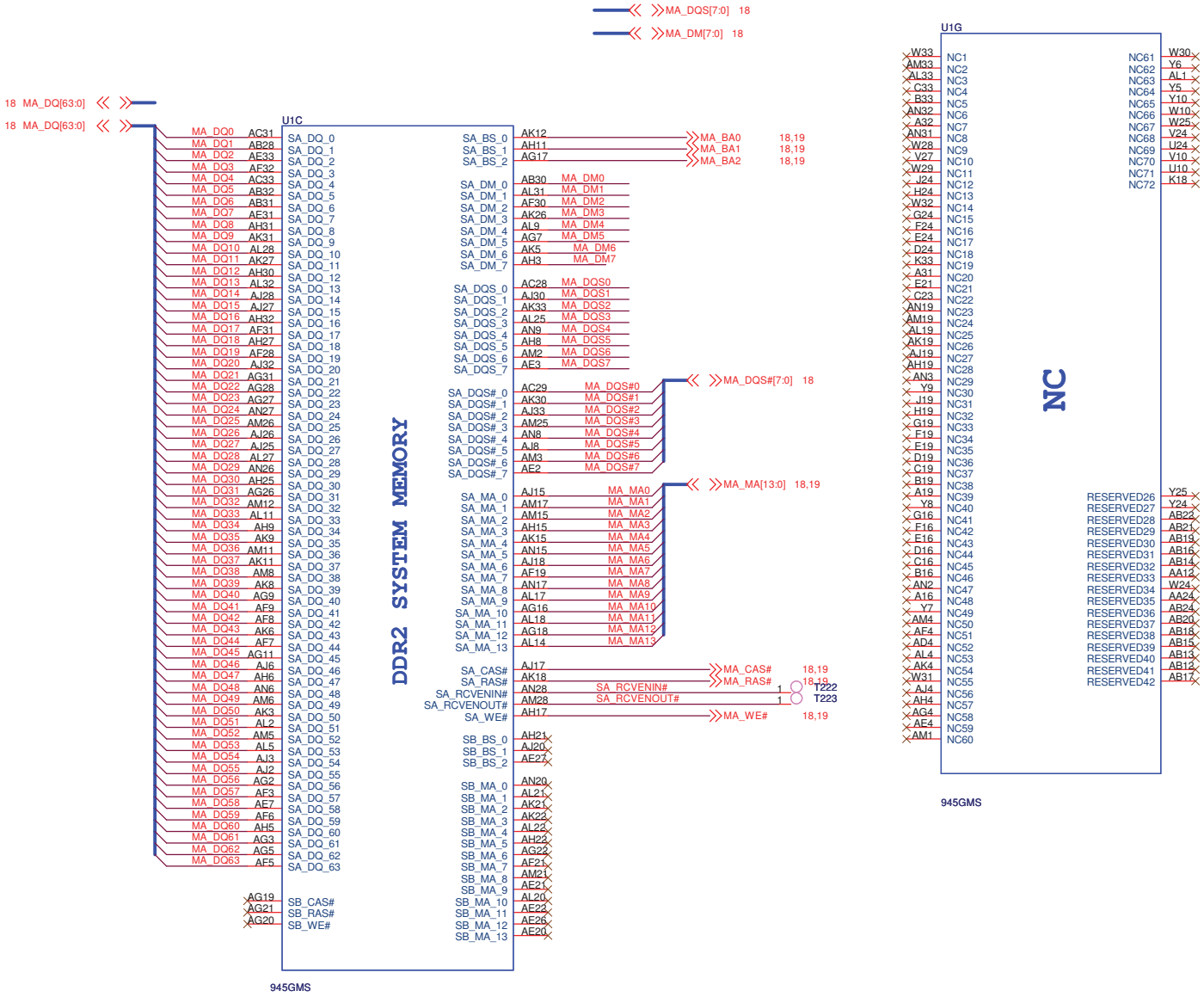
ASUSTeK COMPUTER INC.

Title : NB-945GMS(GRAPHIC)

Engineer: Ryan Fan

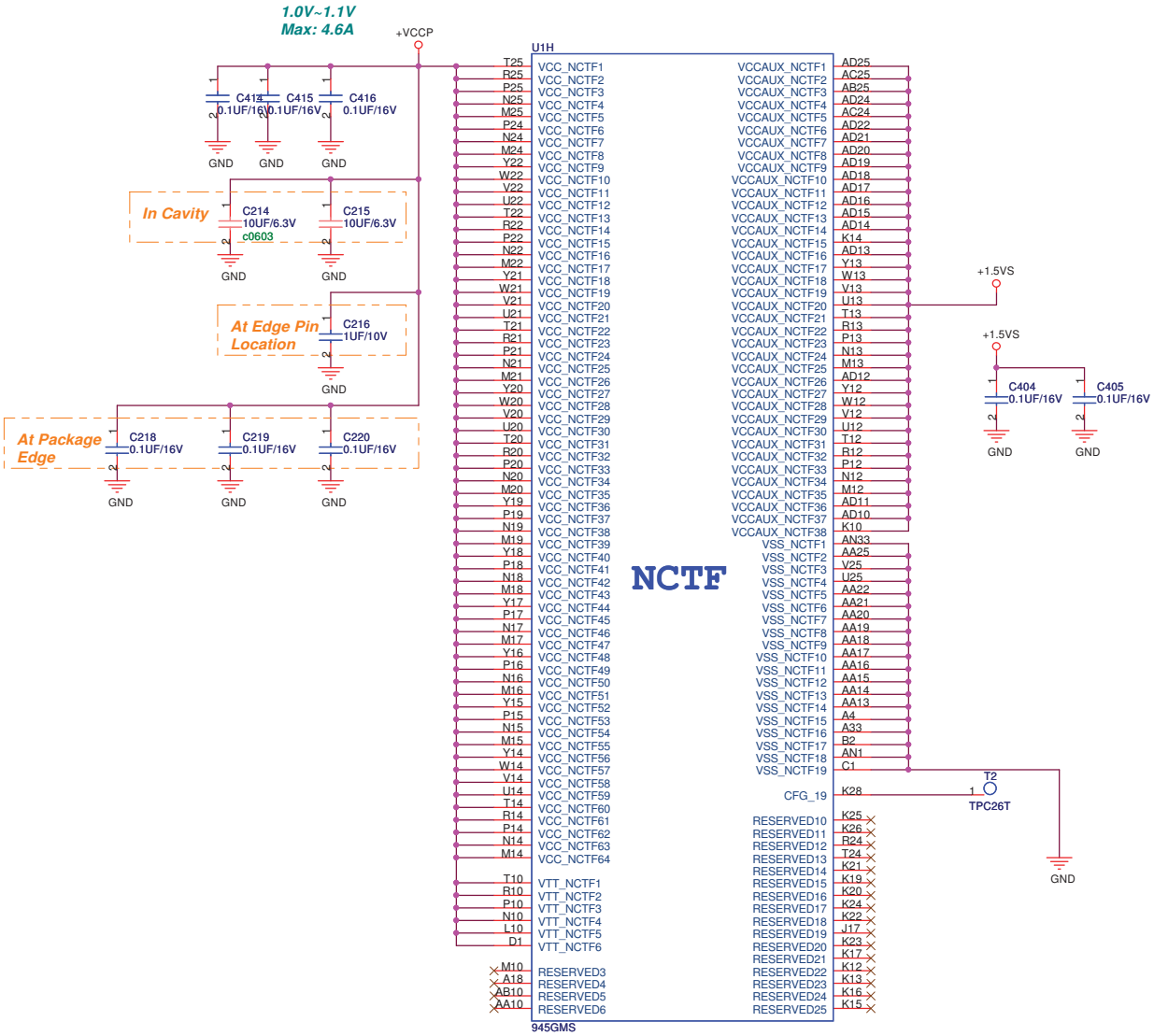
Size	Project Name	Rev
A4	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 9 of 50



<Variant Name>

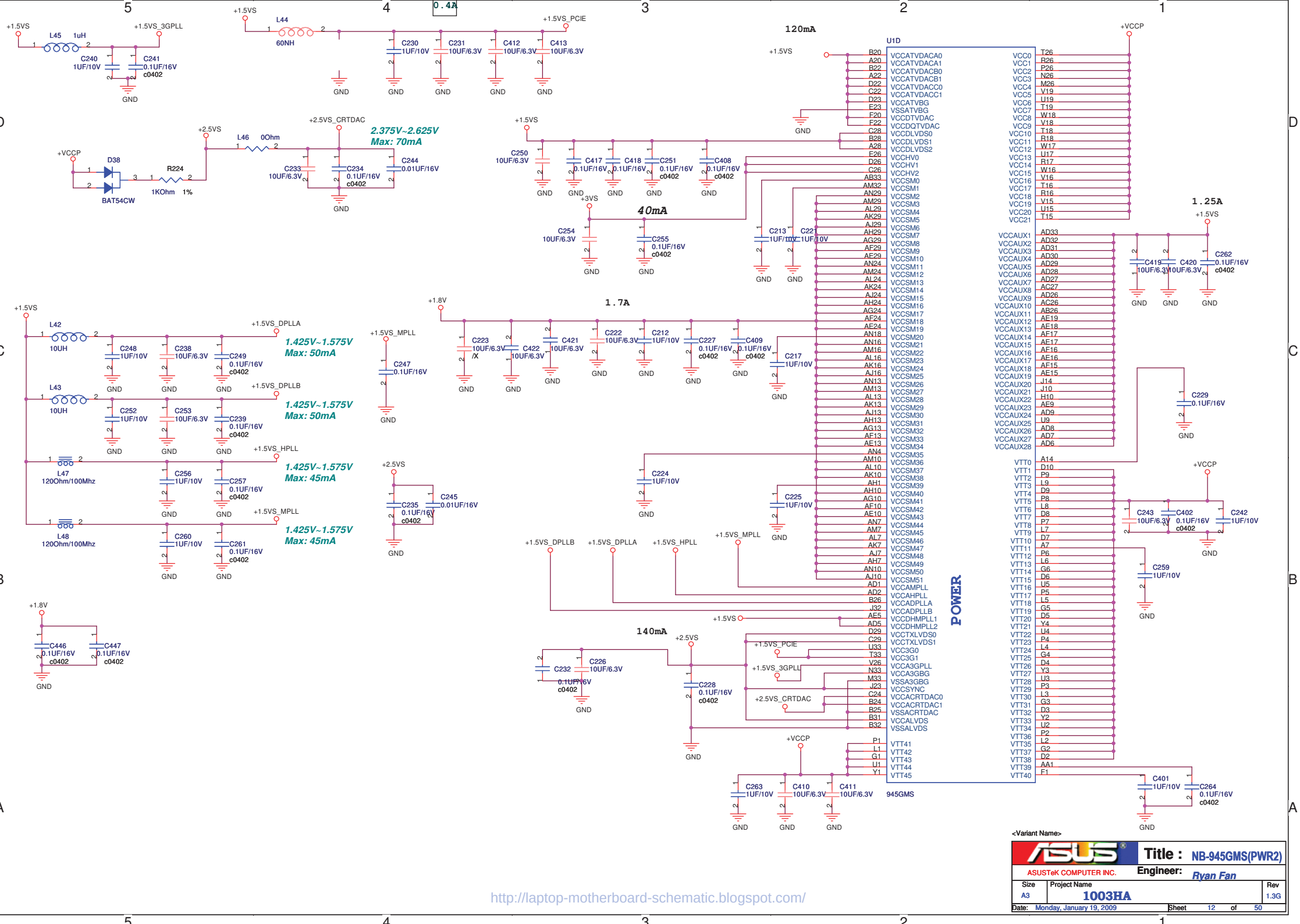
ASUSTeK COMPUTER INC.	Title : NB-945GMS(DDR2)	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 10 of 50	



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

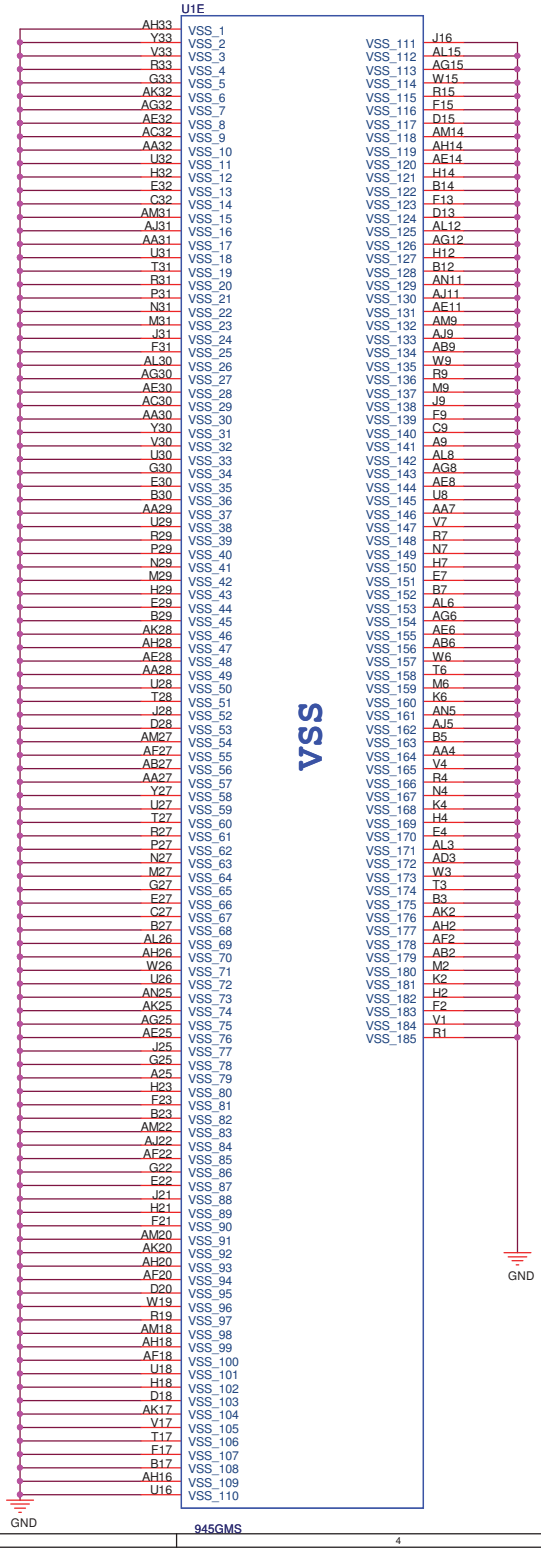
<Variant Name>

ASUSTeK COMPUTER INC.	Title : NB-945GMs(PWR)	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 11 of 50	



<Variant Name>

Title :	NB-945GMS(PWR2)
ASUSTeK COMPUTER INC.	Engineer: Ryan Fan
Size: A3	Project Name: 1003HA
Rev: 1.3G	
Date: Monday, January 19, 2009	Sheet 12 of 50



<Variant Name>

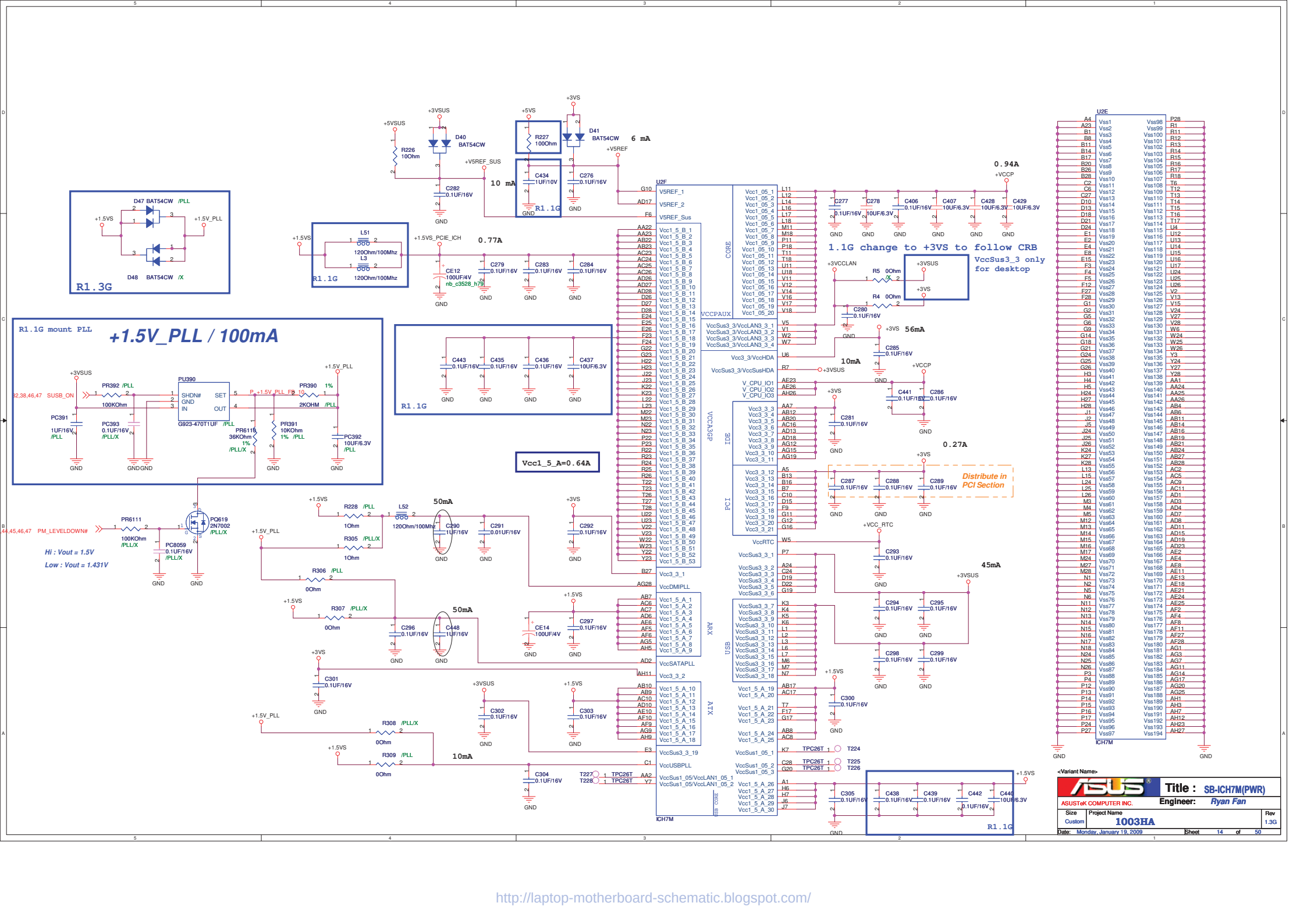
ASUSTeK COMPUTER INC.

