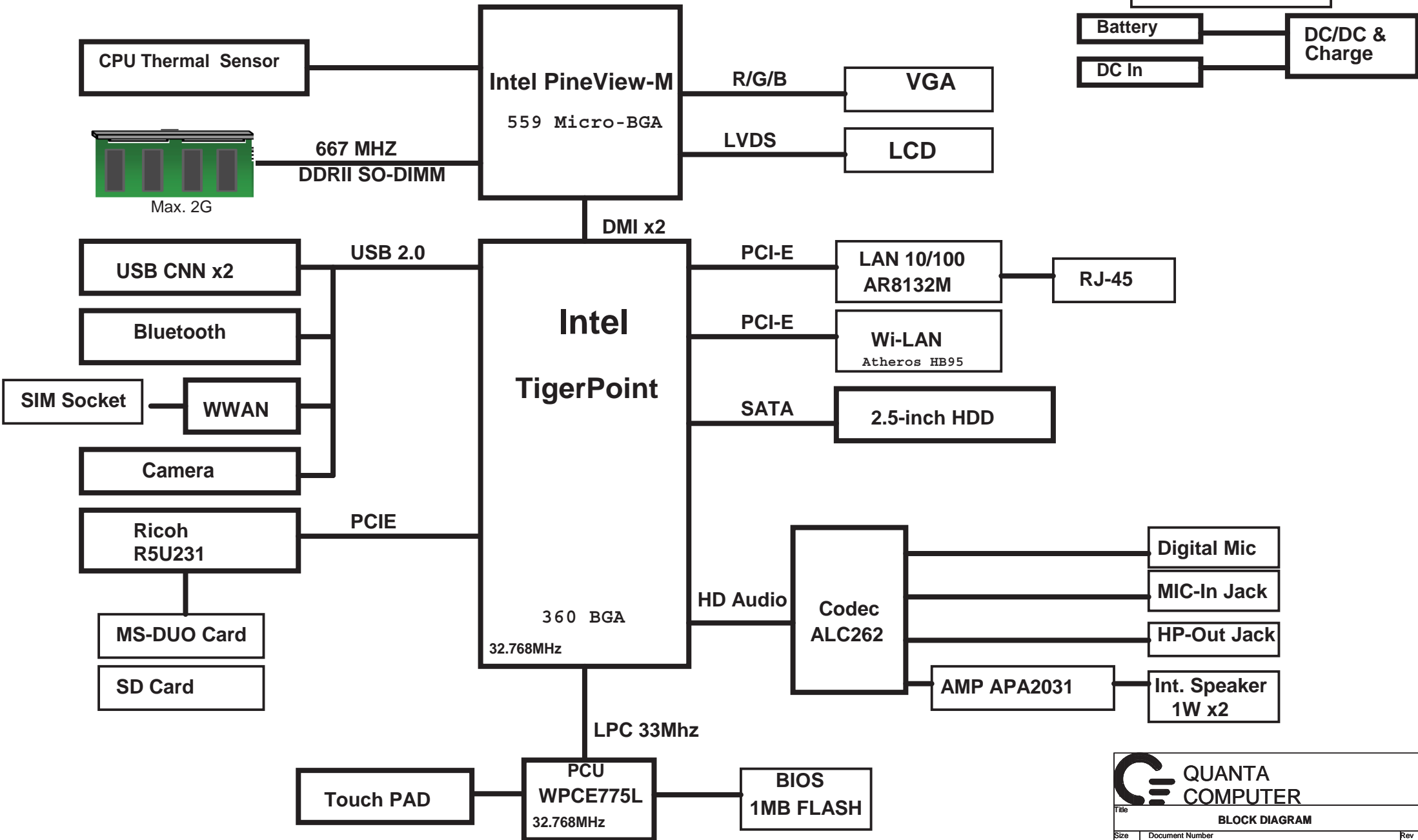

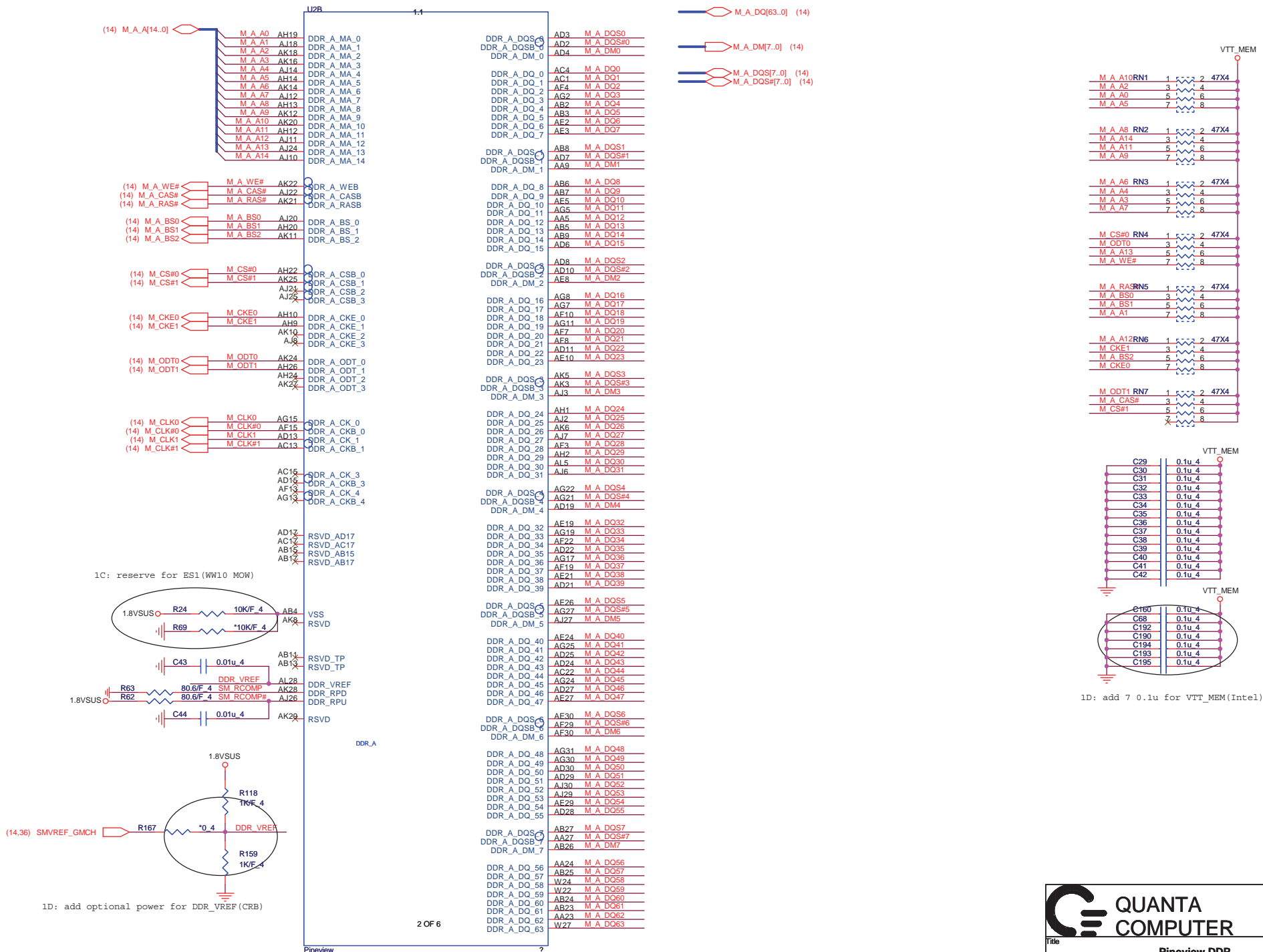


SY3 BLOCK DIAGRAM

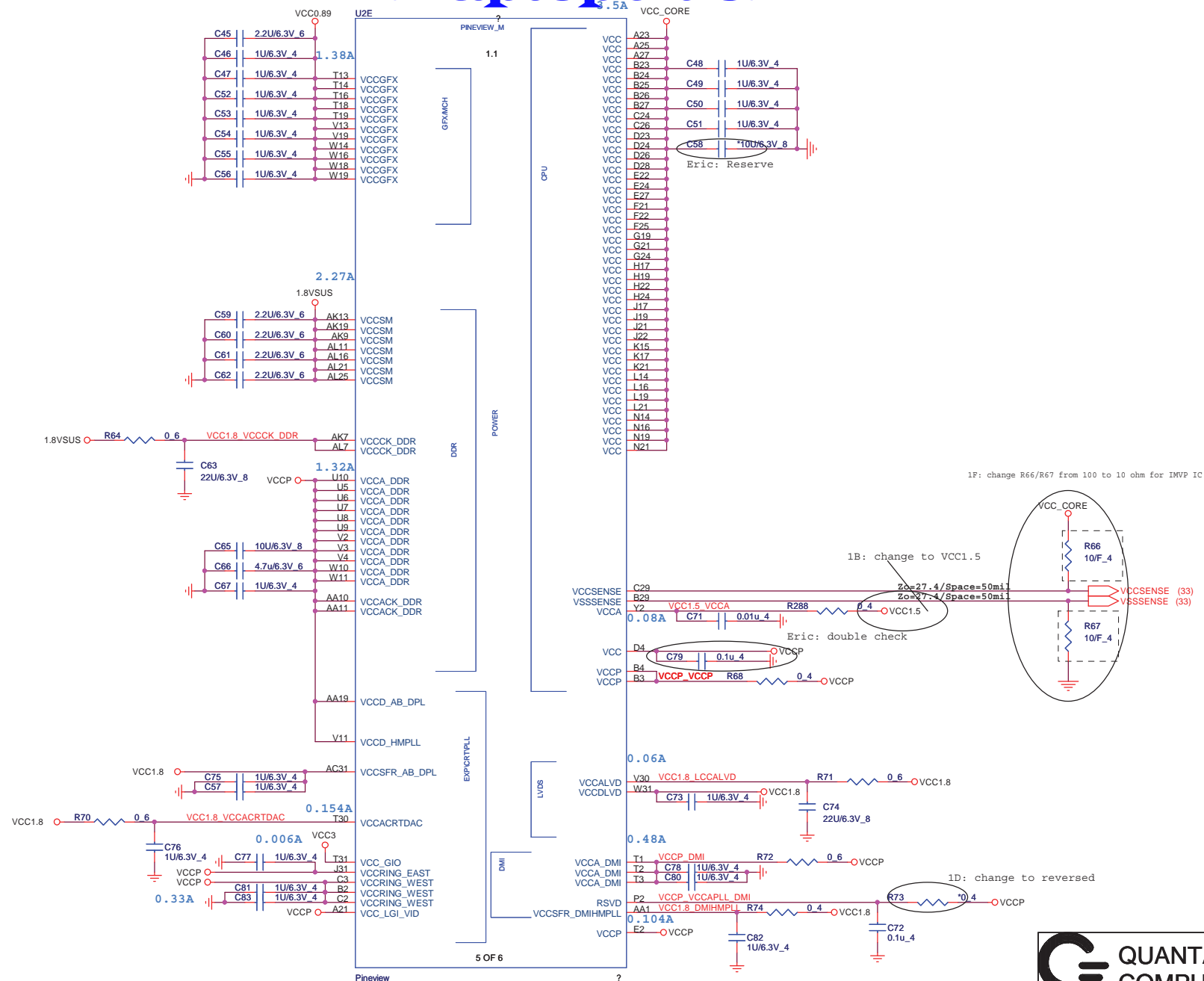


1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

 QUANTA COMPUTER		
Title Front Page		
Size A	Document Number SY3 MB	Rev 1G
Date:	Monday, March 30, 2009	Sheet 2 of 44



Title			Pineview DDR		
Size	Document Number				Rev
Custom	SY3 MB				1G
Date:	Tuesday, March 31, 2009		Sheet	5	of 44

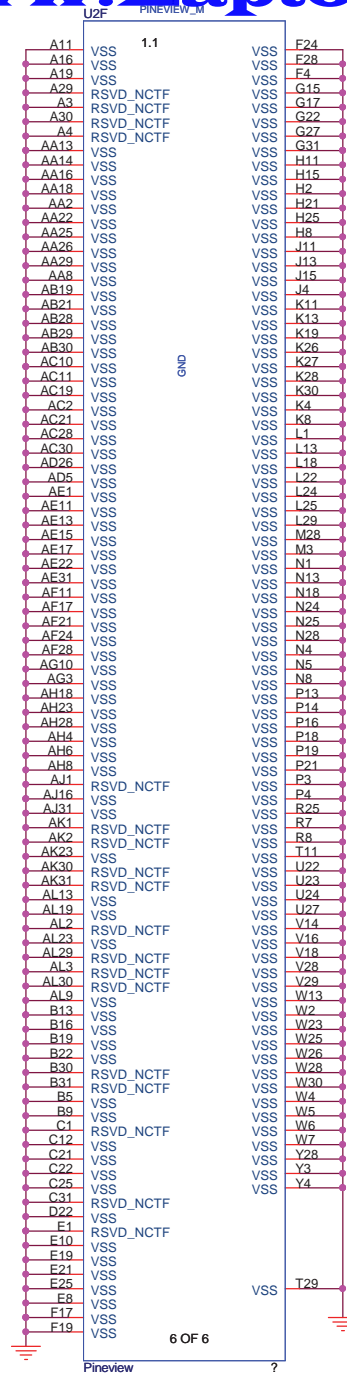


1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

QUANTA
COMPUTER

Title: **Pineview Power**

Size: Custom	Document Number: SY3 MB	Rev: 1G
Date: Tuesday, March 31, 2009		Sheet: 6 of 44



