CHANGE LIST

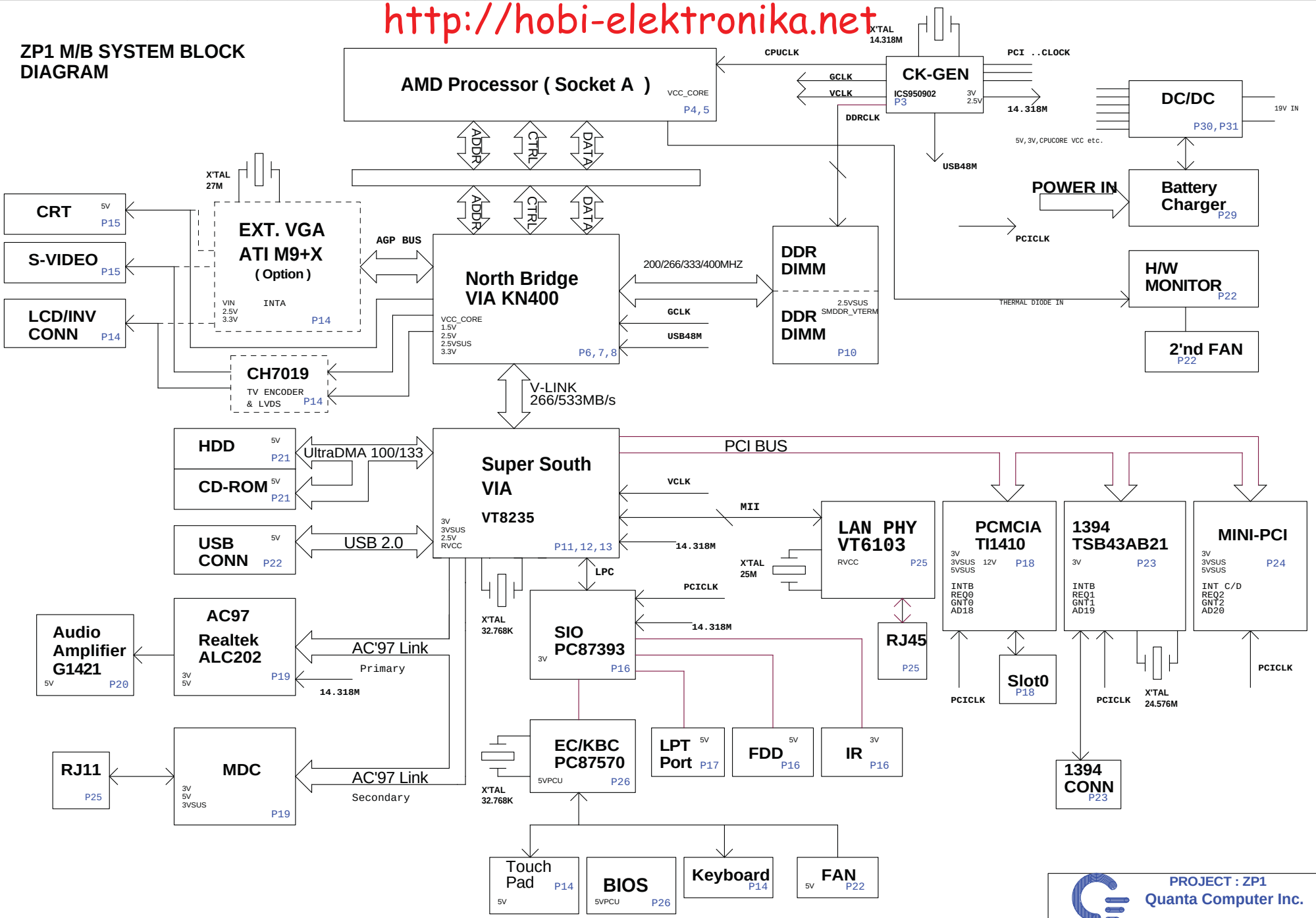
MODEL	REV	
ZP1 M/B BOARD	1A	First Release
	2A	Reference ECN E200305-1522
	2B	Reference ECN E200306-0644
	2C	Reference ECN E200306-1596
	3A	Reference ECN E200307-0524
	3B	Reference ECN E200307-3020
	3C	Reference ECN E200308-0364
	3D	Reference ECN E200308-0959
	3E	Reference ECN E200308-2158
	3F	Reference ECN E200309-0195
	3G	Reference ECN E200309-1215
	3H	Reference ECN E200309-1599

Model / Page	ZP1 M/B BOARD FM	TO
1	1A	
2	1A	
3	2A	
4	3A	
5	3C	
6	2A	3H
7	2A	
8	2B	
9	3A	
10	1A	
11	3A	
12	2A	
13	2A	
14	2A	
15	2A	
16	2C	
17	3A	
18	1A	
19	3G	
20	3C	
21	2A	
22	3D	
23	3A	
24	3F	
25	2A	
26	2A	
27	2A	
28	2C	
29	2A	
30	3B	
31	3E	
32	3C	

Quanta Computer Inc.

PROJECT : ZP1	PCBA NO.31ZP1MB0002	REV:3H	DOC. NO: 204	
APPROVED BY : Jason Liu	CHECK BY: Jason Liu	DRAWING BY: Roger Lee	DATE :09/16/2003	SHEET 1

ZP1 M/B SYSTEM BLOCK DIAGRAM



PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Block Diagram	1A

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Voltage Rails	Core voltage for Processor	ON S0~S1	ON S3	ON S4	ON S5	Control signal
VCC_CORE	Core voltage for Processor	X				VR_ON
SMDDR_VTERM	1.25V for DDR Termination voltage	X				MAINON
SMDDR_VREF	1.25V for DDR Reference Voltage	X				MAINON
1.5V		X				MAINON
2.5VSUS		X	X			SUSON
2.5V		X				MAINON
3VPCU		X	X	X	X	VL
3VSUS		X	X			SUSON
3V		X				MAINON
5VPCU		X	X	X	X	VL
5VSUS		X	X			SUSON
5V		X				MAINON
12V		X				MAINON
12VOUT		X	X	X	X	VL
RVCC		X	X	X		RVCC_ON
VIN	**POWER SOURCE**	X	X	X	X	

PCI DEVICE	IDSEL#	REQ/GNT#	Interrupts
CB1410	AD18	-REQ0/-GNT0	INTB
TSB43AB21	AD19	-REQ1/-GNT1	INTB
MINI-PCI	AD20	-REQ2/-GNT2	INT C/D
AGP			INTA

PROJECT : ZP1

Quanta Computer Inc.

Size	Document Number	Rev
A4	**INFORMATION**	1A

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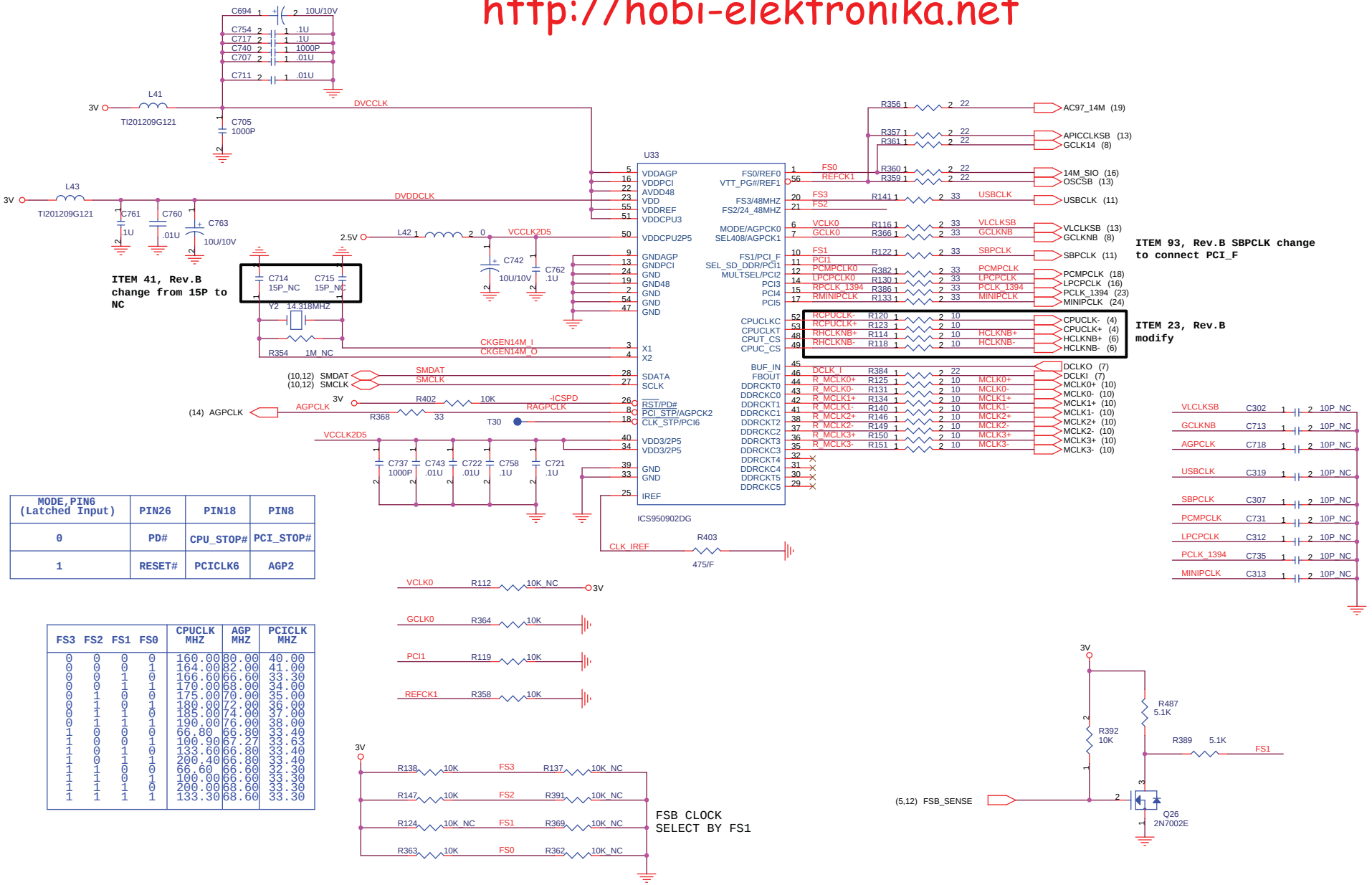

ITEM 41, Rev.B change from 15P to NC

ITEM 93, Rev.B SBPCLK change to connect PCI_F

ITEM 23, Rev.B modify

MODE,PIN6 (Latched Input)	PIN26	PIN18	PIN8
0	PD#	CPU_STOP#	PCI_STOP#
1	RESET#	PCICLK6	AGP2

FS3	FS2	FS1	FS0	CPUCLK MHZ	AGP MHZ	PCICLK MHZ
0	0	0	0	160.00	80.00	40.00
0	0	0	1	164.00	82.00	41.00
0	0	1	0	166.60	66.60	33.30
0	0	1	1	170.00	68.00	34.00
0	1	0	0	175.00	70.00	35.00
0	1	0	1	180.00	72.00	36.00
0	1	1	0	185.00	74.00	37.00
0	1	1	1	190.00	76.00	38.00
1	0	0	0	66.80	66.80	33.40
1	0	0	1	100.90	67.27	33.63
1	0	1	0	133.60	66.80	33.40
1	0	1	1	200.40	66.80	33.40
1	1	0	0	66.60	66.60	32.30
1	1	0	1	100.00	66.60	33.30
1	1	1	0	200.00	68.60	33.30
1	1	1	1	133.30	68.60	33.30

CPU FSB SENSE TABLE	CLKGEN SETTING				CPU CLK
FSB_SENSE	FS3	FS2	FS1	FS0	
0	1	1	1	1	133MHZ
1	1	1	0	1	100MHZ

FS3/48MHZ : INTERNAL 120K PULL-UP RESISTOR TO VDD
FS2/24_48MHZ : INTERNAL 120K PULL-UP RESISTOR TO VDD
FS1/PCI_F : INTERNAL 120K PULL-DOWN RESISTOR TO GND
FS0/REF0 : INTERNAL 120K PULL-UP RESISTOR TO VDD

PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
Custom	CLOCK GENERATOR	2A
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AMD K7 CPU 1 OF 2

U5A

SOCKET_A

(6) -SDATA[0..63]

-SDATA0 AA35 SDATA0
-SDATA1 W37 SDATA1
-SDATA2 W35 SDATA2
-SDATA3 Y35 SDATA3
-SDATA4 U35 SDATA4
-SDATA5 U33 SDATA5
-SDATA6 S37 SDATA6
-SDATA7 S33 SDATA7
-SDATA8 AA33 SDATA8
-SDATA9 AE37 SDATA9
-SDATA10 AC33 SDATA10
-SDATA11 AC37 SDATA11
-SDATA12 Y37 SDATA12
-SDATA13 AA37 SDATA13
-SDATA14 AC35 SDATA14
-SDATA15 S35 SDATA15
-SDATA16 Q37 SDATA16
-SDATA17 Q35 SDATA17
-SDATA18 N37 SDATA18
-SDATA19 J33 SDATA19
-SDATA20 G33 SDATA20
-SDATA21 G37 SDATA21
-SDATA22 E37 SDATA22
-SDATA23 G35 SDATA23
-SDATA24 Q33 SDATA24
-SDATA25 N33 SDATA25
-SDATA26 L33 SDATA26
-SDATA27 N35 SDATA27
-SDATA28 L37 SDATA28
-SDATA29 J37 SDATA29
-SDATA30 A37 SDATA30
-SDATA31 E35 SDATA31
-SDATA32 E31 SDATA32
-SDATA33 E29 SDATA33
-SDATA34 A27 SDATA34
-SDATA35 A25 SDATA35
-SDATA36 E21 SDATA36
-SDATA37 C23 SDATA37
-SDATA38 C27 SDATA38
-SDATA39 A23 SDATA39
-SDATA40 A35 SDATA40
-SDATA41 C35 SDATA41
-SDATA42 C33 SDATA42
-SDATA43 C31 SDATA43
-SDATA44 A29 SDATA44
-SDATA45 C29 SDATA45
-SDATA46 E23 SDATA46
-SDATA47 C25 SDATA47
-SDATA48 E17 SDATA48
-SDATA49 E13 SDATA49
-SDATA50 E11 SDATA50
-SDATA51 C15 SDATA51
-SDATA52 E9 SDATA52
-SDATA53 A13 SDATA53
-SDATA54 C9 SDATA54
-SDATA55 A9 SDATA55
-SDATA56 C21 SDATA56
-SDATA57 A21 SDATA57
-SDATA58 E19 SDATA58
-SDATA59 C19 SDATA59
-SDATA60 C17 SDATA60
-SDATA61 A11 SDATA61
-SDATA62 A17 SDATA62
-SDATA63 A15 SDATA63

(6) -DICLK[0..3]

-DICLK0 W33 SDATAINCLK0
-DICLK1 J35 SDATAINCLK1
-DICLK2 E27 SDATAINCLK2
-DICLK3 E15 SDATAINCLK3

(6) -DIVAL AN33 SDATAINVAL

(6) -DOCLK[0..3]

-DOCLK0 AE35 SDATAOUTCLK0
-DOCLK1 C37 SDATAOUTCLK1
-DOCLK2 A33 SDATAOUTCLK2
-DOCLK3 C11 SDATAOUTCLK3

-DOVAL AL31 SDTATOUTVAL

(6) -AIN[2..14]

-AIN0 AJ29 SADDIN0
-AIN1 AL29 SADDIN1
-AIN2 AG33 SADDIN2
-AIN3 AJ37 SADDIN3
-AIN4 AL35 SADDIN4
-AIN5 AE33 SADDIN5
-AIN6 AJ35 SADDIN6
-AIN7 AG37 SADDIN7
-AIN8 AL33 SADDIN8
-AIN9 AN37 SADDIN9
-AIN10 AL37 SADDIN10
-AIN11 AG35 SADDIN11
-AIN12 AN29 SADDIN12
-AIN13 AN35 SADDIN13
-AIN14 AN31 SADDIN14

(6) -AINCLK AJ33 SADDINCLK

(6) CFWDRST AJ21 CLKFWDRST
(6) CONNECT AL23 CONNECT
(6) PROCRDY AN23 PROCRDY
-FILVAL AJ31 SFILLVAL

A20M AE1 -A20M
FERR AG1 FERR
INIT AJ3 -CPUINIT
INTR AL1 INTR
IGNNE AJ1 -IGNNE
NMI AN3 NMI
RESET AG3 -CPURST
SMI AN5 -SMI
STPCLK AC1 -STPCLK
PWROK AE3 PWRGD_CPU

-A20M (13)
-CPUINIT (13)
INTR (13)
-IGNNE (13)
NMI (13)
-SMI (13)
-STPCLK (13)

