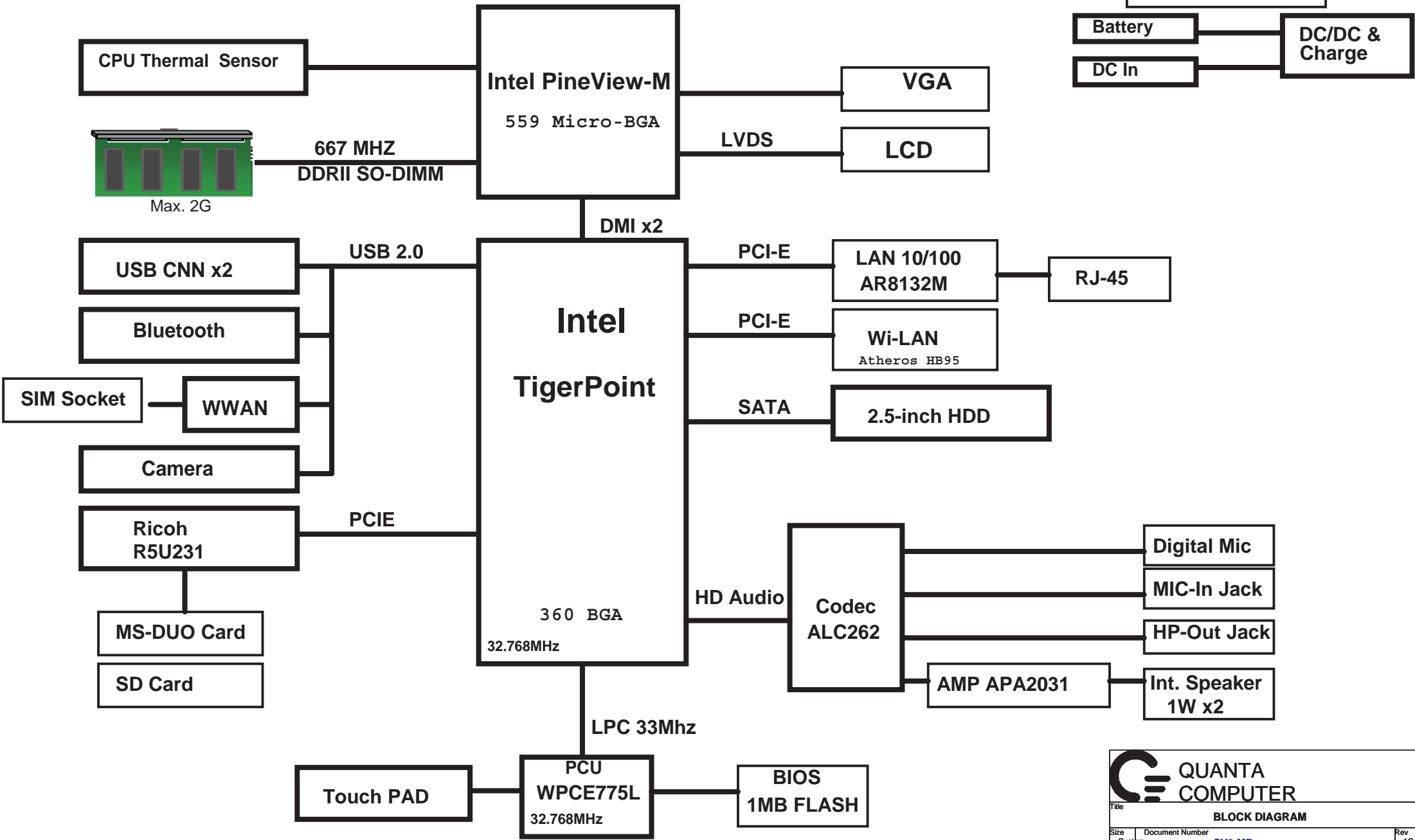



# SY3 BLOCK DIAGRAM

01

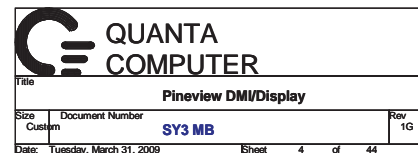


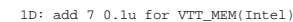
1.Level 1 Environment-related Substances Should NEVER be Used.  
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

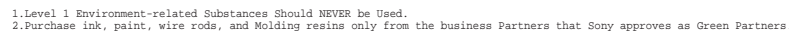
 QUANTA COMPUTER			
Title Front Page			
Size A	Document Number SY3 MB		Rev 1G
Date:	Monday, March 30, 2009	Sheet	2 of 44

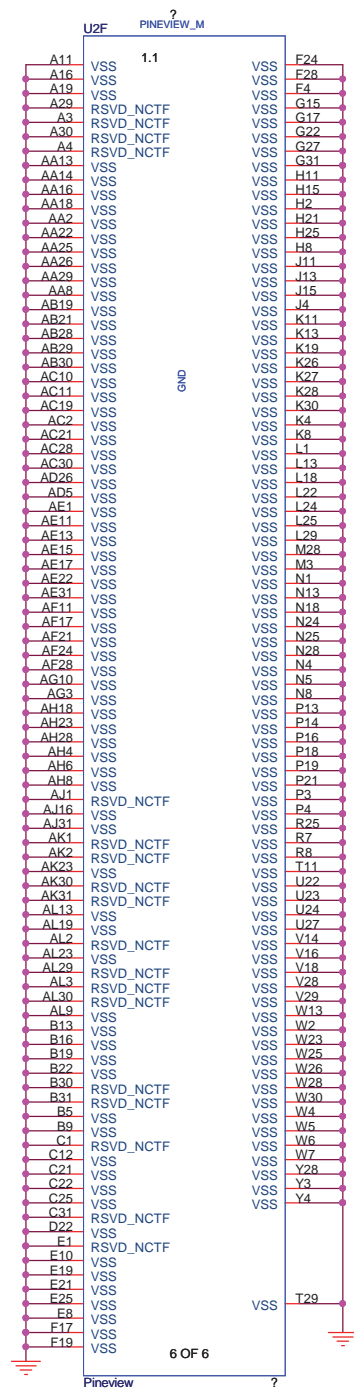


1. Level 1 Environment-related Substances Should NEVER be Used.
2. Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.








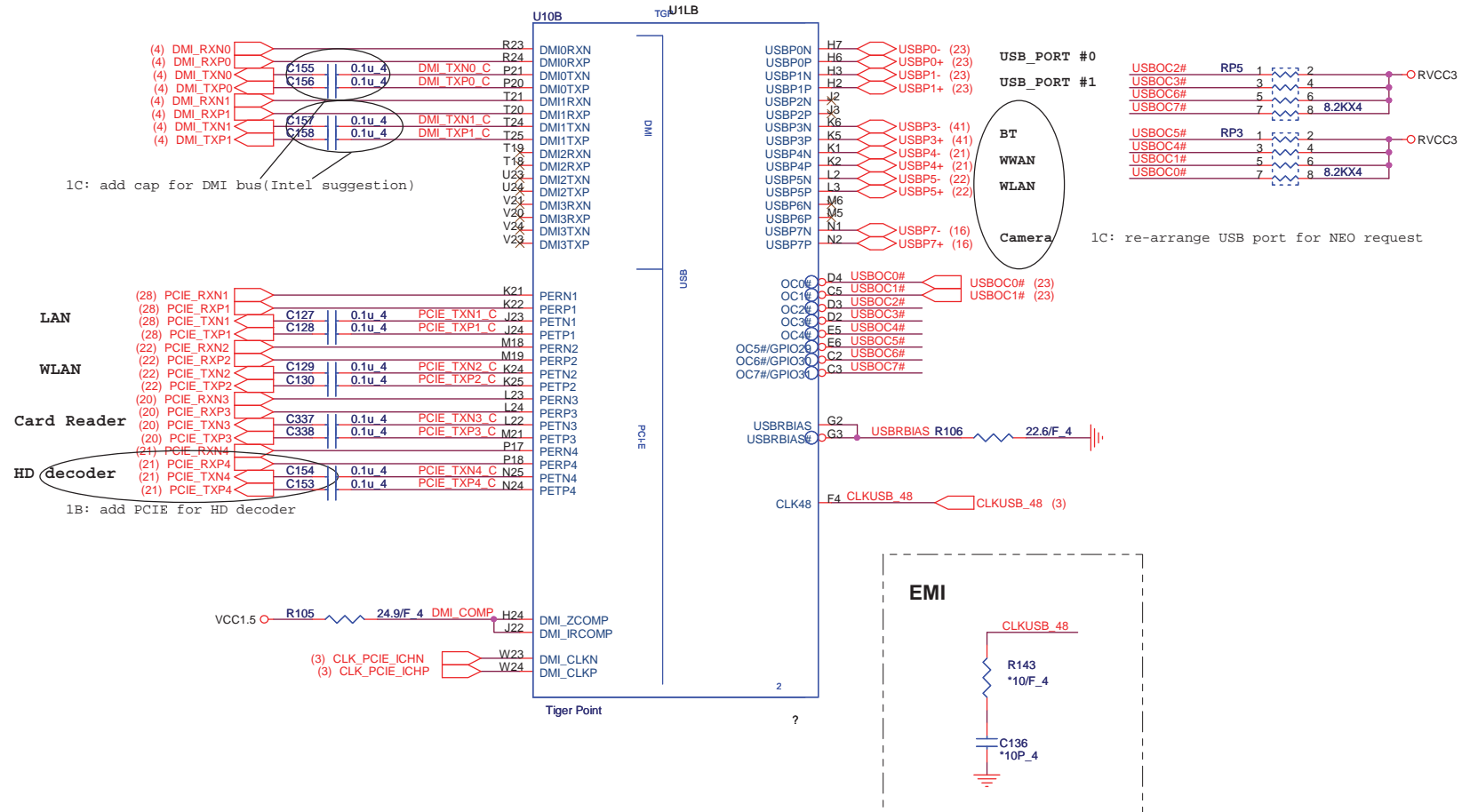


1.Level 1 Environment-related Substances Should NEVER be Used.  
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.



