Preso-II BLOCK DIAGRAM

01

PCB STACK UP

8L

- LAYER 1 : TOP
- LAYER 2 : SGND
- LAYER 3 : IN1
- LAYER 4 : SGND1
- LAYER 5 : SVCC
- LAYER 6 : IN2
- LAYER 7 : SGND2
- LAYER 8 : BOT

CPU Penryn
478P (uPGA)/35W
PAGE 3,4

CPU THERMAL SENSOR
PAGE 4

FSB 667/800/1066

14.318MHz
CLOCK GEN
ALPRS355B MLF64PIN
PAGE 2

CLK_CPU_BCLK, CLK_CPU_BCLK#
CLK_MCH_BCLK, CLK_MCH_BCLK#
DREFCLK, DREFCLK#
DREFSSCLK, DREFSSCLK#

NORTH BRIDGE
Cantiga
PAGE 5~9

PS8101
PAGE 18

27MHz

DDRII-SODIMM1
PAGE 10,11
DDRII 667/800 MHz

DDRII-SODIMM2
PAGE 10,11
DDRII 667/800 MHz

PCI-Express 16X

NVIDIA
N10M-64bit
533p
PAGE 12~16

HDMI CON
PAGE 18

CRT
PAGE 18

Dual Link
LCD CONN
PAGE 17

DMI LINK

32.768KHz

NBSRCCLK, NBSRCCLK#

SOUTH BRIDGE
ICH9-M
PAGE 19,20,21,22

SATA - HDD
PAGE 28
SATA0 150MB

SATA - CD-ROM
PAGE 28
SATA1 150MB

E-SATA
PAGE 31
SATA5 150MB

USB2.0

0,1,2
USB2.0 Ports X3
PAGE 24

8
BlueTooth
PAGE 29

9
Webcam
PAGE 17

12MHz
6
CR for UMA RTS5159
PAGE 23

7,10,11
Mini PCI-E Card x2
Express Card x1
PAGE 28,31

PCI-E

Azalia

X2
Mini PCI-E Card
(Wireless LAN / Robson)
PAGE 31

X1
LAN
Realtek PCIE-LAN
RTL8103EL/8111DL (10/100/GagaLAN)
PAGE 26,27

X1
Express Card
(NEW CARD)
PAGE 28

25MHz
RJ45
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Analog
Realtek ALC272
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AUDIO Amplifier TPA6017A2
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MDC CONN
PAGE 25

32.768KHz
LPC

ENE KBC
KB3926 C0
PAGE 30

Keyboard
Touch Pad PAGE 30

SPI
PAGE 20

microphone
PAGE 17

Audio Jacks
(Phone/ MIC)
PAGE 24

Jack to Speaker
PAGE 25

GMT G9931P1U
FAN
PAGE 29

SPI
PAGE 30

SYSTEM CHARGER(ISL6251AHAZ-T)
PAGE 32

SYSTEM POWER ISL6237IRZ-T
PAGE 33

DDR II SMDDR_VTERM
1.8V/1.8VSUS(TPS51116REGR)
PAGE 37

VCCP +1.5V AND GMCH
1.05V(RT8204)
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VGACORE(1.025V)Oz8118
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CPU CORE ISL6266A
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NB5

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Quanta Computer Inc.

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Custom	Block Diagram	1A

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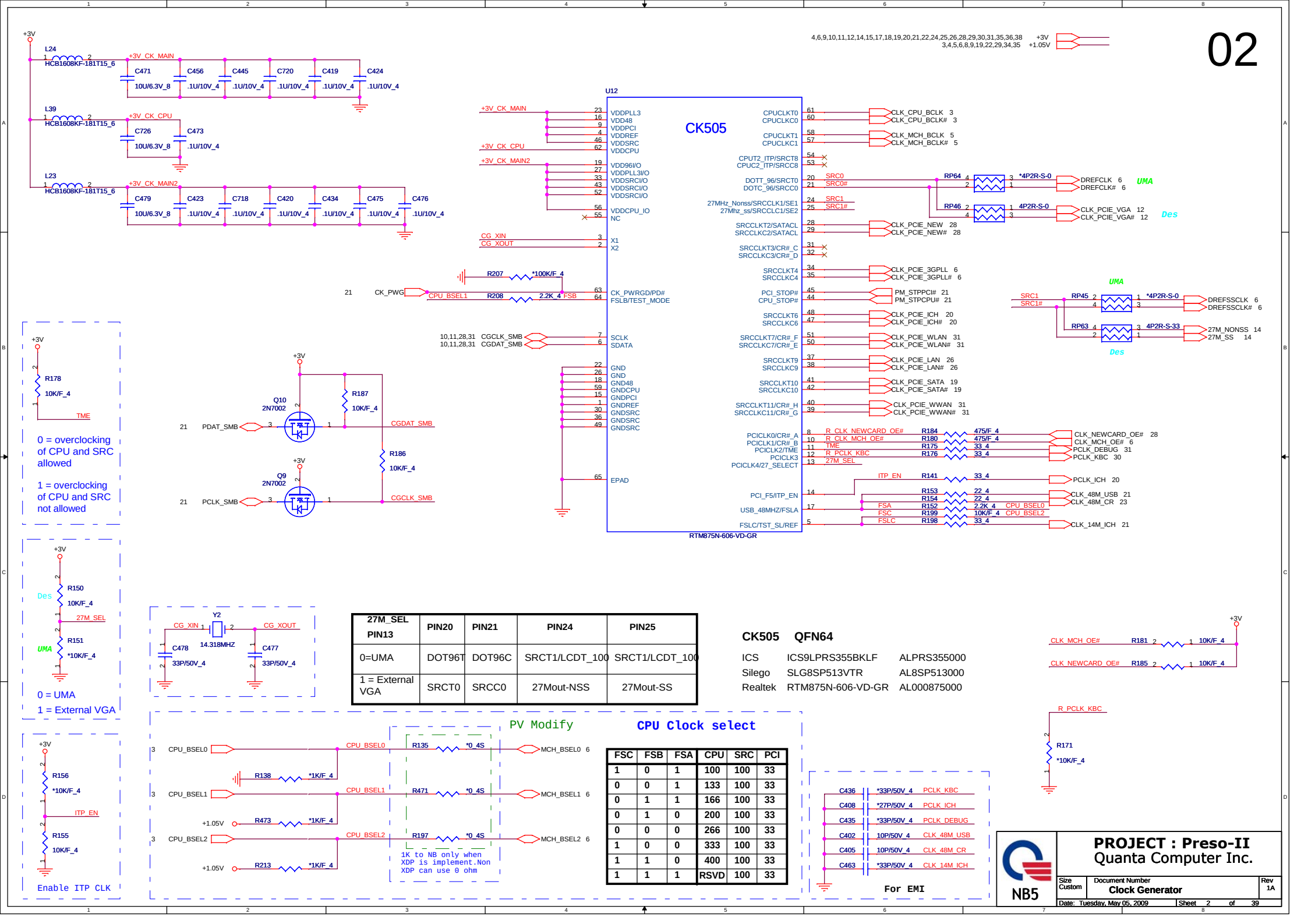


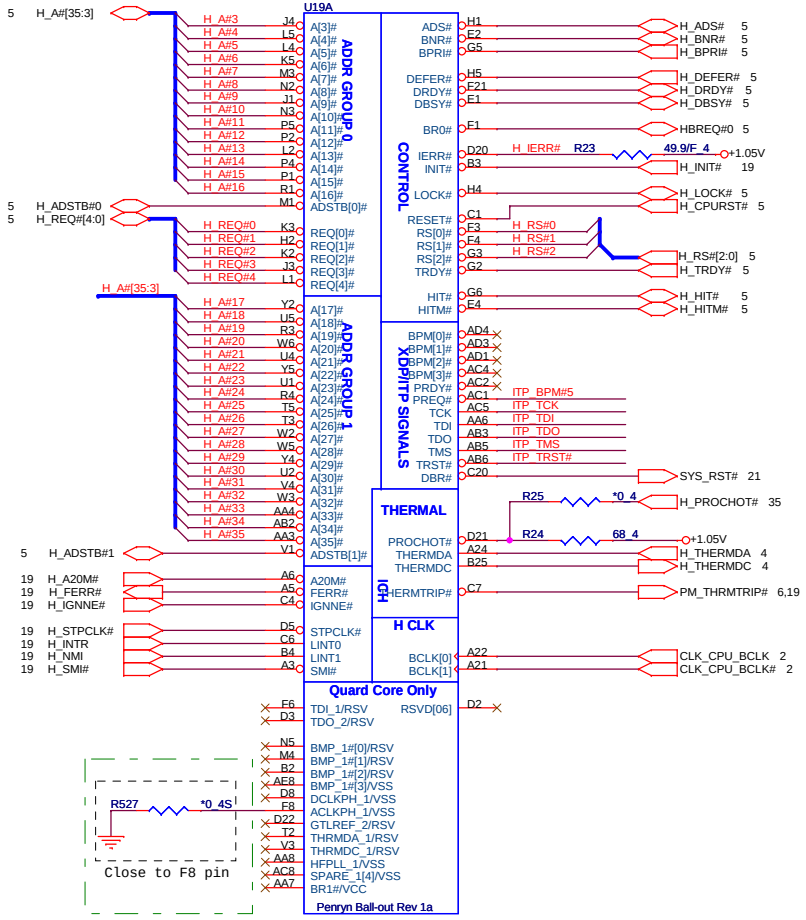
27M_SEL PIN13	PIN20	PIN21	PIN24	PIN25
0=UMA	DOT96T	DOT96C	SRCT1/LCDT_100	SRCT1/LCDT_100
1 = External VGA	SRCT0	SRCC0	27Mout-NSS	27Mout-SS

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	1	0	200	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

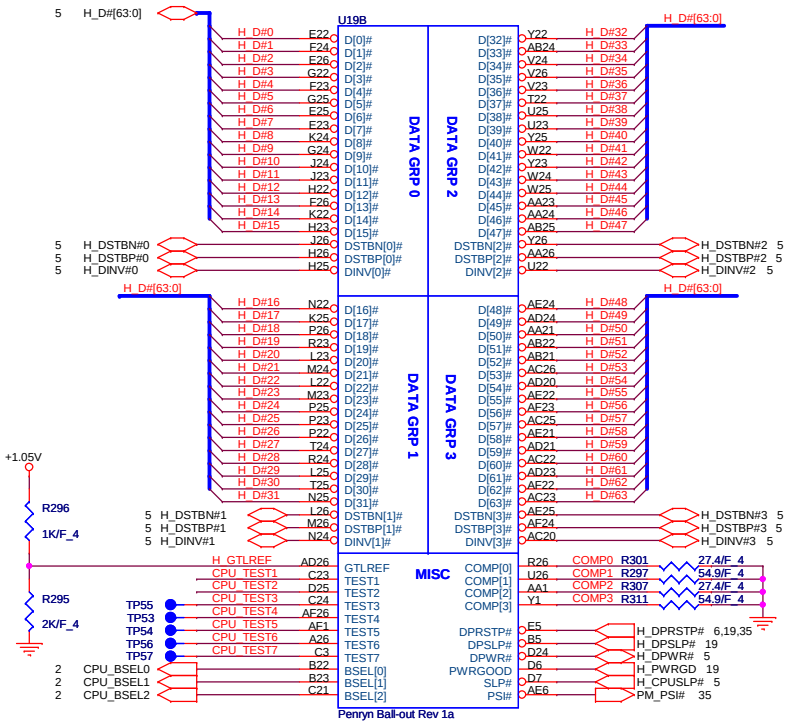
CK505 QFN64

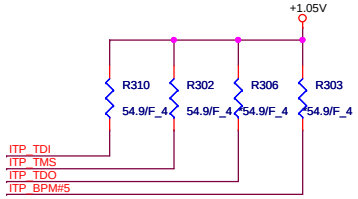
ICS	ICS9LPRS355BKLF	ALPRS355000
Silego	SLG8SP513VTR	AL8SP513000
Realtek	RTM875N-606-VD-GR	AL000875000

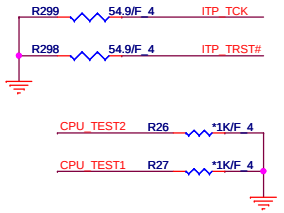
2,4,5,6,8,9,19,22,29,34,35 +1.05V



PV Modify







NB5	PROJECT : Preso-II Quanta Computer Inc.		
Size Custom	Document Number Penryn 1/2		Rev 1A
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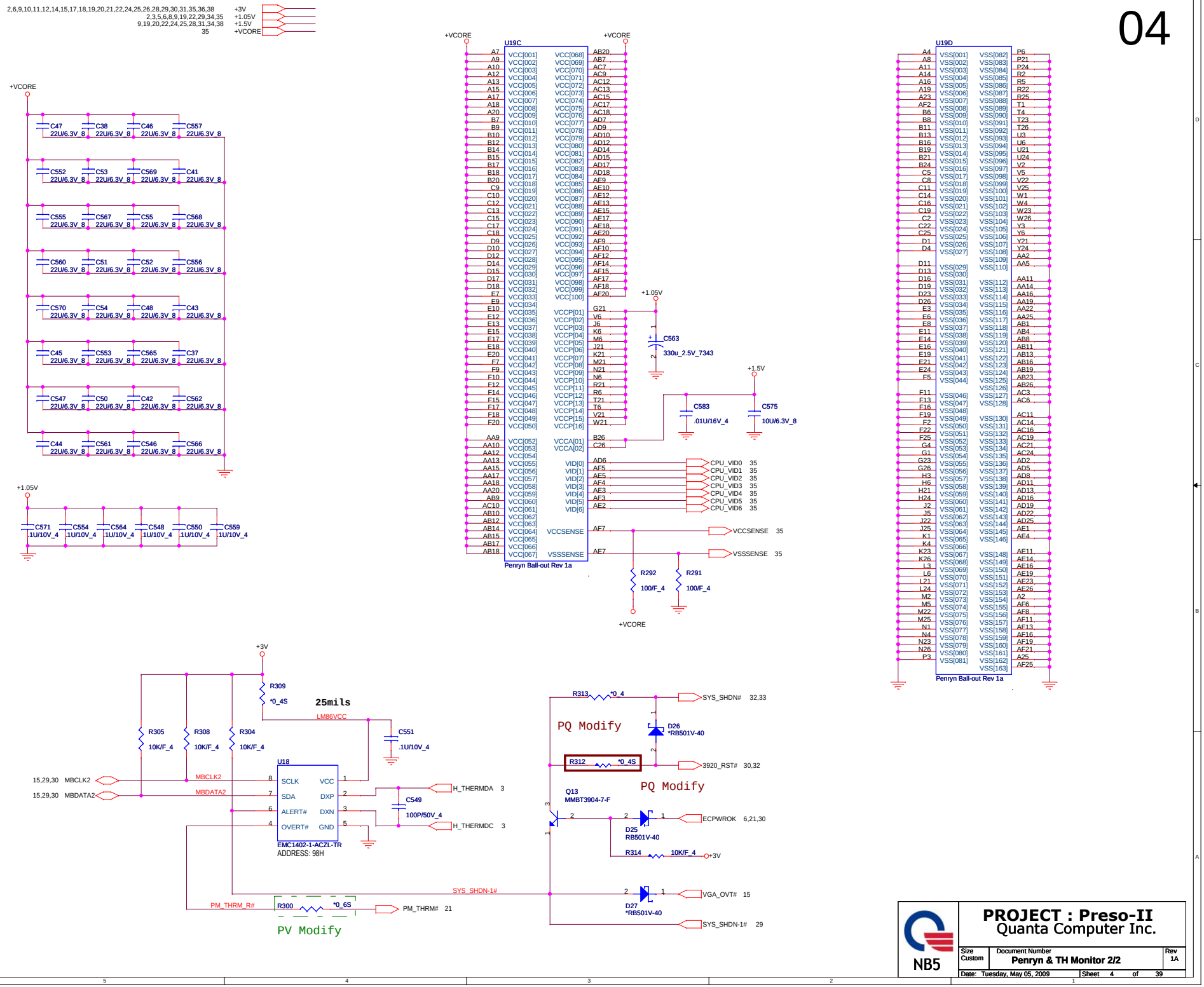

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Quanta Computer Inc.	
NB5	
Size: Custom	Document Number: Penryn & TH Monitor 2/2
Rev: 1A	
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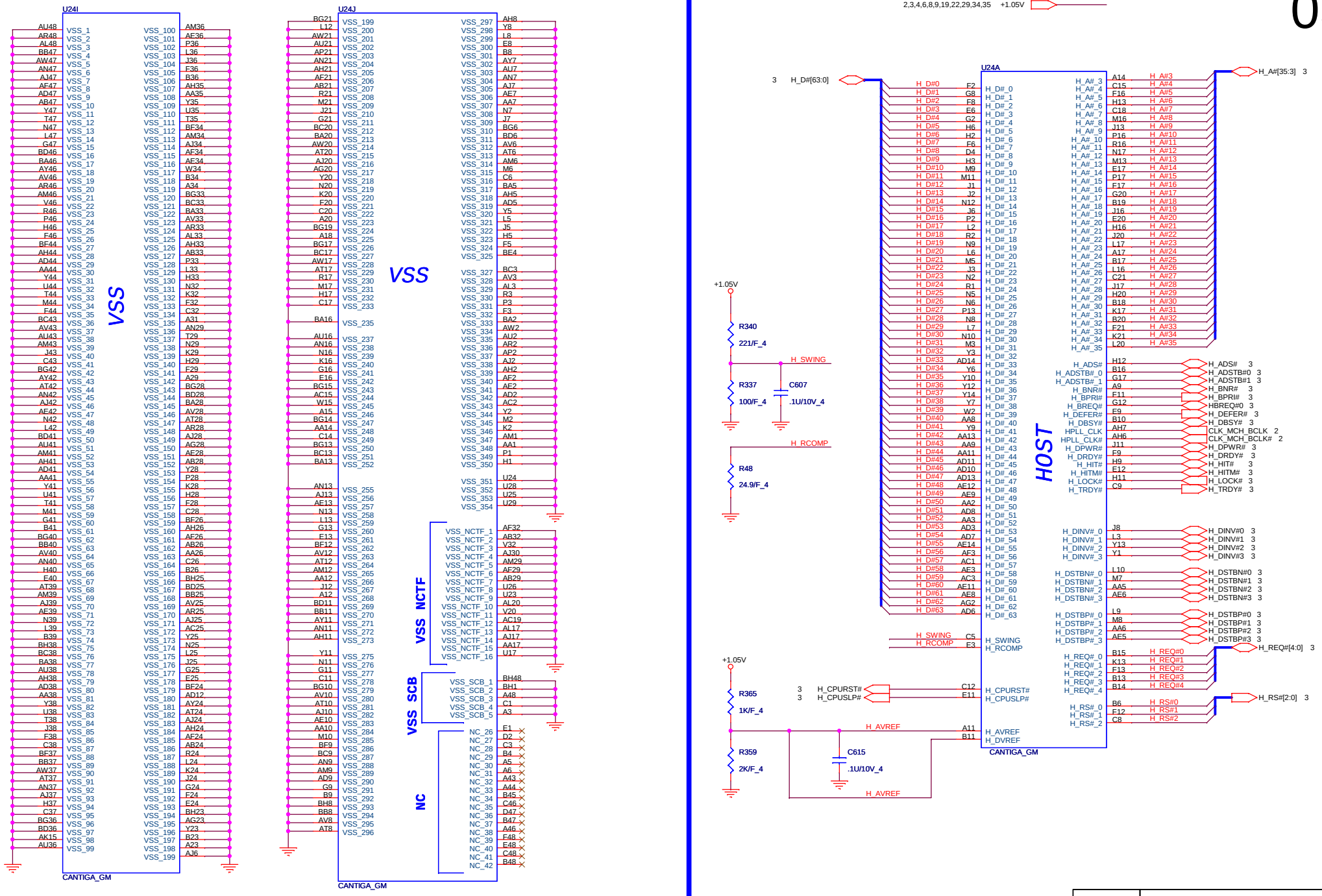

05

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Cantiga Host & VSS 1/5	1A

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NB5

MCH_CFG_5 DMIx2 selection
Low: DMIx2
High: DMIx4 (Default)

MCH_CFG_16 FSB Dynamic ODT
Low: Dynamic ODT disabled
High: Dynamic ODT enabled (Default)

MCH_CFG_9 PCI Express Graphic Lane
Low: Reverse Lane
High: Normal operation(Default)

MCH_CFG_19 DMI Lane Reversal

MCH_CFG_6 iTPM Host Interface
Low: iTPM Host Interface enabled
High: iTPM Host Interface disabled (Default)

MCH_CFG_7 Intel (R) Management Engine Crypto
Low: Intel (R) Management Engine Crypto
TLS cipher suite with no confidentiality
High: Intel (R) Management Engine Crypto
TLS cipher suite with no confidentiality (Default)

MCH_CFG_10 PCIe Lookback Enable
Low: Enabled
High: Disabled (Default)

MCH_CFG_12/13 XOR/ALLZ/CLOCK Un-gating

MCH_CFG_13	MCH_CFG_12	Configuration
0	0	Reserved
1	0	XOR Mode enabled
0	1	All-Z Mode enabled
1	1	Normal operation (Default)

2,4,9,10,11,12,14,15,17,18,19,20,21,22,24,25,26,28,29,30,31,35,36,38 +3V
8,9,10,29,34,37 +1.8VSUS
2,3,4,5,8,9,19,22,29,34,35 +1.05V
2,3,4,5,8,9,19,22,29,34,35 +1.05V_PEG

U24B

RSVD: M36 RSVD1, N36 RSVD2, R33 RSVD3, T33 RSVD4, AH9 RSVD5, AH10 RSVD6, AH12 RSVD7, AH13 RSVD8, K12 RSVD9, T24 RSVD14, B31 RSVD15, B2 RSVD16, M1 RSVD17, AY21 RSVD20, BG23 RSVD22, BF23 RSVD23, BH18 RSVD24, BF18 RSVD25

DDR CLK/ CONTROL/COMPENSATION: SA_CK_0 AP24 M_A_CLK0 10; SA_CK_1 AT21 M_A_CLK1 10; SB_CK_0 AV24 M_B_CLK0 10; SB_CK_1 AU20 M_B_CLK1 10; SA_CK#_0 AR24 M_A_CLK0# 10; SA_CK#_1 AR21 M_A_CLK1# 10; SB_CK#_0 AU24 M_B_CLK0# 10; SB_CK#_1 AV20 M_B_CLK1# 10; SA_CKE_0 BC28 M_A_CKE0 10,11; SA_CKE_1 AY28 M_A_CKE1 10,11; SB_CKE_0 AY36 M_B_CKE0 10,11; SB_CKE_1 BB36 M_B_CKE1 10,11; SA_CS#_0 BA17 M_A_CS#0 10,11; SA_CS#_1 AY16 M_A_CS#1 10,11; SB_CS#_0 AV16 M_B_CS#0 10,11; SB_CS#_1 AR13 M_B_CS#1 10,11; SA_ODT_0 BD17 M_A_ODT0 10,11; SA_ODT_1 AY17 M_A_ODT1 10,11; SB_ODT_0 BF15 M_B_ODT0 10,11; SB_ODT_1 AY13 M_B_ODT1 10,11

SM_RCOMP BG22 SM_RCOMP R77 80.6/F_4; SM_RCOMP# BH21 SM_RCOMP# R70 80.6/F_4
SM_RCOMP_VOH BF28 SM_RCOMP_VOH
SM_RCOMP_VOL BH28 SM_RCOMP_VOL
SM_VREF AV42 +0.9VSMVREF_MCH
SM_PWROK AR36 SW_PWROK_NB R97 10K/F_4
SM_REXT BF17 SM_REXT R63 499/F_4
SM_DRAMRST# BC36 TP_SM_DRAMRST# TP26

+1.8VSUS

CLK: DPLL_REF_CLK B38 DREFCLK 2; DPLL_REF_CLK# A38 DREFCLK# 2; DPLL_REF_SSCLK E41 DREFSSCLK 2; DPLL_REF_SSCLK# F41 DREFSSCLK# 2
PEG_CLK F43 CLK_PCIE_3GPLL 2
PEG_CLK# E43 CLK_PCIE_3GPLL# 2

ME JTAG: TP28 AL34 ME_JTAG_TCK; TP25 AK34 ME_JTAG_TDI; TP21 AN35 ME_JTAG_TDO; TP20 AM35 ME_JTAG_TMS

DMI: DMI_RXN_0 AE41 DMI_TXN0; DMI_RXN_1 AE37 DMI_TXN1; DMI_RXN_2 AE47 DMI_TXN2; DMI_RXN_3 AH39 DMI_TXN3 → DMI_TXN[3:0] 20
DMI_RXP_0 AE40 DMI_TXP0; DMI_RXP_1 AE38 DMI_TXP1; DMI_RXP_2 AE48 DMI_TXP2; DMI_RXP_3 AH40 DMI_TXP3 → DMI_TXP[3:0] 20
DMI_TXN_0 AE35 DMI_RXN0; DMI_TXN_1 AE43 DMI_RXN1; DMI_TXN_2 AE46 DMI_RXN2; DMI_TXN_3 AH42 DMI_RXN3 → DMI_RXN[3:0] 20
DMI_TXP_0 AD35 DMI_RXP0; DMI_TXP_1 AE44 DMI_RXP1; DMI_TXP_2 AE46 DMI_RXP2; DMI_TXP_3 AH43 DMI_RXP3 → DMI_RXP[3:0] 20

