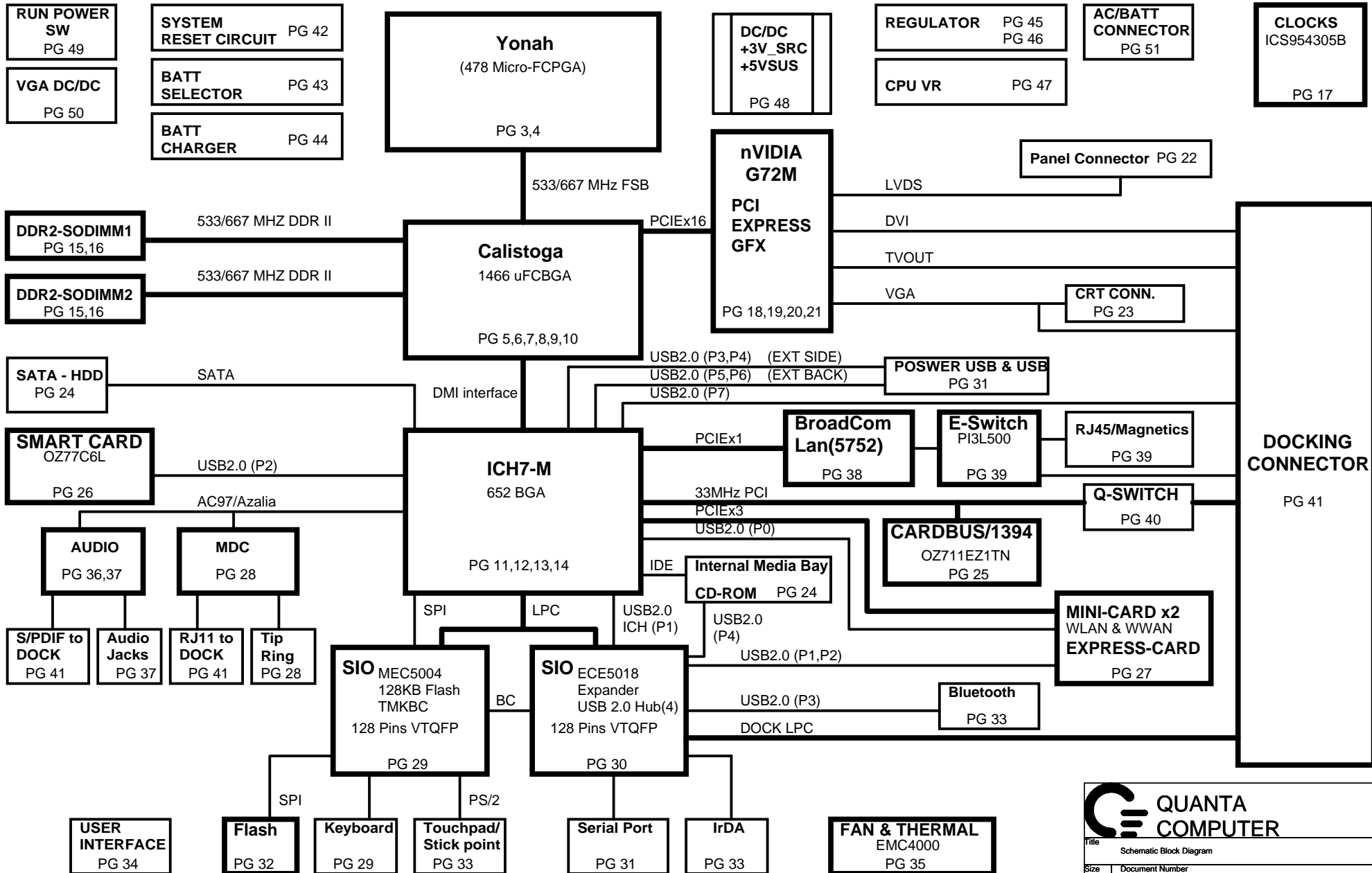


BREWSTER-DISCRETE GFX

PWA XD617, PWB FF094,
SCHEM YD536. (256MB)
VER : 2A



QUANTA COMPUTER

Title: Schematic Block Diagram

Size: Document Number: JM6 Rev 2A

Date: Thursday, September 08, 2005 Sheet 1 of 54

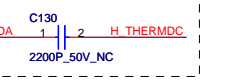
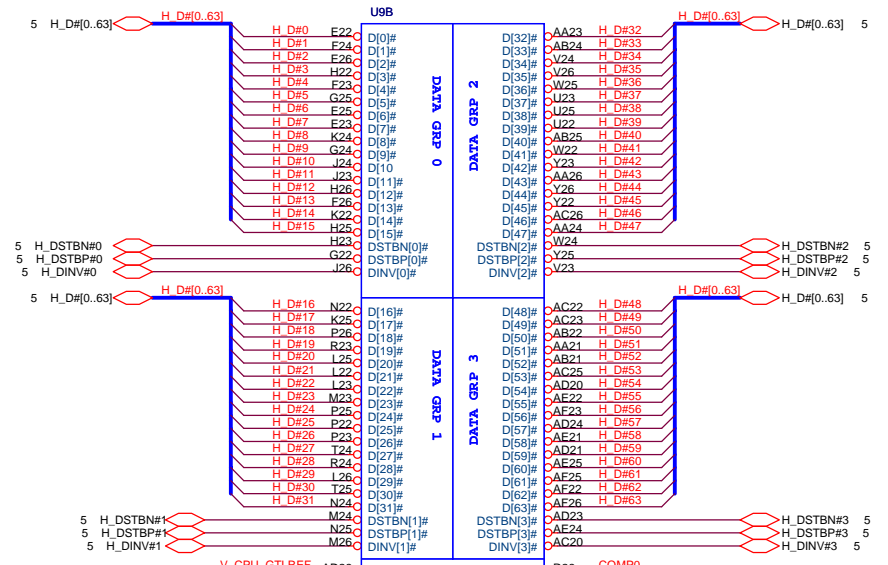
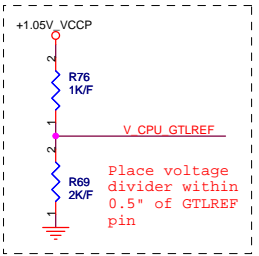
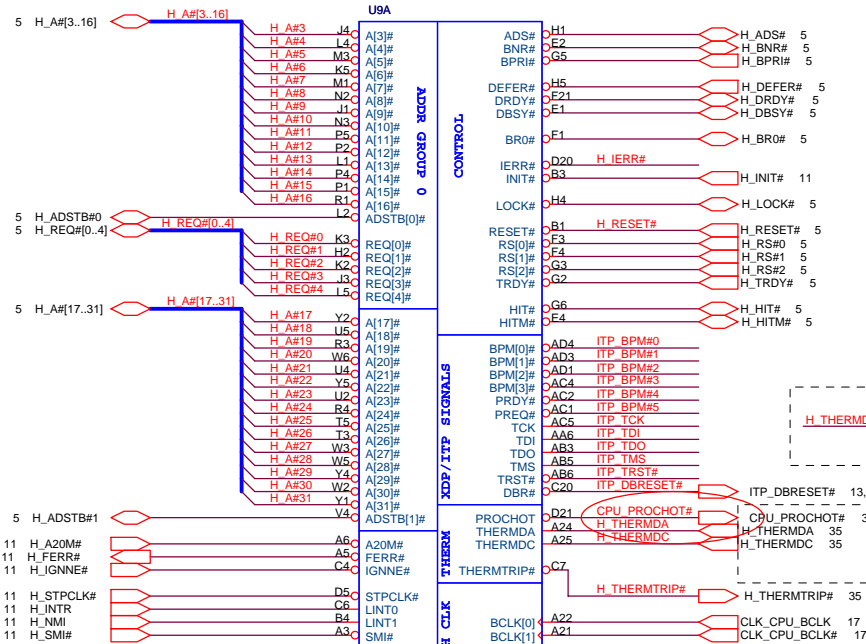
INDEX

Pg#	Description	DNI LIST
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5-10	Calistoga	
11-14	ICH7	
15-16	DDR2 SO-DIMM(200P)	
17	Clock Generator	
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22	LCD Conn. & SSP	
23	CRT Conn	
24	SATA & IDE Conn	
25	PCCARD/Conn & 1394	
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31	SERIAL PORT & USB	
32	Flash ROM & RTC Circuit	
33	TP,BT & FIR	
34	Switch,Keyboard & LED	
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46	1.5VSUS,1.05V(VTT)	
47	CPU Power	
48	D/D Power	
49	RUN Power Switch	
50	VGA DC/DC	
51	DCIN/Batt Conn.	
52	PAD& SCREW	
53	SMBUS BLOCK	

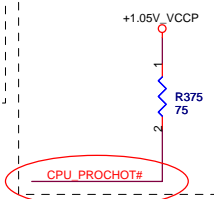
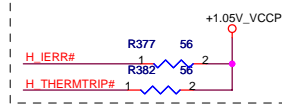
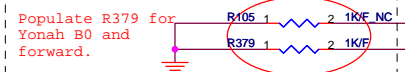
Power & Ground

Label	Pg#	Description	Control Signal
DC_IN+		AC ADAPTER (20V)	
PBATT+		MAIN BATTERY + (10-17V)	
PWR_SRC		MAIN POWER (10-20V)	
RTC_PWR3_3V		RTC & PCL POWER (3_3V)	
+12V		+12V	DRUNPWROK
VHCORE		CPU CORE POWER (1.25/1.15V)	RUNPWROK
V1_2RUN		AGTL+ POWER (1.2V)	RUNPWROK
+3VRUN		SLP_S3# CTRLD POWER	RUN_ON
+3VSUS		SLP_S5# CTRLD POWER	SUS_ON
+5VALW		8051 POWER (5V)	
+5VRUN		SLP_S3# CTRLD POWER	RUN_ON
+5VSUS		SLP_S5# CTRLD POWER	SUS_ON
+5VHDD		HDD POWER (5V)	HDDC_EN#
+5VMOD		MODULE POWER (5V)	MODC_EN#
STRB#/5V		EXTERNAL FDD POWER (5V)	FDD/LPT#
+5VFAN1, +5VFAN2		FAN POWER (5V)	FAN_OFF/ON#
VDDA		AUDIO ANALOG POWER (5V)	RUN_ON
1_8VSUS		RESUME WELL IN ICH	
1_8VRUN		SLP_S3# CTRLD POWER	
+3VALW		8051 POWER (3V)	
V1_5RUN		AGP I/O POWER	
 GND	ALL PAGES	DIGITAL GROUND	
 GNDP		CPU POWER GND	
 CGNDP		CHARGER GND	
 DGNDP		DC/DC POWER GND	
LANGND		COMBO CONN GND	

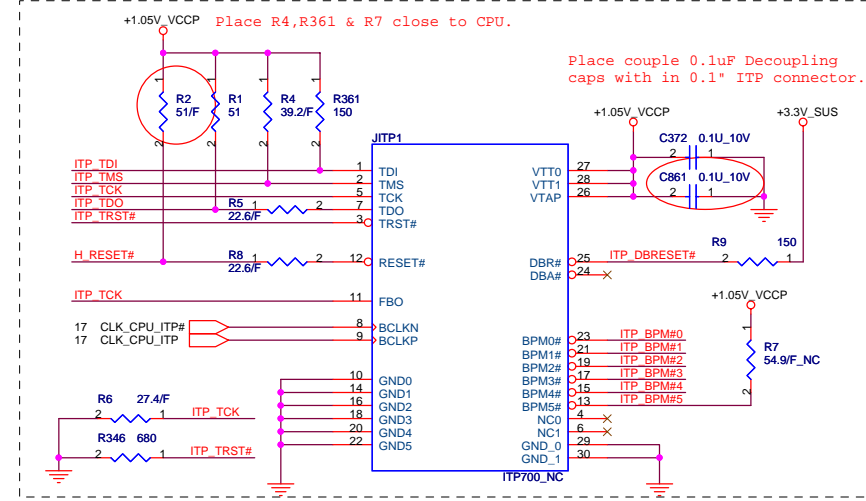




H_THERMDA, H_THERMDC routing together. Trace width/Spacing = 10/10 mil



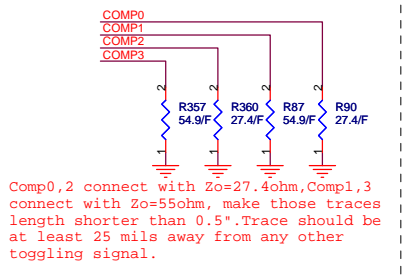
CPU_BSEL	BSEL2	BSEL1	BSEL0
133	0	0	1
166	0	1	1



ITP disable guidelines

Signal	Resistor Value	Connect To	Resistor Placement
TDI	150 ohm +/- 5%	VTT	Within 2.0" of the ITP
TMS	39 ohm +/- 5%	VTT	Within 2.0" of the ITP
TRST#	680 ohm +/- 5%	GND	Within 2.0" of the ITP
TCK	27 ohm +/- 5%	GND	Within 2.0" of the ITP
TDO	Open	VTT	Within 2.0" of the ITP
ITP_EN	R268 Depop	+3VRUN	Close to CK410M Pin8

Note: Populate R5, R8, C372 & R430 when ITP connector is populated.



QUANTA COMPUTER

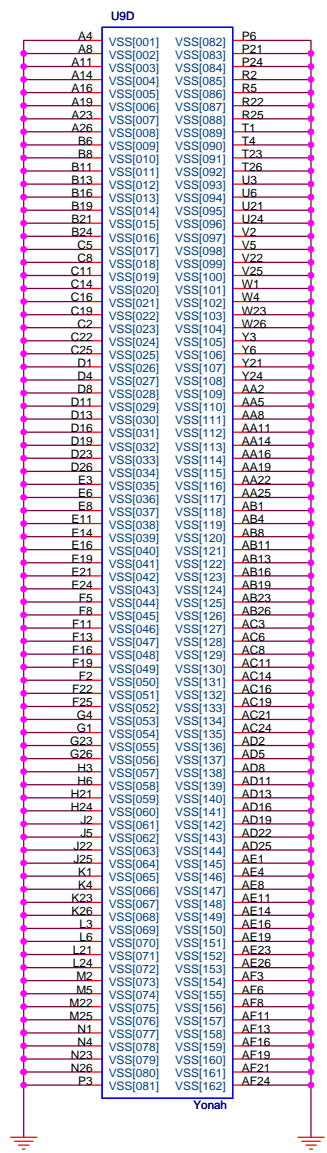
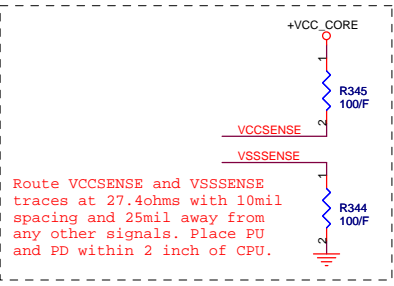
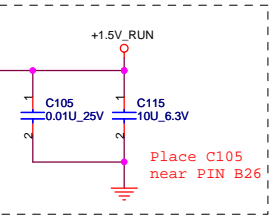
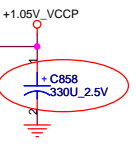
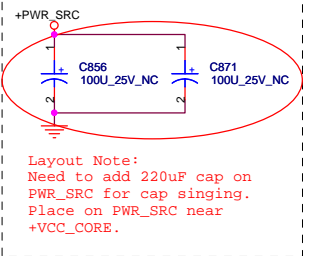
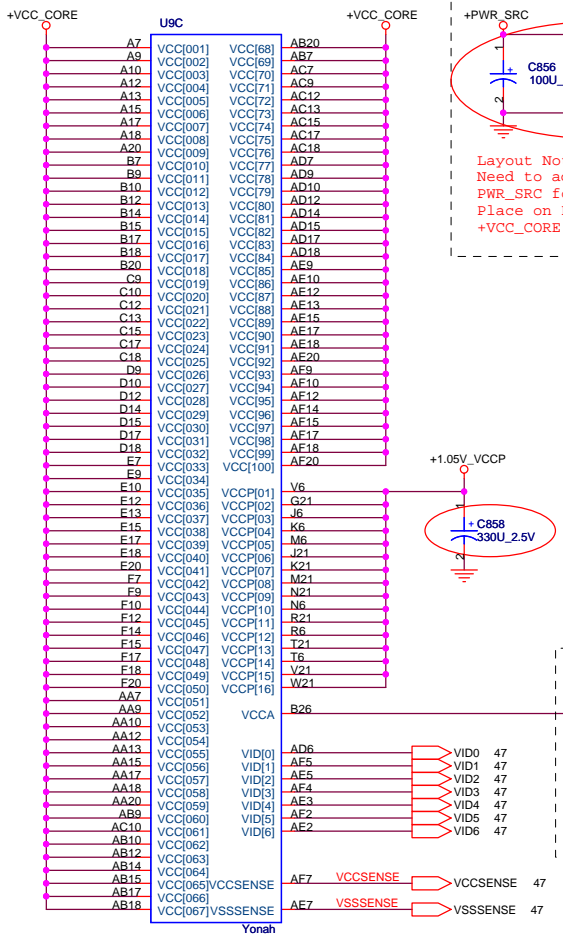
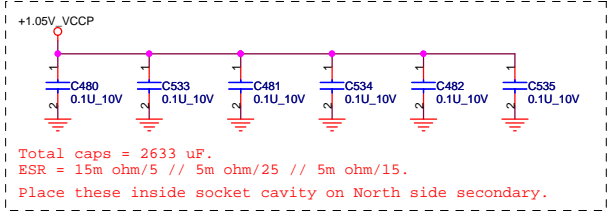
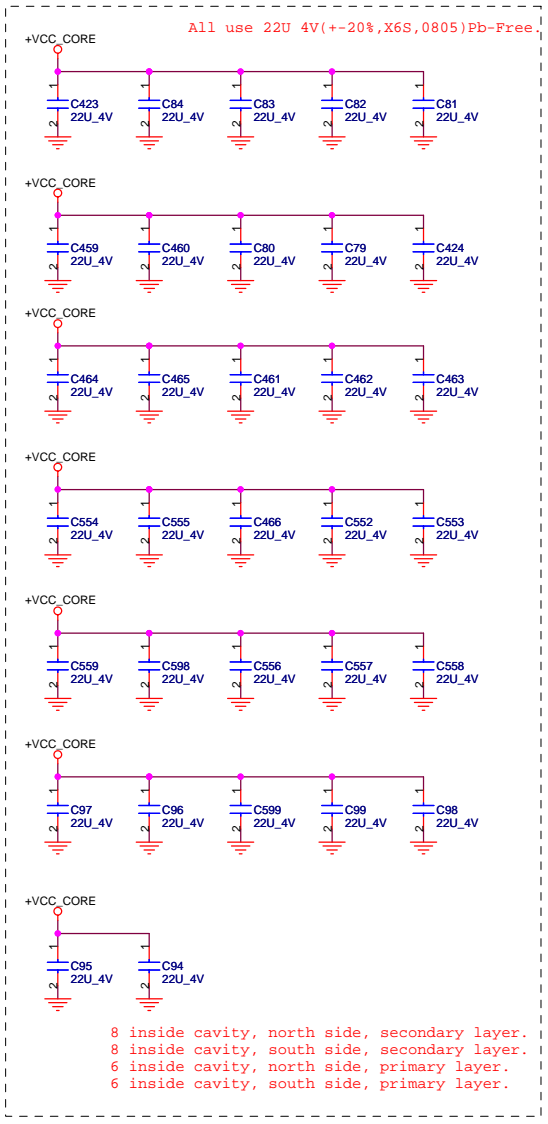
Title: Yonah Processor (HOST BUS)

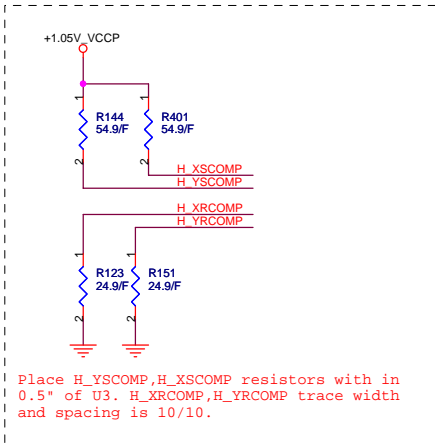
Size: Document Number JM6

Date: Thursday, September 08, 2005

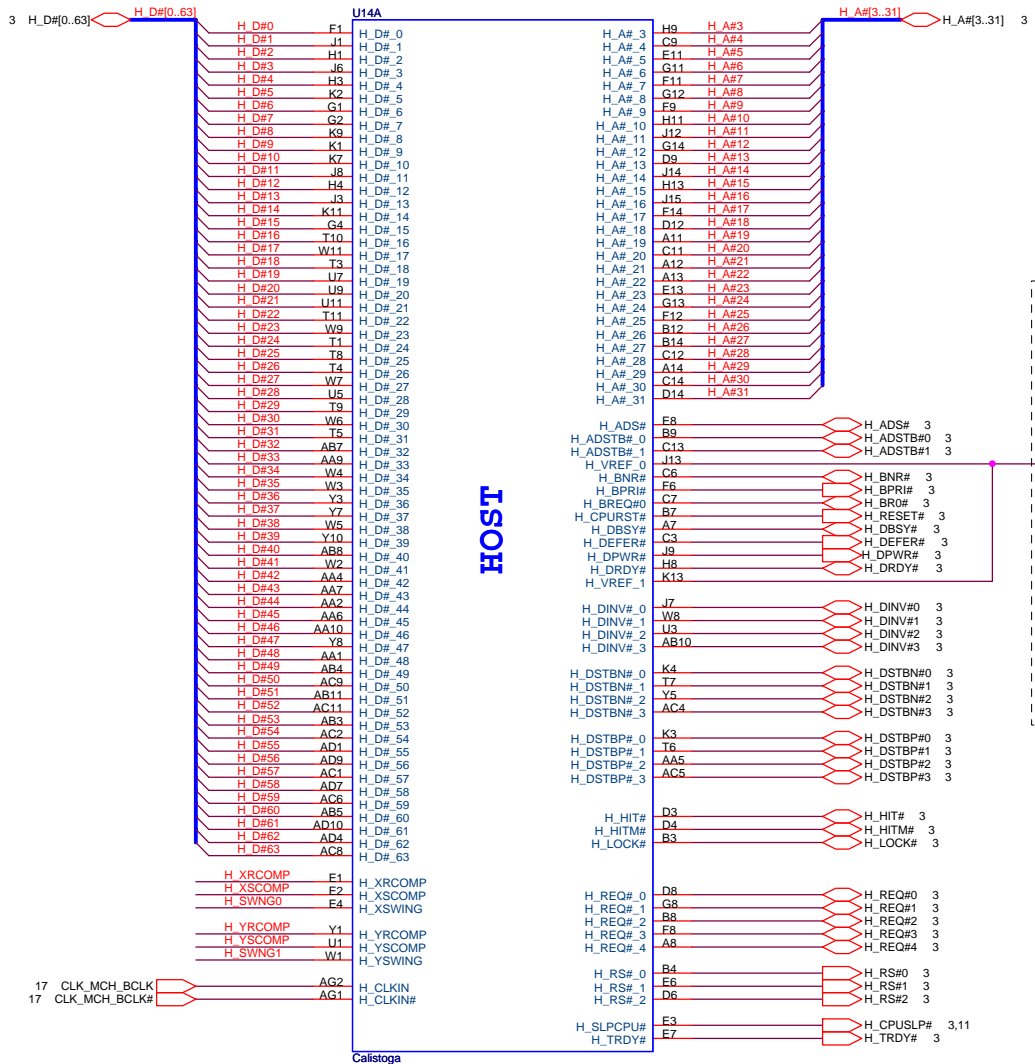
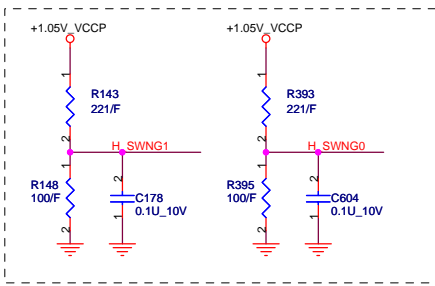
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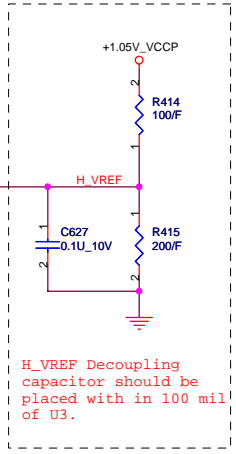




Place H_YSCOMP,H_XSCOMP resistors with in 0.5" of U3. H_XRCOMP,H_YRCOMP trace width and spacing is 10/10.

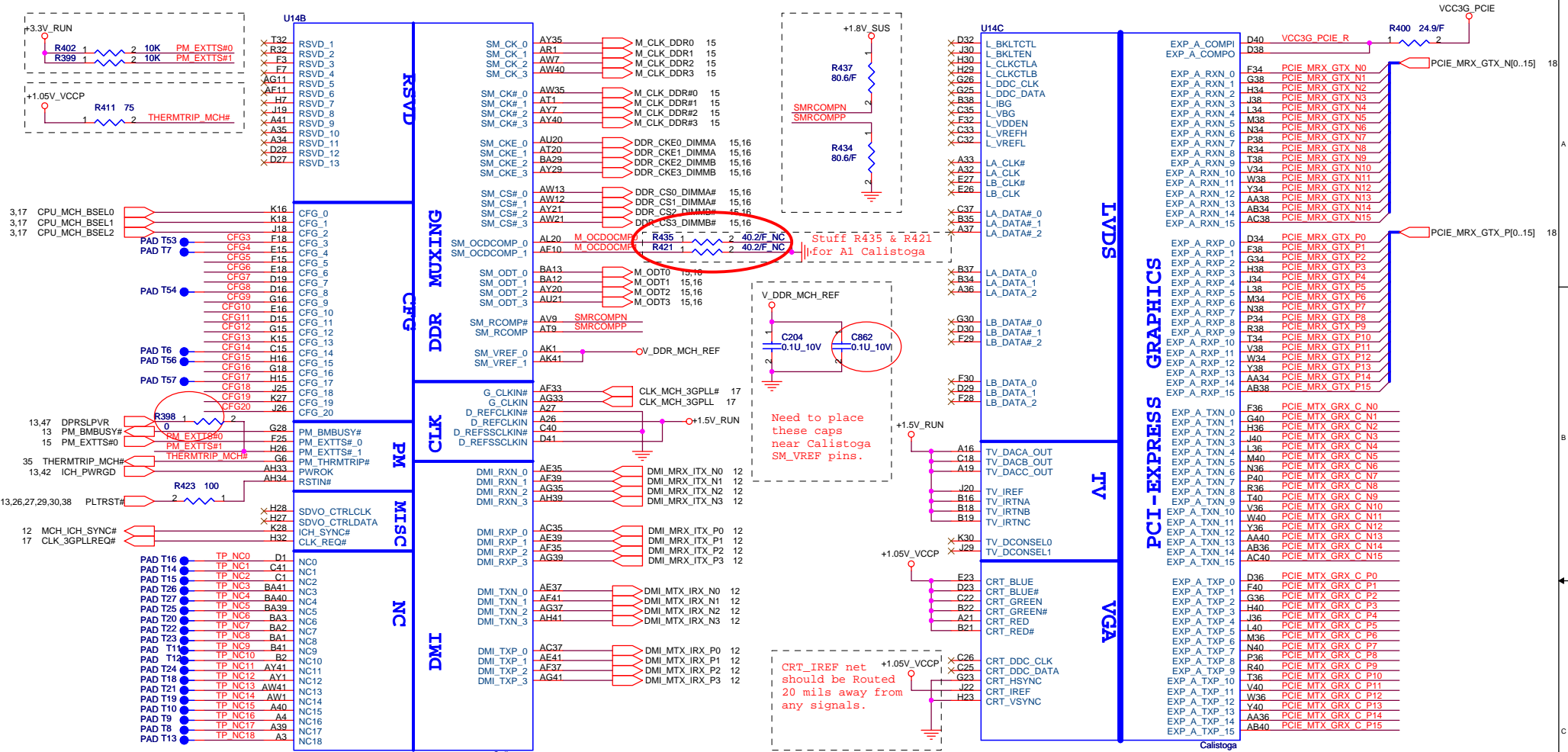


HOST

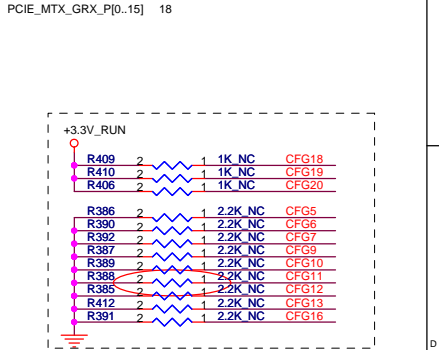
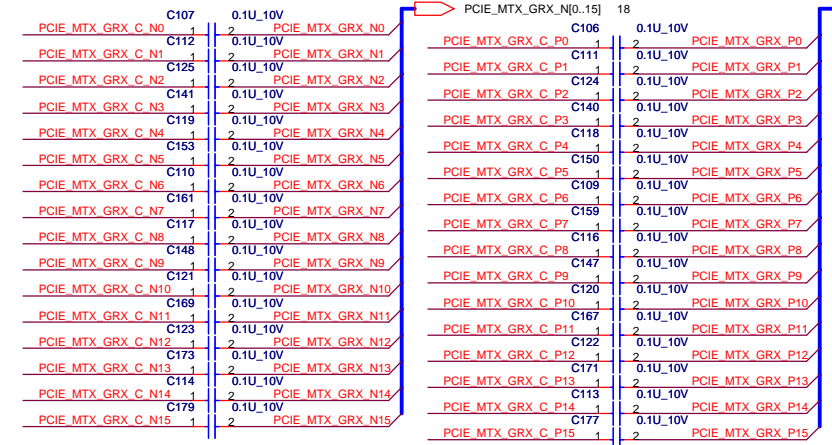


H_VREF Decoupling capacitor should be placed with in 100 mil of U3.