PICCLK N1 APICCLKCPU
PICD0/BYPASSCLK N3 -PICD0
PICD1/BYPASSCLK N5 -PICD1

COREFB- AG13 COREFB-
COREFB+ AG11 COREFB+

CLKIN AN17 CPUCK+
CLKIN AL17 CPUCK-

RSTCLK AN19
RSTCLK AL19

K7CLKOUT AL21 CLKOUT+
K7CLKOUT AN21 CLKOUT-

ANALOG AJ13

SYSVREFMODE AA5 VREFMODE
VREF_SYS W5 VREF_SYS

ZN AC5 ZN
ZP AE5 ZP

PLLBYPASS AJ25 -PLLBP
PLLBYPASSCLK AN15 PLLCK+
PLLBYPASSCLK AL15 PLLCK-

PLLMON1 AN13 PLLMON1
PLLMON2 AL13 PLLMON2
PLLTEST AC3 -PLLTEST

SCANCLK1 S1 SCANCLK1
SCANCLK2 S5 SCANCLK2
SCANINTEVAL S3 SINTVAL
SCANSHIFTEN Q5 SSHIFTEN

DBRDY AA1 DBRDY
DBREQ AA3 -DBREQ
FLUSH AL3 -FLUSH

TCK Q1 TCK
TDI U1 TDI
TDO U5 TDO
TMS Q3 TMS
TRST U3 -TRST

T56
T55

VID0 L1 CPU_VID0 (9)
VID1 L3 CPU_VID1 (9)
VID2 L5 CPU_VID2 (9)
VID3 L7 CPU_VID3 (9)
VID4 J7 CPU_VID4 (9)

FID0 W1 FID0 (9)
FID1 W3 FID1 (9)
FID2 Y1 FID2 (9)
FID3 Y3 FID3 (9)

SCHECK0 U37
SCHECK1 Y33
SCHECK2 L35
SCHECK3 E33
SCHECK4 E25
SCHECK5 A31
SCHECK6 C13
SCHECK7 A19

-PICD0 R25 1K
-PICD1 R26 1K

SADDOUT0 J1 -AOUT0
SADDOUT1 J3 -AOUT1
SADDOUT2 C7 -AOUT2
SADDOUT3 A7 -AOUT3
SADDOUT4 E5 -AOUT4
SADDOUT5 A5 -AOUT5
SADDOUT6 E7 -AOUT6
SADDOUT7 C1 -AOUT7
SADDOUT8 C5 -AOUT8
SADDOUT9 C3 -AOUT9
SADDOUT10 G1 -AOUT10
SADDOUT11 E1 -AOUT11
SADDOUT12 A3 -AOUT12
SADDOUT13 G5 -AOUT13
SADDOUT14 G3 -AOUT14

-AOUT[2..14] (6)

SADDOUTCLK E3 -AOUTCLK (6)

(31) COREFB+ COREFB+ R257 10K
(31) COREFB- COREFB- R260 10K

VCC_CORE

VCC_CORE
R22 510_NC
R14 680
FERR
R23 51
3V
C21 .1U
U1 LMV7219M5X
R13 1K
R12 56K
-SB_FERR (13)

VCC_CORE
R21 270
U44A
5V
U44B
NC7WZ07
PWRGD_CPU
HWPG_POWER (9,26,28,31)

ITEM 30, Rev.B modify this circuit

R249 1K
VCC_CORE
-CPURST
Q15 MMBT3904
-PCIRST_A (8,11,14,16)
C488 100P

VCC_CORE
RP21 820_8P4R
-CPURST
INTR
-IGNNE
-A20M
RP20 820_8P4R
-SMI
-CPUINIT
-FLUSH
NMI
RP1 820_8P4R
TDI
-TRST
TCK
TMS
RP2 1.5K_8P4R
-STPCLK R250 820
-PLLBP R268 820
PLLMON1 R254 56
PLLMON2 R253 56
-DBREQ R252 820
-PLLTEST R251 820
-AIN0 R273 820
-AIN1 R275 820
-AOUT0 R27 1K_NC
-AOUT1 R28 1K_NC
APICCLKCPU R24 1K
-DOVAL R276 820
-FILVAL R269 820
SINTVAL
SCANCLK1
SCANCLK2
SSHIFTEN

Near socket-A

VCC_CORE
R263 60.4/F
R261 60.4/F
R262 301/F

ITEM 92, Rev.B change to stuff

CPUCK+ C527 680P_NPO CPUCLK+ (3)
CPUCK- C524 680P_NPO CPUCLK- (3)

VREF_SYS is set at 50% of VCC_CORE to CPU

VCC_CORE
R40 100/F
C862 10U/10V
VREF_SYS
C30 .01U
C33 .1U
R43 100/F

ITEM 134, Rev.D change from 1u to 10u

VCC_CORE R35 1K_NC
VREFMODE
R39 270_NC
NC for this CPU
VREFMODE=Low=No voltage scaling

VCC_CORE
ZN R37 40.2/F
ZP R36 40.2/F
Push-pull compensation circuit

R267 100/F
R265 100/F
VCC_CORE
VCC_CORE
CLKOUT-
CLKOUT+
R266 100/F
R264 100/F

VCC_CORE
VCC_CORE
R255 100/F
R256 100/F
PLLCK+
PLLCK-
R258 100/F
R259 100/F

PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
C	CPU-1(S2K)	3A
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BANKS

AMD K7 CPU 2 OF 2

Located at Socket-A Cavity

SVID[0..4] SVID[0..4] (9)

VCC_CORE CPU_VCCA U5B SOCKET_A

VCC_CORE

C516 C517 C518 C519 C17 C22 C18 C19 C529 C567 C537 C542 C493 C497 C549 C572 C543 C544 C545 C530 C577 C578 C579 C580 C520 C491 C538 C546 C495 C499 C563 C571 — 22U_0603

0.22uF(0603) X 32
[X7R] AMD
recommandation

VCC_CORE

C505 C508 C515 — 1U

0.1uF(0402) X 3

ITEM 174, Rev.E
change to
connect to GND.

VCC_CORE

C506 C510 C526 C536 C557 C552 C535 C502 — 01U

0.01uF(0402) X 8

ITEM 171, Rev.E
RE-ADD 0.01u

VCC_CORE

C503 C511 C513 C531 C558 C553 C547 C525 — 1000P

1000pF(0402) X 8

THERMDA THERMDC

FSB_SENSE (3,12)

THERMDA — C31 2200P_0603 — THERMDC

THERMDA (22)

THERMDC (22)

ITEM 125, Rev.C add

CPU_VCCA **200mA Need**

CPU_VCCA (9)

C565 22P C564 22P C562 .01U C569 .1U C568 10U/10V

R270 10K/F R271 10K/F C570 470P

U22 MAX8863 OUT IN GND SET SHDN

3V C575 .1U C576 1U_0603

Max8863
Vset=1.25V
V=2.5

ITEM 142, Rev.D removed

ITEM 86, Rev.B
change value

VCC_CORE

C496 470U/2.5V C492 220U/2.5V_NC C500 220U/2.5V_NC C514 470U/2.5V C523 100U/2V_NC C534 100U/2V_NC C550 470U/2.5V

VCC_CORE

C504 C509 C561 C532 C551 C556 C501 C533 — 39P

VCC_CORE

C507 C512 C521 C539 C554 C559 C522 C548 — 39P

VCC_CORE

C869 C870 C872 C874 C876 C878 C880 C882 — 39P

VCC_CORE

C871 C873 C875 C877 C879 C881 — 39P

39pF(0402) X 30

PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
C	CPU-2(POWER)	3C
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BANKS

NORTH BRIDGE 1 of 3 (HOST BUS)

(3,7,8,9,11,12,13,14,17,27) 2.5V
(4,5,27,31) VCC_CORE

U29A

KN400

LCL FILTER

-DICLK_0 — L34 10nH_HK1608_10NJ-T — L35 10nH_HK1608_10NJ-T — -DICLK0 — C629 5P
-DICLK_1 — L31 10nH_HK1608_10NJ-T — L25 10nH_HK1608_10NJ-T — -DICLK1 — C600 5P
-DICLK_2 — L30 10nH_HK1608_10NJ-T — L27 10nH_HK1608_10NJ-T — -DICLK2 — C599 5P
-DICLK_3 — L32 10nH_HK1608_10NJ-T — L26 10nH_HK1608_10NJ-T — -DICLK3 — C598 5P
-DICLK[0..3] (4)

PLACED NEAR NORTH BRIDGE

S2K BUS COMPENSATION

S2KCOMP — R61 300/F

ITEM 13, Rev.B change from 69.8/F

VCC_CORE: C593 220U/2.5V, C145 10U/10V, C98 10U/10V, C120 .01U, C112 .01U, C129 .01U, C138 .01U

VCC_CORE: C117 .1U, C99 .1U, C151 .1U, C118 1000P, C137 1000P, C128 1000P, C119 100P, C144 100P

2.5V: C659 100U/10V, C97 10U/10V, C211 10U/10V, C702 10U/10V, C121 .01U, C165 .01U, C222 .01U, C216 .01U

2.5V: C96 .1U, C94 .1U, C125 .1U, C232 .1U, C218 .1U, C176 .1U, C139 .01U, C113 .01U

2.5V: C78 1000P, C80 1000P, C83 1000P, C161 1000P, C194 1000P, C223 1000P, C100 1000P, C210 1000P

2.5V: C79 100P, C87 100P, C82 100P, C209 100P, C169 100P, C178 100P, C154 100P

NORTH BRIDGE S2K REFERENCE VOTAGE (1/2 VCC_CORE) PLACED UNDER BGA

VCC_CORE — R75 100/F — S2KVREF — C116 1U_0603 — C91 .01U — C124 .01U — R76 100/F

ITEM 75, Rev.B change from 0.1U

AVDDHCLK/AGNDHCLK : POWER/GROUND FOR INTERNAL CPU CLOCK LOGIC

2.5VHCLK — L29 TI201209G121 — 2.5V — C865 22U/10V — C95 .1U — C608 .1U — C864 1U

ITEM 89, Rev.B add

3V — TESTIN0 — R83 1K_NC — RA 0_0402 — TESTIN1 — R85 110K — CB 0.22U

ITEM 196, Rev.E3H rework

PROJECT : ZP1 Quanta Computer Inc.			
Size C	Document Number NORTH BRIDGE-1(S2K)		Rev 3H
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NORTH BRIDGE 2 of 3 (MEMORY)

U29B

KN400

2.5VSUS

2.5VMCLK

AVDD2

AGND2

VCCM

VSS

(10) MA[0..14]

MA0 MA1 MA2 MA3 MA4 MA5 MA6 MA7 MA8 MA9 MA10 MA11 MA12 MA13 MA14

(10) CKE0 (10) CKE1 (10) CKE2 (10) CKE3

CKE0 CKE1 CKE2 CKE3 CKE4 CKE5

T4 T57

(10) -CS0 (10) -CS1 (10) -CS2 (10) -CS3

CS0 CS1 CS2 CS3 CS4 CS5

T21 T24

(10) -SRASA (10) -SCASA (10) -SWEA

SRASA SCASA SWEA

DQM0 DQM1 DQM2 DQM3 DQM4 DQM5 DQM6 DQM7

DQS0 DQS1 DQS2 DQS3 DQS4 DQS5 DQS6 DQS7

MVREF0

MVREF1 MVREF0

MD[0..63] MD[0..63] (10)

DQM[0..7] DQM[0..7] (10)

DQS[0..7] DQS[0..7] (10)

MD0 MD1 MD2 MD3 MD4 MD5 MD6 MD7 MD8 MD9 MD10 MD11 MD12 MD13 MD14 MD15 MD16 MD17 MD18 MD19 MD20 MD21 MD22 MD23 MD24 MD25 MD26 MD27 MD28 MD29 MD30 MD31 MD32 MD33 MD34 MD35 MD36 MD37 MD38 MD39 MD40 MD41 MD42 MD43 MD44 MD45 MD46 MD47 MD48 MD49 MD50 MD51 MD52 MD53 MD54 MD55 MD56 MD57 MD58 MD59 MD60 MD61 MD62 MD63

DCLKO DCLKIN

R60 22

DCLKO (3) DCLKI (3)

ITEM 14, Rev.B remove these 33P caps

VVCLK/GENDNCLK : POWER/GROUND FOR DRAM CLCOK DESKEW CIRCUIT

2.5VMCLK 2.5V L28 TI201209G121 C607 .1U C604 1U C866 1U

ITEM 89, Rev.B add

RP33 10_4P2R_0402 RMDQM0 RMDQS0 DQM0 DQS0

RP39 10_4P2R_0402 RMDQM1 RMDQS1 DQM1 DQS1

RP43 10_4P2R_0402 RMDQS2 RMDQM2 DQS2 DQM2

RP49 10_4P2R_0402 RMDQS3 RMDQM3 DQS3 DQM3

RP66 10_4P2R_0402 RMDQS4 RMDQM4 DQS4 DQM4

RP77 10_4P2R_0402 RMDQS5 RMDQM5 DQS5 DQM5

RP87 10_4P2R_0402 RMDQS6 RMDQM6 DQS6 DQM6

RP94 10_4P2R_0402 RMDQS7 RMDQM7 DQS7 DQM7

2.5VSUS C683 100U/10V C675 10U/10V C181 10U/10V C146 .1U C127 .1U C143 .1U C166 .1U C126 .01U C115 .01U C150 .01U

2.5VSUS C215 .01U C89 .01U C162 1000P C185 1000P C140 1000P C136 100P C195 100P C122 100P

MVERF0/1 : SSTL_2 RECEIVER VREF FOR DDR

2.5VSUS SMDDR_VREF R73 200/F R71 0_NC MVREF0 C111 1000P C184 1000P R72 200/F

RP52 22_8P4R_0402 RMD30 RMD31 RMD26 RMD27 MD30 MD31 MD26 MD27

RP48 22_8P4R_0402 RMD25 RMD24 RMD29 RMD28 MD25 MD24 MD29 MD28

RP45 22_8P4R_0402 RMD23 RMD22 RMD18 RMD19 MD23 MD22 MD18 MD19

RP42 22_8P4R_0402 RMD21 RMD20 RMD16 RMD17 MD21 MD20 MD16 MD17

RP40 22_8P4R_0402 RMD15 RMD14 RMD11 RMD10 MD15 MD14 MD11 MD10

RP37 22_8P4R_0402 RMD12 RMD13 RMD8 RMD9 MD12 MD13 MD8 MD9

RP34 22_8P4R_0402 RMD7 RMD6 RMD2 RMD3 MD7 MD6 MD2 MD3

RP31 22_8P4R_0402 RMD5 RMD4 RMD0 RMD1 MD5 MD4 MD0 MD1

RP71 22_8P4R_0402 RMD39 RMD38 RMD35 RMD34 MD39 MD38 MD35 MD34

RP64 22_8P4R_0402 RMD36 RMD37 RMD32 RMD33 MD36 MD37 MD32 MD33

RP95 22_8P4R_0402 RMD62 RMD63 RMD58 RMD59 MD62 MD63 MD58 MD59

RP93 22_8P4R_0402 RMD61 RMD60 RMD56 RMD57 MD61 MD60 MD56 MD57

RP89 22_8P4R_0402 RMD55 RMD54 RMD50 RMD51 MD55 MD54 MD50 MD51

RP86 22_8P4R_0402 RMD52 RMD53 RMD48 RMD49 MD52 MD53 MD48 MD49

RP82 22_8P4R_0402 RMD46 RMD43 RMD42 RMD47 MD46 MD43 MD42 MD47

RP72 22_8P4R_0402 RMD45 RMD44 RMD40 RMD41 MD45 MD44 MD40 MD41

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Quanta Computer Inc.