CFG: MCH_BSEL0 2 → R75 *2.2K_4; MCH_BSEL1 2; MCH_BSEL2 2
CFG_0 T25, CFG_1 R25, CFG_2 P25, CFG_3 P20, CFG_4 P24, CFG_5 C25, CFG_6 N24, CFG_7 M24, CFG_8 E21, CFG_9 C23, CFG_10 C24, CFG_11 N21, CFG_12 P21, CFG_13 T21, CFG_14 R20, CFG_15 M20, CFG_16 L21, CFG_17 H21, CFG_18 P29, CFG_19 R28, CFG_20 T28
MCH_CFG_3 TP3, MCH_CFG_4 TP13, MCH_CFG_5 TP58, MCH_CFG_6, MCH_CFG_7 TP14, MCH_CFG_8 TP8, MCH_CFG_9 TP6, MCH_CFG_10 TP12, MCH_CFG_11 TP7, MCH_CFG_12 TP10, MCH_CFG_13 TP11, MCH_CFG_14 TP5, MCH_CFG_15 TP4, MCH_CFG_16 TP2, MCH_CFG_17 TP9, MCH_CFG_18 TP18, MCH_CFG_19 TP16, MCH_CFG_20 TP19
For iTPM

PM: PM_SYNC# 21 → R29 B7; H_DPRSTP# 3,19,35 → PM_DPRSTP#; PM_EXTTS#0 10 → N33; PM_EXTTS#1 11 → P32; PM_EXT_TS#_0 AT40; PM_EXT_TS#_1 21,35 DELAY_VR_PWRGOOD → PWROK; PLT_RST-R# 12,20 → R55 100/F_4 RST_IN#_MCH AT11 RSTIN#; PM_THRMTRIP# 3,19 → T20 THERMTRIP#; DPRSLPVR 21,35 → R32 DPRSLPVR

GRAPHICS VID: GFX_VID_0 B33 GFXVR_VID_0 → TP60; GFX_VID_1 B32 GFXVR_VID_1 → TP59; GFX_VID_2 G33 GFXVR_VID_2 → TP23; GFX_VID_3 F33 GFXVR_VID_3 → TP22; GFX_VID_4 E33 GFXVR_VID_4 → TP24
GFX_VR_EN C34 GFXVR_EN → TP61

ME: CL_CLK AH37 CL_CLK0 21; CL_DATA AH36 CL_DATA0 21; CL_PWROK AN36 ECPWROK 4,21,30; CL_RST# AJ35 CL_RST#0 21; CL_VREF AH34 → MCH_CLVREF → C305 .1U/10V_4; R117 1K/F_4; R118 499/F_4 → +1.05V

MISC: DDPC_CTRLCLK N28 DDPC_CTRLCLK → TP17; DDPC_CTRLDATA M28 DDPC_CTRLDATA → TP15; SDVO_CTRLCLK G36 SDVO_CLK 18; SDVO_CTRLDATA E36 SDVO_DATA 18; CLKREQ# K36 CLK_MCH_OE# 2; ICH_SYNC# H36 MCH_ICH_SYNC# 21
TSATN# B12 MCH_TSATN R54 56.2/F_4 → +1.05V

HDA: HDA_BCLK B28 ACZ_BITCLK_MCH 19; HDA_RST# B30 ACZ_RST#_MCH 19; HDA_SDI B29 ACZ_SDIN3_MCH R410 *33_4 → ACZ_SDIN3 19; HDA_SDO C29 ACZ_SDOUT_MCH 19; HDA_SYNC A28 ACZ_SYNC_MCH 19

NC: BG48 NC_1, BF48 NC_2, BD48 NC_3, BC48 NC_4, BH47 NC_5, BG47 NC_6, BE47 NC_7, BH46 NC_8, BF46 NC_9, BG45 NC_10, BH44 NC_11, BH43 NC_12, BH6 NC_13, BH5 NC_14, BG4 NC_15, BH3 NC_16, BF3 NC_17, BH2 NC_18, BG2 NC_19, BE2 NC_20, BG1 NC_21, BF1 NC_22, BD1 NC_23, BC1 NC_24, F1 NC_25, A47 NC_26

+3V → R91 10K/F_4 PM_EXTTS#0; R85 10K/F_4 PM_EXTTS#1
ACZ_BITCLK_MCH → R405 *33_4 → C656 *33P/50V_4

CANTIGA_GM

U24C

LVDS: L_BKLT_CTRL, L_BKLT_EN, L_CTRL_CLK, L_CTRL_DATA, L_DDC_CLK, L_DDC_DATA, L_VDD_EN, LVDS_IBG, LVDS_VBG, LVDS_VREFH, LVDS_VREFL, LVDSA_CLK#, LVDSA_CLK, LVDSB_CLK#, LVDSB_CLK, LVDSA_DATA#_0..3, LVDSA_DATA_0..3, LVDSB_DATA#_0..3, LVDSB_DATA_0..3

UMA
15,17 DPST_PWM → R370 *0_4 DPST_PWM_INT L32
15,17 LVDS_BLON → R89 *0_4 LVDS_BLON_INT G32
R93 *10K/F_4 L_CTRL_CLK M32
+3VO → R92 *10K/F_4 L_CTRL_DATA M33
14,15,17 EDIDCLK → R361 *0_4 EDIDCLK_INT K33
14,15,17 EDIDDATA → R366 *0_4 EDIDDATA_INT J33
15,17 DISP_ON → R376 *0_4 DISP_ON_INT M29
R421 *2.37K/F_4 LVDS_IBG C44
TP64 LVDS_VBG B43
E37, E38
17 LA_CLK# C41, LA_CLK C40, LB_CLK# B37, LB_CLK A37
17 LA_DATAN0 H47, LA_DATAN1 E46, LA_DATAN2 G40 → TP63 LA_DATAN3 A40
17 LA_DATAP0 H48, LA_DATAP1 D45, LA_DATAP2 F40 → TP62 LA_DATAP3 B40
17 LB_DATAN0 A41, LB_DATAN1 H38, LB_DATAN2 G37 → TP27 LB_DATAN3 J37
17 LB_DATAP0 B42, LB_DATAP1 G38, LB_DATAP2 F37 → TP29 LB_DATAP3 K37

TV: TVA_DAC, TVB_DAC, TVC_DAC, TV_RTN, TV_DCONSEL_0, TV_DCONSEL_1

UMA
R76 0_4 TV_COMP1 F25
R72 0_4 TV_Y/G1 H25
R74 0_4 TV_C/R1 K25
H24
R396 *0_4 TV_DCONSEL1 C31
R398 *0_4 TV_DCONSEL0 E32

VGA: CRT_BLUE, CRT_GREEN, CRT_RED, CRT_IRTN, CRT_DDC_CLK, CRT_DDC_DATA, CRT_HSYNC, CRT_TVO_IREF, CRT_VSYNC

UMA
14,18 CRT_B → R400 *0_4 CRT_B_1 E28
14,18 CRT_G → R78 0_4; R401 *0_4 CRT_G_1 G28
14,18 CRT_R → R80 0_4; R403 *0_4 CRT_R_1 J28
R82 0_4 G29
15,18 DDCCLK → R100 *0_4 DDCCLK_INT H32
15,18 DDCDATA → R99 *0_4 DDCDATA_INT J32
14,18 HSYNC_COM → R90 *33_4 HSYNC_INT J29
R81 0_4 CRTIREF E29
14,18 VSYNC_COM → R87 *33_4 VSYNC_INT L29

CANTIGA_GM

PCI-EXPRESS GRAPHICS

PEG_TX#[15:0] → PEG_TX#[15:0] 12
PEG_TX[15:0] → PEG_TX[15:0] 12
PEG_RX#[15:0] → PEG_RX#[15:0] 12
PEG_RX[15:0] → PEG_RX[15:0] 12

+1.05V_PEG
PEG_COMPI T37, PEG_COMPO T36 → PEG_COMP R94 49.9/F_4

PEG_RX#_0 H44 PEG_RX#0; _1 J46 PEG_RX#1; _2 L44 PEG_RX#2; _3 L40 PEG_RX#3; _4 N41 PEG_RX#4; _5 P48 PEG_RX#5; _6 N44 PEG_RX#6; _7 T43 PEG_RX#7; _8 U43 PEG_RX#8; _9 Y43 PEG_RX#9; _10 Y48 PEG_RX#10; _11 Y36 PEG_RX#11; _12 AA43 PEG_RX#12; _13 AD37 PEG_RX#13; _14 AC47 PEG_RX#14; _15 AD39 PEG_RX#15
PEG_RX_0 H43 PEG_RX0; _1 J44 PEG_RX1; _2 L43 PEG_RX2; _3 L41 PEG_RX3; _4 N40 PEG_RX4; _5 P47 PEG_RX5; _6 N43 PEG_RX6; _7 T42 PEG_RX7; _8 U42 PEG_RX8; _9 Y42 PEG_RX9; _10 W47 PEG_RX10; _11 Y37 PEG_RX11; _12 AA42 PEG_RX12; _13 AD36 PEG_RX13; _14 AC48 PEG_RX14; _15 AD40 PEG_RX15

UMA
HDMI_HPD# → *0_4 R119

Des
PEG_TX#_0 J41 C_PEG_TX#0 C303 .1U/10V_4 PEG_TX#0; _1 M46 C_PEG_TX#1 C314 PEG_TX#1; _2 M47 C_PEG_TX#2 C319 PEG_TX#2; _3 M40 C_PEG_TX#3 C311 PEG_TX#3; _4 M42 C_PEG_TX#4 C343 PEG_TX#4; _5 R48 C_PEG_TX#5 C347 PEG_TX#5; _6 N38 C_PEG_TX#6 C313 PEG_TX#6; _7 T40 C_PEG_TX#7 C346 PEG_TX#7; _8 U37 C_PEG_TX#8 C350 PEG_TX#8; _9 U40 C_PEG_TX#9 C306 PEG_TX#9; _10 Y40 C_PEG_TX#10 C351 PEG_TX#10; _11 AA46 C_PEG_TX#11 C309 PEG_TX#11; _12 AA37 C_PEG_TX#12 C316 PEG_TX#12; _13 AA40 C_PEG_TX#13 C320 PEG_TX#13; _14 AD43 C_PEG_TX#14 C353 PEG_TX#14; _15 AC46 C_PEG_TX#15 C355 PEG_TX#15
PEG_TX_0 J42 C_PEG_TX0 C304 .1U/10V_4 PEG_TX0; _1 L46 C_PEG_TX1 C315 PEG_TX1; _2 M48 C_PEG_TX2 C318 PEG_TX2; _3 M39 C_PEG_TX3 C310 PEG_TX3; _4 M43 C_PEG_TX4 C344 PEG_TX4; _5 R47 C_PEG_TX5 C348 PEG_TX5; _6 N37 C_PEG_TX6 C312 PEG_TX6; _7 T39 C_PEG_TX7 C345 PEG_TX7; _8 U36 C_PEG_TX8 C349 PEG_TX8; _9 U39 C_PEG_TX9 C307 PEG_TX9; _10 Y39 C_PEG_TX10 C352 PEG_TX10; _11 Y46 C_PEG_TX11 C308 PEG_TX11; _12 AA36 C_PEG_TX12 C317 PEG_TX12; _13 AA39 C_PEG_TX13 C321 PEG_TX13; _14 AD42 C_PEG_TX14 C354 PEG_TX14; _15 AD46 C_PEG_TX15 C356 PEG_TX15

+1.8VSUS
R88 1K/F_4; R95 3.01K/F_4; R83 1K/F_4
SM_RCOMP_VOH → C217 .01U/16V_4; C200 2.2U/6.3V_6
SM_RCOMP_VOL → C201 .01U/16V_4; C220 2.2U/6.3V_6

PQ Modify
+1.8VSUS → R115 *1K/F_4; R112 *1K/F_4
R116 *0_4S
+0.9VSMVREF_MCH → C286 .1U/10V_4; C285 470P/50V_4 → +0.9VSMVREF 10,37

For UMA HDMI Function
PEG_TX0 RP39 4 → 3 *4P2R-S-0 → IN_D2 18
PEG_TX#0 2 → 1 → IN_D2# 18
PEG_TX1 RP43 4 → 3 *4P2R-S-0 → IN_D1 18
PEG_TX#1 2 → 1 → IN_D1# 18
PEG_TX2 RP44 2 → 1 *4P2R-S-0 → IN_D0 18
PEG_TX#2 4 → 3 → IN_D0# 18
PEG_TX3 RP42 2 → 1 *4P2R-S-0 → IN_CLK 18
PEG_TX#3 4 → 3 → IN_CLK# 18
C416,C423,C440,C431
C419,C418,C430,C424
Need to install for GM
Level: 0.9V
+3V → R371 *20K/F_4 → HDMI_HPD#
DV2 Modify
R529 *0_4
18 HDMI_HPD_CON → R341 *100K/F_4
Q16 *2N7002
R377 *7.5K/F_4
HPD# Inverting Level Shifting Circuit

NB5

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Cantiga DMI/DISP 2/5	1A
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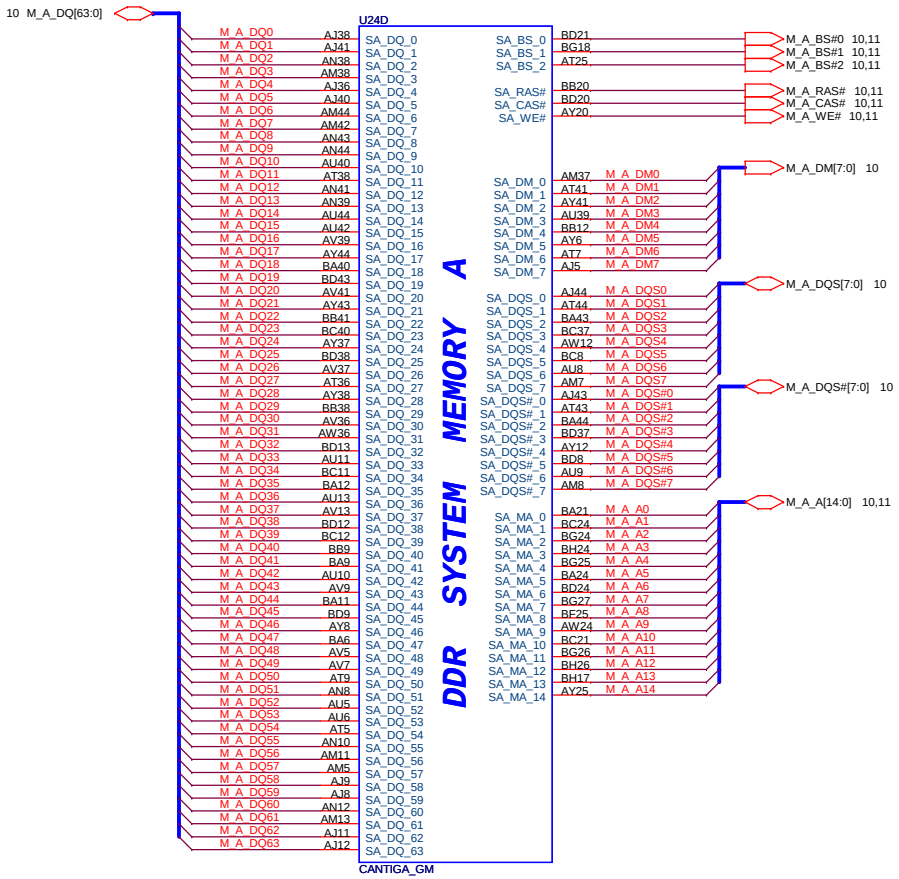

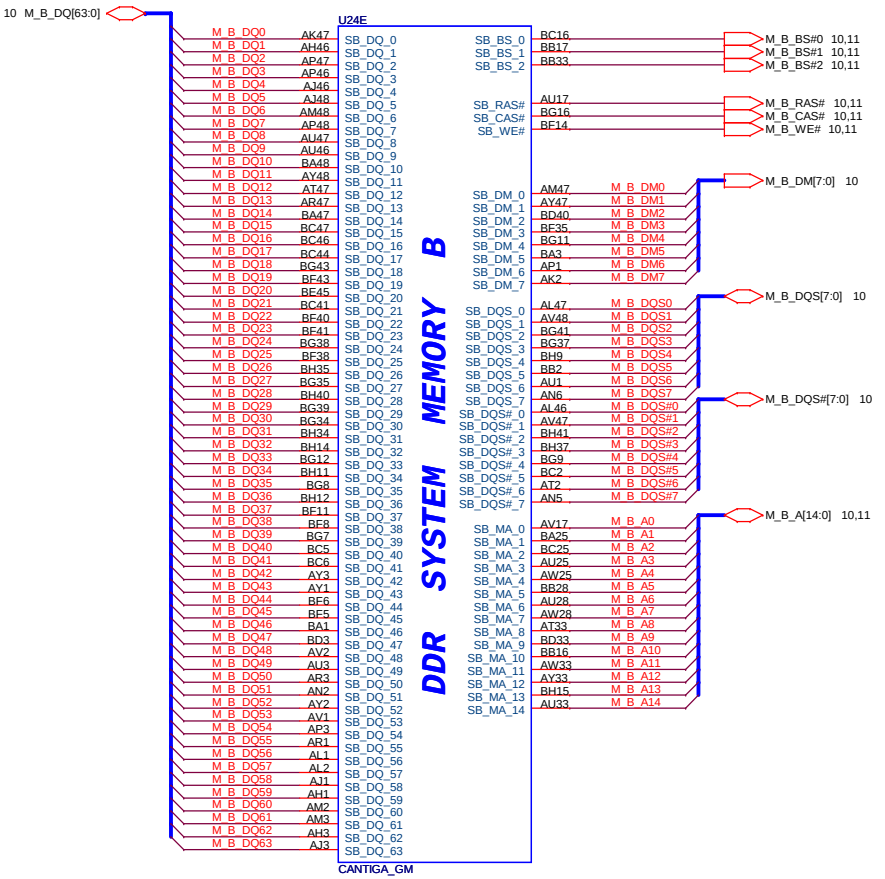

NB5

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Cantiga DDR2 3/5	1A

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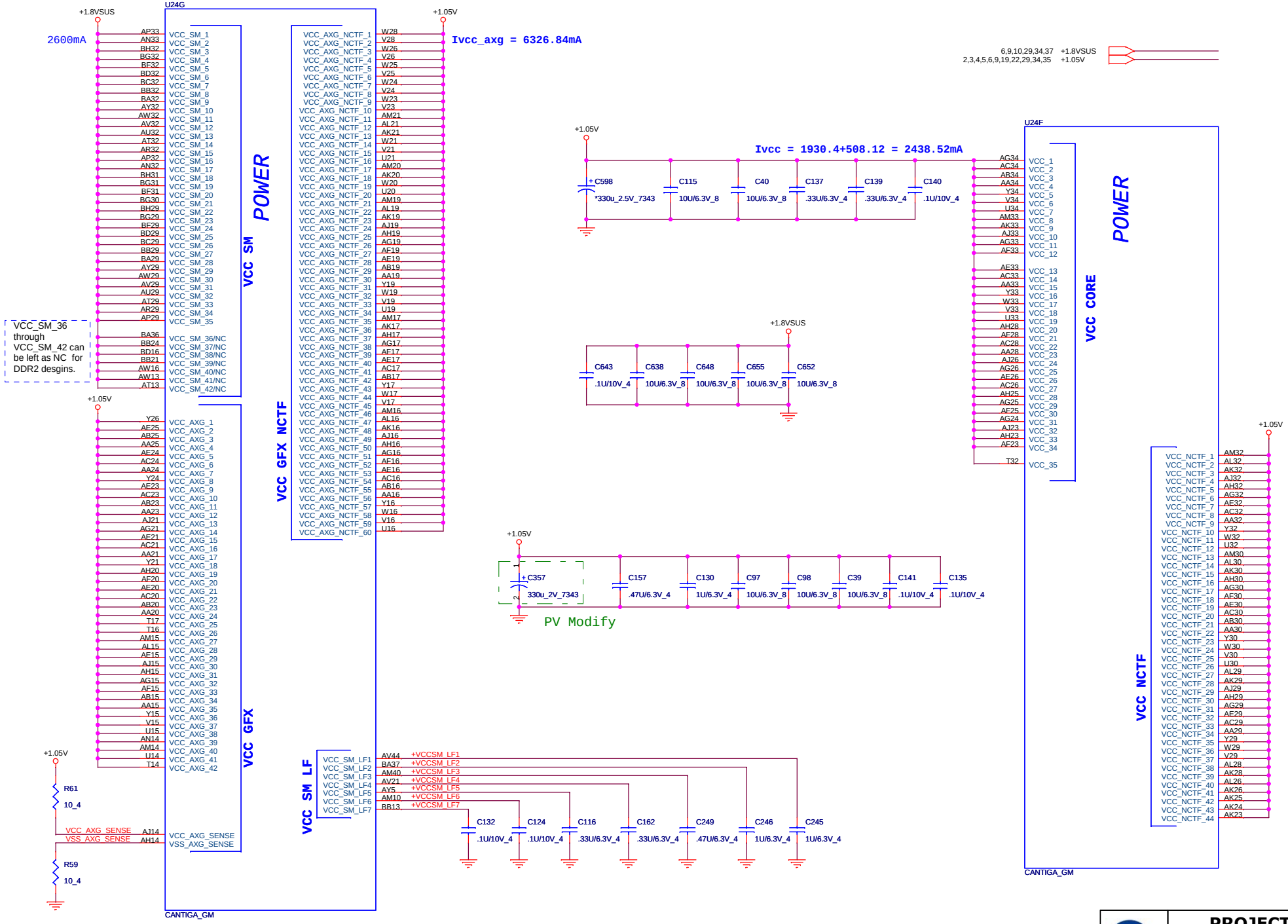

PROJECT :	Preso-II
	Quanta Computer Inc.
Size: Custom	Document Number: Cantiga Vcc 4/5
Rev: 1A	
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NB5

+1.05V 2,3,4,5,6,8,19,22,29,34,35
+3V 2,4,6,10,11,12,14,15,17,18,19,20,21,22,24,25,26,28,29,30,31,35,36,38
+1.5V 4,19,20,22,24,25,28,31,34,38
+1.8VSUS 6,8,10,29,34,37
+1.05V_PEG 2,3,4,5,6,8,19,22,29,34,35

+1.05V_DPLLA
L33 *10uH/100MA_8 UMA
C678 *220U/2.5V_B
C672 *.1U/10V_4
+1.05V_DPLLB
L34 *10uH/100MA_8 UMA
C687 *.1U/10V_4

+1.05V_HPLL
C125 4.7U/6.3V_6
C126 .1U/10V_4
+1.05V_MPLL
L7 HCB1608KF-181T15_6
+1.05V_MCH_PLL
R53 0.5/F_6
C123 10U/6.3V_8
C114 .1U/10V_4

+1.5V_TVDAC
C176 .1U/10V_4
C194 *.022U/16V_4 UMA
+1.5V_QDAC
L12 HCB1608KF-181T15_6
C177 .1U/10V_4
C178 .022U/16V_4

For PM/GM internal thermal sensor power

+1.05V_PEGPLL
L15 HCB1608KF-181T15_6
R86 1/F_6
C202 10U/6.3V_8

+3V_A_CRT_DAC 73mA
R394 *0_6 UMA
C647 *.1U/10V_4 UMA
C649 *.01U/16V_4 UMA
B27 VCCA_CRT_DAC_1
A26 VCCA_CRT_DAC_2

+3V_A_DAC_BG 5mA
R393 *0_6 UMA
C641 *.1U/10V_4 UMA
C640 *.01U/16V_4 UMA
A25 VCCA_DAC_BG
B25 VSSA_DAC_BG
CRT

DPLLA+DPLLB = 64.8mA
+1.05V_DPLLA F47 VCCA_DPLLA
24mA +1.05V_DPLLB L48 VCCA_DPLLB
139.2mA +1.05V_HPLL AD1 VCCA_HPLL
+1.05V_MPLL AE1 VCCA_MPLL
PLL

13.2mA
+1.8VSUS_TX_LVDS J48 VCCA_LVDS
C368 *1000P/50V_4 UMA
J47 VSSA_LVDS
LVDS

414uA
+1.5V_PEG_BG AD48 VCCA_PEG_BG
C284 .1U/10V_4
50mA
C690 .1U/10V_4 +1.05V_PEGPLL AA48 VCCA_PEG_PLL
A PEG

480mA
+1.05V_A_SM
C96 10U/6.3V_8
C99 10U/6.3V_8
C94 *220U/2.5V_B
C100 10U/6.3V_8
C161 4.7U/6.3V_6
C147 1U/6.3V_4
AP20 VCCA_SM_1
AP20 VCCA_SM_2
AN20 VCCA_SM_3
AR17 VCCA_SM_4
AP17 VCCA_SM_5
AN17 VCCA_SM_6
AT16 VCCA_SM_7
AR16 VCCA_SM_8
AP16 VCCA_SM_9
A SM