Title : NB-945PMS(GND)

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 13 of 50



Change to
rechargeable RTC battery

Height : 3.4 mm

R1.2G
C431 not mounted

R1.1G change +3VA net to +3VA_AEC

R1.1G
using SSD, mount R1(with rechargable RTC battery)
using HDD, mount D44(with non-rechargable RTC battery)

R1.2G
AC40 change from 10pF to 22pF for RF

RTCRST# RC delay 18~25ms

Place Near Open Door

ACZ_SDIN0	CODEC
ACZ_SDIN1	NA

NO STUFF R107.CPUSLP# ONLY USE IN DESTOP

<Variant Name>

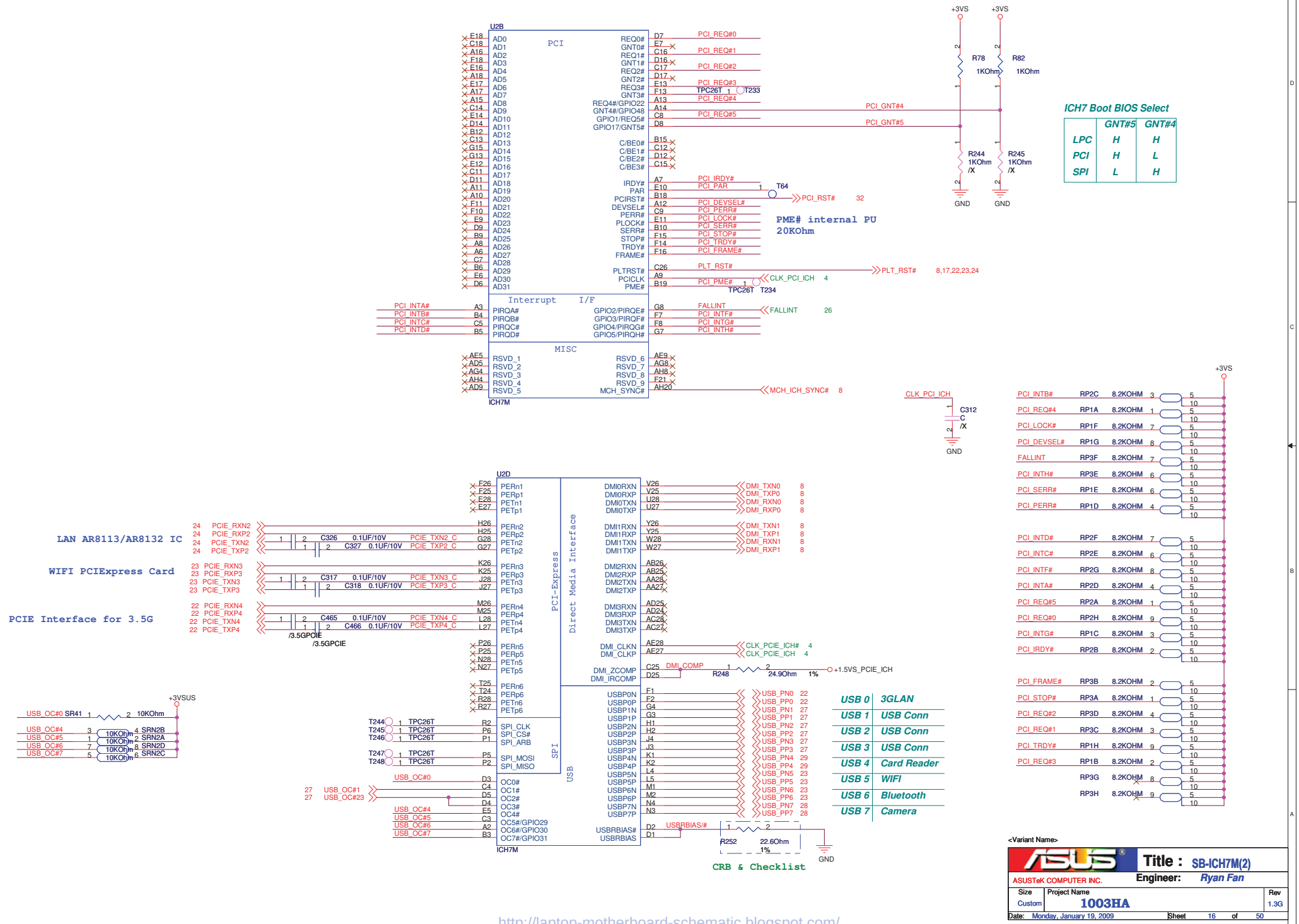
ASUSTeK COMPUTER INC.

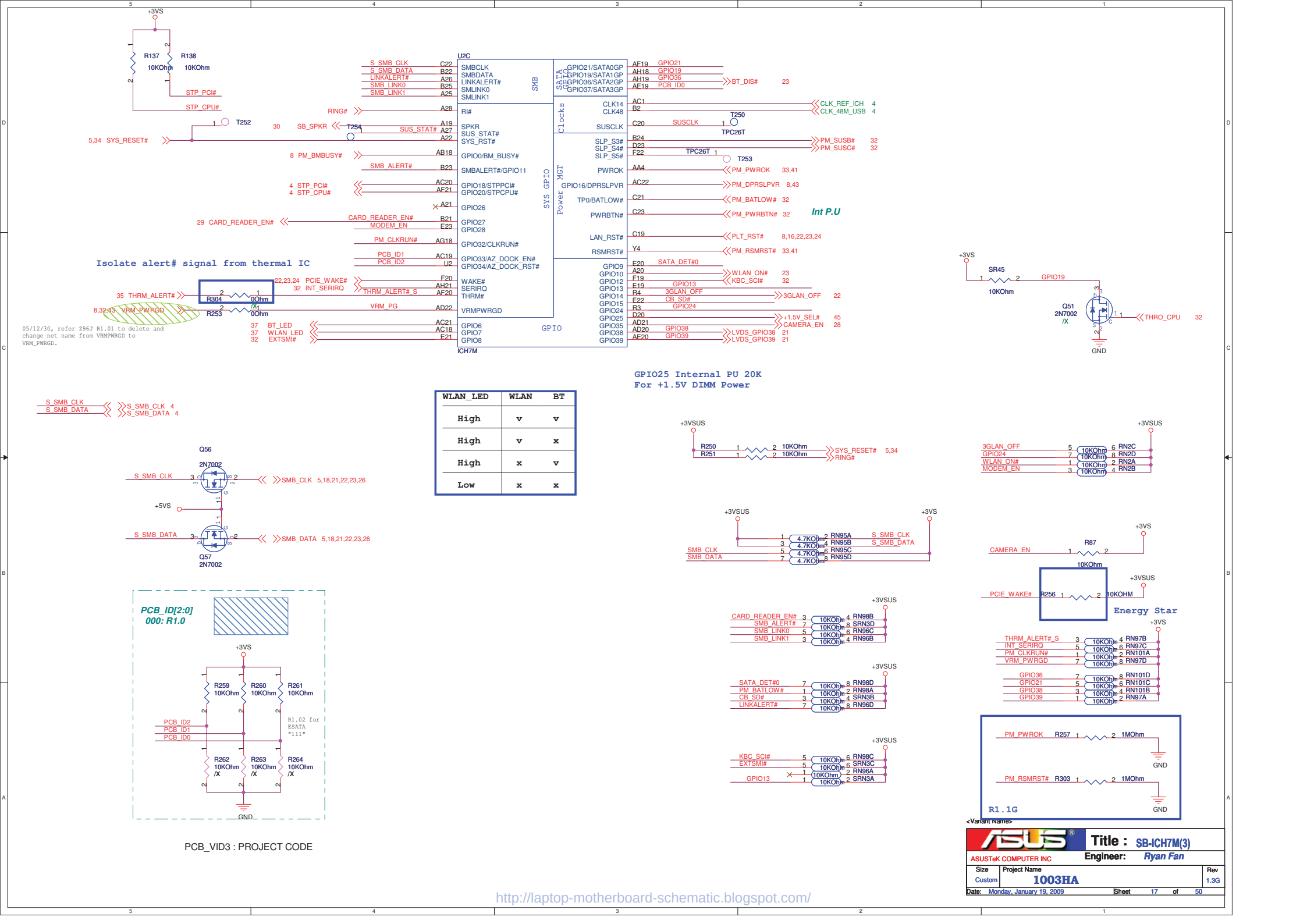
Title : SB-ICH7-M(1)

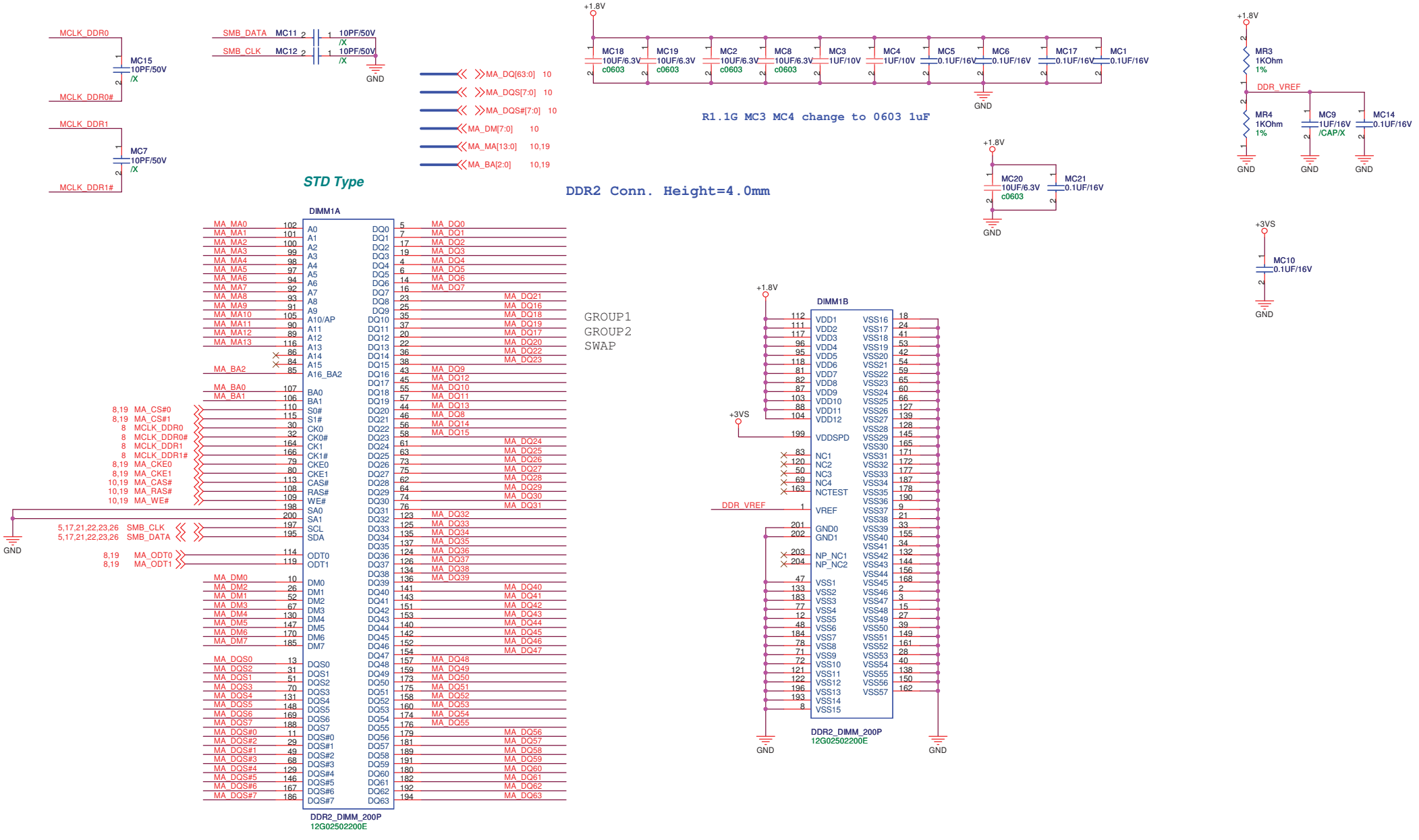
Engineer: Ryan Fan

Size	Project Name	Rev
Custom	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 15 of 50







<Variant Name>

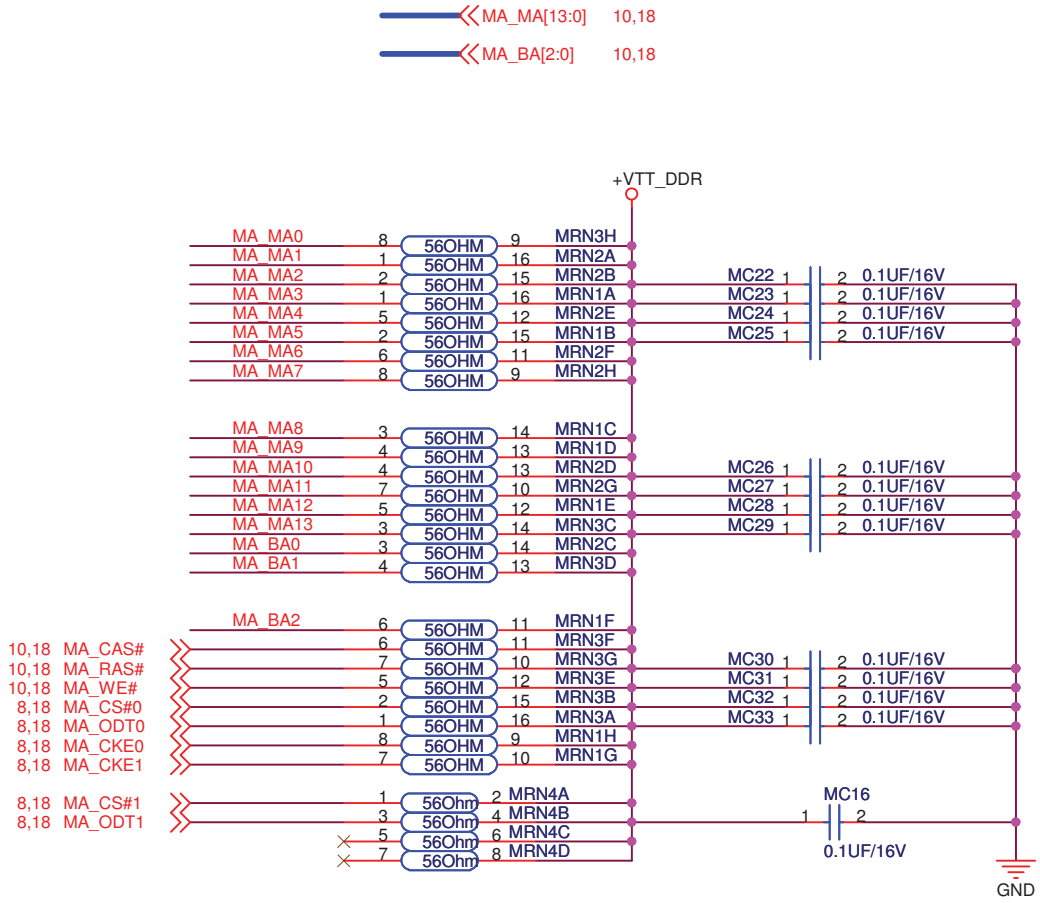
ASUSTek Computer INC.

Title : DDR2 SODIMM

Engineer: Ryan Fan

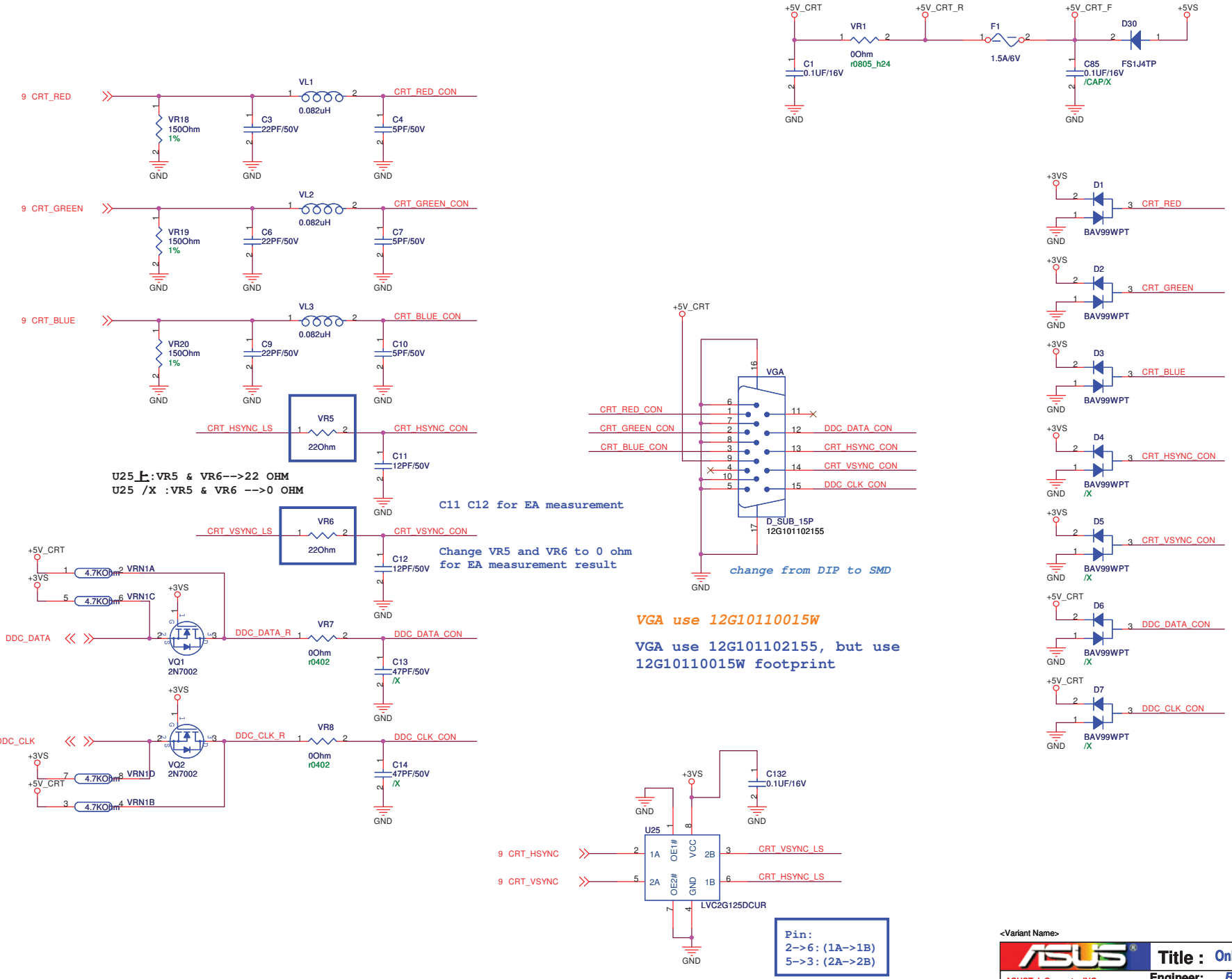
Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 18 of 50



