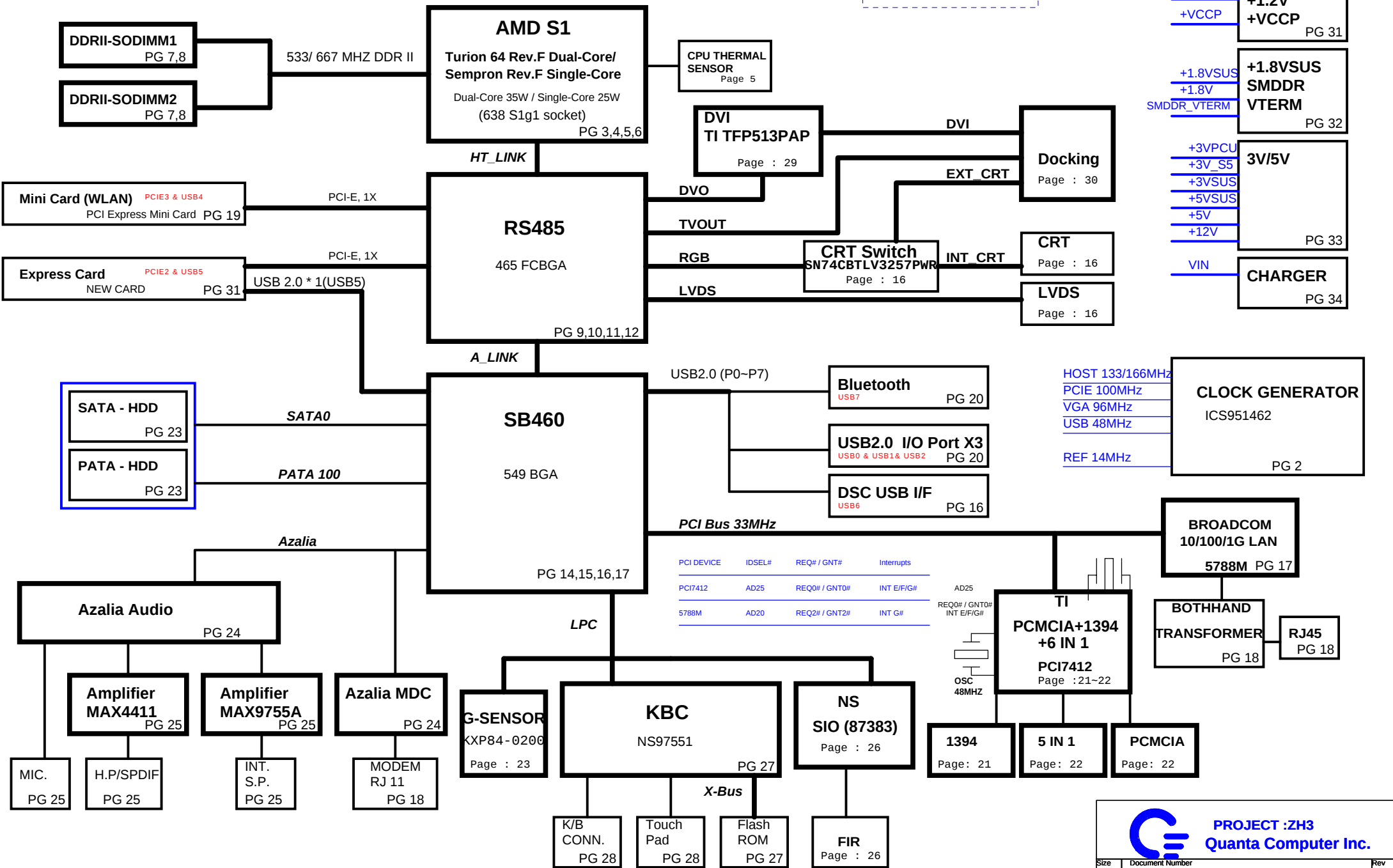
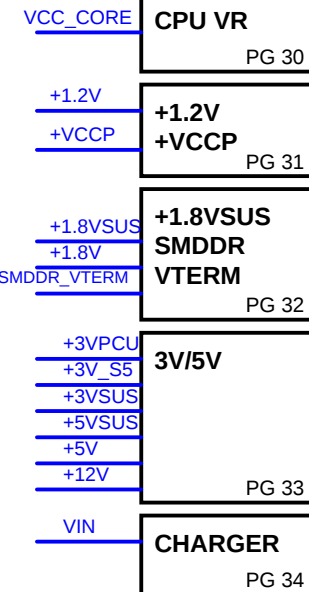


BOM MARK
SA@ SATA 瓊
PA@ PATA 瓊
3@ 36 瓊

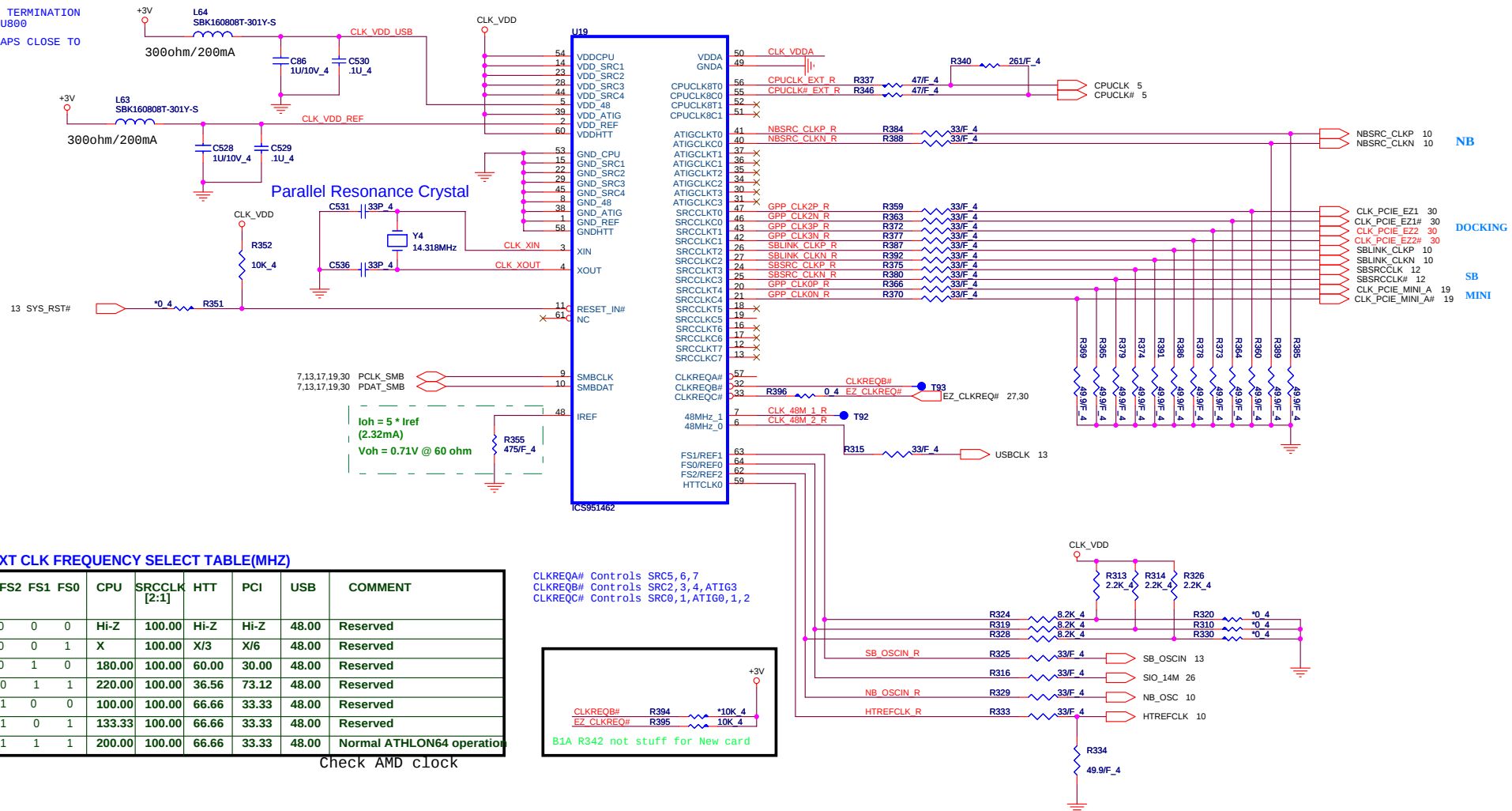
ZH3

ZH3 ASSY P/N :31ZH3MB0008
ZH3 MB C/S ASSY P/N: 41ZH3CS0001
ZH3 MB S/S ASSY P/N: 51ZH3SS0003

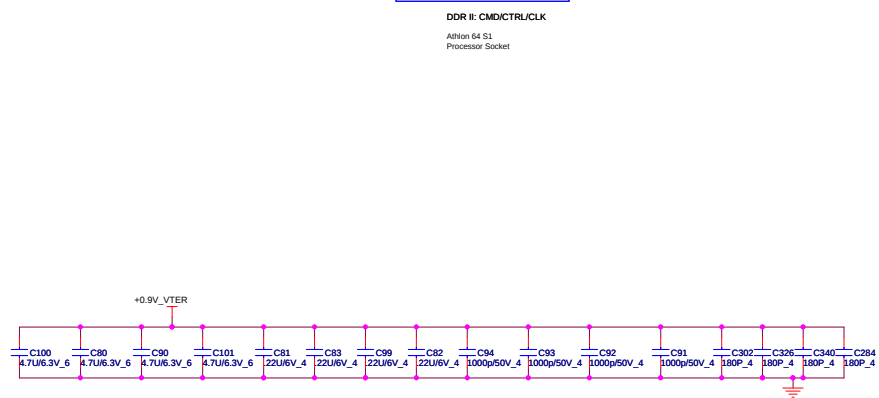
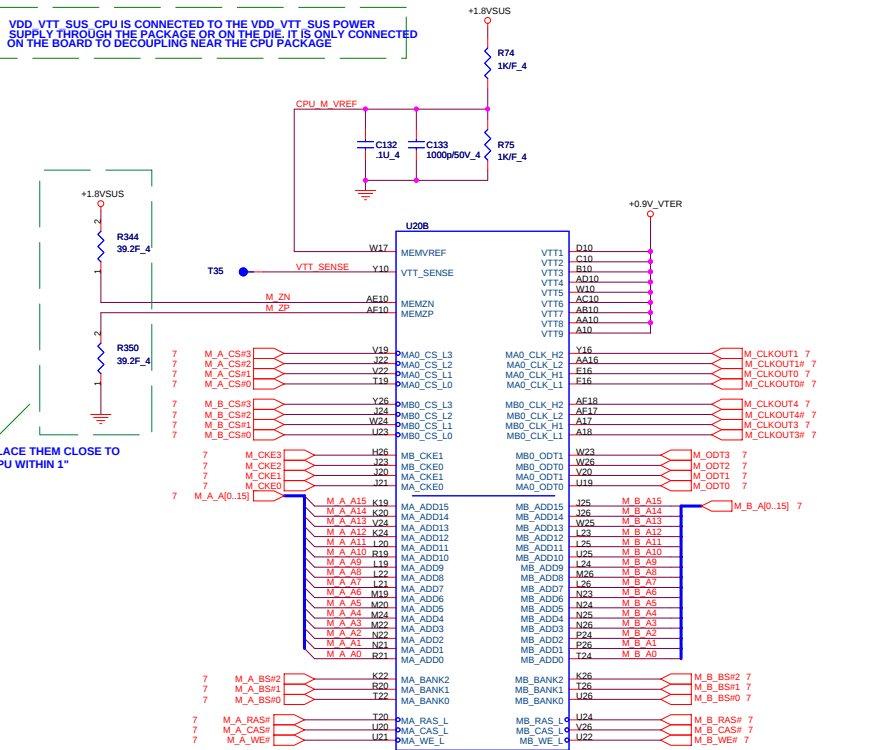




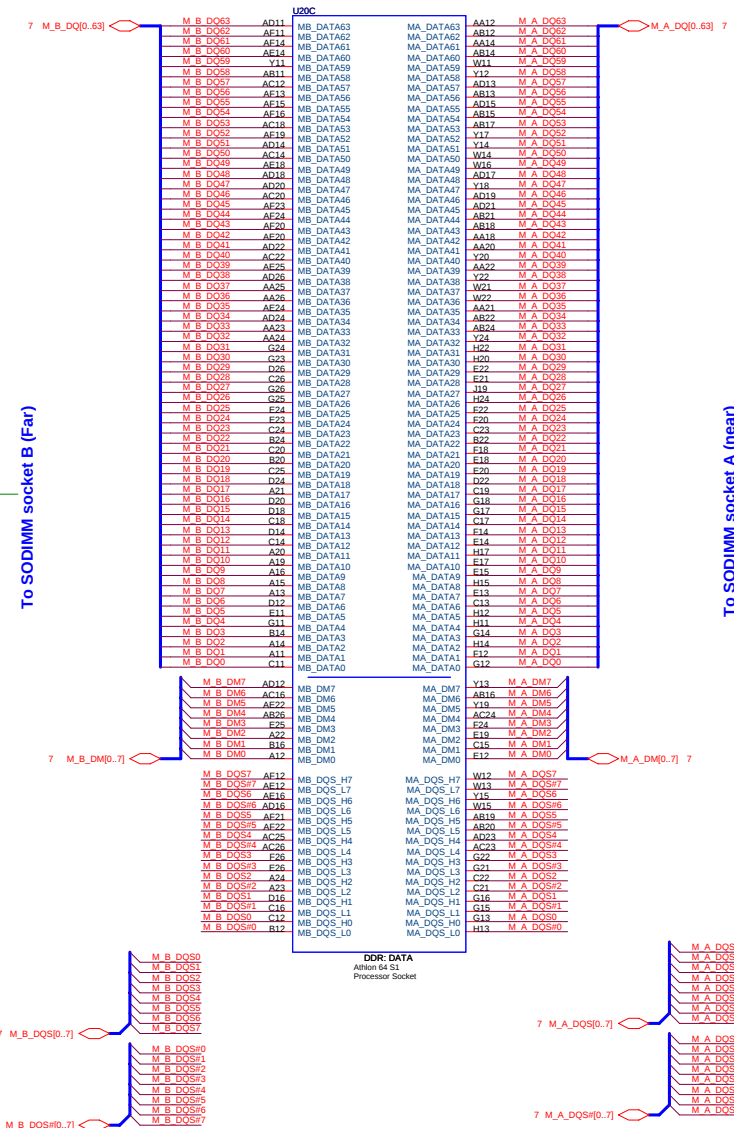
- 1- PLACE ALL SERIAL TERMINATION RESISTORS CLOSE TO U800
- 2- PUT DECOUPLING CAPS CLOSE TO Clock Gen.POWER PIN



