

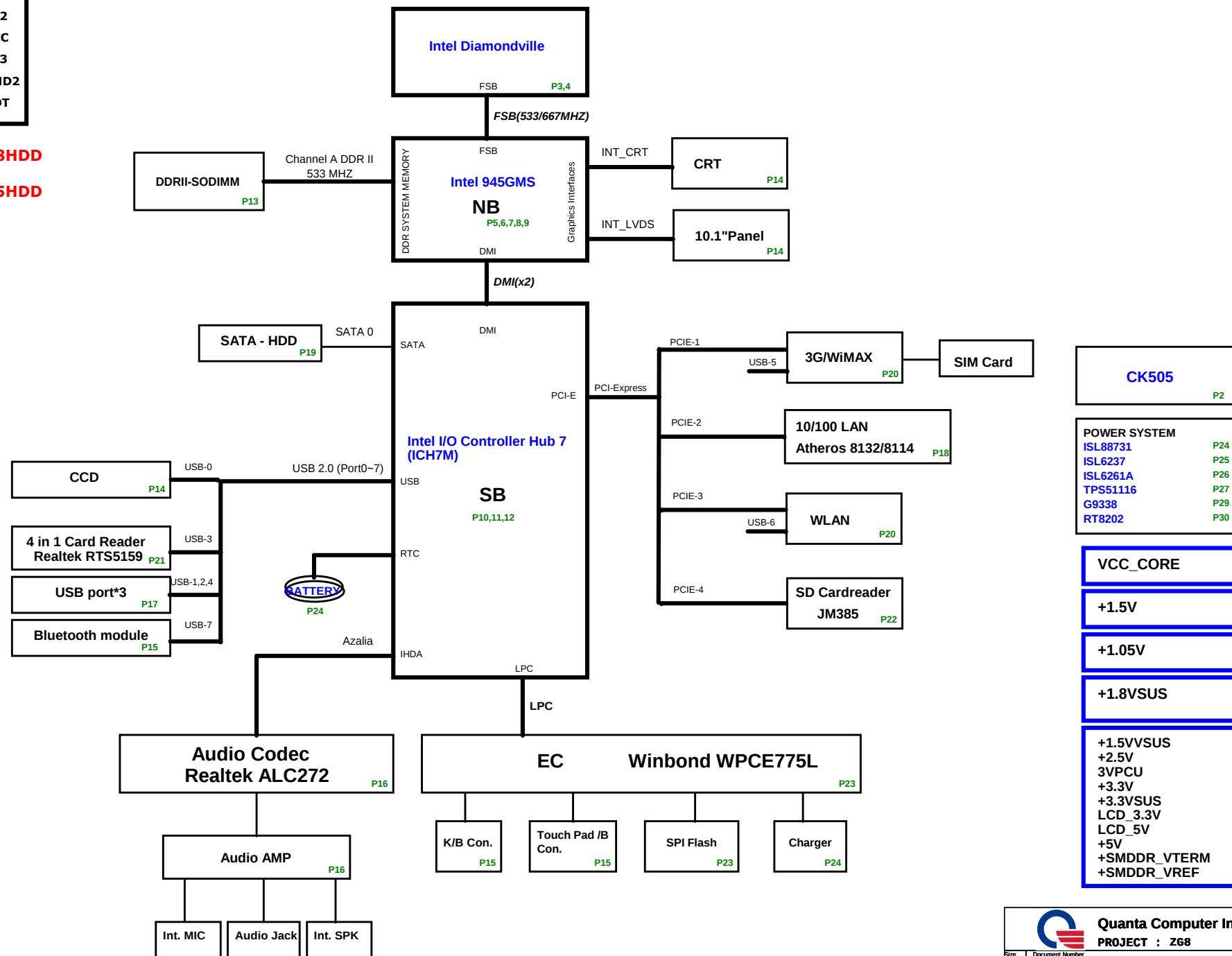
ZG8 Block Diagram

PCB STACK UP

LAYER 1 : TOP
LAYER 2 : GND1
LAYER 3 : IN1
LAYER 4 : IN2
LAYER 5 : VCC
LAYER 6 : IN3
LAYER 7 : GND2
LAYER 8 : BOT

1.8@ for 1.8HDD

2.5@ for 2.5HDD



CK505 (P2)

POWER SYSTEM

ISL88731 (P24)
ISL6237 (P25)
ISL6261A (P26)
TPS51116 (P27)
G9338 (P29)
RT8202 (P30)

VCC_CORE

+1.5V

+1.05V

+1.8VSUS

+1.5VVSUS

+2.5V

3VPCU

+3.3V

+3.3VSUS

LCD_3.3V

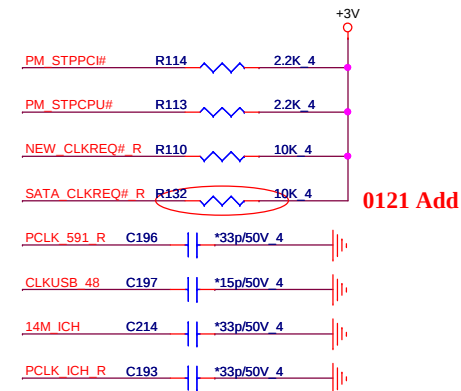
LCD_5V

+5V

+SMDDR_VTERM

+SMDDR_VREF

02



0121 Add

Default

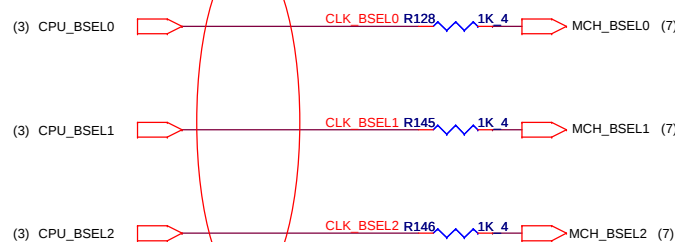
FSC	FSB	FSA	CPU	SRC	PCI
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	1	0	200	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	Reserved		

SLG8SP513VTR ,ICS9LPRS365BKLFT

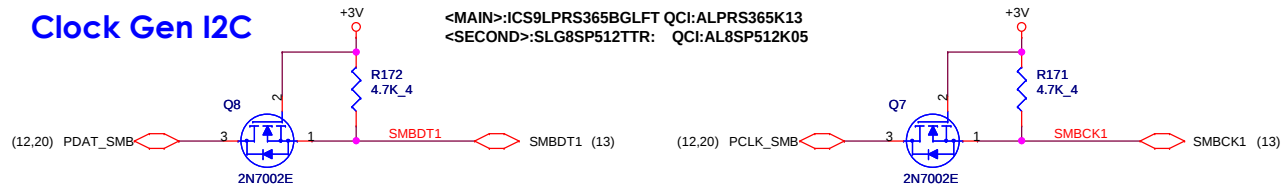
Three circuit diagrams are shown, each representing a pull-up resistor configuration for a PCLK signal. Each diagram consists of a 3V supply connected to a resistor, which is then connected to a PCLK signal line. The resistors are labeled with values like 10K 4 and *10K 4. A note indicates HIGH 27MHz LOW SRC.

- Top Diagram:** A 3V supply is connected to resistor R167 (10K 4), which is connected to PCLK_OZ129. Resistor R168 (*10K 4) is also connected to the 3V supply and the PCLK_OZ129 line.
- Middle Diagram:** A 3V supply is connected to resistor R161 (*10K 4), which is connected to PCLK_591_R. Resistor R155 (10K 4) is also connected to the 3V supply and the PCLK_591_R line. A note indicates HIGH 27MHz LOW SRC.
- Bottom Diagram:** A 3V supply is connected to resistor R151 (*10K 4), which is connected to PCLK_ICH_R. Resistor R152 (10K 4) is also connected to the 3V supply and the PCLK_ICH_R line.

To NB



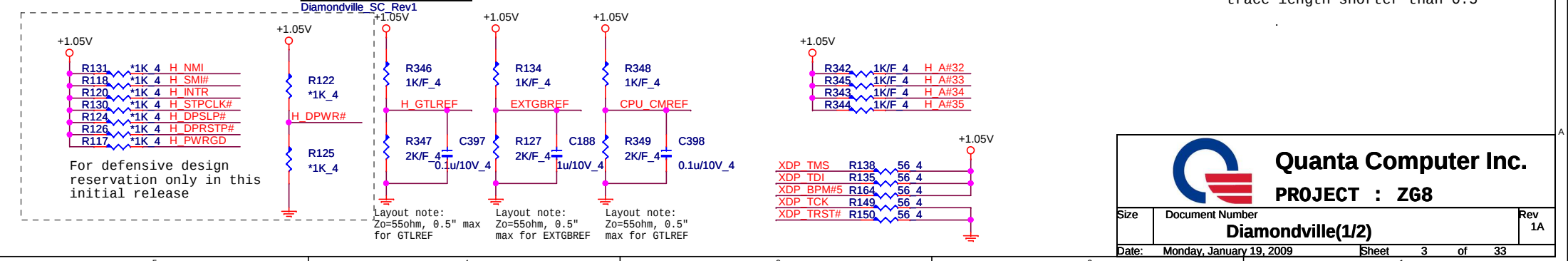
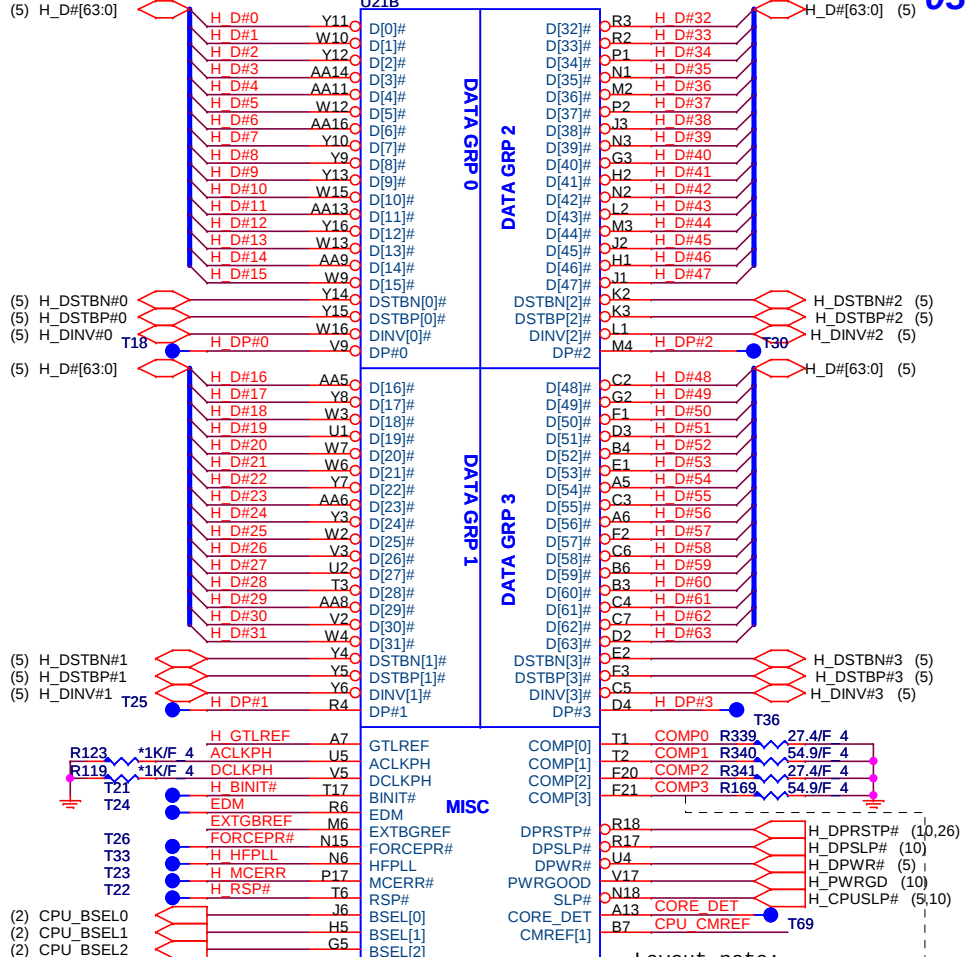
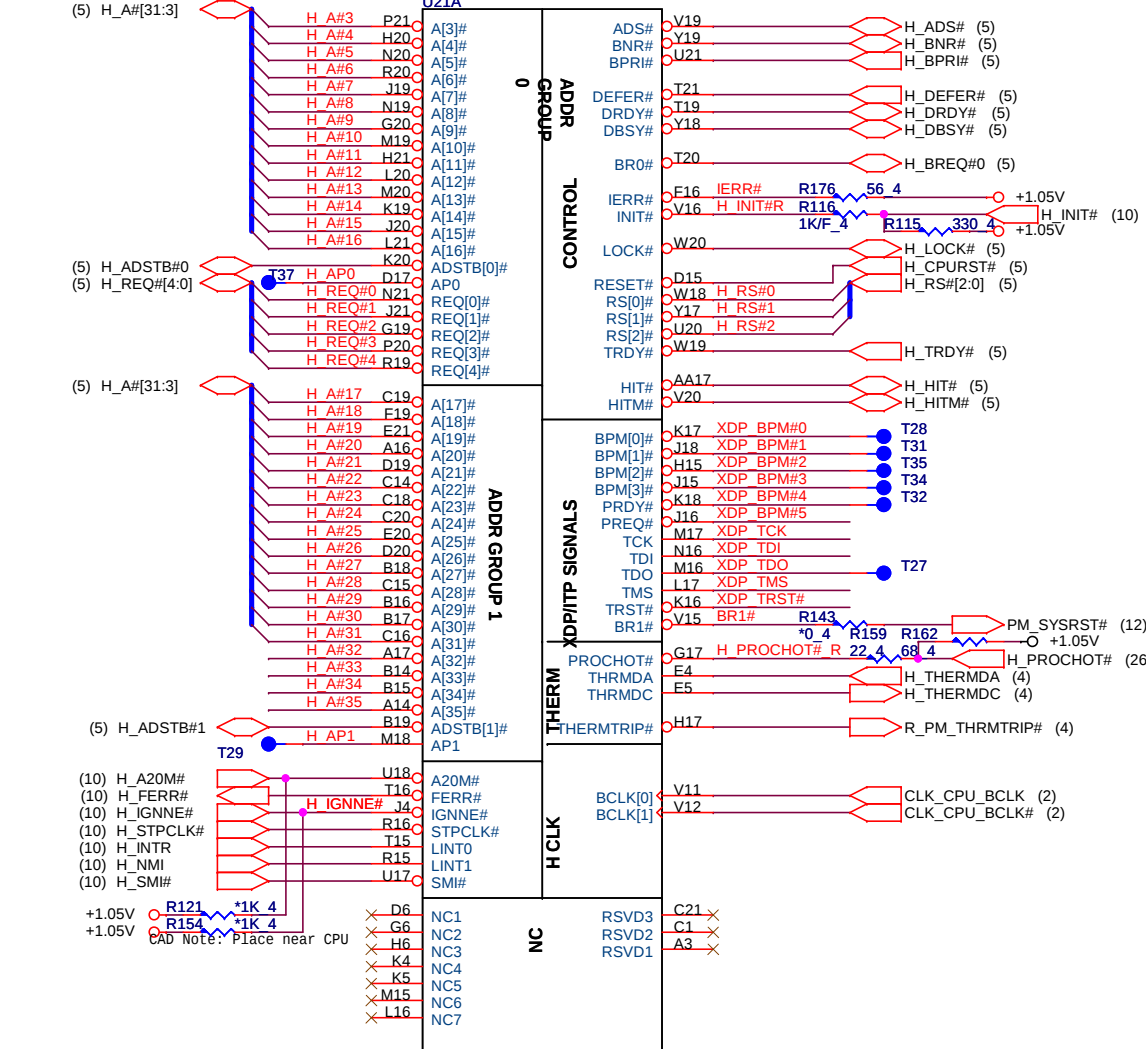
<MAIN>:ICS9LPRS365BGLFT QCI:ALPRS365K13
<SECOND>:SLG8SP512TTR: QCI:AL8SP512K05



Quanta Computer Inc.
PROJECT : ZG8

Size	Document Number	Rev
	CLOCK GENERATOR	1/
Date:	Tuesday, February 03, 2009	Sheet 2 of 33

CPU-1(CPU)