QUANTA  
COMPUTER

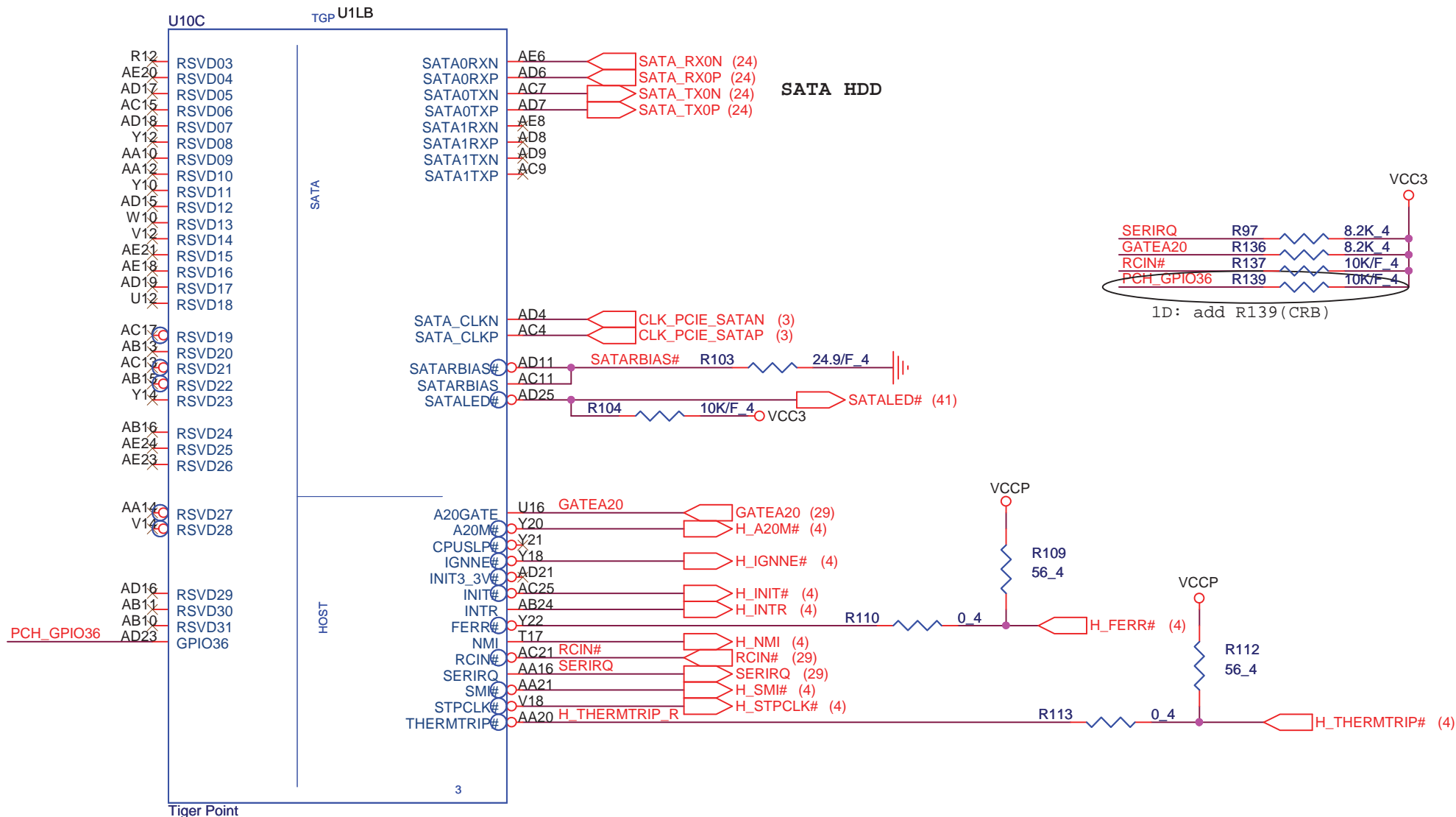
Title <b>Pineview GND</b>		
Size Custom	Document Number <b>SY3 MB</b>	Rev 1G
Date: Tuesday, March 31, 2009		Sheet 7 of 44




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.

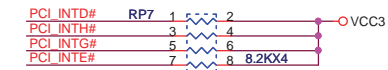
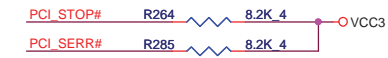
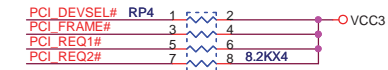
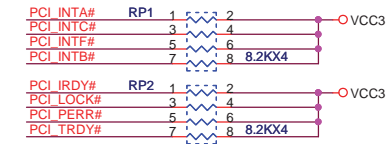
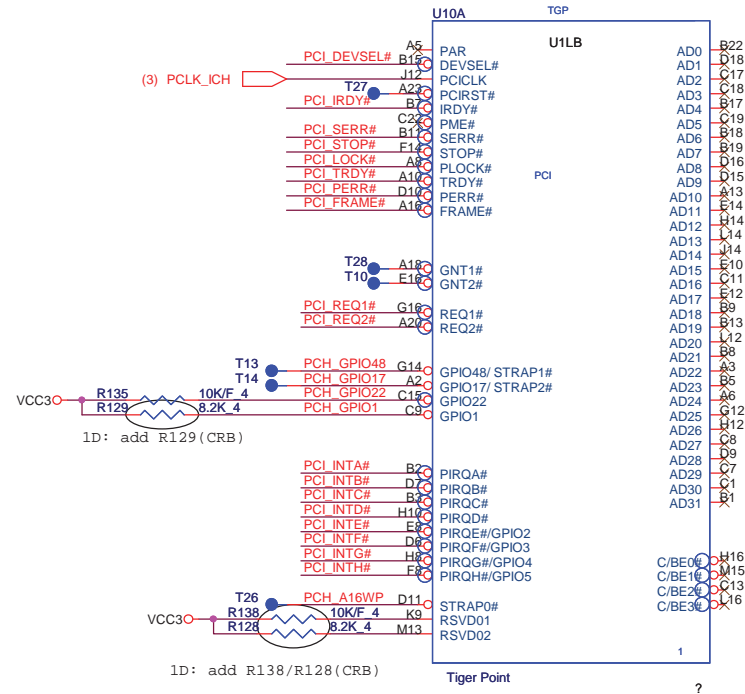
		QUANTA COMPUTER	
Title <b>Tiger Point DMI/PCIE/USB</b>			
Size B	Document Number <b>SY3 MB</b>		Rev 1G
Date: Tuesday, March 31, 2009		Sheet 8 of 44	





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.

 <b>QUANTA COMPUTER</b>		
Title <b>Tiger Point Sata/Host</b>		
Size A	Document Number <b>SY3 MB</b>	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

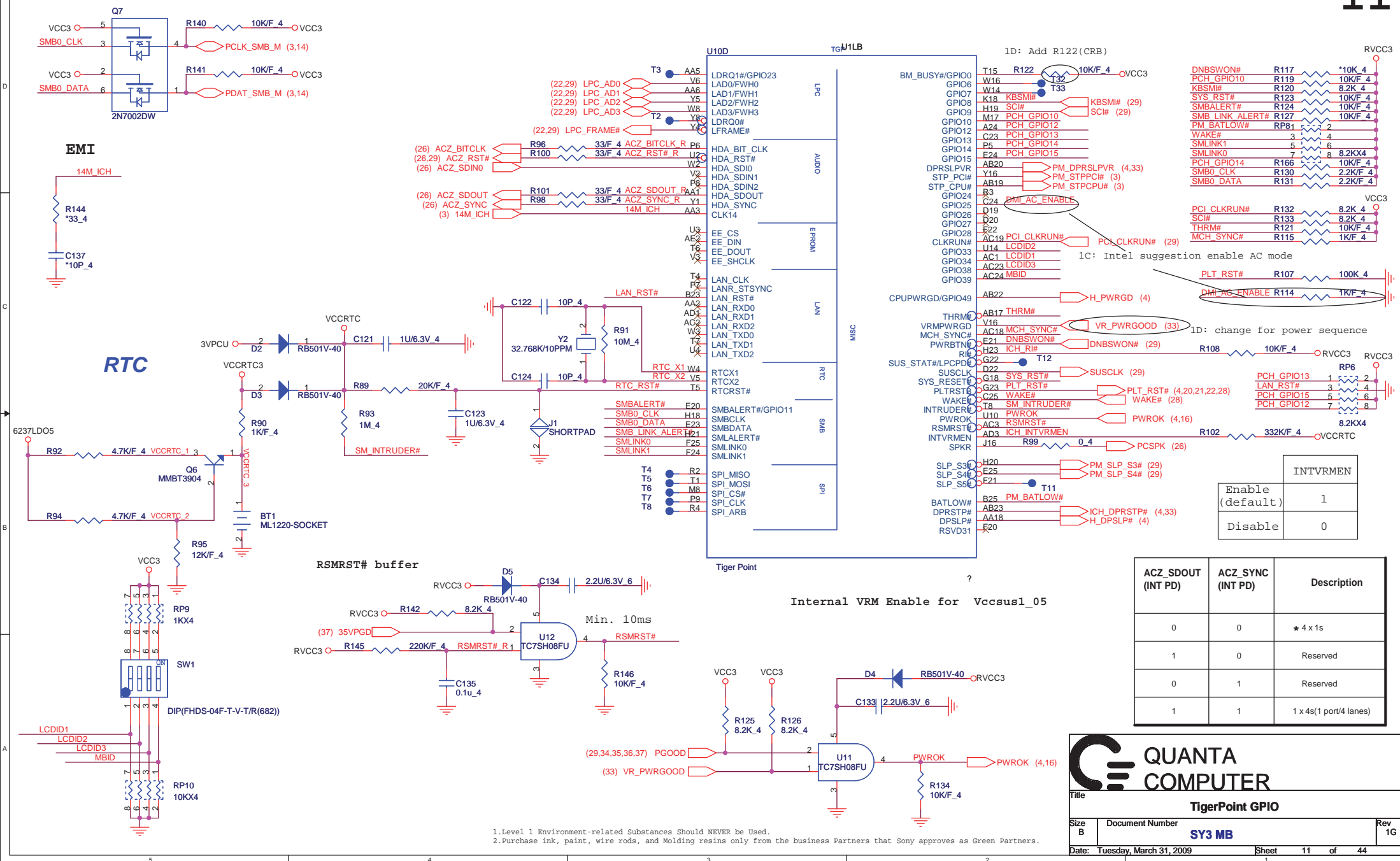
PCI_GNT#2	Internal PU Should not be PD
-----------	---------------------------------



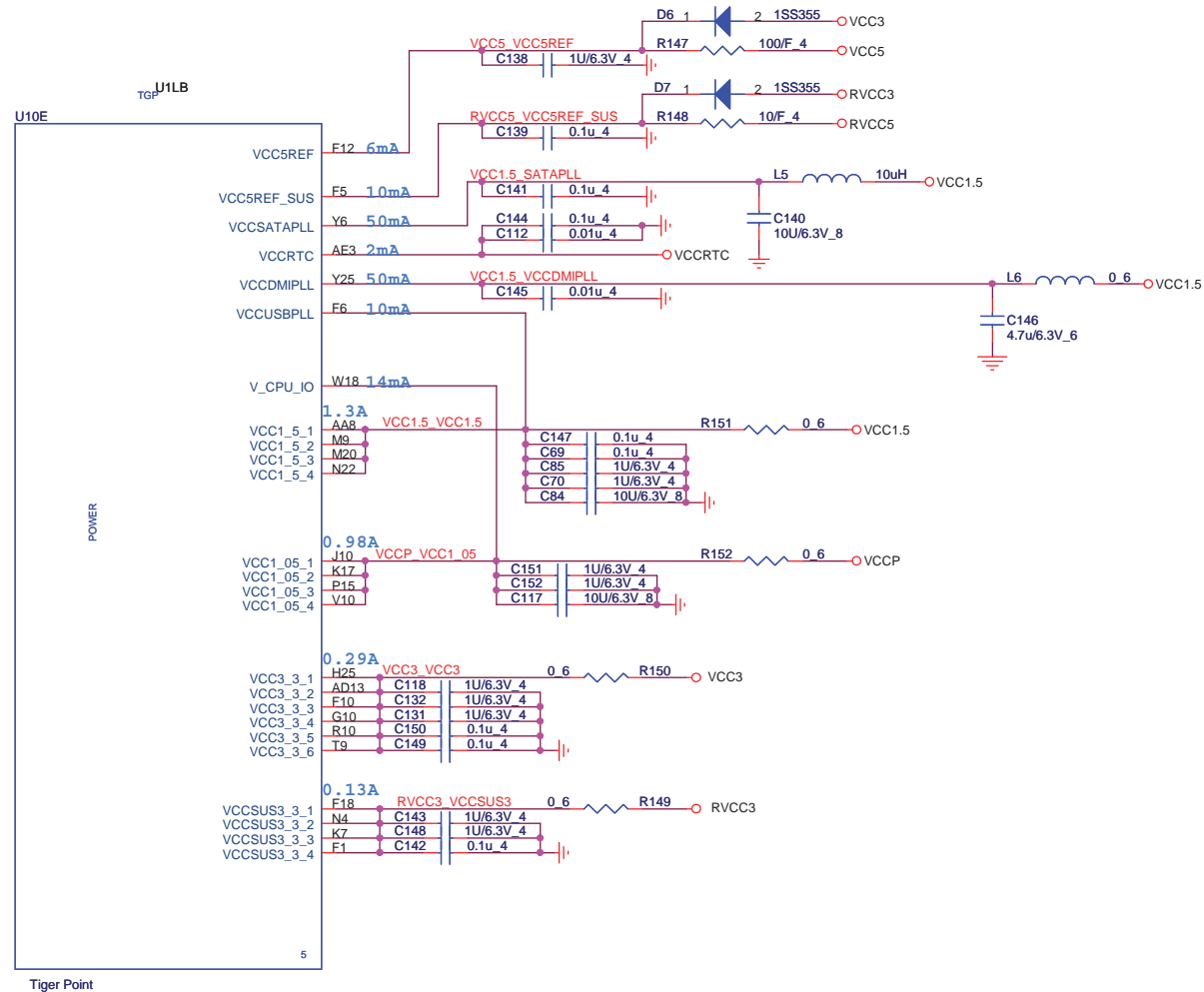
QUANTA  
COMPUTER

Title <b>TigerPoint PCI(3/6)</b>		
Size B	Document Number <b>SY3 MB</b>	Rev 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.