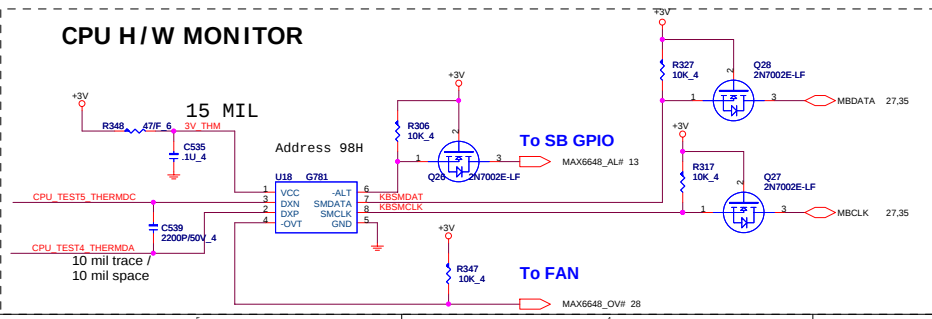
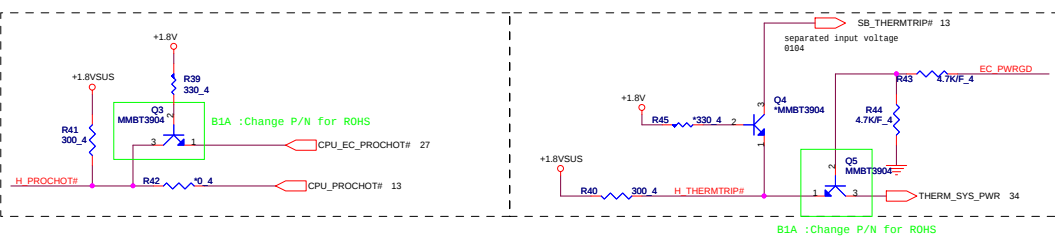
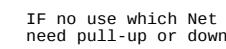
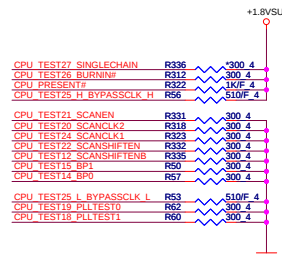
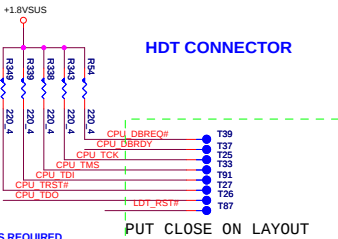
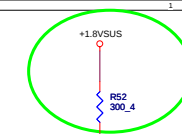
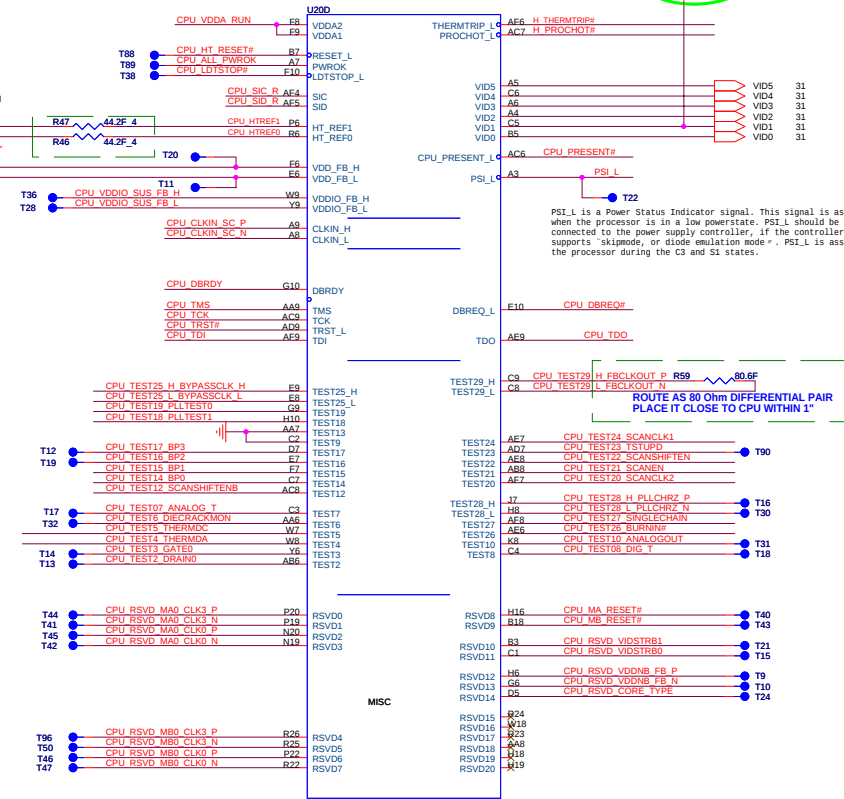
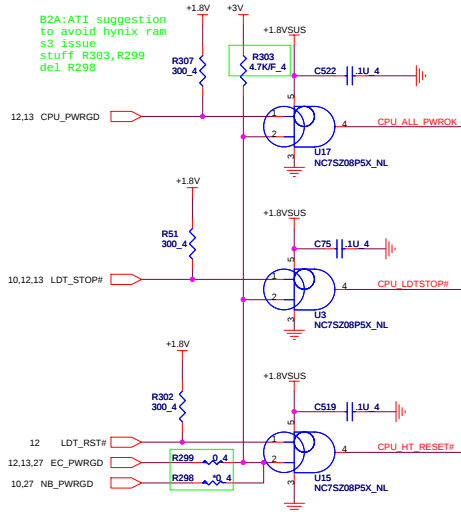
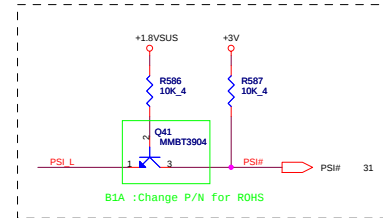
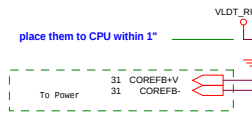
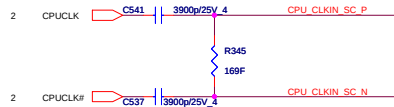
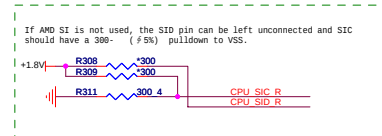
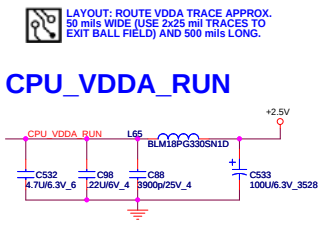
VDD VTT SUS CPU IS CONNECTED TO THE VDD VTT SUS POWER SUPPLY THROUGH THE PACKAGE OR ON THE DIE. IT IS ONLY CONNECTED ON THE BOARD TO DECOUPLING NEAR THE CPU PACKAGE

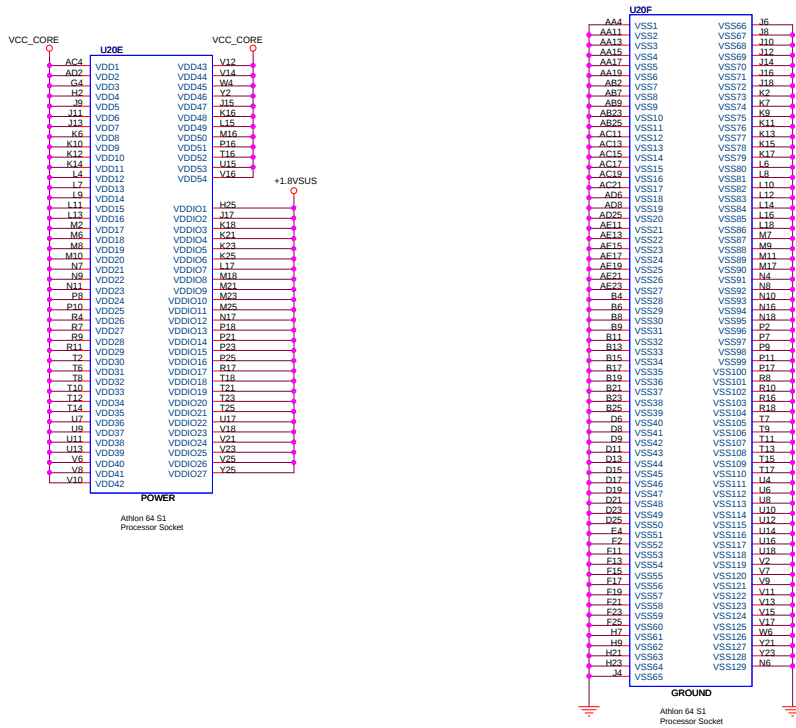


Processor DDR2 Memory Interface

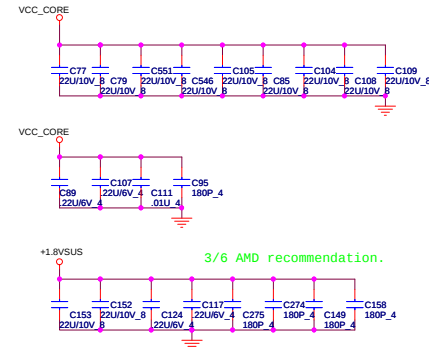


ATHLON Control and Debug

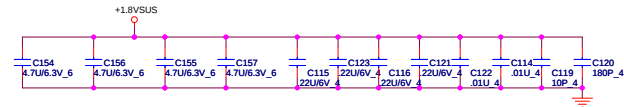




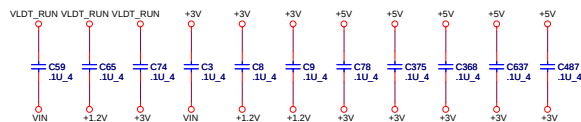
BOTTOMSIDE DECOUPLING



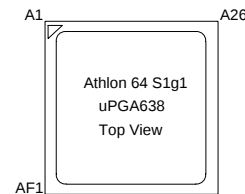
DECOUPLING BETWEEN PROCESSOR AND DIMMS PLACE CLOSE TO PROCESSOR AS POSSIBLE



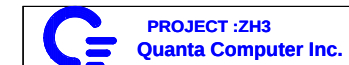
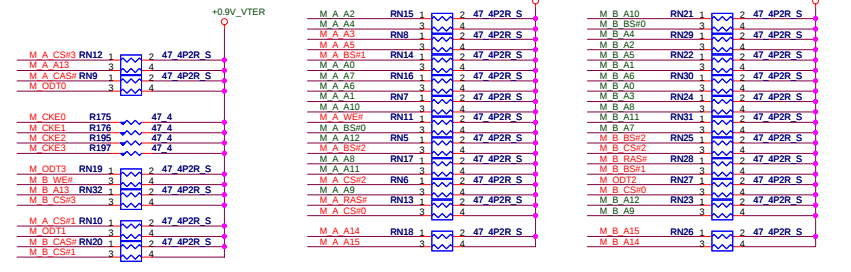
PROCESSOR POWER AND GROUND

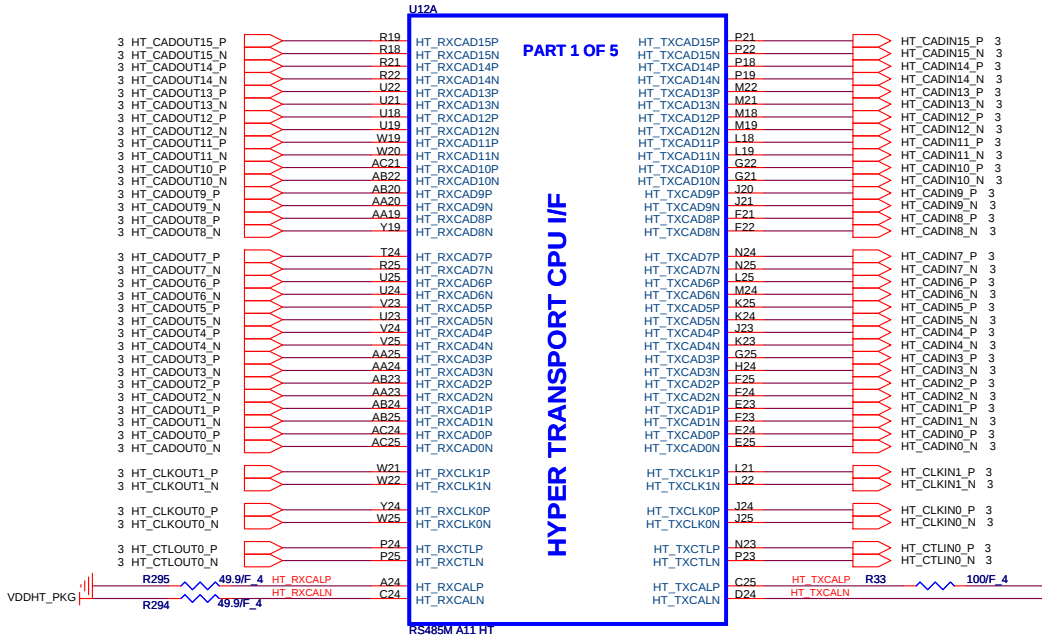


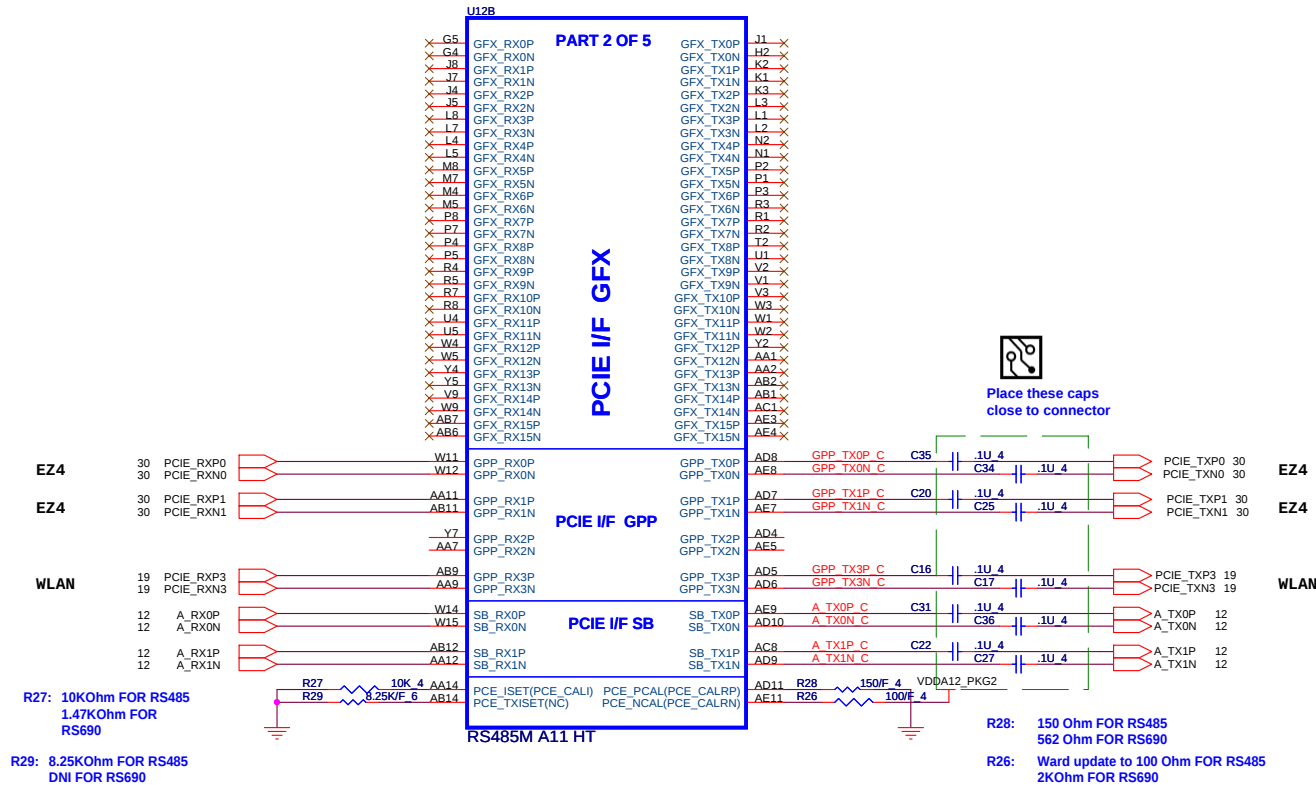
3/6 : ADD 0.1U CAPACITOR TO CROSS POWER PLANE.

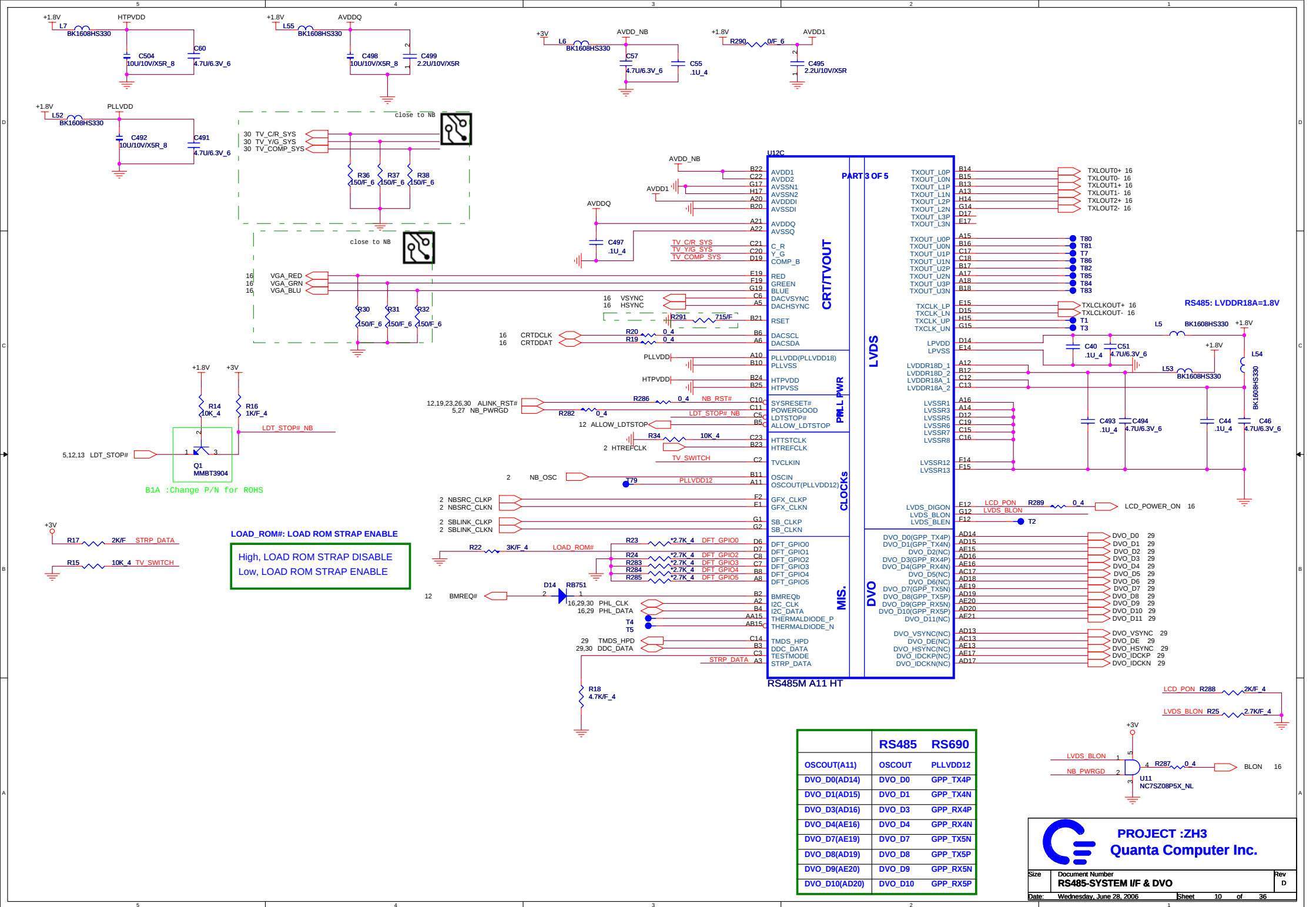


DDR2 TERMINATOR

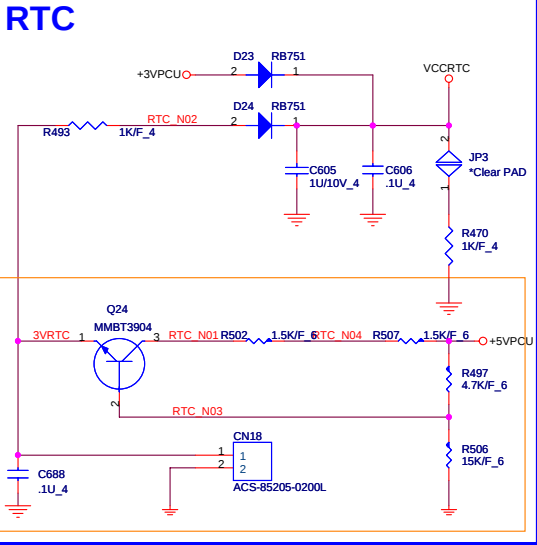
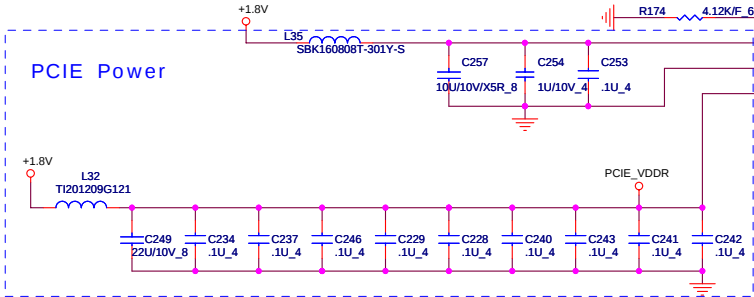