24mA
+1.05V_A_SM_CK
C174 2.2U/6.3V_6
C203 10U/6.3V_8
C198 .1U/10V_4
AP28 VCCA_SM_CK_1
AN28 VCCA_SM_CK_2
AP25 VCCA_SM_CK_3
AN25 VCCA_SM_CK_4
AN24 VCCA_SM_CK_5
AM28 VCCA_SM_CK_NCTF_1
AM26 VCCA_SM_CK_NCTF_2
AM25 VCCA_SM_CK_NCTF_3
AL25 VCCA_SM_CK_NCTF_4
AM24 VCCA_SM_CK_NCTF_5
AL24 VCCA_SM_CK_NCTF_6
AM23 VCCA_SM_CK_NCTF_7
AL23 VCCA_SM_CK_NCTF_8
A CK

79mA
+3V_A_TV_DAC
R386 *0_6 UMA
C631 *.1U/10V_4 UMA
B24 VCCA_TV_DAC_1
A24 VCCA_TV_DAC_2
TV

50mA
+1.5V_HDA
R96 *0_6 UMA
C237 *.1U/10V_4 UMA
A32 VCC_HDA
HDA

35mA +1.5V_TVDAC M25 VCCD_TVDAC
120uA +1.5V_QDAC L28 VCCD_QDAC
157.2mA +1.05V_MCH_PLL AF1 VCCD_HPLL
50mA +1.05V_PEGPLL AA47 VCCD_PEG_PLL
C118 .1U/10V_4
C689 .1U/10V_4
D TV/CRT

60.31mA
+1.8VSUS
R84 *0_6 UMA
+1.8VSUS_GMCH_VCCD
C233 *10U/6.3V_8 UMA
C232 *1U/6.3V_4 UMA
M38 VCCD_LVDS_1
L37 VCCD_LVDS_2
LVDS

U24H
CANTIGA_GM

POWER

VTT
U13 VTT_1
T13 VTT_2
U12 VTT_3
T12 VTT_4
U11 VTT_5
T11 VTT_6
U10 VTT_7
T10 VTT_8
U9 VTT_9
T9 VTT_10
U8 VTT_11
T8 VTT_12
U7 VTT_13
T7 VTT_14
U6 VTT_15
T6 VTT_16
U5 VTT_17
T5 VTT_18
V3 VTT_19
U3 VTT_20
V2 VTT_21
U2 VTT_22
T2 VTT_23
V1 VTT_24
U1 VTT_25

852mA
+1.05V
C216 .47U/6.3V_4
C129 2.2U/6.3V_6
C149 4.7U/6.3V_6
C121 4.7U/6.3V_6

+1.05V_AXF
C160 1U/6.3V_4
C179 10U/6.3V_8
+1.05V

+1.8VSUS_SM_CK
L8 1uH/300mA_8
+1.8VSUS
C152 10U/6.3V_8
C143 .1U/10V_4
R62 1/F_6
+1.8VSUS_SM_CK_L
C628 10U/6.3V_8

119.85mA
+1.8VSUS_TX_LVDS
C367 *.1U/10V_4 UMA
C366 *10U/6.3V_8
C365 *10U/6.3V_8 UMA
L17 *1uH/300mA_8 UMA
+1.8VSUS

AXF
B22 VCC_AXF_1
B21 VCC_AXF_2
A21 VCC_AXF_3

SM CK
BF21 VCC_SM_CK_1
BH20 VCC_SM_CK_2
BG20 VCC_SM_CK_3
BF20 VCC_SM_CK_4

+1.05V
D9 RB501V-40
+1.05V_HV_MCH
R51 10_4
+3V

118.8mA
105.3mA
VCC_TX_LVDS K47
+3V_HV
C262 .1U/10V_4
+3V_HV
C247 .1U/10V_4

HV
VCC_HV_1 C35
VCC_HV_2 B35
VCC_HV_3 A35

PEG
V48 VCC_PEG_1
U48 VCC_PEG_2
V47 VCC_PEG_3
U47 VCC_PEG_4
U46 VCC_PEG_5
1782mA
+1.05V_PEG
+1.05V
C691 4.7U/6.3V_6
C358 *330u_2.5V_7343
C688 10U/6.3V_8

DMI
AH48 VCC_DMI_1
AF48 VCC_DMI_2
AH47 VCC_DMI_3
AG47 VCC_DMI_4

456mA
+1.05V_RXR_DMI
+1.05V
C289 .1U/10V_4

VTTLF
A8 VTTLF1 +VTTLF_CAP1
L1 VTTLF2 +VTTLF_CAP2
AB2 VTTLF3 +VTTLF_CAP3

+VTTLF_CAP1
+VTTLF_CAP2
+VTTLF_CAP3
C597 .47U/6.3V_4
C119 .47U/6.3V_4
C613 .47U/6.3V_4

NB5

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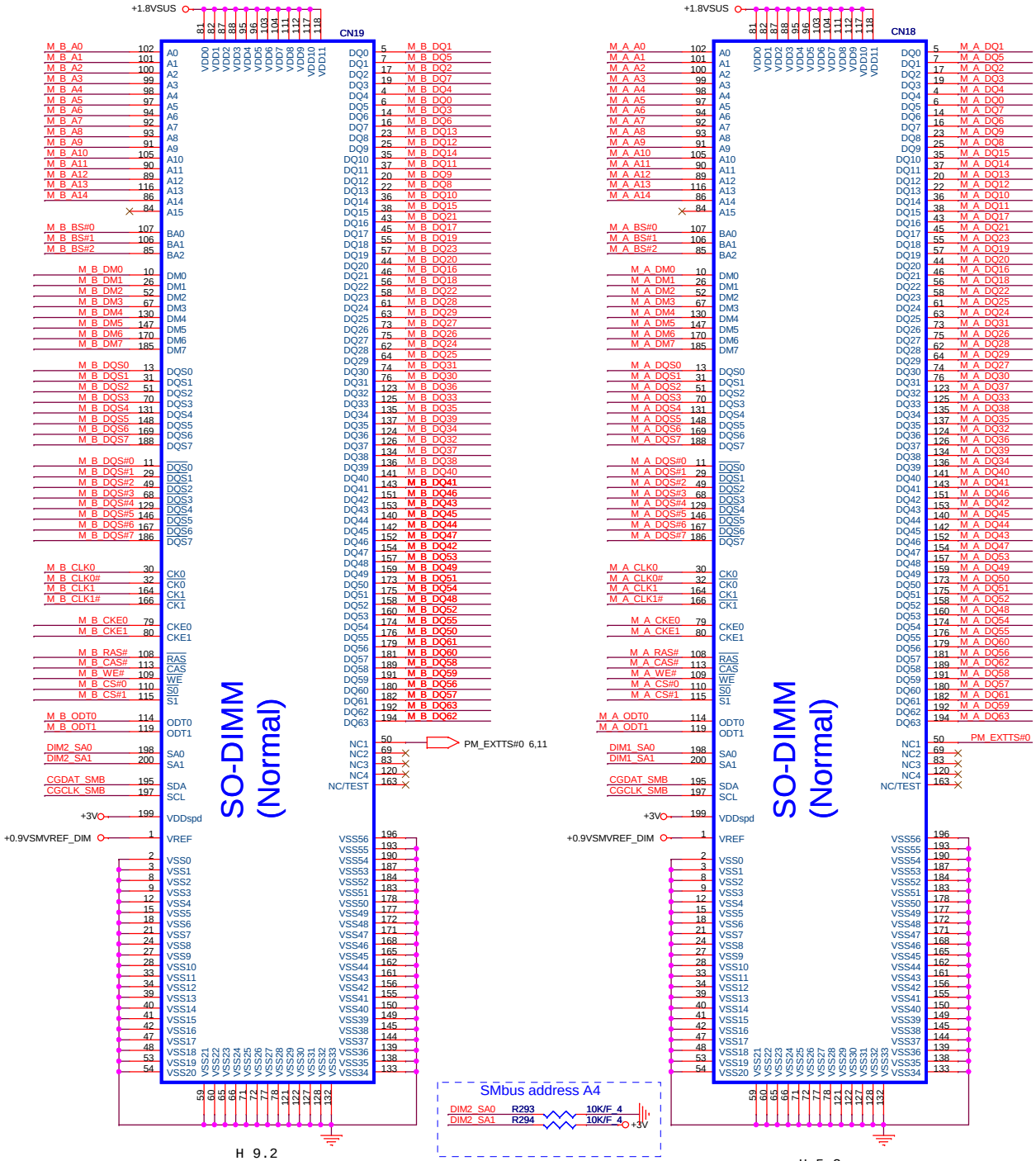

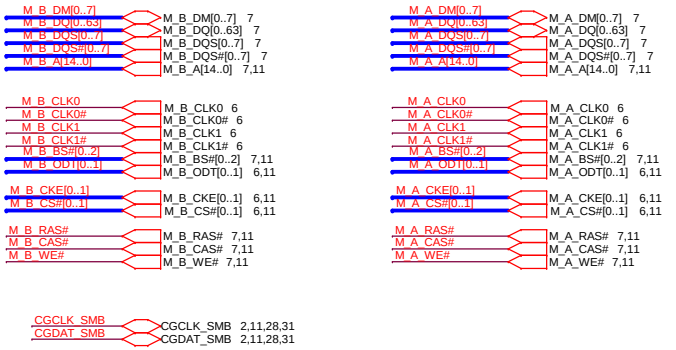

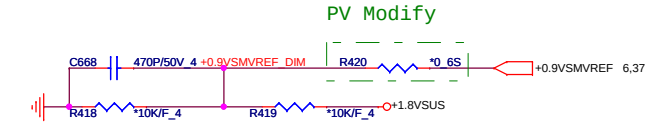

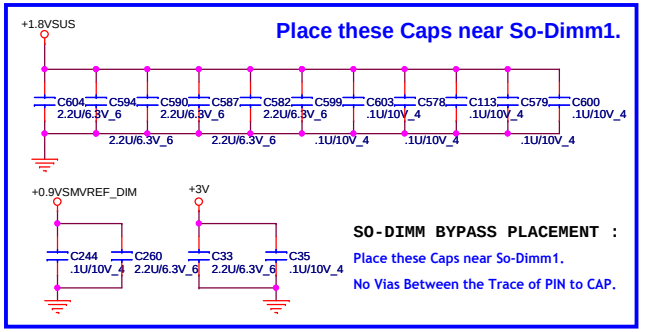

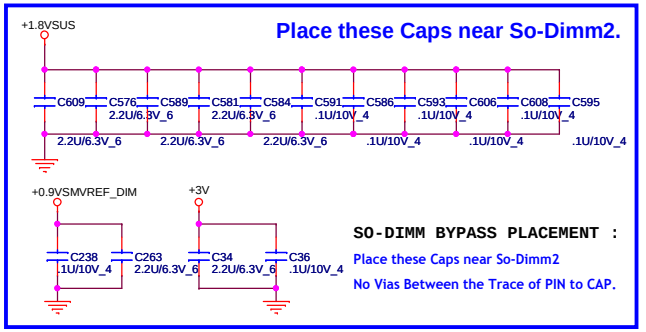

6,8,9,29,34,37 +1.8VSUS
2,4,6,9,11,12,14,15,17,18,19,20,21,22,24,25,26,28,29,30,31,35,36,38 +3V

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Quanta Computer Inc.

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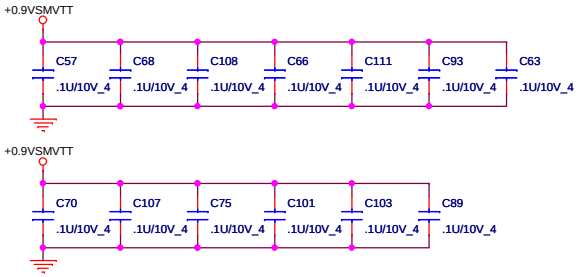
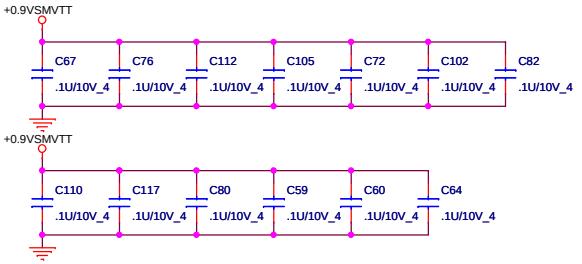
DDRII DUAL CHANNEL A,B.

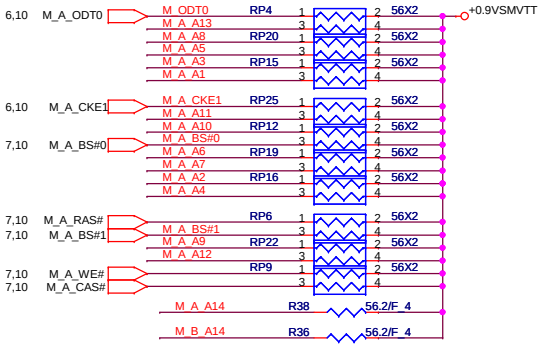
DDRII A CHANNEL

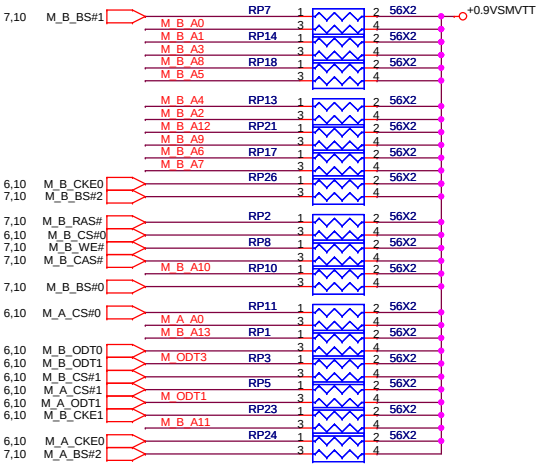


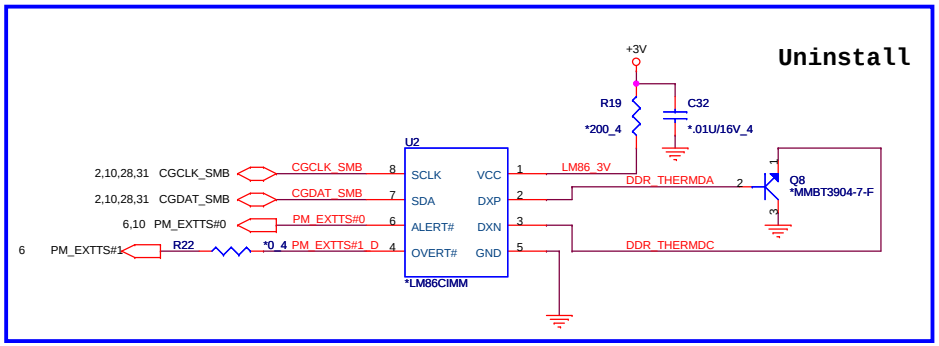
DDRII B CHANNEL

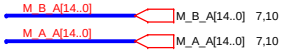


Layout note: Place one cap close to every 2 pullup resistors terminated to SMDDR_VTERM









+0.9VSMVTT 37

+3V 2,4,6,9,10,12,14,15,17,18,19,20,21,22,24,25,26,28,29,30,31,35,36,38

NB5	**PROJECT : Preso-II** Quanta Computer Inc.	
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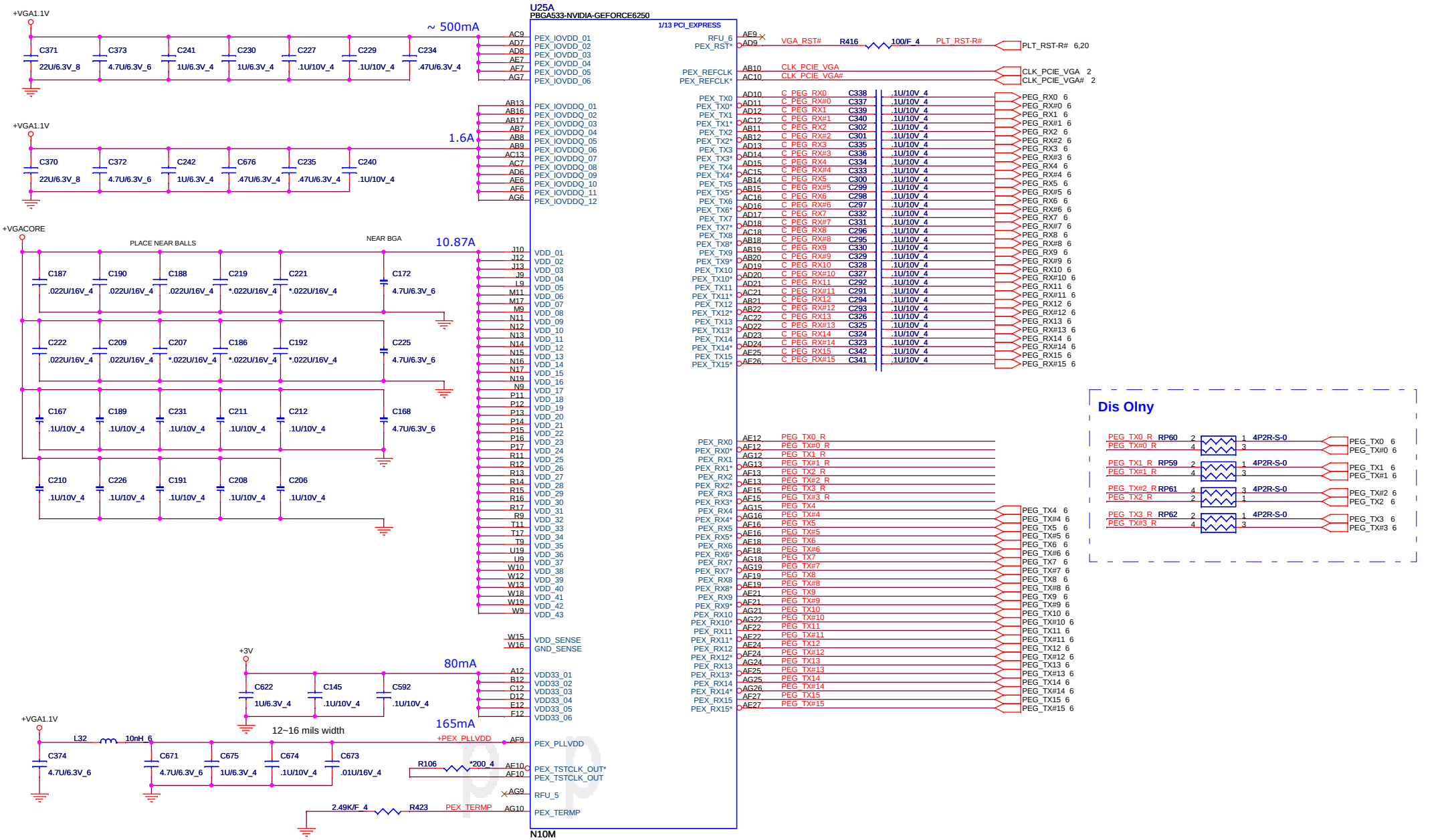

U25A
PBGA533-NVIDIA-GEFORCE6250
1/13 PCI_EXPRESS
N10M
+VGA1.1V
~ 500mA
1.6A
+VGACORE
PLACE NEAR BALLS
NEAR BGA
10.87A
+3V
80mA
165mA
12~16 mils width
L32
10nH_6
+PEX_PLLVDD
R106
*200_4
2.49K/F_4
R423
PEX_TERMP
Dis Olny
4P2R-S-0

U25B
PBGA533-NVIDIA-GEFORCE6250
2/13 FRAME_BUFFER

+1.8V
1.63A

FBVDDQ_01 A13
FBVDDQ_02 B13
FBVDDQ_03 C13
FBVDDQ_04 D13
FBVDDQ_05 D14
FBVDDQ_06 E13
FBVDDQ_07 F13
FBVDDQ_08 F14
FBVDDQ_09 F15
FBVDDQ_10 F16
FBVDDQ_11 F17
FBVDDQ_12 F19
FBVDDQ_13 F22
FBVDDQ_14 H23
FBVDDQ_15 H26
FBVDDQ_16 J15
FBVDDQ_17 J16
FBVDDQ_18 J18
FBVDDQ_19 J19
FBVDDQ_20 L19
FBVDDQ_21 L23
FBVDDQ_22 L26
FBVDDQ_23 M19
FBVDDQ_24 N22
FBVDDQ_25 U22
FBVDDQ_26 Y22

FBA_D0 D21 VMA_DQ0
FBA_D1 C22 VMA_DQ1
FBA_D2 B22 VMA_DQ2
FBA_D3 A22 VMA_DQ3
FBA_D4 C24 VMA_DQ4
FBA_D5 B25 VMA_DQ5
FBA_D6 A25 VMA_DQ6
FBA_D7 A26 VMA_DQ7
FBA_D8 D22 VMA_DQ8
FBA_D9 E22 VMA_DQ9
FBA_D10 E24 VMA_DQ10
FBA_D11 D24 VMA_DQ11
FBA_D12 D26 VMA_DQ12
FBA_D13 D27 VMA_DQ13
FBA_D14 C27 VMA_DQ14
FBA_D15 B27 VMA_DQ15
FBA_D16 D16 VMA_DQ16
FBA_D17 E16 VMA_DQ17
FBA_D18 D17 VMA_DQ18
FBA_D19 F18 VMA_DQ19
FBA_D20 D20 VMA_DQ20
FBA_D21 F20 VMA_DQ21
FBA_D22 E21 VMA_DQ22
FBA_D23 F21 VMA_DQ23
FBA_D24 C16 VMA_DQ24
FBA_D25 B18 VMA_DQ25
FBA_D26 C18 VMA_DQ26
FBA_D27 D18 VMA_DQ27
FBA_D28 C19 VMA_DQ28
FBA_D29 C21 VMA_DQ29
FBA_D30 B21 VMA_DQ30
FBA_D31 A21 VMA_DQ31
FBA_D32 P22 VMA_DQ32
FBA_D33 P24 VMA_DQ33
FBA_D34 R23 VMA_DQ34
FBA_D35 R24 VMA_DQ35
FBA_D36 T23 VMA_DQ36
FBA_D37 U24 VMA_DQ37
FBA_D38 V23 VMA_DQ38
FBA_D39 V24 VMA_DQ39
FBA_D40 N25 VMA_DQ40
FBA_D41 N26 VMA_DQ41
FBA_D42 R25 VMA_DQ42
FBA_D43 R26 VMA_DQ43
FBA_D44 T25 VMA_DQ44
FBA_D45 V26 VMA_DQ45
FBA_D46 V25 VMA_DQ46
FBA_D47 V27 VMA_DQ47
FBA_D48 V22 VMA_DQ48
FBA_D49 W22 VMA_DQ49
FBA_D50 W23 VMA_DQ50
FBA_D51 W24 VMA_DQ51
FBA_D52 AA22 VMA_DQ52
FBA_D53 AB23 VMA_DQ53
FBA_D54 AB24 VMA_DQ54
FBA_D55 AC24 VMA_DQ55
FBA_D56 W25 VMA_DQ56
FBA_D57 W26 VMA_DQ57
FBA_D58 W27 VMA_DQ58
FBA_D59 AA25 VMA_DQ59
FBA_D60 AB25 VMA_DQ60
FBA_D61 AB26 VMA_DQ61
FBA_D62 AD26 VMA_DQ62
FBA_D63 AD27 VMA_DQ63

16 VMA_DQ[63..0]
16 VMA_DM[7..0]
16 VMA_WDQS[7..0]
16 VMA_RDQS[7..0]

16 VMA_MA3 F26 FBA_CMD0
16 VMA_MA0 J24 FBA_CMD1
16 VMA_MA2 F25 FBA_CMD2
16 VMA_MA1 M23 FBA_CMD3
16 VMA_MA3H N27 FBA_CMD4
16 VMA_MA4H M27 FBA_CMD5
16 VMA_MA5H K26 FBA_CMD6
J25 FBA_CMD7
J27 FBA_CMD8
16 VMA_CS0# G23 FBA_CMD9
16 VMA_WE# G26 FBA_CMD10
16 VMA_BA0 J23 FBA_CMD11
16 VMA_CKE M25 FBA_CMD12
16 VMA_ODT K27 FBA_CMD13
16 VMA_MA2H G25 FBA_CMD14
16 VMA_MA12 L24 FBA_CMD15
16 VMA_RAS# K23 FBA_CMD16
16 VMA_MA11 K24 FBA_CMD17
16 VMA_MA10 G22 FBA_CMD18
16 VMA_BA1 K25 FBA_CMD19
16 VMA_MA8 H22 FBA_CMD20
16 VMA_MA9 M26 FBA_CMD21
16 VMA_MA6 H24 FBA_CMD22
16 VMA_MA5 F27 FBA_CMD23
16 VMA_MA7 J26 FBA_CMD24
16 VMA_MA4 G24 FBA_CMD25
16 VMA_CAS# G27 FBA_CMD26
M24 FBA_CMD27
16 VMA_BA2 K22 FBA_CMD28