Size	Document Number	Rev
C	NORTH BRIDGE(DDR)	2A

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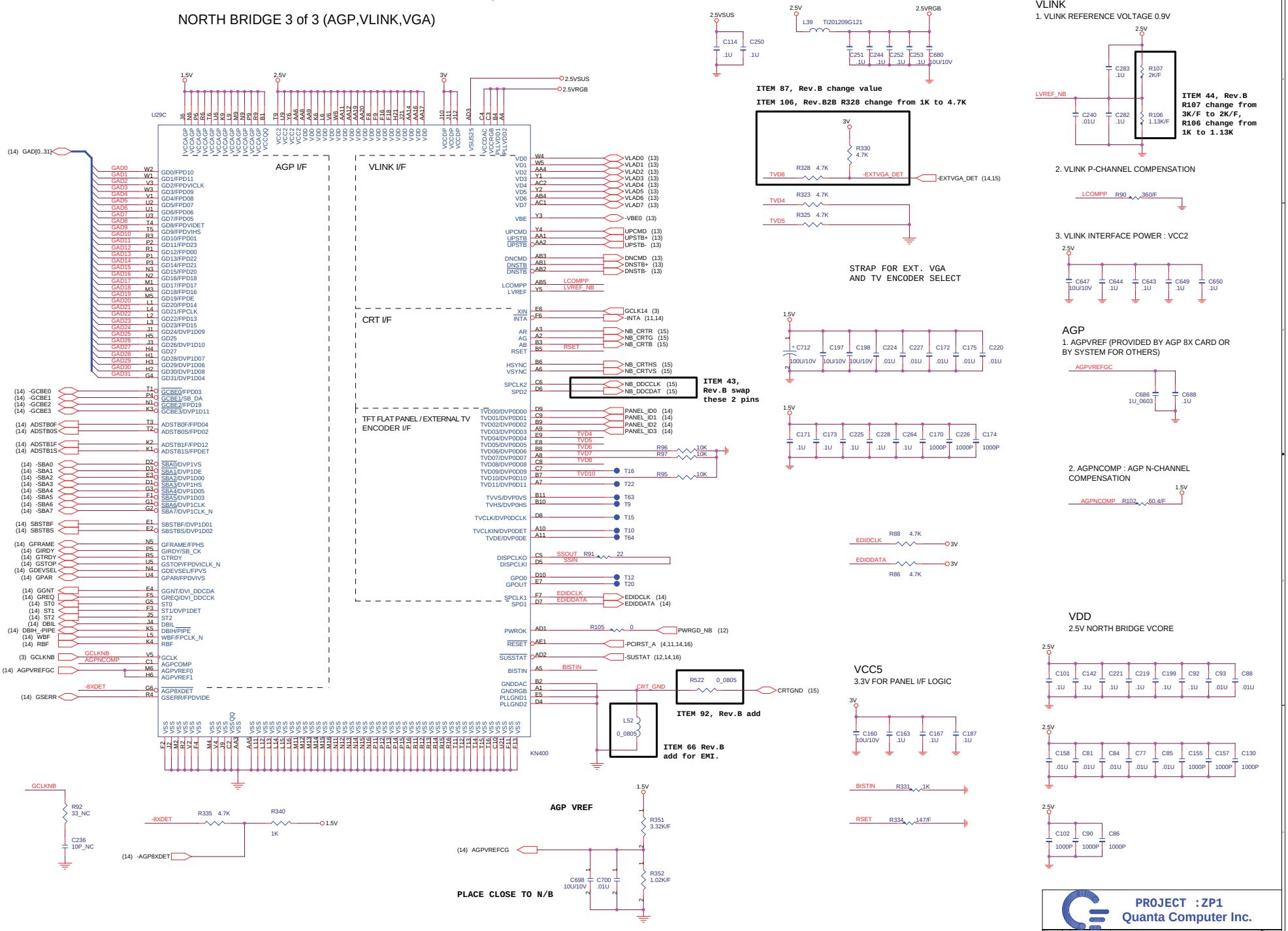
BANKS

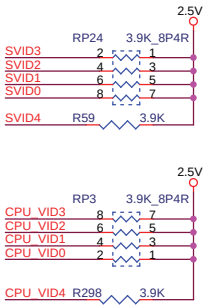
NORTH BRIDGE 3 of 3 (AGP,VLINK,VGA)

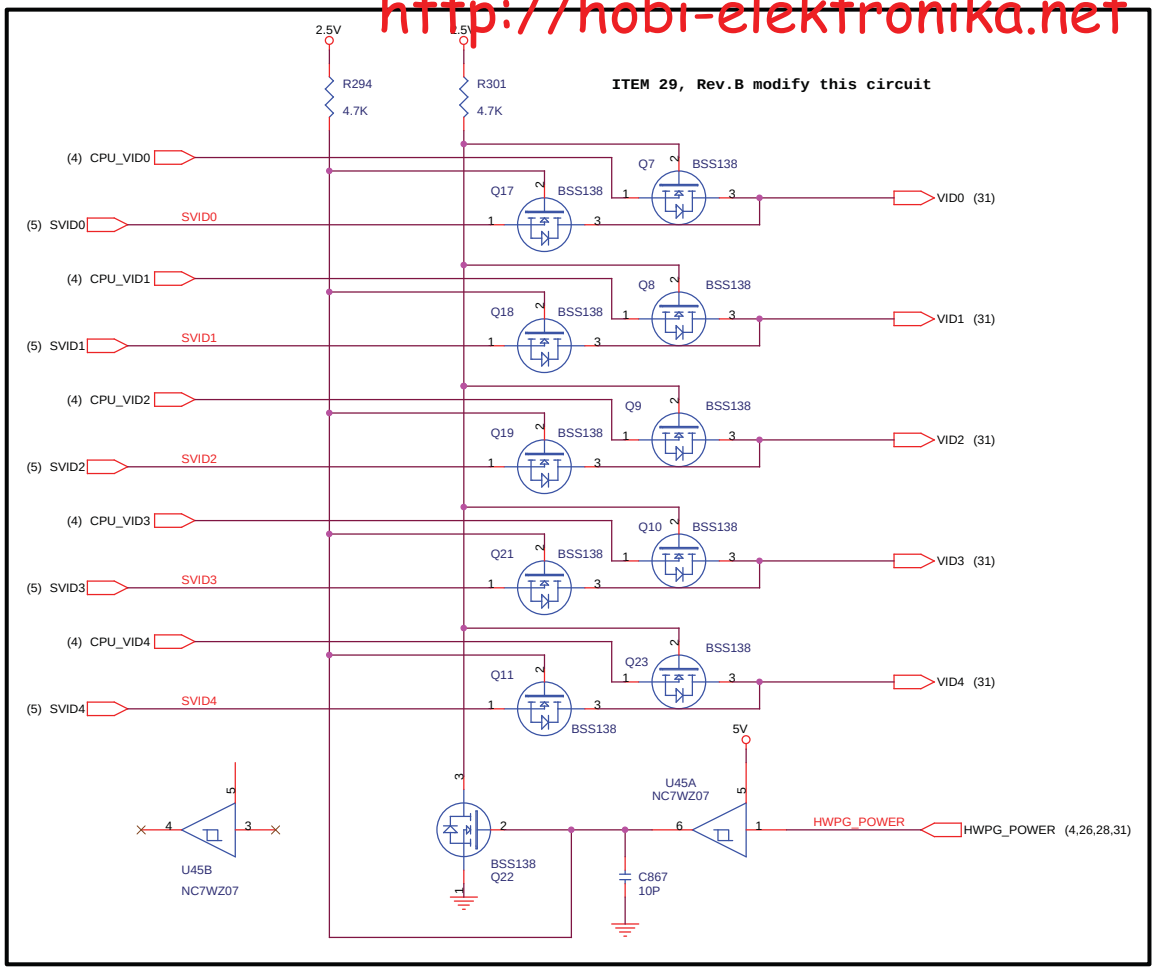


PROJECT : ZP1
Quanta Computer Inc.
Size C
Document Number
NORTH BRIDGE-3(VGA)
Rev 2B
Date: Wednesday, September 17, 2003
Sheet 8 of 32

VID / FID Interface

AMD suggest 3.9K



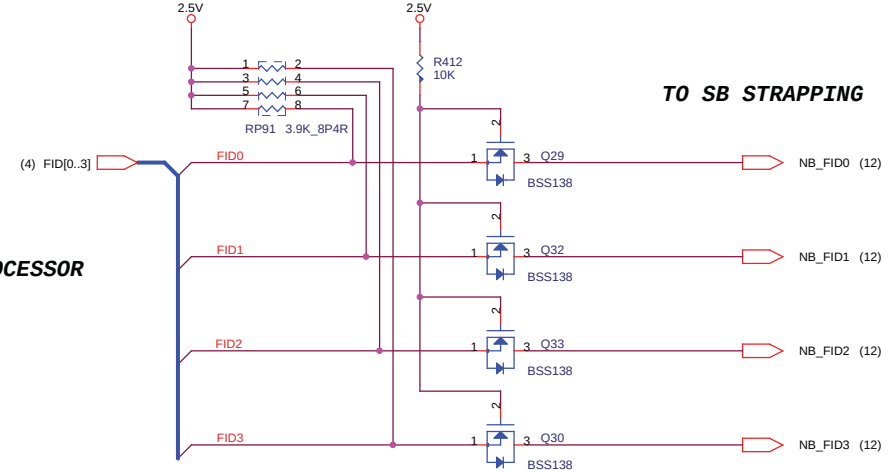


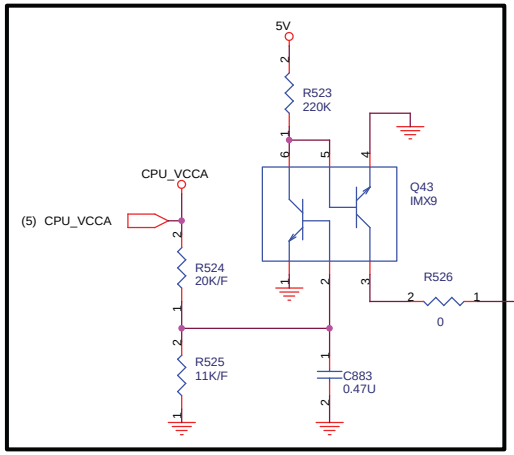
VID Codes

VID[4:0]	VCC_CORE	VID[4:0]	VCC_CORE
00000	2.000	10000	1.275
00001	1.950	10001	1.250
00010	1.900	10010	1.225
00011	1.850	10011	1.200
00100	1.800	10100	1.175
00101	1.750	10101	1.150
00110	1.700	10110	1.125
00111	1.650	10111	1.100
01000	1.600	11000	1.075
01001	1.550	11001	1.050
01010	1.500	11010	1.025
01011	1.450	11011	1.000
01100	1.400	11100	0.975
01101	1.350	11101	0.950
01110	1.300	11110	0.925
01111	SHUTDOWN	11111	SHUTDOWN

FID Codes

Four-Bit FID	Clock Multiplier	Four-Bit FID	Clock Multiplier
0000	11.0	1000	7.0
0001	11.5	1001	7.5
0010	12.0	1010	8.0
0011	12.5	1011	8.5
0100	5.0	1100	9.0
0101	5.5	1101	9.5
0110	6.0	1110	10.0
0111	6.5	1111	10.5

