TE1 Block Diagram

PCB STACK UP

LAYER 1 : TOP
LAYER 2 : SGND
LAYER 3 : IN1
LAYER 4 : VCC
LAYER 5 : IN2
LAYER 6 : IN3
LAYER 7 : SGND2
LAYER 8 : BOT

VCC_CORE
+1.5V
+1.05V
+1.25V
+1.8VSUS
+1.8V
+3VPCU
+3V_S5
+3VSUS
+3V
+5VPCU
+5V_S5
+5V
+SMDDR_VTERM
+SMDDR_VREF

HDMI Page 21 — HDMI — Transmitter Sil1392 Page 21 — Azalia

CRT Page 20

LCD PANEL Page 19

LED PANEL Page 19 — LED Driver IC Page 19

SATA - HDD Page 22

IDE - ODD Page 22

Intel Merom (35W) Page 3,4 — FSB(667/800MHZ)

CLOCK GENERATOR CK505 ICS9LPR363 Page 2

Crestline GM Page 5,7,8,9,10,11 — SDVO, CRT, LVDS, SATA, PATA, DMI(x2/x4), PCI-E 16X Lan, 533/ 667 MHZ DDR II

VGA CONNECTOR (FOX) Page 18 — Azalia — CRT, HDMI, LCD/LED

DDRII-SODIMM1 DDRII-SODIMM2 Page 12,13

ICH8M Page 14,15,16,17 — USB 2.0, Azalia, PCI Express, PCI Bus, LPC

DAUGHTER BOARD
LAN/B USB Page 26 (FTB) — USB-0
Camera Page 19 — USB-3
WLAN Page 25 — USB-5
Finger Printer Page 26 (FTB) — USB-1
Bluetooth Page 26 — USB-2
New Card Page 27 — USB-9
M/B USB 2 Page 27 — USB-7
Felica Page 26 (FTB) — USB-4
M/B USB Page 27 — USB-6
TV/ROBSON Page 25 — USB-8

MINI CARD-3 U 9H_HD-DVD Page 25 — PCIE-2
MINI CARD-4 D ROBSON Page 25 (FTB) — PCIE-4
MINI CARD-1 U&D 5.6H_WLAN Page 25 — PCIE-6
MINI CARD-2 U 6.75H_TV/ROBSON D 7.5H_HD-DVD Page 25 — PCIE-3
NEW CARD Page 27 — PCIE-1
Connector Page 26 — PCIE-5

LAN/RJ11/RJ45/USB/RF DAUGHTER BOARD
Marvell LAN 10/100/Giga 88E8040T/88E8072
Transformer
RJ45 | RJ11 | USB | RF

PCMCIA Controller (CB 1410) Page 23 — PCMCIA
Card Reader/1394 (OZ129T) Page 24 — 5 IN 1 | 1394

32.768KHz

WPCE775C Page 28

PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
REQ0# / GNT0#	AD17	INTA#	OZ129T
REQ1# / GNT1#	AD18	INTC#	CB1410

VR Page 30 | FAN Page 3 | Kill SW Page 27 | Key Board Page 26 | FLASH ROM Page 28 | CIR Page 28 | G-Sensor Page 22

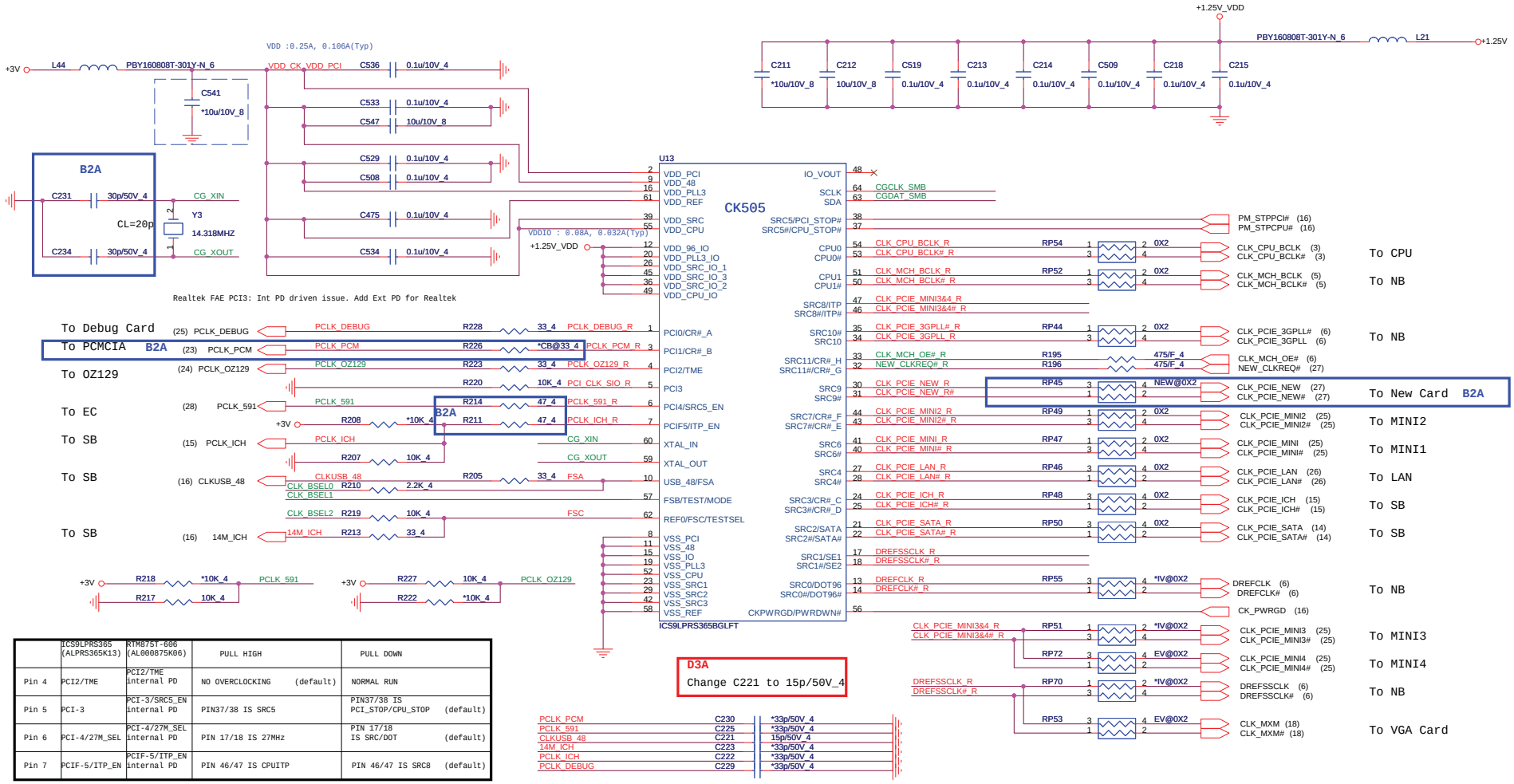
HP Page 30 — Port-A
MIC JACK Page 30 — Port-B
INT SPK Page 29 — SPK AMP Page 29
AUDIO CODEC (CX20561) Page 29 — Port-C
FM TUNER & MDC Page 30 — Reserve FM Page 29
Reserve MIC Page 19
Reserve MIC Page 29
MDC Board — RJ11

DAUGHTER BOARD
LED Board
Low Cost Board Page 26
MMB Board Page 26
Power Board Page 26
Touch Pad Board Page 26

BTO BOM OPTION
IV@ : UMA
EV@ : VGA/B
CB@ : CARD_BUS
GS@ : G-SENSOR
NEW@ : NEW CARD
LCD@ : LCD TYPE PANEL
LED@ : LED TYPE PANEL
CIR@ : CIR

Quanta Computer Inc.
PROJECT : TE1
Size | Document Number: Block Diagram | Rev 1A
Date: Saturday, January 19, 2008 | Sheet 1 of 41

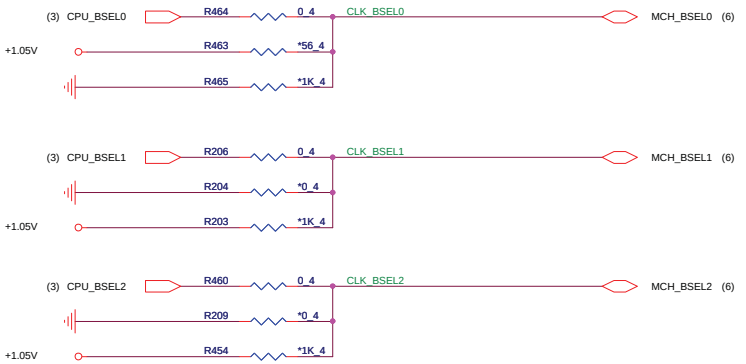
Clock Generator



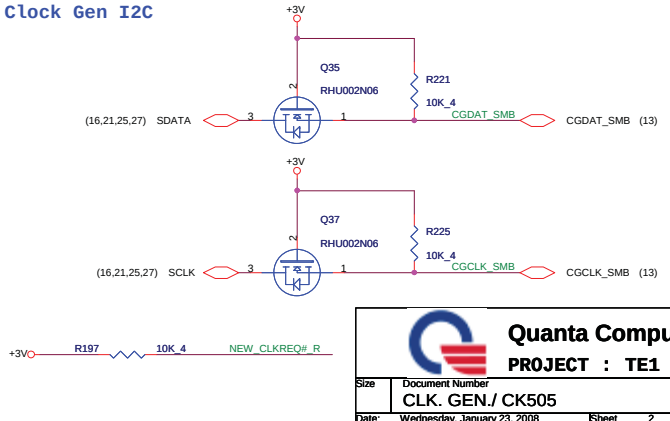
	ICS9LPRS365 (ALPRS365K13)	RTM875T-686 (AL000875K06)	PULL HIGH	PULL DOWN
Pin 4	PCI2/TME	PCI2/TME internal PD	NO OVERCLOCKING (default)	NORMAL RUN
Pin 5	PCI-3	PCI-3/SRC5_EN internal PD	PIN37/38 IS SRC5	PIN37/38 IS PCI_STOP/CPU_STOP (default)
Pin 6	PCI-4/27M_SEL	PCI-4/27M_SEL internal PD	PIN 17/18 IS 27MHz	PIN 17/18 IS SRC/DOT (default)
Pin 7	PCIF-5/ITP_EN	PCIF-5/ITP_EN internal PD	PIN 46/47 IS CPUITP	PIN 46/47 IS SRC8 (default)

BSEL Frequency Select Table

FSC	FSB	FSA	Frequency
0	0	0	266Mhz
0	0	1	133Mhz
0	1	1	166Mhz
0	1	0	200Mhz
1	1	0	400Mhz
1	1	1	Reserved
1	0	1	100Mhz
1	0	0	333Mhz



Clock Gen I2C

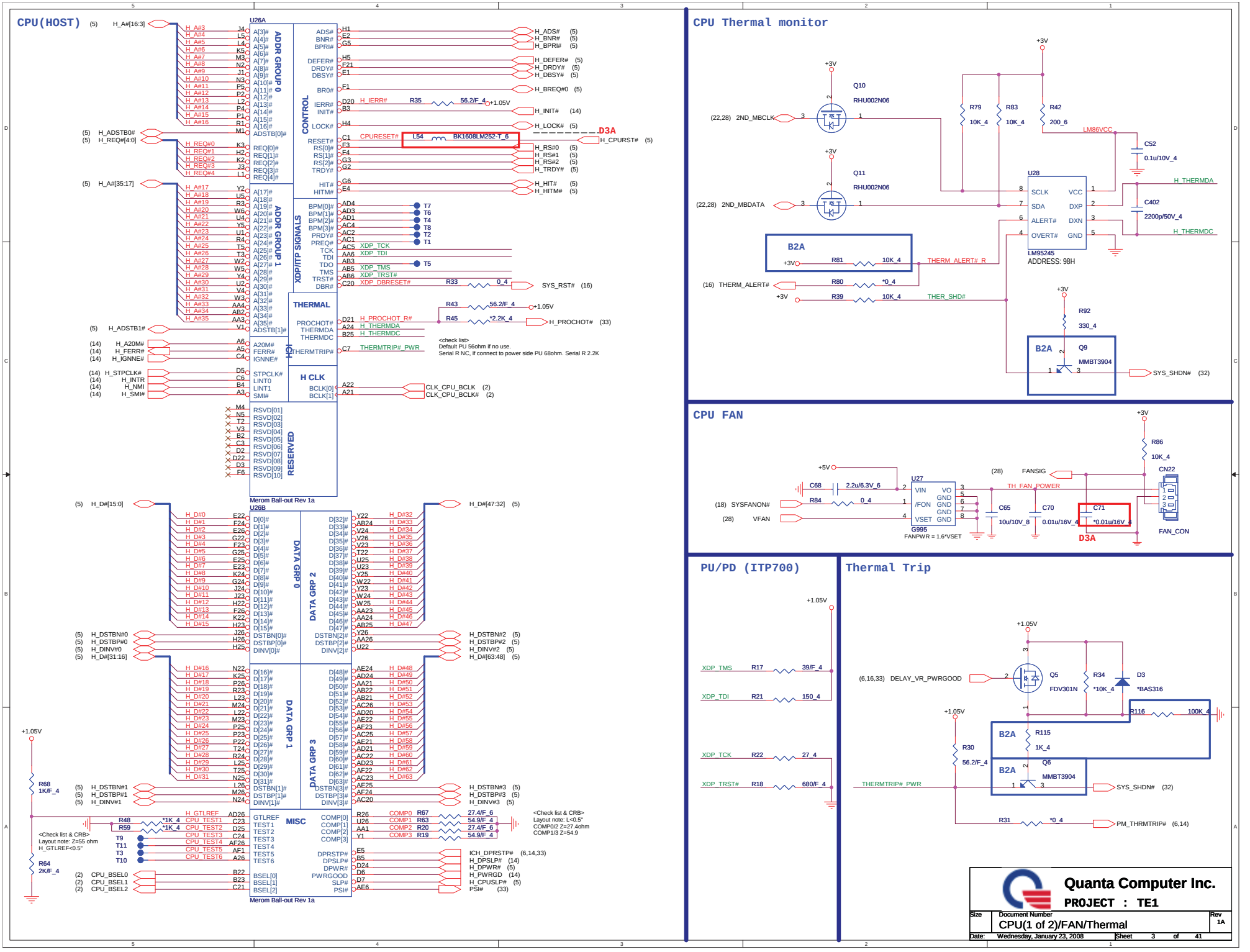


Quanta Computer Inc.