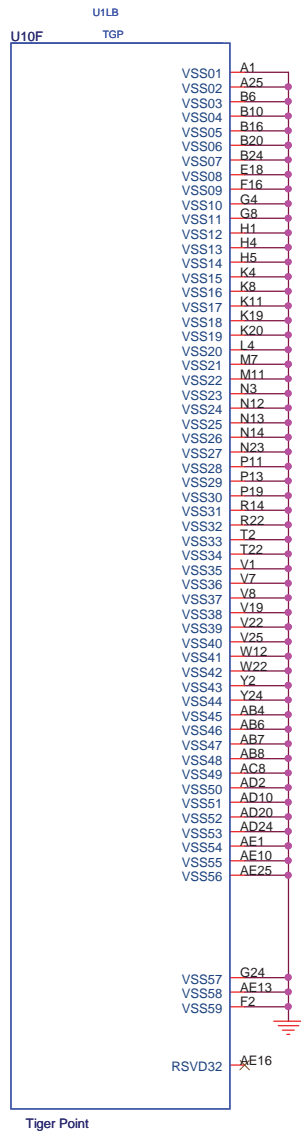


1. Level 1 Environment-related Substances Should NEVER be Used.  
2. Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.




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 <b>TigerPoint Power</b>			
Size B	Document Number <b>SY3 MB</b>		Rev 1G
Date:	Tuesday, March 31, 2009	Sheet	12 of 44

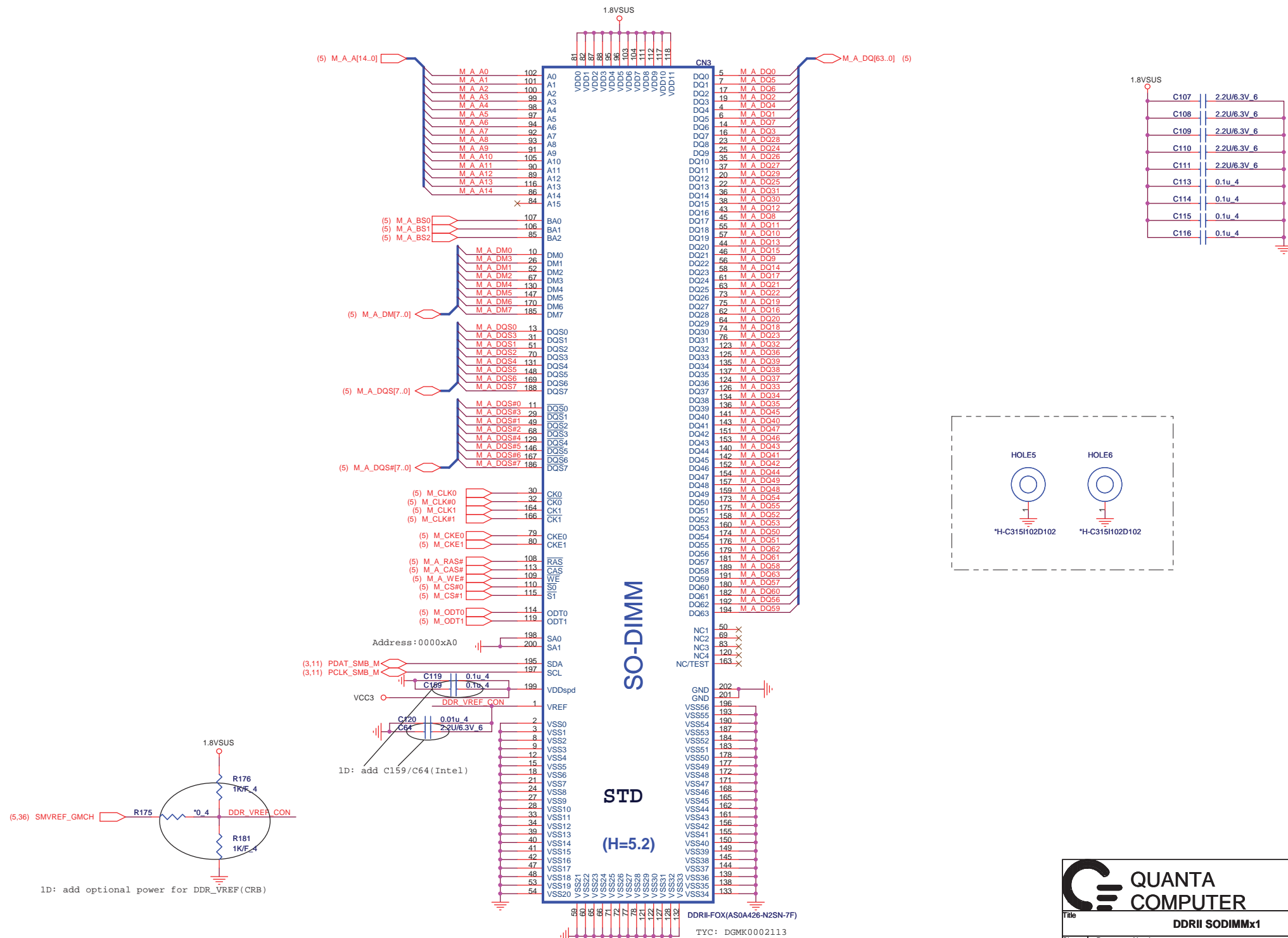



1.Level 1 Environment-related Substances Should NEVER be Used.  
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.



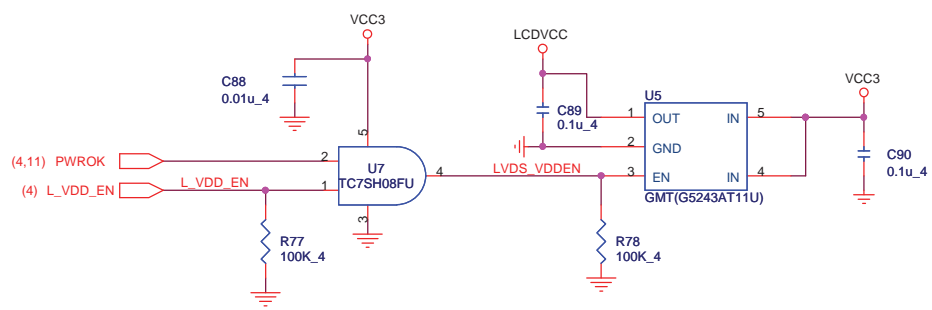
QUANTA  
COMPUTER

Title <b>TigerPoint GND</b>		
Size B	Document Number <b>SY3 MB</b>	Rev 1G
Date: Tuesday, March 31, 2009		Sheet 13 of 44

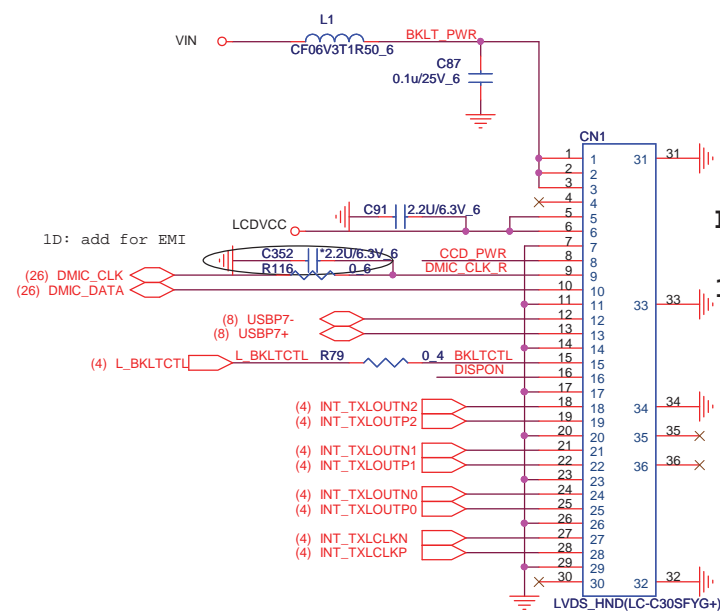
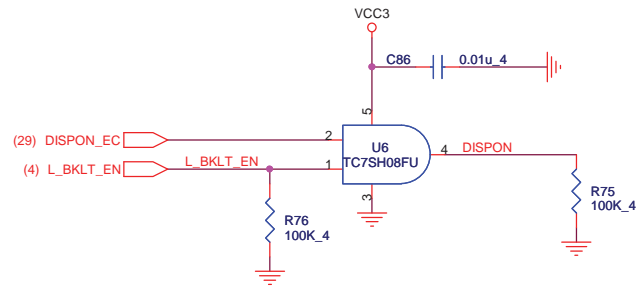


 QUANTA COMPUTER		
Title DDRII SODIMMx1		
Size A	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009		Sheet 15 of 44

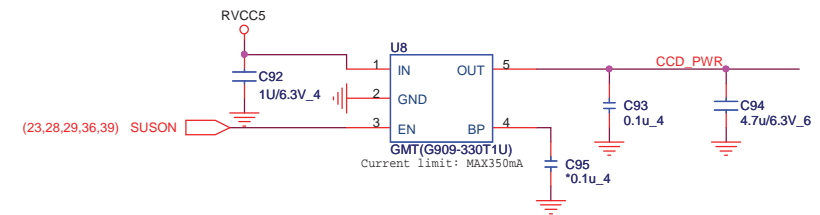
## LVDS Enable




## Display On



LVDS (10.1")  
(1024x600,  
1366x768)