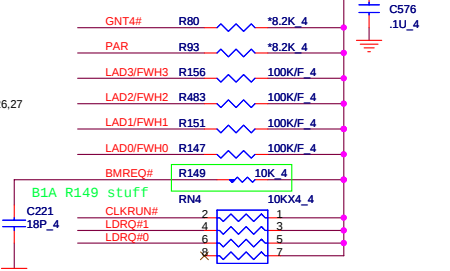
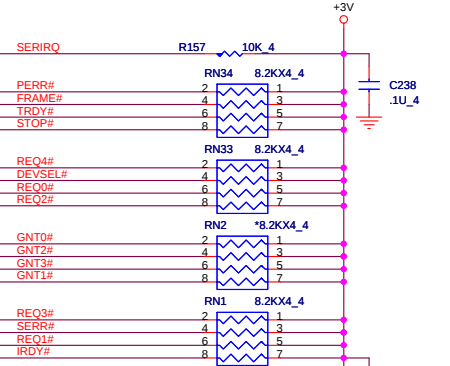
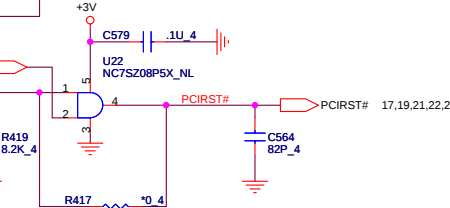
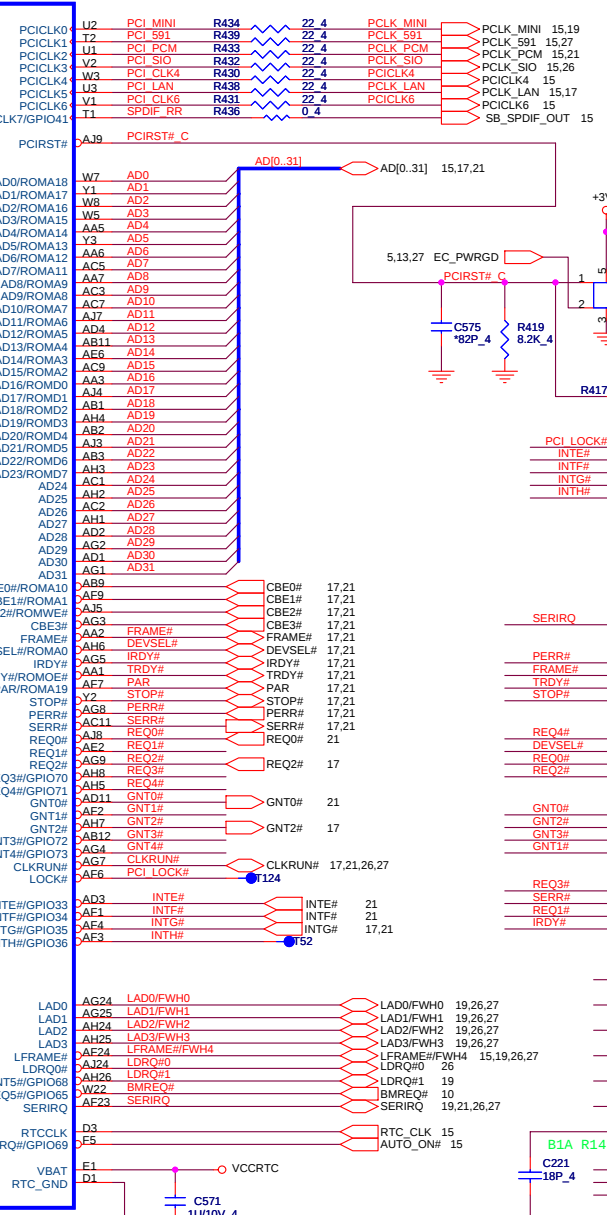
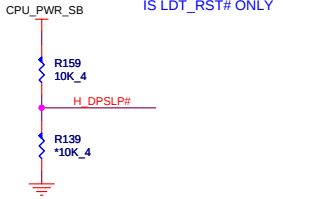
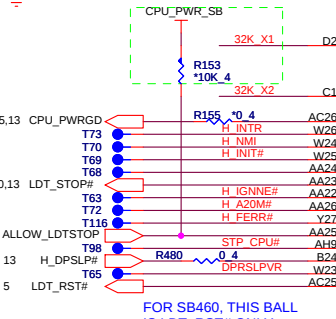
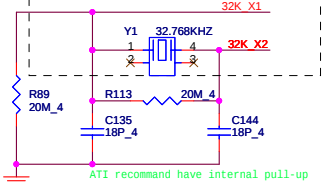
	SB600	SB460
R173	562 OHM 1%	150 OHM 1%
R172	2.05K 1%	150 OHM 1%
R174	0 ohm	4.12K 1%



SB-1

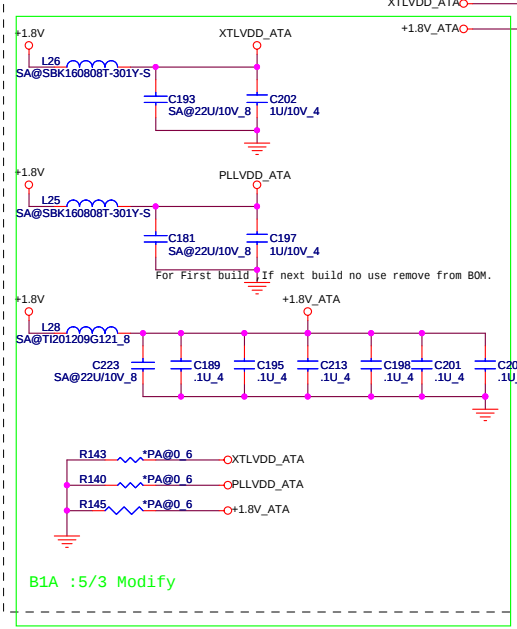
D3A: Due to remove bridge battery, Add RTC circuit ,

ATI Recommend
Vendor: NSK
Part Number: NXG 32.768KAE12FUD 16 PPM.

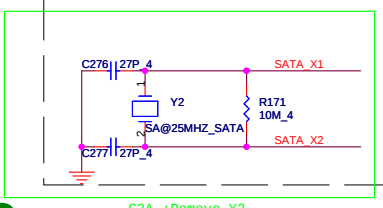


SB-3

SATA Power



SATA clock



SB460 SB 27x27mm

Part 2 of 4

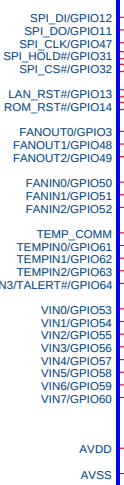
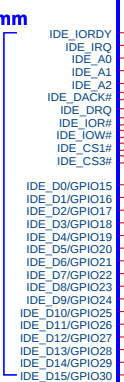
SERIAL ATA

ATA 66/100

SPI ROM

HW MONITOR

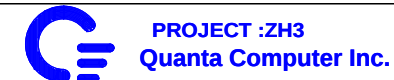
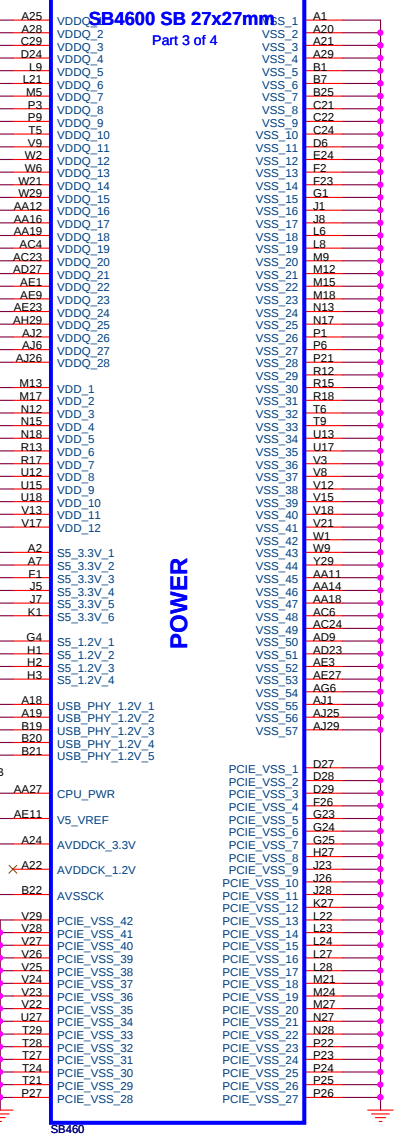
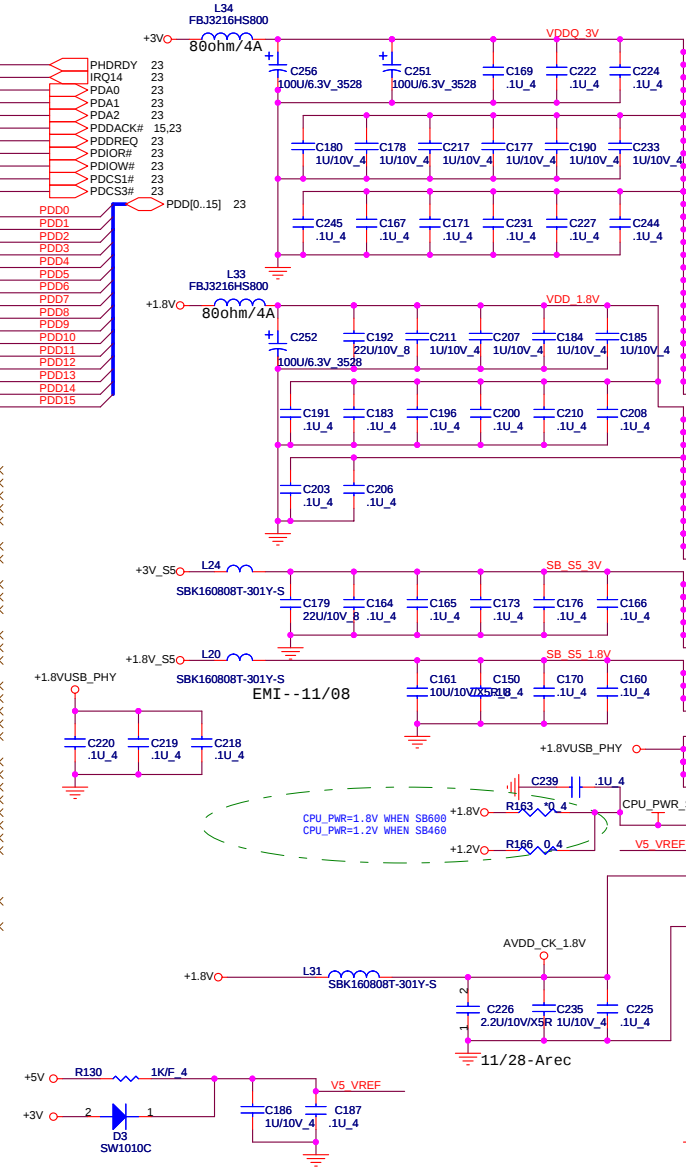
SERIAL ATA POWER



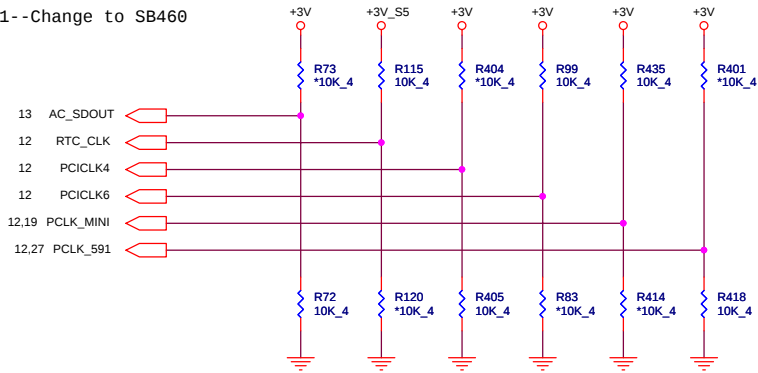
SB4600 SB 27x27mm

Part 3 of 4

POWER

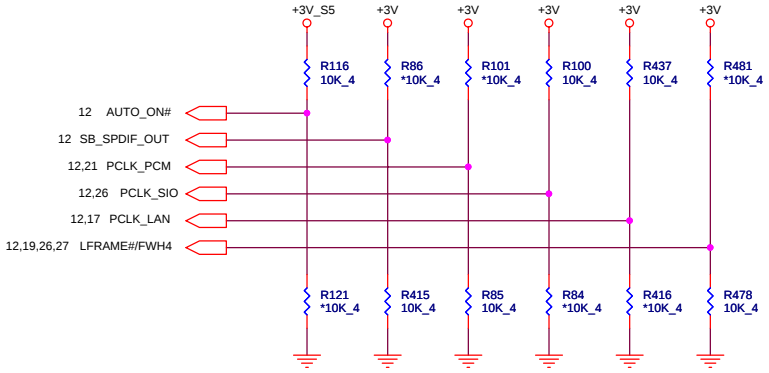


Size	Document Number	Rev
	SB450M HDD/POWER/DECOUPLING	D
Date:	Wednesday, June 28, 2006	Sheet 14 of 36



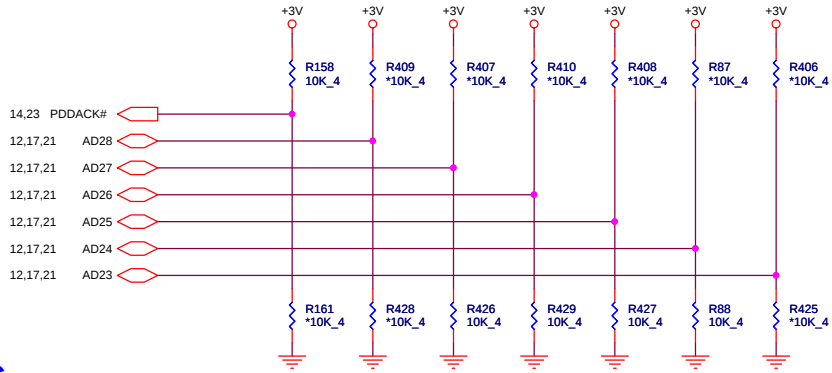
REQUIRED STRAPS

				PCLK_MINI	PCLK_591
PULL HIGH	AC_SDOUT	RTC_CLK	PCI_CLK4	PCI_CLK6	PCI_CLK0 PCI_CLK1
	USE DEBUG STRAPS	INTERNAL RTC DEFAULT	USE INT. PLL48	CPU IF=K8	ROM TYPE: H, H = PCI ROM H, L = LPC TYPE I ROM L, H = LPC TYPE II ROM DEFAULT
PULL LOW	IGNORE DEBUG STRAPS DEFAULT	EXTERNAL RTC	USE EXT. 48MHZ DEFAULT	CPU IF=P4 DEFAULT	L, L = FWH ROM NOTE:FOR SB460,PCICLK[8:7] ARE CONNECTED TO SUBSTRATE BALLS PCICLK[1:0]