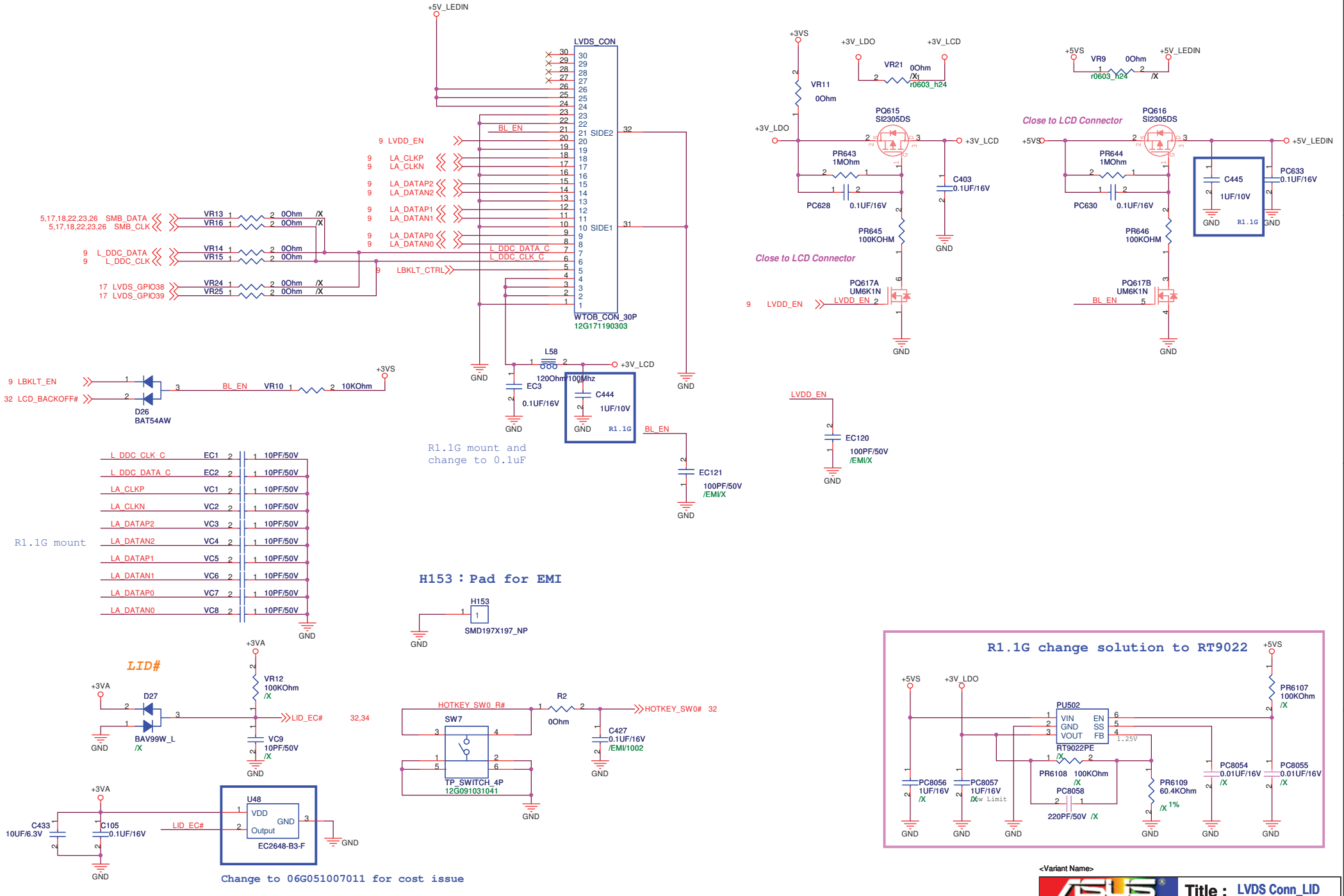
<Variant Name>

ASUSTek Computer INC.	Title : DDR2_Termination	
	Engineer: Ryan Fan	
Size: A4	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 19 of 50	



<Variant Name>

ASUSTek Computer INC.	Title : Onboard VGA	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 20 of 50	



<Variant Name>

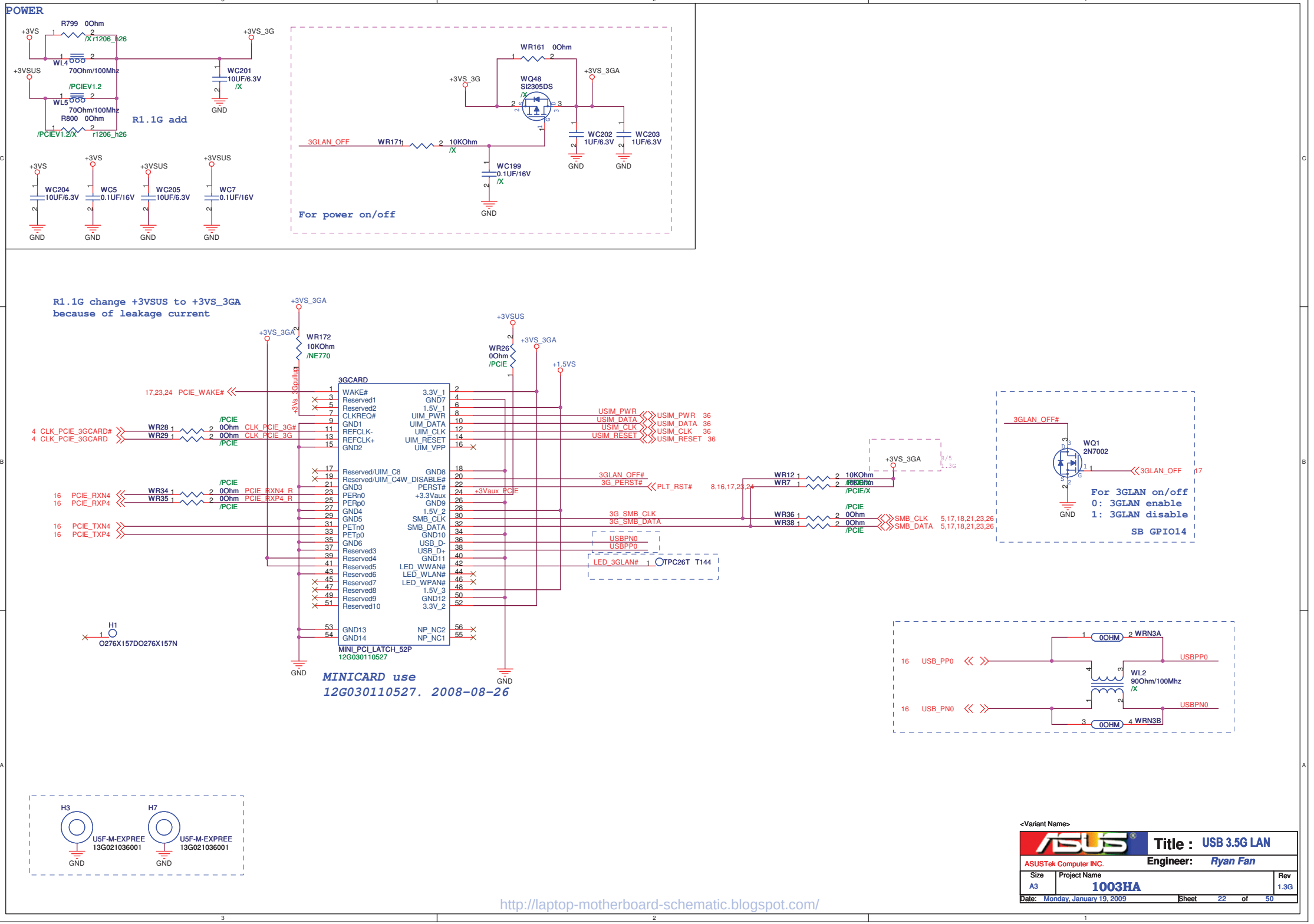
ASUSTek Computer INC.

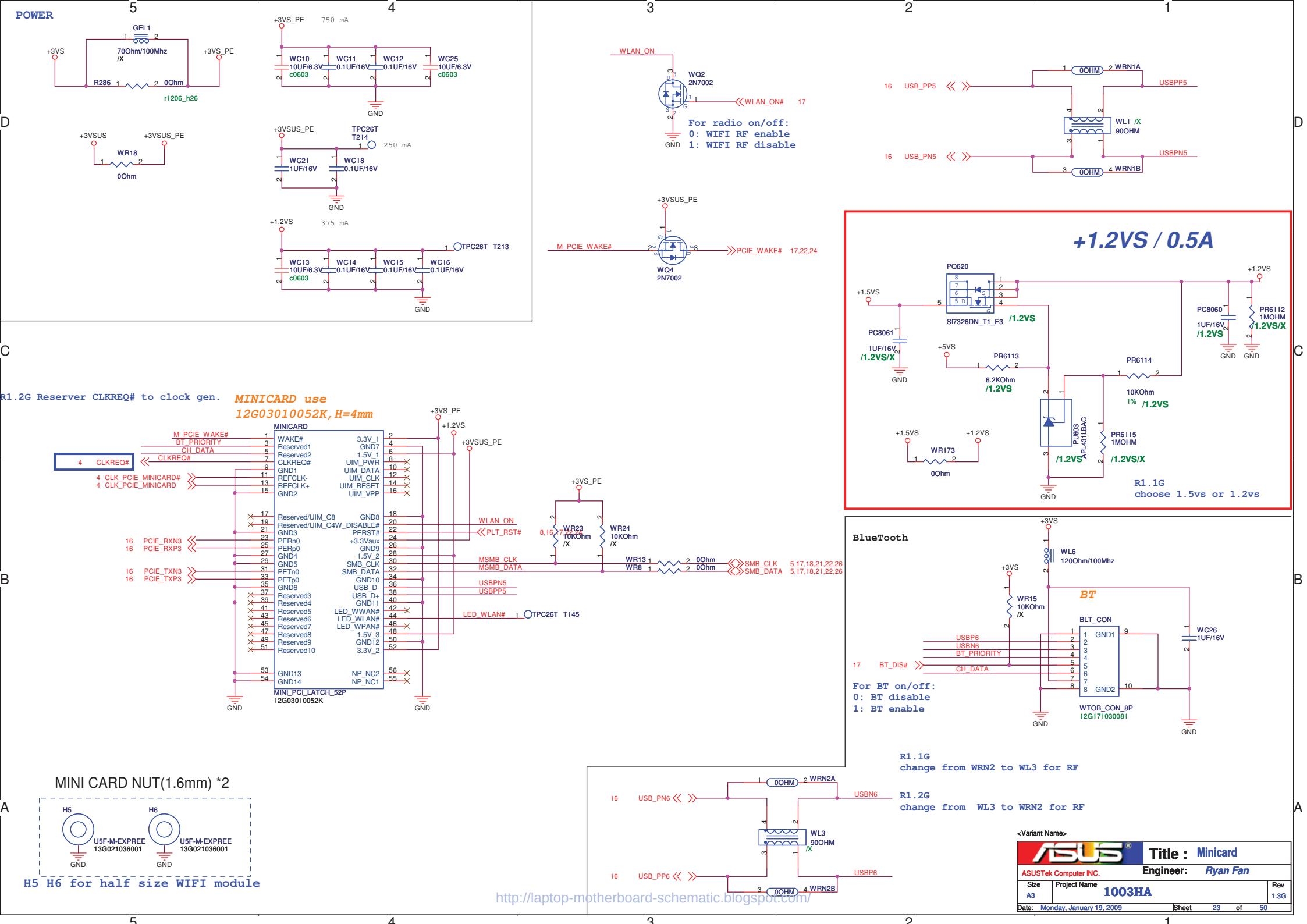
Title : LVDS Conn_LID

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 21 of 50





0.1A Beta

R1.2G
LR5 change from 0 ohm to 300 ohm

2008-08-22

2008-08-28

2008-08-29

2008-08-22

AR8132_V1: LC17=1uF
AR8132_V0/AR8113: LC17=0.1uF
2008/9/10

2008-09-28

Close to LU1

For AR8132_v0 and AR8113 : LC82=1uF

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

<Variant Name>

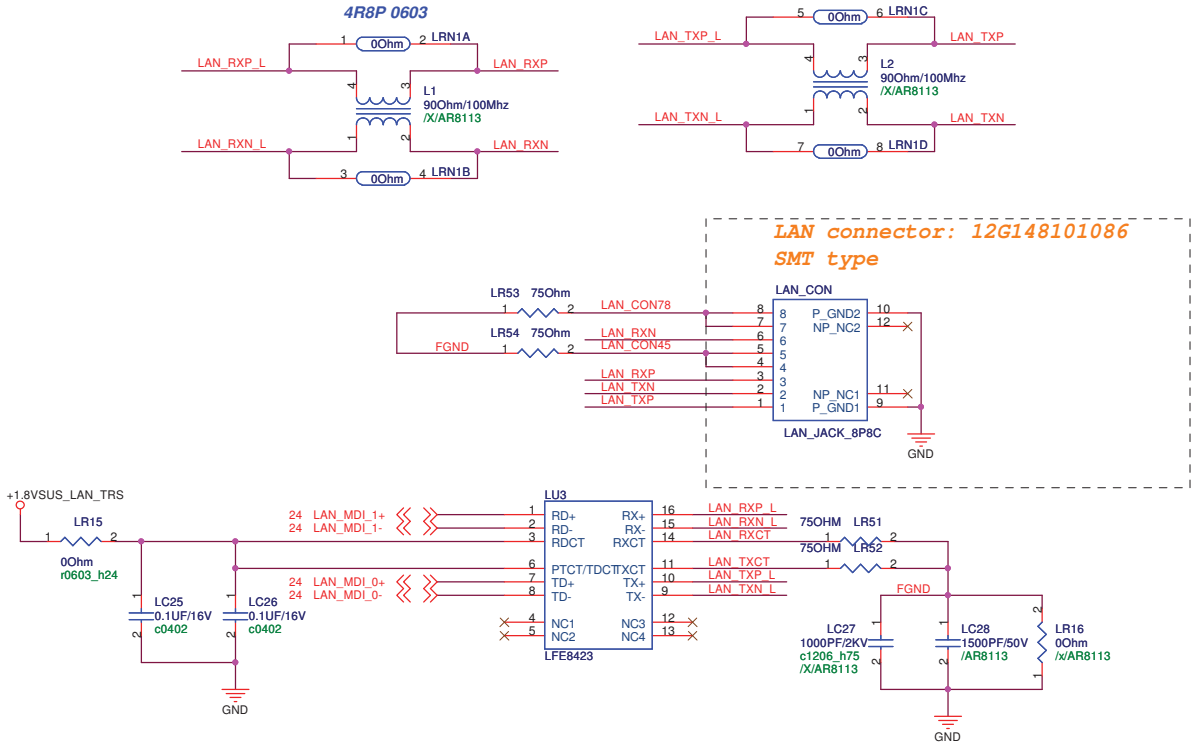
ASUSTek Computer INC

Title : AR8113/AR8132

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

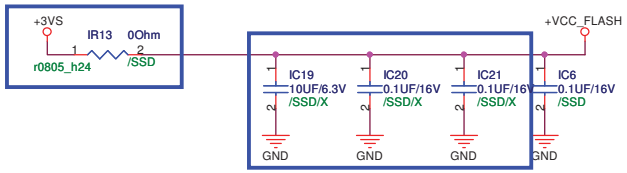
Date: Monday, January 19, 2009 Sheet 24 of 50



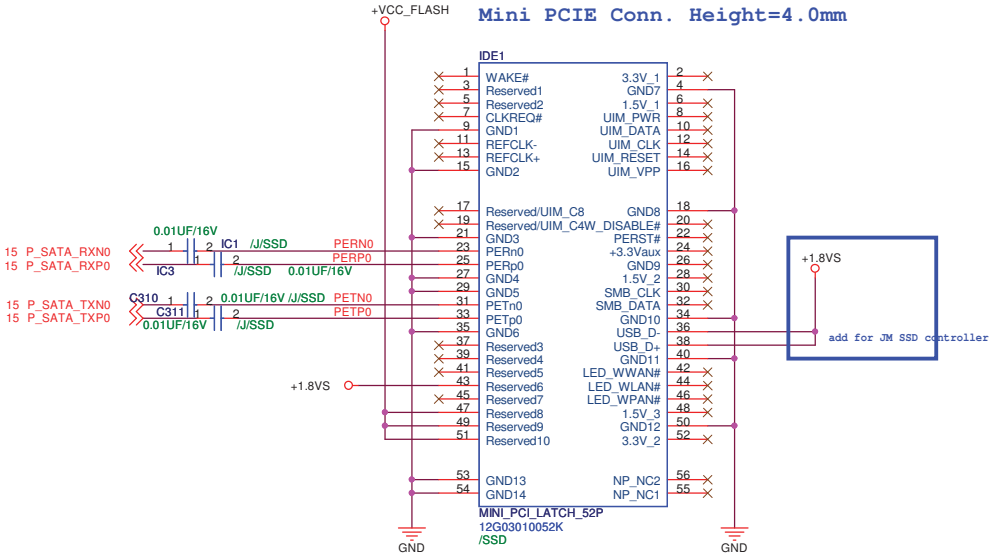
<Variant Name>

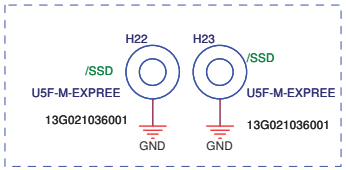
ASUSTek Computer INC.	Title : RJ45	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 25 of 50	

POWER



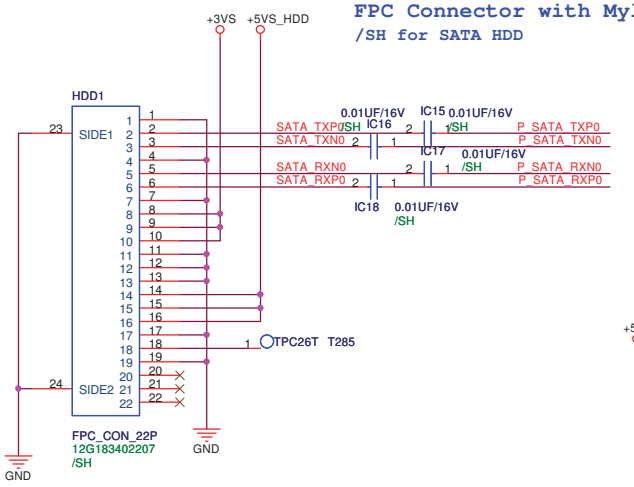
Mini PCIE Conn. Height=4.0mm

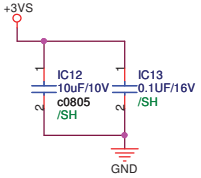


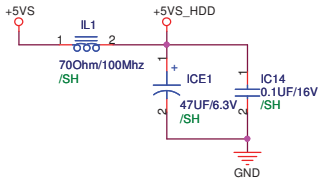


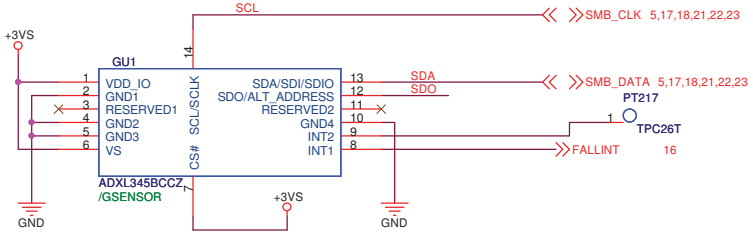
SATA HDD Connector

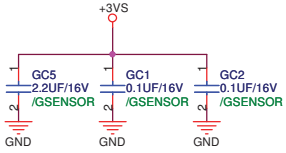
FPC Connector with Mylar
/SH for SATA HDD



