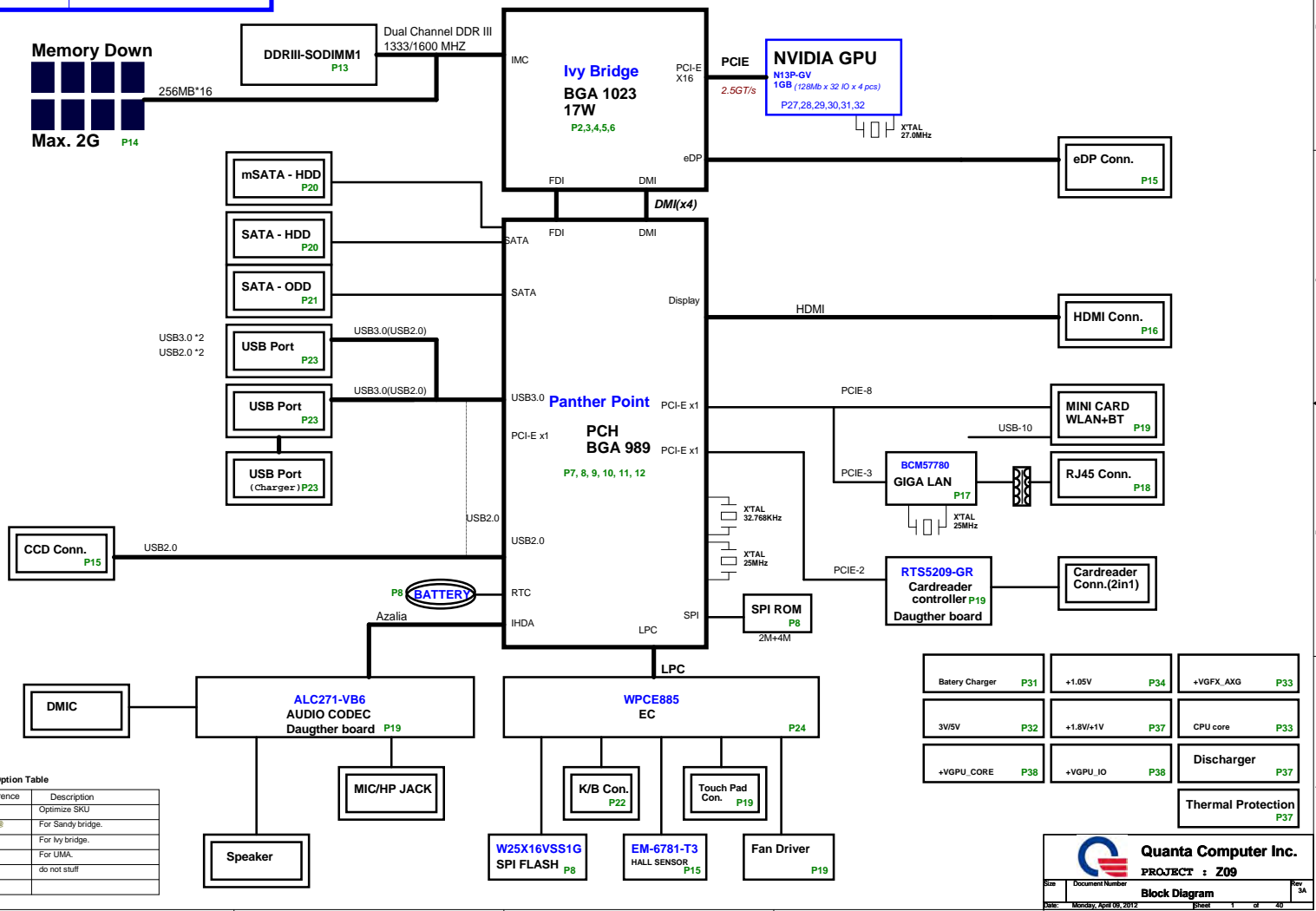
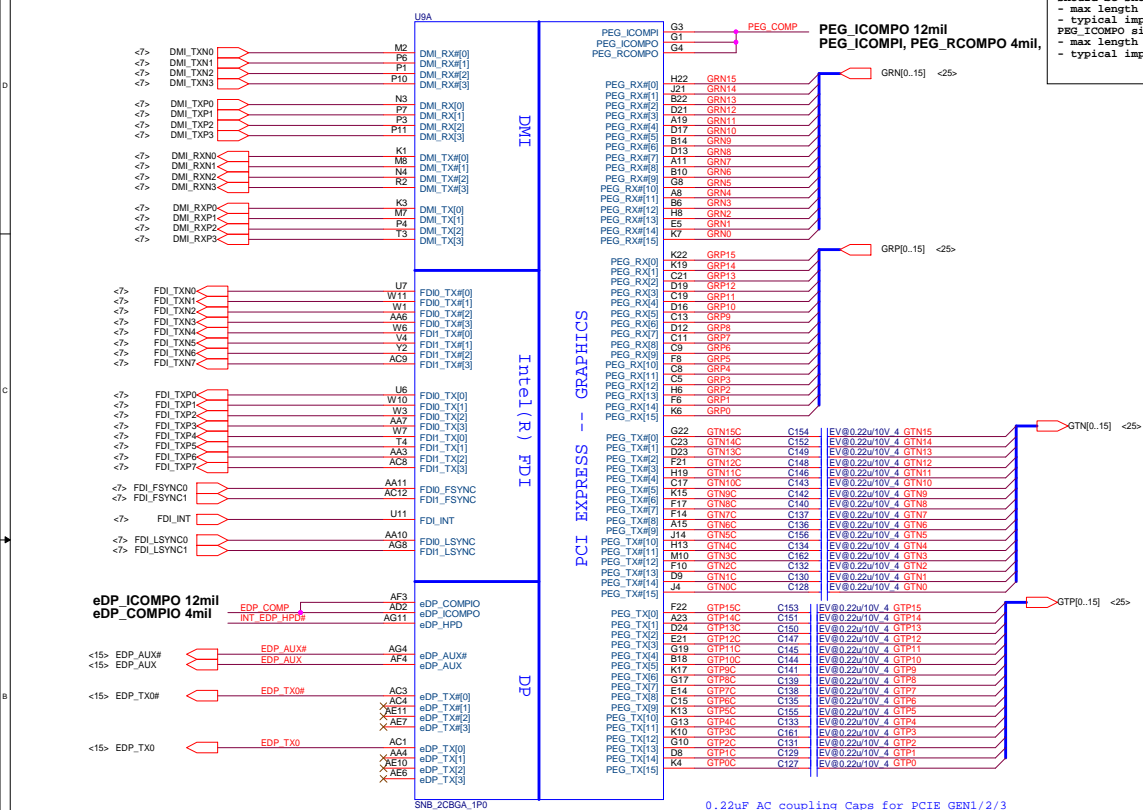


BOM P/N	Description
---------	-------------

Z09 SYSTEM BLOCK DIAGRAM



Ivy Bridge Processor (DMI,PEG,FDI)



PEG_ICOMPI and RCOMPO signals
should be shorted and routed with

- max length = 500 mils
- typical impedance = 43 mohms

PEG_ICOMPO signals should be routed with

- max length = 500 mils
- typical impedance = 14.5 mohms

DP_COMPIO and ICOMPO signals
should be shorted near balls and routed with
- typical impedance < 25 mohms

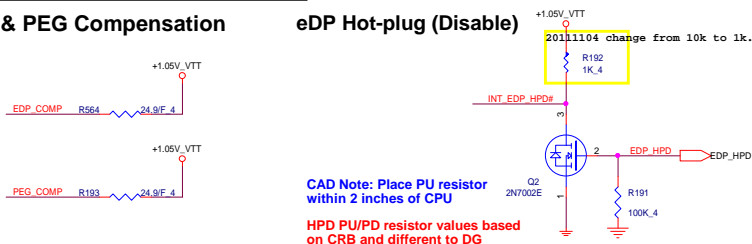
```

.....
DG 1.0 :
The recommended AC cap value is changed to 220nF for compatibility with
PCIe Gen3 on future platforms.
For Gen2 only designs, it is acceptable to continue to use the 100nF capacitor
.....

```

DP & PEG Compensation

eDP Hot-plug (Disable)



CAD Note: Place PU resistor within 2 inches of CPU

HPD PU/PD resistor values based on CRB and different to DG

**Quanta Computer Inc.**

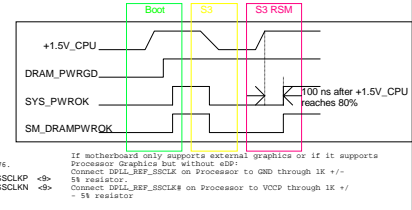
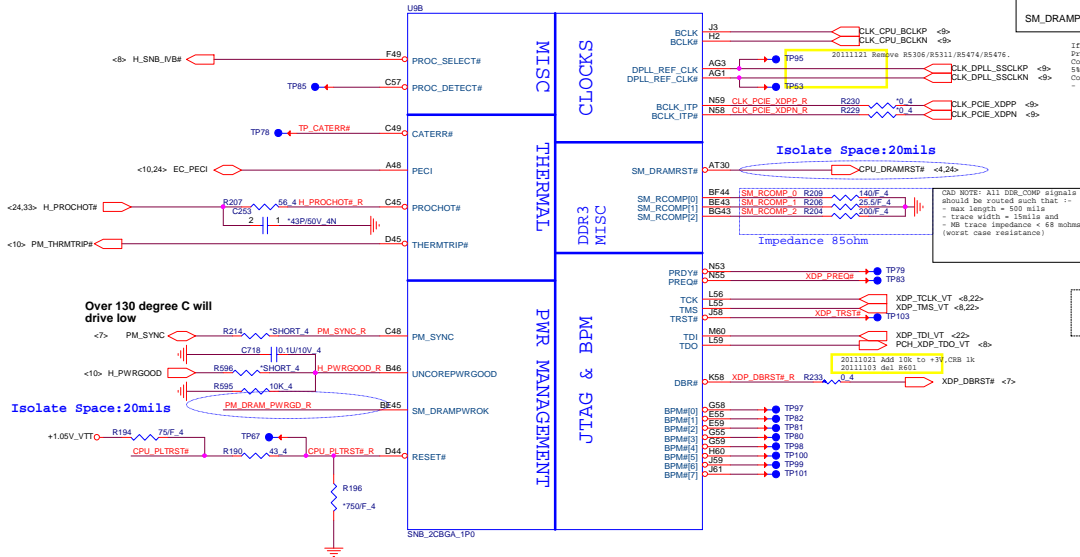
PROJECT : Z09

Size	Document Number
	Ivy Bridge 1/5

Date: Monday, April 09, 2012

Sheet 2 of 40

Ivy Bridge Processor (CLK,MISC,JTAG)

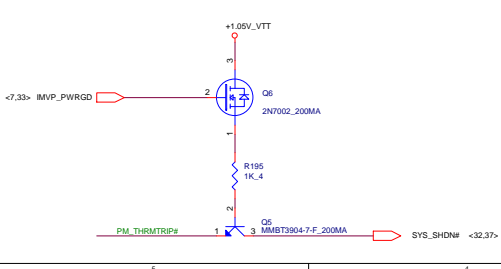


If motherboard only supports external graphics or if it supports Processor Graphics but without eDP:
Connect CPU_DRAMPWROK on Processor to GND through 1K +/- 1% resistor.
Connect CPU_DRAMPWROK on Processor to VDDP through 1K +/- 1% resistor.