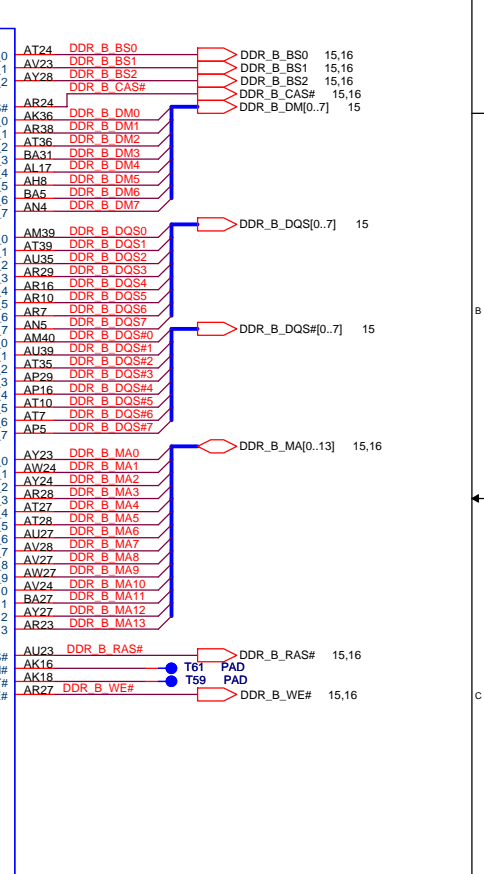
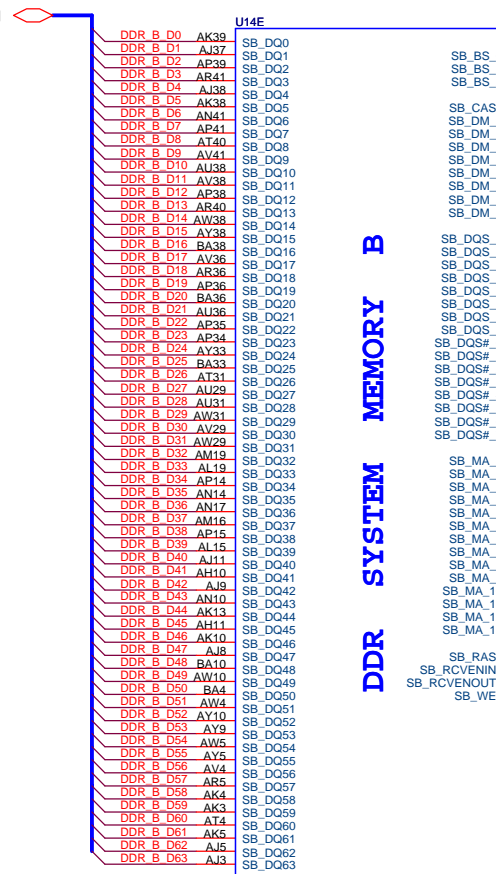
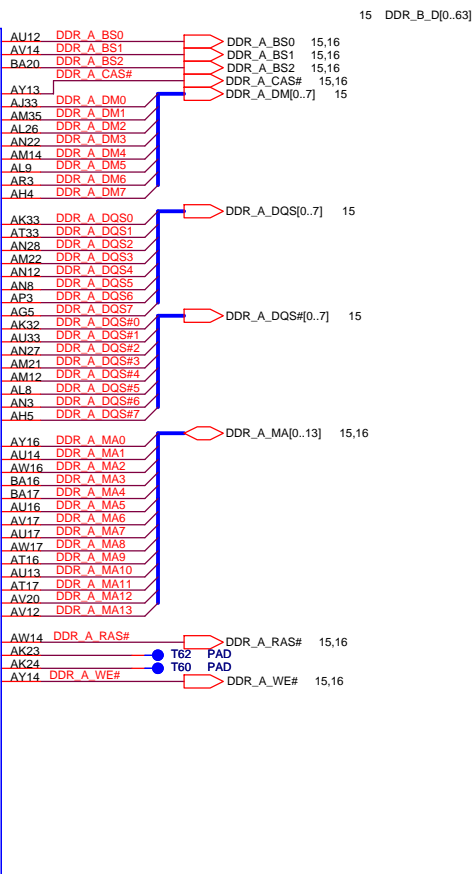
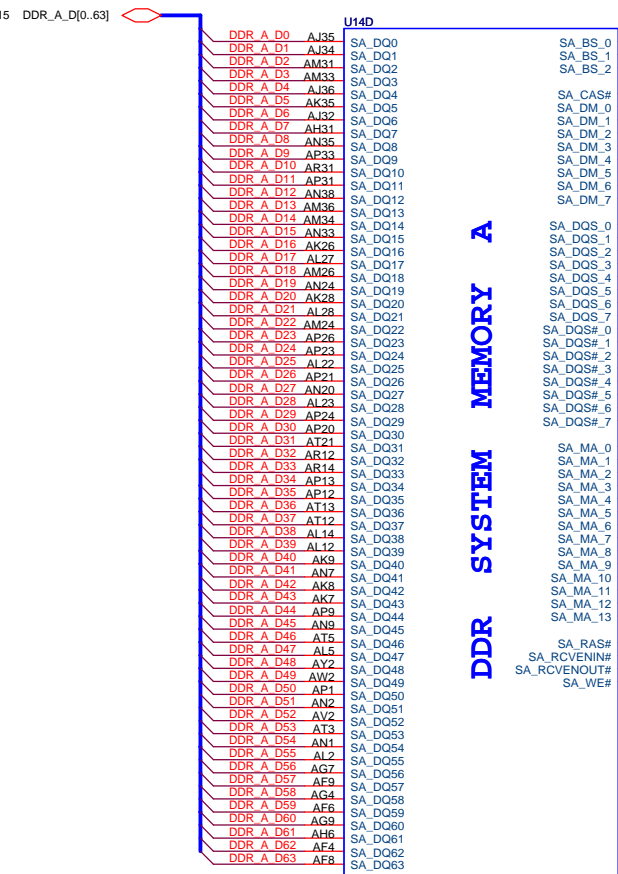


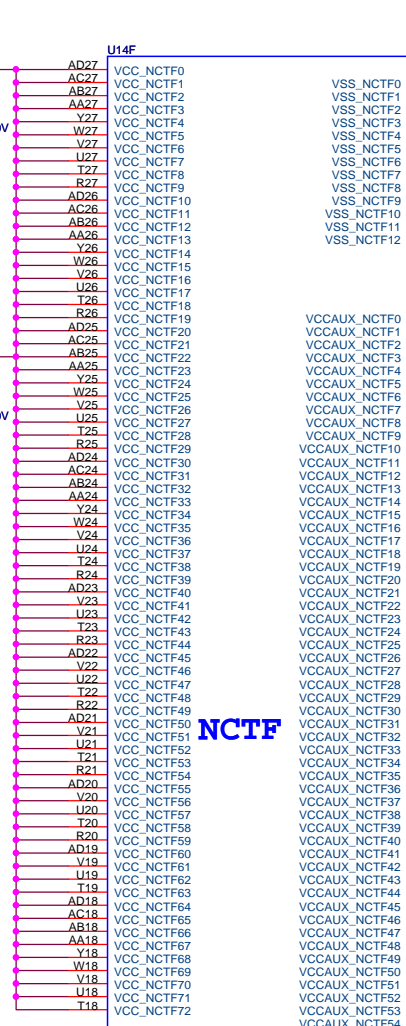
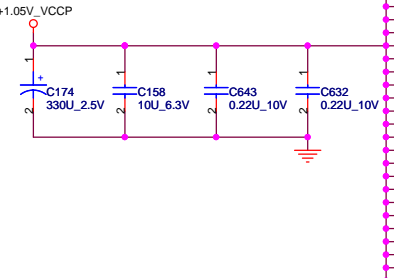
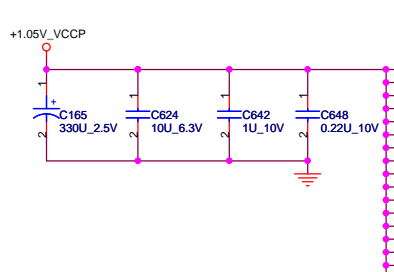
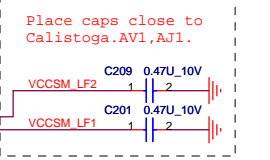
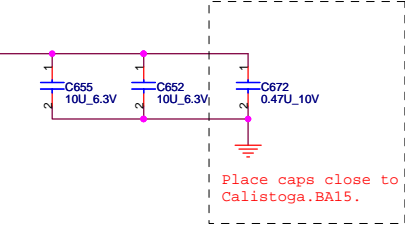
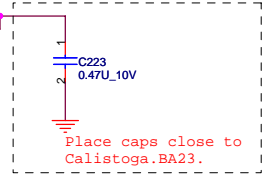
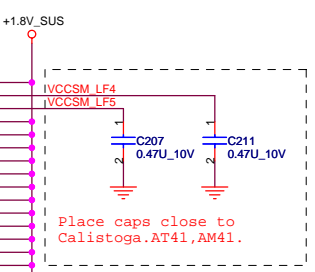
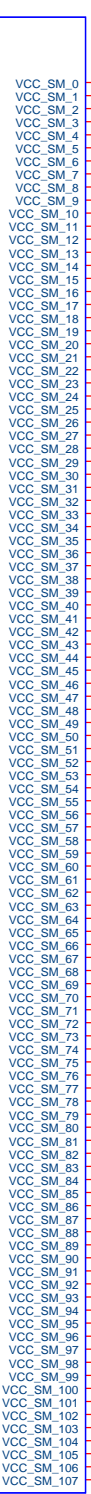
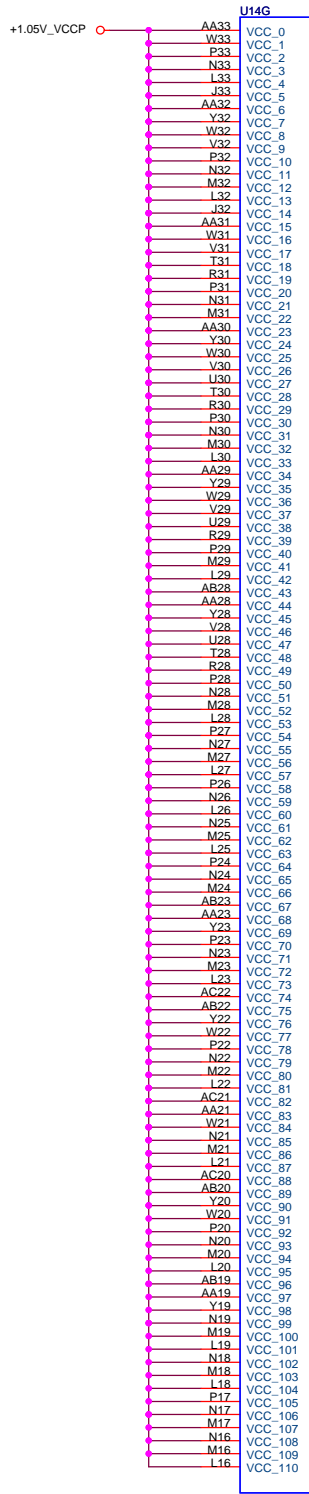


CFG5	Low=DMiX2 High=DMiX4
CFG6	Low=Moby Disk High=Calistoga.
CFG7	Low=RSVD High=Mobile CPU
CFG9	Low= Reverse Lane High=Normal operation
CFG10	Low=Reserved High=Mobility
CFG11	Low=Calistoga High=Reserved
CFG[13:12]	00=Reserved. 01=XOR Mode Enable. 11=Normal operation.
CFG16	Low=Dynamic ODT Disable High=Dynamic ODT Enable
CFG18	Low=1.05V High=1.5V
CFG19	Low=Normal High=Lane Reversed
CFG20	Low=Only SDVO or PCIe1 is operational (defaults) High=SDVO and PCIe1 are operating simultaneously via PEG port
SDVO_CTRLDATA	Low=No SDVO device present. High=SDVO device present.

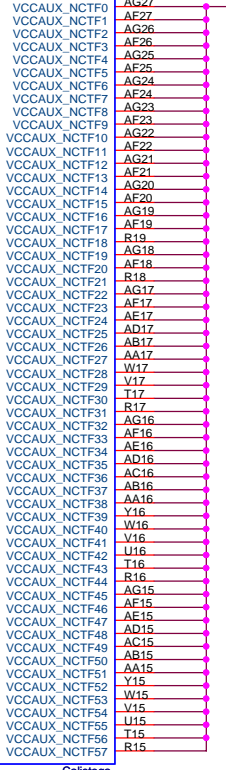
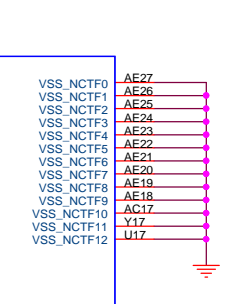


DC Blocked Cap.

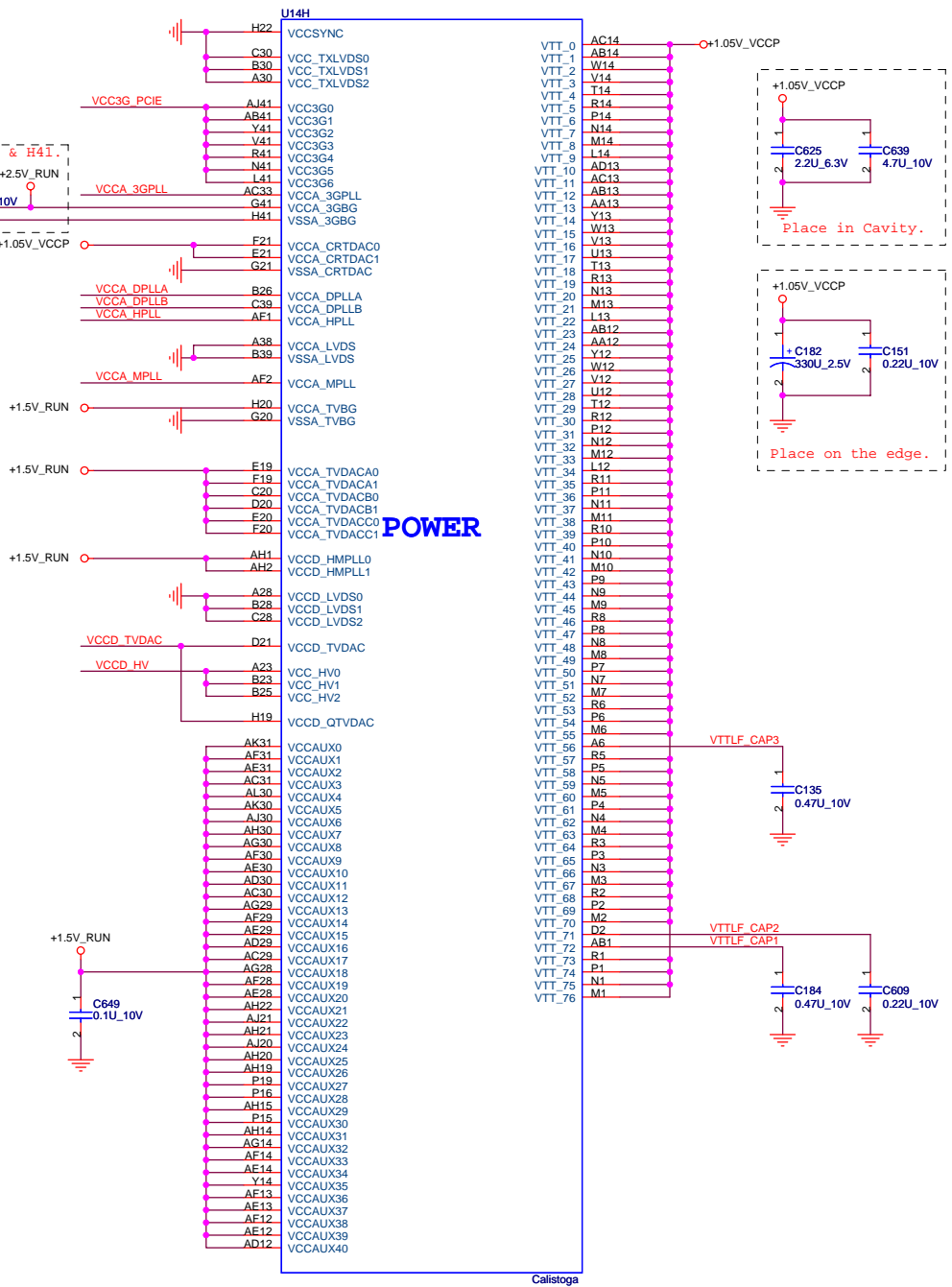
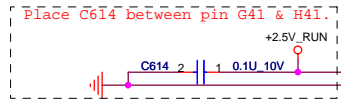
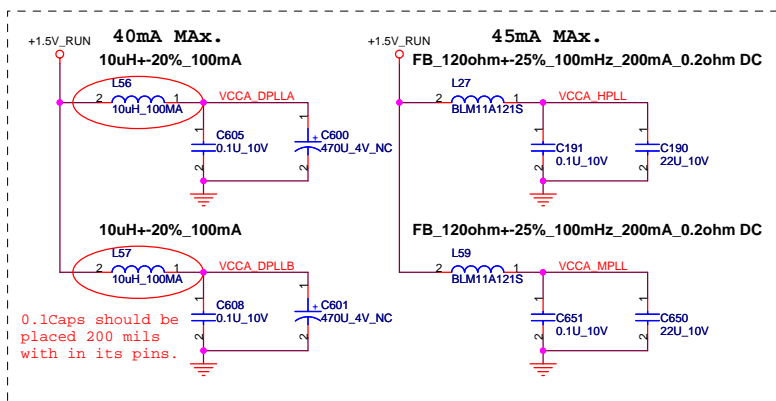
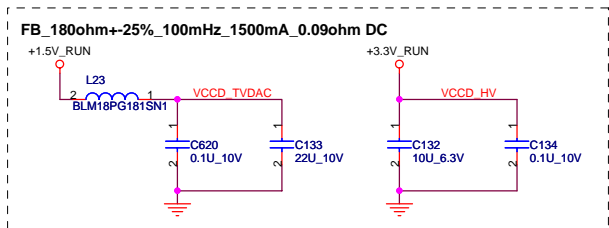
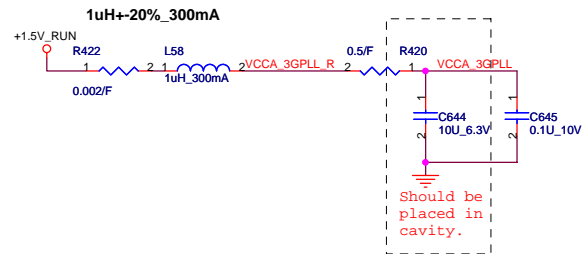
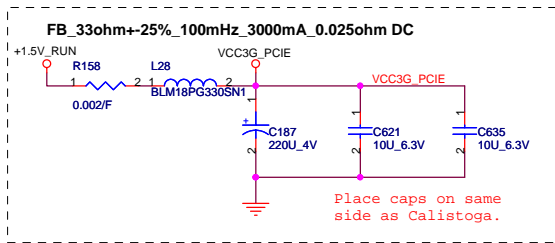




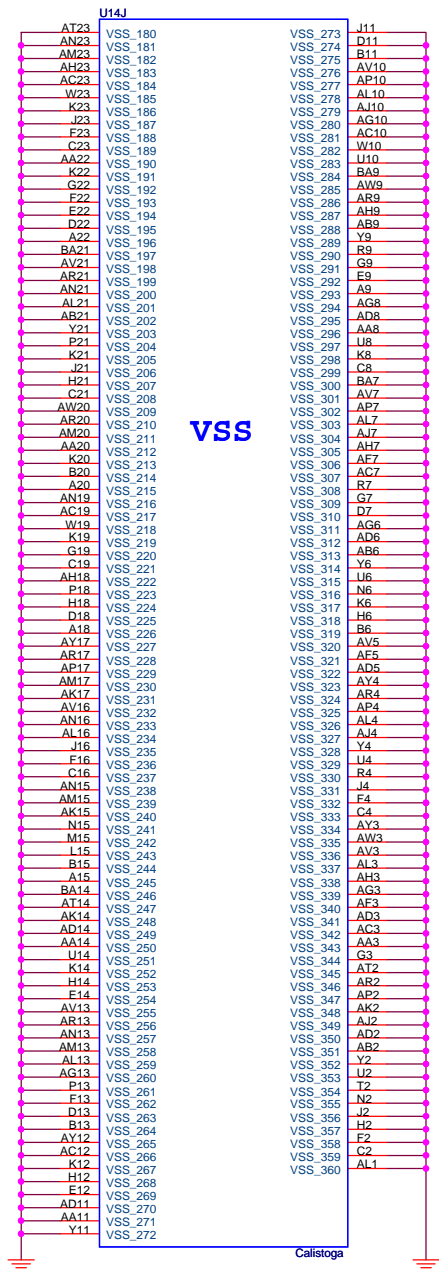
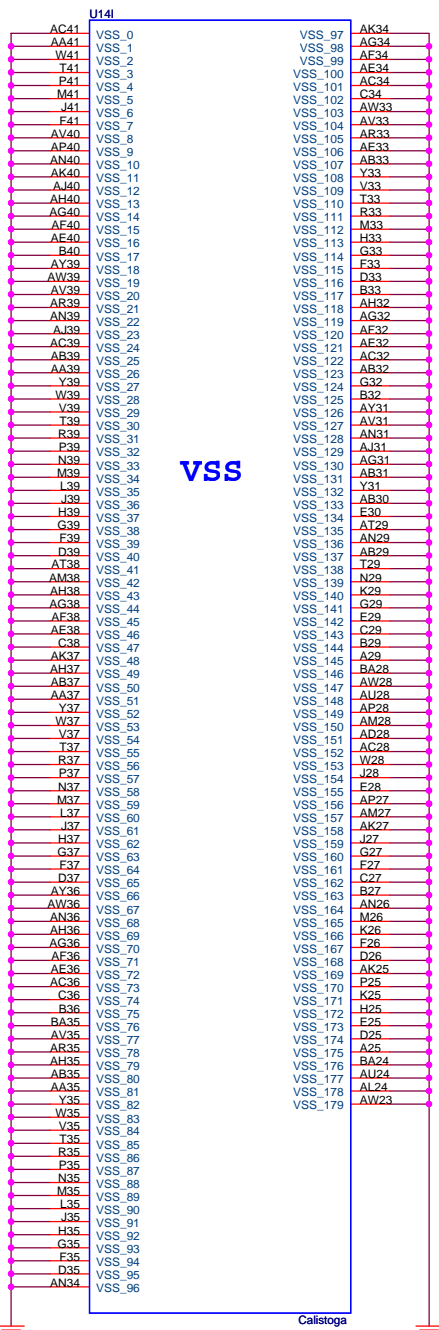
NCTF



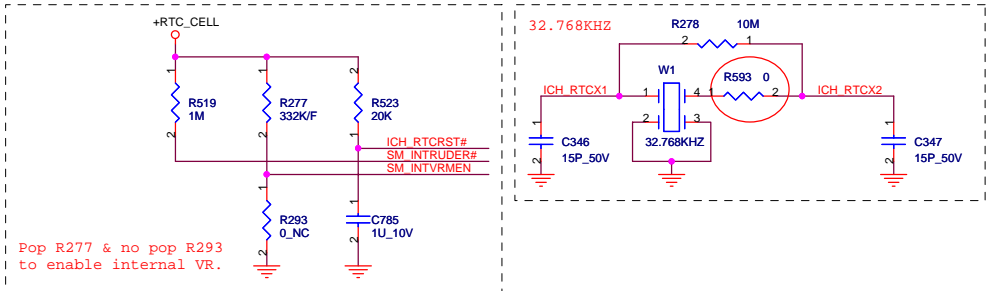
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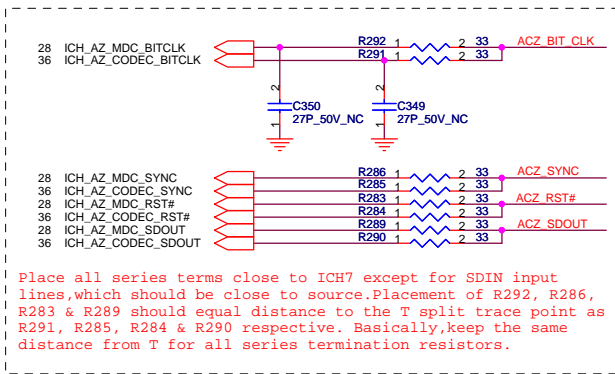
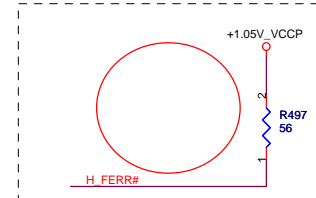
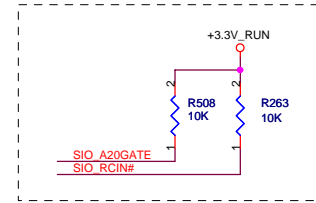
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Size JM6	Document Number JM6	Rev 2A
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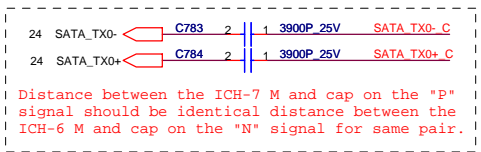
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Calistoga (VSS)		
Size	Document Number	Rev
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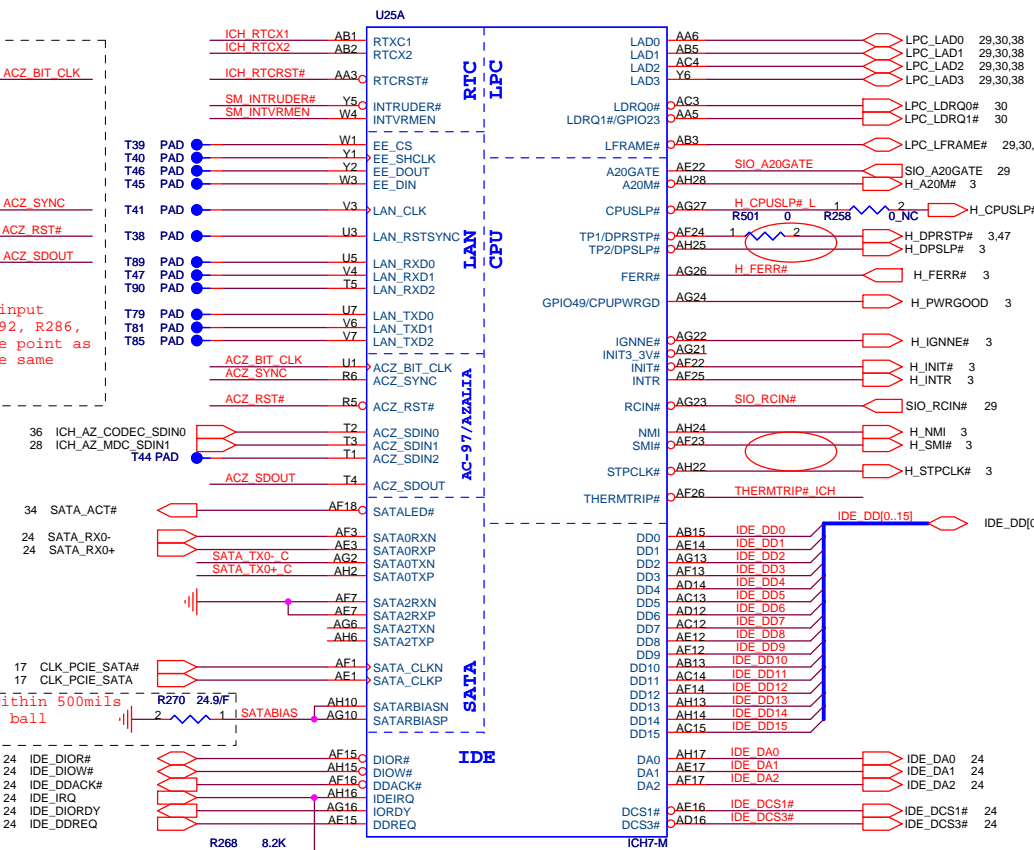
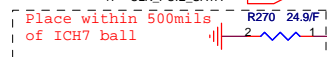
Pop R277 & no pop R293 to enable internal VR.



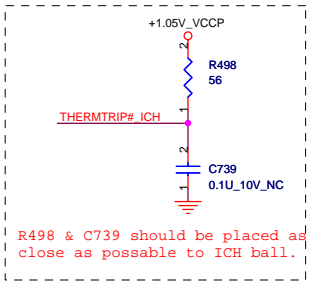
Place all series terms close to ICH7 except for SDIN input lines, which should be close to source. Placement of R292, R286, R283 & R289 should equal distance to the T split trace point as R291, R285, R284 & R290 respective. Basically, keep the same distance from T for all series termination resistors.



Distance between the ICH-7 M and cap on the "P" signal should be identical distance between the ICH-6 M and cap on the "N" signal for same pair.



Depop R258 if the MCH is driving CPUSLP# to the CPU. Place the resistors from ICH & MCH close together minimize stubs for either pop option.



R498 & C739 should be placed as close as possible to ICH ball.

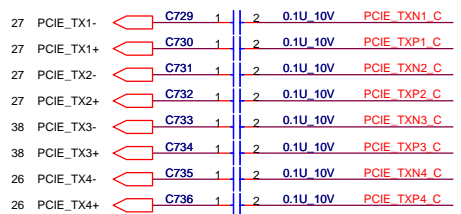
QUANTA COMPUTER

Title: ICH7-M (CPU,IDE,SATA,LPC,AC97)

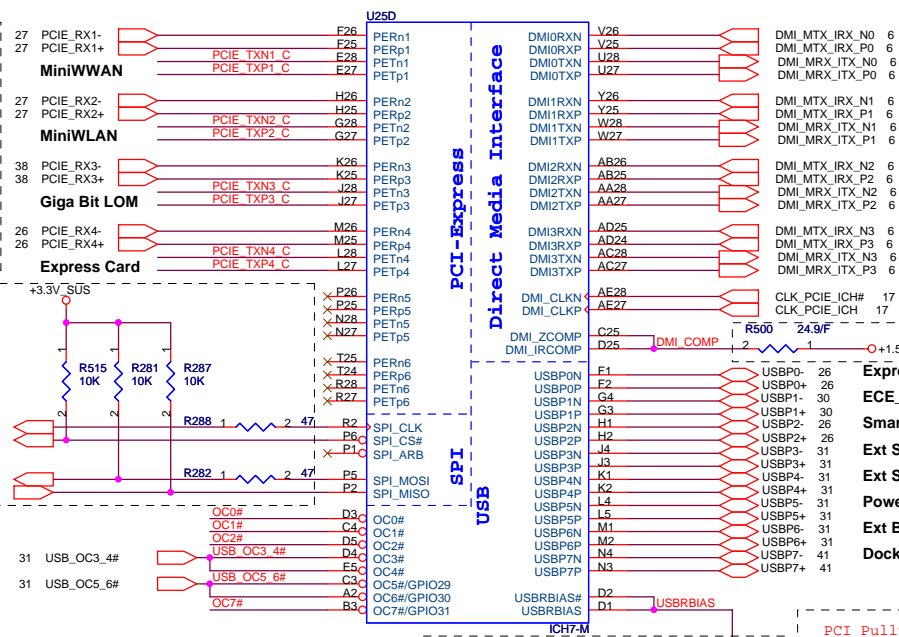
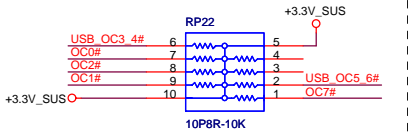
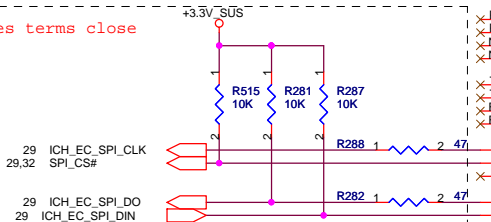
Size: Document Number JM6 Rev 2A

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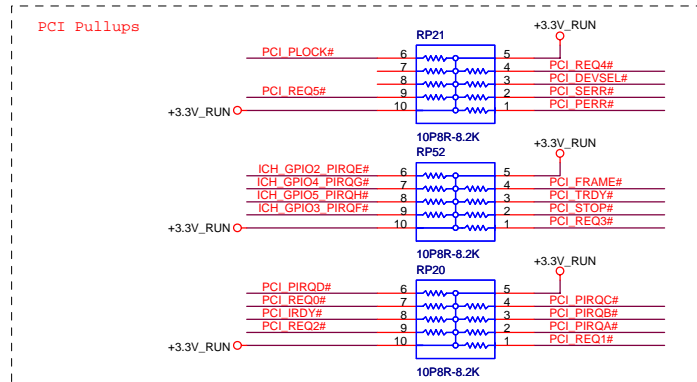
Place TX DC blocking caps close ICH7.



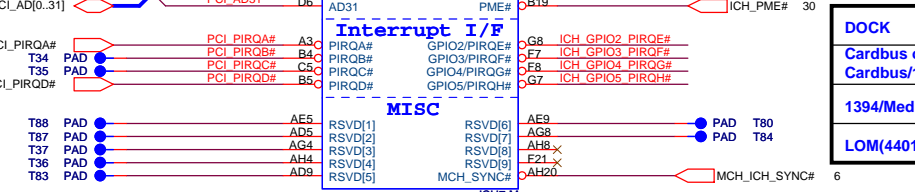
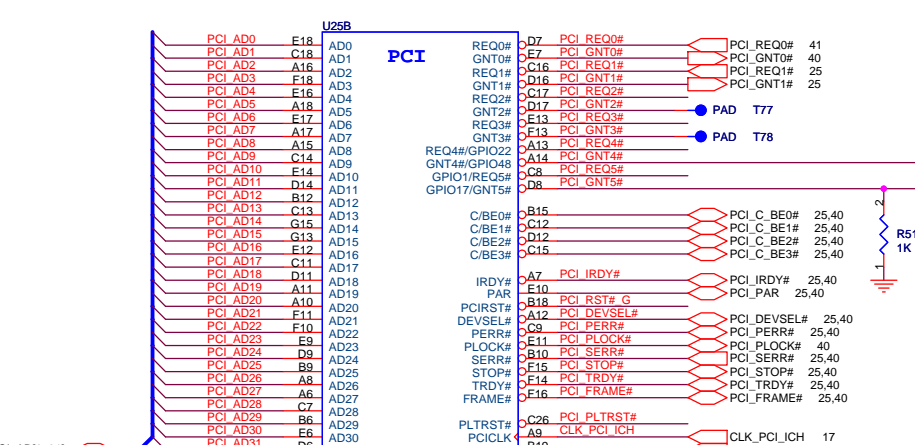
Place series terms close to source.



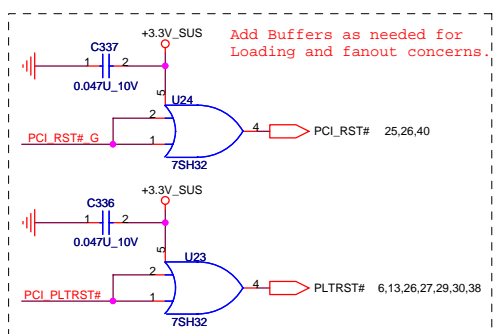
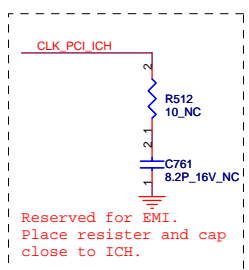
Short D2 and D1 at the package and keep length to less than 500mils. Trace Impedance should be 60ohms +/- 15%.