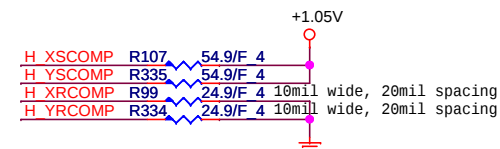
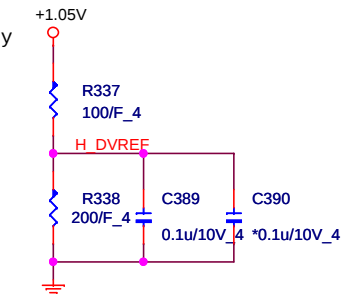
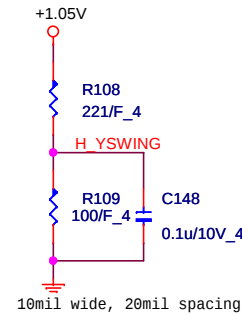
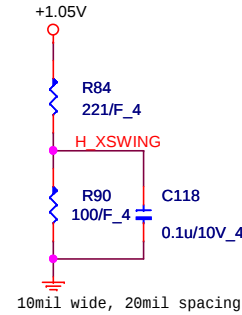
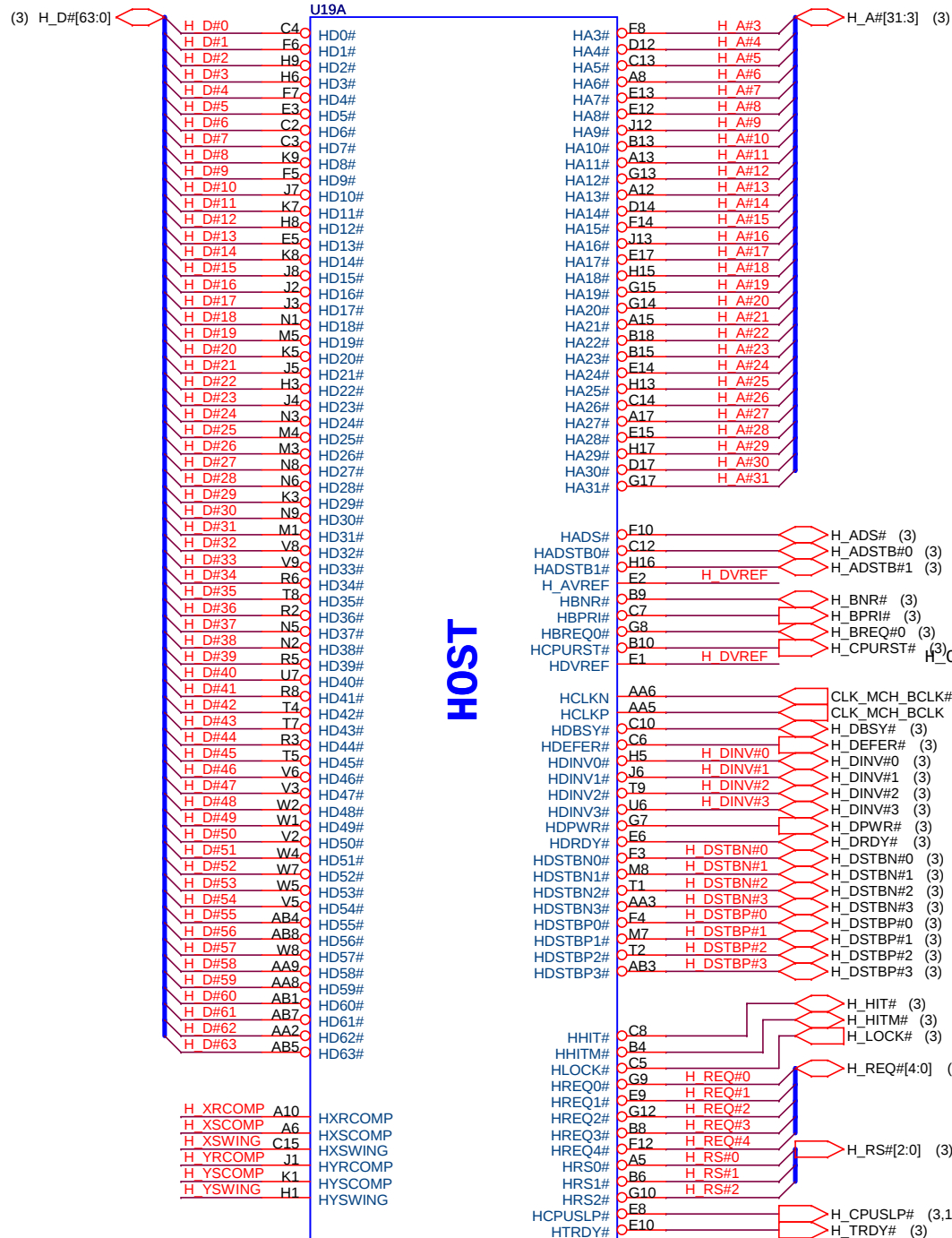


Quanta Computer Inc.
PROJECT : ZG8

Size	Document Number	Rev 1A
Diamondville(1/2)		
Date: Monday, January 19, 2009	Sheet 3	of 33



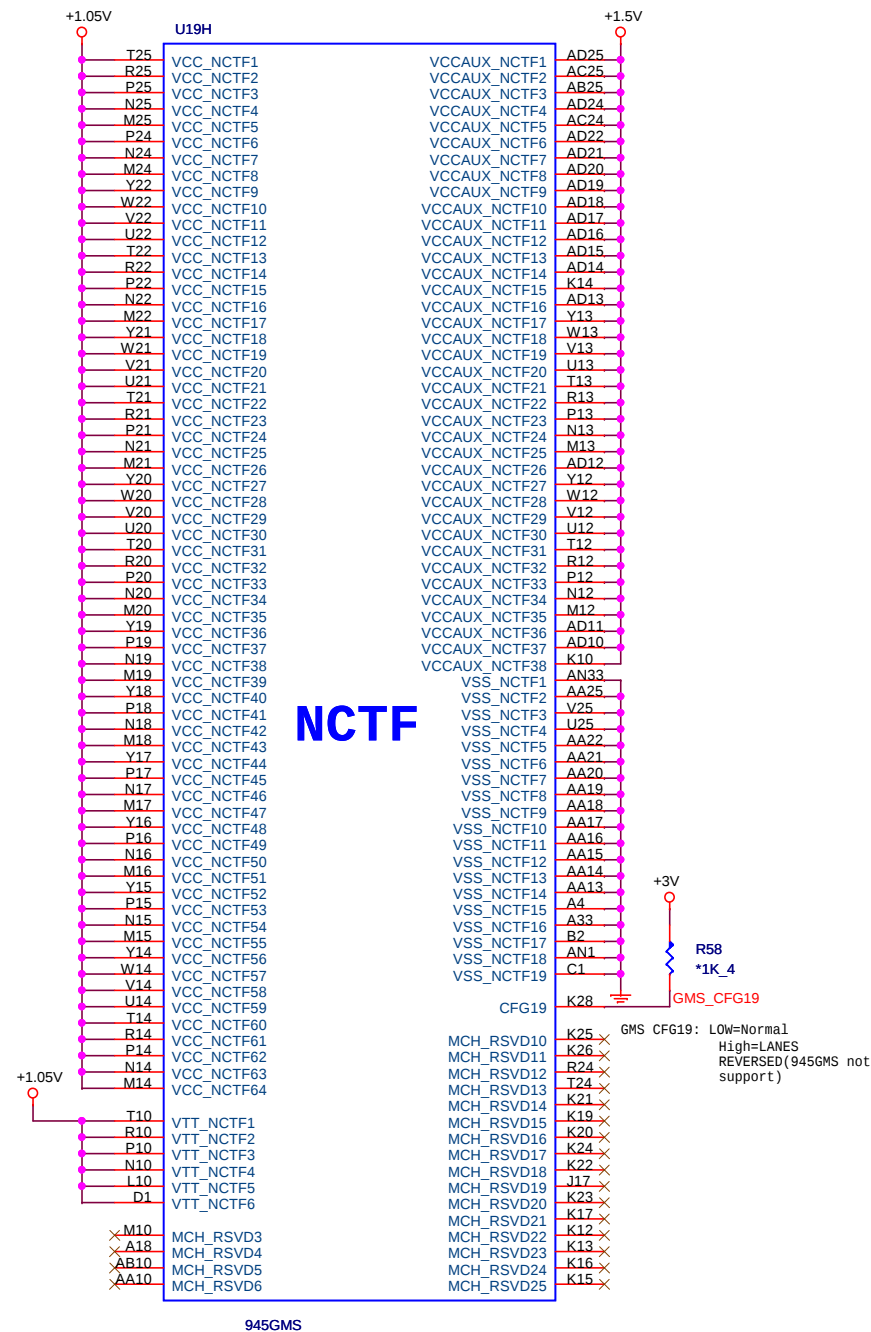
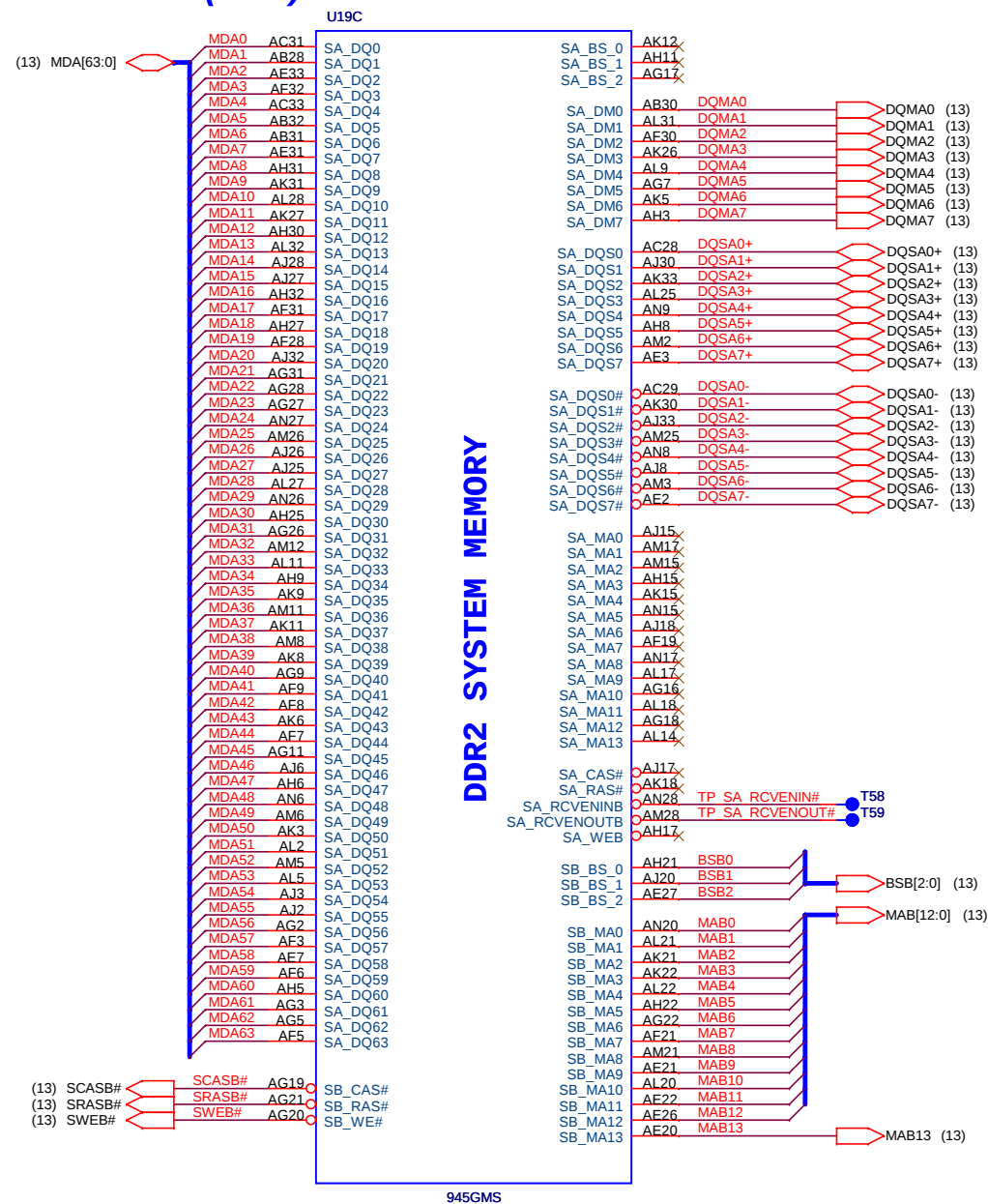
125 Degree Protection(CPU)



Quanta Computer Inc.

PROJECT : ZG8

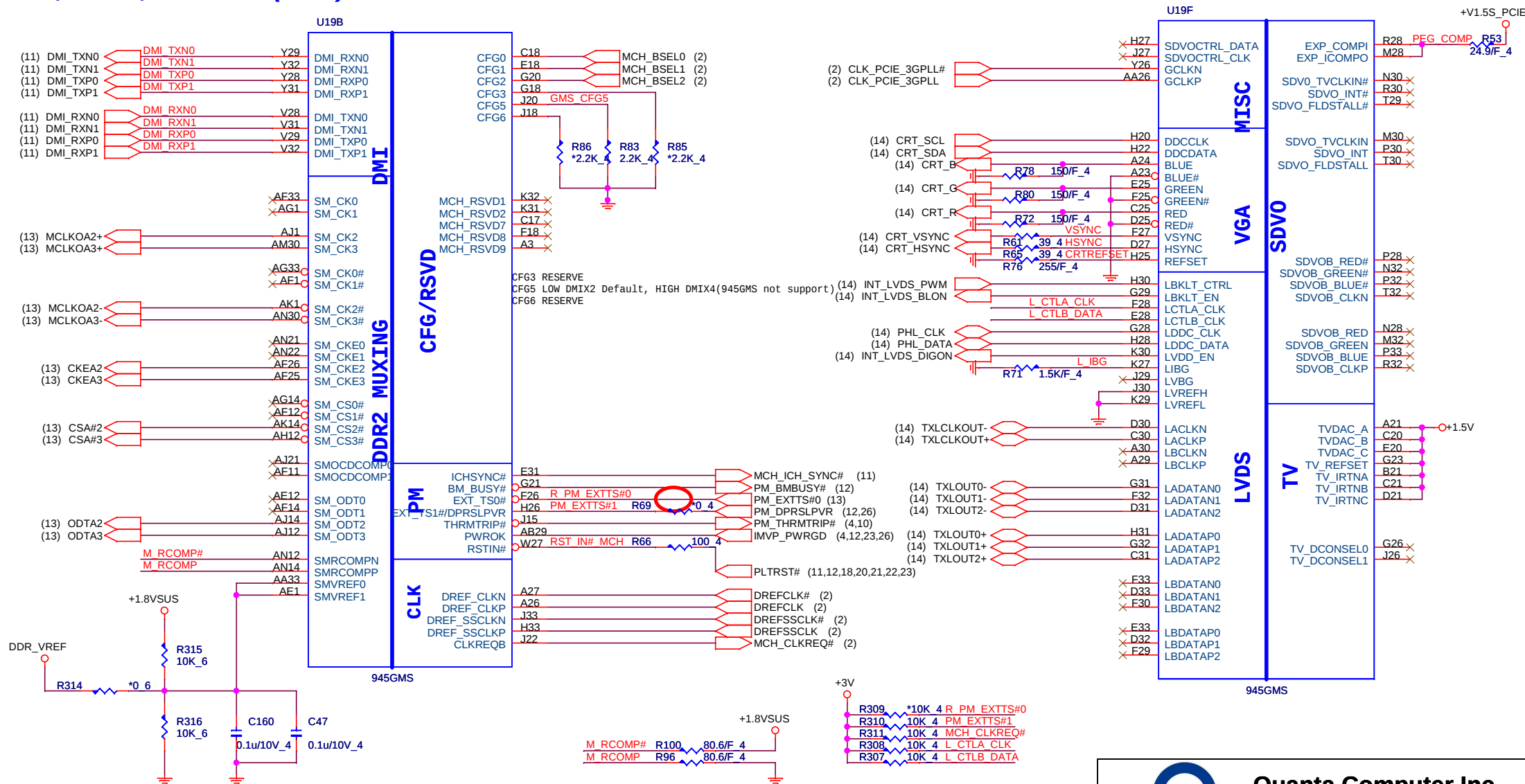
Size	Document Number	Rev
	945GMS HOST	1A
Date:	Monday, January 19, 2009	Sheet 5 of 33



Quanta Computer Inc.
PROJECT : ZG8

DMI, LVDS, DDR CLK(CLG)

07



Quanta Computer Inc.
PROJECT : ZG8

Size	Document Number	Rev
	945GMS LVDS, DMI, DDR CLK	1A
Date:	Monday, January 19, 2009	Sheet 7 of 33