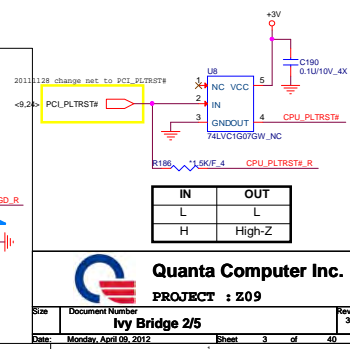
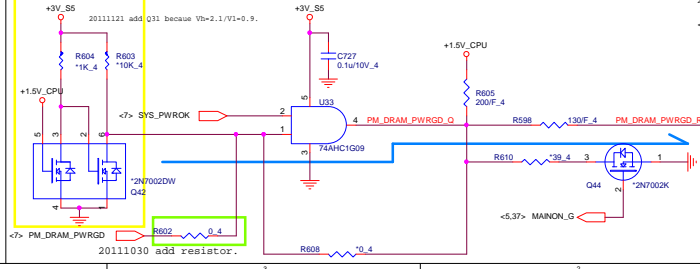
Place near to XDP connector

Option for Prochot function
68 ohm for unused, 62 ohm for used

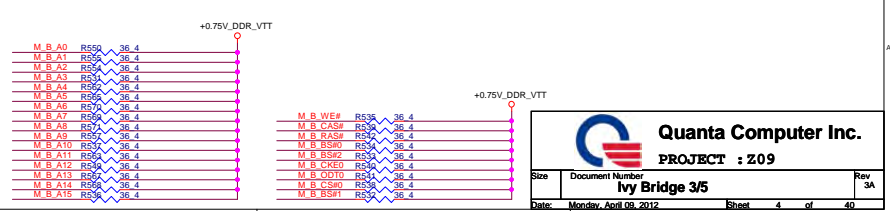
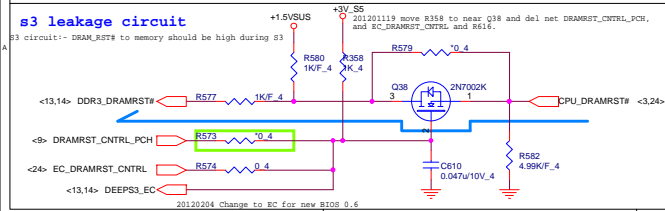
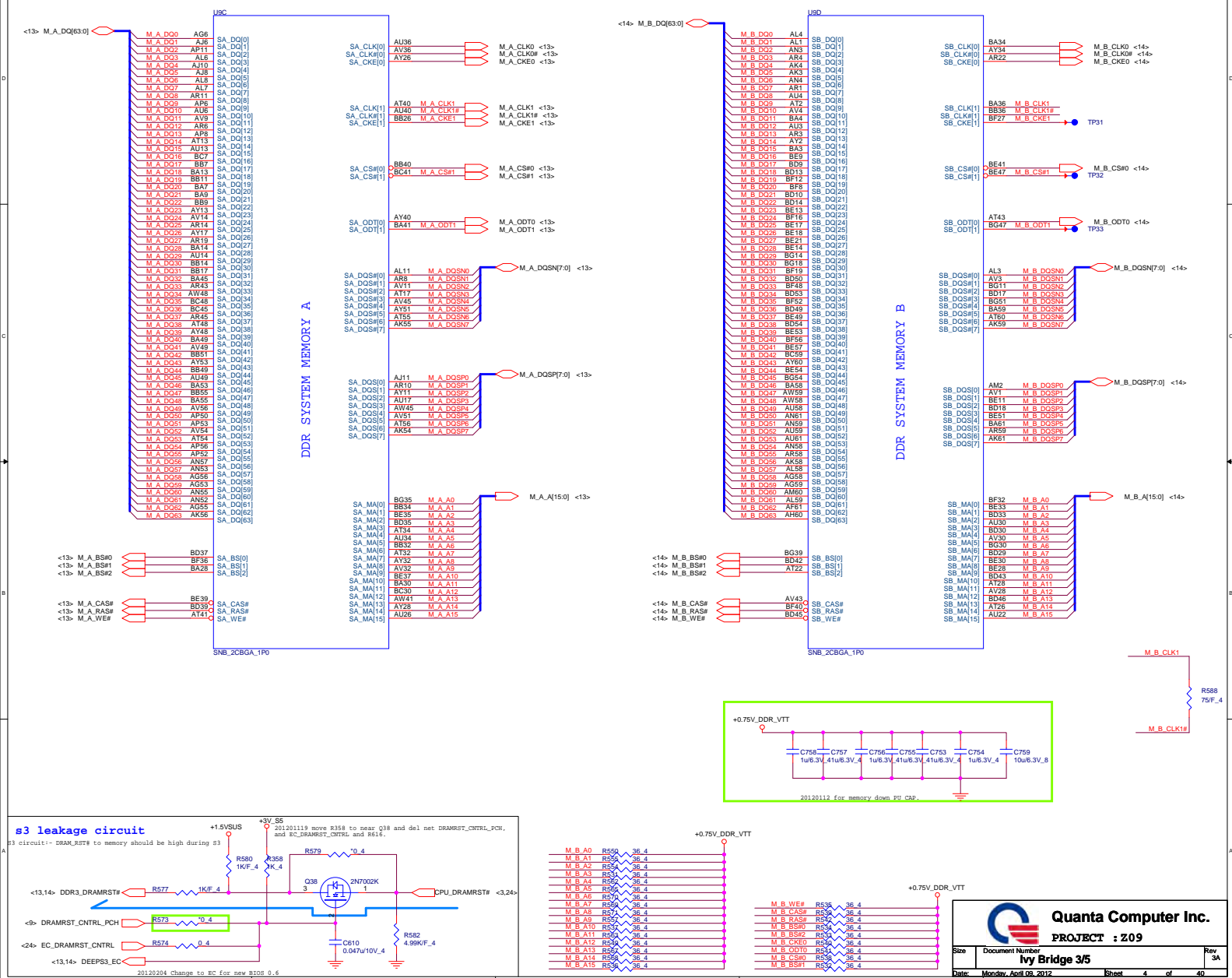
Thermal Trip <CPU>