	AUTO_ON#	SB_SPDIF_OUT	PCLK_PCM	PCLK_SIO	PCLK_LAN	LFRAME#
PULL HIGH	ACPWRON	SPDIF_OUT	PCI_CLK2	PCI_CLK3	PCI_CLK5	LFRAME#
	MANUAL PWR ON	SIO 24MHz	XTAL MODE	USB PHY POWERDOWN	PCIE_CM_SET LOW	ENABLE THERMTRIP#
	DEFAULT		NOT SUPPORTED	DISABLE DEFAULT	DEFAULT	DEFAULT
PULL LOW	AUTO PWR ON	SIO 48MHz	48MHZ OSC MODE	USB PHY POWERDOWN	PCIE_CM_SET HIGH	DISABLE THERMTRIP#
		DEFAULT	DEFAULT	ENABLE	BIOS ENABLE	AFTER ST

BIOS ENABLE AFTER STARTUP



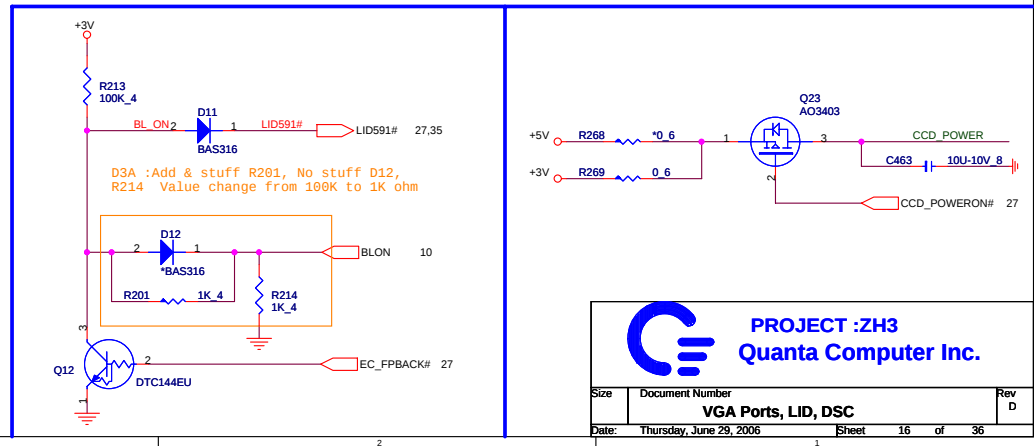
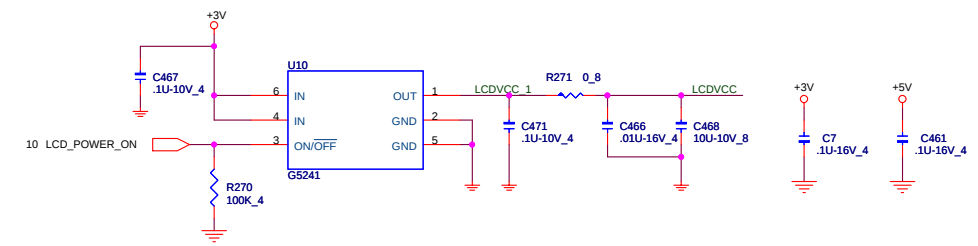
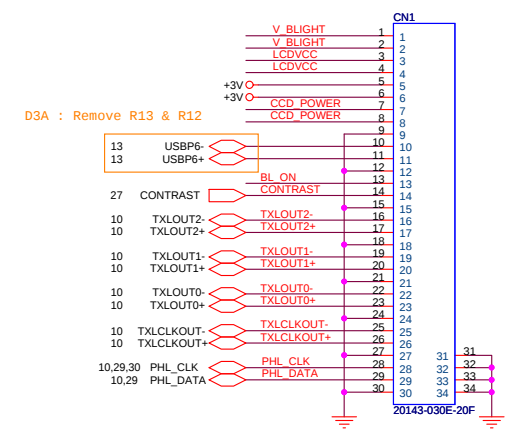
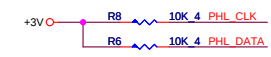
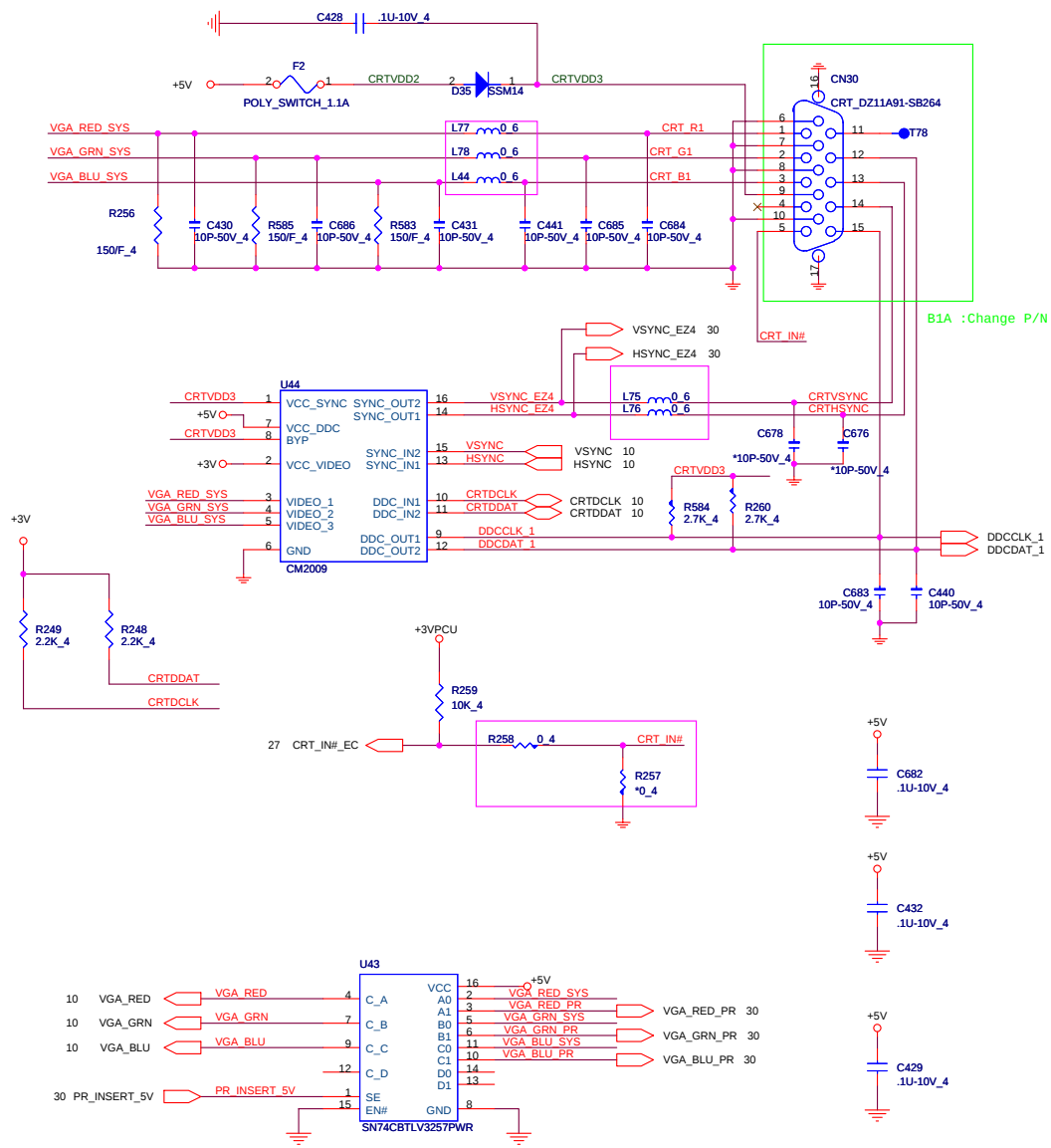
DEBUG STRAPS

	PDAK#	PCI_AD28	PCI_AD27	PCI_AD26	PCI_AD25	PCI_AD24	PCI_AD23
PULL HIGH	USE LONG RESET DEFAULT	Reserved	BYPASS PCI PLL	BYPASS ACPI BCLK	BYPASS IDE PLL	USE EEPROM PCIE STRAPS	Reserved
PULL LOW	USE SHORT RESET		USE PCI PLL DEFAULT	USE ACPI BCLK DEFAULT	USE IDE PLL DEFAULT	USE DEFAULT PCIE STRAPS DEFAULT	

SB-4

PROJECT :ZH3
Quanta Computer Inc.

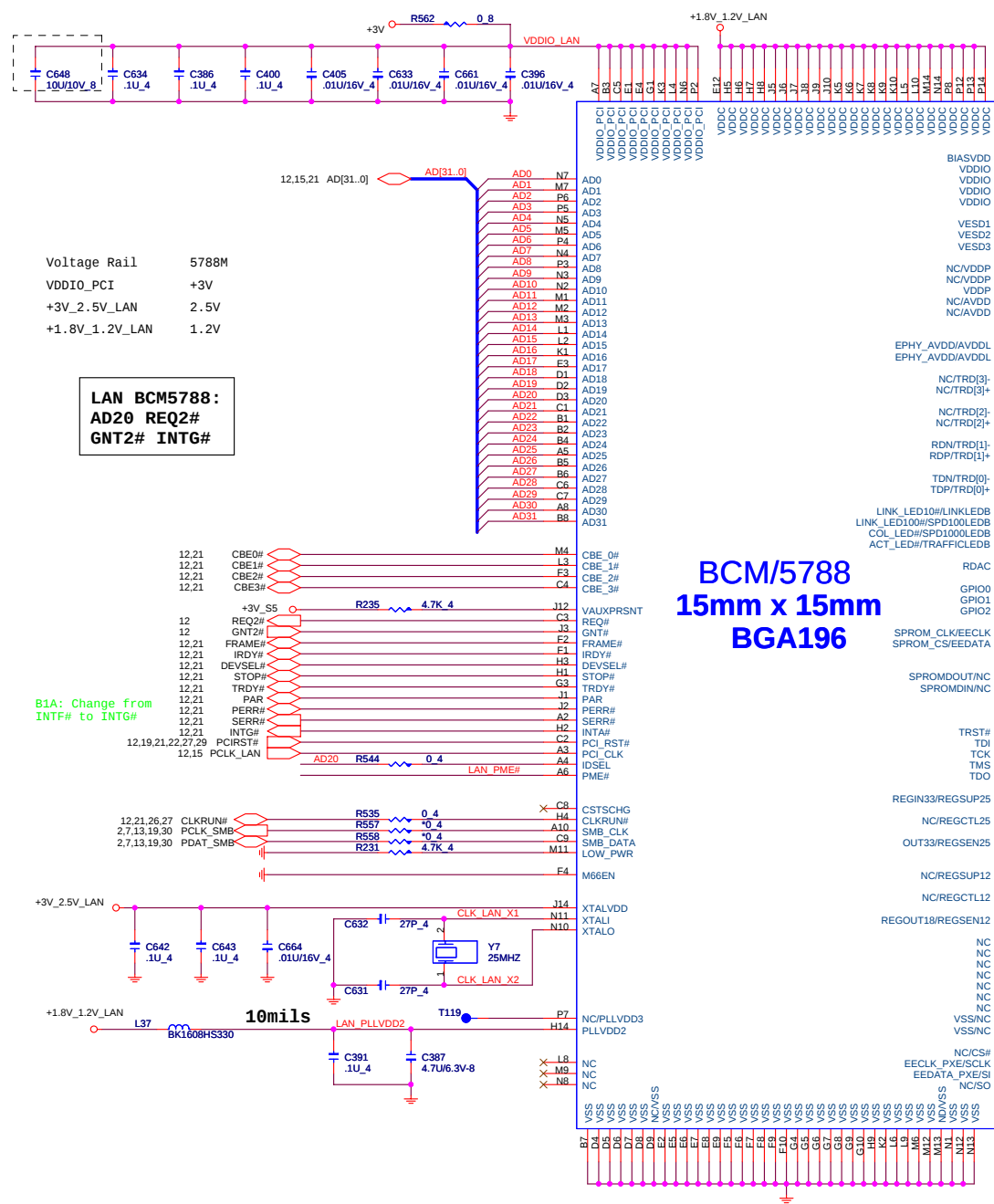
Size	Document Number	Rev
	SB460M STRAPS	D
Date:	Wednesday, June 28, 2006	Sheet 15 of 36





PROJECT :ZH3
Quanta Computer Inc.

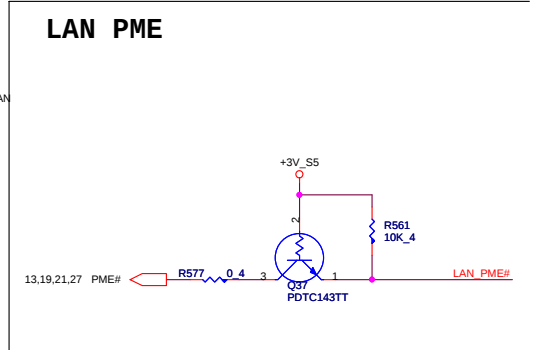
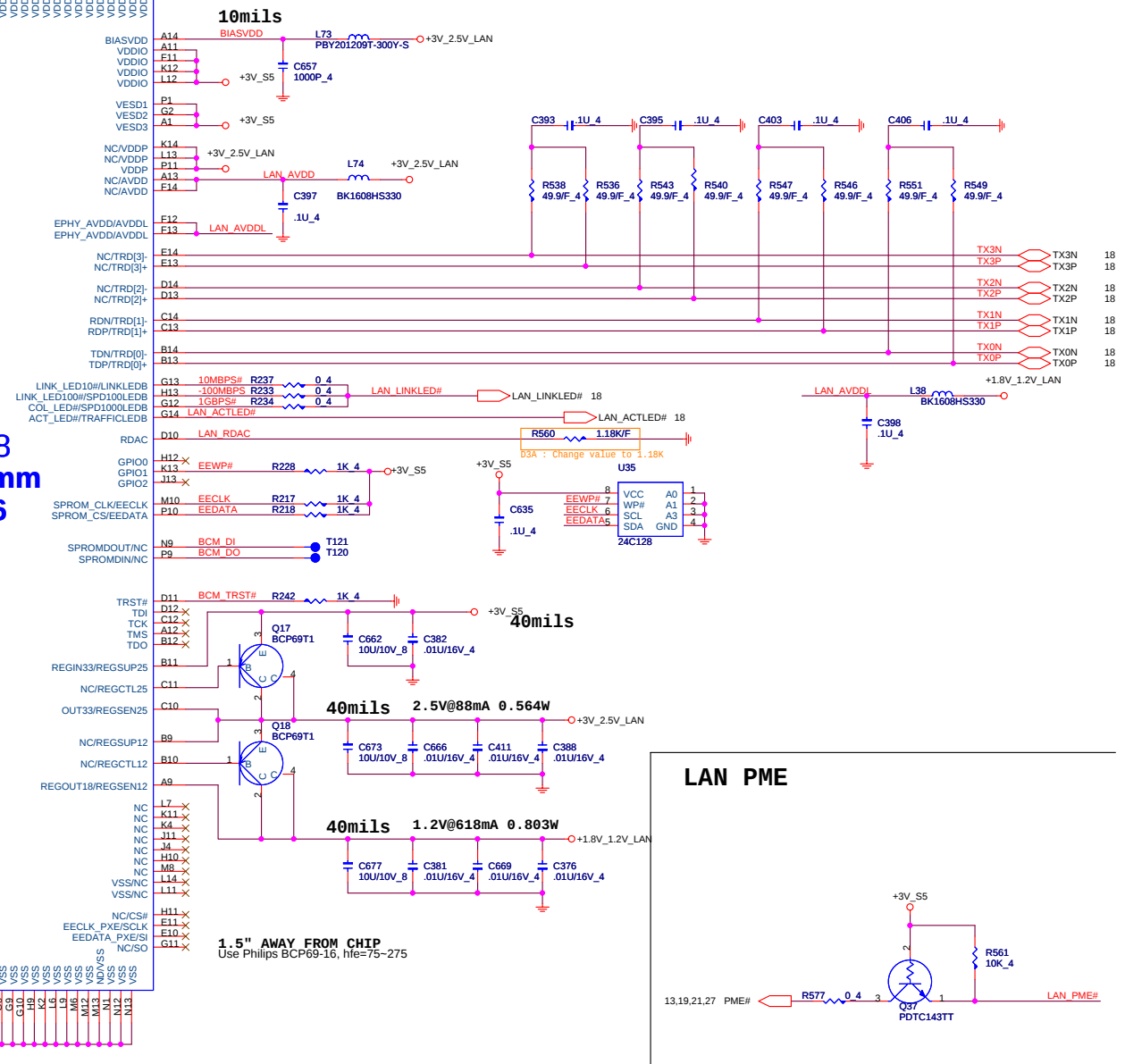
Size	Document Number	Rev
	VGA Ports, LID, DSC	D
Date:	Thursday, June 29, 2006	Sheet 16 of 36