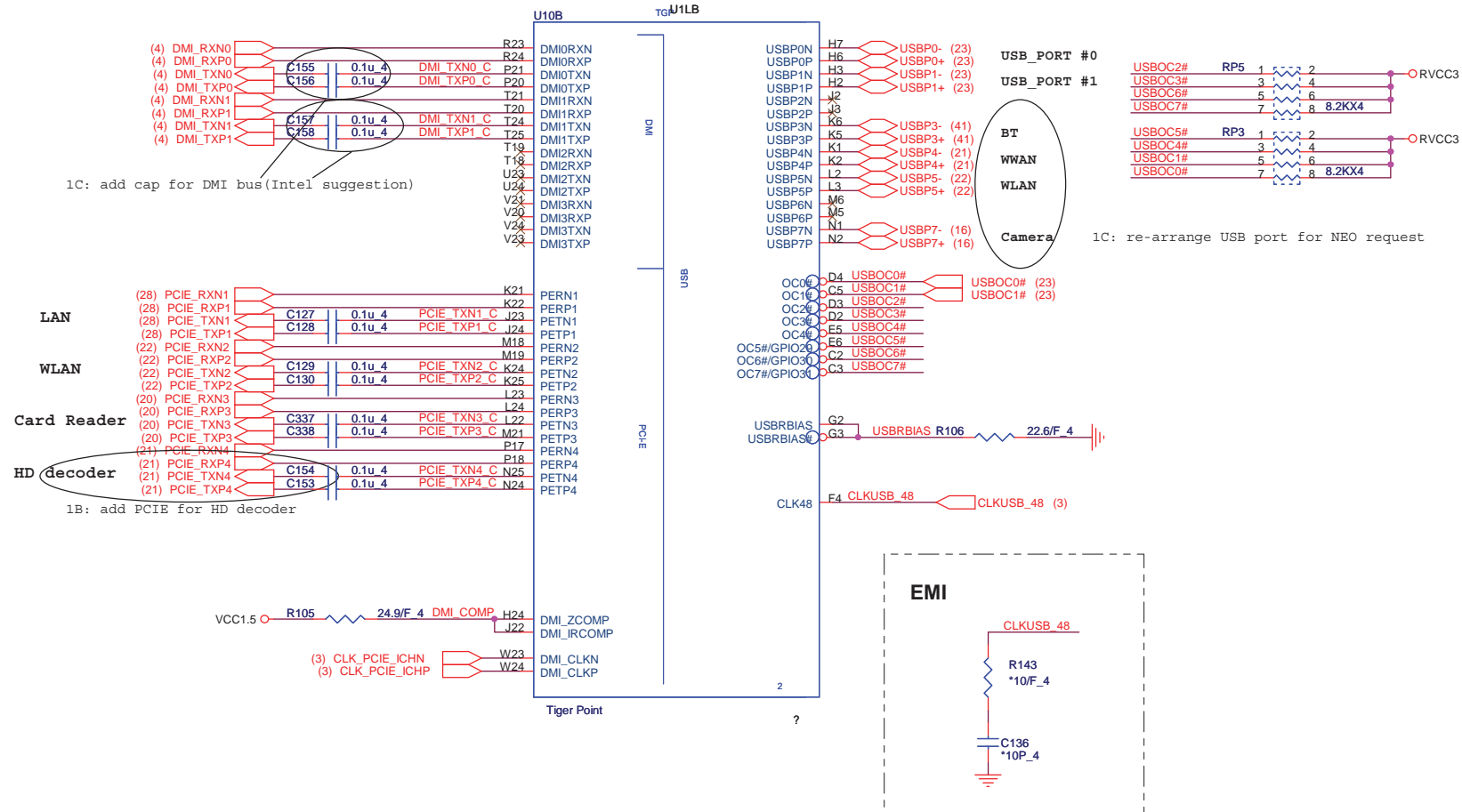
Title Pineview GND

Size Custom Document Number SY3 MB


Rev 1G

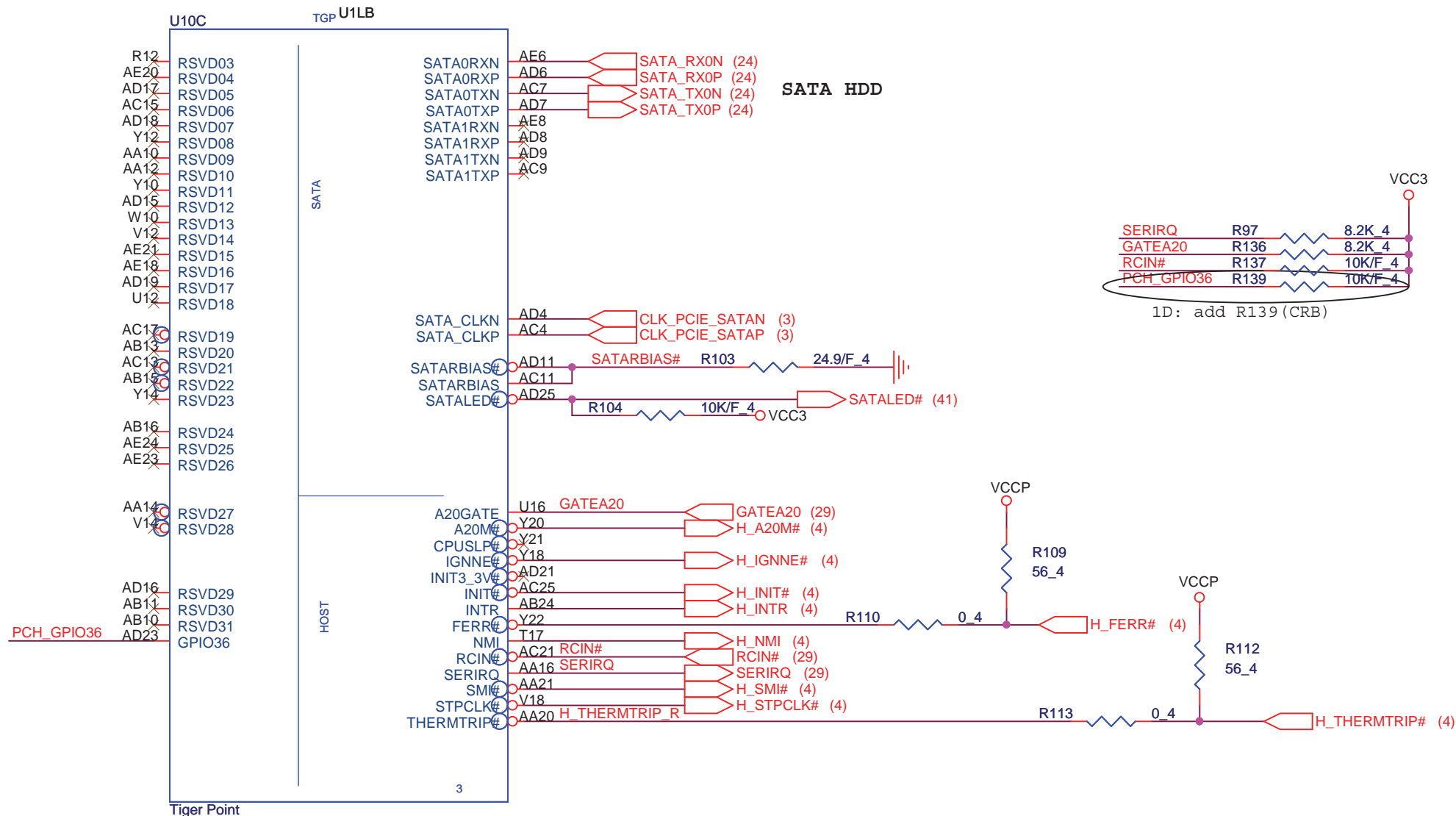
Date: Tuesday, March 31, 2009

Sheet 7 of 44




1.Level 1 Environment-related Substances Should NEVER be Used.
 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

 QUANTA COMPUTER		Title	
		Tiger Point DMI/PCIe/USB	
Size B	Document Number SY3 MB	Rev 1G	
Date: Tuesday, March 31, 2009		Sheet	8 of 44



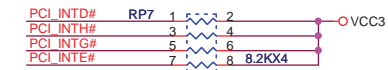
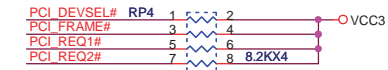
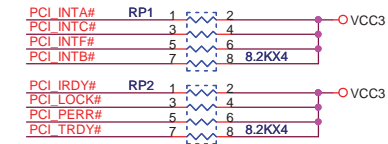
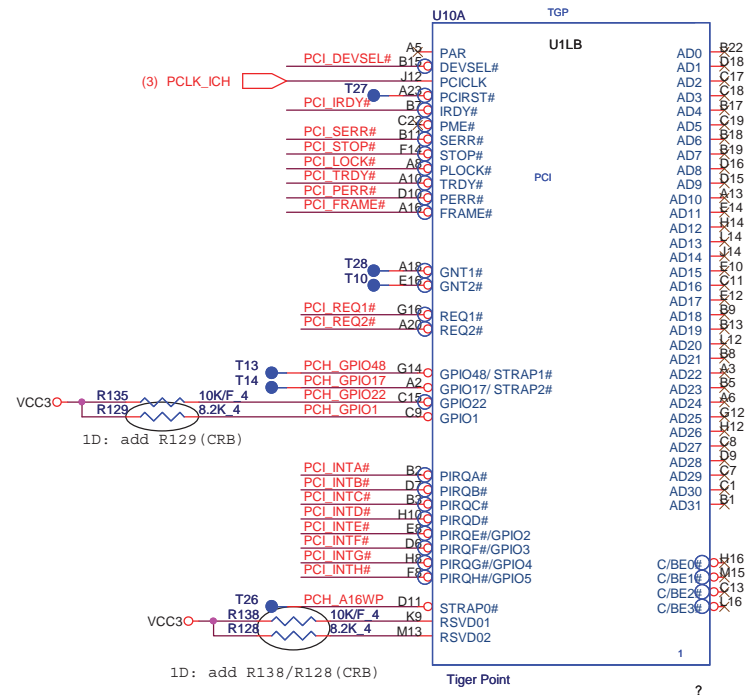
1.Level 1 Environment-related Substances Should NEVER be Used.
 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

<http://laptop-motherboard-schematic.blogspot.com/>



QUANTA COMPUTER

Title		
Tiger Point Sata/Host		
Size A	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009		Sheet 9 of 44



ICH Boot BIOS select

PCH_GPIO17 (INT PU)	PCH_GPIO48 (INT PU)	Boot BIOS Location
0	1	SPI
1	0	PCI
1	1	LPC (Default)