	GNT5#	GNT4#
LPC	11	No stuff
PCI	10	No stuff
SPI	01	Stuff



	REQ0	GNT0	PIRQA
DOCK			
Cardbus or Cardbus/1394	REQ1	GNT1	PIRQD
1394/MediaCard	REQ2	GNT2	PIRQC
LOM(4401)	REQ3	GNT3	PIRQB

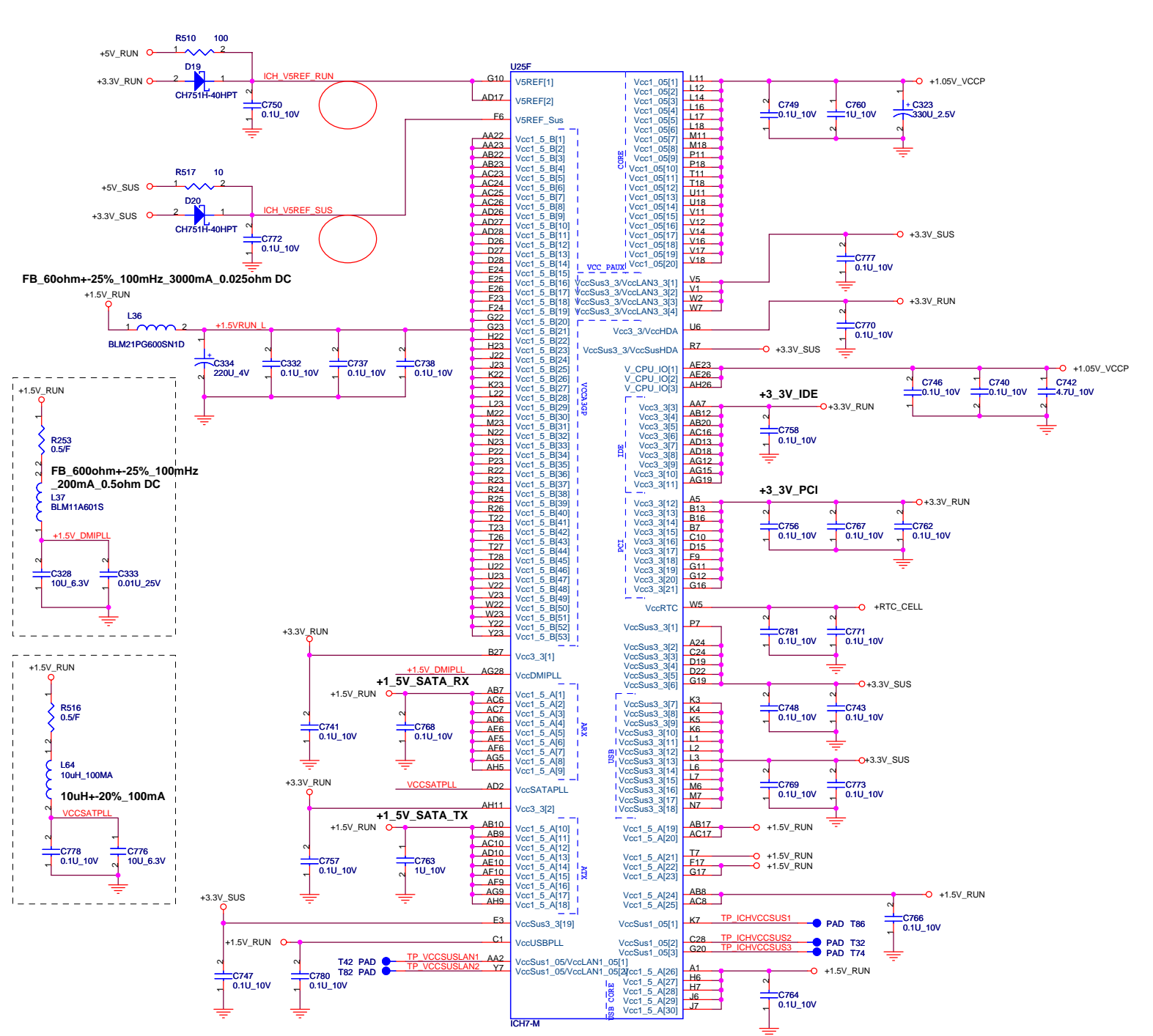


QUANTA COMPUTER

Title: ICH7-M (USB,DMI,PCIE,PCI)

Size: Document Number JM6 Rev 2A

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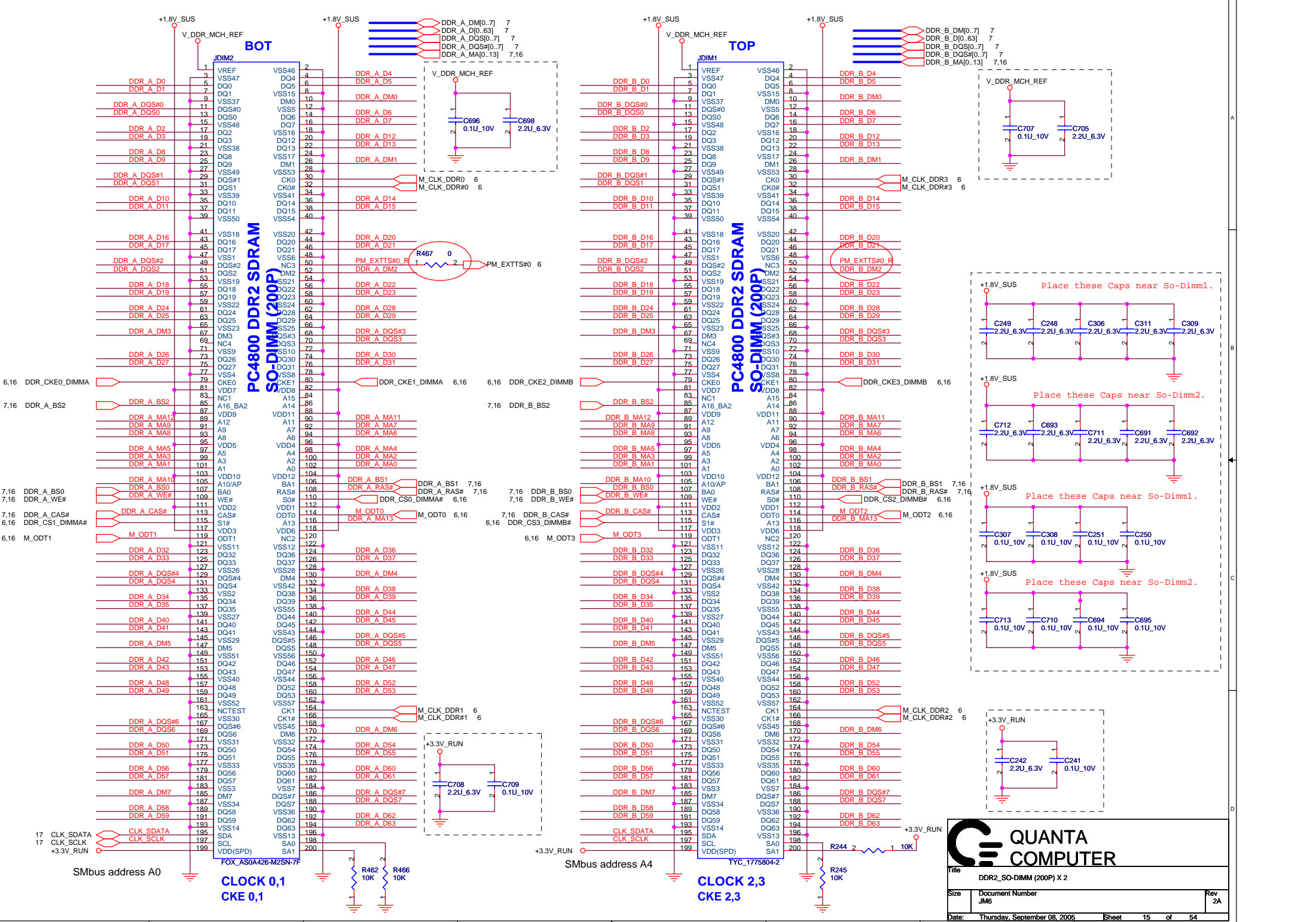
FB_60ohm+-25%_100mHz_3000mA_0.025ohm DC

FB_600ohm+-25%_100mHz_200mA_0.5ohm DC

10uH+-20%_100mA

U25E		
A4	VSS[1]	VSS[98]
A23	VSS[2]	VSS[99]
B1	VSS[3]	VSS[100]
B8	VSS[4]	VSS[101]
B11	VSS[5]	VSS[102]
B14	VSS[6]	VSS[103]
B17	VSS[7]	VSS[104]
B20	VSS[8]	VSS[105]
B26	VSS[9]	VSS[106]
B28	VSS[10]	VSS[107]
C2	VSS[11]	VSS[108]
C6	VSS[12]	VSS[109]
C27	VSS[13]	VSS[110]
D10	VSS[14]	VSS[111]
D13	VSS[15]	VSS[112]
D18	VSS[16]	VSS[113]
D21	VSS[17]	VSS[114]
D24	VSS[18]	VSS[115]
E1	VSS[19]	VSS[116]
E2	VSS[20]	VSS[117]
E4	VSS[21]	VSS[118]
E8	VSS[22]	VSS[119]
E15	VSS[23]	VSS[120]
F3	VSS[24]	VSS[121]
F4	VSS[25]	VSS[122]
F5	VSS[26]	VSS[123]
F12	VSS[27]	VSS[124]
F27	VSS[28]	VSS[125]
F28	VSS[29]	VSS[126]
G1	VSS[30]	VSS[127]
G2	VSS[31]	VSS[128]
G5	VSS[32]	VSS[129]
G6	VSS[33]	VSS[130]
G9	VSS[34]	VSS[131]
G14	VSS[35]	VSS[132]
G18	VSS[36]	VSS[133]
G21	VSS[37]	VSS[134]
G24	VSS[38]	VSS[135]
G25	VSS[39]	VSS[136]
G26	VSS[40]	VSS[137]
H3	VSS[41]	VSS[138]
H4	VSS[42]	VSS[139]
H5	VSS[43]	VSS[140]
H24	VSS[44]	VSS[141]
H27	VSS[45]	VSS[142]
H28	VSS[46]	VSS[143]
J1	VSS[47]	VSS[144]
J2	VSS[48]	VSS[145]
J5	VSS[49]	VSS[146]
J24	VSS[50]	VSS[147]
J25	VSS[51]	VSS[148]
J26	VSS[52]	VSS[149]
K24	VSS[53]	VSS[150]
K27	VSS[54]	VSS[151]
K28	VSS[55]	VSS[152]
L13	VSS[56]	VSS[153]
L15	VSS[57]	VSS[154]
L24	VSS[58]	VSS[155]
L25	VSS[59]	VSS[156]
L26	VSS[60]	VSS[157]
M3	VSS[61]	VSS[158]
M4	VSS[62]	VSS[159]
M5	VSS[63]	VSS[160]
M12	VSS[64]	VSS[161]
M13	VSS[65]	VSS[162]
M14	VSS[66]	VSS[163]
M15	VSS[67]	VSS[164]
M16	VSS[68]	VSS[165]
M17	VSS[69]	VSS[166]
M24	VSS[70]	VSS[167]
M27	VSS[71]	VSS[168]
M28	VSS[72]	VSS[169]
N1	VSS[73]	VSS[170]
N2	VSS[74]	VSS[171]
N5	VSS[75]	VSS[172]
N6	VSS[76]	VSS[173]
N11	VSS[77]	VSS[174]
N12	VSS[78]	VSS[175]
N13	VSS[79]	VSS[176]
N14	VSS[80]	VSS[177]
N15	VSS[81]	VSS[178]
N16	VSS[82]	VSS[179]
N17	VSS[83]	VSS[180]
N18	VSS[84]	VSS[181]
N25	VSS[85]	VSS[182]
N26	VSS[86]	VSS[183]
N26	VSS[87]	VSS[184]
P3	VSS[88]	VSS[185]
P4	VSS[89]	VSS[186]
P12	VSS[90]	VSS[187]
P13	VSS[91]	VSS[188]
P14	VSS[92]	VSS[189]
P15	VSS[93]	VSS[190]
P16	VSS[94]	VSS[191]
P17	VSS[95]	VSS[192]
P24	VSS[96]	VSS[193]
P27	VSS[97]	VSS[194]





PC4800 DDR2 SDRAM SO-DIMM (200P)

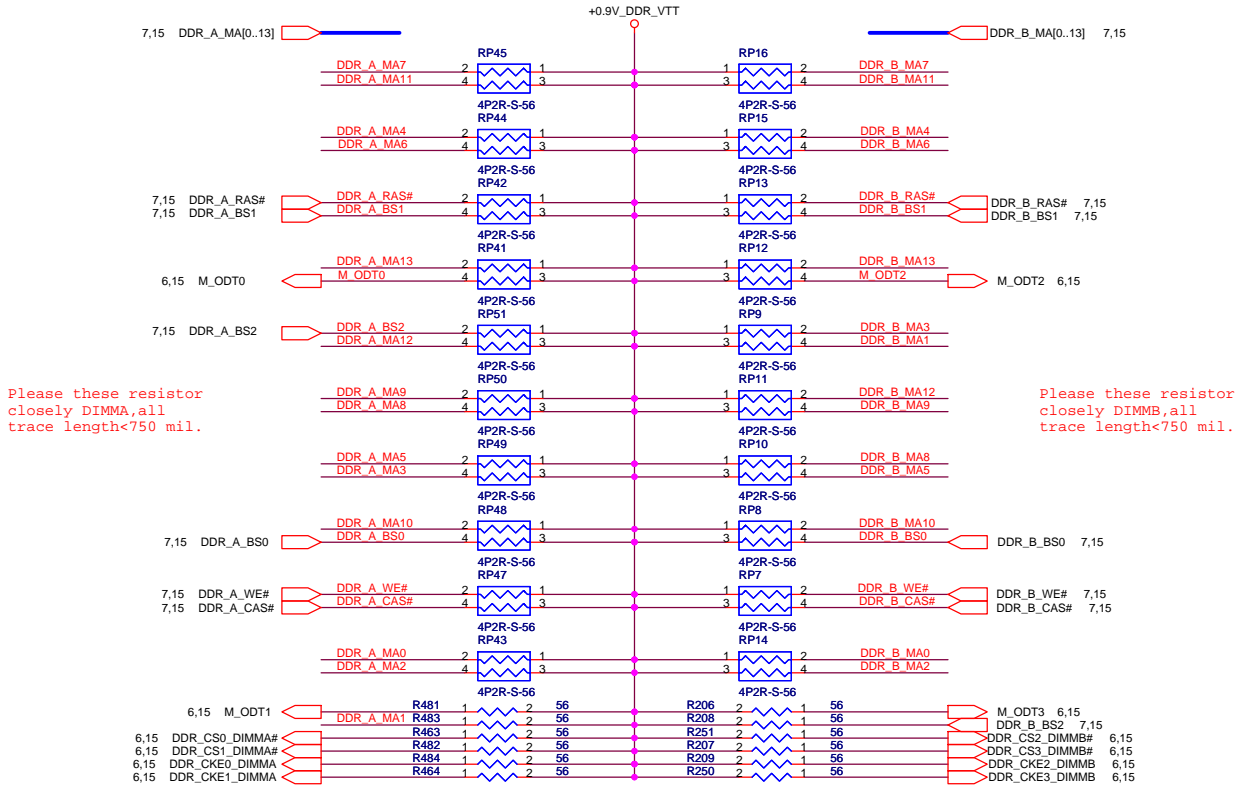
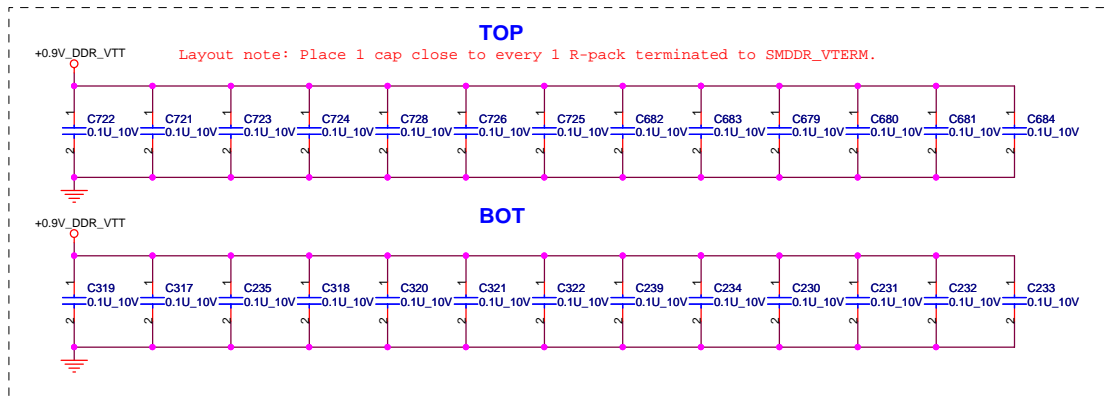
PC4800 DDR2 SDRAM SO-DIMM (200P)

QUANTA COMPUTER

Title: **DDR2_SO-DIMM (200P) X 2**

Size: **JM6** | Document Number: **JM6** | Rev: **2A**

Date: **Thursday, September 08, 2005** | Sheet: **15** of **54**

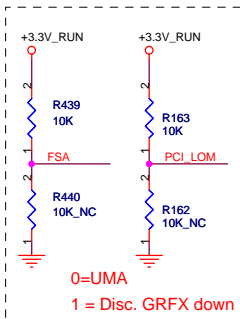


**QUANTA
COMPUTER**

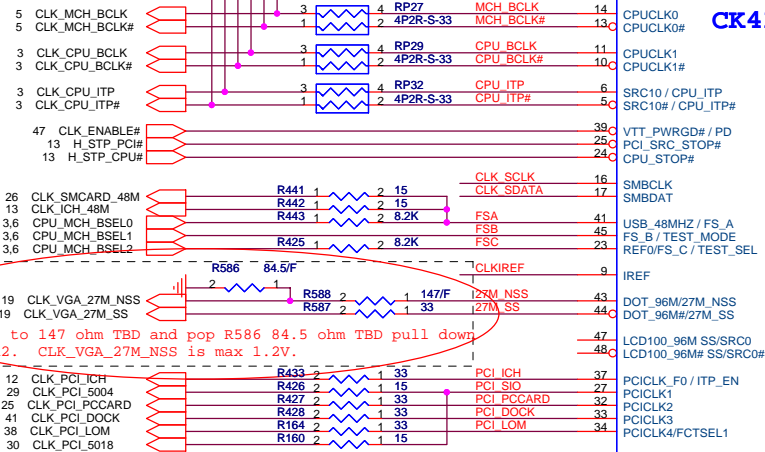
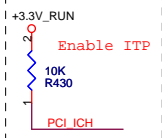
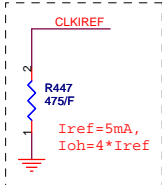
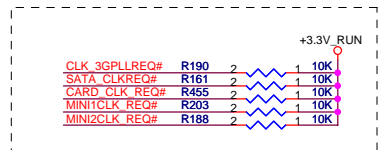
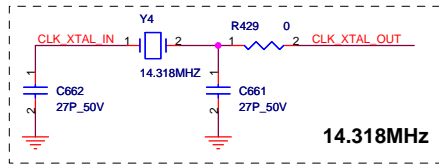
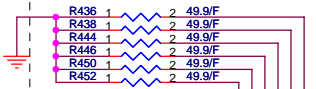
Title: **DDR2.RES.ARRAY**

Size	Document Number JM6	Rev 2A
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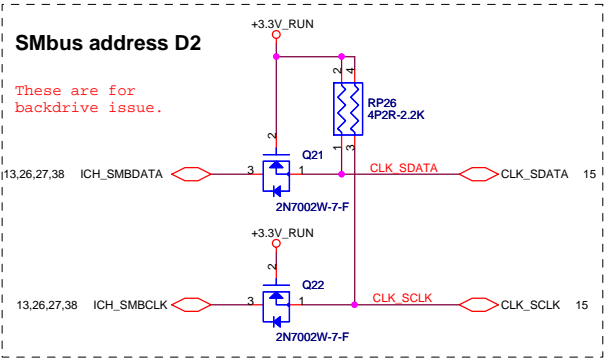
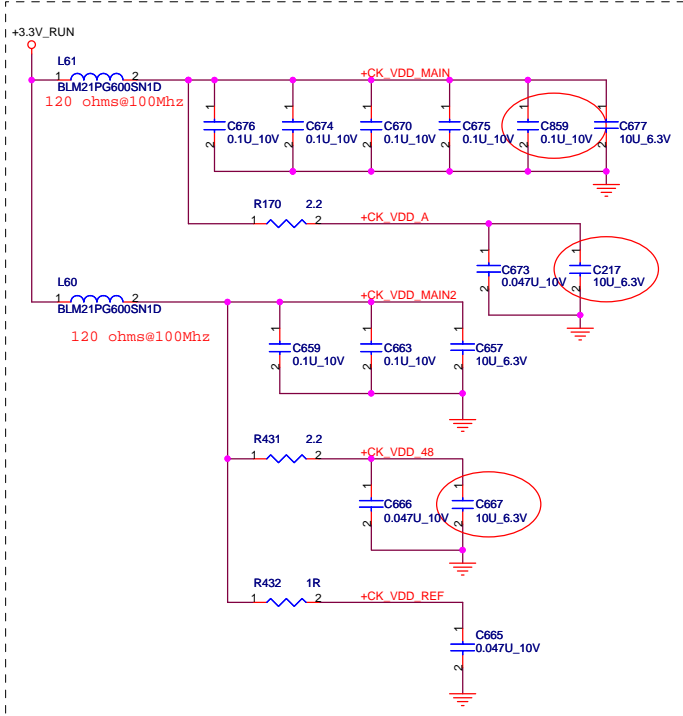
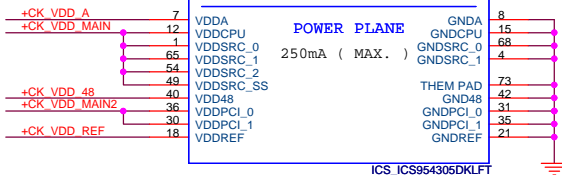
Date: Thursday, September 08, 2005 Sheet 16 of 54



Place these termination to close CK410M.

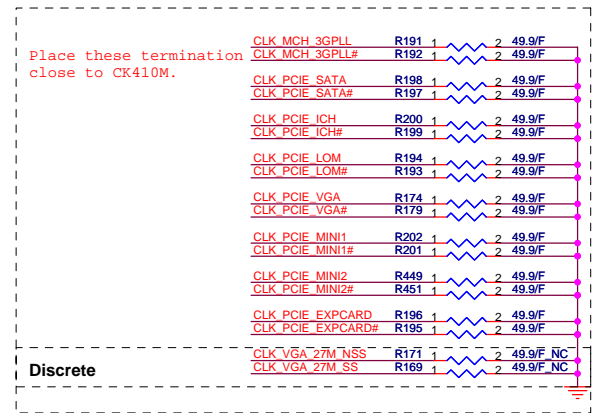


Discrete
Change R588 to 147 ohm TBD and pop R586 84.5 ohm TBD pull down on R589 pin2. CLK_VGA_27M_NSS is max 1.2V.



PCI_LOM = FCTSEL1

FCTSEL1 (PIN34)	PIN43	PIN44	PIN47	PIN48
0=UMA	DOT96T	DOT96C	96/100M_T	96/100M_C
1 = Disc. GRFX down	27Mout	27MSSout	SRCT0	SRCC0

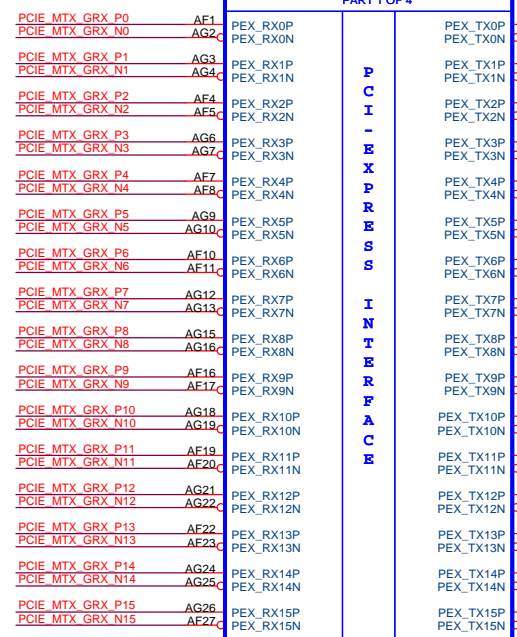
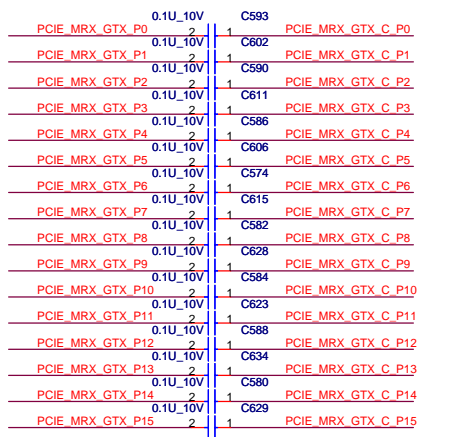


FSC	FSB	FSA	CPU	SRC	PCI
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	RSVD	100	33

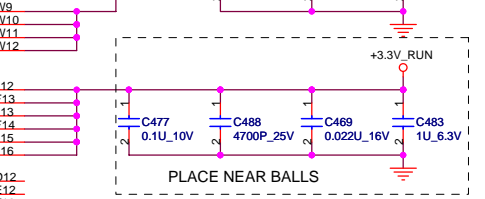
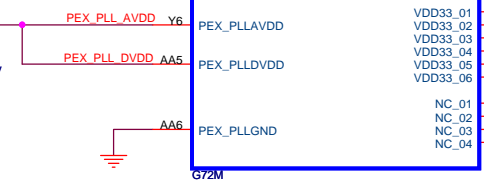
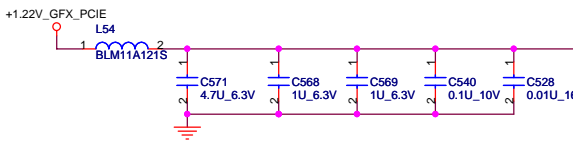
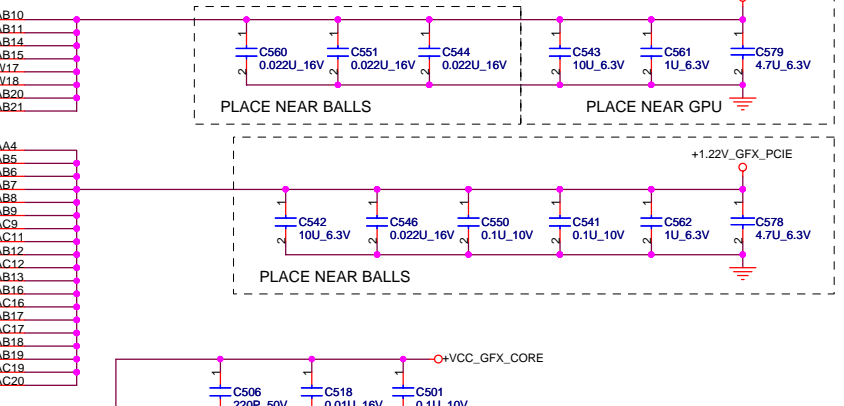
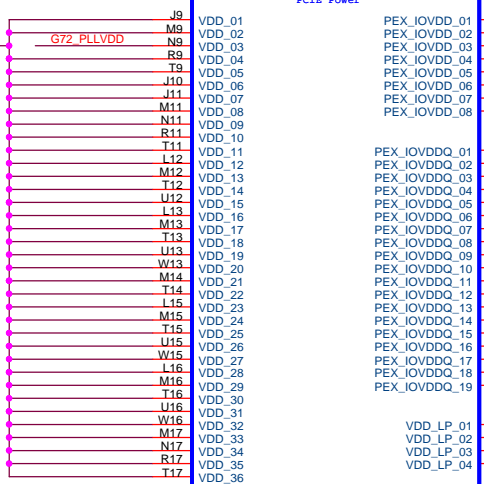
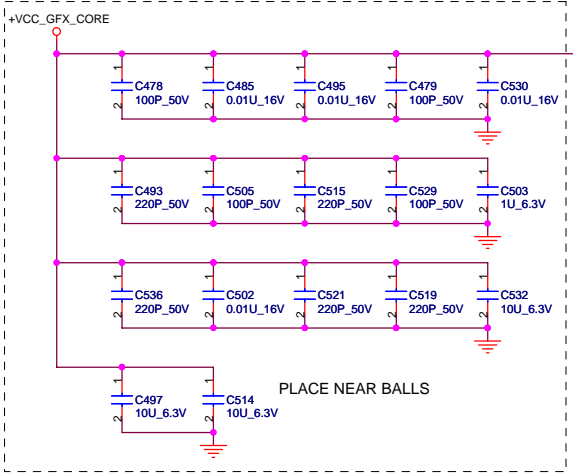
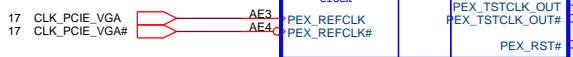
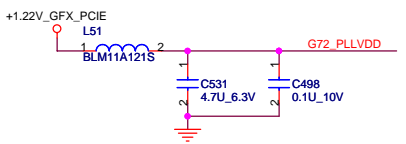
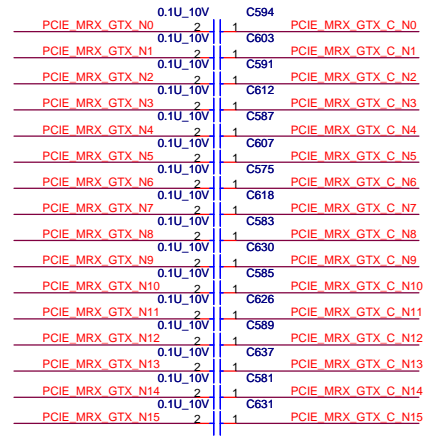


6 PCIE_MTX_GRX_P[0..15]
6 PCIE_MTX_GRX_N[0..15]

6 PCIE_MRX_GTX_P[0..15]

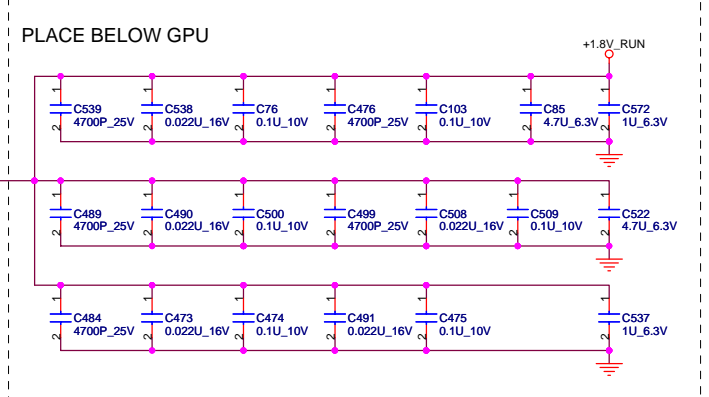
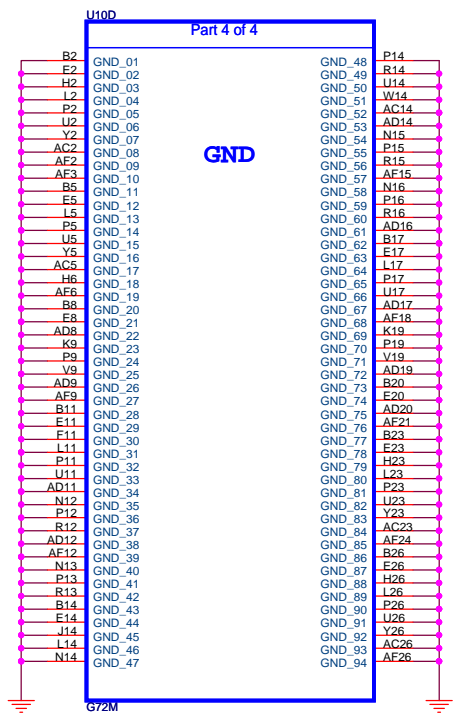
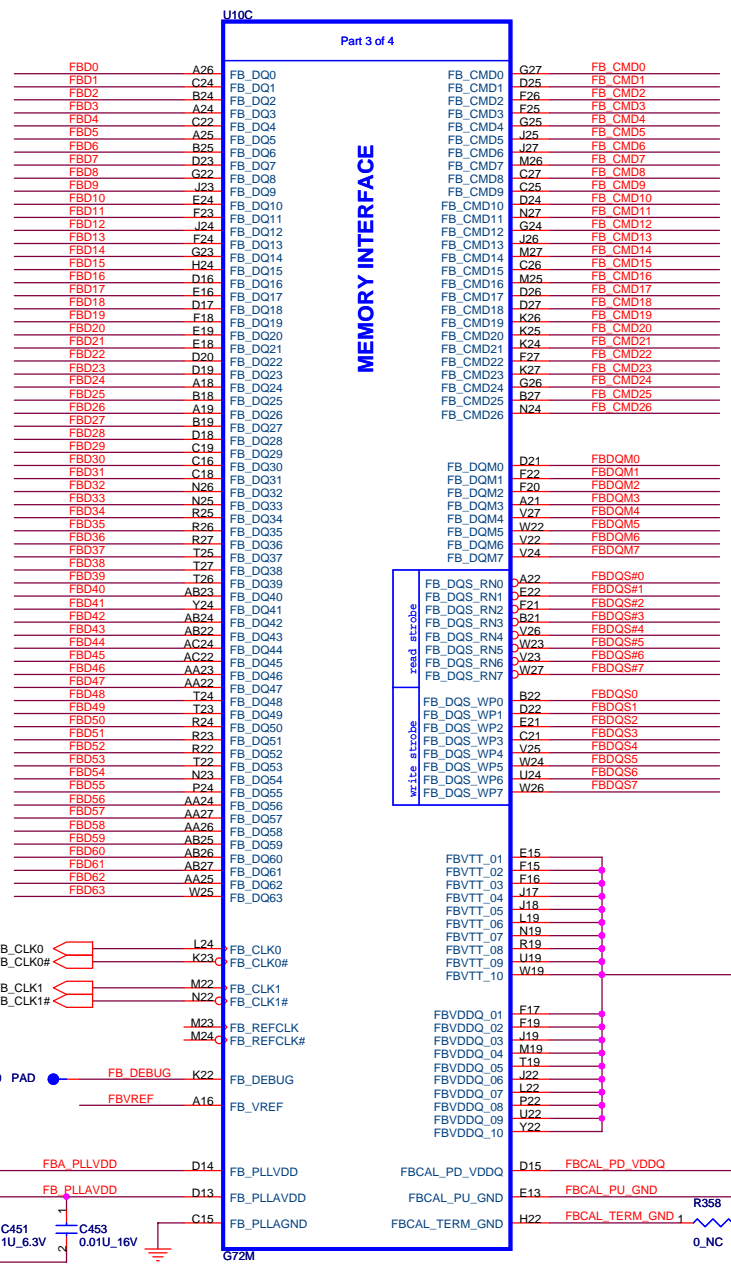
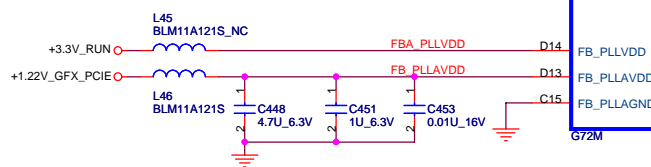
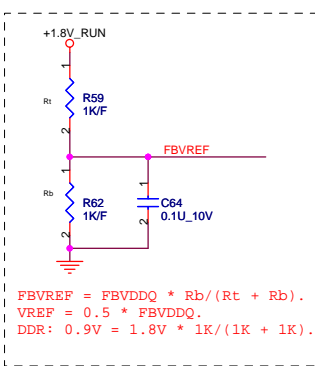


6 PCIE_MRX_GTX_N[0..15]



Title VGA-G72M (PCIE,POWER)		
Size JM6	Document Number	Rev 2A
Date: Thursday, September 08, 2005	Sheet 18	of 54