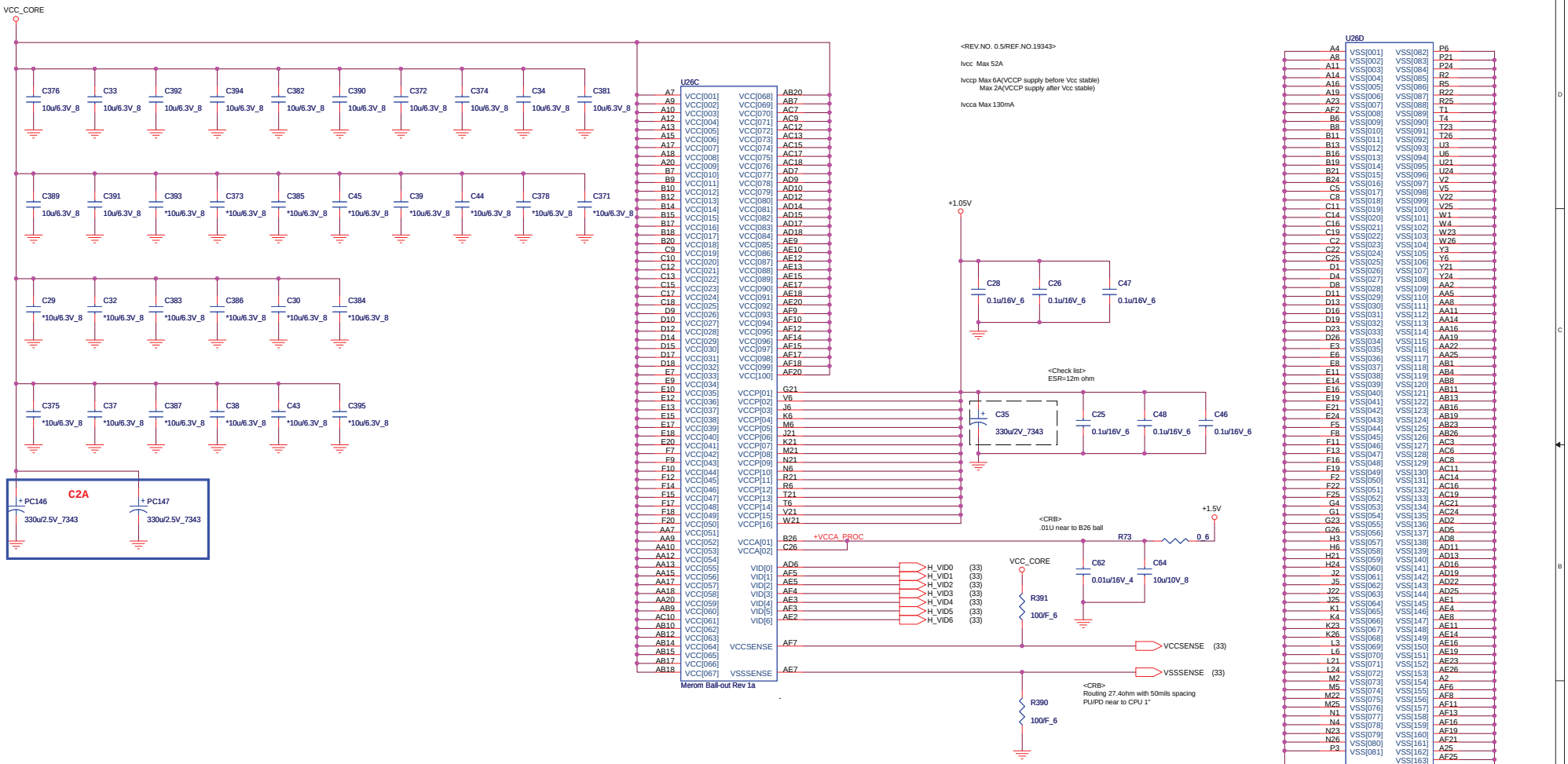
PROJECT : TE1

Size	Document Number	Rev
	CLK. GEN./ CK505	1A

Date: Wednesday, January 23, 2008 Sheet 2 of 41

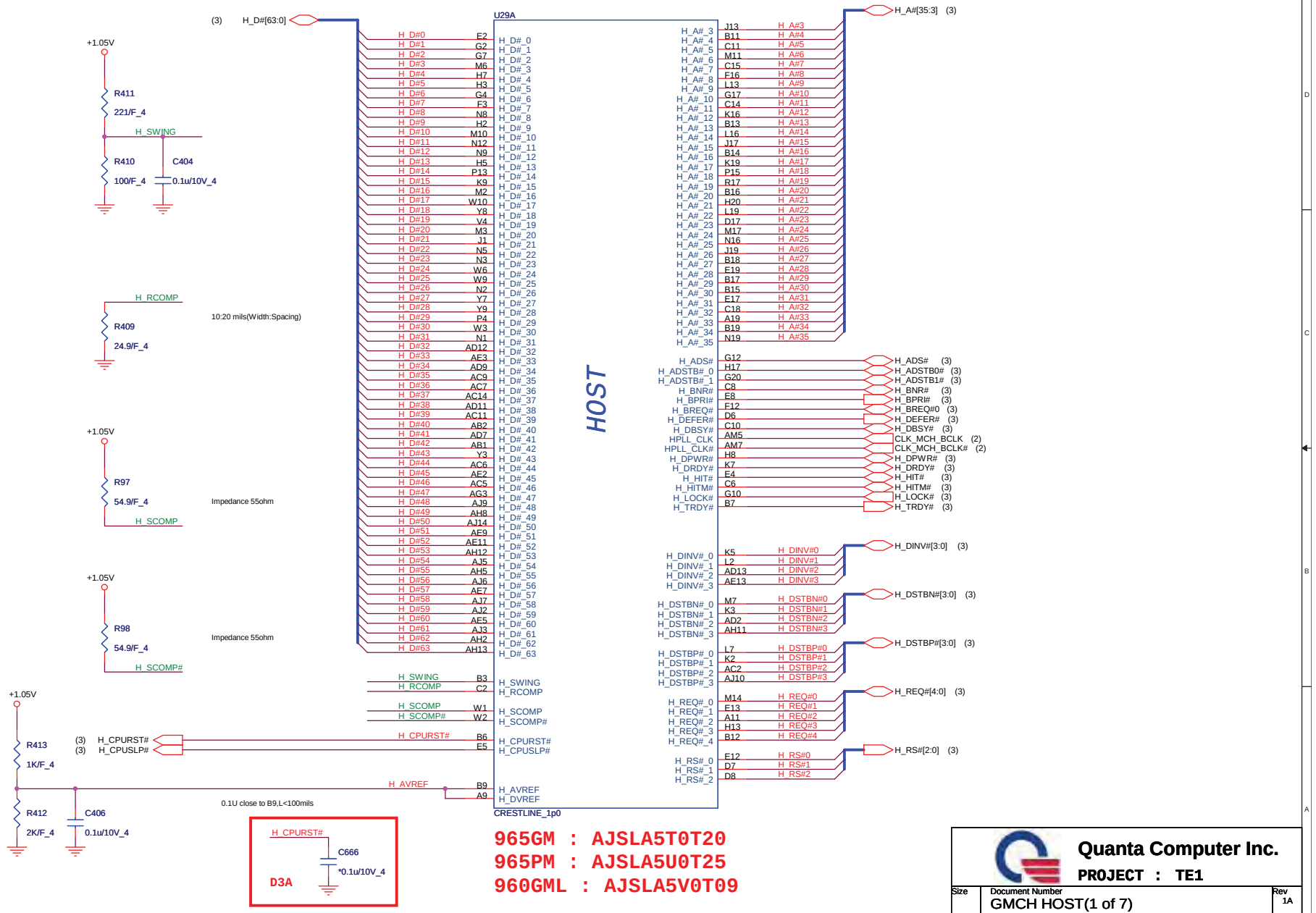

CPU(HOST)
U26A
ADDR GROUP 0
ADDR GROUP 1
CONTROL
XDP/ITP SIGNALS
THERMAL
H CLK
RESERVED
Merom Ball-out Rev 1a
U26B
DATA GRP 0
DATA GRP 1
DATA GRP 2
DATA GRP 3
MISC
Merom Ball-out Rev 1a
CPU Thermal monitor
Q10
RHU002N06
Q11
RHU002N06
U28
LM95245
ADDRESS: 98H
B2A
Q9
MMBT3904
CPU FAN
U27
G995
FANPWR = 1.6*VSET
FAN_CON
D3A
PU/PD (ITP700)
Thermal Trip
Q5
FDV301N
D3
*BAS316
Q6
MMBT3904
Quanta Computer Inc.
PROJECT : TE1
Size
Document Number
CPU(1 of 2)/FAN/Thermal
Rev
1A
Date: Wednesday, January 23, 2008
Sheet 3 of 41

CPU(Power)



Quanta Computer Inc.	
PROJECT : TE1	
Size	Document Number: CPU(2 of 2) — Rev: 1A
Date: Wednesday, January 23, 2008	Sheet 4 of 41

NB(HOST)



965GM : AJSLA5T0T20
965PM : AJSLA5U0T25
960GML : AJSLA5V0T09

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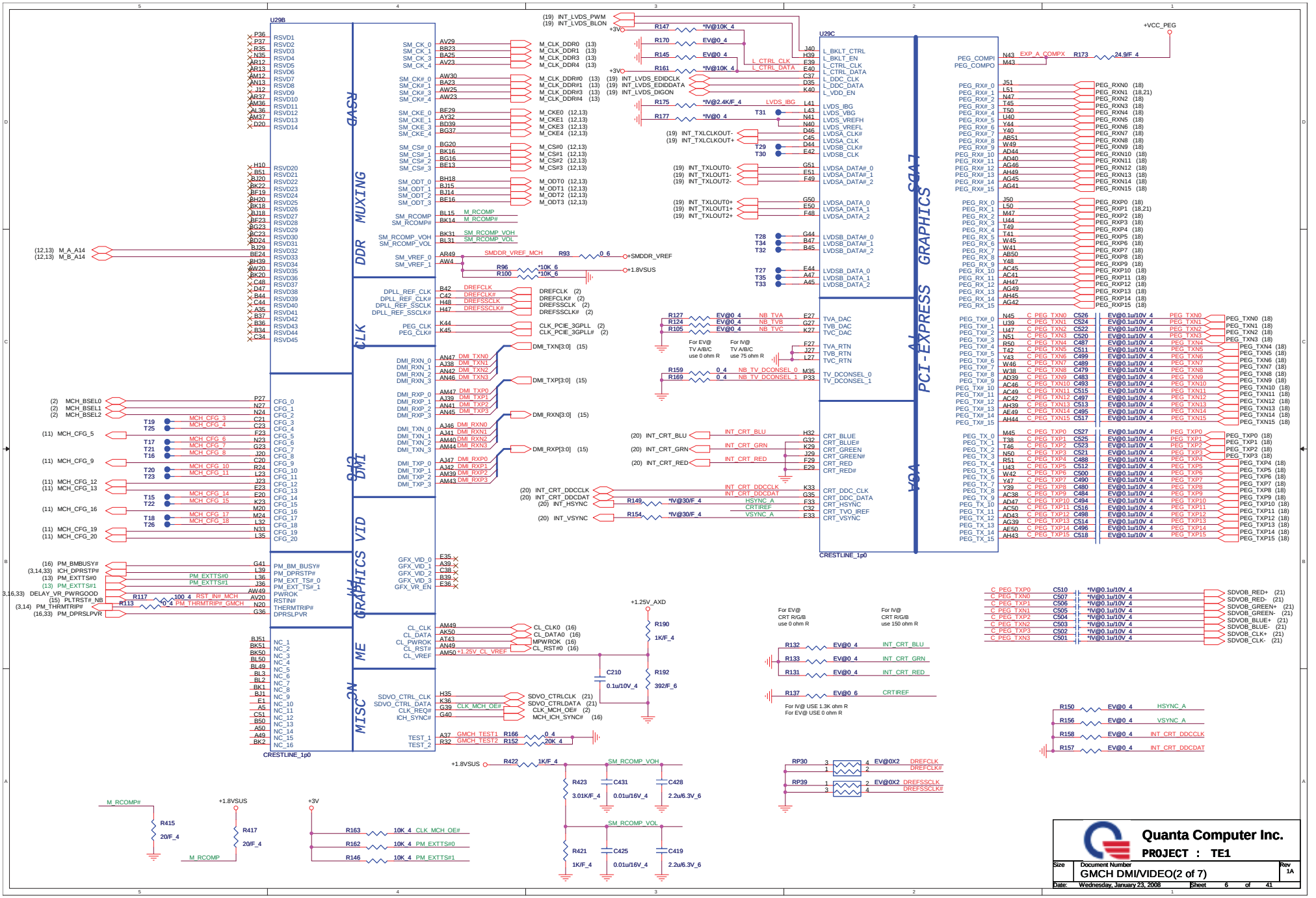
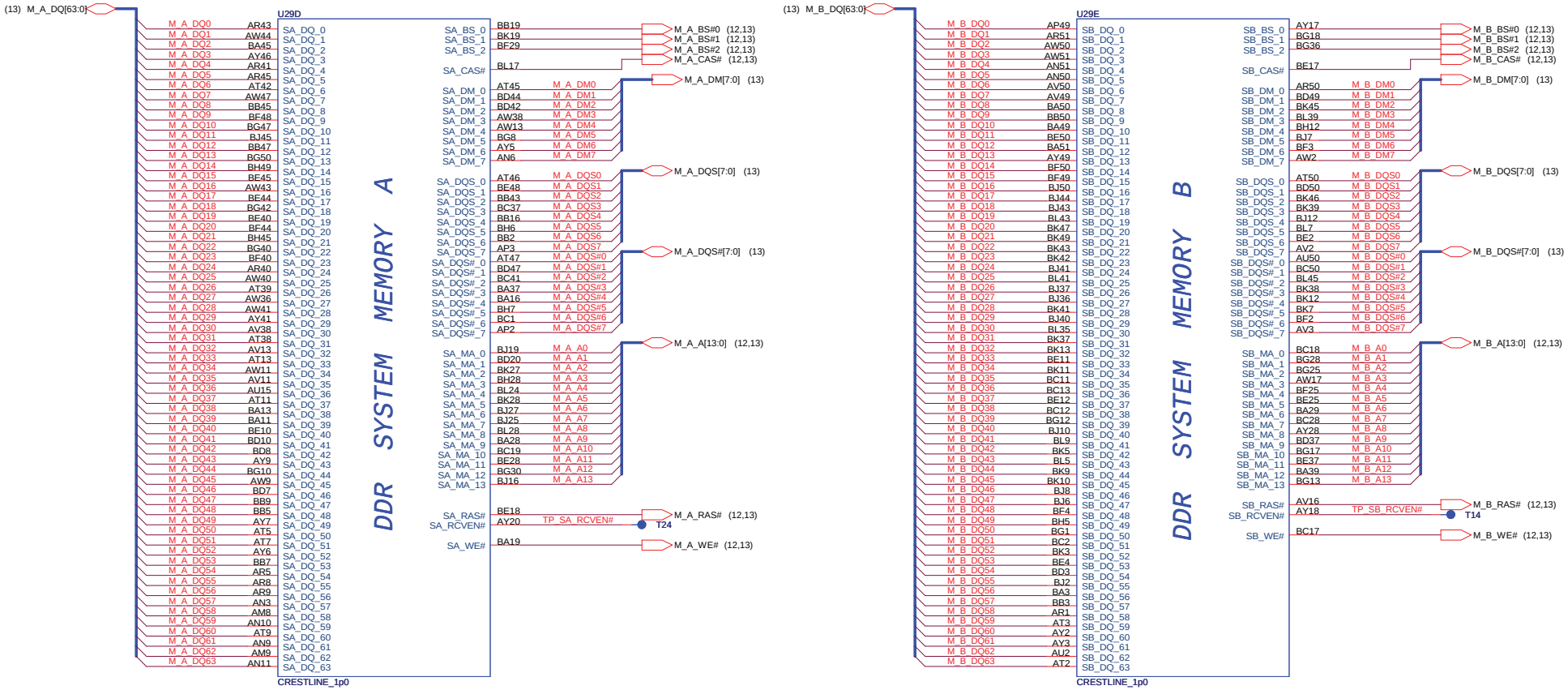
PROJECT : TE1

Size	Document Number	Rev
	GMCH HOST(1 of 7)	1A
Date: Wednesday, January 23, 2008	Sheet 5 of 41	

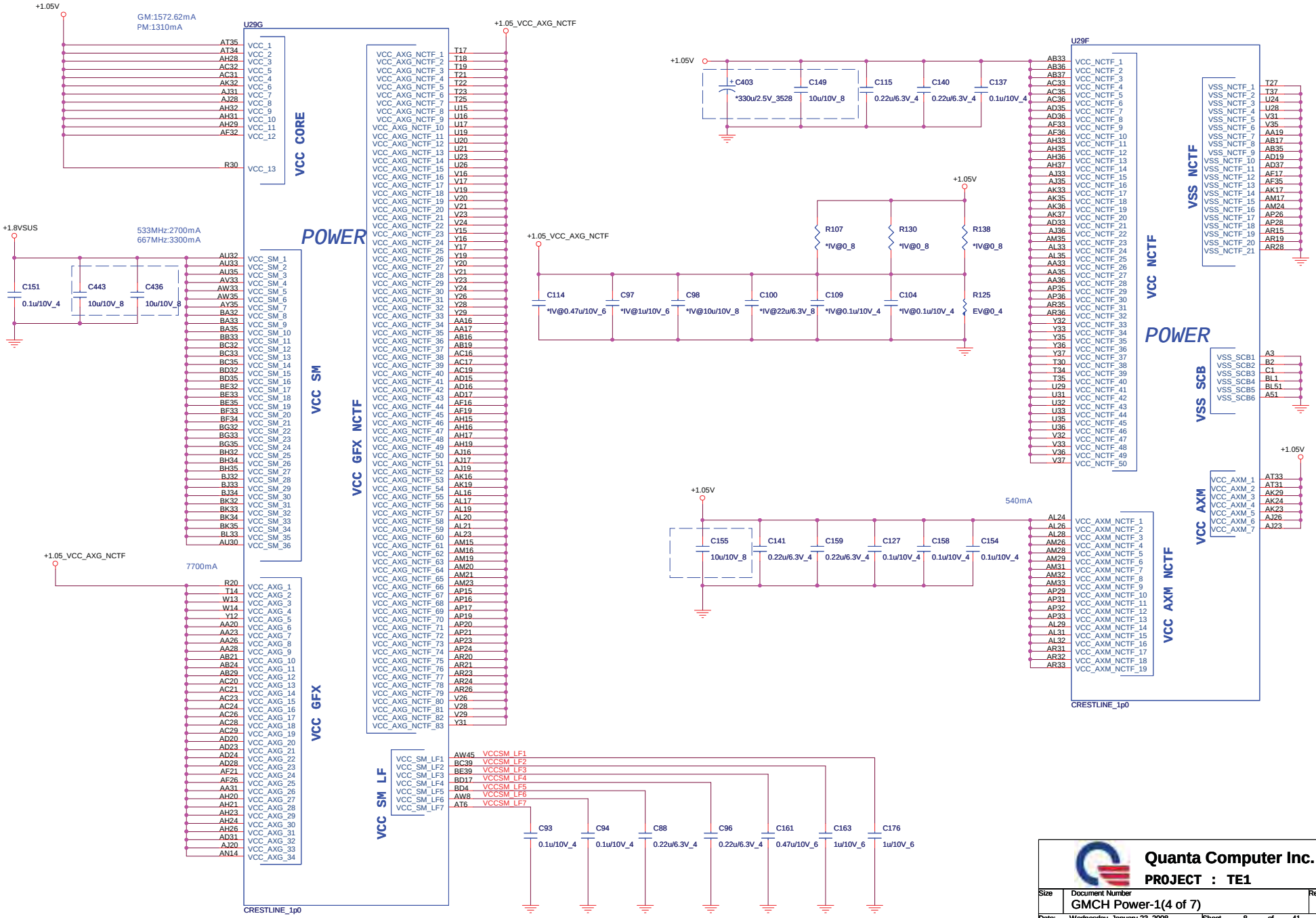

U29B
CRESTLINE_1p0
U29C
CRESTLINE_1p0
Quanta Computer Inc.
PROJECT : TE1
GMCH DMI/VIDEO(2 of 7)
Size
Document Number
Rev 1A
Date: Wednesday, January 23, 2008
Sheet 6 of 41