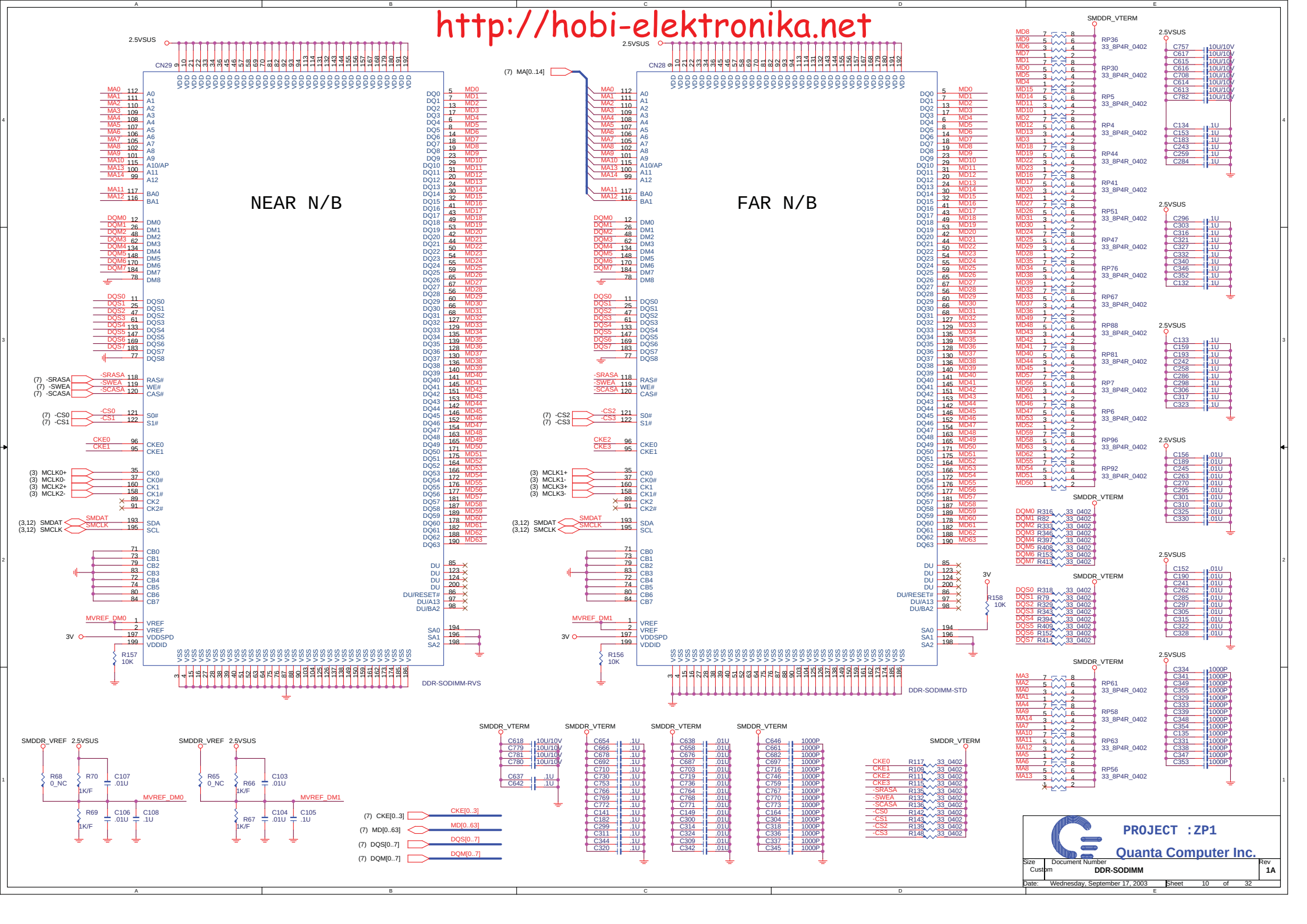


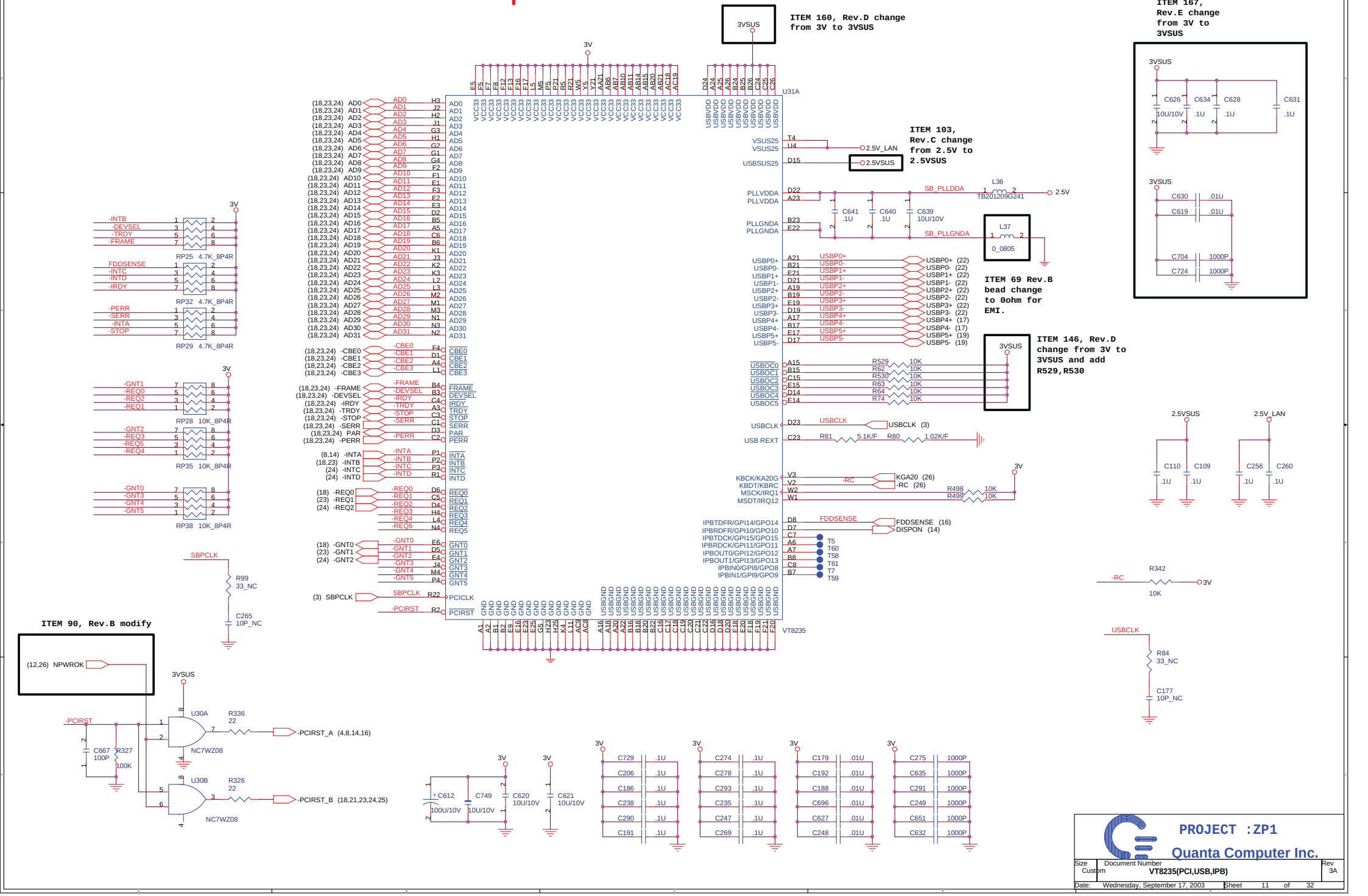


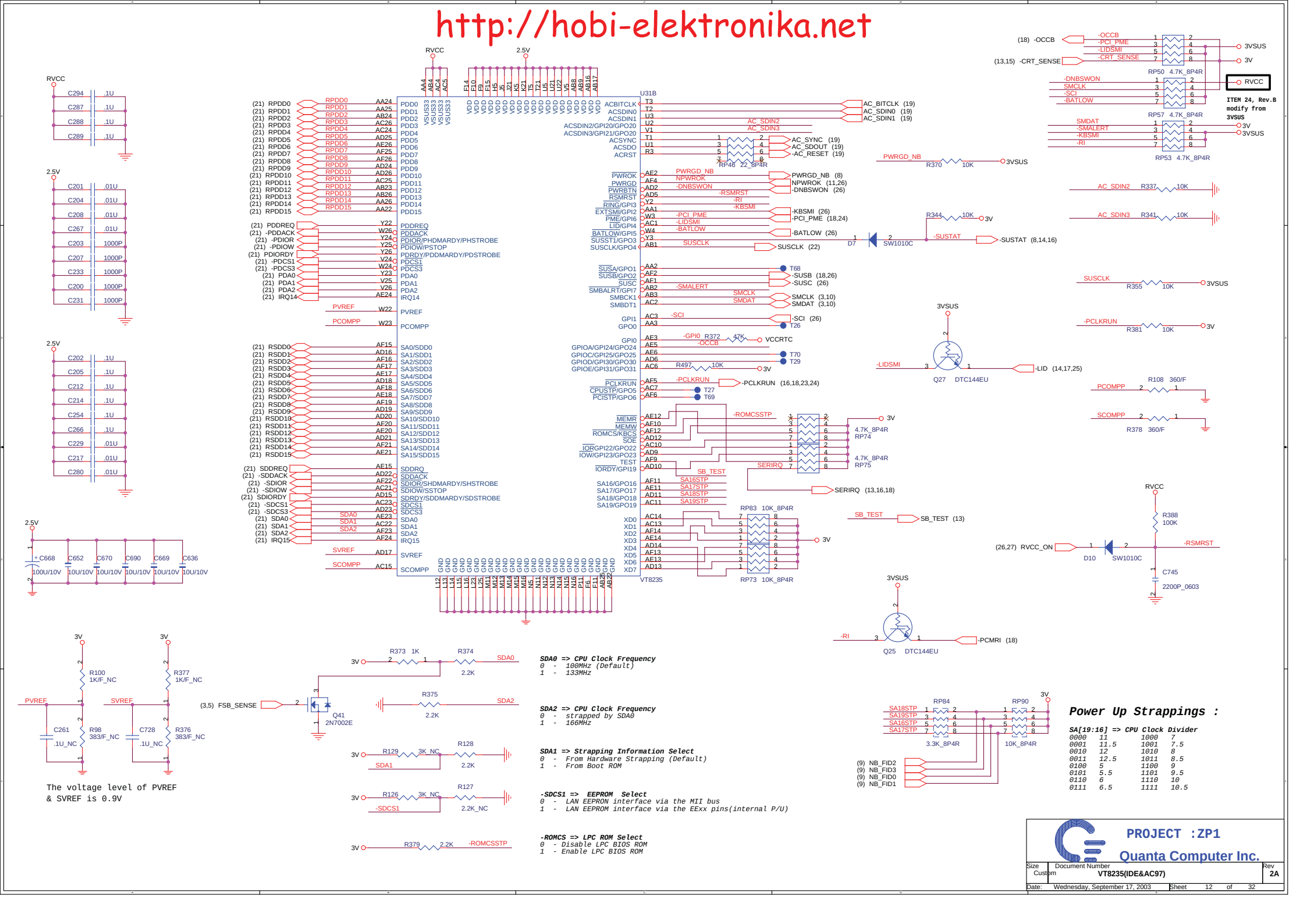
ITEM 131, Rev.D add

PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
	CPU VID/FID INTERFACE	3A
Date: Wednesday, September 17, 2003	Sheet 9 of 32	







ITEM 44, Rev.B change from 3K/F to 2K/F

ITEM 88, Rev.B change to 2.5V

The voltage level of VLREF_SB is 0.9V

ITEM 79, Rev.B U31 GPO change from pin V23 to P24

PROJECT : ZP1			
Quanta Computer Inc.			
Size: Custom	Document Number: VT8235(LPC,LAN,VLINK)		Rev: 2A
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ITEM 82, Rev.B change CN14 and CN18 type from E & T to Foxconn

Int. K/B

CN18

FOXCONN_QTS0120A-1021

AGP 4X/8X I/F

CRT I/F

CN14

FOXCONN_QTS0060A-1021

ITEM 46, Rev.B remove ext. VGA thermal I2C pin and CKT

TV-Out I/F

INVERTER

CA1 220PX4 MX5 MX7 MY1 MX4

CA5 220PX4 MX2 MX3 MY7 MY5

CA4 220PX4 MY3 MY0 MY2 MX6

CA2 220PX4 MY4 MY6 MY8 MY9

CA3 220PX4 MX1 MY11 MY12 MY14

CA6 220PX4 MX0 MY15 MY13 MY10

(8) GAD[0..31] GAD[0..31]

MX[0..7] MX[0..7] (26)

MY[0..15] MY[0..15] (26)

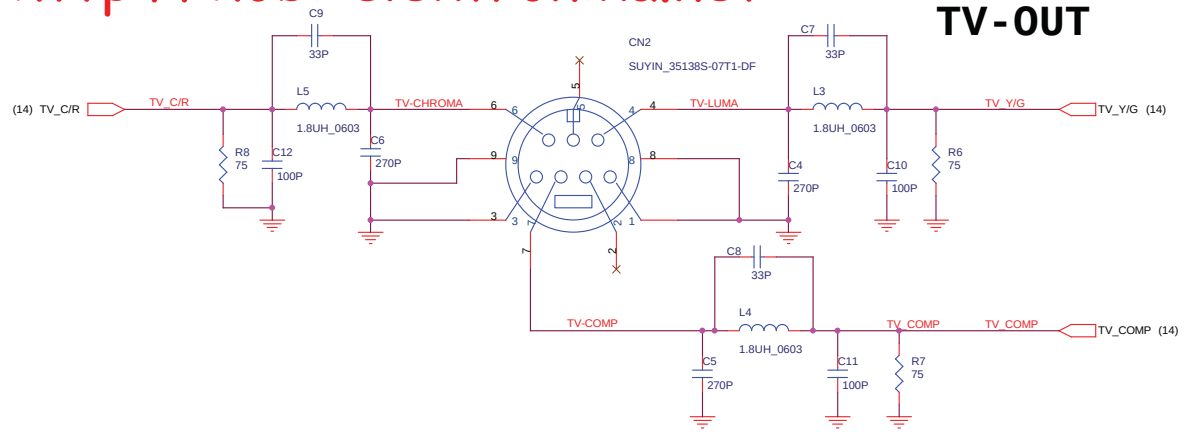
ITEM 42, Rev.B swap ID2 and ID3

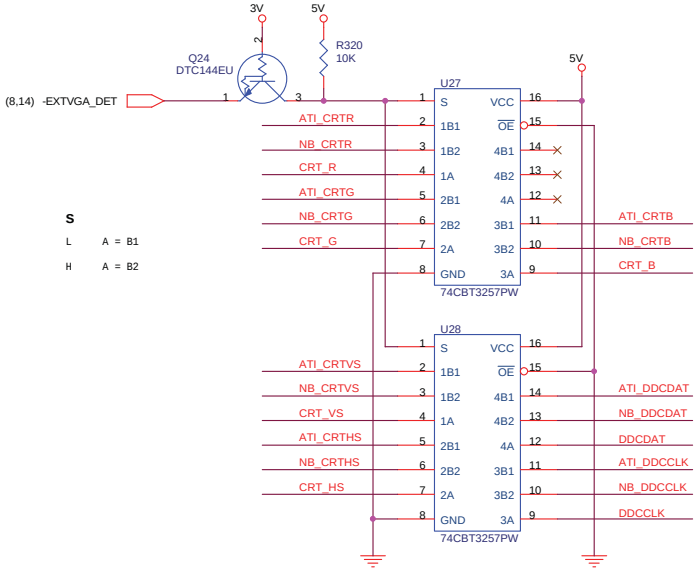
Size: Custom	Document Number: Option VGA And TV Encoder Connecor
Rev: 2A	
Date: Wednesday, September 17, 2003	Sheet 14 of 32

PROJECT : ZP1

Quanta Computer Inc.

TV-OUT

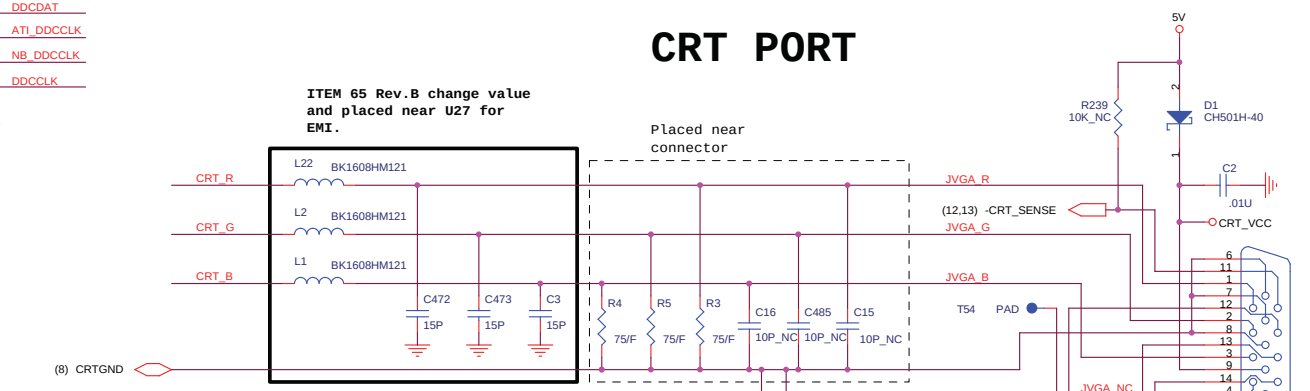


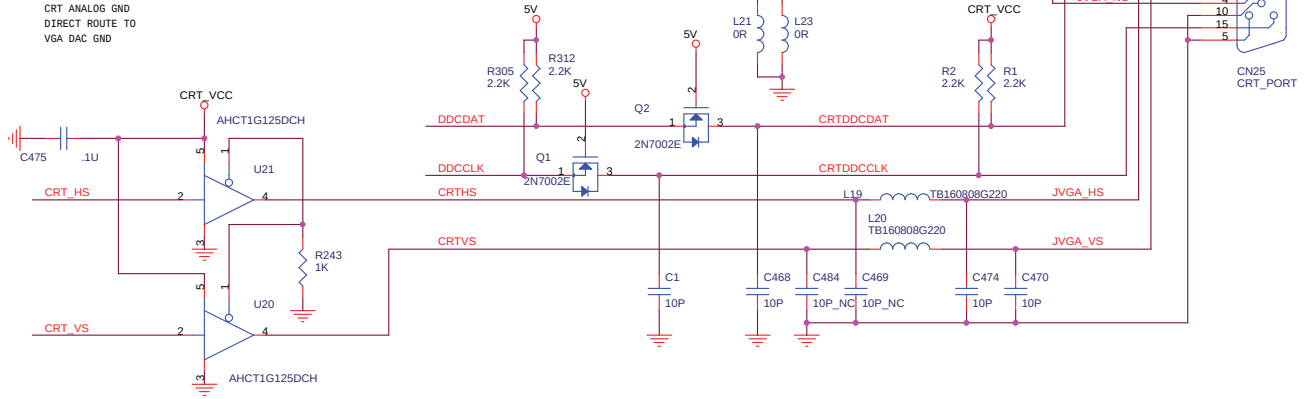


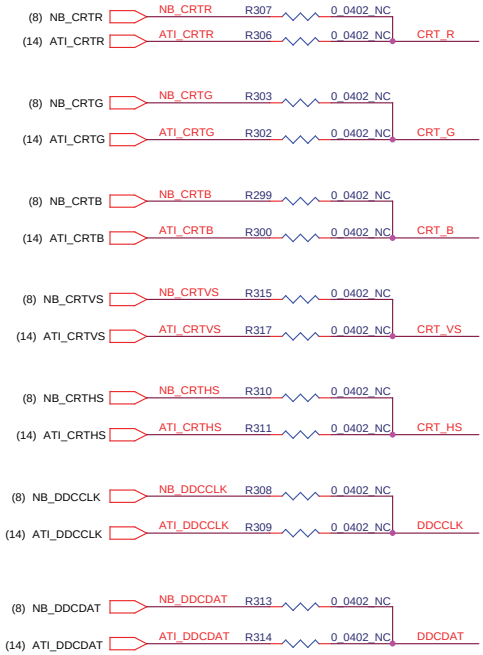
CRT PORT

ITEM 65 Rev.B change value and placed near U27 for EMI.

Placed near connector







PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
	CRT PORT & S-VIDEO	2A
Date: Wednesday, September 17, 2003	Sheet 15 of 32	

Super I/O

PC87393

ECN 124 change from 3V to 5V

SET ADDRESS

ITEM 96, Rev.C remove reserved serial port

ITEM 78, Rev.B change from 0_1206 to 3.9_1206

ITEM 58, Rev.B add

ITEM 59, Rev.B remove

ITEM 58, CKT modify from Rev.B

Molex_52610-2690

20mil

TFDU6102

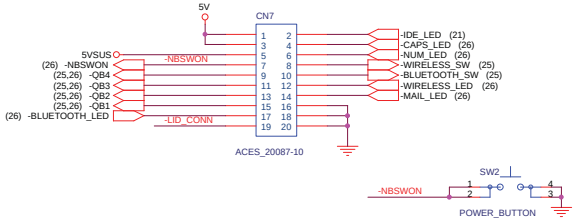
PROJECT : ZP1

Quanta Computer Inc.

Size	Document Number	Rev
Custom	PC87393F, COM1	2C

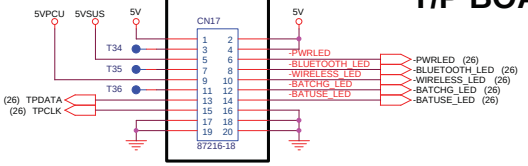
Date: Wednesday, September 17, 2003 Sheet 16 of 32

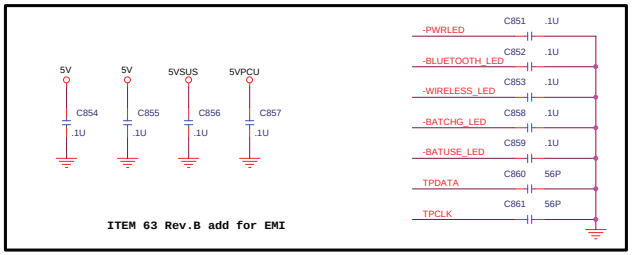
LED BOARD



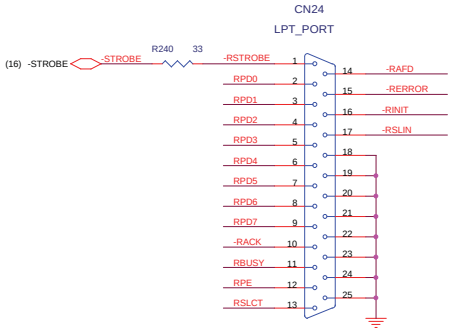
T/P BOARD

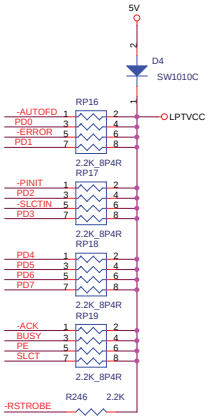
ITEM 172, Rev.E change from 18 pin to 20 pin