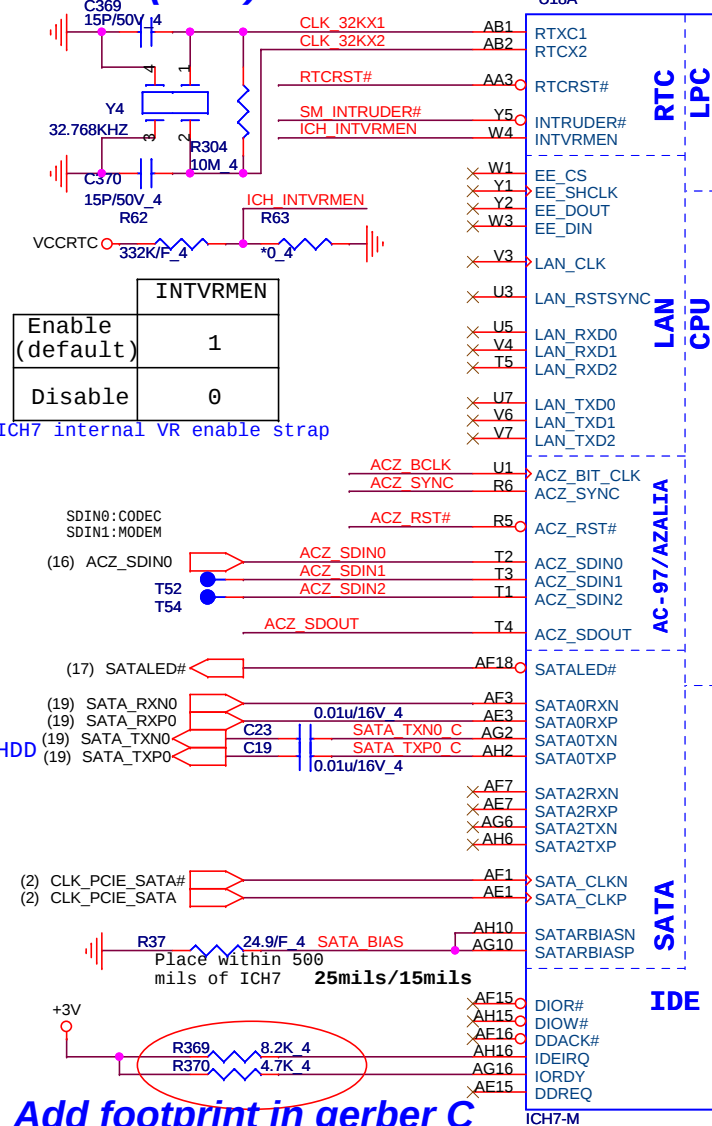
09



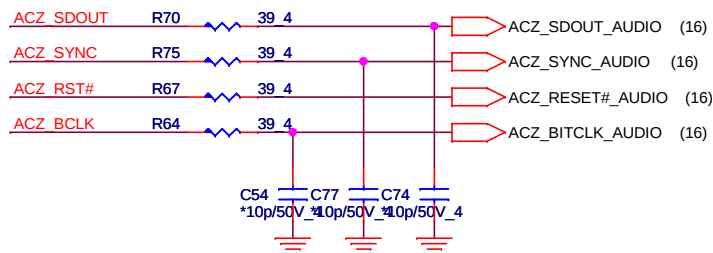
PROJECT : ZG8

Rev	1
-----	---

ICH7-M(CLG) 1/7 Change CAP to 15P for crystal precision



Add footprint in gerber C



COMPONENTS

945GMS

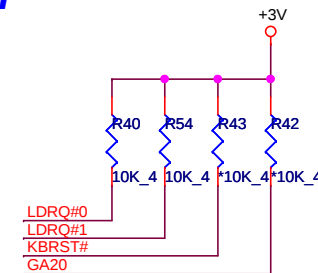
ICH7-M

P/N

AJSLB2R0T00

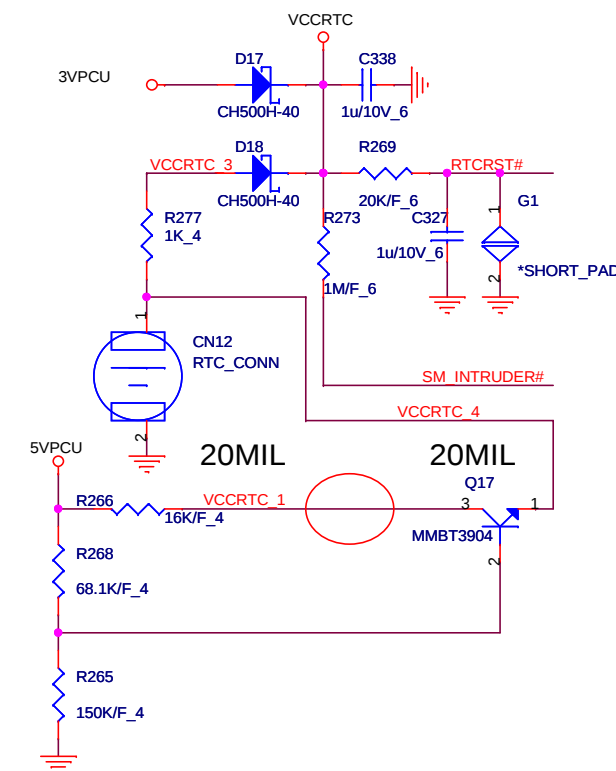
AJSL8YB0T21

Pull-UP



10

RTC(RTC)

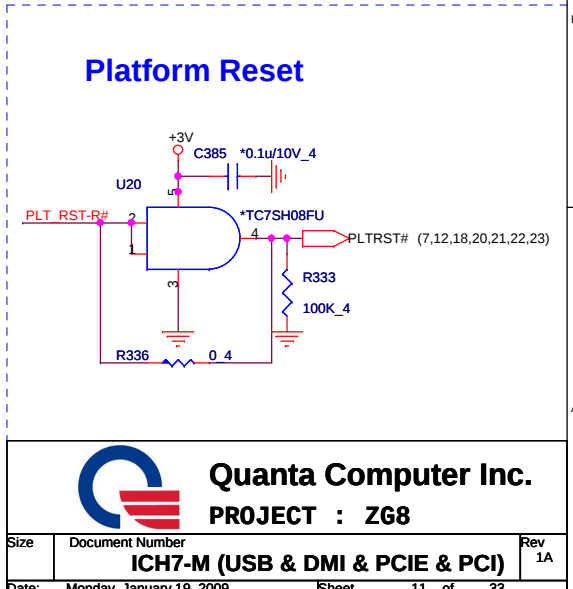
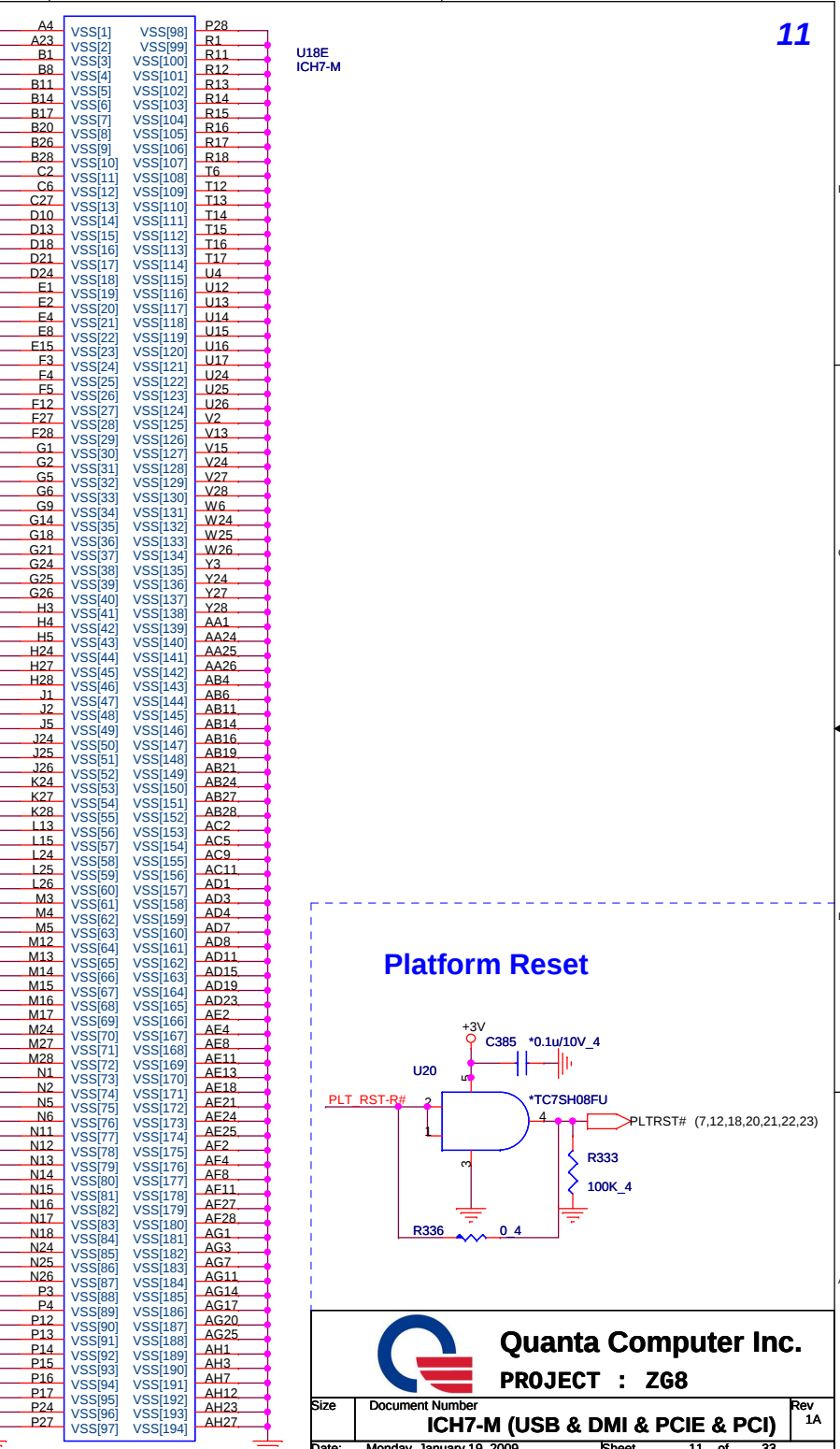
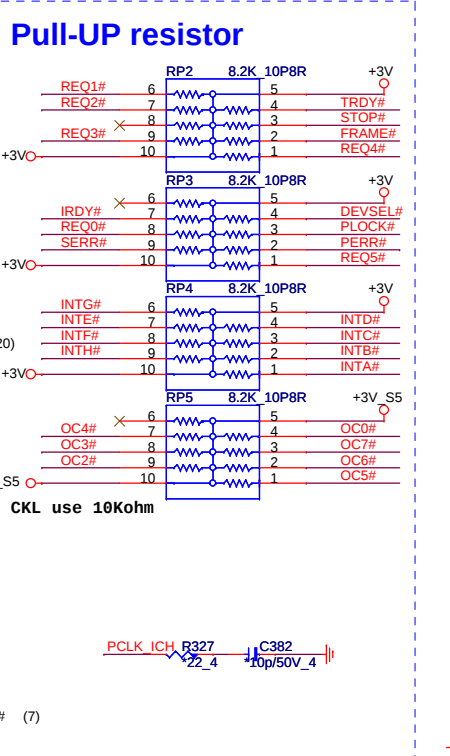
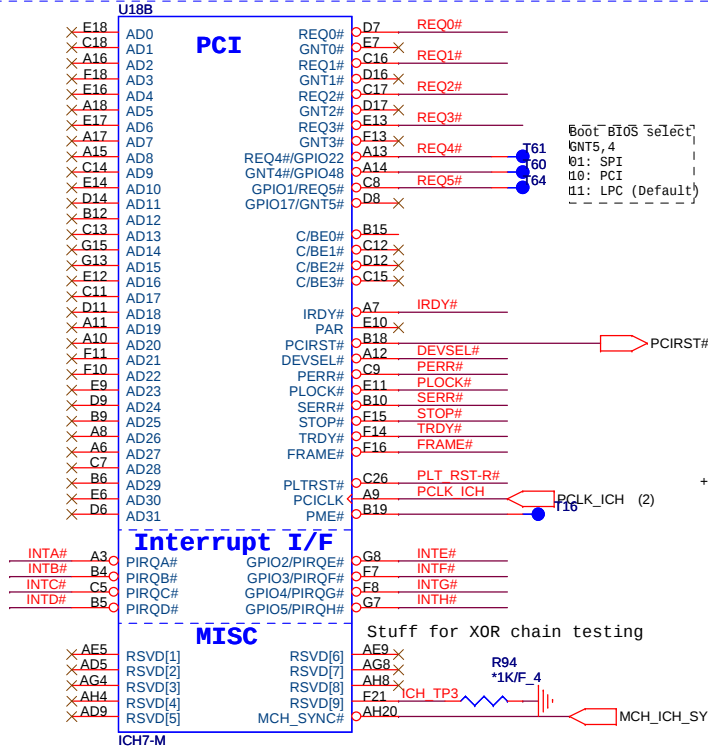
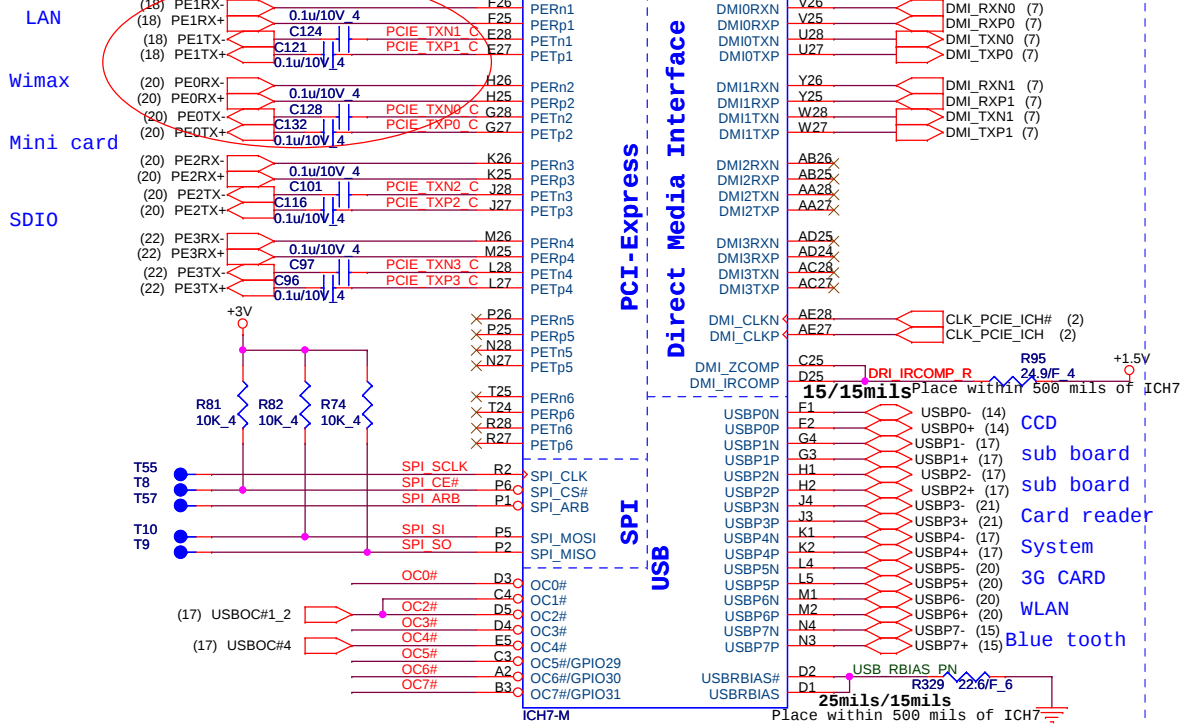


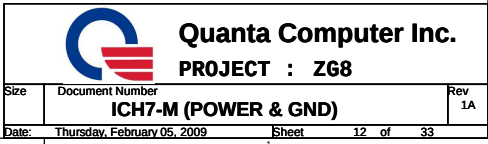
Quanta Computer Inc.
PROJECT : ZG8

Size	Document Number	Rev
	ICH7-M (CPU, SATA, IDE,LPC)	1A
Date:	Tuesday, February 03, 2009	Sheet 10 of 33

ICH7-M(CLG)

