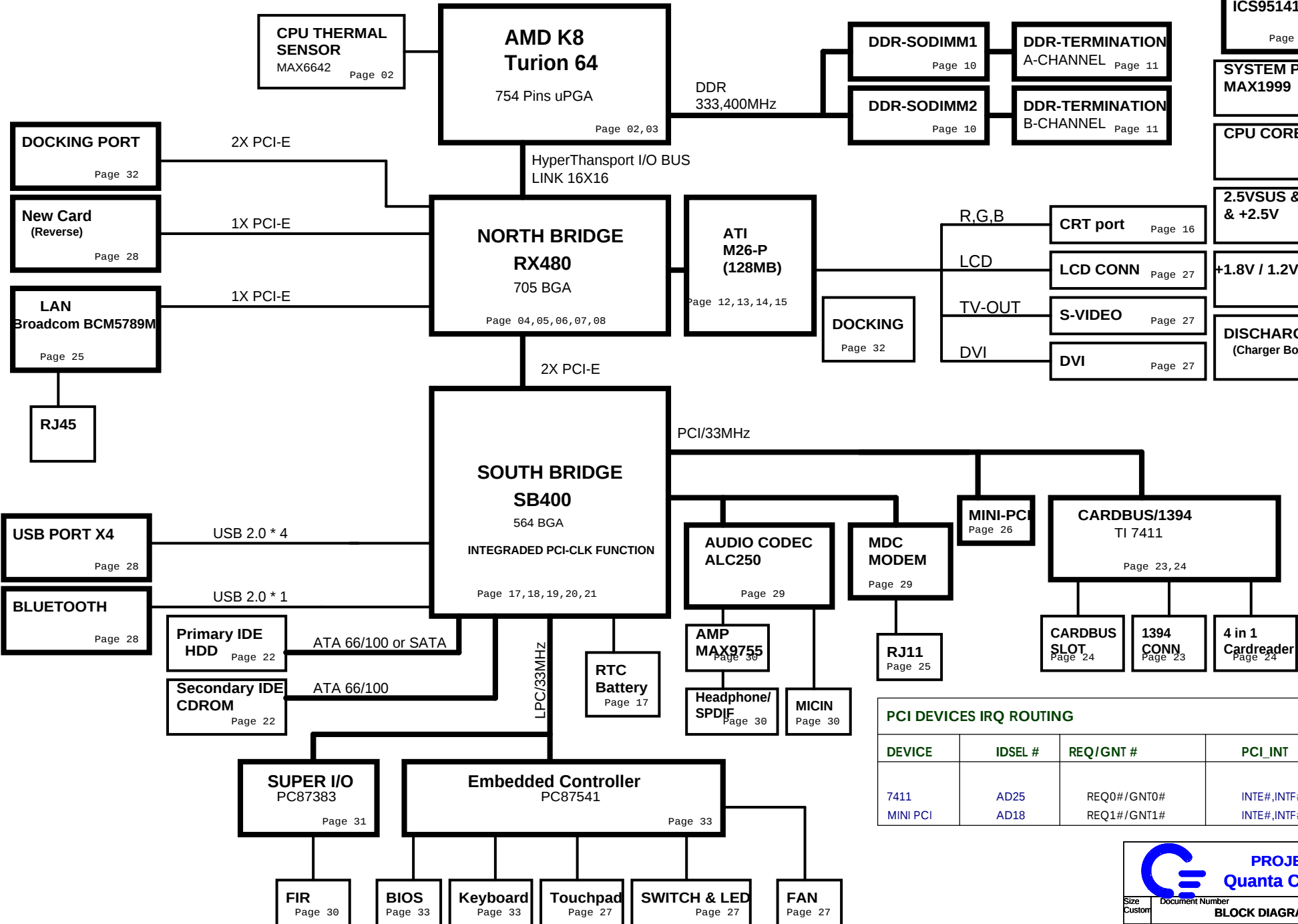
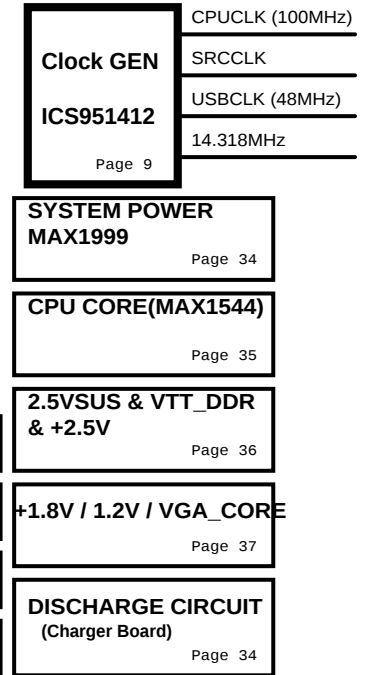


ZF3 BLOCK DIAGRAM

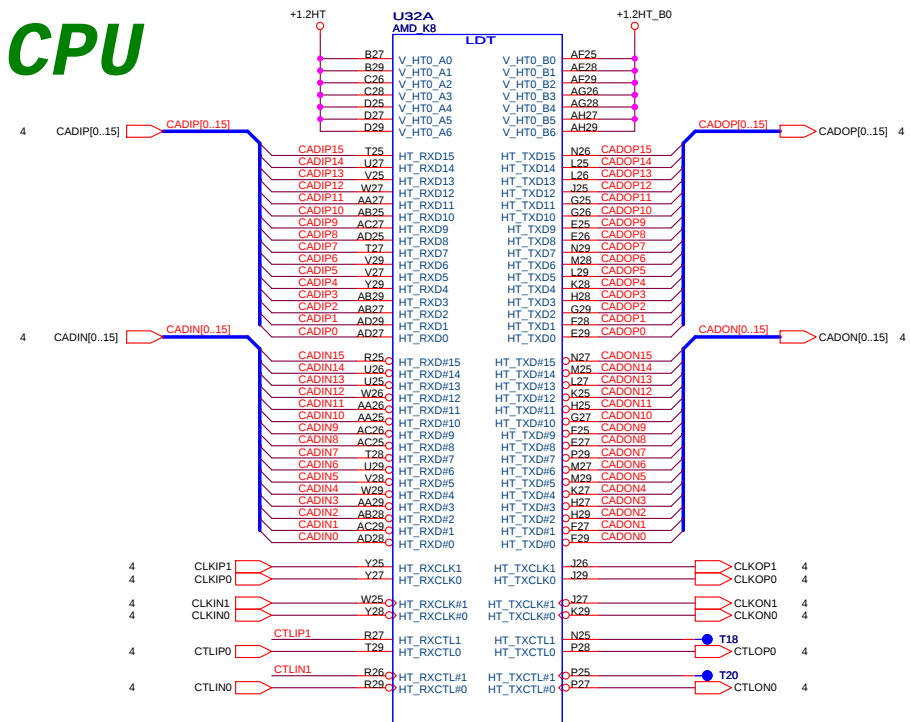
AMD K8/RX480/SB400

REV: G3A

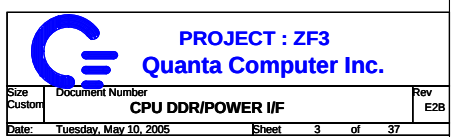
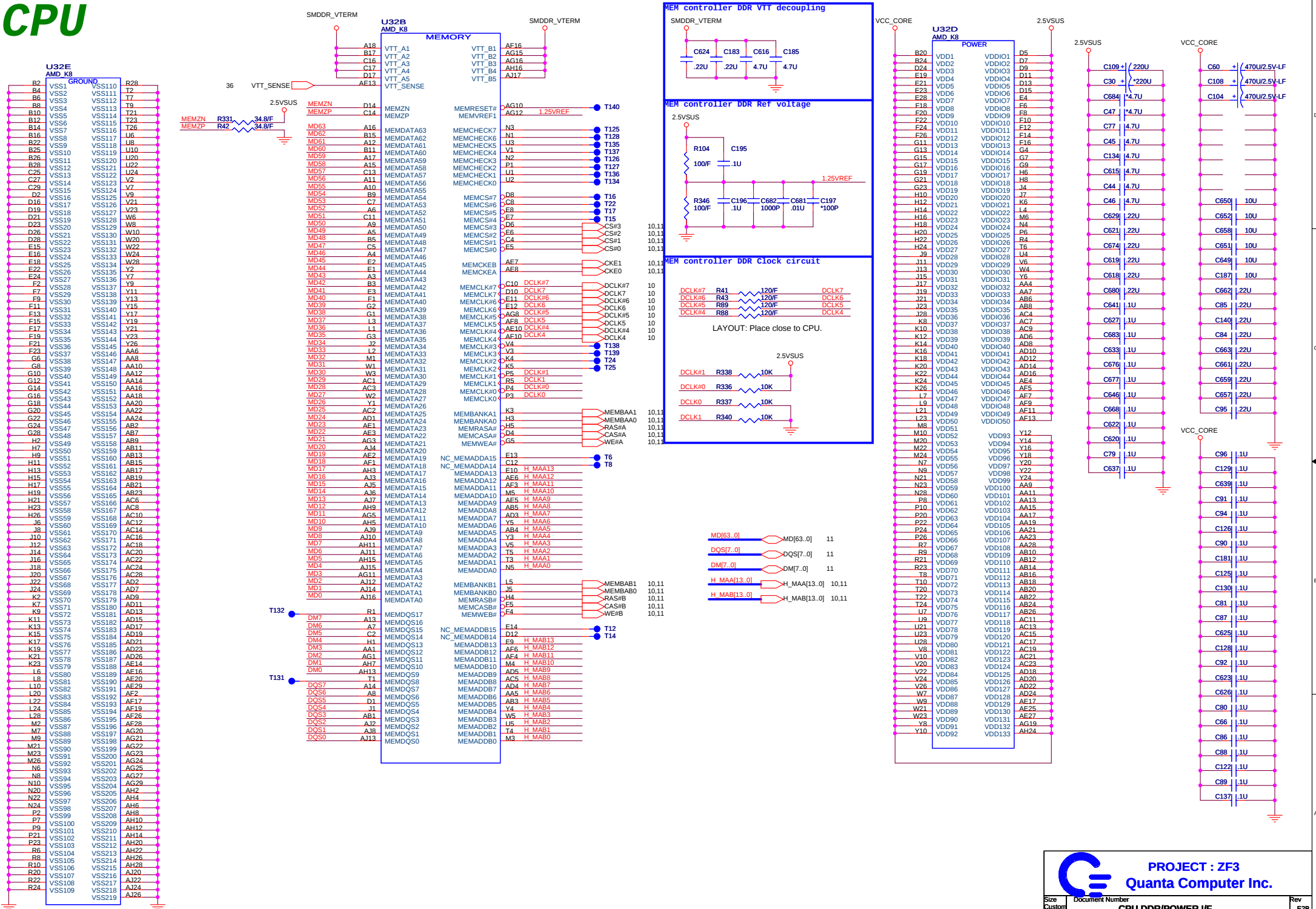


PCI DEVICES IRQ ROUTING			
DEVICE	IDSEL #	REQ/GNT #	PCI_INT
7411 MINI PCI	AD25 AD18	REQ0#/GNT0# REQ1#/GNT1#	INTE#,INTF#,INTH# INTE#,INTF#