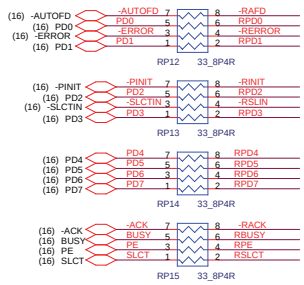


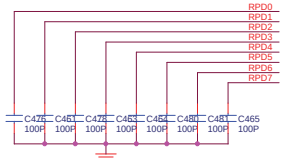


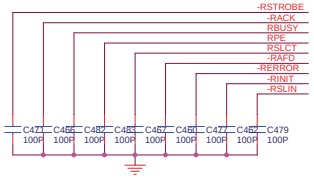
LPT

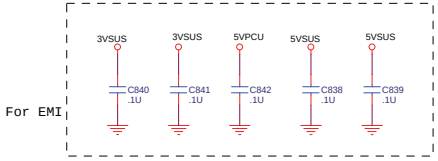






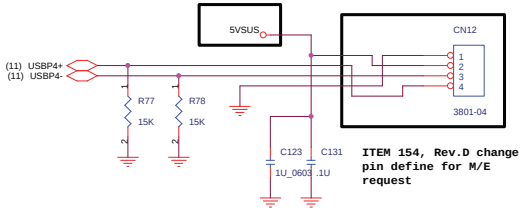




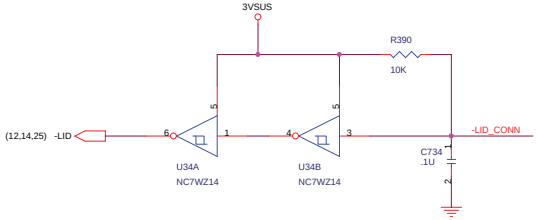


4 IN 1 CARD READER

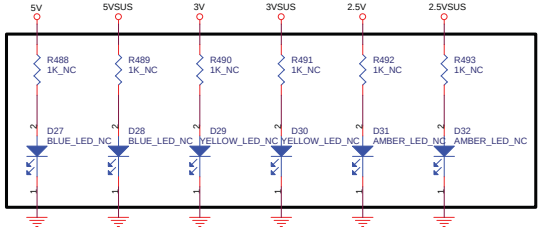
ITEM 175, Rev.E change from 5V to 5VSUS



LID SWITCH



DEBUG LED



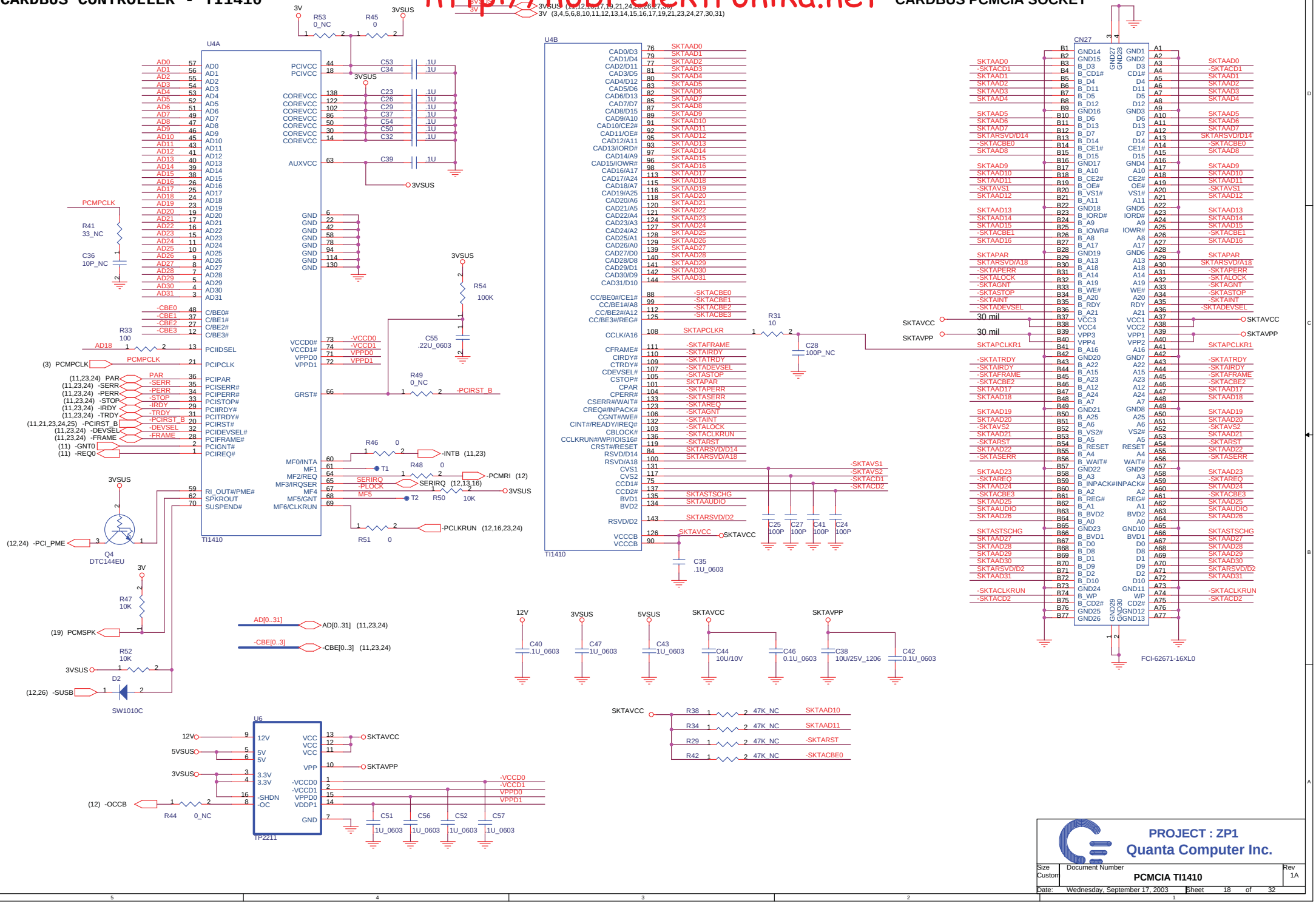
ITEM 97, Rev.C Remove

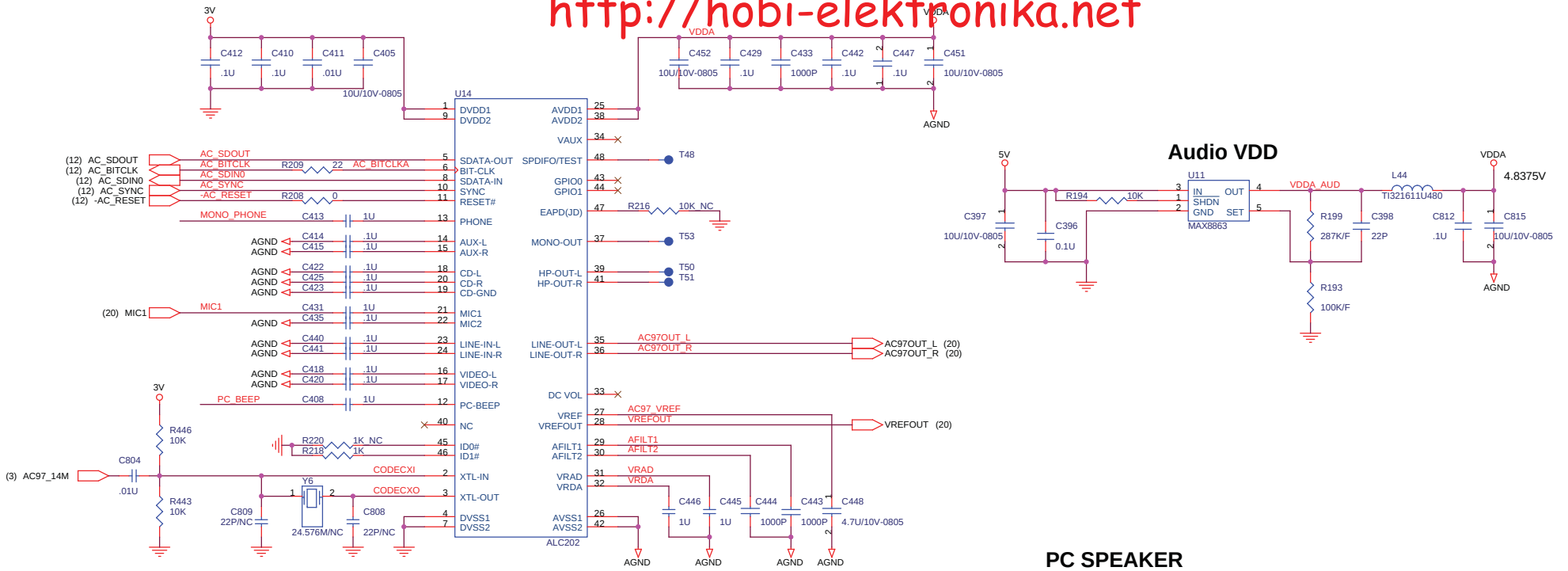
PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
	LPT, LED, CARD READER, LID SW	3A
Date: Wednesday, September 17, 2003	Sheet 17 of 32	

CARDBUS CONTROLLER - TI1410

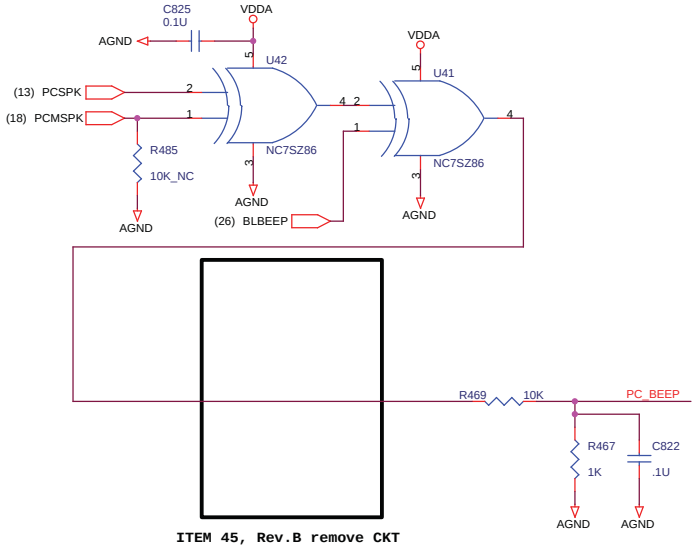
CARDBUS PCMCIA SOCKET

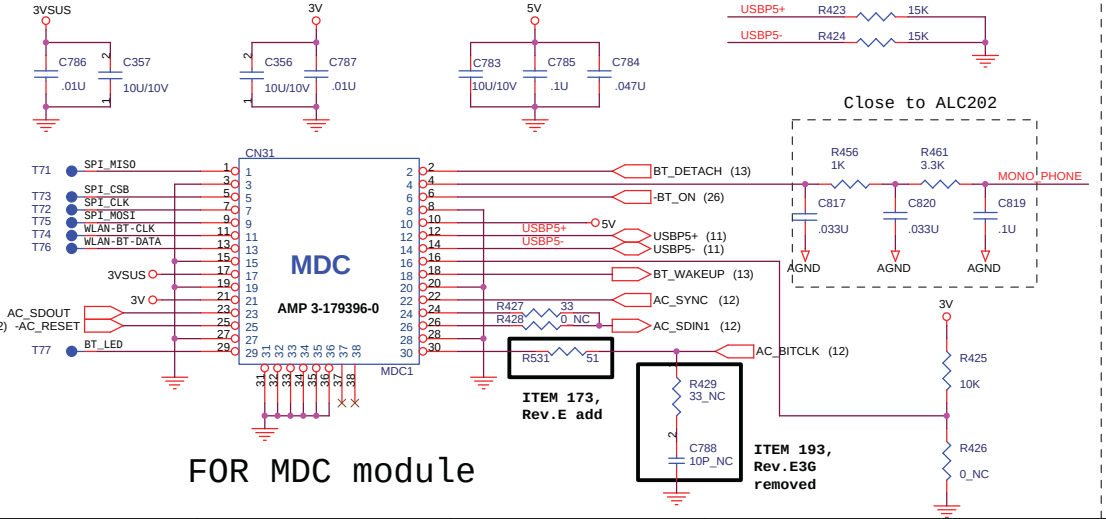




Audio VDD

PC SPEAKER





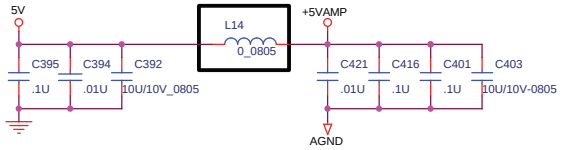
ITEM 45, Rev.B remove CKT

PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
Custom	AC97 CODEC	3G
Date: Wednesday, September 17, 2003	Sheet 19 of 32	

Audio amplifier

ITEM 69 Rev.B bead
change to 0ohm for EMI.

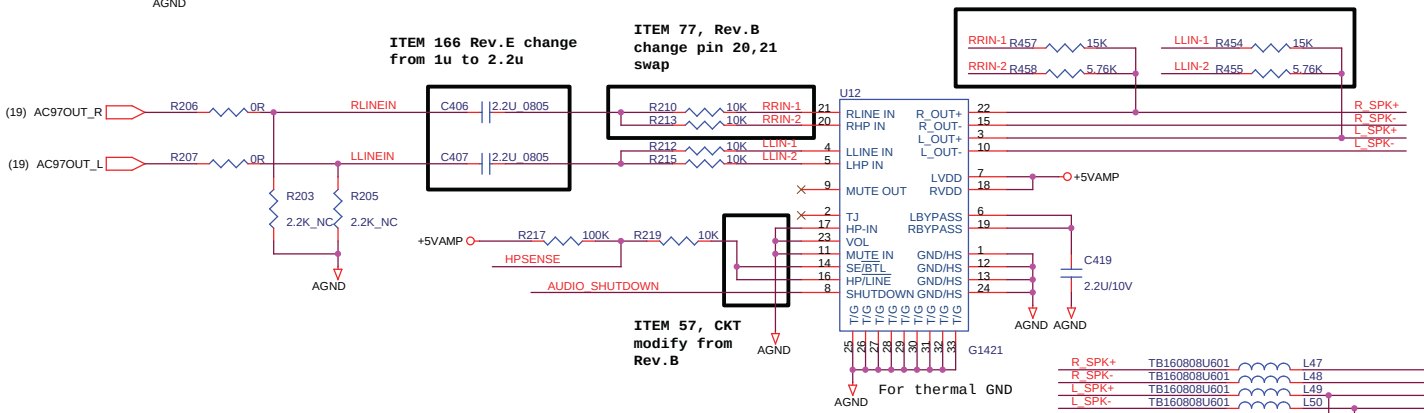


ITEM 166 Rev.E change
from 1u to 2.2u

ITEM 77, Rev.B
change pin 20,21
swap

ITEM 81, Rev.B modify

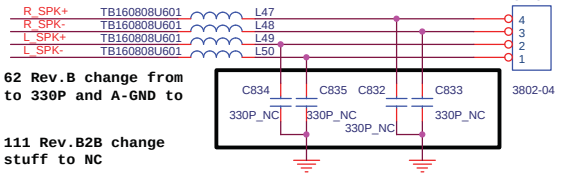
ITEM 111, Rev.B2B change R454,R457 from 24.9K to 15K



ITEM 57, CKT
modify from
Rev.B

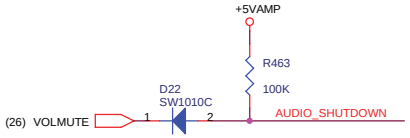
For thermal GND

INT. SPEAKER

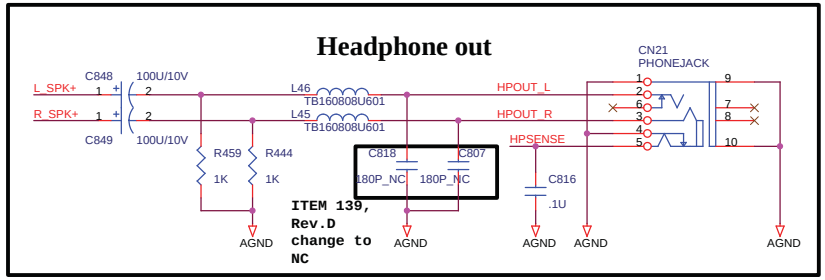


ITEM 62 Rev.B change from
180P to 330P and A-GND to
GND

ITEM 111 Rev.B2B change
from stuff to NC



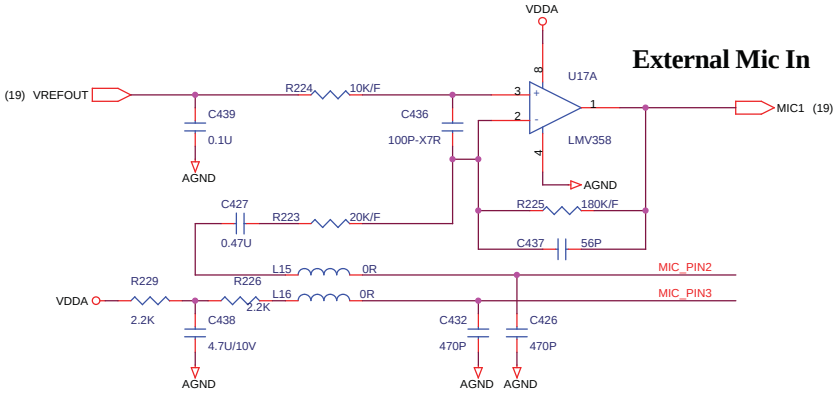
Headphone out

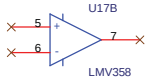


ITEM 139,
Rev.D
change to
NC

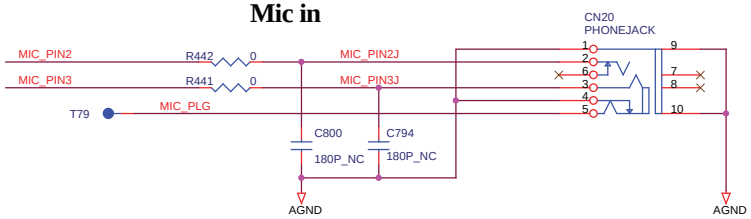
ITEM 57, CKT modify from Rev.B

External Mic In





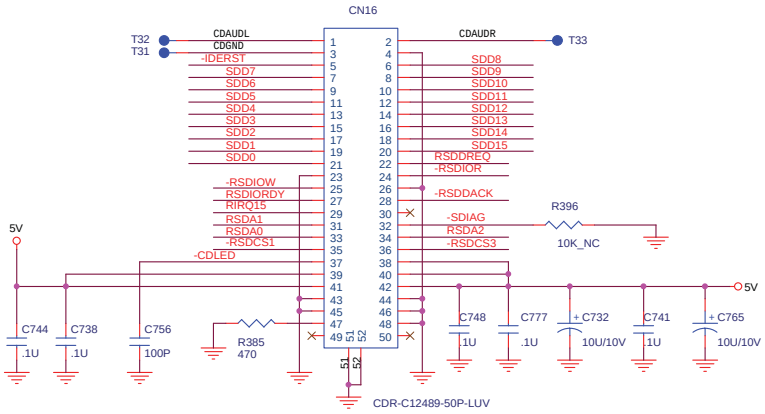
Mic in

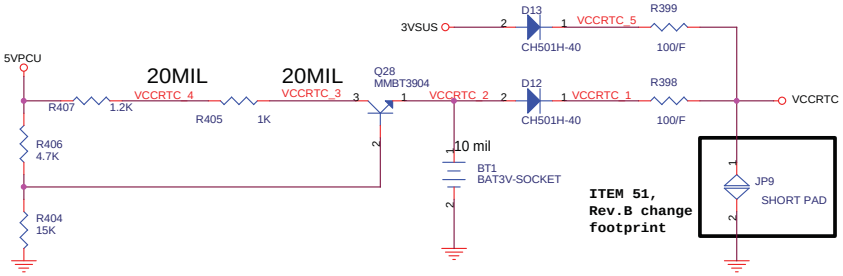


PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
Custom	AUDIO AMP & JACK	3C
Date: Wednesday, September 17, 2003	Sheet 20 of 32	