J22 RFU_3
L22 RFU_4

16 VMA_CLK0 VMA_CLK0 F24 FBA_CLK0
16 VMA_CLK0# VMA_CLK0# F23 FBA_CLK0*
16 VMA_CLK1 VMA_CLK1 N24 FBA_CLK1
16 VMA_CLK1# VMA_CLK1# N23 FBA_CLK1*

+1.8V R344 30/F_4 FB_CAL_PD_VDDQ B15 FB_CAL_PD_VDDQ
R345 36.5/F_4 FB_CAL_PU_GND A15 FB_CAL_PU_GND
R343 *40.2/F_4 FB_CAL_TERM_GND B16 FB_CAL_TERM_GND
R192 Install for DDR3
+1.8V *60.4/F_4 R71 FBA_DEBUG M22 FBA_DEBUG
For debug only
10mA

+VGA1.1V 15mils width 25mA
L35 HCB1608KF-181T15_6 +FB_PLLAVDD R19 FB_PLLAVDD
C686 4.7U/6.3V_6 C205 .1U/10V_4 C193 .1U/10V_4 C679 1U/6.3V_4 T19 FB_DLLAVDD

FBA_DQM0 D23 VMA_DM0
FBA_DQM1 C26 VMA_DM1
FBA_DQM2 D19 VMA_DM2
FBA_DQM3 B19 VMA_DM3
FBA_DQM4 T24 VMA_DM4
FBA_DQM5 T26 VMA_DM5
FBA_DQM6 AA23 VMA_DM6
FBA_DQM7 AB27 VMA_DM7

FBA_DQS_WP0 A24 VMA_WDQS0
FBA_DQS_WP1 C25 VMA_WDQS1
FBA_DQS_WP2 E19 VMA_WDQS2
FBA_DQS_WP3 A19 VMA_WDQS3
FBA_DQS_WP4 T22 VMA_WDQS4
FBA_DQS_WP5 T27 VMA_WDQS5
FBA_DQS_WP6 AA24 VMA_WDQS6
FBA_DQS_WP7 AA26 VMA_WDQS7

FBA_DQS_RN0 B24 VMA_RDQS0
FBA_DQS_RN1 D25 VMA_RDQS1
FBA_DQS_RN2 E18 VMA_RDQS2
FBA_DQS_RN3 A18 VMA_RDQS3
FBA_DQS_RN4 R22 VMA_RDQS4
FBA_DQS_RN5 R27 VMA_RDQS5
FBA_DQS_RN6 Y24 VMA_RDQS6
FBA_DQS_RN7 AA27 VMA_RDQS7

FB_VREF A16 +FB_VREF1

+1.8V
15mils width
R331 *1K/F_4
C610 *.1U/10V_4
R338 *1K/F_4

R374 10K/F_4 VMA_ODT
R40 10K/F_4 VMA_CKE
for DDR2 need use CMD11(CKE) and CMD12(ODT)

power up sequence
+VGA1.1V
+3V
+VGACORE
+1.8V

U25J
PBGA533-NVIDIA-GEFORCE6250
13/13 GND_NC

NC_01 AA6
NC_02 AC19
NC_03 E15
NC_04 Y6

GND_01 AC11
GND_02 AC14
GND_03 AC17
GND_04 AC2
GND_05 AC20
GND_06 AC23
GND_07 AC26
GND_08 AC5
GND_09 AC8
GND_10 AF11
GND_11 AF14
GND_12 AF17
GND_13 AF2
GND_14 AF20
GND_15 AF23
GND_16 AF26
GND_17 AF5
GND_18 AF8
GND_19 B11
GND_20 B14
GND_21 B17
GND_22 B2
GND_23 B20
GND_24 B23
GND_25 B26
GND_26 B5
GND_27 B8
GND_28 E11
GND_29 E14
GND_30 E17
GND_31 E2
GND_32 E20
GND_33 E23
GND_34 E26
GND_35 E5
GND_36 E8
GND_37 H2
GND_38 H5
GND_39 J11
GND_40 J14
GND_41 J17
GND_42 K19
GND_43 K9
GND_44 L11
GND_45 L12
GND_46 L13
GND_47 L14
GND_48 L15
GND_49 L16
GND_50 L17
GND_51 L2
GND_52 L5
GND_53 M12
GND_54 M13
GND_55 M14
GND_56 M15
GND_57 M16
GND_58 P19
GND_59 P2
GND_60 P23
GND_61 P26
GND_62 P5
GND_63 P9
GND_64 T12
GND_65 T13
GND_66 T14
GND_67 T15
GND_68 T16
GND_69 U11
GND_70 U12
GND_71 U13
GND_72 U14
GND_73 U15
GND_74 U16
GND_75 U17
GND_76 U2
GND_77 U23
GND_78 U26
GND_79 U5
GND_80 V19
GND_81 V9
GND_82 W11
GND_83 W14
GND_84 W17
GND_85 Y2
GND_86 Y23
GND_87 Y26
GND_88 Y5

N10M

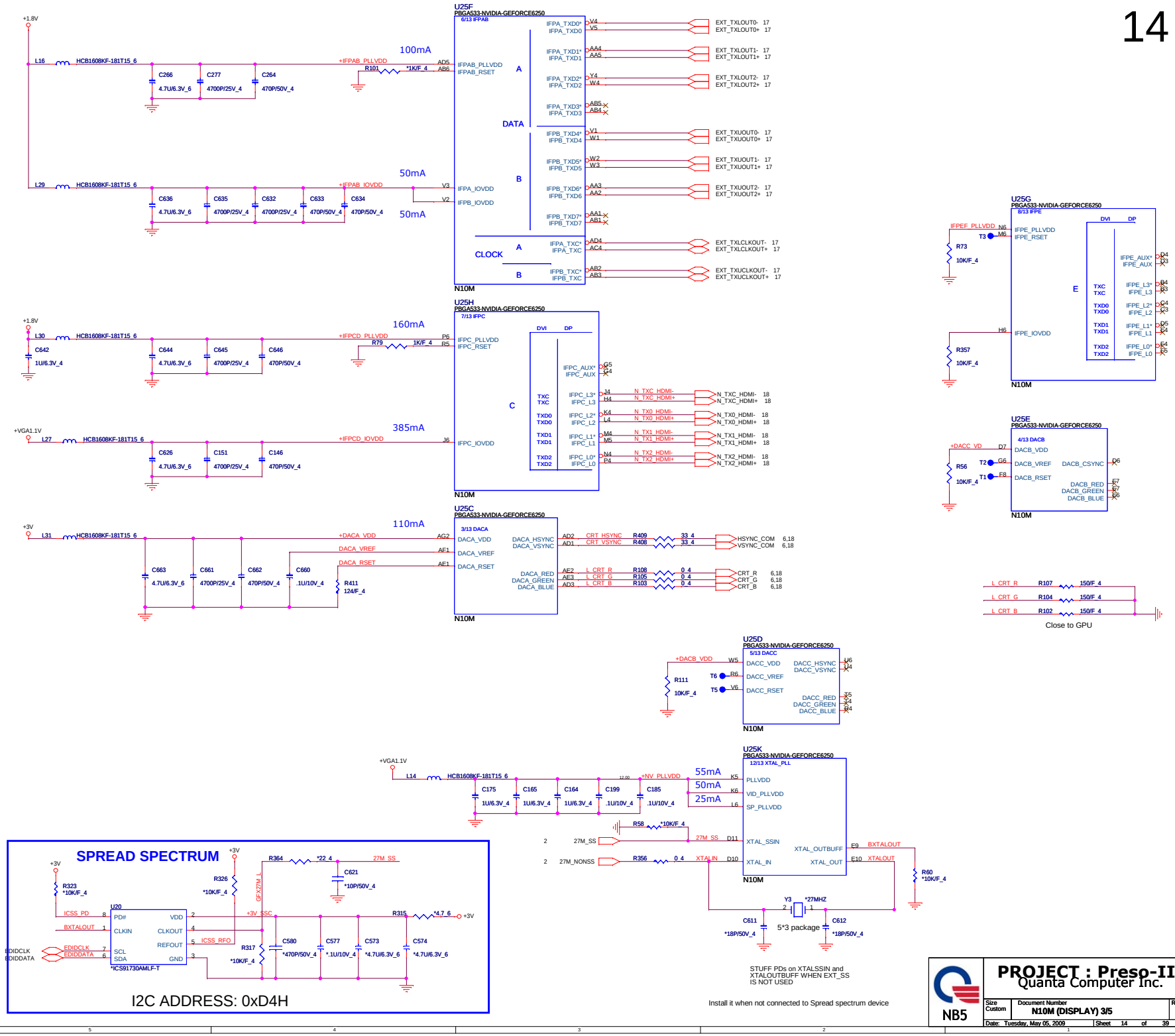
+1.8V
C134 4.7U/6.3V_6 C170 .47U/6.3V_4 C155 .47U/6.3V_4 C322 .1U/10V_4 C677 4.7U/6.3V_6 C171 .47U/6.3V_4 C685 .47U/6.3V_4 C153 .1U/10V_4 C248 .1U/10V_4 C601 .1U/10V_4 C684 .1U/10V_4 C659 .1U/10V_4 C657 .1U/10V_4 C682 .1U/10V_4

+1.8V
C680 4.7U/6.3V_6 C136 .47U/6.3V_4 C158 .47U/6.3V_4 C290 .1U/10V_4 C283 4.7U/6.3V_6 C173 .47U/6.3V_4 C204 .47U/6.3V_4 C651 .1U/10V_4 C196 .1U/10V_4 C214 .1U/10V_4 C156 .1U/10V_4 C148 .1U/10V_4 C154 .1U/10V_4 C239 .1U/10V_4

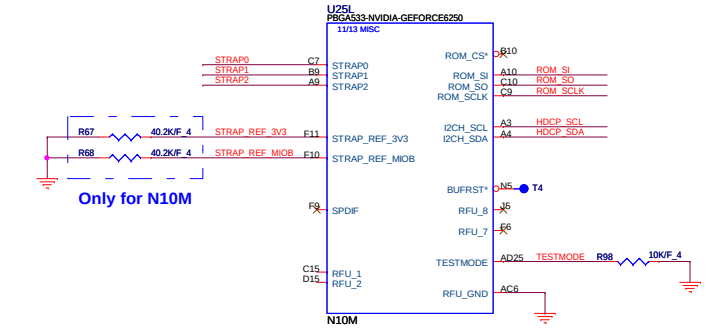
NB5

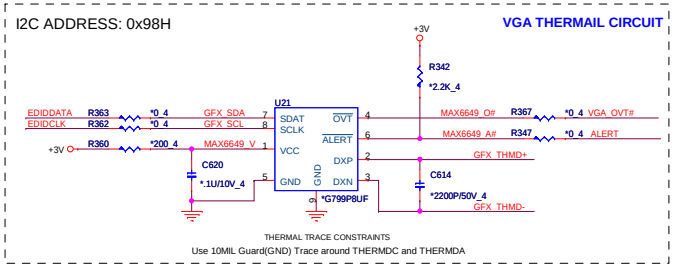
PROJECT : Preso-II
Quanta Computer Inc.

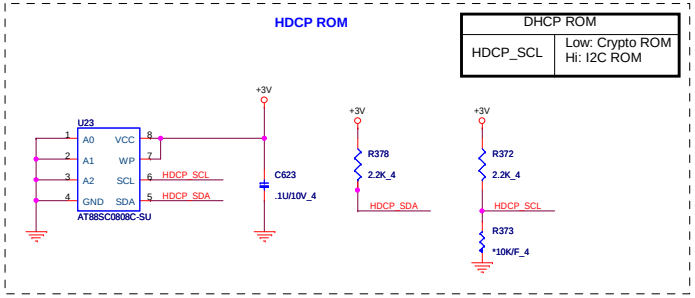
Size Custom | Document Number N10M (MEMORY I/F) 2/5 | Rev 1A
Date: Tuesday, May 05, 2009 | Sheet 13 of 39



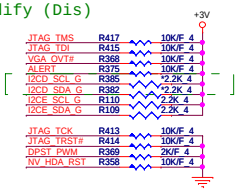
PROJECT :	Preso-II
Quanta Computer Inc.	
NB5	
Size: Custom	Document Number: N10M (DISPLAY) 3/5
Rev: 1A	
Date: Tuesday, May 05, 2009	Sheet 14 of 39

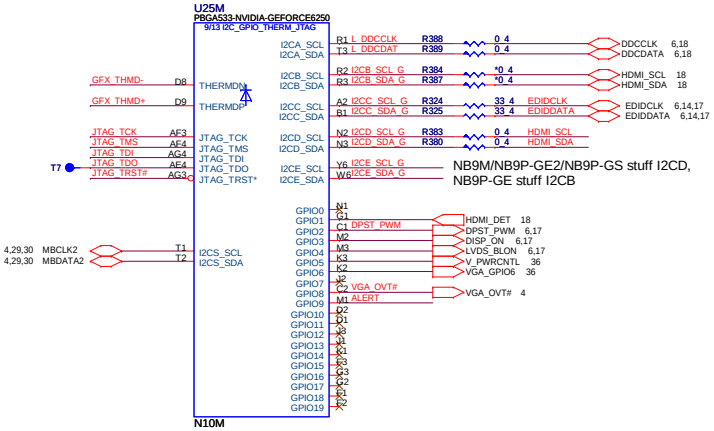


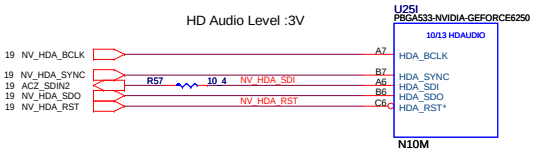




PV Modify (Dis)



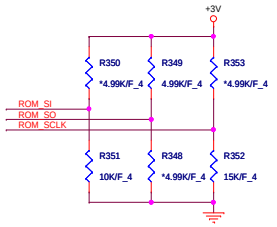




GPIO ASSIGNMENTS

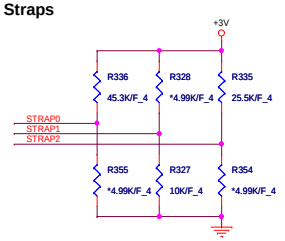
GPIO	I/O	ACTIVE	USAGE
0	IN	N/A	PRIMARY DVI HOTPLUG
1	IN	N/A	SECONDARY DVI HOTPLUG
2	OUT	HIGH	PANEL BACKLIGHT PWM
3	OUT	HIGH	PANEL POWER ENABLE
4	OUT	HIGH	PANEL BACKLIGHT ENABLE
5	OUT	N/A	NVVDD VID0
6	OUT	N/A	NVVDD VID1
7	OUT	N/A	FBVDD VID0
8	IN	LOW	THERMAL ALERT
9	OUT	LOW	FAN PWM
10	OUT	N/A	FBVREF SELECT
11	OUT	N/A	SLI SYNC0
12	IN	N/A	AC DETECT
13	OUT	LOW	PS CONTROL OR HDMI_CEC
14	OUT	HIGH	PS CONTROL

PCI_DEVID[4] / SUBVENDOR



VRAM ID	
ROM_SI	PD 5K: Hynix PD 10K: Samsung PD 15K: Qimonda

Straps



Logical Strap Bit Mapping

	PU	PD
5K	1000	0000
10K	1001	0001
15K	1010	0010
20K	1011	0011
25K	1100	0100
30K	1101	0101
35K	1110	0110
45K	1111	0111

NB5

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
C	N10M (GPIO & STRRAPS) 4/5	1A

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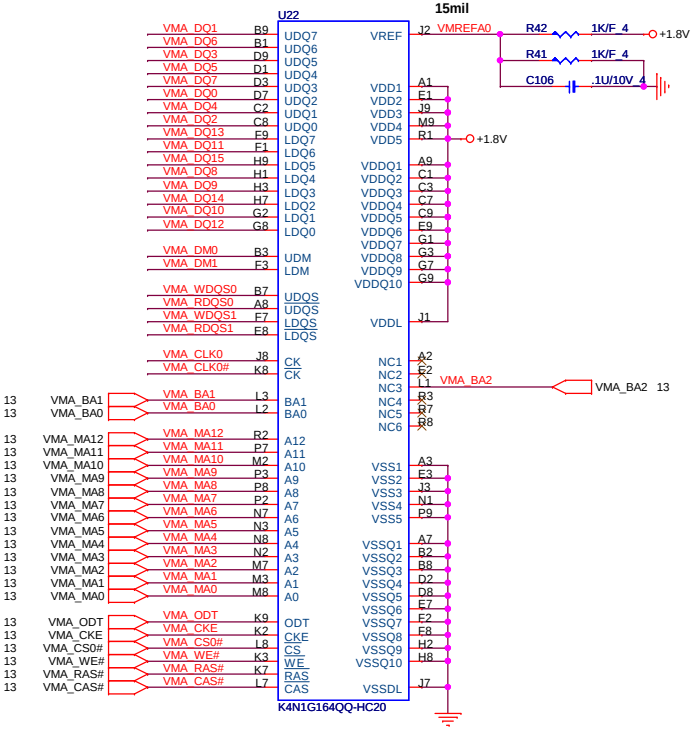
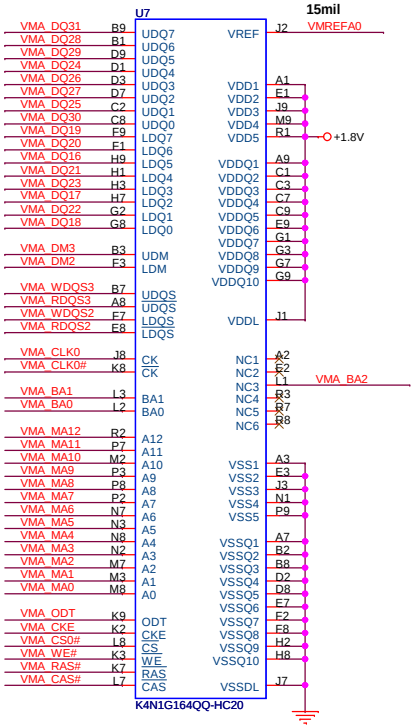
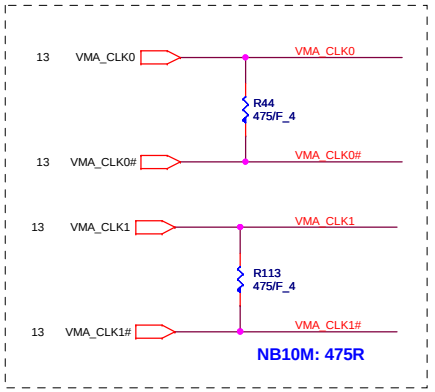
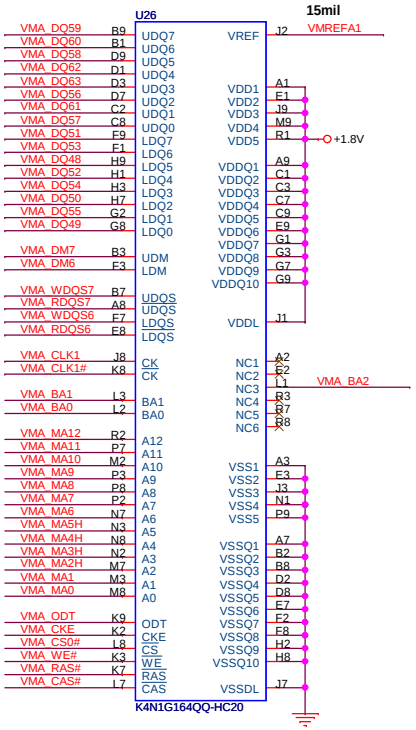


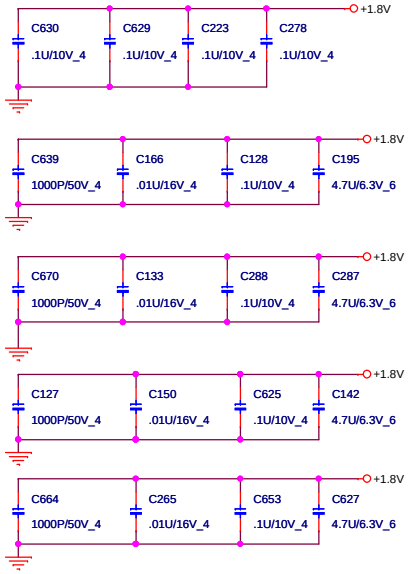




CS14752FB11 RES CHIP 475 1/16W +-1%(0402)



(By pass capacitor)



13 VMA_DQ[63..0]
13 VMA_DM[7..0]
13 VMA_WDQS[7..0]
13 VMA_RDQS[7..0]

NB5

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	N10M VRAM-1(GDDR2) 5/5	1A

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1. If LCD connector near GPU, then place these series Resistors near GPU
2. If LCD connector near N/B, then place these series Resistors near N/B

OPTION SIGNAL FROM NB FOR UMA VGA

6	LA_CLK	RP34	*4P2R-S-0	TXLCLKOUT+	
6	LA_CLK#			TXLCLKOUT-	
6	LA_DATAP0	RP37	*4P2R-S-0	TXLOUT0+	
6	LA_DATAN0			TXLOUT0-	
6	LA_DATAP1	RP31	*4P2R-S-0	TXLOUT1+	
6	LA_DATAN1			TXLOUT1-	
6	LA_DATAP2	RP29	*4P2R-S-0	TXLOUT2+	
6	LA_DATAN2			TXLOUT2-	
6	LB_CLK#	RP58	*4P2R-S-0	TXUCLKOUT-	
6	LB_CLK			TXUCLKOUT+	
6	LB_DATAP0	RP52	*4P2R-S-0	TXUOUT0+	
6	LB_DATAN0			TXUOUT0-	
6	LB_DATAP1	RP54	*4P2R-S-0	TXUOUT1+	
6	LB_DATAN1			TXUOUT1-	
6	LB_DATAP2	RP56	*4P2R-S-0	TXUOUT2+	
6	LB_DATAN2			TXUOUT2-	

OPTION SIGNAL FROM Nvidia to VGA

14	EXT_TXLCLKOUT+	RP35	4P2R-S-0	TXLCLKOUT+	
14	EXT_TXLCLKOUT-			TXLCLKOUT-	
14	EXT_TXLOUT0-	RP36	4P2R-S-0	TXLOUT0-	
14	EXT_TXLOUT0+			TXLOUT0+	
14	EXT_TXLOUT1+	RP32	4P2R-S-0	TXLOUT1+	
14	EXT_TXLOUT1-			TXLOUT1-	
14	EXT_TXLOUT2+	RP30	4P2R-S-0	TXLOUT2+	
14	EXT_TXLOUT2-			TXLOUT2-	
14	EXT_TXUCLKOUT+	RP57	4P2R-S-0	TXUCLKOUT+	
14	EXT_TXUCLKOUT-			TXUCLKOUT-	
14	EXT_TXUOUT0+	RP51	4P2R-S-0	TXUOUT0+	
14	EXT_TXUOUT0-			TXUOUT0-	
14	EXT_TXUOUT1-	RP53	4P2R-S-0	TXUOUT1-	
14	EXT_TXUOUT1+			TXUOUT1+	
14	EXT_TXUOUT2-	RP55	4P2R-S-0	TXUOUT2-	
14	EXT_TXUOUT2+			TXUOUT2+	

PV Modify

+5V, R5 *0_6S, U1 (VIN, VOUT, SHDN, GND, SET), C7 1U/6.3V_4, R1, R4 *215K/F_4, R2, R3 *100K/F_4, C8 4.7U/6.3V_6, +3.6V_CAM

*IC(5P) G913C (SOT23-5)EP

Vout=1.25(1+R1/R2)

2,4,6,9,10,11,12,14,15,18,19,20,21,22,24,25,26,28,29,30,31,35,36,38 +3V
18,22,24,25,28,29,31,37,38 +5V
32,33,34,35,36,37,38 +VIN
19,29,30,32,33,36,38 +3VPCU
33,38 +12VALW

CN1 CAMERA-BOARD

+3.6V_CAM, C4 .01U/16V_4, 20 USBP9+, 20 USBP9-, 24 DIGITAL_CLK, 24 DIGITAL_D1, C6 *100P/50V_4, C5 *100P/50V_4

Close with CN28

LCD / USB CAMERA / DIGITAL MIC CONNECTOR

CN2

+3V, C3 1000P/50V_4, C820 .22U/10V_4, 6,14,15 EDIDCLK, 6,14,15 EDIDDATA, EMI, C821 *1000P/50V_4, C822 *1000P/50V_4, EMI

PV Modify

+3V, R1 2.2K_4 EDIDCLK, R2 2.2K_4 EDIDDATA

+3VLCD_CON

TXLOUT0- TXLOUT0+ TXLOUT1- TXLOUT1+ TXLOUT2- TXLOUT2+ TXLCLKOUT- TXLCLKOUT+ TXUOUT0- TXUOUT0+ TXUOUT1- TXUOUT1+ TXUOUT2- TXUOUT2+ TXUCLKOUT- TXUCLKOUT+

