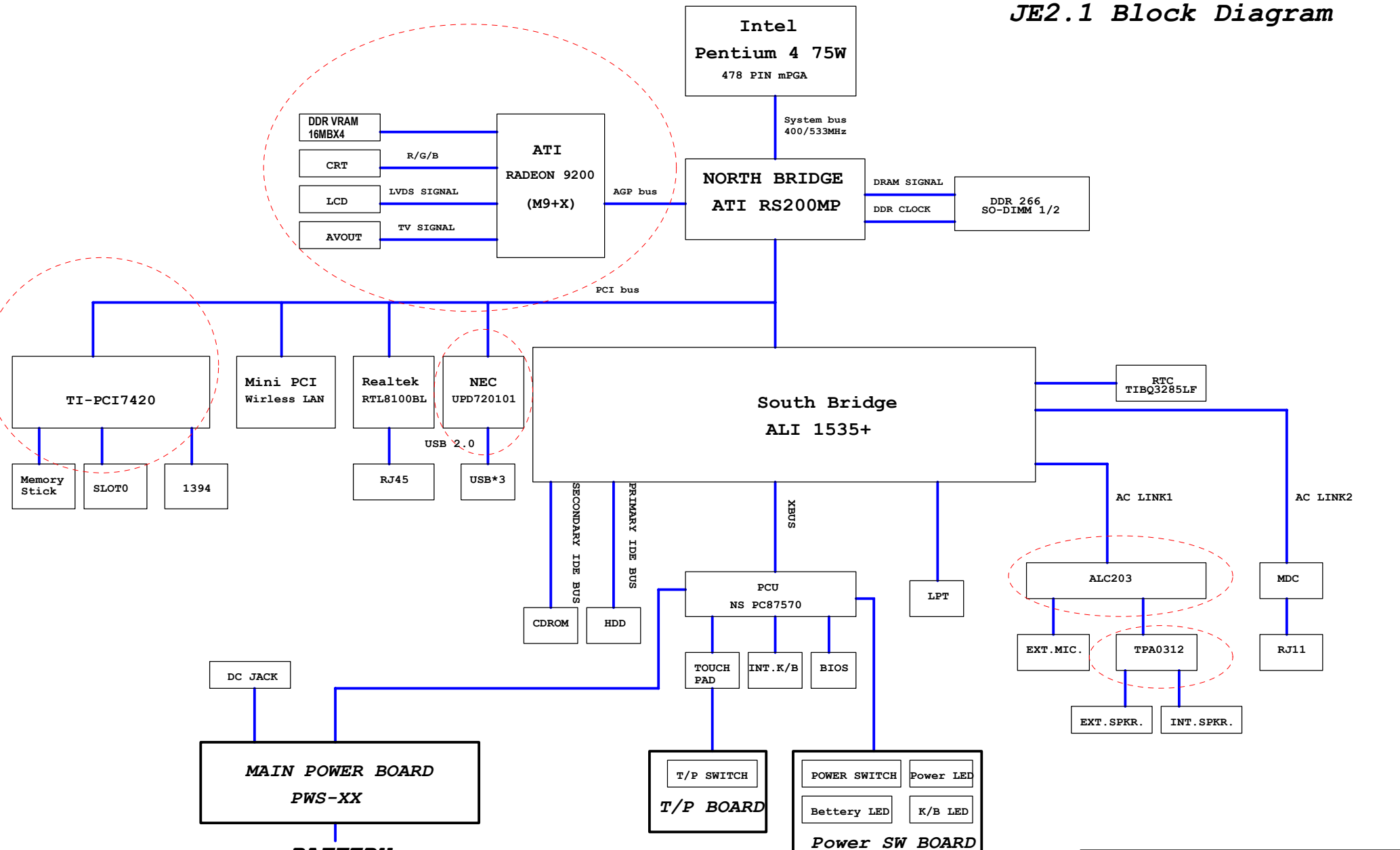



# JE2.1 Block Diagram





**QUANTA  
COMPUTER**

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JE2.1 Main Board	1A	1A
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 15 USB2.0 Controller (NEC-uPD720101)

16 ATI M9+ 1/3  
 17 ATI M9+ 2/3  
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21 AGP SSC/FAN3  
 22 TI7420-A (CARDBUS+1394+MS)  
 23 TI7420-B (CARDBUS+1394+MS)  
 24 Cardbus slot  
 25 LAN interface RTL8100B

26 Audio CODEC  
 27 Audio AMP & Int. Speaker  
 28 MiniPCI & MDC  
 29 RTC/POWER GOOD LOGIC  
 30 IDE/HDD/LPT Connector

31 PCU NS 87570  
 32 Int. Keyboard/Bios/FAN  
 33 VCORE POWER 1  
 34 MAX1546 (VCORE POWER 2)  
 35 MAX1632 (5V/3V/12V)

36 MAX1844 (2.5V/1.8V/1.25V )  
 37 MAX1844 (VCC1.5)  
 38 Load Switch



Title		
COVER PAGE		
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(5) HA[3..31] >> HA[3..31]

HA3	K2	A#3
HA4	K4	A#4
HA5	L6	A#5
HA6	K10	A#6
HA7	M0	A#7
HA8	M6	A#8
HA9	L2	A#9
HA10	M3	A#10
HA11	M4	A#11
HA12	M0	A#11
HA13	N1	A#12
HA14	N2	A#13
HA15	N4	A#14
HA16	N5	A#16
HA17	T1	A#17
HA18	P4	A#18
HA19	P2	A#19
HA20	P4	A#19
HA21	R3	A#20
HA22	R2	A#21
HA23	U1	A#23
HA24	P6	A#24
HA25	B0	A#24
HA26	T4	A#25
HA27	V2	A#26
HA28	R6	A#28
HA29	W1	A#29
HA30	T6	A#30
HA31	U4	A#30

(5) HD[0..63] >> HD[0..63]

HD0	B21	D#0
HD1	B20	D#1
HD2	A23	D#2
HD3	A25	D#3
HD4	C21	D#4
HD5	D22	D#5
HD6	B24	D#5
HD7	C23	D#6
HD8	C24	D#8
HD9	B25	D#9
HD10	G22	D#10
HD11	H21	D#11
HD12	C26	D#11
HD13	D23	D#12
HD14	J21	D#14
HD15	D25	D#15
HD16	H22	D#16
HD17	E24	D#17
HD18	G23	D#18
HD19	F23	D#19
HD20	F24	D#20
HD21	E25	D#21
HD22	D26	D#22
HD23	D26	D#22
HD24	L21	D#23
HD25	G26	D#25
HD26	H24	D#26
HD27	M21	D#27
HD28	L22	D#28
HD29	L24	D#29
HD30	K23	D#29
HD31	H25	D#30
HD32	M23	D#32
HD33	N22	D#33
HD34	P21	D#34
HD35	M24	D#34
HD36	N23	D#35
HD37	M26	D#36
HD38	N26	D#38
HD39	N25	D#39
HD40	R21	D#40
HD41	P24	D#41
HD42	R25	D#41
HD43	R24	D#42
HD44	T26	D#44
HD45	T25	D#45
HD46	T22	D#46
HD47	T23	D#46
HD48	U26	D#47
HD49	U24	D#48
HD50	U23	D#50
HD51	V25	D#51
HD52	V22	D#52
HD53	V24	D#53
HD54	V24	D#53
HD55	W26	D#54
HD56	Y26	D#55
HD57	W25	D#57
HD58	Y23	D#58
HD59	Y24	D#58
HD60	Y21	D#59
HD61	AA25	D#60
HD62	AA22	D#62
HD63	AA24	D#63

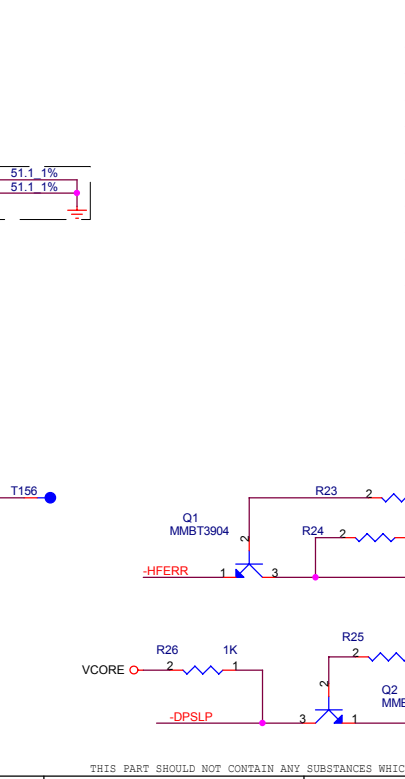
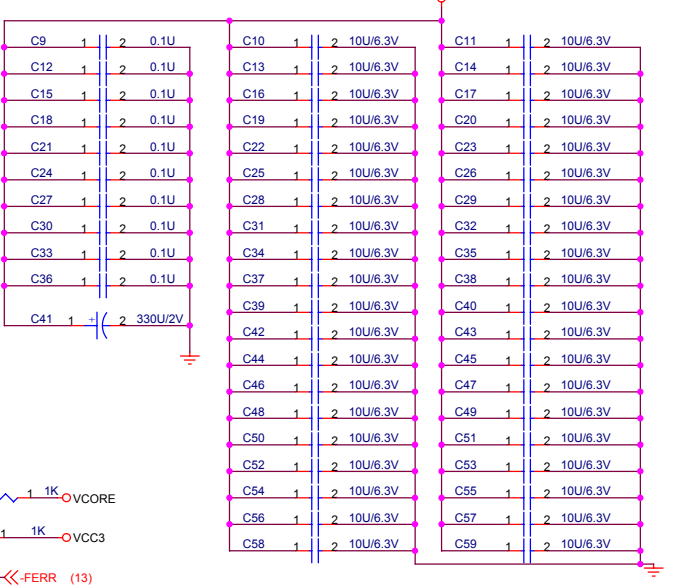
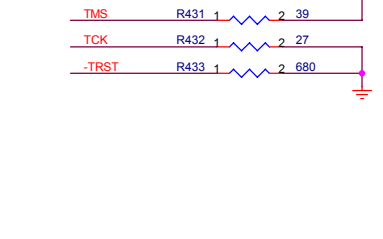
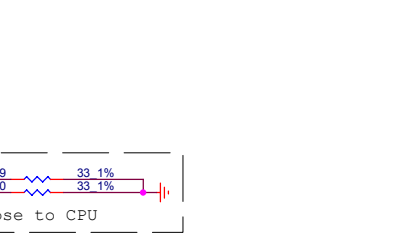
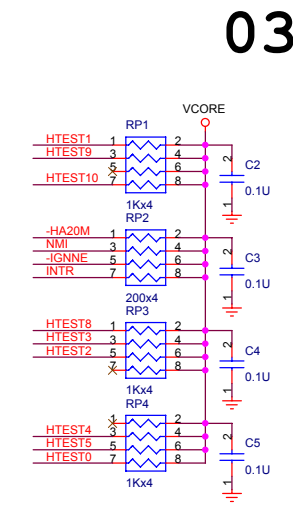
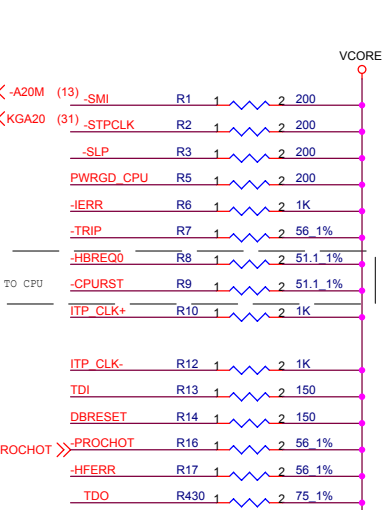
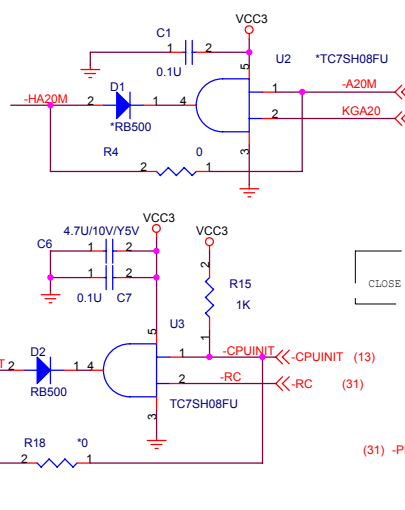
(5) -HDB[0..3] >> -HDB[0..3]

-HDB0	E21	DBI0
-HDB1	G25	DBI1
-HDB2	P26	DBI2
-HDB3	V21	DBI3

A20M	C6	-HA20M	A#3
FERR	B6	-HFERR	A#4
INIT	W5	-HCPUINIT	A#5
LINT0	D1	-INTR	A#6
LINT1	E5	-INTR	A#6
IGNNE	B2	-IGNNE	A#7
SMI	R5	-SMI	A#8
SLP	AB26	-SLP	A#9
STPCLK	Y4	-STPCLK	A#10
ADS	G1	-HADS	A#11
ADSTB0	L5	-HA_STB0	A#12
ADSTB1	R5	-HA_STB1	A#13
ADSTB2	G2	-HBNR	A#14
ADSTB3	H5	-HDBSY	A#15
ADSTB4	E2	-HDEFER	A#16
ADSTB5	H2	-HDRDY	A#17
ADSTB6	E3	-HHIT	A#18
ADSTB7	J6	-HTRDY	A#19
ADSTB8	D2	-HBPRI	A#20
ADSTB9	H6	-HBREQ0	A#21
ADSTB10	G4	-HLOCK	A#22
ADSTB11	H1	-HREQ0	A#23
ADSTB12	K5	-HREQ1	A#24
ADSTB13	L4	-HREQ2	A#25
ADSTB14	M3	-HREQ3	A#26
ADSTB15	H3	-HREQ4	A#27
ADSTB16	F1	-HRS0	A#28
ADSTB17	G5	-HRS1	A#29
ADSTB18	E4	-HRS2	A#30
ADSTB19	F21	-HD_STBP0	A#31
ADSTB20	E22	-HD_STBN0	A#32
ADSTB21	J23	-HD_STBP1	A#33
ADSTB22	K22	-HD_STBN1	A#34
ADSTB23	R23	-HD_STBP2	A#35
ADSTB24	R22	-HD_STBN2	A#36
ADSTB25	W23	-HD_STBP3	A#37
ADSTB26	W22	-HD_STBN3	A#38
ADSTB27	AE22	CPUCLK+	A#39
ADSTB28	AE23	CPUCLK-	A#40
ADSTB29	AD26	ITP_CLK+	A#41
ADSTB30	AC26	ITP_CLK-	A#42
ADSTB31	AC3	-IERR	A#43
ADSTB32	V6	-DBRESET	A#44
ADSTB33	AE25	-CPURST	A#45
ADSTB34	AB23	PWRGD_CPU	A#46
ADSTB35	AE26	T108	A#47
ADSTB36	L24	CPU_COMP0	A#48
ADSTB37	P1	CPU_COMP1	A#49
ADSTB38	J26	T117	A#50
ADSTB39	K25	T119	A#51
ADSTB40	K26	T121	A#52
ADSTB41	L25	T123	A#53
ADSTB42	B3	THERMDA	A#54
ADSTB43	C4	THERMDC	A#55
ADSTB44	A2	-TRIP	A#56
ADSTB45	C3	-PROCHOT	A#57
ADSTB46	AD24	HTEST0	A#58
ADSTB47	AA2	HTEST1	A#59
ADSTB48	AC21	HTEST2	A#60
ADSTB49	AC20	HTEST3	A#61
ADSTB50	AC24	HTEST4	A#62
ADSTB51	AC23	HTEST5	A#63
ADSTB52	AA20	ITPCLK0	A#64
ADSTB53	AB22	ITPCLK1	A#65
ADSTB54	U6	HTEST8	A#66
ADSTB55	W4	HTEST9	A#67
ADSTB56	Y3	HTEST10	A#68
ADSTB57	A6	-GHI	A#69
ADSTB58	AD25	-DPSLP	A#70
ADSTB59	AD6	BS0	A#71
ADSTB60	AD5	BS1	A#72
ADSTB61	D4	TCK	A#73
ADSTB62	C1	TDI	A#74
ADSTB63	D5	TDO	A#75
ADSTB64	E7	TMS	A#76
ADSTB65	E6	-TRST	A#77
ADSTB66	AE5	P_VID0	A#78
ADSTB67	AE4	P_VID1	A#79
ADSTB68	AE3	P_VID2	A#80
ADSTB69	AE2	P_VID3	A#81
ADSTB70	AE1	P_VID4	A#82
ADSTB71	AD3	P_VID5	A#83

C6	-HA20M	A#3
B6	-HFERR	A#4
W5	-HCPUINIT	A#5
D1	-INTR	A#6
E5	-INTR	A#6
B2	-IGNNE	A#7
R5	-SMI	A#8
AB26	-SLP	A#9
Y4	-STPCLK	A#10
G1	-HADS	A#11
L5	-HA_STB0	A#12
R5	-HA_STB1	A#13
G2	-HBNR	A#14
H5	-HDBSY	A#15
E2	-HDEFER	A#16
H2	-HDRDY	A#17
E3	-HHIT	A#18
J6	-HTRDY	A#19
D2	-HBPRI	A#20
H6	-HBREQ0	A#21
G4	-HLOCK	A#22
H1	-HREQ0	A#23
K5	-HREQ1	A#24
L4	-HREQ2	A#25
M3	-HREQ3	A#26
H3	-HREQ4	A#27
F1	-HRS0	A#28
G5	-HRS1	A#29
E4	-HRS2	A#30
F21	-HD_STBP0	A#31
E22	-HD_STBN0	A#32
J23	-HD_STBP1	A#33
K22	-HD_STBN1	A#34
R23	-HD_STBP2	A#35
R22	-HD_STBN2	A#36
W23	-HD_STBP3	A#37
W22	-HD_STBN3	A#38
AE22	CPUCLK+	A#39
AE23	CPUCLK-	A#40
AD26	ITP_CLK+	A#41
AC26	ITP_CLK-	A#42
AC3	-IERR	A#43
V6	-DBRESET	A#44
AE25	-CPURST	A#45
AB23	PWRGD_CPU	A#46
AE26	T108	A#47
L24	CPU_COMP0	A#48
P1	CPU_COMP1	A#49
J26	T117	A#50
K25	T119	A#51
K26	T121	A#52
L25	T123	A#53
B3	THERMDA	A#54
C4	THERMDC	A#55
A2	-TRIP	A#56
C3	-PROCHOT	A#57
AD24	HTEST0	A#58
AA2	HTEST1	A#59
AC21	HTEST2	A#60
AC20	HTEST3	A#61
AC24	HTEST4	A#62
AC23	HTEST5	A#63
AA20	ITPCLK0	A#64
AB22	ITPCLK1	A#65
U6	HTEST8	A#66
W4	HTEST9	A#67
Y3	HTEST10	A#68
A6	-GHI	A#69
AD25	-DPSLP	A#70
AD6	BS0	A#71
AD5	BS1	A#72
D4	TCK	A#73
C1	TDI	A#74
D5	TDO	A#75
E7	TMS	A#76
E6	-TRST	A#77
AE5	P_VID0	A#78
AE4	P_VID1	A#79
AE3	P_VID2	A#80
AE2	P_VID3	A#81
AE1	P_VID4	A#82
AD3	P_VID5	A#83

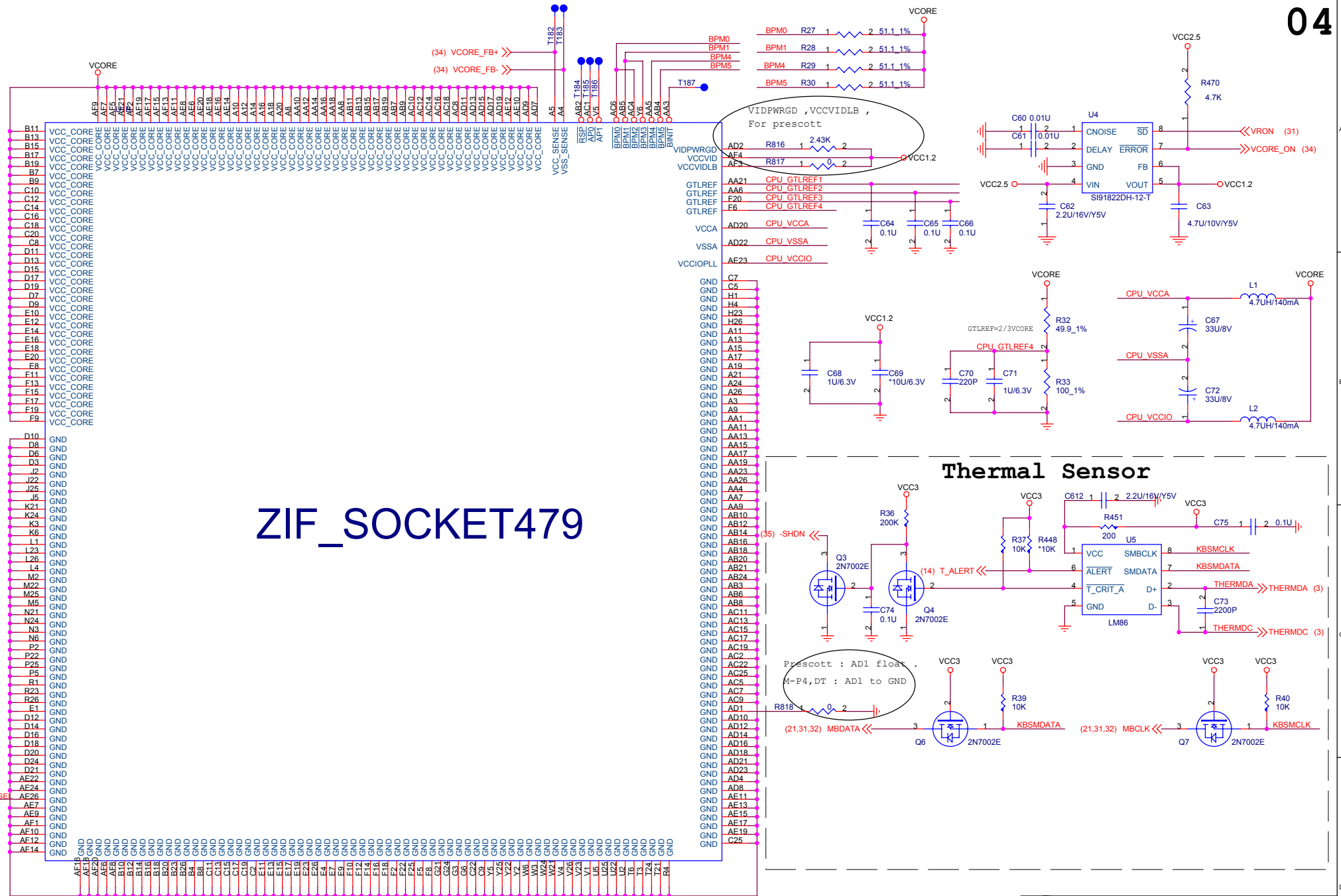
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P_VID1	T176
P_VID2	T178
P_VID3	T180
P_VID4	T181
P_VID5	T373