Exchange LAN & Wimax

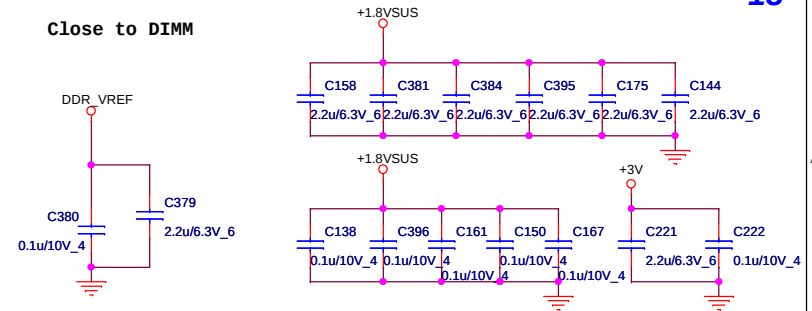




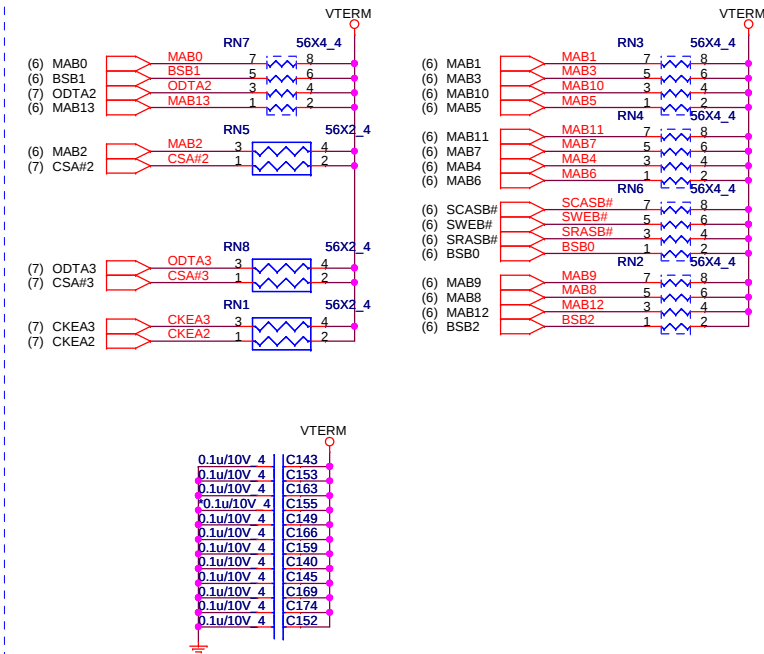
DDR II SOCKET(DDR)

13

Close to DIMM



Termination resistor

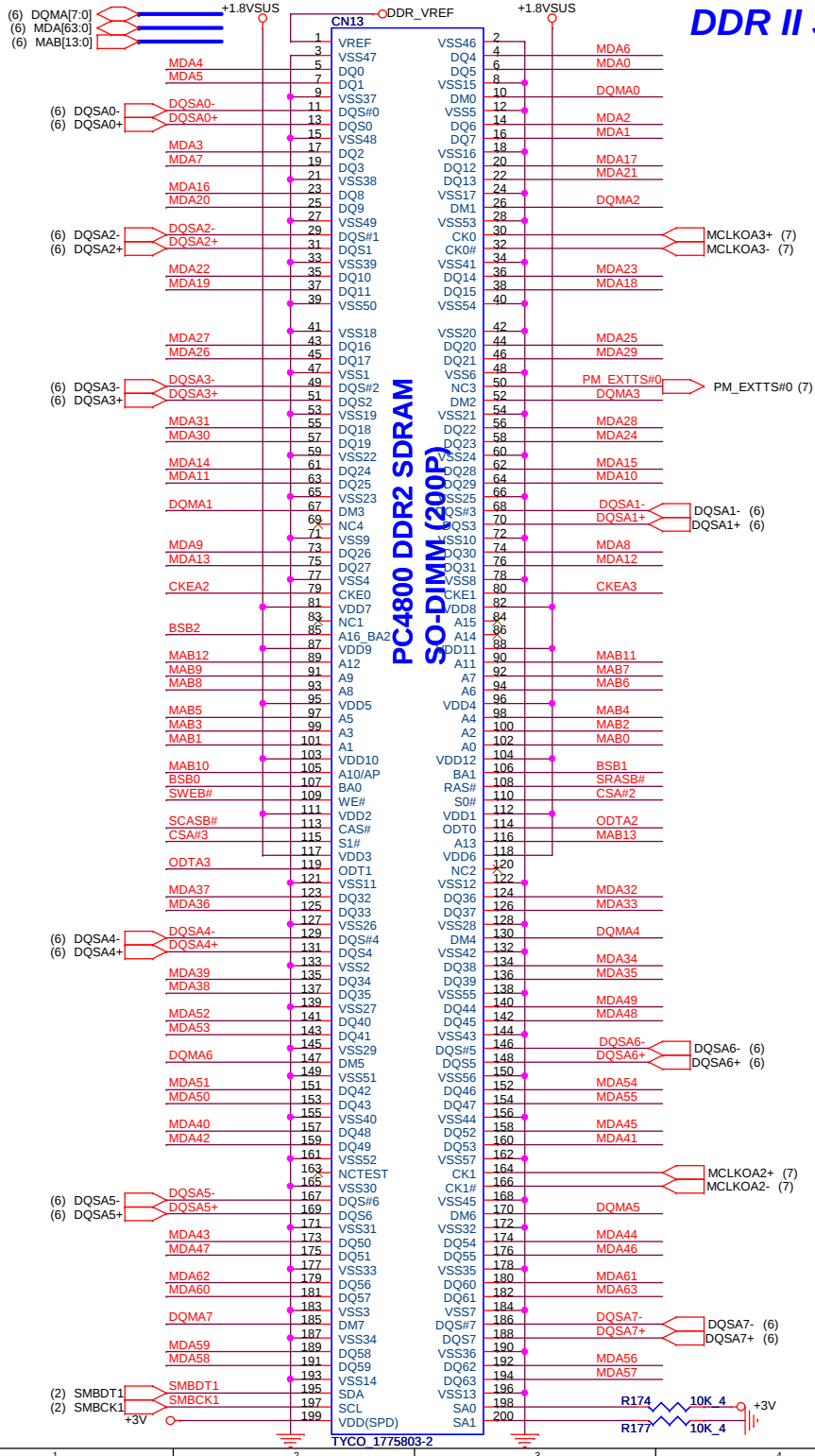


STD H: 4.0mm

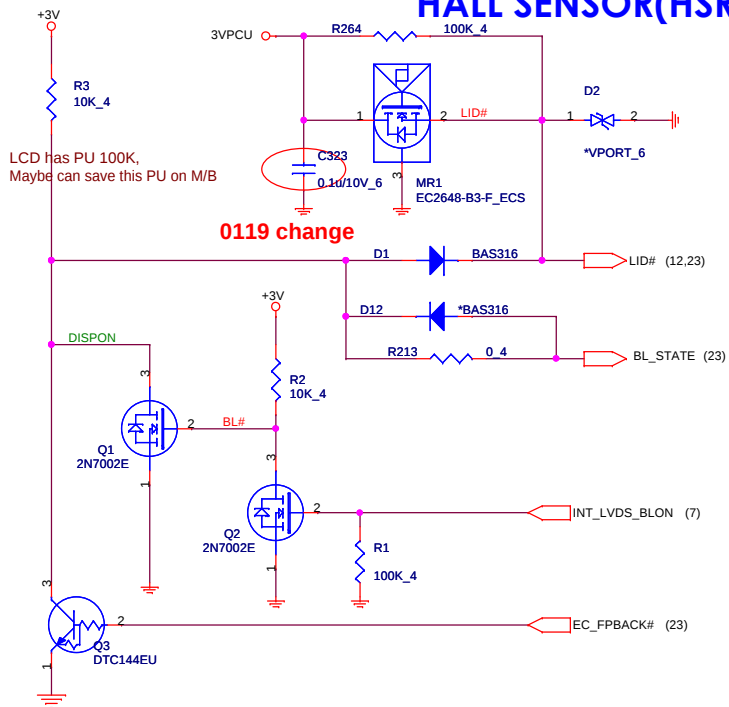
SMbus address A1

CLOCK 1,2
CKE 2,3

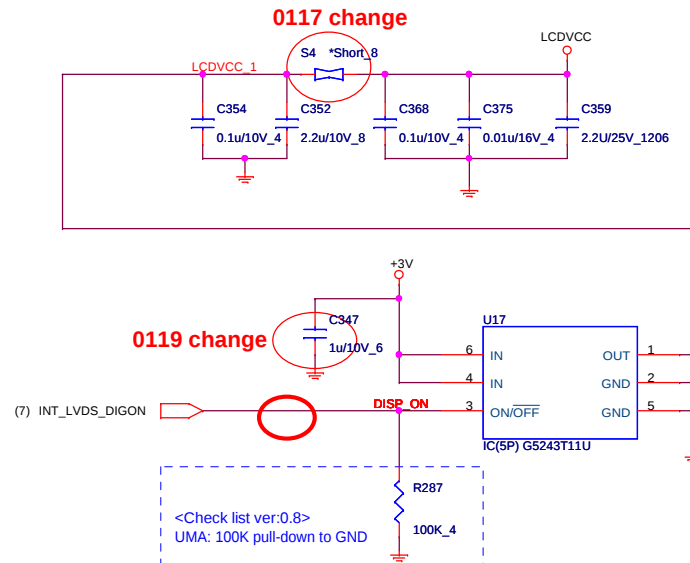
 Quanta Computer Inc. PROJECT : Z68		
Size	Document Number	Rev 1A
DDR2 SO-DIMM(200P)		
Date: Monday, February 02, 2009	Sheet 13 of 33	



HALL SENSOR(HSR)

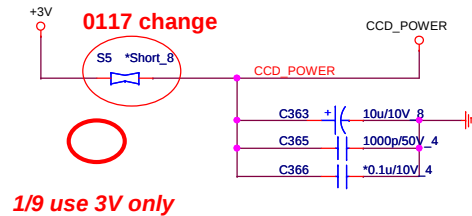


LCD POWER SWITCH(LDS)



CAMERA POWER(CCD)

14

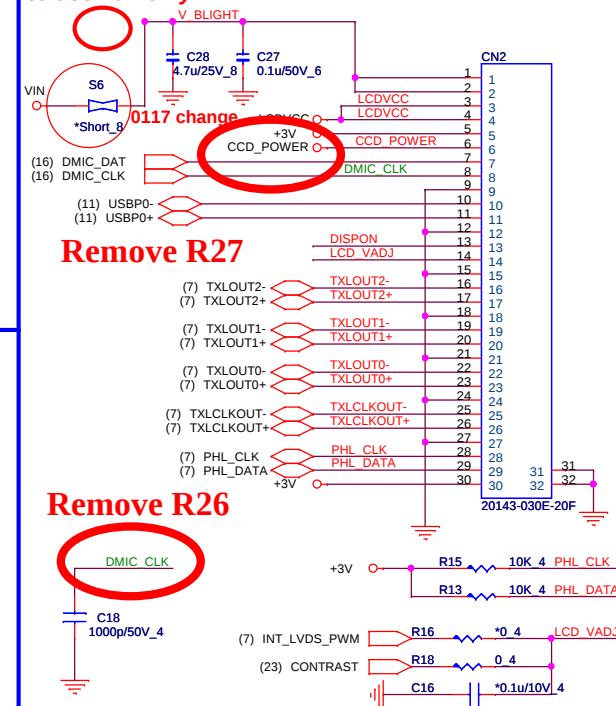


LCD MODULE(LDS)

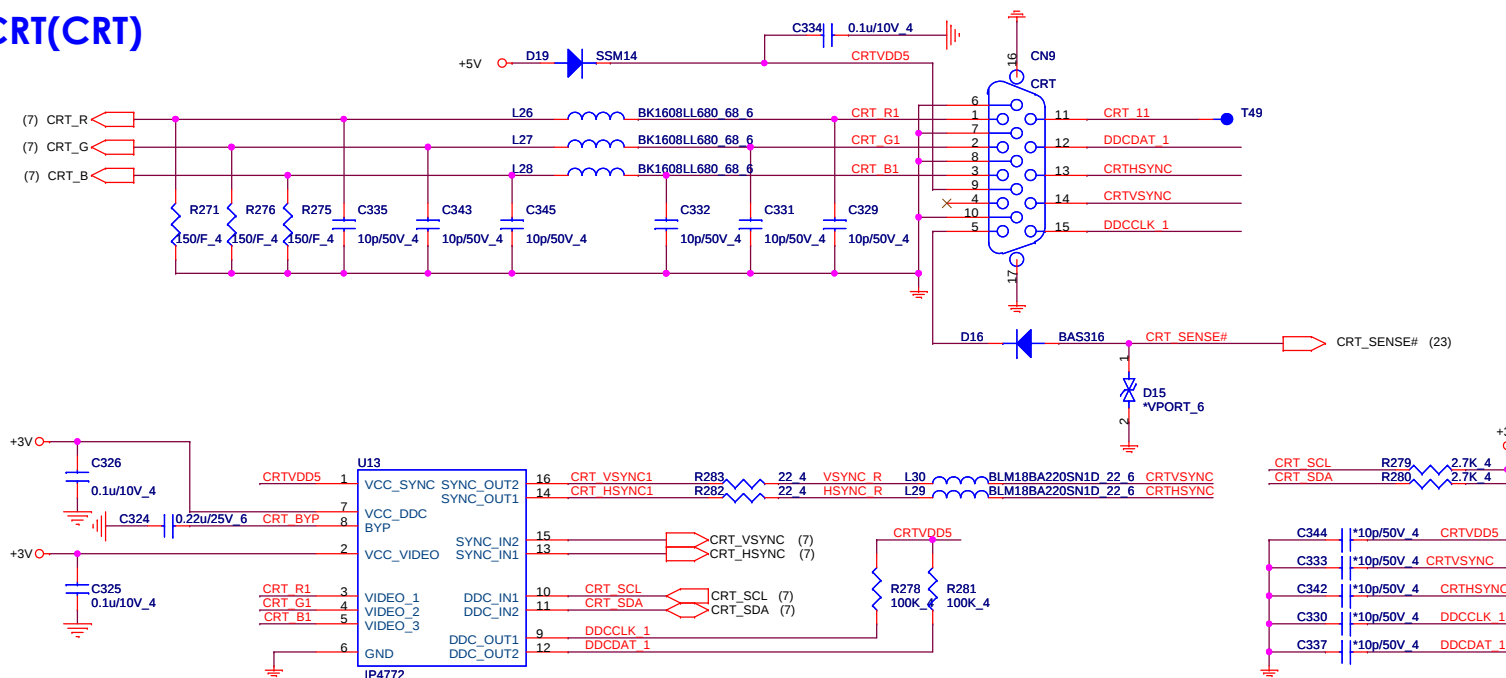
V_BLIGHT

8.9"(5.5V):supply 5V 10.1":supply 19V

1/9 use 19V only



CRT(CRT)

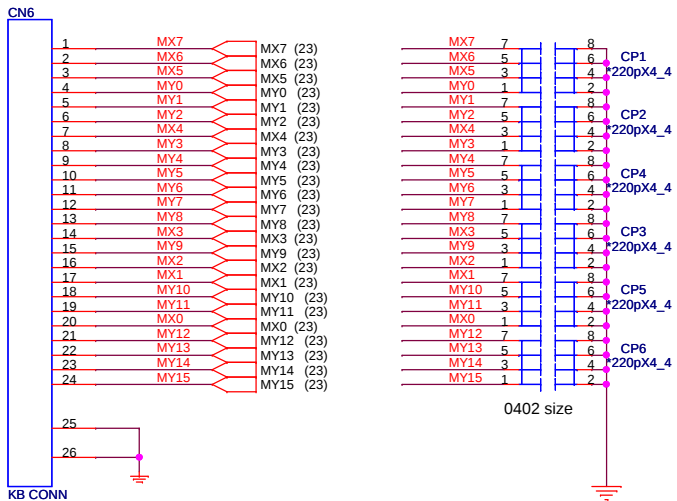


Quanta Computer Inc.