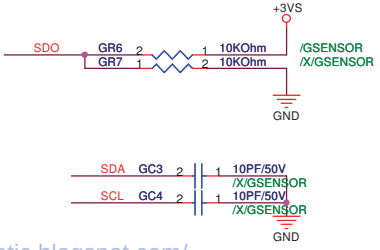






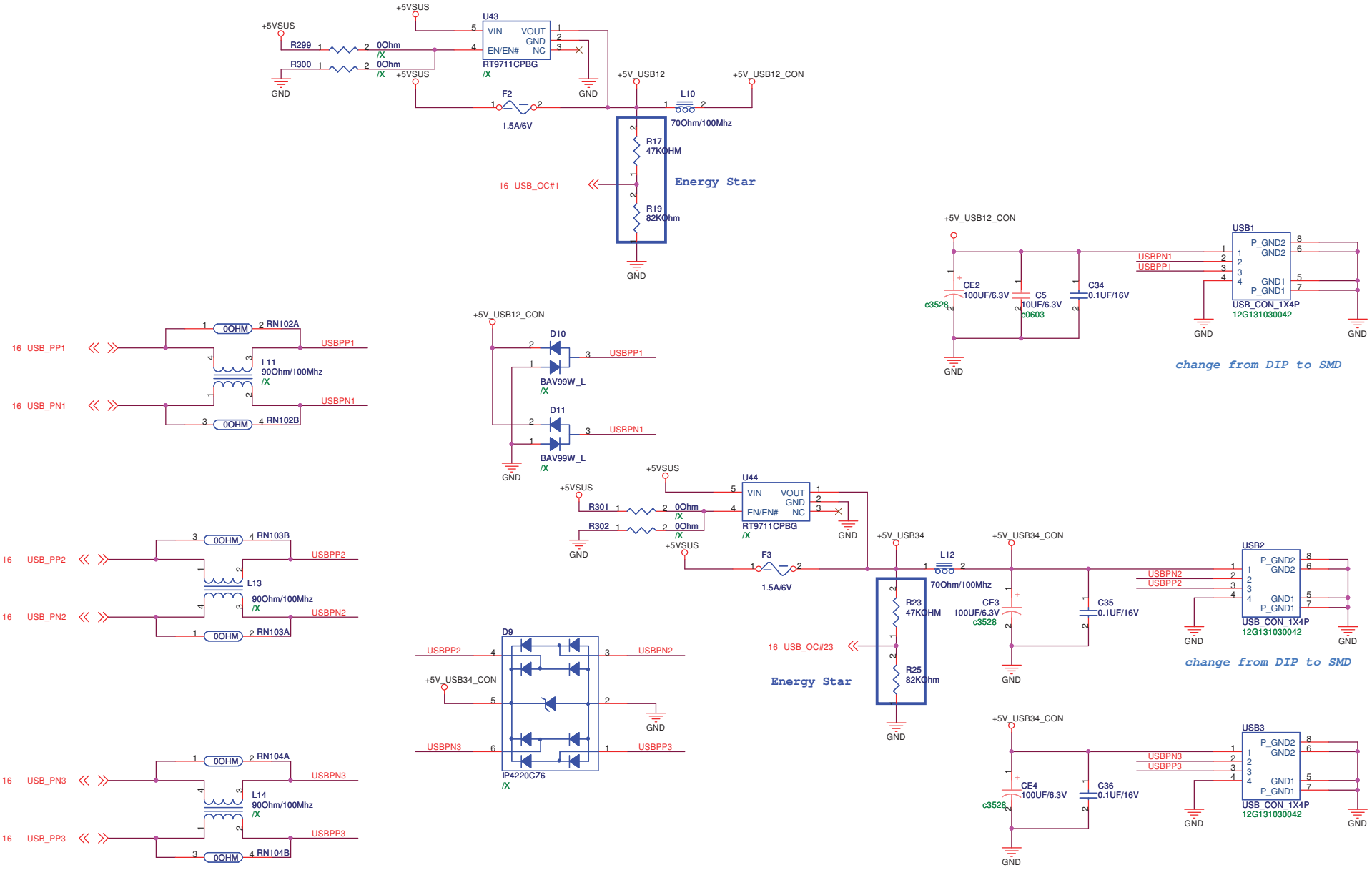


Install GR6 being slaveaddr "3A"
for ADI/Freescale/ST G-sensors



<Variant Name>

ASUSTek Computer INC.	Title : HD + Flash Conn	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 26 of 50	



<Variant Name>

ASUSTek Computer INC.

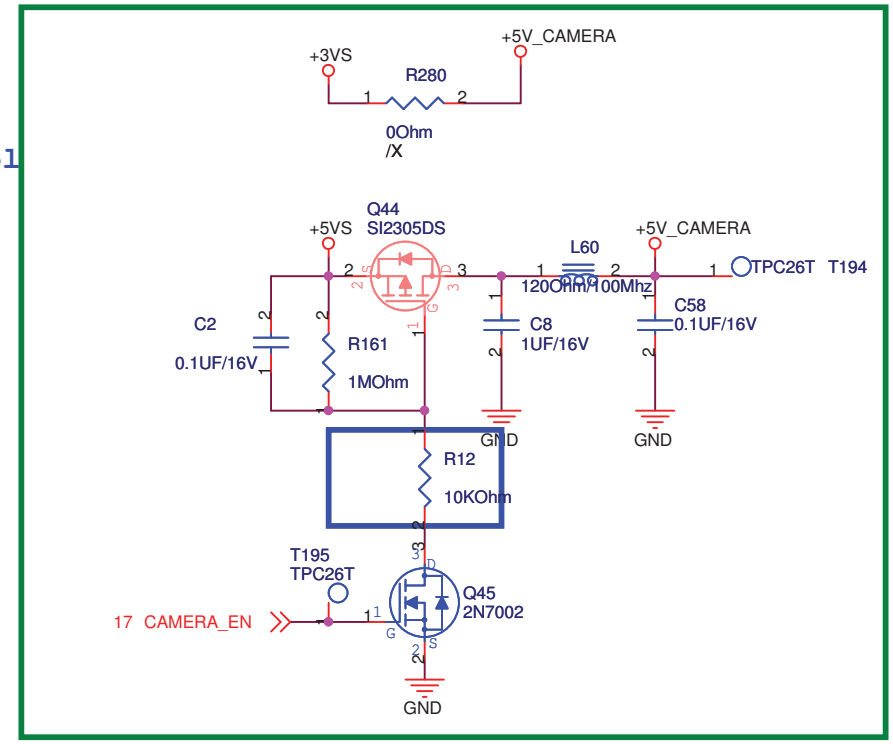
Title : USB Port

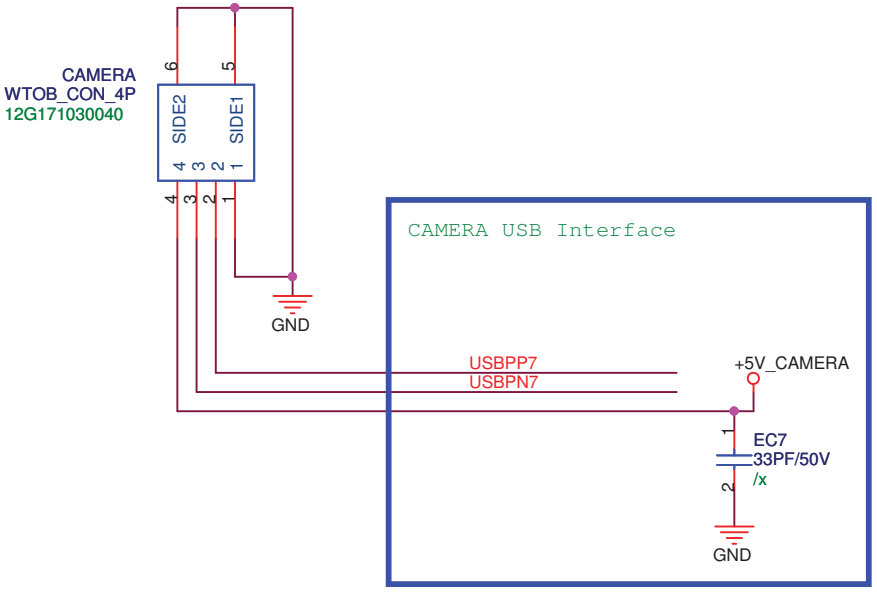
Engineer: Ryan Fan

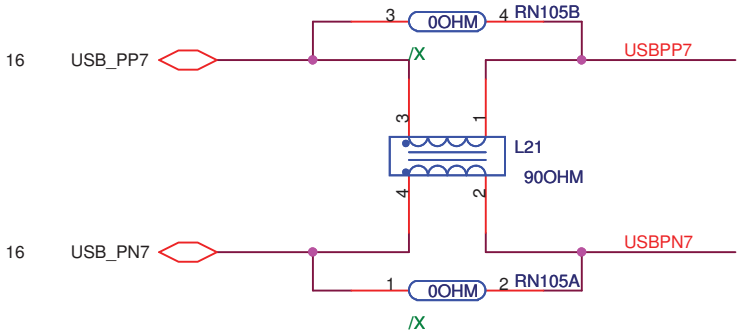
Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 27 of 50

Power Control



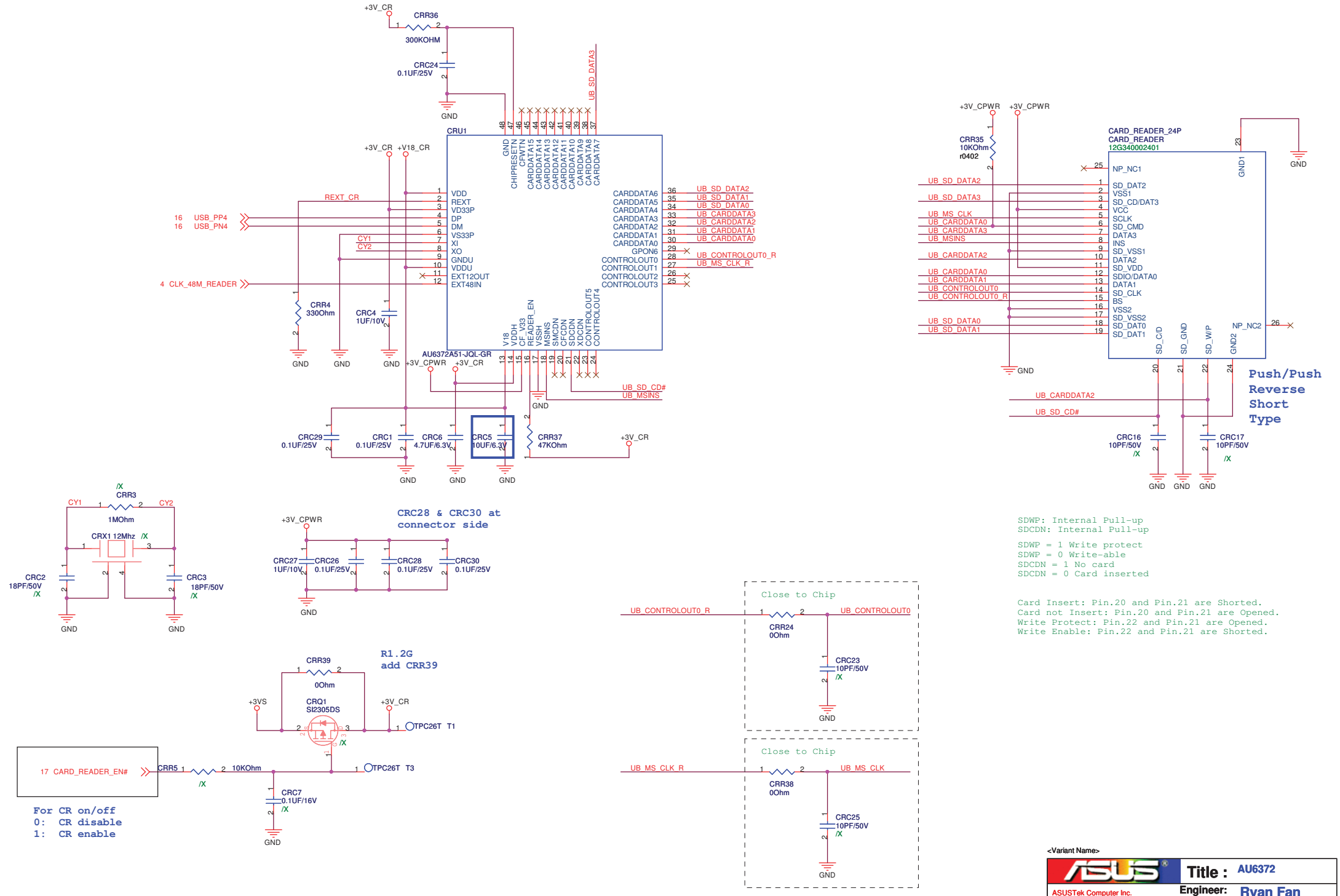




R1.2G
change from RN105 to L21 for RF

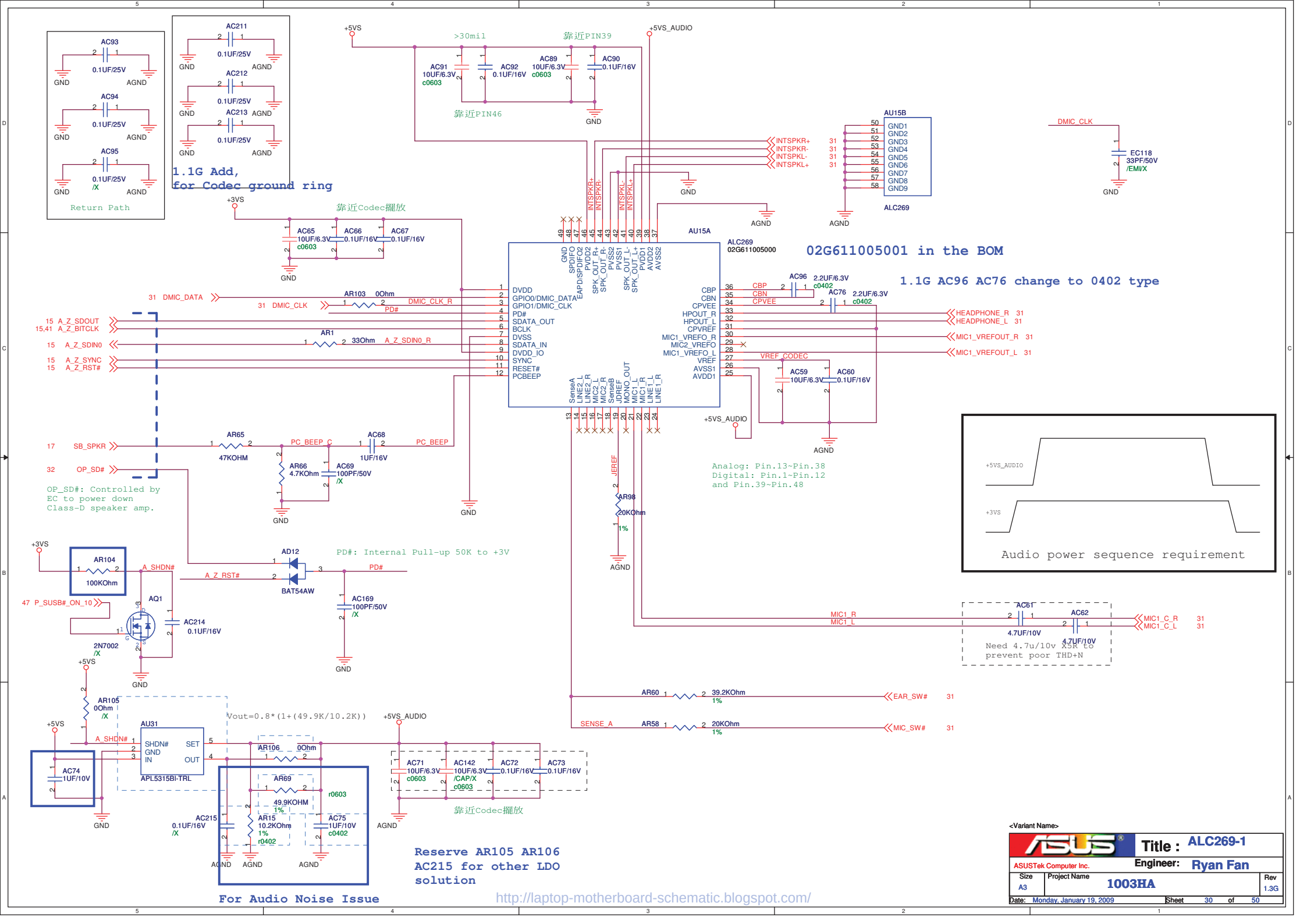
<Variant Name>

ASUSTek Computer INC.	Title : Camera Power	
	Engineer: Ryan Fan	
Size: A4	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 28 of 50	



<Variant Name>

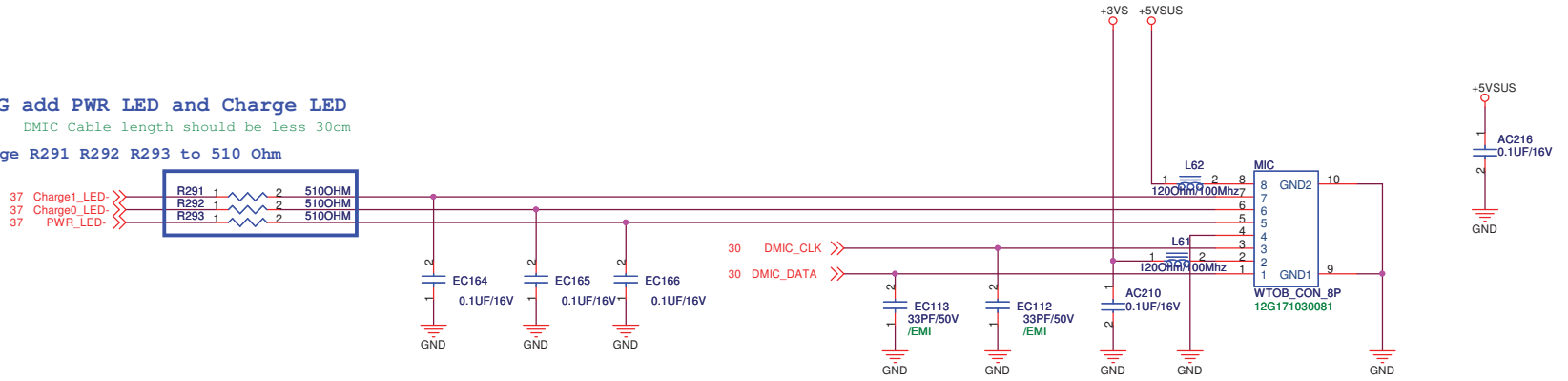
ASUSTek Computer Inc.	Title : AU6372	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 29 of 50	


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
INTSPKR+
INTSPKR-
INTSPKL-
INTSPKL+
AU15B
ALC269
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
DMIC_DATA
DMIC_CLK
AR103 0Ohm
DMIC_CLK_R
PD#
A_Z_SDOUT
A_Z_BITCLK
A_Z_SDIN0
A_Z_SYNC
A_Z_RST#
AR1 33Ohm
A_Z_SDIN0_R
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
HEADPHONE_L
MIC1_VREFOUT_R
MIC1_VREFOUT_L
VREF_CODEC
AC59 10UF/6.3V
AC60 0.1UF/16V
Analog: Pin.13~Pin.38
Digital: Pin.1~Pin.12
and Pin.39~Pin.48
SB_SPKR
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.
JEREF
AR98 20KOhm 1%
+5VS_AUDIO
+3VS
Audio power sequence requirement
AR104 100KOhm
A_SHDN#
AD12 BAT54AW
PD#: Internal Pull-up 50K to +3V
A_Z_RST#
P_SUSB#_ON_10
AQ1 2N7002 /X
AC214 0.1UF/16V
AC169 100PF/50V /X
MIC1_R
MIC1_L
AC61 4.7UF/10V
AC62 4.7UF/10V
MIC1_C_R
MIC1_C_L
Need 4.7u/10v X5R to
prevent poor THD+N
AR60 39.2KOhm 1%
EAR_SW#
SENSE_A
AR58 20KOhm 1%
MIC_SW#
AR105 0Ohm /X
AU31
APL5315BI-TRL
Vout=0.8*(1+(49.9K/10.2K))
AR106 0Ohm
AC74 1UF/10V
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
AR69 49.9KOHM 1% r0603
AR15 10.2KOhm 1% r0402
AC215 0.1UF/16V /X
AC75 1UF/10V c0402
Reserve AR105 AR106
AC215 for other LDO
solution
For Audio Noise Issue
http://laptop-motherboard-schematic.blogspot.com/
<Variant Name>
Title : ALC269-1
ASUSTek Computer Inc.
Engineer: Ryan Fan
Size A3
Project Name 1003HA
Rev 1.3G
Date: Monday, January 19, 2009
Sheet 30 of 50