A16 SWAP Override strap

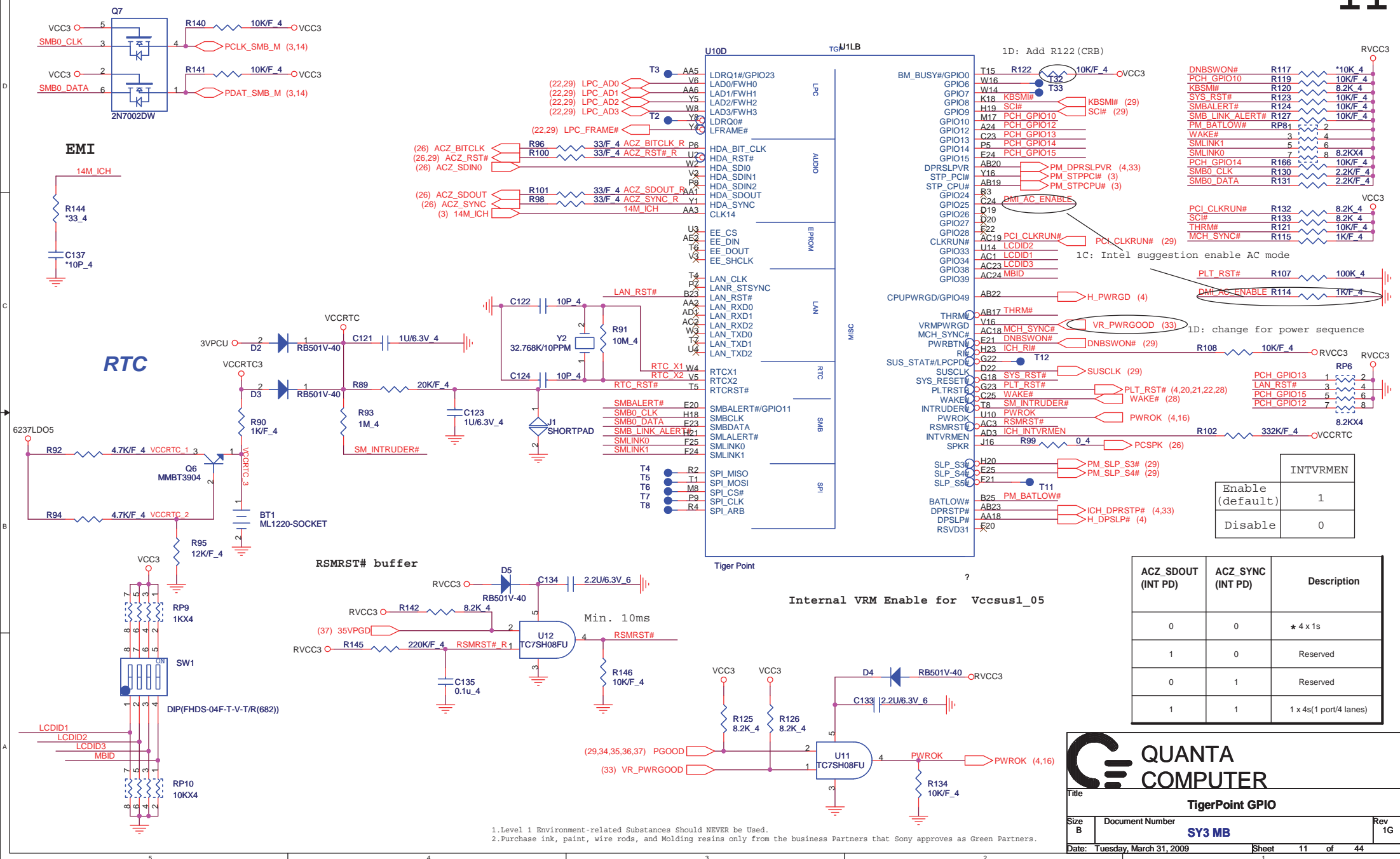
PCH_A16WP (INT PU)	Low = A16 swap override enabled High = Default
-----------------------	---

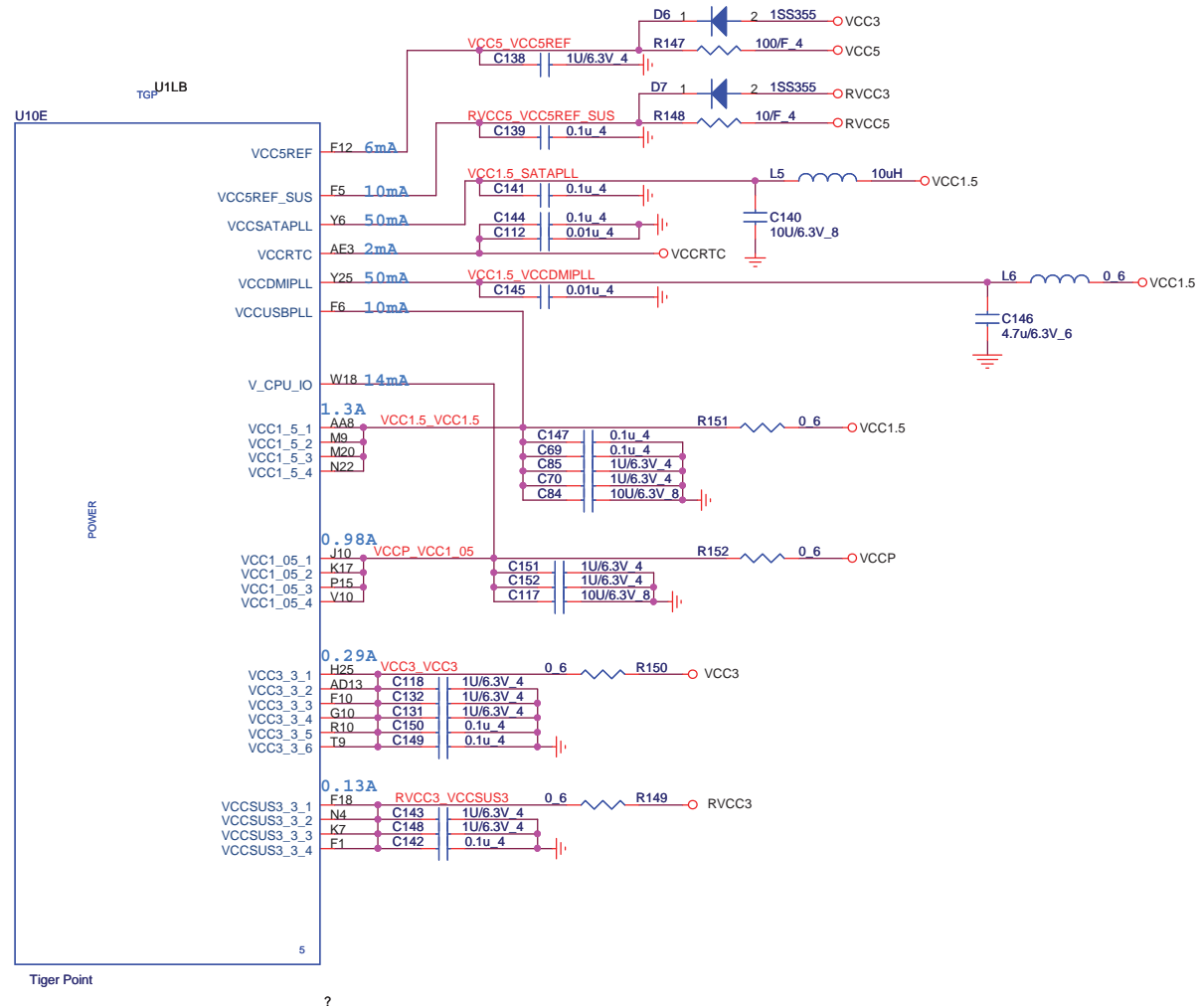
IRQ	Description
PIRQA	USB UHCI Controller #1, #4
PIRQB	AC'97 Codec; option for SMBUS
PIRQC	USB UH Controller #3; SATA/IDE Native Mode
PIRQD	USB UHCI Controller #2
PIRQE	Internal LAN; Option for SCI, TCO, HPET#0,1,2
PIRQF	Option for SCI, TCO, HPET#0,1,2
PIRQG	Option for SCI, TCO, HPET#0,1,2
PIRQH	USB EHCI Controller; Option for SCI, TCO, HPET#0,1,2

PCI_GNT#2	Internal PU Should not be PD
-----------	---------------------------------


Title		
TigerPoint PCI(3/6)		
Size	Document Number	Rev
B	SY3 MB	1G
Date:	Tuesday, March 31, 2009	Sheet 10 of 44

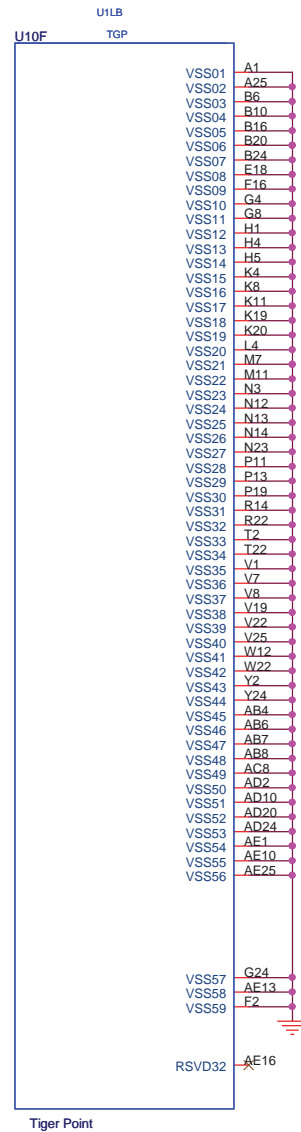
1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.






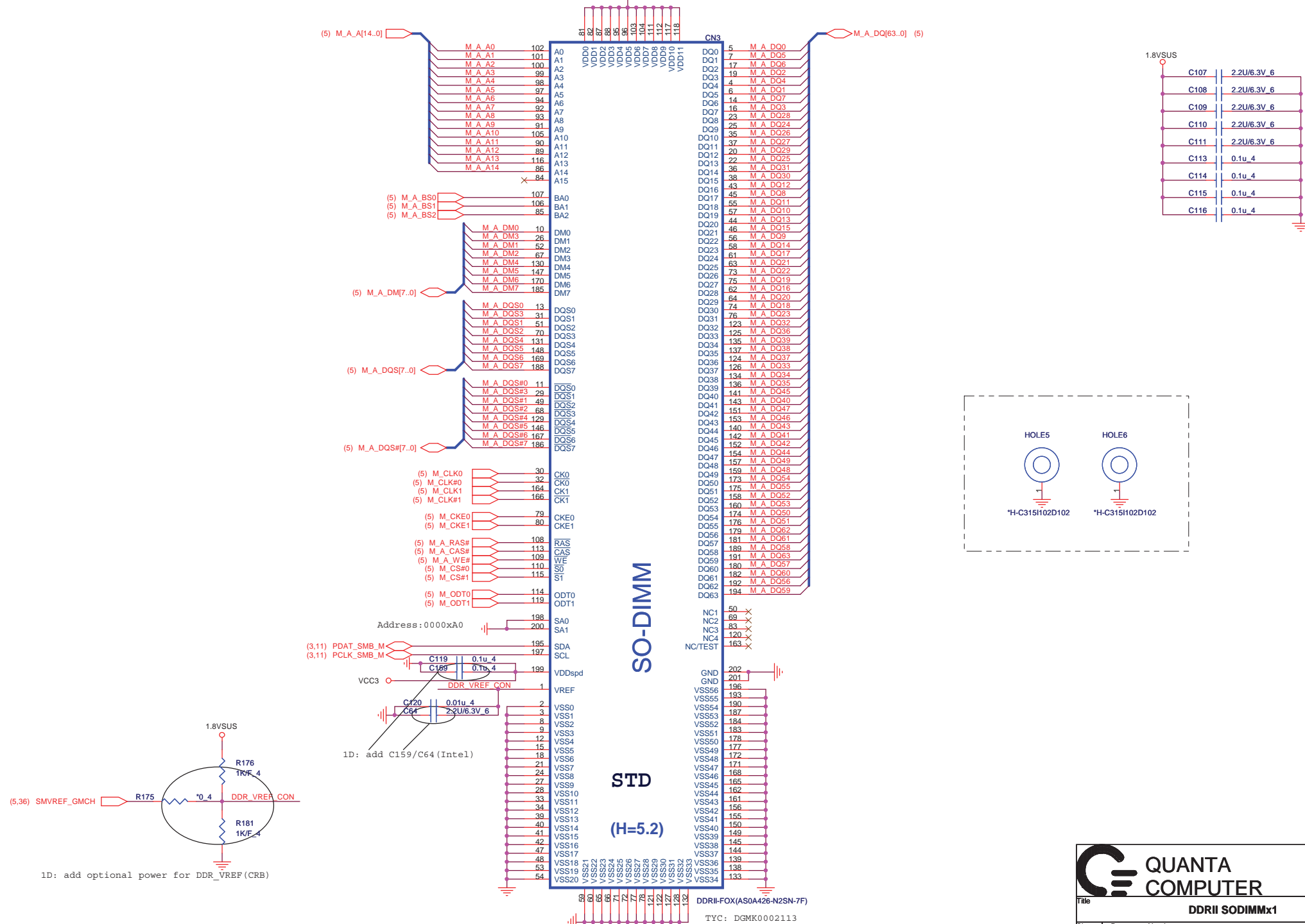
- 1.Level 1 Environment-related Substances Should NEVER be Used.
- 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

 QUANTA COMPUTER		
Title TigerPoint Power		
Size B	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009 Sheet 12 of 44		




- 1.Level 1 Environment-related Substances Should NEVER be Used.
- 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