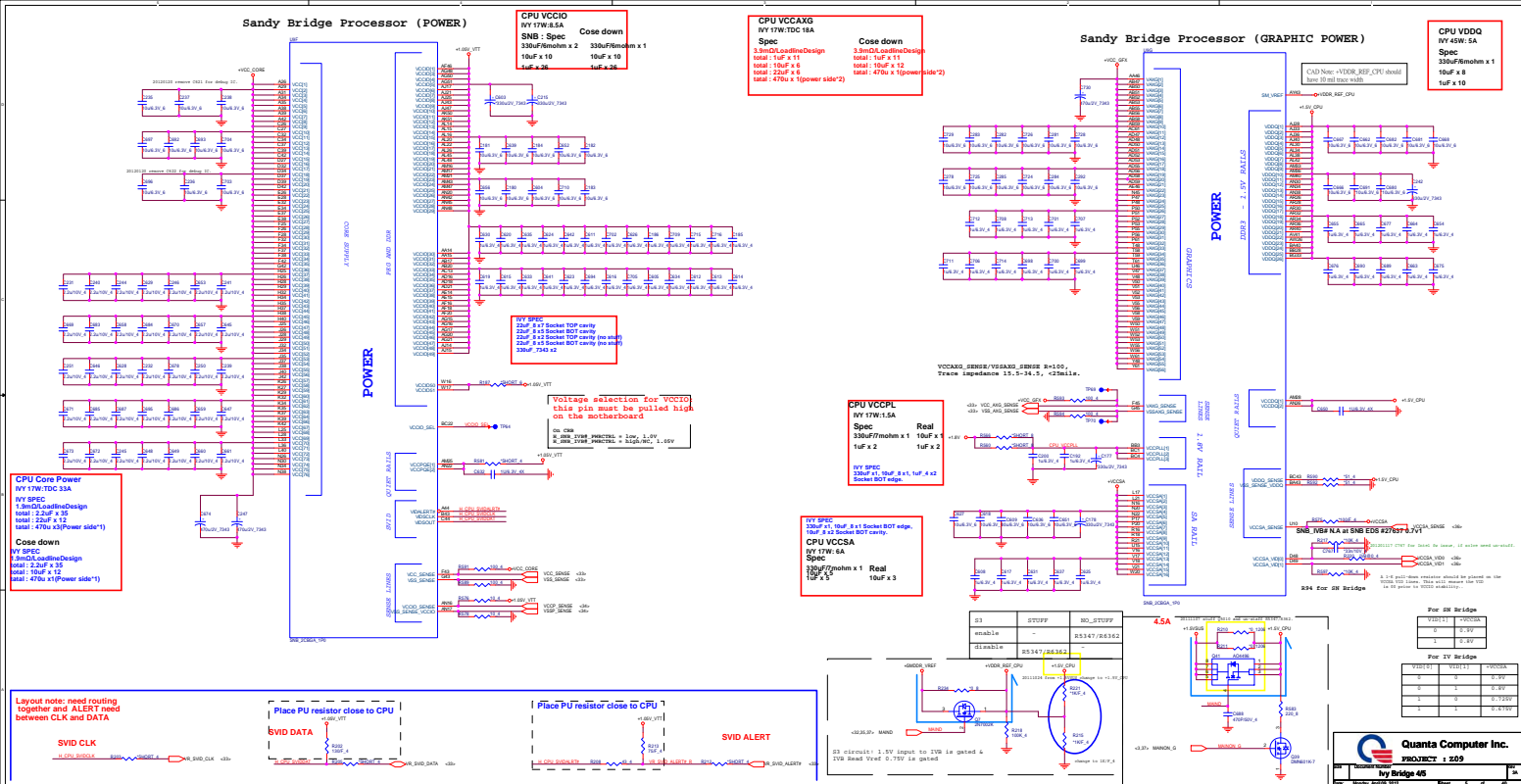


s3 leakage circuit

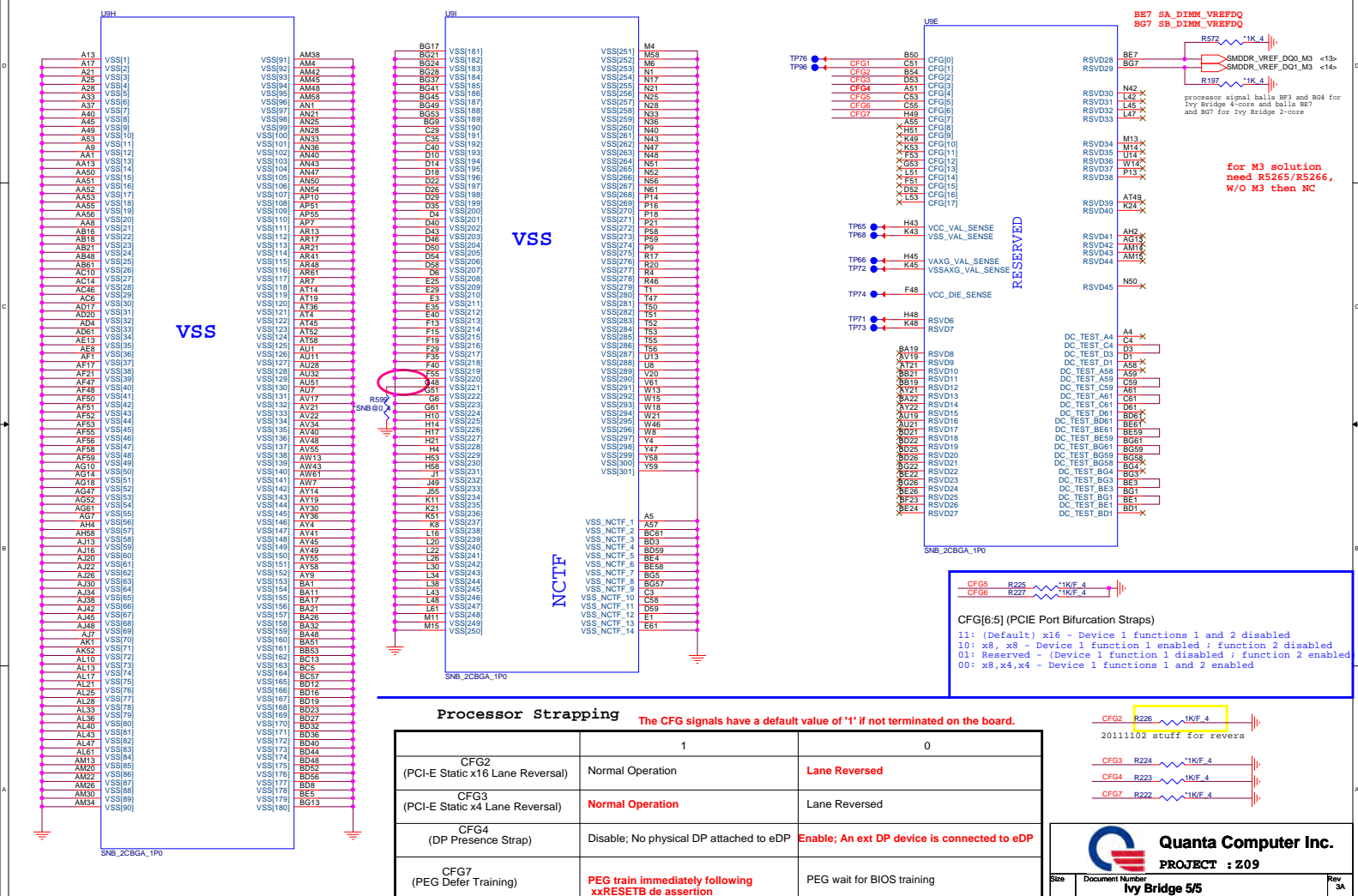


Sandy Bridge Processor (DDR3)





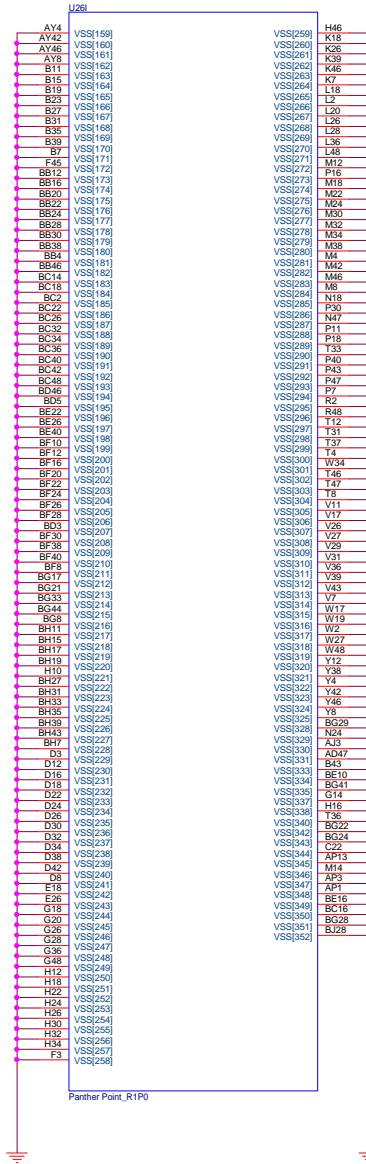
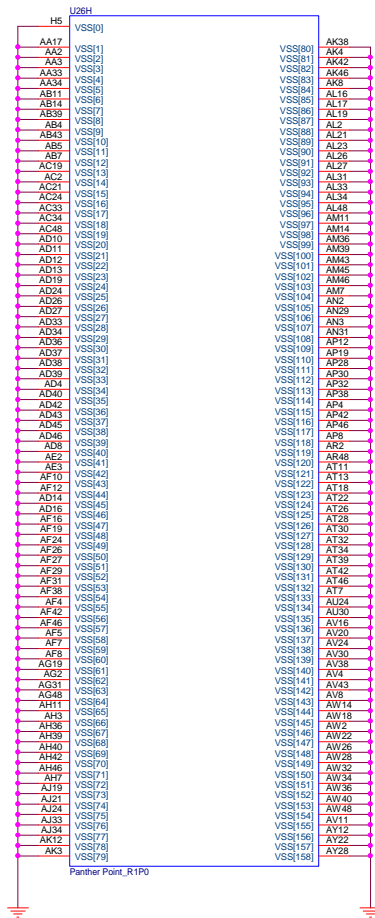
Sandy Bridge Processor (RESERVED, CFG)





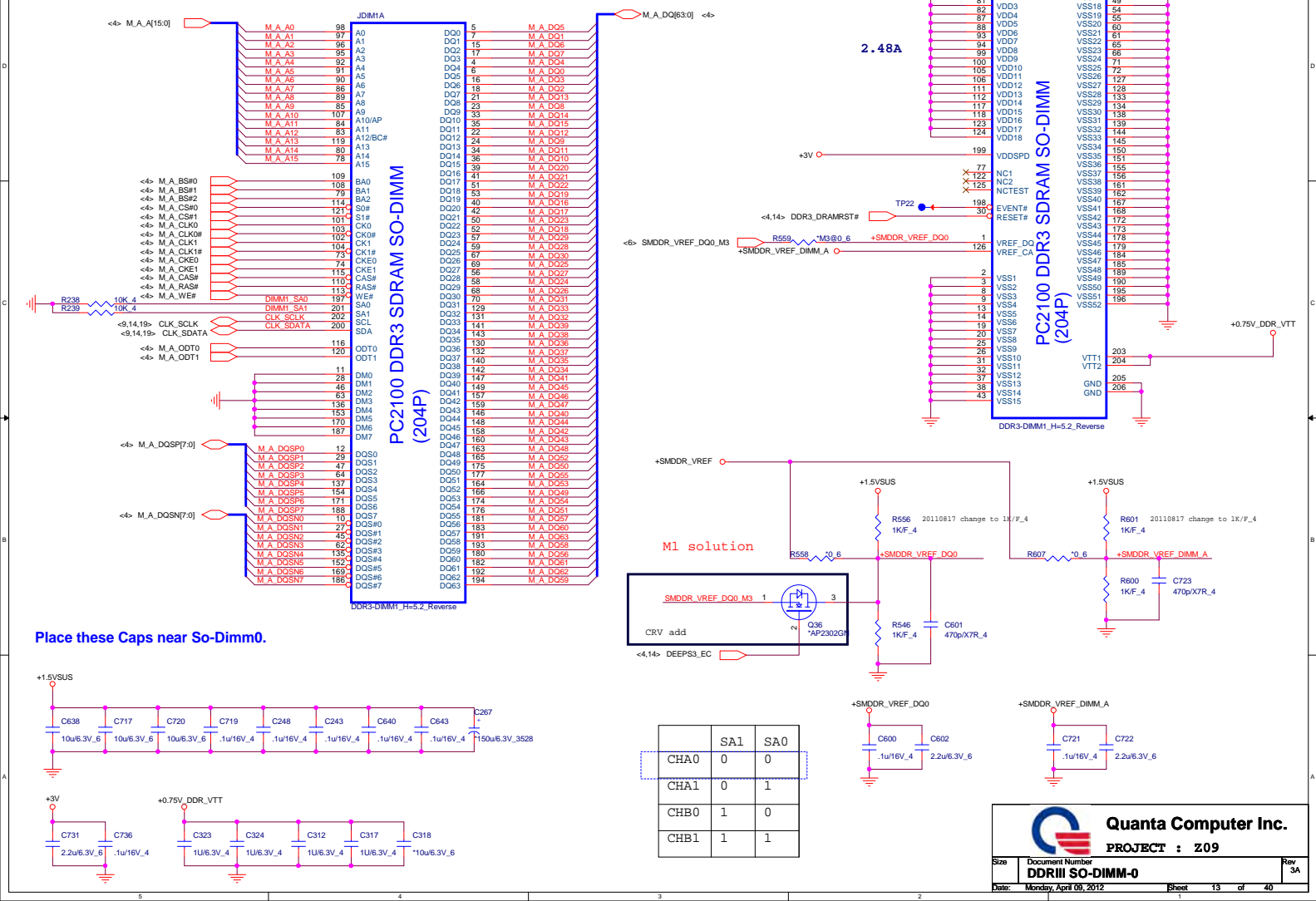


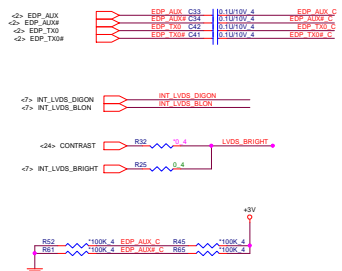
IBEX PEAK-M (GND)



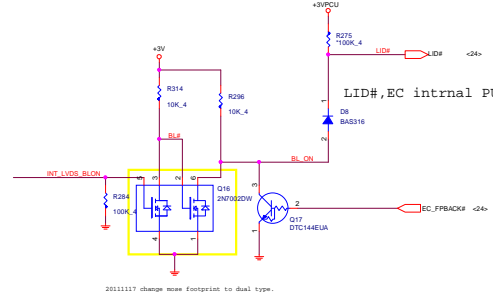
Quanta Computer Inc.
PROJECT : Z09
Panther Point 6/6
Date: Monday, April 09, 2012 Sheet 12 of 40