NB(Memory controller)

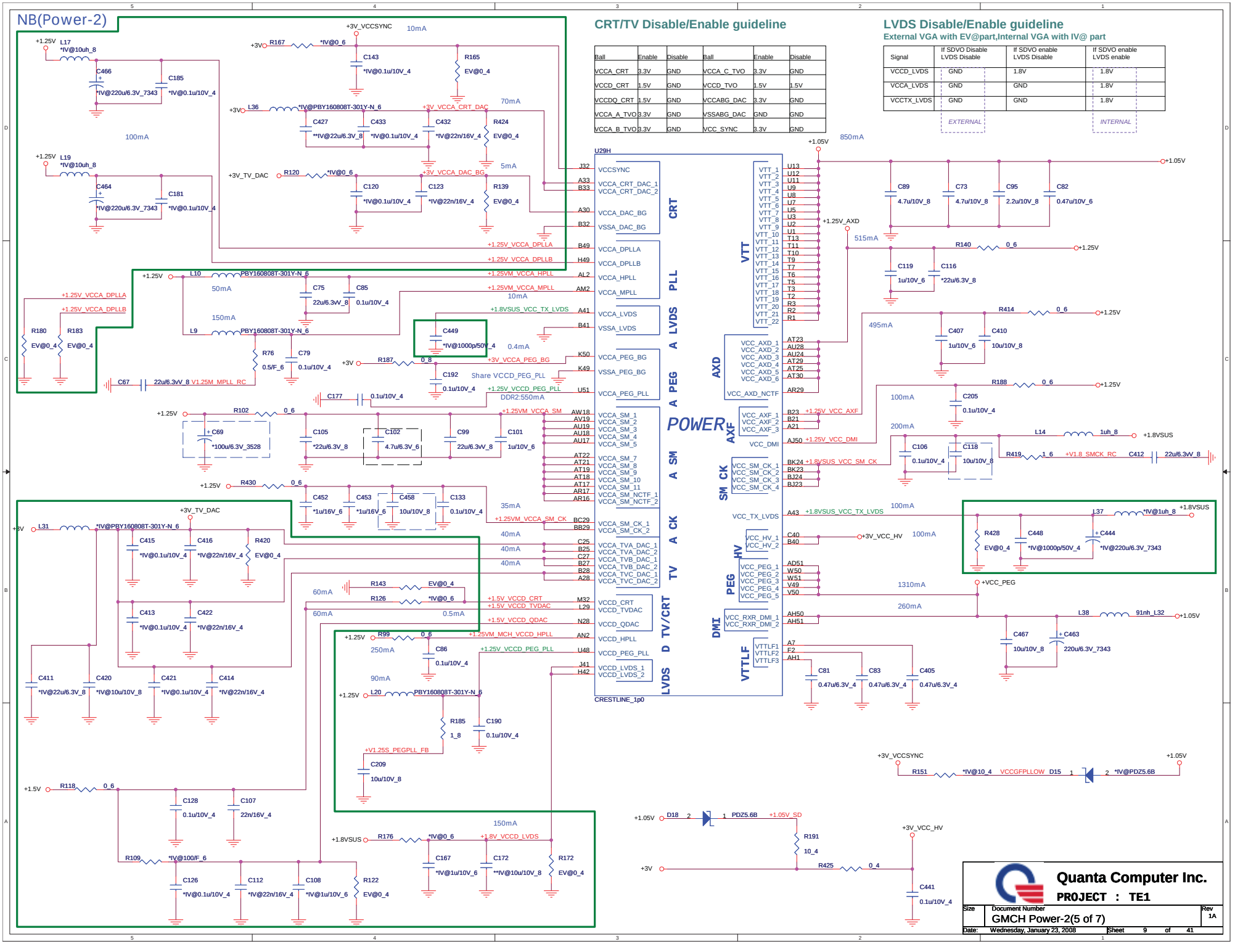


Quanta Computer Inc.		
PROJECT : TE1		
Size	Document Number: MCH DDR(3 of 7)	Rev 1A
Date: Wednesday, January 23, 2008	Sheet 7 of 41	

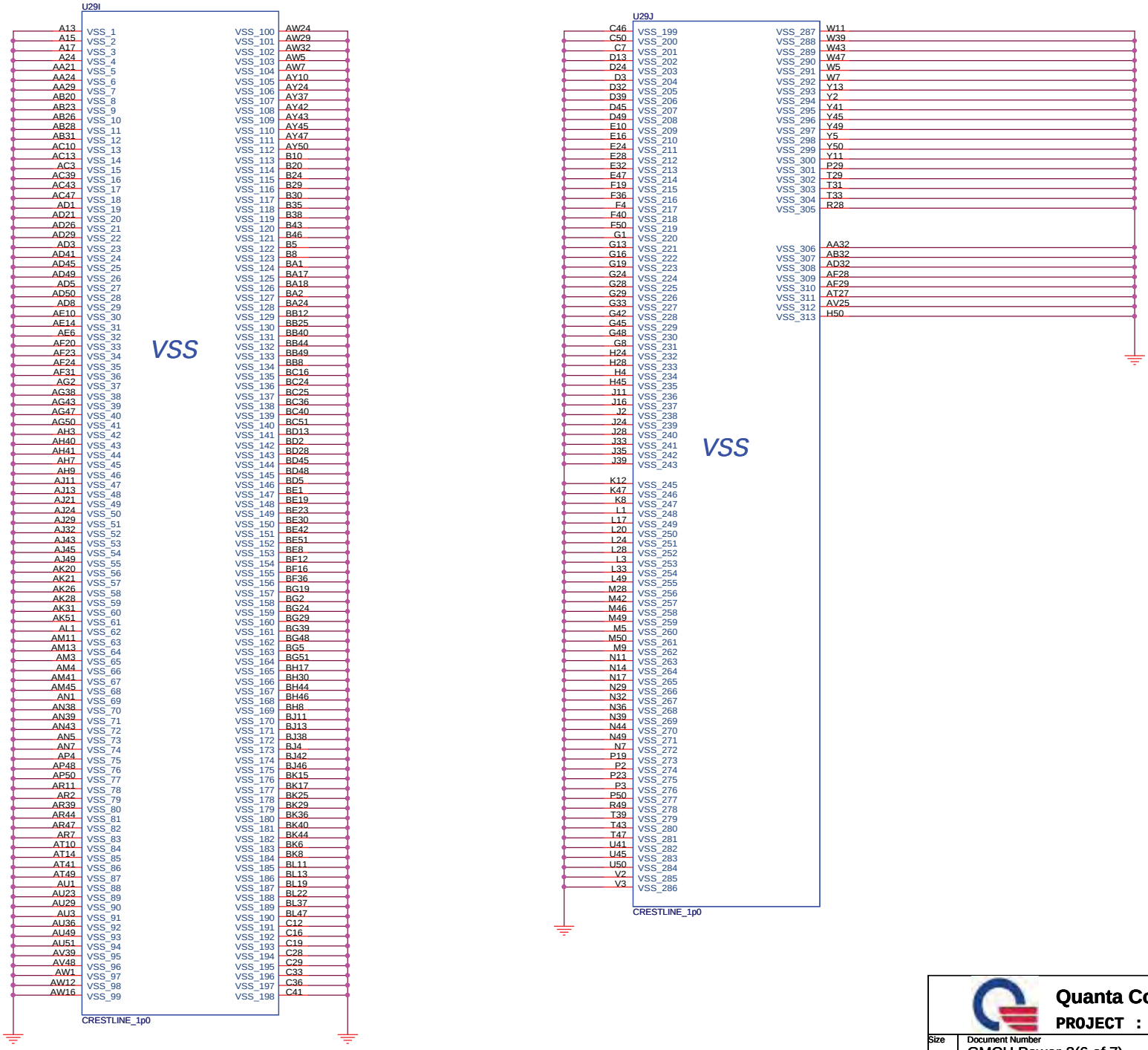
NB(Power-1)



Quanta Computer Inc.	
PROJECT : TE1	
Size	Document Number: GMCH Power-1(4 of 7) — Rev: 1A
Date: Wednesday, January 23, 2008	Sheet 8 of 41


NB(Power-2)
CRT/TV Disable/Enable guideline
LVDS Disable/Enable guideline
External VGA with EV@part,Internal VGA with IV@ part
U29H
CRESTLINE_1p0
POWER
Quanta Computer Inc.
PROJECT : TE1
GMCH Power-2(5 of 7)
Wednesday, January 23, 2008

NB(Power-3)



Quanta Computer Inc.	
PROJECT : TE1	
Size	Document Number: GMCH Power-3(6 of 7) — Rev: 1A
Date: Wednesday, January 23, 2008	Sheet 10 of 41

Strap table(base on checklist Ver1.6)

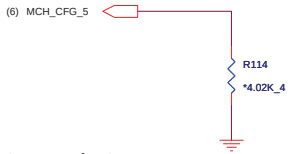
All strap are sampled with respect to the leading edge of the GMCH Power OK(PWROK) Signal

CFG[17:3] Have internal Pull-up
CFG[18:19] Have internal Pull-down
Any CFG signal strapping option not list below should be left NC Pin

Pin Name	Strap description	Configuration
CFG[2:0]	FSB Frequency Select	010 = FSB 800MHz 011 = FSB 667MHz
CFG[4:3]	Reserved	
CFG5	DMI X2 Select	0 = DMI X2 1 = DMI X4(Default)
CFG6	Reserved	
CFG7	Intel? Management Engine Crypto strap	0 = Intel? Management Engine Crypto Transport Layer.Security (TLS) cipher suite with no confidentiality 1= Intel Management Engine Crypto TLS Cipher Suite with confidentiality (default)
CFG8	Reserved	
CFG9	PCI Express Graphics Lane Reversal	0 = Reverse Lanes 1 = Normal operation(Default)
CFG[11:10]	Reserved	
CFG[13:12]	XOR/ALLZ	00 = Reserved 01 = XOR Mode Enable 10 = All-Z Mode Enabled 11 = Normal operation(Default)
CFG[15:14]	Reserved	
CFG16	FSB Dynamic ODT	0 = Dynamic ODT disable 1 = Dynamic ODT Enable(Default)
CFG[18:17]	Reserved	
SDVO_CTRLDATA	SDVO Present	0 = No SDVO Card present(Default) 1 = SDVO Card Present
CFG19	DMI Lane Reversal	0 = Normal operation(Default) 1 = Reverse Lanes
CFG20	SDVO/PCIe concurrent	0 = Only SDVO or PCIE is operation(Default) 1 = SDVO and PCIE are operating simultaneously via the PEG port

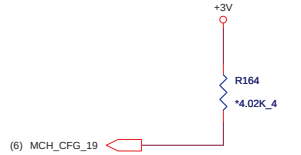
DMI X2 Select

MCH_CFG_5	Low = DMIX2 High = IDMIX4(Default)



DMI Lane Reversal

MCH_CFG_19	Low = Normal operation(Default) High = Reverse Lane



XOR /ALLz /Clock Un-gating

MCH_CFG_12	MCH_CFG_13	Configuration
0	0	Clock gating disable
0	1	XOR Mode Enable
1	0	ALL-z Mode Enable
1	1	Normal operation(Default)

PCI Express Graphics

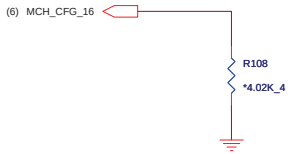
MCH_CFG_9	Low = Reverse Lane High = Normal operation(Default)

SDVO Present

Strap define at External HDMI control page

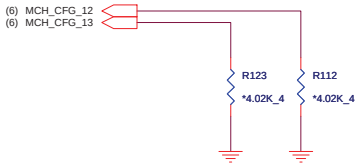
FSB Dynamic ODT

MCH_CFG_16	Low = ODT Disable High = ODT Enable(Default)



SDVO/PCIE Concurrent operation

MCH_CFG_20	Low = Only SDVO or PCIE is operational(Default) High = SDVO andPCIE are operating simultaneously via the PEG port



Quanta Computer Inc.
PROJECT : TE1

Size	Document Number	Rev
	GMCH Strap(7 of 7)	1A
Date: Wednesday, January 23, 2008	Sheet 11 of 41	

DDR2 Dual channel A/B PU

M_A_A[13..0] → M_A_A[13..0] (7,13)

M_B_A[13..0] → M_B_A[13..0] (7,13)

DDRII A CHANNEL

+SMDDR_VTERM

C148 C165 C121 C132 C183 C174 C162 C147 C142 C194 C193 C195 C134 — 0.1u/10V_4

DDRII B CHANNEL

+SMDDR_VTERM

C202 C171 C124 C139 C125 C196 C203 C169 C160 C144 C178 C199 C152 — 0.1u/10V_4

Place one cap close to every 2 pull-up resistor terminated to SMDDR_VTERM

M_A_A3	RP28	M_A_A1	56X2	+SMDDR_VTERM
M_A_A9	RP34	M_A_A5	56X2	+SMDDR_VTERM
M_A_A2	RP32	M_A_A4	56X2	+SMDDR_VTERM
M_A_A11	RP40	(6,13) M_CKE1	56X2	+SMDDR_VTERM
RP38	M_A_A8	(6,13) M_CKE0	56X2	+SMDDR_VTERM
M_A_A12	RP41	(7,13) M_A_BS#2	56X2	+SMDDR_VTERM
RP25	M_A_A0	(7,13) M_A_BS#1	56X2	+SMDDR_VTERM

M_B_A10	RP26	(7,13) M_B_WE#	56X2	+SMDDR_VTERM
M_B_A3	RP29	M_B_A1	56X2	+SMDDR_VTERM
RP27	M_B_A0	(7,13) M_B_BS#1	56X2	+SMDDR_VTERM
M_B_A7	RP35	M_B_A11	56X2	+SMDDR_VTERM
M_B_A8	RP33	M_B_A5	56X2	+SMDDR_VTERM
M_B_A2	RP31	M_B_A4	56X2	+SMDDR_VTERM
M_B_A9	RP36	M_B_A12	56X2	+SMDDR_VTERM

(6,13) M_A_A14	R181	56_4		+SMDDR_VTERM
(6,13) M_B_A14	R178	56_4		

M_A_A7	RP37	M_A_A6	56X2	+SMDDR_VTERM
(6,13) M_CKE3	RP43	(7,13) M_B_BS#2	56X2	+SMDDR_VTERM
(6,13) M_ODT1	RP18	(6,13) M_CS#1	56X2	+SMDDR_VTERM
(6,13) M_ODT3	RP19	(7,13) M_B_BS#0	56X2	+SMDDR_VTERM
M_A_A10	RP24	(7,13) M_A_BS#0	56X2	+SMDDR_VTERM
(7,13) M_A_CAS#	RP21	(7,13) M_A_WE#	56X2	+SMDDR_VTERM
(6,13) M_CS#0	RP23	(7,13) M_A_RAS#	56X2	+SMDDR_VTERM
(7,13) M_B_CAS#	RP22	(6,13) M_CS#3	56X2	+SMDDR_VTERM
M_B_A6	RP42	(6,13) M_CKE4	56X2	+SMDDR_VTERM
(6,13) M_ODT2	RP20	(7,13) M_B_RAS#	56X2	+SMDDR_VTERM
(6,13) M_ODT0	RP16	M_A_A13	56X2	+SMDDR_VTERM
M_B_A13	RP17	(6,13) M_CS#2	56X2	+SMDDR_VTERM

Quanta Computer Inc.