ODD CONNECTOR

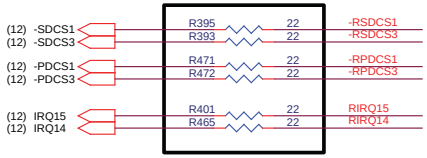




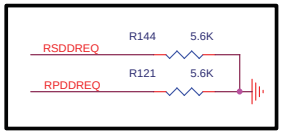
ITEM 51, Rev.B change footprint

RTC

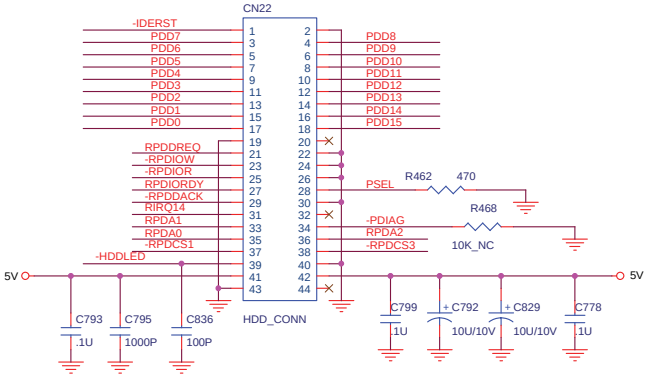
ITEM 38, Rev.B modify, placed near South Bridge



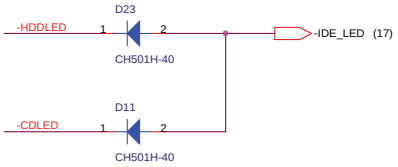
ITEM 35, Rev.B modify, placed near South Bridge

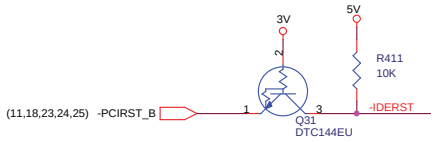


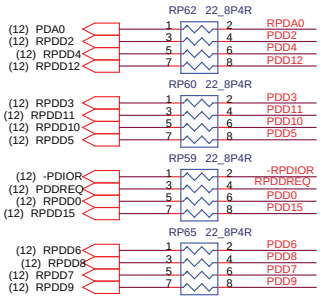
ITEM 36, Rev.B modify, placed near South Bridge

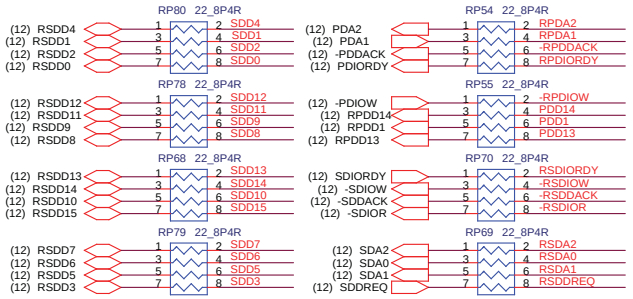


HDD connector

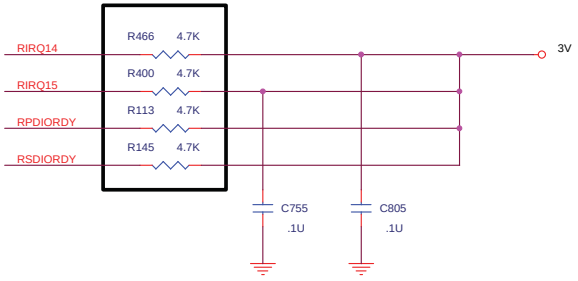








Placed near VT8235

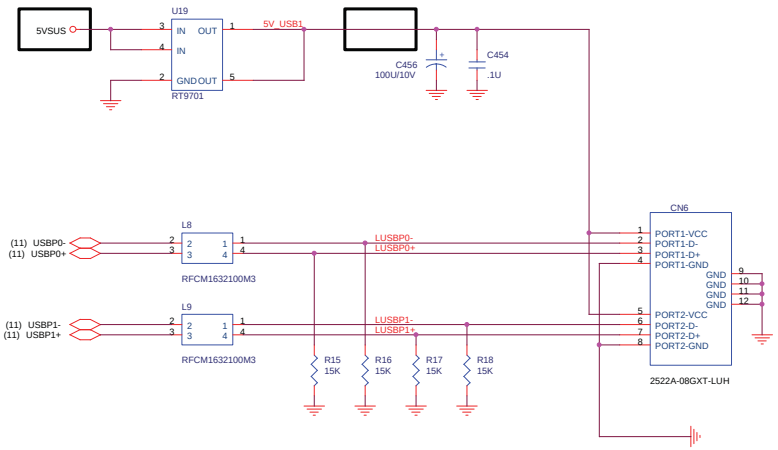


PROJECT : ZP1
Quanta Computer Inc.

Size	Document Number	Rev
	IDE,RTC,LEDs	2A
Date: Wednesday, September 17, 2003	Sheet 21 of 32	

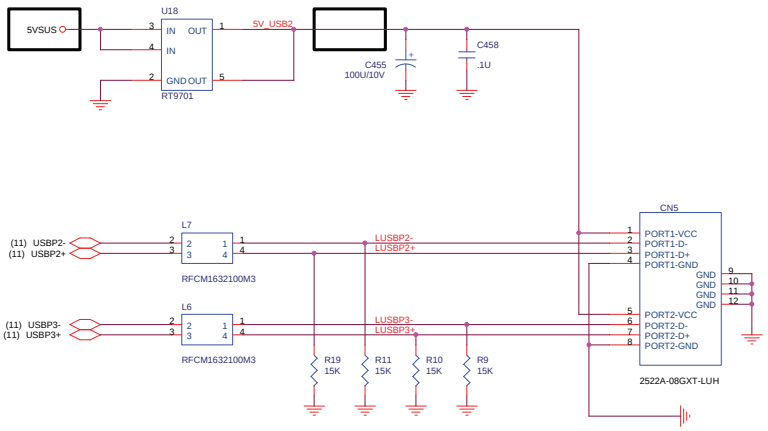
ITEM 103, Rev.C change from 5V to 5VSUS

Rev.C remove reserved 0_0805



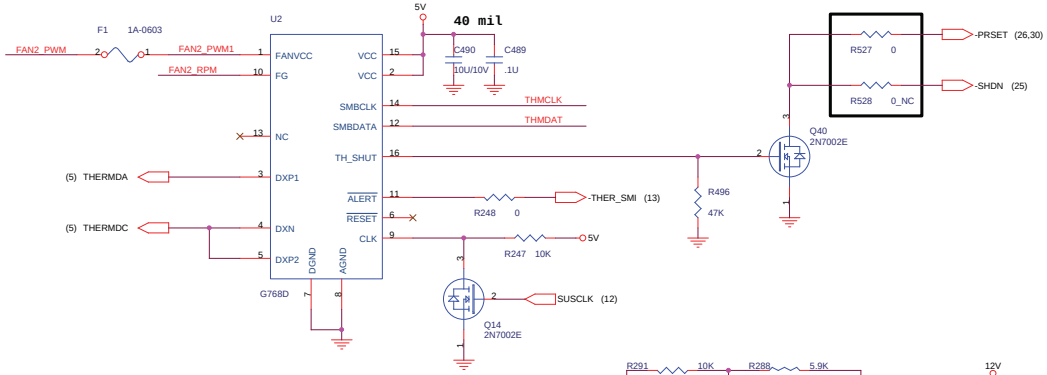
ITEM 103, Rev.C change from 5V to 5VSUS

Rev.C remove reserved 0_0805

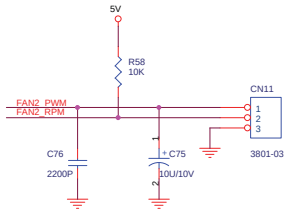


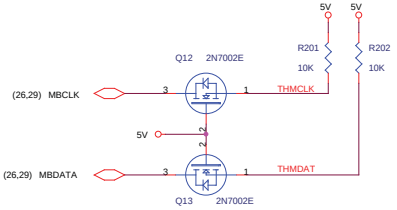
ITEM 146, Rev.D remove over current event to system

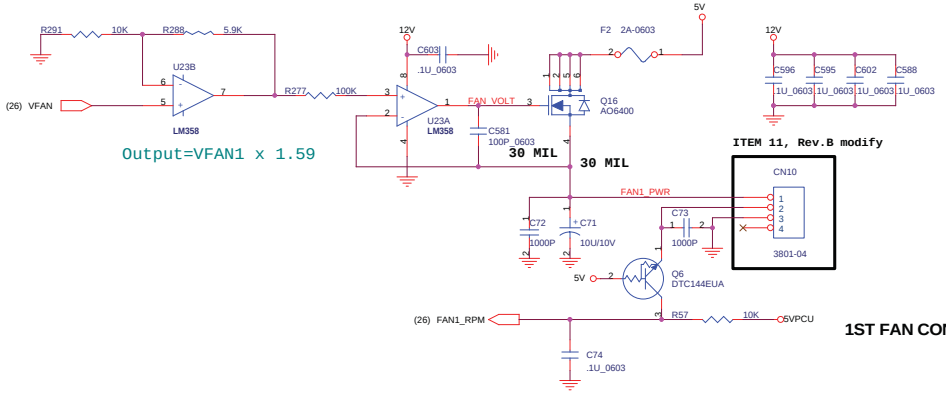
ITEM 145, Rev.D add



Second FAN







1ST FAN CONN

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Quanta Computer Inc.

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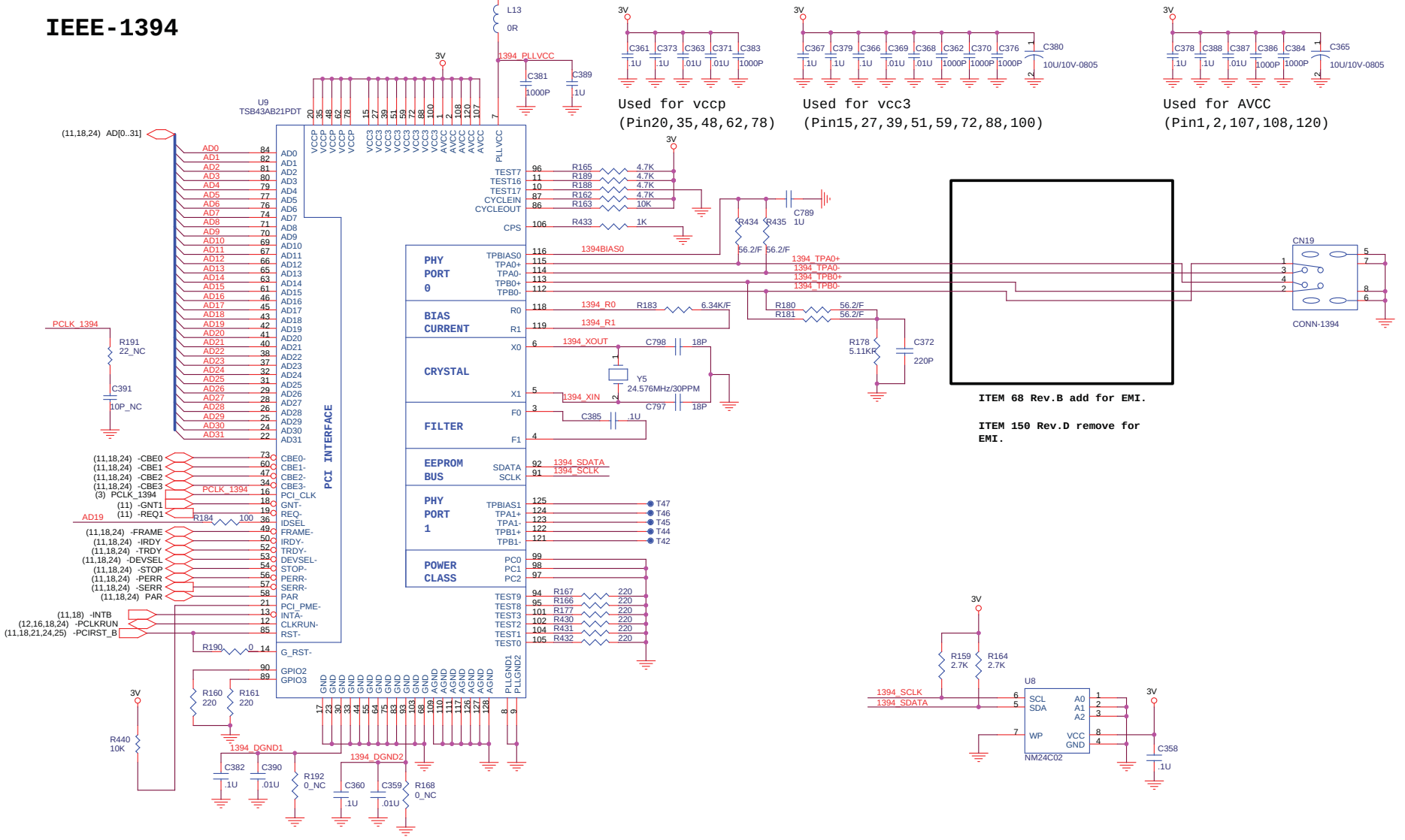
IEEE-1394



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Quanta Computer Inc.		
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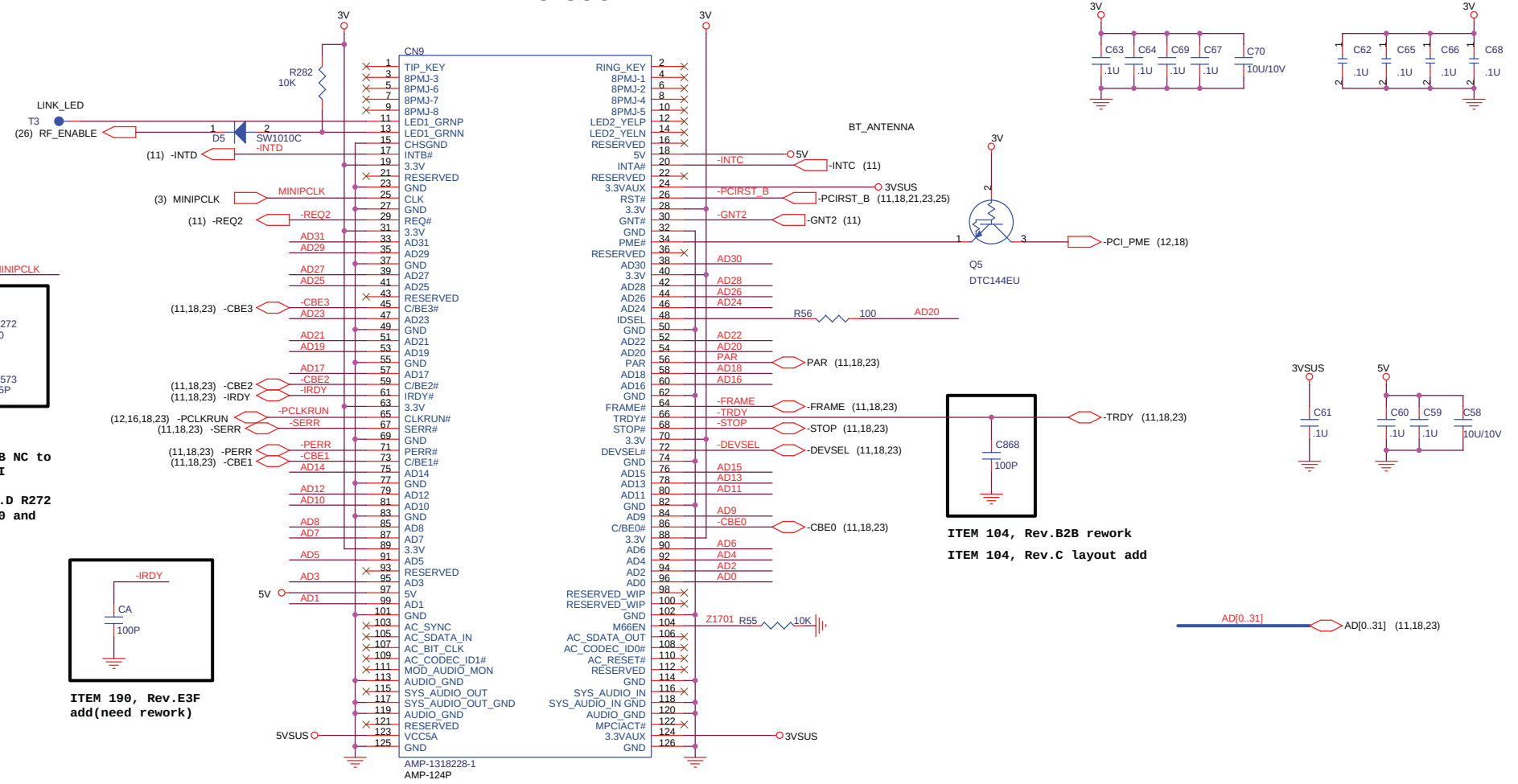
TYPE III MINI PCI SOCKET