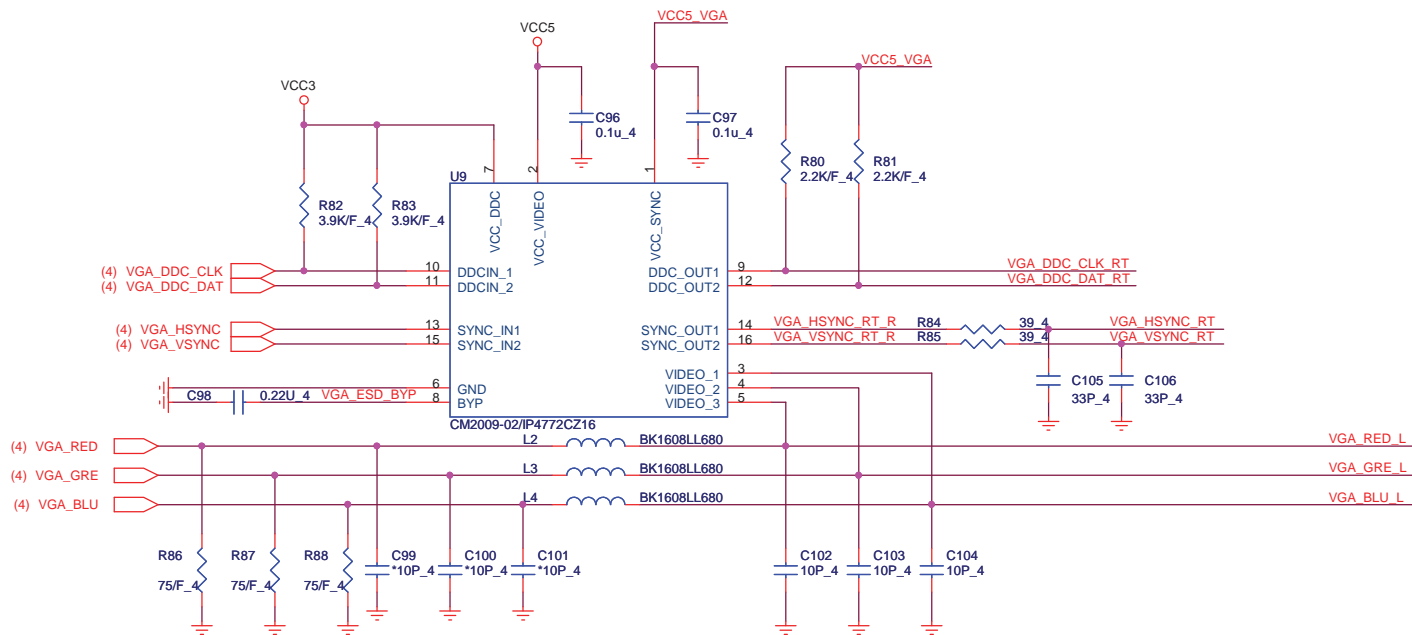
1.Level 1 Environment-related Substances Should NEVER be Used.  
2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.



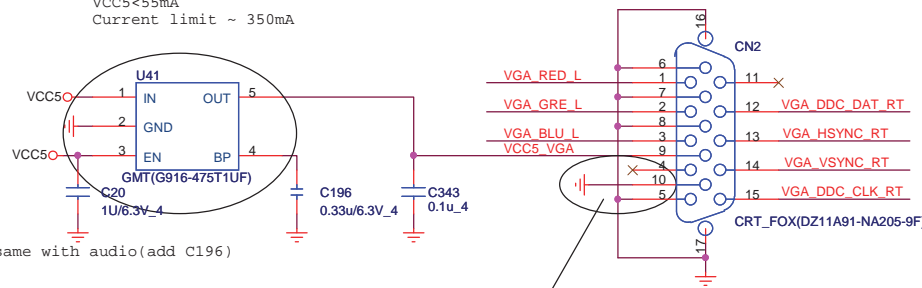
QUANTA  
COMPUTER

Title			LVDS
Size	Document Number	Rev	
B	SY3 MB	1G	
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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.
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QUANTA  
COMPUTER

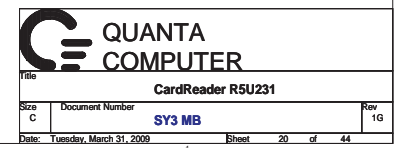
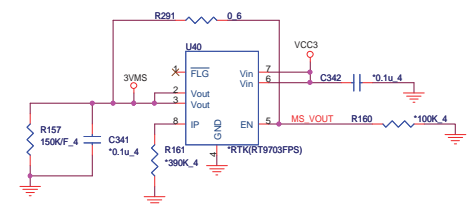
Title CRT		
Size B	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009		
Sheet 17 of 44		

A

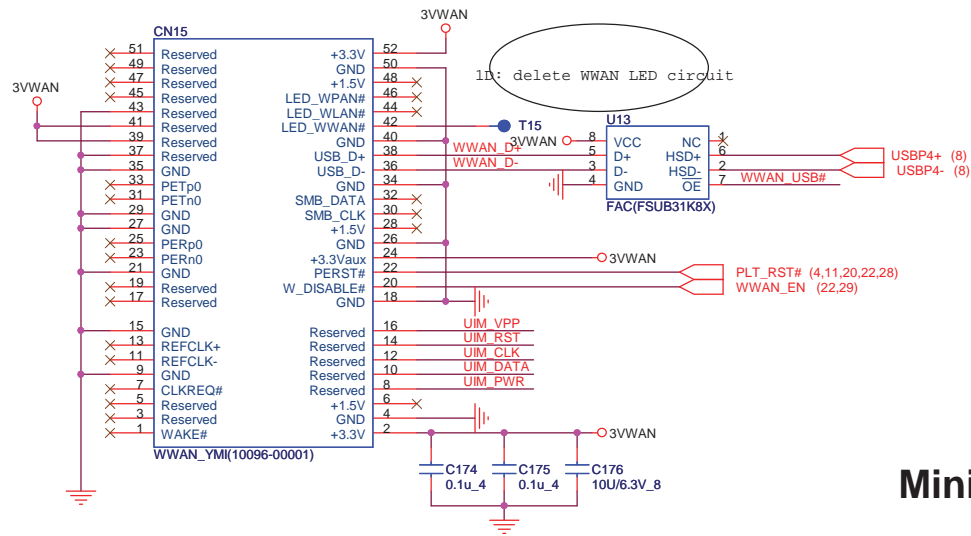
A

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

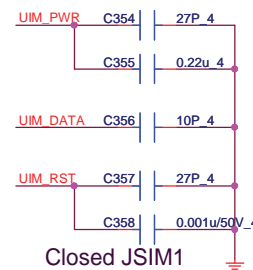
 QUANTA COMPUTER		
Title Display I/O		
Size A	Document Number SY3 MB	Rev 1G
Date: Tuesday, March 31, 2009		Sheet 19 of 44



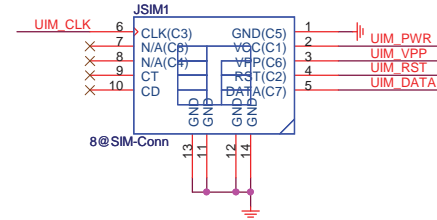
## SIM CARD



## SIM CARD SIGNALS ROUTE PARALLEL

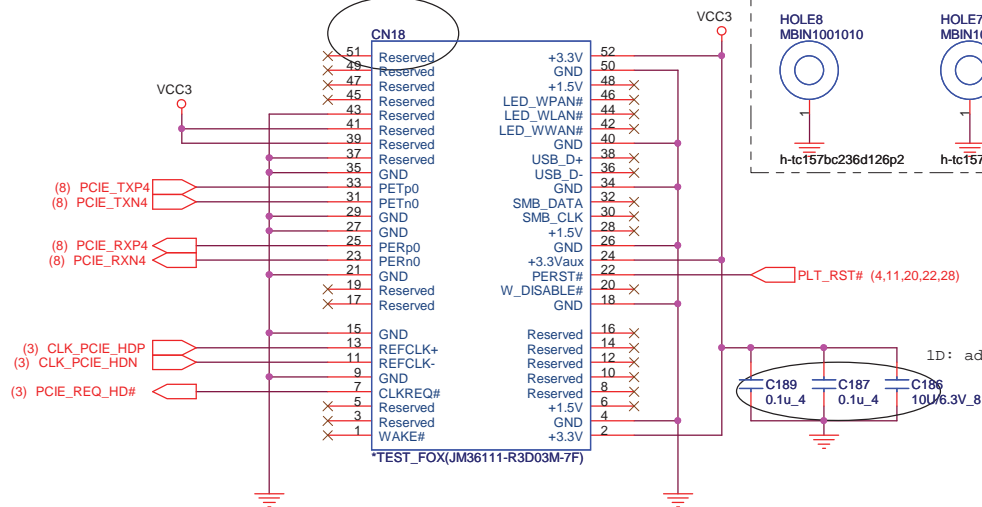


## Mini PCI-E Card FOR WWAN

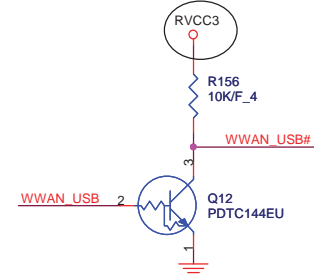


The value of the capacitor is suggest by Siemens HQ expert.  
For against 900MHz RF interference. The value of capacitor is 27pF.  
For against 1800MHz RF interference. The value of capacitor is 10pF.  
1nF/10nF value capacitor use for against ESD purpose.