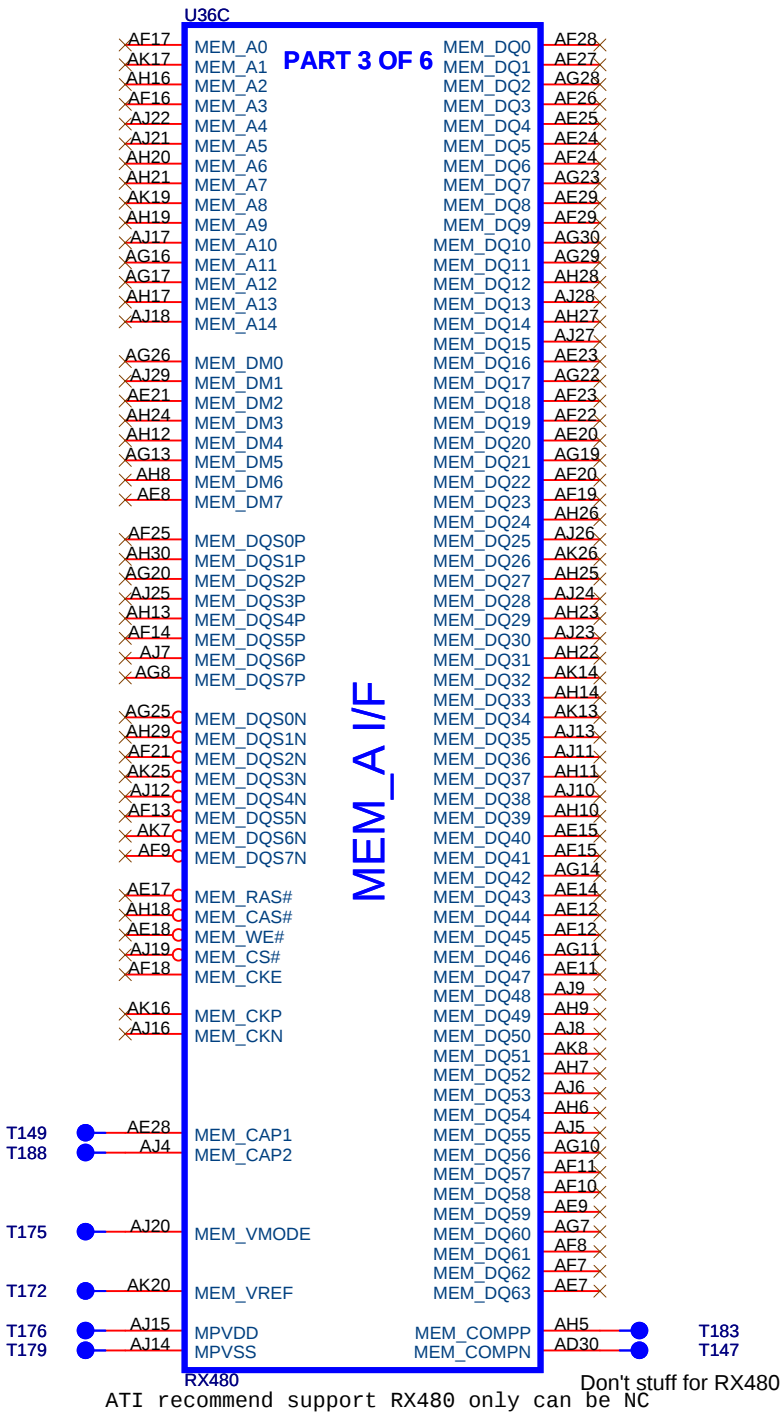
CPU



CPU



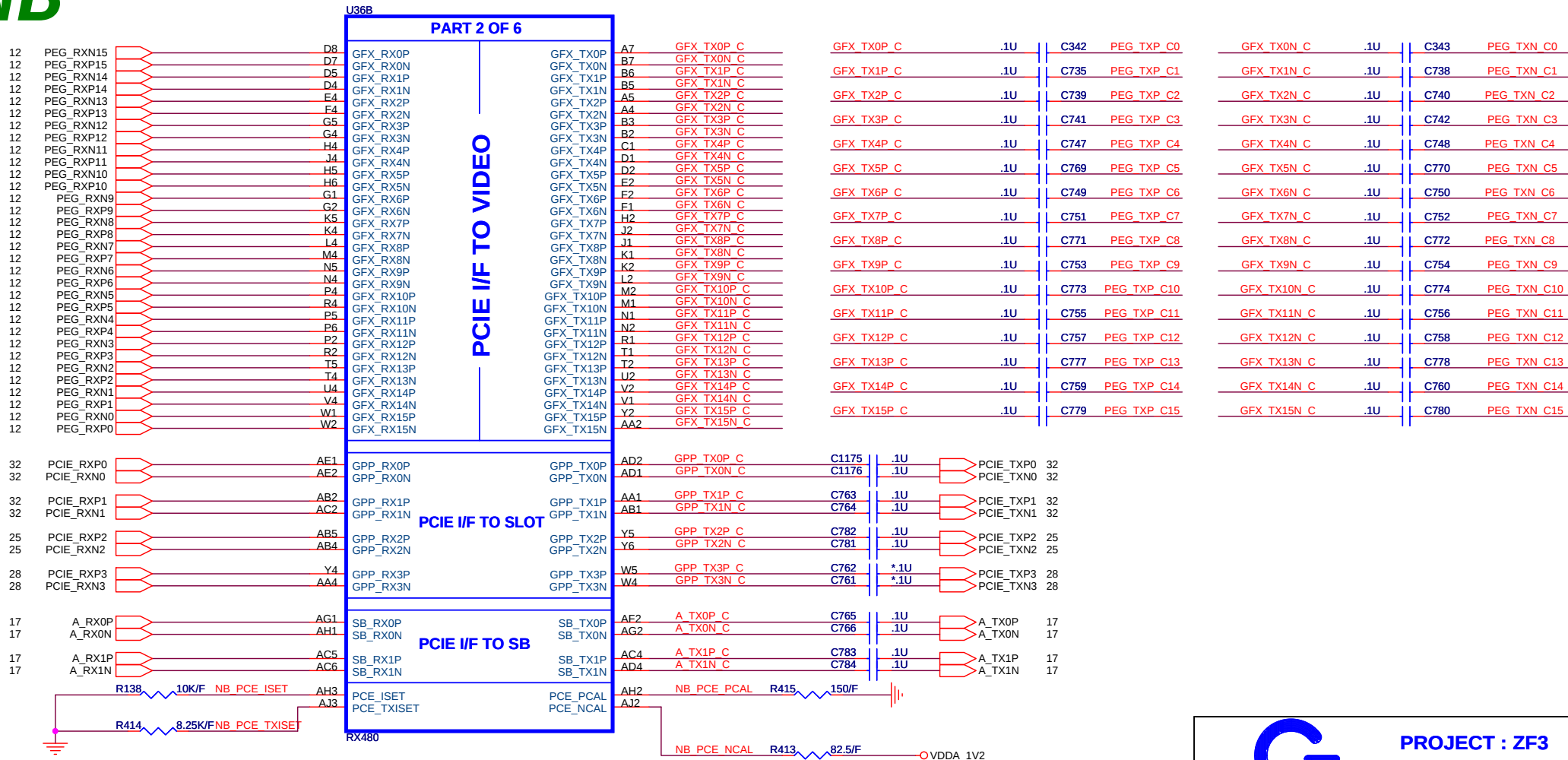
NB



PROJECT : ZF3
Quanta Computer Inc.

Size Custom	Document Number RS480M SIDE-PORT MEM I/F	Rev E2B
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NB



PROJECT : ZF3
Quanta Computer Inc.

Size	Document Number	Rev
Custom	RS480M PCIE LINK I/F	E2B
Date:	Tuesday, May 10, 2005	Sheet 6 of 37

PCB Layout: RS480M POWER

Components and Values:

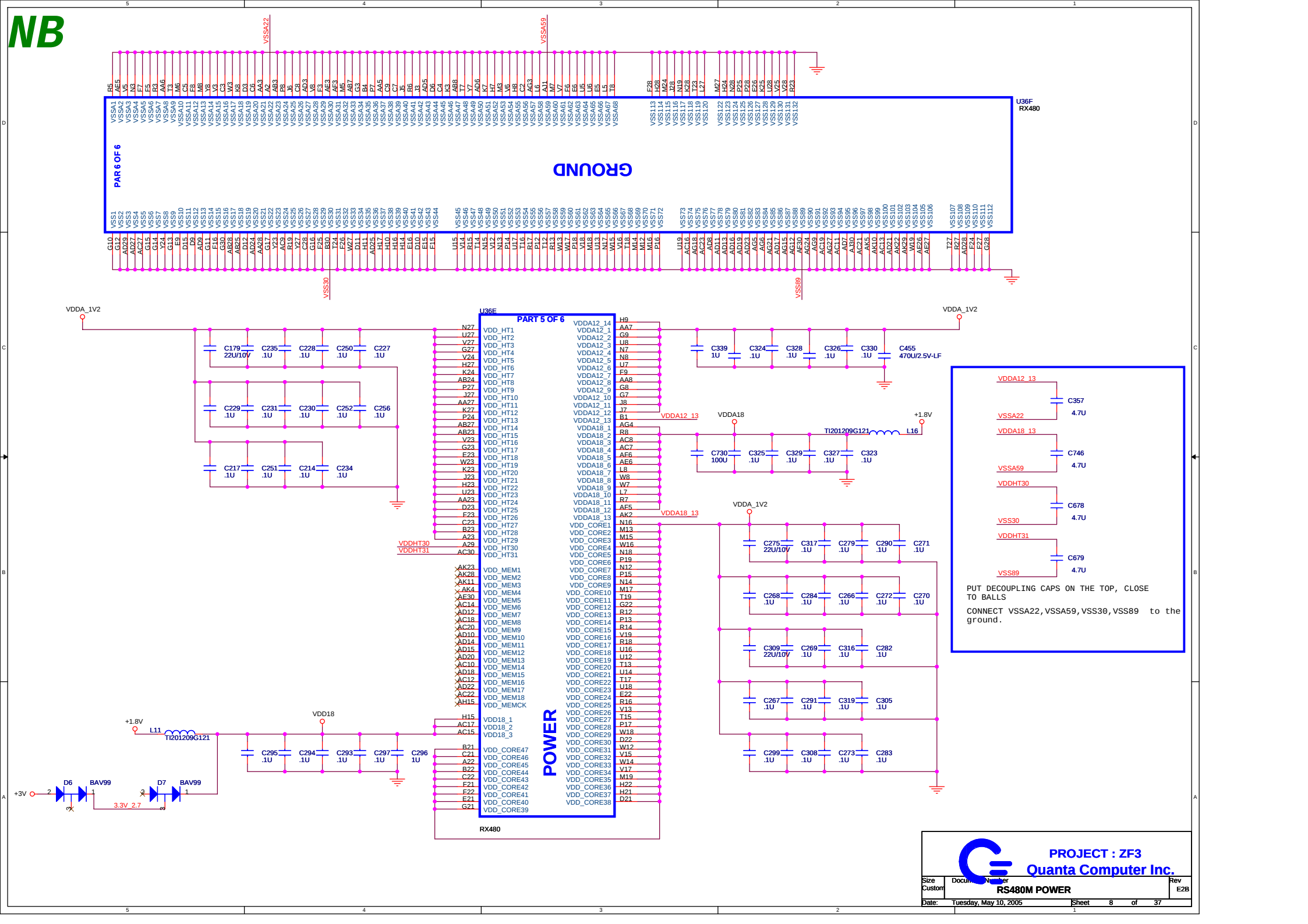
- Regulator Section (Left):**
 - 3V Regulator: D6, BAV99, D7, BAV99
 - Capacitors: C295, C294, C293, C297, C296
- Power Distribution (Middle):**
 - Decoupling Capacitors: C179, C235, C228, C250, C227, C229, C231, C230, C252, C256, C217, C251, C214, C234
 - Inductor: L11, L16
 - Resistor: R1
- Decoupling Section (Right):**
 - Capacitors: C357, C746, C678, C679
 - Inductor: L16
- Ground Plane (Bottom):**
 - Ground Plane: GND

Notes:

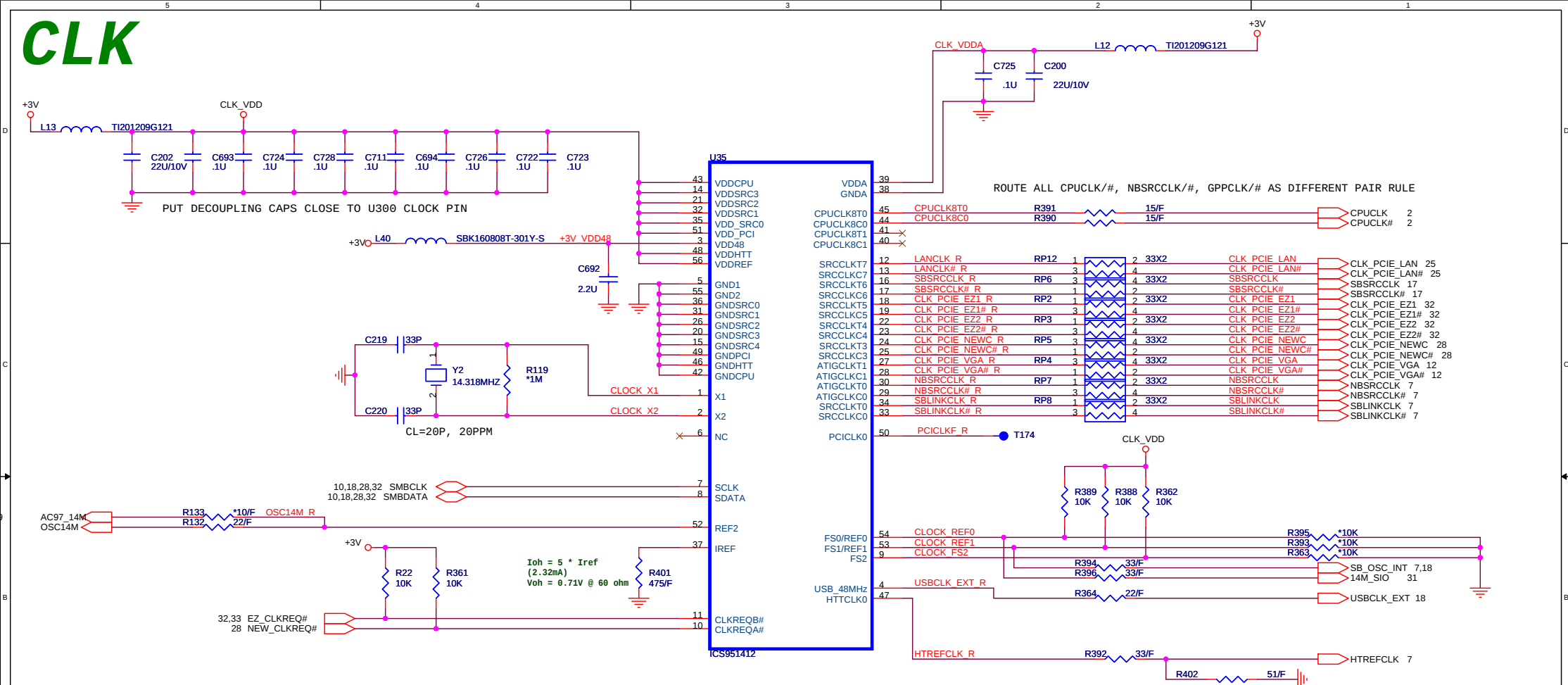
- PUT DECOUPLING CAPS ON THE TOP, CLOSE TO BALLS
- CONNECT VSSA22, VSSA59, VSS30, VSS89 to the ground.

Project Information:

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- Quanta Computer Inc.
- Rev E2B
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- Sheet 8 of 37



CLK

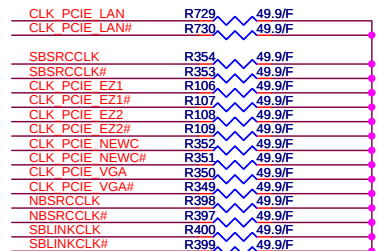


Speed table

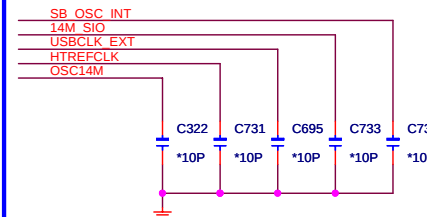
EXT CLK FREQUENCY SELECT TABLE(MHZ)