**QUANTA COMPUTER**

File: **CPU Socket -1/2- Signal**

Size B Document Number **JE2.1 Main Board** Rev 3A



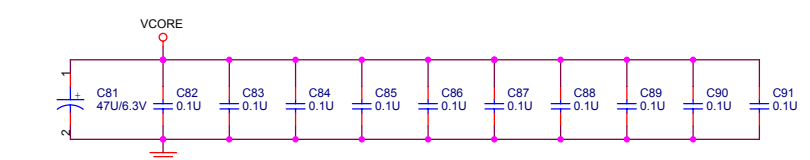
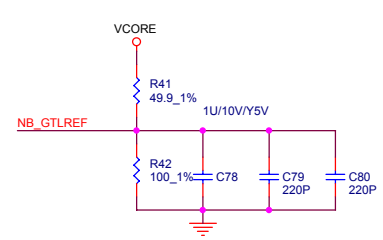
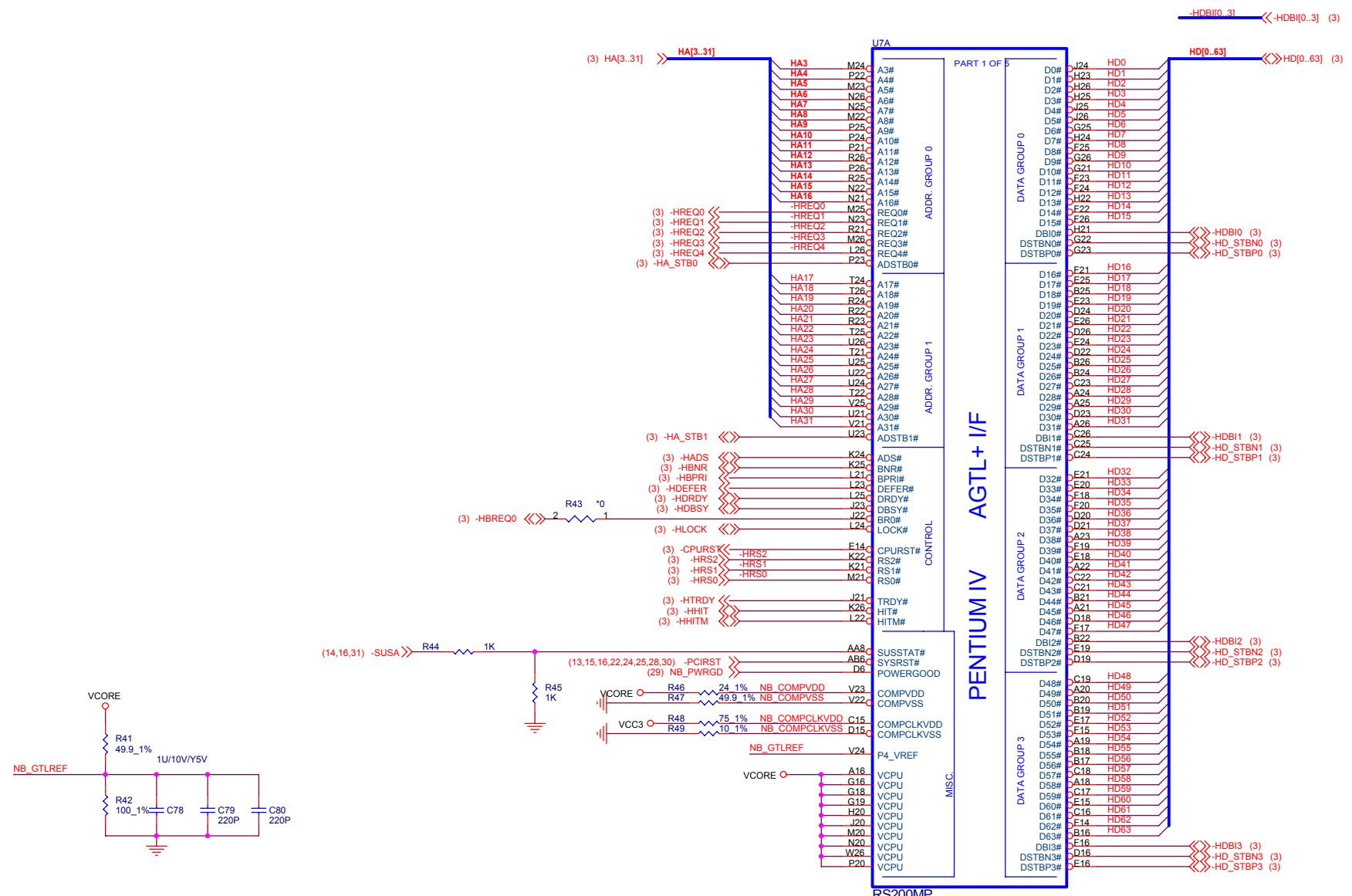
# ZIF\_SOCKET479

**QUANTA COMPUTER**

Title: CPU Socket -2/2- Power & Ground

Size B Document Number JE2.1 Main Board Rev 1A

Date: Monday, August 11, 2003 Sheet 4 of 38



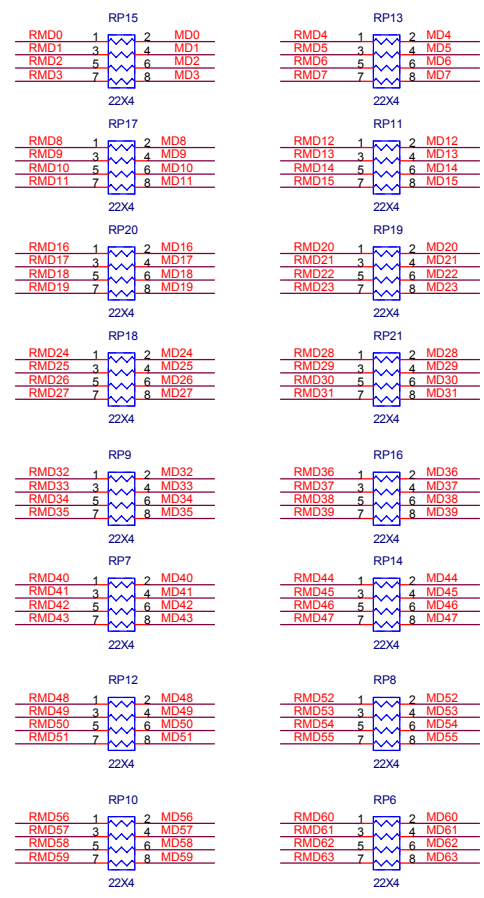
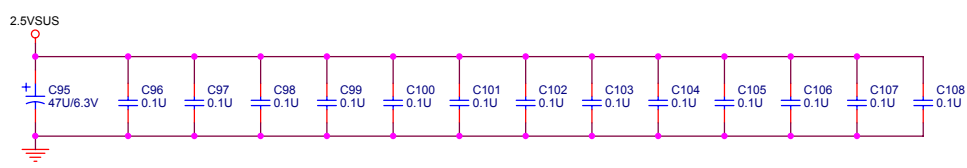
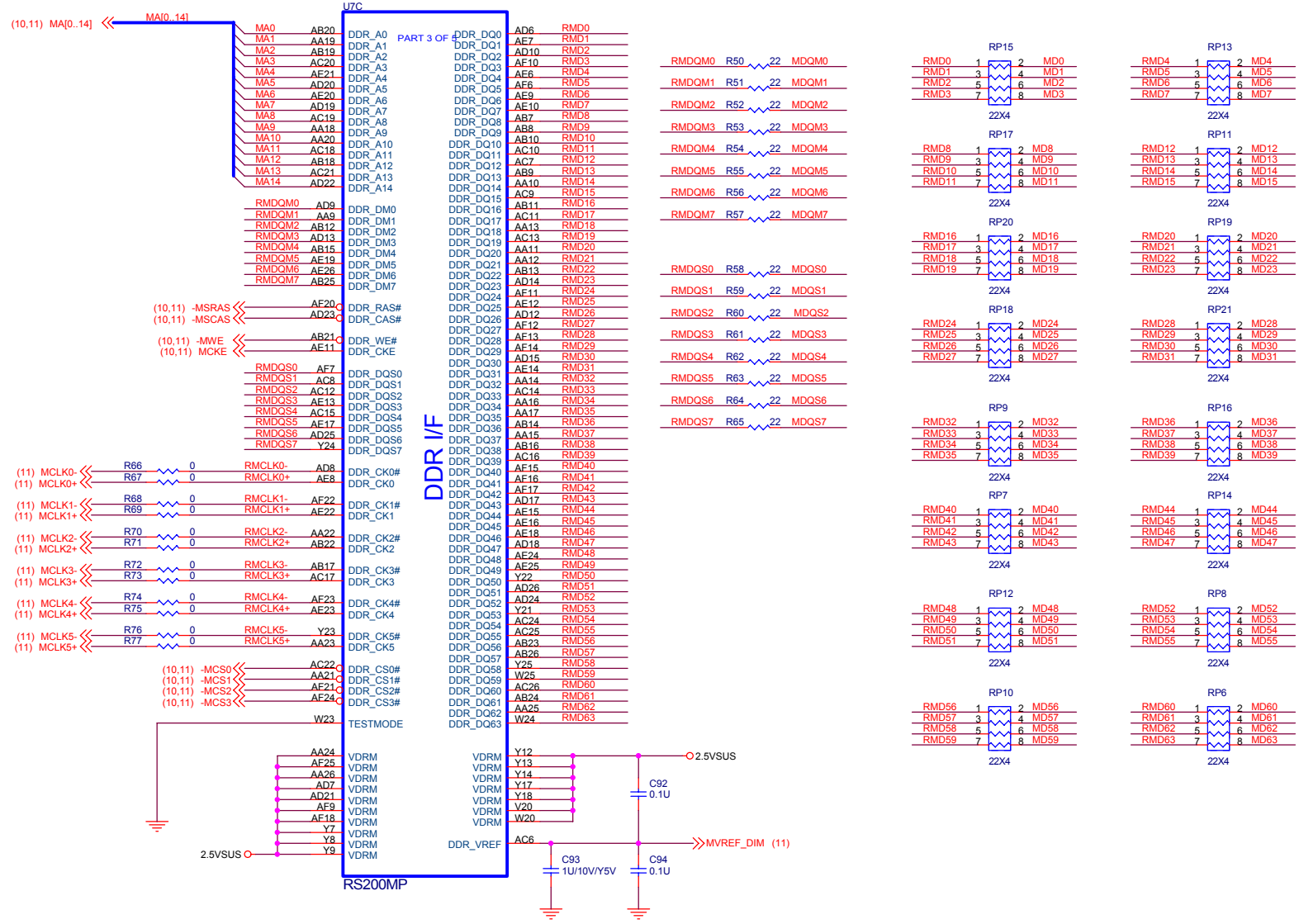
PENTIUM IV AGTL+ I/F



Title		RS200M 1/4	
Size	B	Document Number	JE2.1 Main Board
Rev	1A		

# ATI\_RS200M+ - 2 ( DDR Interface )

MDI0\_63I >>> MD[0..63] (10,11)  
 MDQM0\_7I >>> MDQM[0..7] (10,11)  
 MDQS0\_7I >>> MDQS[0..7] (10,11)



**QUANTA COMPUTER**

Title: **RS200M 2/4**

Size B Document Number **JE2.1 Main Board** Rev 1A

Date: Monday, August 11, 2003 Sheet 6 of 38

(9,13,15,22,25,28) AD[0..31] <<< AD[0..31]  
(9,13,15,22,25,28) -CBE[0..3] <<< -CBE[0..3]

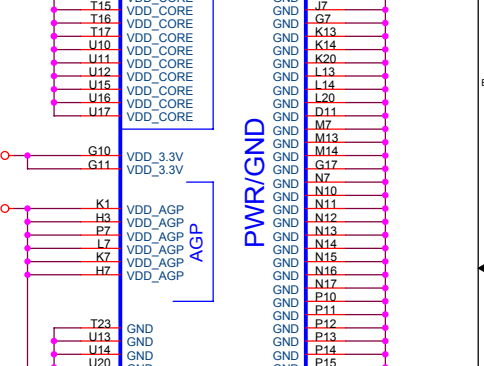
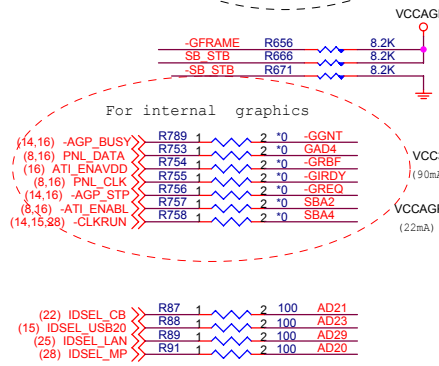
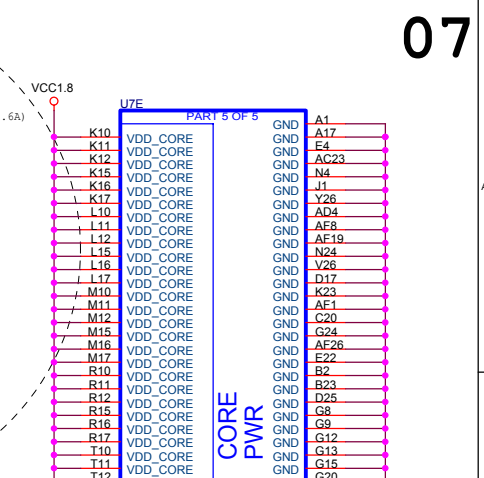
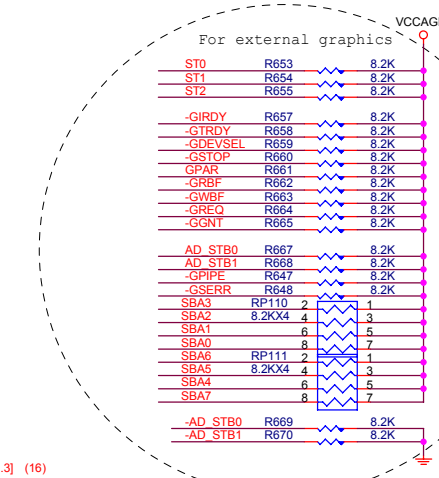
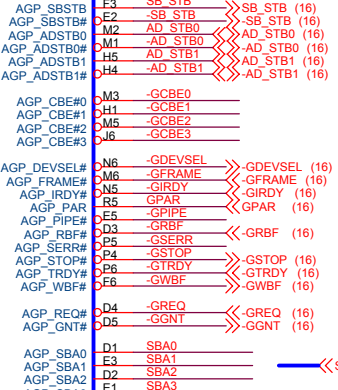
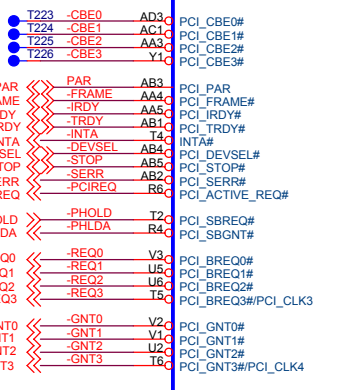
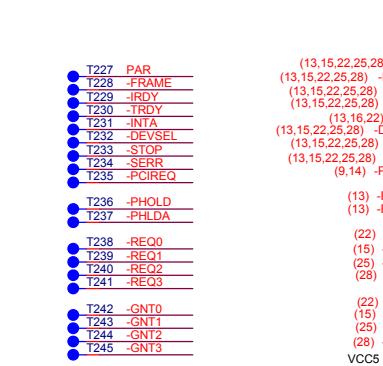
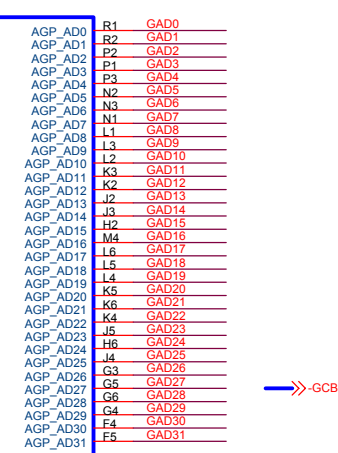
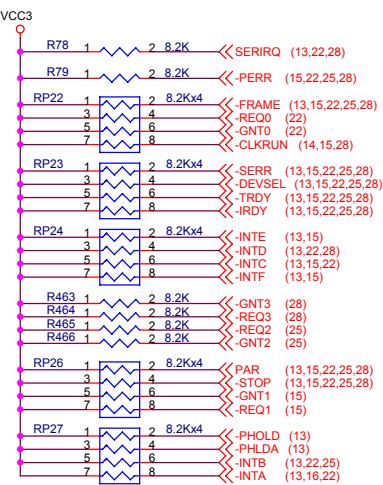
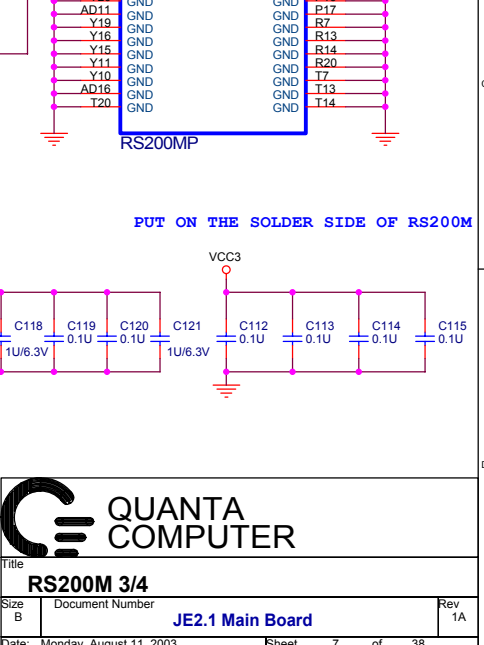
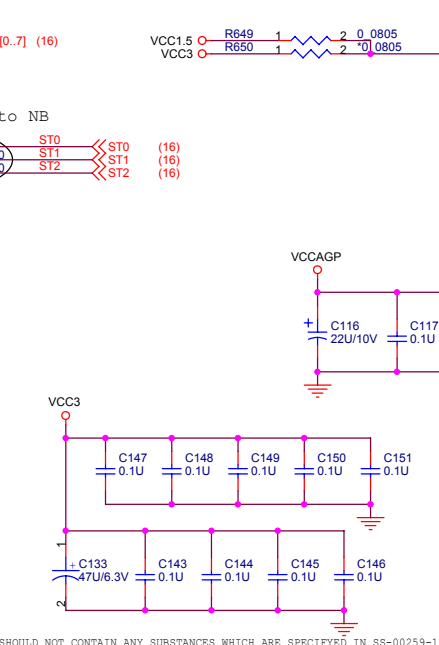
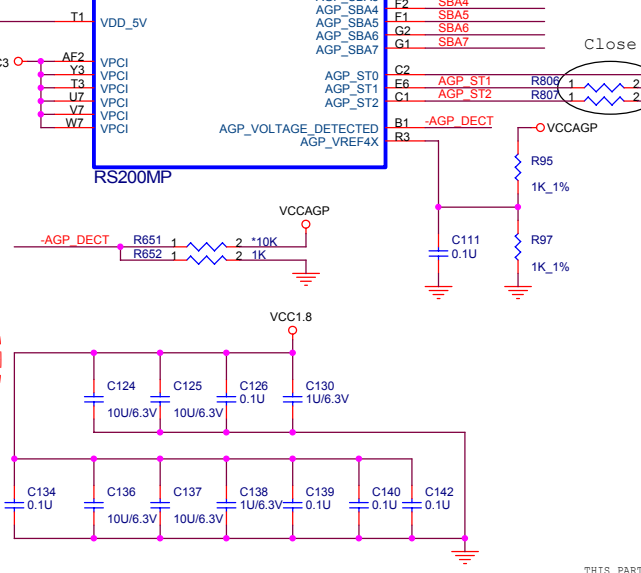
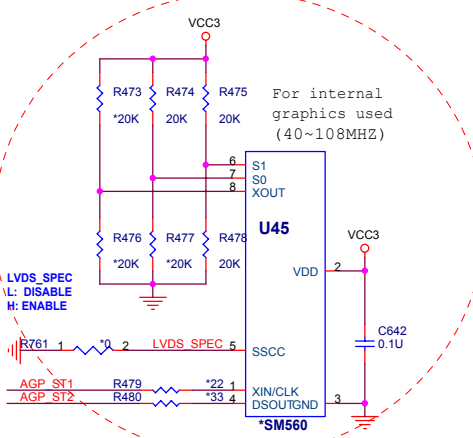
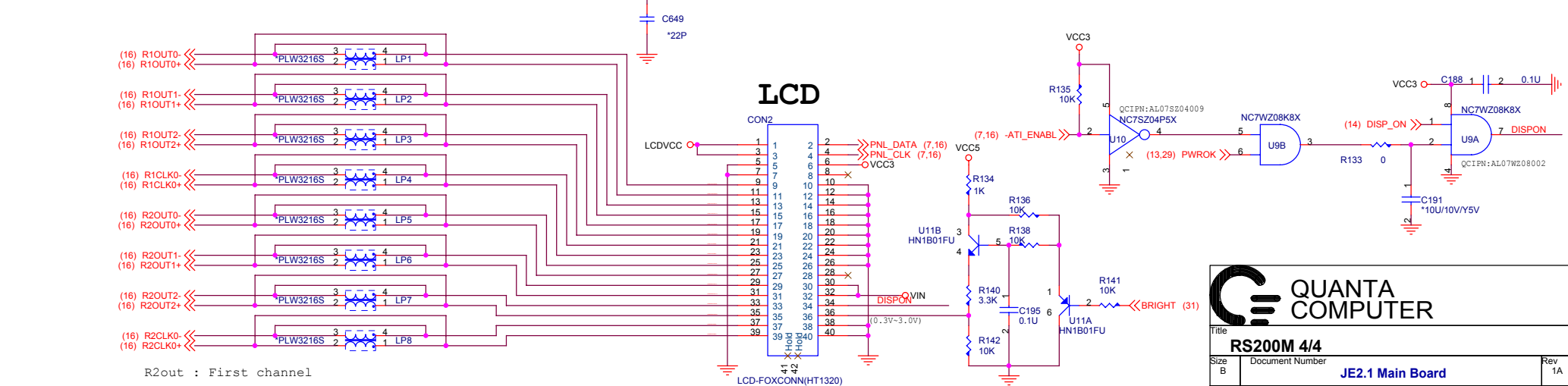
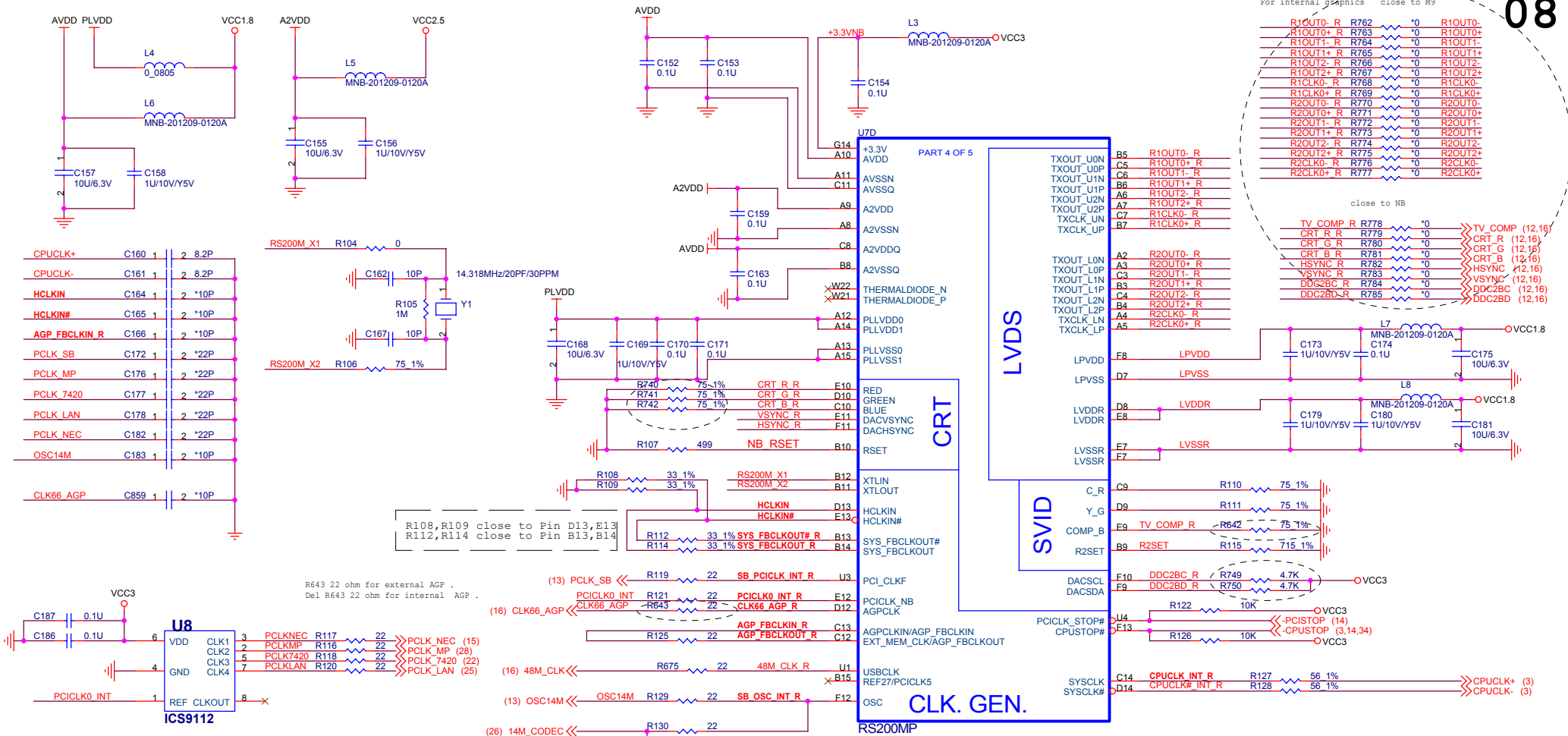


Table with 3 columns: AGP\_DECT, AGP, VCCAGP. Row 1: 1 Inter., 2X, 3.3V. Row 2: 0 external, 4X, 1.5V.