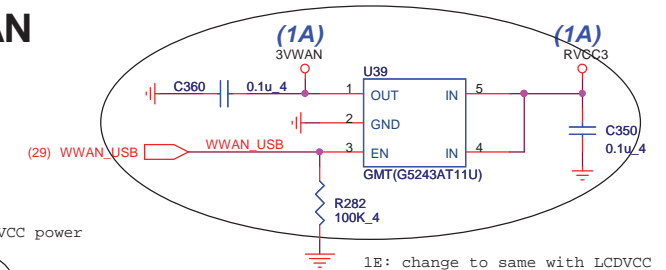
```
1B: add HD decoder connector
```



1B: change to RVCC power



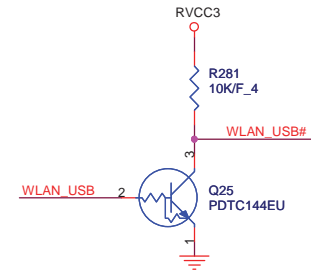
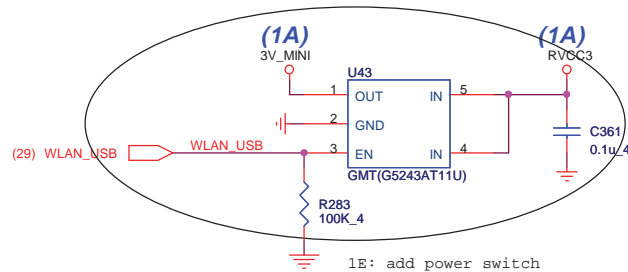
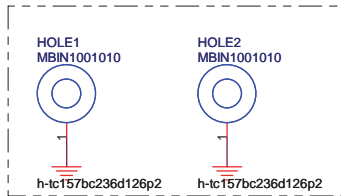
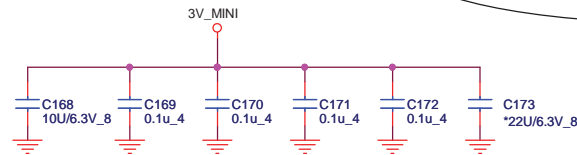
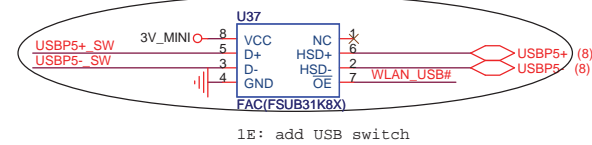
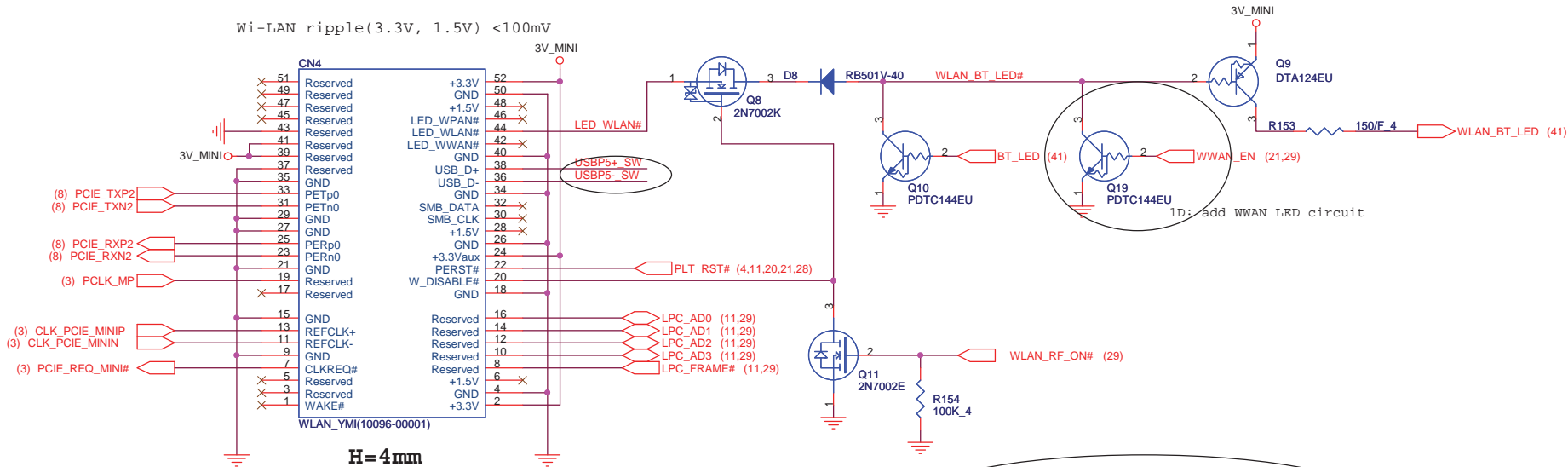
```
1E: change to same with LCDVCC
```



- 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.

## Mini PCI-E Card--W-LAN

Wi-LAN ripple(3.3V, 1.5V) &lt;100mV



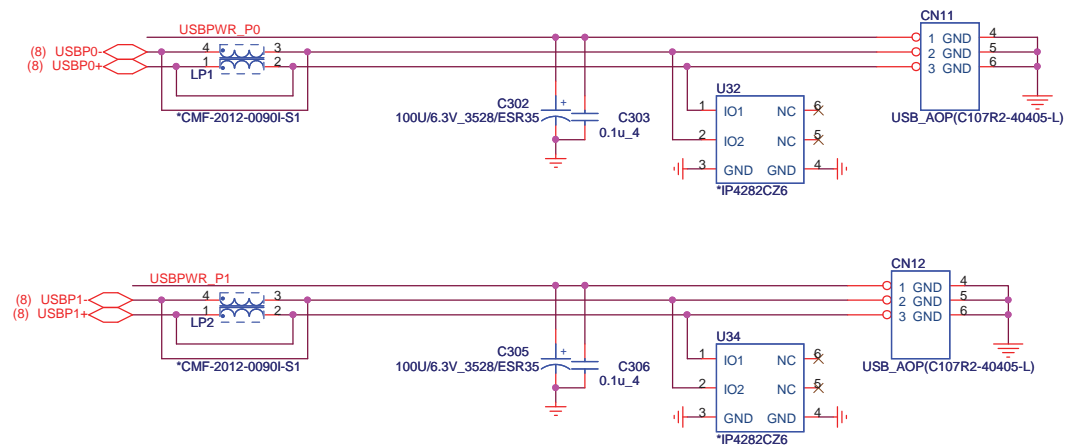
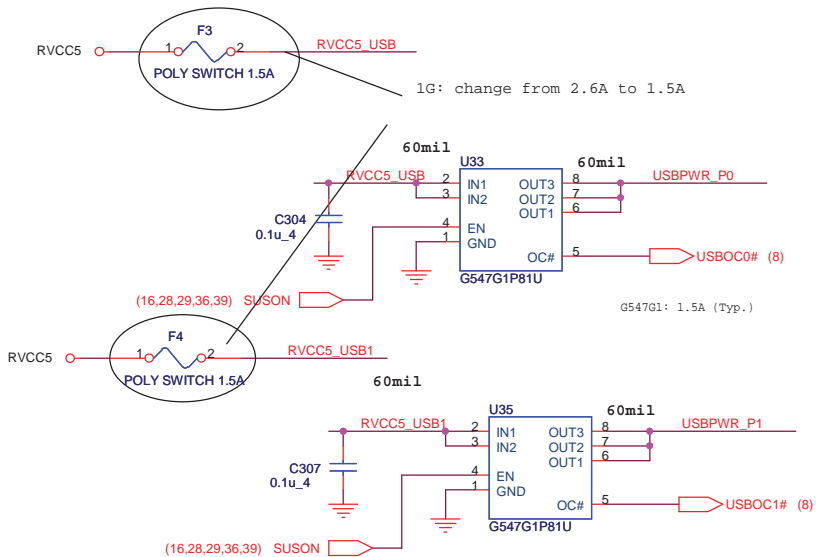
- 1.Level 1 Environment-related Substances Should NEVER be Used.
- 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

QUANTA COMPUTER		
Title		
WLAN		
Size	Document Number	Rev
B	SY3 MB	1G
Date: Tuesday, March 31, 2009		
Sheet 22 of 44		


# USB Power and Over current

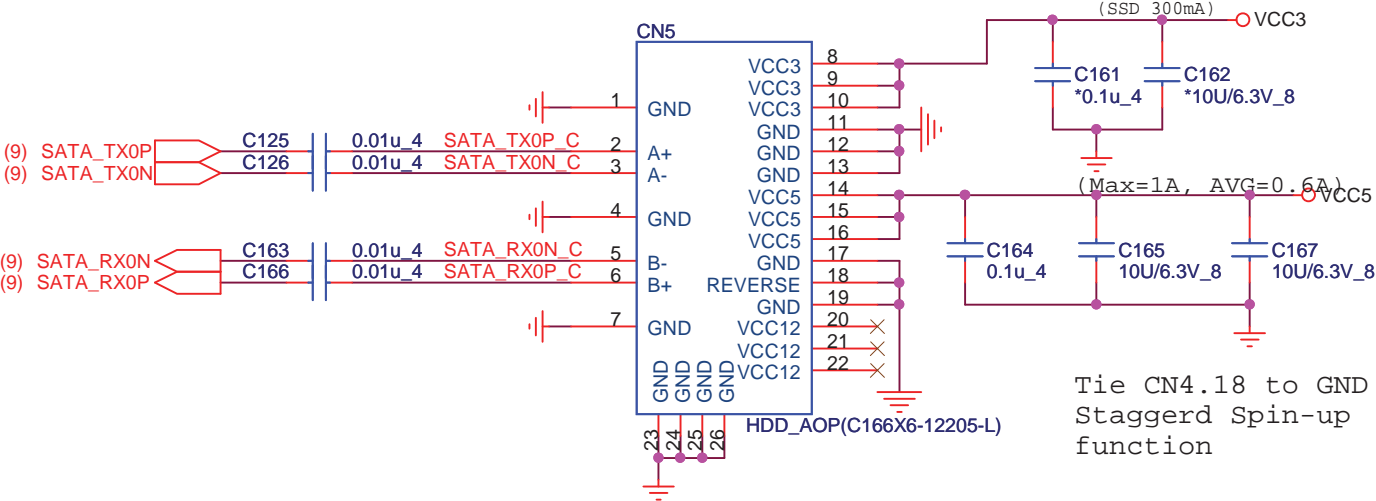
# USB Connector

23




- 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.

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




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.

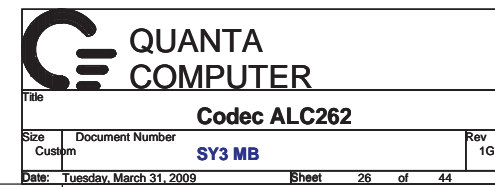


QUANTA  
COMPUTER

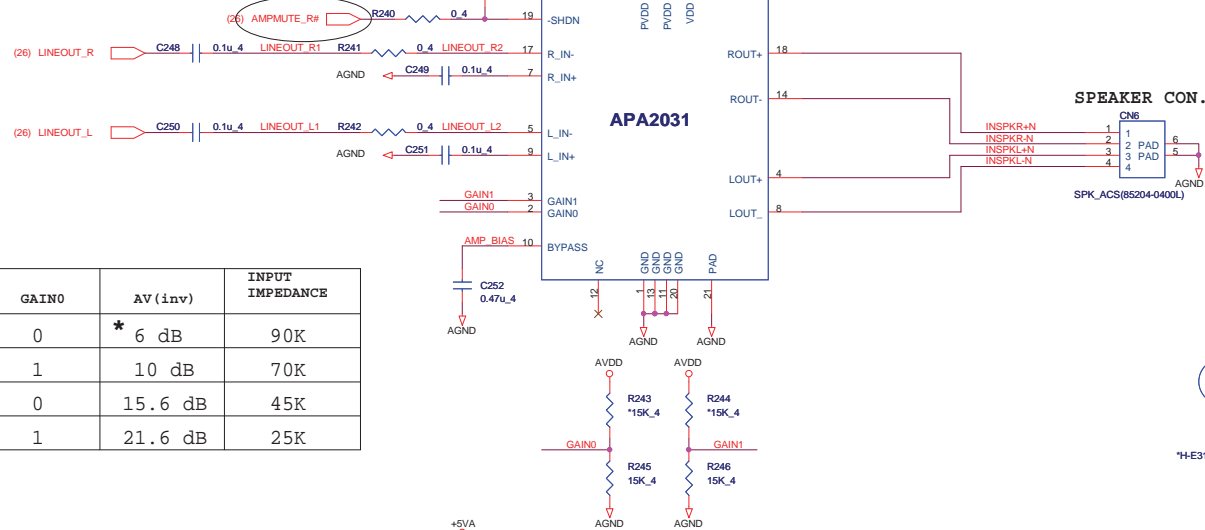
Title		
SATA		
Size	Document Number	Rev
A	SY3 MB	1G
Date: Tuesday, March 31, 2009		Sheet 24 of 44