PROJECT : ZG8

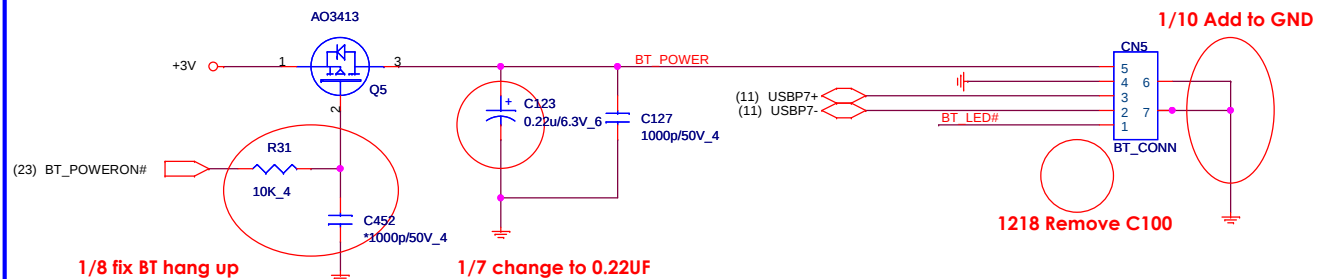
Size	Document Number	Rev
	CRT/LVDS	1A
Date:	Monday, February 02, 2009	Sheet 14 of 33

KEYBOARD(KBC)

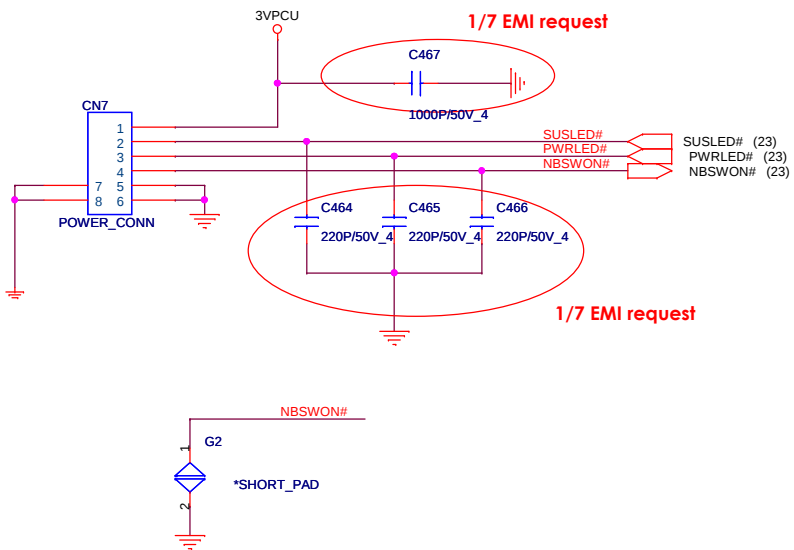


BLUETOOTH(BTM)

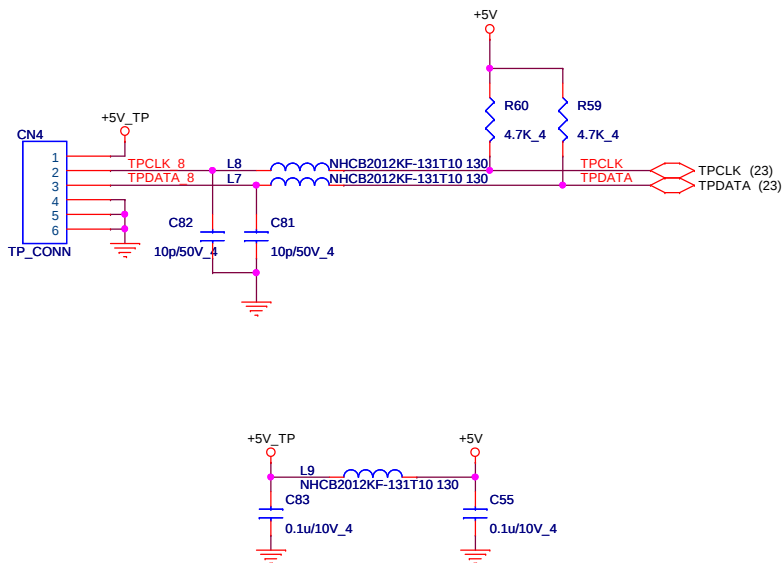
15



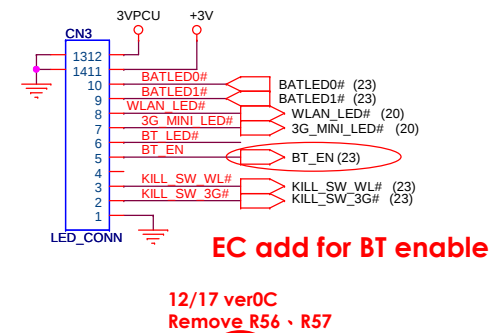
Power On Connector(UIF)



TOUCH PAD(TPD)



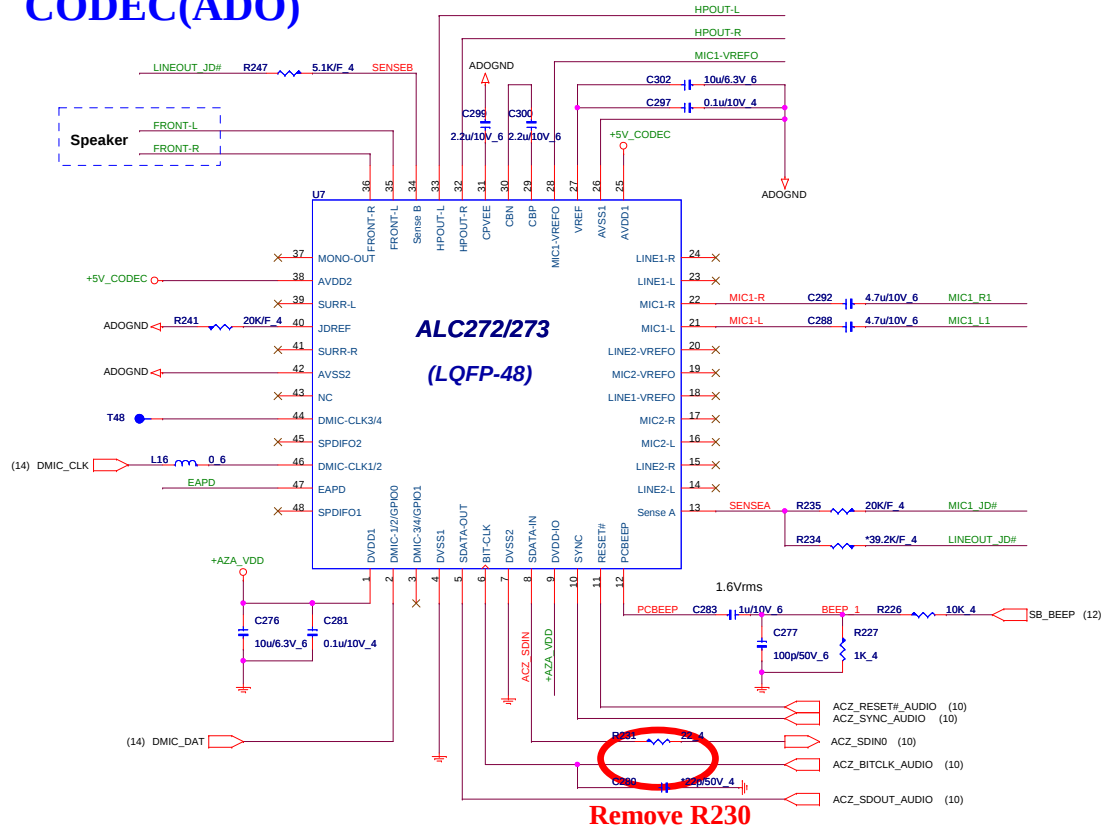
LED CONNECTOR(KBC)



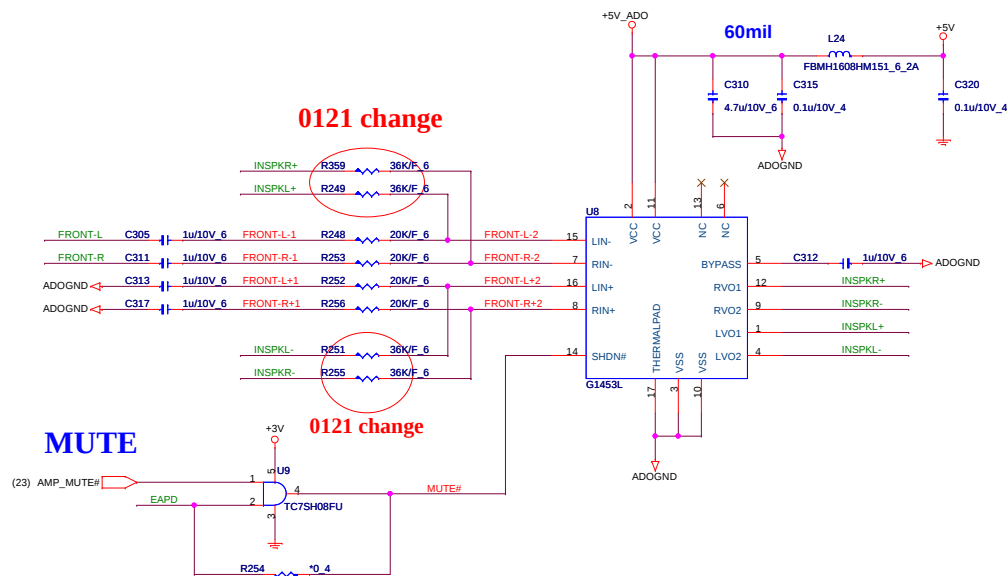
Quanta Computer Inc.
PROJECT : ZG8

Size	Document Number KB/BT/TP/LED/Power Connector	Rev 1A
Date:	Thursday, February 05, 2009	Sheet 15 of 33

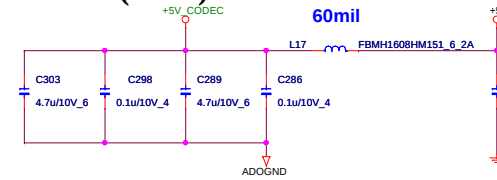
CODEC(ADO)



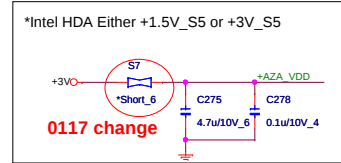
Speaker Amplifier(AMP)



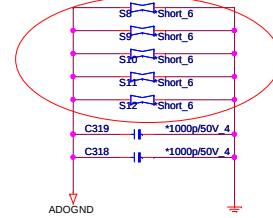
Codec Power(ADO)



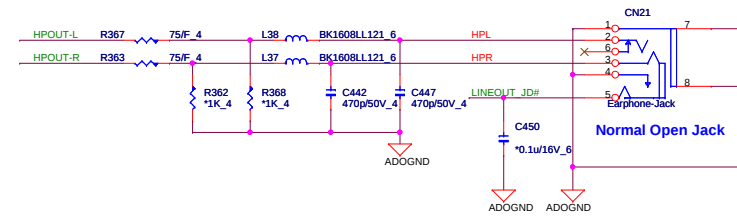
HDA Power(ADO)



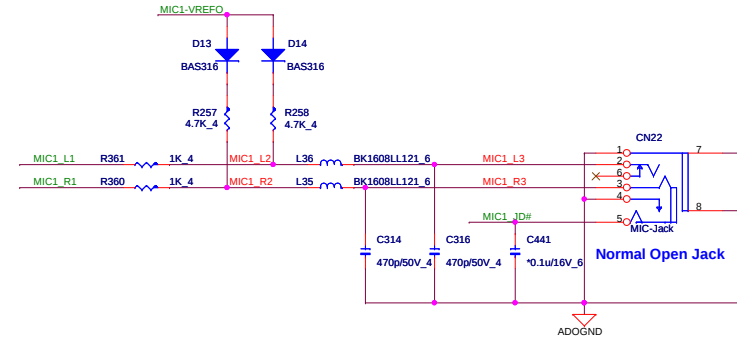
0117 Change short pad



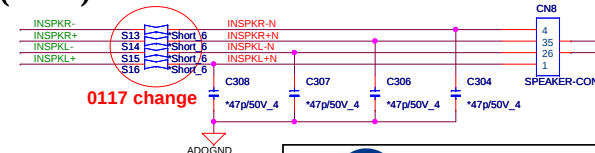
Earphone(AMP)



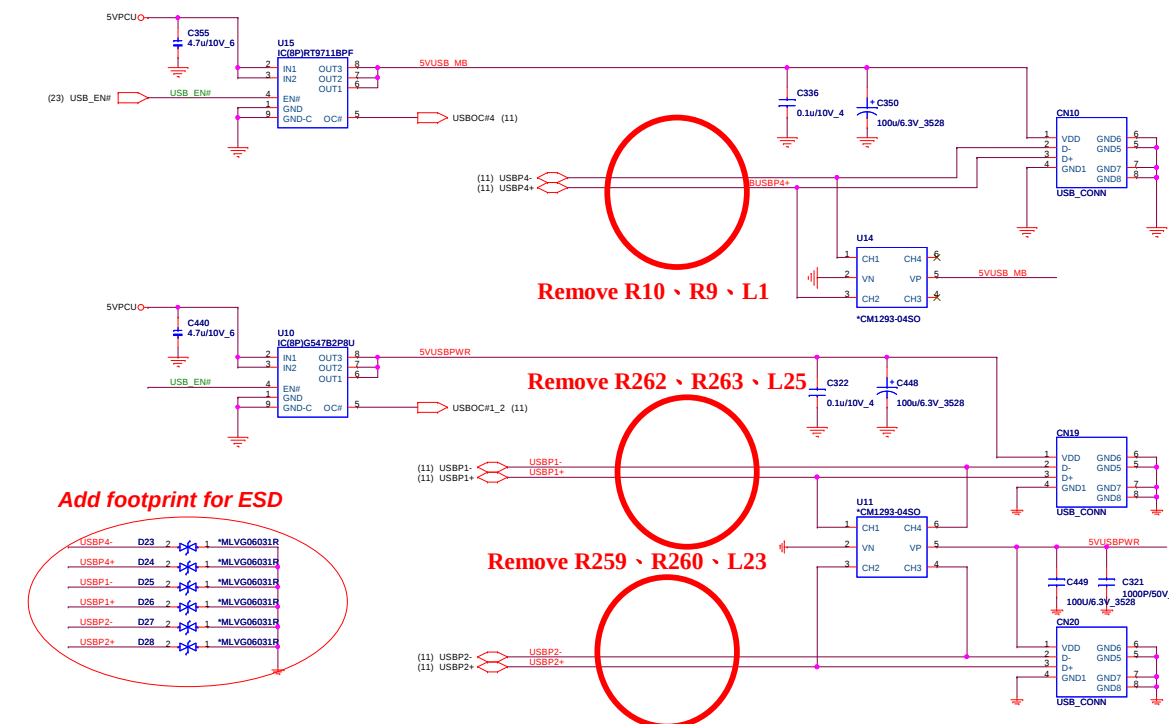
System MIC(AMP)



Speaker(AMP)

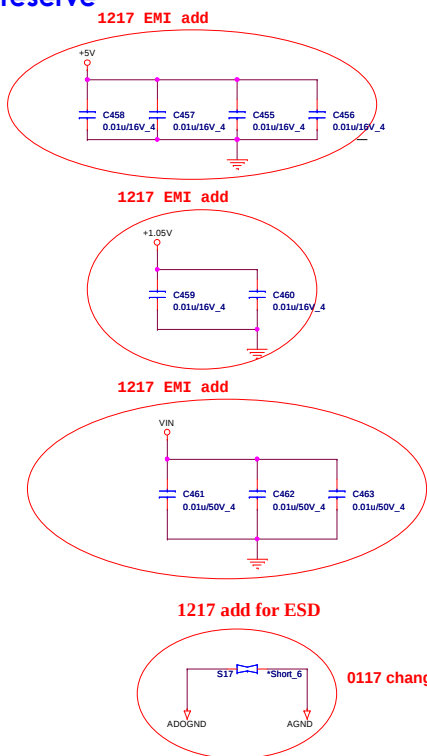


USB(USB)