FS2	FS1	FS0	CPU	SRCCLK [2:1]	HTT	PCI	USB	COMMENT
0	0	0	Hi-Z	100.00	Hi-Z	Hi-Z	48.00	Reserved
0	0	1	X	100.00	X/3	X/6	48.00	Reserved
0	1	0	180.00	100.00	60.00	30.00	48.00	Reserved
0	1	1	220.00	100.00	36.56	73.12	48.00	Reserved
1	0	0	100.00	100.00	66.66	33.33	48.00	Reserved
1	0	1	133.33	100.00	66.66	33.33	48.00	Reserved
1	1	1	200.00	100.00	66.66	33.33	48.00	Normal HAMMER operation

clock circuit



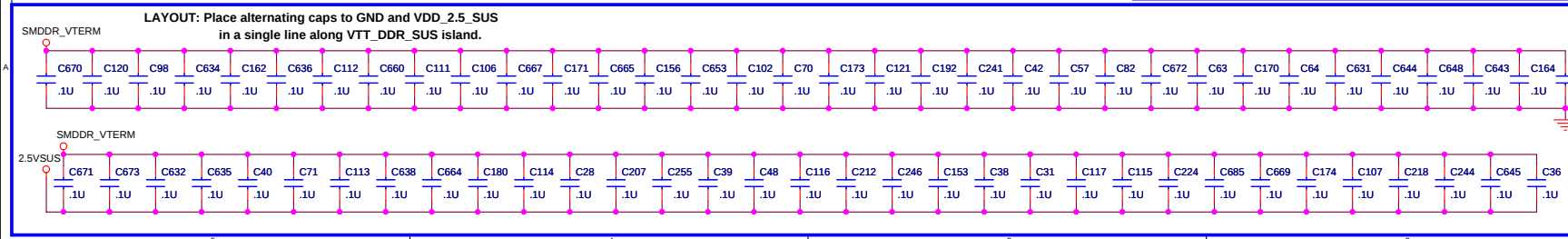
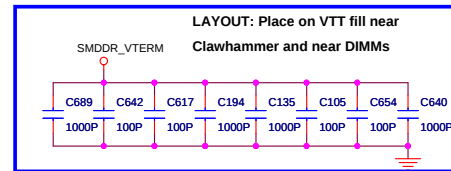
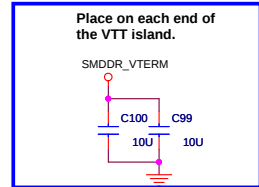
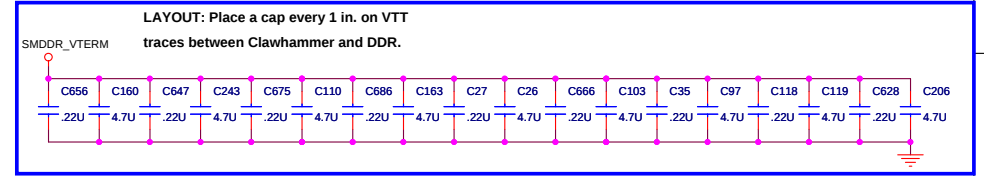
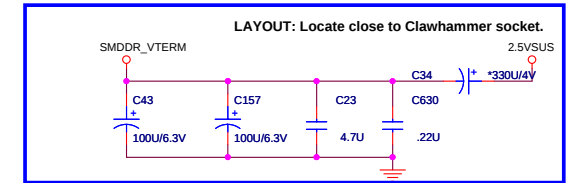
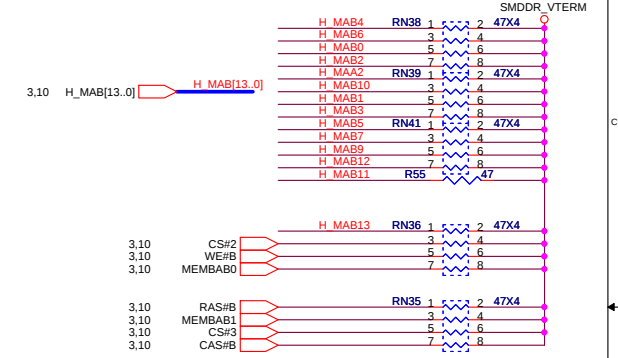
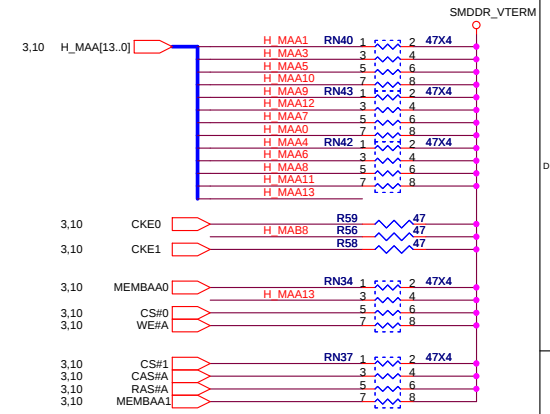
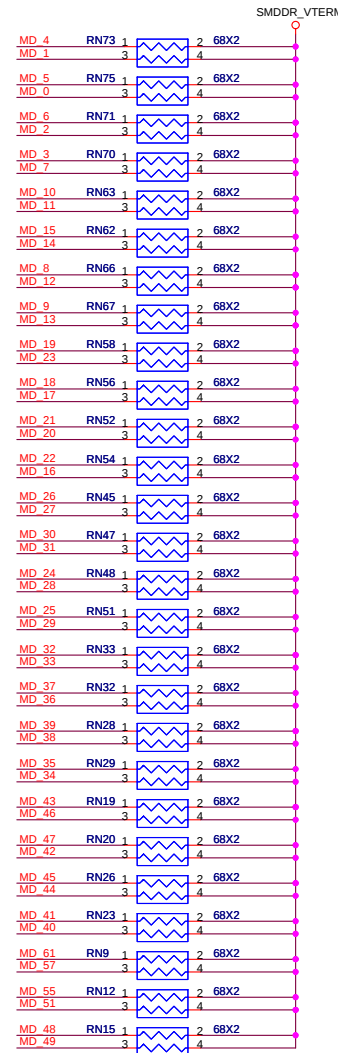
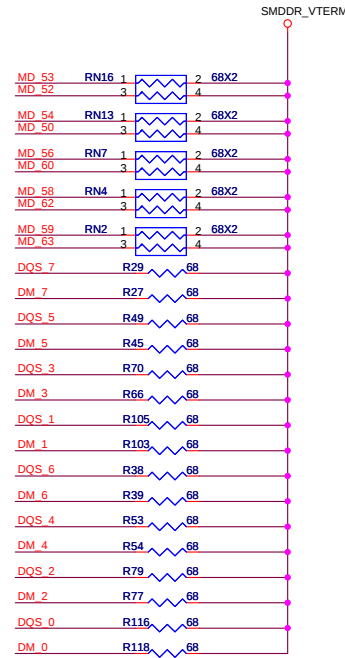
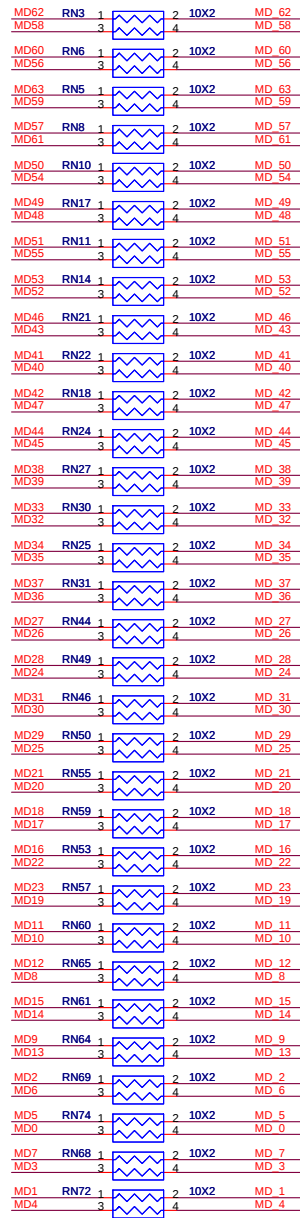
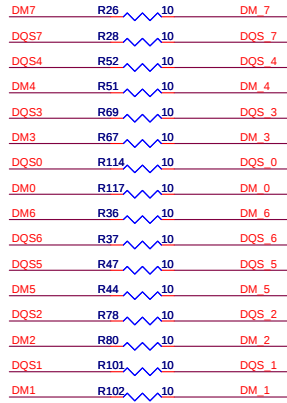
EMI



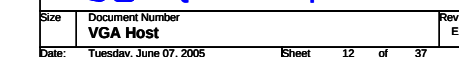
PROJECT : ZF3
Quanta Computer Inc.

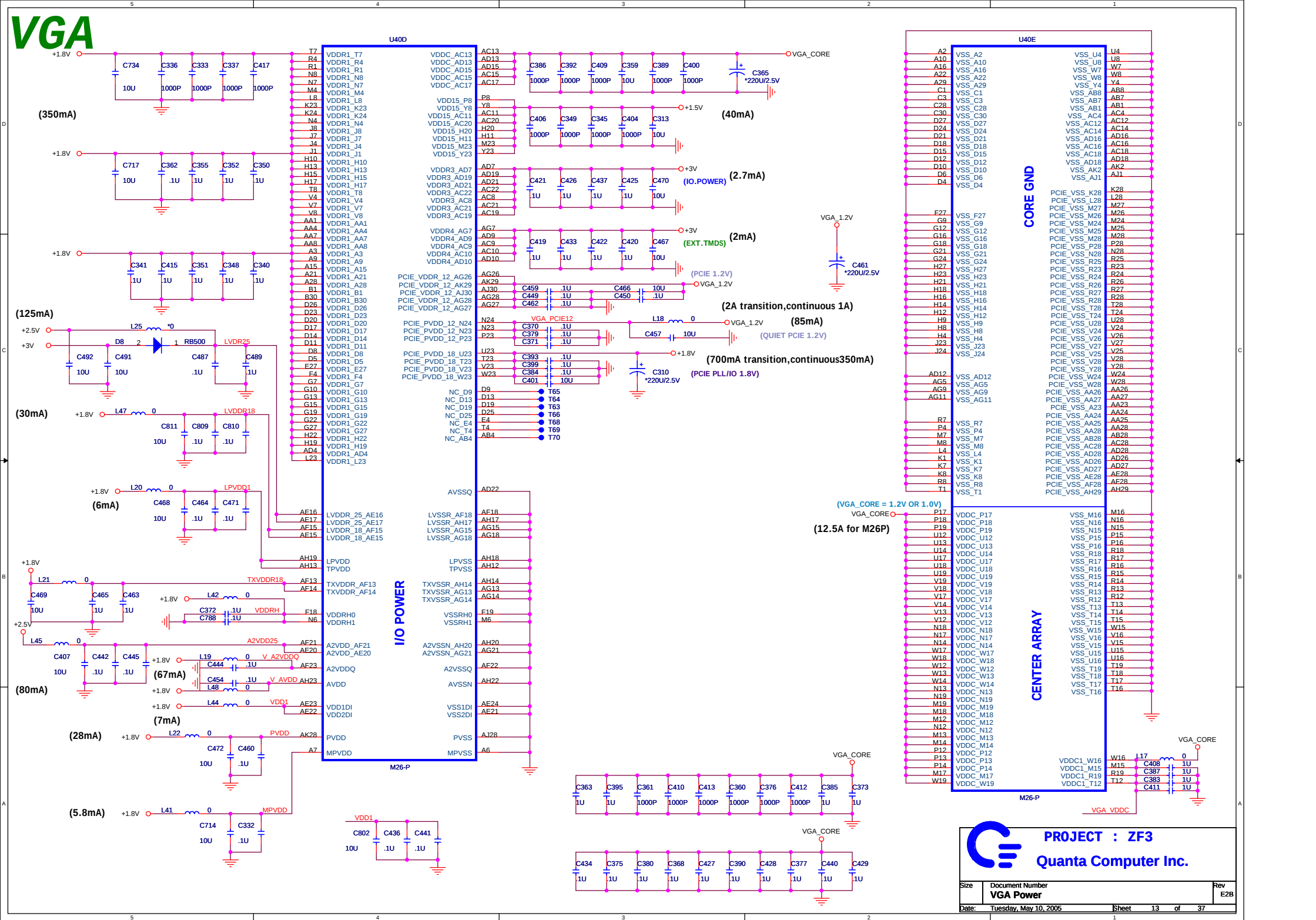
Size	Document Number	Rev
Custom	EXT CLOCK GENERATOR	E2B
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DDR

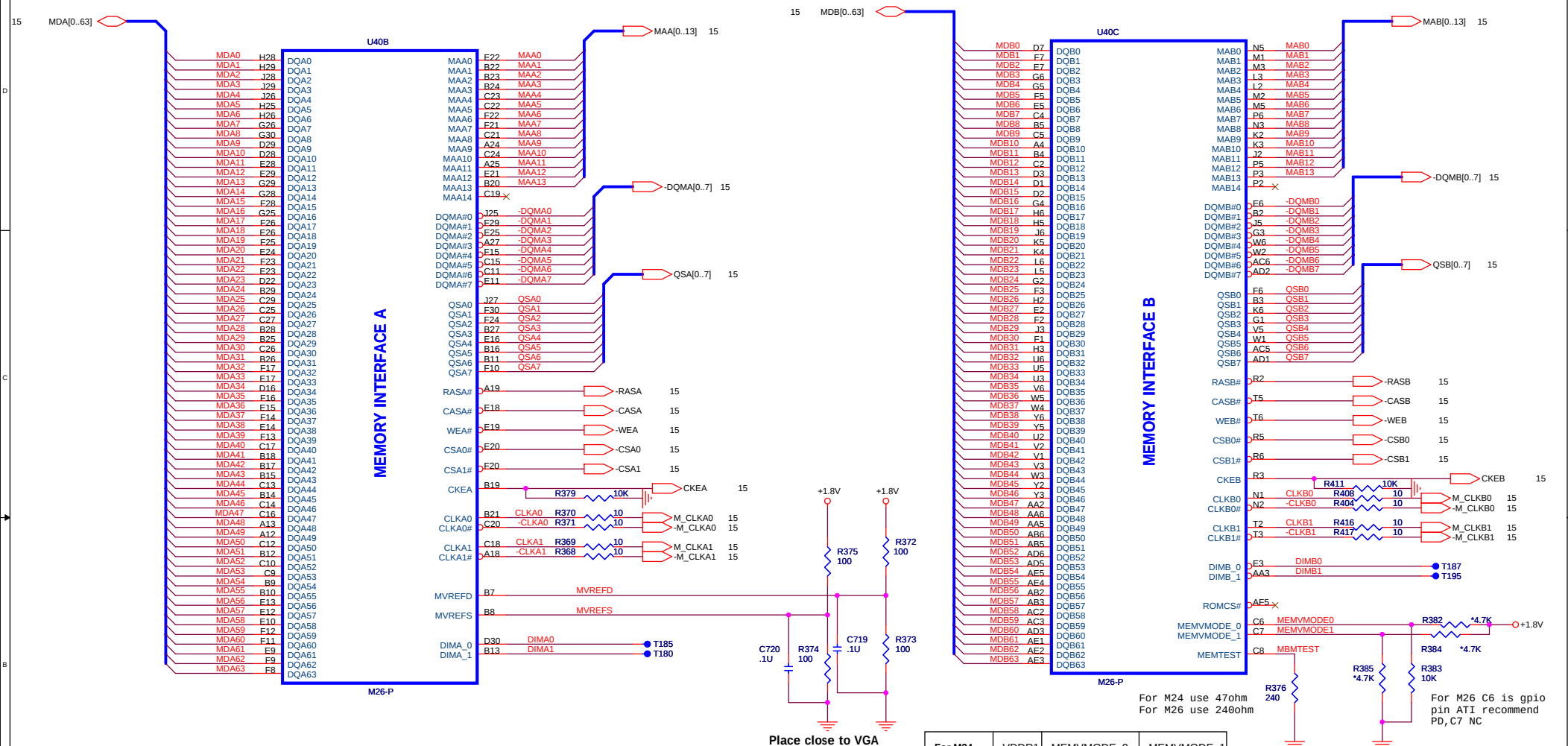


Thermal circuit





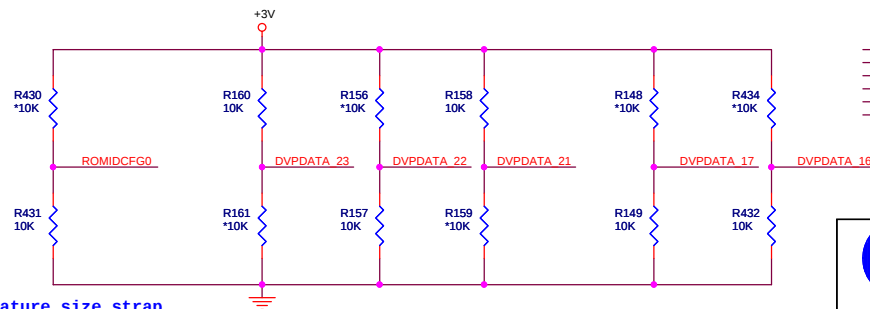
VGA



STRAPS PIN

GPIO(9,13:11) INT P/D	ROMIDCFG
	0x0x: No ROM, CHG_ID=0 0x1x: No Rom, CHG_ID=1 1000: Parallel ROM, Chip ID'S from ROM 1000: Parallel ROM, Chip ID'S from ROM
DVPDATA_21-23 MEM TYPE	DVPDATA_21: 0=4Mx32 1=8Mx32 DVPDATA_22: 0=128M 1=64M DVPDATA_23: 0=Hynix 1=Samsung Default Samsung 128M