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



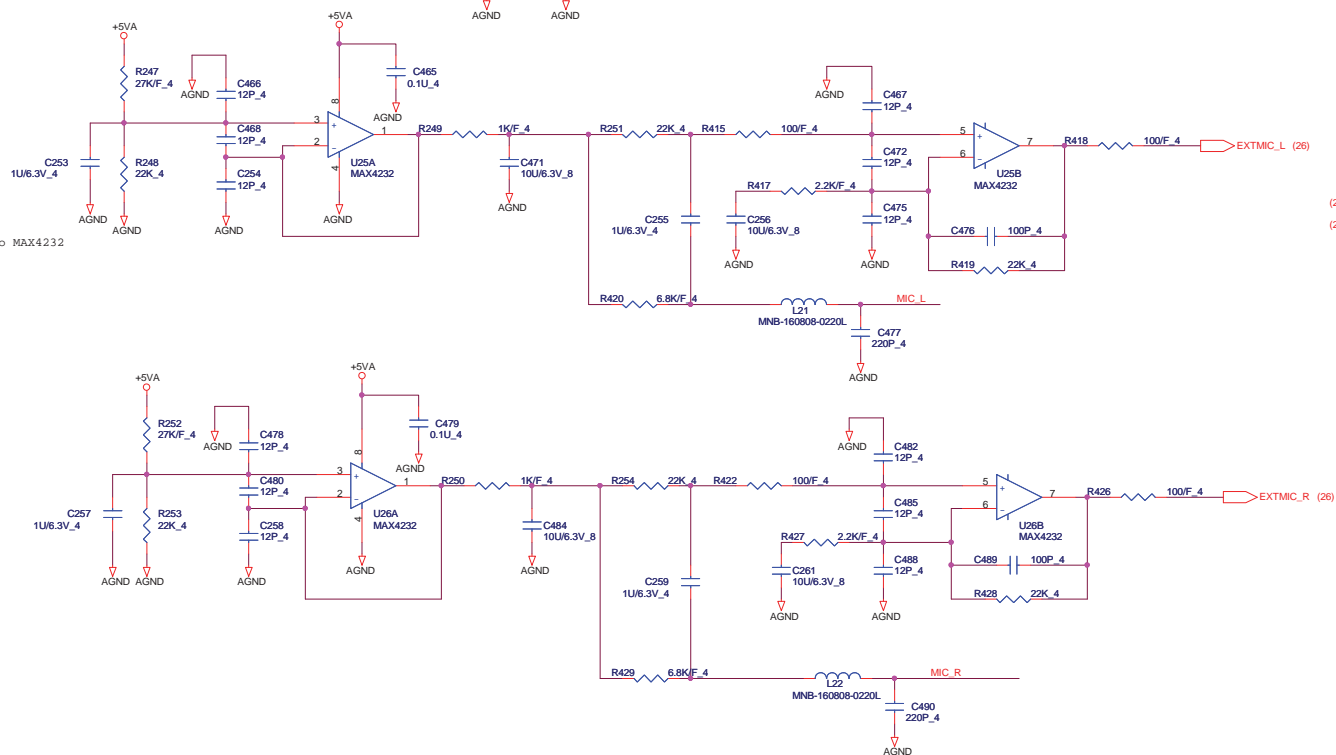
1E: change to control by HW



GAIN1	GAIN0	AV (inv)	INPUT IMPEDANCE
0	0	* 6 dB	90K
0	1	10 dB	70K
1	0	15.6 dB	45K
1	1	21.6 dB	25K

**MIC Pre-AMP**

1F: change from MAX9812H to MAX4232

**MIC**

1F: delete MIC reference power from codec

**HP**

4-pin

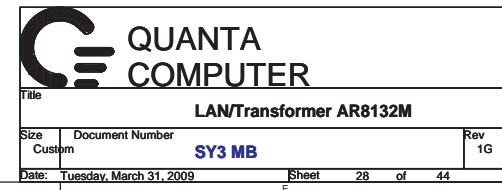


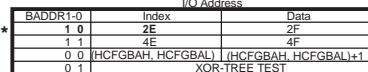
File: Audio CNN TPA6017A2

Size: Custom Document Number: SY3 MB

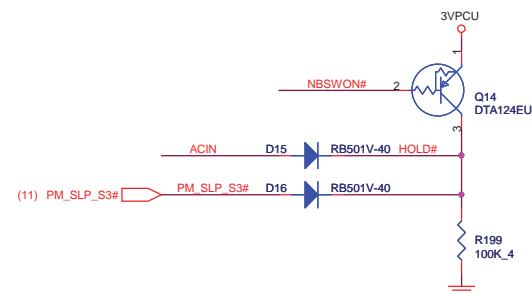
Date: Monday, March 30, 2009 Sheet: 27 of 44

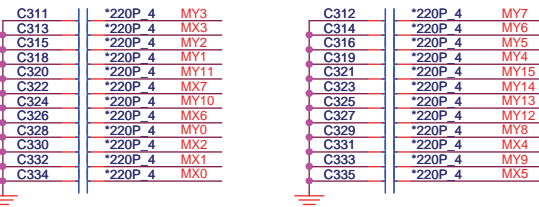
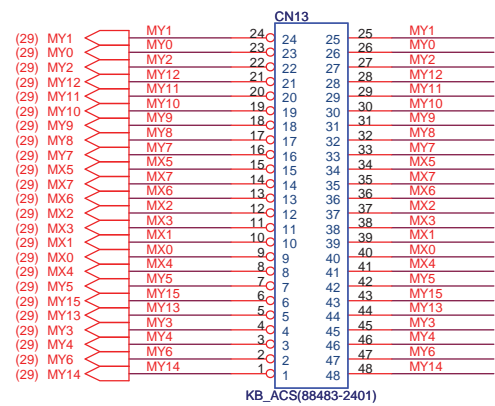
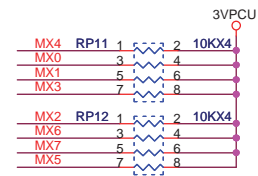
1.Level 1 Environment-related Substances Should NEVER be Used.  
 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.






T?: BADDR1

[illegible]



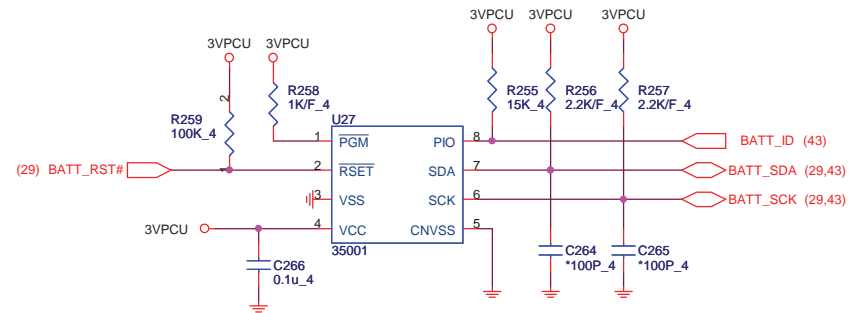
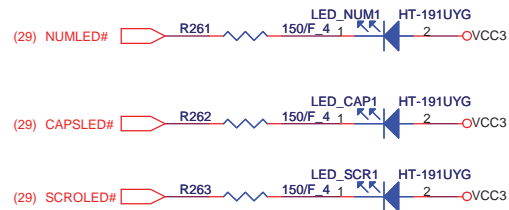
1E: Delete reserved ESD diode for WLAN layout



QUANTA  
COMPUTER

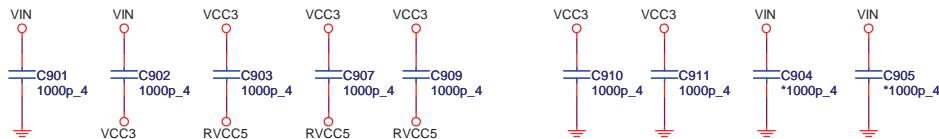
Title		
KB/BT/TP		
Size	Document Number	Rev
B	SY3 MB	1G
Date:	Tuesday, March 31, 2009	Sheet 30 of 44

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.




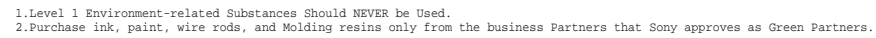
## Decoupling Cap

1E: add decoupling cap



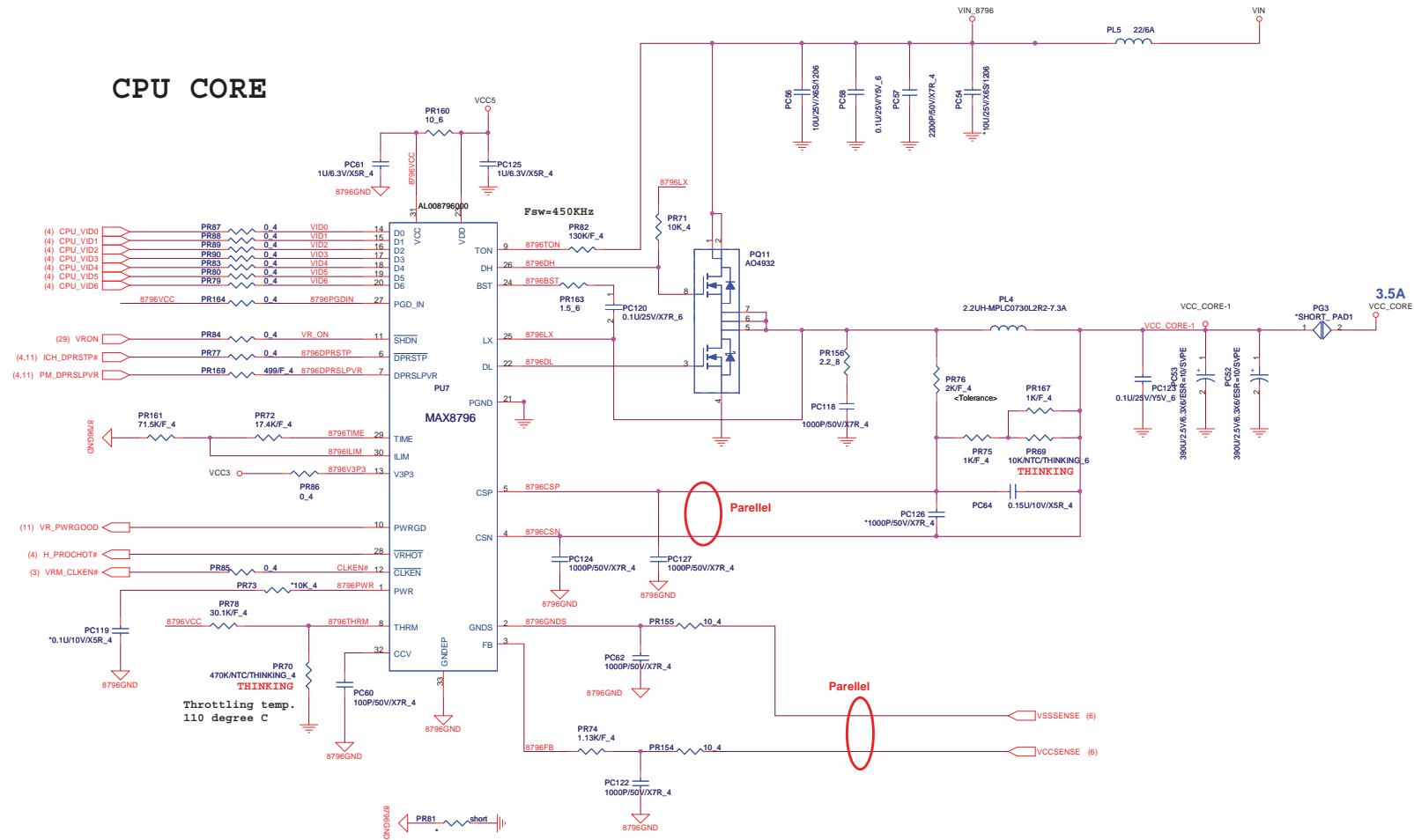
- 1.Level 1 Environment-related Substances Should NEVER be Used.
- 2.Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