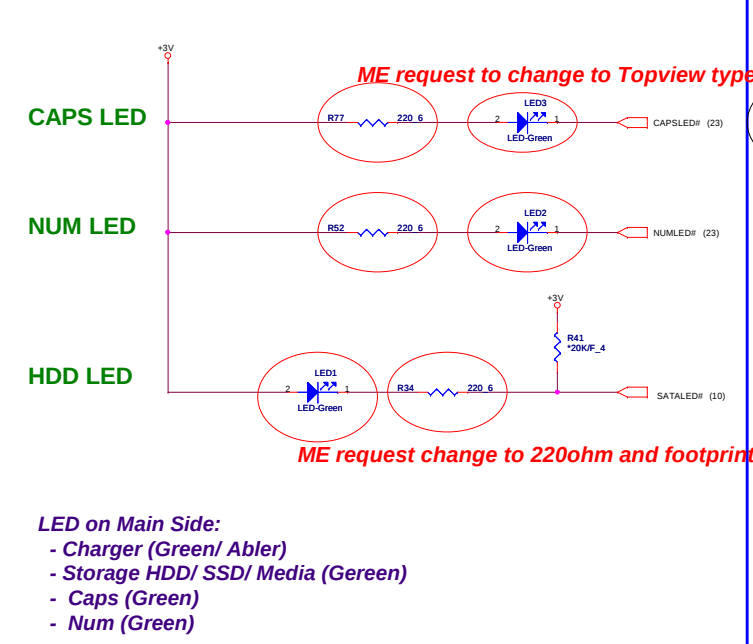


EMI reserve

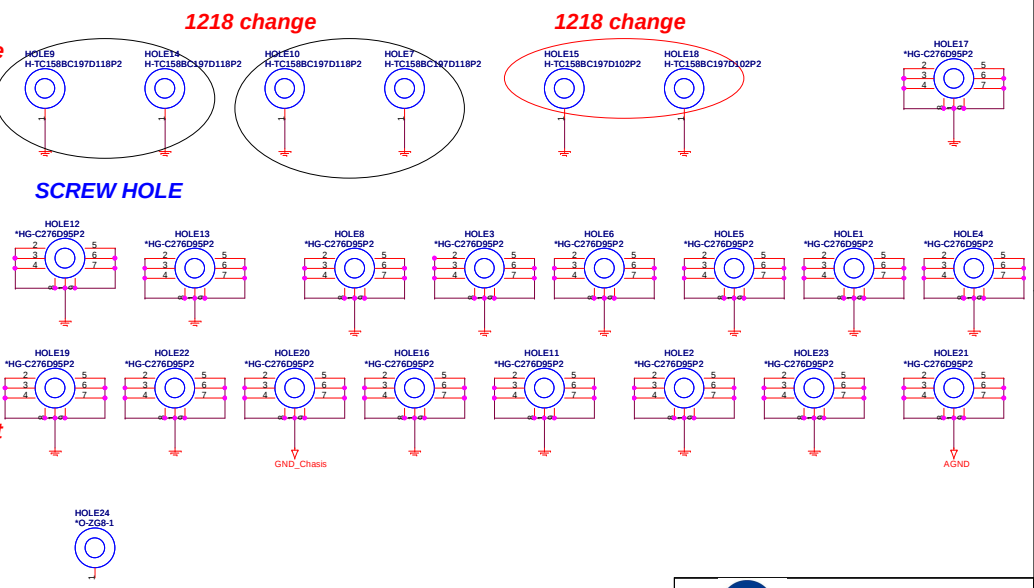
17



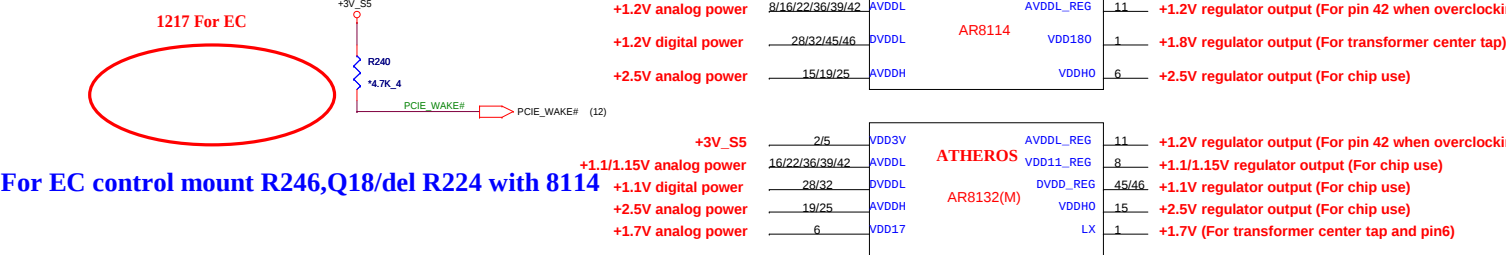
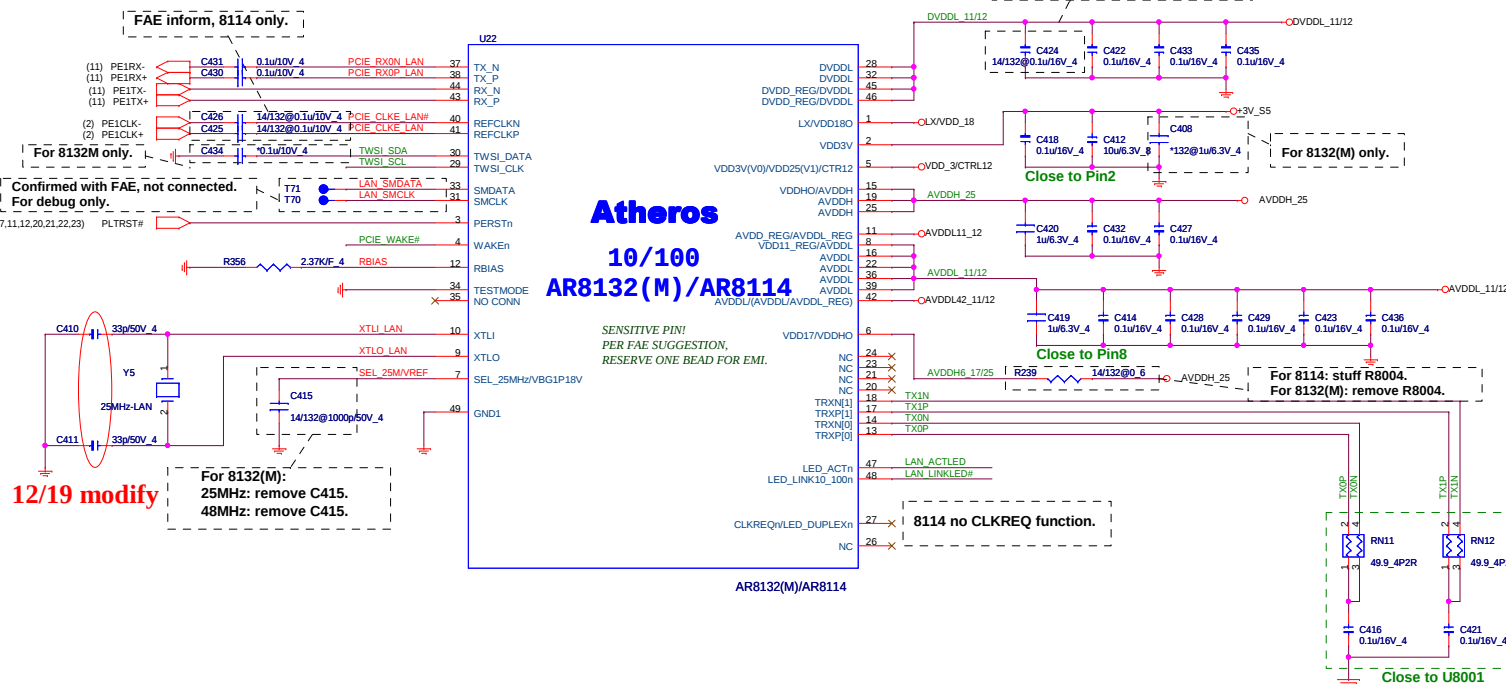
LED on M/B(UIF)



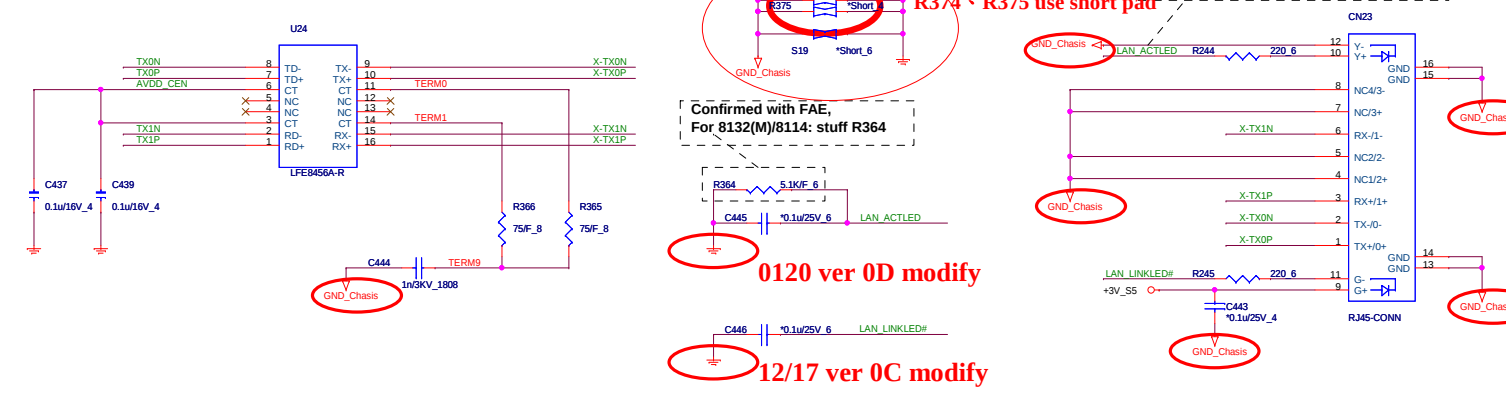
SCREW HOLE



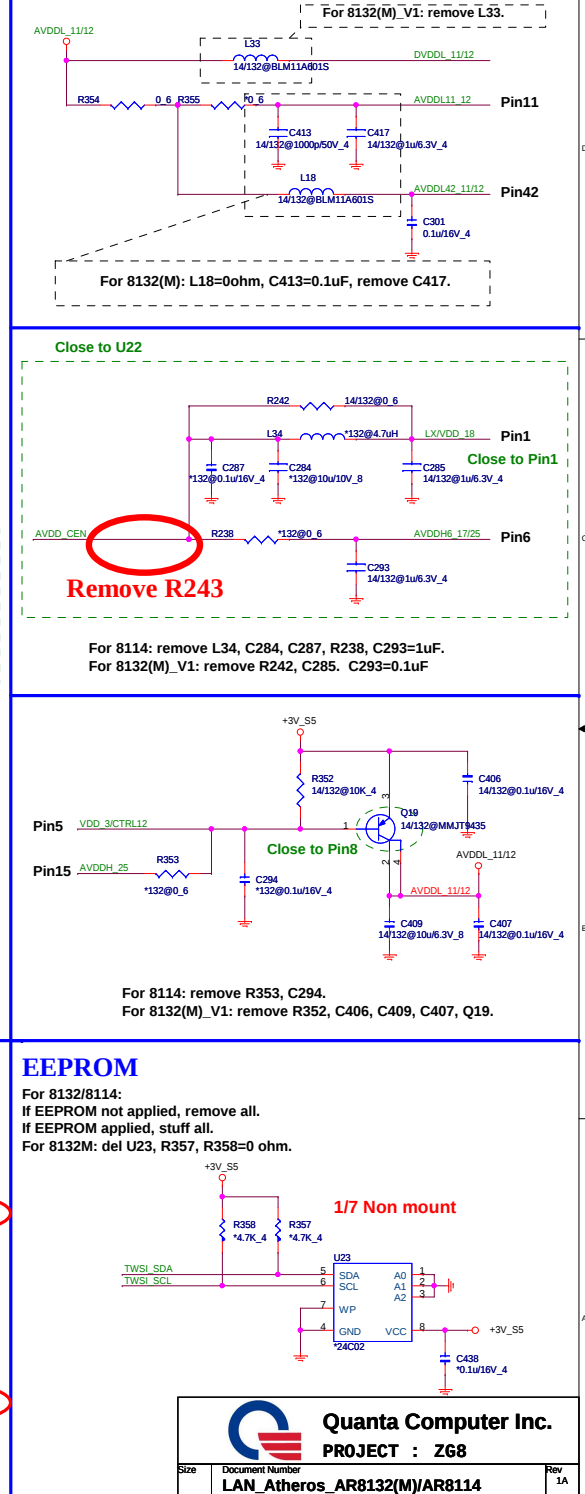
LAN



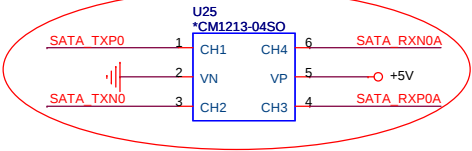
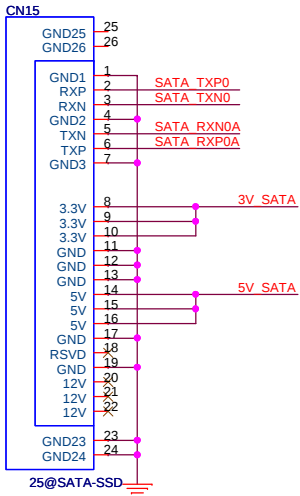
TRANSFORMER



EEPROM

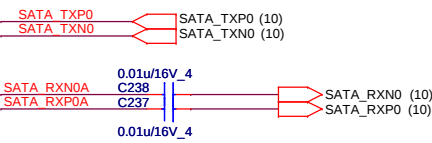


2.5" SATA HDD(HDD)

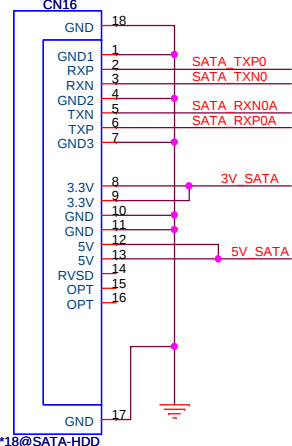
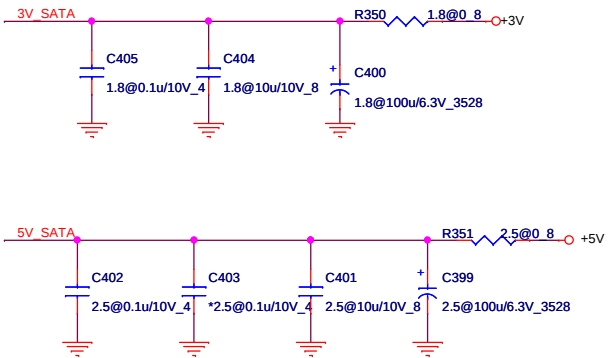


0119 add for ESD and place near SATA conn

0120 : CN15 PIN25 & 26 IS NP, NO contact to GND.