QUANTA COMPUTER logo and title block: RS200M 3/4, JE2.1 Main Board, Rev 1A, Date: Monday August 11, 2003, Sheet 7 of 38.



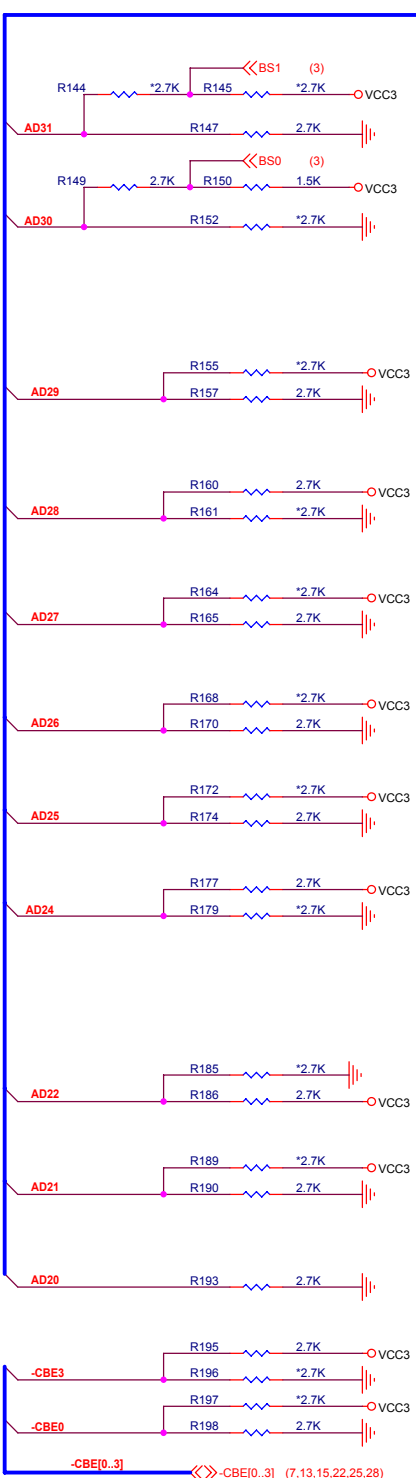
**QUANTA COMPUTER**

Title: **RS200M 4/4**

Size B Document Number **JE2.1 Main Board** Rev 1A

Date: Monday, August 11, 2003 Sheet 8 of 38





**AD[31..30] : CLK SPEED**  
 DEFAULT: 01  
 00: 100 MHZ  
 01: 133 MHZ  
 10: 166MHZ  
 11: 66 MHZ

**AD29: RS200M FULL CONFIGURATION**  
 DEFAULT:1  
 0: FULL CONFIGURATION  
 1: USES DEFAULT VALUES

**AD28: SPREAD SPECTRUM ENABLE**  
 DEFAULT:1  
 0: DISABLE  
 1: ENABLE

**AD27: MCERR OBSERVATION**  
 DEFAULT: 0  
 0: ENABLE  
 1: DISABLE

**AD26: BUS PARKING**  
 DEFAULT : 0  
 0: ENABLE  
 1: DISABLE

**AD25: BINIT# OBSERVATION**  
 DEFAULT : 0  
 0: ENABLE  
 1: DISABLE

**AD24: IOQ ENABLE**  
 DEFAULT : 1  
 0: SET IOQ TO 1  
 1:SET IOQ TO 12

**AD22:REF27 ENABLE**  
 DEFAULT : 1  
 0: PCICLK5 OUTPUT  
 1: 27 MHzREFERENCE CLOCK INPUT

**AD21 : CLK\_BYPASS(TEST ONLY)**  
 DEFAULT : 0  
 0: NORMAL  
 1: TEST MODE

**AD20 : PCICLK EXPANSION**  
 DEFAULT : 0  
 1: PCI\_REQ#3, PCI\_GNT#3 USED AS PCICLK  
 0: PCI\_REQ#3, PCI\_GNT#3 USED AS REQ/GNT

**CBE#3: PROD TEST**  
 DEFAULT : 1  
 0: SHORT TIMERS  
 1: NORMAL OPERATION

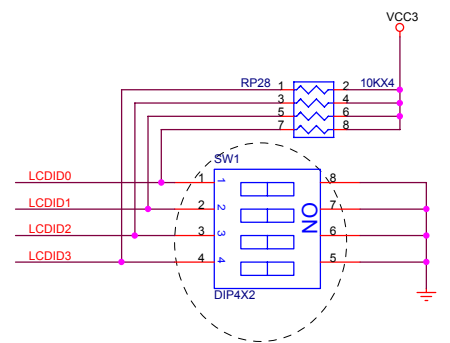
**CBE#0:RESERVE**



**AD[12] : FLAT PANEL ID MSB**

**AD[7..4] : FLAT PANEL ID**

**AD14 : AGTL+ VDDQ**  
 0: 1.2V MOBILE PART  
 1: 1.7V DESKTOP PART



**AD3: A\_LINK ENABLE**  
 DEFAULT: 0  
 0:PCI- 33MHz MULTI POINT CONNECTION  
 1: A\_LINK, POINT TO POINT INTERCONNECT

**AD2: AUTO CALIBRATION ENABLE**  
 DEFAULT:0  
 0: AUTO CALIBRATION ENABLE  
 1: AUTO CALIBRATION DISABLE

**AD1: FrcShortReset**  
 DEFAULT: 0  
 0: NORMAL OPERATION  
 1: TEST MODE

**AD0: PCI/AGP CONFIG.**  
 DEFAULT : 1  
 1: EXTERNAL AGP 66 Mhz  
 0: INTERNAL AGP 33 Mhz

**PCI\_PREQACT#: INTERNAL CLOCK GEN.**  
 DEFAULT : 1  
 0: DISABLE  
 1: ENABLE

The AD0 signal strapping pull high for external AGP .  
 The AD0 signal strapping pull low for internal AGP .



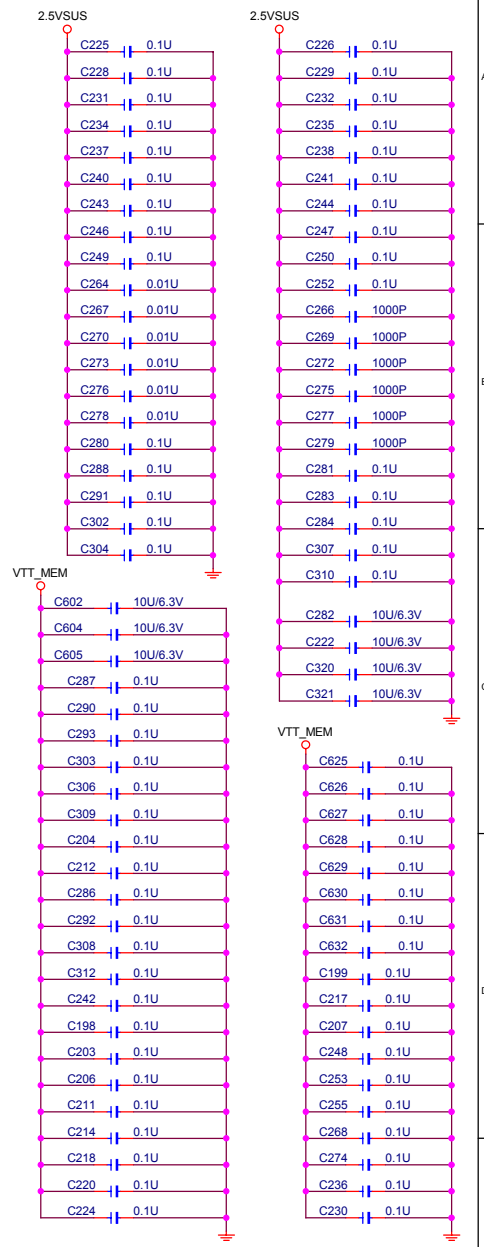
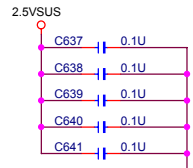
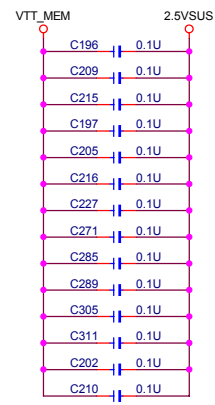
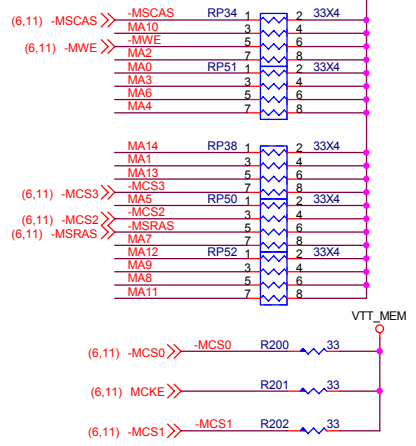
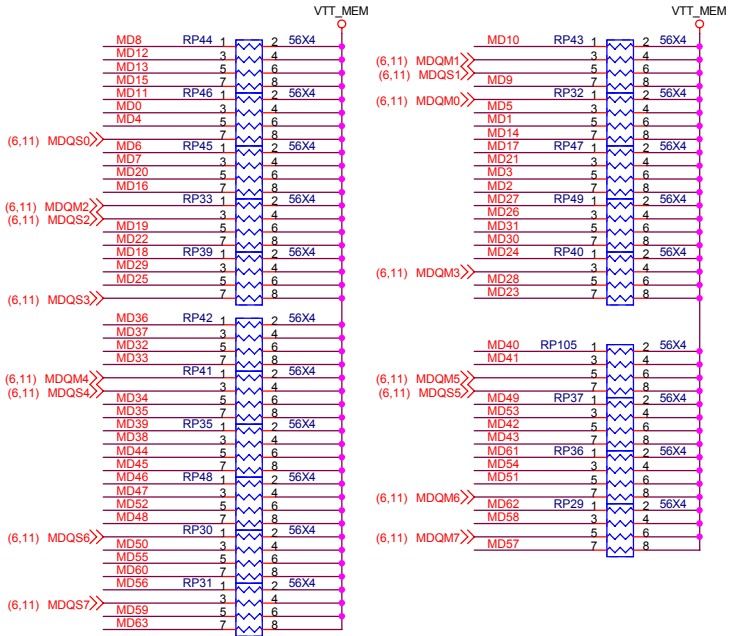
**QUANTA COMPUTER**

Title: **SYSTEM CONFIG**

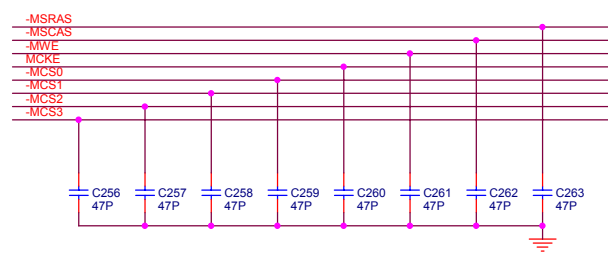
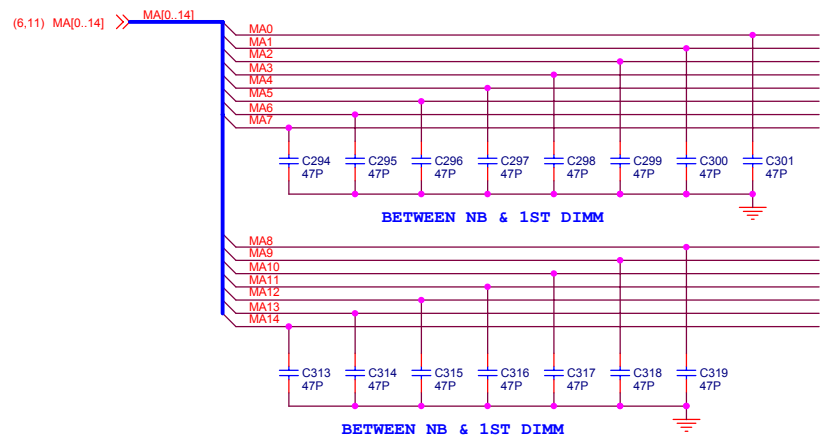
Size: B Document Number: **JE2.1 Main Board** Rev: 1A

Date: Monday, August 11, 2003 Sheet: 9 of 38

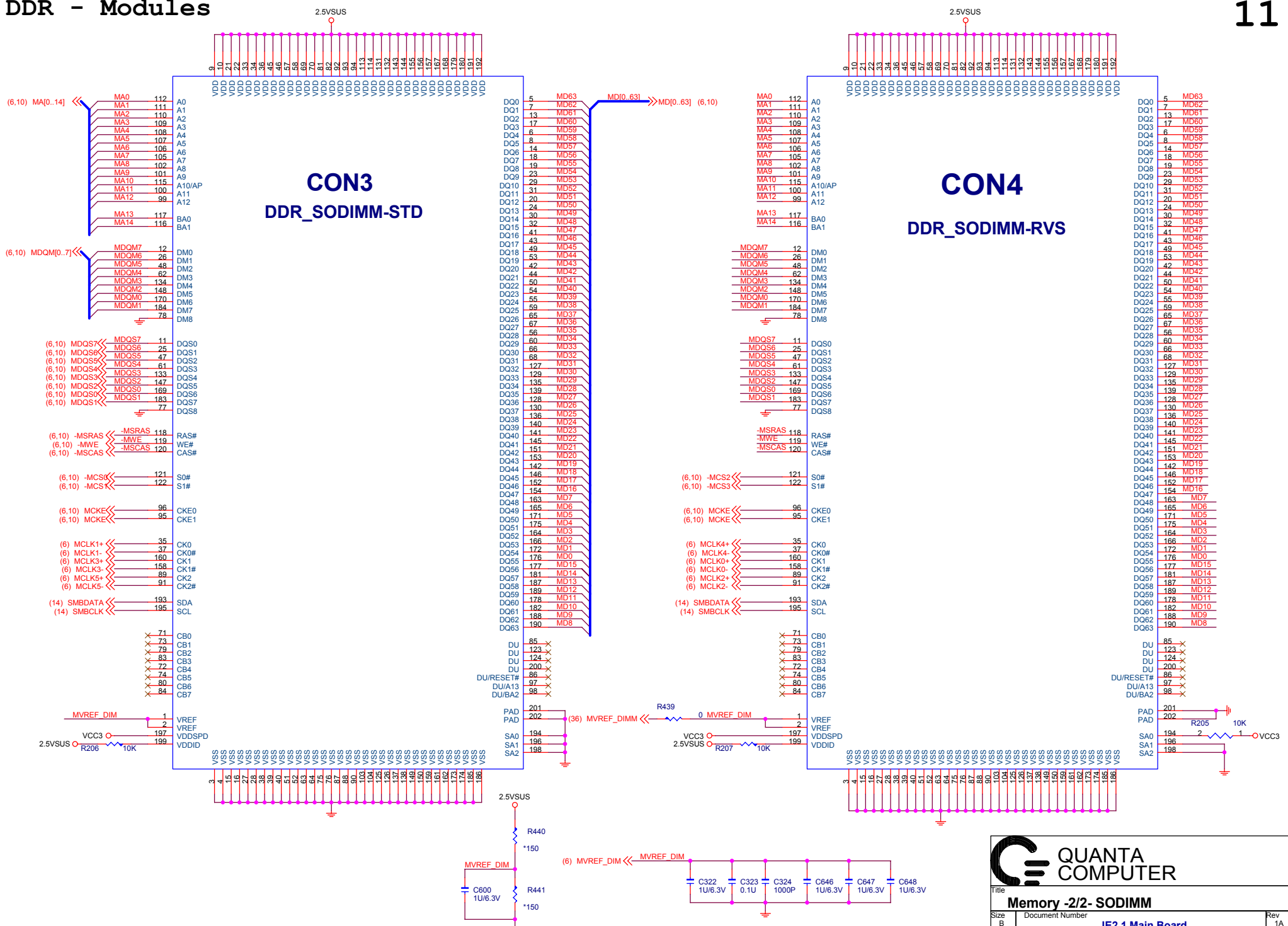
# DDR TERMINATOR

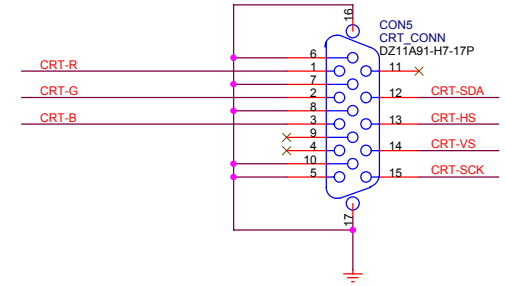
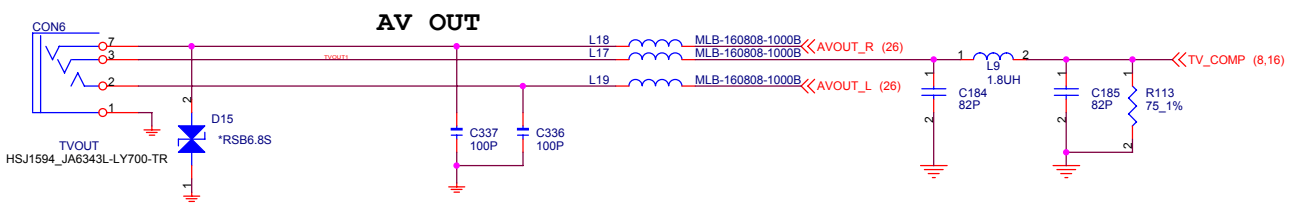
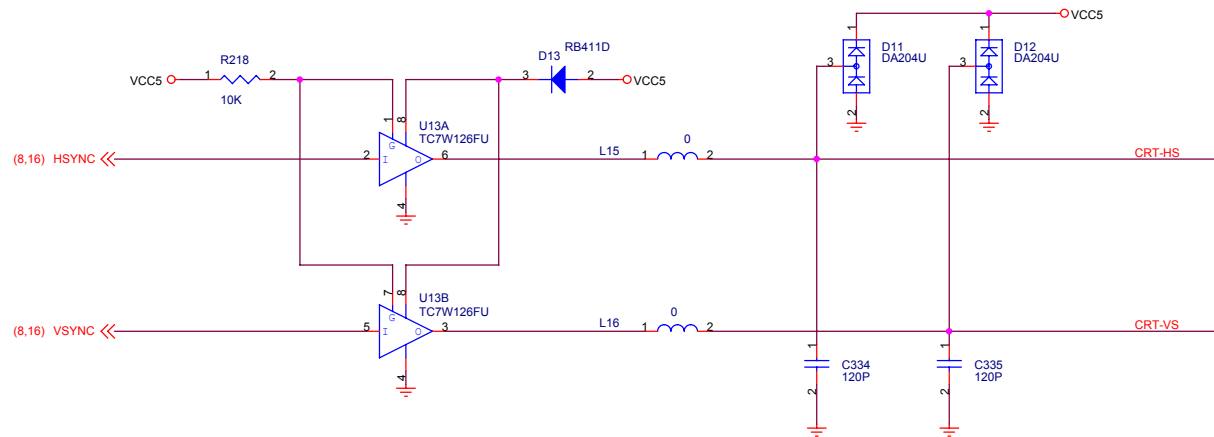
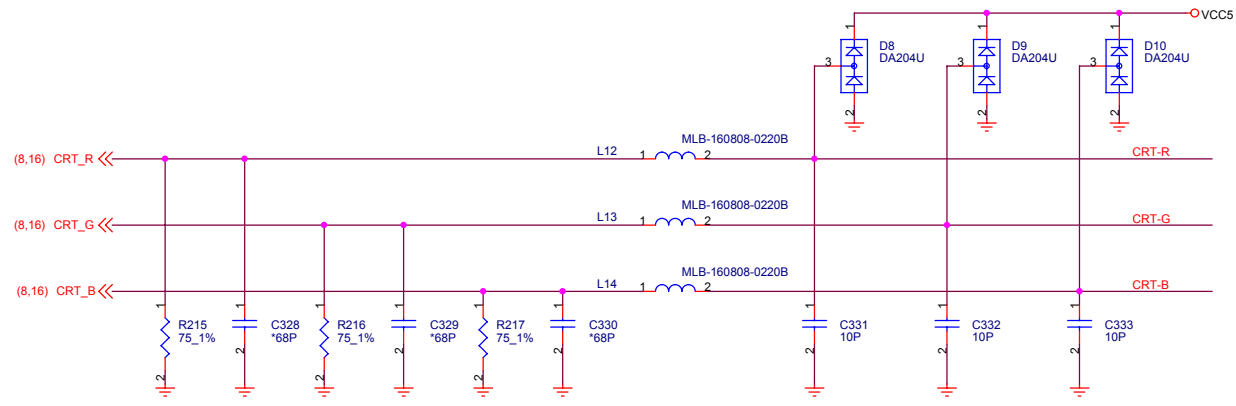
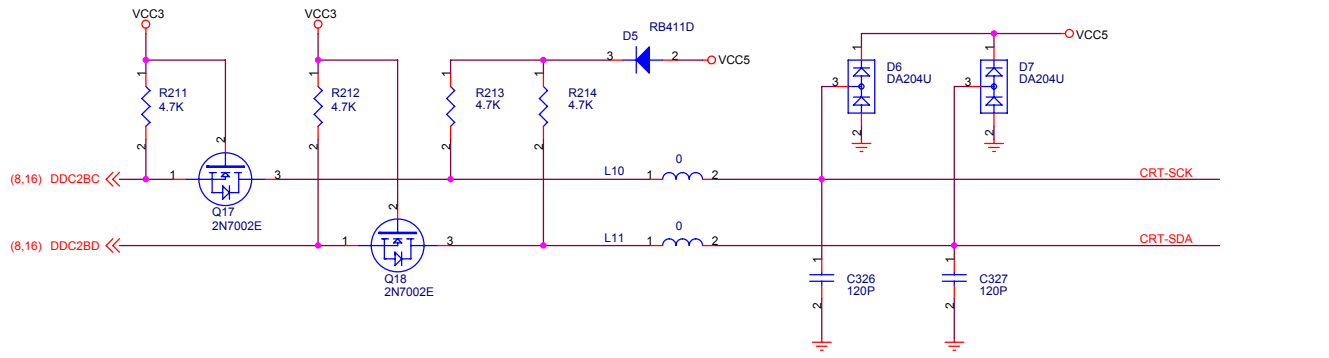


# MA Terminator



**QUANTA COMPUTER**  
Title: Memory -1/2- Terminator  
Size B Document Number JE2.1 Main Board Rev 1A  
Date: Monday, August 11, 2003 Sheet 10 of 38