ROMID1 is aperture size strap
0: 128M
1: 256M

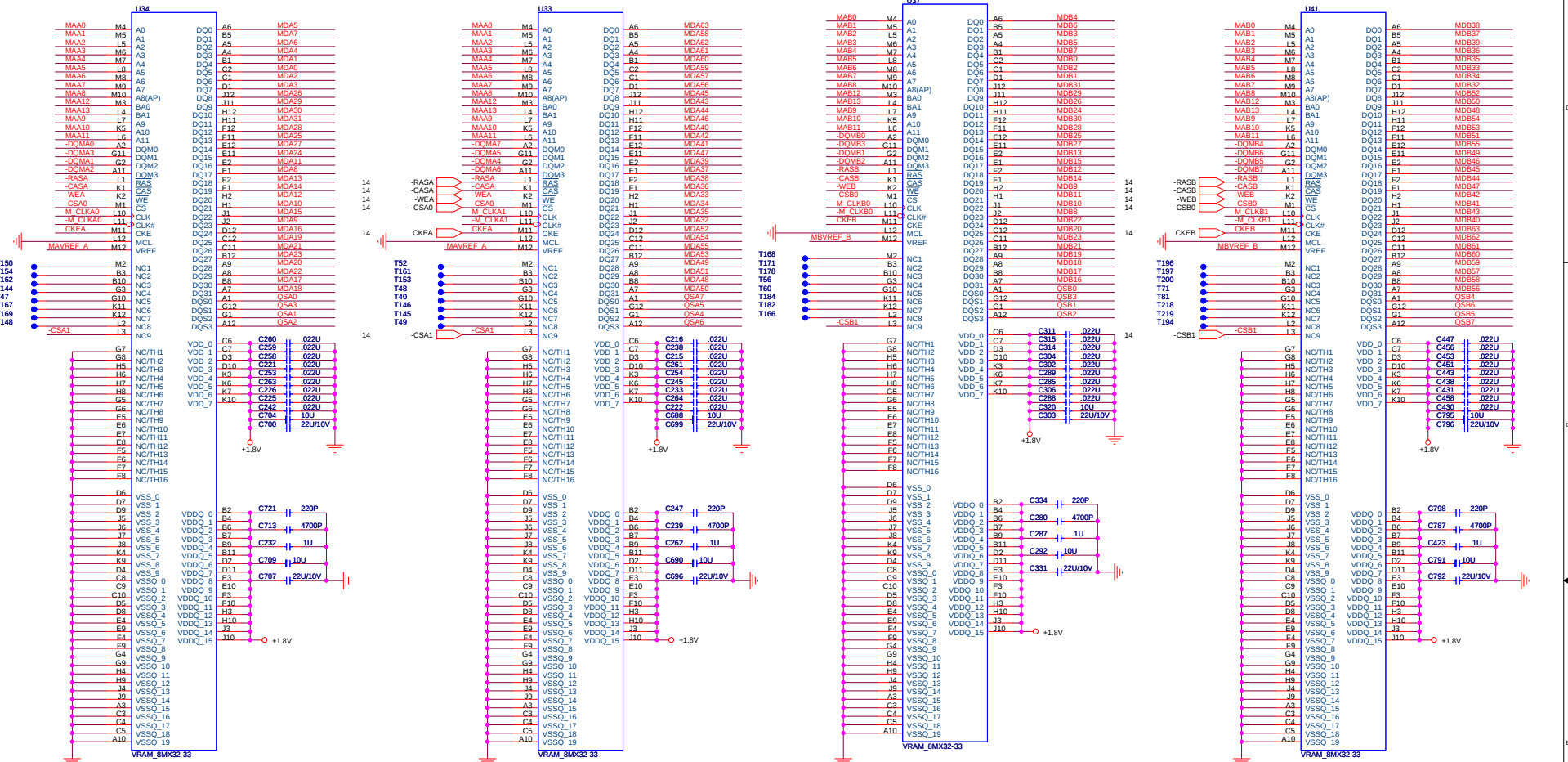


ROMIDCFG0	ROMIDCFG0 12
DVPDATA_16	DVPDATA_16 12
DVPDATA_17	DVPDATA_17 12
DVPDATA_21	DVPDATA_21 12
DVPDATA_22	DVPDATA_22 12
DVPDATA_23	DVPDATA_23 12

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Quanta Computer Inc.

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	VGA MEM & Strapping	E2B
Date:	Tuesday, May 10, 2005	Sheet 14 of 37

VGA

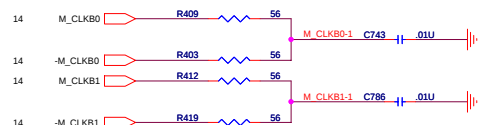
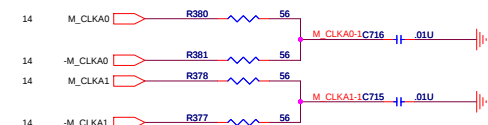


VGA DDR MEMORY A
@64/128MBytes DDR 256Mbit 2MX32X4 uBGA

VGA DDR MEMORY B
@64/128MBytes DDR 256Mbit 2MX32X4 uBGA

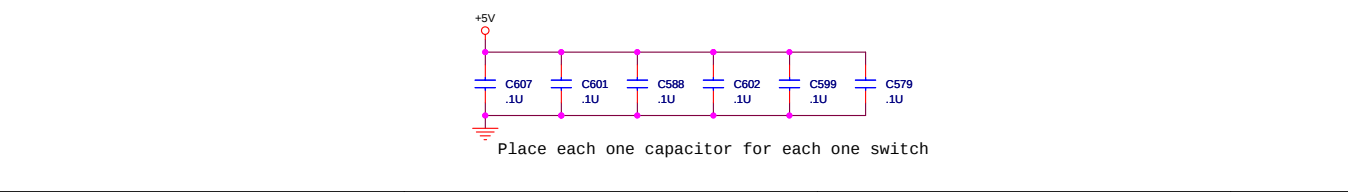
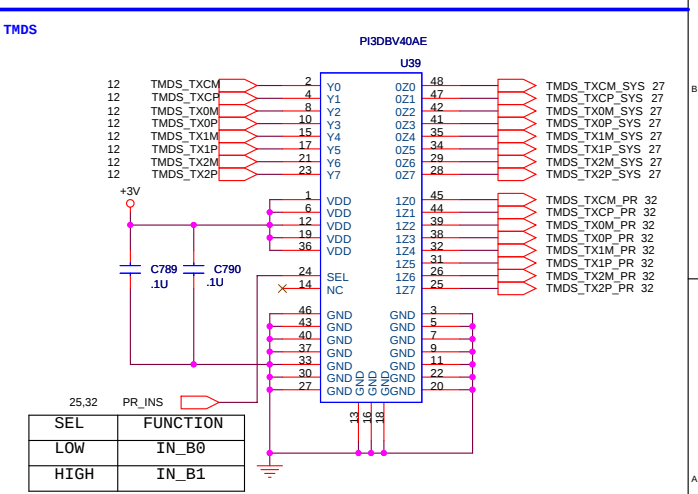
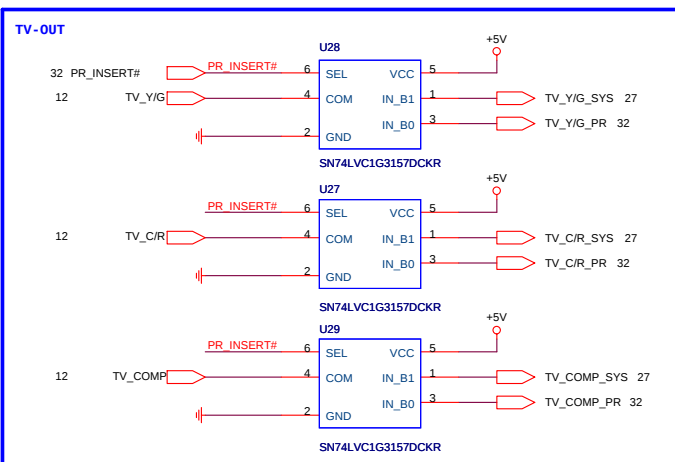
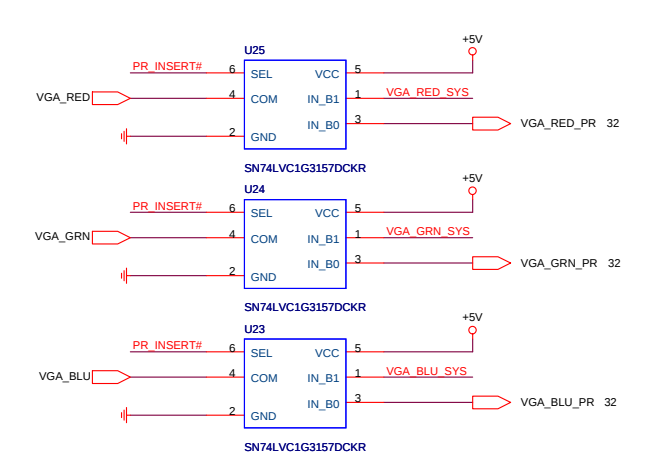
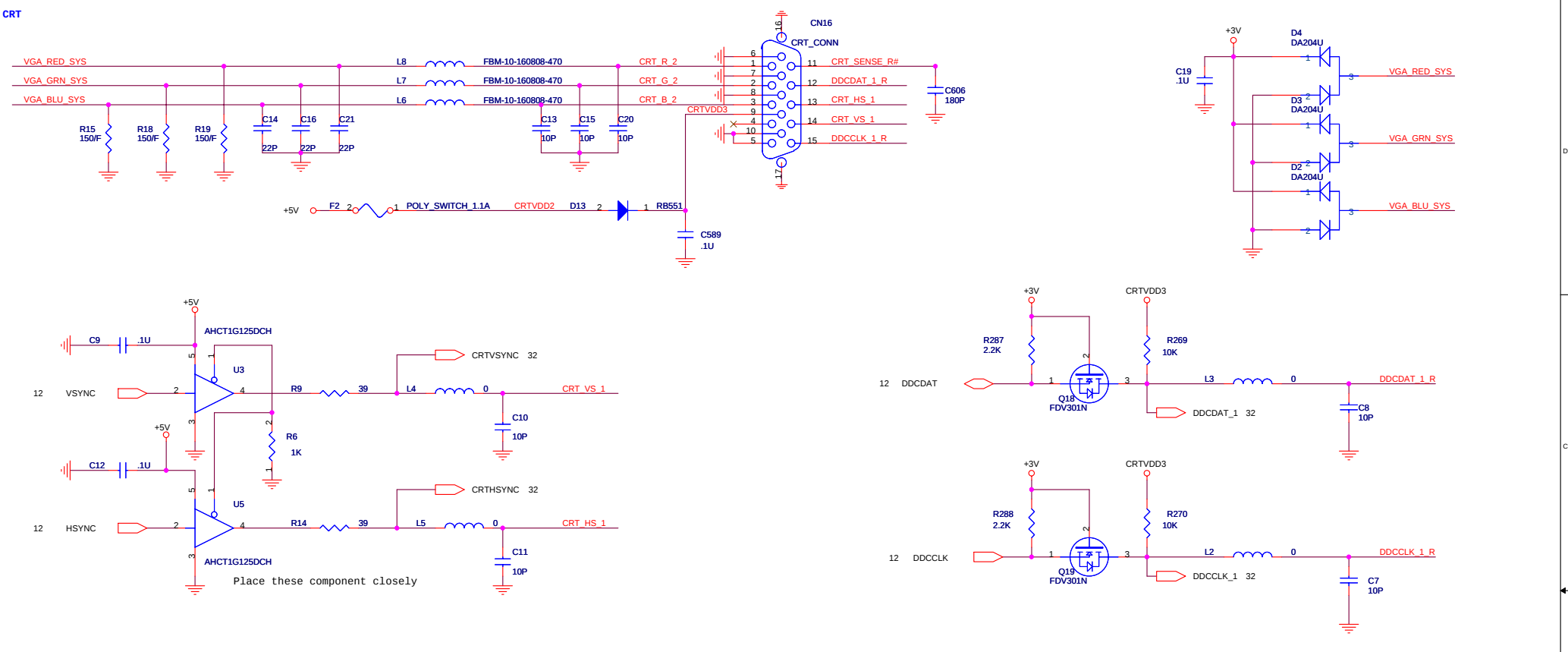
Place close to VRAM