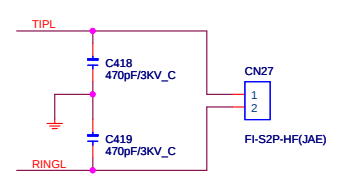
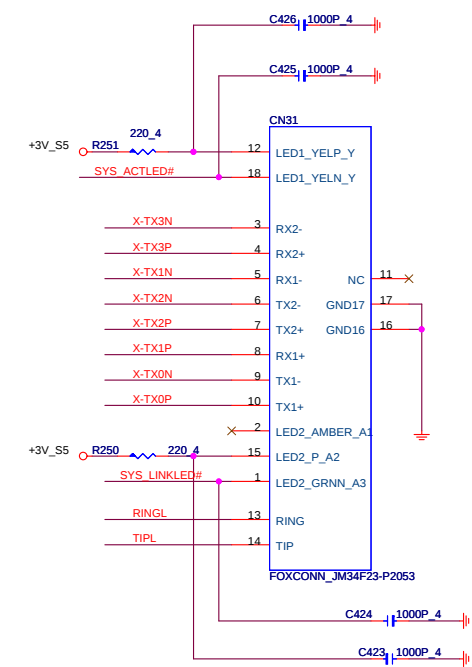
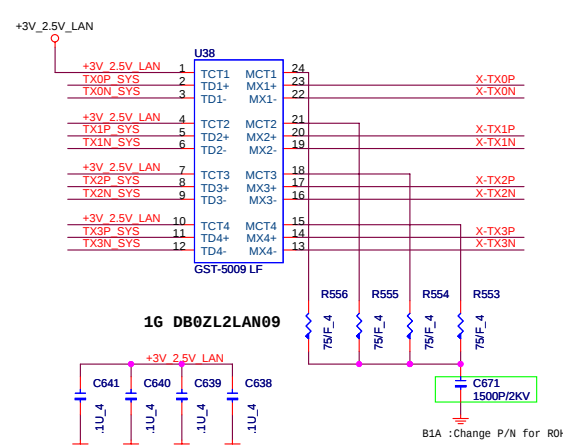
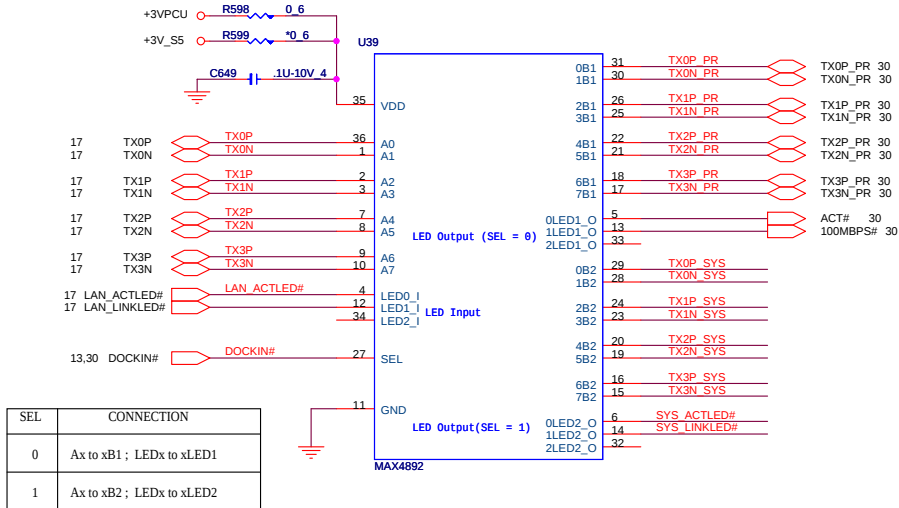


Voltage Rail 5788M
VDDIO_PCI +3V
+3V_2.5V_LAN 2.5V
+1.8V_1.2V_LAN 1.2V

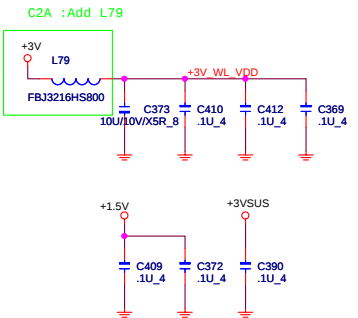
LAN BCM5788:
AD20 REQ2#
GNT2# INTG#

B1A: Change from
INTF# to INTG#





B1A:These signals of reserve have be used by wireless module of Foxconn BG. These signals impact LPC. I remove signal line in order to solve the WLAN issue.

[illegible]

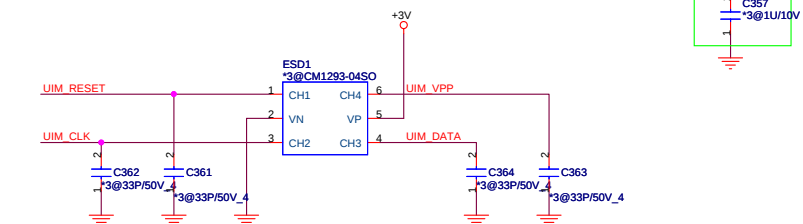
B1A: Change footprint
C2A: Change footprint & modify SIM card PIN define

JSIM1

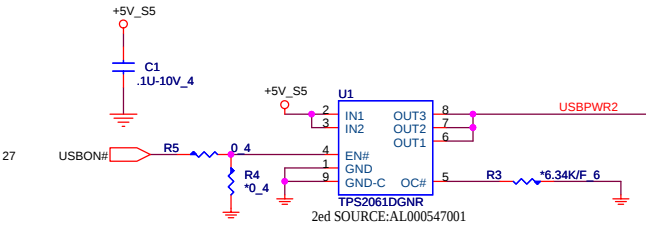
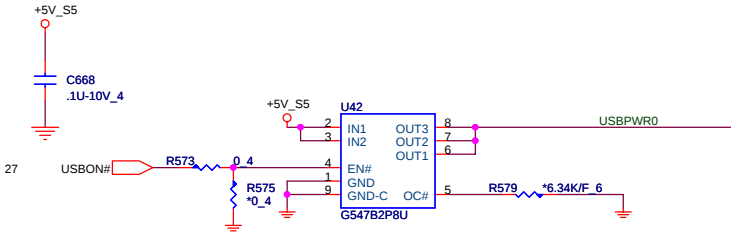
UIM DATA C7
UIM VPP C6
VCC C5
RST C4
CLK C3
GND C2
DATA C1
1
2
3

UIM CLK
UIM RST
UIM PWR

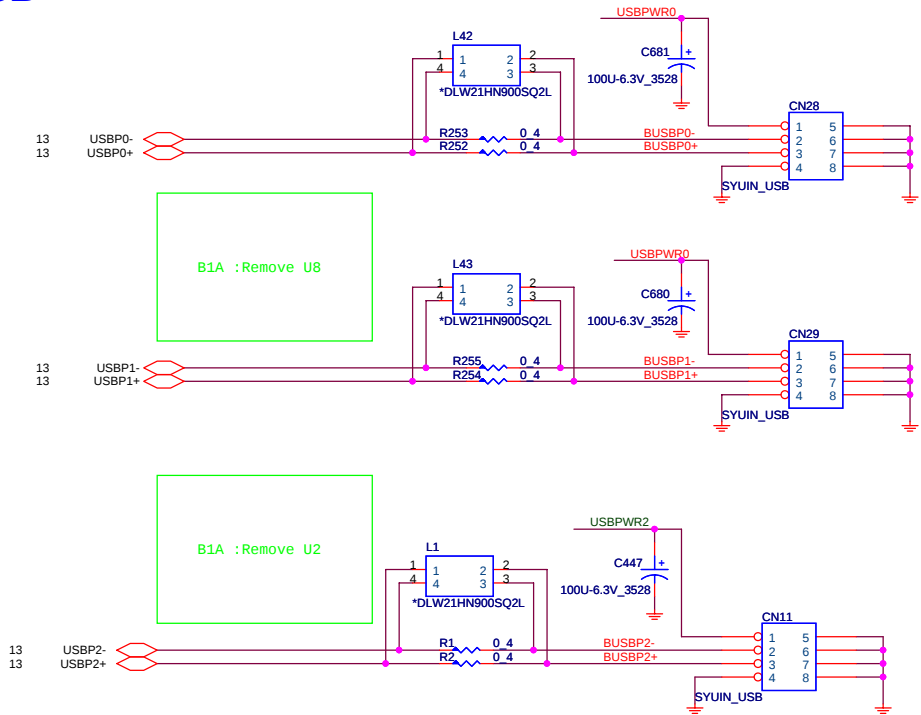
*3@FOX_WL618E2-U05-7F



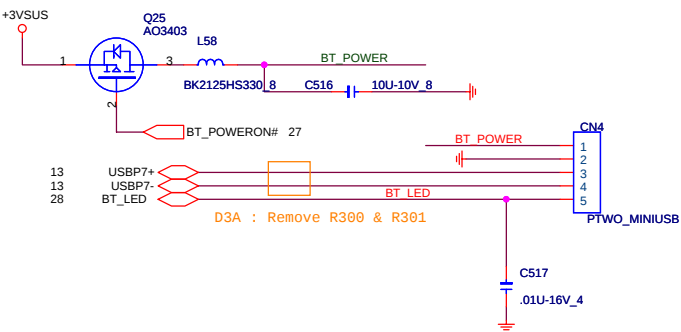
USB POWER SUPPLY



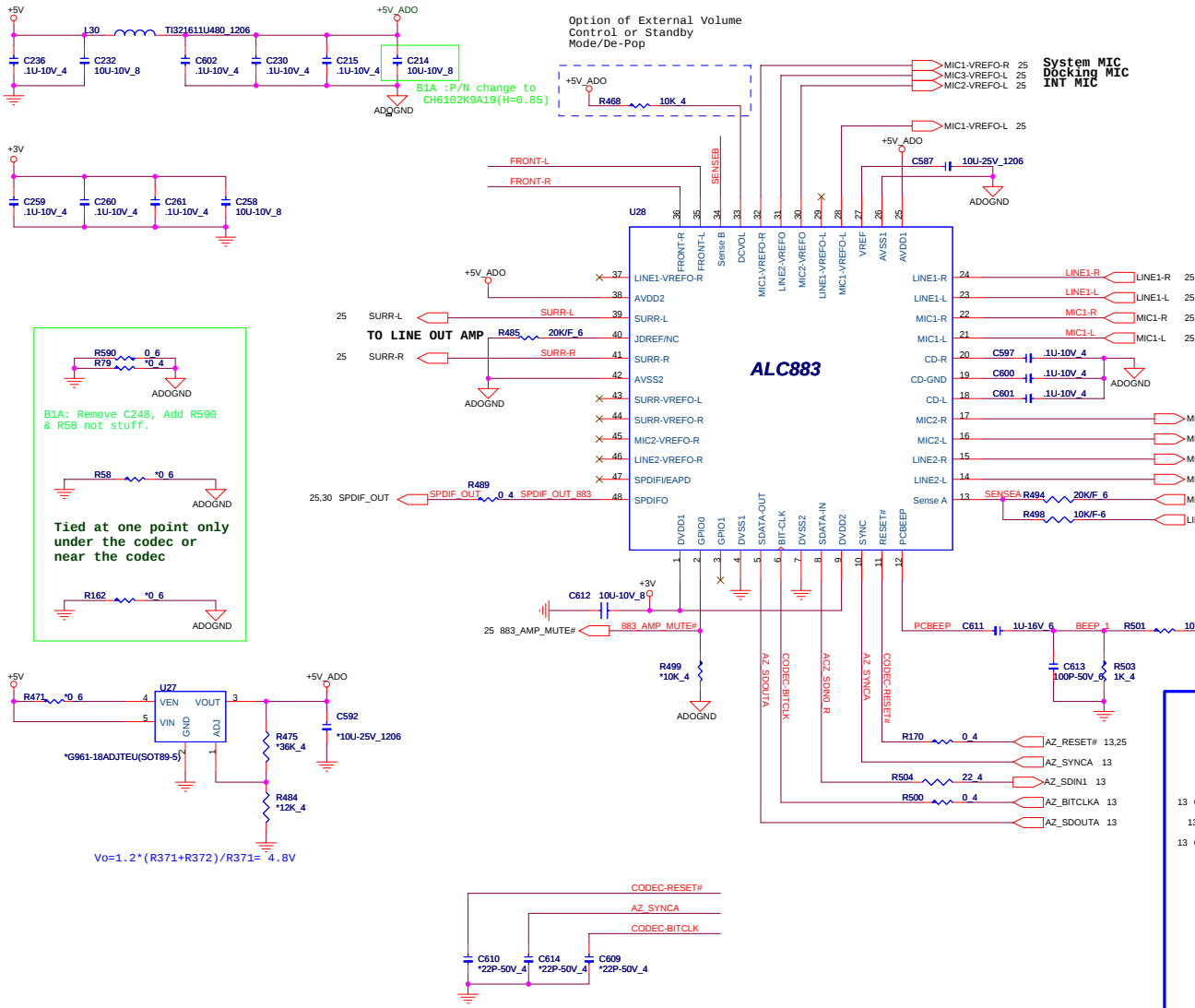
USB



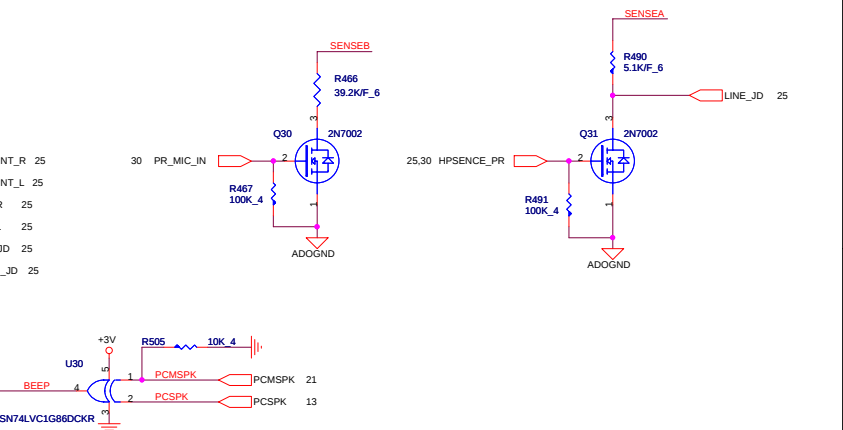
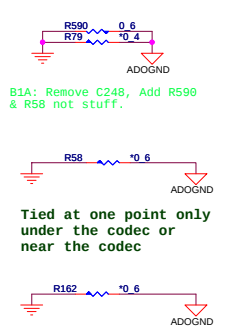
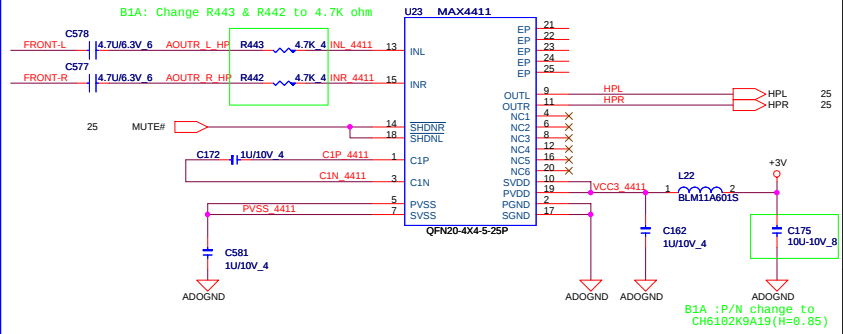
BLUETOOTH MODULE CONNECTOR



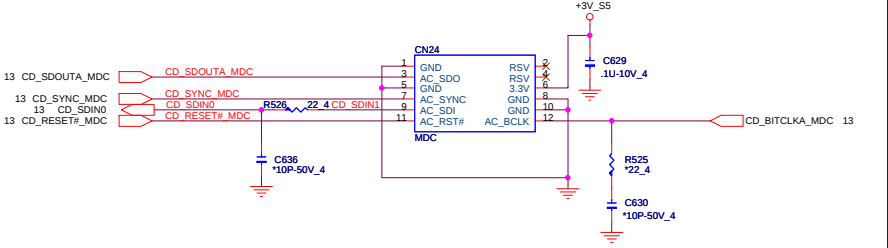
CODEC(ALC883)