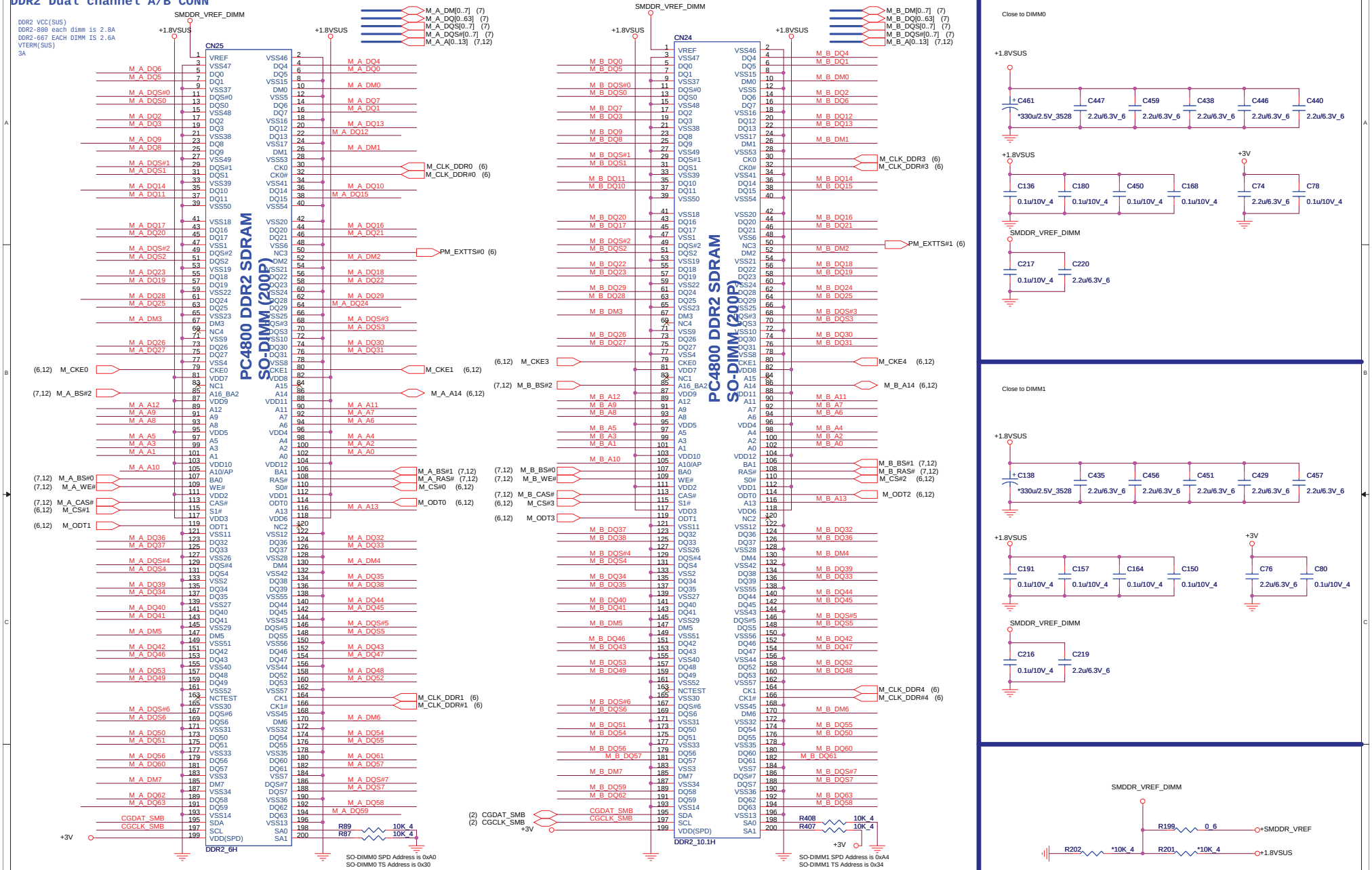
PROJECT : TE1

Size	Document Number	Rev
	DDR RES. ARRAY	1A

Date: Wednesday, January 23, 2008 Sheet 12 of 41

DDR2 Dual channel A/B CONN

DDR2 VCC(SUS)
DDR2-800 each dimm is 2.8A
DDR2-667 EACH DIMM IS 2.6A
VTERM(SUS)
3A

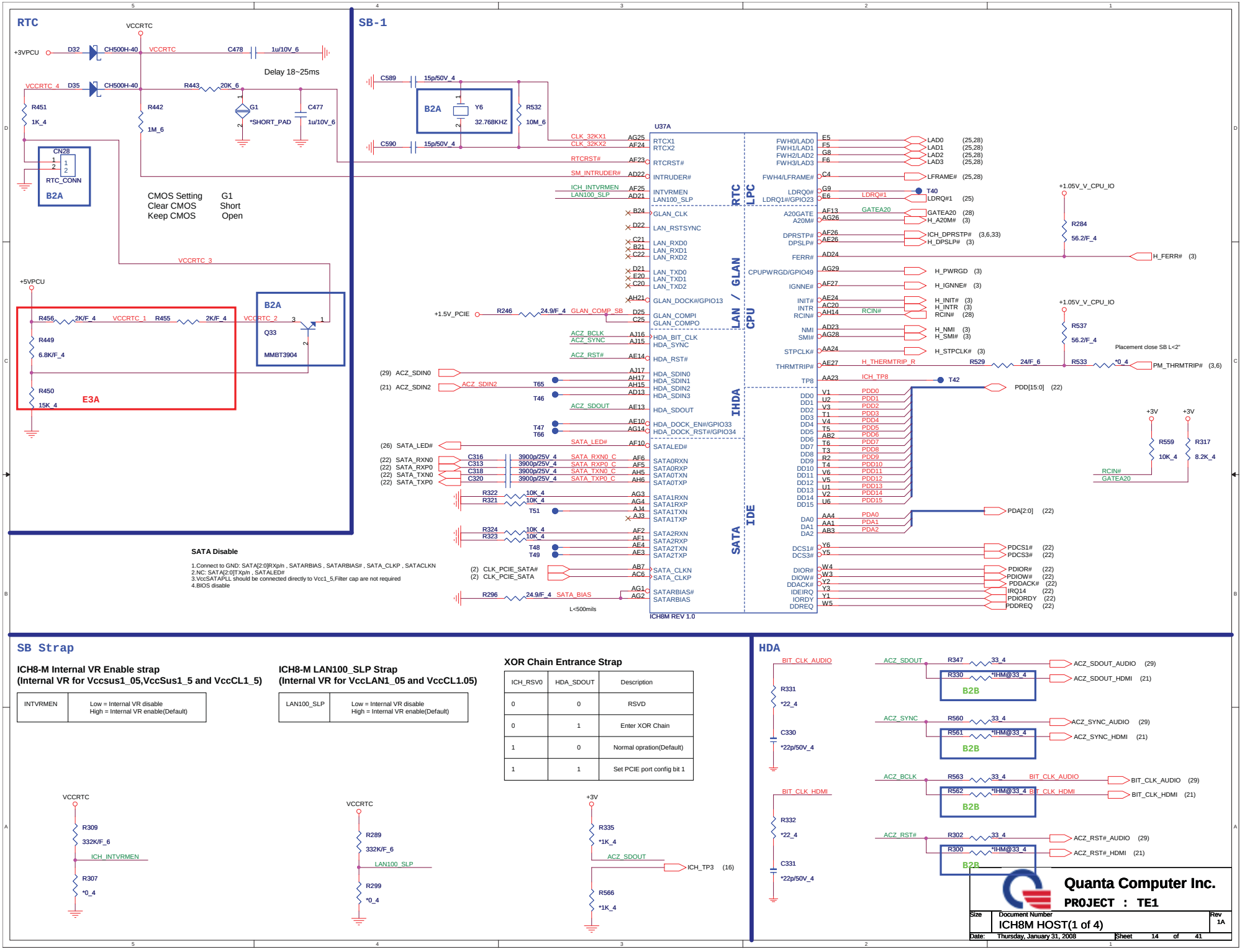


Quanta Computer Inc.

PROJECT : TE1

Size	Document Number	Rev
	DDR SO-DIMM(200P)	1A

Date: Wednesday, January 23, 2008 Sheet 13 of 41


RTC
SB-1
SB Strap
HDA
VCCRTC
+3VPCU
D32
CH500H-40
C478
1u/10V_6
Delay 18~25ms
VCCRTC_4
D35
R443
20K_6
R451
1K_4
R442
1M_6
G1
*SHORT_PAD
C477
CN28
RTC_CONN
B2A
CMOS Setting
Clear CMOS
Keep CMOS
G1
Short
Open
VCCRTC_3
+5VPCU
R456
2K/F_4
VCCRTC_1
R455
VCCRTC_2
Q33
MMBT3904
R449
6.8K/F_4
R450
15K_4
E3A
C589
15p/50V_4
Y6
32.768KHZ
R532
10M_6
C590
U37A
CLK_32KX1
CLK_32KX2
RTCRST#
SM_INTRUDER#
ICH_INTVRMEN
LAN100_SLP
GLAN_CLK
LAN_RSTSYNC
LAN_RXD0
LAN_RXD1
LAN_RXD2
LAN_TXD0
LAN_TXD1
LAN_TXD2
GLAN_DOCK#/GPIO13
GLAN_COMPI
GLAN_COMPO
+1.5V_PCIE
R246
24.9/F_4
GLAN_COMP_SB
HDA_BIT_CLK
HDA_SYNC
HDA_RST#
HDA_SDIN0
HDA_SDIN1
HDA_SDIN2
HDA_SDIN3
HDA_SDOUT
HDA_DOCK_EN#/GPIO33
HDA_DOCK_RST#/GPIO34
SATALED#
SATA0RXN
SATA0RXP
SATA0TXN
SATA0TXP
SATA1RXN
SATA1RXP
SATA1TXN
SATA1TXP
SATA2RXN
SATA2RXP
SATA2TXN
SATA2TXP
SATA_CLKN
SATA_CLKP
SATARBIAS#
SATARBIAS
ICH8M REV 1.0
RTC
LPC
LAN / GLAN
CPU
IHDA
SATA
IDE
FWH0/LAD0
FWH1/LAD1
FWH2/LAD2
FWH3/LAD3
FWH4/LFRAME#
LDRQ0#
LDRQ1#/GPIO23
A20GATE
A20M#
DPRSTP#
DPSLP#
FERR#
CPUPWRGD/GPIO49
IGNNE#
INIT#
INTR
RCIN#
NMI
SMI#
STPCLK#
THRMTRIP#
TP8
DD0
DD1
DD2
DD3
DD4
DD5
DD6
DD7
DD8
DD9
DD10
DD11
DD12
DD13
DD14
DD15
DA0
DA1
DA2
DCS1#
DCS3#
DIOR#
DIOW#
DDACK#
IDEIRQ
IORDY
DDREQ
LAD0 (25,28)
LAD1 (25,28)
LAD2 (25,28)
LAD3 (25,28)
LFRAME# (25,28)
LDRQ#1
LDRQ#1 (25)
GATEA20
GATEA20 (28)
H_A20M# (3)
ICH_DPRSTP# (3,6,33)
H_DPSLP# (3)
H_FERR# (3)
H_PWRGD (3)
H_IGNNE# (3)
H_INIT# (3)
H_INTR (3)
RCIN# (28)
H_NMI (3)
H_SMI# (3)
H_STPCLK# (3)
H_THERMTRIP_R
R529
24/F_6
ICH_TP8
T42
PDD[15:0] (22)
PDA[2:0] (22)
PDCS1# (22)
PDCS3# (22)
PDIOR# (22)
PDIOW# (22)
PDDACK# (22)
IRQ14 (22)
PDIORDY (22)
PDDREQ (22)
+1.05V_V_CPU_IO
R284
56.2/F_4
R537
56.2/F_4
Placement close SB L<2"
R533
*0_4
PM_THRMTRIP# (3,6)
+3V
R559
10K_4
R317
8.2K_4
RCIN#
GATEA20
SATA Disable
1.Connect to GND: SATA[2:0]RXp/n , SATARBIAS , SATARBIAS# , SATA_CLKP , SATACLKN
2.NC: SATA[2:0]TXp/n , SATALED#
3.VccSATAPLL should be connected directly to Vcc1_5,Filter cap are not required
4.BIOS disable
L<500mils
ACZ_SDIN0
ACZ_SDIN2
SATA_LED#
SATA_RXN0
SATA_RXP0
SATA_TXN0
SATA_TXP0
SATA_BIAS
CLK_PCIE_SATA#
CLK_PCIE_SATA
ICH8-M Internal VR Enable strap
(Internal VR for Vccsus1_05,VccSus1_5 and VccCL1_5)
INTVRMEN
Low = Internal VR disable
High = Internal VR enable(Default)
ICH8-M LAN100_SLP Strap
(Internal VR for VccLAN1_05 and VccCL1.05)
LAN100_SLP
Low = Internal VR disable
High = Internal VR enable(Default)
XOR Chain Entrance Strap
ICH_RSV0
HDA_SDOUT
Description
0
0
RSVD
0
1
Enter XOR Chain
1
0
Normal opration(Default)
1
1
Set PCIE port config bit 1
R309
332K/F_6
R307
*0_4
R289
332K/F_6
R299
*0_4
R335
*1K_4
R566
*1K_4
ICH_TP3 (16)
BIT_CLK_AUDIO
R331
*22_4
C330
*22p/50V_4
BIT_CLK_HDMI
R332
*22_4
C331
*22p/50V_4
ACZ_SDOUT
R347
33_4
R330
*IHM@33_4
ACZ_SDOUT_AUDIO (29)
ACZ_SDOUT_HDMI (21)
ACZ_SYNC
R560
33_4
R561
*IHM@33_4
ACZ_SYNC_AUDIO (29)
ACZ_SYNC_HDMI (21)
ACZ_BCLK
R563
33_4
R562
*IHM@33_4
BIT_CLK_AUDIO (29)
BIT_CLK_HDMI (21)
ACZ_RST#
R302
33_4
R300
*IHM@33_4
ACZ_RST#_AUDIO (29)
ACZ_RST#_HDMI (21)
B2B
Quanta Computer Inc.
PROJECT : TE1
Size
Document Number
ICH8M HOST(1 of 4)
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1A
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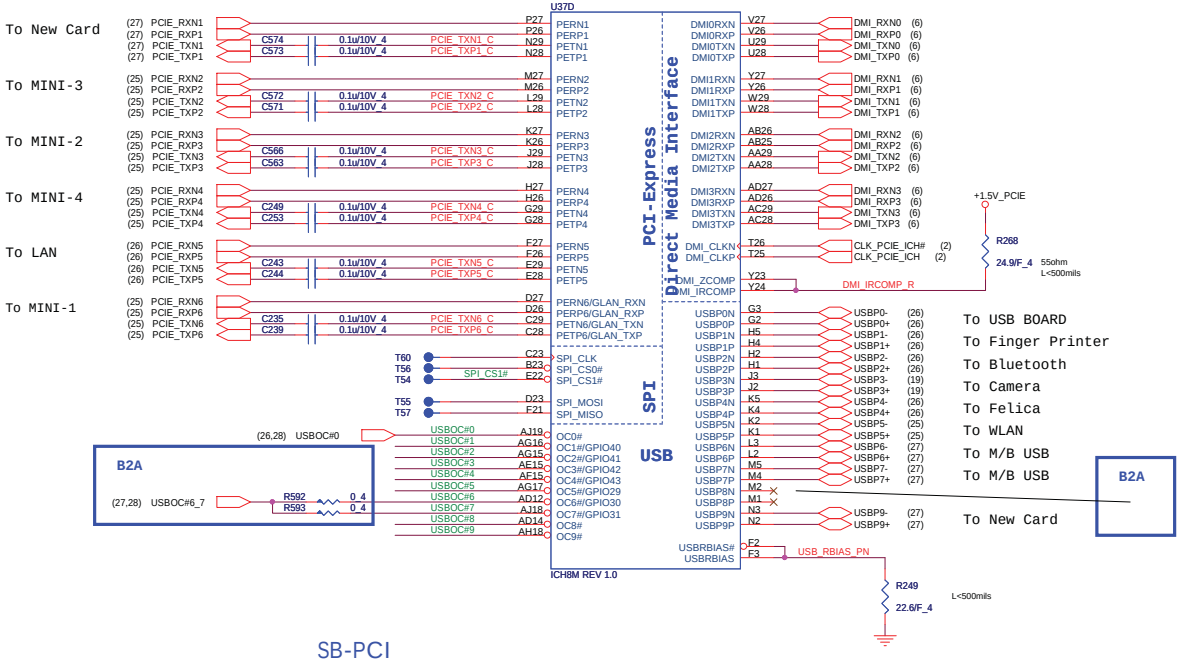
SB-PCIE/USB/DMI