Place close to VRAM

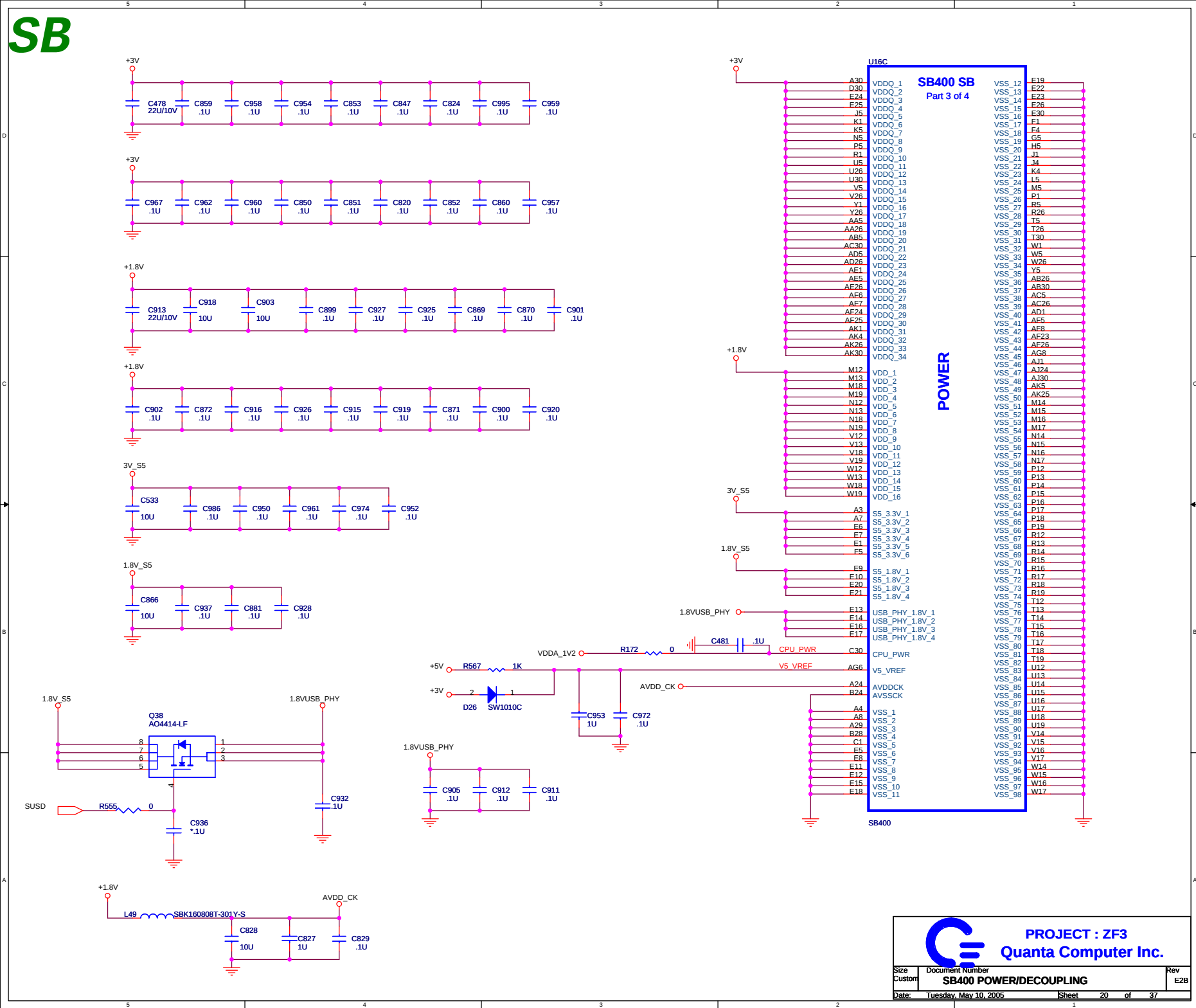


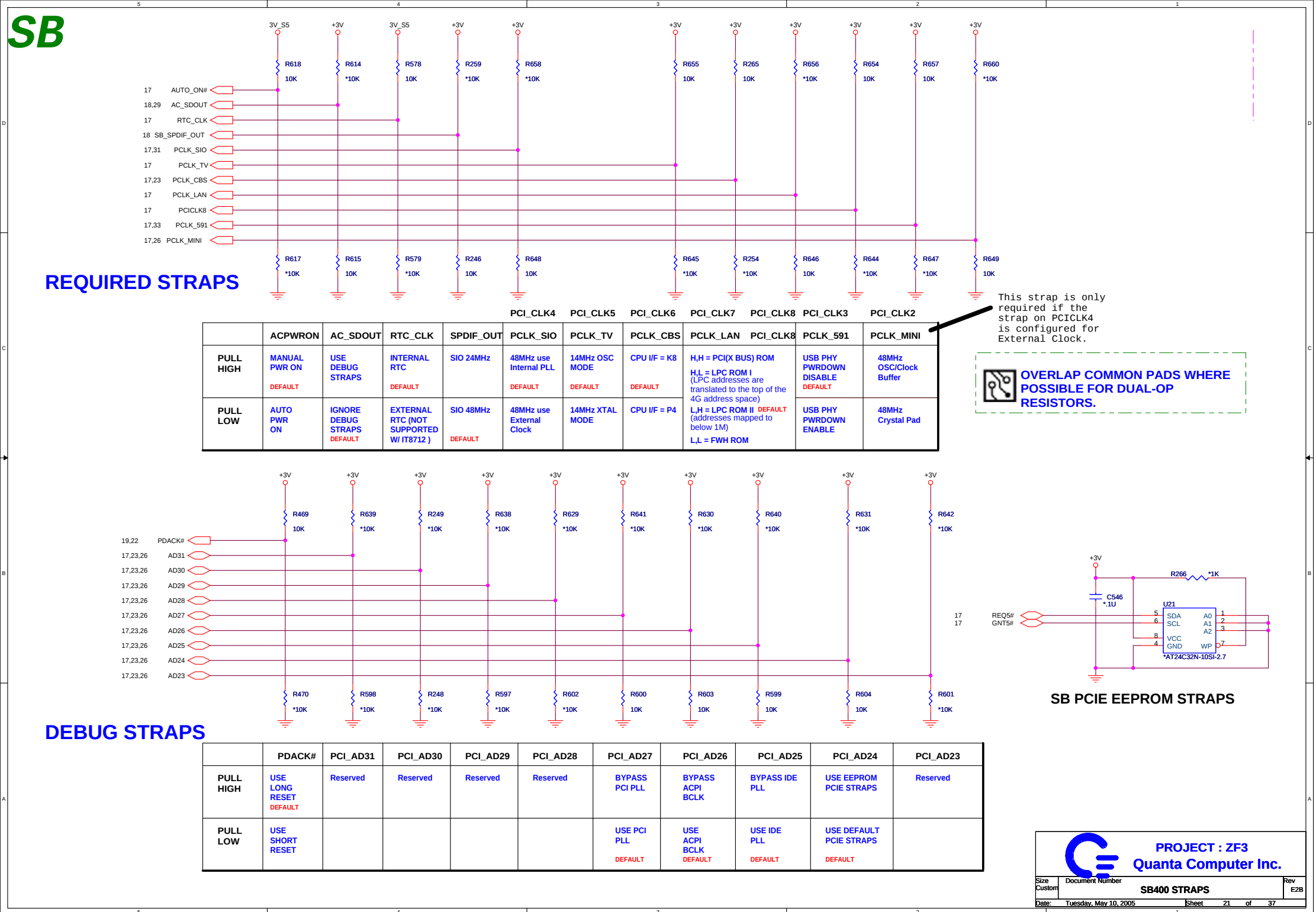
At least a 2.5:1 spacing between the pair
These resistors and caps must be placed to minimize any stubs. These must also be placed after the memory

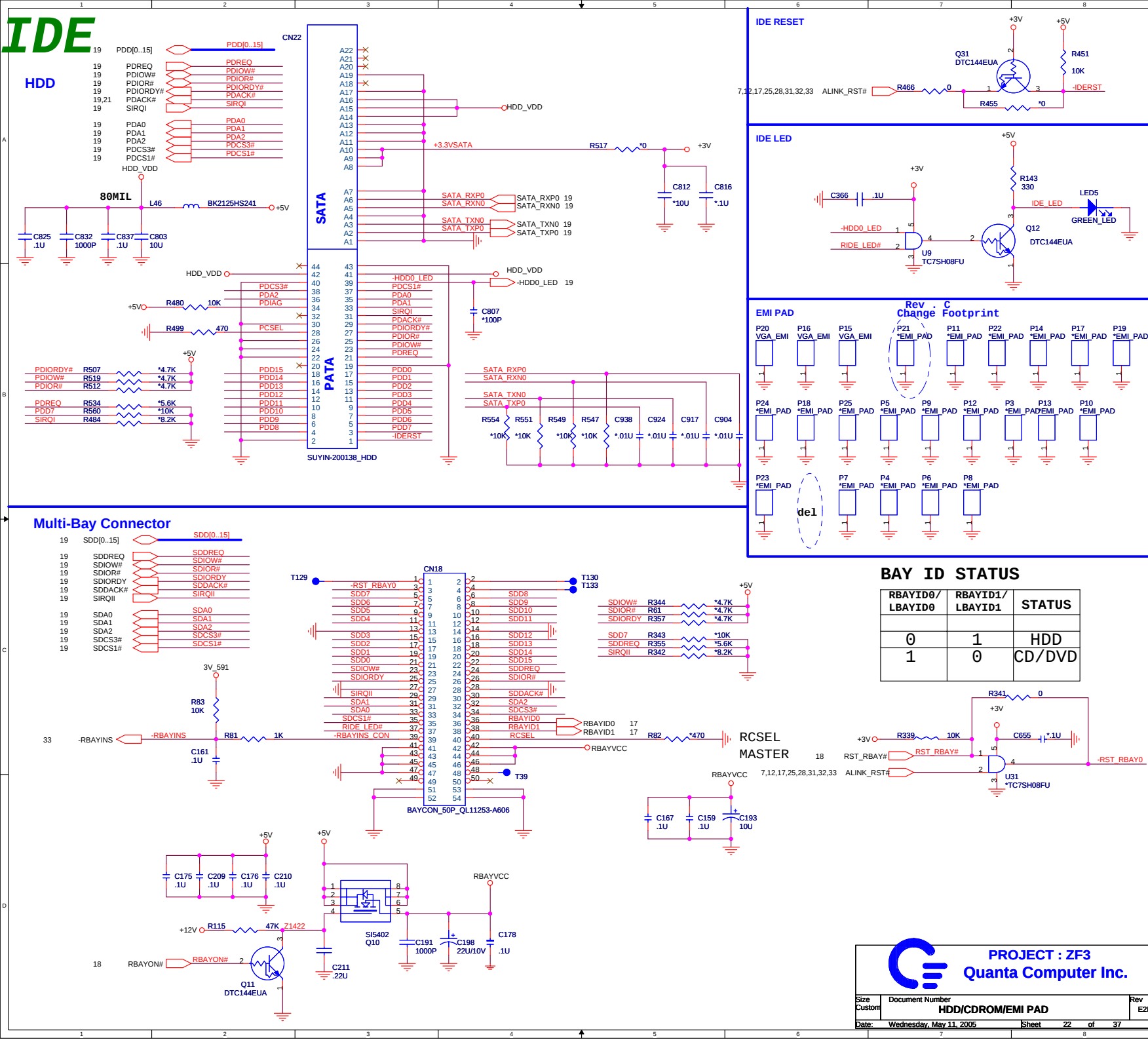
At least a 2.5:1 spacing between the pair
These resistors and caps must be placed to minimize any stubs. These must also be placed after the memory



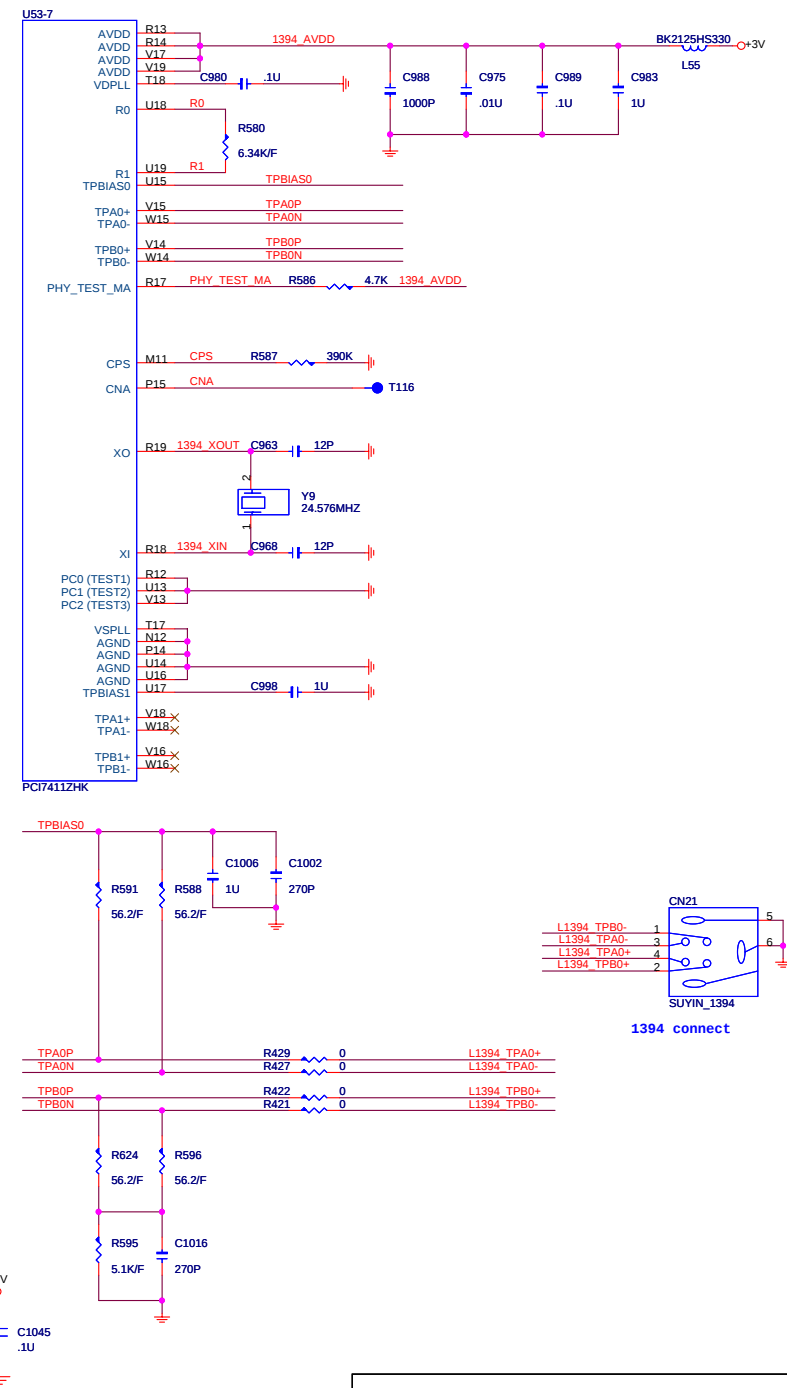
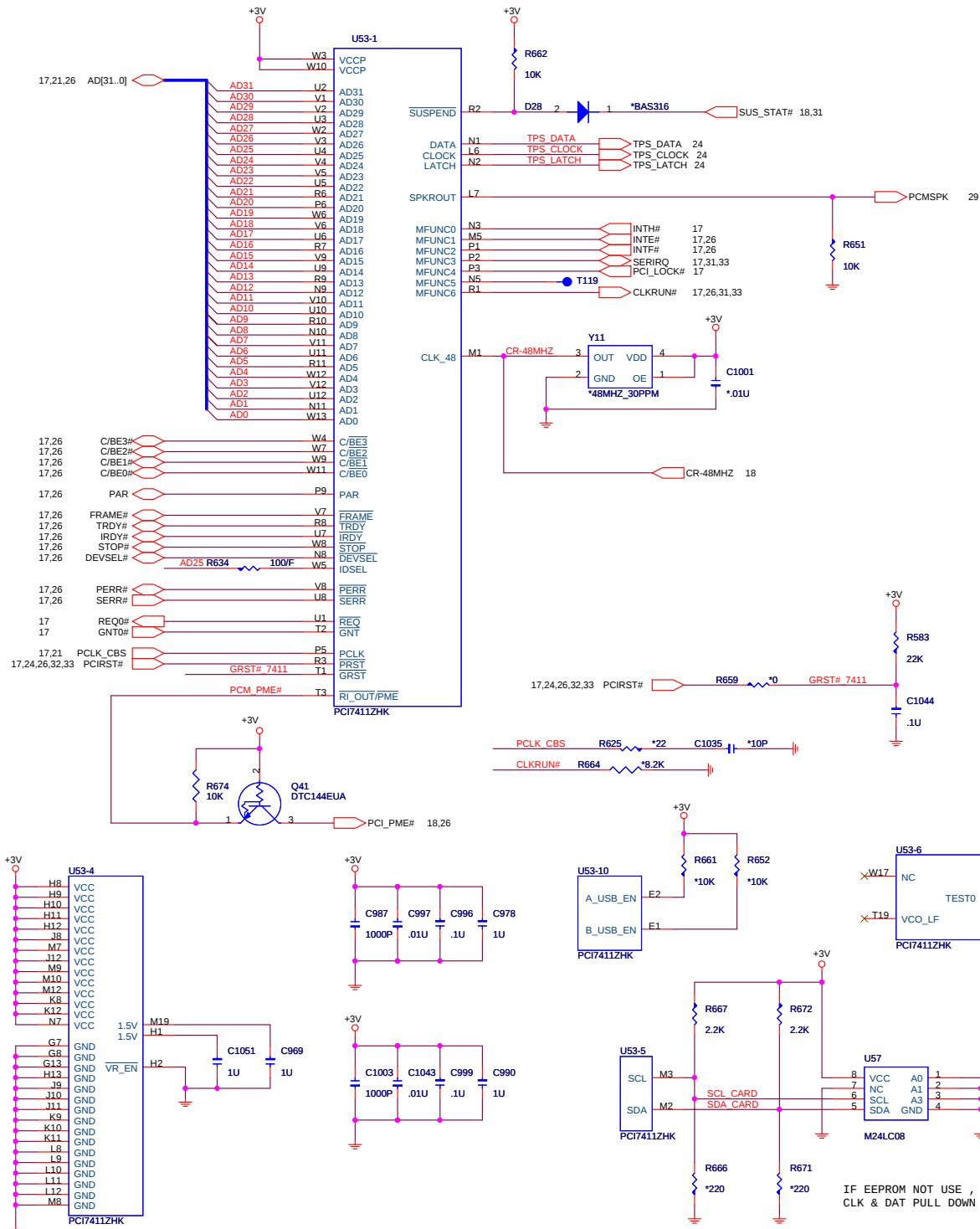