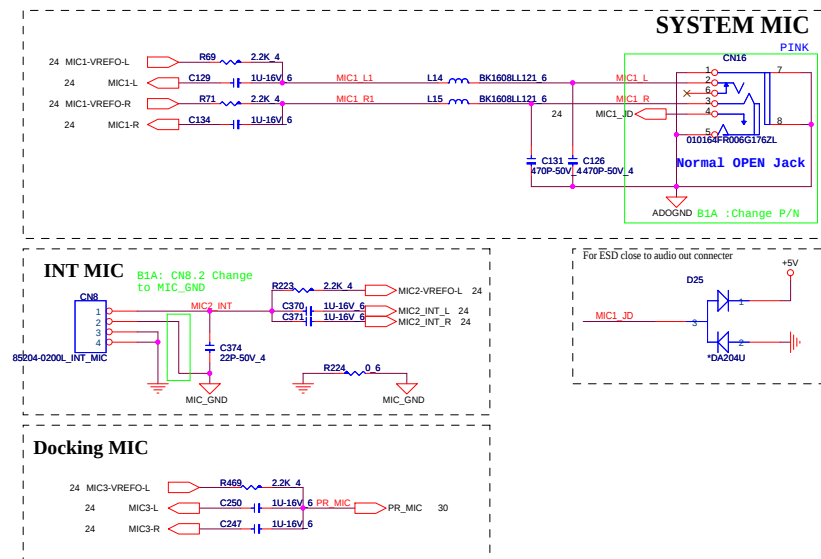
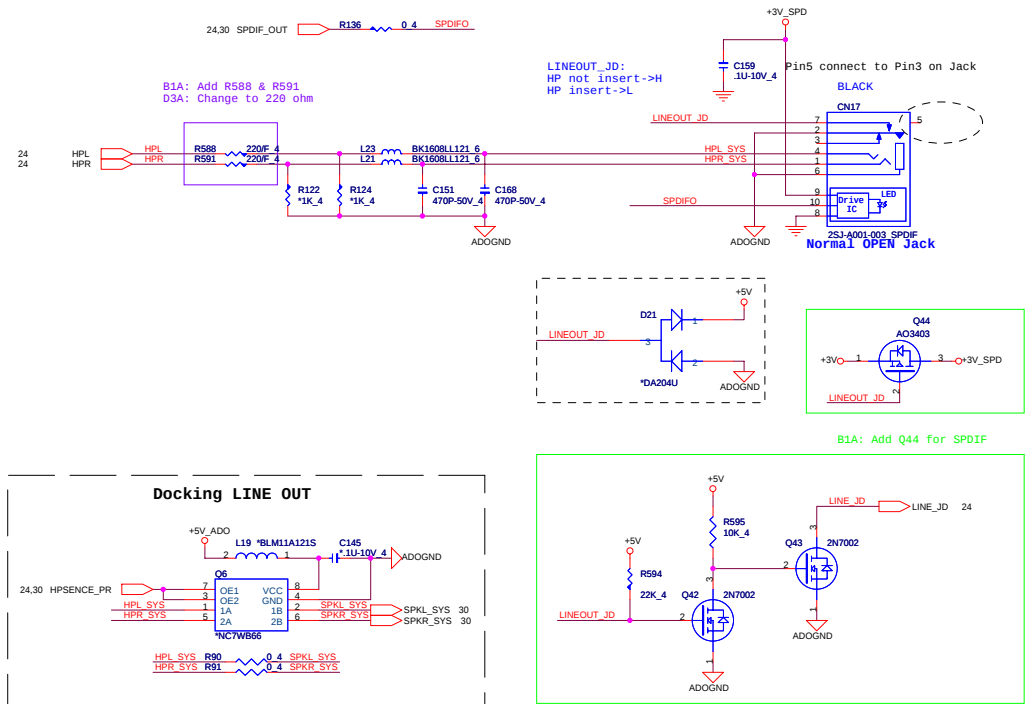
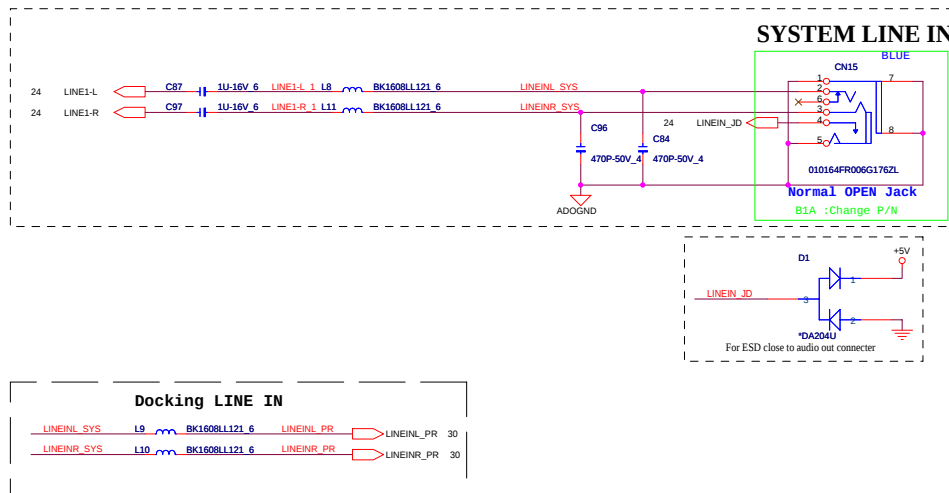
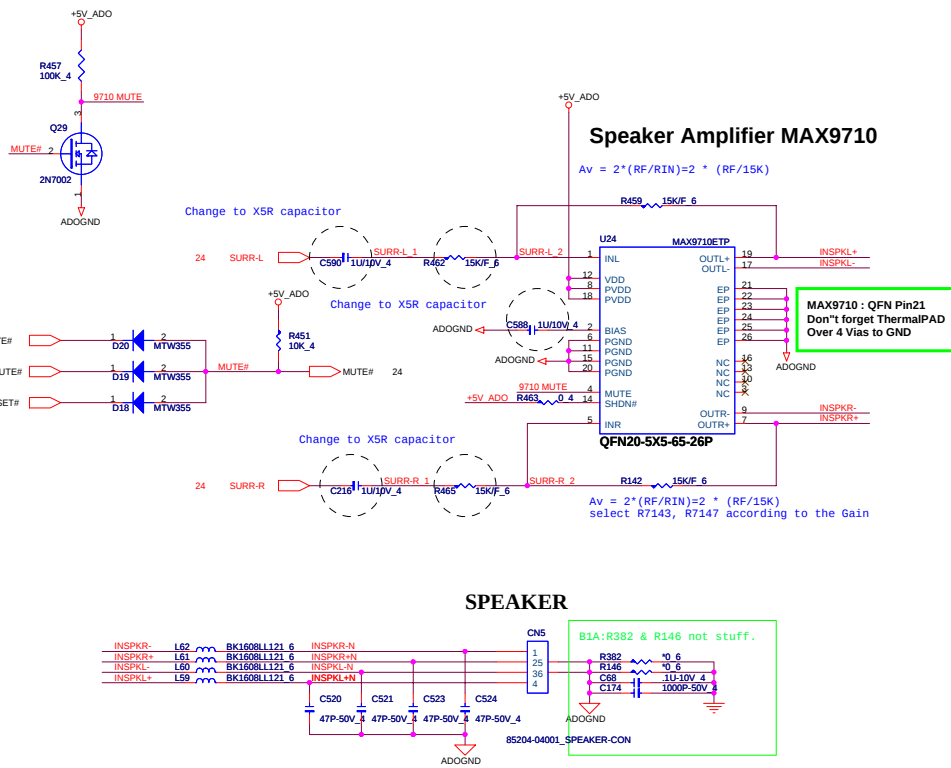


LINE OUT Amplifier



MDC For MDC Module





SIO

FIR

NS PC87383

STRAP PINS
NC==>164E
PD==>2E2F

B1A: Stuff R552, set PC87383 I/O to 2E/2F

IRRX R548 10K 4 +3V

B1A :Change to 0 ohm

PROJECT :ZH3
Quanta Computer Inc.

Size Custom Document Number SIO (87383) & FIR Rev D
Date: Thursday, June 29, 2006 Sheet 26 of 36

SIO

FIR

NS PC87383

STRAP PINS
NC==>164E
PD==>2E2F

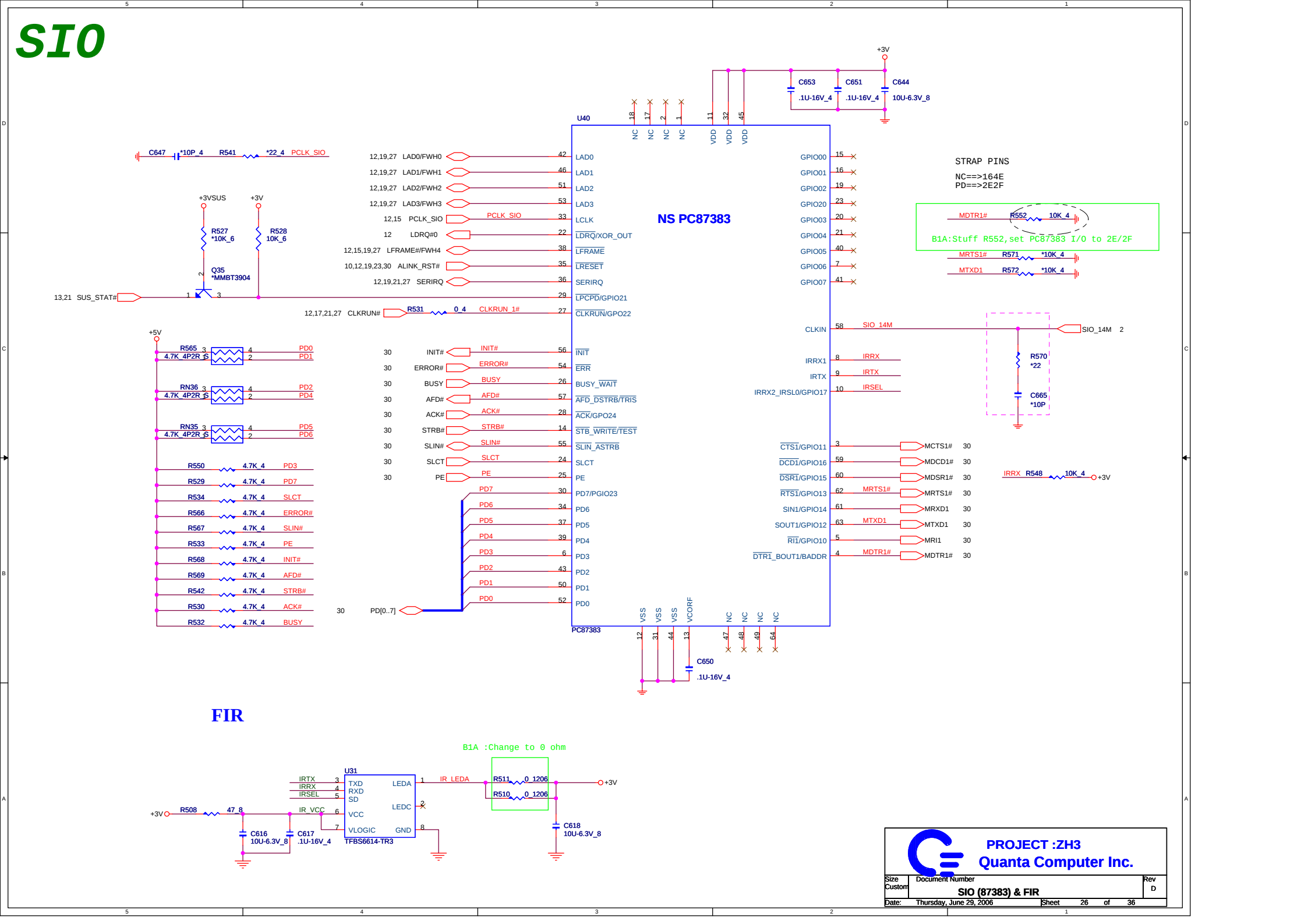
B1A: Stuff R552, set PC87383 I/O to 2E/2F