VADJ1 BLON_CON

+VIN_BLIGHT, +VIN, L1 FBM2125 HM330-T, C18 .1U/50V_6, C10 .01U/50V_4, C12 .1U/50V_6, C15 *10U/25V_12

LCD_CON40
GS12401-1011-40P-R-NH

DISP_ON R18 100K/F_4

LVDS_BLON R12 100K/F_4

6,15 LVDS_BLON, R11 1K/F_4 PN_BLON, D1 BAT54A, R6 36K/F_4, Close to EC, LID_EC# 29,30, BLON_CON

21 LCD_BK, Q2 DTC144EUA, R9 100K/F_4, C16 22P/50V_4

6,15 DPST_PWM, DPST_PWM R8 1K/F_4

30 PWM_VADJ, PWM_VADJ R7 *0_4, VADJ1

PQ Modify

C14 *4.7U/6.3V_6, C13 22P/50V_4

+12VALW, A03404 ID current 5.8A, R16 330K_4, Q4 AO3404, +3V, C19 .1U/10V_4

+5VSUS, R17 100K/F_4, Q6 2N7002, C25 .022U/16V_4, LCDONG, +3VLCD, L2 PBY201209T-4A/08, +3VLCD_CON, R15 22_8, C1 .01U/16V_4, C2 .1U/10V_4, C20 10U/6.3V_8, LCDDISCHG

6,15 DISP_ON, Q7 DTC144EUA, LCDON#, Q5 2N7002

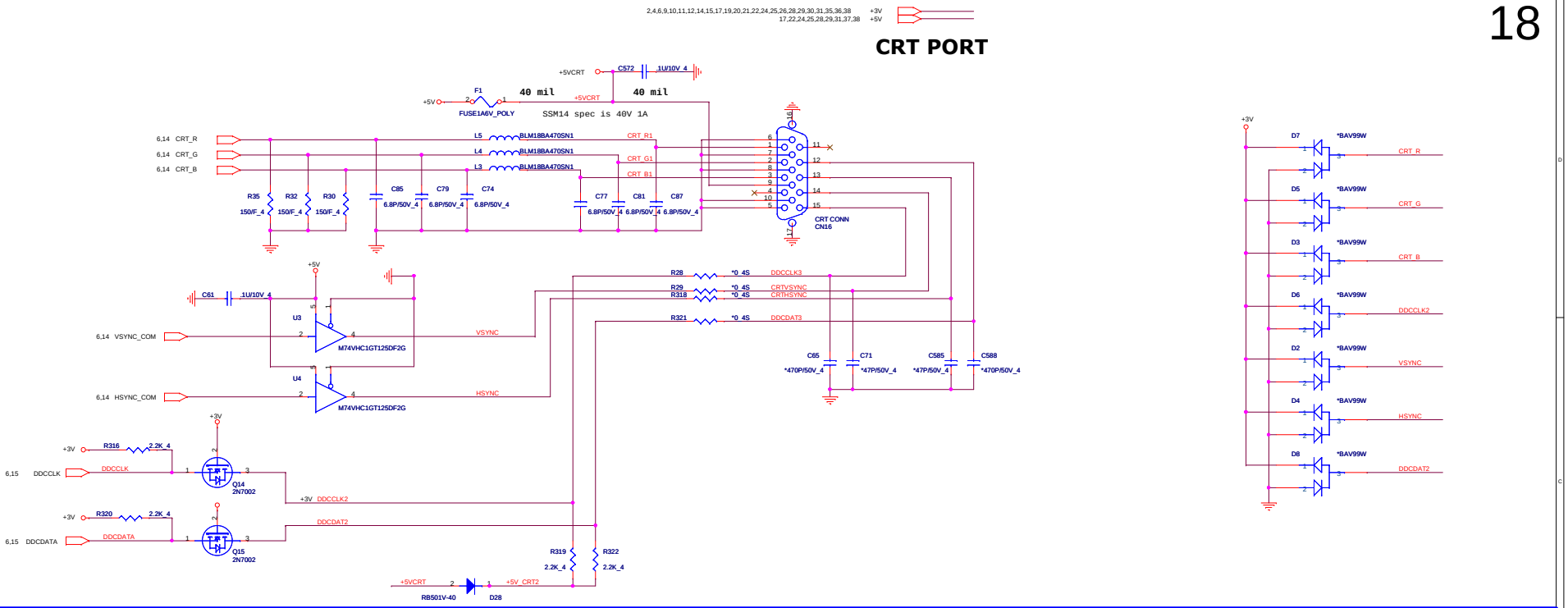
NB5

PROJECT : Preso-II
Quanta Computer Inc.

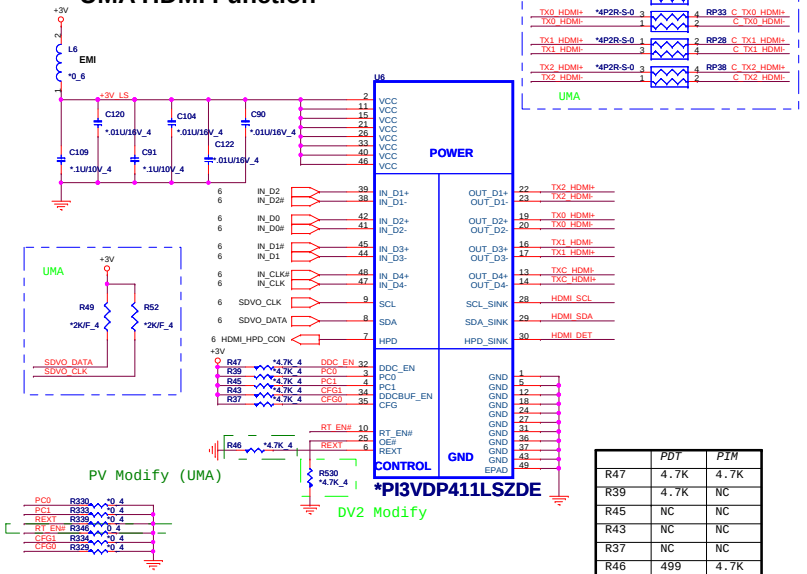
Size	Document Number	Rev
Custom	LCD CONN(WC/MIC)/LID	1A

Date: Tuesday, May 05, 2009 | Sheet 17 of 39

CRT PORT



UMA HDMI Function

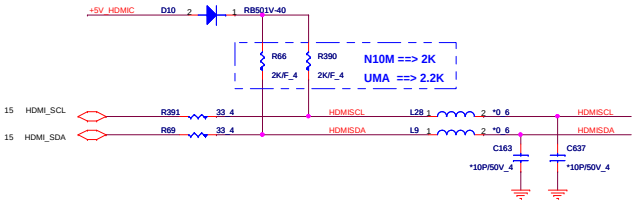


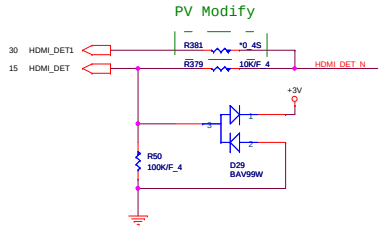
	PDT	PIM
R47	4.7K	4.7K
R39	4.7K	NC
R45	NC	NC
R43	NC	NC
R37	NC	NC
R46	499	4.7K
R529	NC	0
R341	100K	NC
R377	7.5K	NC
R371	20K	NC
Q16	2N7002	NC

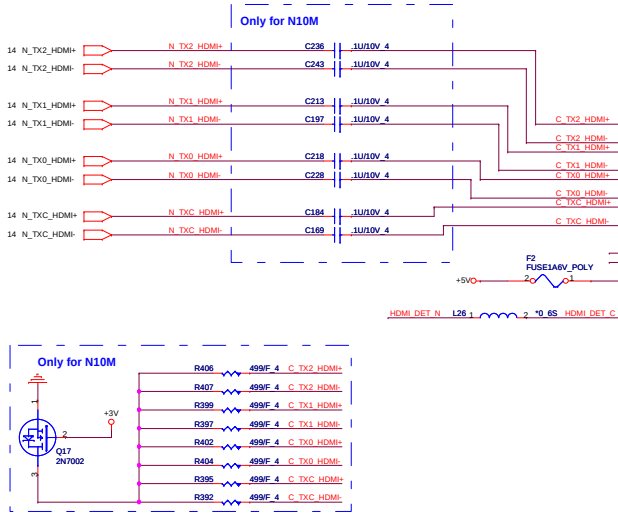
Vendor:PDT P/N:AL008101000
Vendor:PIM P/N:ALP411LS001

EQUALIZATION SETTING
PC1:PC0=0:0 8dB
PC1:PC0=0:1 4dB Recommanded
PC1:PC0=1:0 12dB
PC1:PC0=1:1 0dB

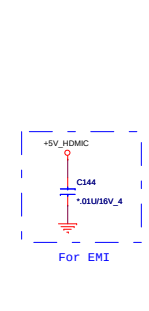
SCLZ/SDAZ Low-level input/output Voltage
CFG1:CFG0=0:0 VIL:<0.4V VOL:0.6V (Default)
CFG1:CFG0=0:1 VIL:<0.36V VOL:0.55V
CFG1:CFG0=1:0 VIL:<0.44V VOL:0.65V
CFG1:CFG0=1:1 VIL:<0.36V VOL:0.6V



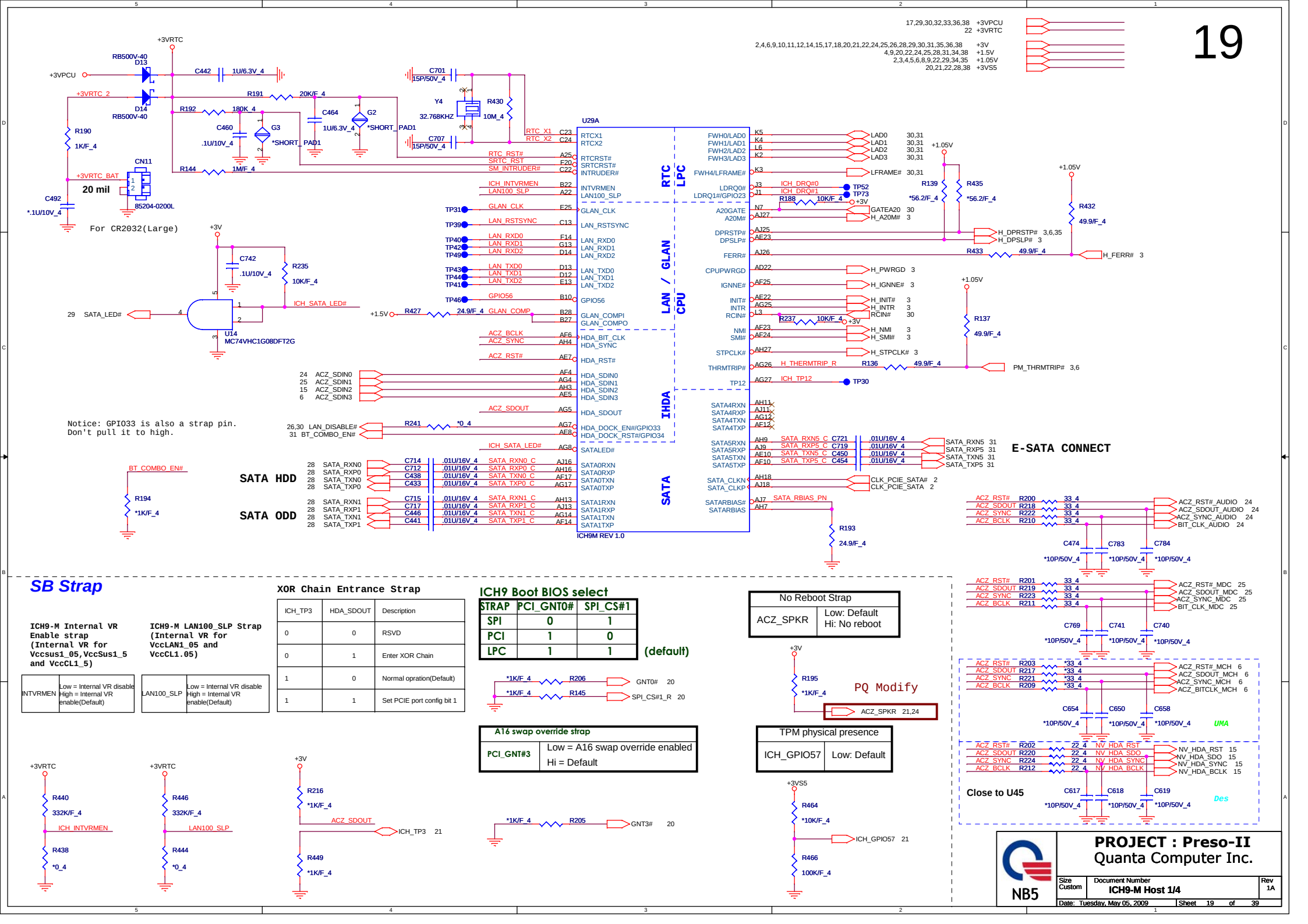




HDMI PORT



NB5	PROJECT : Preso-II Quanta Computer Inc.
Size: Custom	Document Number: CRT/PS8101 HDMI Conn
Rev: 1A	
Date: Tuesday, May 05, 2009	Sheet 18 of 39



INTVRMEN	Low = Internal VR disable High = Internal VR enable(Default)

LAN100_SLP	Low = Internal VR disable High = Internal VR enable(Default)

ICH_TP3	HDA_SDOUT	Description
0	0	RSVD
0	1	Enter XOR Chain
1	0	Normal opration(Default)
1	1	Set PCIE port config bit 1

STRAP	PCI_GNT0#	SPI_CS#1
SPI	0	1
PCI	1	0
LPC	1	1

4,9,19,22,24,25,28,31,34,38 +1.5V
2,4,6,9,10,11,12,14,15,17,18,19,21,22,24,25,26,28,29,30,31,35,36,38 +3V
21,23,29,31,34,35,36,38 +3VSUS

MINI CARD PCI-E(WLAN)

EXPRESS CARD (NEW CARD)

MINI CARD PCI-E(Robson)

PCIE-LAN

U29D

PCI-Express

Direct Media Interface

SPI

USB

ICH9M REV 1.0

E-SATA and USB Connector
USB Connector
USB Connector

Card Reader
NEW CARD
BLUETOOTH
Carama USB
Wireless Mini-Card
Robson Mini-Card

For GM HDCP

512K byte SPI ROM
for HDCP only

for EMI

For iTPM

U29B

PCI

Interrupt I/F

ICH9M REV 1.0

PV Modify

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	ICH9-M PCIE 2/4	1A

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4,9,19,20,22,24,25,28,31,34,38 +1.5V
2,4,6,9,10,11,12,14,15,17,18,19,20,22,24,25,26,28,29,30,31,35,36,38 +3V
19,20,22,28,38 +3VS5
23,29,31,34,35,36,38 +3VSUS

U29C

SMB
SMBCLK
SMBDATA
LINKALERT#/GPIO60/CLGPIO4
SMLINK0
SMLINK1

SYS GPIO
RI#
SUS_STAT#/LPCPD#
SYS_RESET#
PMSYNC#/GPIO0
SMBALERT#/GPIO11
STP_PCI#
STP_CPU#
CLKRUN#
WAKE#
SERIRQ
THRM#
VRMPWRGD
TP11

Power MGT
GPIO1
GPIO6
GPIO7
GPIO8
GPIO12
GPIO13
GPIO17
GPIO18
GPIO20
SCLOCK/GPIO22
GPIO27
GPIO28
SATACLKREQ#/GPIO35
SLOAD/GPIO38
SDATAOUT0/GPIO39
SDATAOUT1/GPIO48
GPIO49
GPIO57/CLGPIO5

GPIO Controller Link
SPKR
MCH_SYNC#
TP3
TP8
TP9
TP10

MISC
ICH9M REV 1.0

SATA GPIO
SATA0GP/GPIO21
SATA1GP/GPIO19
SATA4GP/GPIO36
SATA5GP/GPIO37

Clocks
CLK14
CLK48
SUSCLK

SLP_S3#
SLP_S4#
SLP_S5#
S4_STATE#/GPIO26
PWROK
DPRSLPVR/GPIO16
BATLOW#
PWRBTN#
LAN_RST#
RSMRST#
CK_PWRGD
CLPWROK
SLP_M#
CL_CLK0
CL_CLK1
CL_DATA0
CL_DATA1
CL_VREF0
CL_VREF1
CL_RST0#
CL_RST1#
MEM_LED/GPIO24
GPIO10/SUS_PWR_ACK
GPIO14/AC_PRESENT
WOL_EN/GPIO9

2 PCLK_SMB
2 PDAT_SMB
SMB_LINK_ALERT#
SMB_CLK_ME
SMB_DATA_ME
PM_RI#
TP50 PM_SUS_STAT#
3 SYS_RST#
6 PM_SYNC#
SMB_ALERT#
2 PM_STPPCI#
2 PM_STPCPU#
30 CLKRUN#
26,28,31 PCIE_WAKE#
30 SERIRQ
4 PM_THRM#
VR_PWRGO_CLKEN
TP66
TP35
30 KBSMI#
30 SCI#
30 SWI#
T8 LAN_PHYPC
5158_RST_R#
23 5159_RST_R#
BOARD_ID5
GPIO 18
17 LCD_BK
BOARD_ID2
31 WAN_OFF#
TP75 ICH_GPIO35
TP38 ICH_GPIO33
TP33 MFG_MODE
TP34 CRB_SV_DET_R
TP32 DMI_TERM_SEL
19 ICH_GPIO57
19,24 ACZ_SPKR
MCH_ICH_SYNC#
19 ICH_TP3
TP68 ICH_TP8
TP67 ICH_TP9
TP65 ICH_TP10

AH23 BOARD_ID1
AF19 BOARD_ID0
AE21 BOARD_ID3
AD20 BOARD_ID4
H1 CLK14
AF3 CLK48
R227 33_4
CLK_14M_ICH 2
CLK_48M_USB 2
P1 SUSCLK TP74
C16 SLP_S3# SUSB# 30
E16 SLP_S4# SUSC# 30
G17 SLP_S5# TP37
C10 S4_STATE# TP71
G20 PM_ICH_PWROK
M2 DPRSLPVR 6,35
B13 PM_BATLOW# 30
R3 DNBSWON# 30
D20 LAN_RST#
D22 RSMRST# 30
R5 CK_PWG 2
R6 ECPWROK
B16 ICH_SLP_M# TP69
F24 CL_CLK0 6
B19 CL_CLK1 31
F22 CL_DATA0 6
C19 CL_DATA1 31
C25 CL_VREF0_ICH
A19 CL_VREF1_ICH
F21 CL_RST#0 6
D18 CL_RST#1 31
A16 TP70
C18 SUS_PWR_ACK
C11 AC_PRESENT TP47
C20 ICH_WOL_EN
R163 100K/F_4

+3VS5
+3V
R458 3.24K/F_4
R133 3.24K/F_4
0.405V
C711 .1U/10V_4
R455 453/F_4
C397 .1U/10V_4
R134 453/F_4

+3VS5
SWI# R451 10K/F_4
PM_RI# R170 10K/F_4
SMB_CLK_ME R179 10K/F_4
SMB_DATA_ME R454 10K/F_4
DNBSWON# R229 10K/F_4
PCLK_SMB R182 2.2K_4
PDAT_SMB R461 2.2K_4
SMB_ALERT# R456 10K/F_4
PCIE_WAKE# R160 10K/F_4
PM_BATLOW# R463 8.25K/F_4
SMB_LINK_ALERT# R174 10K/F_4
SYS_RST# R459 10K/F_4

BIOS_REC:BOARD_ID2
Default is PH
For Bios recovery PD

PQ Modify

+3V
R528 1K/F_4
VR_PWRGO_CLKEN
Q11 BS870-7-F
R468 100K/F_4
35 VR_PWRGD_CK410#

+3V
R162 *10K/F_4 BOARD_ID0 R148 10K/F_4
R442 *10K/F_4 BOARD_ID1 R436 10K/F_4
R448 10K/F_4 BOARD_ID2 R447 *10K/F_4
R142 *10K/F_4 BOARD_ID3 R140 10K/F_4
R146 *10K/F_4 BOARD_ID4 R147 10K/F_4
R173 10K/F_4 BOARD_ID5 R168 *10K/F_4
R534 *10K/F_4 GPIO 18 R535 10K/F_4

PV Modify

+3V
ICH_TP3 R450 *10K/F_4
PM_THRM# R443 8.25K/F_4
SERIRQ R189 10K/F_4
CLKRUN# R196 8.25K/F_4
KBSMI# R453 10K/F_4
SCI# R452 10K/F_4
ICH_GPIO35 R236 *10K/F_4

SUS_PWR_ACK R166 10K/F_4
RSMRST# R143 10K/F_4

Board ID

Model	BOARD_ID 2	BOARD_ID 3	BOARD_ID 5
GM45	0	0	1
GL40	0	0	1
N10M	1	0	1

CLK_48M_USB
CLK_14M_ICH
R234 *10_4
R239 *33_4
C488 *10P/50V_4
C489 *10P/50V_4

+3V
+3VSUS
R183 *2K/F_4
C443 *.1U/10V_4
U11 *MC74VHC1G08DFT2G
6,35 DELAY_VR_PWRGOOD
4,6,30 ECPWROK
PM_ICH_PWROK
R157 10K/F_4
R169 *0_4S

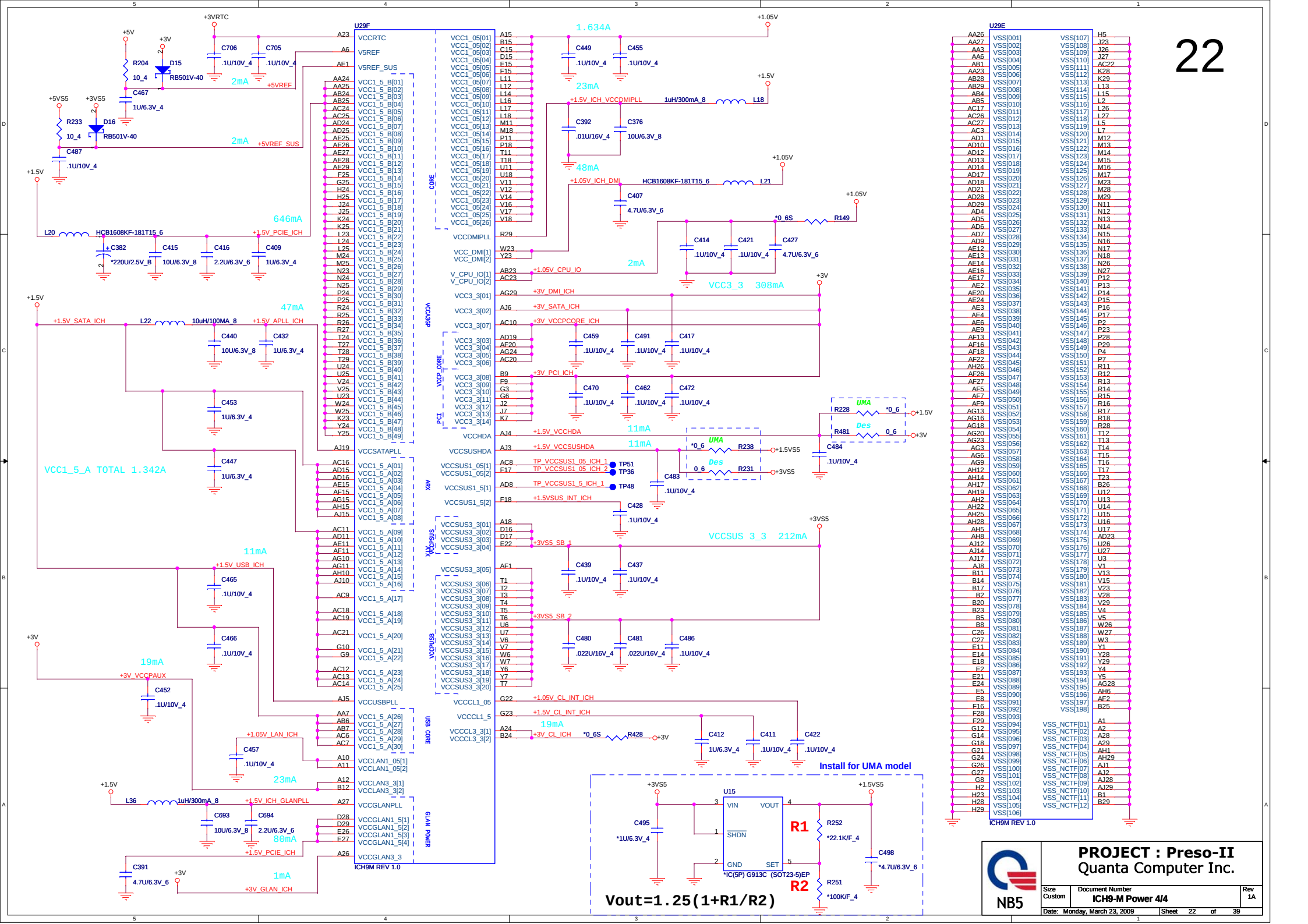
PQ Modify

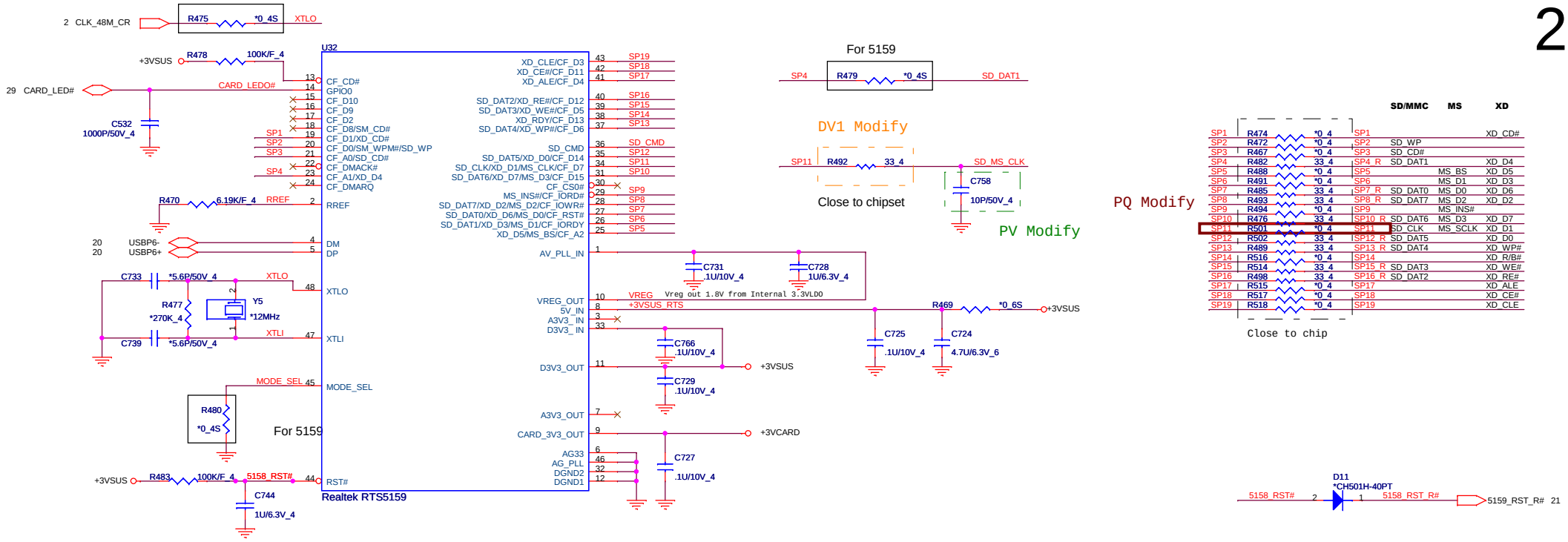
NB5

PROJECT : Preso-II
Quanta Computer Inc.