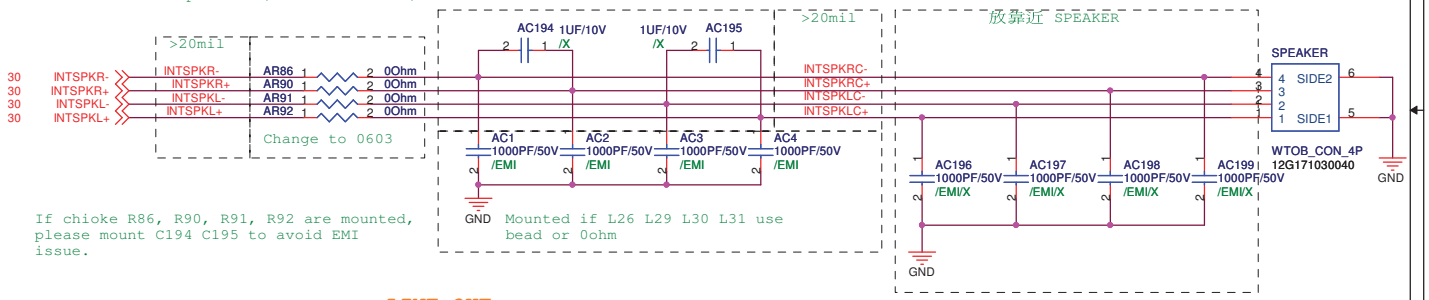
1.1G add PWR LED and Charge LED

DMIC Cable length should be less 30cm

Change R291 R292 R293 to 510 Ohm



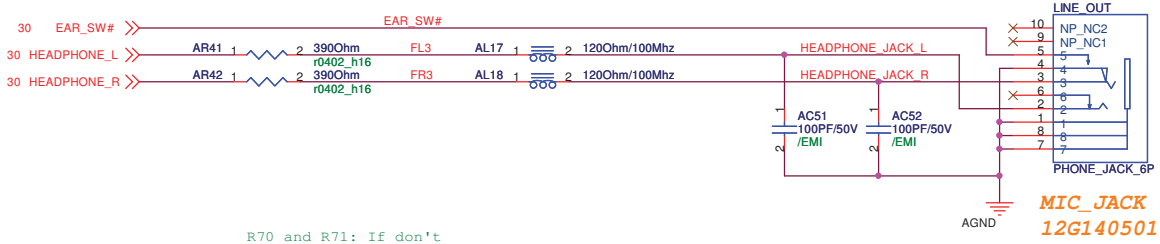
Total length from speakerR+- L+-(pin40 41 44 45) to internal speaker please as short as possible(<20cm is better)



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

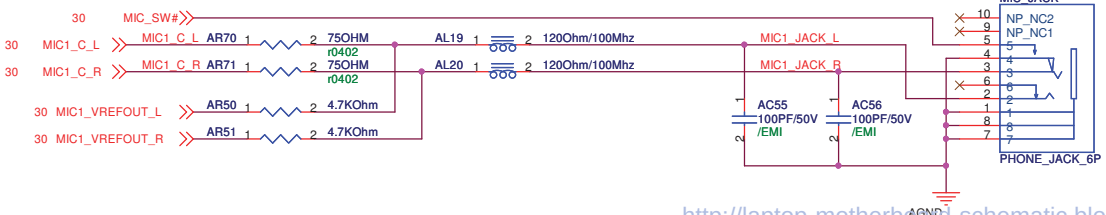
R1.2G
For France，AR41 and AR42 mounted 390 ohm

LINE_OUT use 12G14050106P(SINGATRON) Black



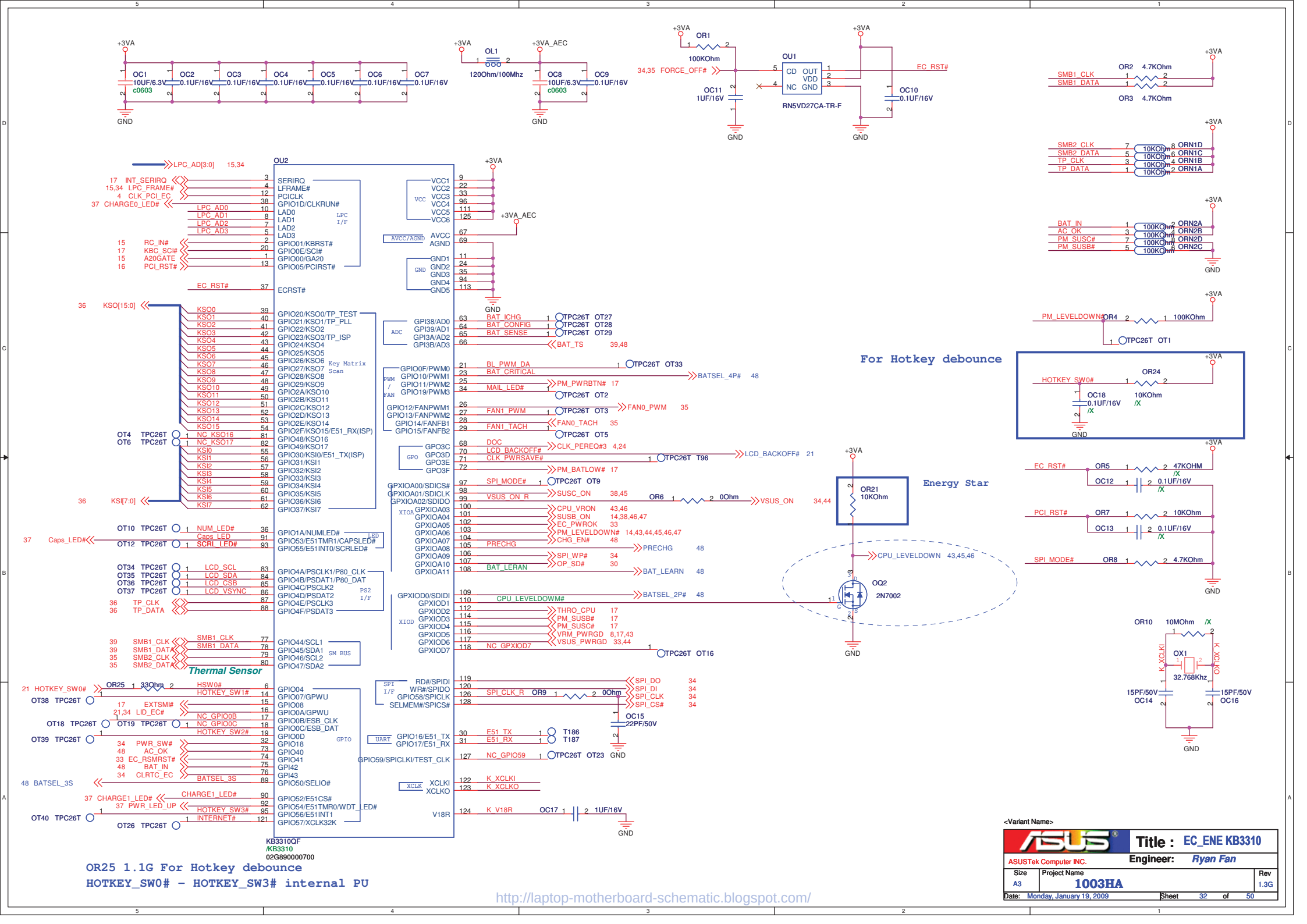
MIC_JACK use 12G14050106P(SINGATRON) Black

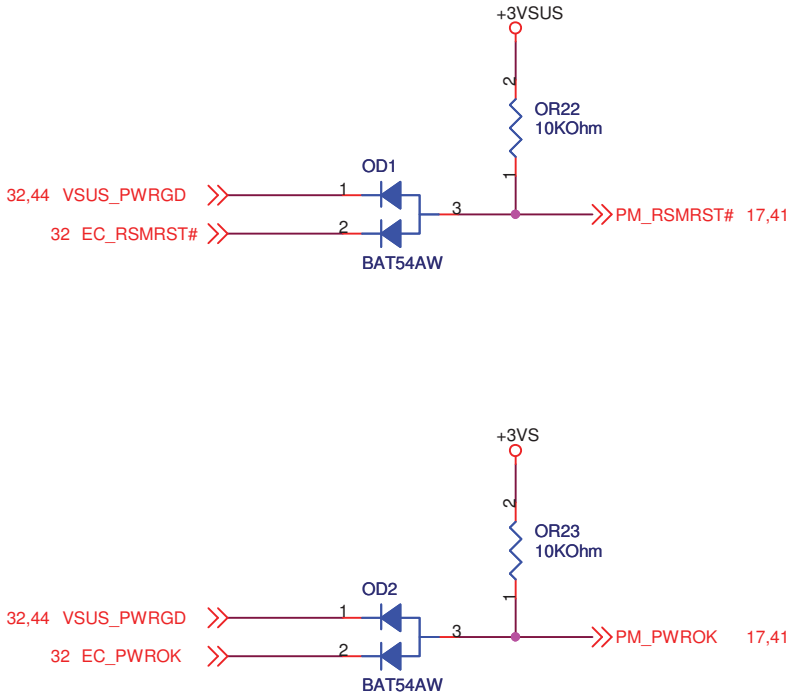
R70 and R71: If don't need retasking function, change to 1K.



<Variant Name>

ASUSTek Computer Inc.	Title : ALC269-2	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 31 of 50	


OU2
KB3310QF
/KB3310
02G890000700
Thermal Sensor
For Hotkey debounce
Energy Star
OR25 1.1G For Hotkey debounce
HOTKEY_SW0# - HOTKEY_SW3# internal PU
http://laptop-motherboard-schematic.blogspot.com/
<Variant Name>
Title : EC_ENE KB3310
ASUSTek Computer INC.
Engineer: Ryan Fan
Size A3
Project Name 1003HA
Rev 1.3G
Date: Monday, January 19, 2009
Sheet 32 of 50



<Variant Name>

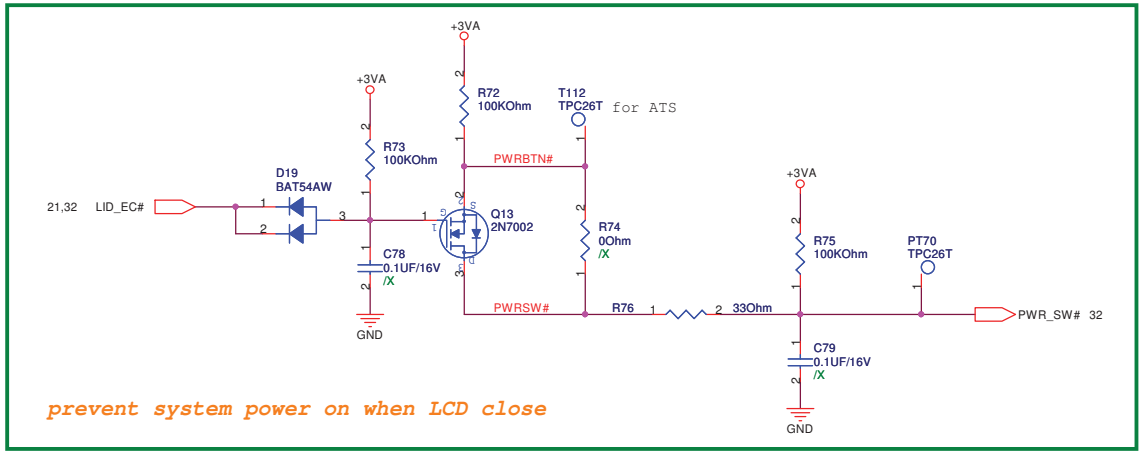
ASUSTek Computer INC.

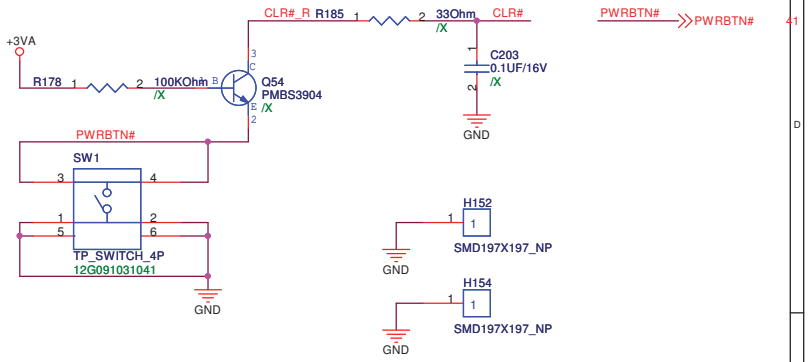
Title : EC_UART_KC3820

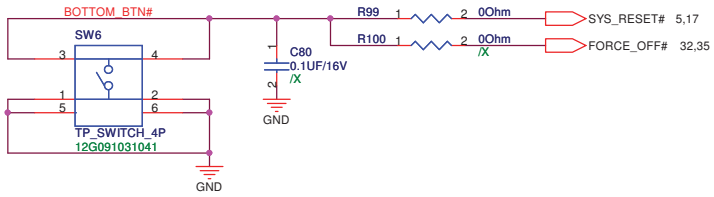
Engineer: Ryan Fan

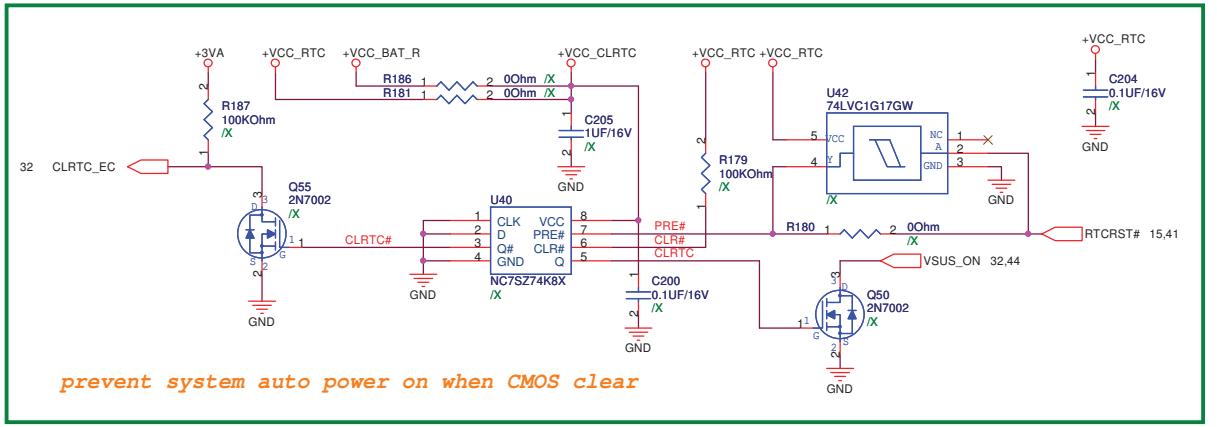
Size	Project Name	Rev
A4	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 33 of 50