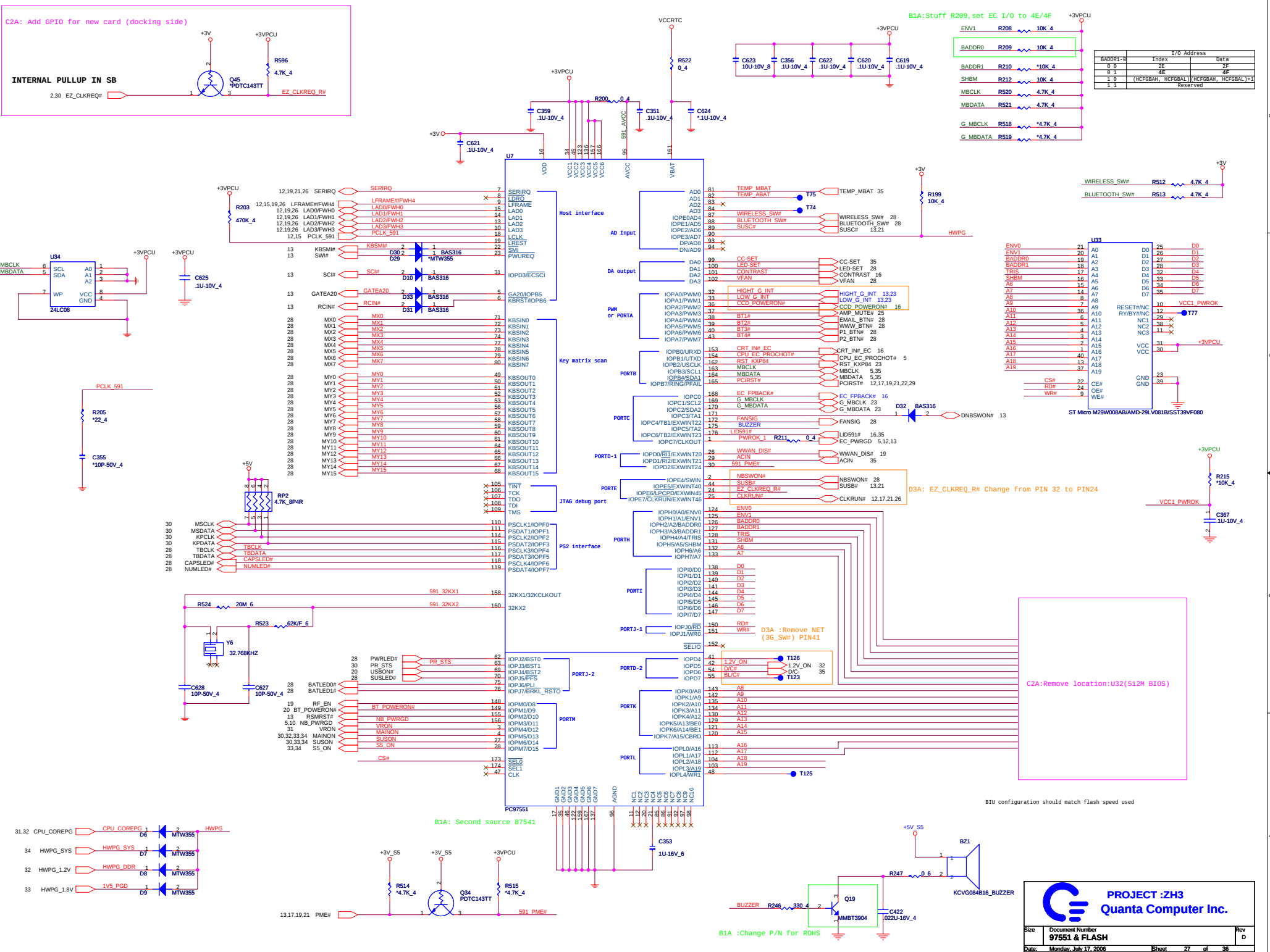
IRRX R548 10K 4 +3V

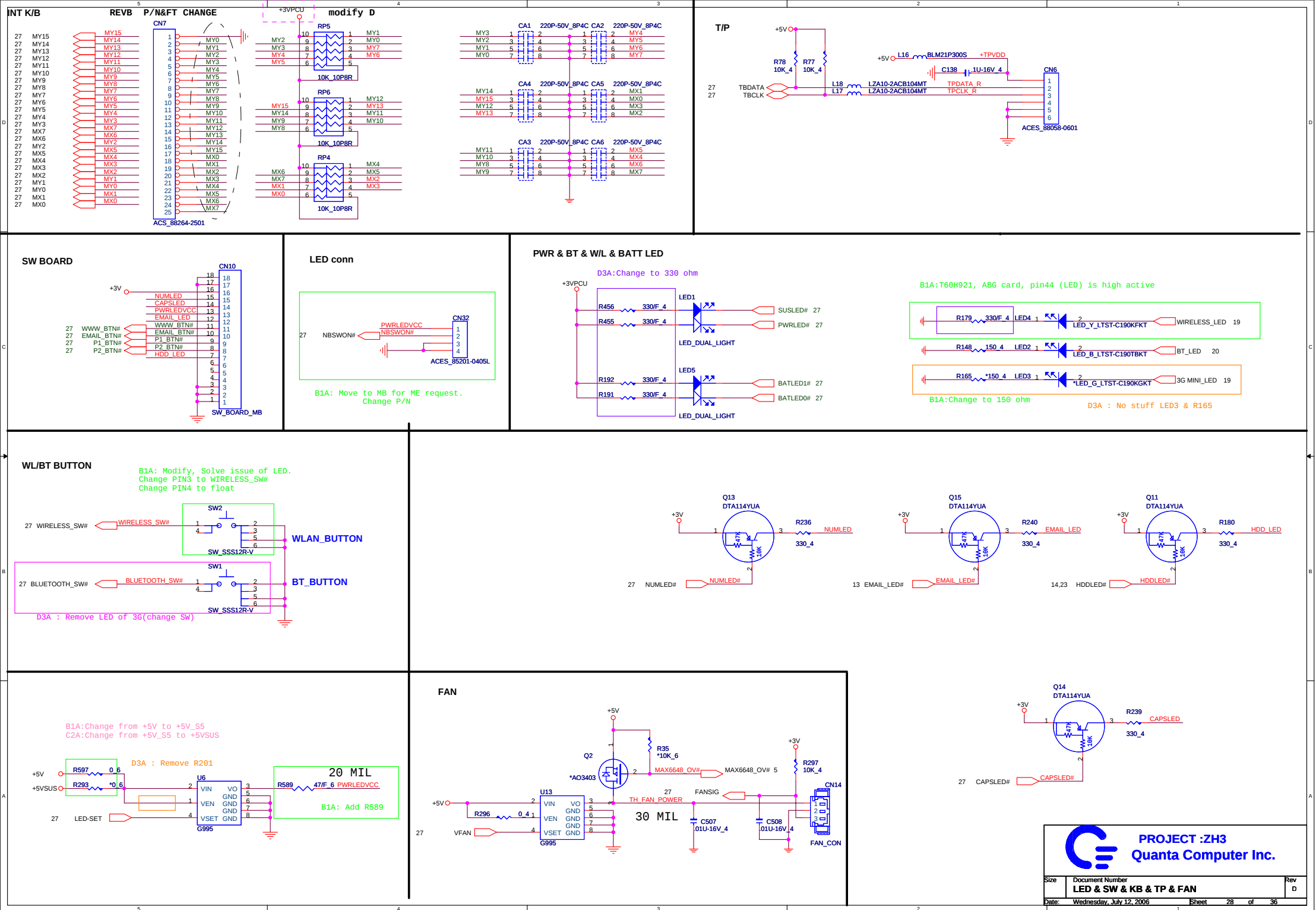
B1A :Change to 0 ohm

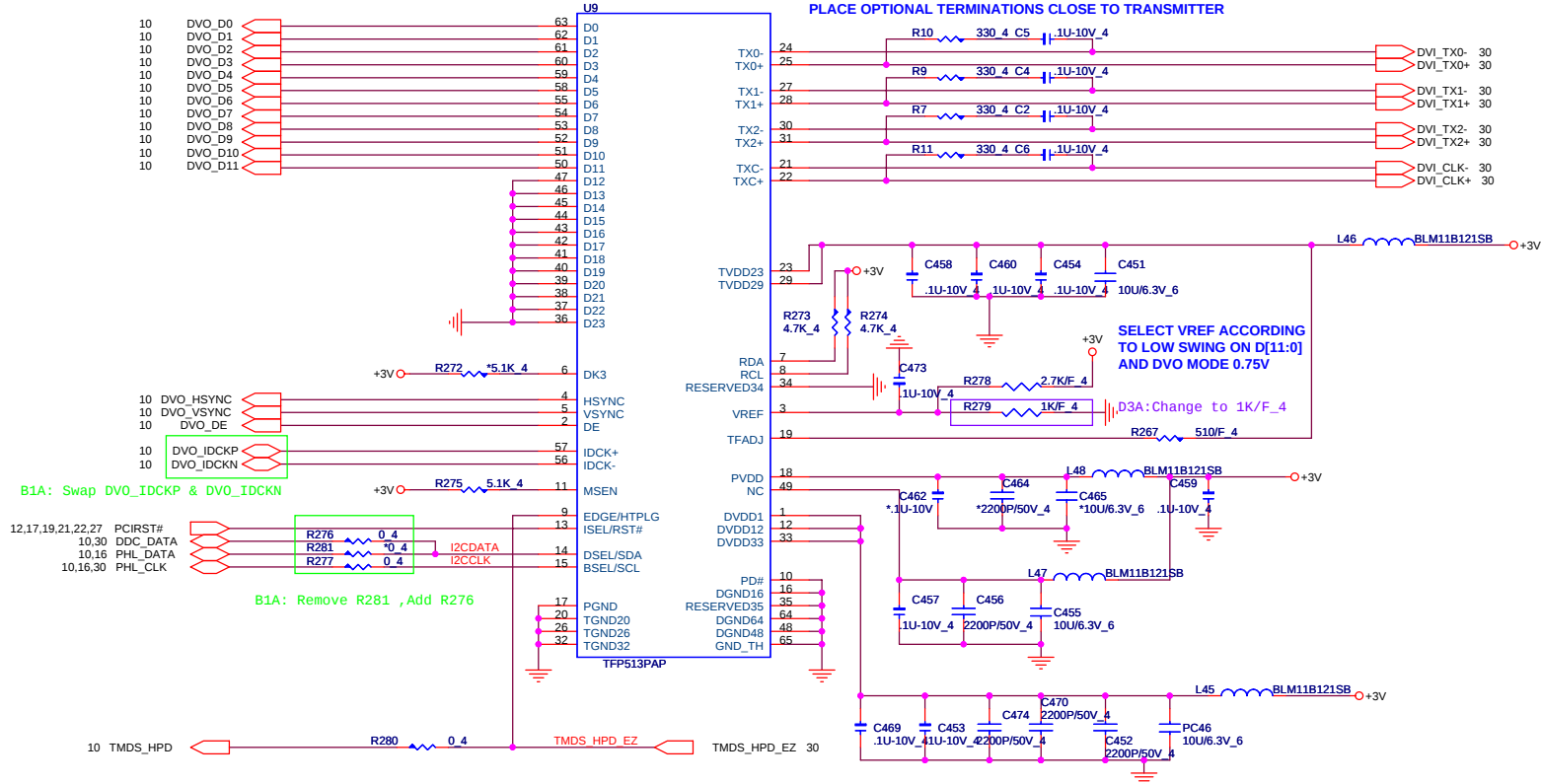
PROJECT :ZH3
Quanta Computer Inc.

Size Custom Document Number SIO (87383) & FIR Rev D
Date: Thursday, June 29, 2006 Sheet 26 of 36

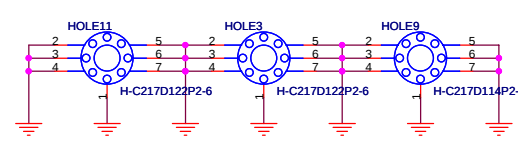
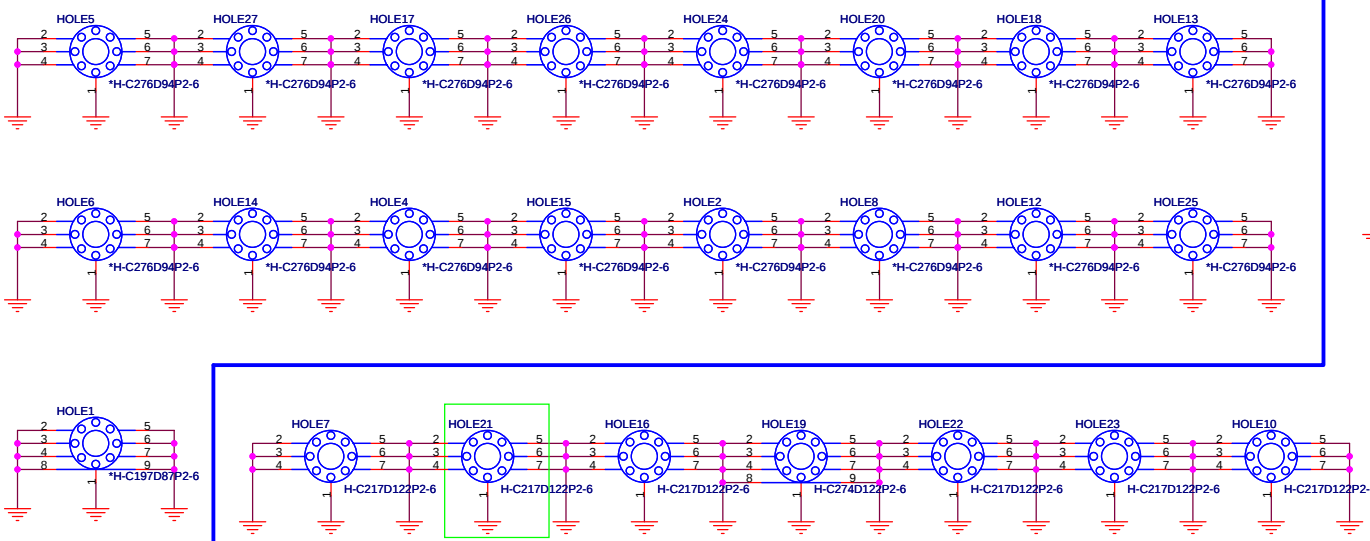








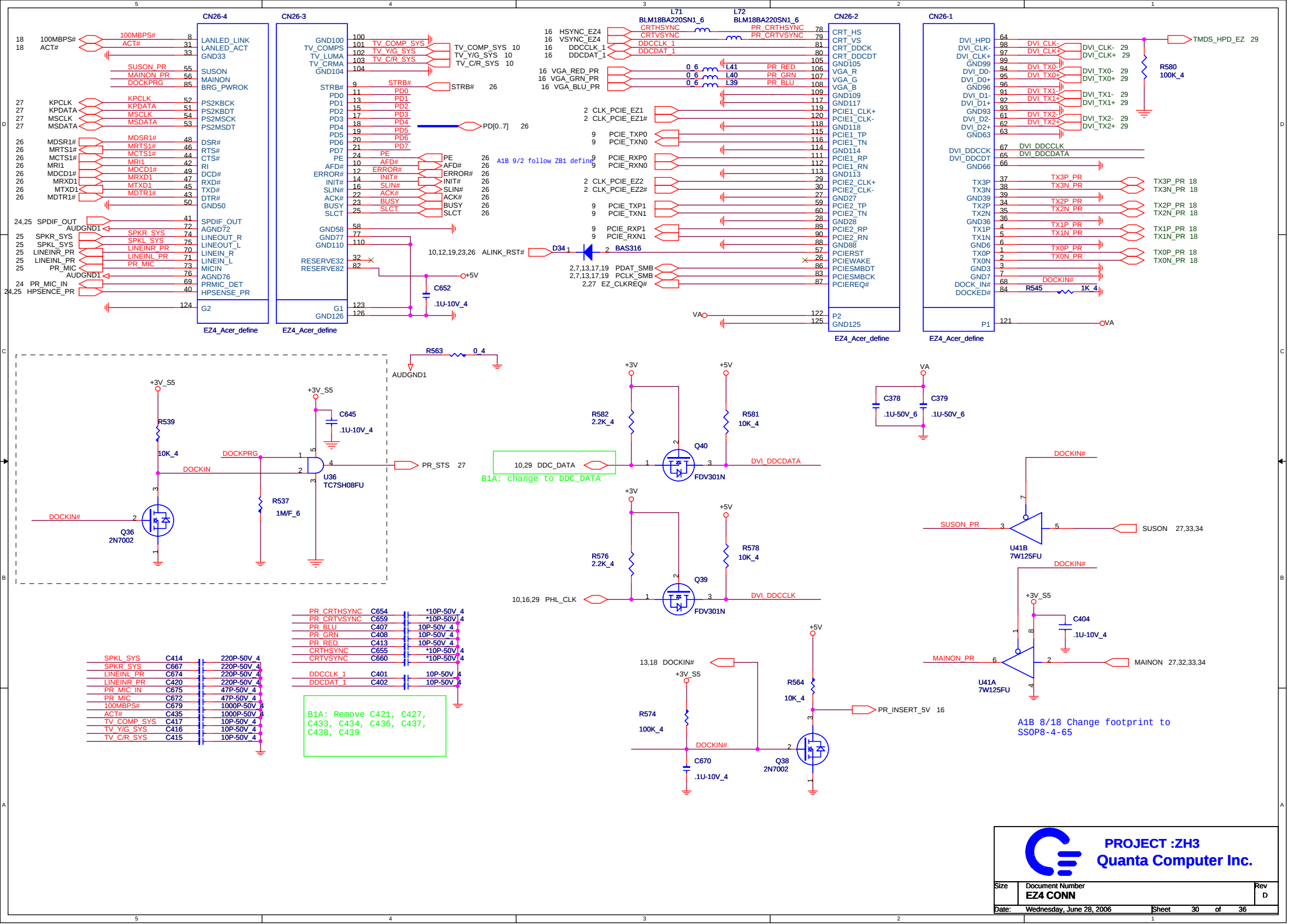
HOLE





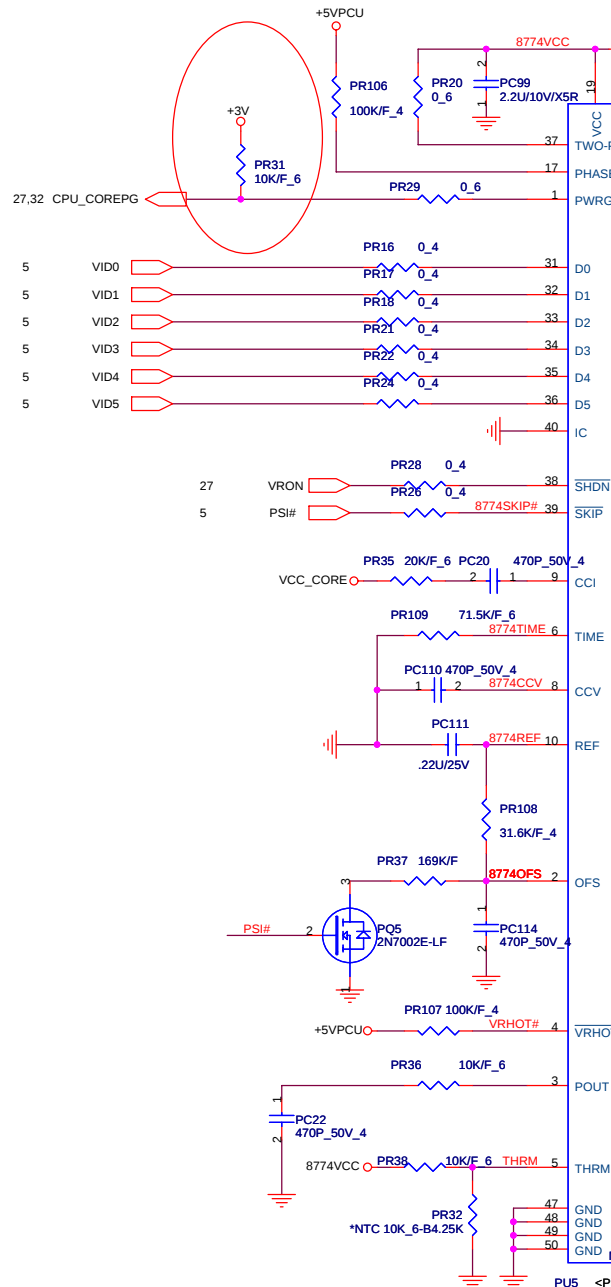
PROJECT :ZH3
Quanta Computer Inc.

Size	Document Number	Rev
	CH7307& HOLE	D
Date:	Wednesday, July 12, 2006	Sheet 29 of 36

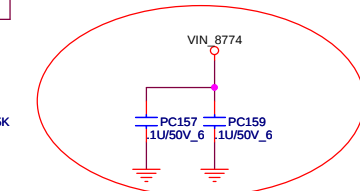
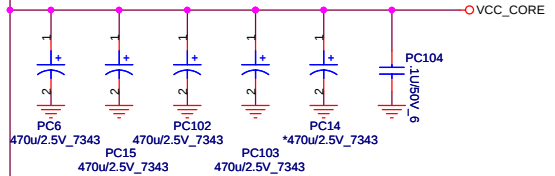
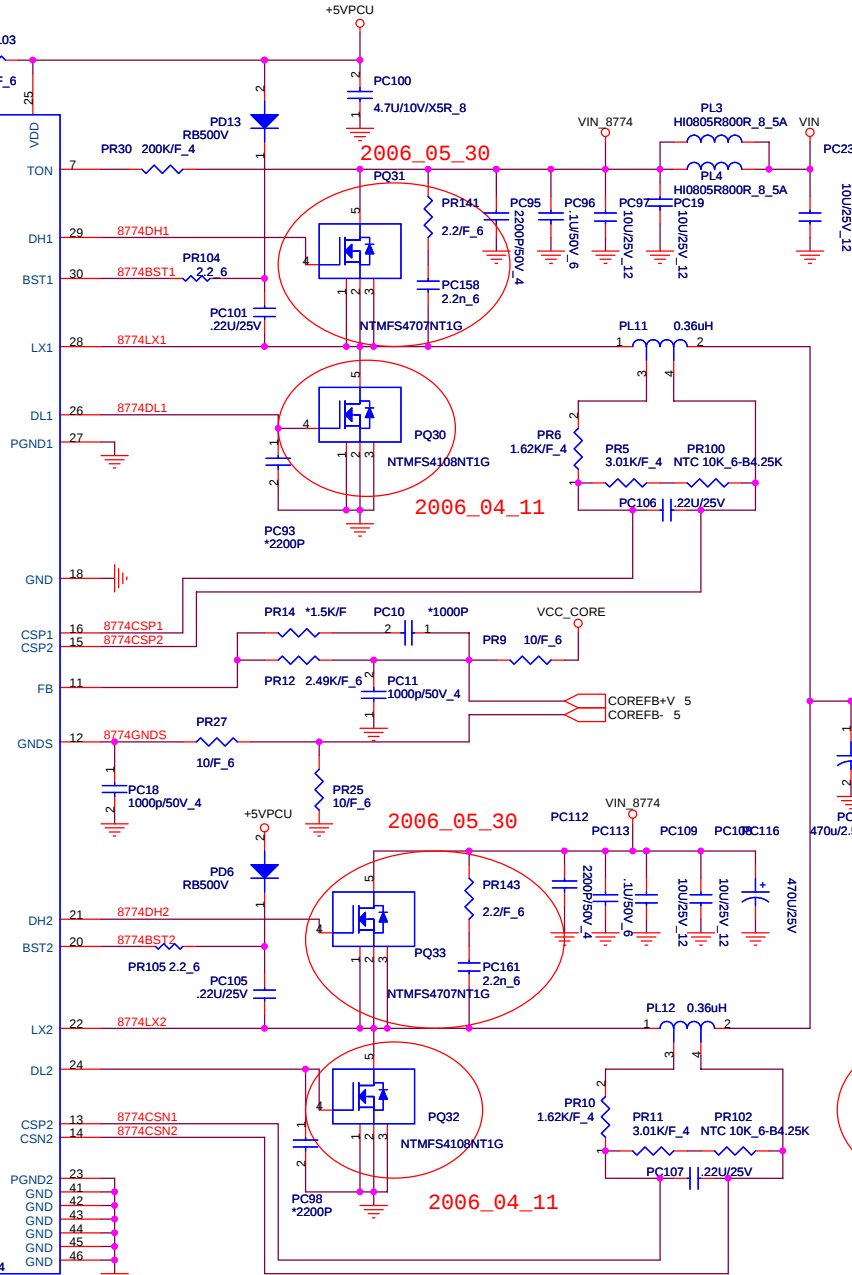


PROJECT :ZH3
Quanta Computer Inc.