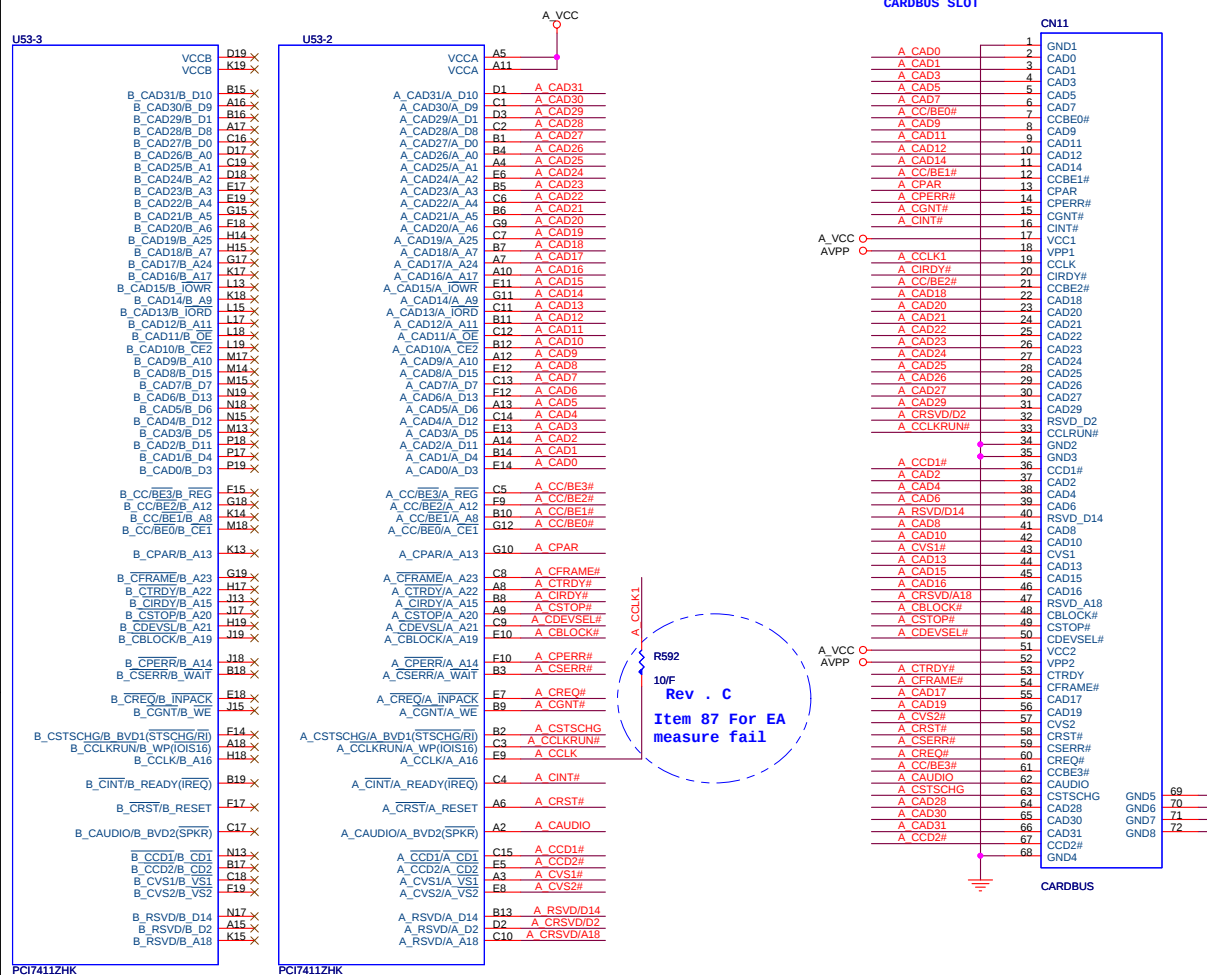


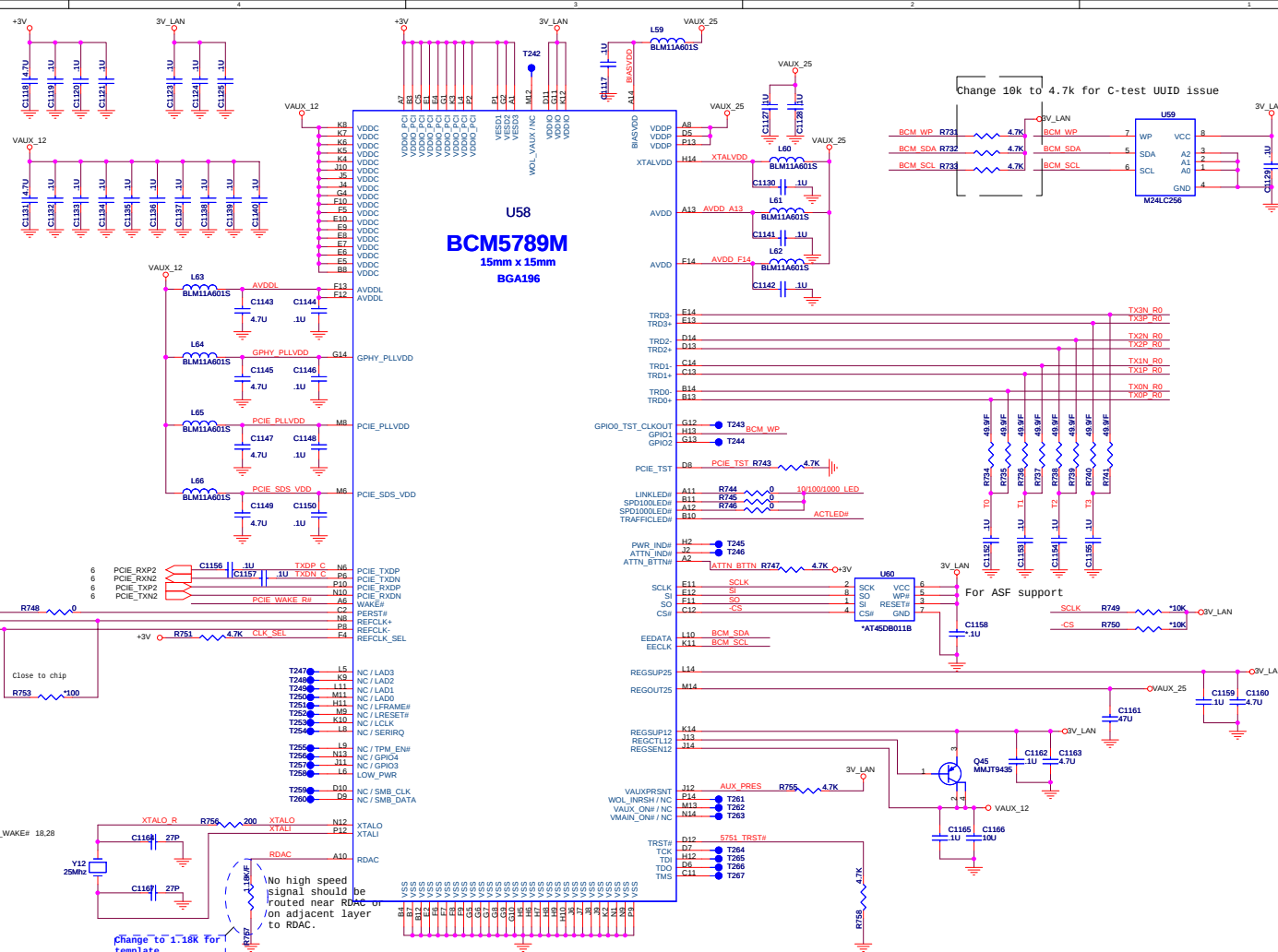


7411

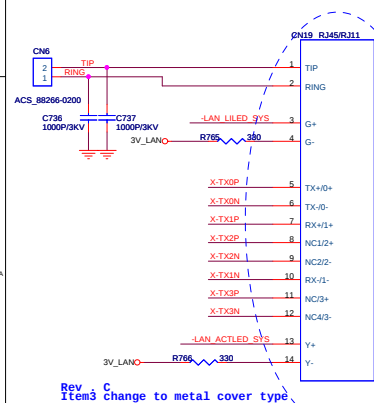


7411



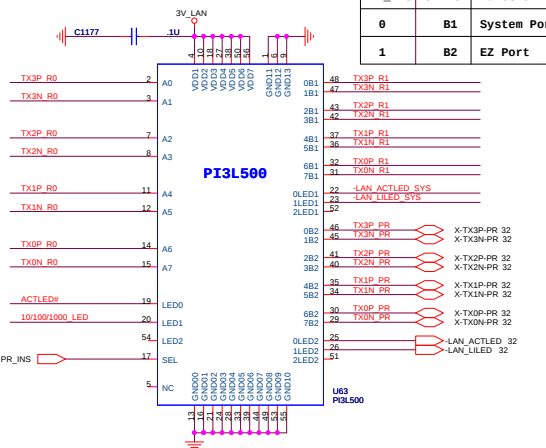


LAN/RJ11 Connector



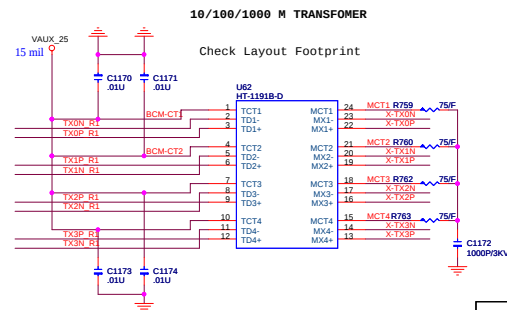
Rev C
Item3 change to metal cover type

LAN Switch



PR_INS	SELECT	Function
0	B1	System Po
1	B2	EZ Port

LAN Transformer



10/100/1000 M TRANSFORMER

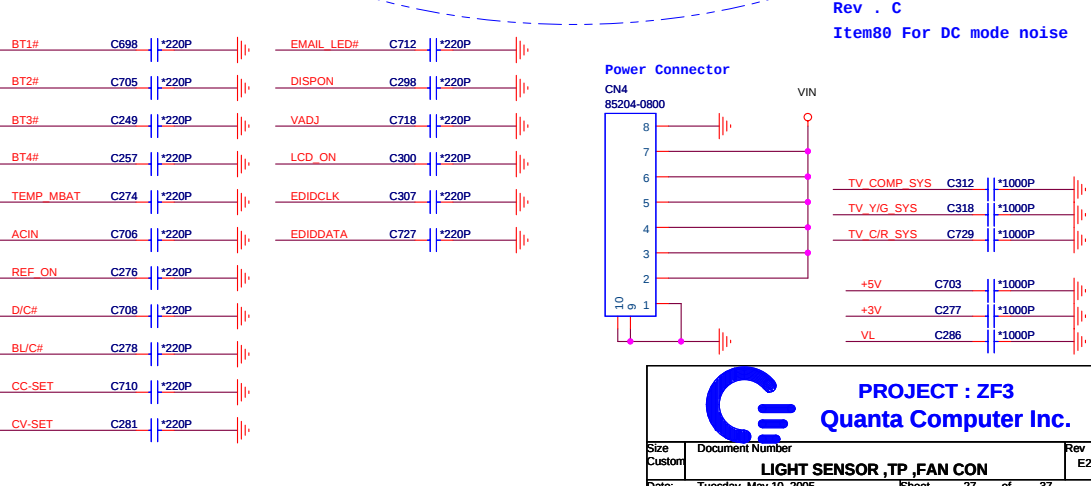
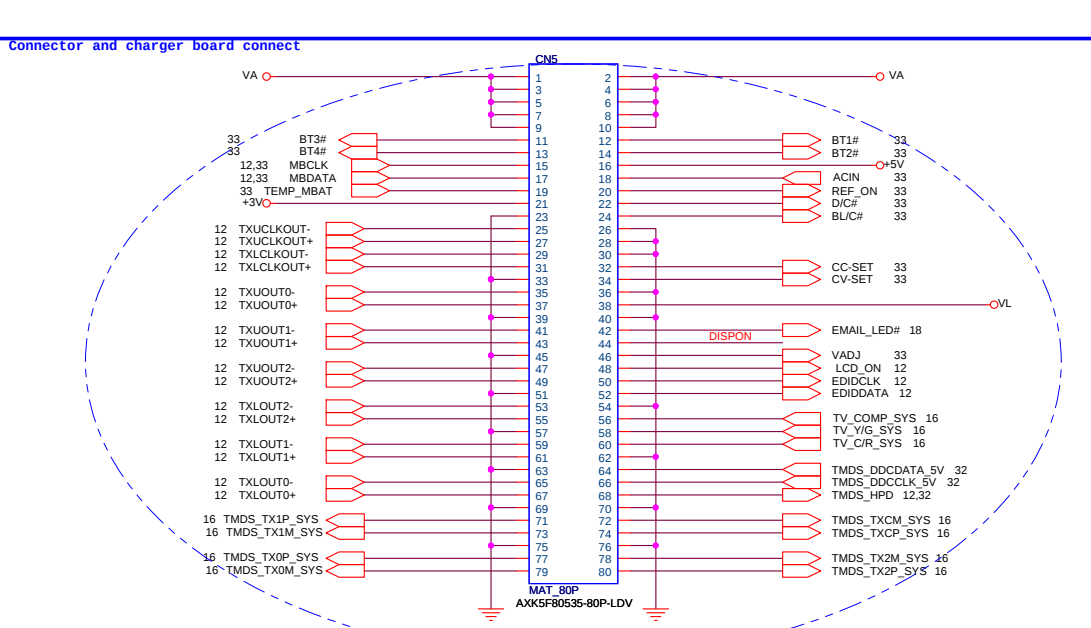