1.8" SATA HDD(TOSHIBA)



ZT4 card connector

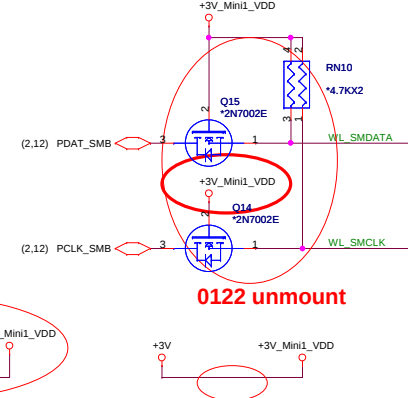
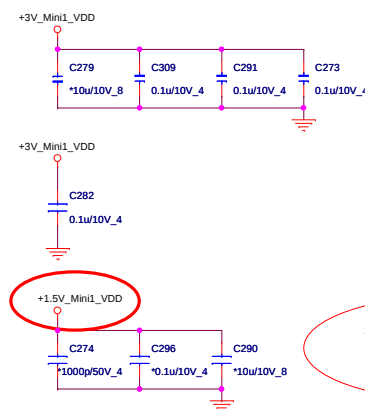
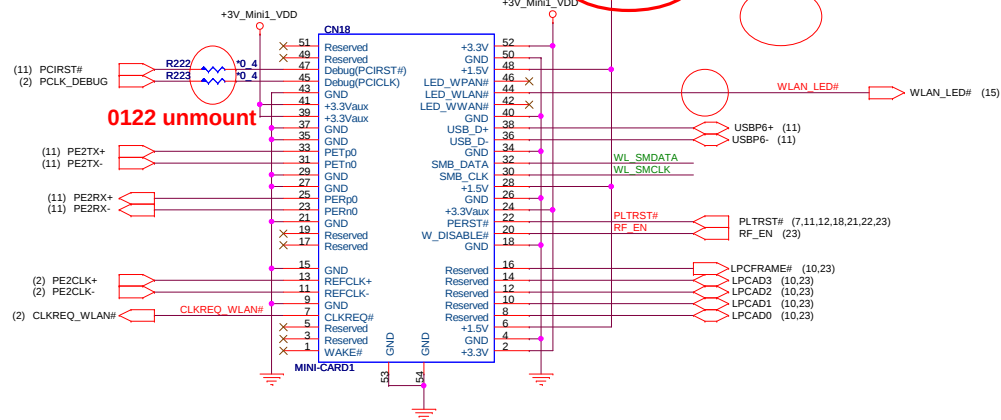


Quanta Computer Inc.
PROJECT : Z68

Size	Document Number	Rev
	SATA-HDD/SSD	1A

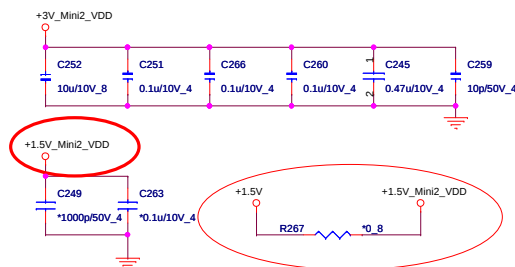
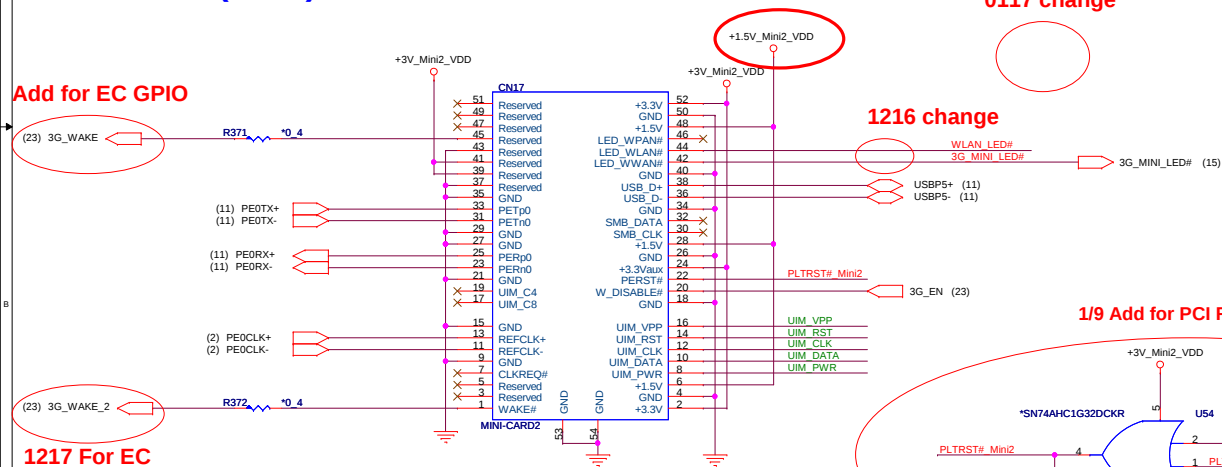
Date: Monday, February 02, 2009 Sheet 19 of 33

Mini Card(MPC)



20

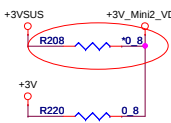
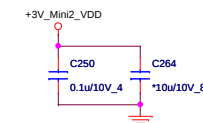
Mini Card 2(MNC)



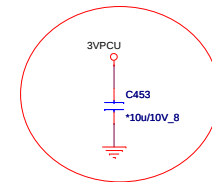
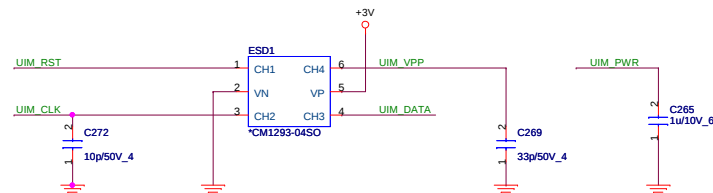
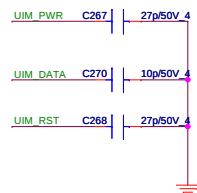
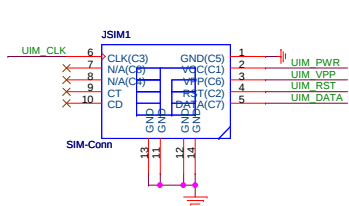
0117 Remove

1211 Add

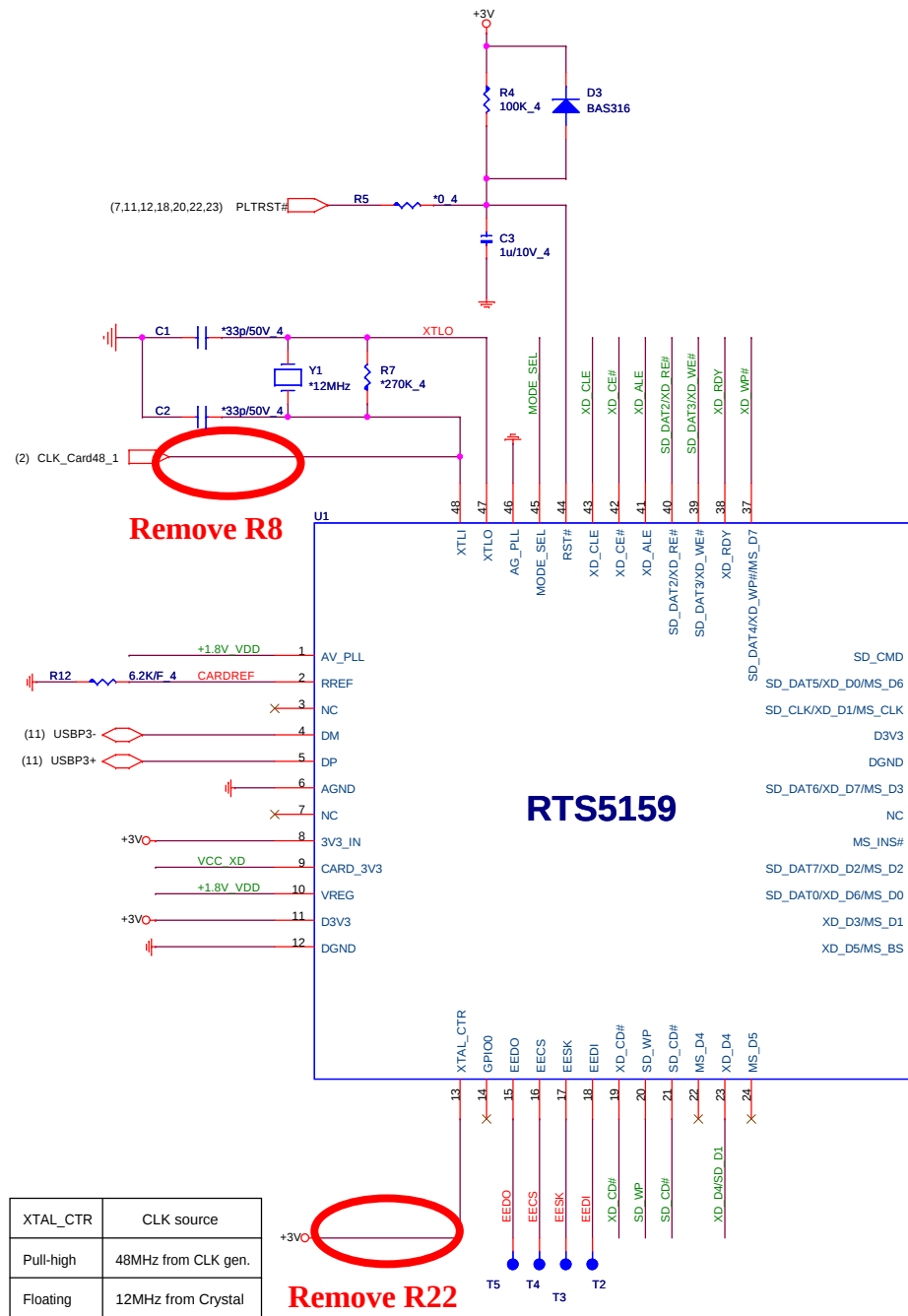
1/7 Change power source



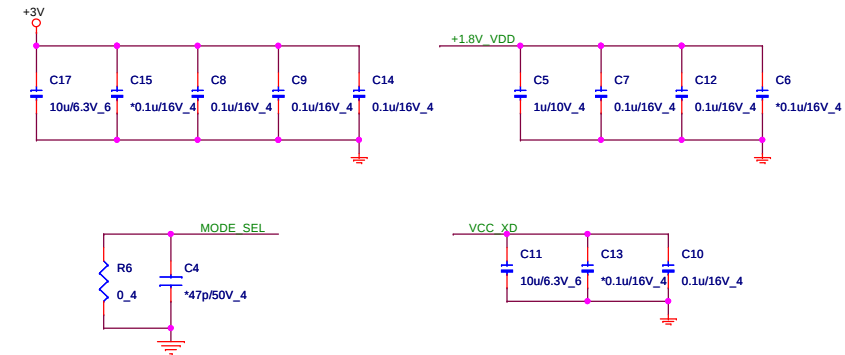
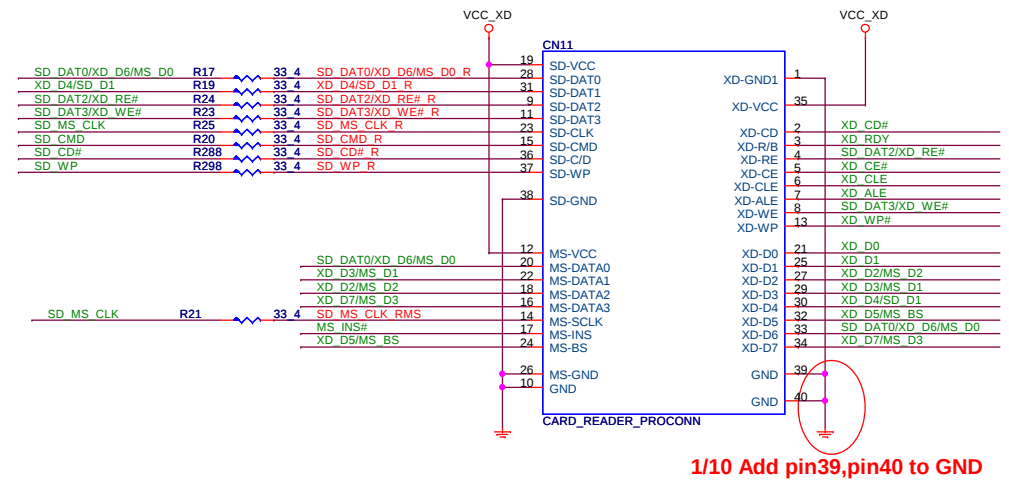
SIM



0117 Add



4 IN 1 CARD READER



MODE_SEL Table (Please refer to Realtek Application Notes for more detail description)

	R9016	C9016	Power mode	SD_D1 Out From
RTS 5158E	NC	NC	Power Saving	Pin23
RTS 5159	0 ohm	NC	Power Saving	Pin23

Power Saving mode need install Realtek icon driver.
USB Hotfix KB941600 is also needed for Vista SP0 but SP1.



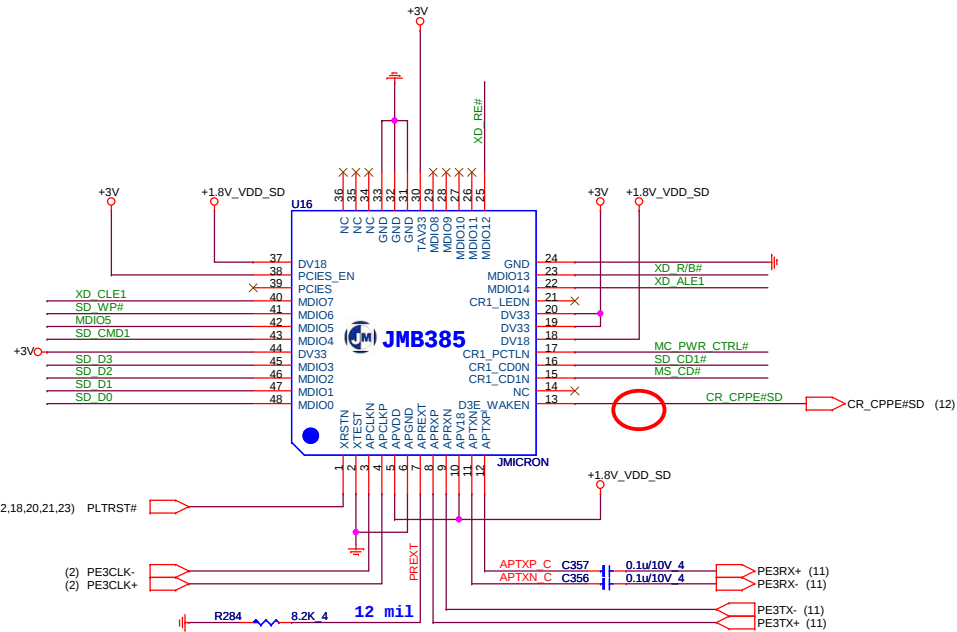
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RTS5159 (Card Reader)

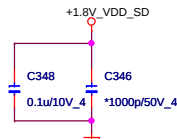
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	RTS5159 (Card Reader)	1A
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JMB385 SIDO(MMC)



For APVDD(pin5)

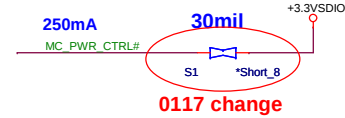


APVDD(pin5) must put C346/1000pF close to APVDD(pin5) (length must under 120mil) and trace width = 20mil, after C346, pls put one more 0.1uF for it.

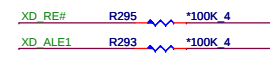
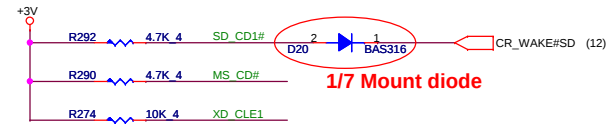
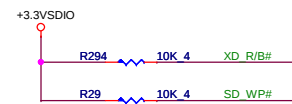
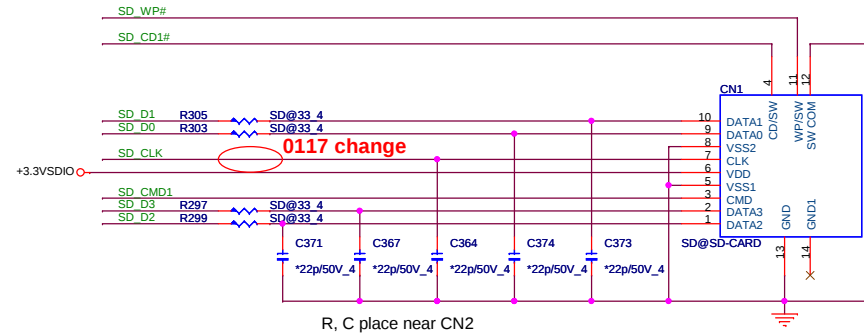
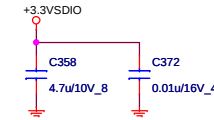
SD CONNDETOR