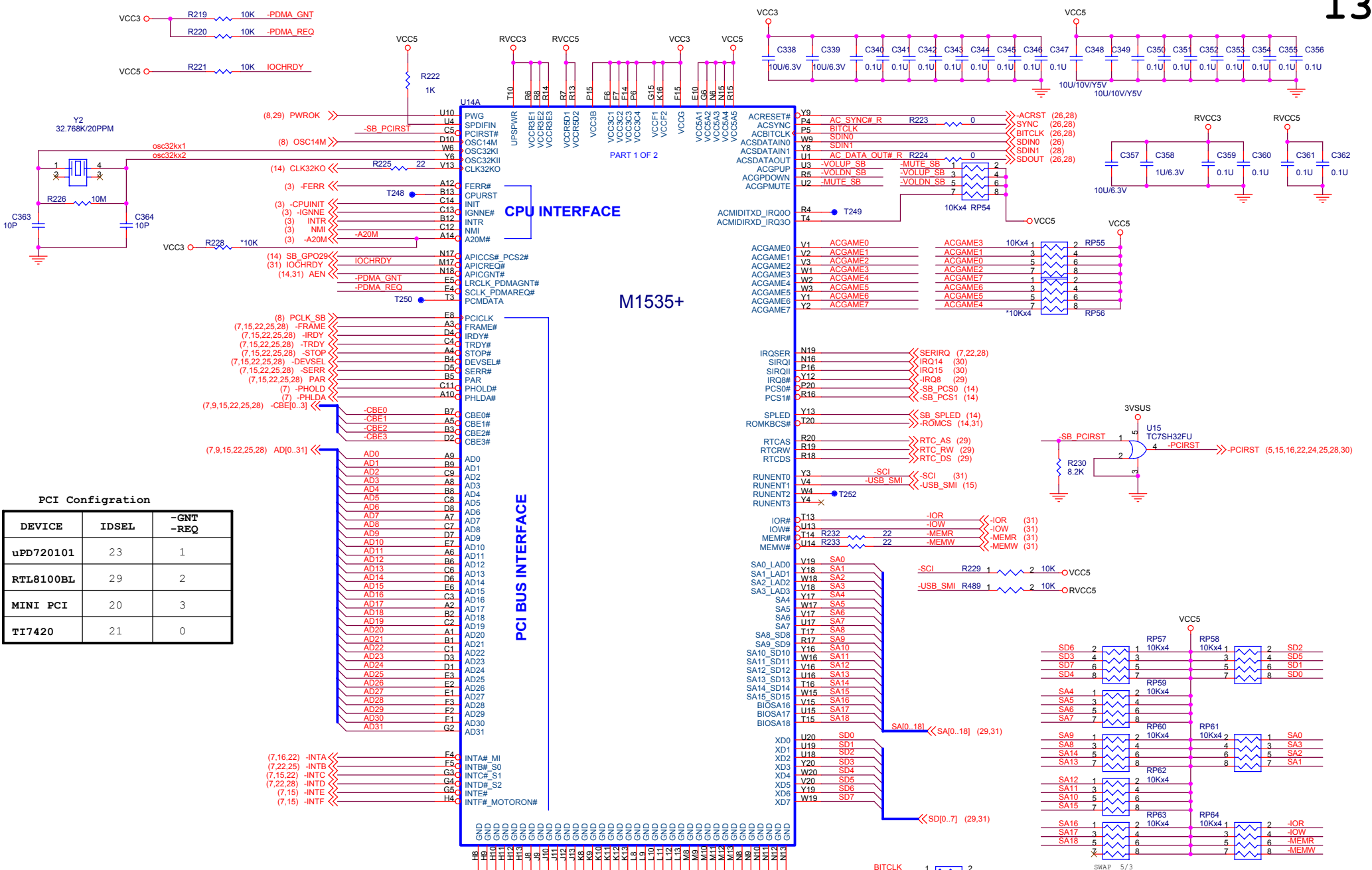


**QUANTA COMPUTER**

Title: **CRT PORT/TV**

Size B Document Number: **JE2.1 Main Board** Rev 1A

Date: Monday, August 11, 2003 Sheet 12 of 38



**PCI Configuration**

DEVICE	IDSEL	-GNT	-REQ
uPD720101	23	1	
RTL8100BL	29	2	
MINI PCI	20	3	
TI7420	21	0	

**QUANTA COMPUTER**

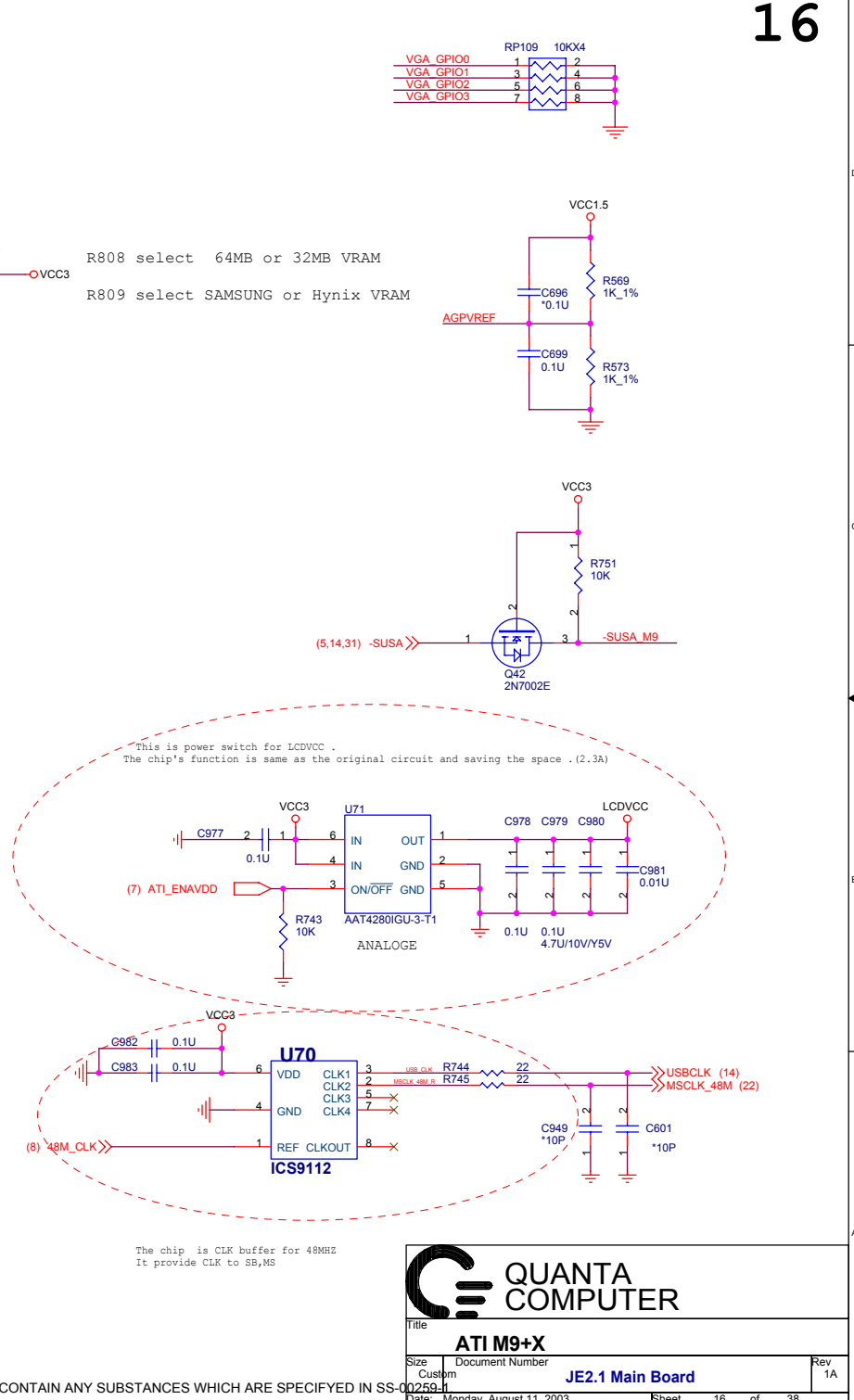
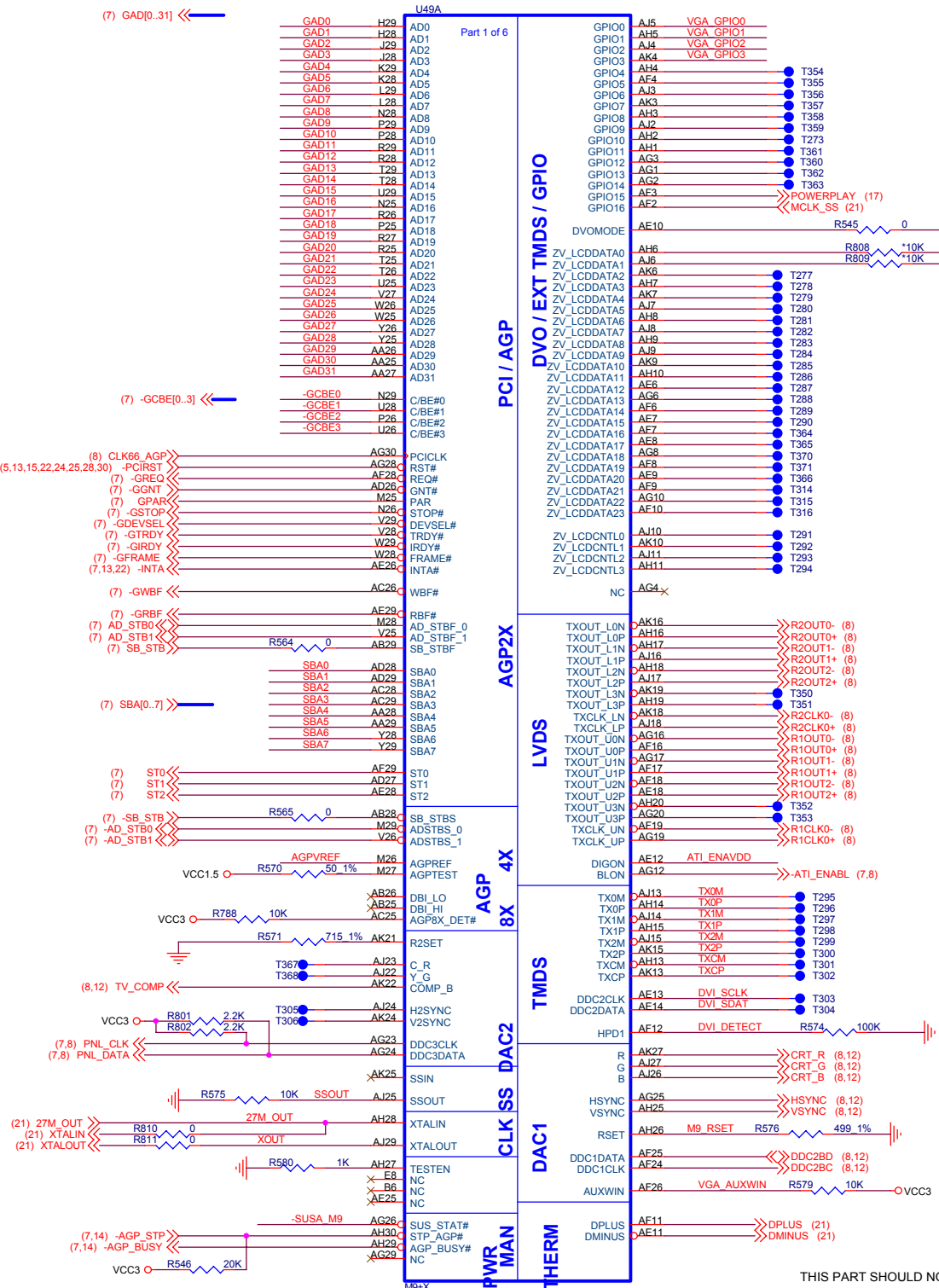
Title: **1535+ 2/2**

Size B Document Number **JE2.1 Main Board** Rev 1A

Date: Monday, August 11, 2003 Sheet 13 of 38







**QUANTA COMPUTER**

Title: **ATI M9+X**

Size: Custom Document Number: **JE2.1 Main Board**

Date: Monday, August 11, 2003

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U498

VMDA0	L25	DOA0	MAA0	E22	VMAA0
VMDA1	L26	DOA1	MAA1	B22	VMAA1
VMDA2	K25	DOA2	MAA2	B23	VMAA2
VMDA3	K26	DOA3	MAA3	B24	VMAA3
VMDA4	J26	DOA4	MAA4	C23	VMAA4
VMDA5	H25	DOA5	MAA5	C22	VMAA5
VMDA6	H26	DOA6	MAA6	F22	VMAA6
VMDA7	G26	DOA7	MAA7	F21	VMAA7
VMDA8	G30	DOA8	MAA8	E21	VMAA8
VMDA9	D29	DOA9	MAA9	A24	VMAA9
VMDA10	D28	DOA10	MAA10	C24	VMAA10
VMDA11	E28	DOA11	MAA11	A25	VMAA11
VMDA12	E29	DOA12	MAA12	B20	VMAA12
VMDA13	G29	DOA13	MAA13	E21	VMAA13
VMDA14	G28	DOA14	MAA13	C19	X
VMDA15	F28	DOA15	NC		
VMDA16	G25	DOA16	DQMA#0	J25	VDQMA0
VMDA17	F26	DOA17	DQMA#1	E29	VDQMA1
VMDA18	E26	DOA18	DQMA#2	F25	VDQMA2
VMDA19	F25	DOA19	DQMA#3	A27	VDQMA3
VMDA20	E24	DOA20	DQMA#4	E15	VDQMA4
VMDA21	F23	DOA21	DQMA#5	C15	VDQMA5
VMDA22	E23	DOA22	DQMA#6	C11	VDQMA6
VMDA23	D22	DOA23	DQMA#7	E11	VDQMA7
VMDA24	B29	DOA24	QSA0	J27	VDQSA0
VMDA25	C29	DOA25	QSA1	F30	VDQSA1
VMDA26	C25	DOA26	QSA2	F24	VDQSA2
VMDA27	C27	DOA27	QSA3	B27	VDQSA3
VMDA28	B28	DOA28	QSA4	E16	VDQSA4
VMDA29	B25	DOA29	QSA4	B16	VDQSA5
VMDA30	C26	DOA30	QSA5	F11	VDQSA6
VMDA31	B26	DOA31	QSA6	B10	VDQSA7
VMDA32	F17	DOA32	RASA#	A19	VRASA# (19)
VMDA33	E17	DOA33	CASA#	E18	VCASA# (19)
VMDA34	D16	DOA34	WEA#	E19	VWEA# (19)
VMDA35	F16	DOA35	CSA0#	E20	VCSA0# (19)
VMDA36	E15	DOA36	CSA1#	F20	X
VMDA37	F14	DOA37	CSEA#	B19	VCKEA (19)
VMDA38	E14	DOA38	CLKA0	B21	VRAMCLKA0 (19)
VMDA39	F13	DOA39	CLKA0#	C20	VRAMCLKA0# (19)
VMDA40	C17	DOA40	CLKA1	C18	VRAMCLKA1 (19)
VMDA41	B16	DOA41	CLKA1#	A18	VRAMCLKA1# (19)
VMDA42	B17	DOA42	MVREFD	B7	VDDR VREF
VMDA43	B15	DOA43	NC	B8	X
VMDA44	C13	DOA44	DIMA_0	D30	X
VMDA45	B14	DOA45	DIMA_1	B13	X
VMDA46	C14	DOA46			
VMDA47	C16	DOA47			
VMDA48	A13	DOA48			
VMDA49	A12	DOA49			
VMDA50	C12	DOA50			
VMDA51	B12	DOA51			
VMDA52	C10	DOA52			
VMDA53	C9	DOA53			
VMDA54	B9	DOA54			
VMDA55	B10	DOA55			
VMDA56	E13	DOA56			
VMDA57	E12	DOA57			
VMDA58	E10	DOA58			
VMDA59	F12	DOA59			
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VMDA61	E9	DOA61			
VMDA62	F9	DOA62			
VMDA63	F8	DOA63			

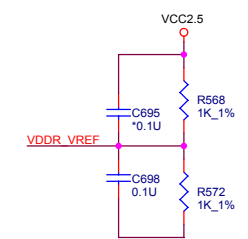
MEMORY INTERFACE A

U49C

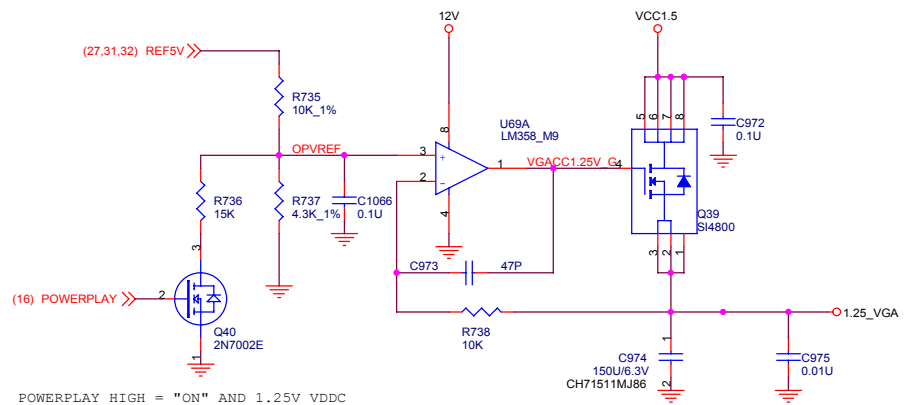
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VMDB2	E7	DOB2	MAB2	M3	VMAB2
VMDB3	G6	DOB3	MAB3	L3	VMAB3
VMDB4	G5	DOB4	MAB4	L2	VMAB4
VMDB5	F5	DOB5	MAB5	M2	VMAB5
VMDB6	E5	DOB6	MAB6	M5	VMAB6
VMDB7	C4	DOB7	MAB7	P6	VMAB7
VMDB8	B5	DOB8	MAB8	N3	VMAB8
VMDB9	C5	DOB9	MAB9	K2	VMAB9
VMDB10	A4	DOB10	MAB10	K3	VMAB10
VMDB11	B20	DOB11	MAB11	J2	VMAB11
VMDB12	C2	DOB12	MAB12	P3	VMAB12
VMDB13	D3	DOB13	MAB13	P5	VMAB13
VMDB14	D1	DOB14	NC	P2	X
VMDB15	D2	DOB15	DOMB#0	E6	VDQMB0
VMDB16	G4	DOB16	DOMB#1	B2	VDQMB1
VMDB17	H6	DOB17	DOMB#2	J5	VDQMB2
VMDB18	H5	DOB18	DOMB#3	G3	VDQMB3
VMDB19	J6	DOB19	DOMB#4	W6	VDQMB4
VMDB20	K5	DOB20	DOMB#5	W2	VDQMB5
VMDB21	K4	DOB21	DOMB#6	AC6	VDQMB6
VMDB22	L6	DOB22	DOMB#7	AD2	VDQMB7
VMDB23	L5	DOB23	QSB0	F6	VDQSB0
VMDB24	G2	DOB24	QSB1	B3	VDQSB1
VMDB25	F3	DOB25	QSB2	K6	VDQSB2
VMDB26	H2	DOB26	QSB3	G1	VDQSB3
VMDB27	E2	DOB27	QSB4	V5	VDQSB4
VMDB28	F2	DOB28	QSB5	W1	VDQSB5
VMDB29	J3	DOB29	QSB6	AC5	VDQSB6
VMDB30	F1	DOB30	QSB7	AD1	VDQSB7
VMDB31	H3	DOB31	RASB#	R2	VRASB# (20)
VMDB32	U6	DOB32	CASB#	T5	VCASB# (20)
VMDB33	U5	DOB33	WEB#	T6	VWEB# (20)
VMDB34	U5	DOB34	CSB0#	R5	VCSB0# (20)
VMDB35	V6	DOB35	CSB1#	R6	X
VMDB36	W5	DOB36	CKEB	R3	VCKEB (20)
VMDB37	W4	DOB37	CLKB0	N1	VRAMCLKB0 (20)
VMDB38	Y6	DOB38	CLKB0#	N2	VRAMCLKB0# (20)
VMDB39	Y5	DOB39	CLKB1	T2	VRAMCLKB1 (20)
VMDB40	U2	DOB40	CLKB1#	T3	VRAMCLKB1# (20)
VMDB41	V2	DOB41	DIMB_0	E3	X
VMDB42	V1	DOB42	DIMB_1	AA3	X
VMDB43	V3	DOB43	ROMCS#	AF5	X
VMDB44	W3	DOB44	MEMVMODE_0	C6	VGA MEM0
VMDB45	Y2	DOB45	MEMVMODE_1	C7	VGA MEM1
VMDB46	Y3	DOB46	MEMTEST	C8	MEMTEST
VMDB47	AA2	DOB47			
VMDB48	AA6	DOB48			
VMDB49	AA5	DOB49			
VMDB50	AB6	DOB50			
VMDB51	AB5	DOB51			
VMDB52	AD6	DOB52			
VMDB53	AD5	DOB53			
VMDB54	AE5	DOB54			
VMDB55	AE4	DOB55			
VMDB56	AE2	DOB56			
VMDB57	AB3	DOB57			
VMDB58	AC2	DOB58			
VMDB59	AC3	DOB59			
VMDB60	AD3	DOB60			
VMDB61	AE1	DOB61			
VMDB62	AE2	DOB62			
VMDB63	AE3	DOB63			

MEMORY INTERFACE B

- VMDB[0..63] (19)
- VMAA[0..13] (19)
- VDQMA[0..7] (19)
- VDQSA[0..7] (19)
- VMAB[0..63] (20)
- VMAB[0..13] (20)
- VDQMB[0..7] (20)
- VDQSB[0..7] (20)