A16 SWAP Override strap

PCI_GNT#3	Low = A16 swap override enabled High = Default

GNT3# R469 *1K_4

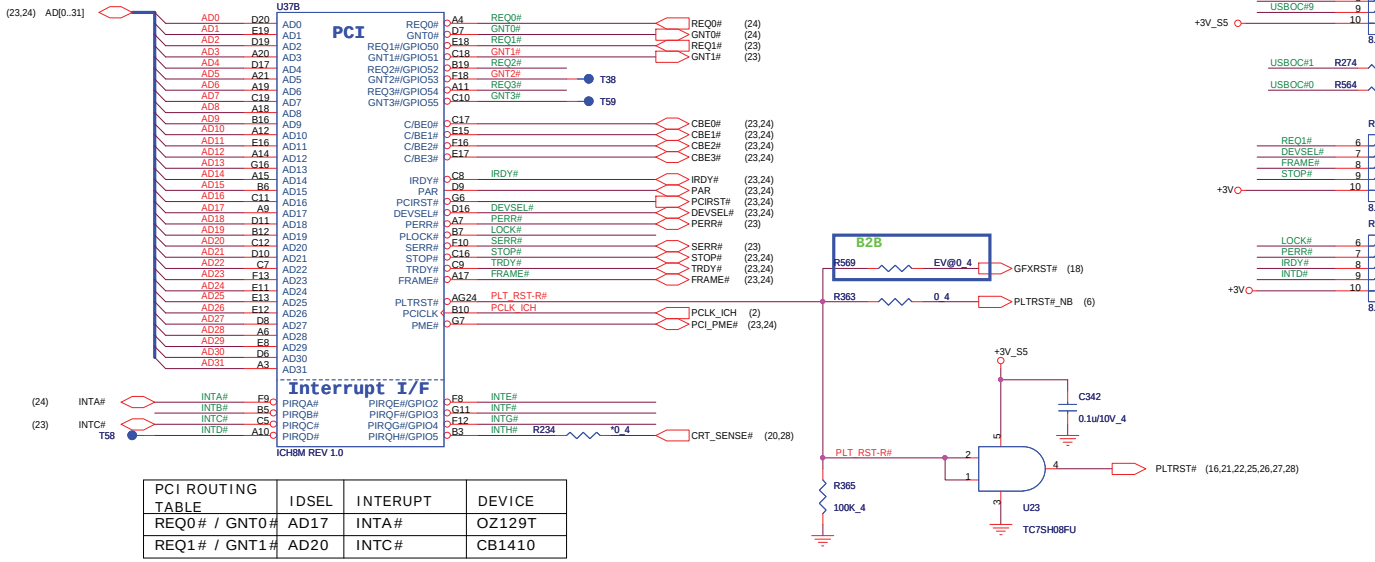
ICH8 Boot BIOS select

PCI_GNT#0	SPI_CS#1	Boot BIOS Location
0	1	SPI(Default)
1	0	PCI
1	1	LPC

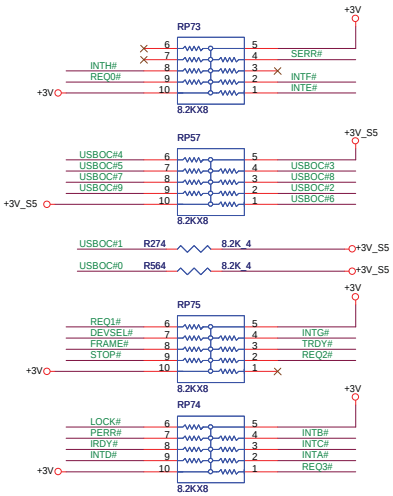
SPI_CS1# R467 *1K_4

GNT0# R244 *1K_4

SB-PCI

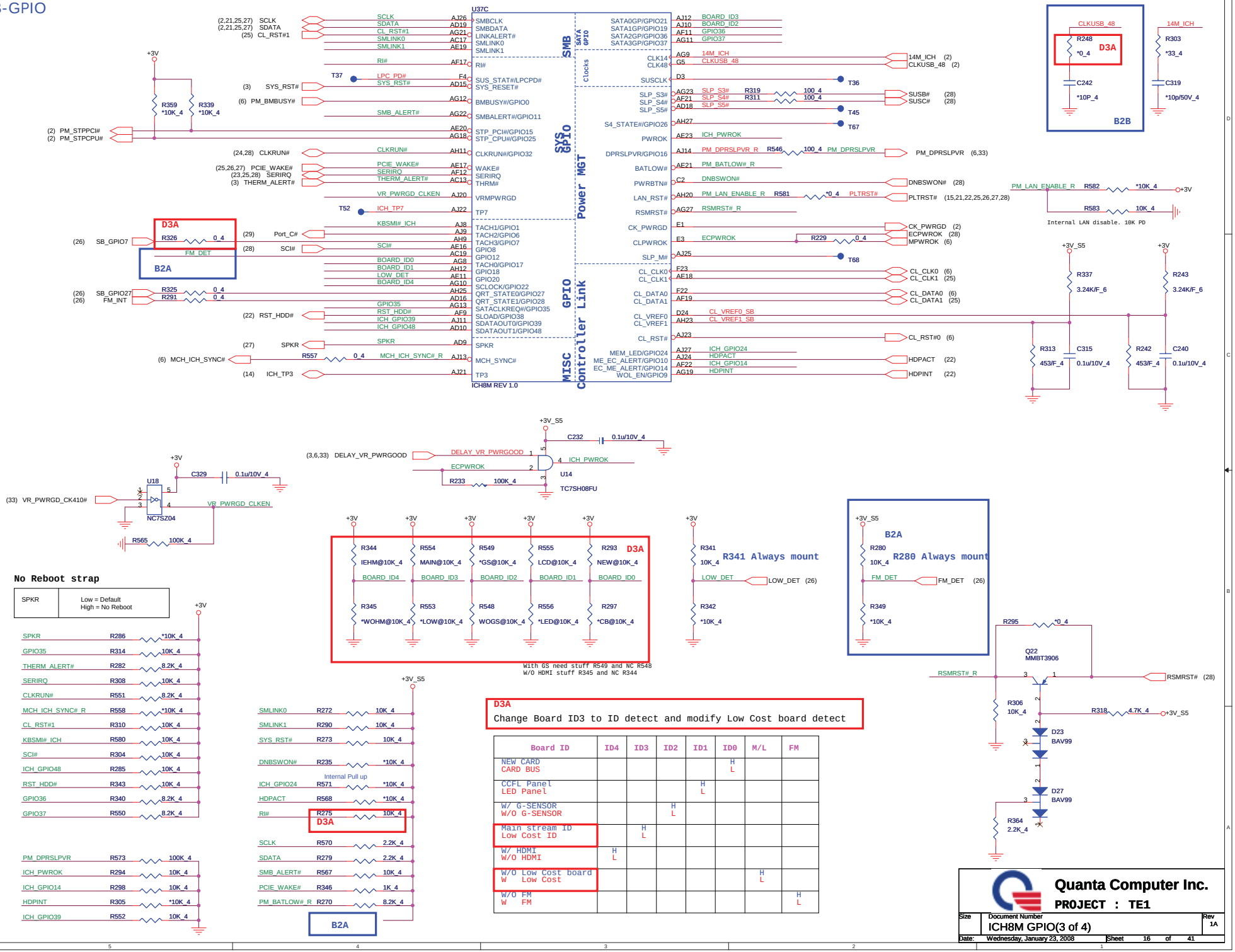


PCI ROUTING TABLE	IDSEL	INTERUPT	DEVICE
REQ0# / GNT0#	AD17	INTA#	OZ129T
REQ1# / GNT1#	AD20	INTC#	CB1410



Quanta Computer Inc.			
PROJECT : TE1			
Size	Document Number		Rev
	ICH8M PCIE(2 of 4)/ BIOS		1A
Date: Wednesday, January 23, 2008		Sheet 15 of 41	

SB-GPIO


U37C
SMB
SATA GPIO
Clocks
SYS GPIO
Power MGT
GPIO
MISC Controller Link
ICH8M REV 1.0
D3A
B2A
B2B
No Reboot strap
SPKR
Low = Default
High = No Reboot
With GS need stuff R549 and NC R548
W/O HDMI stuff R345 and NC R344
Internal Pull up
R341 Always mount
R280 Always mount
Internal LAN disable. 10K PD
D3A
Change Board ID3 to ID detect and modify Low Cost board detect
Board ID | ID4 | ID3 | ID2 | ID1 | ID0 | M/L | FM
NEW CARD CARD BUS | | | | | H L | |
CCFL Panel LED Panel | | | | H L | | |
W/ G-SENSOR W/O G-SENSOR | | | H L | | | |
Main Stream ID Low Cost ID | | H L | | | | |
W/ HDMI W/O HDMI | H L | | | | | |
W/O Low Cost board W Low Cost | | | | | | H L |
W/O FM W FM | | | | | | | H L
Quanta Computer Inc.
PROJECT : TE1
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ICH8M GPIO(3 of 4) | 1A
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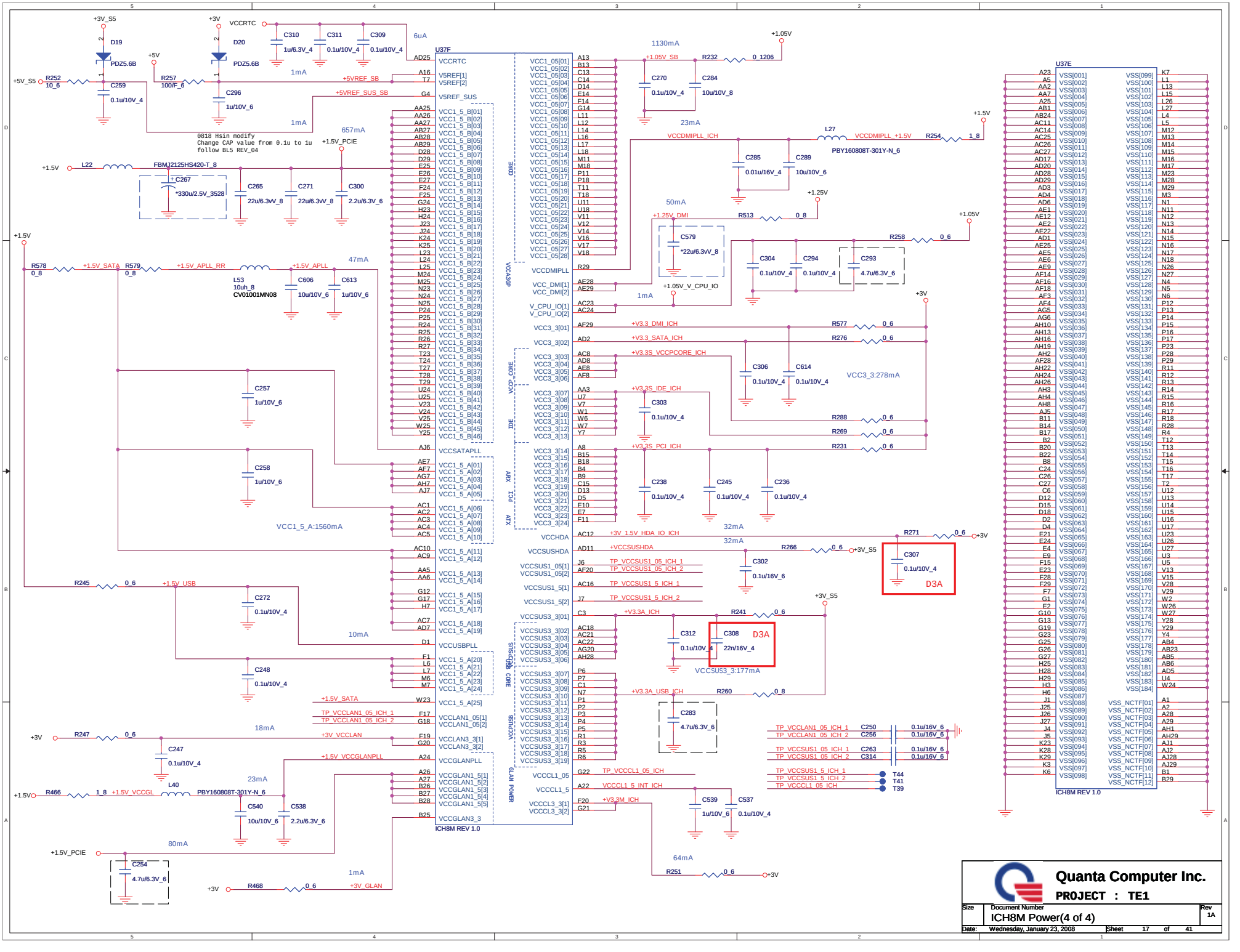
U37F
ICH8M REV 1.0
U37E
ICH8M REV 1.0
0818 Hsin modify
Change CAP value from 0.1u to 1u
follow BL5 REV_04
VCC1_5_A:1560mA
VCCSUS3_3:177mA
VCC3_3:278mA
D3A
D3A
Quanta Computer Inc.
PROJECT : TE1
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ICH8M Power(4 of 4)
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1A
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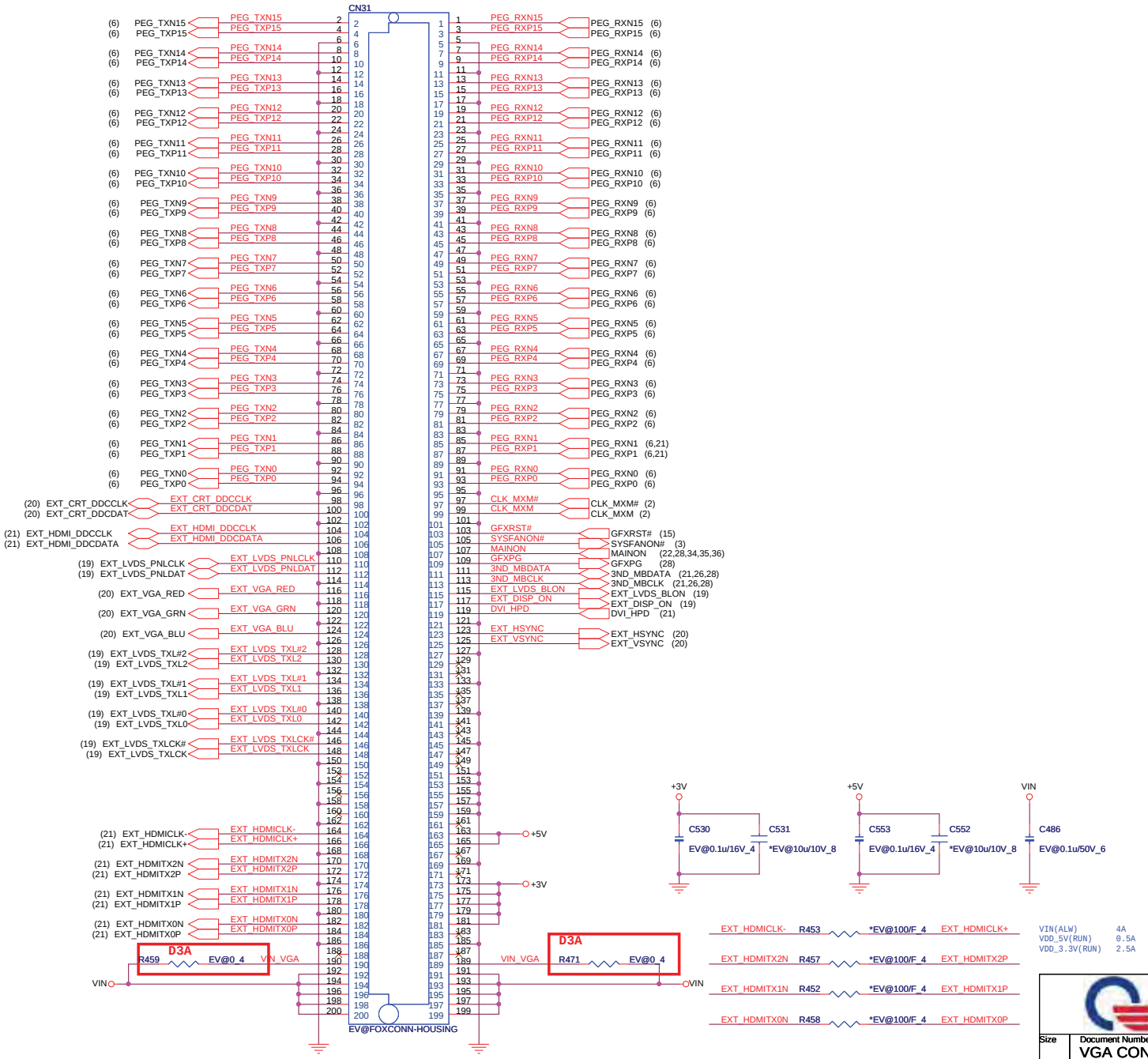
VGA/B conn



Quanta Computer Inc.

PROJECT : TE1

Size	Document Number	Rev
	VGA CONNECTOR	1A

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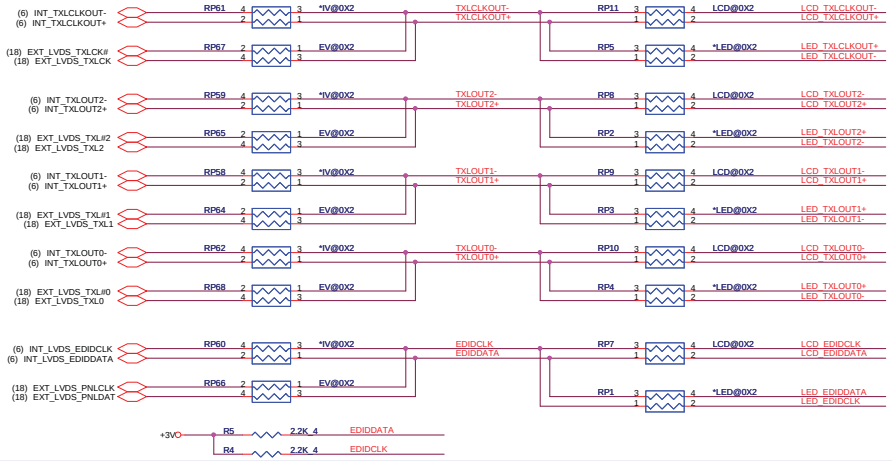
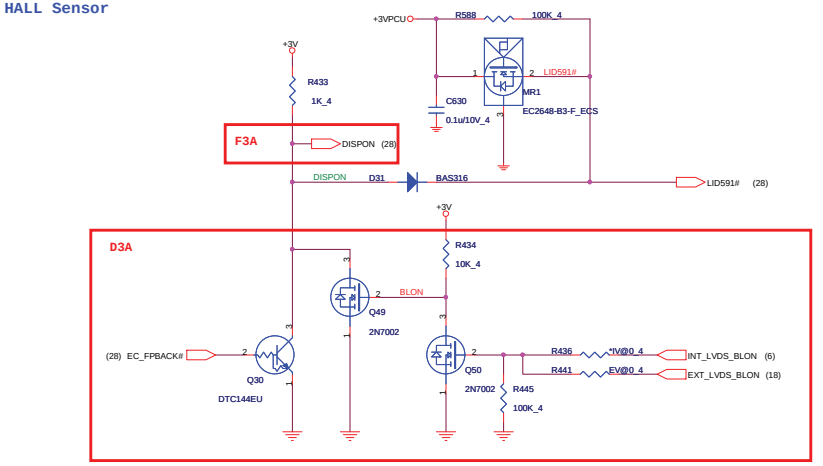
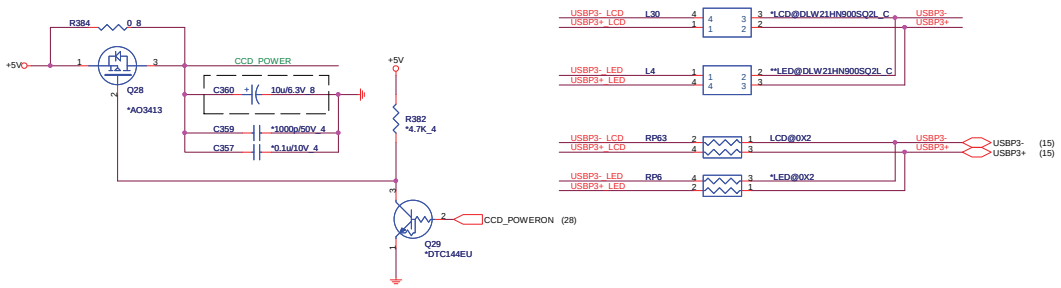
Panel source