FB_CMD[0..26] 21
 FBD[0..63] 21
 FBDQM[0..7] 21
 FBDQS[0..7] 21
 FBDQS#[0..7] 21

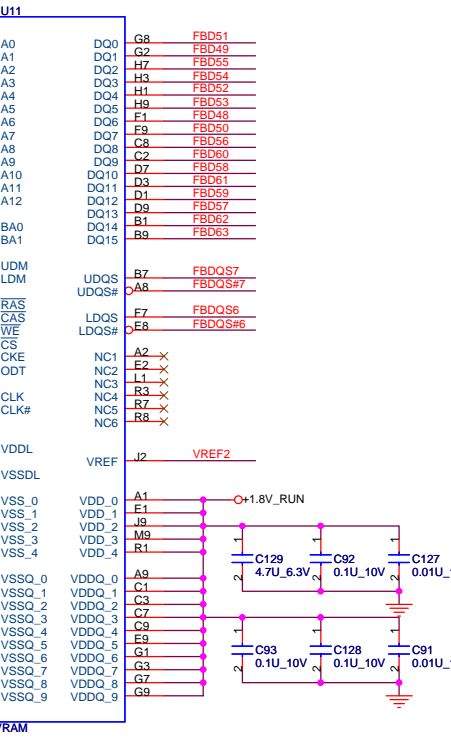
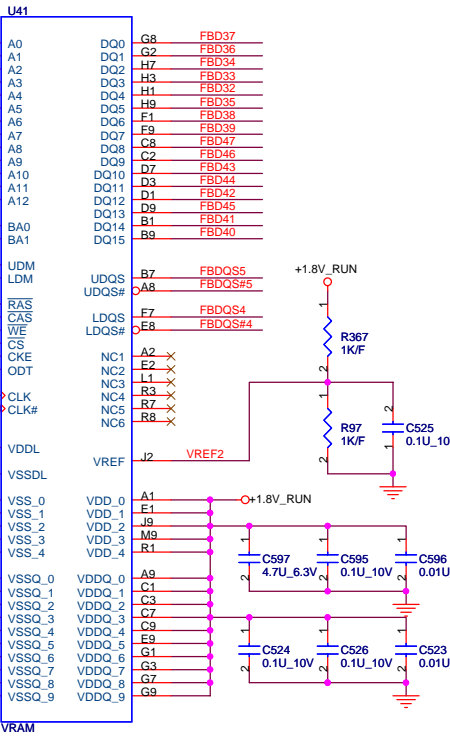
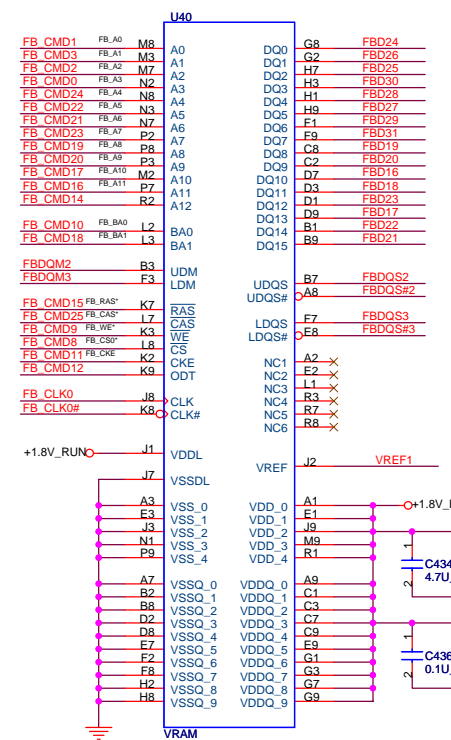
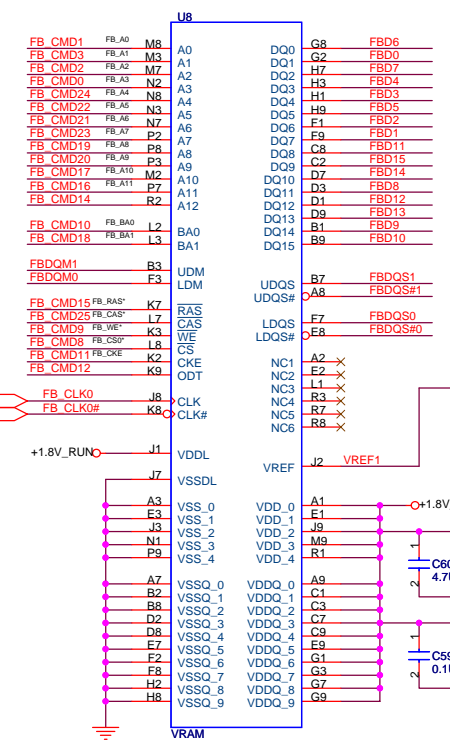
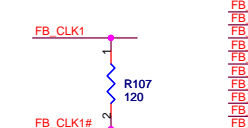
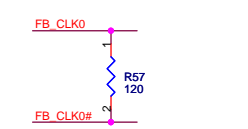
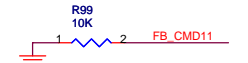
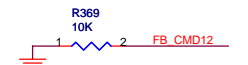


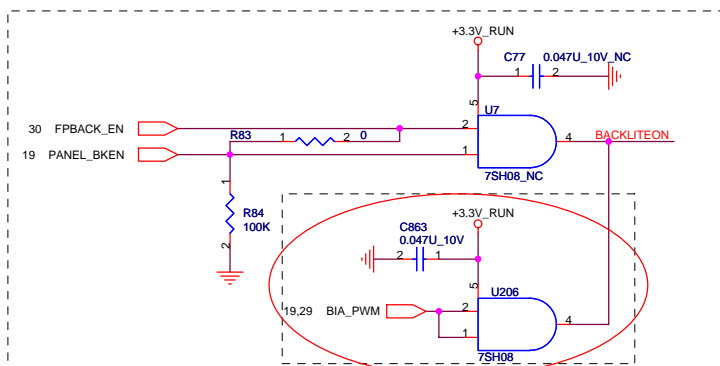
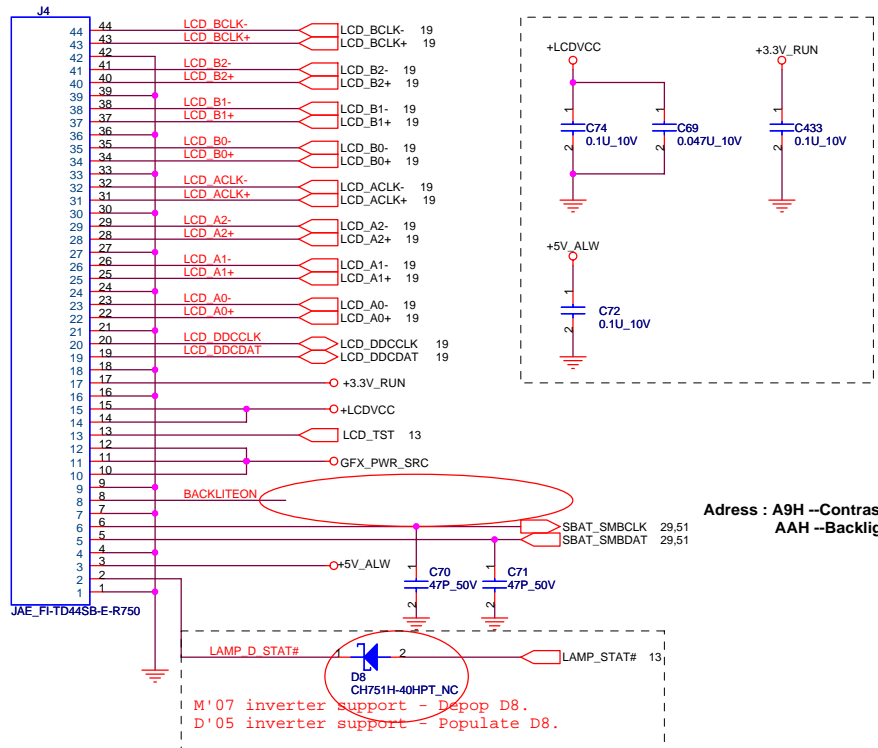
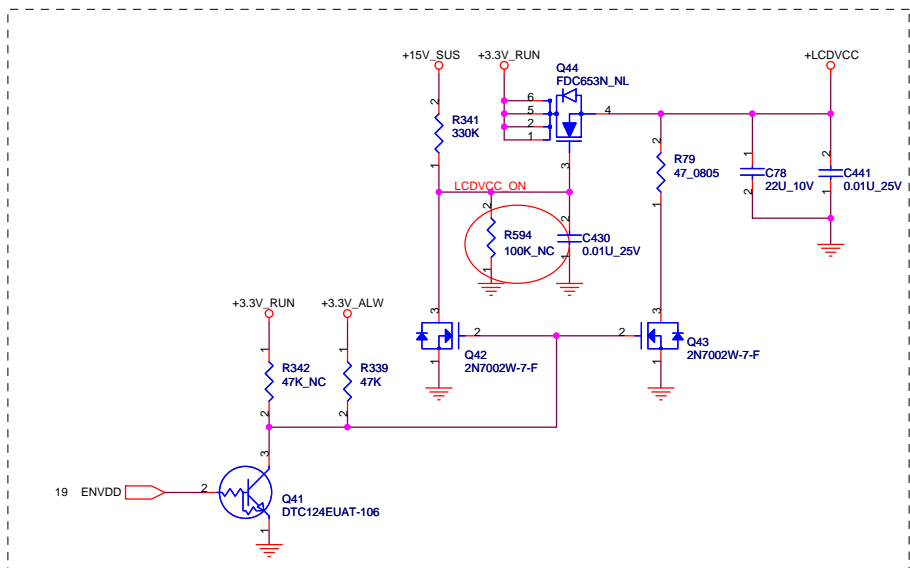
QUANTA COMPUTER

Title: VGA-G72M (MEMORY_GUD)

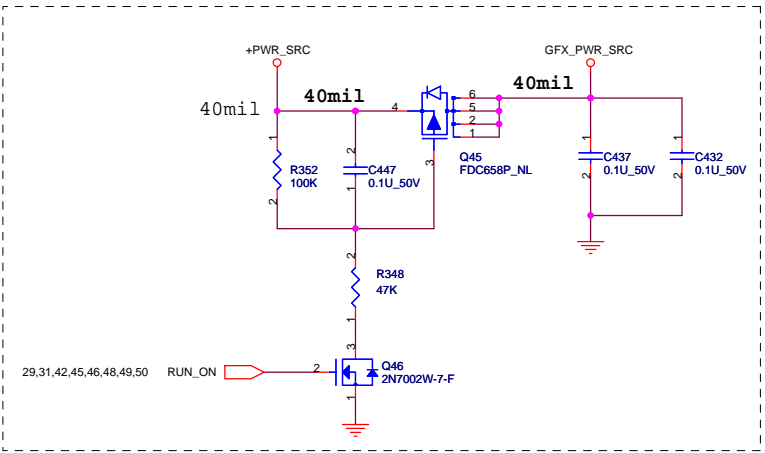
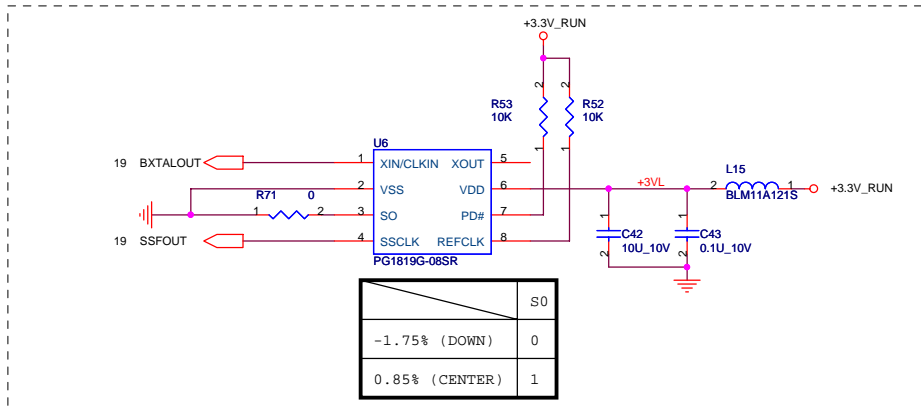
Size: JM6	Document Number	Rev: 2A
Date: Thursday, September 08, 2005	Sheet: 20	of 54

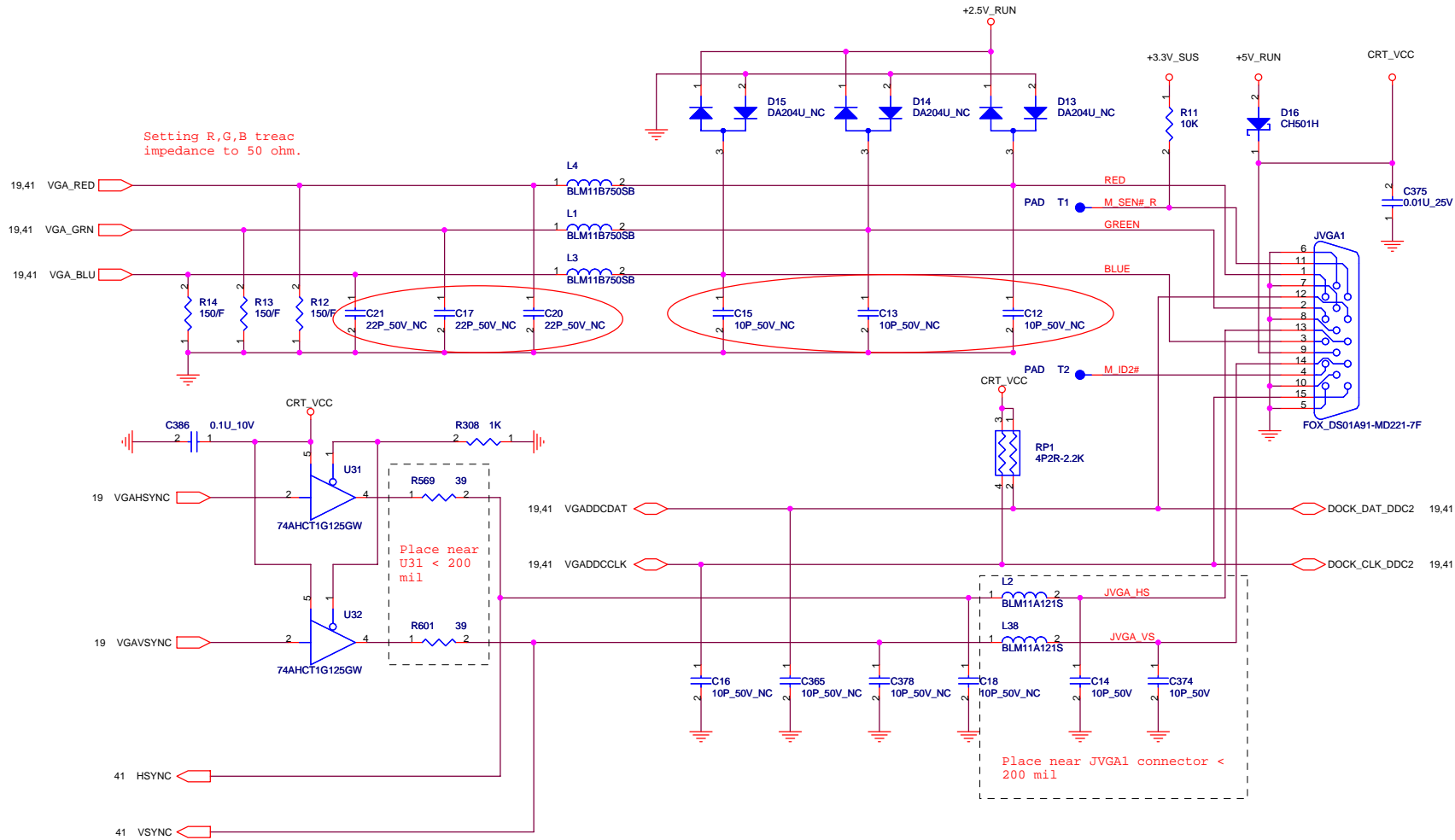
FB_CMD[0..26] 20
 FBD[0..63] 20
 FBDQM[0..7] 20
 FBDQS[0..7] 20





M'07 inverter support - Populate R83,U206,C863 Depop U7,C77.
 D'05 inverter support - Populate U7,C77; Depop R83,U206,C863.





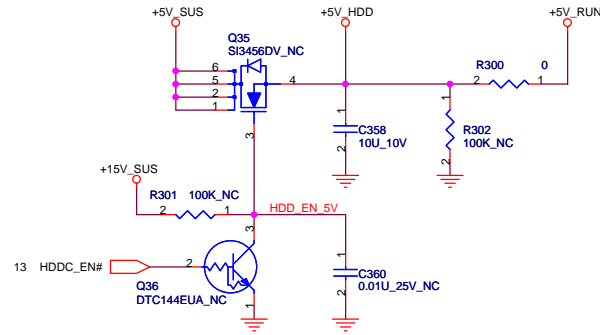
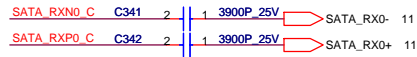
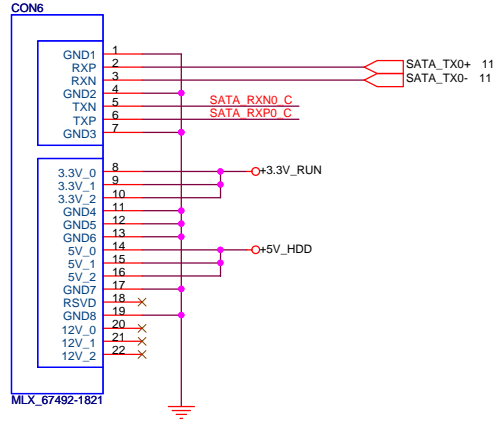
QUANTA COMPUTER

Title: CRT&TV CONN

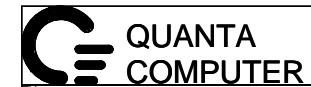
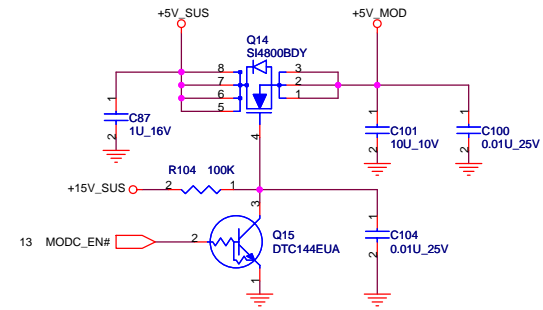
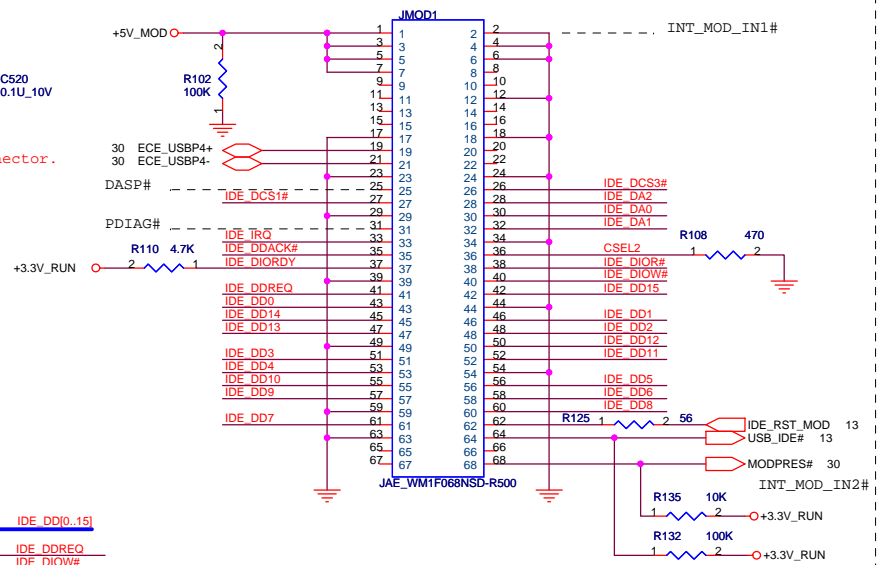
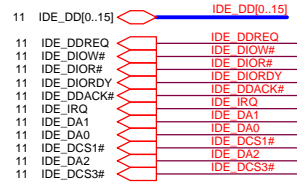
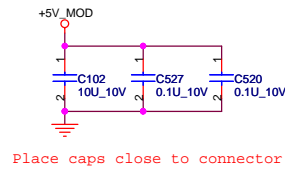
Size	Document Number JM6	Rev 2A
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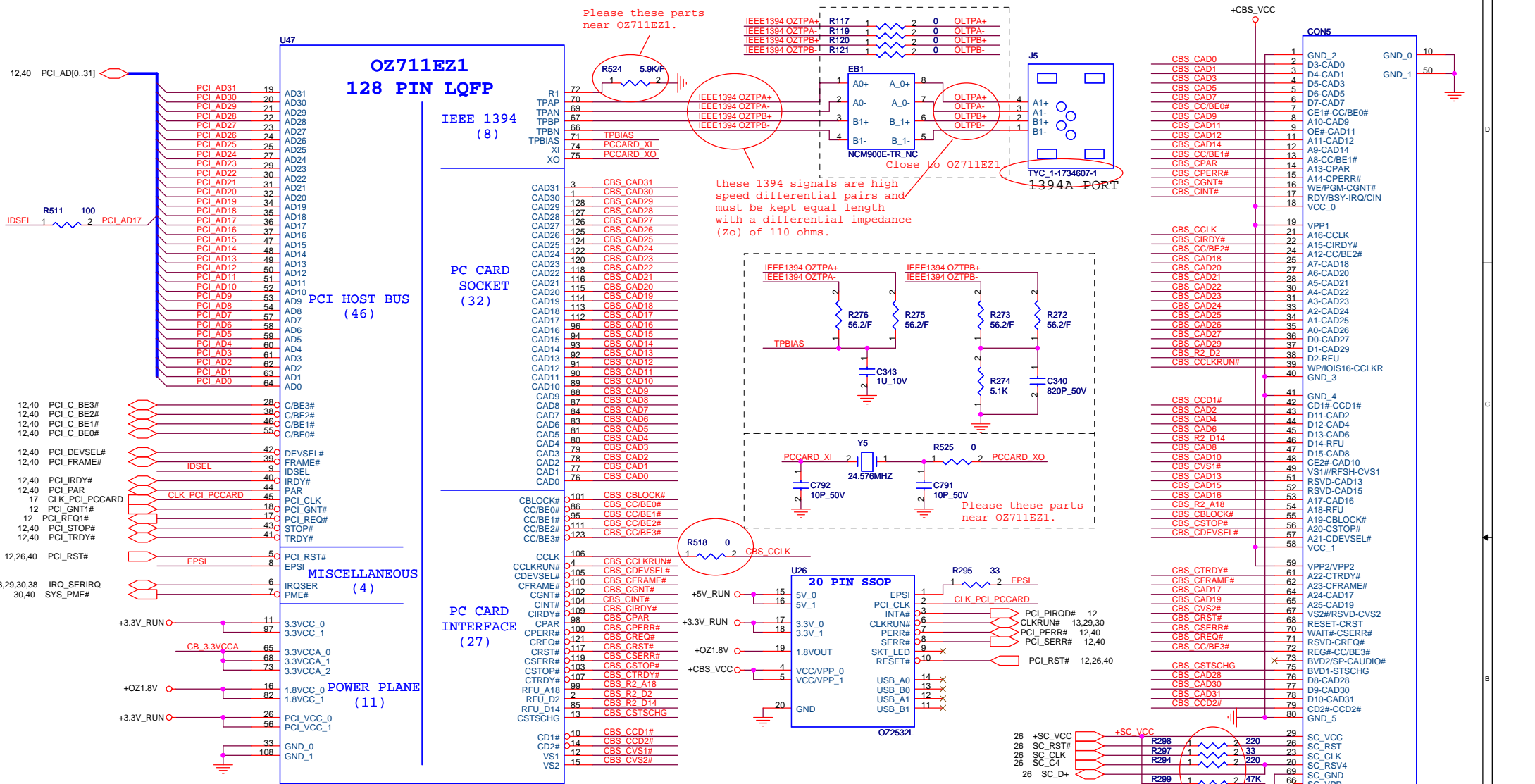
Date: Thursday, September 08, 2005 Sheet 23 of 54

SATA Connector.



ODD Connector.





Please these parts near OZ711EZ1.

these 1394 signals are high speed differential pairs and must be kept equal length with a differential impedance (Zo) of 110 ohms.

Close to OZ711EZ1

Please these parts near OZ711EZ1.

R518 0

Reserved for EMI. Place the parts near pin 45.

Place these caps near connector.

Place these parts near connector.

Place these parts near connector.

Place these caps near OZ711EZ1.

Place these caps near OZ2532.

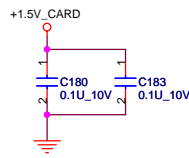
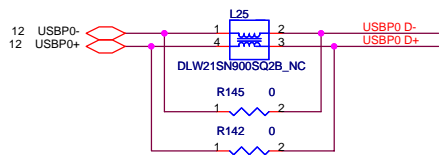
QUANTA COMPUTER

Title: PCCARD

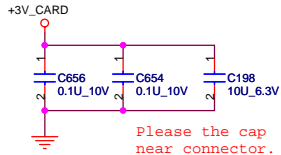
Size: JM6	Document Number: JM6	Rev: 2A
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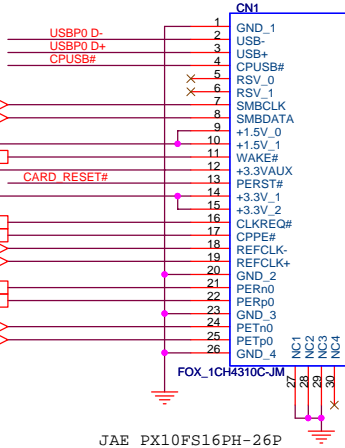
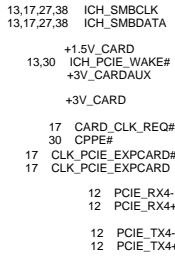
Express Card



Please the cap near connector.



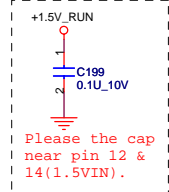
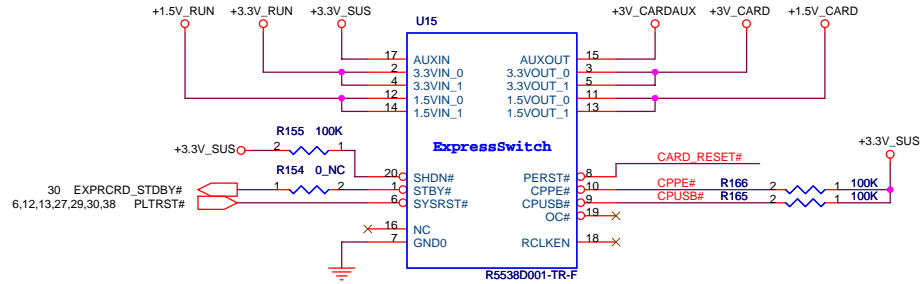
Please the cap near connector.



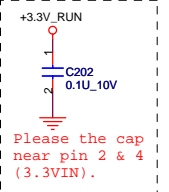
FOX_1CH310CJM

PCI-Express TX and RX direct to connector.

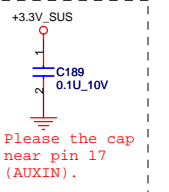
+1.5V_CARD Max. 650mA, Average 500mA.
+3V_CARD Max. 1300mA, Average 1000mA.



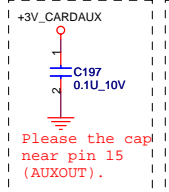
Please the cap near pin 12 & 14 (1.5VIN).



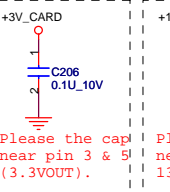
Please the cap near pin 2 & 4 (3.3VIN).



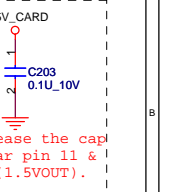
Please the cap near pin 17 (AUXIN).



Please the cap near pin 15 (AUXOUT).

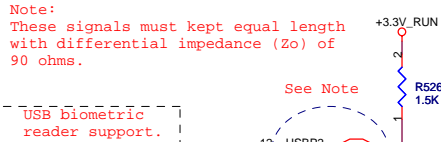


Please the cap near pin 3 & 5 (3.3VOUT).



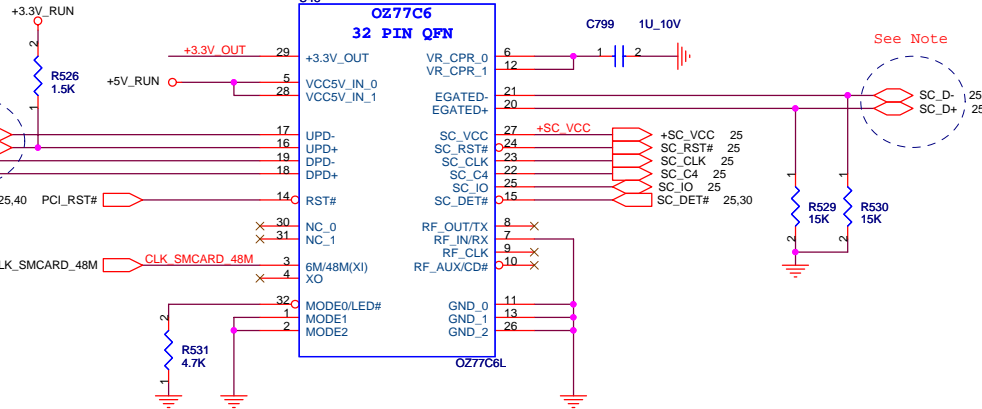
Please the cap near pin 11 & 13 (1.5VOUT).

Smart Card

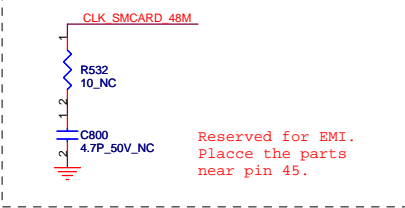


USB biometric reader support.

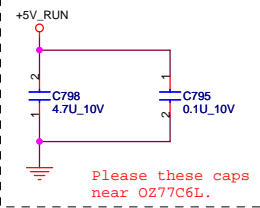
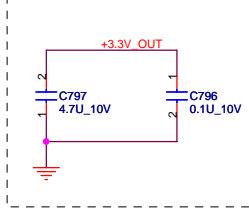
MODE1	CLOCK INPUT
LOW	48MHz
HIGH	6MHz Crystal



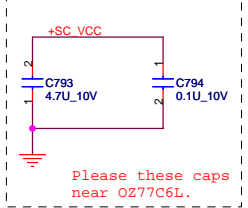
See Note



Reserved for EMI. Place the parts near pin 45.



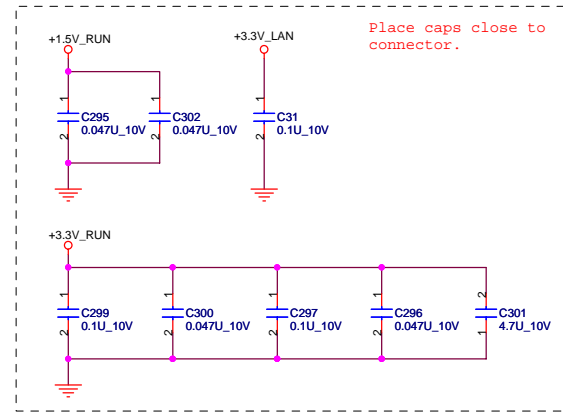
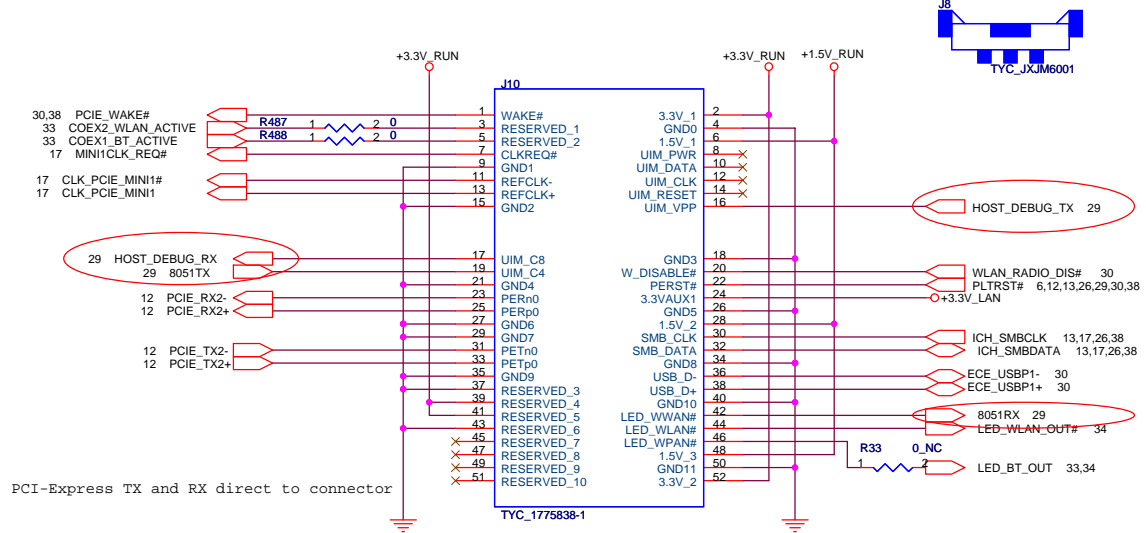
Please these caps near OZ77C6L.