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

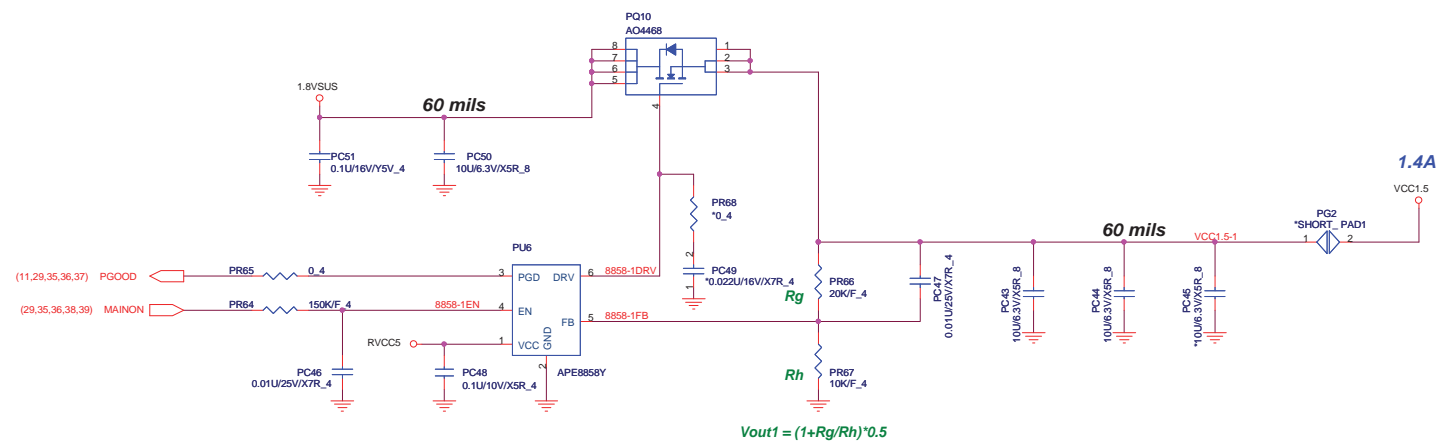




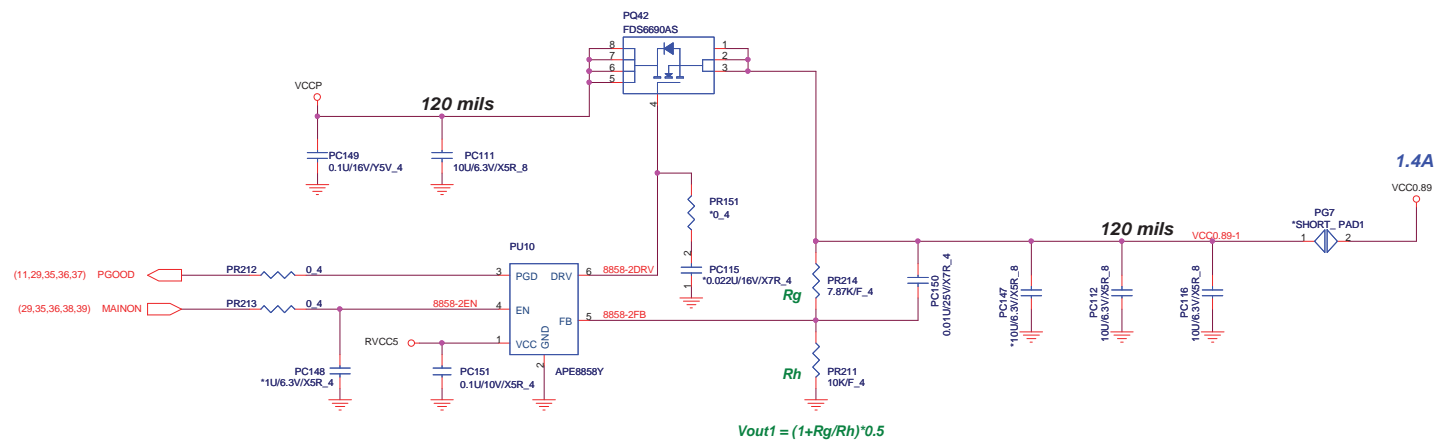
# CPU CORE



## VCC1.5



## VCC0.89

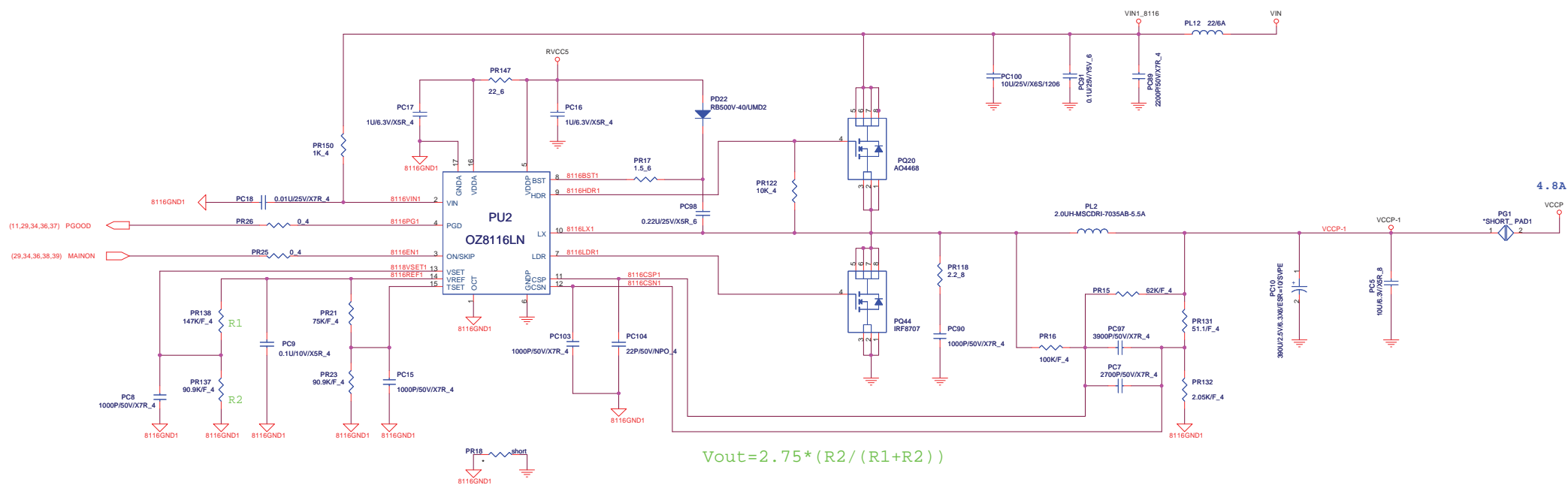


QUANTA  
COMPUTER

Size	Document Number	Rev
	SY3 MB	1G
Date	Monday, March 30, 2009	Sheet 34 of 44

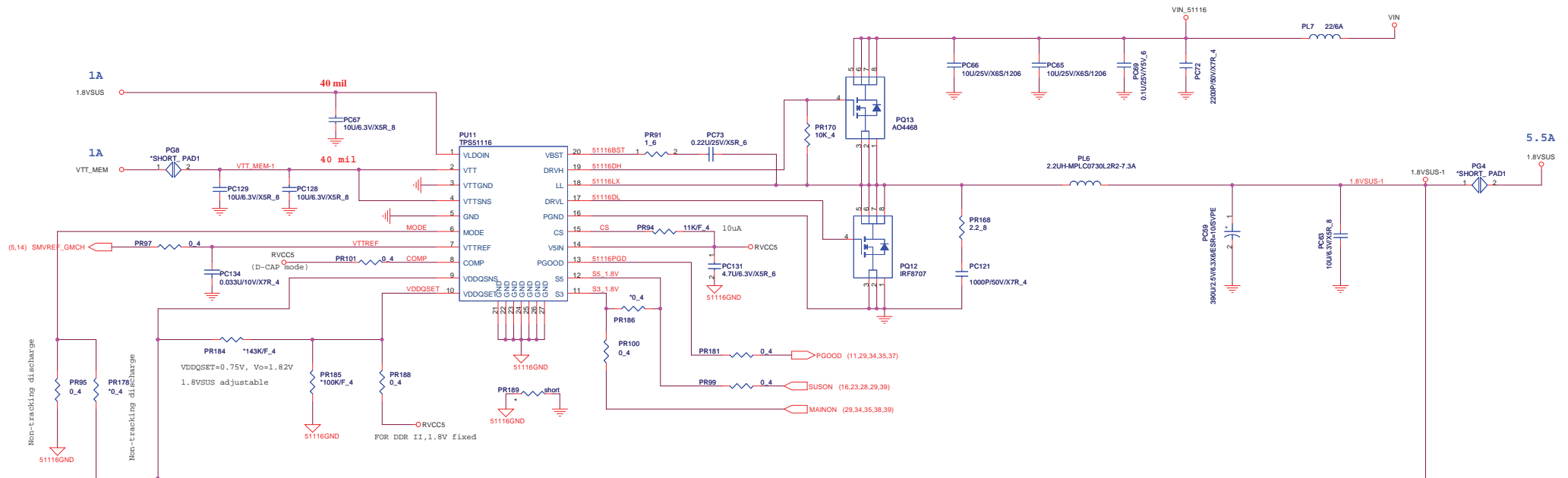
1. Level 1 Environment-related Substances Should NEVER be Used.  
2. Purchase Ink, paint, wire rods, and Molding resins only from the business Partners that Sony approves as Green Partners.

## VCCP



**QUANTA  
COMPUTER**

## 1.8VSUS &amp; VTT\_MEM

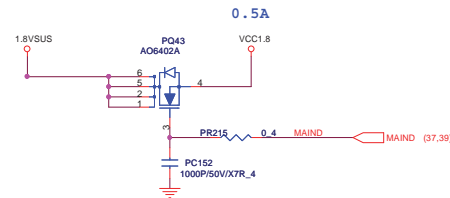


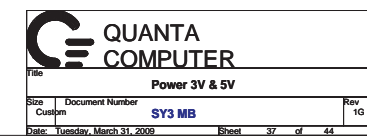
MODE	DISCHARGE MODE
+5V	No discharge
+1.8V	Tracking discharge
GND	Non-tracking discharge