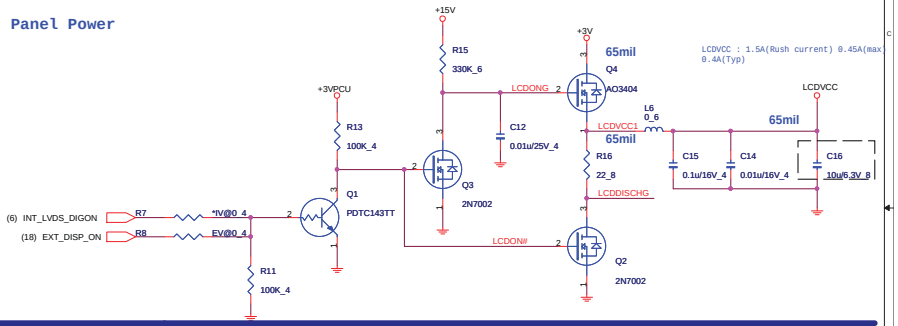
HALL Sensor



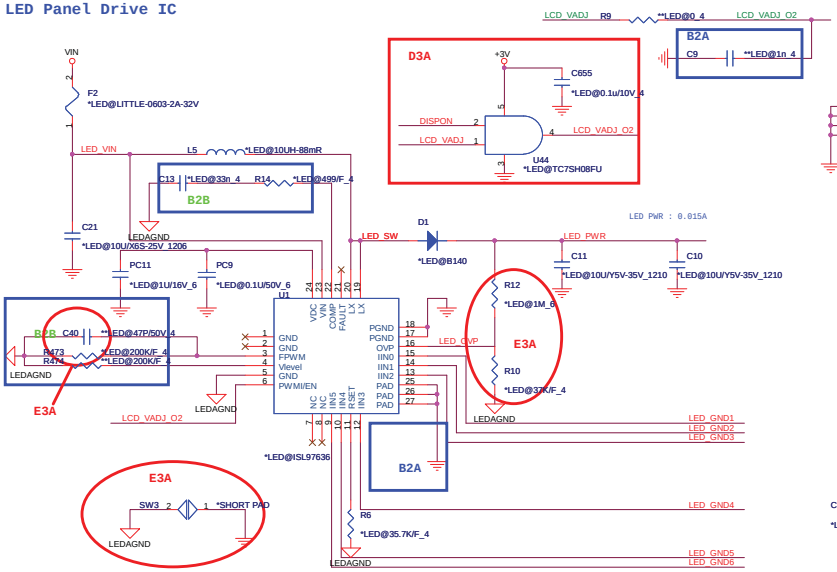
CAMERA Module



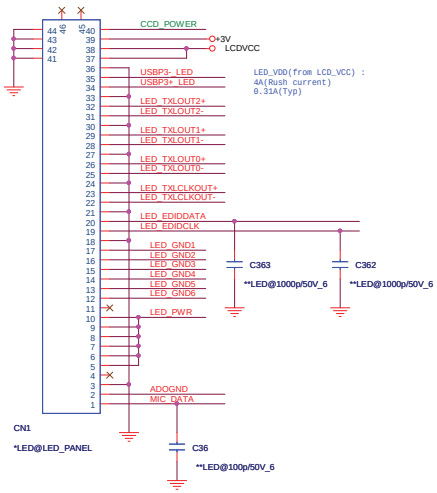
Panel Power



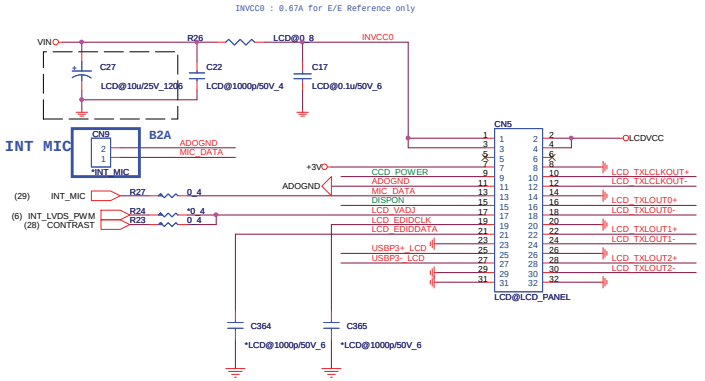
LED Panel Drive IC



TOSHIBA LED Panel Module



LCD Panel Module



Quanta Computer Inc.
PROJECT : TE1

Size	Document Number	Rev
	LCD/CRT/LID/CAMERA	1A

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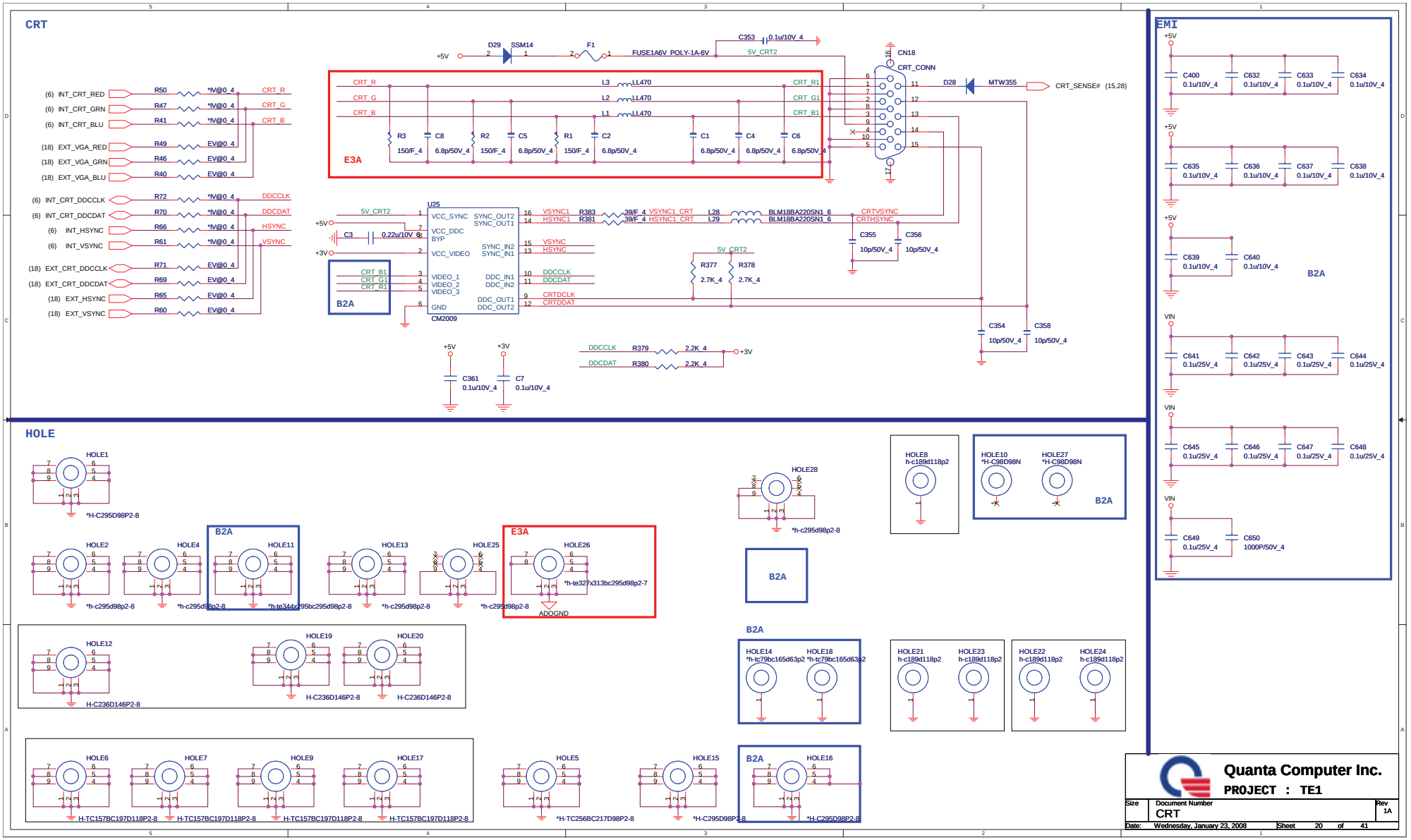
CRT
(6) INT_CRT_RED
(6) INT_CRT_GRN
(6) INT_CRT_BLU
(18) EXT_VGA_RED
(18) EXT_VGA_GRN
(18) EXT_VGA_BLU
R50
R47
R41
R49
R46
R40
*IV@0_4
EV@0_4
CRT_R
CRT_G
CRT_B
(6) INT_CRT_DDCCLK
(6) INT_CRT_DDCDAT
(6) INT_HSYNC
(6) INT_VSYNC
(18) EXT_CRT_DDCCLK
(18) EXT_CRT_DDCDAT
(18) EXT_HSYNC
(18) EXT_VSYNC
R72
R70
R66
R61
R71
R69
R65
R60
DDCCLK
DDCDAT
HSYNC
VSYNC
+5V
D29
SSM14
F1
FUSE1A6V_POLY-1A-6V
5V_CRT2
C353
0.1u/10V_4
CN18
CRT_CONN
D28
MTW355
CRT_SENSE# (15,28)
E3A
L3
L2
L1
LL470
CRT_R1
CRT_G1
CRT_B1
R3
R2
R1
C8
C5
C2
C1
C4
C6
150/F_4
6.8p/50V_4
U25
CM2009
VCC_SYNC
VCC_DDC
BYP
VCC_VIDEO
VIDEO_1
VIDEO_2
VIDEO_3
GND
SYNC_OUT2
SYNC_OUT1
SYNC_IN2
SYNC_IN1
DDC_IN1
DDC_IN2
DDC_OUT1
DDC_OUT2
VSYNC1
HSYNC1
VSYNC
HSYNC
DDCCLK
DDCDAT
CRTDCLK
CRTDDAT
R383
R381
39/F_4
VSYNC1_CRT
HSYNC1_CRT
L28
L29
BLM18BA220SN1_6
CRTVSYNC
CRTHSYNC
C3
0.22u/10V_6
B2A
R377
R378
2.7K_4
C355
C356
C354
C358
10p/50V_4
C361
C7
0.1u/10V_4
R379
R380
2.2K_4
+3V
EMI
C400
C632
C633
C634
C635
C636
C637
C638
C639
C640
C641
C642
C643
C644
C645
C646
C647
C648
C649
C650
0.1u/10V_4
0.1u/25V_4
1000P/50V_4
VIN
HOLE
HOLE1
HOLE2
HOLE4
HOLE11
HOLE13
HOLE25
HOLE26
HOLE28
HOLE12
HOLE19
HOLE20
HOLE6
HOLE7
HOLE9
HOLE17
HOLE5
HOLE15
HOLE16
HOLE8
HOLE10
HOLE27
HOLE14
HOLE18
HOLE21
HOLE23
HOLE22
HOLE24
*H-C295D98P2-8
*h-c295d98p2-8
*h-te344x295bc295d98p2-8
*h-te327x313bc295d98p2-7
ADOGND
H-C236D146P2-8
H-TC157BC197D118P2-8
*H-TC256BC217D98P2-8
*H-C295D98P2-8
h-c189d118p2
*H-C98D98N
*h-tc790bc165d63p2
*h-tc79bc165d63p2
Quanta Computer Inc.
PROJECT : TE1
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CRT
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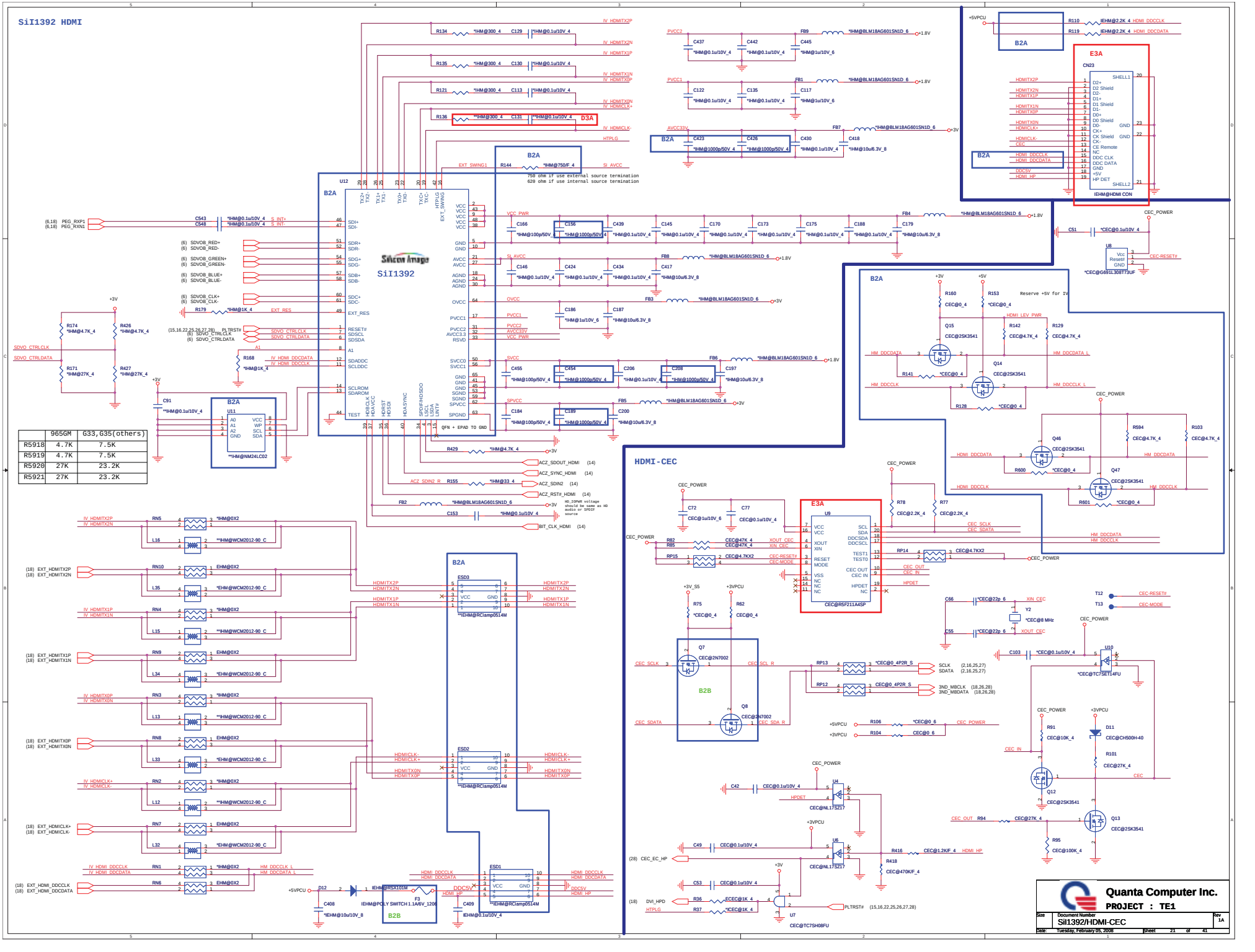

	965GM	G33,G35(others)
R5918	4.7K	7.5K
R5919	4.7K	7.5K
R5920	27K	23.2K
R5921	27K	23.2K

ODD

5VHDD(RUN) : 1A

D3A

CN36

(14) PDD[0..15] — PDD[0..15]

(14) PDDREQ — PDDREQ
(14) PDIOW# — PDIOW#
(14) PDIOR# — PDIOR#
(14) PDIORDY — PDIORDY
(14) PDDACK# — PDDACK#
(14) IRQ14 — IRQ14
(14) PDA1 — PDA1
(14) PDA0 — PDA0
(14) PDCS1# — PDCS1#
(14) PDA2 — PDA2
(14) PDCS3# — PDCS3#

(26) ODD_LED# — ODD_LED#

-IDERST
PDD7 PDD6 PDD5 PDD4 PDD3 PDD2 PDD1 PDD0
PDIOW# PDIORDY IRQ14 PDA1 PDA0 PDCS1# ODD_LED#

PDD8 PDD9 PDD10 PDD11 PDD12 PDD13 PDD14 PDD15 PDDREQ PDIOR# PDDACK# DIAG# PDA2 PDCS3#

+5V — R256 *10K_4 — +5V

R236 470_6

C276 0.1u/10V_4
C260 1000p/50V_6
C277 0.1u/10V_4
C281 10u/6.3V_8
C251 *150u/6.3V_7343

ODD_CONN

F3A

+3V_S5 — Q38 DTC144EU — +5V — R504 10K_4 — -IDERST

(16) RST_HDD# — R240 *0_4
(15,16,21,25,26,27,28) PLTRST# — R239 0_4

+3V — R264 4.7K_4 — PDIORDY
+3V — R259 8.2K_4 — IRQ14

SATA HDD

5VODD(RUN) : 1.8A

D3A

CN19

GND23 GND1 RXP RXN GND2 TXN TXP GND3 3.3V 3.3V 3.3V GND GND GND 5V 5V 5V GND RSVD GND 12V 12V 12V GND24

Serial_ATA

SATA_TXP0 — SATA_TXP0 (14)
SATA_TXN0 — SATA_TXN0 (14)
SATA_RXN0 — SATA_RXN0 (14)
SATA_RXP0 — SATA_RXP0 (14)