DDR3 DIMM-A





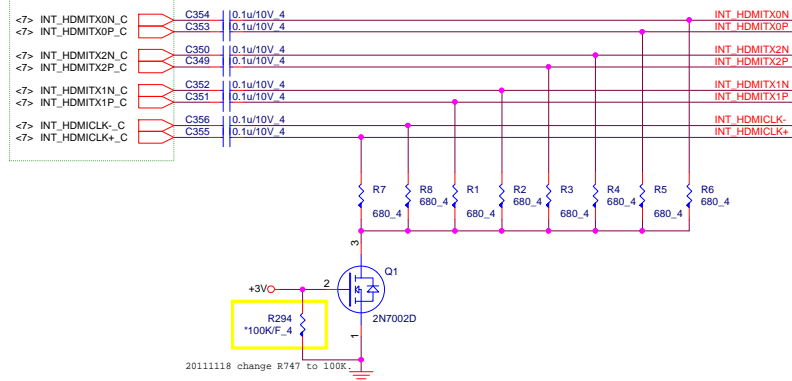
Backlight Control



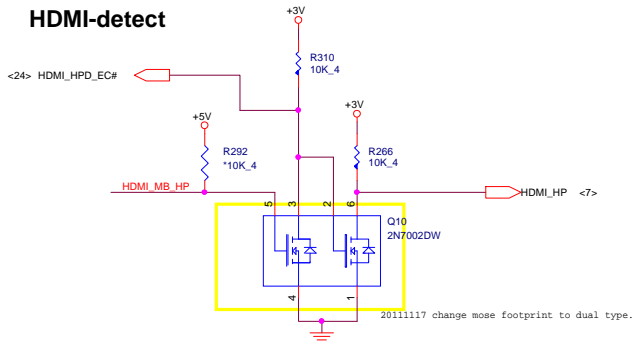
R_{FLCT}	F_{SM}
833K	600KHz
625K	800KHz
499K	1MHz

HDMI

from PCH

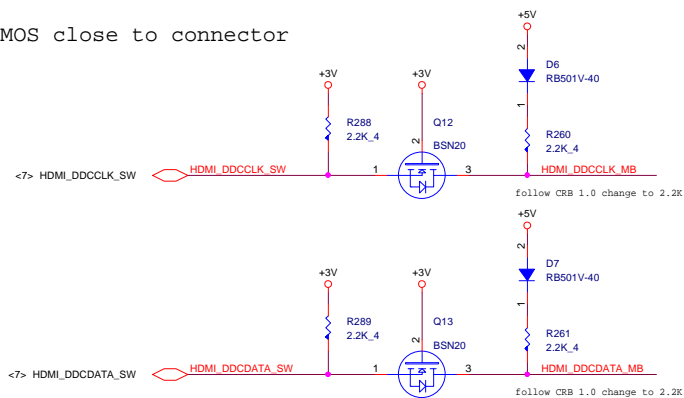


HDMI-detect

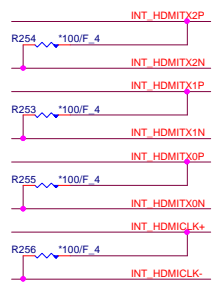


I2C

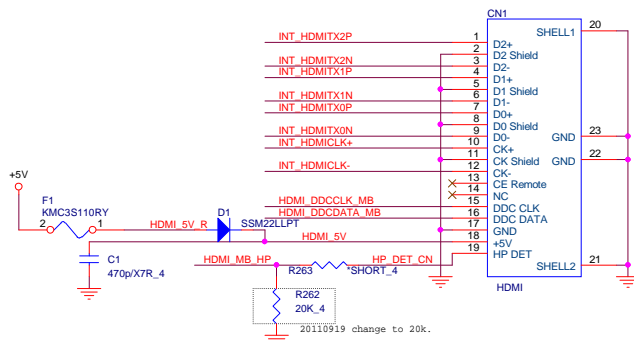
MOS close to connector



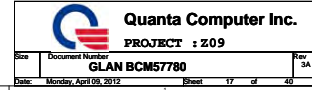
EMI



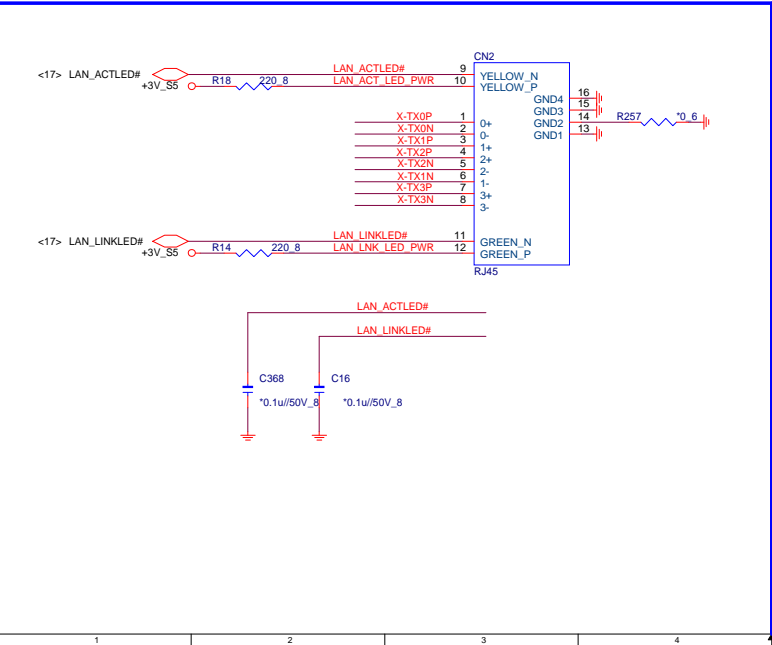
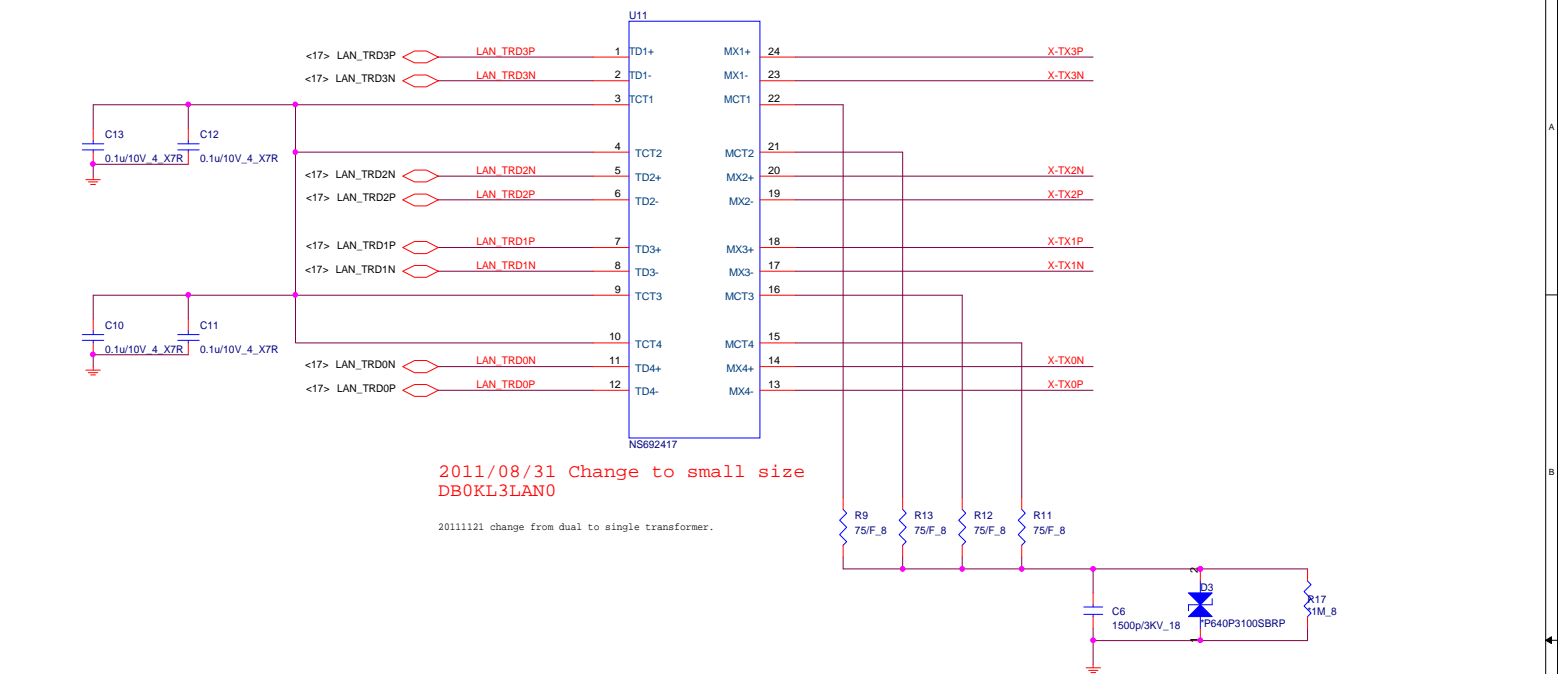
HDMI connector



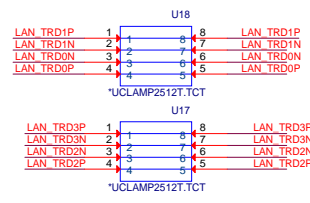
Quanta Computer Inc. PROJECT : Z09		Rev 3A
Size	Document Number	
HDMI (PS8101)		
Date:	Monday, April 09, 2012	Sheet 16 of 40




TRANSFORMER



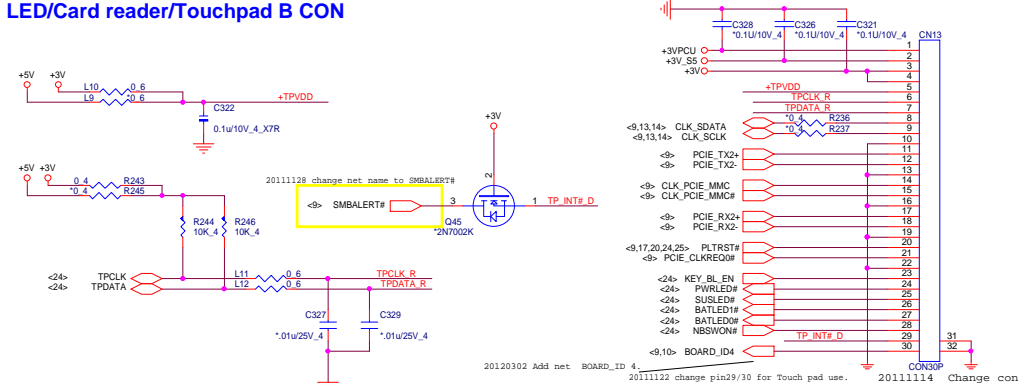
For EMI



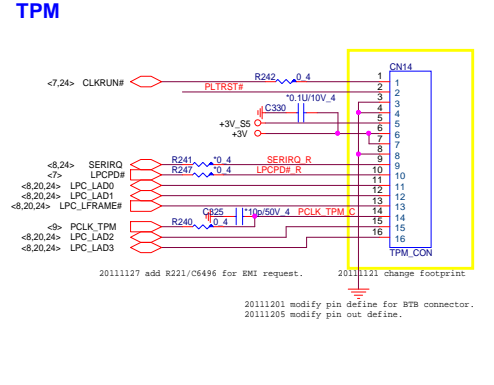
**Quanta Computer Inc.**
PROJECT : Z09

Size	Document Number	Rev
	LAN Transformer and RJ45	3A
Date:	Monday, April 09, 2012	Sheet 18 of 40