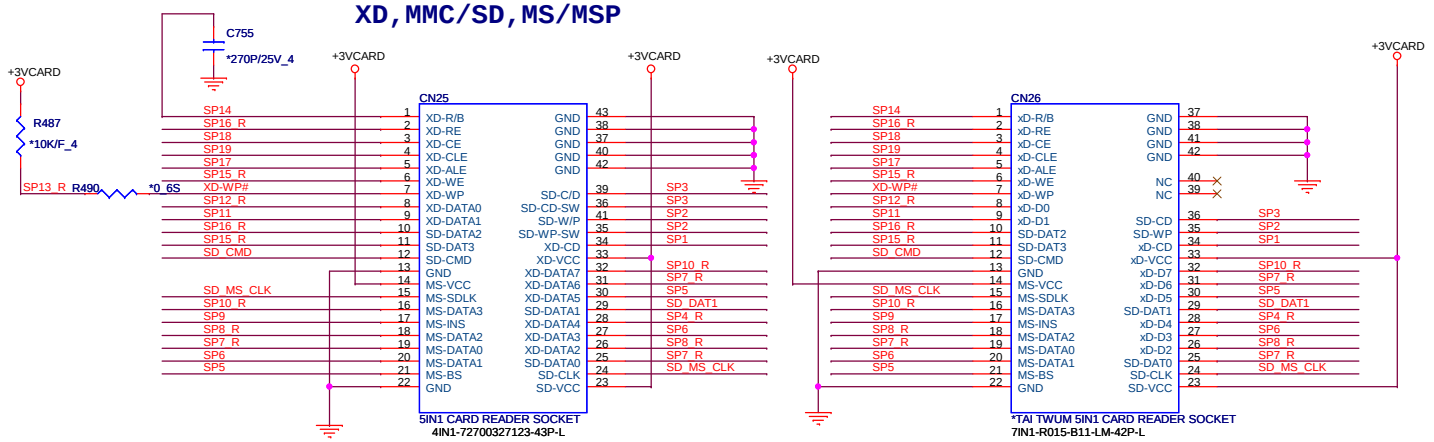
Size	Document Number	Rev
Custom	ICH9-M GPIO 3/4	1A

Date: Tuesday, May 05, 2009 Sheet 21 of 39

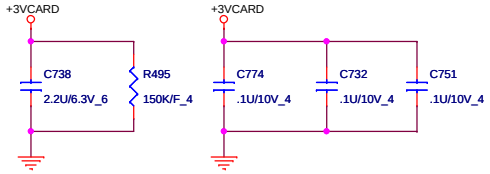

22
U29F
U29E
VCC1_5_A TOTAL 1.342A
VCCSUS 3_3 212mA
VCC3_3 308mA
1.634A
23mA
48mA
646mA
47mA
11mA
19mA
2mA
80mA
1mA
Install for UMA model
Vout=1.25(1+R1/R2)
*IC(5P) G913C (SOT23-5)EP
ICH9M REV 1.0
PROJECT : Preso-II
Quanta Computer Inc.
NB5
ICH9-M Power 4/4
Date: Monday, March 23, 2009
Sheet 22 of 39

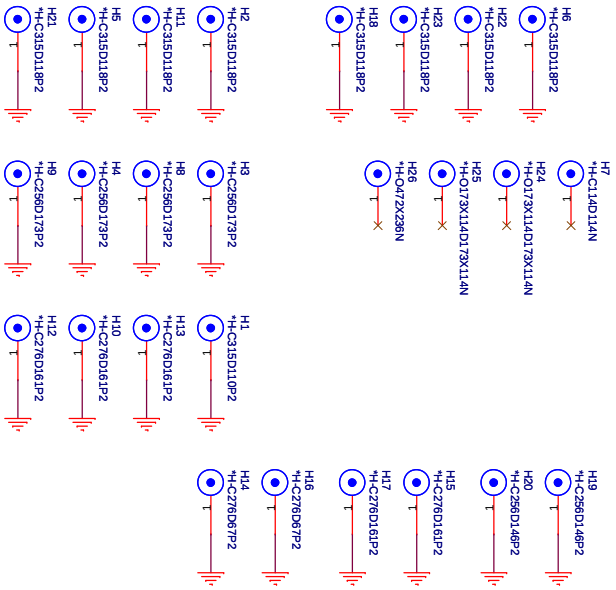


5 IN1 CARD READER
XD,MMC/SD,MS/MSP



Close Connector



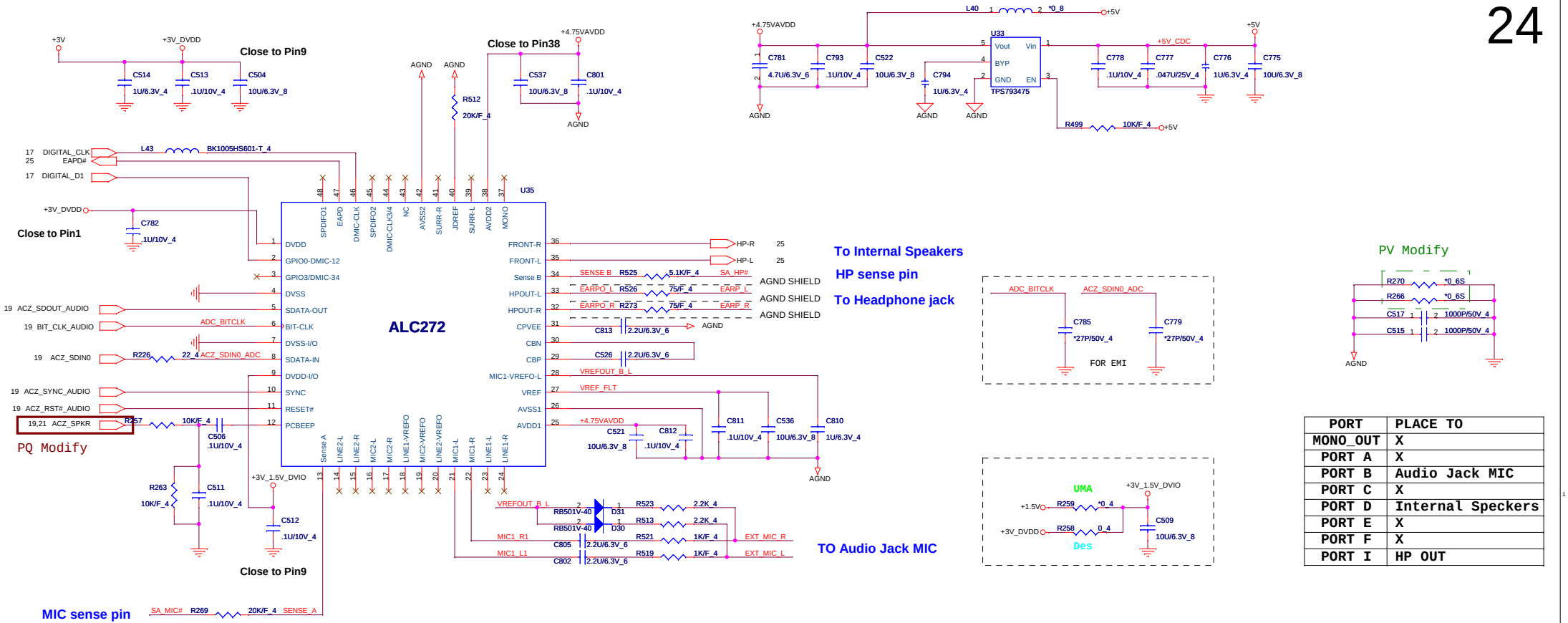


NB5

PROJECT : Preso-II
Quanta Computer Inc.

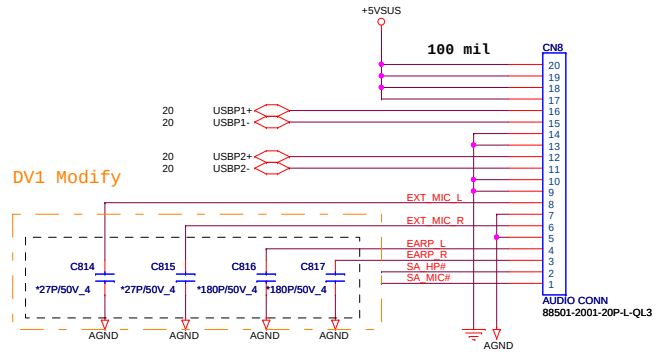
Size	Document Number	Rev
Custom	RTS5158 & CR SOCKET &HOLE	1A

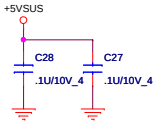
Date: Tuesday, May 05, 2009 Sheet 23 of 39



PORT	PLACE TO
MONO_OUT	X
PORT A	X
PORT B	Audio Jack MIC
PORT C	X
PORT D	Internal Speckers
PORT E	X
PORT F	X
PORT I	HP OUT

AUDIO / USB BOARD CONNECTOR





PROJECT :	Preso-II
Quanta Computer Inc.	
Size: Custom	Document Number: Azalia IDT92HD71B7
Rev: 1A	
Date: Tuesday, May 05, 2009	Sheet 24 of 39

NB5

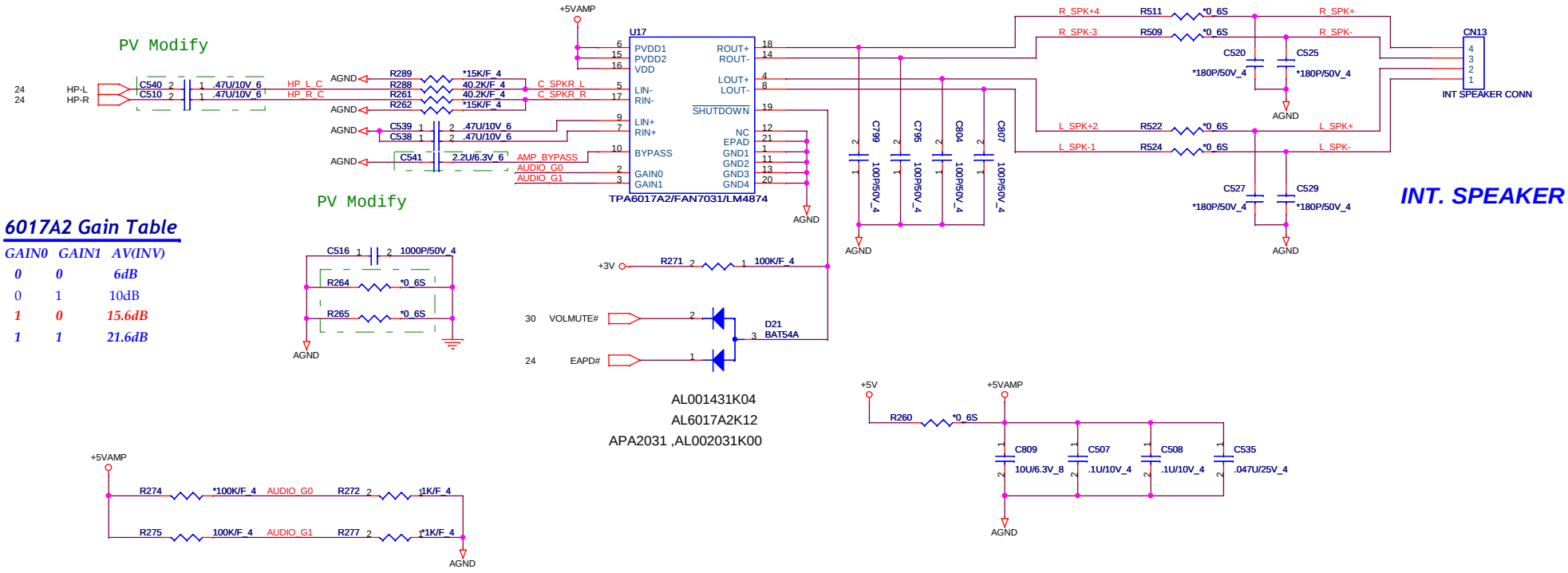
AUDIO AMPLIFIER

PV Modify

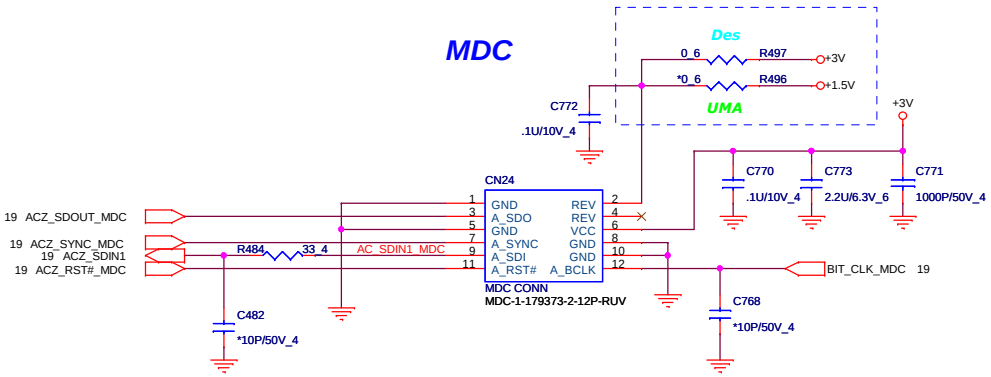
PV Modify

6017A2 Gain Table

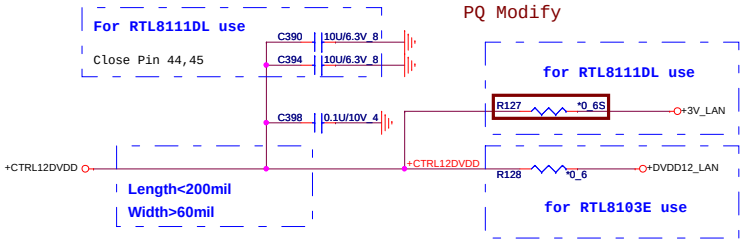
GAIN0	GAIN1	AV(INV)
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB

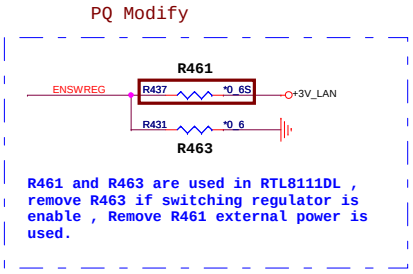


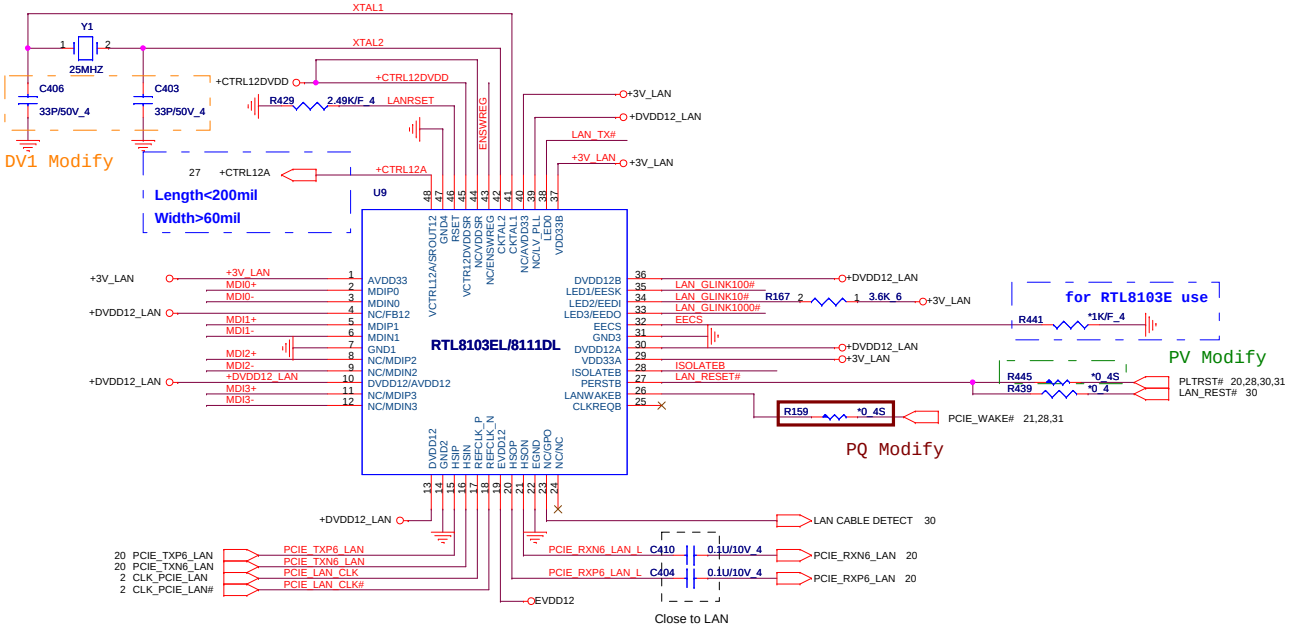
MDC

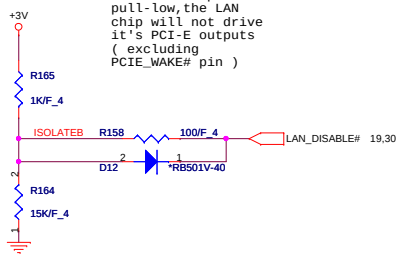


NB5	PROJECT : Preso-II Quanta Computer Inc.	
	Size: Custom	Document Number: AMP_TPA6017/MDC — Rev: 1A
	Date: Tuesday, May 05, 2009	Sheet 25 of 39



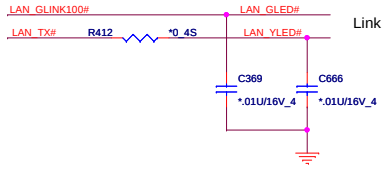


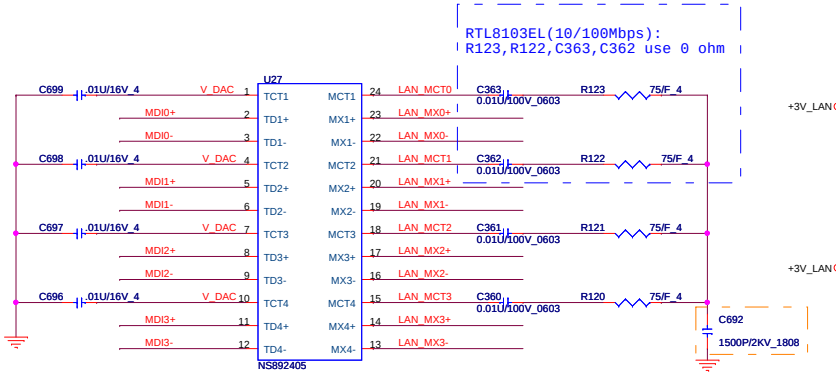


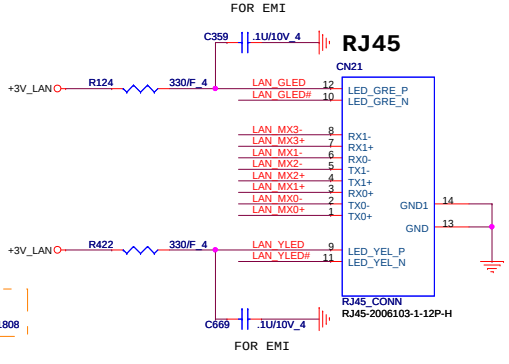


AL08111DB00 RTL8111DL-GR

AL08103EB00 RTL8103EL-GR







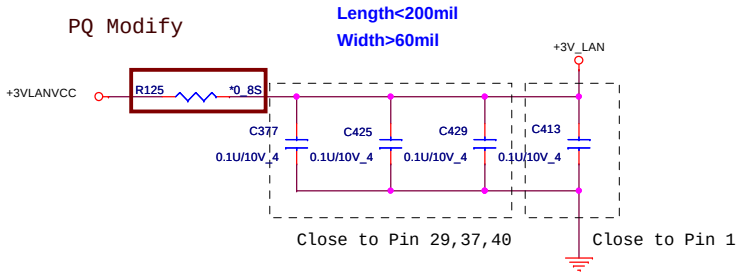
NS892402:1G	DB0AT9LAN05
NS892405:10/100	DB0ZB1LAN04

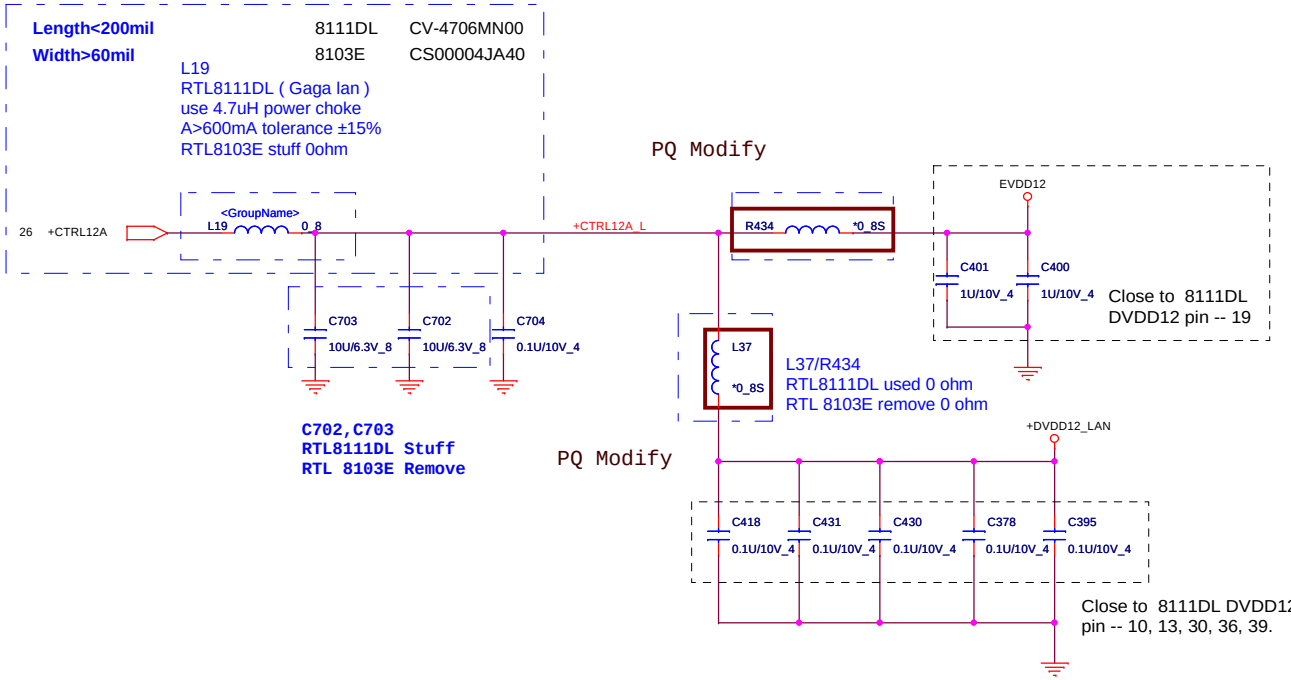
NB5

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	RTL8111C/8101E/RJ45	1A

Date: Tuesday, May 05, 2009 | Sheet 26 of 39





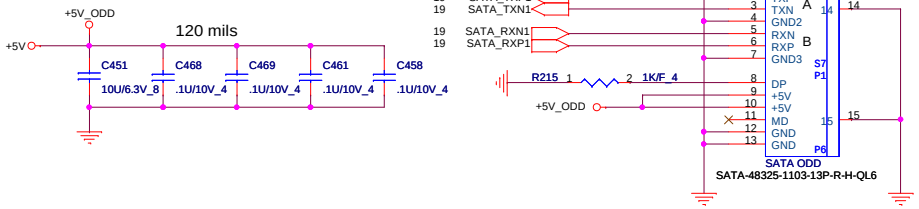
NB5

PROJECT : Preso-II
Quanta Computer Inc.