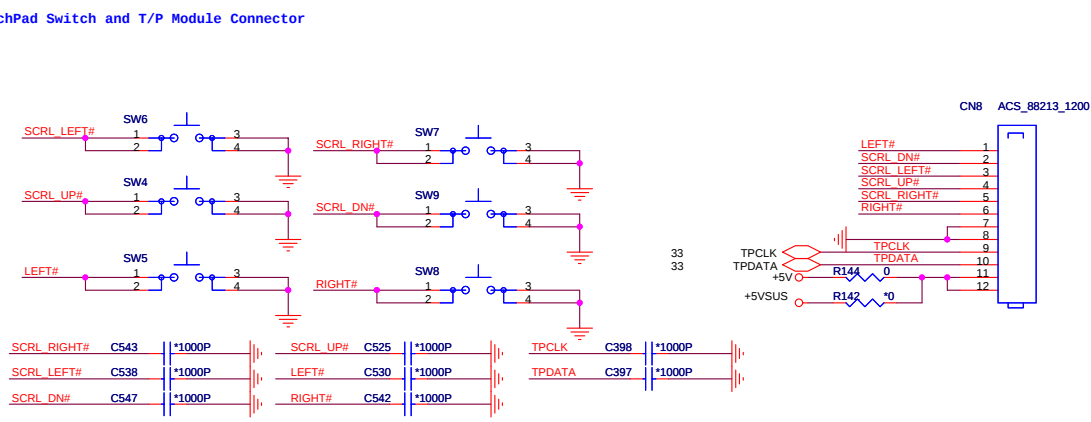
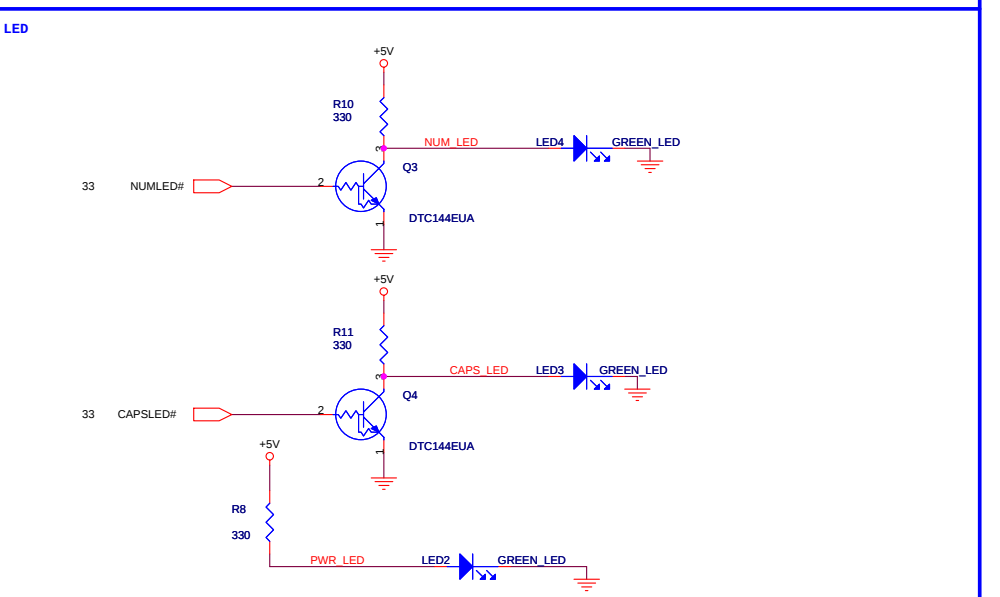
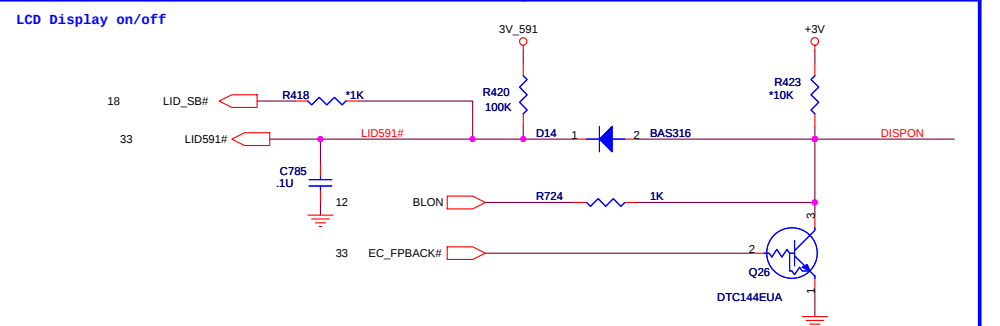
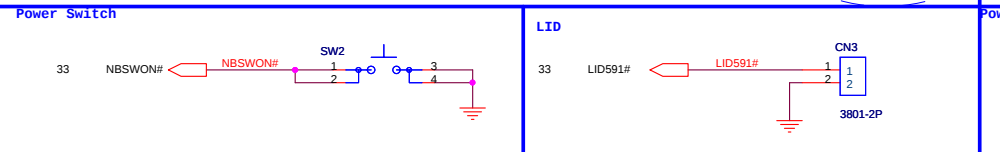
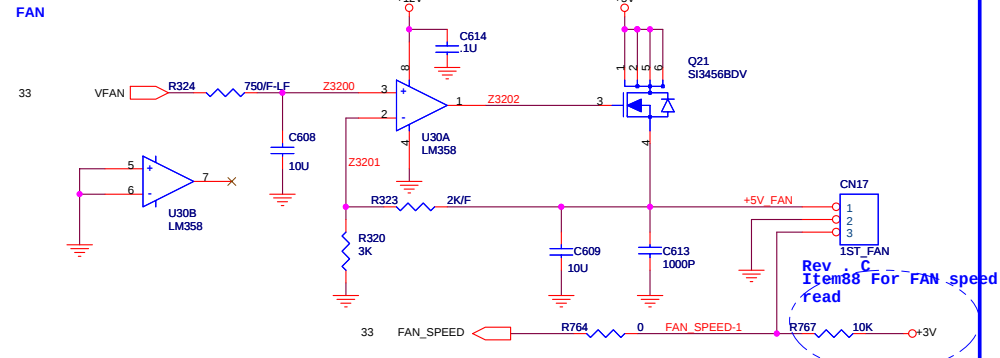
Check Layout Footprint



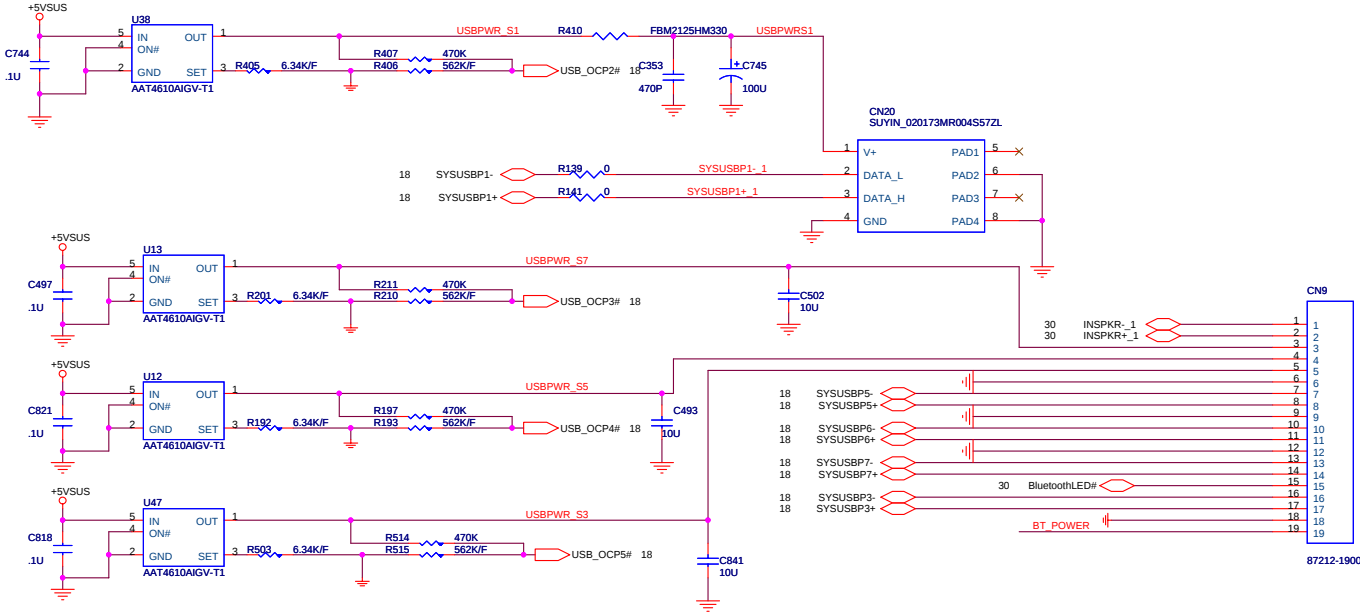
PROJECT : ZF3
Quanta Computer Inc.

PROJECT : ZF3 Quanta Computer Inc.		
Size Custom	Document Number MININ PCI	Rev E2B
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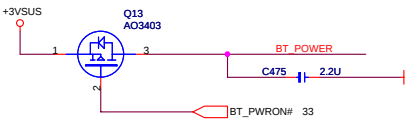
MISC