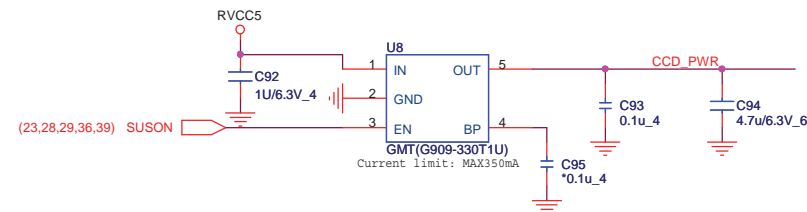
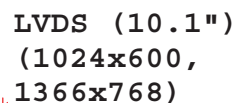
 QUANTA COMPUTER			
Title TigerPoint GND			
Size B	Document Number SY3 MB		Rev 1G
Date: Tuesday, March 31, 2009		Sheet 13 of 44	

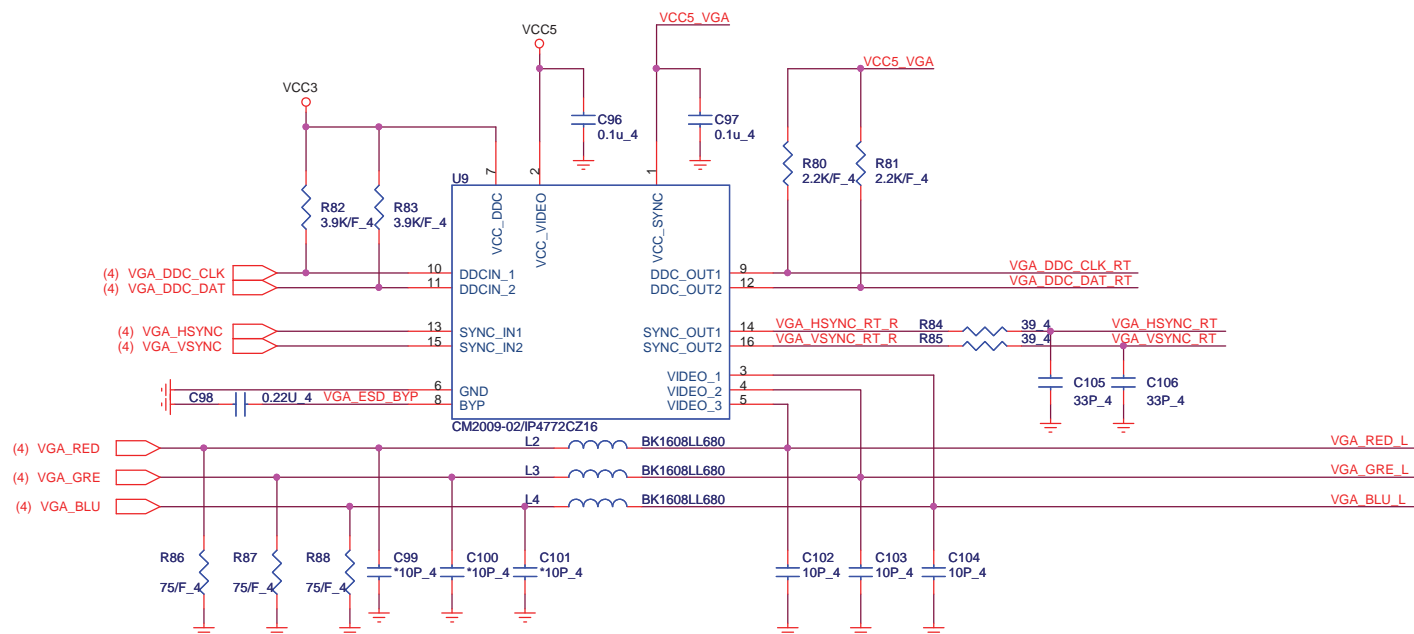


1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

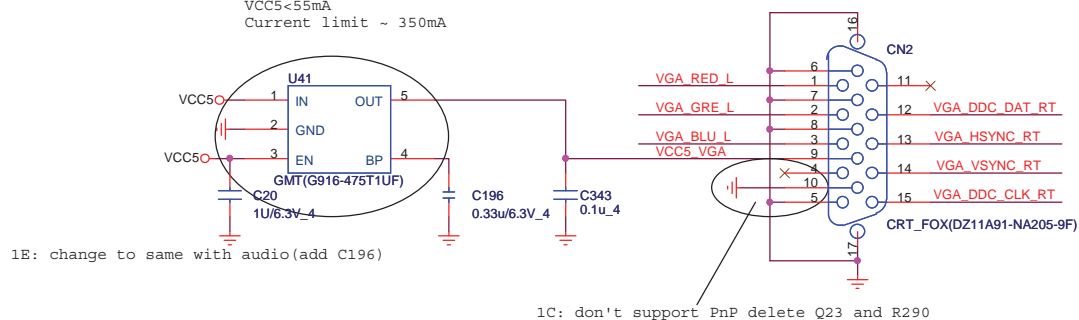
 QUANTA COMPUTER		
Title DDRII SODIMMx1		
Size A	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009		Sheet 15 of 44

LVDS Enable






VCC5_VGA (5V+-10%)
Current limit <1A
VCC5<55mA
Current limit ~ 350mA




1E: change to same with audio(add C196)

1C: don't support PnP delete Q23 and R290


- 1.Level 1 Environment-related Substances Should NEVER be Used.
- 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

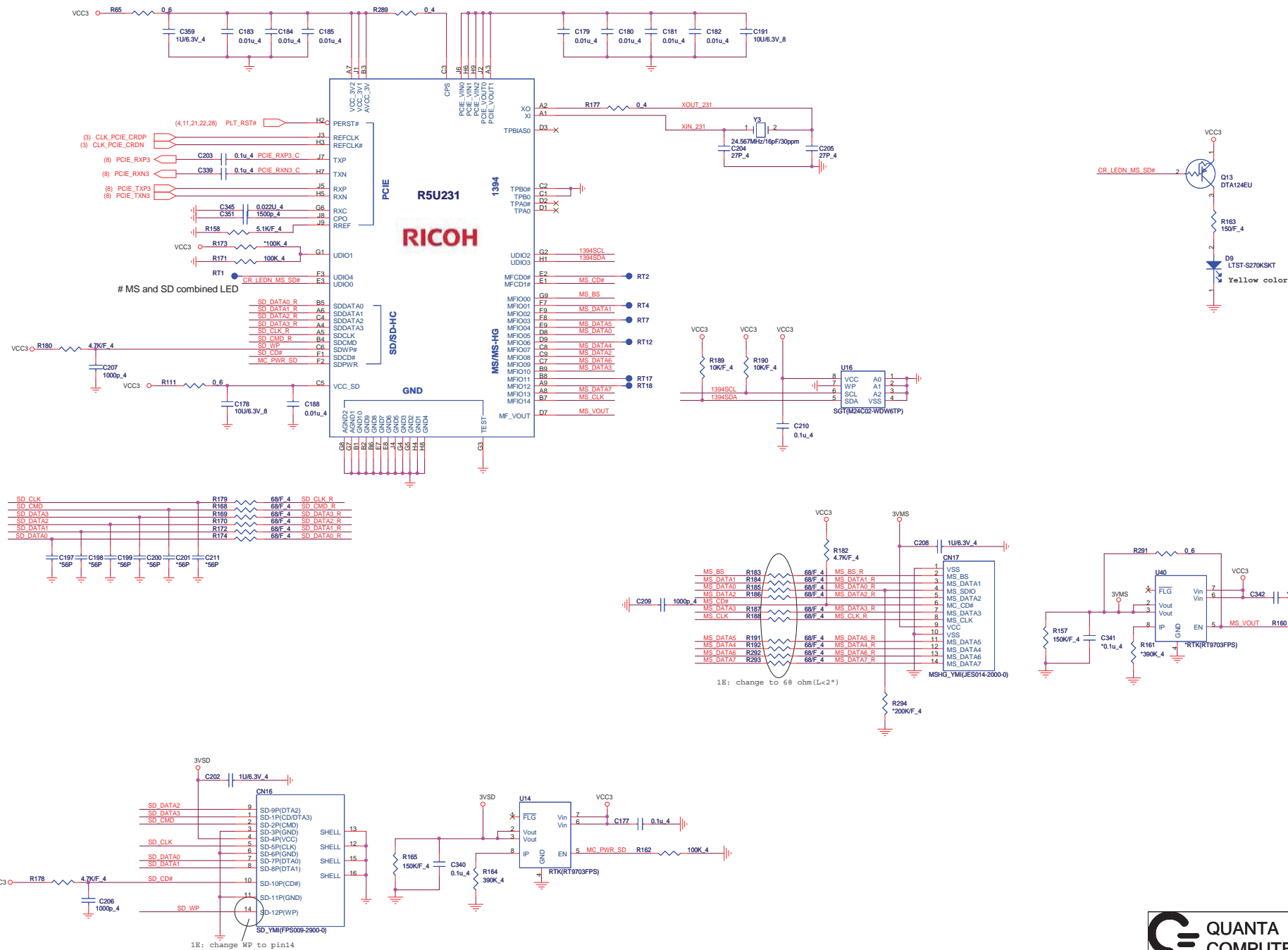
 QUANTA COMPUTER		
Title CRT		
Size B	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009 Sheet 17 of 44		

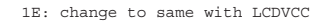
1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

 QUANTA COMPUTER		
Title Display I/O		
Size A	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009	Sheet 18 of 44	

1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

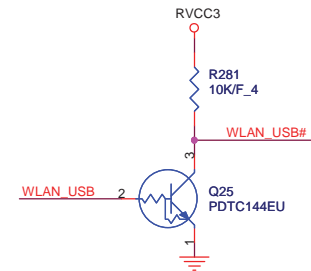
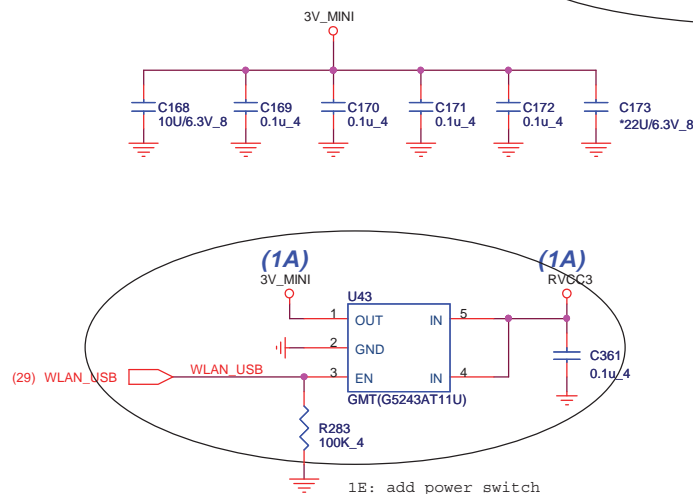
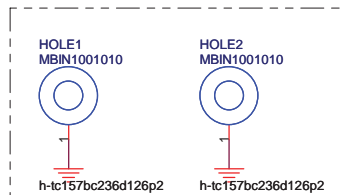
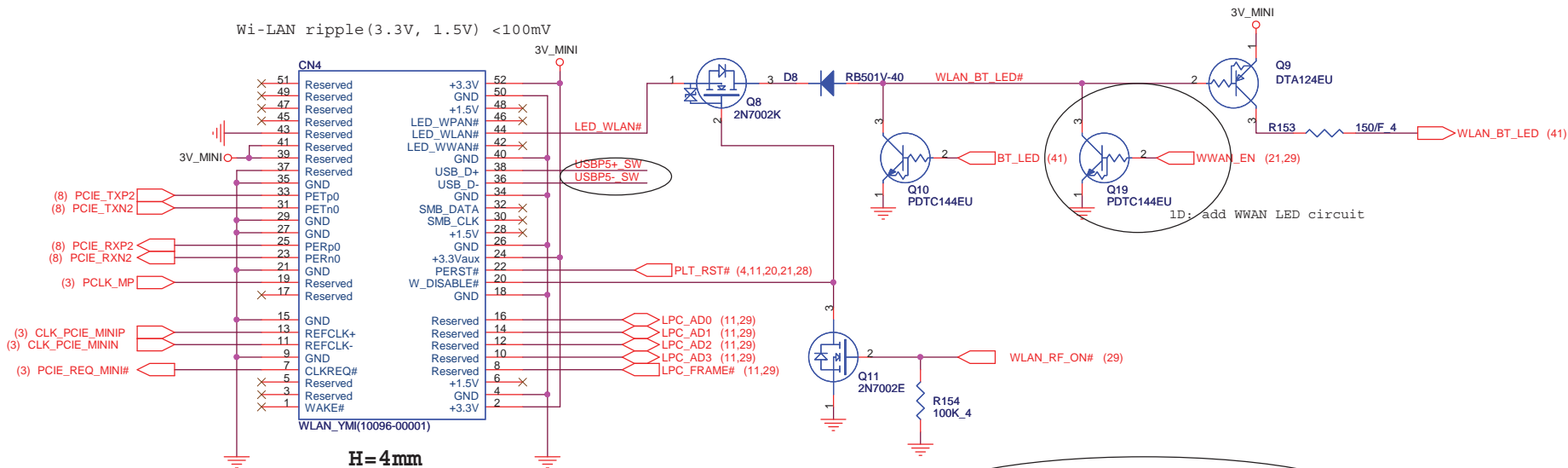
 QUANTA COMPUTER		
Title Display I/O		
Size A	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009	Sheet 19	of 44