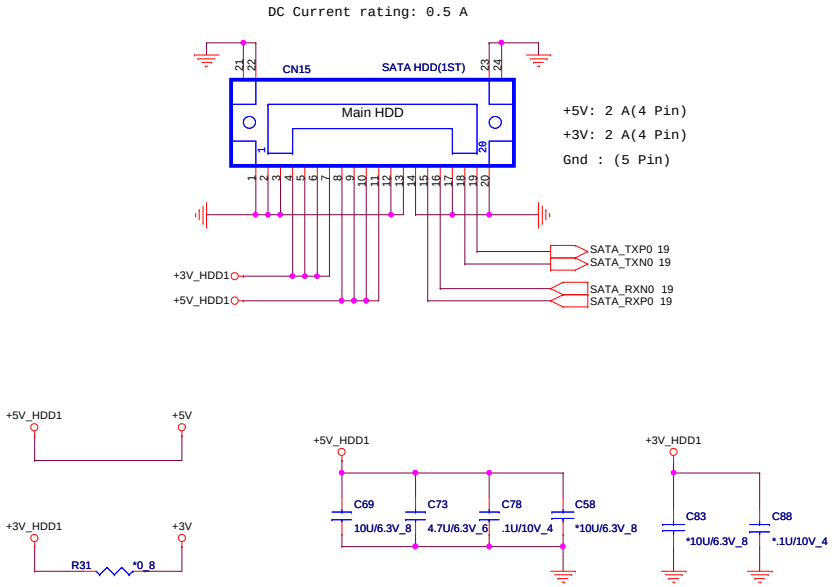
Size	Document Number	Rev
A3	**LAN Power**	1A

Date: Tuesday, May 05, 2009 Sheet 27 of 39

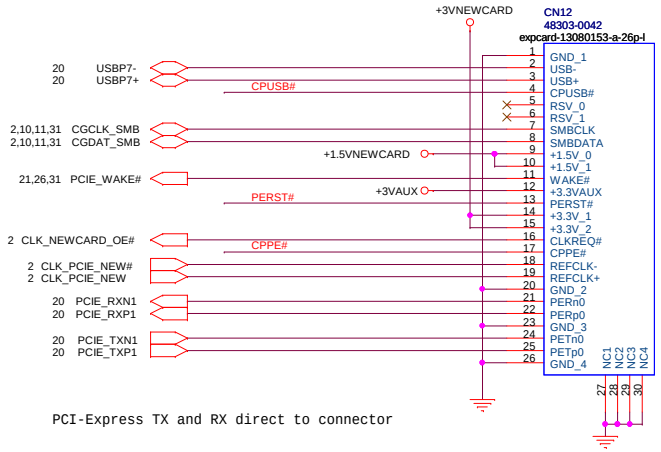
SATA ODD CONECTOR



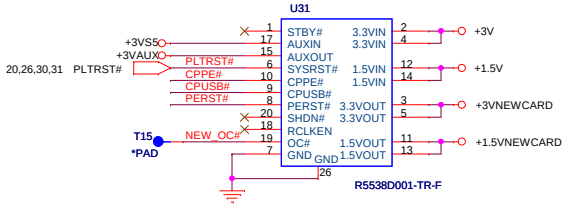
SATA HDD CONNECTOR

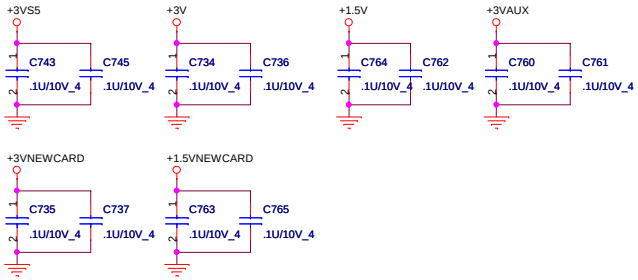


NEWCARD



PCI-Express TX and RX direct to connector



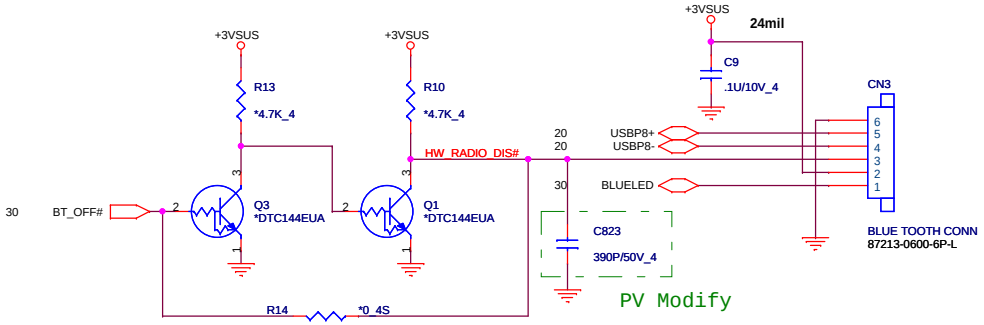


NB5

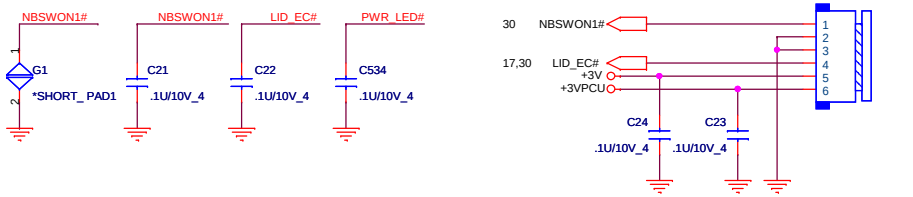
PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	ODD/HDD/NEW CARD	1A
Date: Tuesday, May 05, 2009	Sheet 28 of 39	

BLUETOOTH POWER



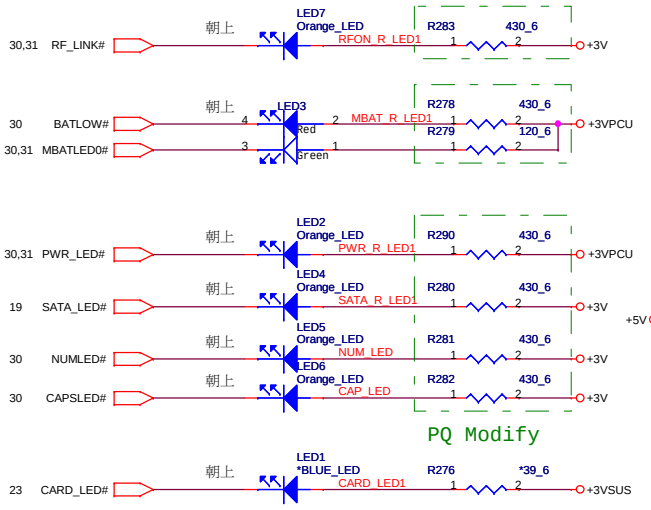
POWER BOTTON CONNECT



1. NBSWON1#
2. GND
3. GND
4. LID_EC#
5. +3V
6. +3VPCU

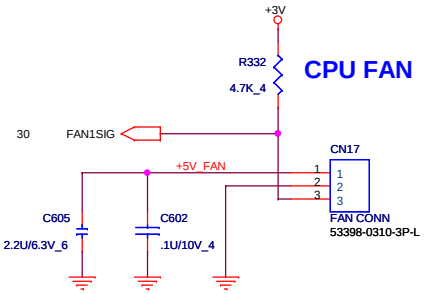
LED

Pv Modify



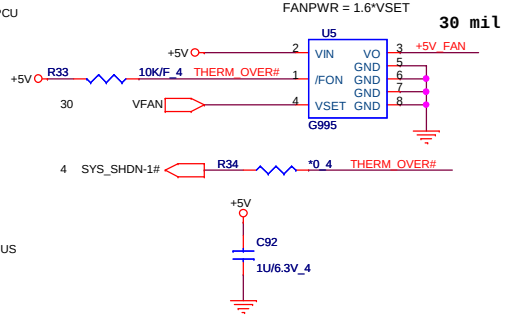
PQ Modify

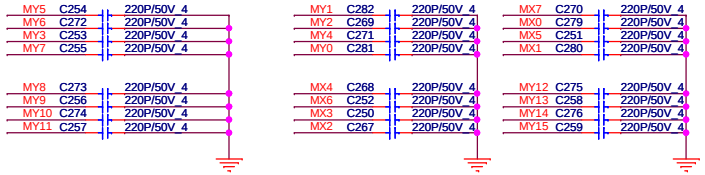
CPU FAN

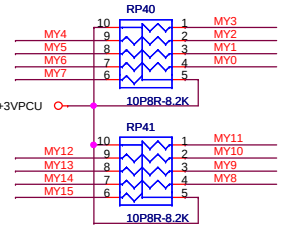


FANPWR = 1.6*VSET

30 mil

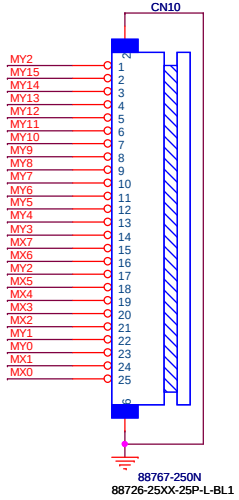


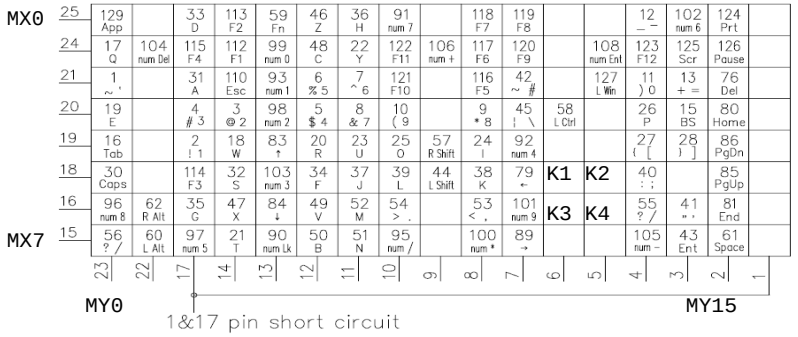




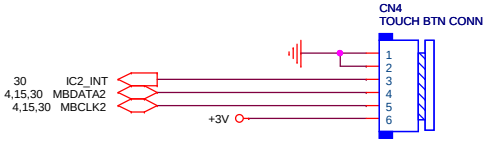
30 MY[0..15] MY[0..15]

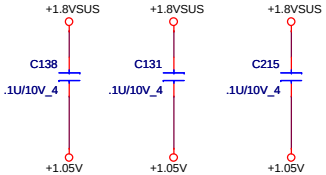
30 MX[0..7] MX[0..7]



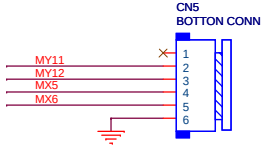


K1: Mute
K2: Volume Up
K3: Volume Down
K4: SRS





Close to U21 For EMI



NB5

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	KB/FAN/POWER CONN/LED	1A

Date: Tuesday, May 05, 2009 Sheet 29 of 39

TOUCH PAD CONNECTOR

25 mils

close connector

PQ Modify

DV1 Modify

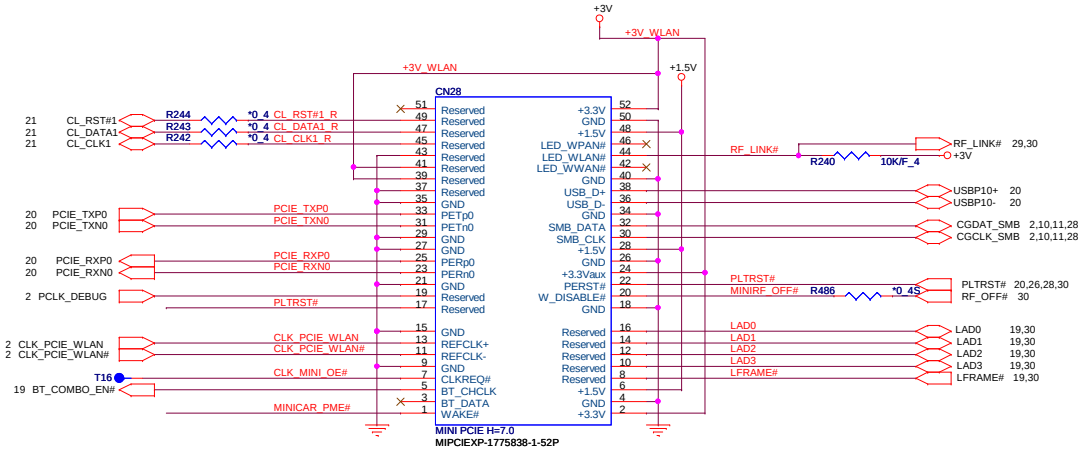
For SW9

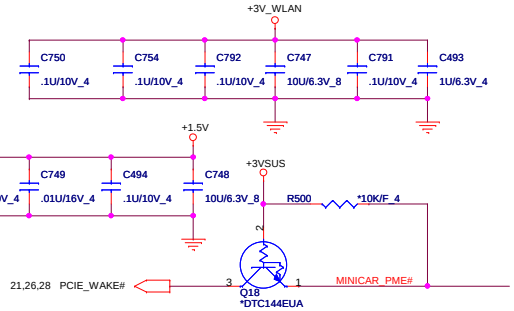
TOUCH PAD L/R

CLIENT_ID HI ==>LG
LOW==>CB

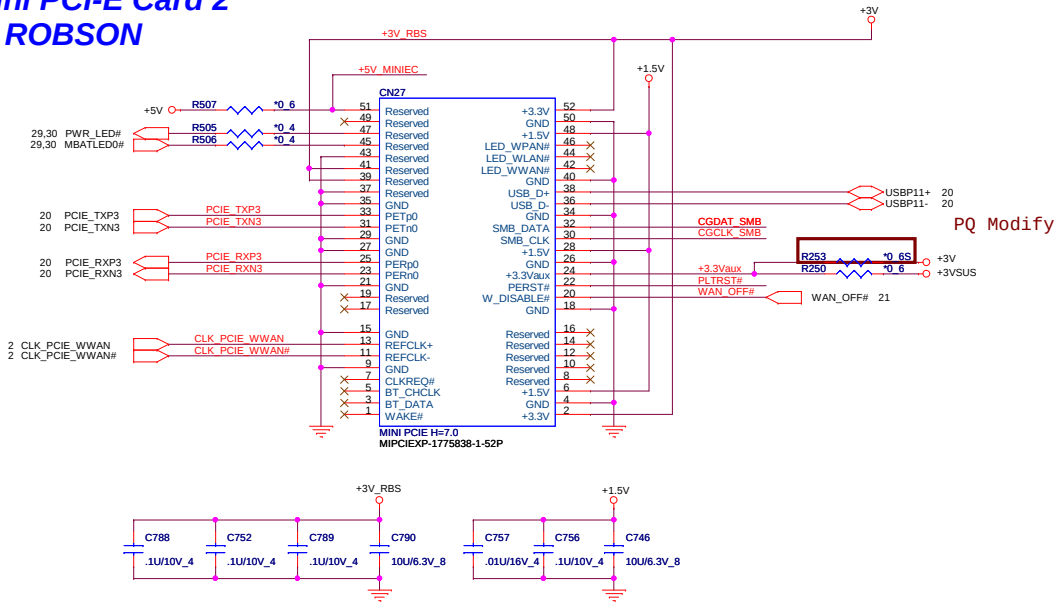
PROJECT :	Preso-II
Quanta Computer Inc.	
NB5	
Size: Custom	Document Number: KB3926/ROM/TP
Rev: 1A	
Date: Tuesday, May 05, 2009	Sheet 30 of 39

Mini PCI-E Card 1
WLAN

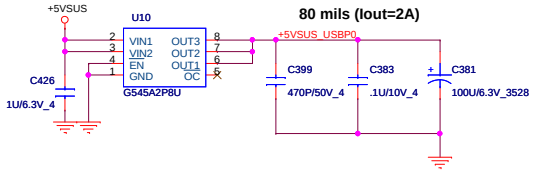




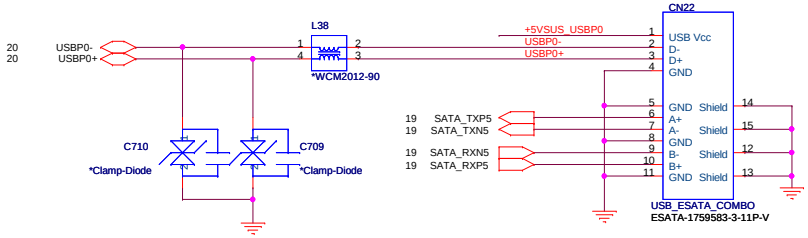
Mini PCI-E Card 2
ROBSON



E-SATA/USB COMBO



USB & ESATA



NB5

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	MINI PCIE CONN X2/E-SATA	1A
Date: Tuesday, May 05, 2009	Sheet 31 of 39	

TOP DC_JACK
60W/90W

DB Modify for connector swap (follow QL8)

close with PQ29

over lap

for EC damage

Close to N-CH MOSFET

close to PQ25

Setting the Vin min to 12V
For ACSET 1.26V

Setting the Vin min to 17V
For EN = 1.06V

CELL_SLT = 1 -- 3 S (Cells = GND 3S)
CELL_SLT = 0 -- 4 S (Cells = VDD 4S)

Charging Curret setting =
I chg = 165mV / Rsense * (Vchlim / 3.3V)

Input Current monitor
V icm = 19.9 * (Vcsip - Vcsin)

VADJ =
VERF >> 4.2V +5%
Float >> 4.2V
GND >> 4.2 -5%

V ACLIM = VREF *
(Rl // 152K) / (Rh // 152K + Rlow// 152K)
Input curren = 2.9A (71.5K , 10K)
(0.05/Vref * Vaclim + 0.05) / Rsense

For mosfet burn

ADP TYPE	PR27 VALUE	P/N
60W	31.6K/F	CS33162FB14
90W	2.55K/F	CS22552FB01

PROJECT : Preso-II
Quanta Computer Inc.

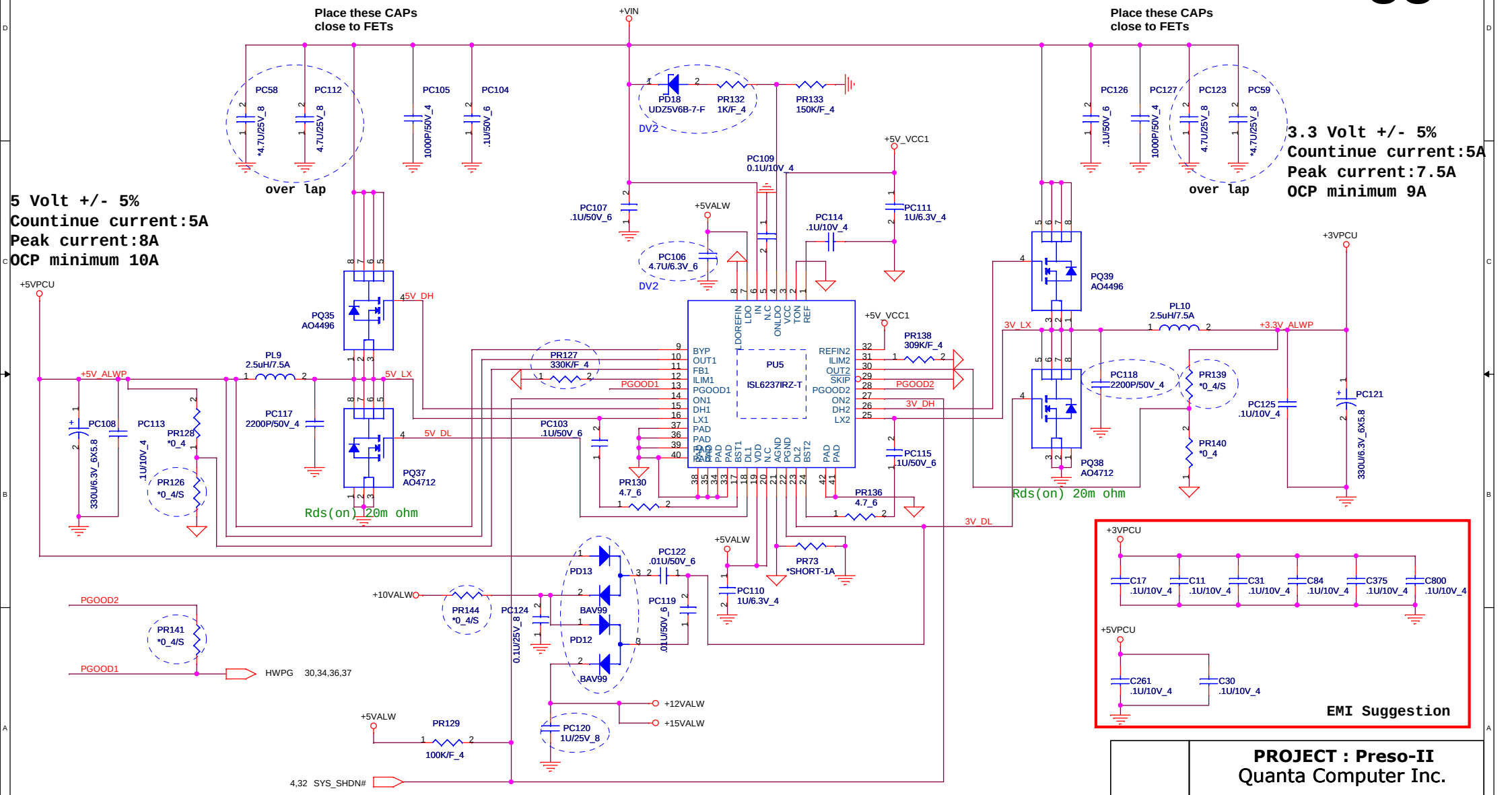
NB5

Size	Document Number	Rev
Custom	Charger (ISL6251)	4C

Date: Tuesday, May 05, 2009 | Sheet 32 of 39

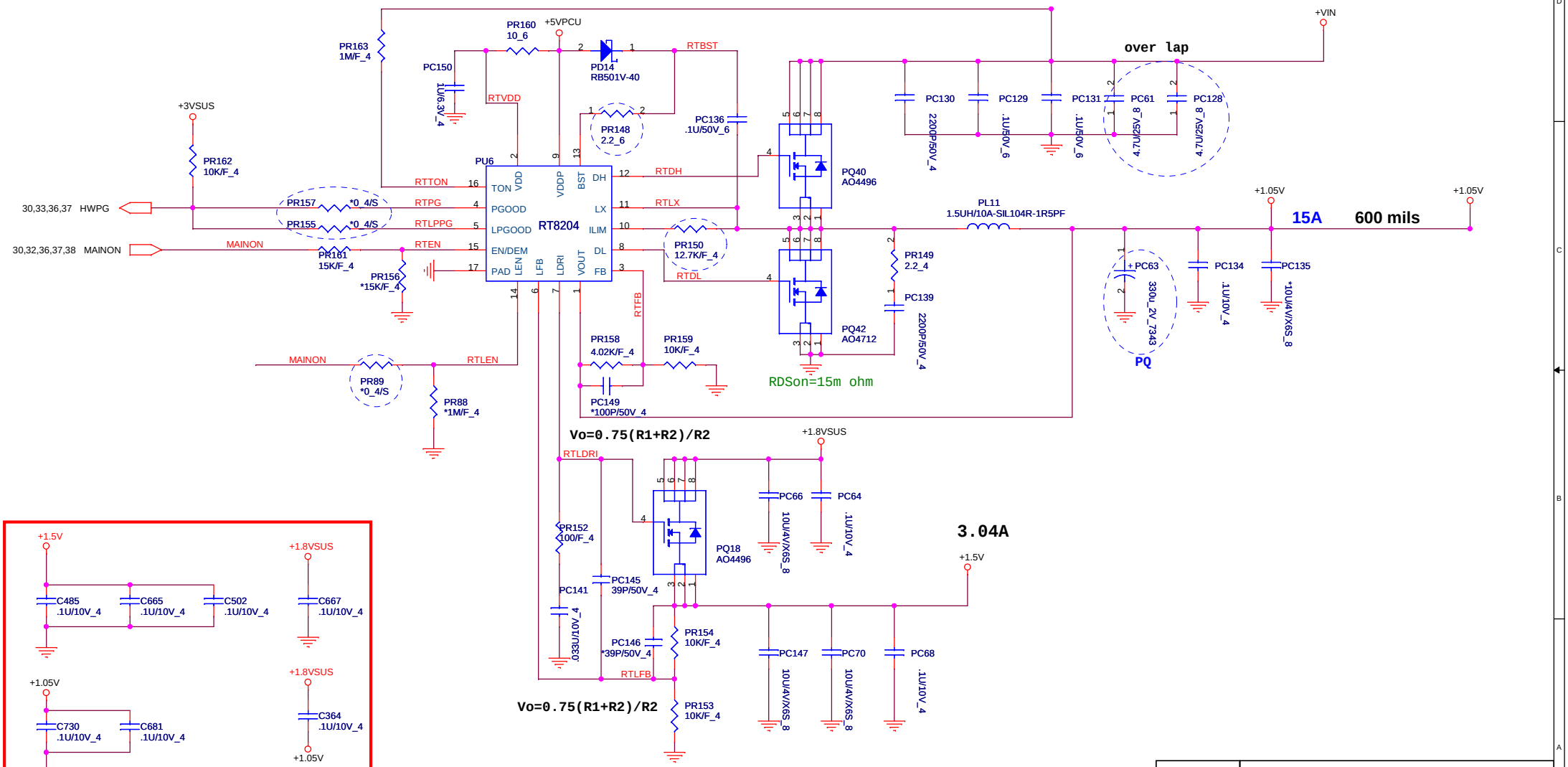
DC/DC +3V_ALW/+5V_ALW/+5V_ALW2 /+12V_ALW

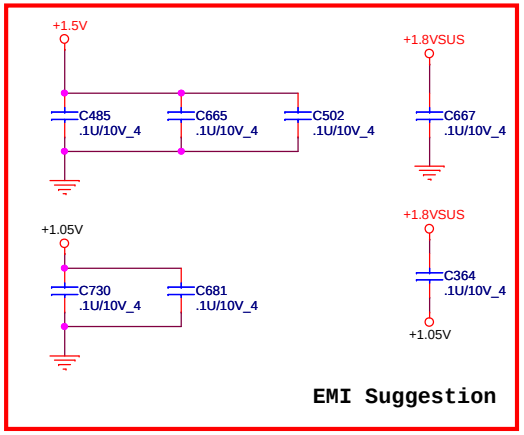
33



VCCP1.05V & +1.5V

+1.05Volt +/- 5%
Countinue current:7.5A
Peak current:10A
OCP minimum 15A





NB5

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Quanta Computer Inc.