2006_03_06 for AMD

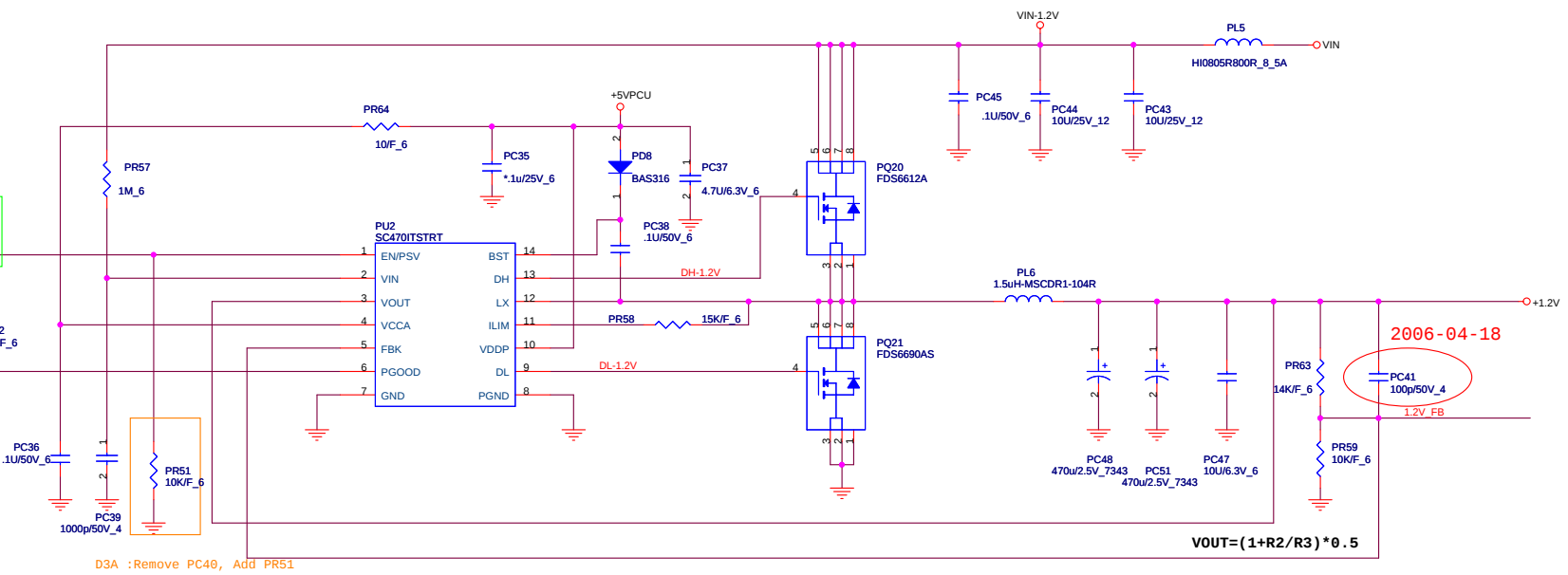
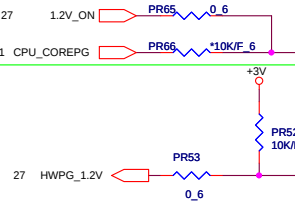


PUS <Pin Numbers Visible>
B1A:PUS Change footprint to -50P

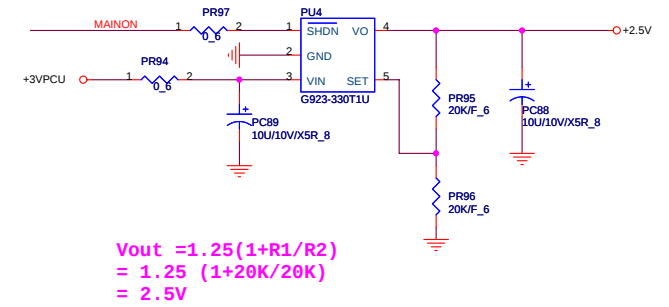
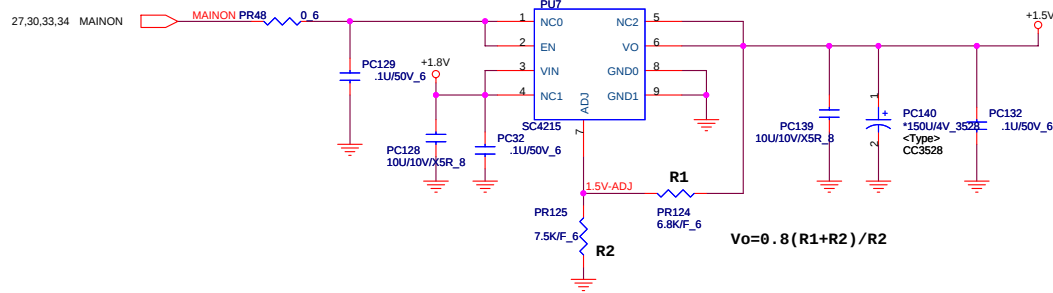


2006-0417
For EMI

C2A :Modify to EC control ,
Remove PR66, Stuff PR65



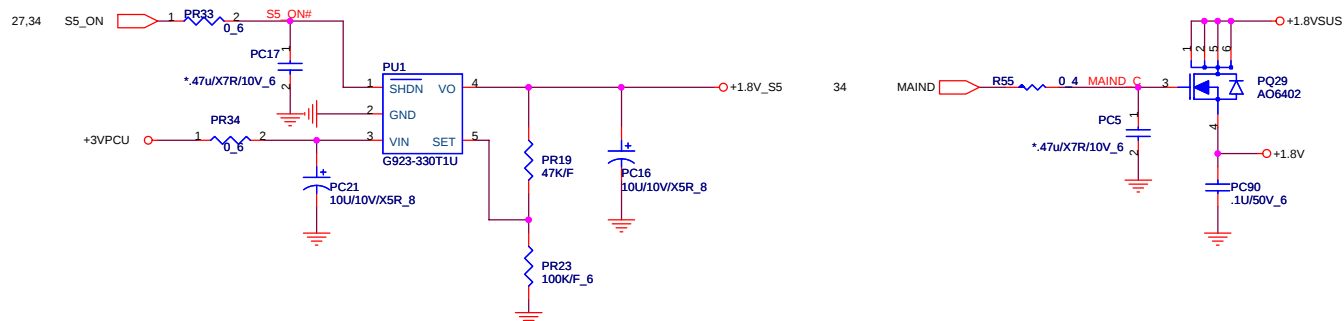
D3A :Remove PC49, Add PR51



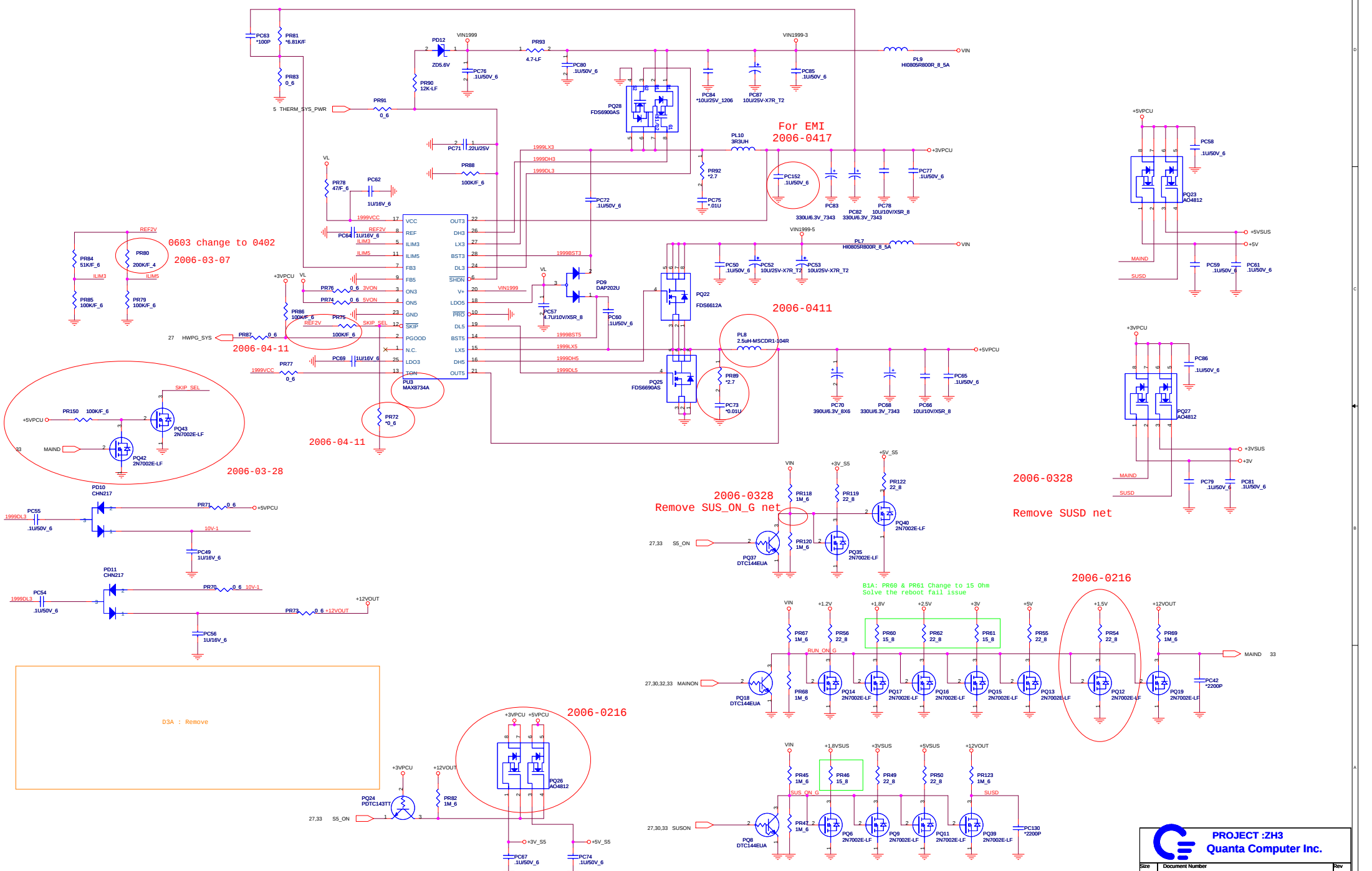
change from NCP5214 to SC480IMLTRT

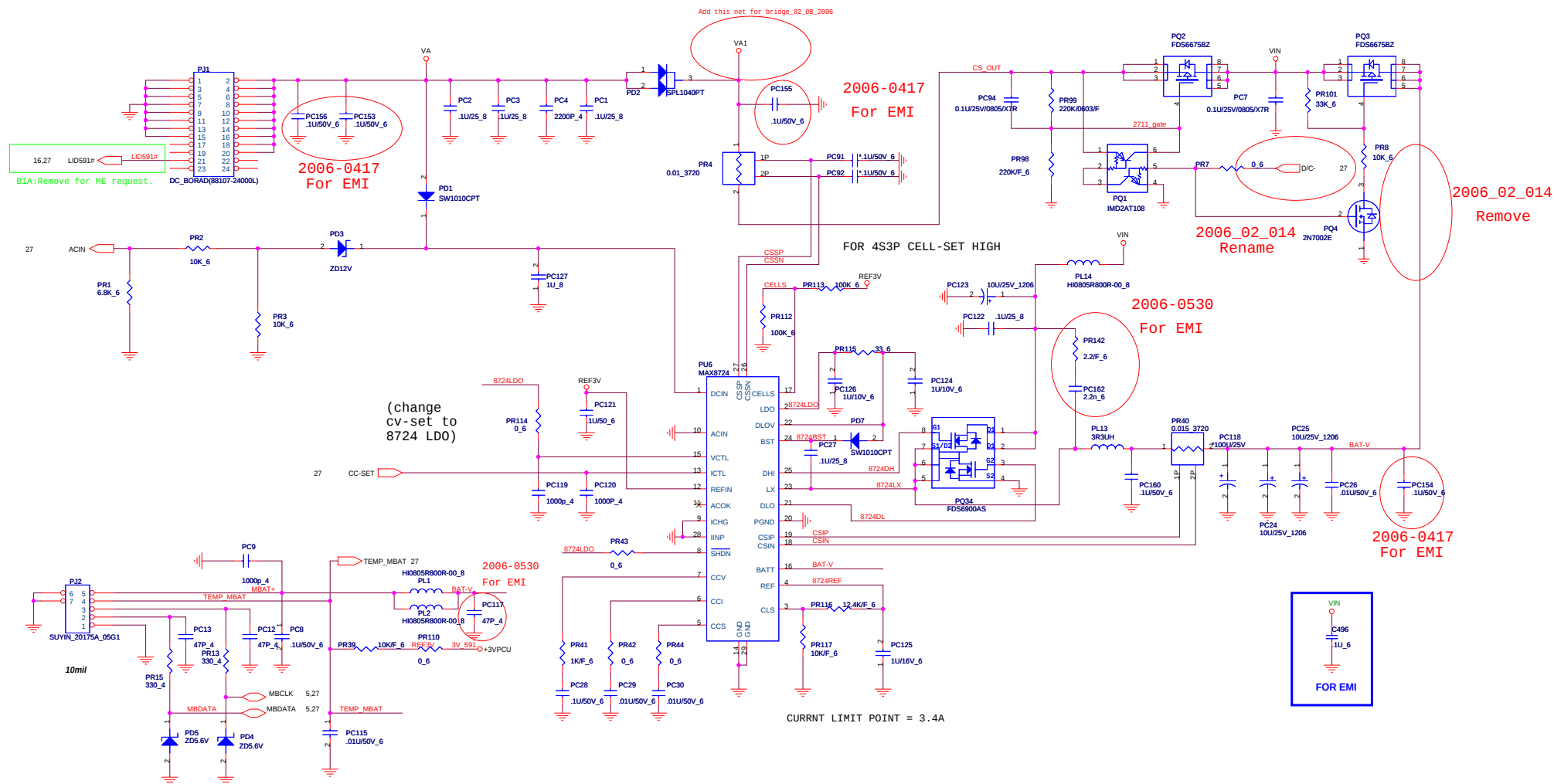


$$V_{OUT} = (1 + PR_{82}/PR_{81}) * 1.5$$



$$\begin{aligned} V_{out} &= 1.25(1 + R_1/R_2) \\ &= 1.25(1 + 44K/100K) \\ &= 1.8V \end{aligned}$$





Change list

Item	Fixed Issue	Modify List	Schematic Rev.	PG#	
1	New card issue.	NC_EN# connect the PIN4 & PIN17 of CN2 and PIN11 & PIN12 of CN14	B	13,31	
2	New card issue.	Change from USB8 to USB5 for new card,	B	13,31	
3	Lan issue.	Signal change from INTF to INTG	B	12,17	
4	INT MIC issue.	CN8.2 change from MIC2_INT to MIC_GND	B	25	
5	Wireless LED issue.	SW2.1 change from GND to wireless_sw#, SW2.2 change from wireless_sw# to GND.PIN3,4 is float	B	28	
6	DVI issue	Q40.1 change from PHL_DATA to DDC_DATA	B	29,30	
7	RAMP test				
8					
9					
10					
1					
2					
3					
4					
5					
6					
7					
8					
1					
2					
3					