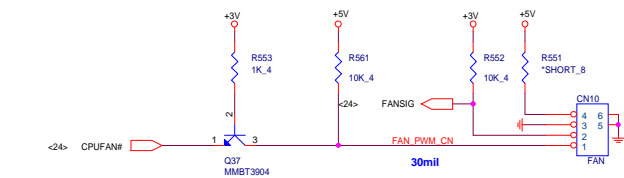
LED/Card reader/Touchpad B CON



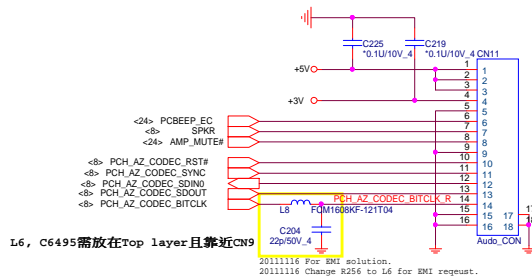
TPM



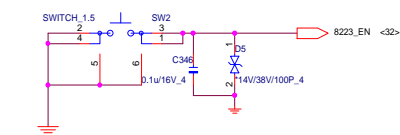
CPU FAN



Audio Connector

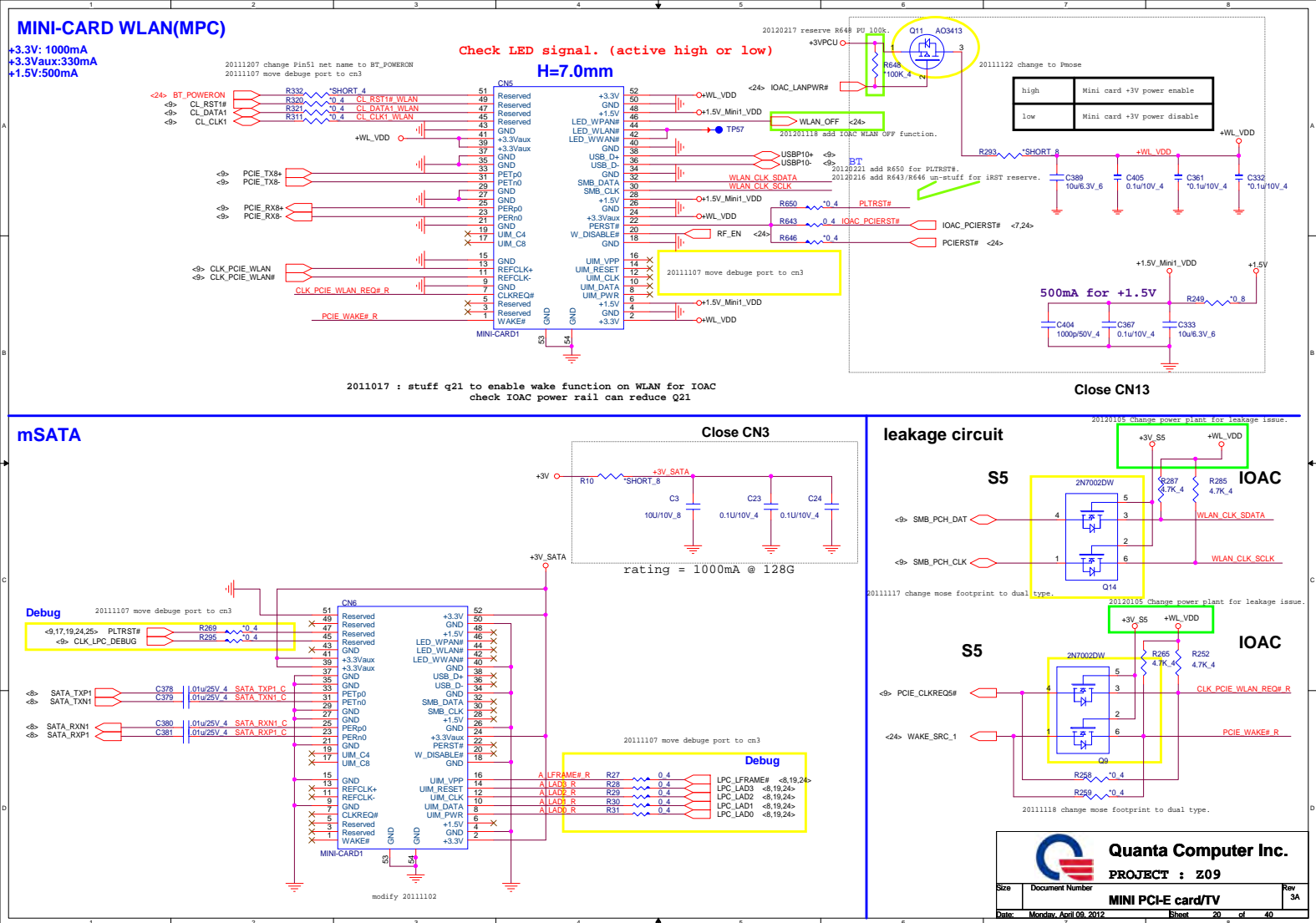


3/5VPCU reset switch

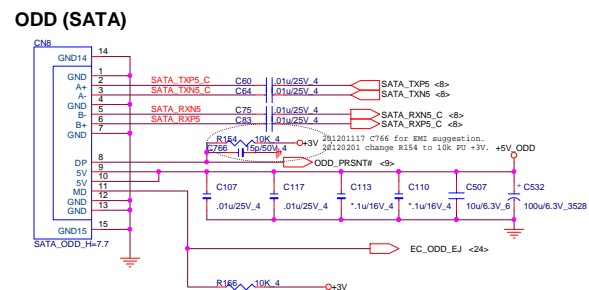
**Quanta Computer Inc.**

PROJECT : Z09

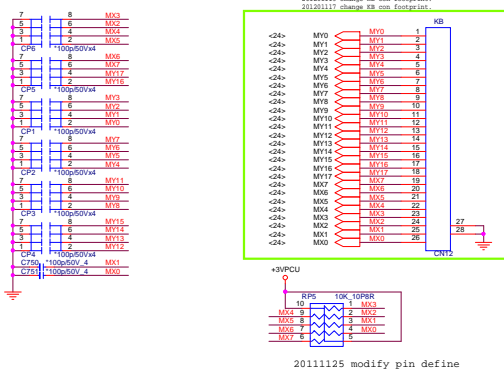
Size	Document Number mSATA/CR/LED	Rev 3A
Date:	Monday, April 09, 2012	Sheet 19 of 40



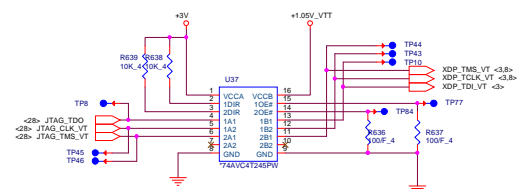
MAIN SATA HDD 21111207 change Cn12 Pin define following ZHA.

[illegible]

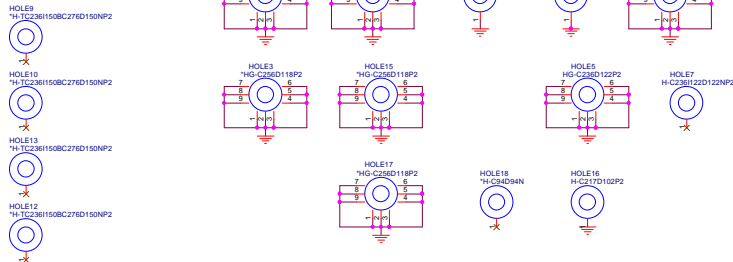
K/B



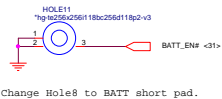
ICT TEST FIXTURE(VOLTAGE TRANSLATOR)



SCREW HOLE




BATT Enable short pad



20111208 Change Hole8 to BATT short pad.

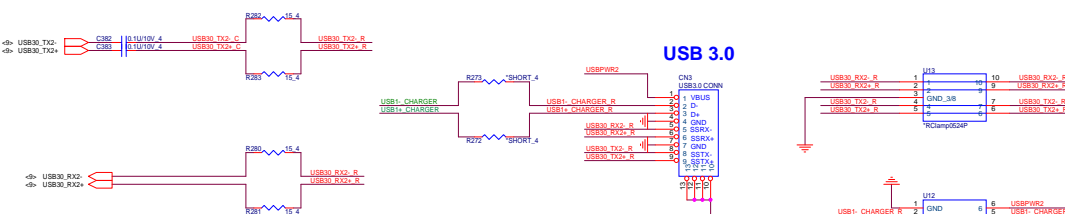


**Quanta Computer Inc.**

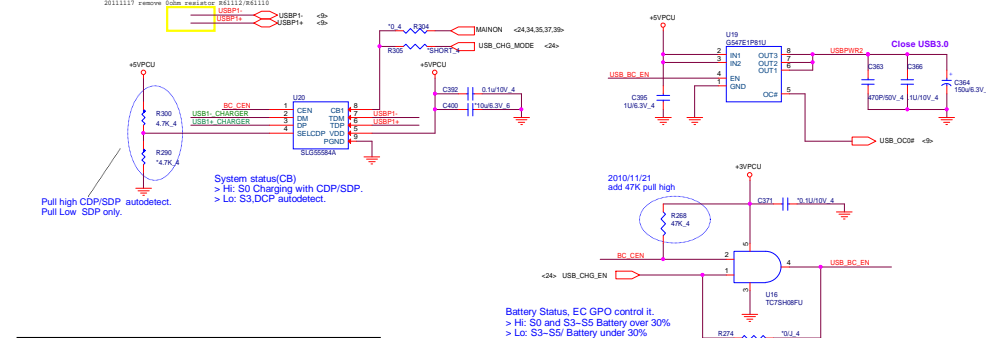
PROJECT : Z09

Size	Document Number	Rev
	XDP/ Hole	3A
Date	Monday, April 09, 2012	Sheet 22 of 40