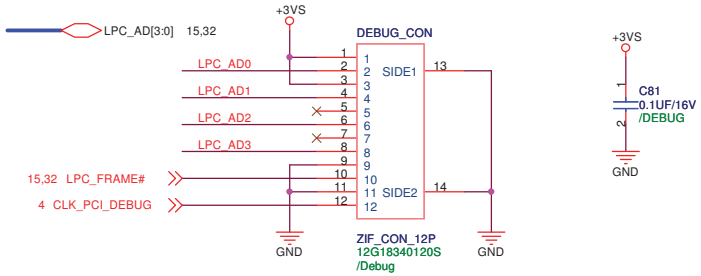




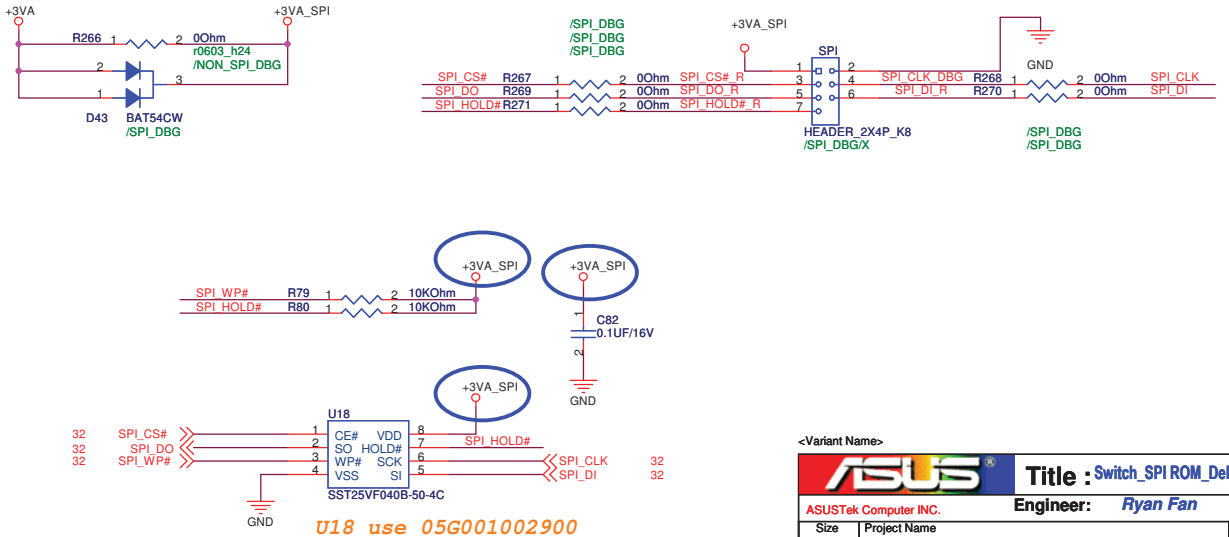




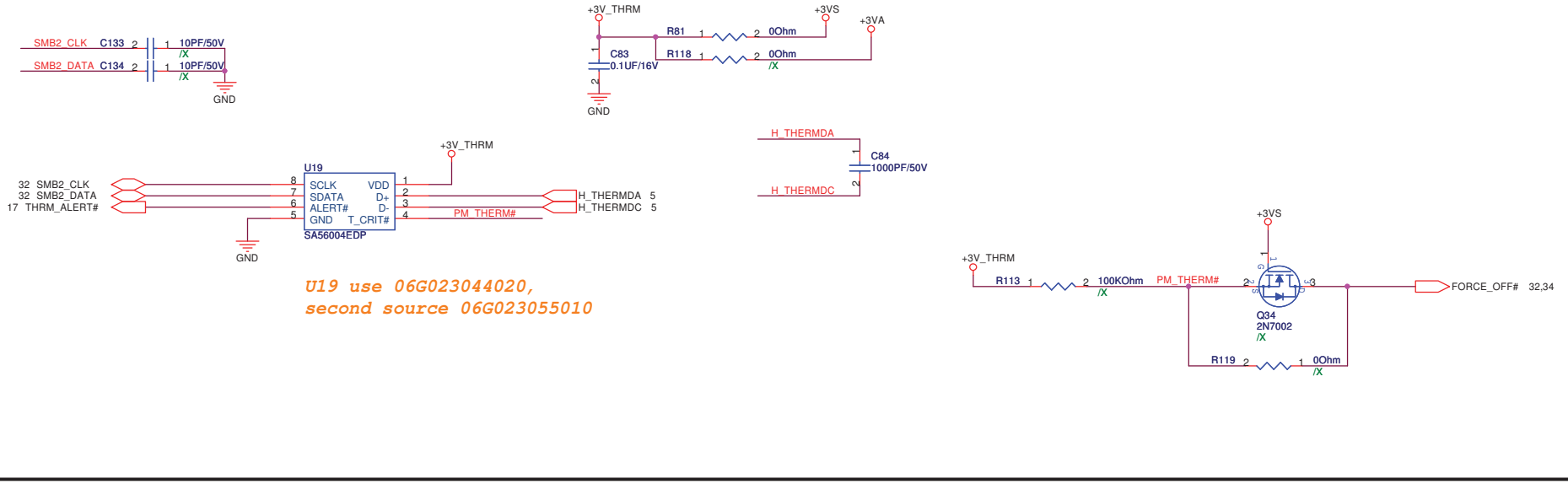
For Debug

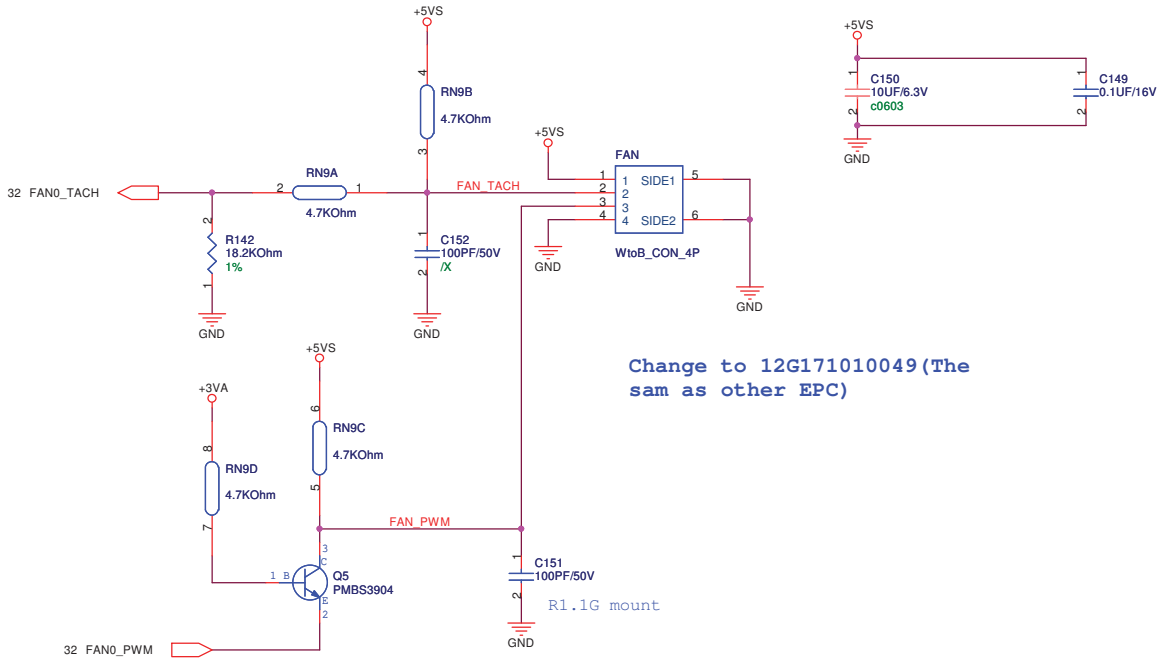


Debug Card cable use Z96 Touch Pad cable, P/N: 14G124110126, 14G124110120, 14G124110121 14G124110124, 14G124110125



<Variant Name>
ASUSTek Computer INC.
Title : Switch_SPI ROM_Debug
Engineer: Ryan Fan
Size A3
Project Name 1003HA
Rev 1.3G
Date: Monday, January 19, 2009
Sheet 34 of 50





<Variant Name>

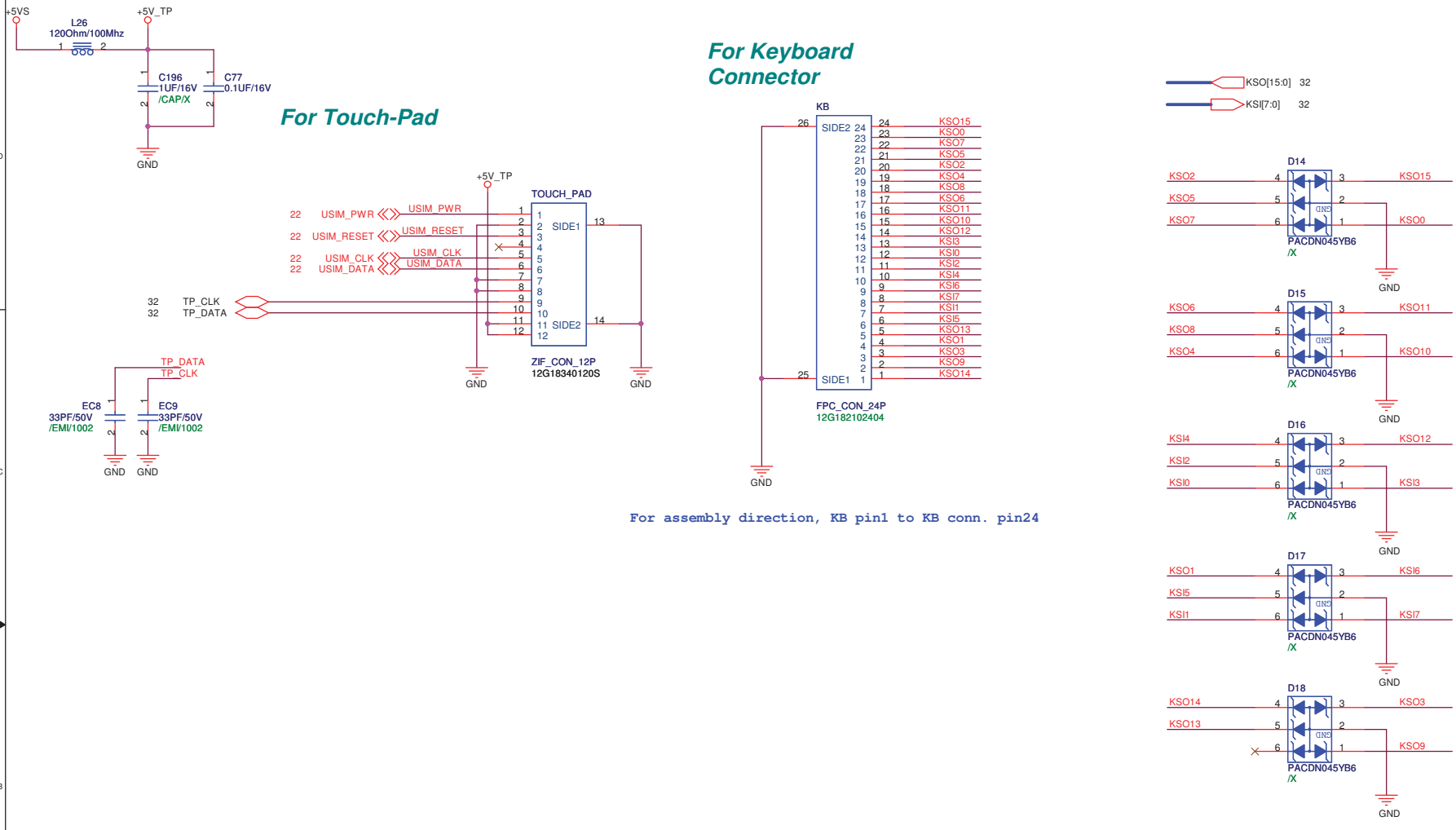
ASUSTek Computer INC.

Title : Thermal Sensor_FAN

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 35 of 50

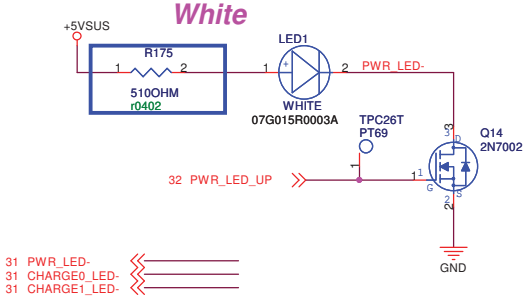


For assembly direction, KB pin1 to KB conn. pin24

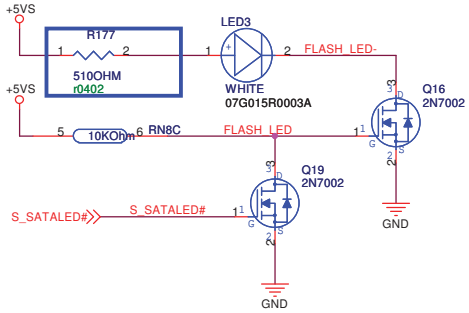
<Variant Name>

ASUSTek Computer INC.	Title : KB_Touch Pad	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 36 of 50	

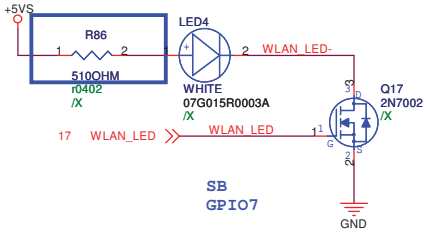
for POWER LED
White



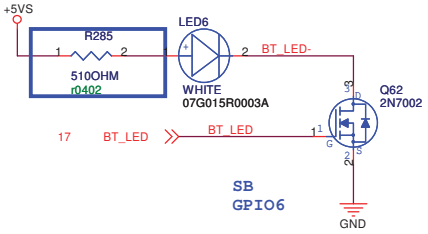
for FLASH LED
White



White /X

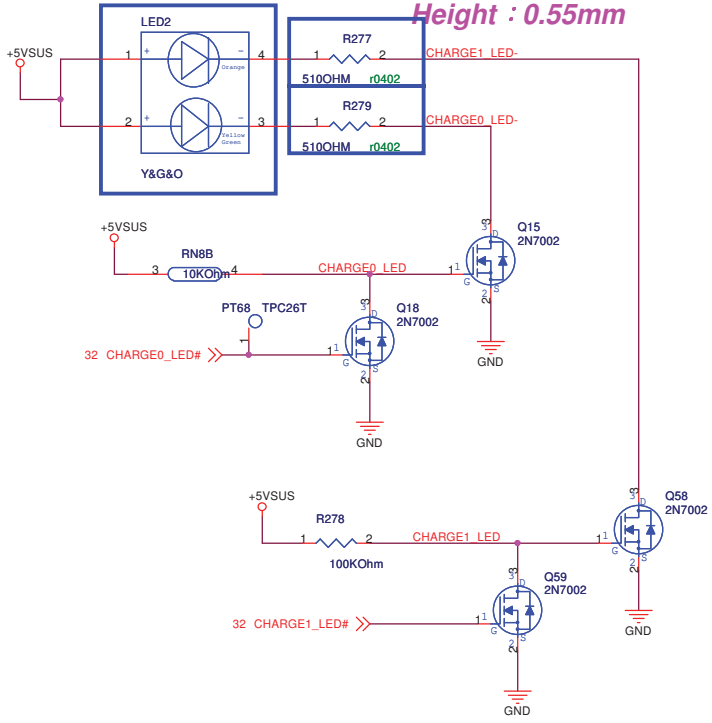


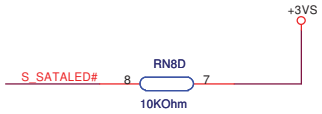
for WIFI/BlueTooth LED
White



1.1G change to EVERLIGHT

for CHARGE LED
Height：0.55mm





R1.2G Add pull high

S0/ S3	接上充電器	未接上充電器
電池狀態 95%～100%	綠色燈恆亮	燈號不亮
電池容华飽狀態 11%~94%	橘色燈恆亮	燈號不亮
電力不足狀態 0%~ 10%	橘色燈閃爍=>橘色燈閃爍(0.5Hz)	橘色燈閃爍=>橘色燈閃爍(0.5Hz)

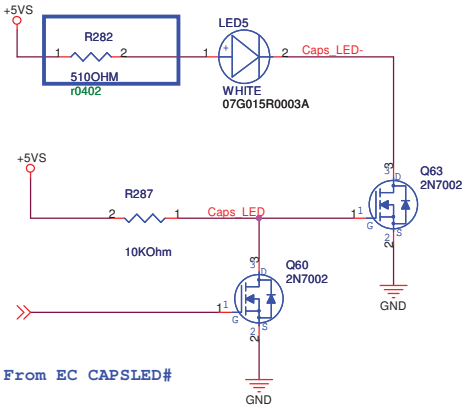
**Alarm Power Level: Default 10%. Sync. OS settings.

S4/S5	接上充電器	未接上充電器
電池狀態 95%～100%	綠色燈恆亮	燈號不亮
電池容华飽狀態 11%~94%	橘色燈恆亮	燈號不亮
電力不足狀態 0%~ 10%	橘色燈閃爍=>橘色燈閃爍(0.5Hz)	燈號不亮

**Alarm Power Level: Default 10%. Sync. OS settings.

S0/S3/S4/S5	接上充電器	未接上充電器
沒有放入電池	燈號不亮	燈號不亮

for Caps Lock LED
White



From EC CAPSLED#

<Variant Name>

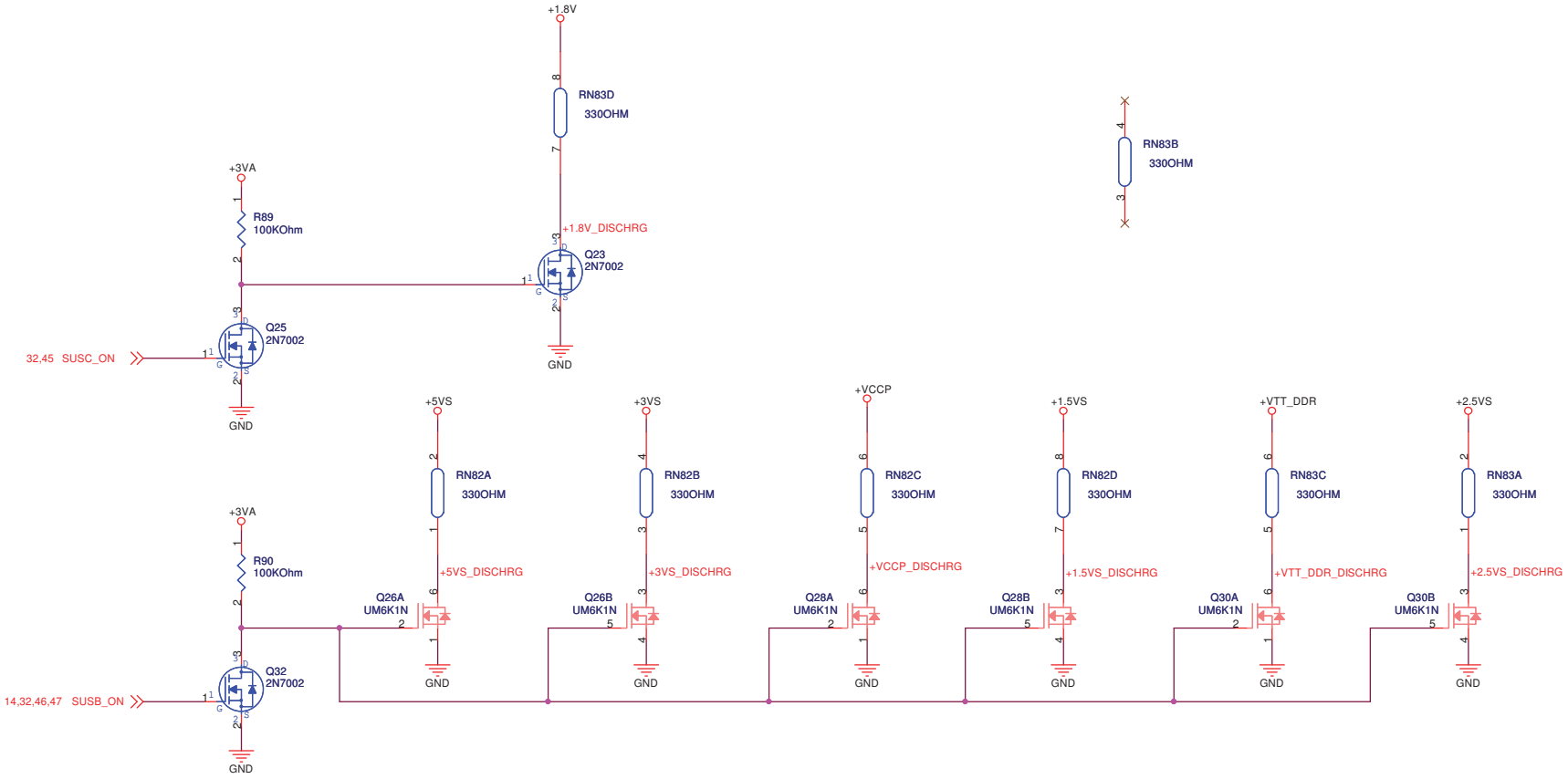
ASUSTek Computer INC.

Title : LED

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 37 of 50



<Variant Name>

ASUSTek Computer INC.