Mini PCI-E Card--W-LAN

Wi-LAN ripple(3.3V, 1.5V) <100mV

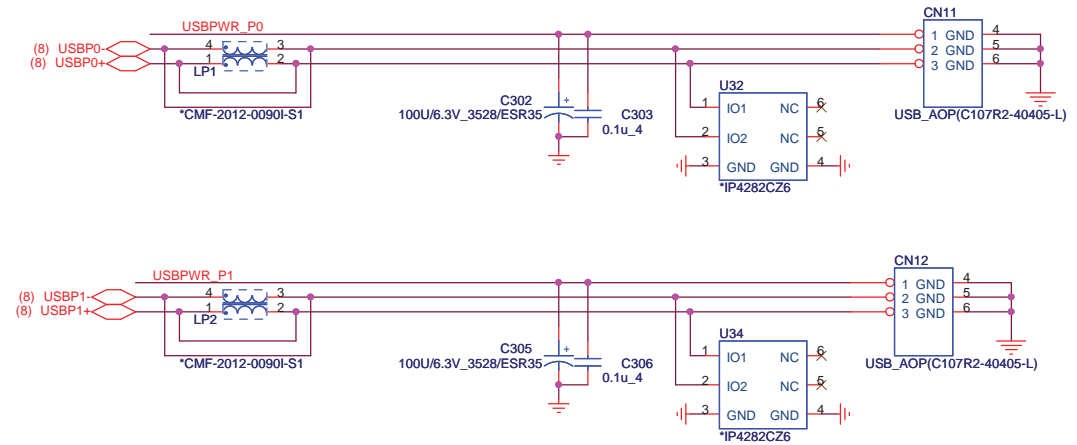
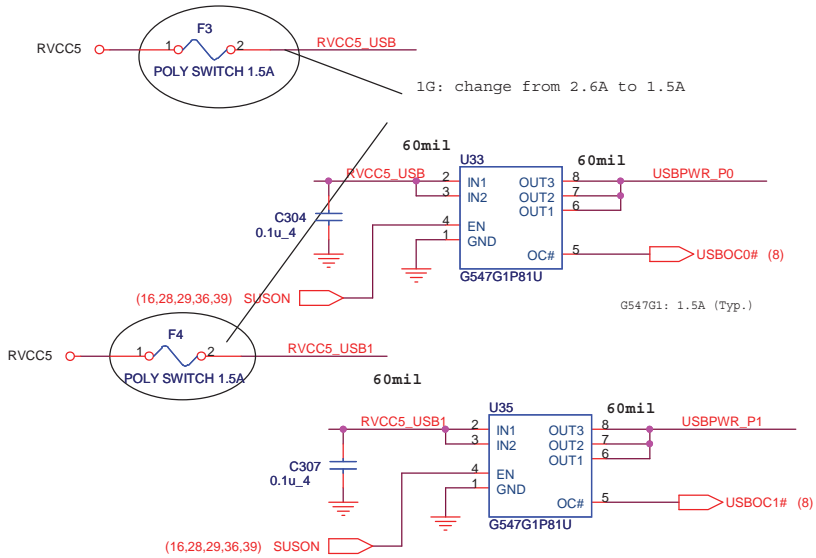


Title			WLAN
Size	Document Number	Rev	
B	SY3 MB	1G	
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- 1.Level 1 Environment-related Substances Should NEVER be Used.
- 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

USB Power and Over current

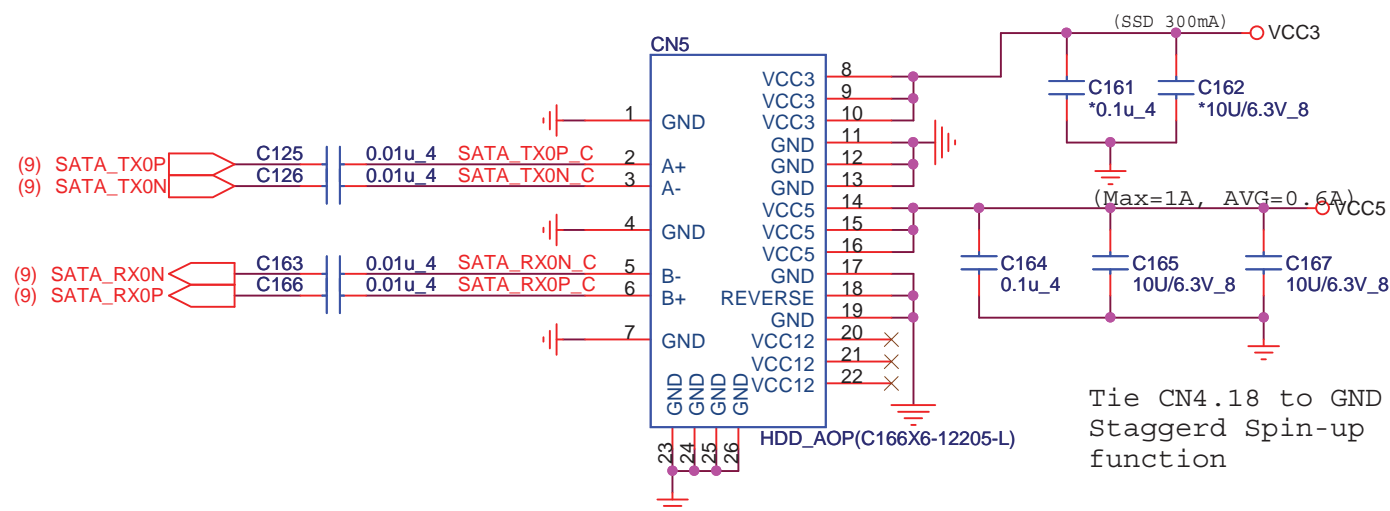
USB Connector



- 1.Level 1 Environment-related Substances Should NEVER be Used.
- 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

 QUANTA COMPUTER		
Title USB		
Size B	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009 Sheet 23 of 44		


HDD

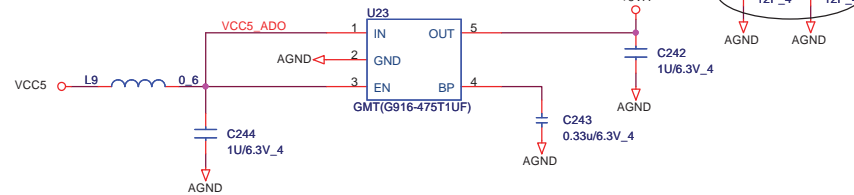


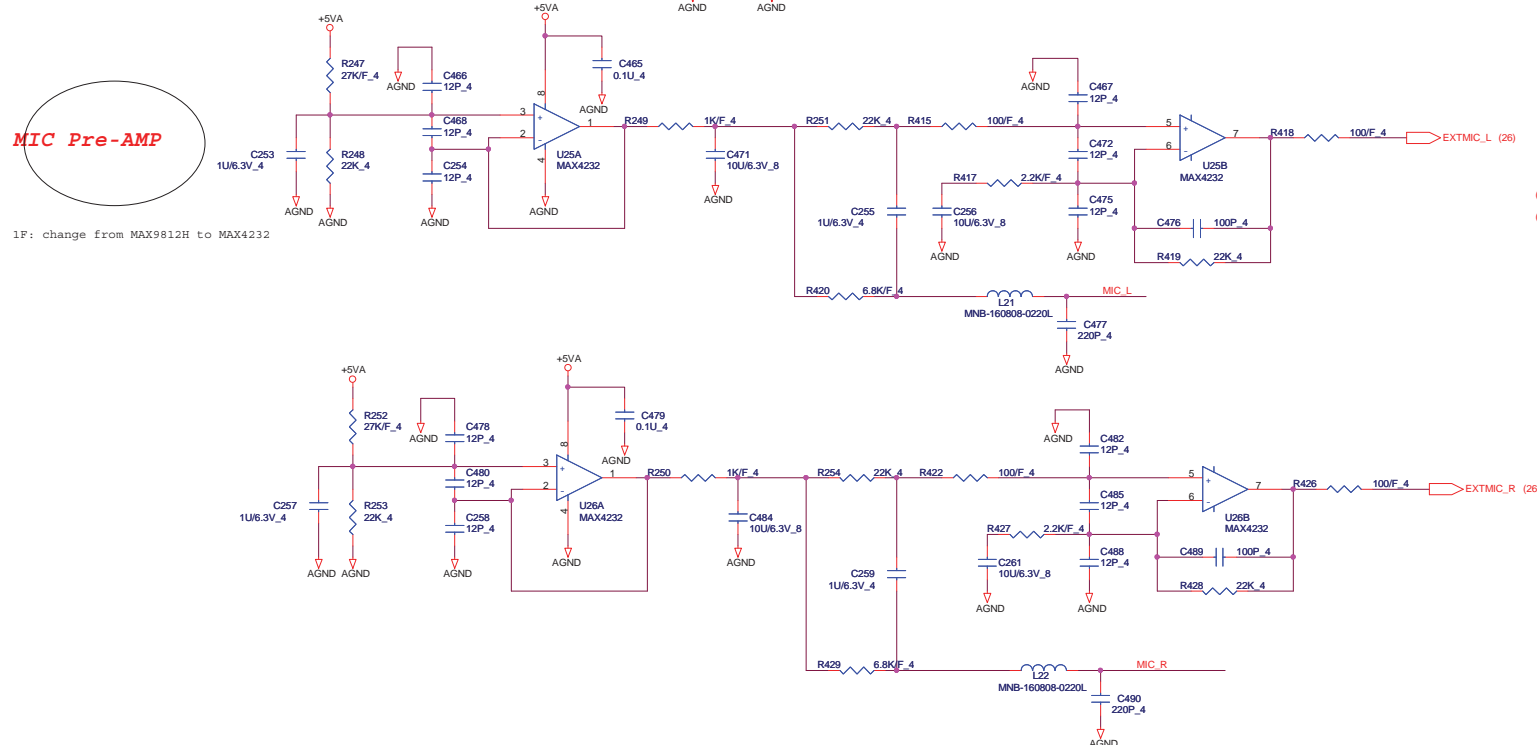
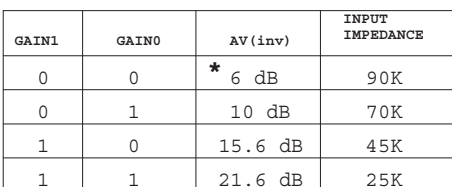
1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

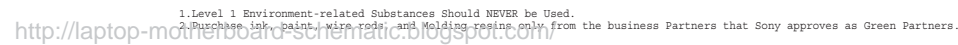
Title		
SATA		
Size A	Document Number	Rev 1G
	SY3 MB	
Date: Tuesday, March 31, 2009	Sheet 24 of 44	

1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

 QUANTA COMPUTER		
Title USB3		
Size A	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009		Sheet 25 of 44



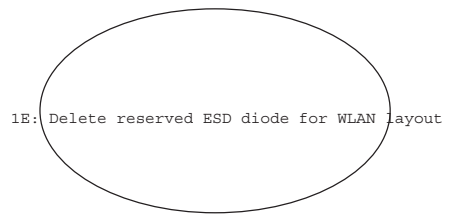
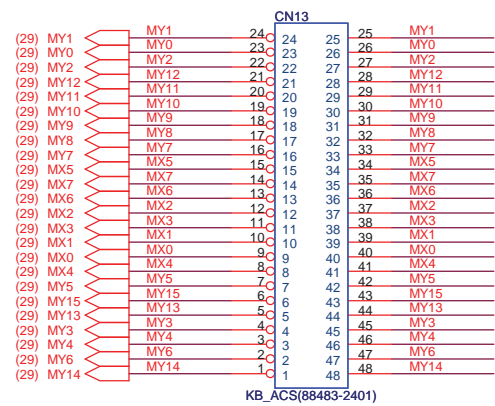
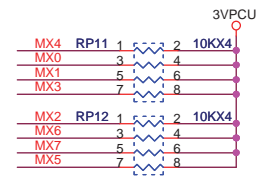