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Quanta Computer Inc.		
Size: Custom	Document Number: MINI PCI	Rev: 3F
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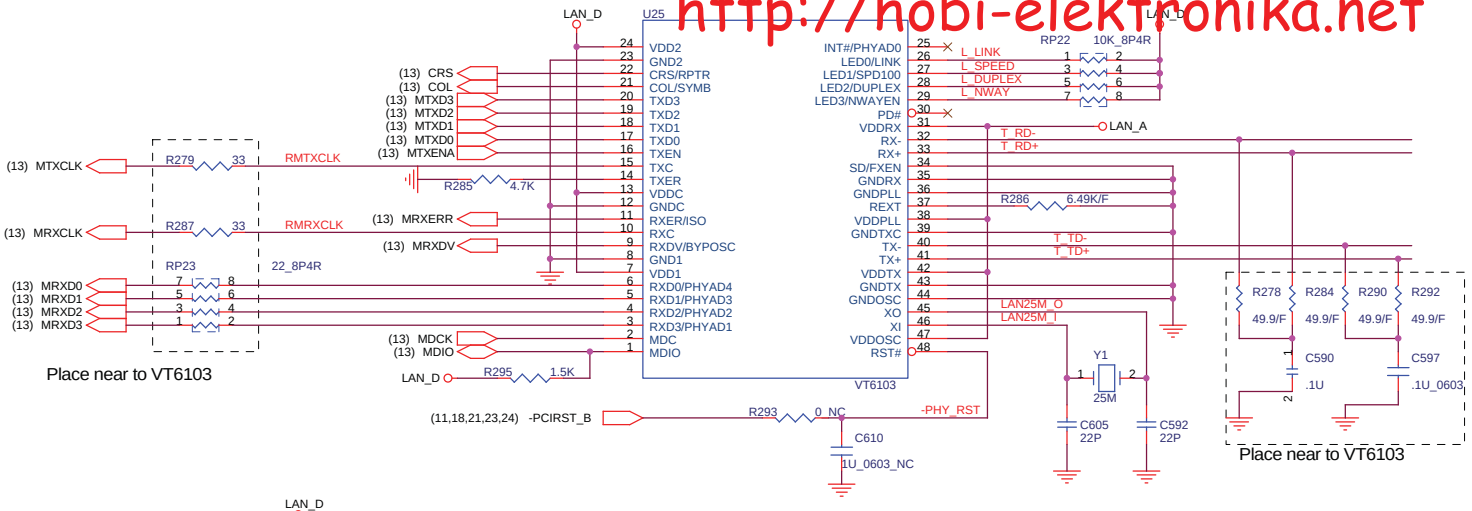
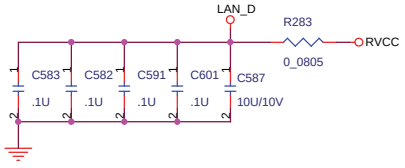
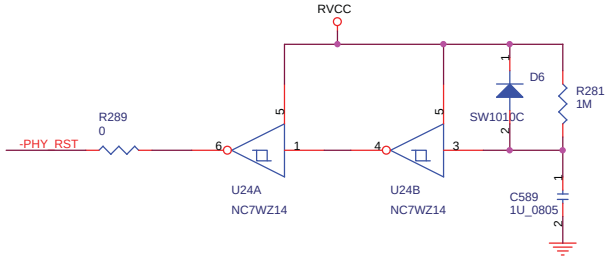
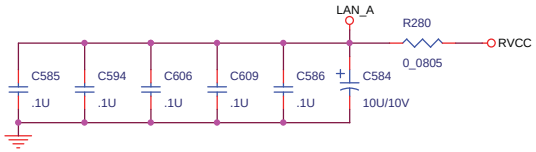
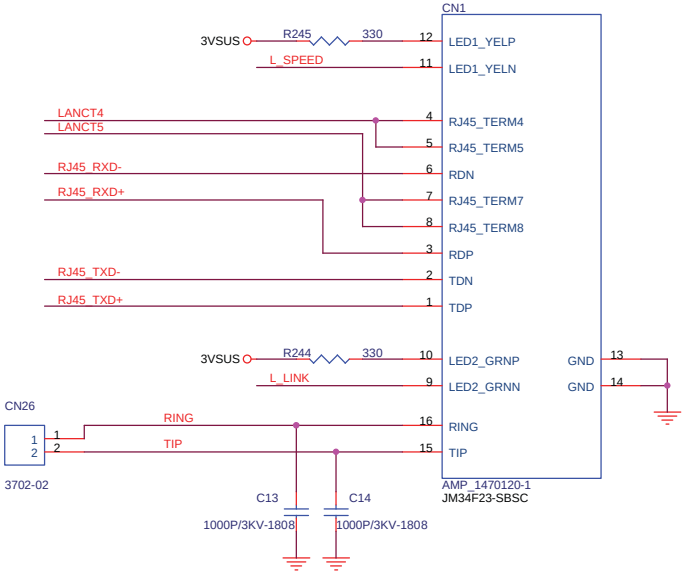


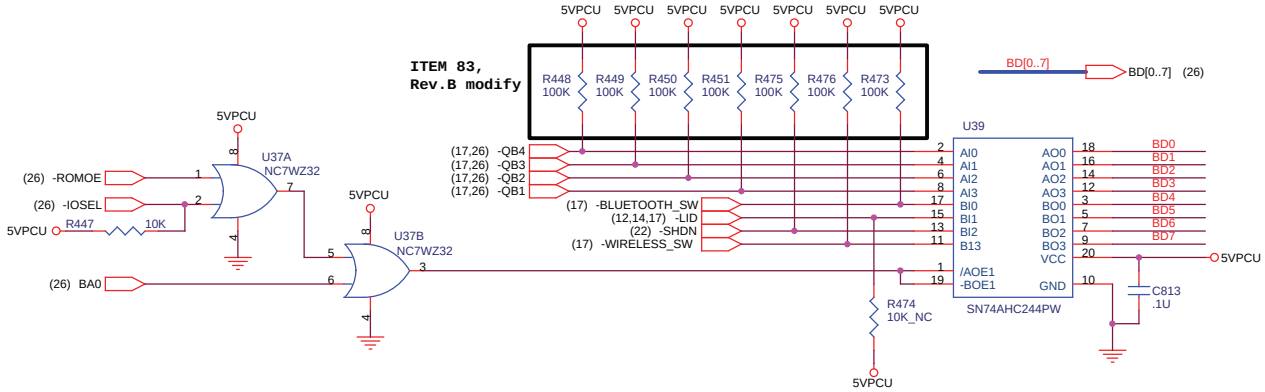








570 EXP. IO



ITEM 74 Rev.B add pin15 -LID and R474 NC for S/W request

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A3	LAN PHY VT6103 + RJ11&RJ45, 570 EXP. IO	2A
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ITEM 34, Rev.B R482 change from NC to stuff, R481 change from stuff to NC

ITEM 34, Rev.B add R500,R502,R503 pull up

ITEM 34, Rev.B add

RESET SWITCH

ITEM 84, Rev.B change from stuff to NC

PLCC

FOR EMI

30mil

30mil

PC87C570-TQFP

PC87C570-TQFP

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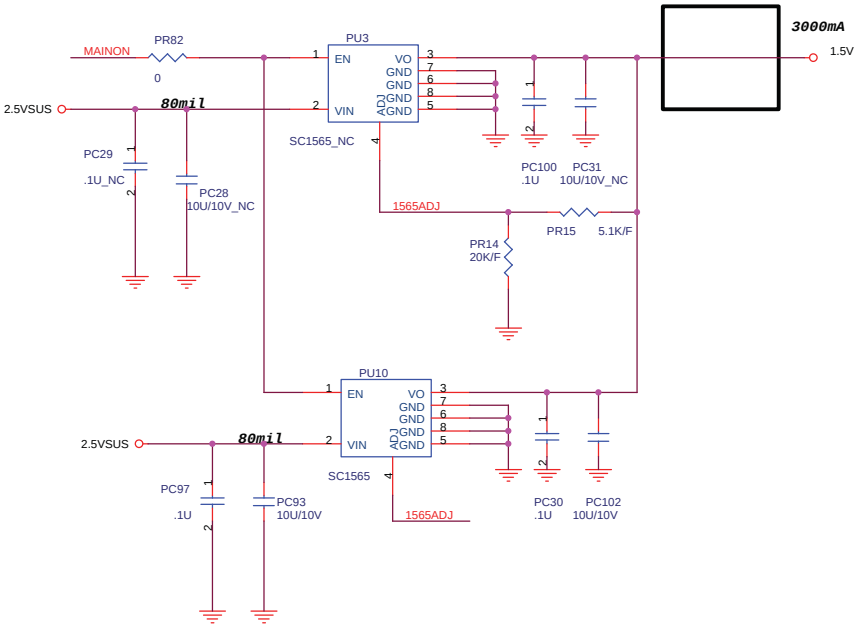
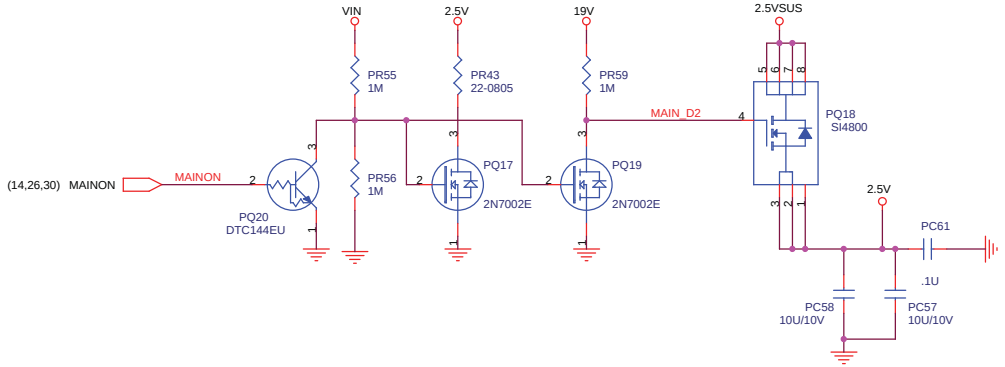
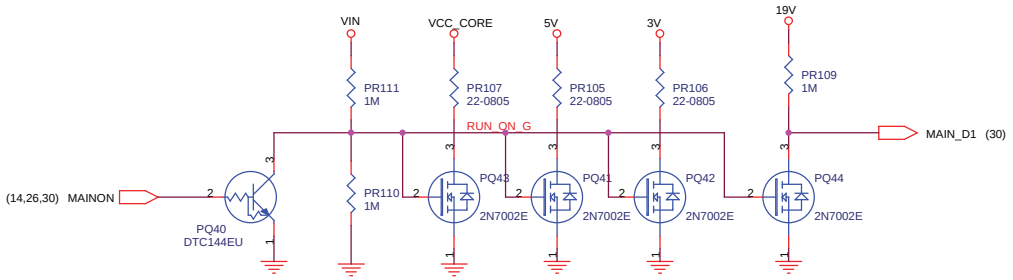
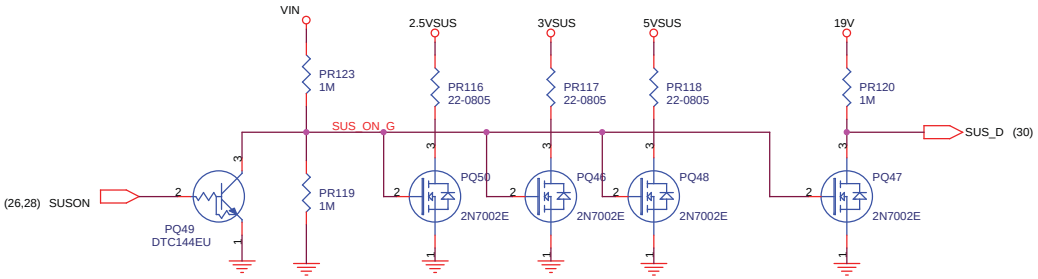
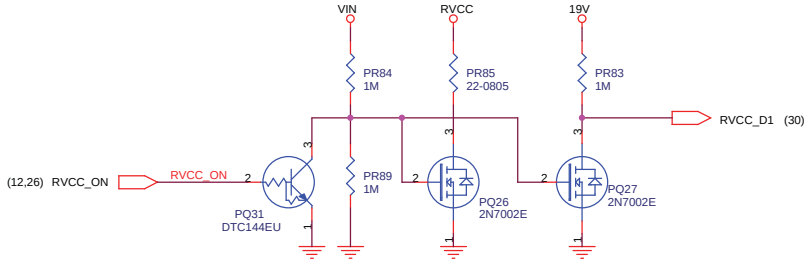
ITEM 85, Rev.B remove jumper











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Quanta Computer Inc.

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Custom	DISCHARGE CIRCUIT	2A
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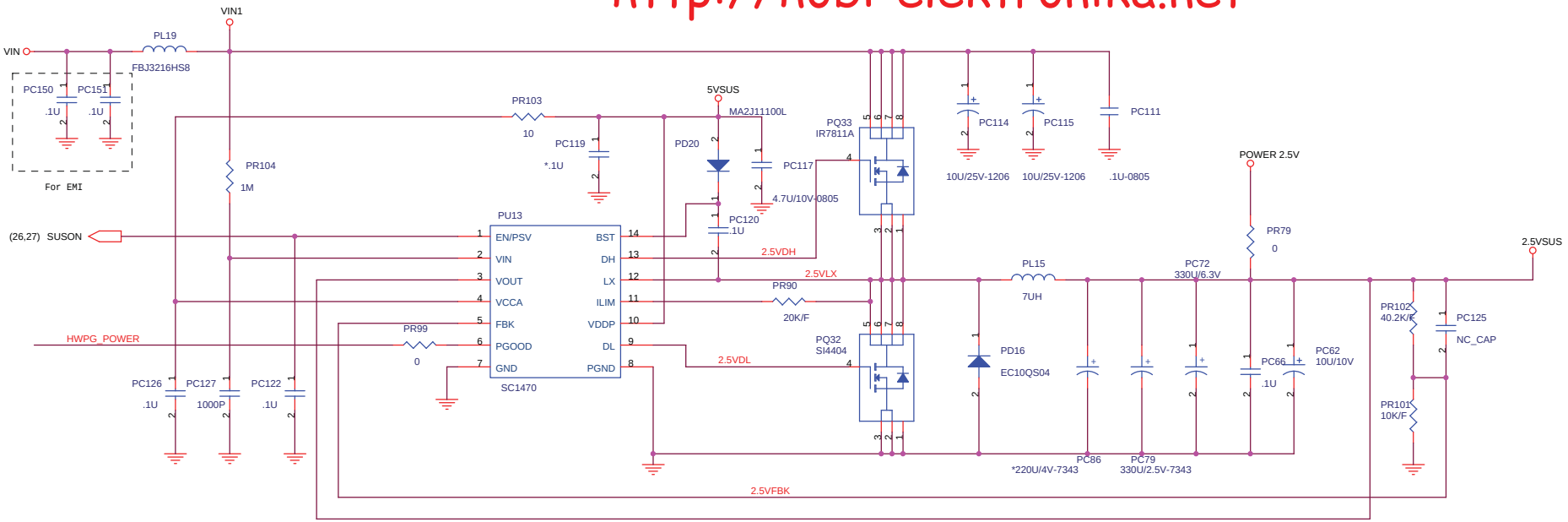

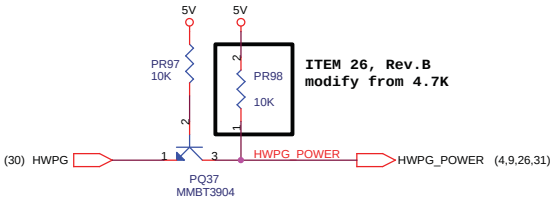

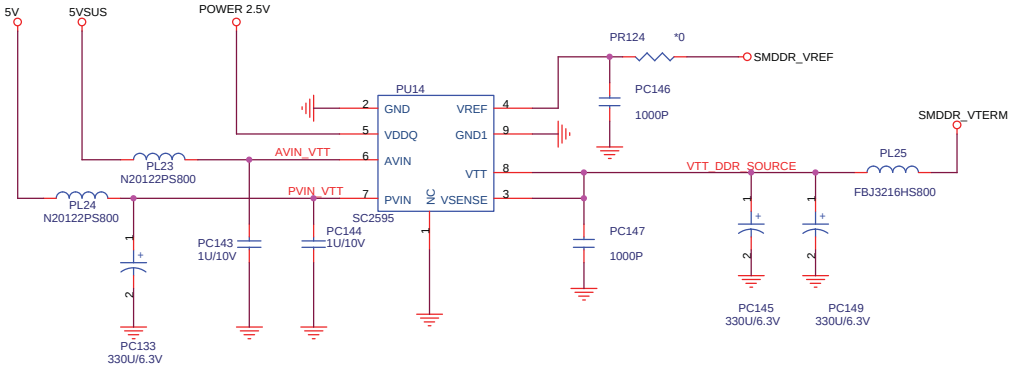

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Quanta Computer Inc.