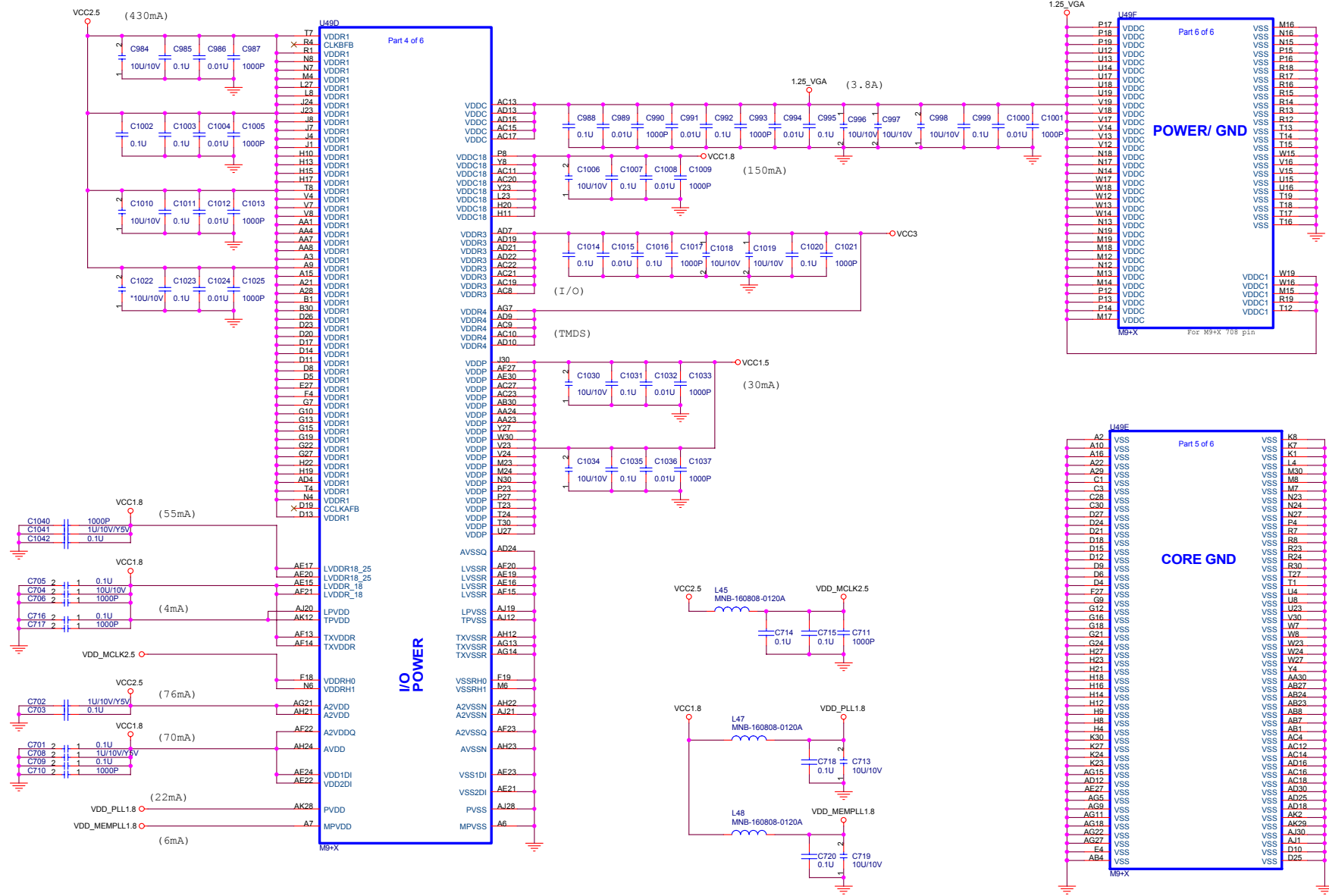
MEMORY IO VOLTAGE = 2.5V



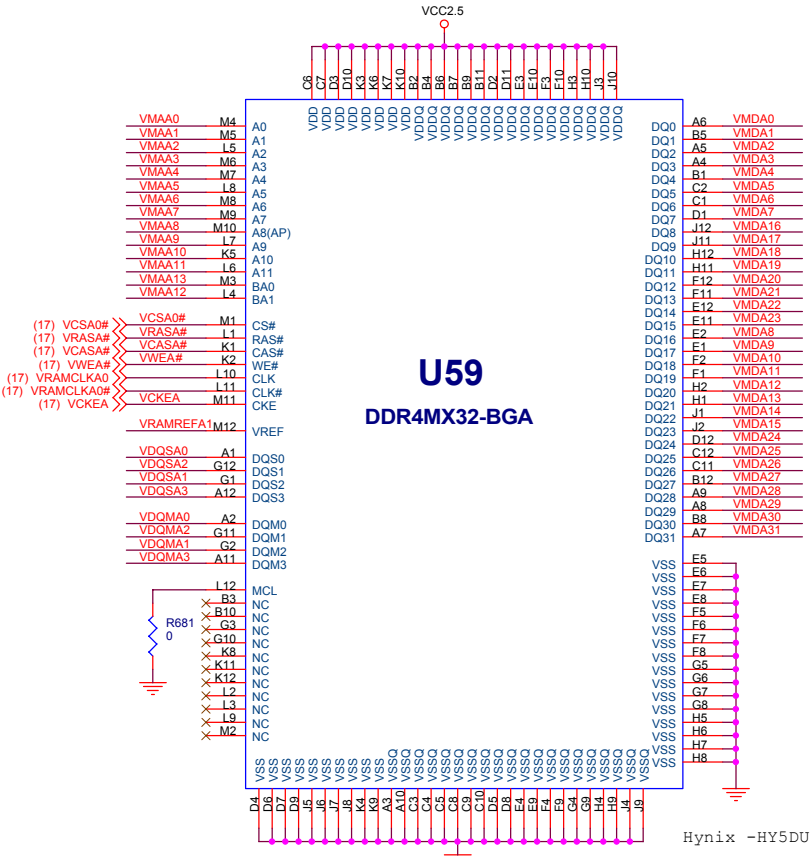
POWERPLAY HIGH = "ON" AND 1.25V VDDC  
 POWERPLAY LOW = "OFF" AND 1.5V VDDC



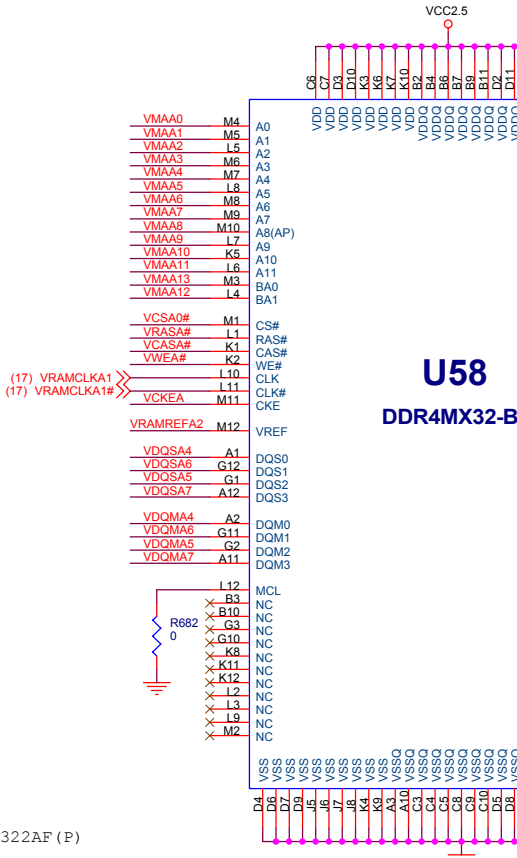
File		ATI M9+X	
Size	Document Number	Sheet	Rev
Custpm	JE2.1 Main Board	17	1A
Date	Monday, August 11, 2003	Sheet	of
		1	38



THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFIED IN SS-00259-1.

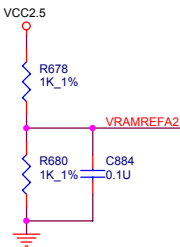
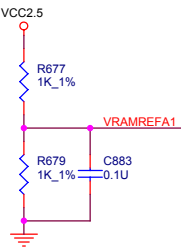
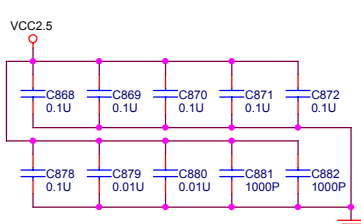
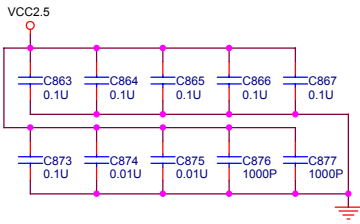


**U59**  
DDR4MX32-BGA



**U58**  
DDR4MX32-BGA

VMDA[0..63] (17)  
 VMAA[0..13] (17)  
 VDMA[0..7] (17)  
 VDQSA[0..7] (17)



Hynix -HY5DU28322AF (P)

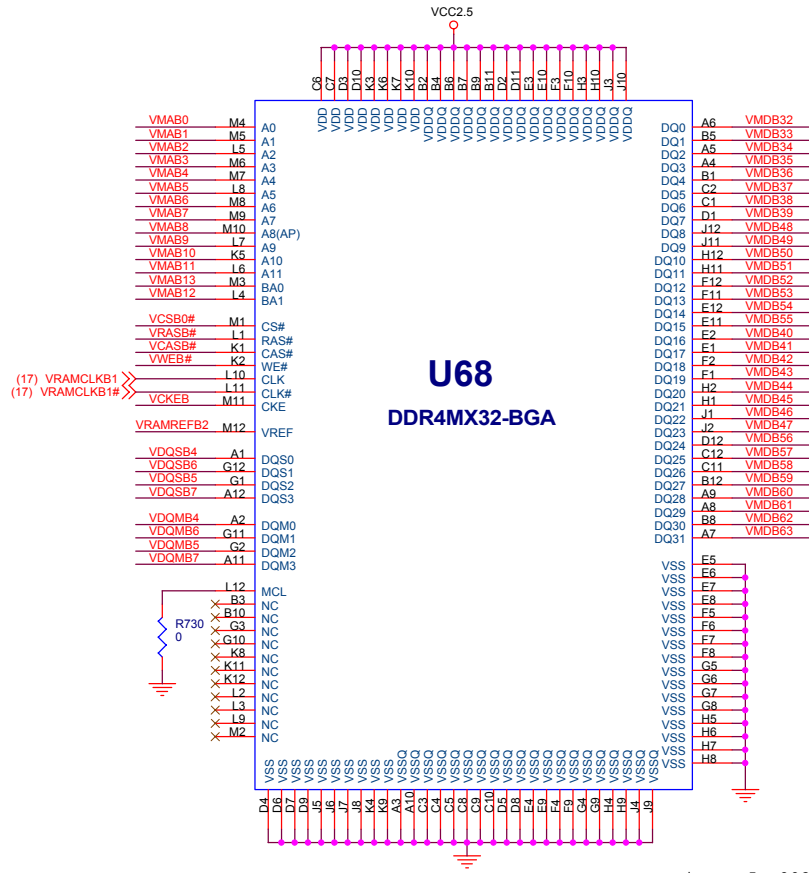
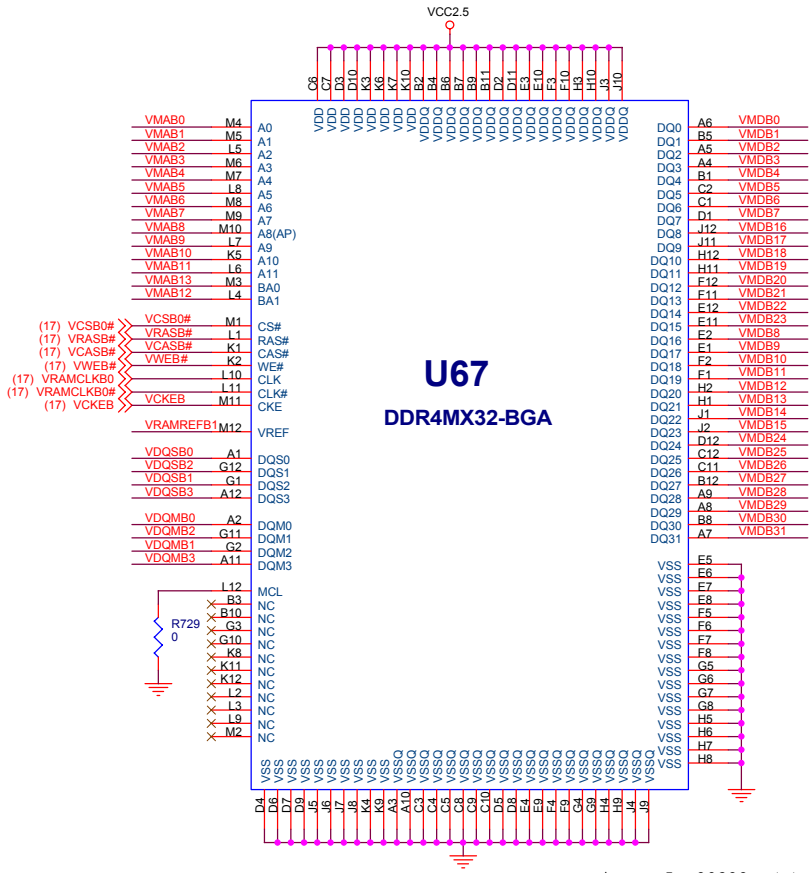
Hynix -HY5DU28322AF (P)

**QUANTA COMPUTER**

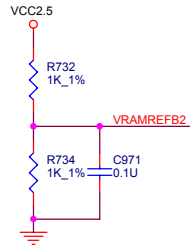
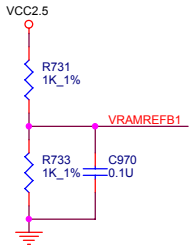
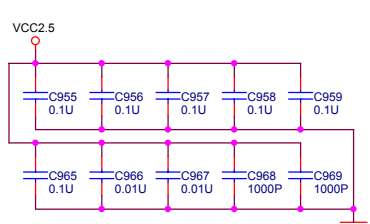
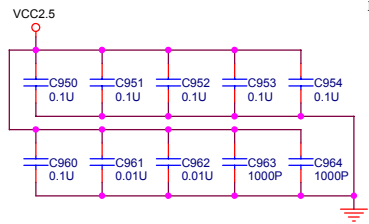
Title: **VGA DDR VRAMx2 1/2**

Size: Custom Document Number: **JE2.1 Main Board** Rev 1A

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<<VMDB[0..63] (17)  
 <<VMAB[0..13] (17)  
 <<VDQMB[0..7] (17)  
 <<VDQSB[0..7] (17)



THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFIED IN SS-00259-1

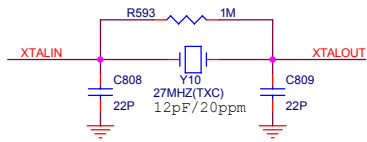
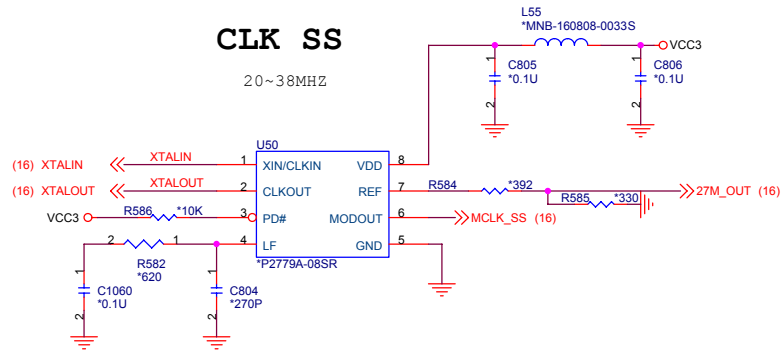
**QUANTA COMPUTER**

Title: **VGA DDR VRAMx2 2/2**

Size	Document Number	Rev
Custom	<b>JE2.1 Main Board</b>	1A

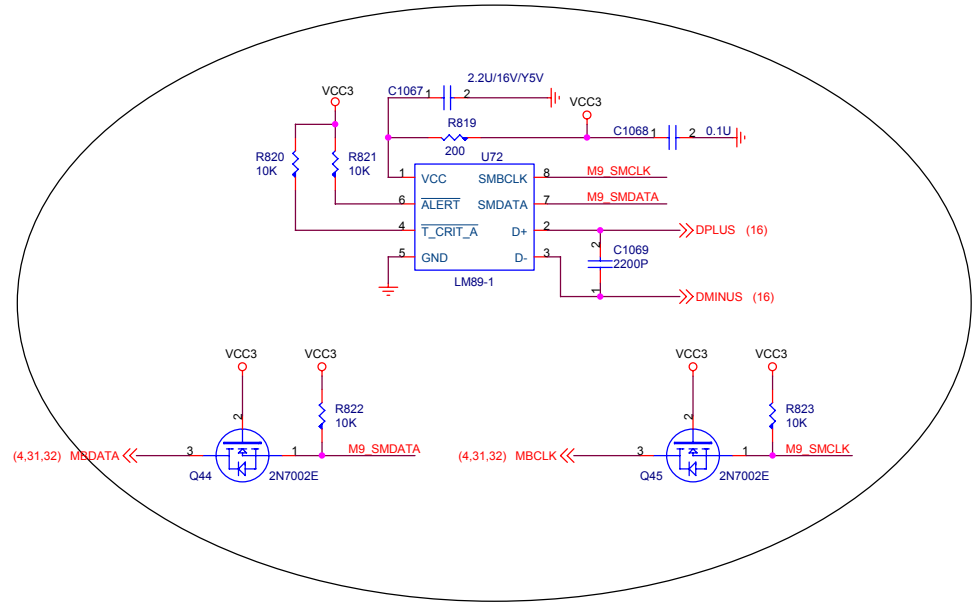
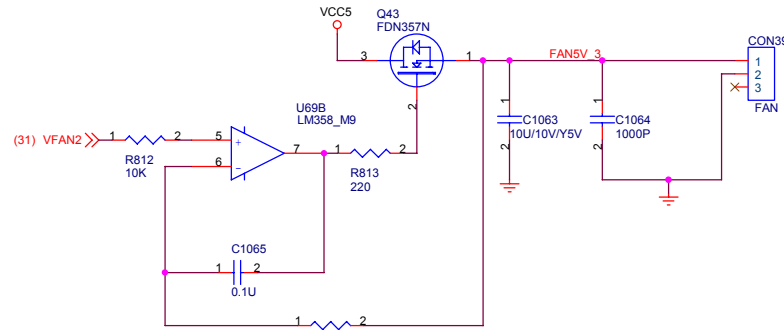
Date: Monday, August 11, 2003 Sheet 20 of 38

MCLK (230MHZ) SPREAD SPECTRUM LOGIC

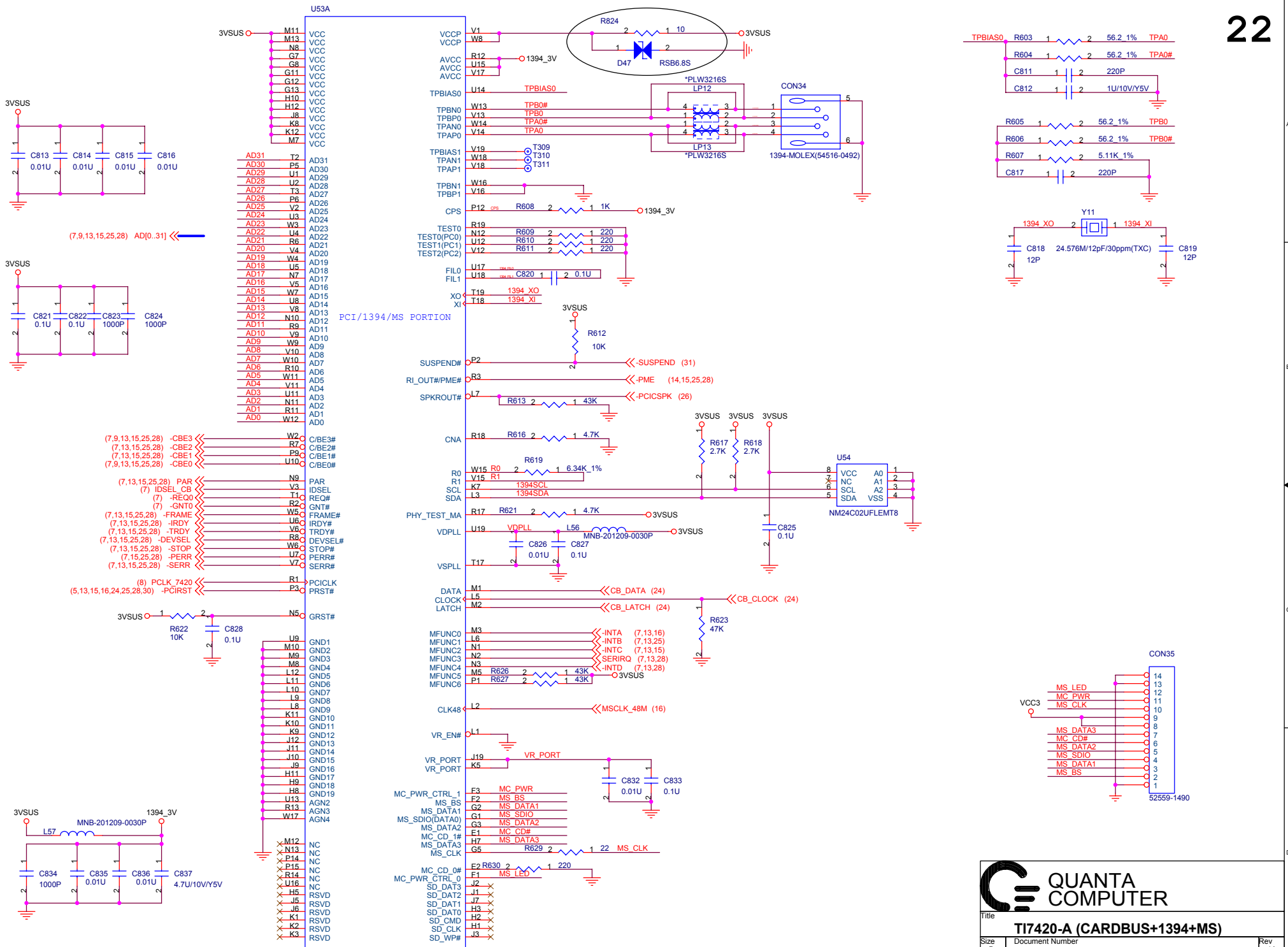


close to M9

FAN3 UNIT



Title		AGP SSC / FAN3	
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Custom		Date: Monday, August 11, 2003	Sheet 21 of 38
			Rev 1A