USB3.0 CONN

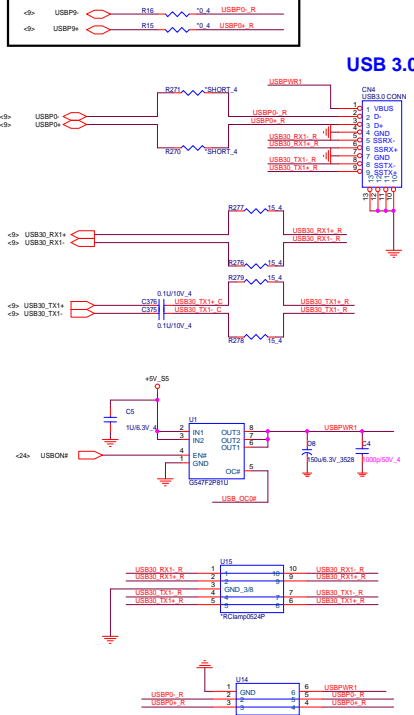


USB charger



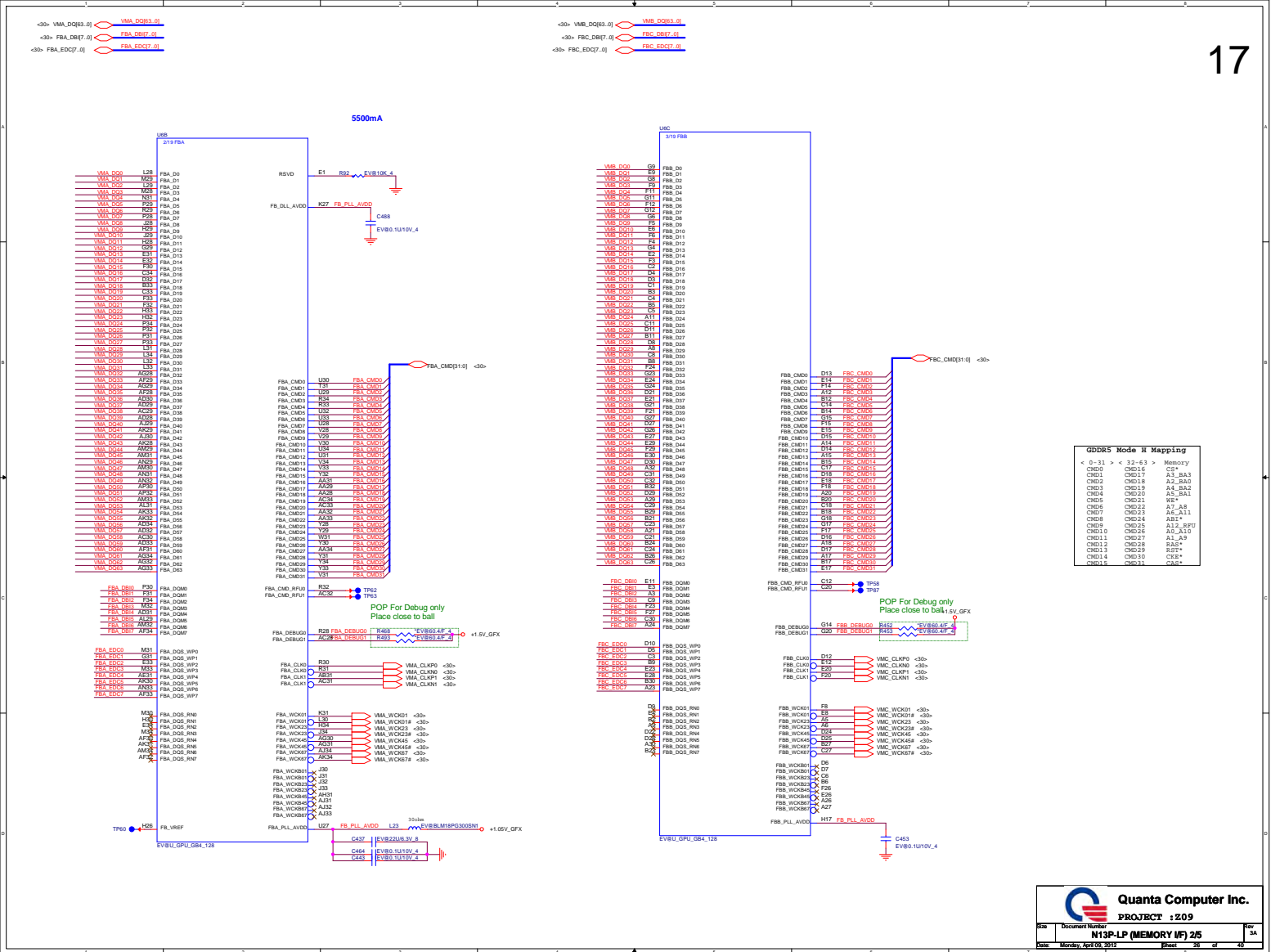
Name	USB data	State	Max Current	Apple Device
SDP	YES	S0-S3	500mA	500mA
CDP	YES	S0-S3	1500mA	500mA
DCP_Auto	NO	S4-S5	1800mA	1800mA

Reserve for Debug

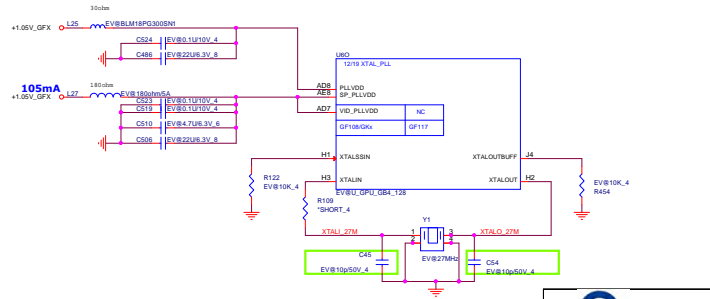
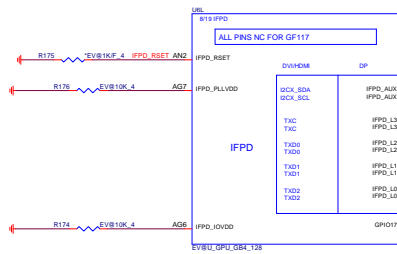
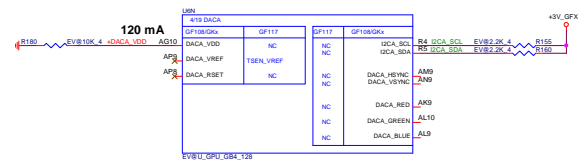
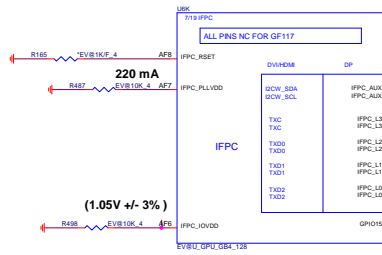
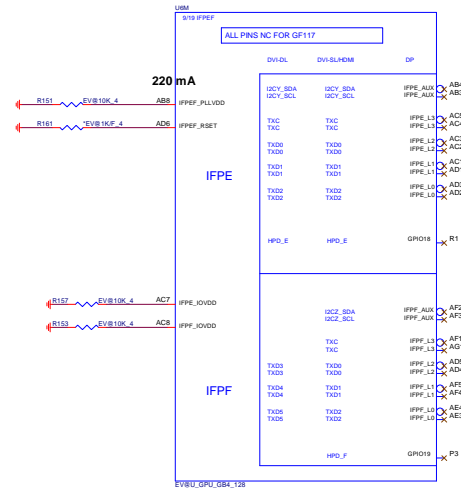
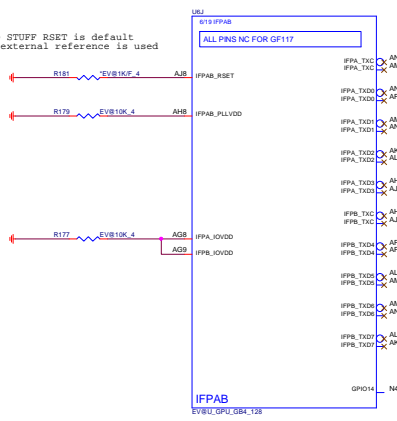