2. Purchase ink, paint, wire rods, and Molding resins only from

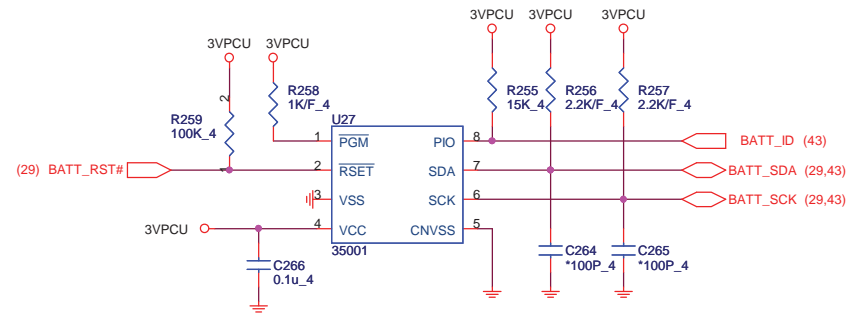
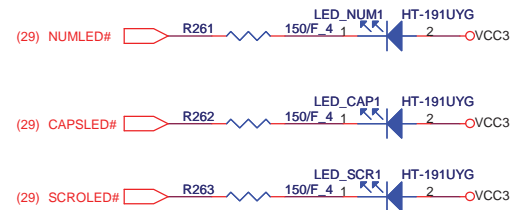
INT. KEYBOARD



1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

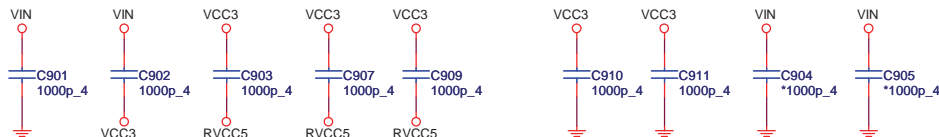
QUANTA
COMPUTER

Title		
KB/BT/TP		
Size	Document Number	Rev
B	SY3 MB	1G
Date:	Tuesday, March 31, 2009	Sheet 30 of 44




Decoupling Cap

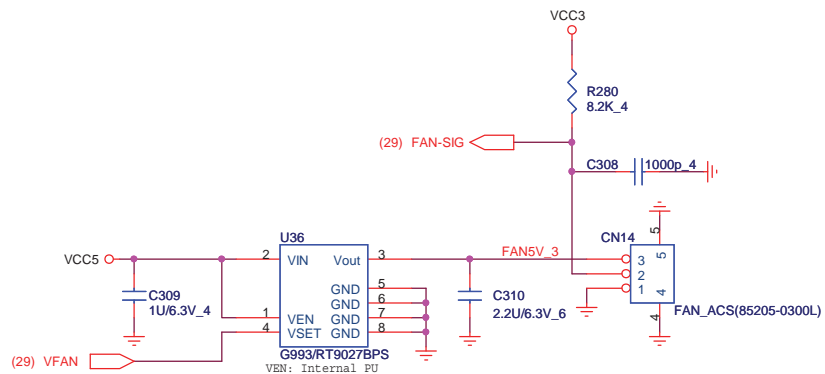
1E: add decoupling cap




1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

 QUANTA COMPUTER		
Title SW/LED/Other		
Size B	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009 Sheet 31 of 28		

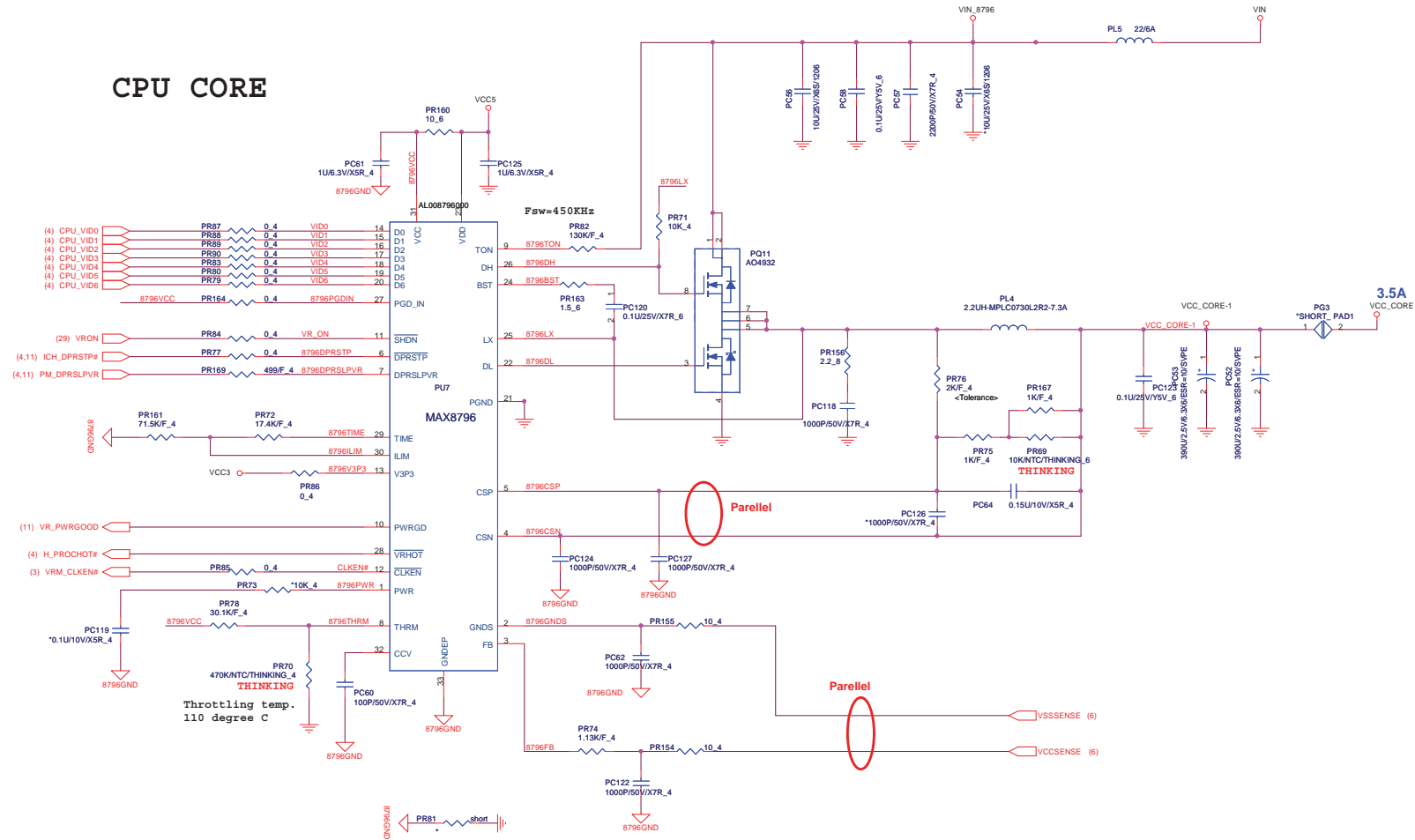
FAN Circuit



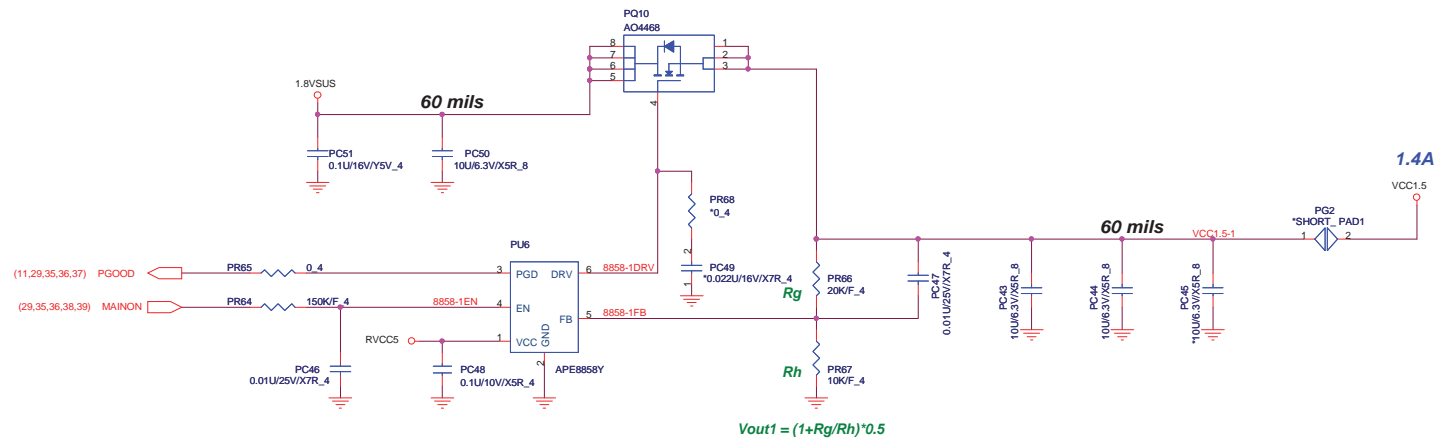
- 1.Level 1 Environment-related Substances Should NEVER be Used.
- 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

 QUANTA COMPUTER		
Title FAN/Thermal/Docking		
Size B	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009	Sheet 32 of 44	

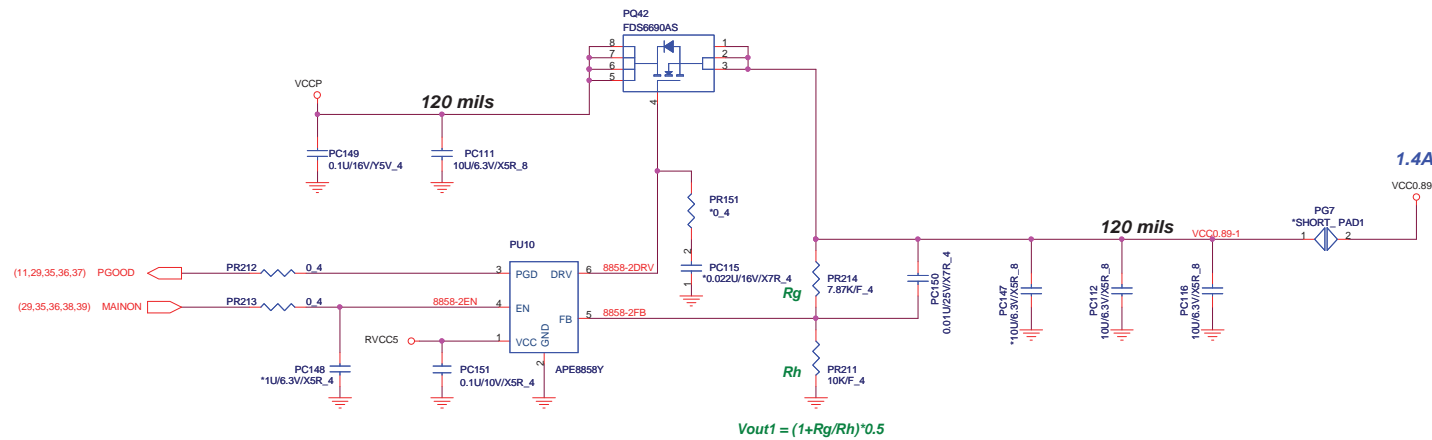
CPU CORE



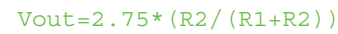
VCC1.5



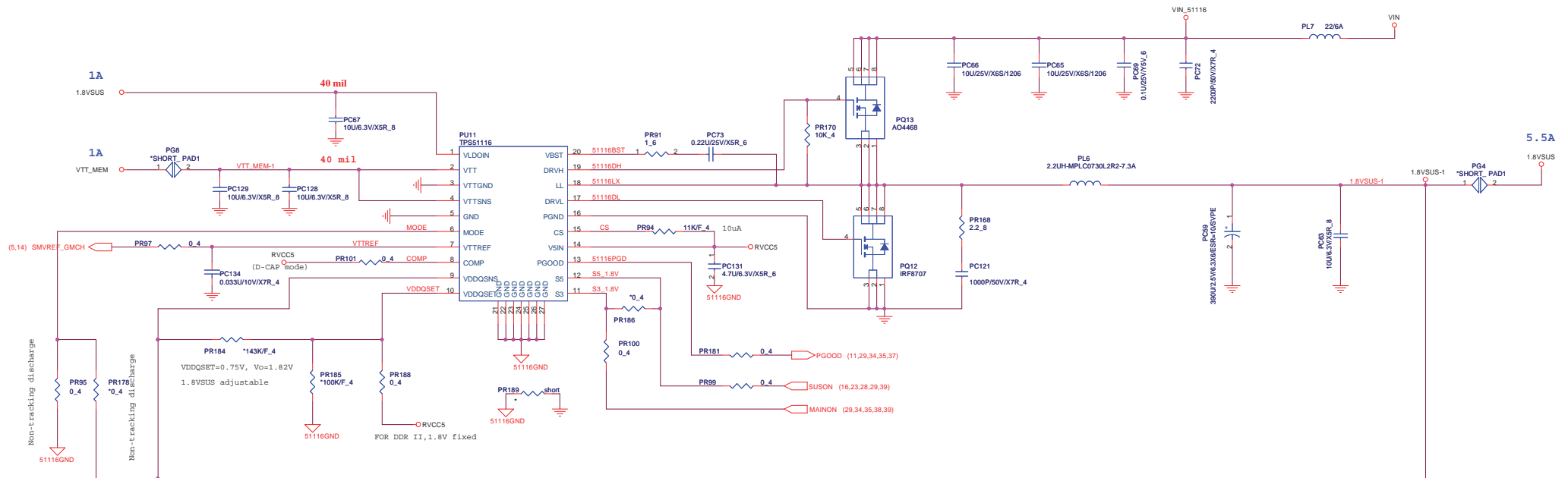
VCC0.89



VCCP



1.8VSUS & VTT_MEM

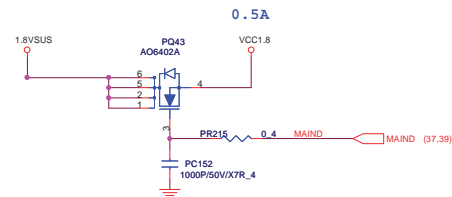



MODE	DISCHARGE MODE
+5V	No discharge
+1.8V	Tracking discharge
GND	Non-tracking discharge