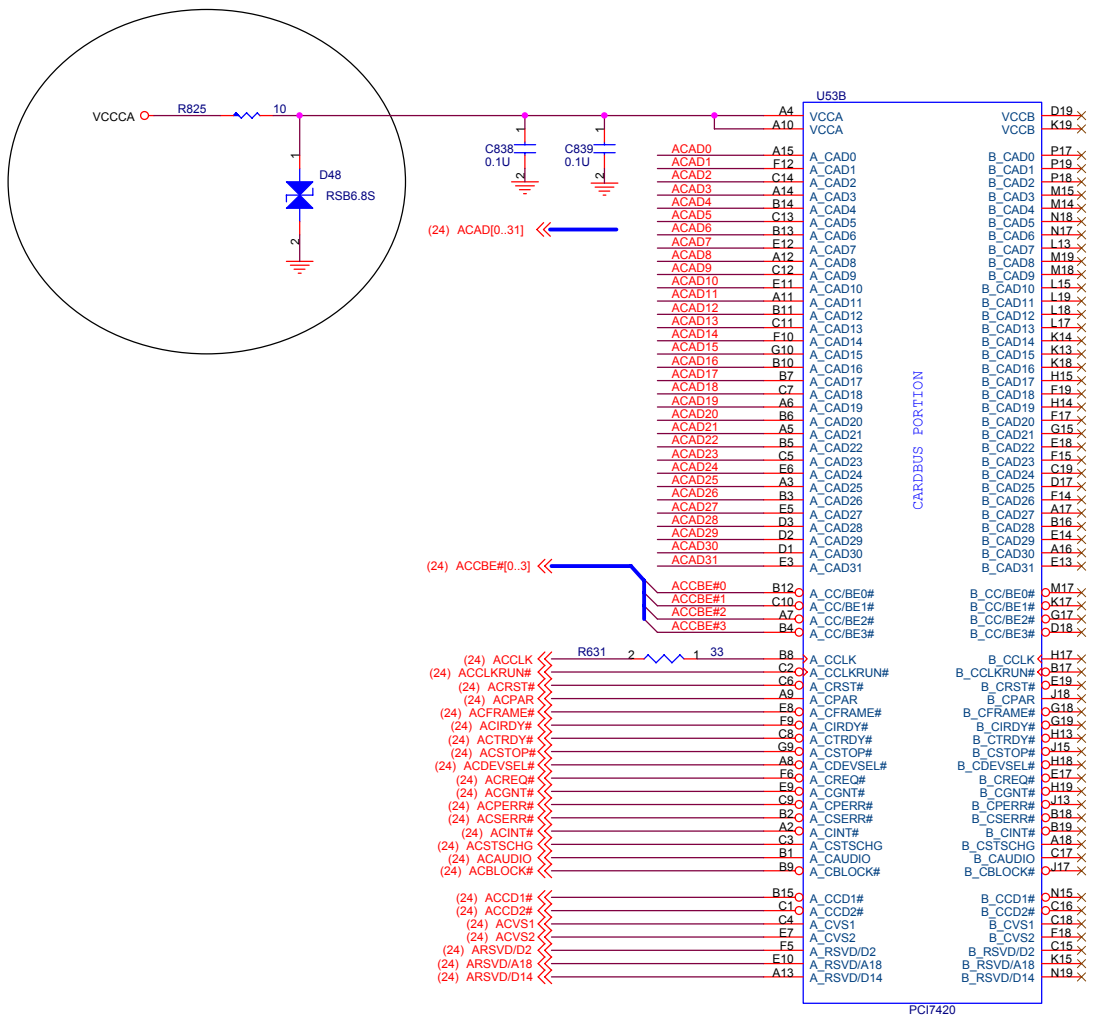
**QUANTA COMPUTER**

Title: **TI7420-A (CARBUS+1394+MS)**

Size B Document Number **JE2.1 Main Board** Rev 1A

Date: Monday, August 11, 2003 Sheet 22 of 38

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFIED IN SS-00259-1



**QUANTA COMPUTER**

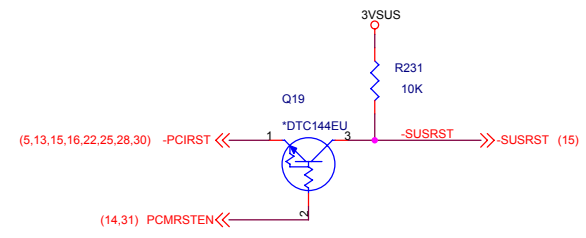
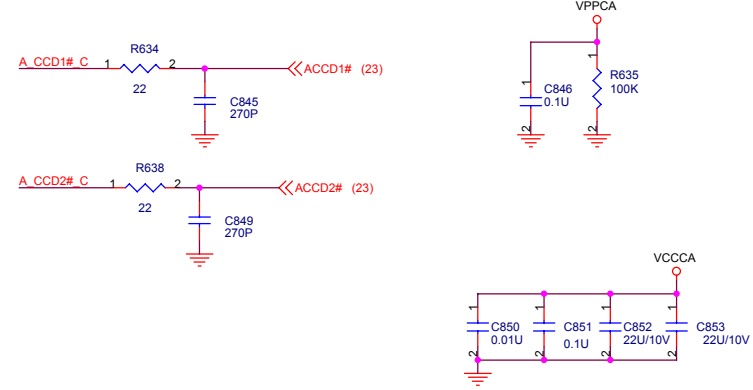
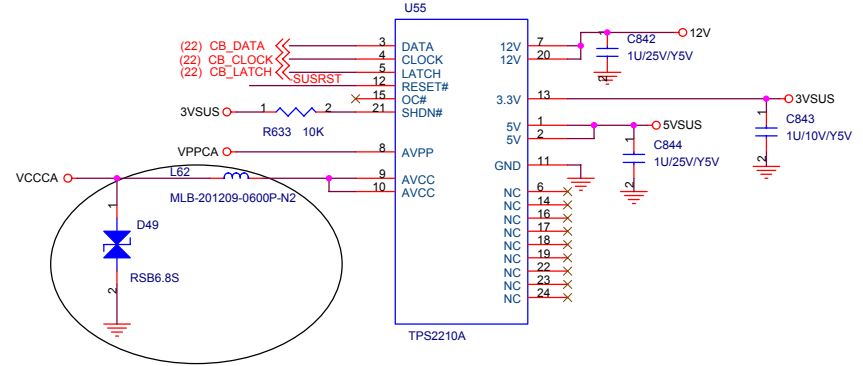
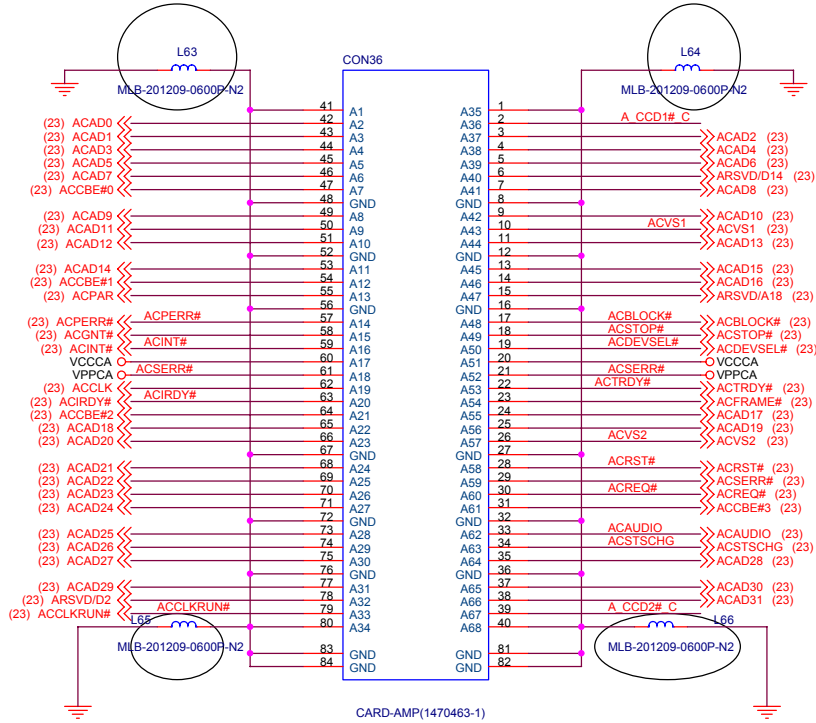
Title: **TI7420-A (CARBUS+1394+MS)**

Size: Custom	Document Number: <b>JE2.1 Main Board</b>	Rev: 1A
Date: Monday, August 11, 2003		Sheet: 23 of 38

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFIED IN SS-00259-1

CardBus power switch chip

(23) ACAD[0..31] << <<  
(23) ACCBE#[0..3] << <<



**QUANTA COMPUTER**

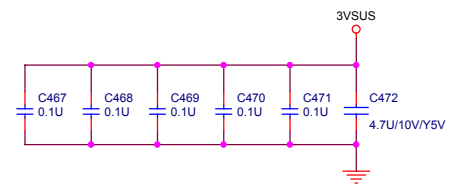
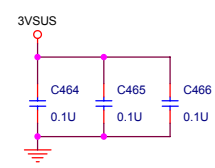
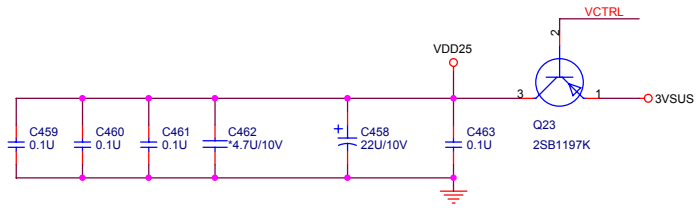
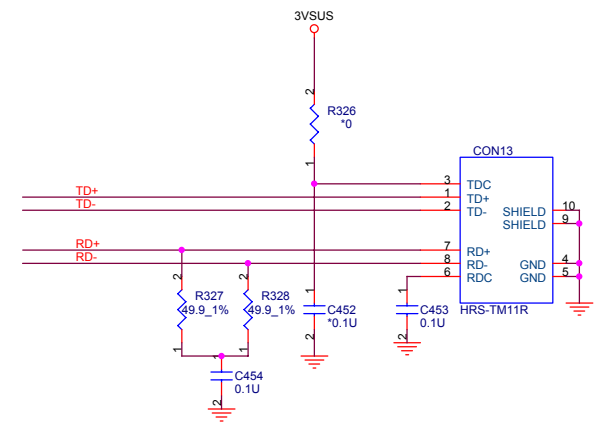
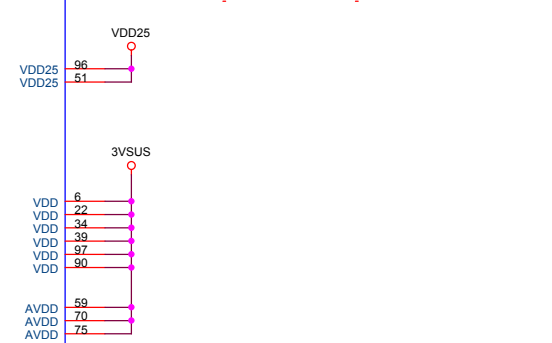
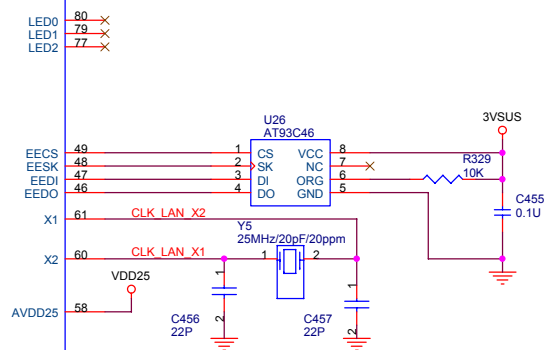
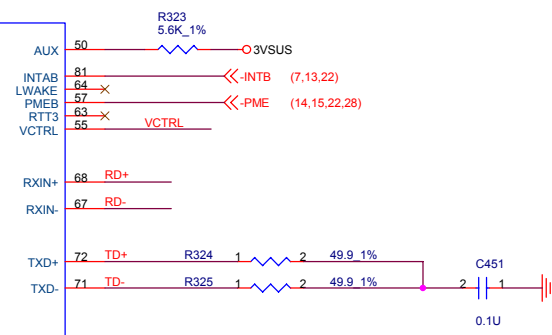
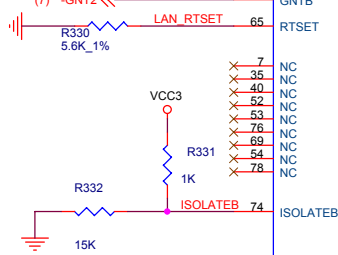
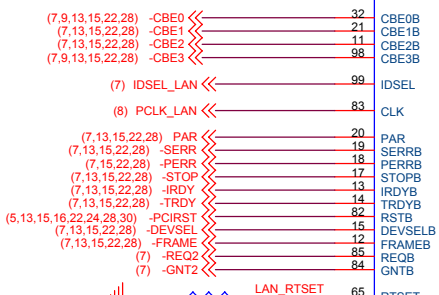
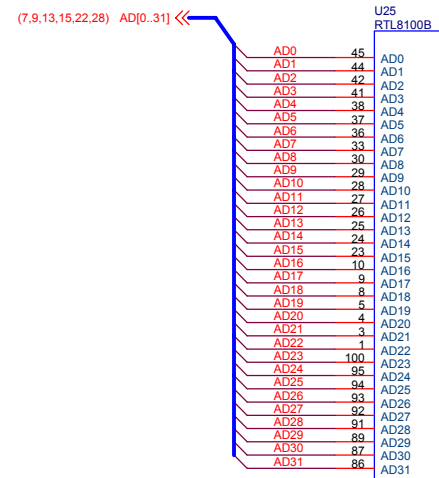
Title: **CARDBUS SLOT**

Size B Document Number: **JE2.1 Main Board** Rev 1A

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THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFIED IN SS-00259-1

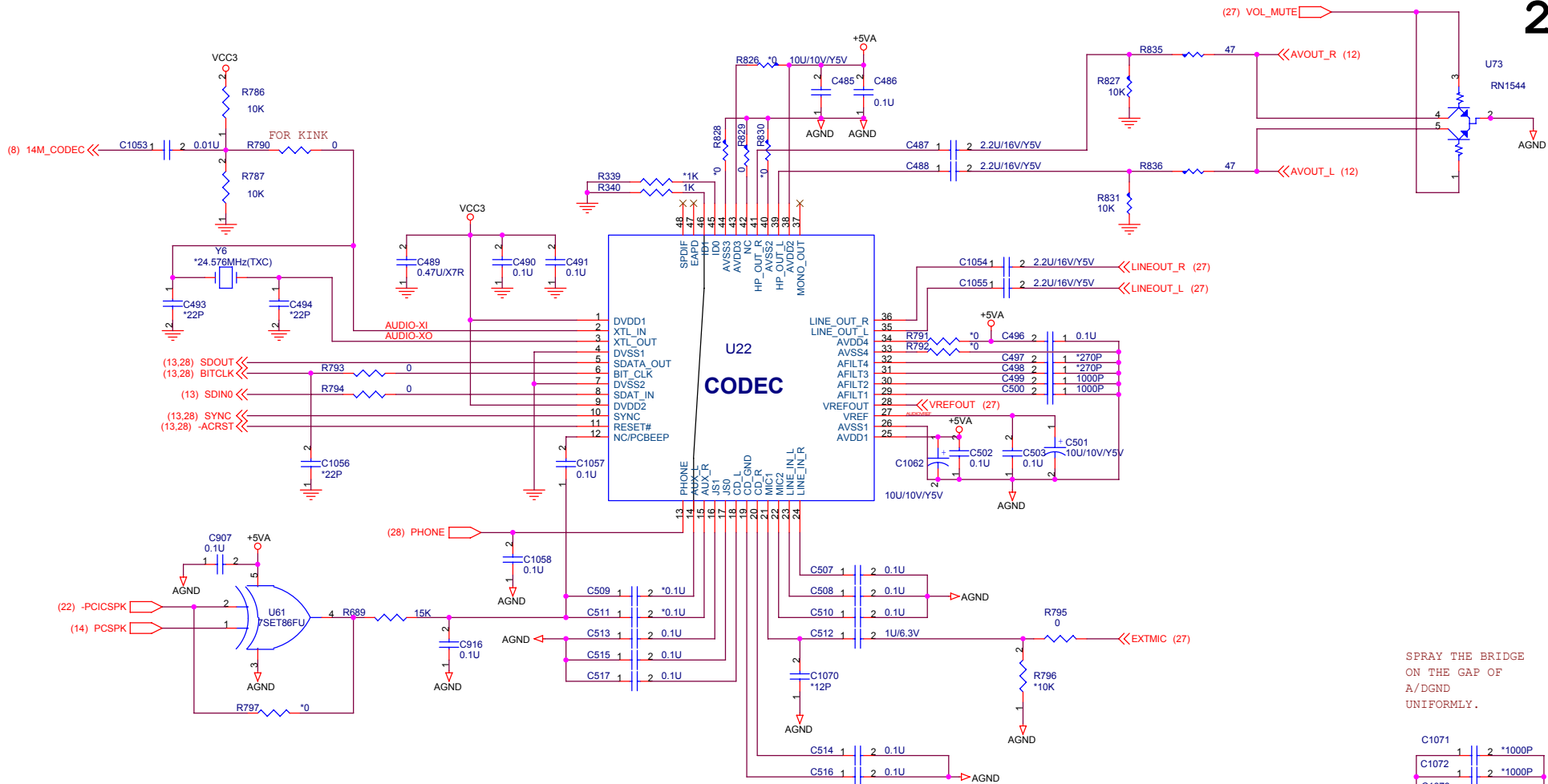




**QUANTA COMPUTER**

Title: **RTL8100BL PCI LAN**

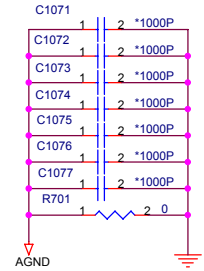
Size B Document Number **JE2.1 Main Board** Rev 1A



- 1) U61,U28,Q38,L60 AND U62 PLACE ON THE GAP OF A/DGND.
- 2) ANALOG INPUT CAPACITORS CAN BE DELETED WHEN NO USE AFTER EVT.
- 3) AD1981B => MOUNT C509,C511,R791,R792; REMOVE C1057; C499,C500,C497,C498=270PF.
- 4) ALC203 => MOUNT C1057; REMOVE C509,C511,R791,R792; C499,C500=1000PF.

$V_{out} = V_{set}(1 + R(4.5)/R(5.gnd))$   
 $V_{set} = 1.25V$   
 $V_{out} = 1.25(1 + 27K/10K) = 4.625V$   
 $V_{out} = 1.25(1 + 29.4K/10K) = 4.925V$

SPRAY THE BRIDGE ON THE GAP OF A/DGND UNIFORMLY.



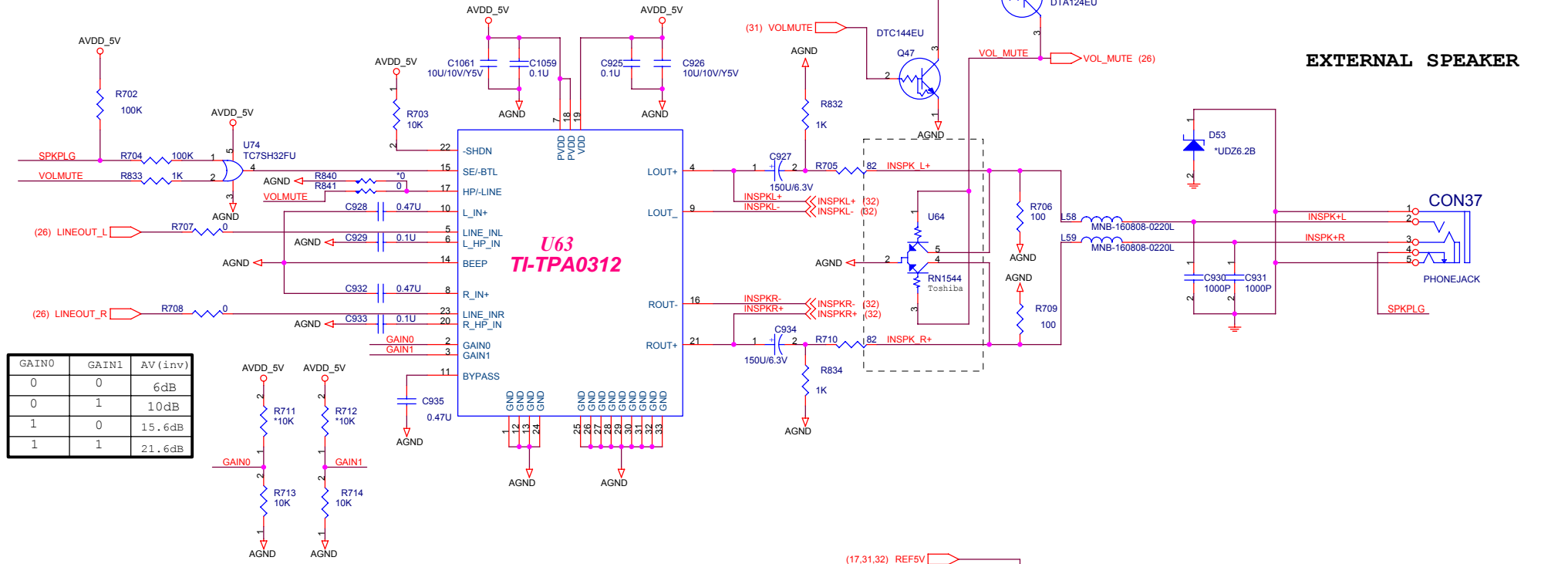
**QUANTA COMPUTER**

Title: **Audio ALC203**

Size B | Document Number: **JE2.1 Main Board** | Rev 1A

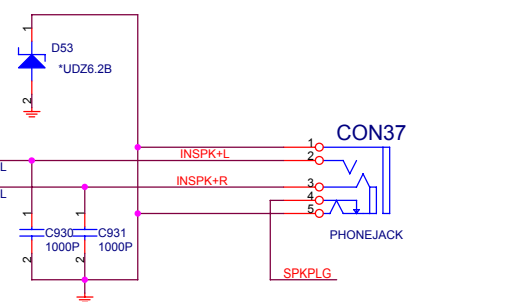
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# Audio amplifier