Size	Document Number	Rev
B	+1.05V/+1.5V (RT8204)	4C

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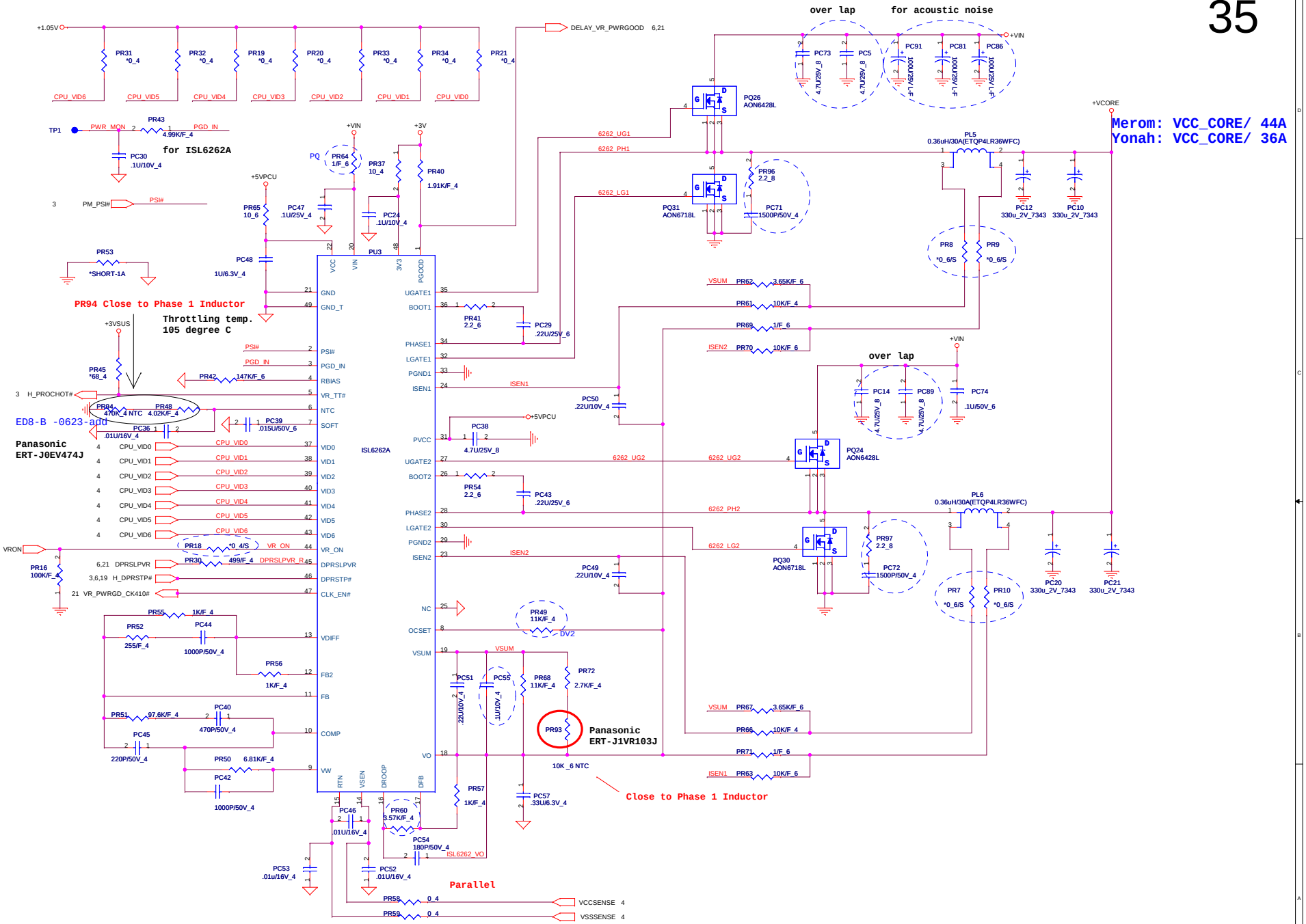

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Quanta Computer Inc.	
NB5	Size: Custom; Document Number: CPU Core (ISL6262A); Rev: 4C
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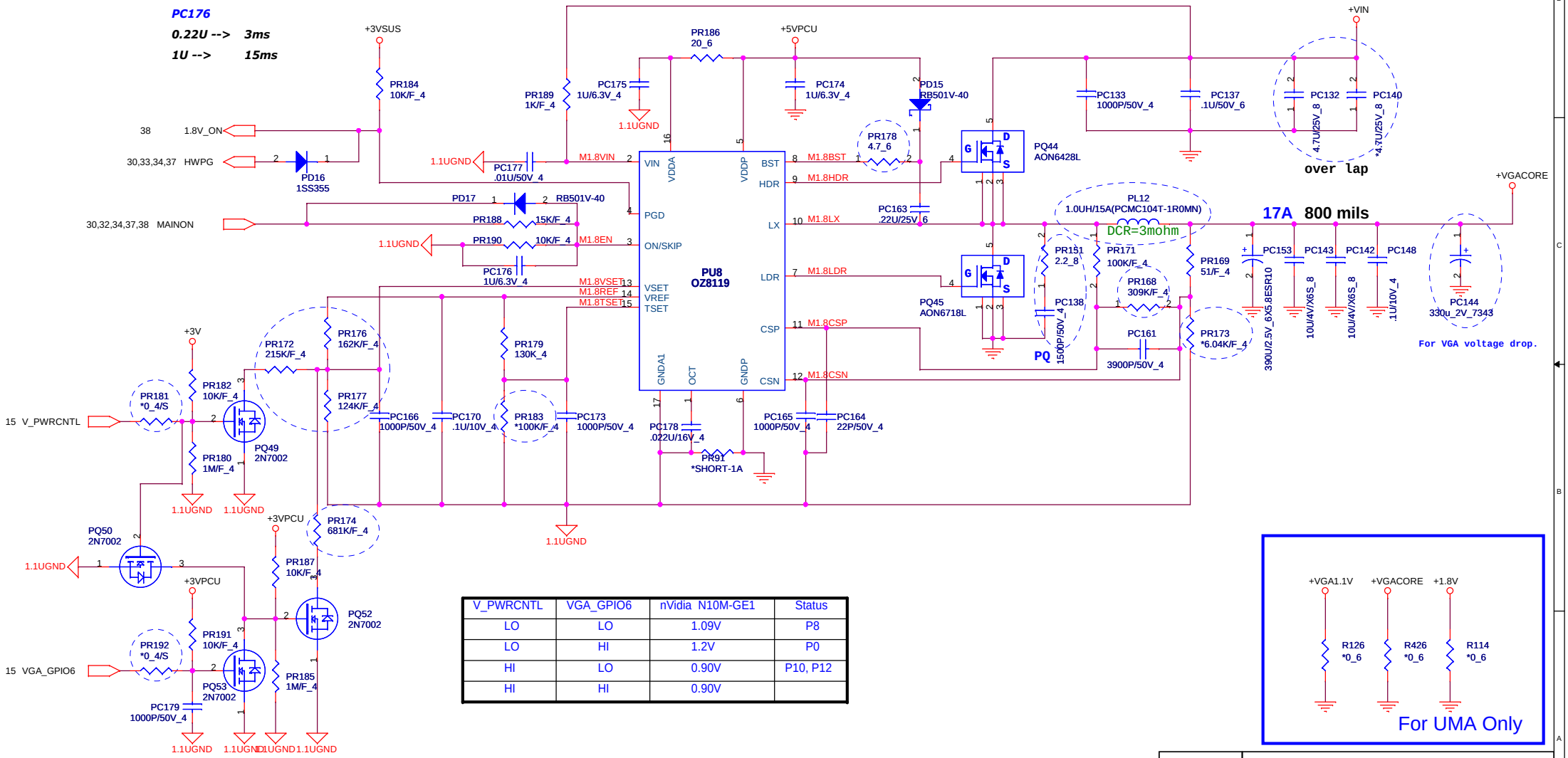
VGA Core & VCC1.1

+1.1Volt +/- 5%
Countinue current:15A
Peak current:17A
OCP minimum 22A



V_PWRCNTL	VGA_GPIO6	nVidia N10M-GE1	Status
LO	LO	1.09V	P8
LO	HI	1.2V	P0
HI	LO	0.90V	P10, P12
HI	HI	0.90V	

NB5

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Size	Document Number	Rev
B	VGA CORE OZ8119	4C

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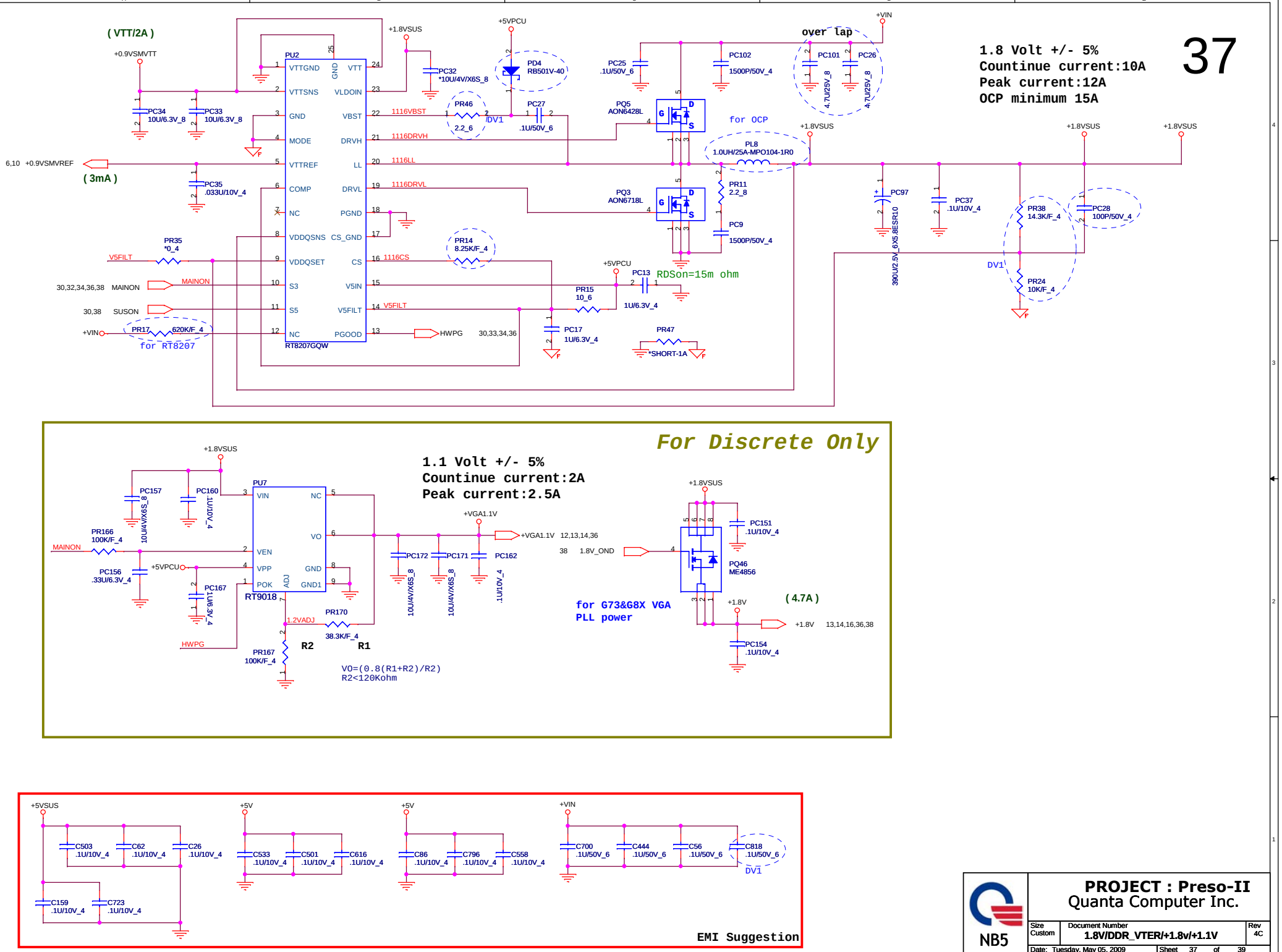
(VTT/2A)
PU2
RT8207GQW
+0.9VSMVTT
+1.8VSUS
+5VPCU
+VIN
over lap
1.8 Volt +/- 5%
Countinue current:10A
Peak current:12A
OCP minimum 15A
37
6,10 +0.9VSMVREF
(3mA)
for OCP
PL8
1.0UH/25A-MPO104-1R0
PQ5
AON6428L
PQ3
AON6718L
RDSon=15m ohm
PR14
8.25K/F_4
PR15
10_6
PR17
620K/F_4
for RT8207
PR35
*0_4
V5FILT
MAINON
SUSON
HWPG
PR47
*SHORT-1A
DV1
PR24
10K/F_4
PR38
14.3K/F_4
PC28
100P/50V_4
PC97
390U/2.5V_6.3X5.8ESR10
PC37
.1U/10V_4
For Discrete Only
1.1 Volt +/- 5%
Countinue current:2A
Peak current:2.5A
PU7
RT9018
+VGA1.1V
for G73&G8X VGA
PLL power
(4.7A)
PQ46
ME4856
1.8V_OND
PR170
38.3K/F_4
R2
R1
PR167
100K/F_4
VO=(0.8(R1+R2)/R2)
R2<120Kohm
EMI Suggestion
+5VSUS
+5V
+VIN
PROJECT : Preso-II
Quanta Computer Inc.
NB5
Size Custom
Document Number
1.8V/DDR_VTER/+1.8v/+1.1V
Rev 4C
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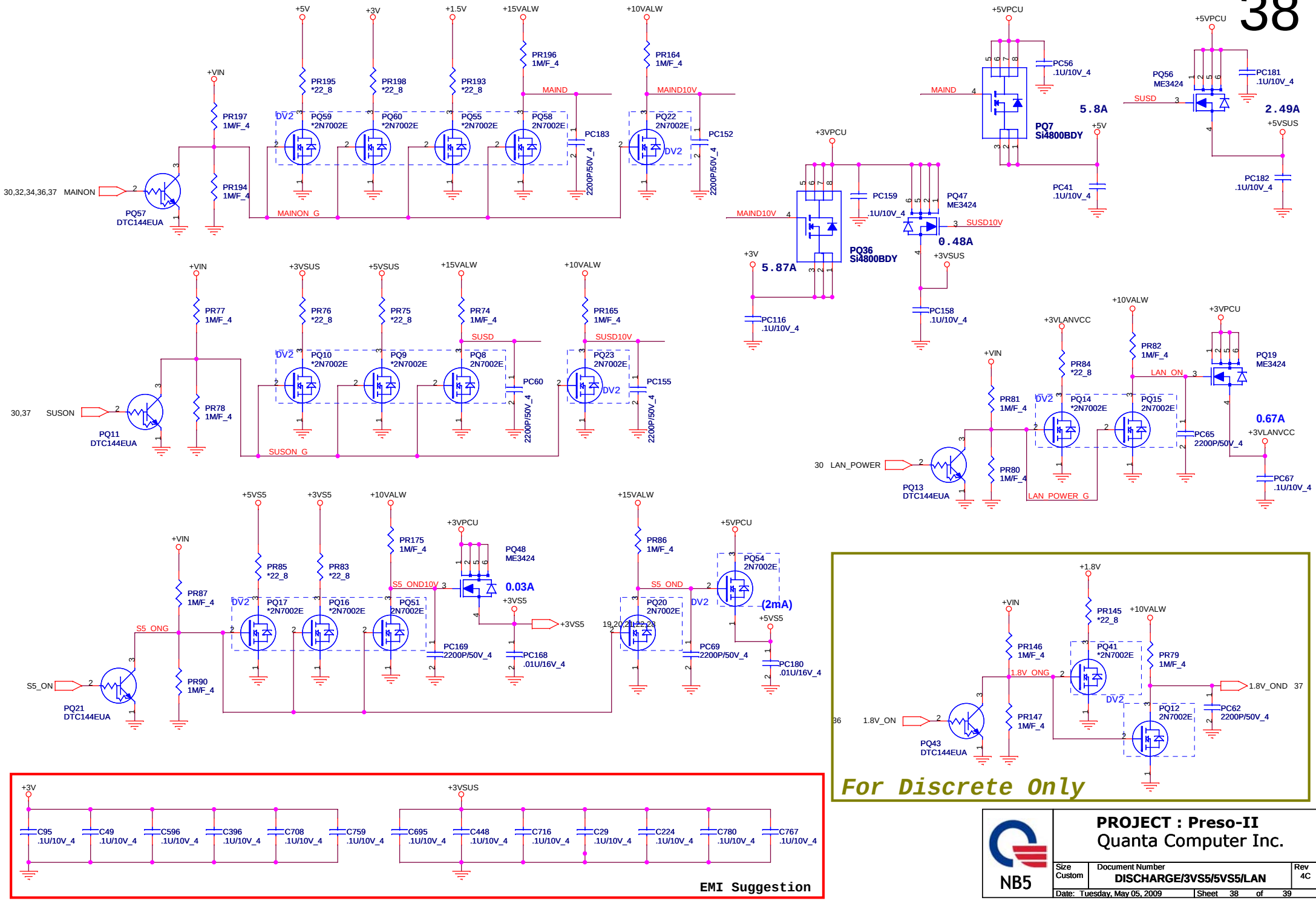
+5V
+3V
+1.5V
+15VALW
+10VALW
+VIN
PR195 *22_8
PR198 *22_8
PR193 *22_8
PR196 1M/F_4
PR164 1M/F_4
PR197 1M/F_4
PR194 1M/F_4
DV2
PQ59 *2N7002E
PQ60 *2N7002E
PQ55 *2N7002E
PQ58 2N7002E
PQ22 2N7002E
PC183 2200P/50V_4
PC152 2200P/50V_4
MAIND
MAIND10V
MAINON_G
30,32,34,36,37 MAINON
PQ57 DTC144EUA
+5VPCU
PC56 .1U/10V_4
PQ7 Si4800BDY
5.8A
PC41 .1U/10V_4
+5V
PQ56 ME3424
PC181 .1U/10V_4
SUSD
2.49A
+5VSUS
PC182 .1U/10V_4
+3VPCU
PC159 .1U/10V_4
PQ47 ME3424
SUSD10V
0.48A
+3VSUS
PC158 .1U/10V_4
PQ36 Si4800BDY
5.87A
+3V
PC116 .1U/10V_4
+VIN
PR77 1M/F_4
PR78 1M/F_4
+3VSUS
+5VSUS
+15VALW
+10VALW
PR76 *22_8
PR75 *22_8
PR74 1M/F_4
PR165 1M/F_4
PQ10 *2N7002E
PQ9 *2N7002E
PQ8 2N7002E
PQ23 2N7002E
PC60 2200P/50V_4
PC155 2200P/50V_4
SUSD
SUSD10V
SUSON_G
30,37 SUSON
PQ11 DTC144EUA
+10VALW
+3VLANVCC
+3VPCU
PR82 1M/F_4
PR84 *22_8
PQ19 ME3424
LAN_ON
PR81 1M/F_4
PQ14 *2N7002E
PQ15 2N7002E
PC65 2200P/50V_4
0.67A
+3VLANVCC
PC67 .1U/10V_4
PR80 1M/F_4
LAN_POWER_G
30 LAN_POWER
PQ13 DTC144EUA
+5VS5
+3VS5
+10VALW
+15VALW
+3VPCU
+5VPCU
+VIN
PR85 *22_8
PR83 *22_8
PR175 1M/F_4
PR86 1M/F_4
PR87 1M/F_4
PQ17 *2N7002E
PQ16 *2N7002E
PQ51 2N7002E
PQ20 2N7002E
PQ54 2N7002E
PQ48 ME3424
S5_OND10V
S5_OND
0.03A
(2mA)
+3VS5
+5VS5
PC169 2200P/50V_4
PC168 .01U/16V_4
PC69 2200P/50V_4
PC180 .01U/16V_4
S5_ONG
19,20,21,22,28
S5_ON
PR90 1M/F_4
PQ21 DTC144EUA
+1.8V
+VIN
PR145 *22_8
+10VALW
PR146 1M/F_4
PQ41 *2N7002E
PR79 1M/F_4
1.8V_ONG
1.8V_OND 37
DV2
PR147 1M/F_4
PQ12 2N7002E
PC62 2200P/50V_4
36 1.8V_ON
PQ43 DTC144EUA
For Discrete Only
+3V
C95 .1U/10V_4
C49 .1U/10V_4
C596 .1U/10V_4
C396 .1U/10V_4
C708 .1U/10V_4
C759 .1U/10V_4
+3VSUS
C695 .1U/10V_4
C448 .1U/10V_4
C716 .1U/10V_4
C29 .1U/10V_4
C224 .1U/10V_4
C780 .1U/10V_4
C767 .1U/10V_4
EMI Suggestion
NB5
PROJECT : Preso-II
Quanta Computer Inc.
Size Custom
Document Number
DISCHARGE/3VS5/5VS5/LAN
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Date: Tuesday, May 05, 2009
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		AC MODE				DC MODE			
	Voltage level	S0	S3	S4	S5	S0	S3	S4	S5
+3VPCU	3.3V +/- 5%	V	V	V	V	V	V	V	V
+5VPCU	5V +/- 5%	V	V	V	V	V	V	V	V
+3VRTC	3.3V +/- 5%	V	V	V	V	V	V	V	V
+3VS5	3.3V +/- 5%	V	V	V	V	V	V		
+5VS5	5V +/- 5%	V	V	V	V	V	V		
+3VSUS	3.3V +/- 5%	V	V			V	V		
+5VSUS	5V +/- 5%	V	V			V	V		
+1.8VSUS	1.8V +/- 5%	V	V			V	V		
+0.9VSMVTT	0.9V +/- 5%	V	V			V	V		
+1.5V	1.5V +/- 5%	V				V			
+1.05V	1.05V +/- 5%	V				V			
+VCORE	0.9~1.15V	V				V			
+VGA_CORE	0.9~1.2V	V				V			
+VGA1.1V	1.1V +/- 5%	V				V			
+1.8V	1.8V +/- 5%	V				V			
+3VLANVCC	3.3V +/- 5%	V				V			

NB5

PROJECT : Preso-II
Quanta Computer Inc.

Size	Document Number	Rev
Custom	**Voltage status**	1A

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