VDDQSET	VDDQ(V)	VTTREF & VTT	NOTE
GND	2.5 fixed	VDDQSNS/2	DDR
5V	1.8 fixed	VDDQSNS/2	DDR2
FB-Resistor	Adjustable	VDDQSNS/2	1.5V<VDDQ<3V

$$VTT = VTTREF = VDDQSNS/2 = 0.9V$$

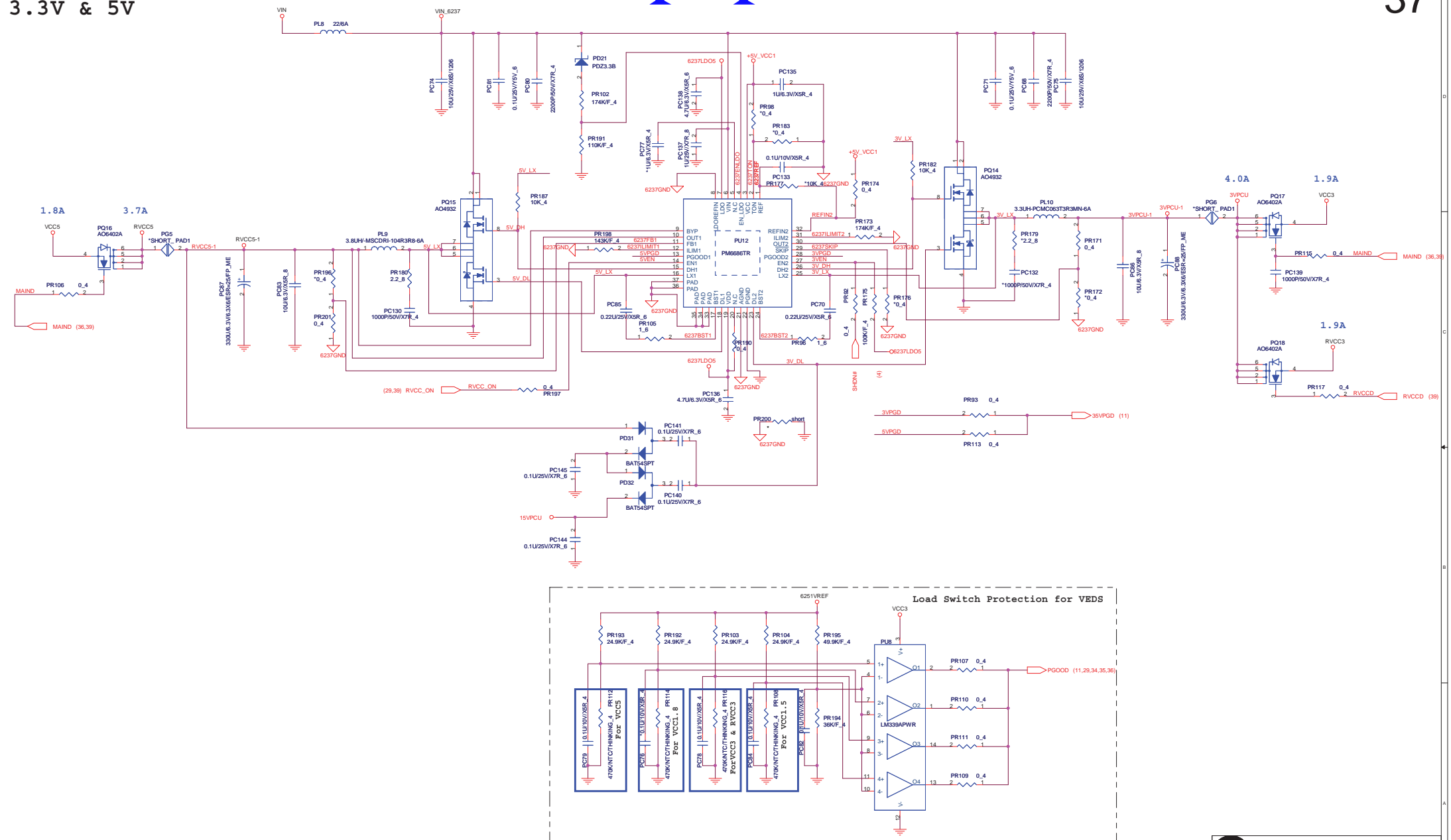
STATE	S3	S5	1.8VSUS	VTTREF	VTT
S0	1	1	on	on	on
S3	0	1	on	on	off
S4/S5	0	0	off	off	off

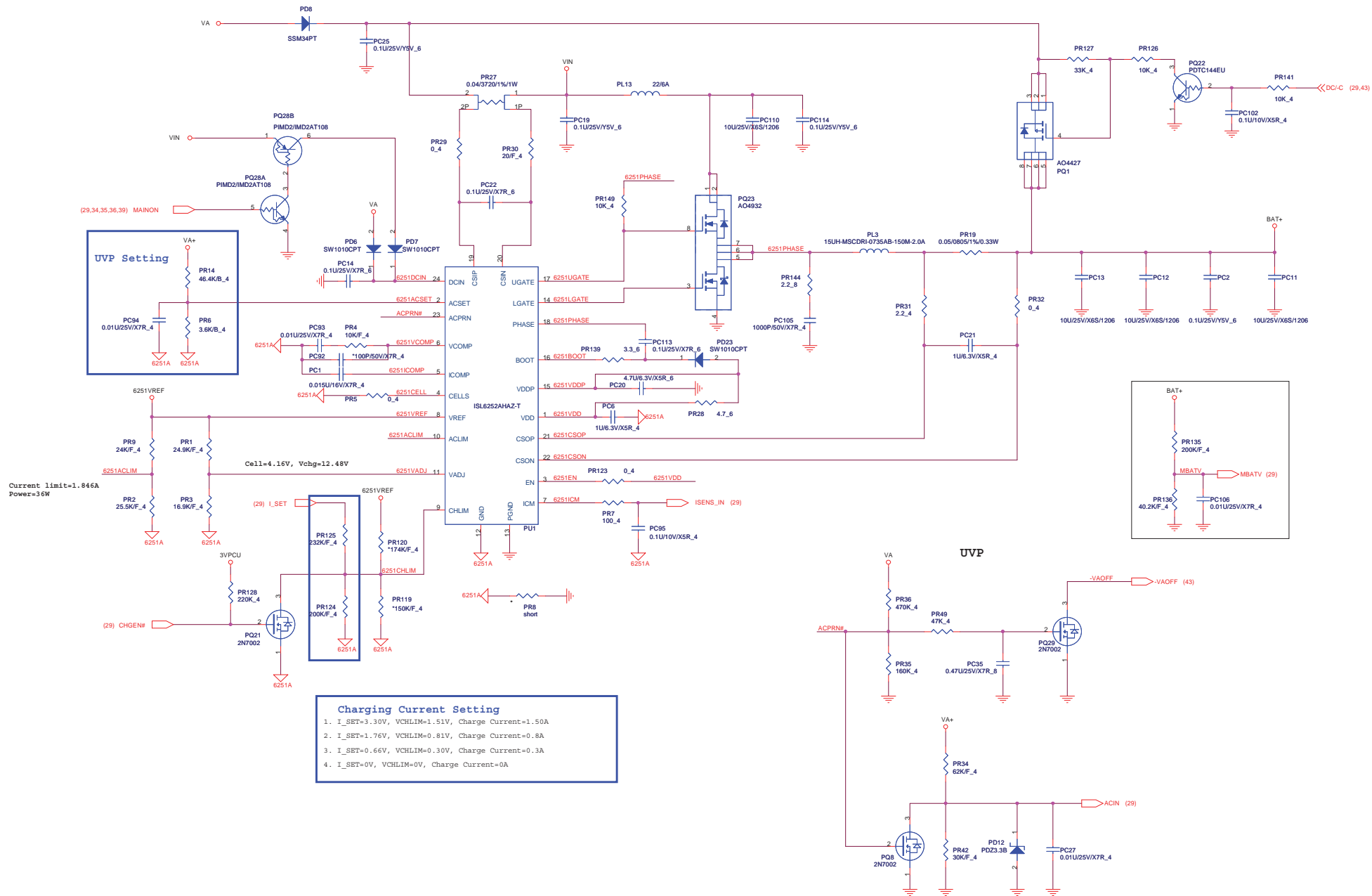


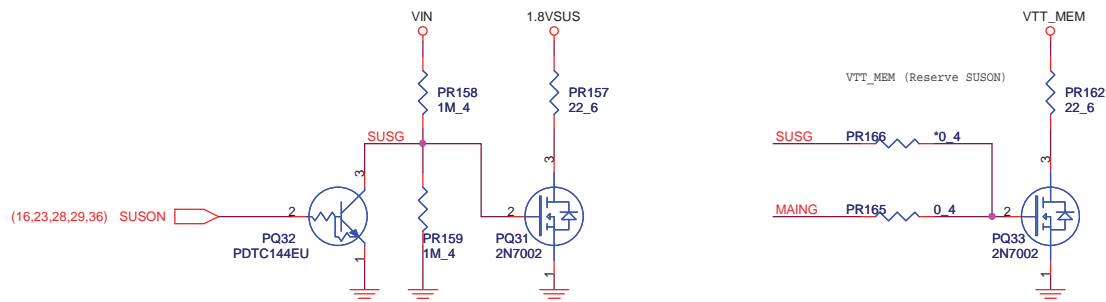
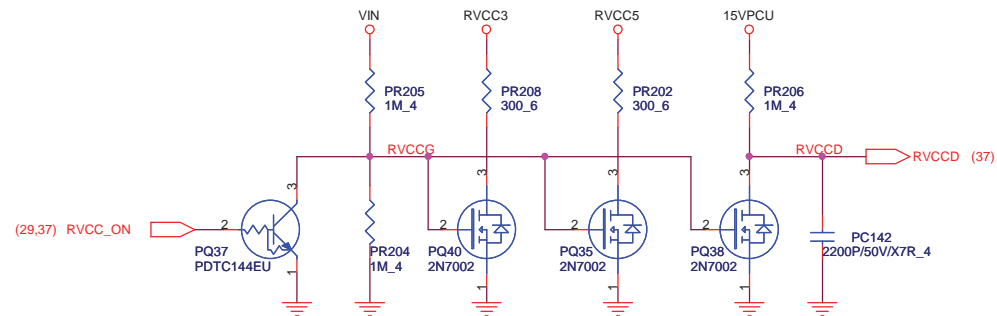
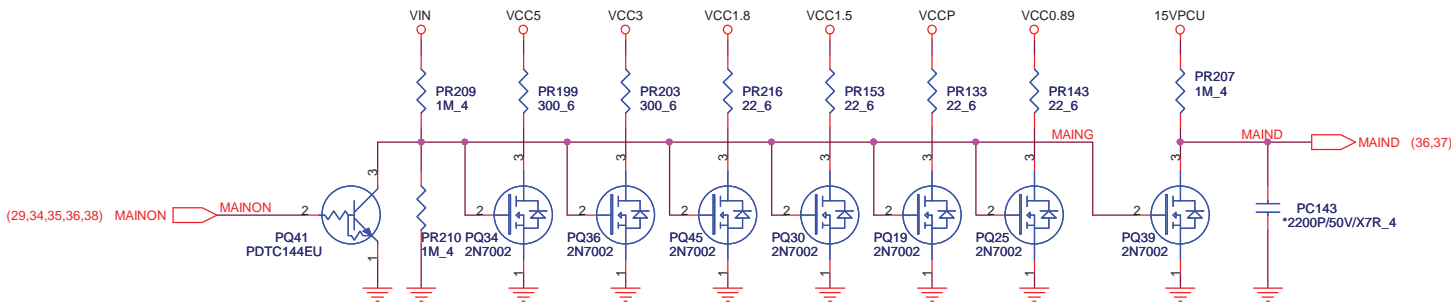