WWW.AliSaler.Com

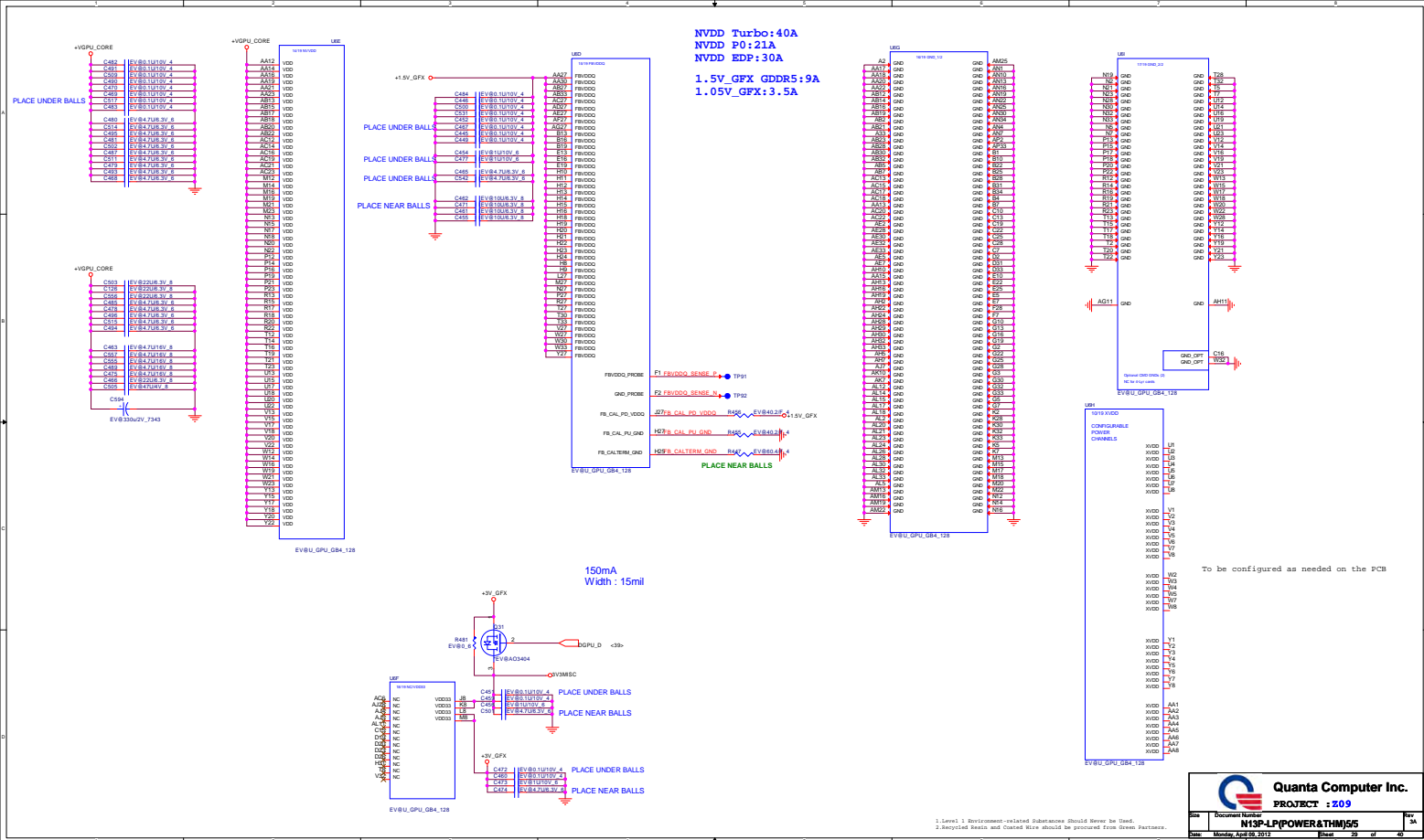


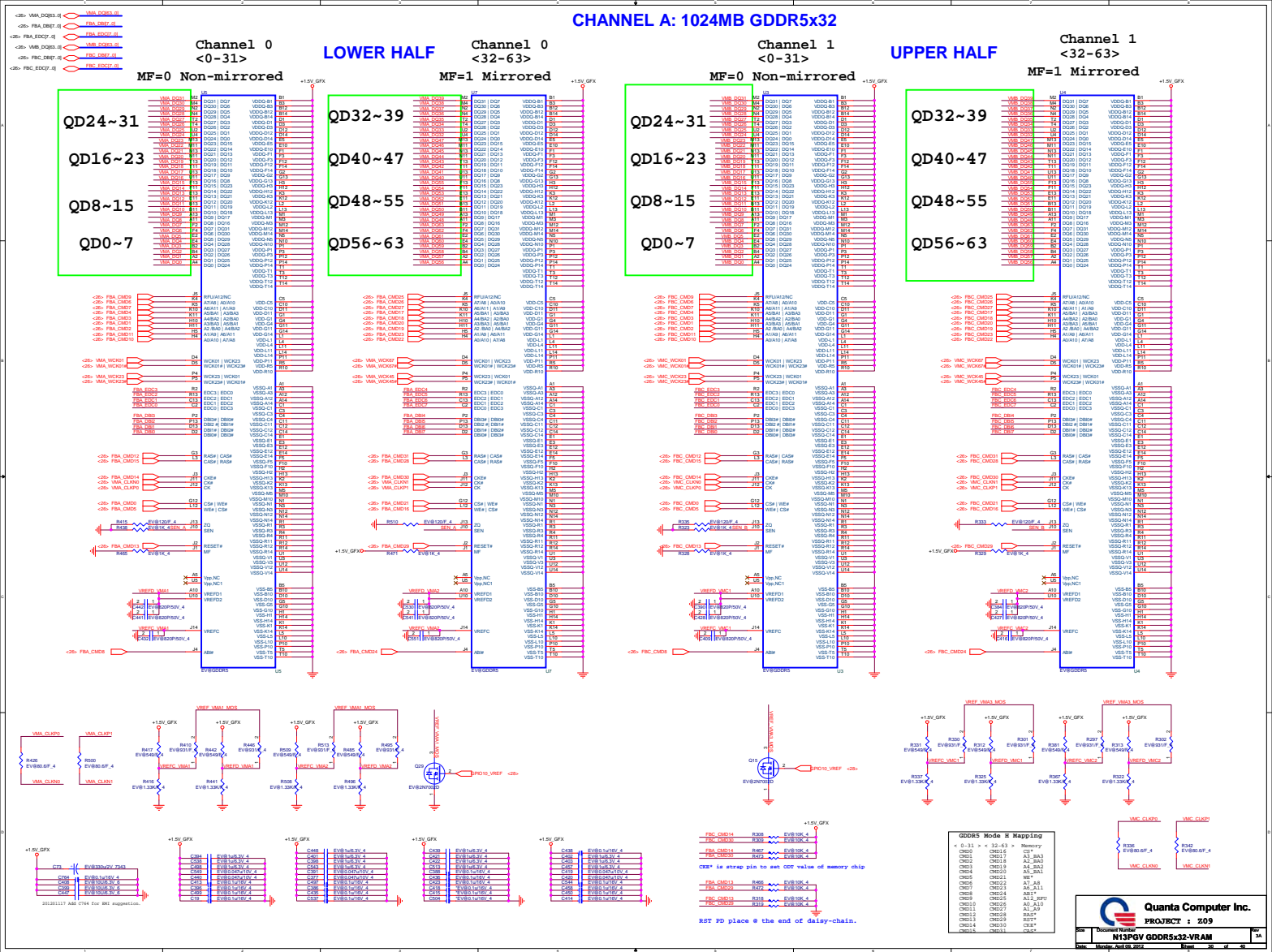


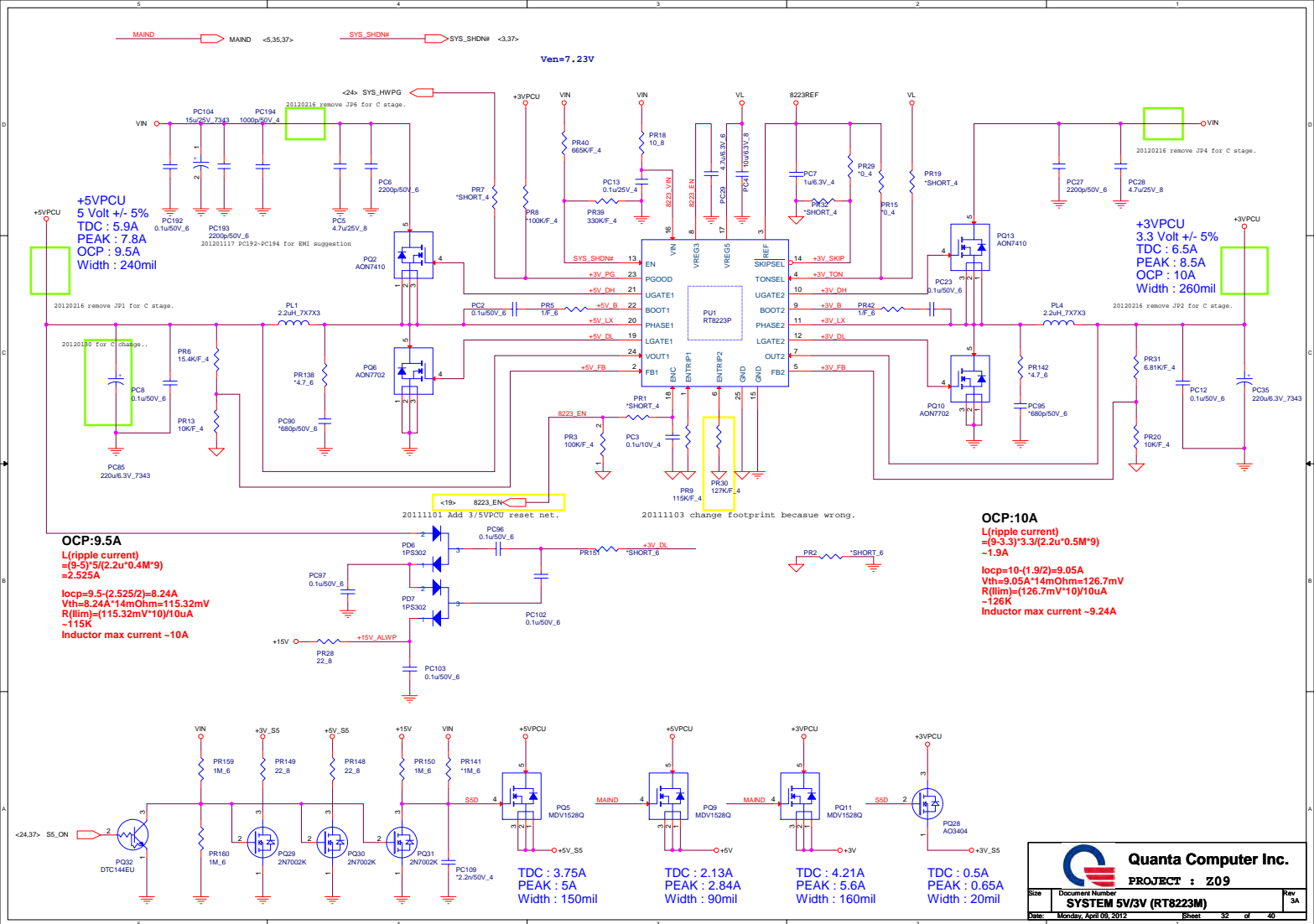
IFPAB ONLY: NO STUFF RSET is default
Required when external resistor is used