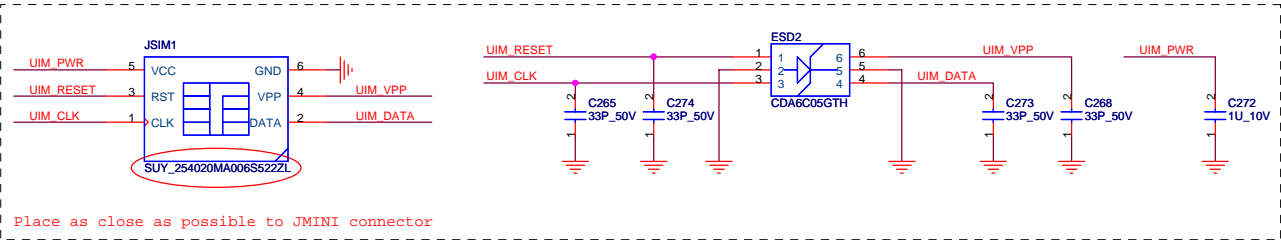
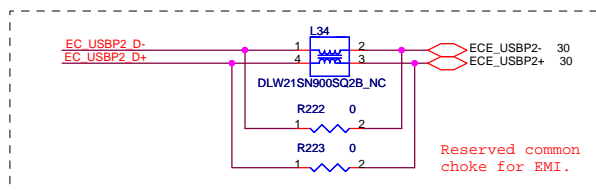
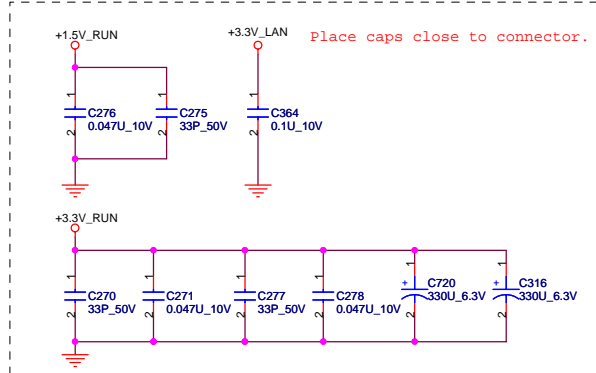
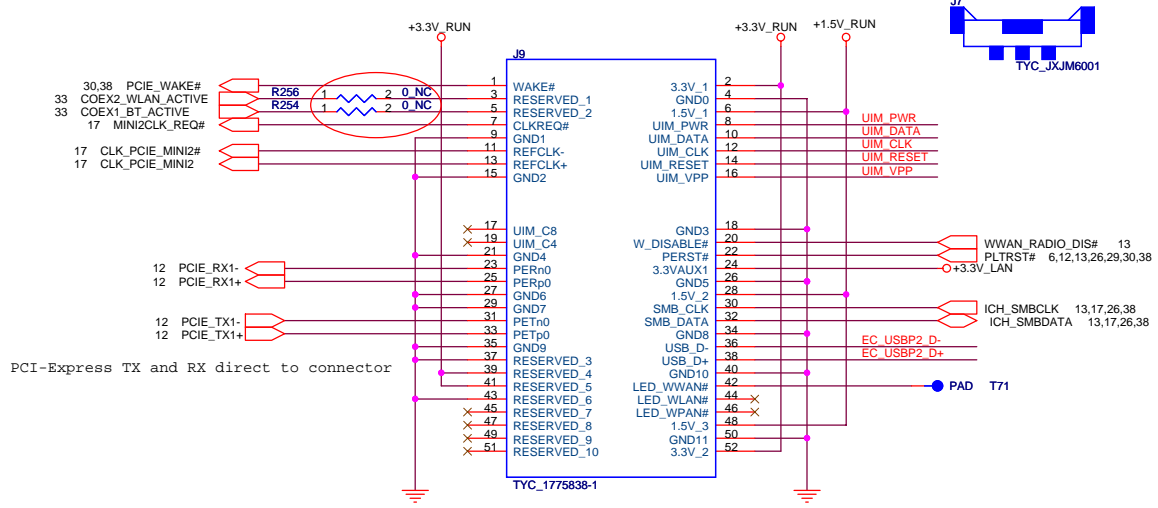
Please these caps near OZ77C6L.

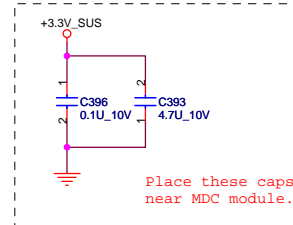
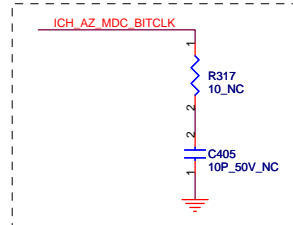
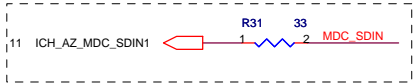
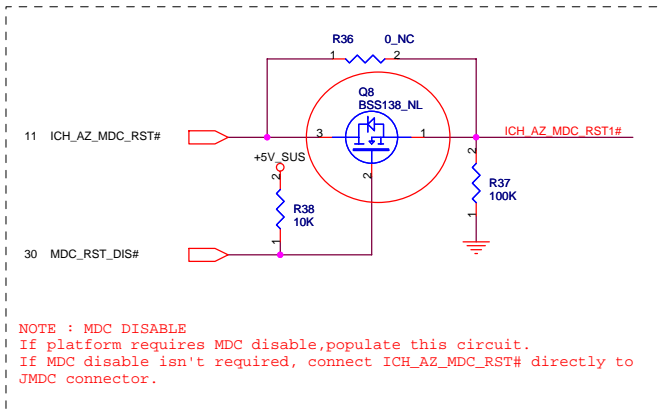
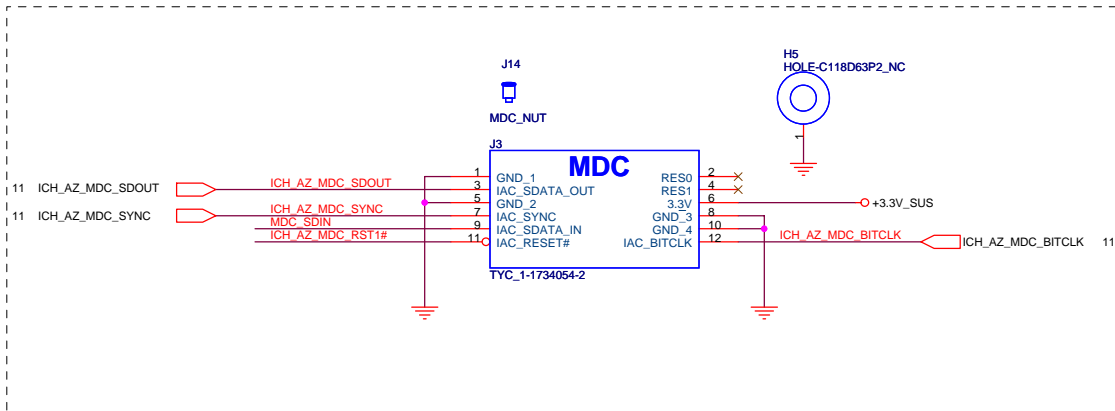
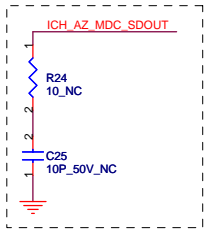
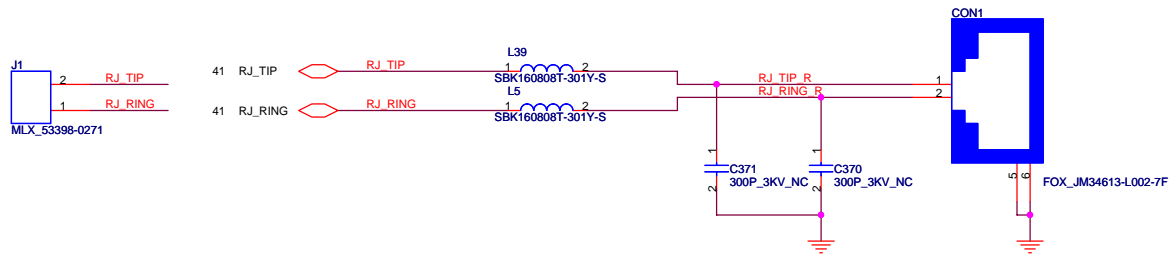


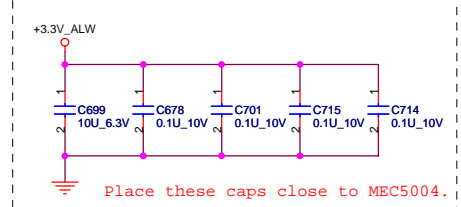
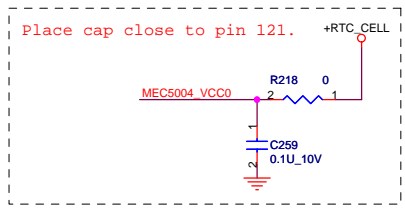
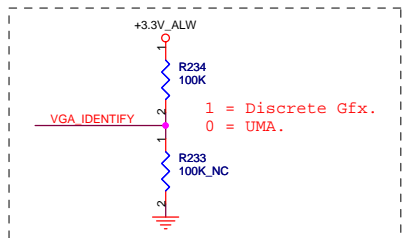
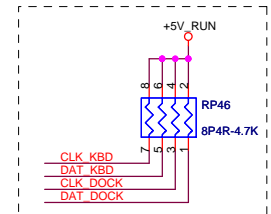
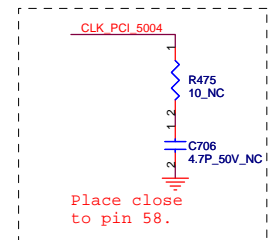
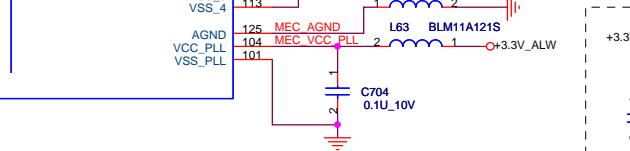
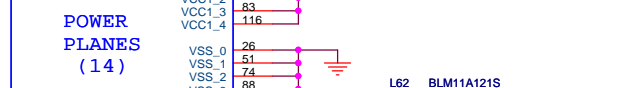
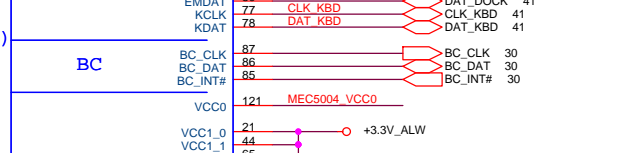
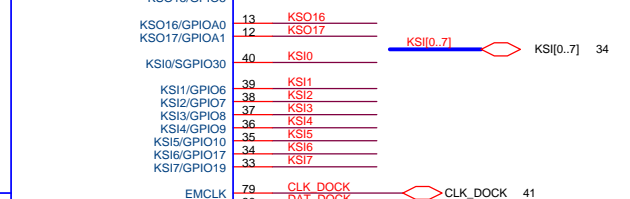
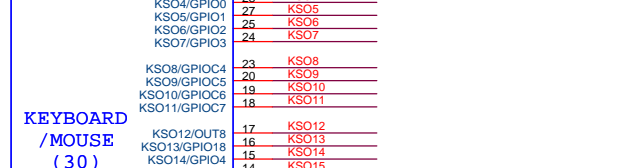
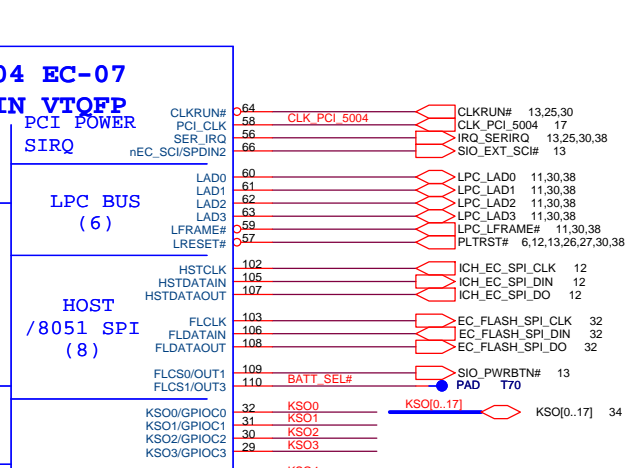
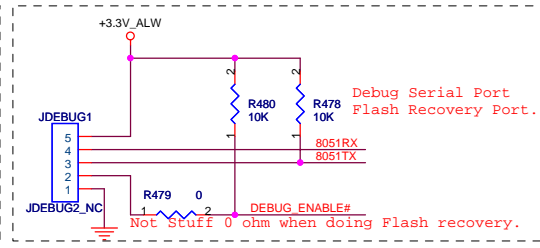
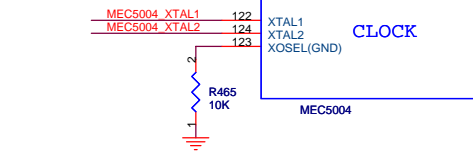
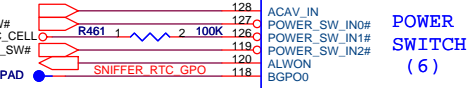
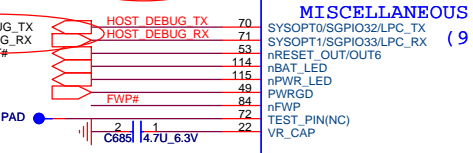
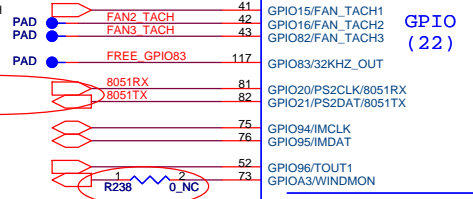
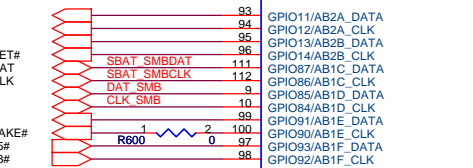
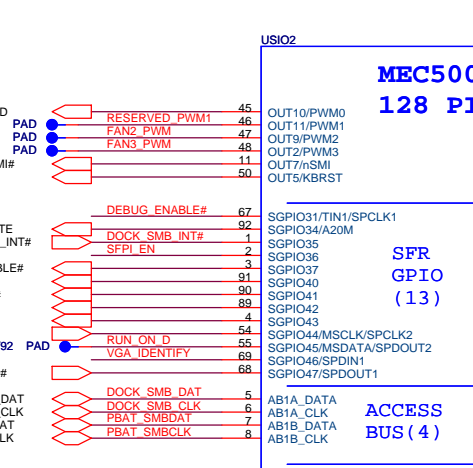
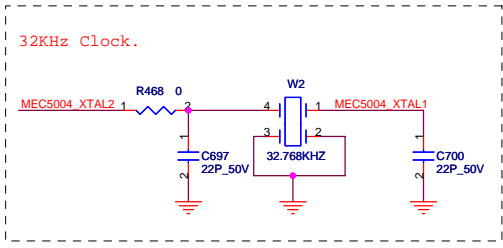
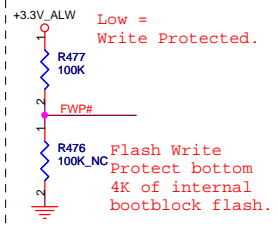
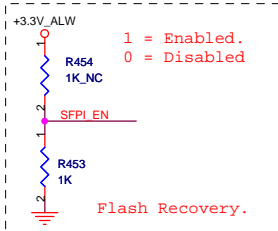
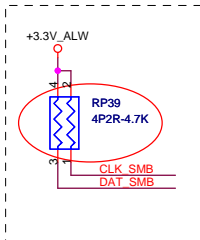
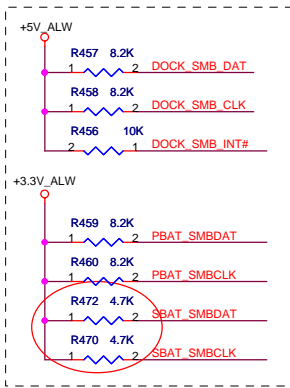
MiniCard WLAN connector



MiniCard WWAN connector







MEC5004 EC-07

128 PIN QVFP

PCI POWER SIRQ

LPC BUS (6)

HOST /8051 SPI (8)

ACCESS BUS (4)

KEYBOARD / MOUSE (30)

GPIO (22)

MISCELLANEOUS (9)

BC

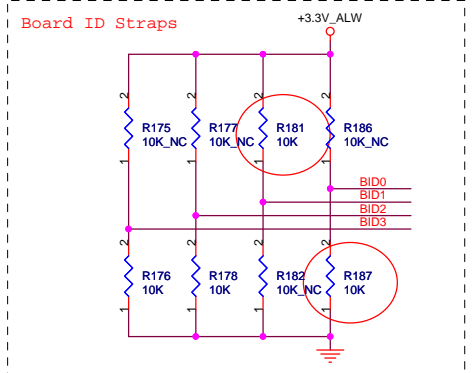
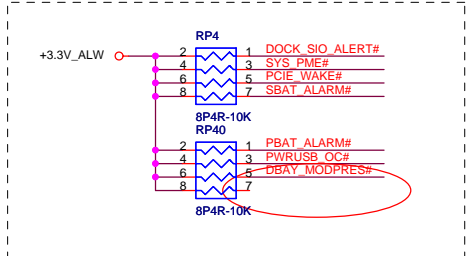
POWER PLANES (14)

CLOCK

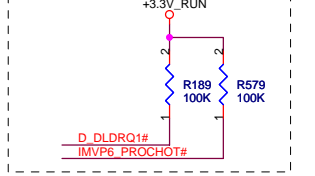
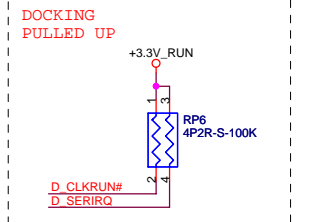
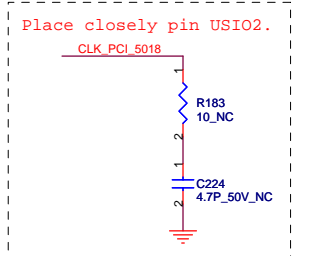
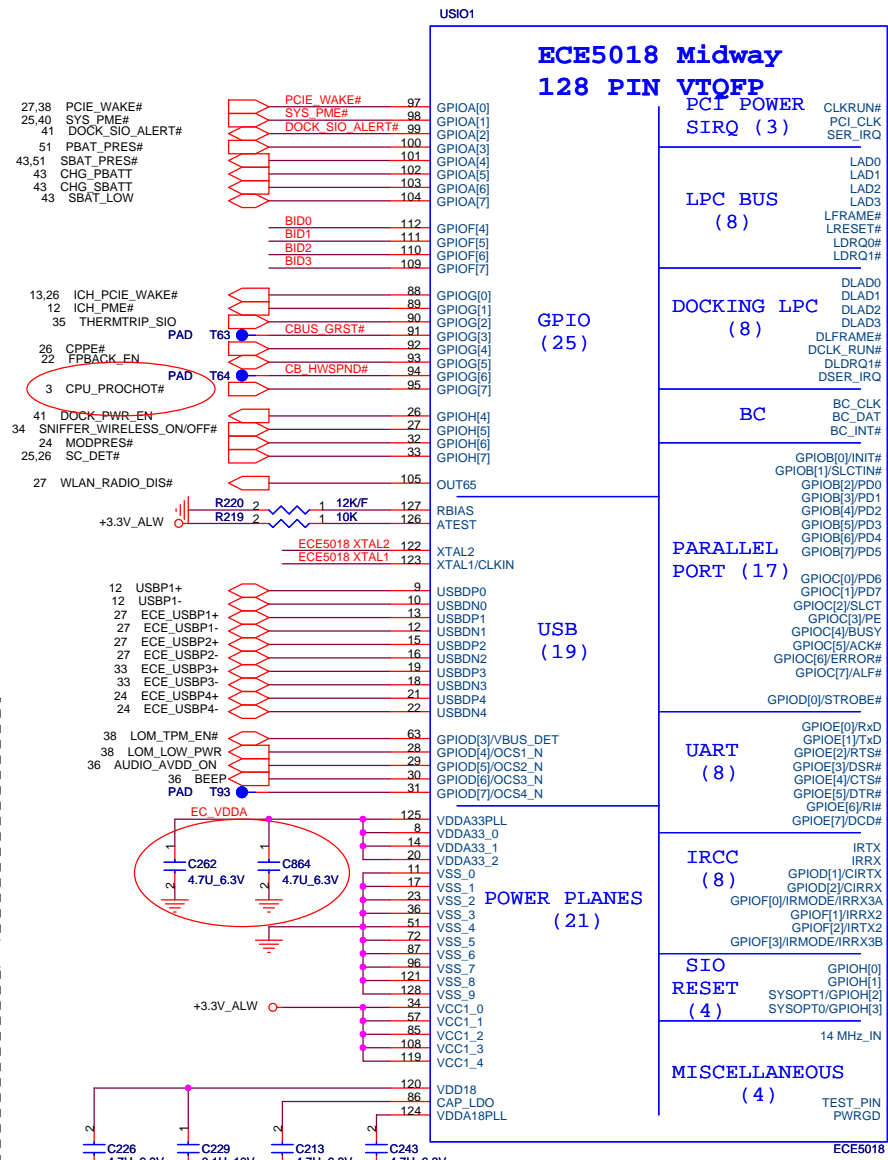
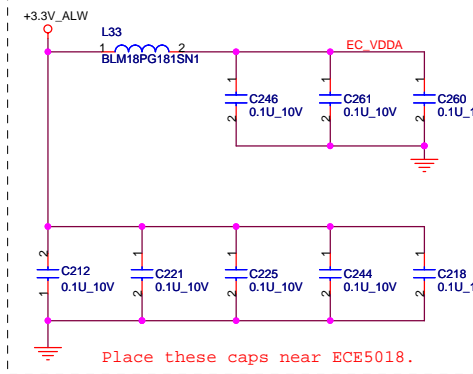
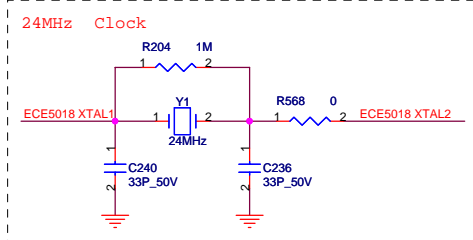
Ultra I/O Controller MEC5004

Size	Document Number JM6	Rev 2A
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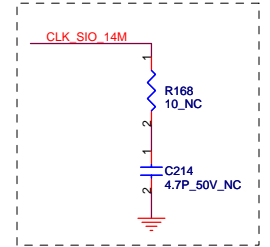
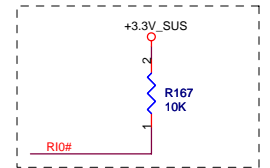
Date: Thursday, September 08, 2005 Sheet 29 of 54



BID3	BID2	BID1	BID0	Board Revision
0	0	0	0	ENG1 (M00)
0	0	0	1	ENG2 (X00)
0	0	1	0	ENG3 (X01)
0	0	1	1	ENG4 (X02)
0	1	0	0	QT (X03)
0	1	0	1	RAMP (A00)



To MDC disable ckt. Reserved. To Express Card Pwr Switch.



QUANTA COMPUTER

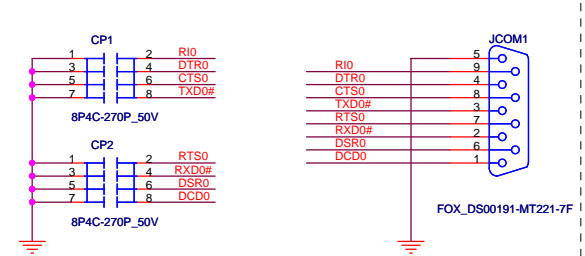
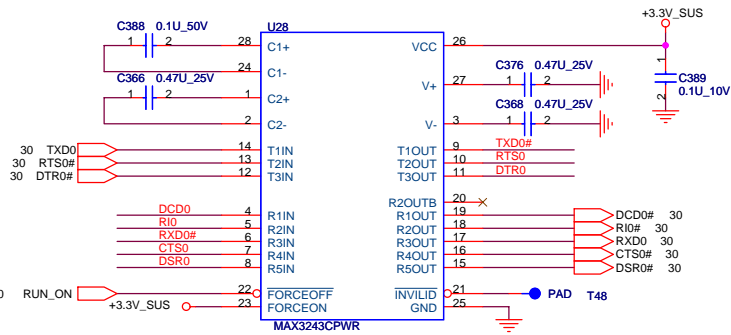
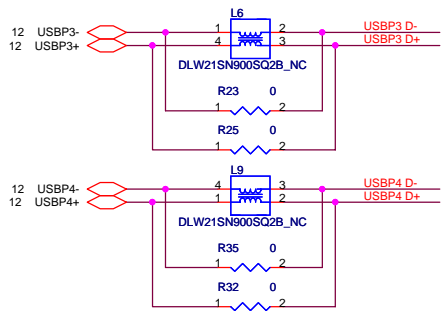
Title: Ultra I/O Controller EEC5018

Size: Document Number J16

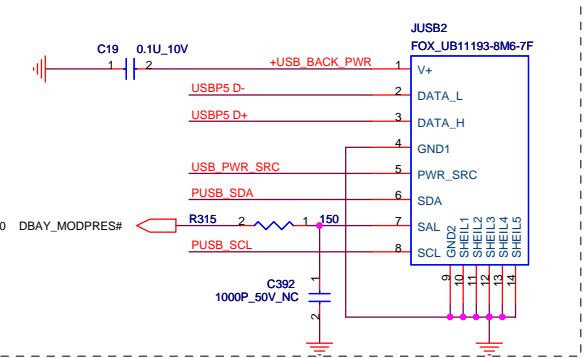
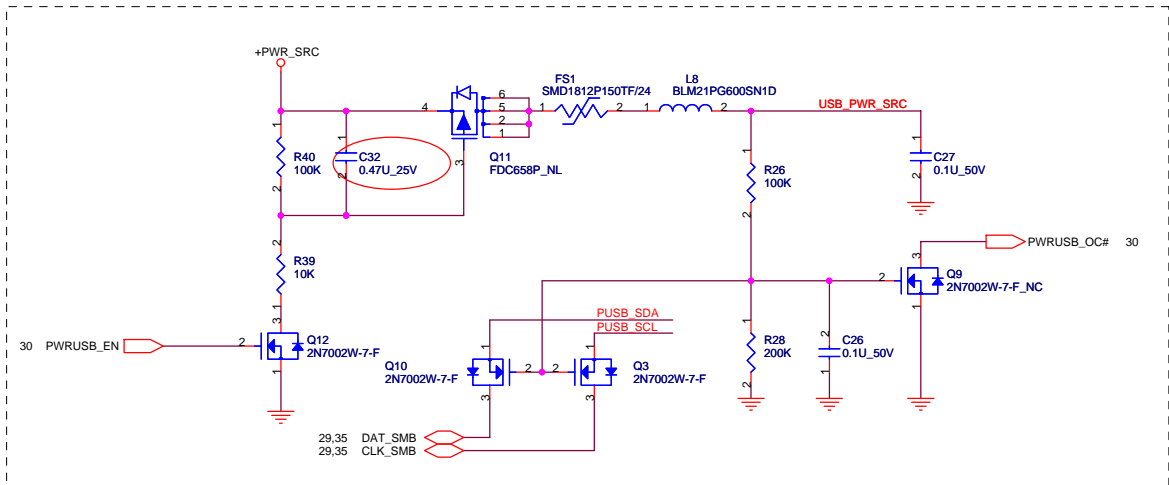
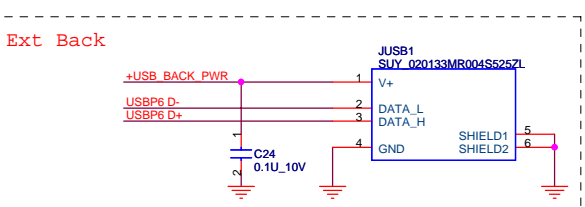
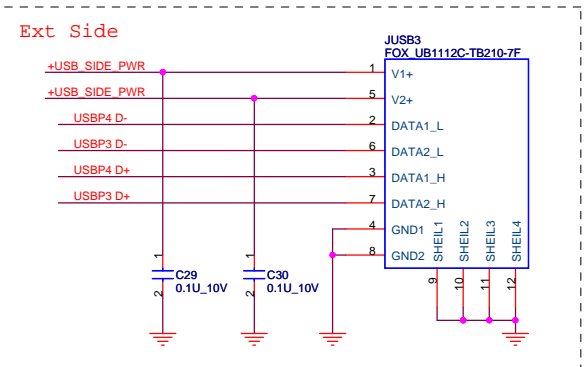
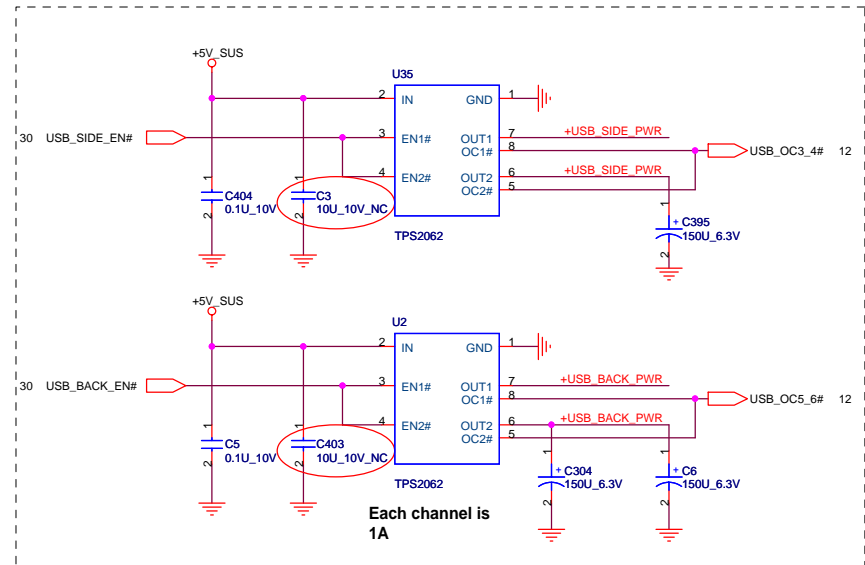
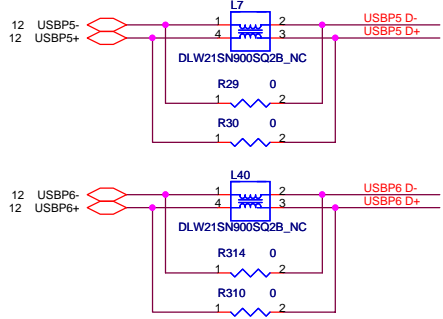
Date: Thursday, September 08, 2005

Sheet: 30 of 54

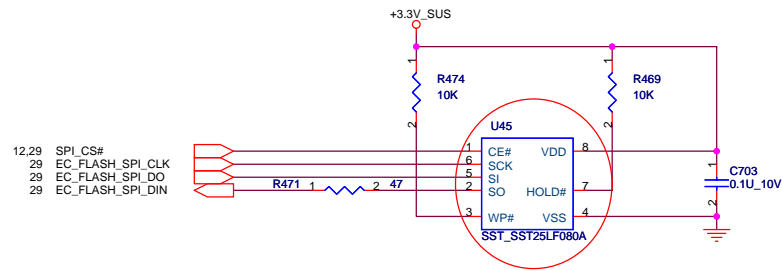
Rev: 2A



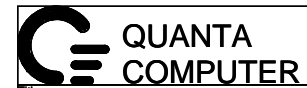
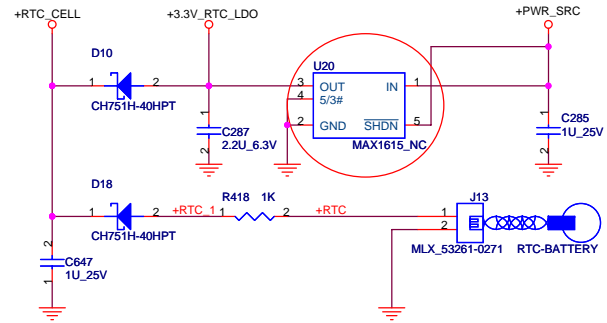
Place these beads close to JCOM1 as soon as possible
 If MAX3243 pin 22 tied to RUN_ON, then it can not support Ring Out



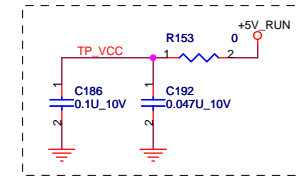
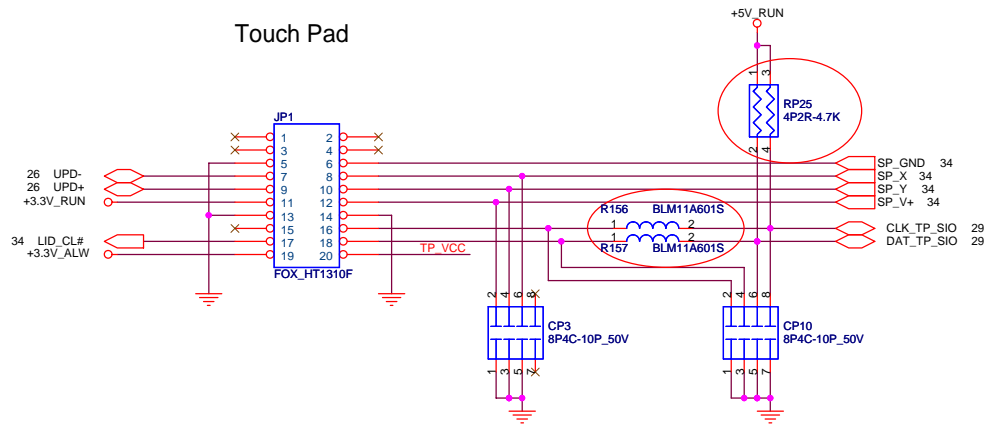
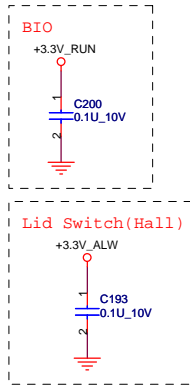
8Mbit (1M Byte), SPI



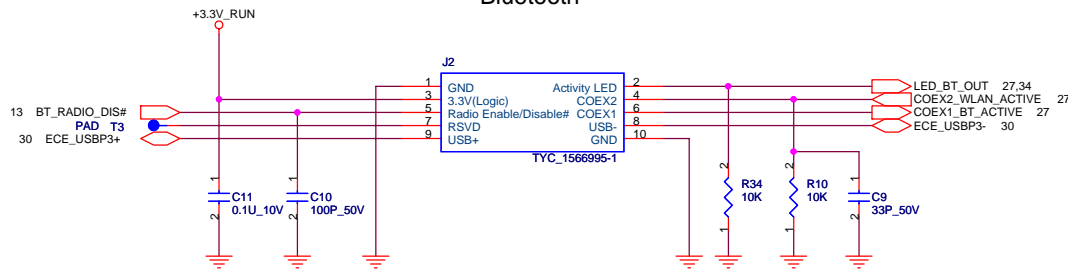
RTC BATTERY



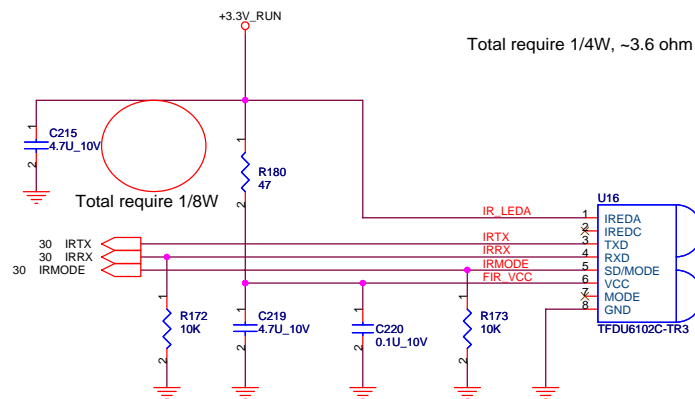
Touch Pad



Bluetooth

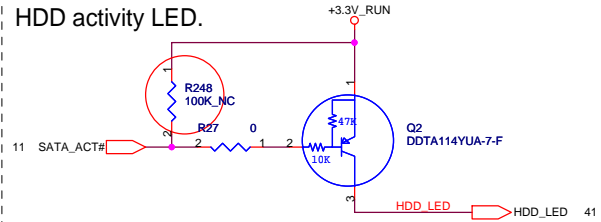


FIR

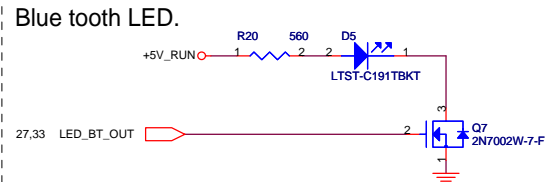


QUANTA COMPUTER		
Title TOUCH PAD & BULE TOOTH & FIR		
Size JM6	Document Number	Rev 2A
Date: Thursday, September 08, 2005 Sheet 33 of 54		

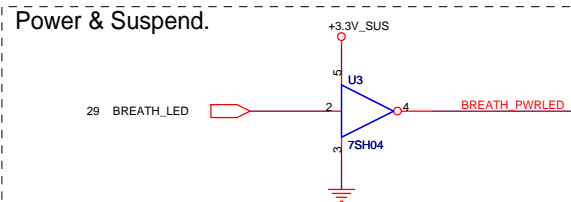
HDD activity LED.