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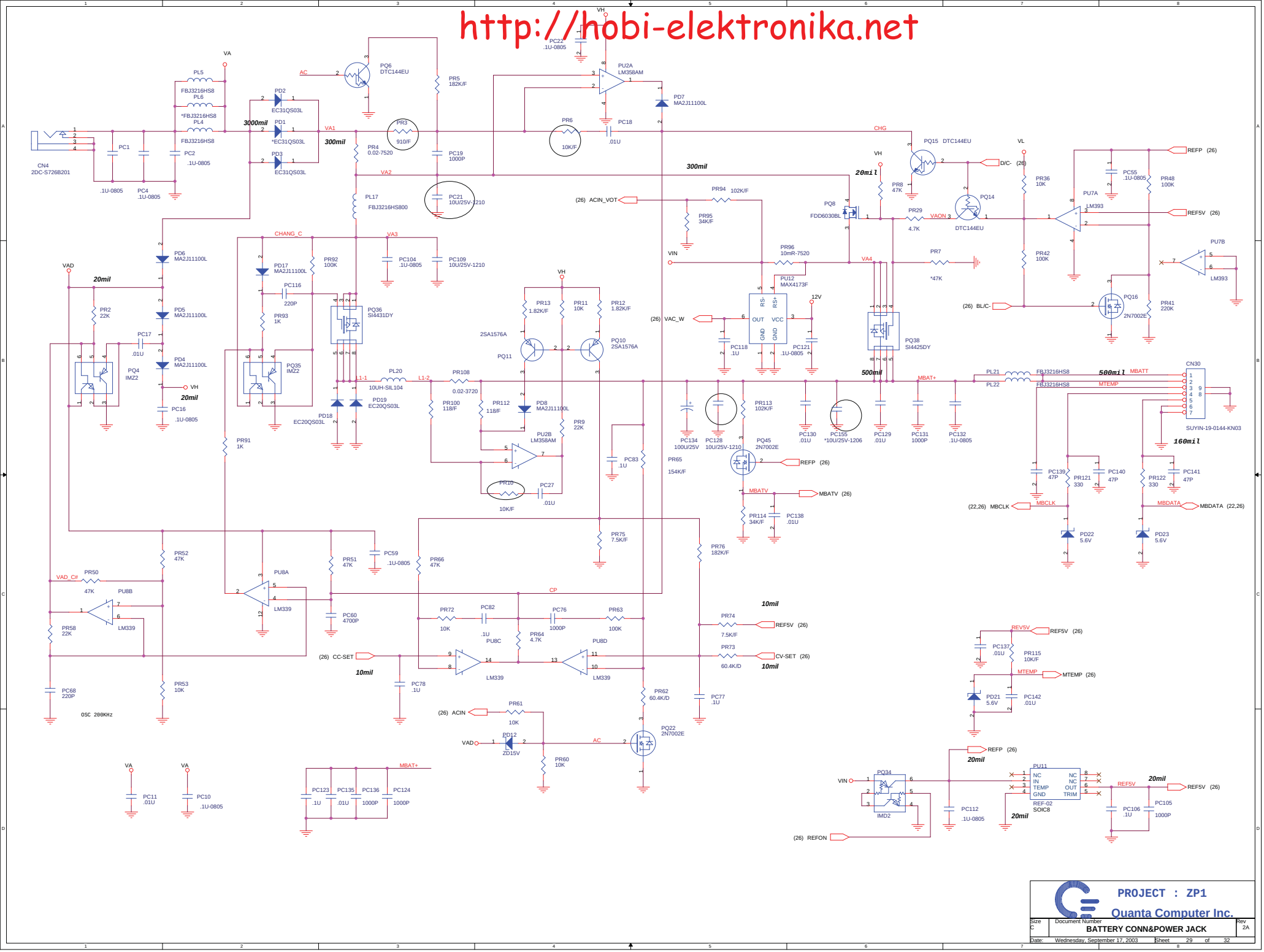

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Quanta Computer Inc.			
Size: C	Document Number: BATTERY CONN&POWER JACK		Rev: 2A
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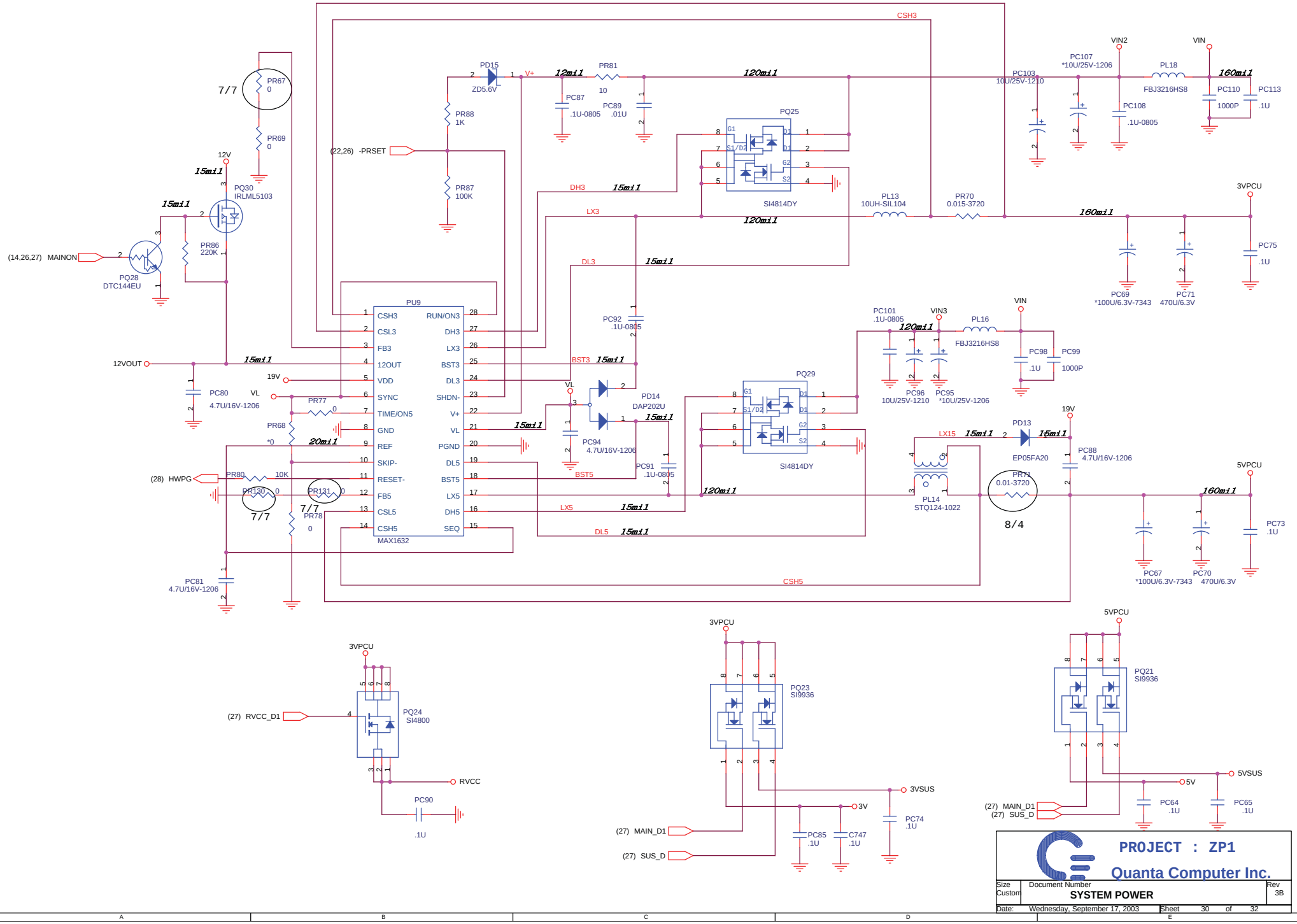

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Quanta Computer Inc.

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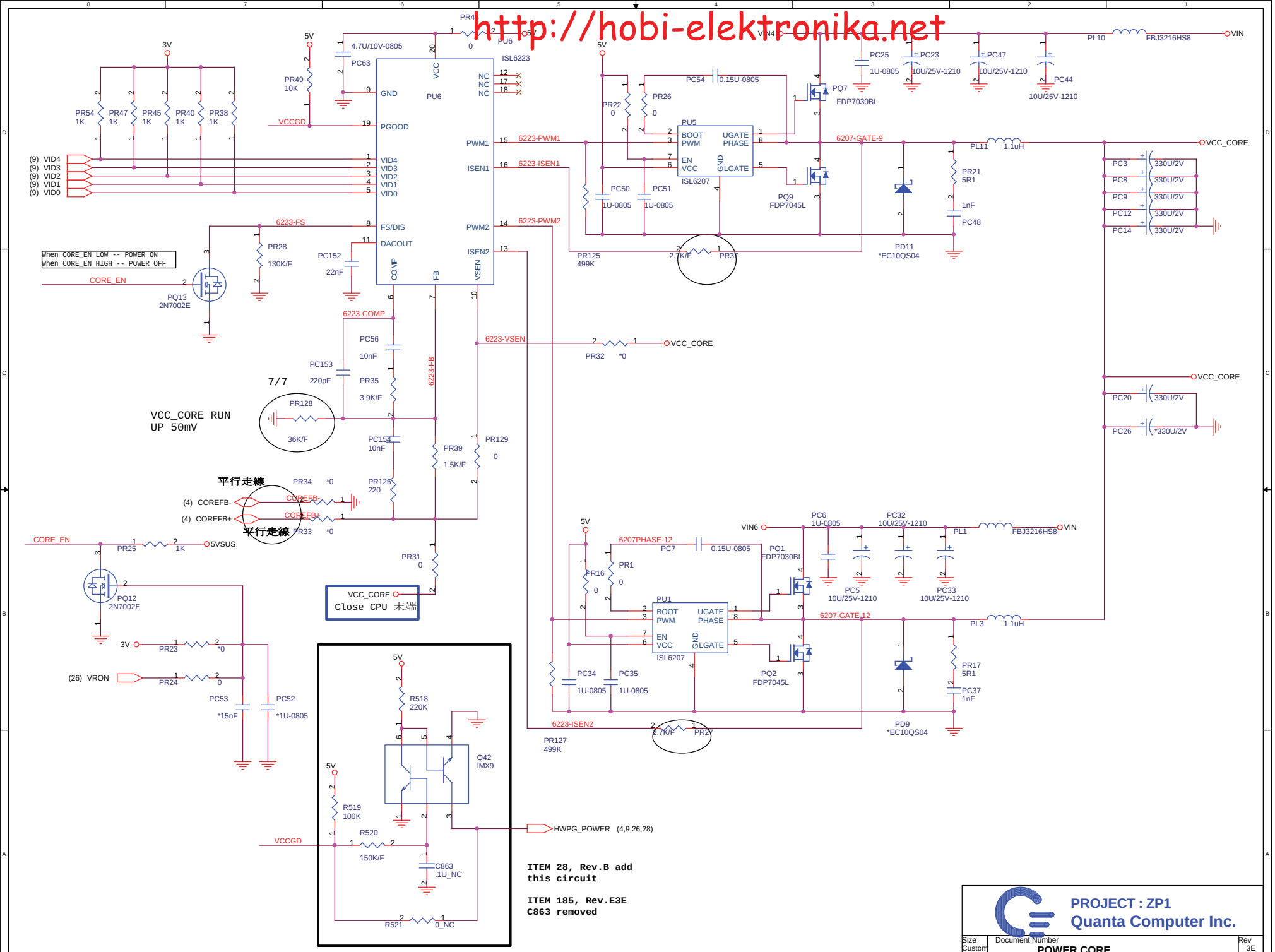
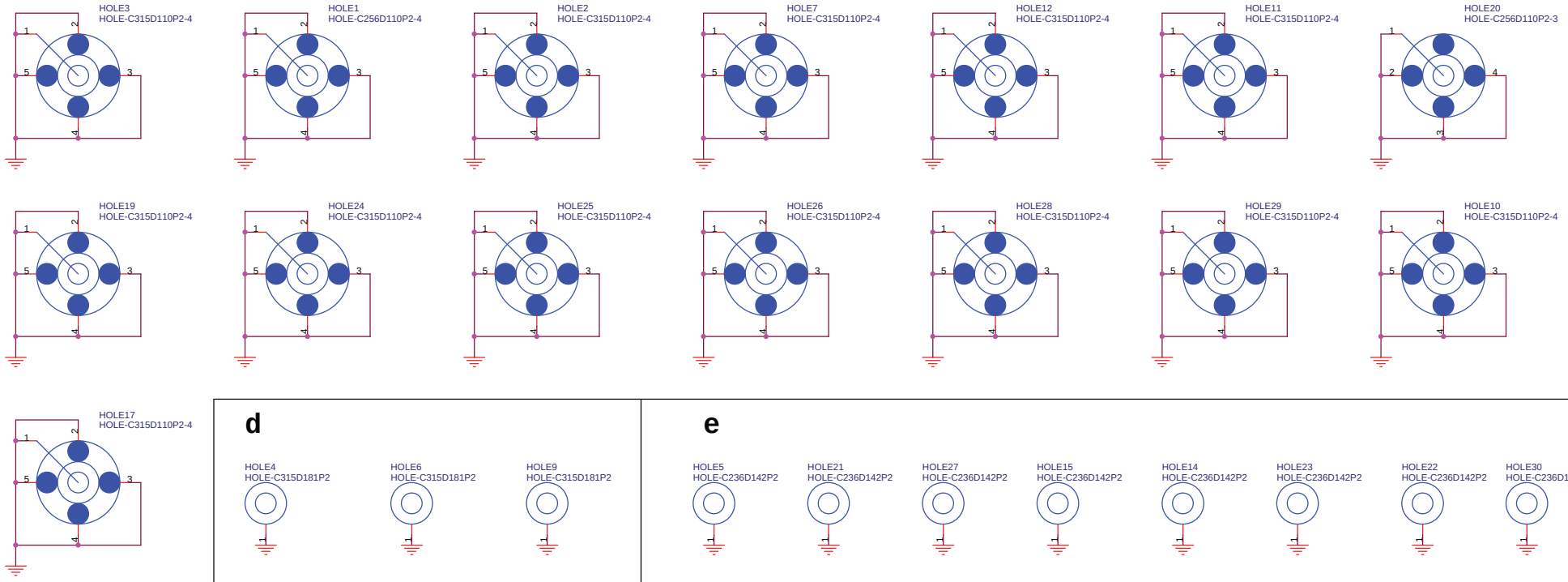


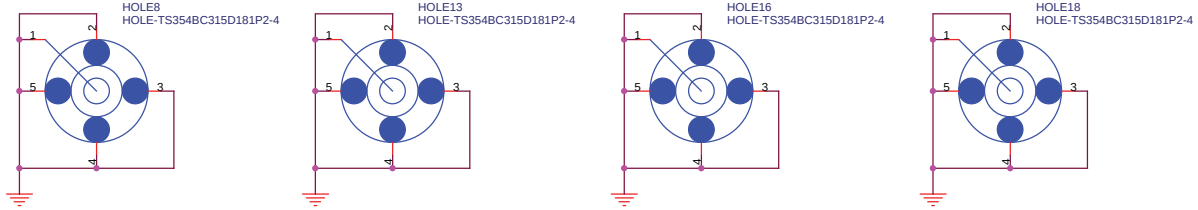
A

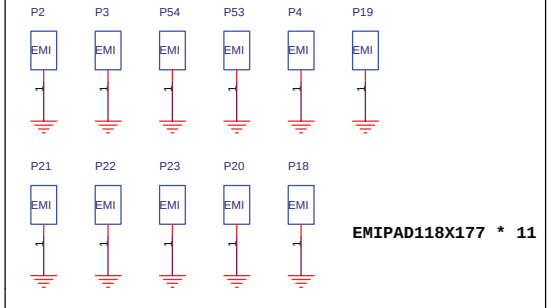


d

e

f





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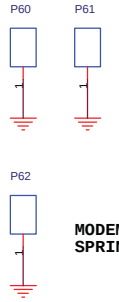
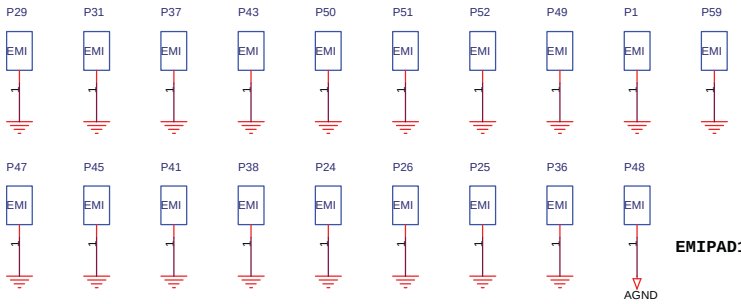


MODEM CABLE SPRING * 3



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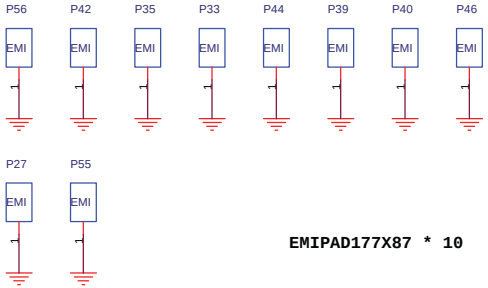

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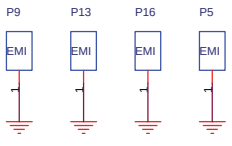

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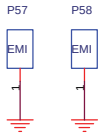

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