+3.3VSATA — R388 *0_8 — +3V
C369 *4.7u/10V_8
C370 *0.1u/10V_4

+5VSATA — R386 0_8 — +5V
C23 0.1u/10V_4
C20 0.1u/10V_4
C24 10u/6.3V_8
C31 *100u/6.3V_3528

G SENSOR

(18,28,34,35,36) MAINON — +5V_S5

U30 SHDN VO GND VIN SET — *GS@G913-C

+3V_HDP — C469 *GS@10u/10V_8
C472 *GS@0.1u/10V_4

U33 *GS@LIS3L02AQ3

NC NC NC NC NC NC NC NC NC NC NC NC NC NC NC Reserved Reserved Reserved Reserved Reserved Reserved NC Reserved Reserved Reserved Reserved Reserved FS Voutz PD NC NC GND VDD Vouty ST Voutx NC NC NC

+3V_HDP — C471 *GS@0.1u/10V_4

ACCELY — AXSTST — ACCELX

+3V_HDP — R437 **GS@10K_4
FS
R440 *GS@10K_4
ACCELZ

FS (Full Scale) selection

FS	0	1
	2g Full-Scale	6g Full-Scale

PD (Power Down) selection

PD	0	1
	Normal Mode	Power-down mode

+3V_HDP — Q32 *GS@2N7002 — RP71 *GS@4.7KX2
ADDRESS: 32H
(3,28) 2ND_MBDATA — KXP84_SDA

+3V_HDP — Q31 *GS@2N7002
(3,28) 2ND_MBCLK — KXP84_SCL

Close to Pin 7 and Pin 16

+3V_HDP — C474 *GS@0.1u/10V_4
+3V_HDP — C470 *GS@0.1u/10V_4

B2A

U31 Vcc Reset# GND — G-RESET# — *GS@G691L308T73UF-SOT23

B2A

XIN_G — C485 **GS@22p_6 — Y4 **GS@8 MHz — XOUT_G — C476 **GS@22p/50V_6

B2A

U34 VCC VCC HDPSCL HDPSDA ACCELX ACCELY ACCELZ AXSTST ACCELX ACCELY ACCELZ AXSTST HDPACT HDPPD HDPINT VSS Reserved Reserved Reserved Reserved Reserved Reserved RESET MODE

*GS@R5F21174

KXP84_SCL — KXP84_SDA
G-RESET# — R448 *GS@10K_4 — R431 *GS@10K_4
XIN_G — R444 *GS@10K_4
XOUT_G — R438 *GS@10K_4

(16) HDPACT
(16) HDPINT — R432 *GS@1K_4 — HD_PINT
R435 *GS@47K/F_6

GND

HDPPD selection

HDPPD	0	1
	Normal Mode	Power-down mode

ACCELX — C492 *GS@33n/16V_4
ACCELY — C491 *GS@33n/16V_4
ACCELZ — C481 *GS@33n/16V_4

Close Chipset

Quanta Computer Inc.
PROJECT : TE1

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	SATA/PATA/G-SENSOR	1A

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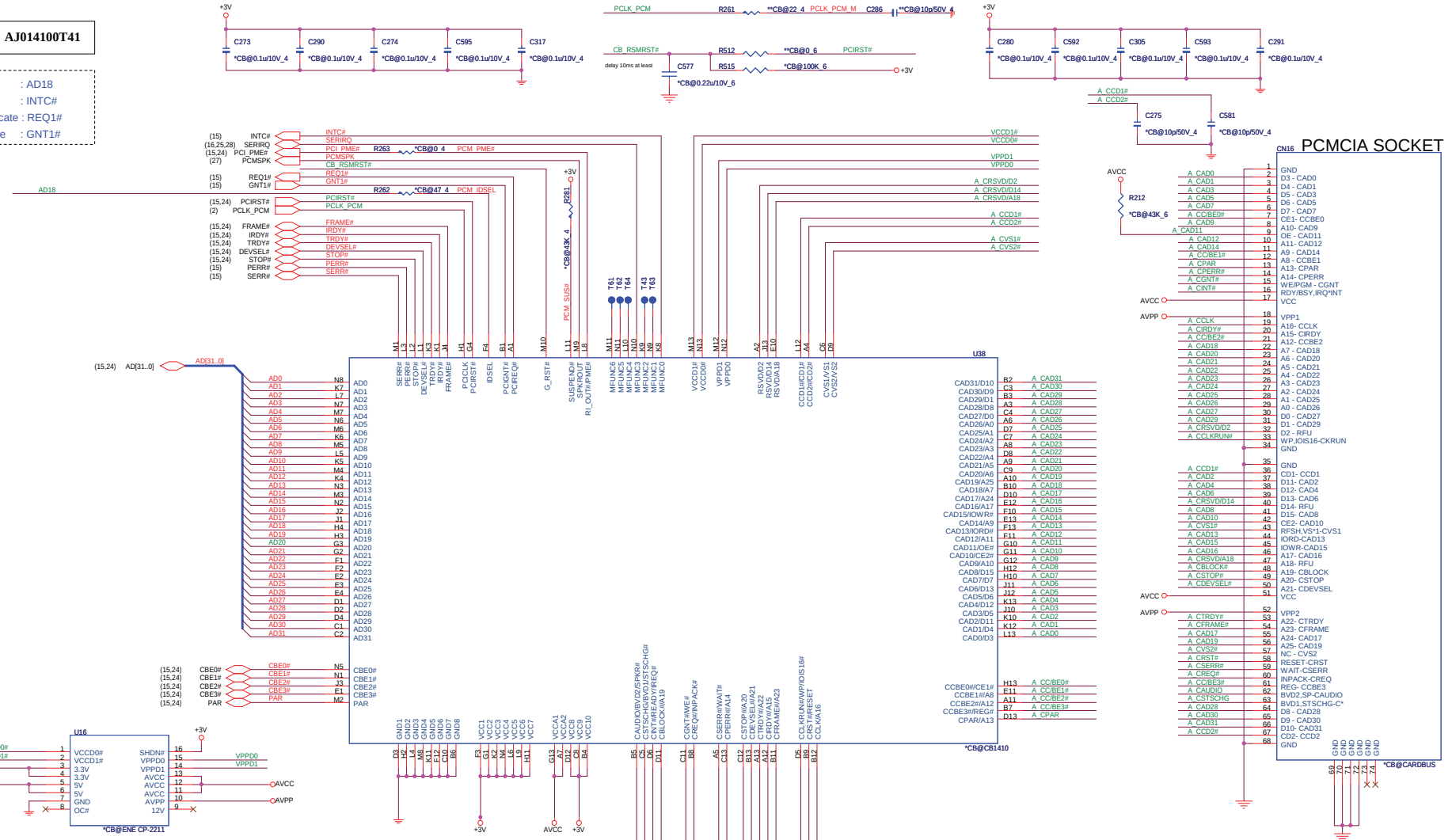
Cardbus

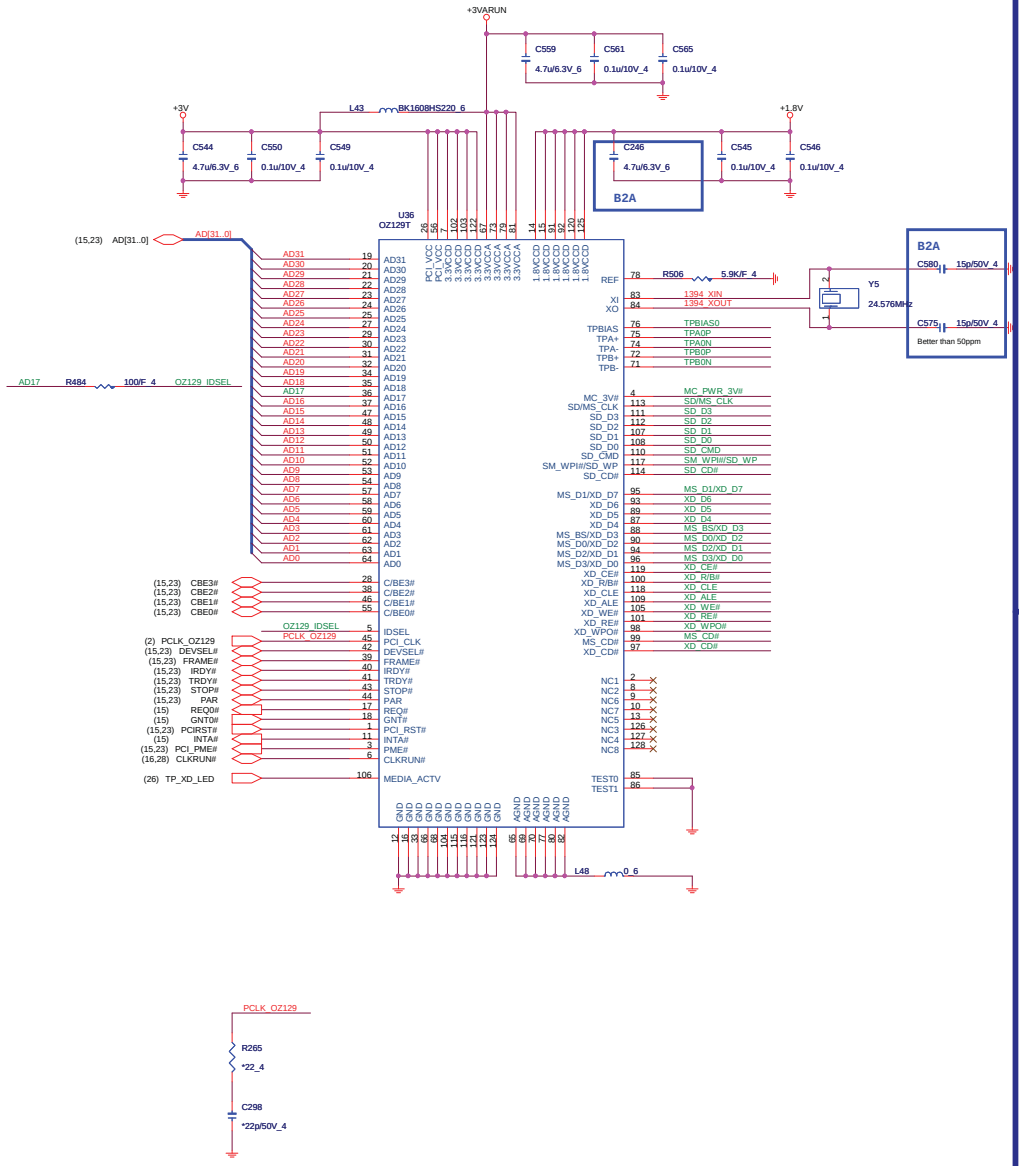
ENE1410	AJ014100T41

ID Select : AD18
Interrupt Pin : INTC#
Request Indicate : REQ1#
Grant Indicate : GNT1#

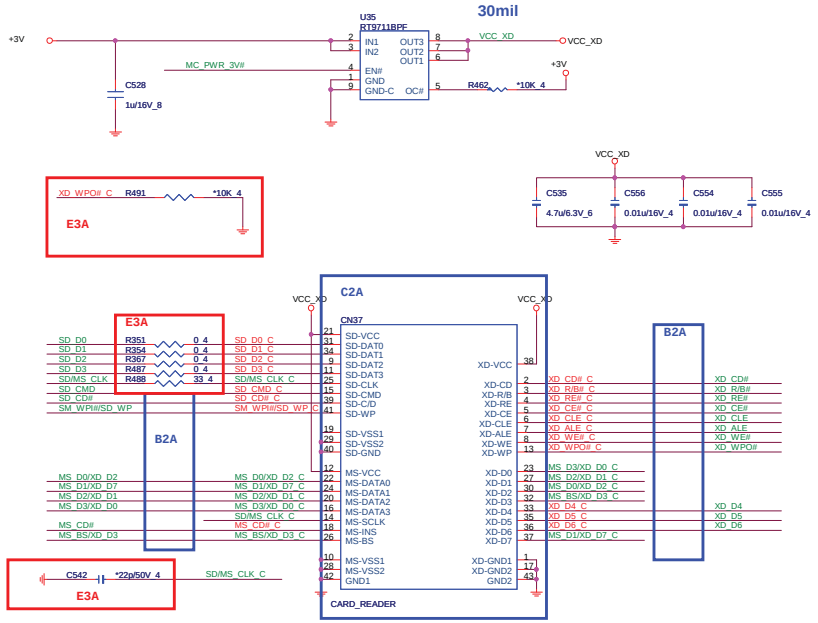


OZ129 for Cardreader+1394

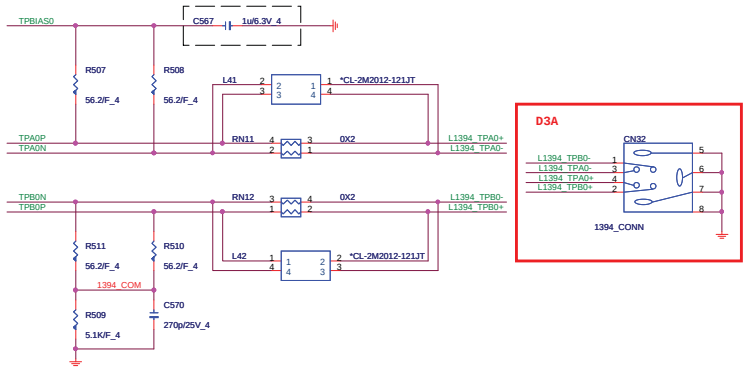
ID Select : AD17
Interrupt Pin : INTA#
Request Indicate : REQ0#
Grant Indicate : GNT0#



5 IN 1 Card reader



1394



Quanta Computer Inc.			
PROJECT : TE1			
Size	Document Number		Rev
	OZ129T(5in1/1394)		1A
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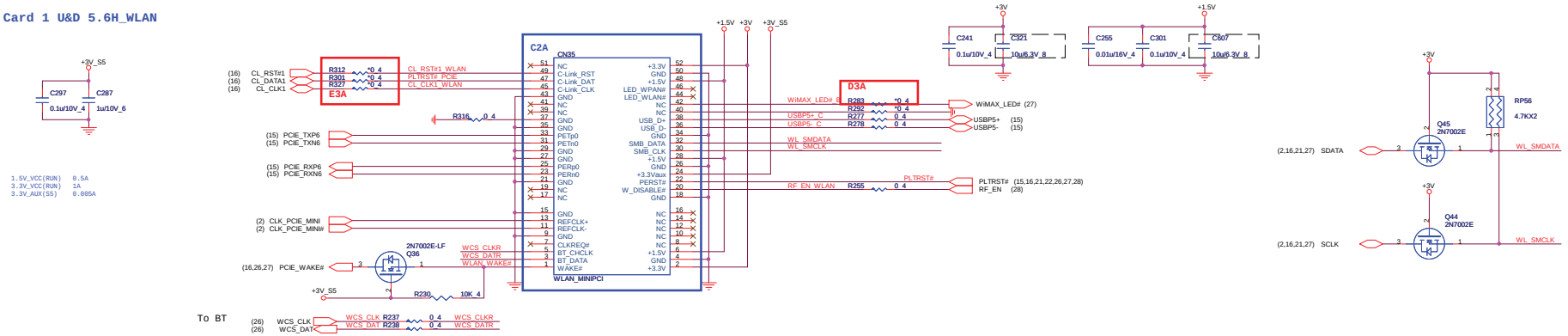
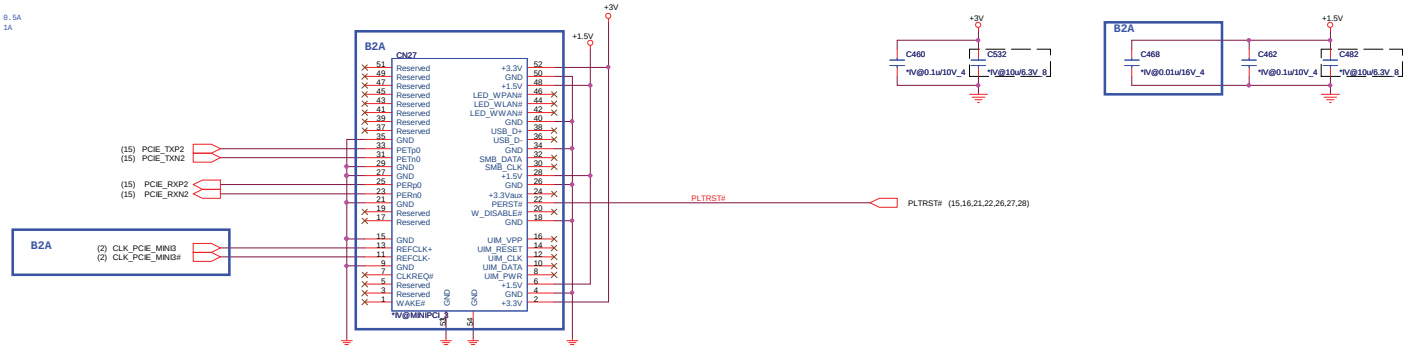
MINI Card 1 U&D 5.6H_WLAN