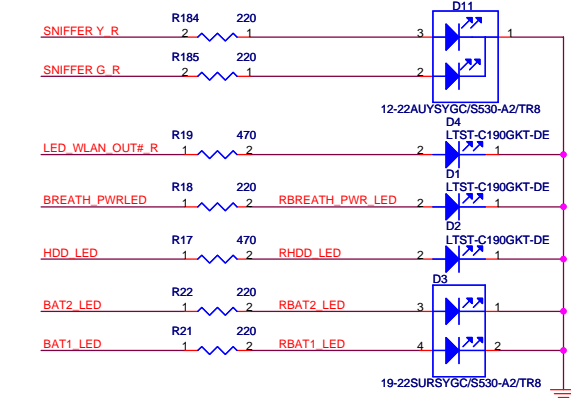
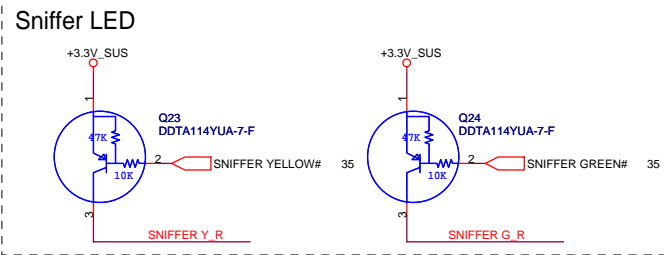
Blue tooth LED.



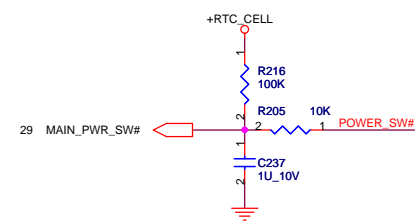
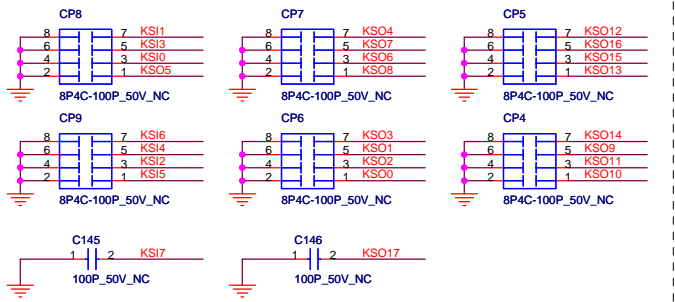
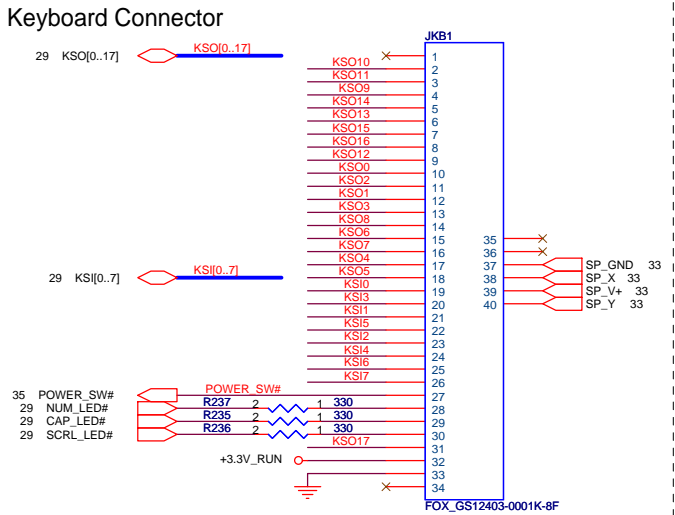
Power & Suspend.



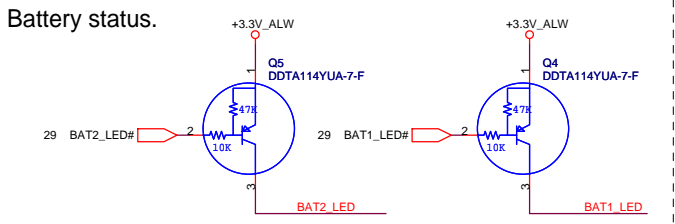
Sniffer LED



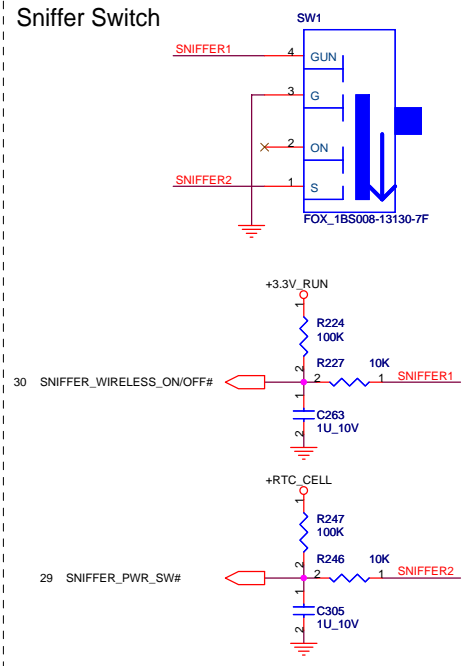
Keyboard Connector



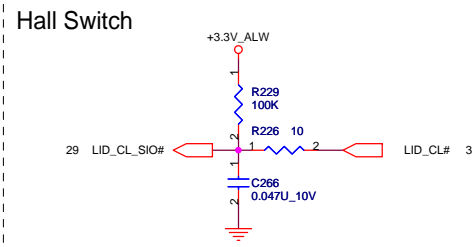
Battery status.



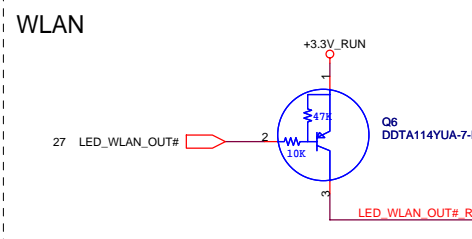
Sniffer Switch

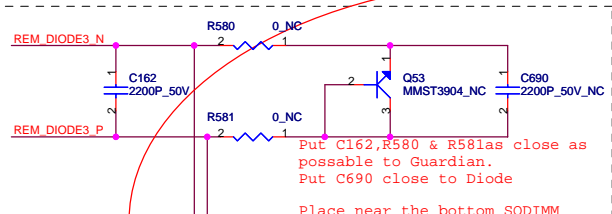
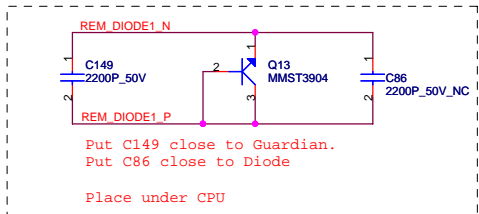
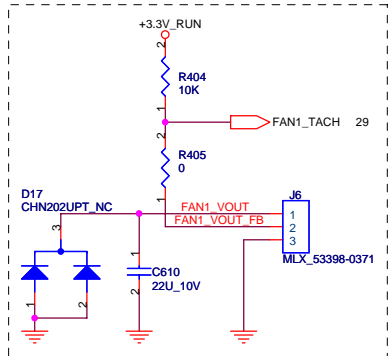


Hall Switch



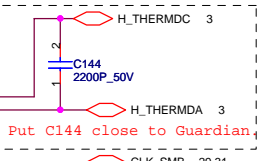
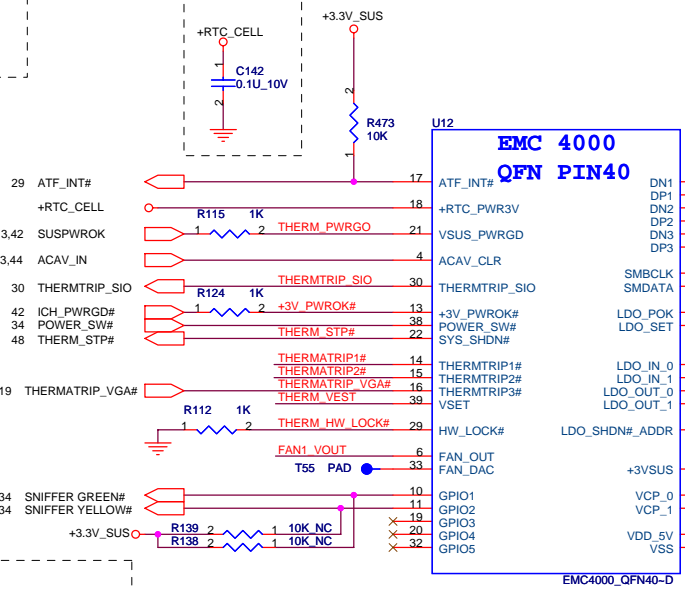
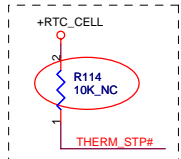
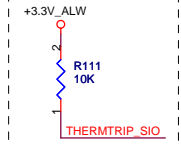
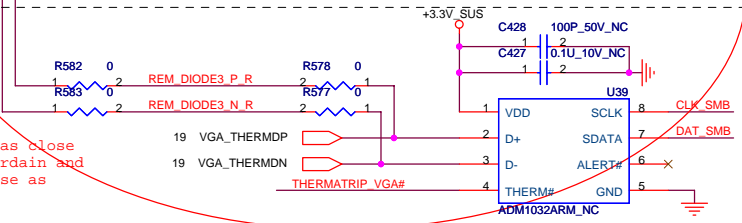
WLAN



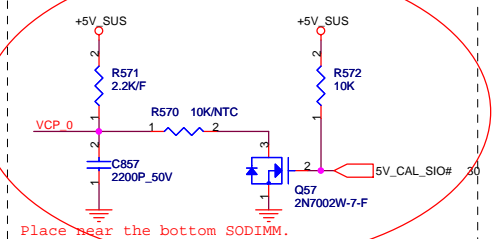


Discrete

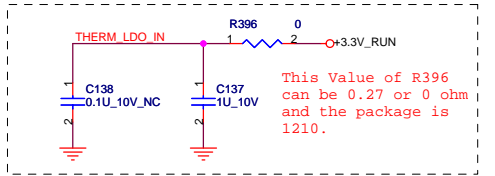
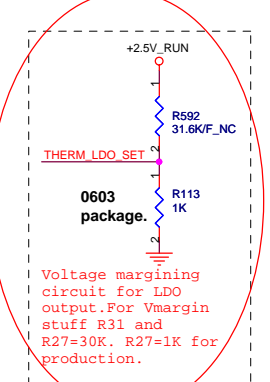
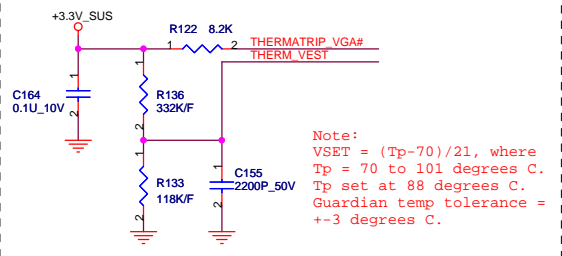
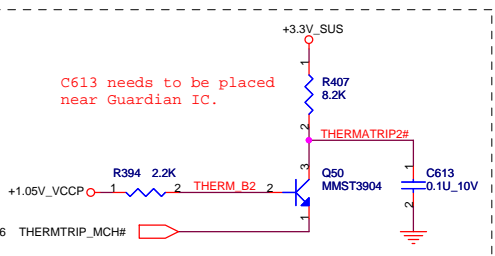
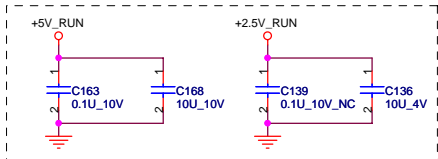
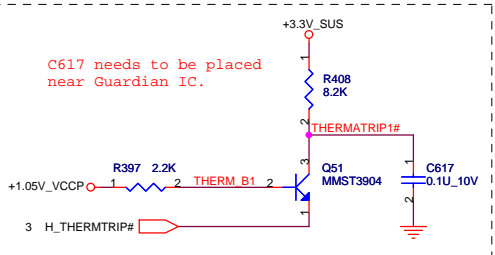
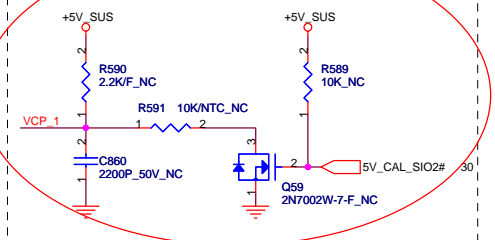
Place R582 & R583 as close as possible to Guardian and R578 & R577 as close as possible to 1032.



Can place and stuff this thermistor circuit for additional sensor in Discrete Down Designs.

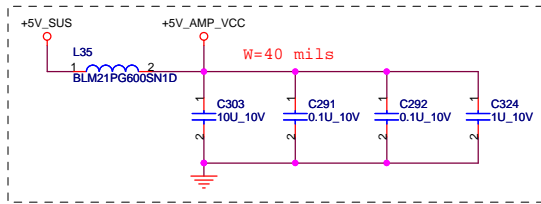


May need to place and stuff this thermistor circuit for additional sensor in Discrete Down Designs.

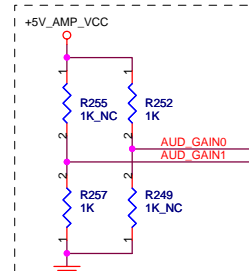
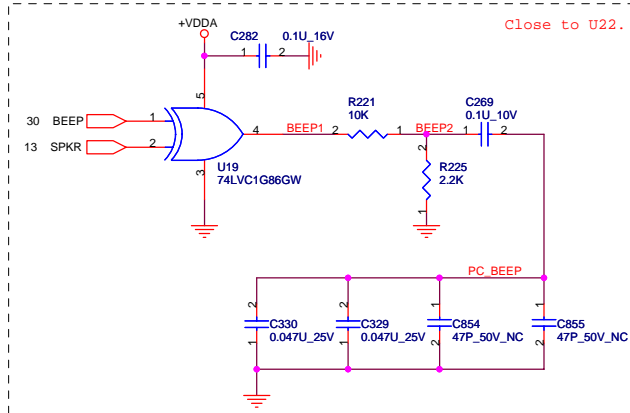
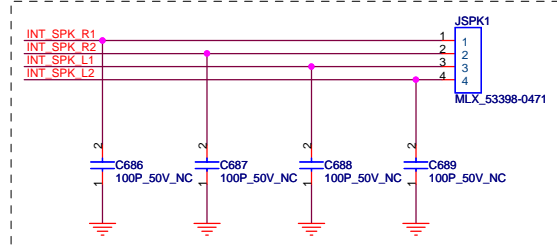
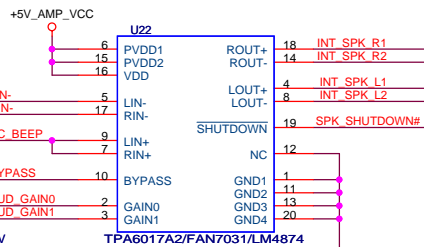


Title FAN & THERMAL		
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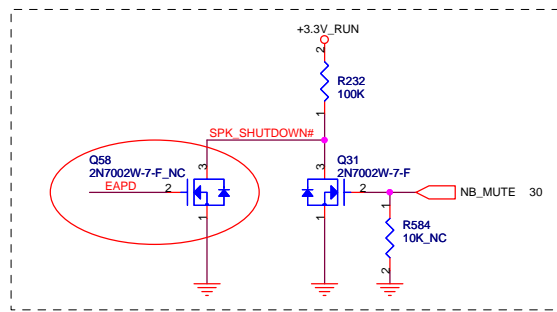
INTERNAL SPEAKER AMP



NOTE: Speaker trace width should be minimum 10 Mils.

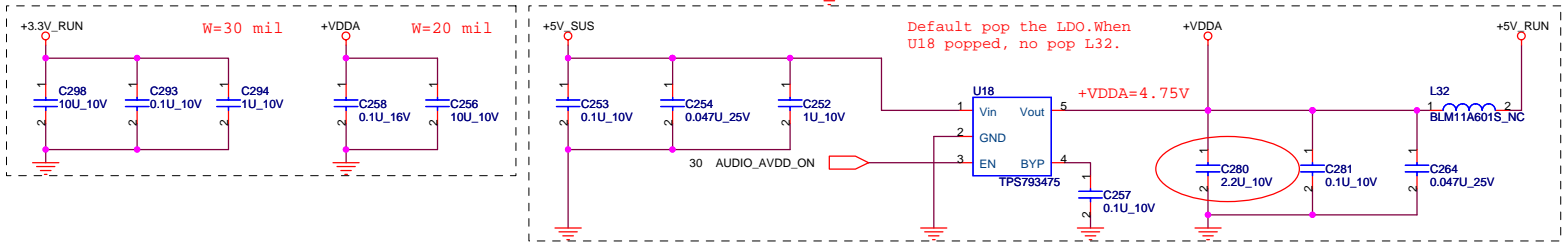
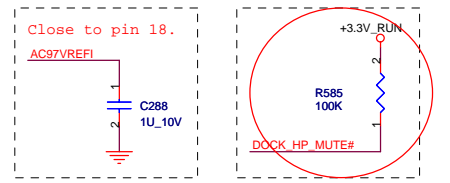
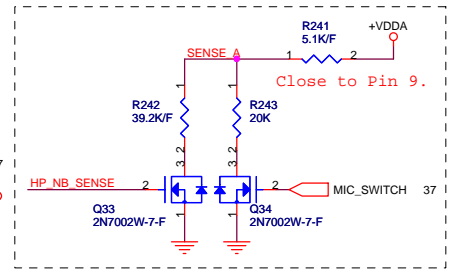
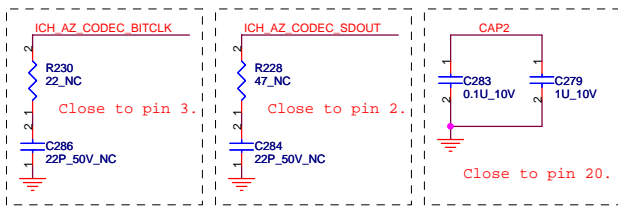
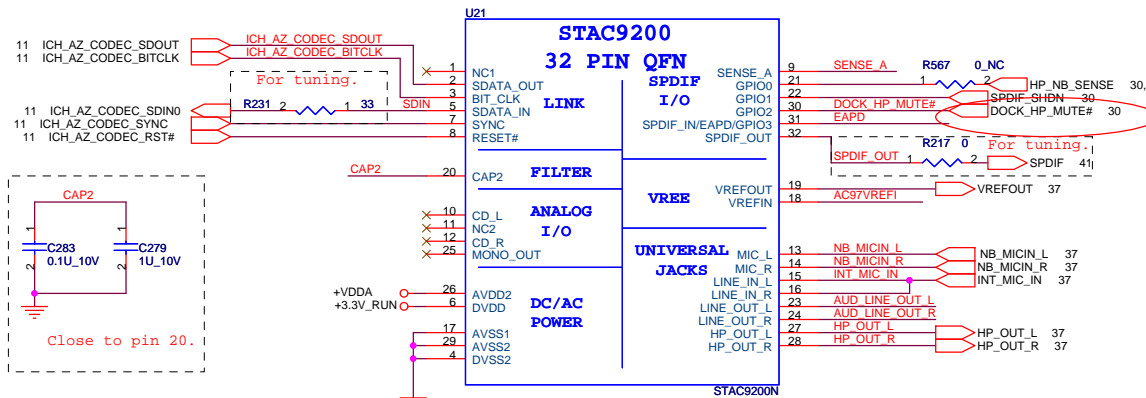


GAIN0	GAIN1	AV	RIN
0	0	6dB	90K
0	1	10dB	70K
1	0	15.6dB	45K
1	1	21.6dB	25K



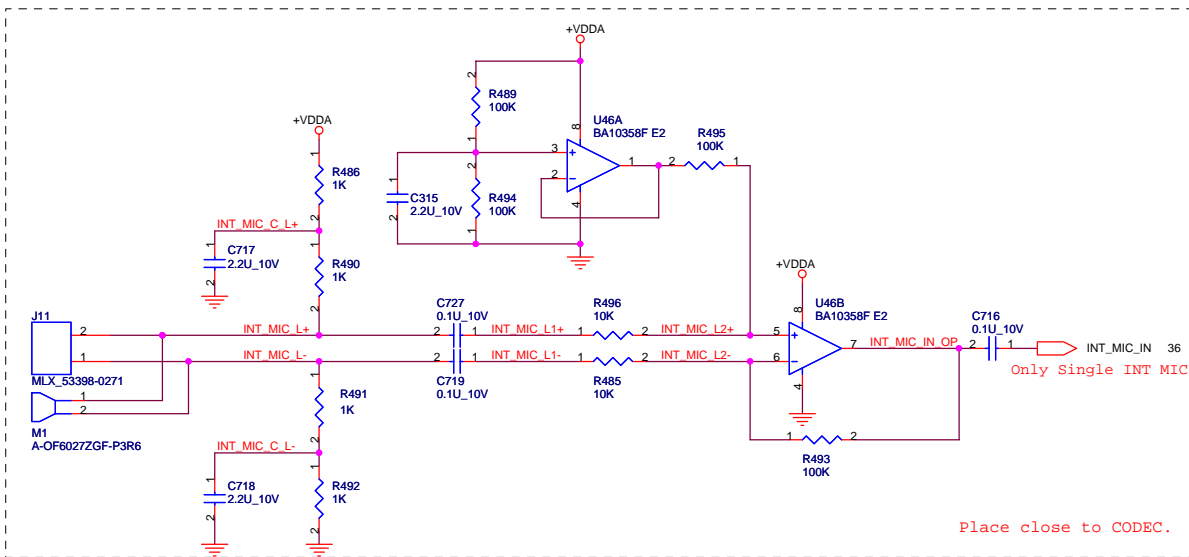
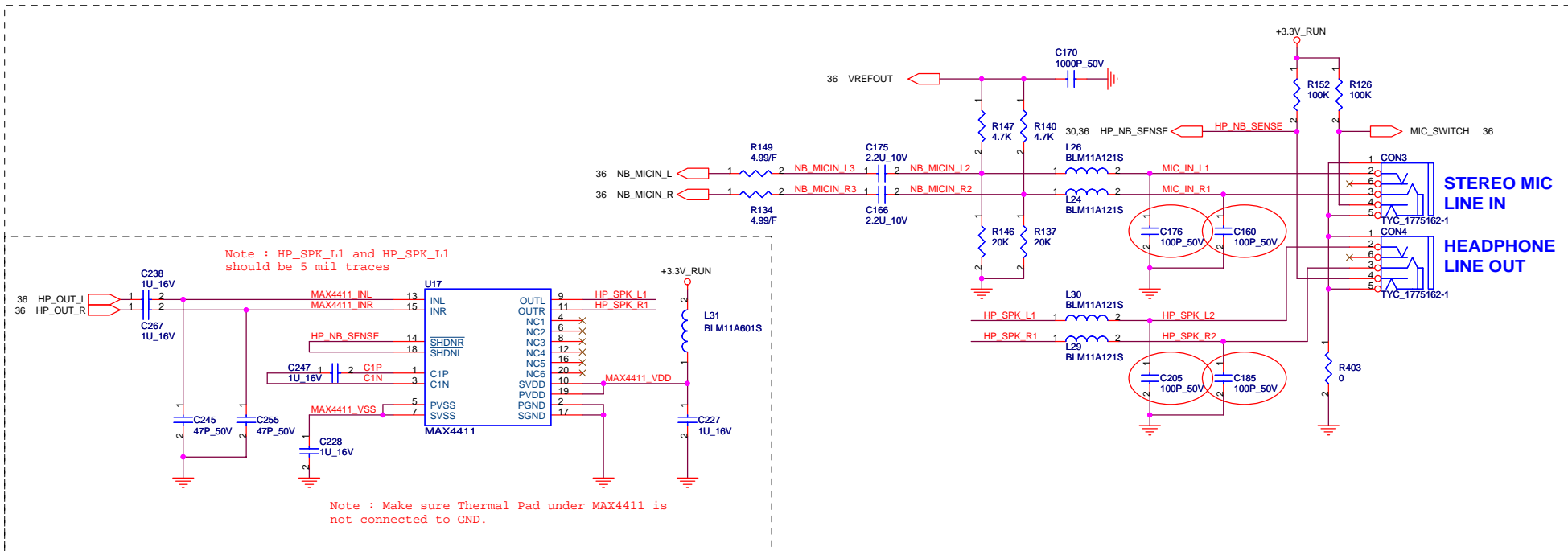
AZALIA (HD) CODEC

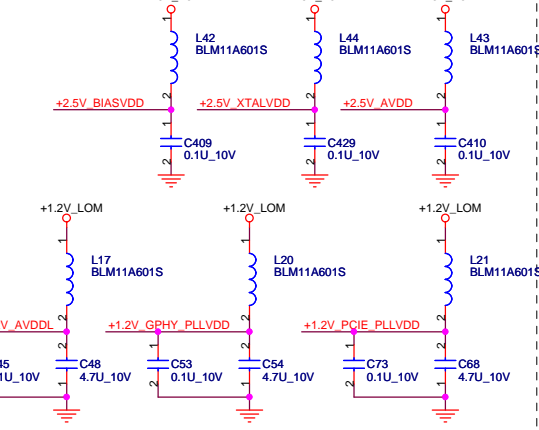
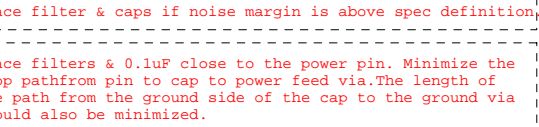
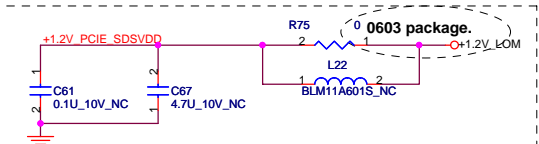
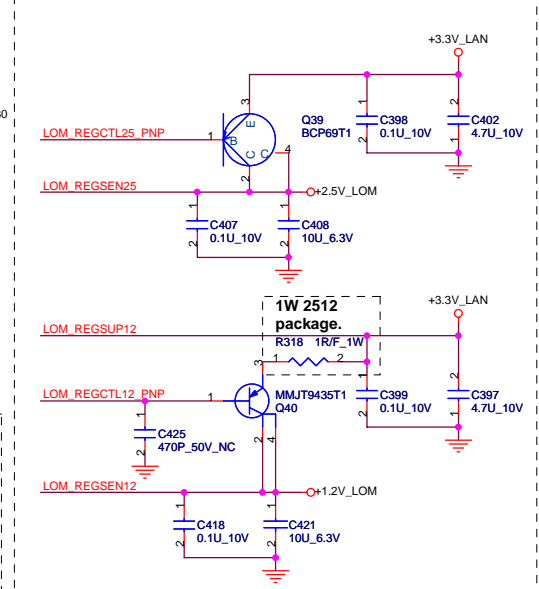
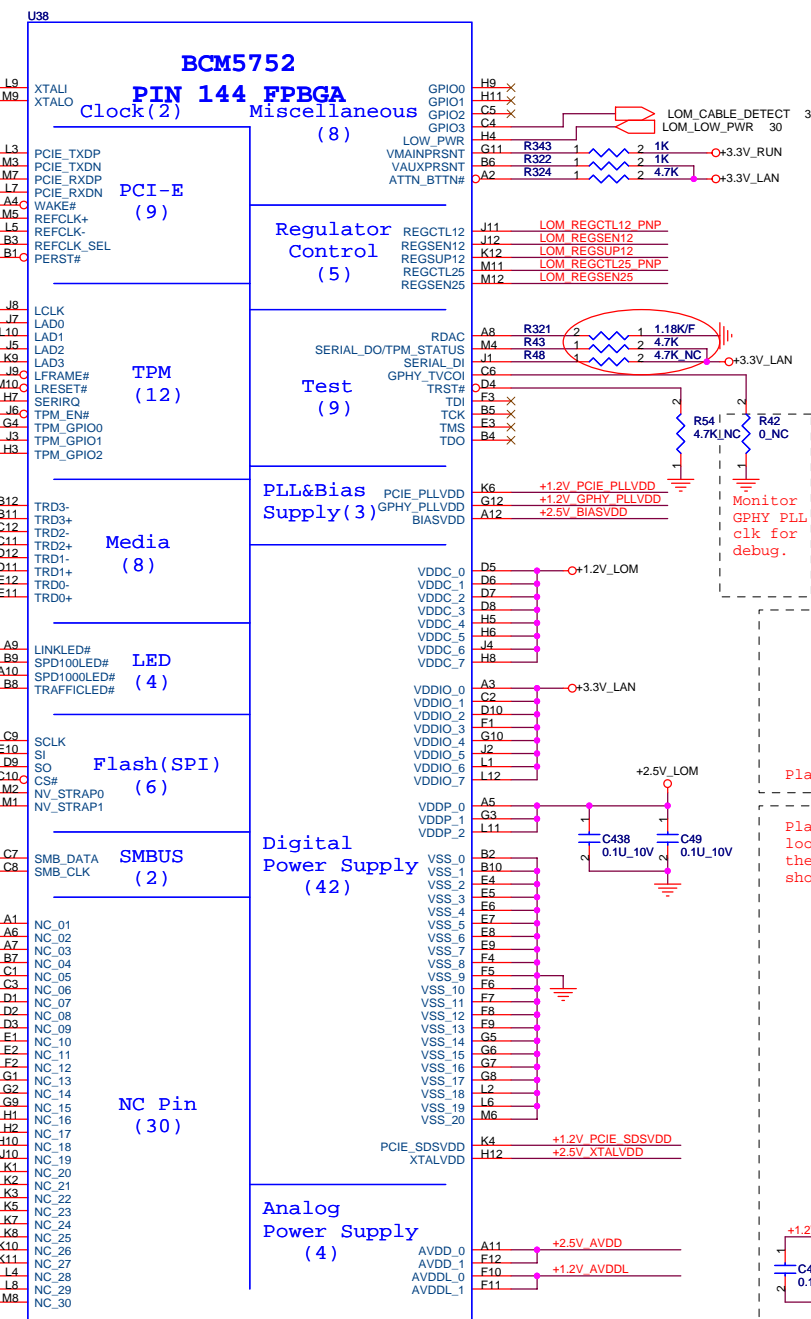
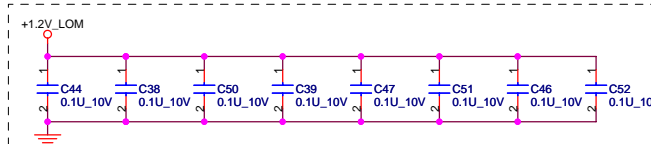
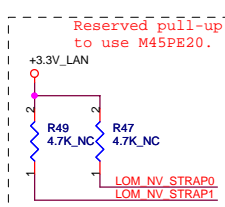
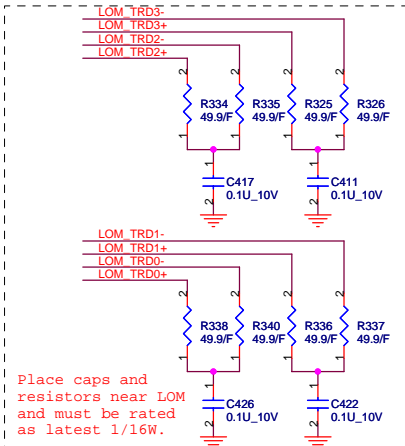
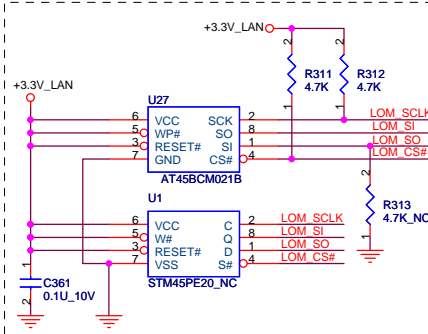
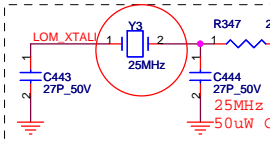
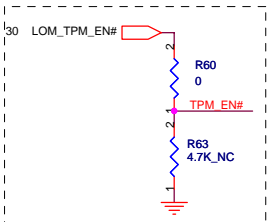
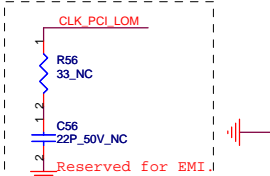
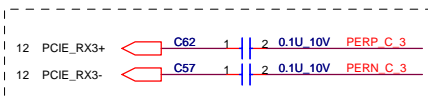
All CODEC analog audio inputs and outputs should be 5 Mil traces.