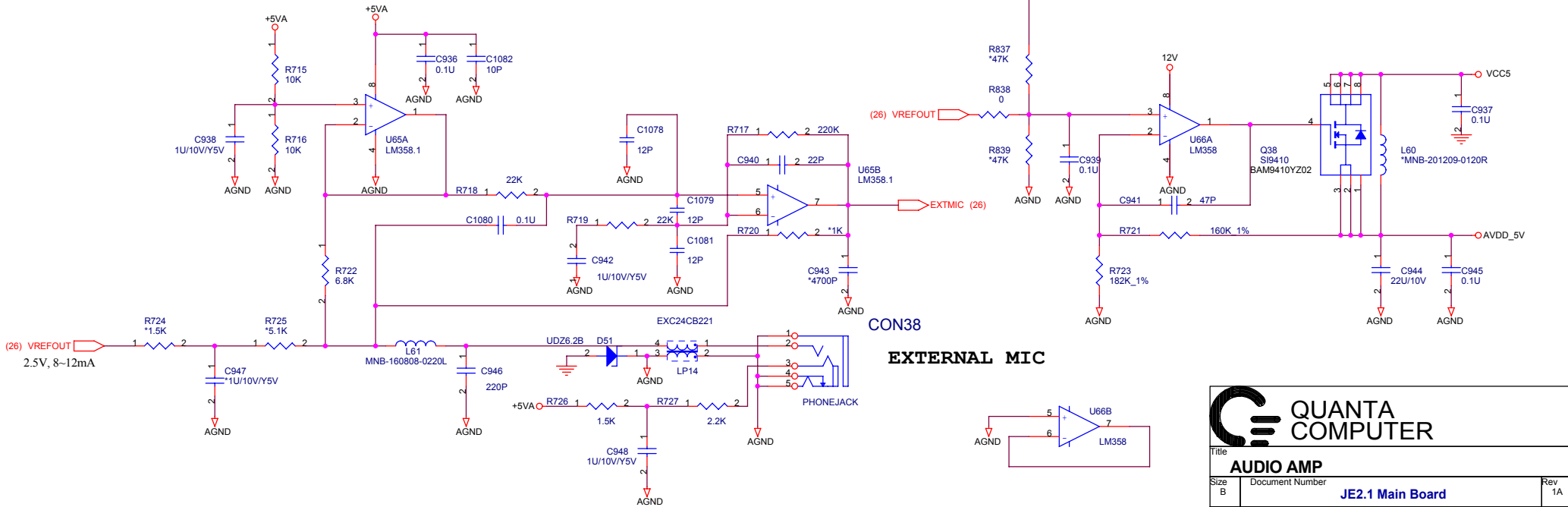


GAIN0	GAIN1	AV (inv)
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB

## EXTERNAL SPEAKER



## EXTERNAL MIC



**QUANTA  
COMPUTER**

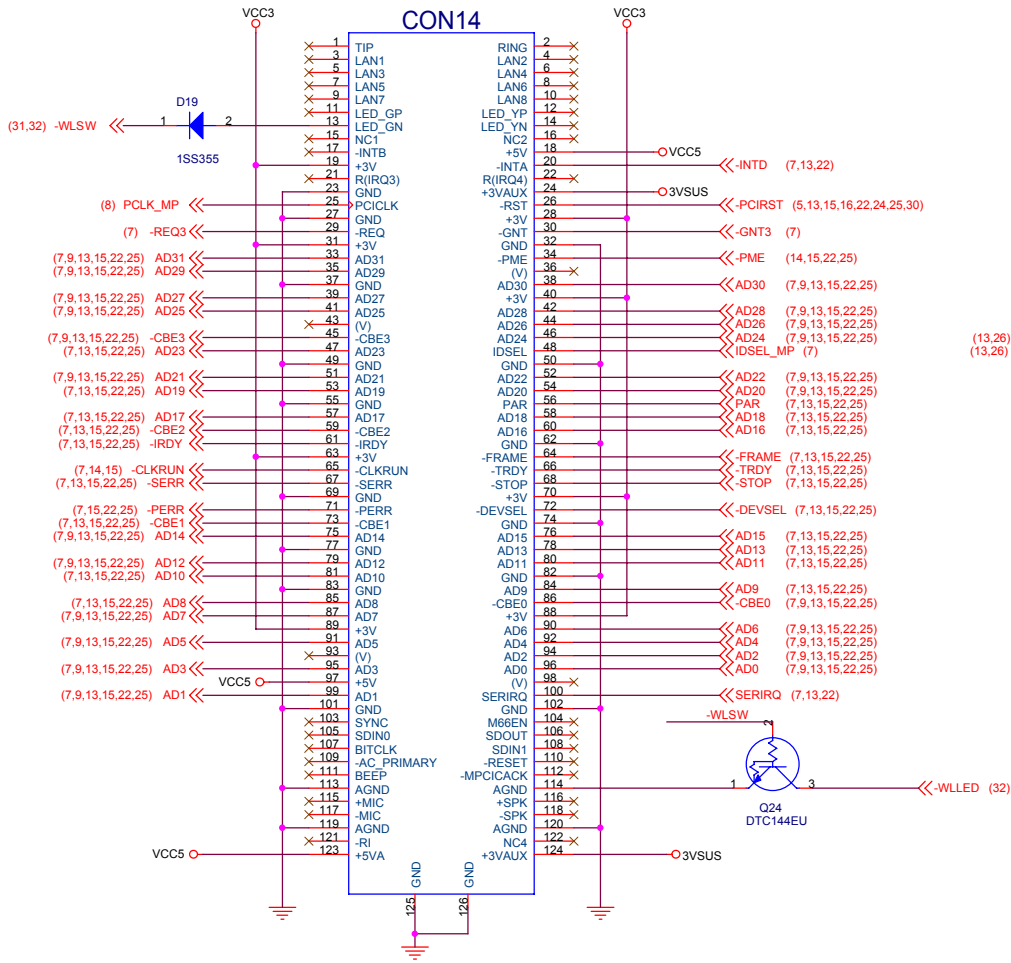
Title: **AUDIO AMP**

Size B Document Number **JE2.1 Main Board**

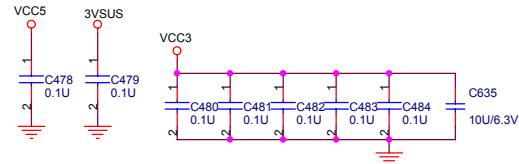
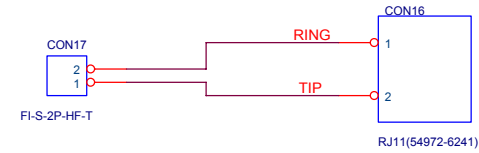
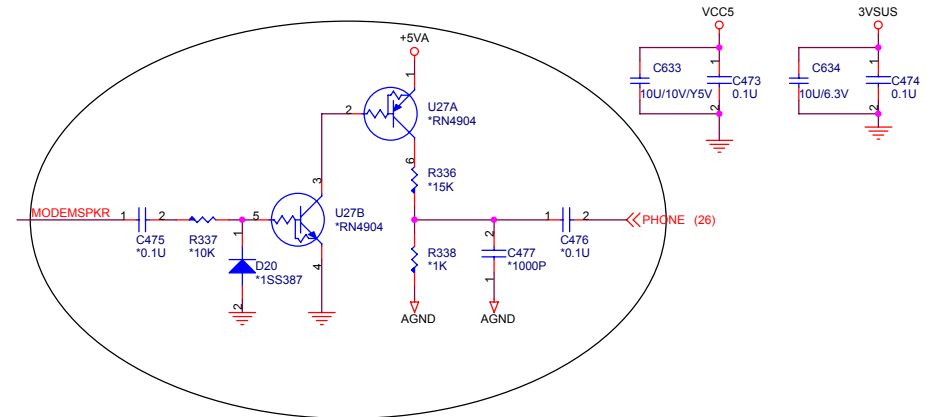
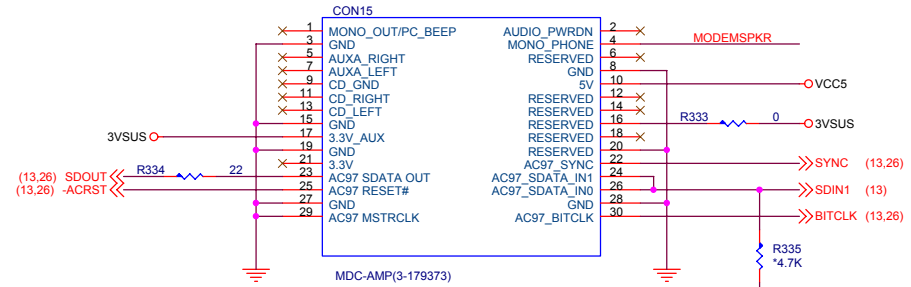
Rev 1A

MINIPCI-AMP(440073-124)

CON14

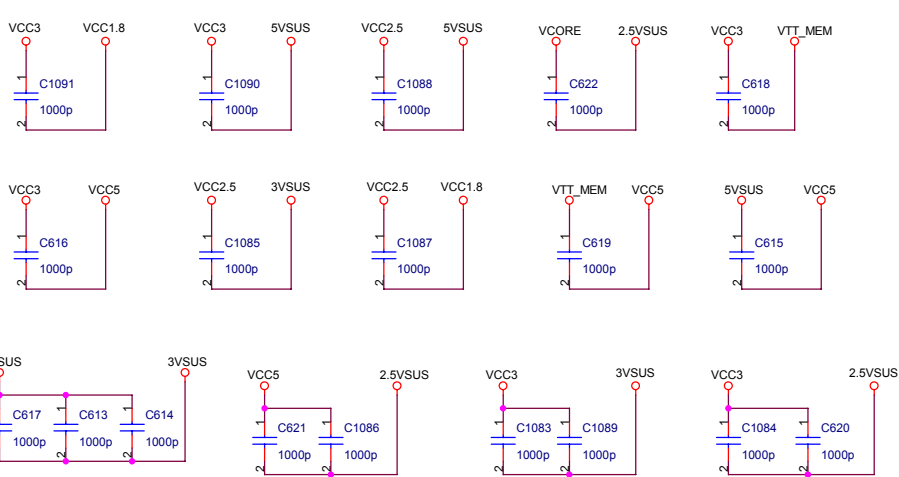
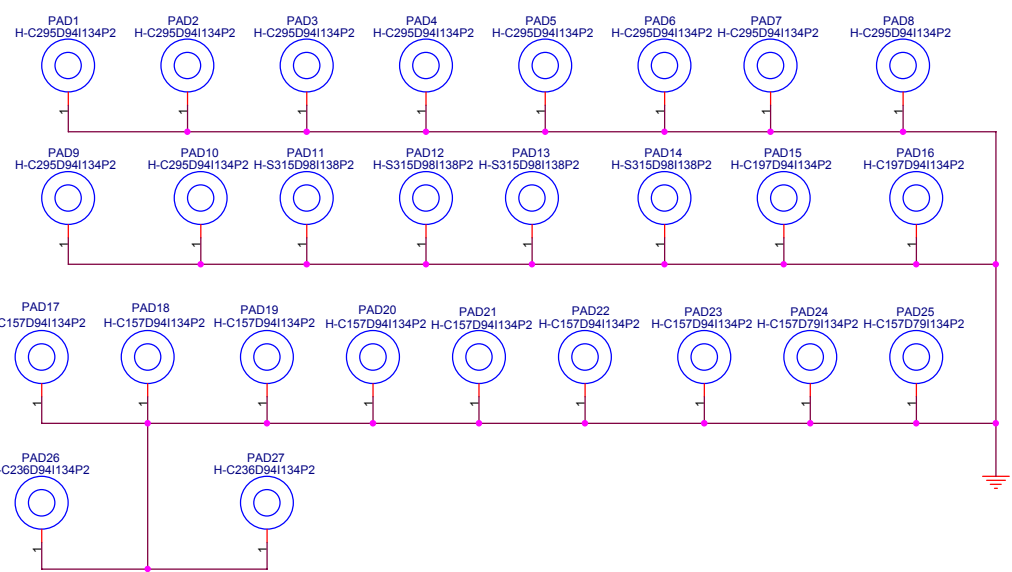
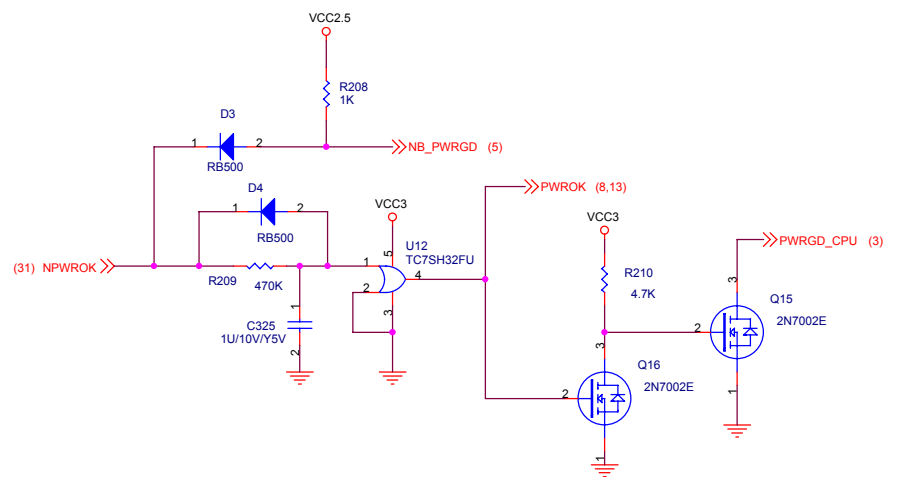
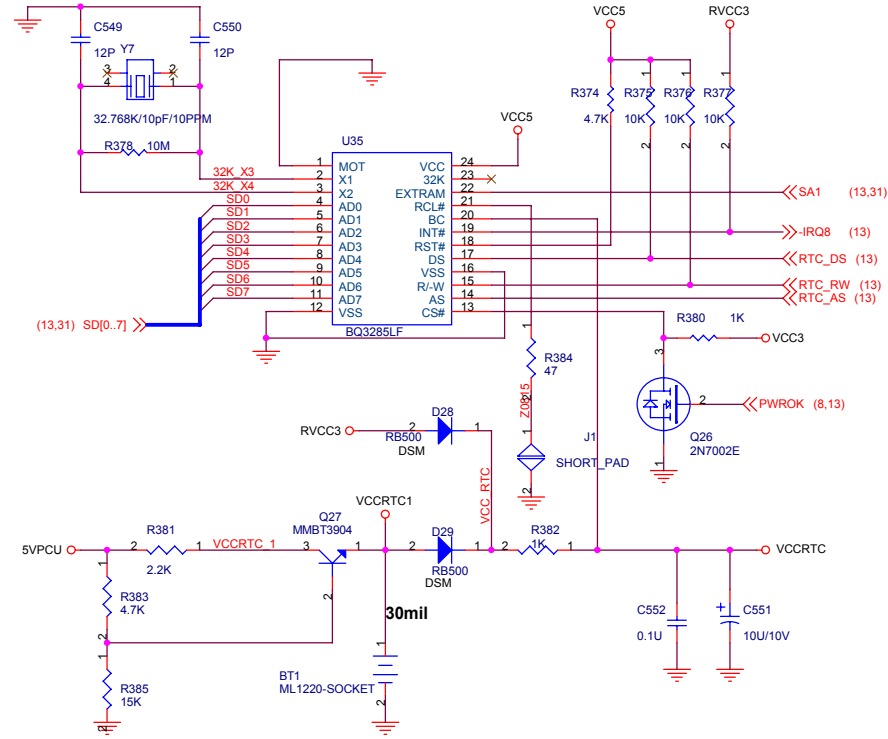


MDC (Hight 4.4mm)



Title		MiniPCI & MDC	
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RTC



**QUANTA COMPUTER**

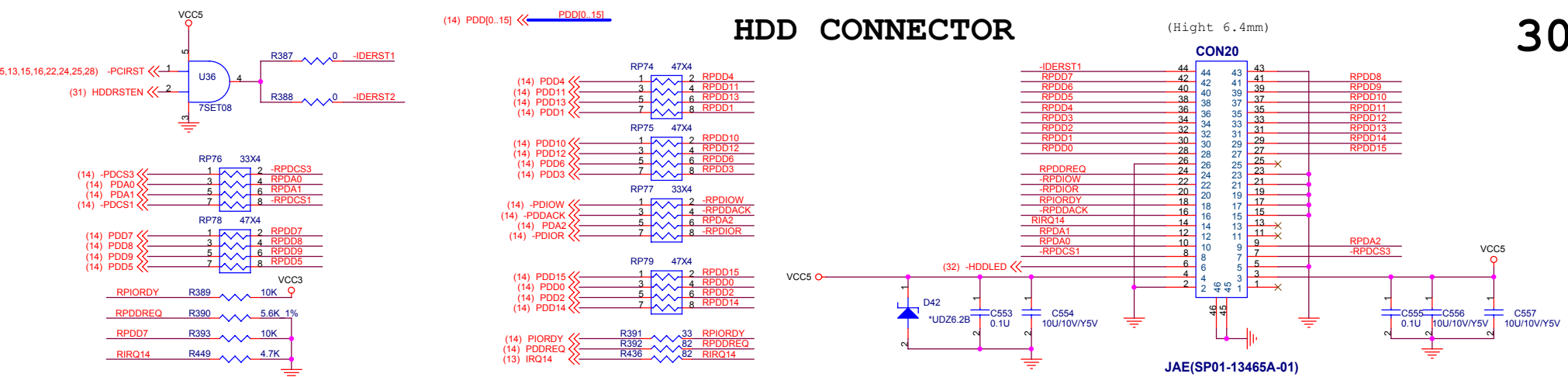
Title: **RTC/POWER GOOD LOGIC**

Size B Document Number **JE2.1 Main Board** Rev 1A

# HDD CONNECTOR

(Height 6.4mm)

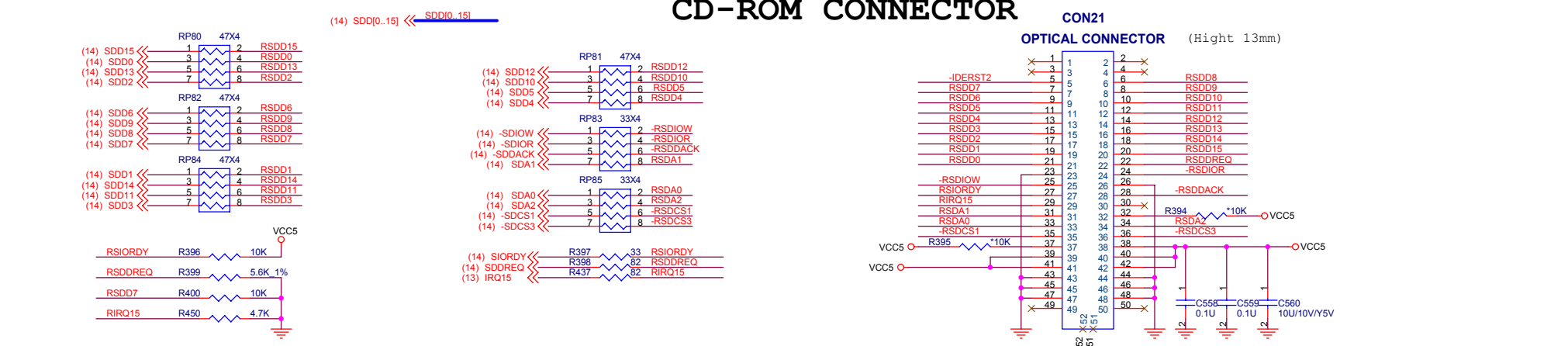
# 30



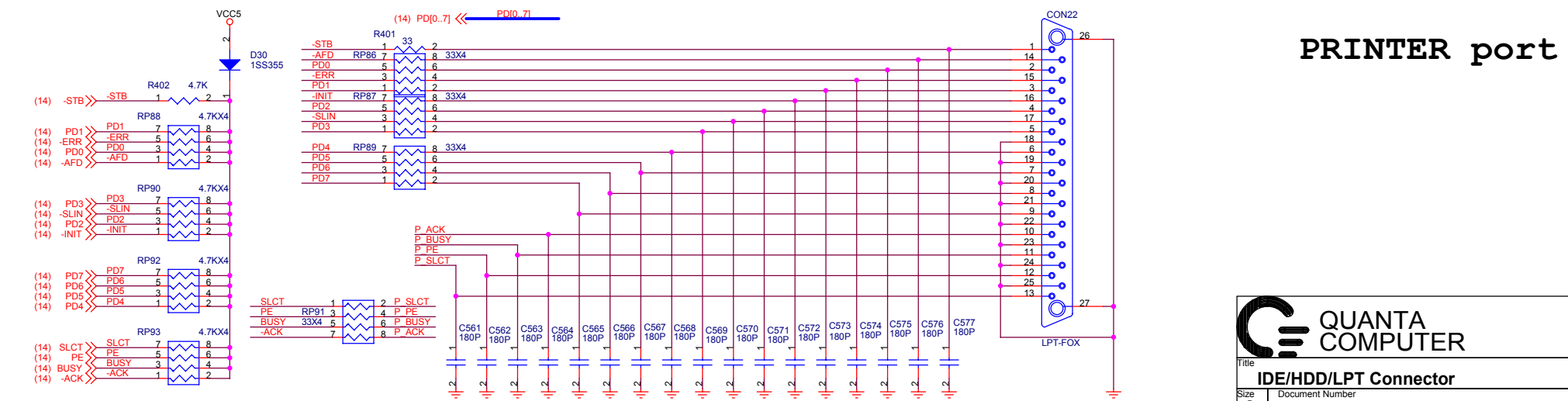
# CD-ROM CONNECTOR

CON21

(Height 13mm)



# PRINTER port



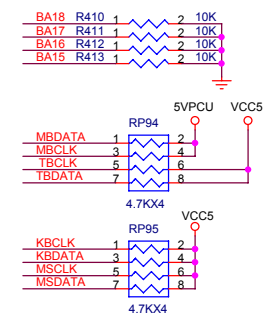
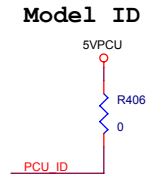
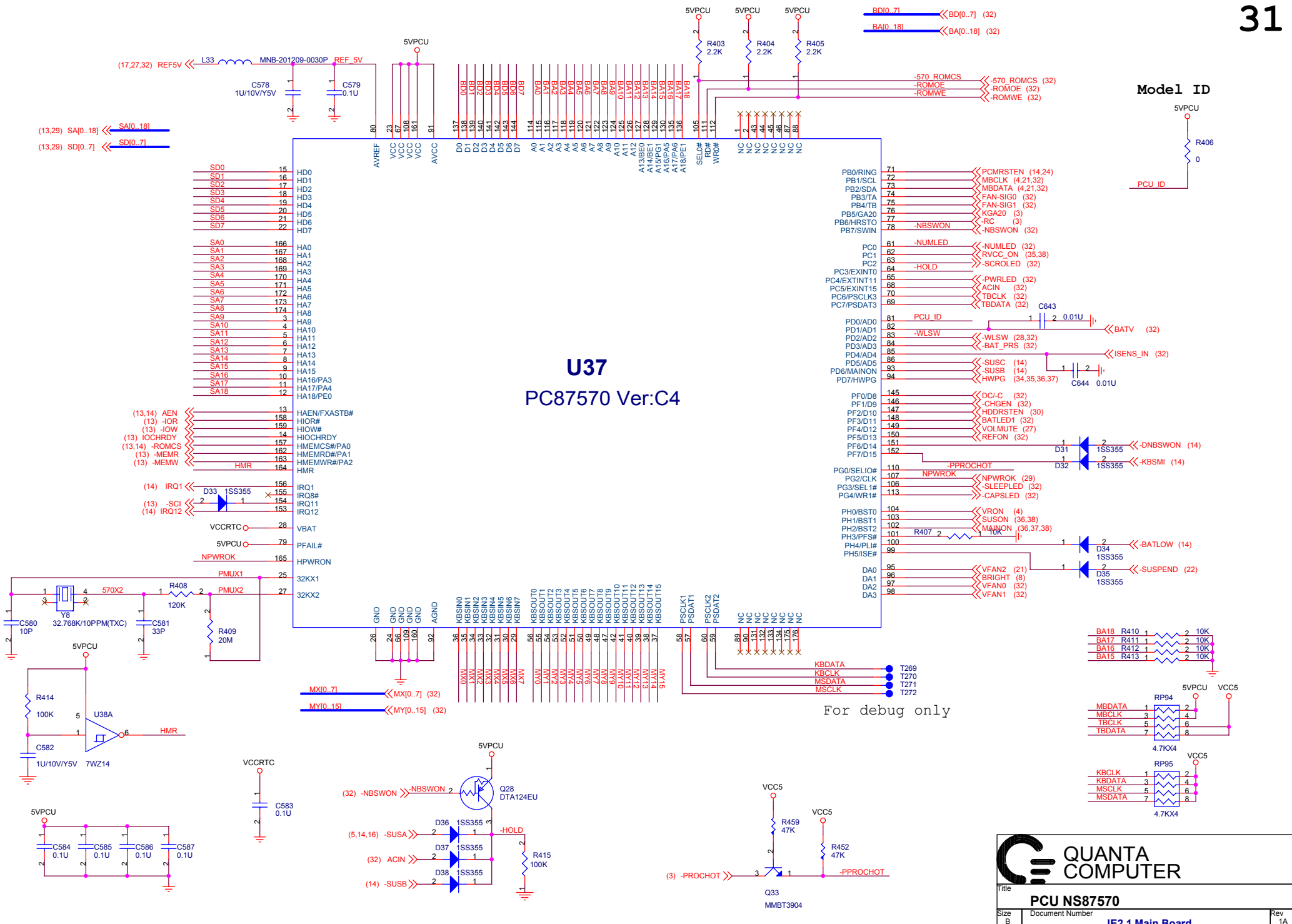
**QUANTA COMPUTER**

Title: IDE/HDD/LPT Connector

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### U37 PC87570 Ver:C4



For debug only

**QUANTA COMPUTER**

Title: **PCU NS87570**

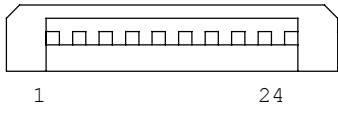
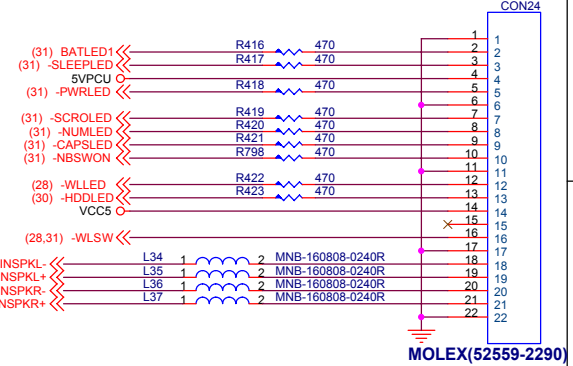
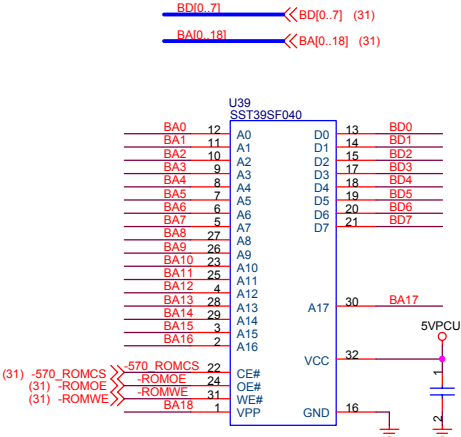
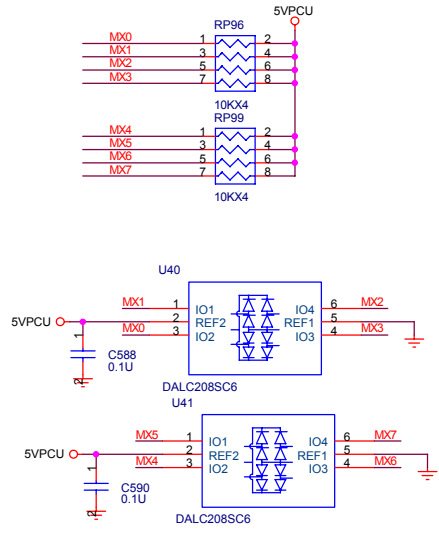
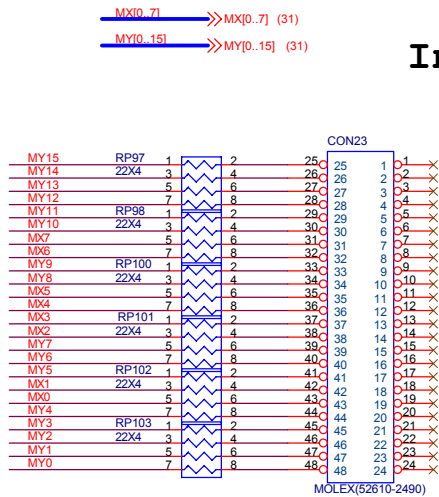
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# Int. keyboard