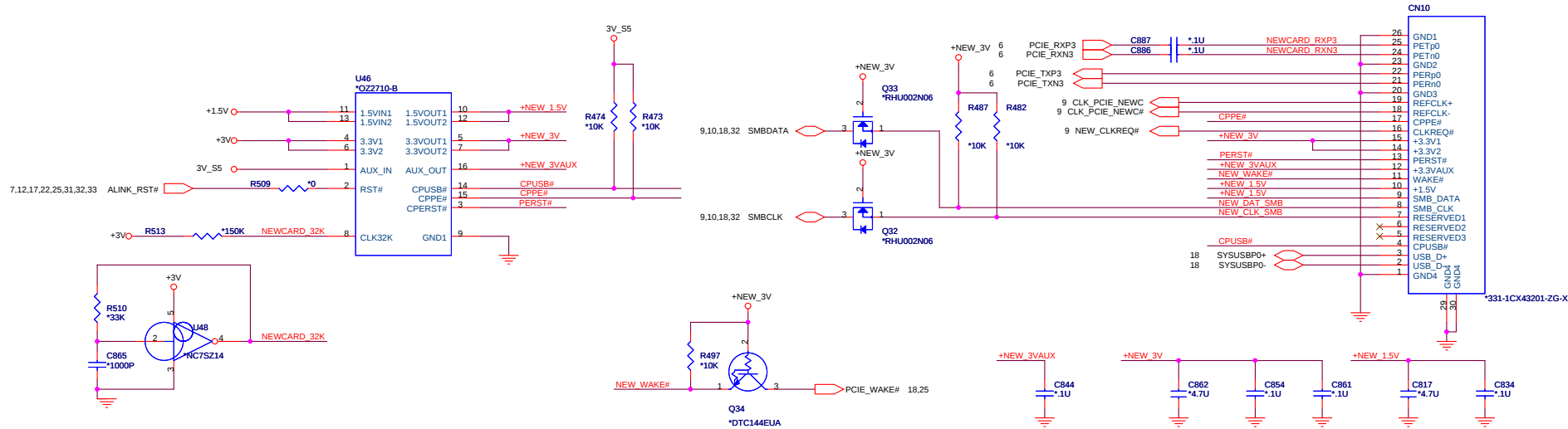
USB Connector and USB board



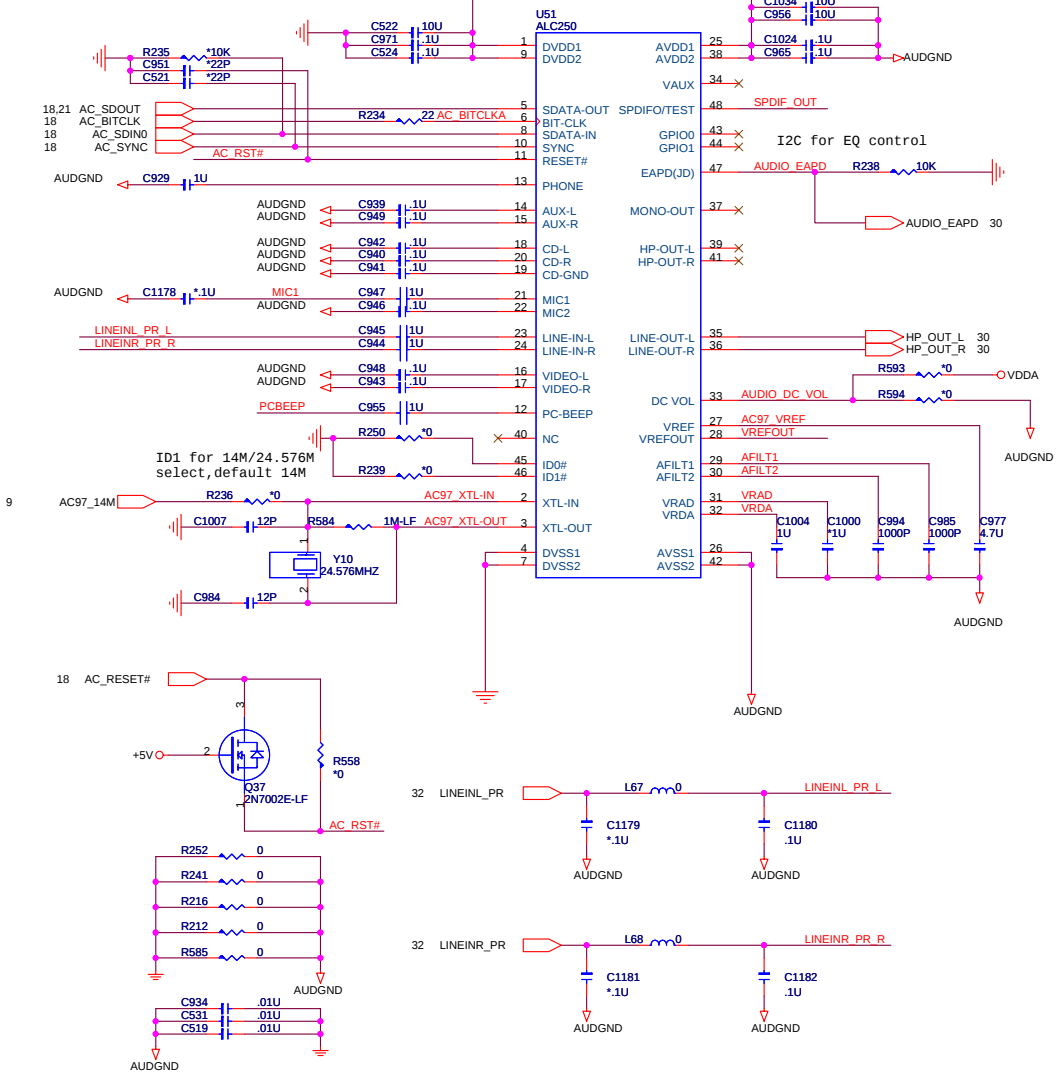
Bluetooth AND USB Connector



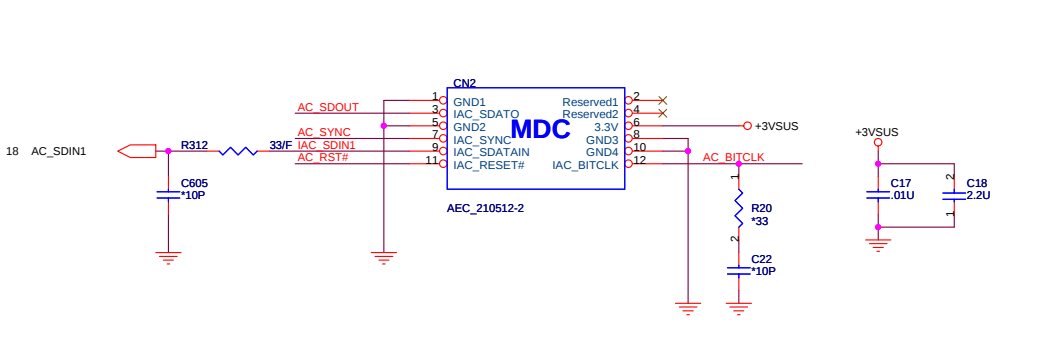
NewCard



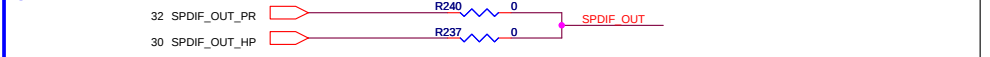
AUDIO



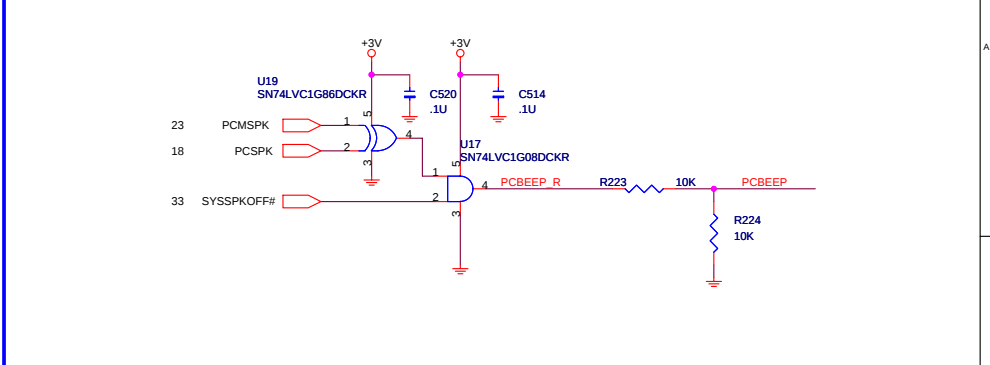
MODEM



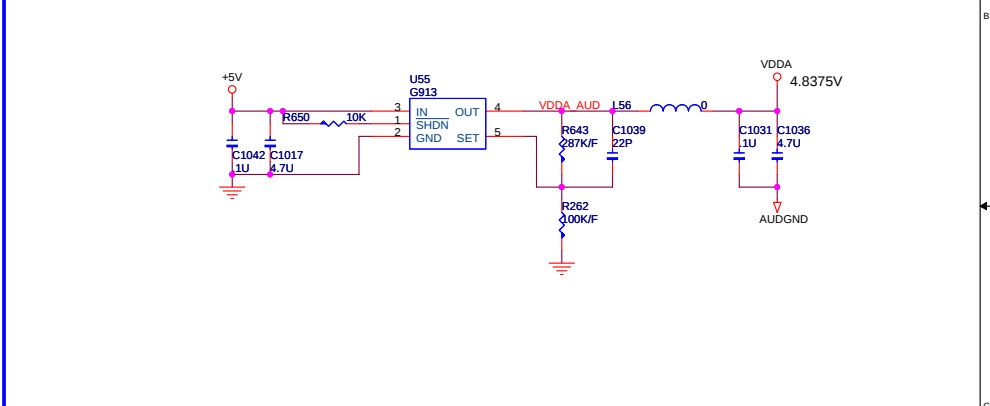
SPDIF



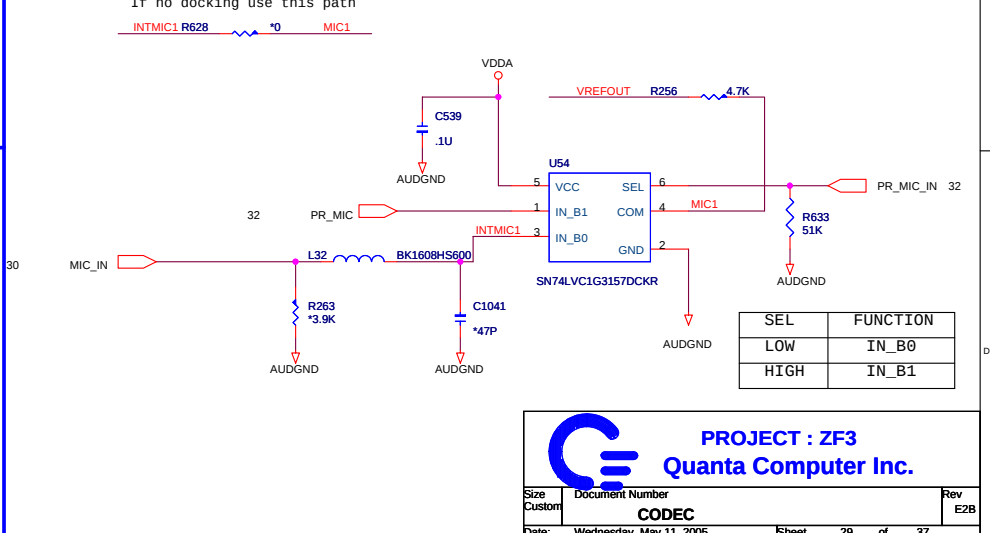
BEEP



CODEC POWER

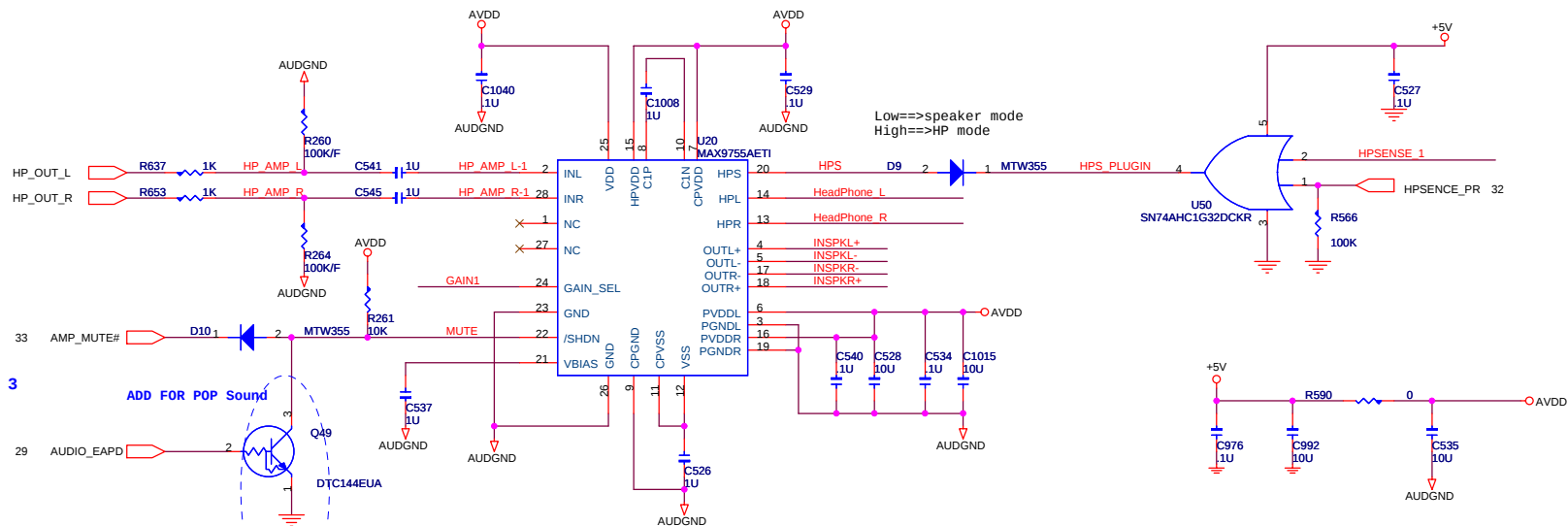


MIC

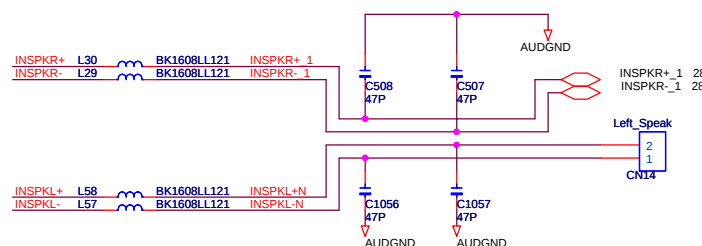
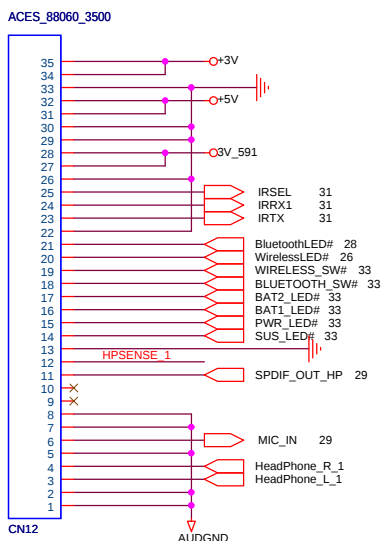


AMP

Item25 Change Gain to 10.5 , 3



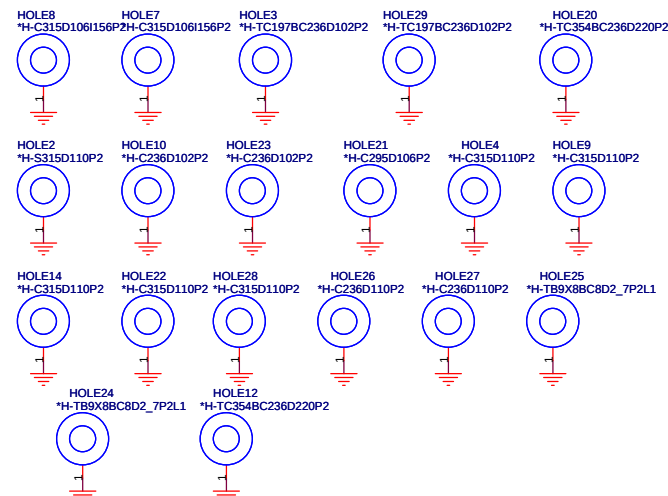
Internal speaker



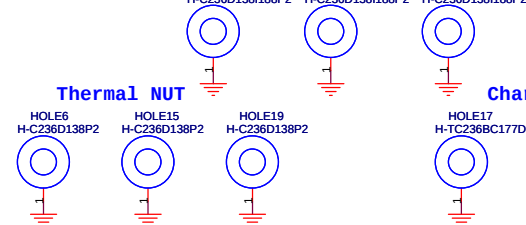
Headphone



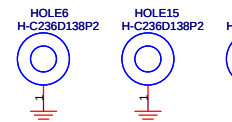
HOLE



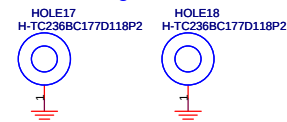
CPU NUT



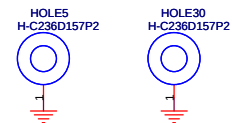
Thermal NUT



Charger board NUT



MDC NUT



PROJECT : ZF3
Quanta Computer Inc.

AUDIO AMP & JACK & HOLE

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AUDIO AMP & JACK & HOLE		
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KEYBOARD