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Title: Azelia CODEC		
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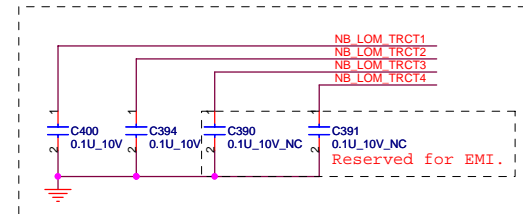
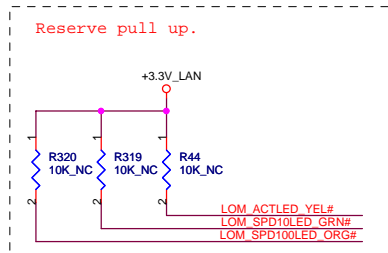
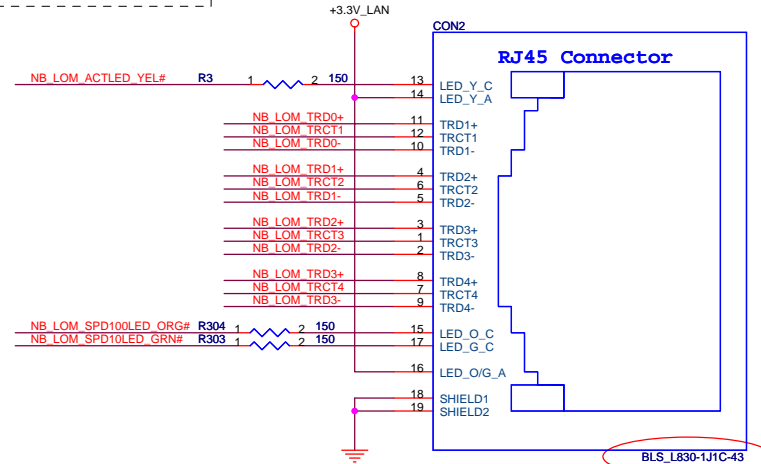
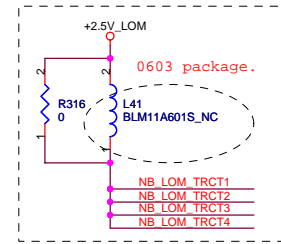
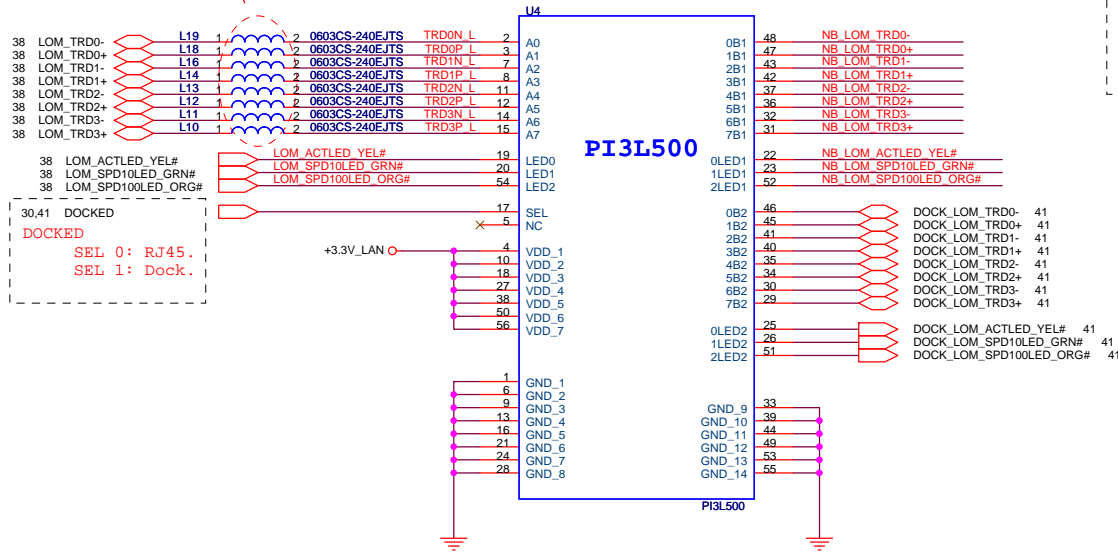
Title: Broadcom 5752

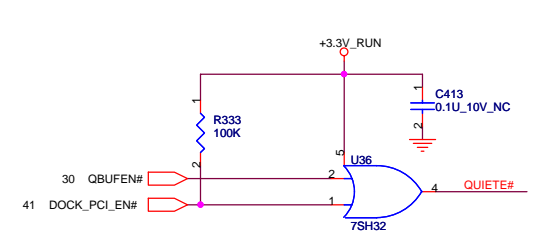
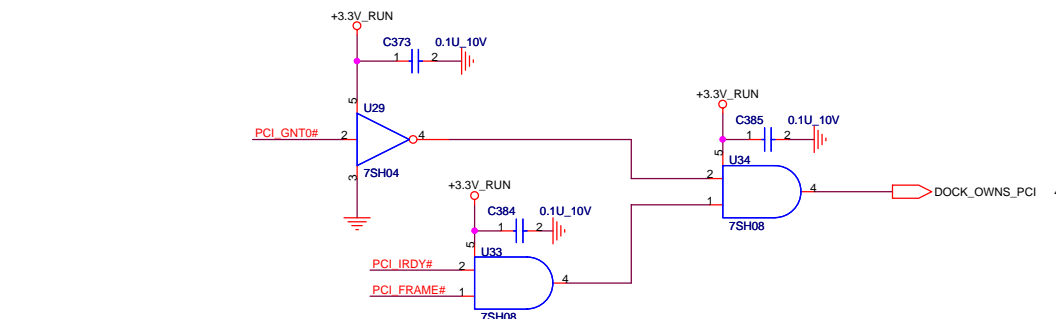
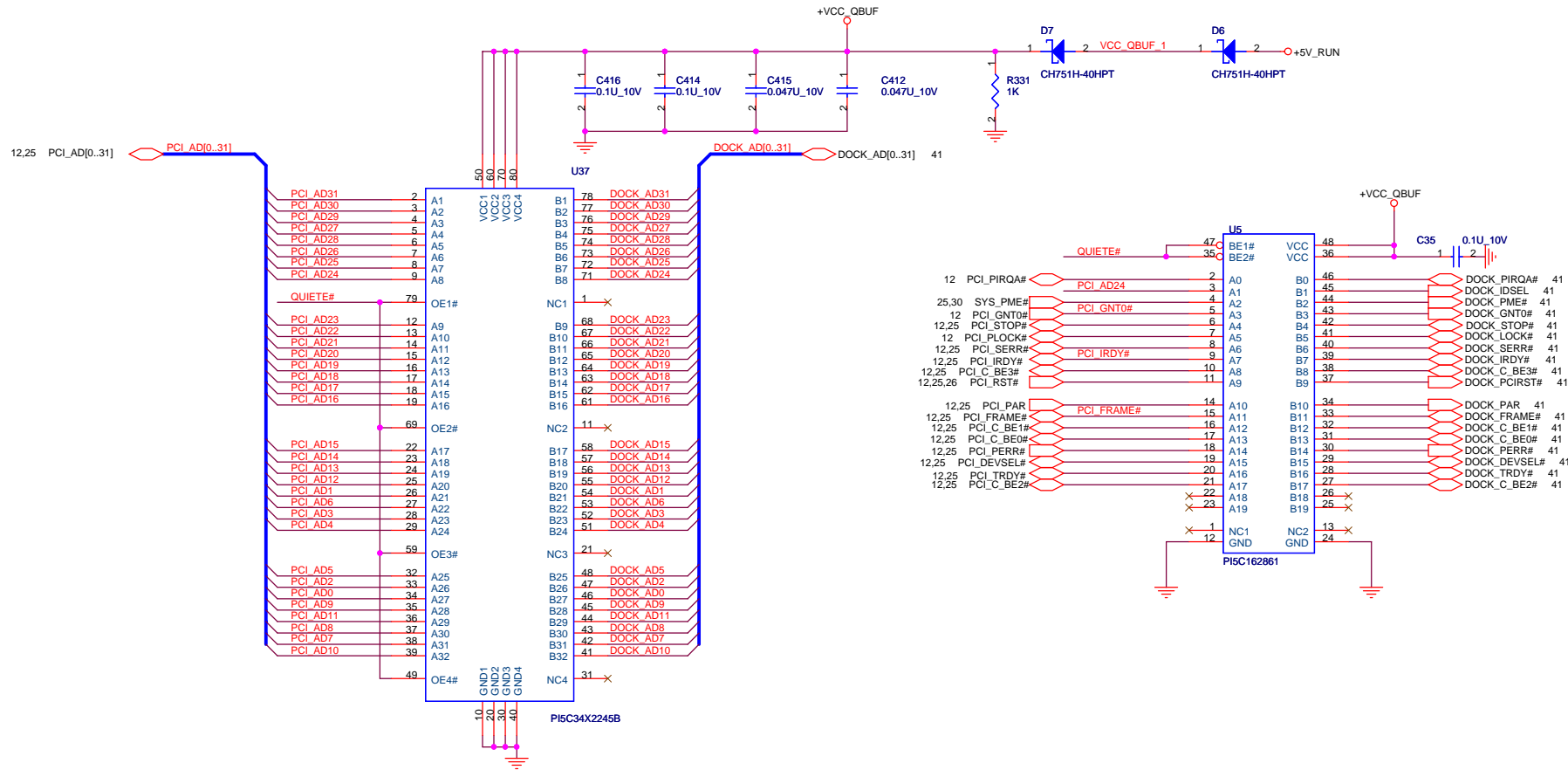
Size: JM6	Document Number: JM6	Rev: 2A
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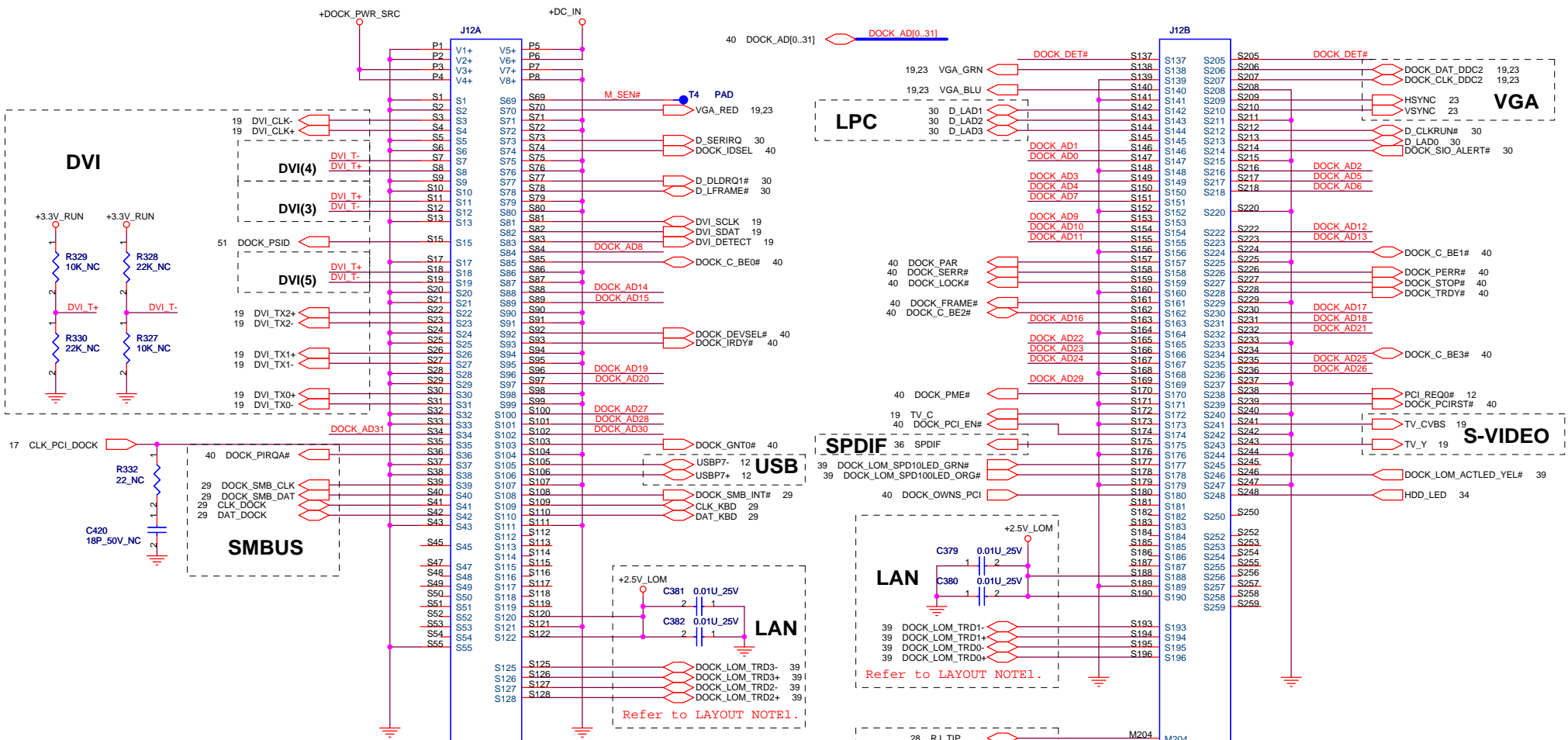
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TRANSFORM+RJ45

24nH is a suggested value.
Actual value will be system dependent.
Must use 0603 package for lower DC resistance.





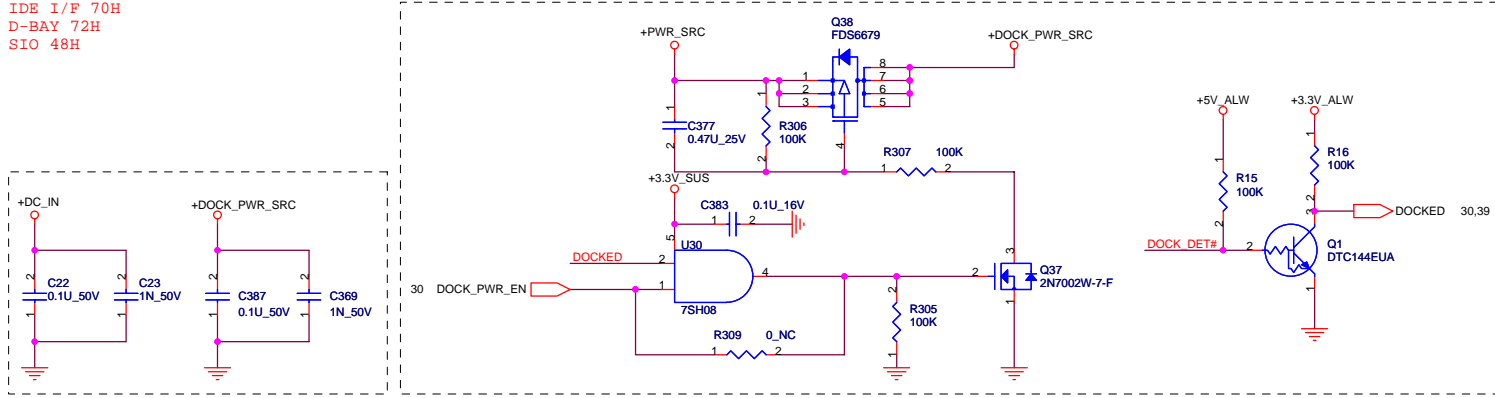


SMBUS ADDRESS :
 DOCK/APR Microprocessor -- 74H
 DOCK USB/IDE Interface(FX2) -- 72H

DOCK Smbus -
 Battery 16H
 Charger 12H
 IDE I/F 70H
 D-BAY 72H
 SIO 48H

LAYOUT NOTES:
 Follow the Intel Platform Design
 Guideline routing recommendations
 for the following buses: PCI, DVI,
 LPC & USB.

LAYOUT NOTES1:
 Terminators should be as close as
 possible to dock connector pins.
 Keep traces as short as possible.

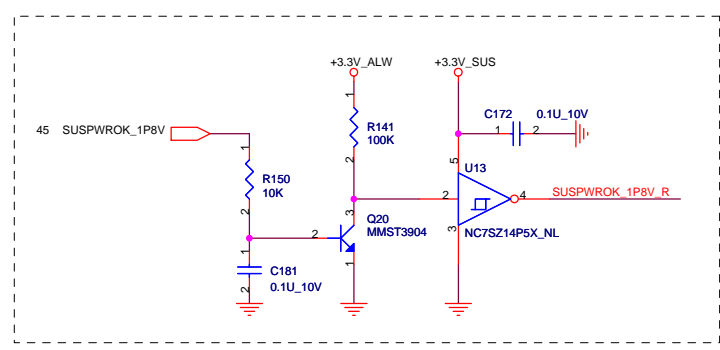
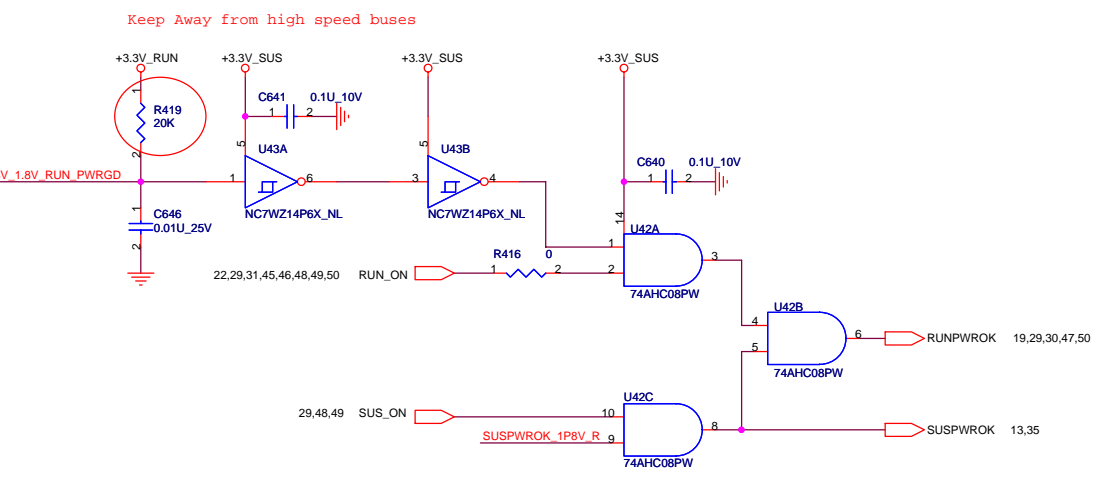
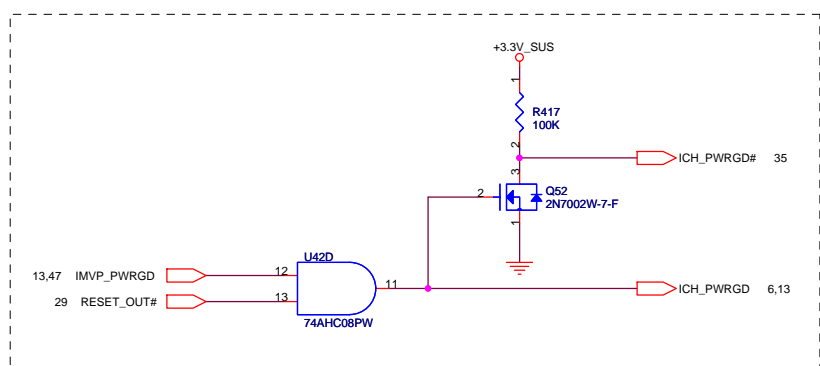
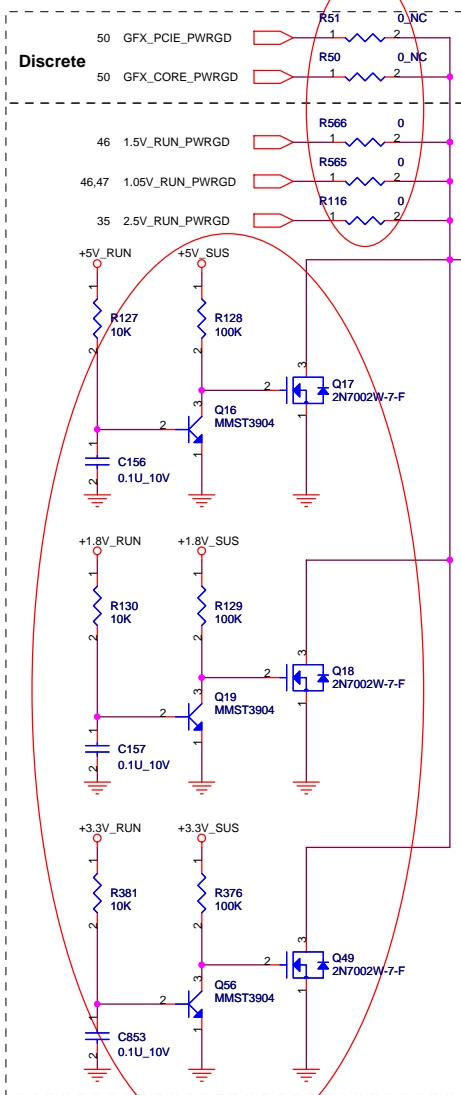


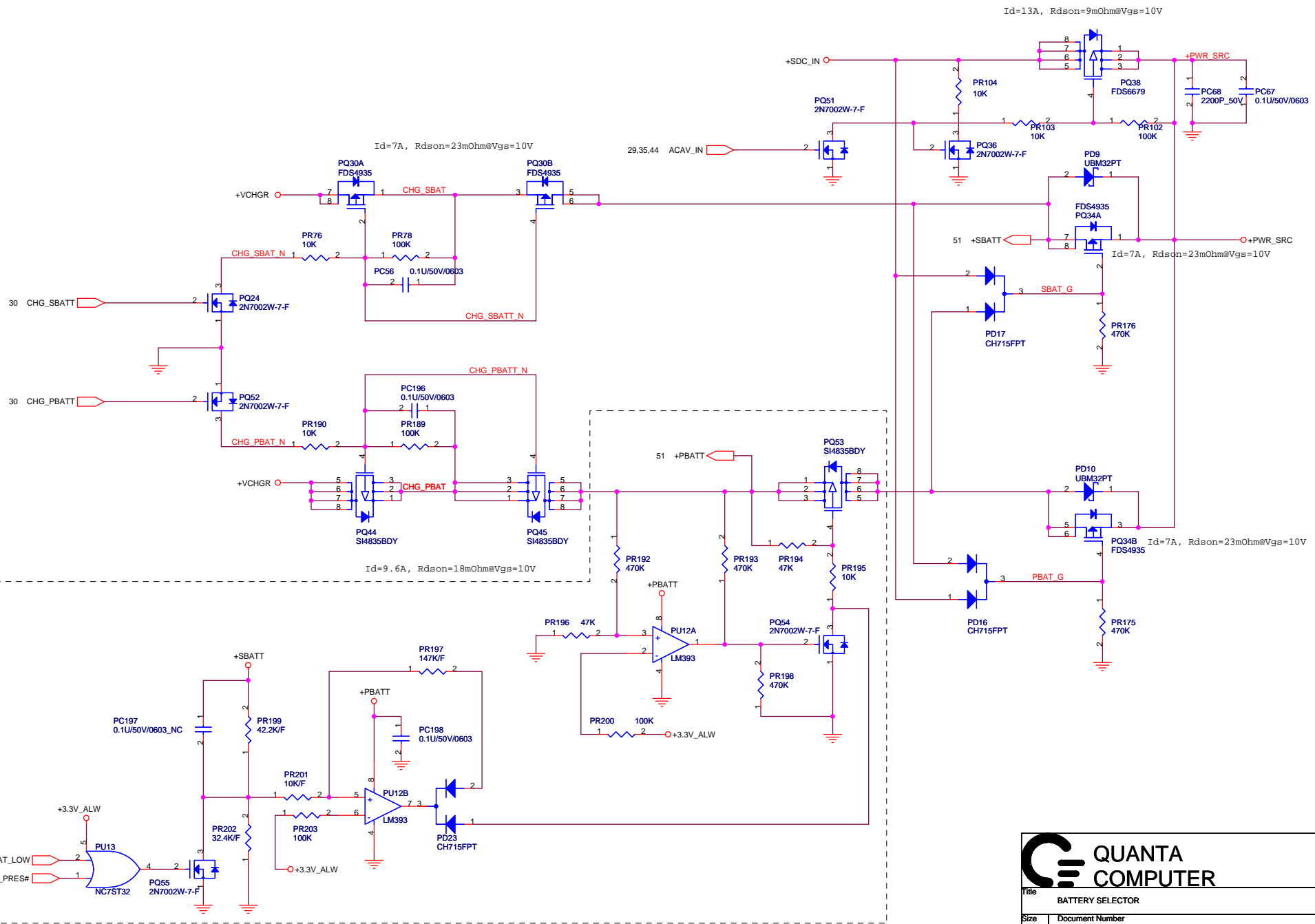
QUANTA COMPUTER

Title: Docking Station Conn.

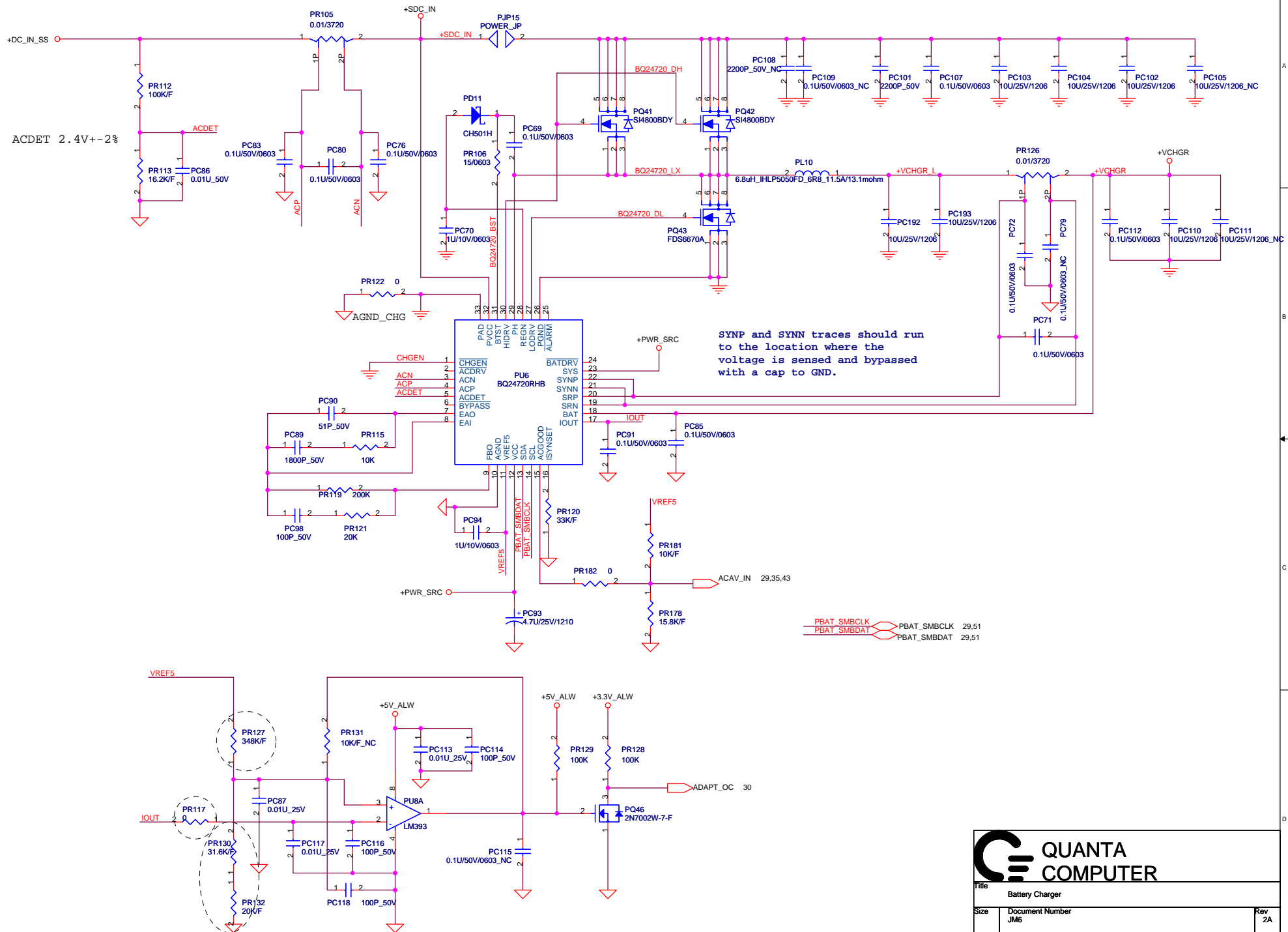
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Title		BATTERY SELECTOR
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Title		Battery Charger
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PR32 Close to Phase 1 Inductor lower MOSFET
Throttling temp. 105 degree C

Close to Phase 1 Inductor

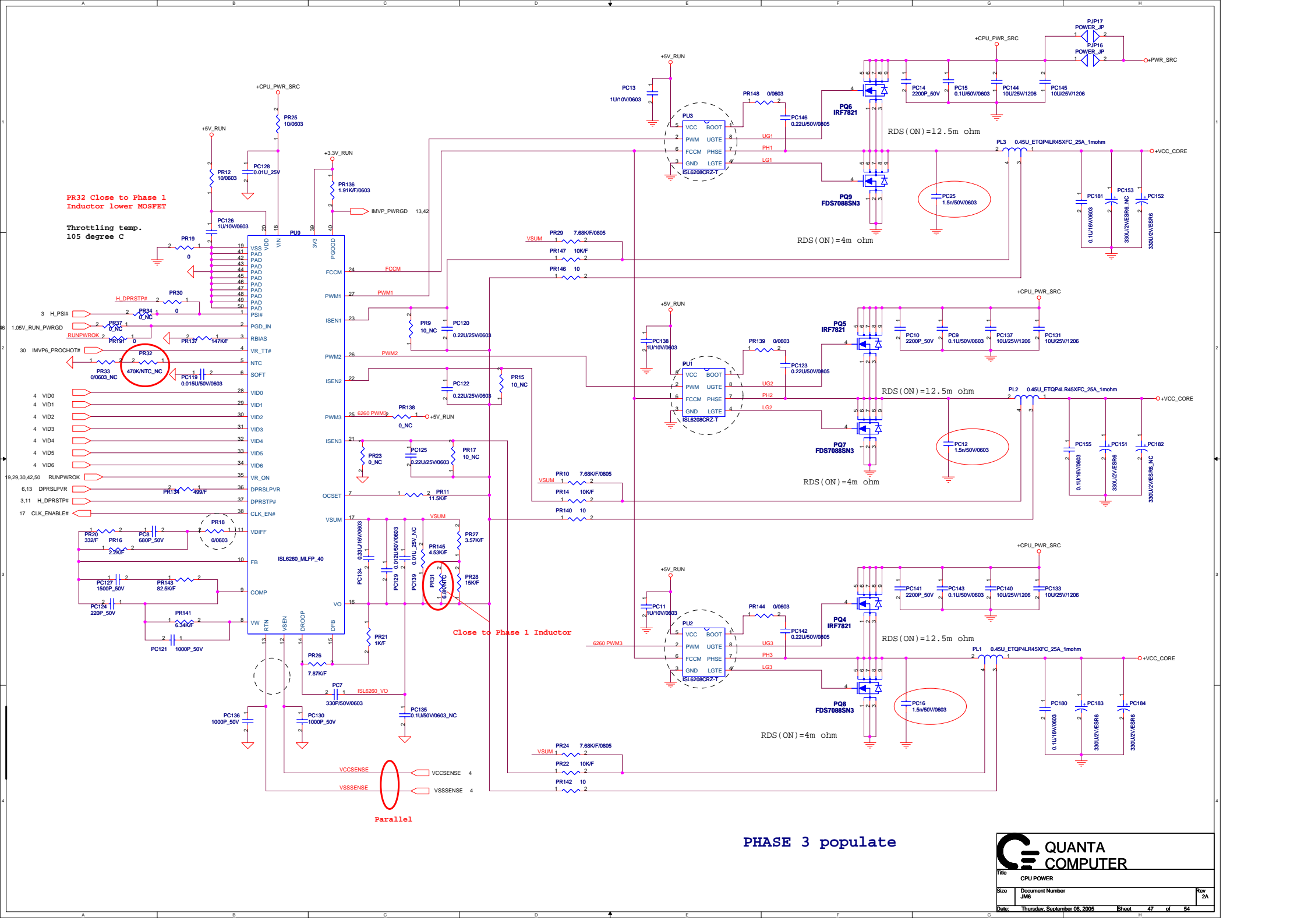
Parallel

PHASE 3 populate



**QUANTA
COMPUTER**

Title: CPU POWER
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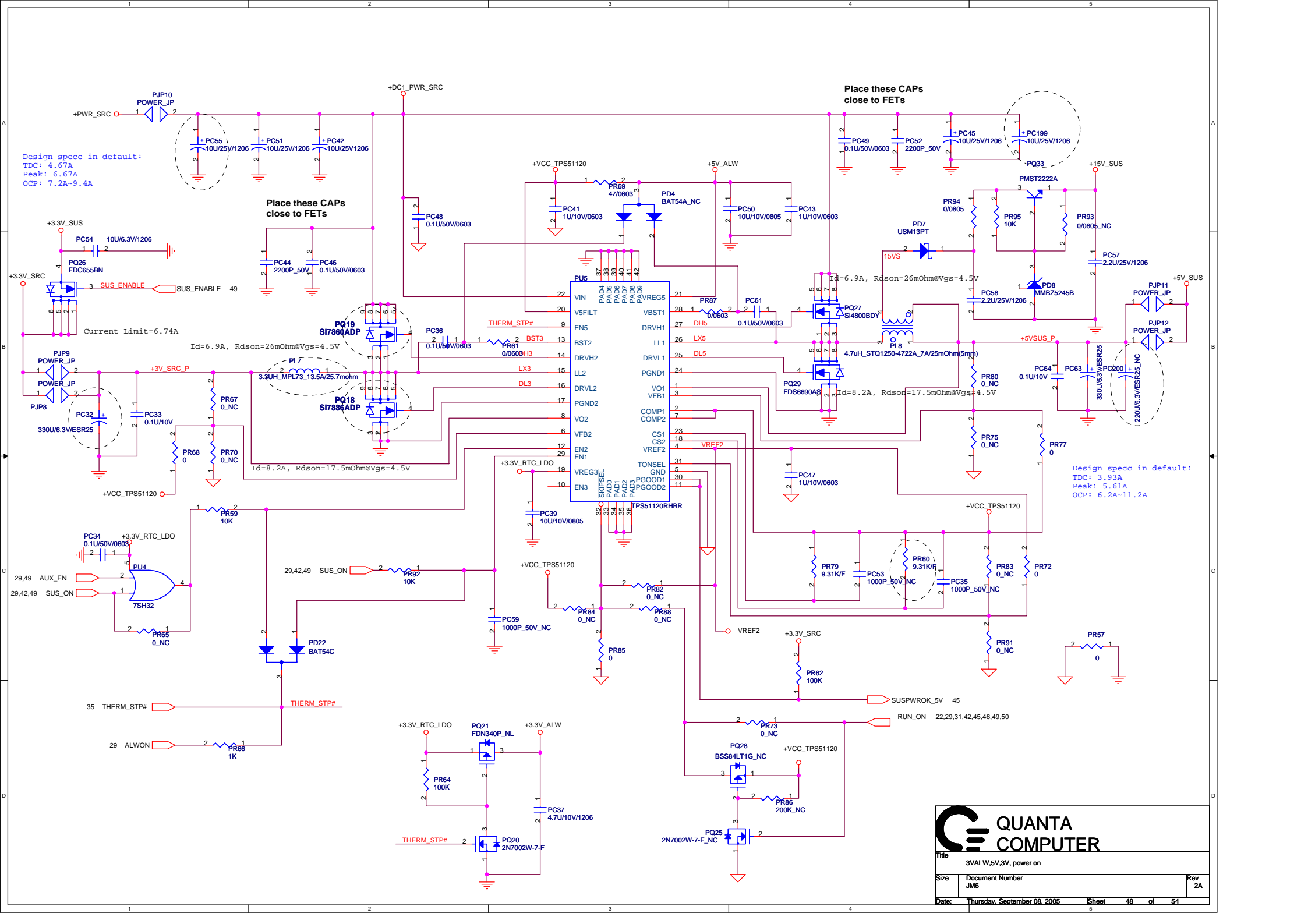