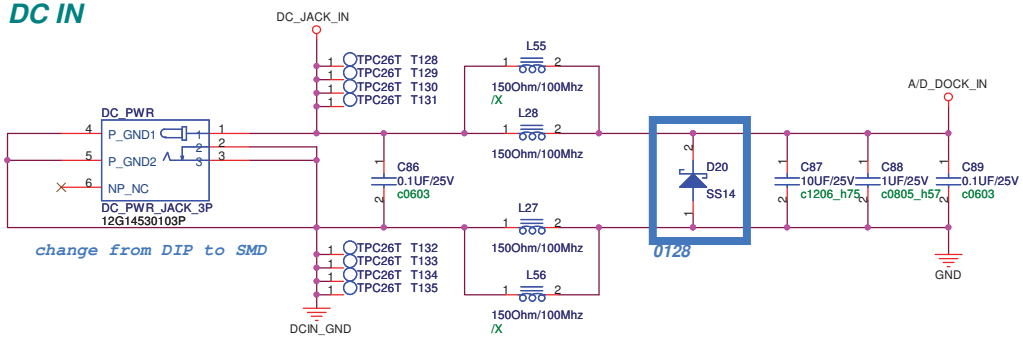
Title : Discharge

Engineer: Ryan Fan

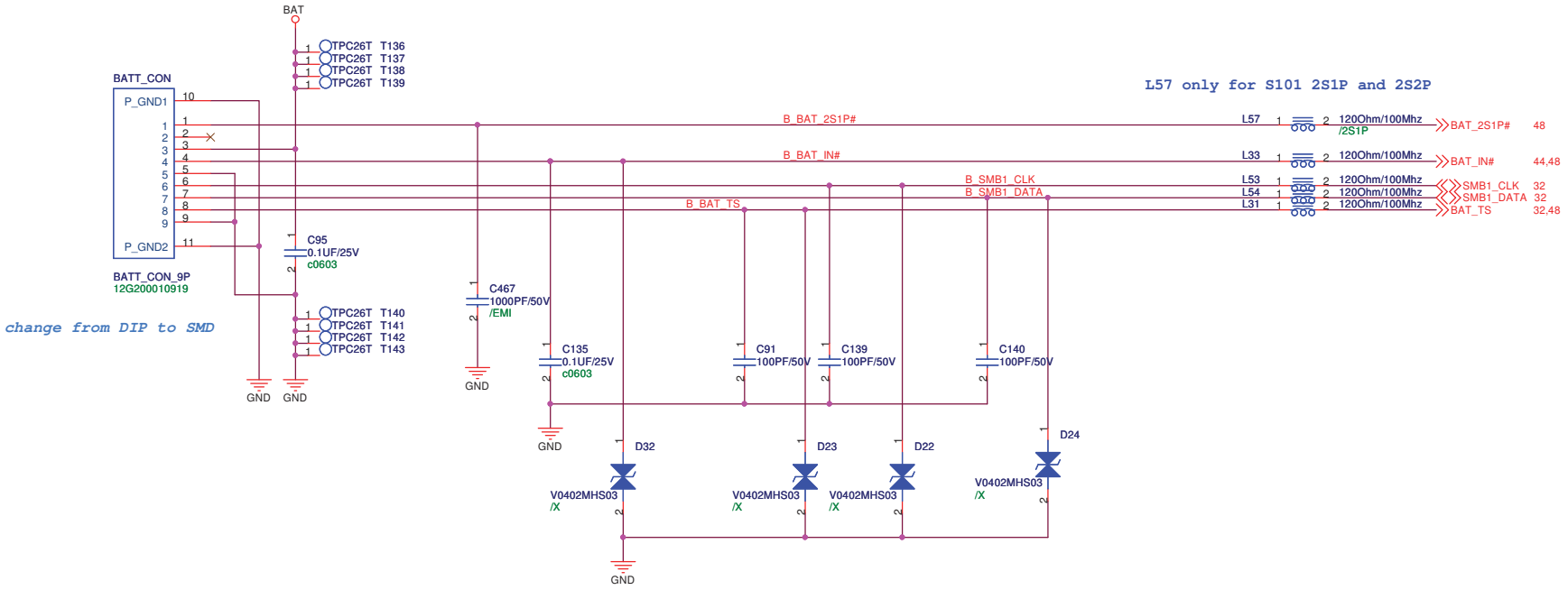
Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 38 of 50

DC IN

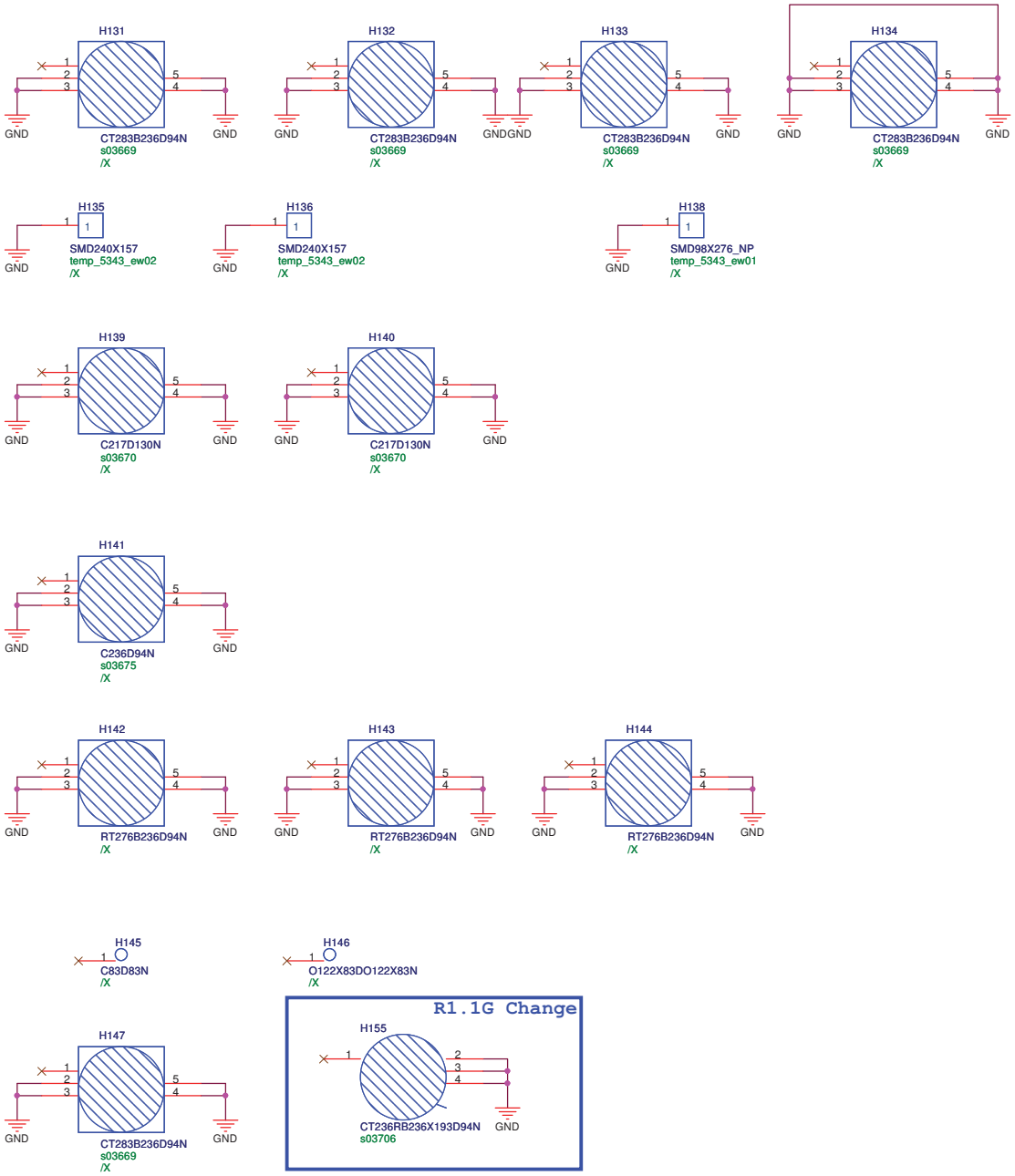


BAT IN



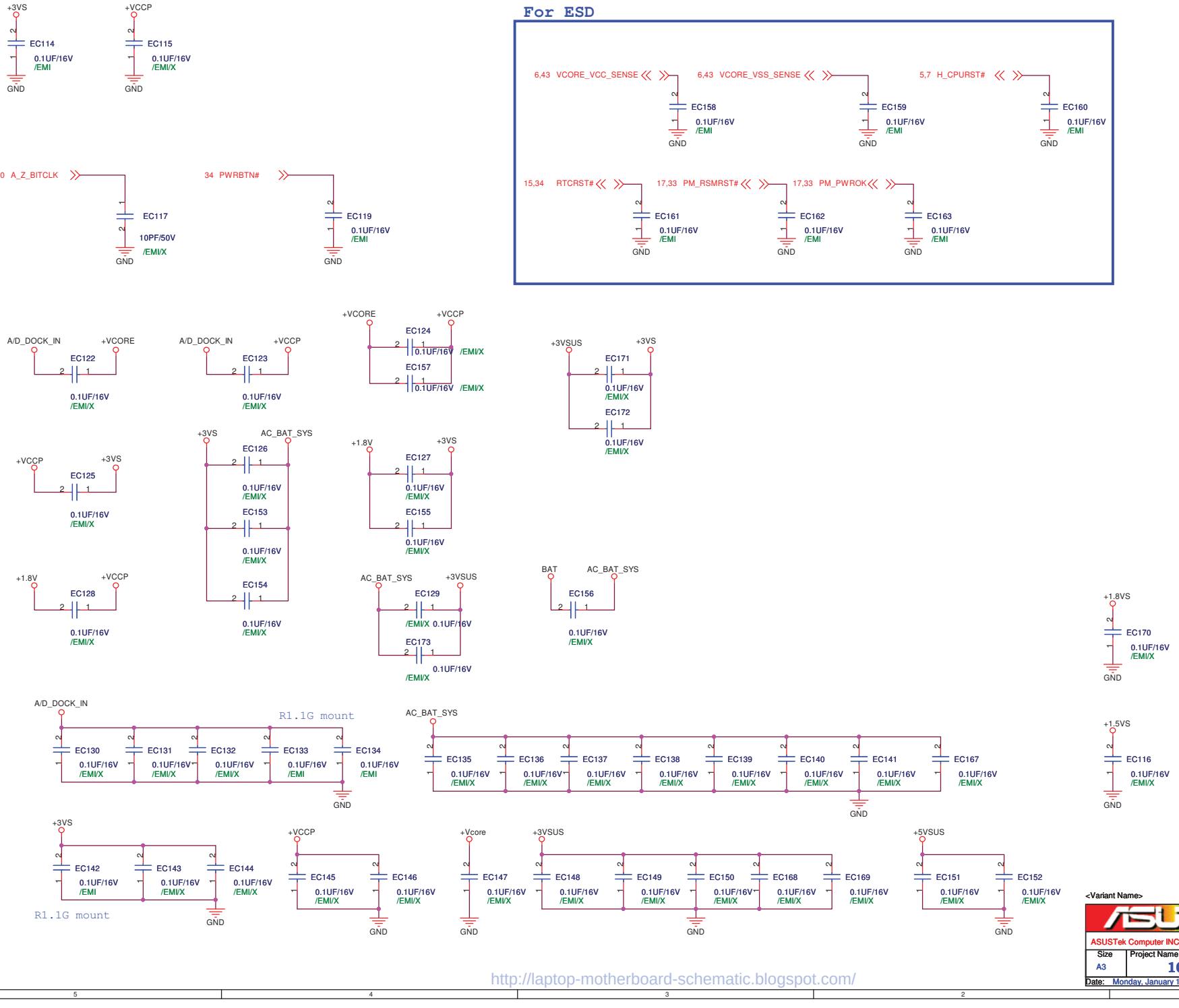
<Variant Name>

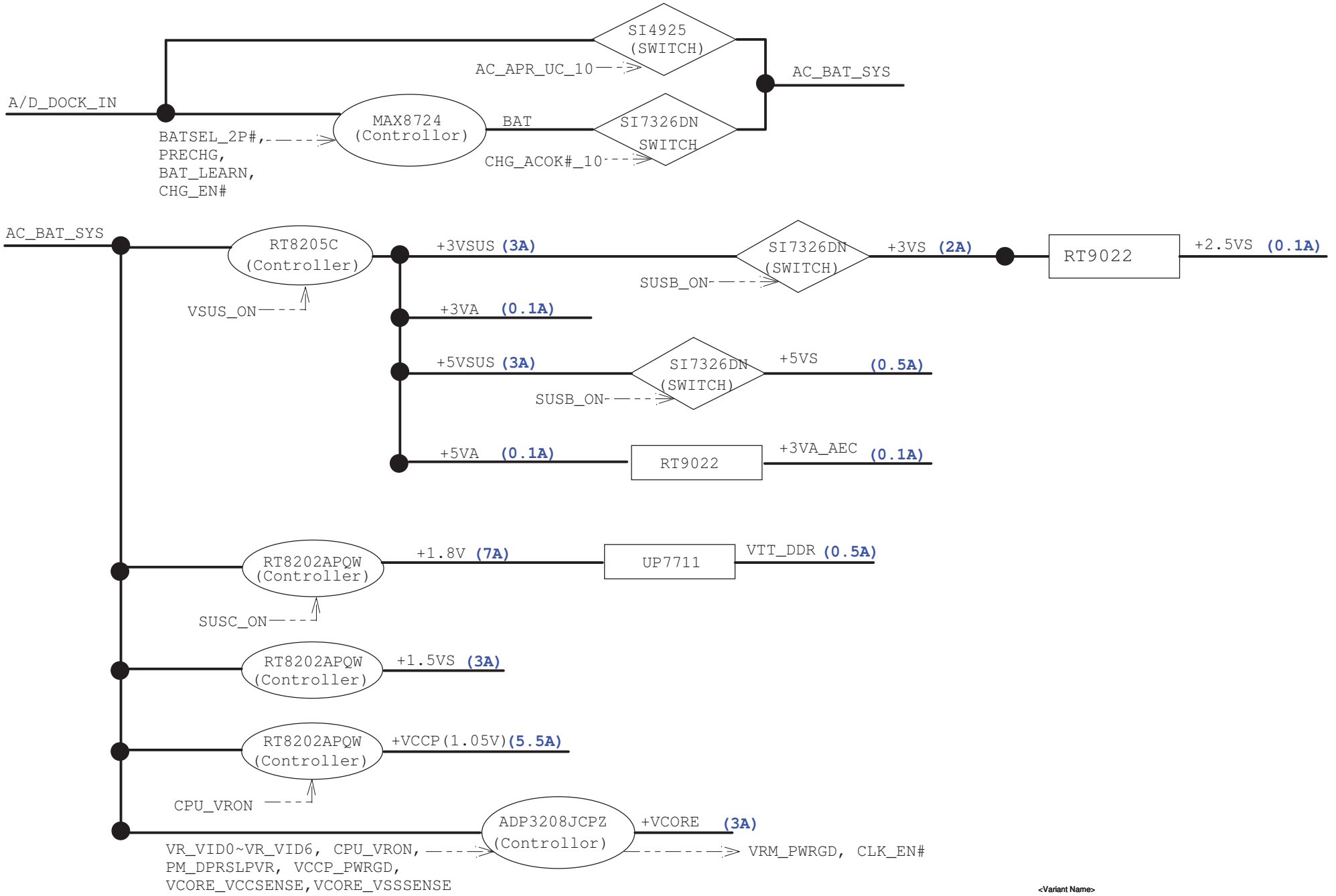
ASUSTek Computer INC.	Title : PWR Jack	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 39 of 50	



<Variant Name>

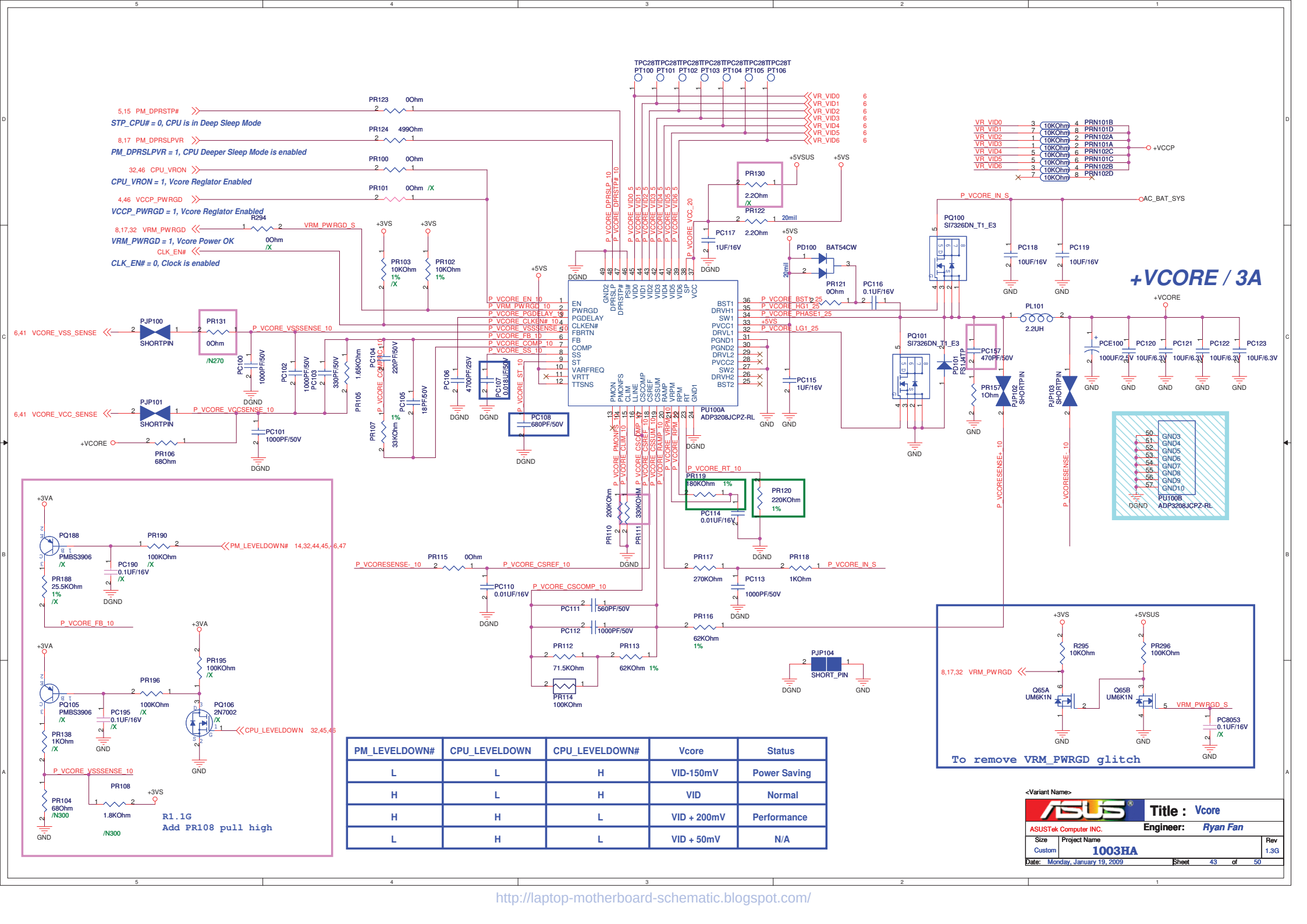
ASUSTek Computer INC.	Title : Srew Hole	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 40 of 50	





<Variant Name>

ASUSTek Computer INC.	Title : Power Flow	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	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

<Variant Name>

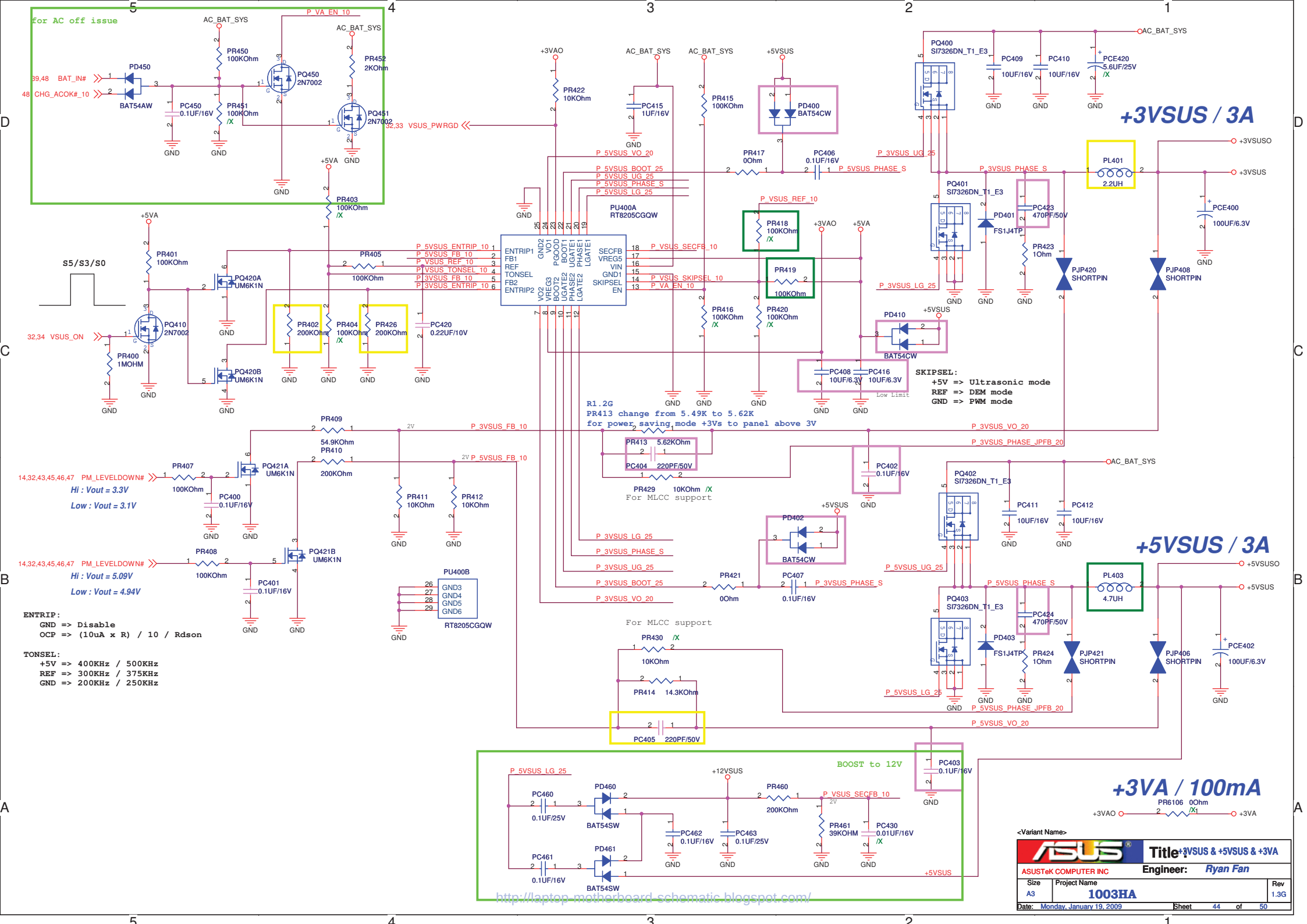
ASUSTek Computer INC.