# BIOS

# POWER SWITCH BOARD CONNECTOR

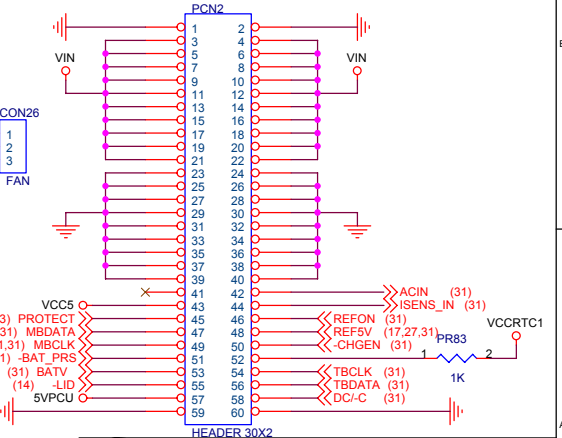
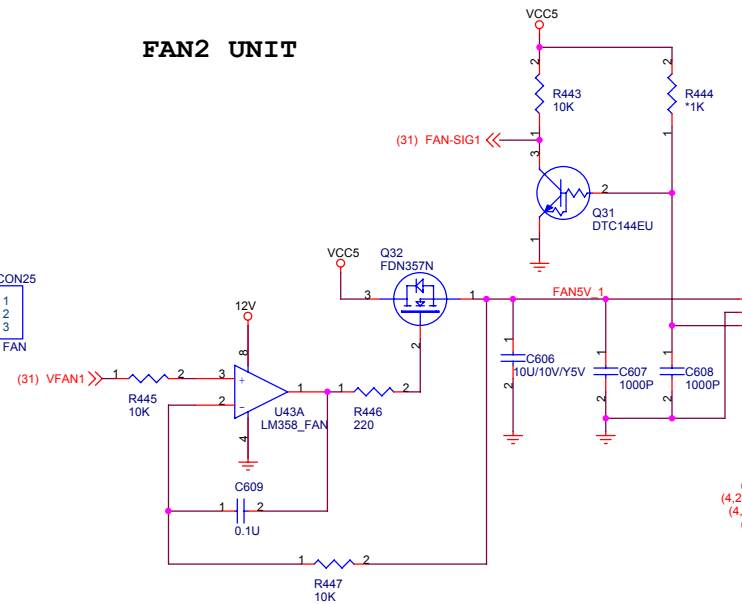
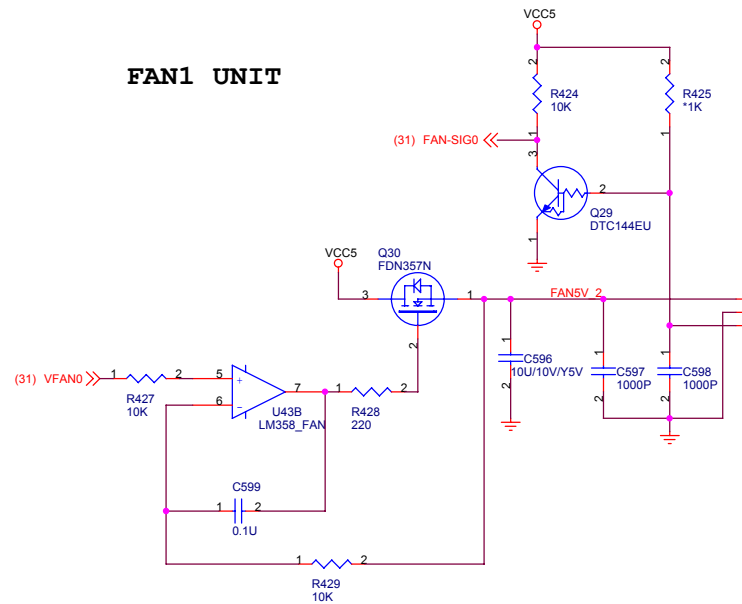


MOLEX(52559-2290)

# FAN1 UNIT

# FAN2 UNIT

# CHARGER BOARD CONNECTOR



**QUANTA COMPUTER**

Title: **INT. KEYBOARD/FAN**

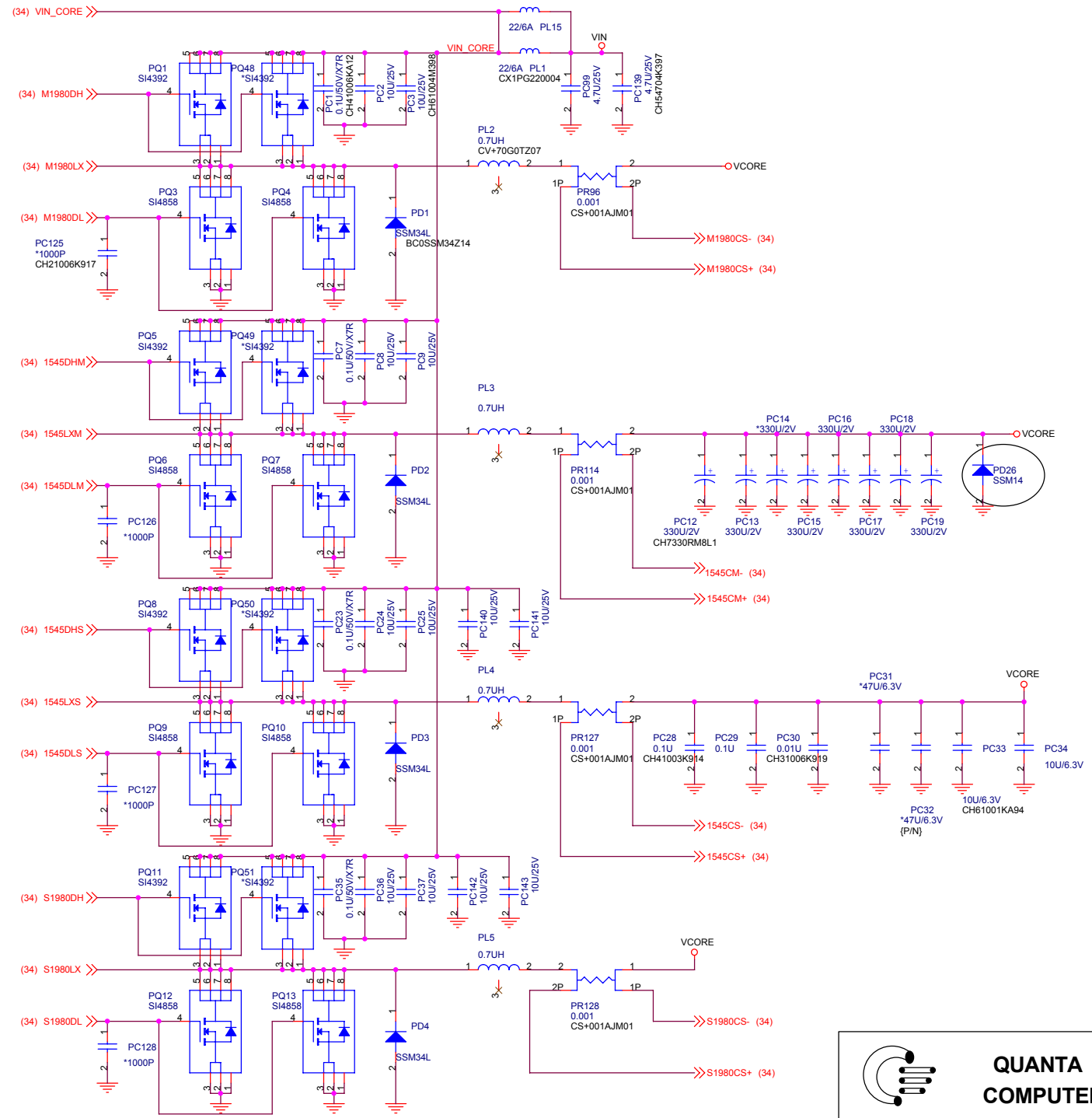
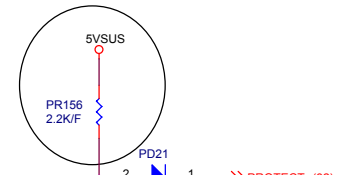
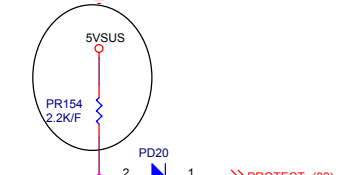
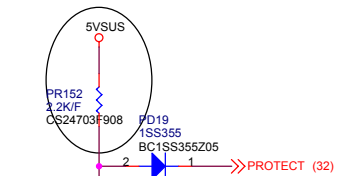
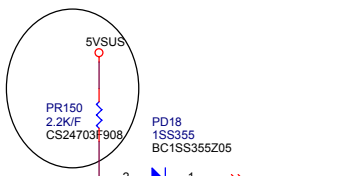
Size: Custom Document Number


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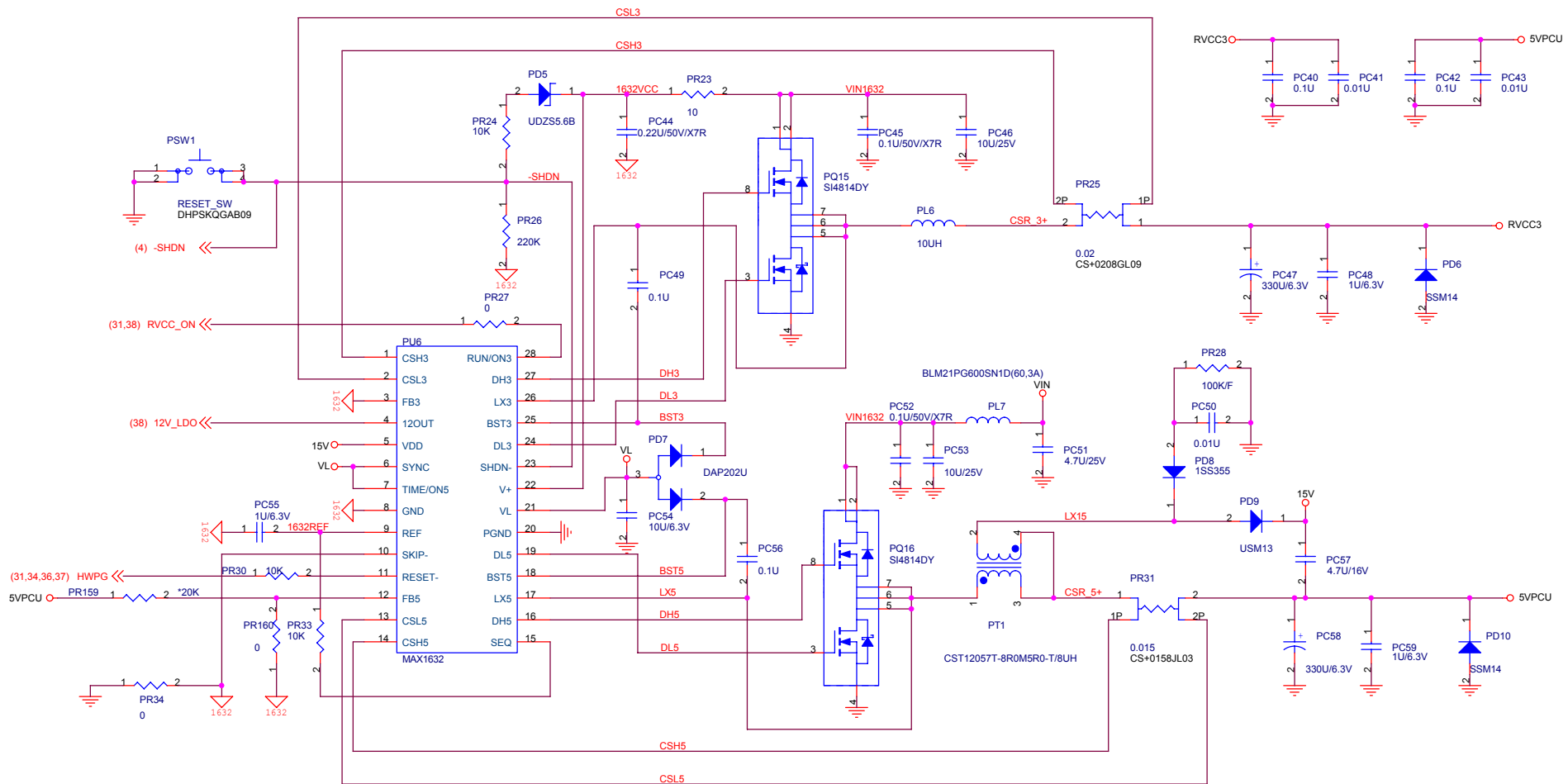



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COMPUTER**

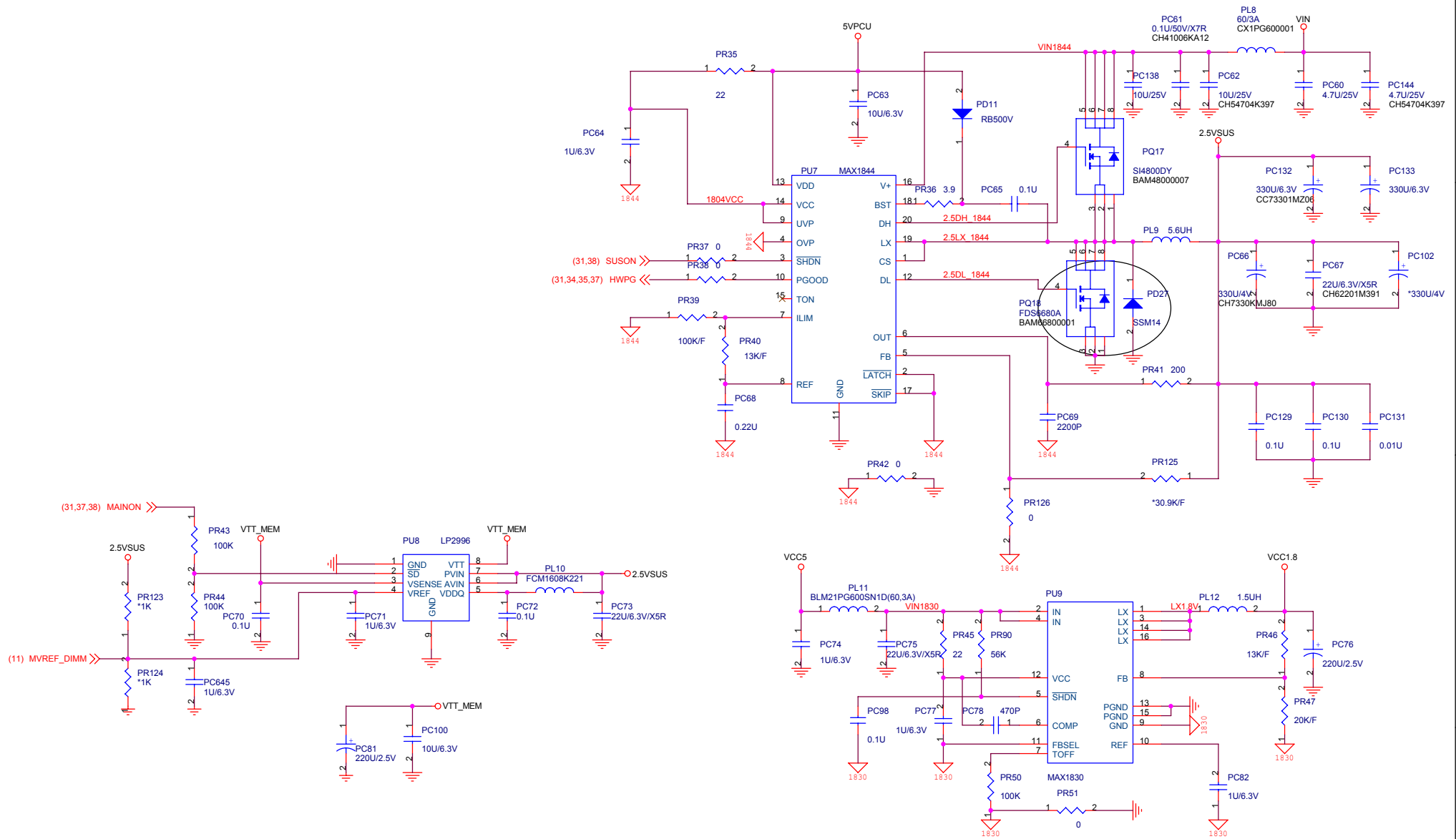
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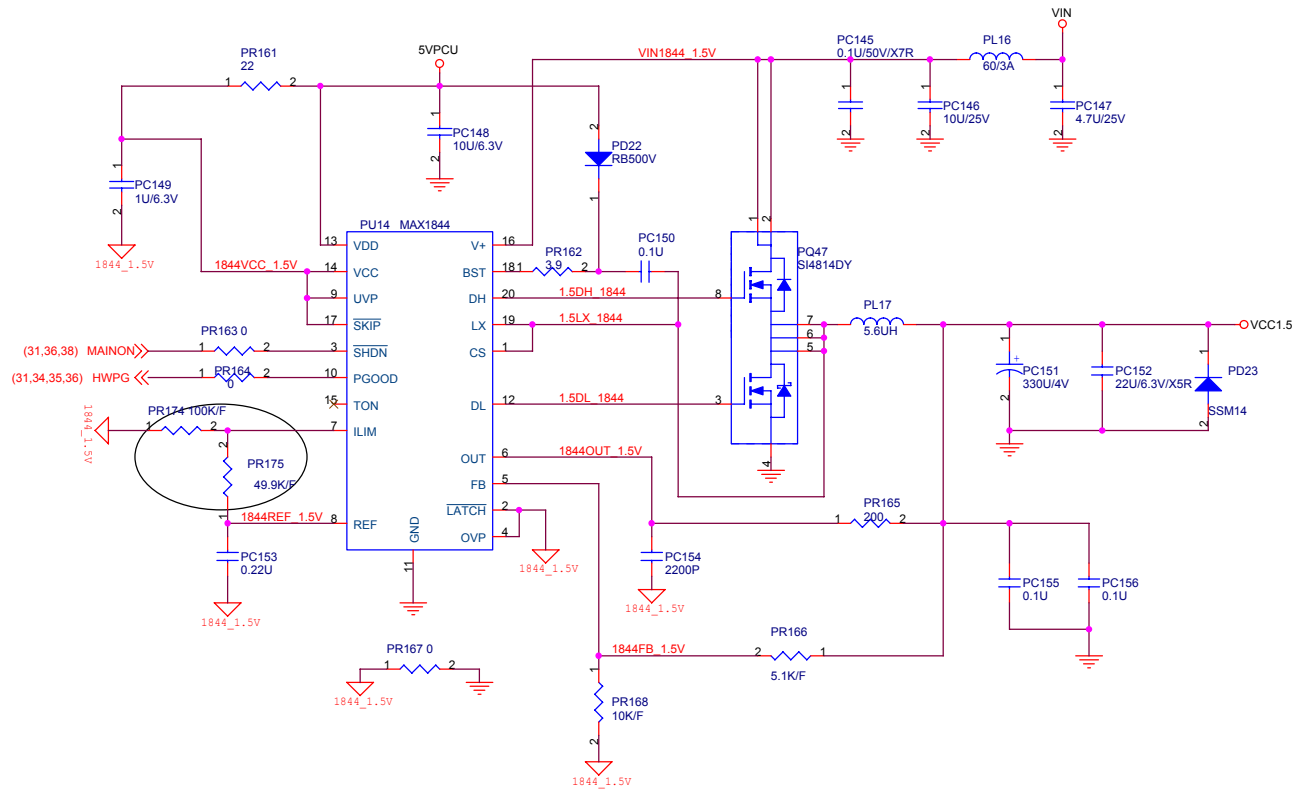


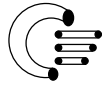
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		Document Number <b>JE2.1 Main Board</b>
		Rev <b>1A</b>

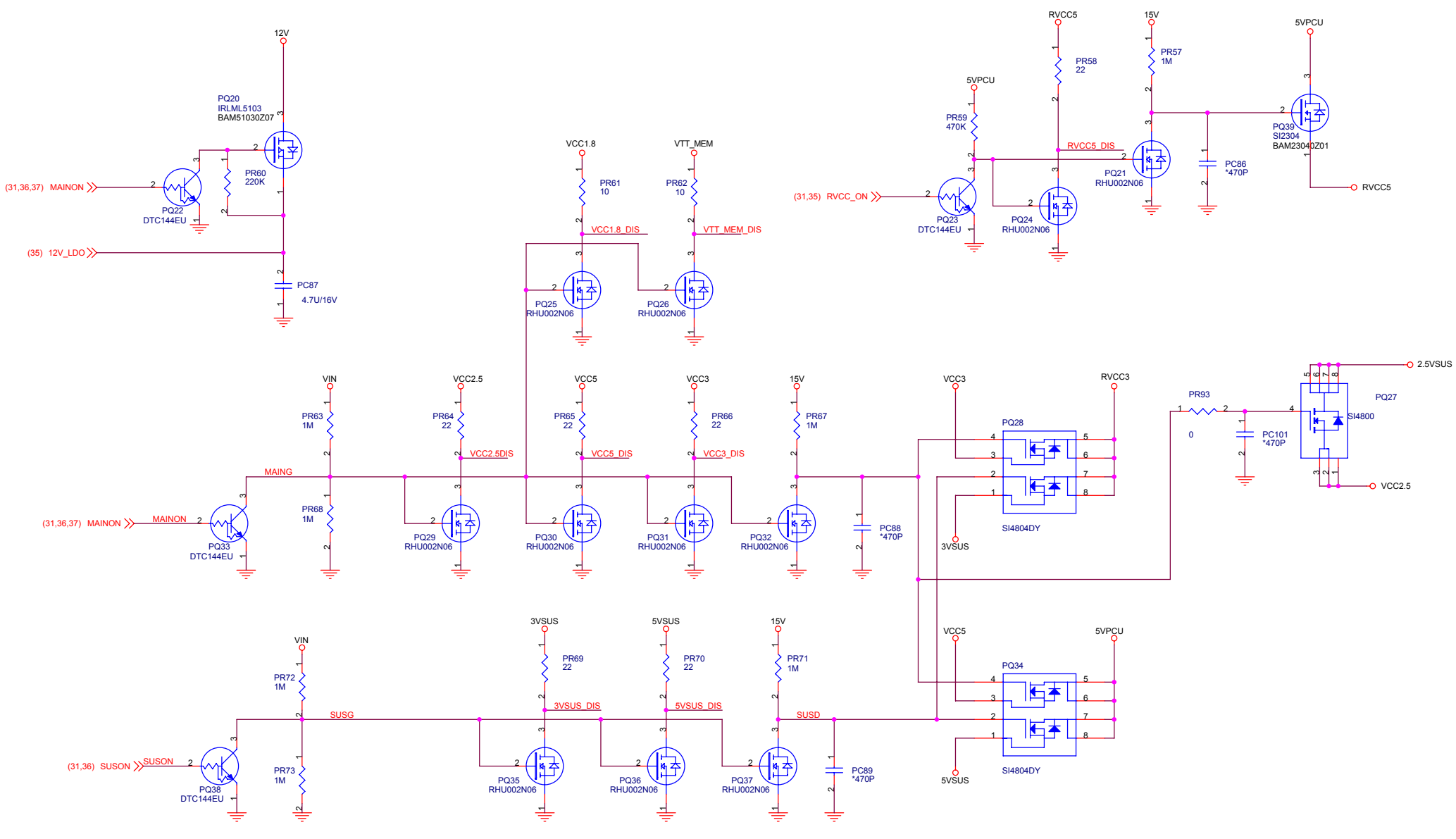



		<b>QUANTA COMPUTER</b>
Size	Document Number	Rev
	<b>JE2.1 Main Board</b>	<b>1A</b>

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