Design spec in default:
 TDC: 4.67A
 Peak: 6.67A
 OCP: 7.2A-9.4A

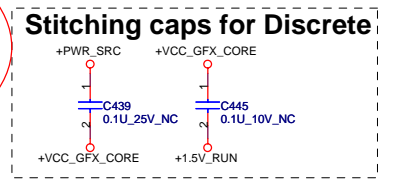
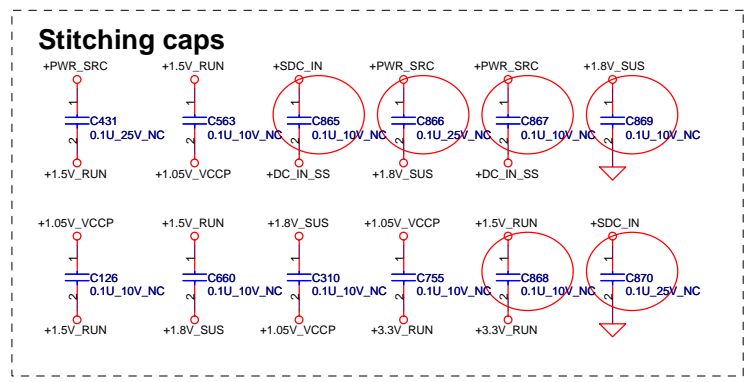
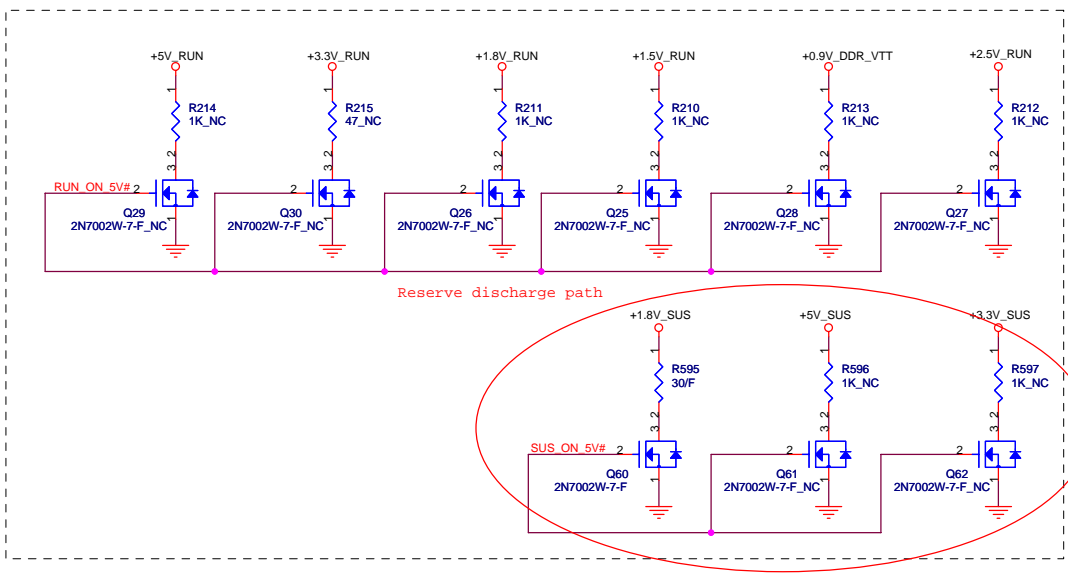
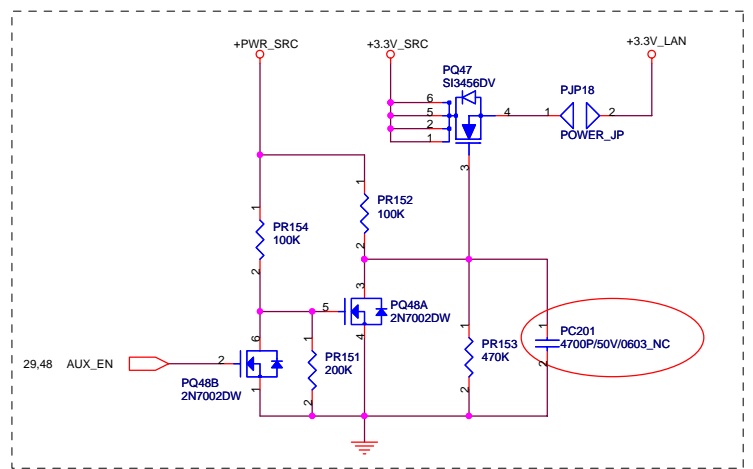
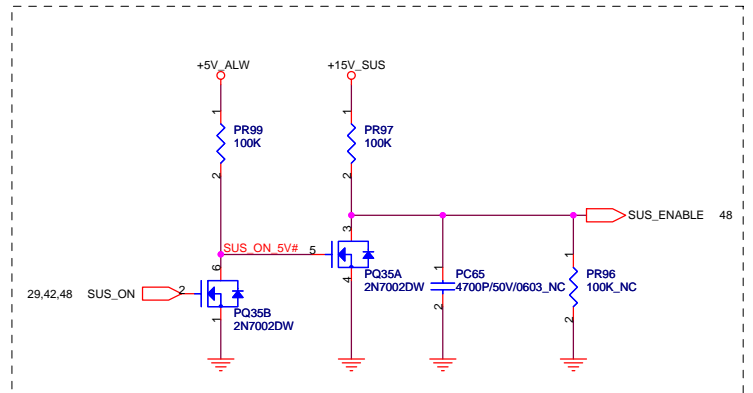
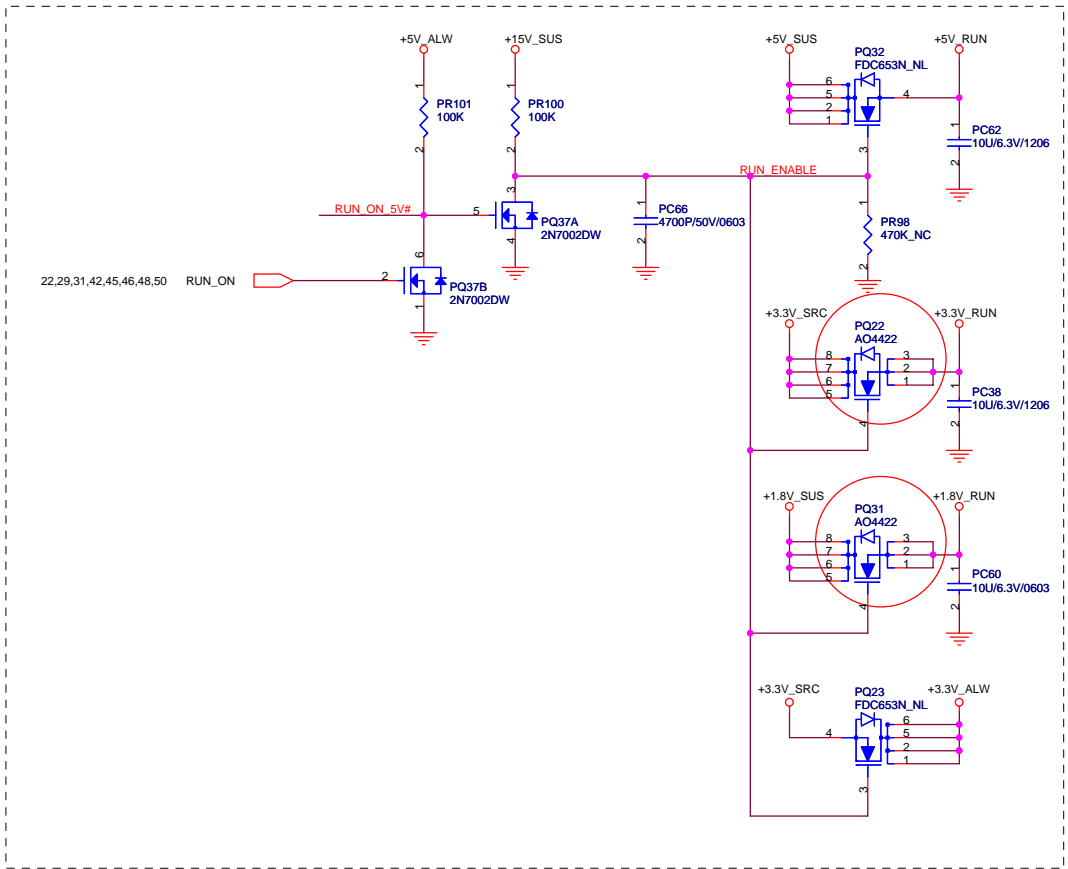
Place these CAPS
 close to FETs

Place these CAPS
 close to FETs

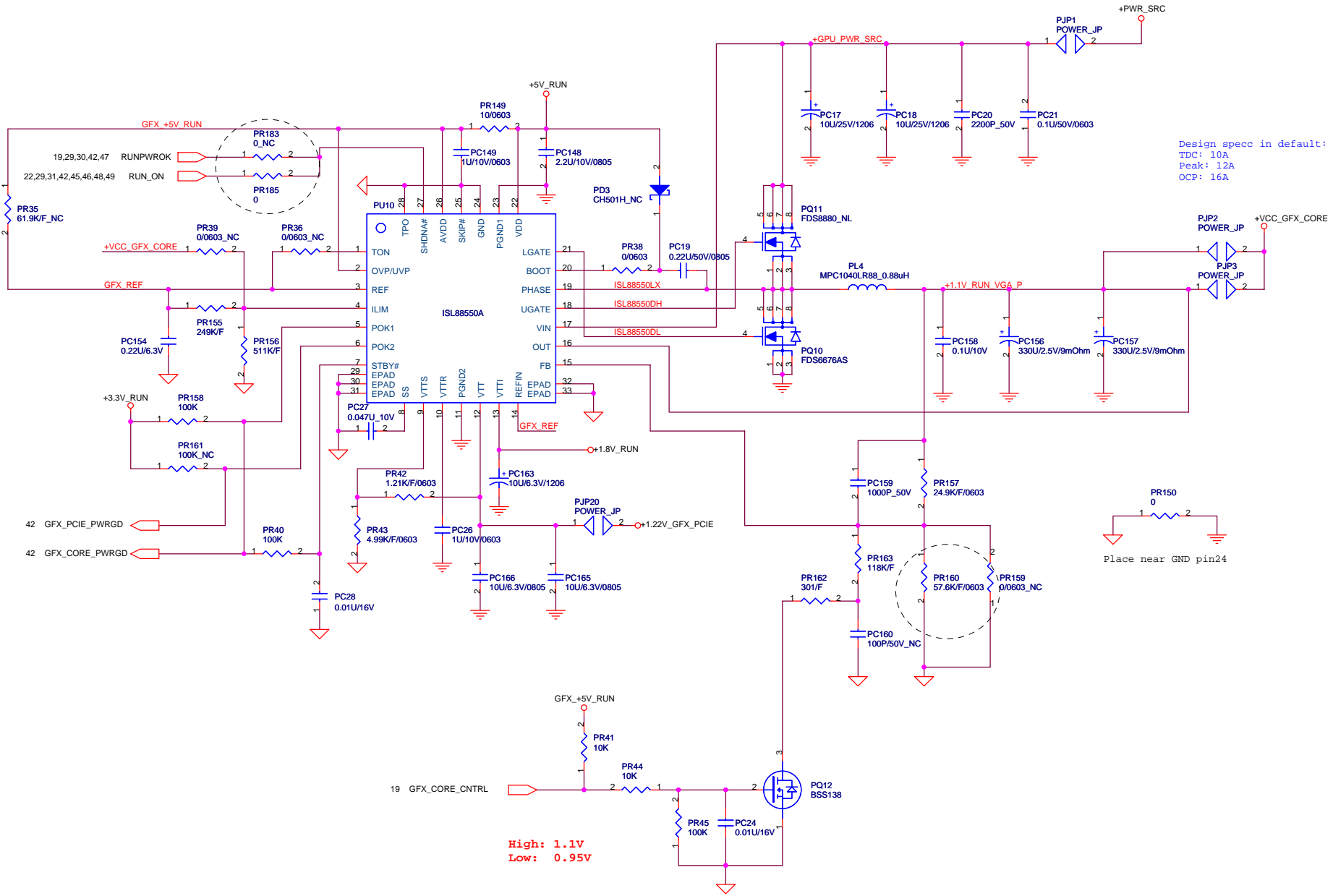
Design spec in default:
 TDC: 3.93A
 Peak: 5.61A
 OCP: 6.2A-11.2A



Title		
3VALW.5V.3V, power on		
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QUANTA COMPUTER
 Title: RUN POWER SW
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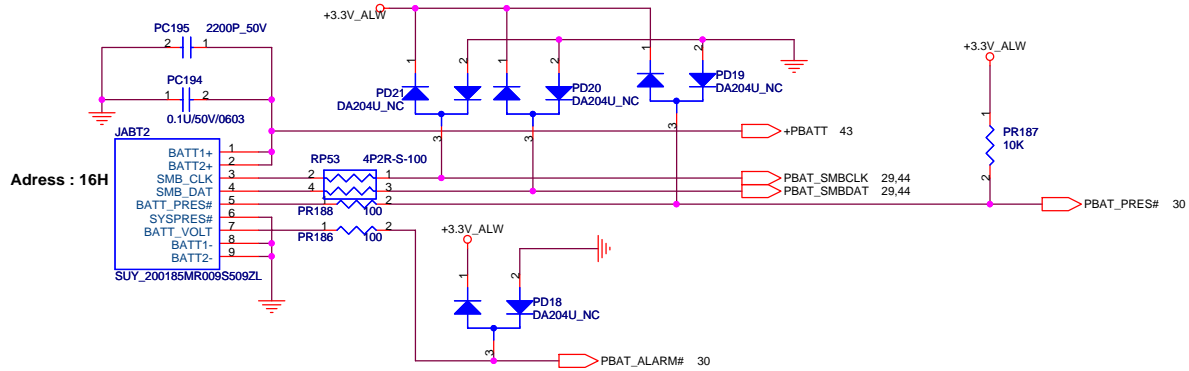
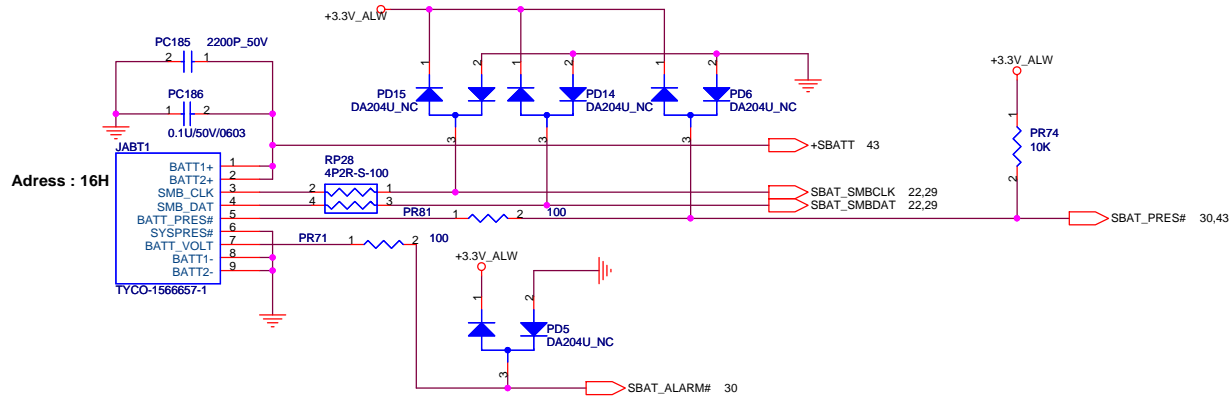
Design spec in default:
 TDC: 10A
 Peak: 12A
 OCP: 16A

PR150
 0
 Place near GND pin24

High: 1.1V
 Low: 0.95V

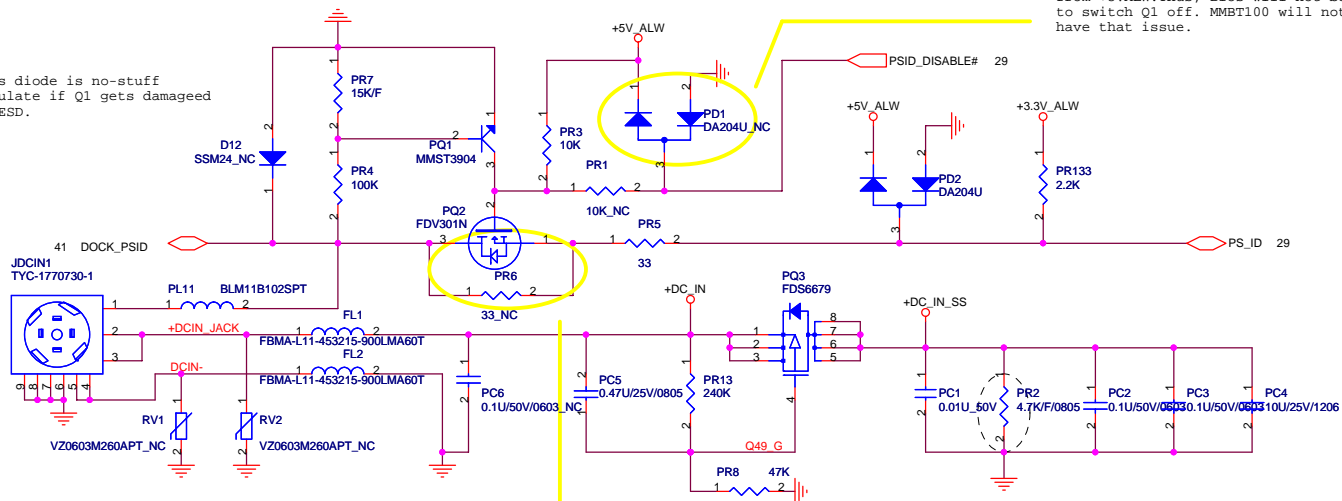


Title		VGA DC/DC
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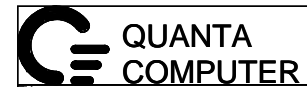


This resistor must be depopulated if FDV301N/FDV303 are used to avoid a 1.36mA constant current drain from +3VALW. Thus, Bios will not be to switch Q1 off. MMBT100 will not have that issue.

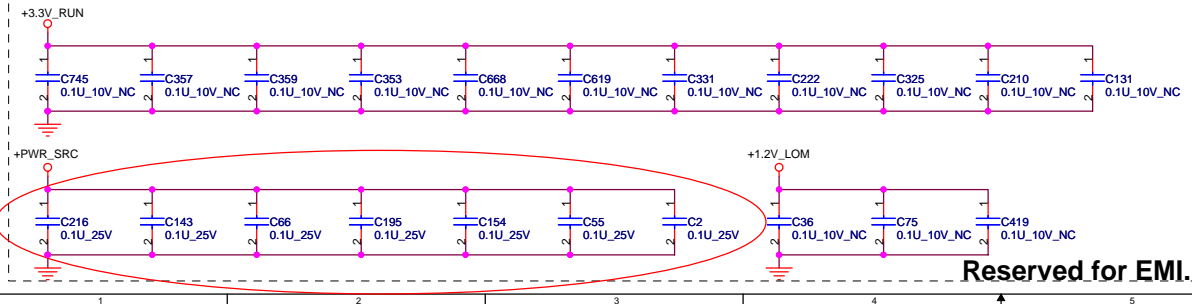
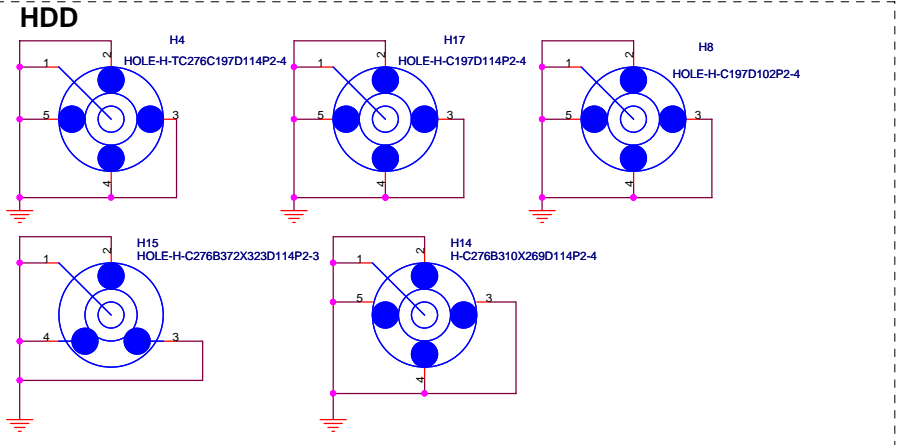
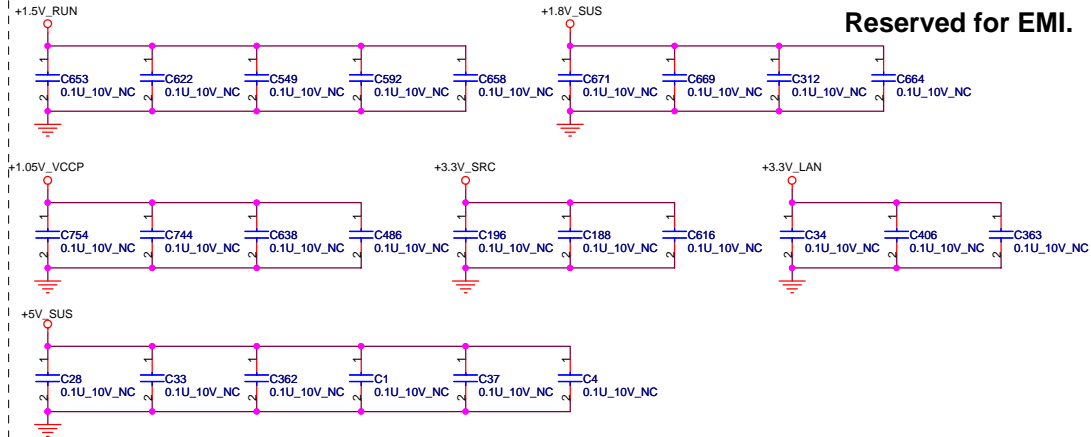
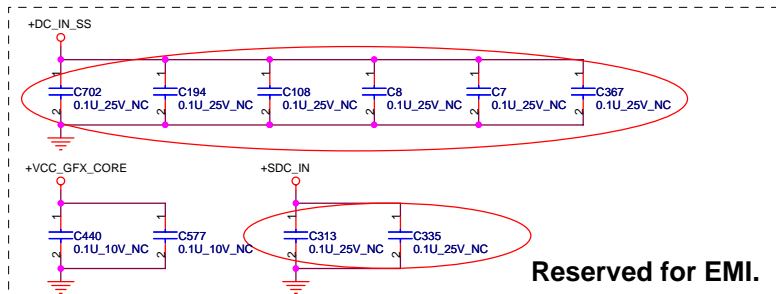
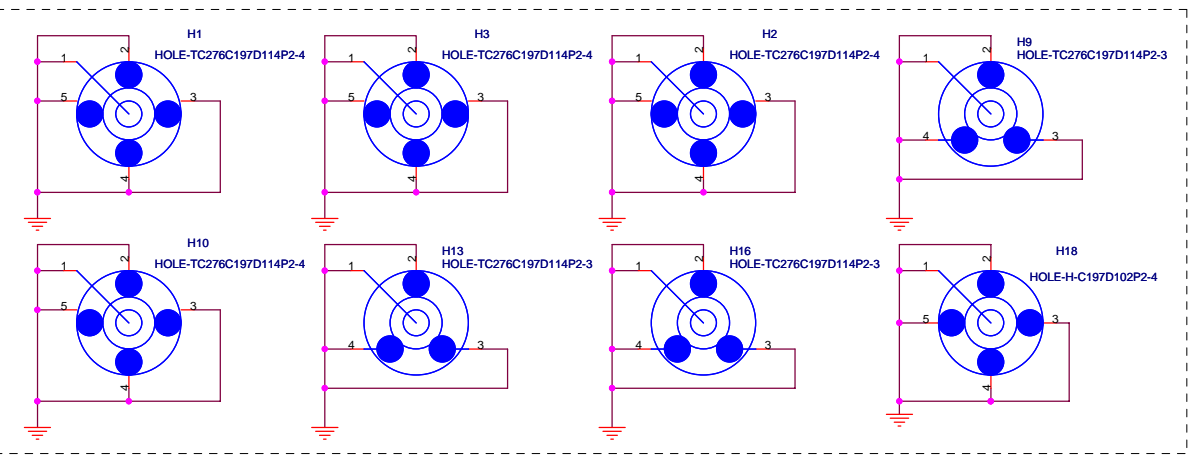
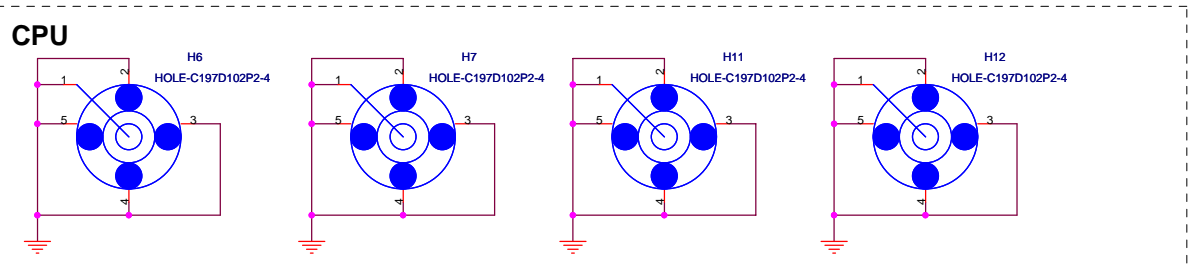
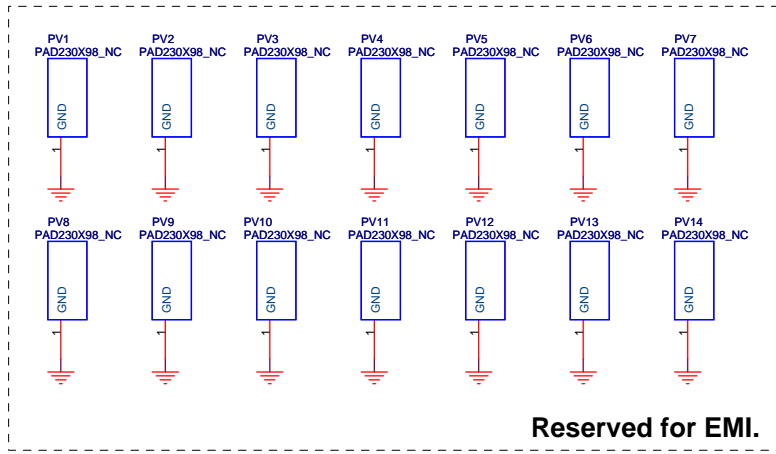
This diode is no-stuff populate if Q1 gets damaged by ESD.



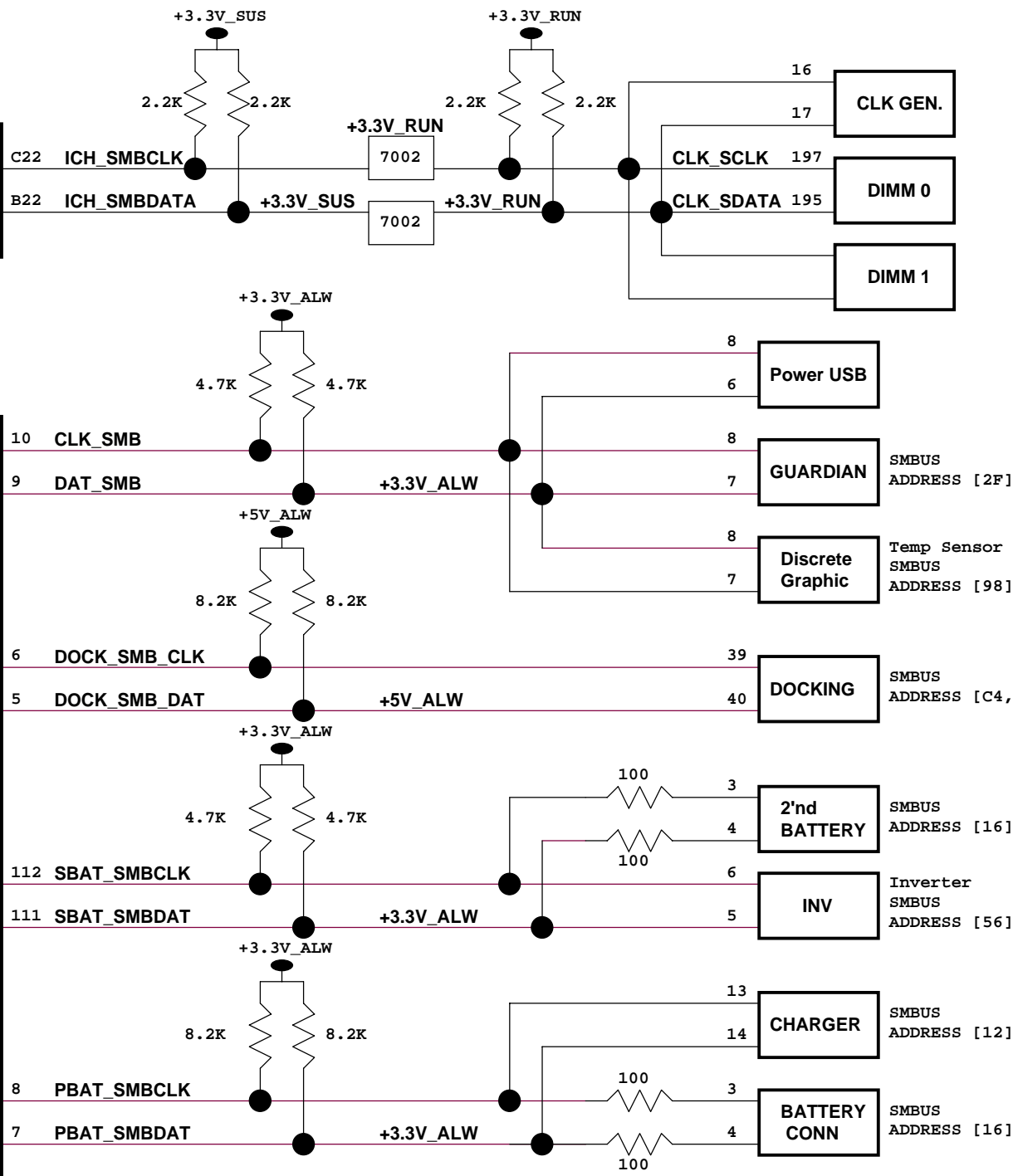
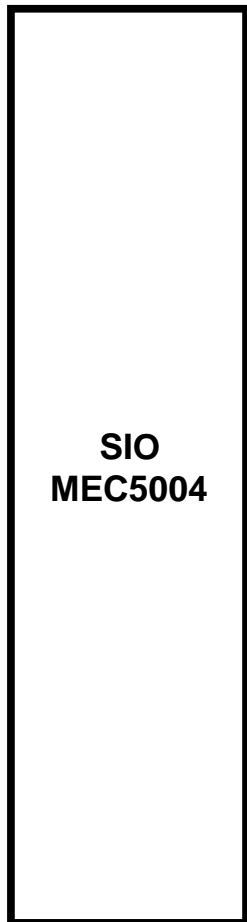
Three transistor can be used for Q1 (pin compatible): FDV301N/FDV303N has low Vgs_on w/built-in ESD protection. MMBT100 BJT works in reverse conduction mode.



Title		DCIN,BATT CONNECTOR
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Title			SCREW PAD
Size	Document Number	Rev	
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QUANTA COMPUTER

Title: SMBUS BLOCK

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