**QUANTA
COMPUTER**

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Date	Monday, March 30, 2009	Sheet 36 of 44




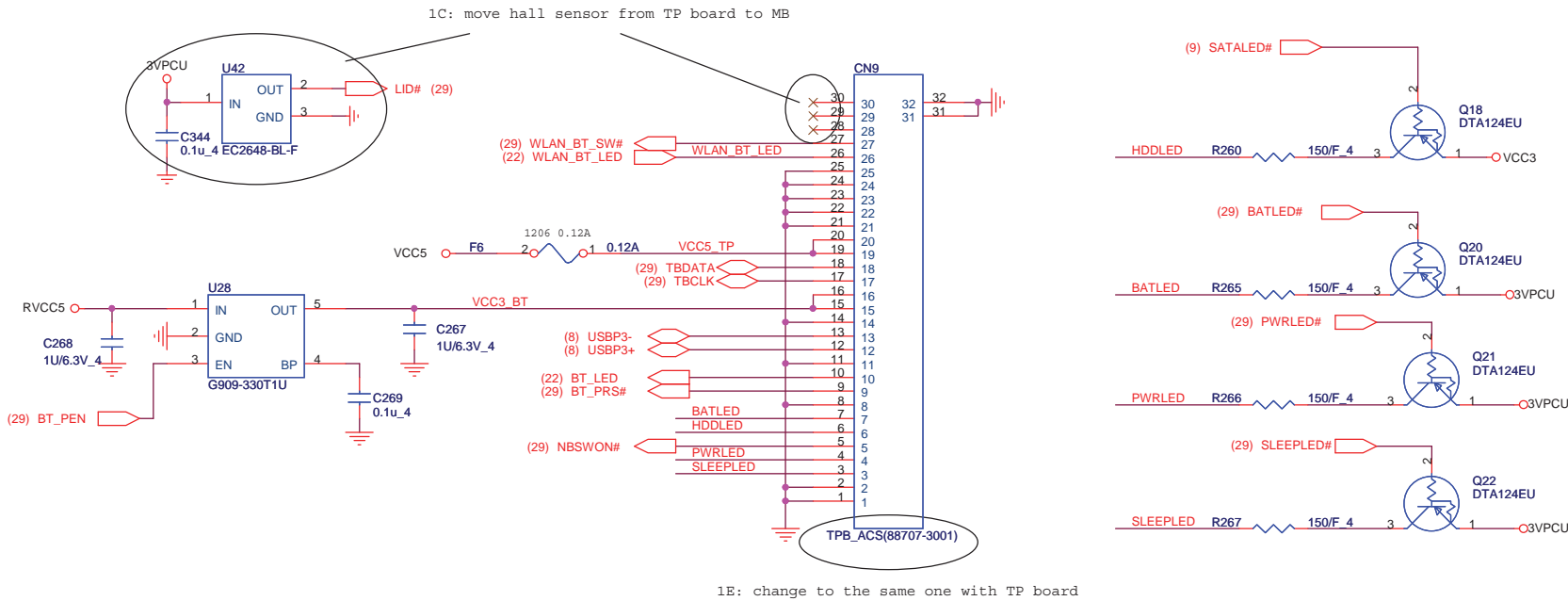





 QUANTA COMPUTER			
Title Discharge			
Size B	Document Number SY3 MB		Rev 1G
Date:	Tuesday, March 31, 2009	Sheet 39 of 44	

1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

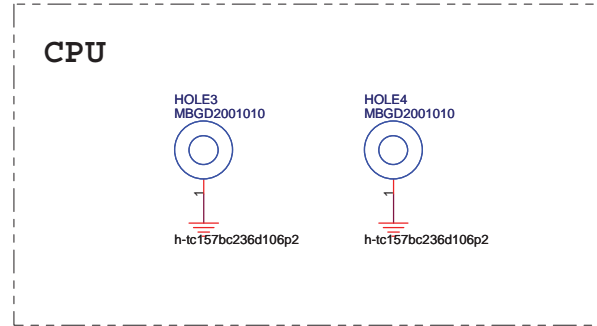
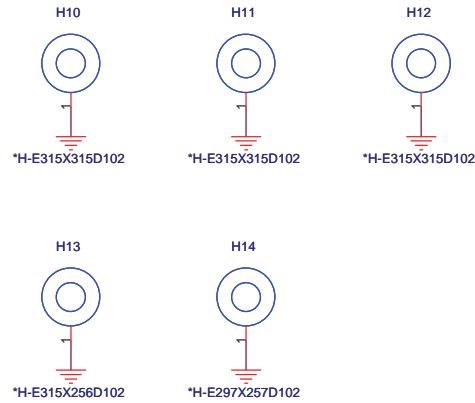
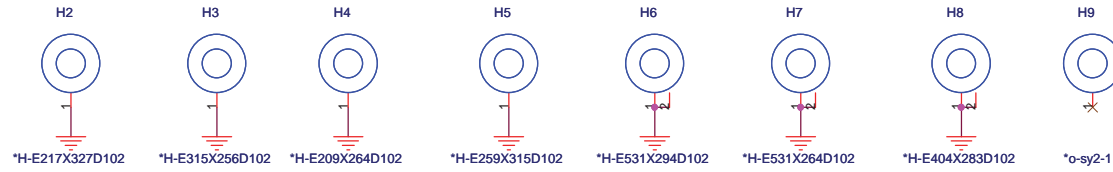
 QUANTA COMPUTER		
Title XDP		
Size A	Document Number SY3 MB	Rev 1G
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"Power, S0 (green), S3 (Umber flash), S4 (off), S5 (off)
 "Charger status in Umber color, Charge (on), Error (flash quickly)
 "HDD status, LED in yellow color
 "Caps Lock/Num Lock/Scroll Lock in green color
 "Wireless status in green color
 "Memory Stick Duo/SD Card status in yellow color
 "Camera status in green color (on Camera module)

 QUANTA COMPUTER		
Title Small Board		
Size B	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009		
Sheet 41 of 44		

1.Level 1 Environment-related Substances Should NEVER be Used.
 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

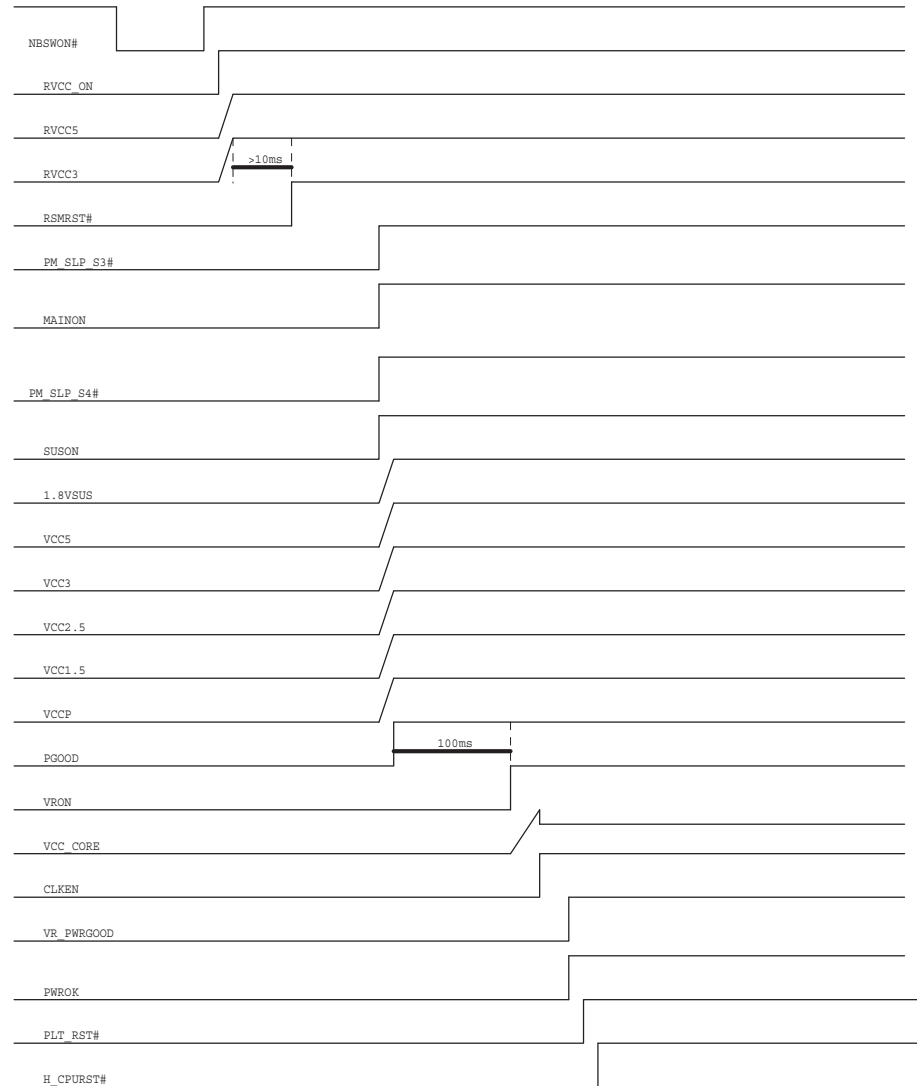
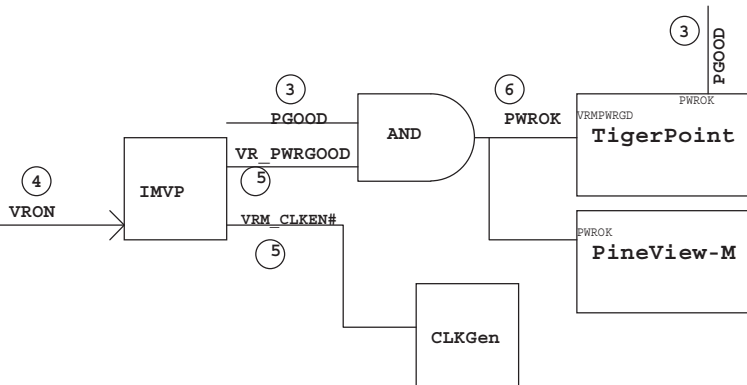
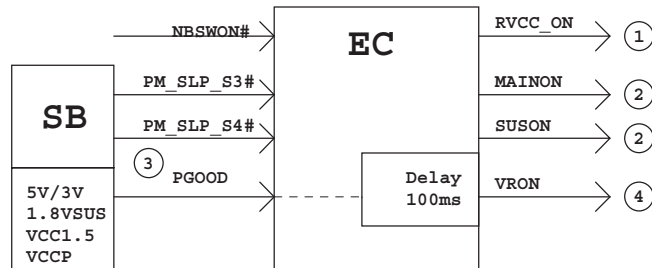


 QUANTA COMPUTER		
Title		
Screw Hole		
Size B	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009		Sheet 42 of 44

1.Level 1 Environment-related Substances Should NEVER be Used.
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

SY3 Power-up Block

SY3 Power-up Sequencing



Power State Table									
AC Mode	S0	S3	S4	S5	BATT	S0	S3	S4	S5
6237LDO5	ON	ON	ON	ON	6237LDO5	ON	ON	ON	ON
3VPCU	ON	ON	ON	ON	3VPCU	ON	ON	ON	ON
RVCC5	ON	ON	ON	OFF	RVCC5	ON	ON	OFF	OFF
RVCC3	ON	ON	ON	OFF	RVCC3	ON	ON	OFF	OFF
1.8VSUS	ON	ON	OFF	OFF	1.8VSUS	ON	ON	OFF	OFF
VCC5	ON	OFF	OFF	OFF	VCC5	ON	OFF	OFF	OFF
VCC3	ON	OFF	OFF	OFF	VCC3	ON	OFF	OFF	OFF
VCC1.8	ON	OFF	OFF	OFF	VCC1.8	ON	OFF	OFF	OFF
VCCP	ON	OFF	OFF	OFF	VCCP	ON	OFF	OFF	OFF
VCC_CORE	ON	OFF	OFF	OFF	VCC_CORE	ON	OFF	OFF	OFF

**QUANTA
COMPUTER**

Title

Power-up Sequence

Size B

Document Number

SY3 MB

Date: Tuesday, March 31, 2009

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Rev 1G