VDDQSET	VDDQ(V)	VITREF & 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

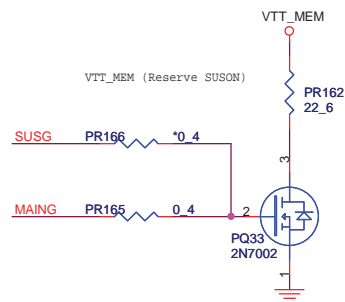
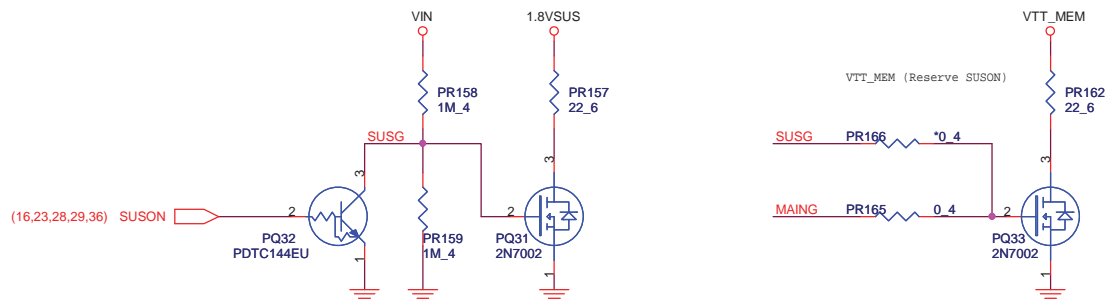
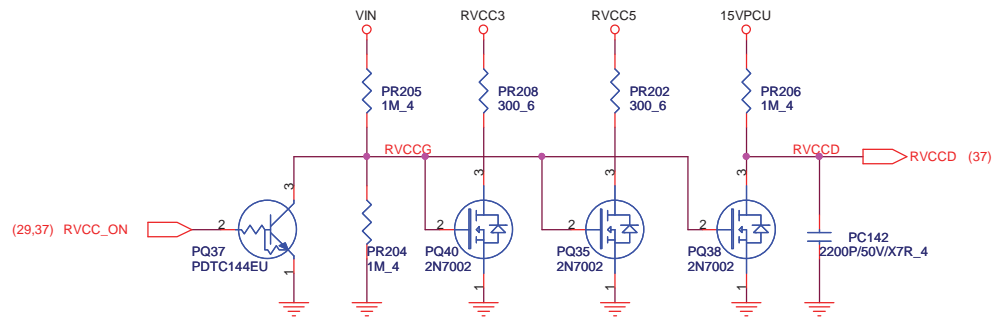
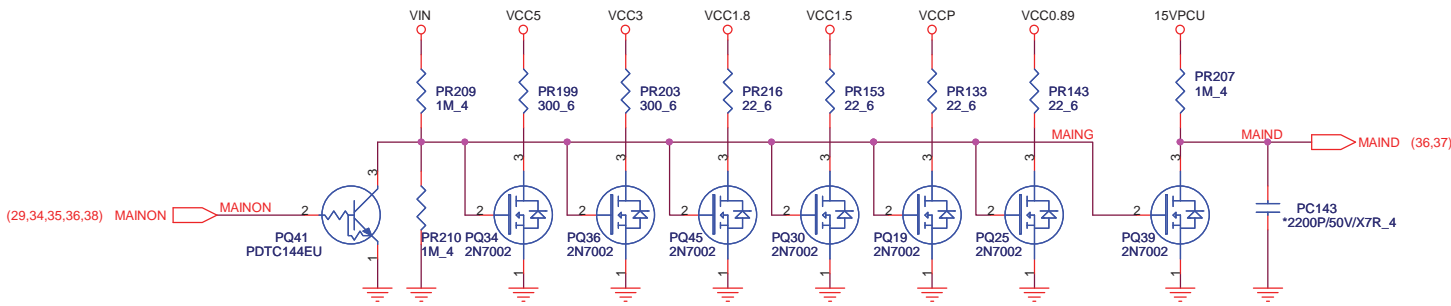
$$VIT = VITREF = VDDQSNS/2 = 0.9V$$

STATE	S3	S5	1.8VSUS	VITREF	VIT
S0	1	1	on	on	on
S3	0	1	on	on	off
S4/S5	0	0	off	off	off






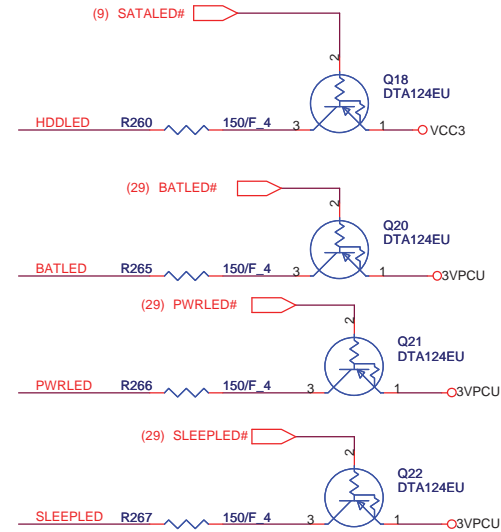




Title			
Discharge			
Size B	Document Number  SY3 MB		Rev 1G
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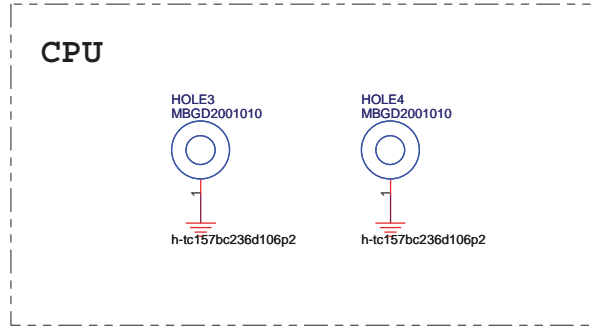
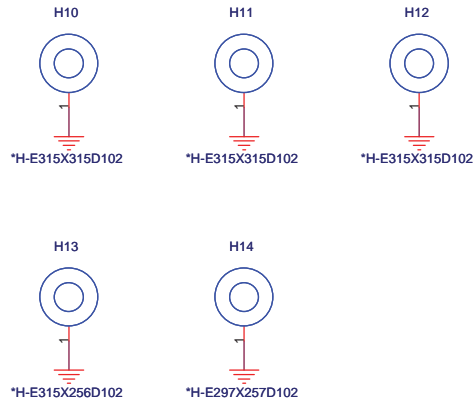
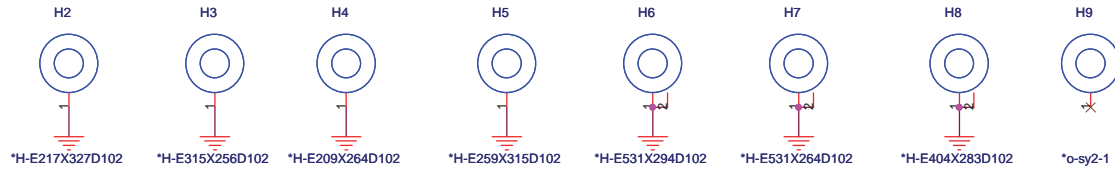
		QUANTA COMPUTER	
Title			
XDP			
Size A	Document Number		Rev
	SY3 MB		1G
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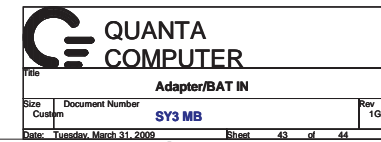
1E: change to the same one with TP board

```
"Power, S0 (green), S3 (Umbur flash), S4 (off), S5 (off)
"Charger status in Umbur 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)
```



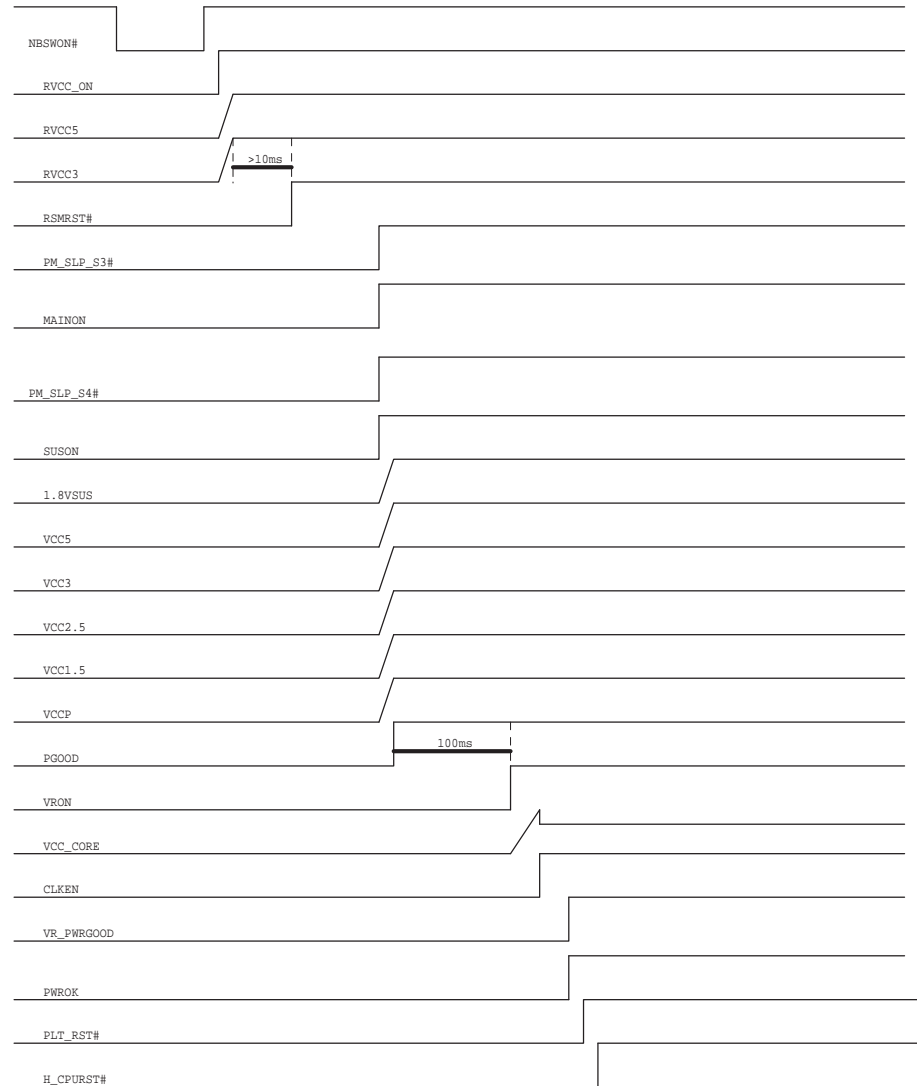
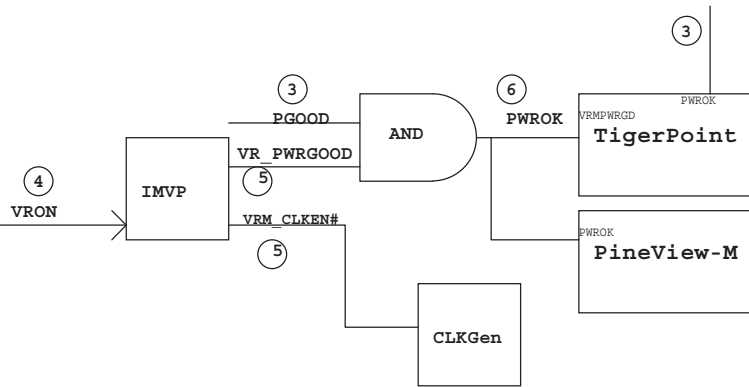
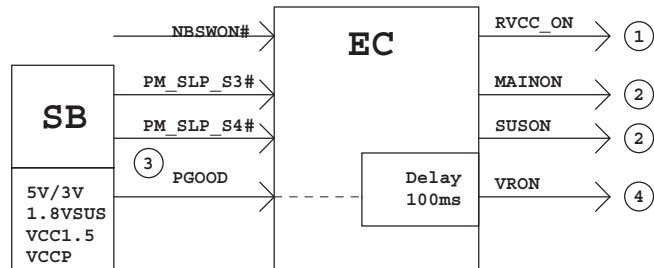
 <b>QUANTA COMPUTER</b>		
Title		
Screw Hole		
Size B	Document Number <b>SY3 MB</b>	Rev 1G
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1. Level 1 Environment-related Substances Should NEVER be Used.  
2. Purchase ink, paint, wire rods, and Molding resins only from the business Partners that Sony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



## 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

Rev  
1G

Date: Tuesday, March 31, 2009

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