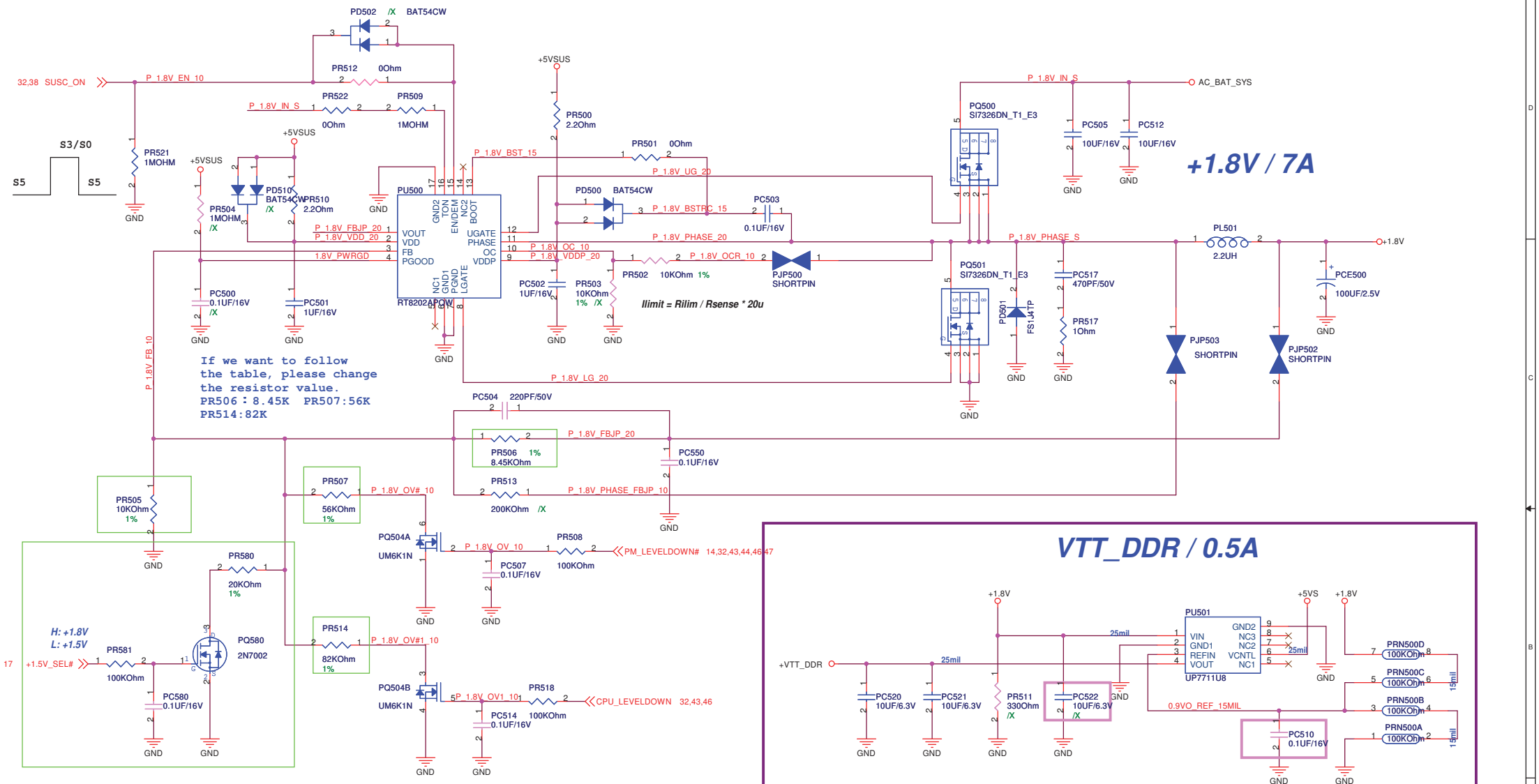
Title : Vcore

Engineer: Ryan Fan

Size	Project Name	Rev
Custom	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 43 of 50


for AC off issue
+3VSUS / 3A
+5VSUS / 3A
+3VA / 100mA
S5/S3/S0
R1.2G
PR413 change from 5.49K to 5.62K
for power saving mode +3Vs to panel above 3V
SKIPSEL:
+5V => Ultrasonic mode
REF => DEM mode
GND => PWM mode
ENTRIP:
GND => Disable
OCP => (10uA x R) / 10 / Rdson
TONSEL:
+5V => 400KHz / 500KHz
REF => 300KHz / 375KHz
GND => 200KHz / 250KHz
Hi : Vout = 3.3V
Low : Vout = 3.1V
Hi : Vout = 5.09V
Low : Vout = 4.94V
BOOST to 12V
For MLCC support
PU400A RT8205CGQW
PU400B RT8205CGQW
ASUSTeK COMPUTER INC
Engineer: Ryan Fan
Project Name 1003HA
Rev 1.3G
Date: Monday, January 19, 2009
Sheet 44 of 50
http://laptop-motherboard-schematic.blogspot.com/



+1.5V_SEL#	PM_LEVELDOWN#	CPU_LEVELDOWN	CPU_LEVELDOWN#	Voltage	Status
H	L	L	H	1.72V	Power Saving
H	H	L	H	1.84V	Normal
H	H	L	H	1.84V	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

<Variant Name>

ASUSTek Computer INC.

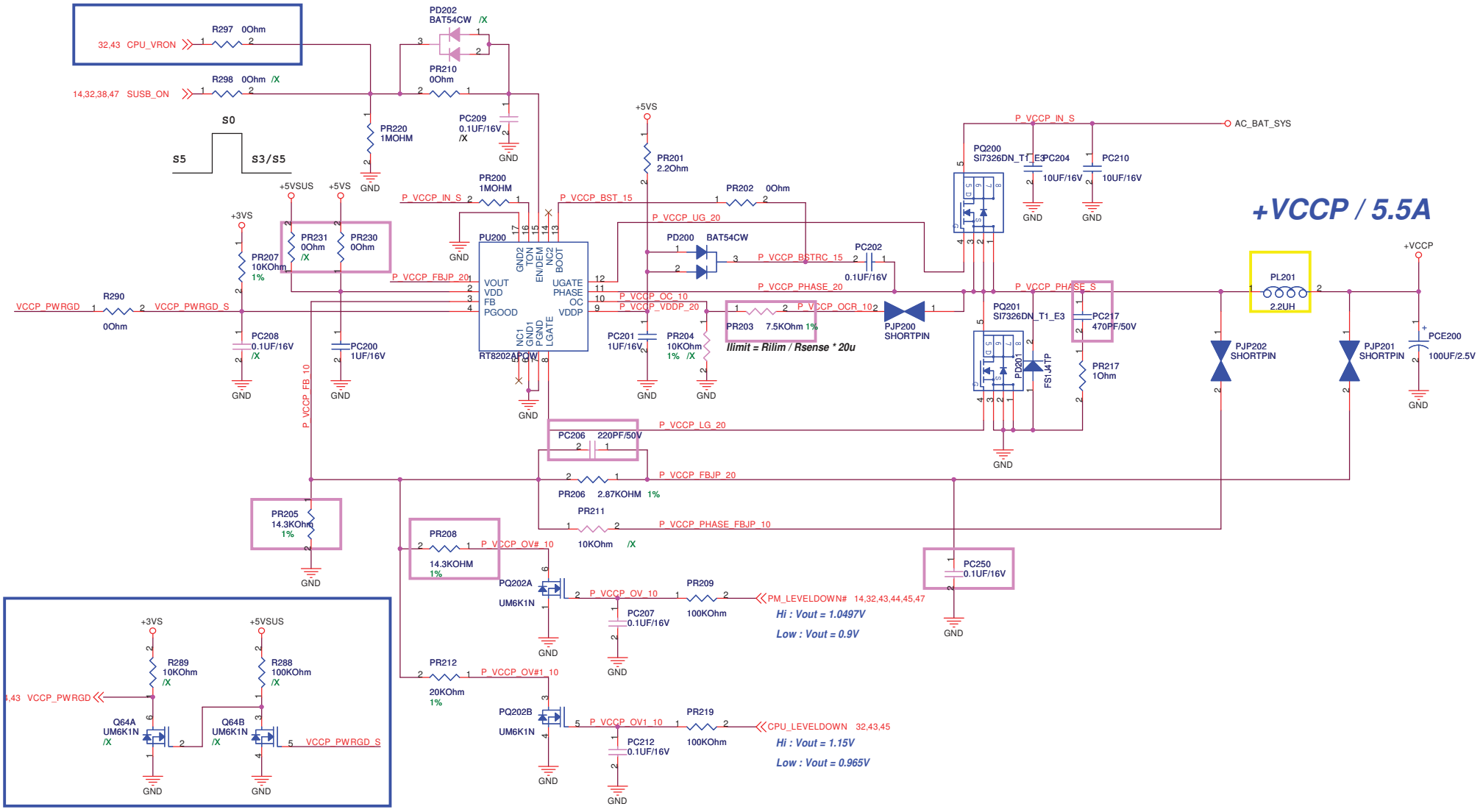
Title : +1.8V & VTTDDR

Engineer: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

Date: Monday, January 19, 2009 Sheet 45 of 50

1.1G change Enable signal from CPU_VRON

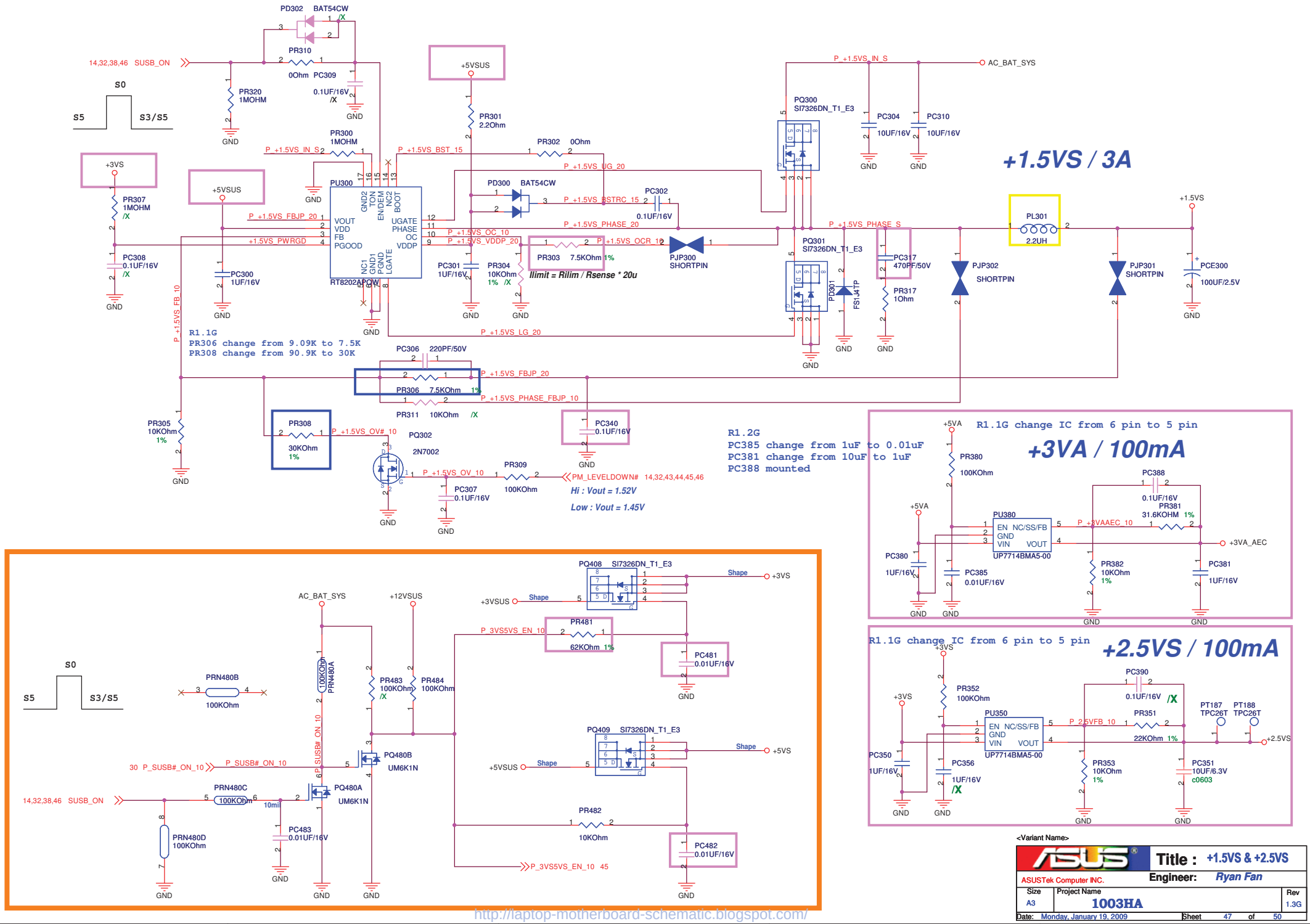


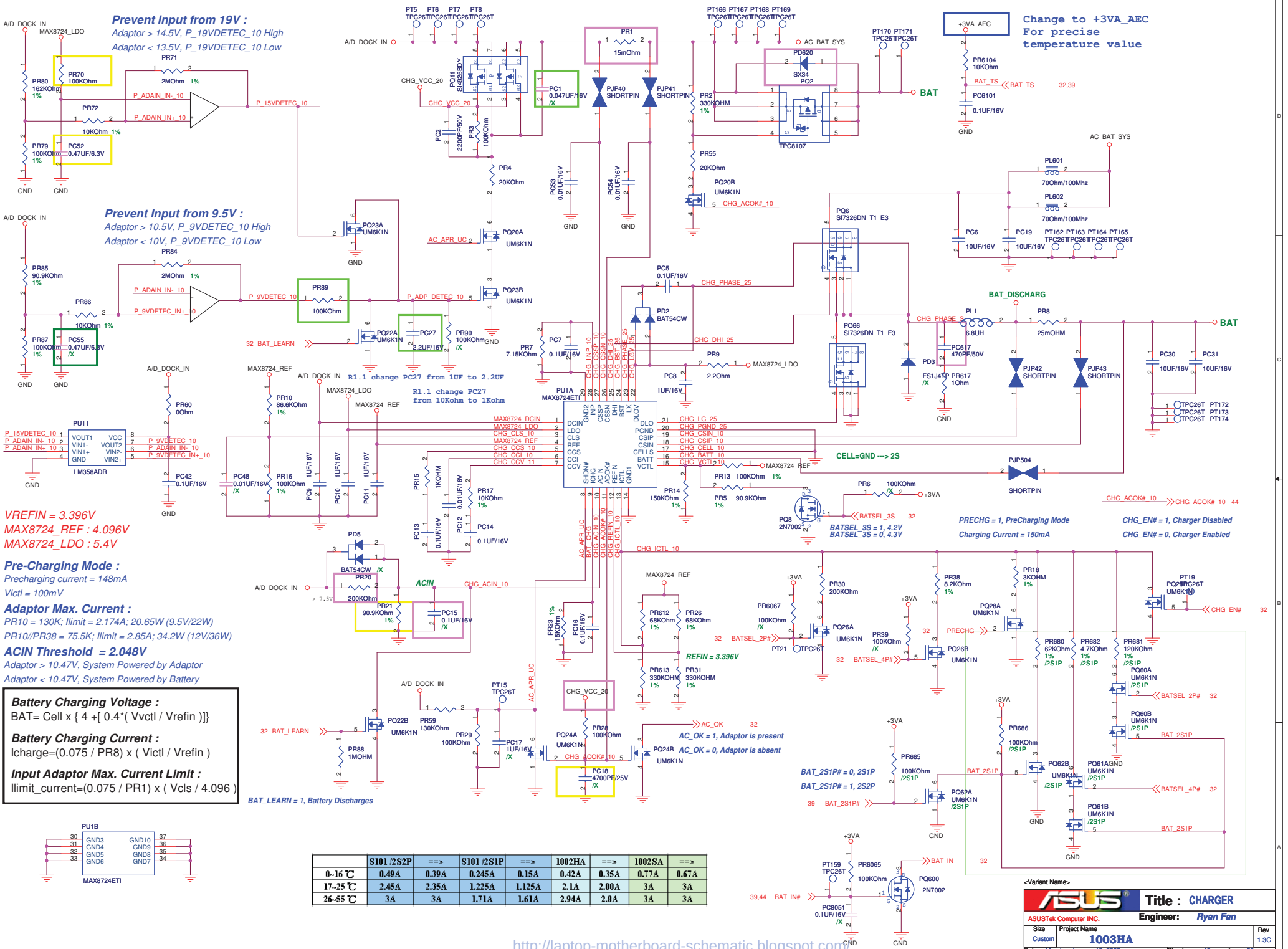
To remove VCCP_PWRGD glitch

PM_LEVELDOWN#	CPU_LEVELDOWN	CPU_LEVELDOWN#	Voltage	Status
L	L	H	0.89V	Power Saving
H	L	H	1.04V	Normal
H	L	H	1.04V	Performance
L	H	L	1.072V	N/A

<Variant Name>

ASUSTek Computer INC.	Title : VCCP	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
Date: Monday, January 19, 2009	Sheet 46 of 50	





	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

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
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: Ryan Fan

Size	Project Name	Rev
A3	1003HA	1.3G

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<Variant Name>

ASUSTek Computer INC.	Title : History	
	Engineer: Ryan Fan	
Size: A3	Project Name: 1003HA	Rev: 1.3G
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