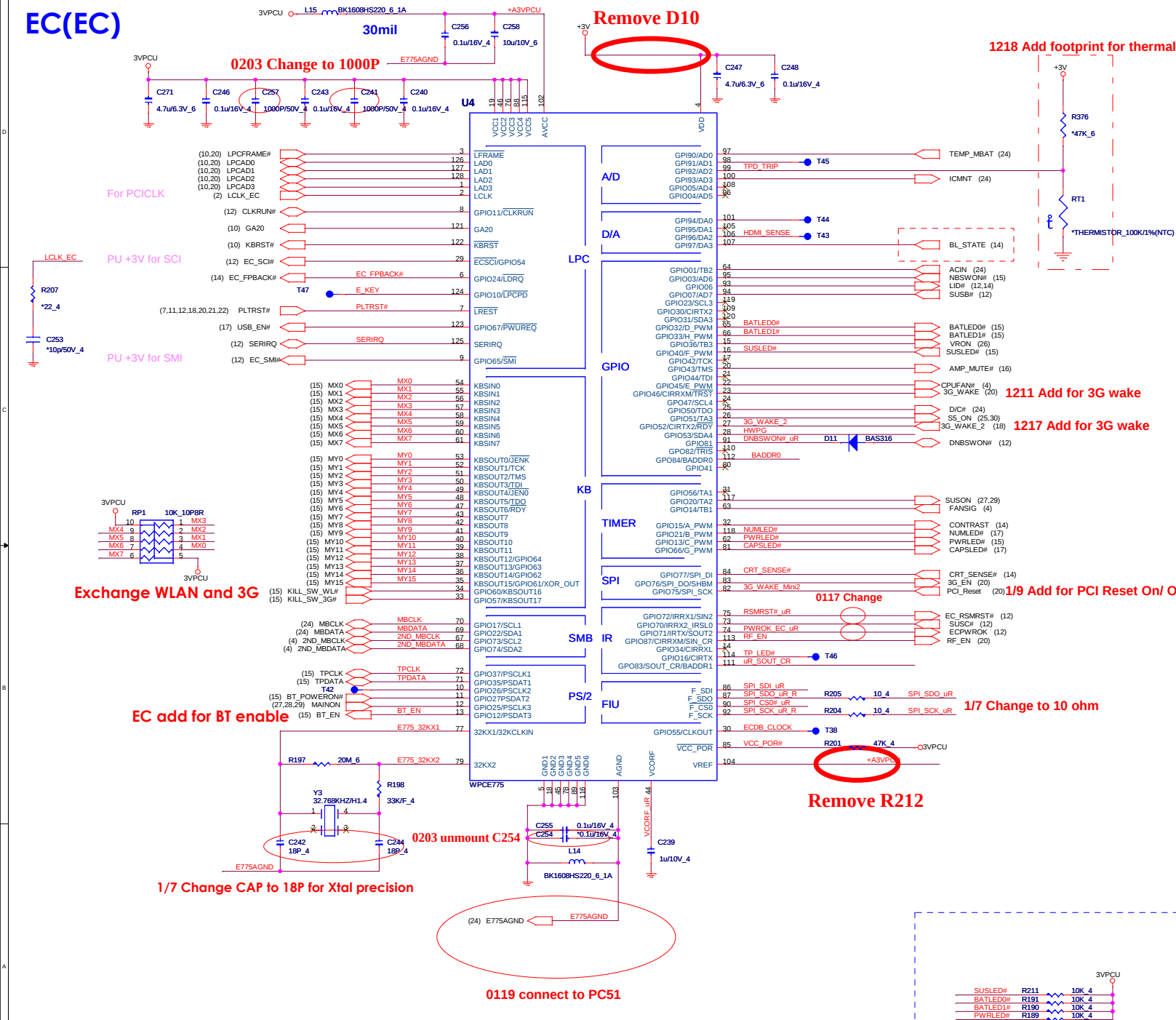
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Use 0805 type and over 20 mils trace width on both side



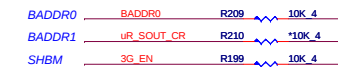
Memory Card Power Supply



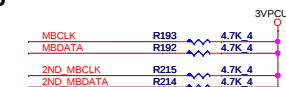


I/O Address		
BADDR1-0	Index	Data
0 0	XOR TREE TEST MODE	
0 1	CORE DEFINED	
1 0	2Eh	2Fh
1 1	164Eh	164Fh

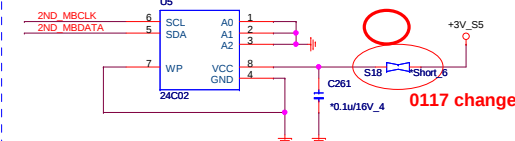
SHBM=0: Enable shared memory with host BIOS



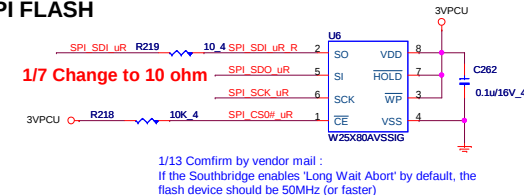
SM BUS PU



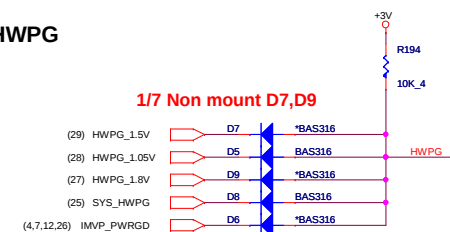
ACER ID



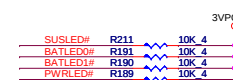
SPI FLASH



HWPG



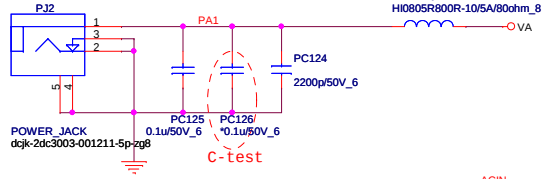
INTERNAL KEYBOARD STRIP SET



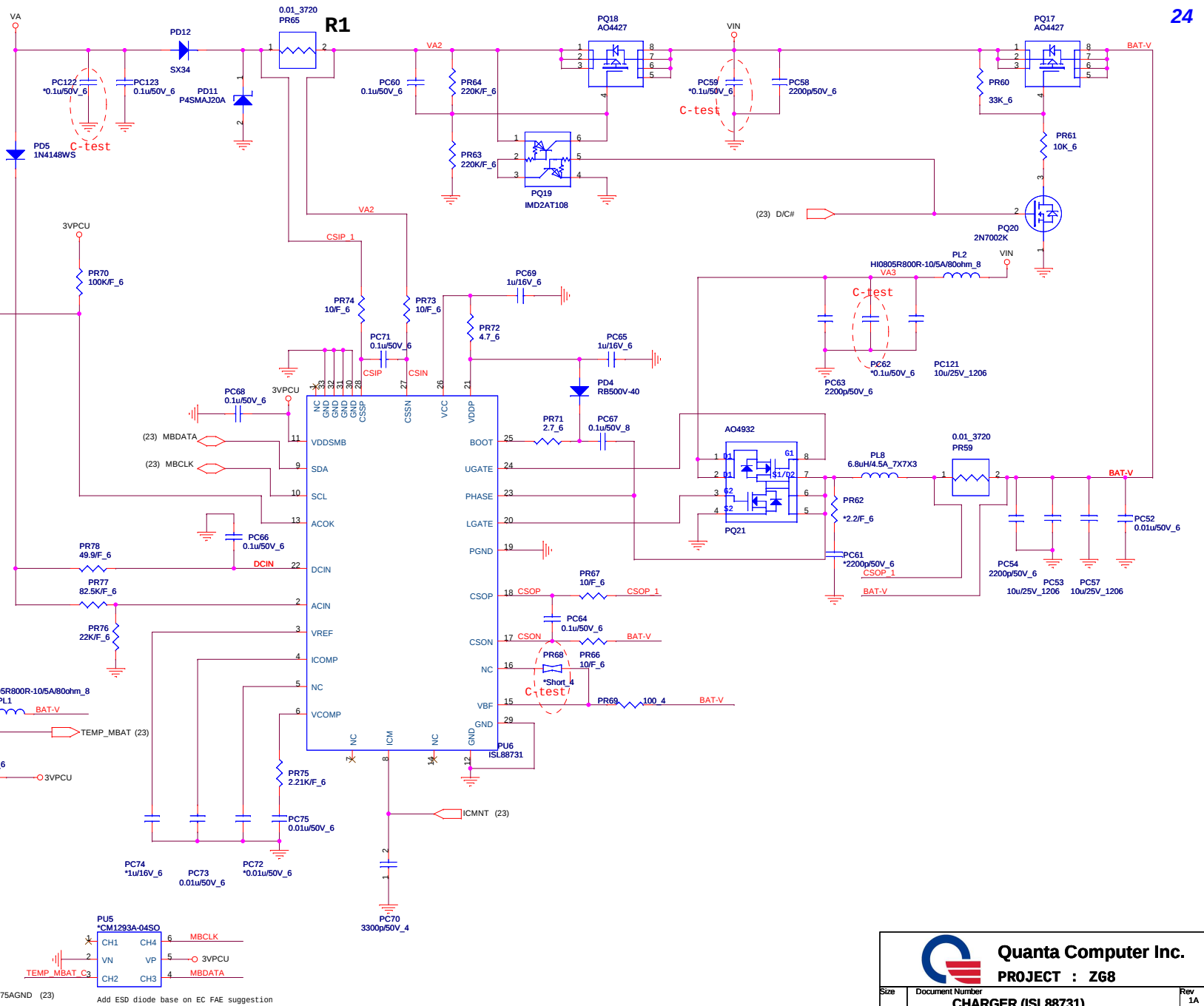
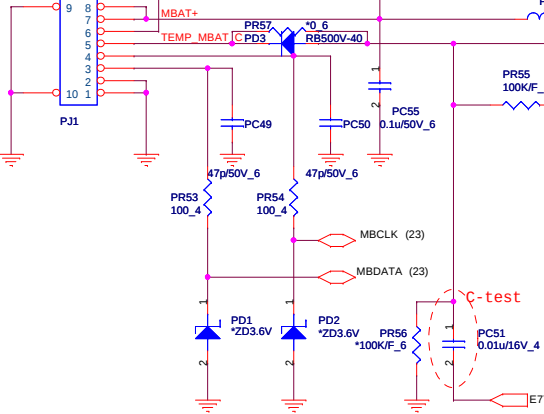
Charger(DCD)

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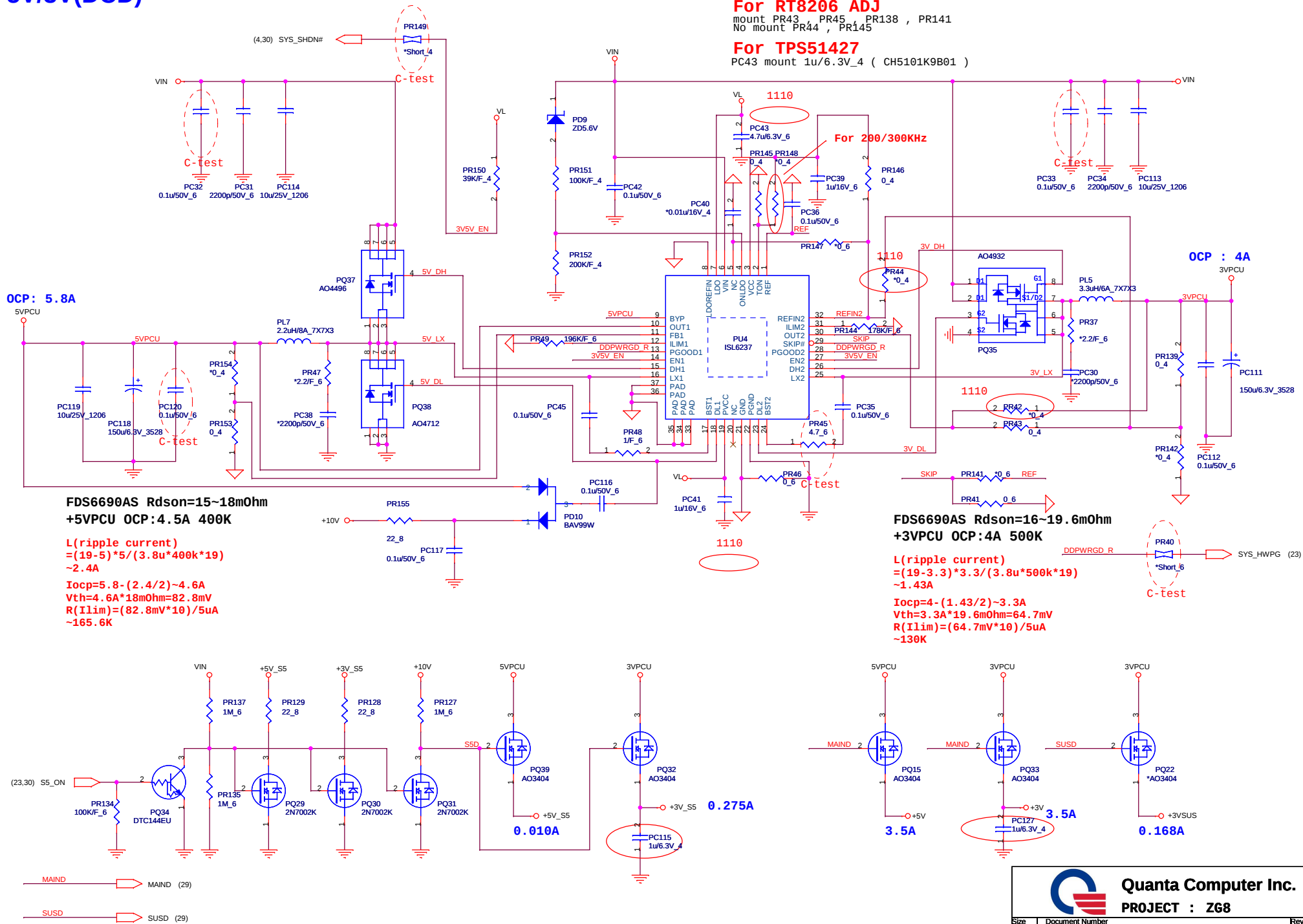
DC-IN JACK

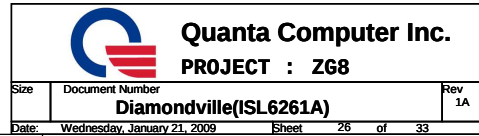


SUYIN_Batt

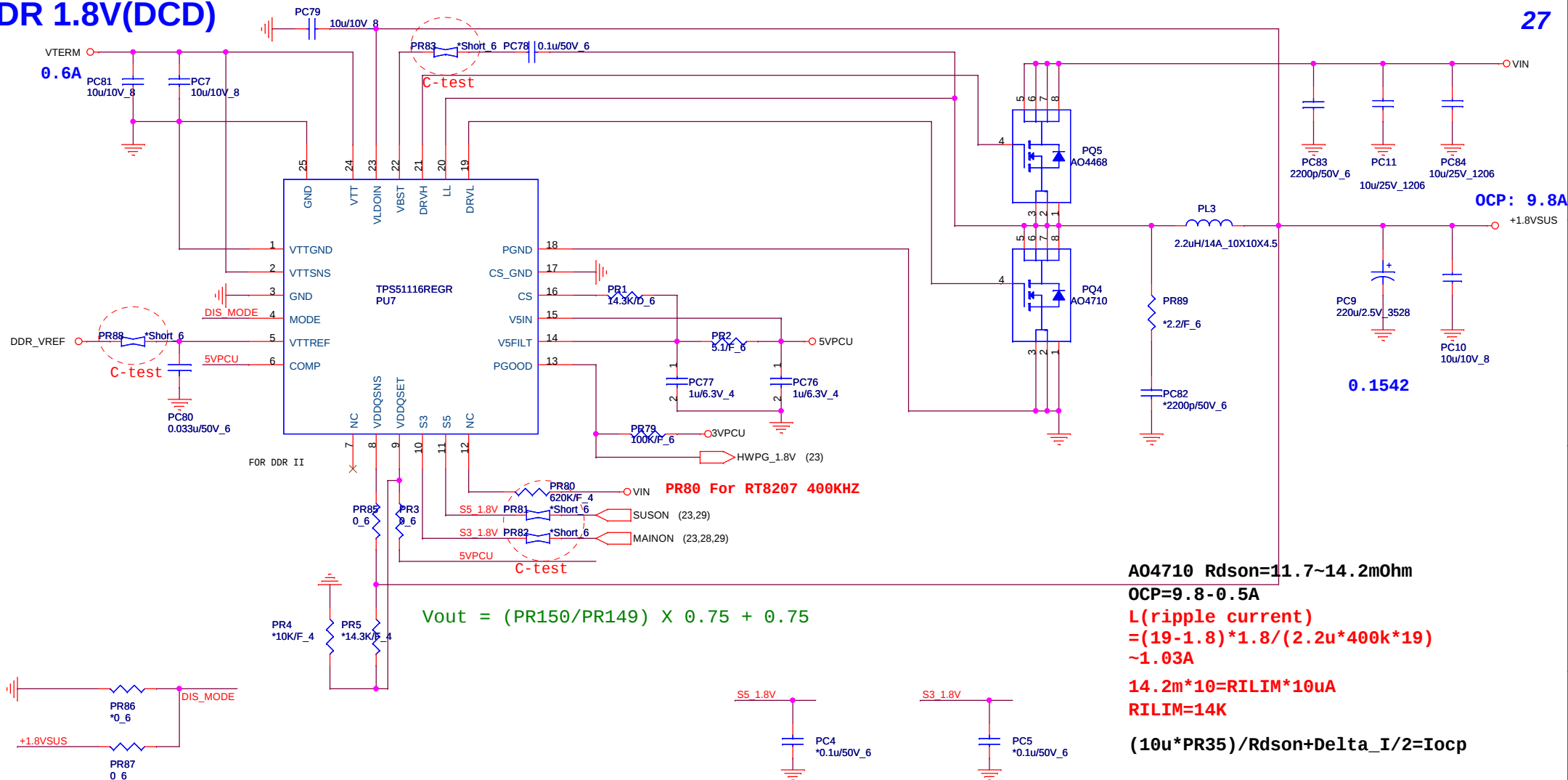


5V/3V(DCD)





DDR 1.8V(DCD)



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