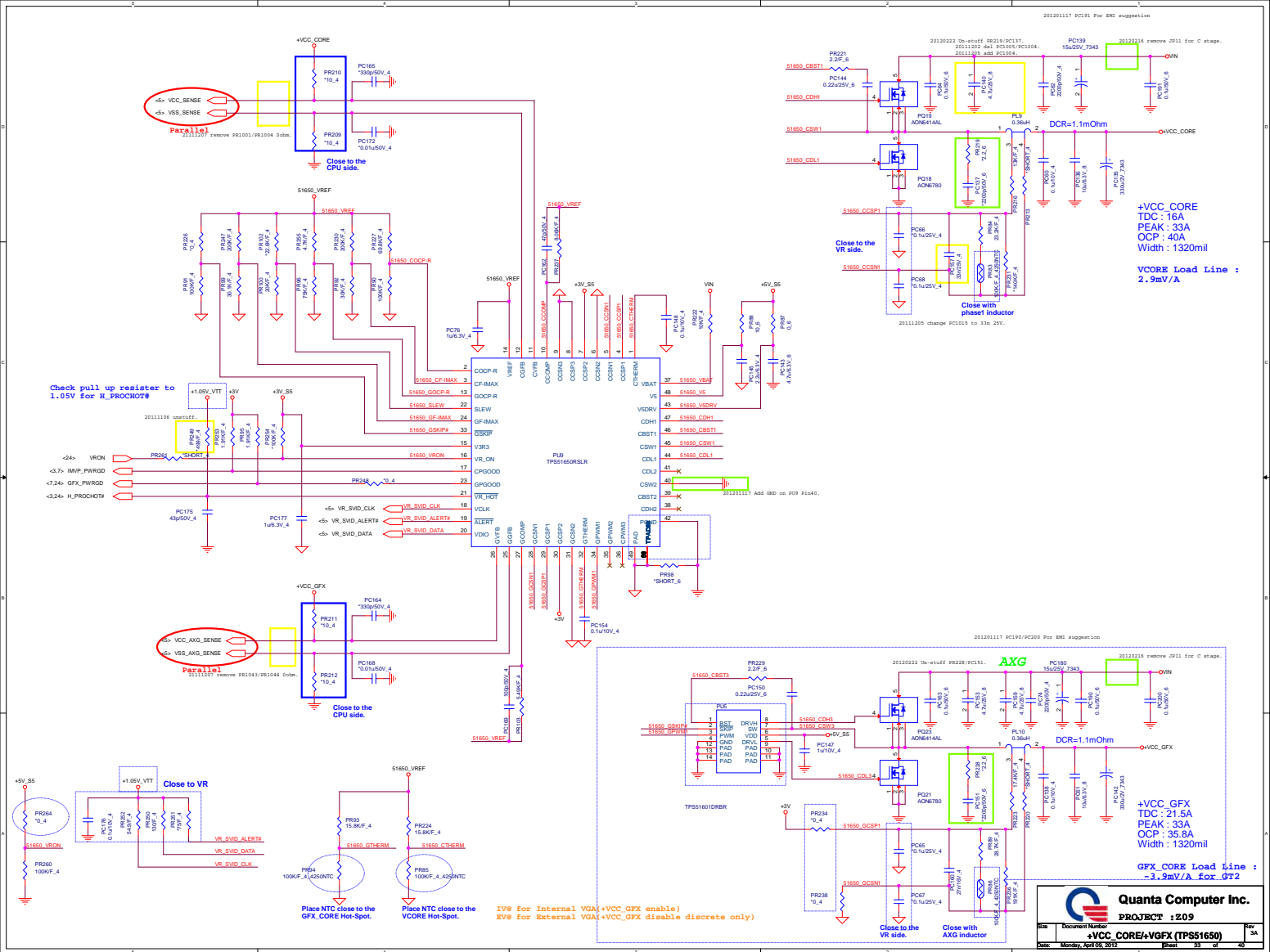


20120201 Change CAP from 27p to 10p.

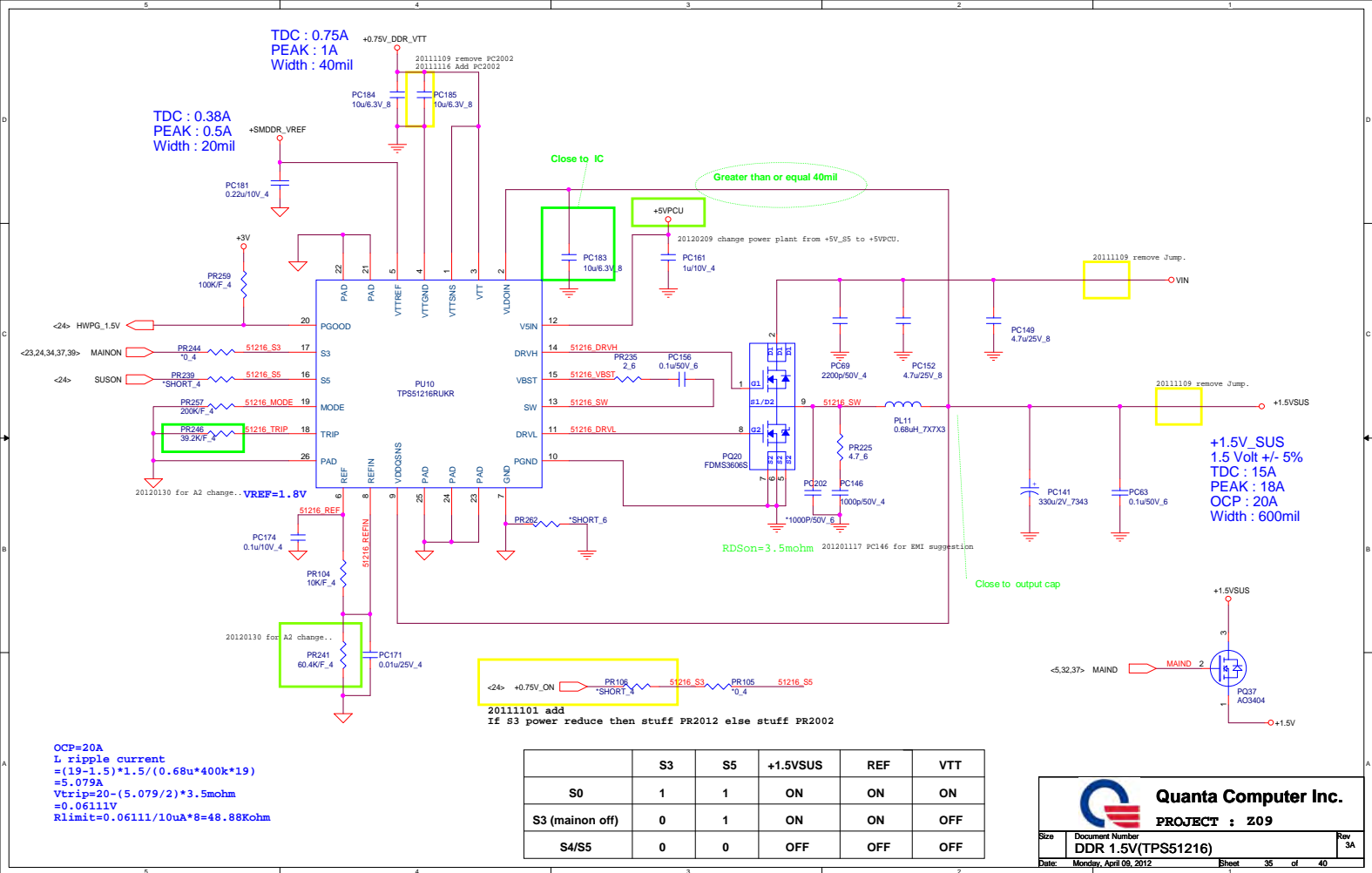


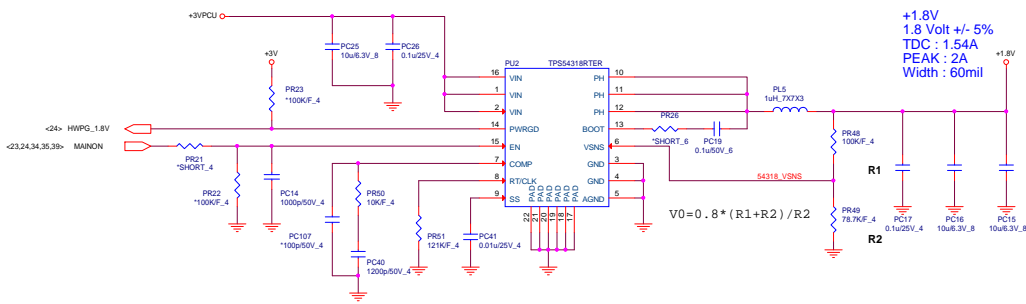




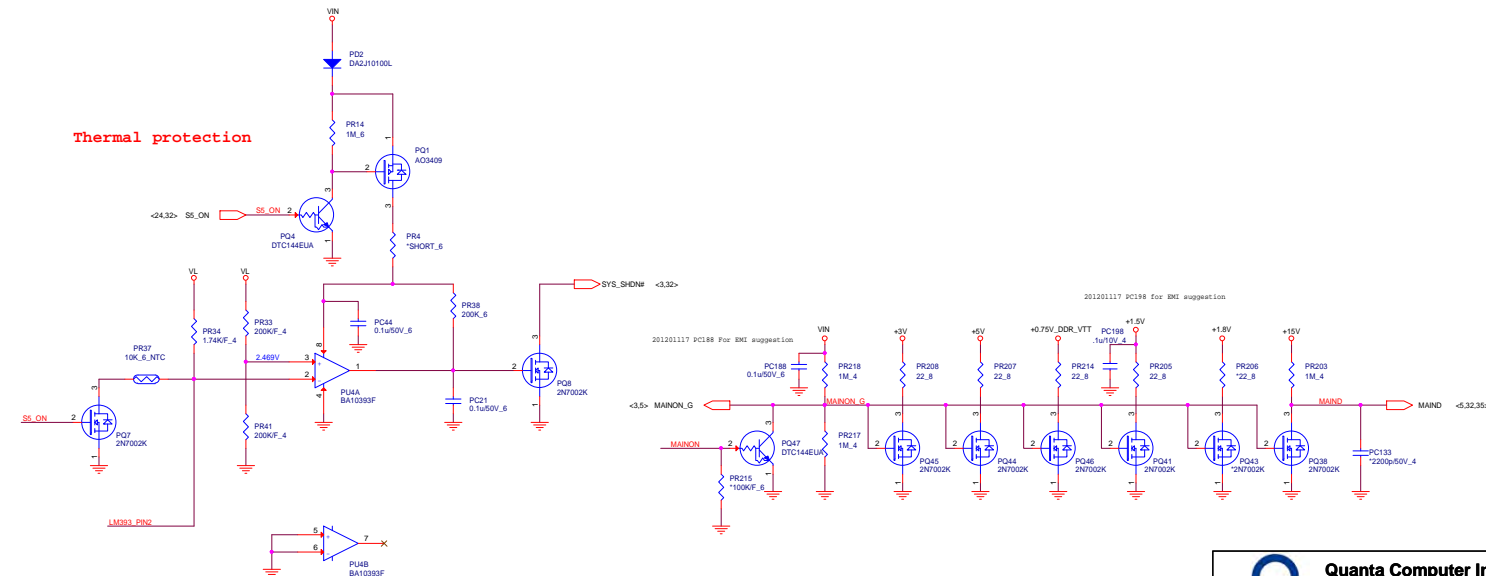




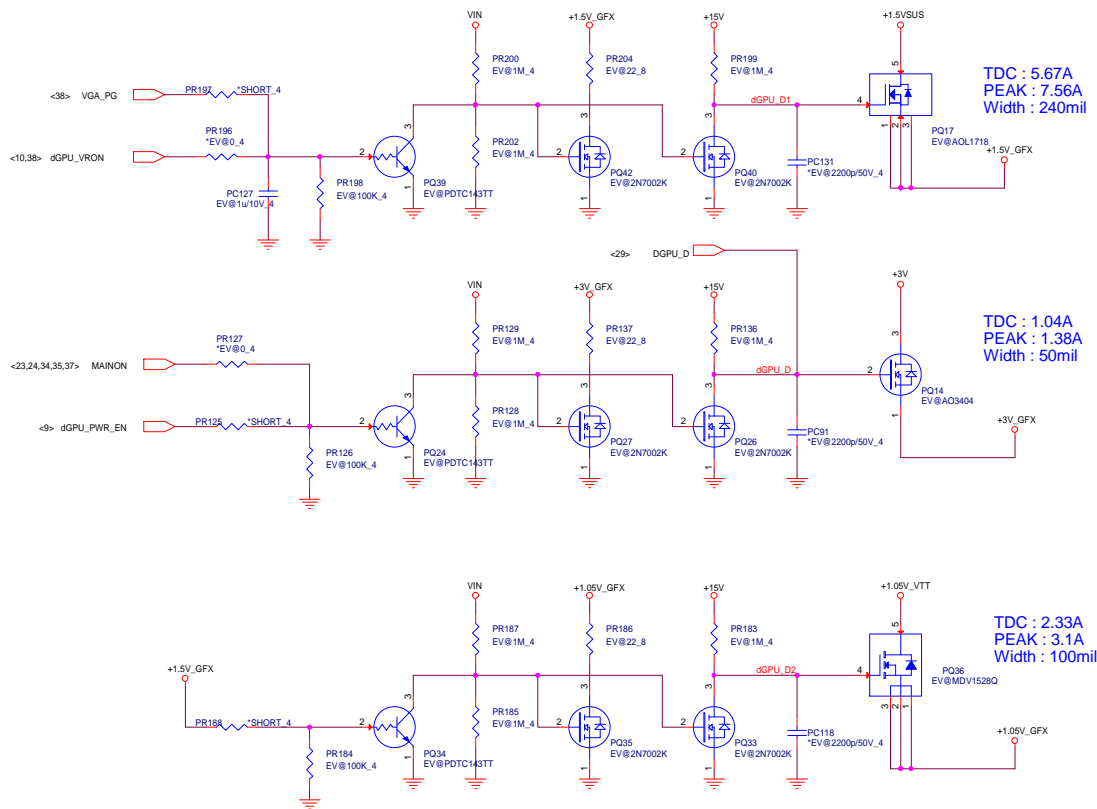




Thermal protection







 Quanta Computer Inc. PROJECT : Z09	DOC NO.	PROJECT MODEL :	Z09	APPROVED BY:	DATE:	2010/7/20
	PART NUMBER		DRAWING BY:		REVISION:	1A