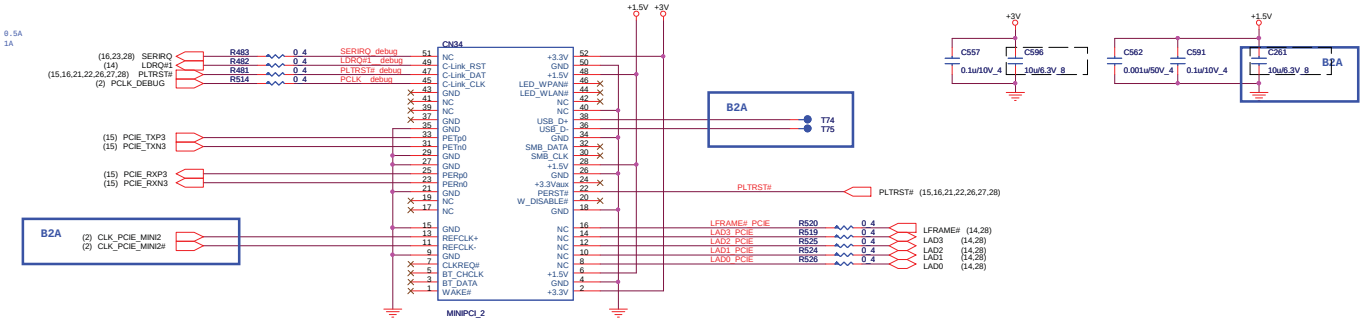
MINI Card 3 U 9H_HD-DVD

1.5V_VCC(RUN) 0.5A
3.3V_VCC(RUN) 1A

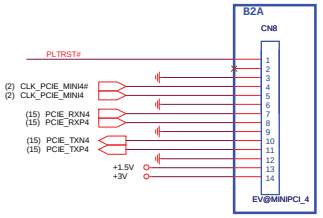


MINI Card 2
U 5.6H_ROBOSON
D 7.5H_HD-DVD

1.5V_VCC(RUN) 0.5A
3.3V_VCC(RUN) 1A



MINI Card 4-D/Robson



Remark1:TV+Robson or HD-DVD+Robson or TV+HD-DVD for UMA SKU

Remark2:TV is just for UMA(13")

	UMA	Discrete
1	WLAN	WLAN
2	Robson	HD-DVD
3	HD-DVD or Robson	N.C
4	N.C	Robson

Quanta Computer Inc.
PROJECT : TE1

Size	Document Number	Rev
	MINI CARD	1A
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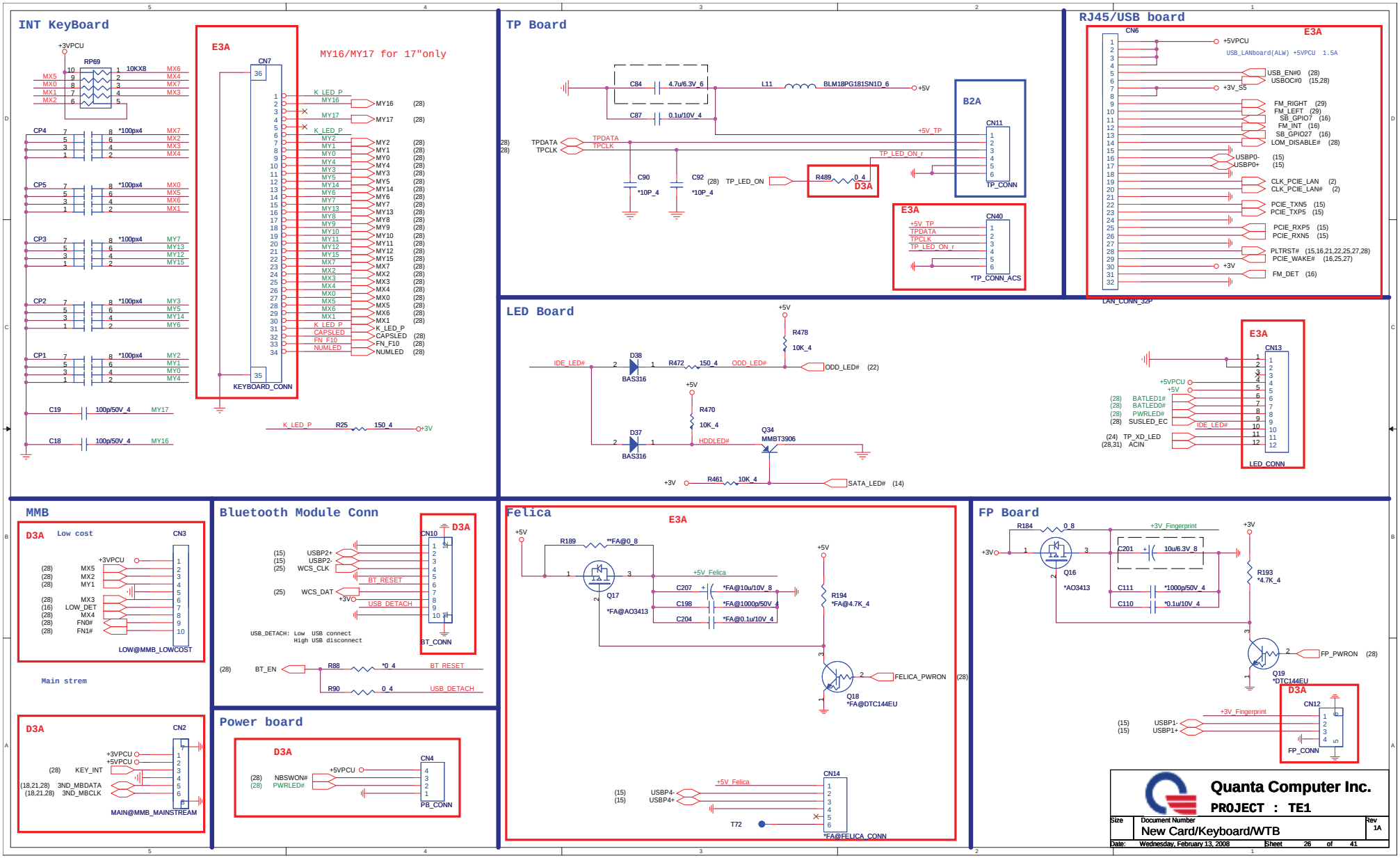
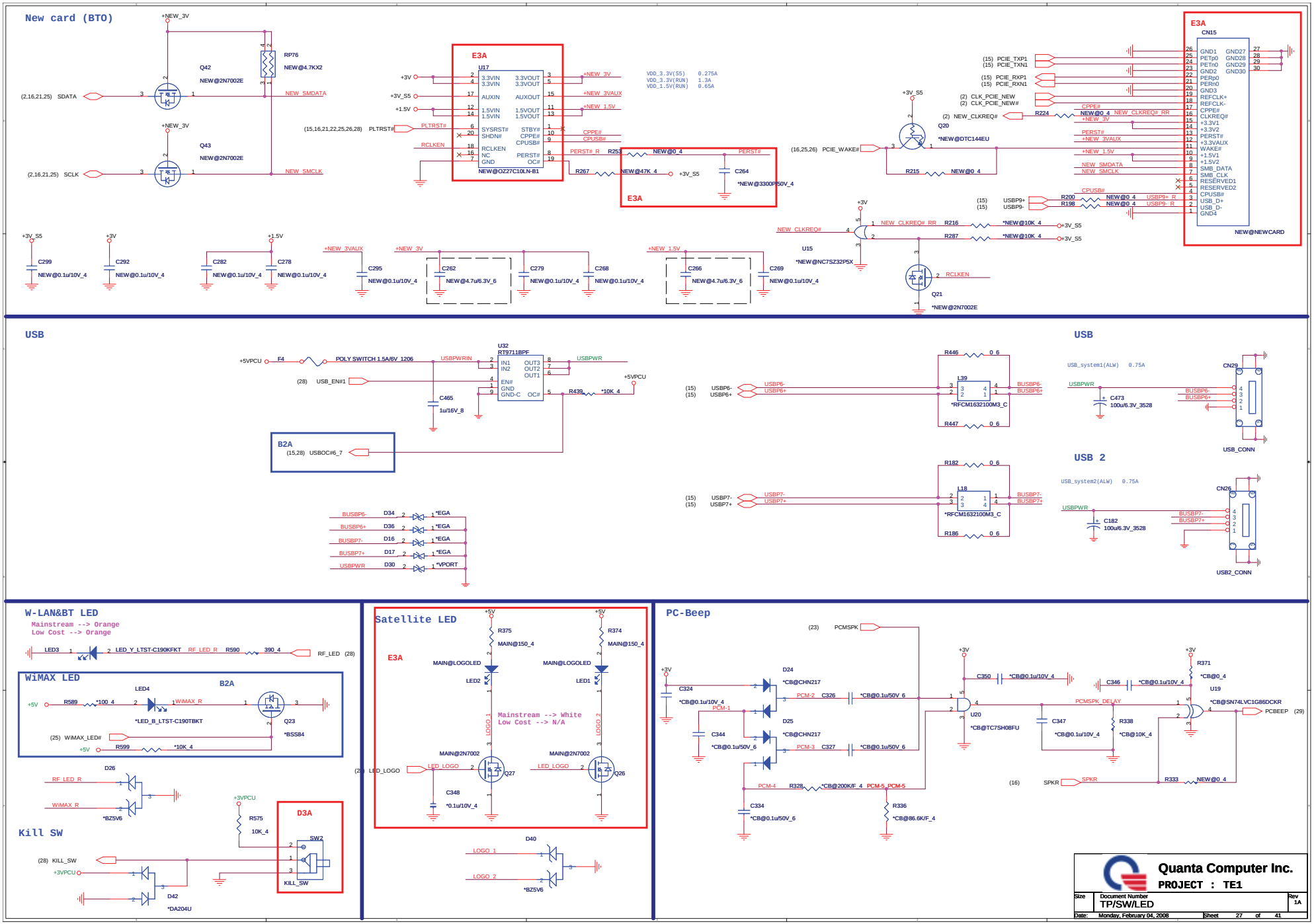
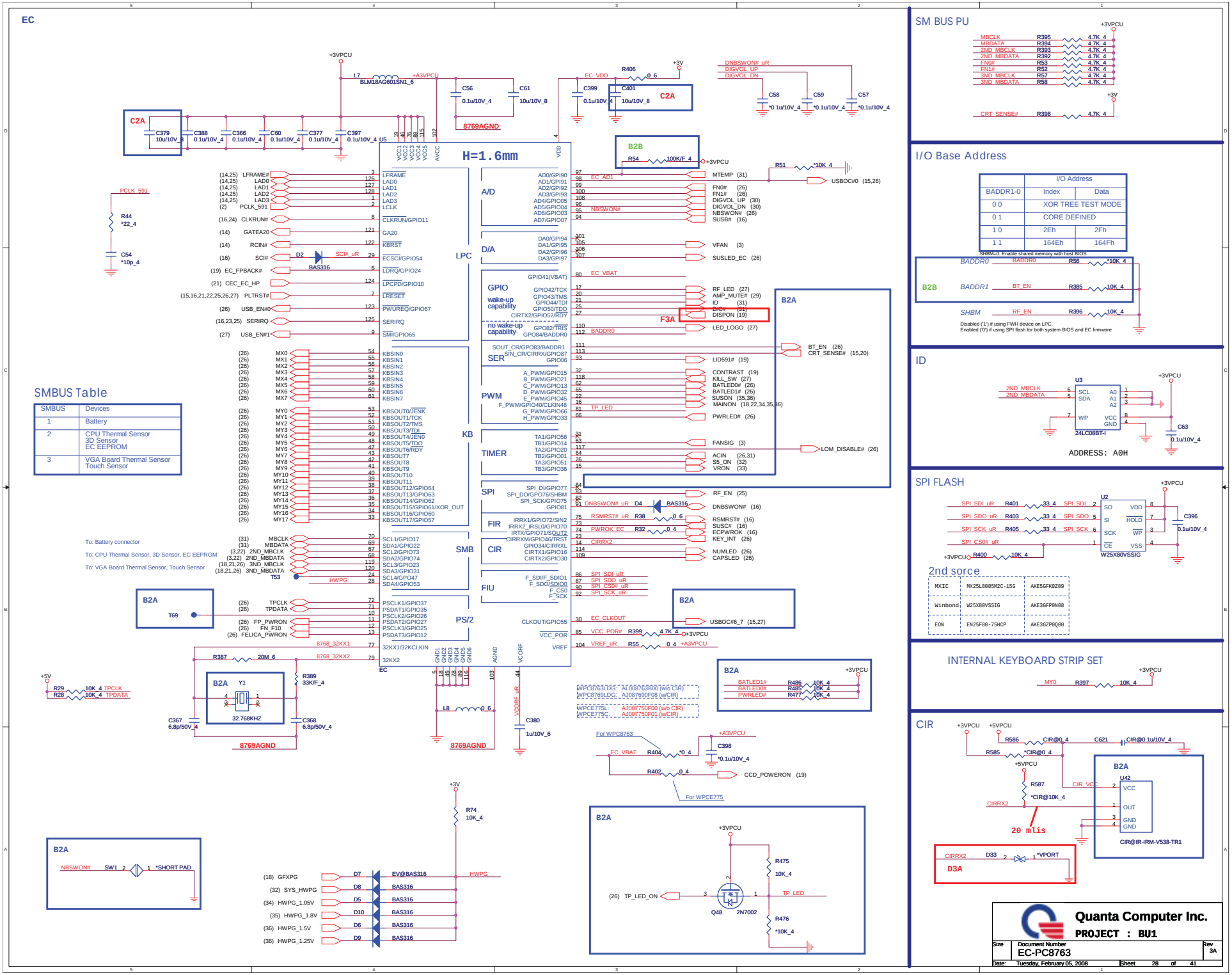
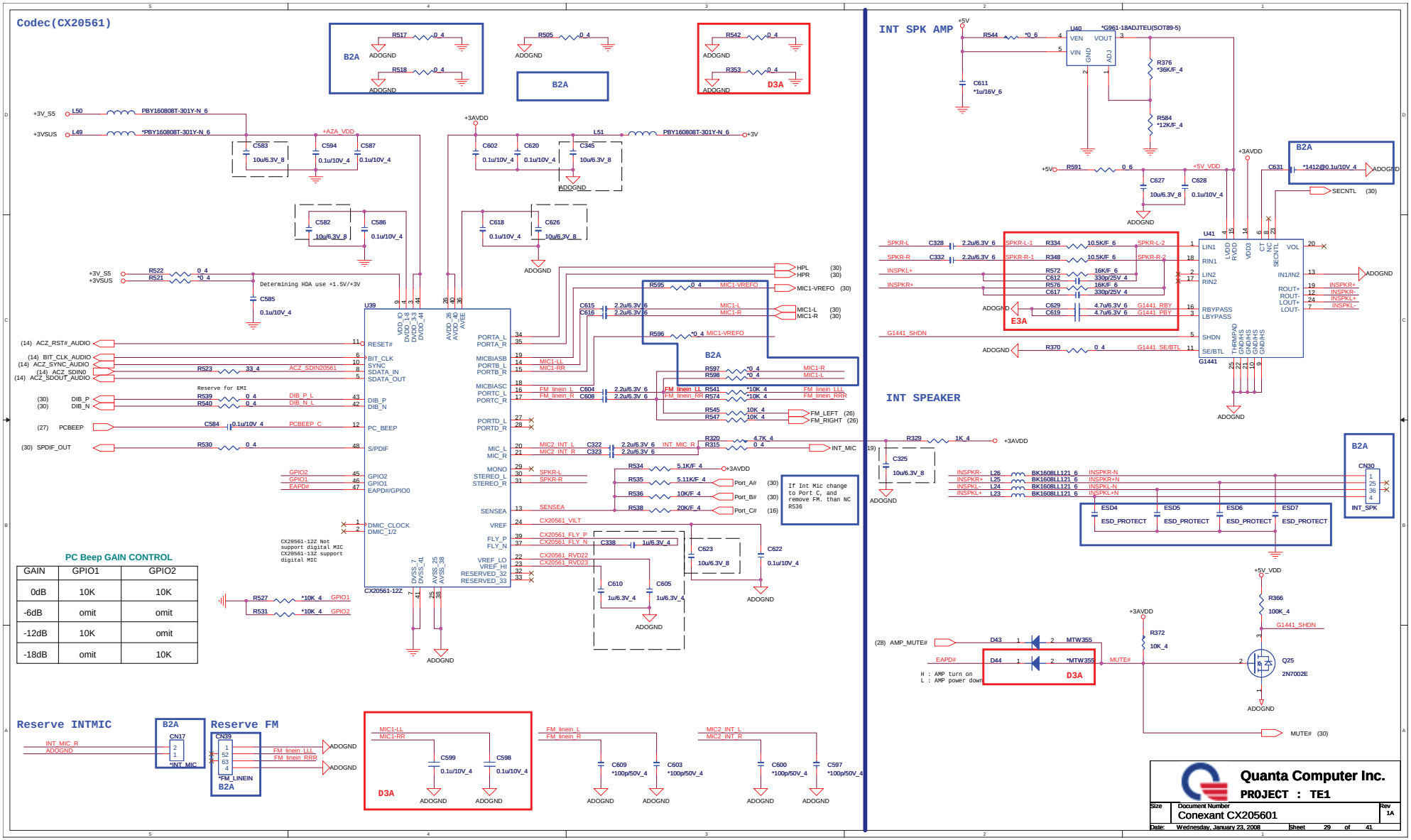
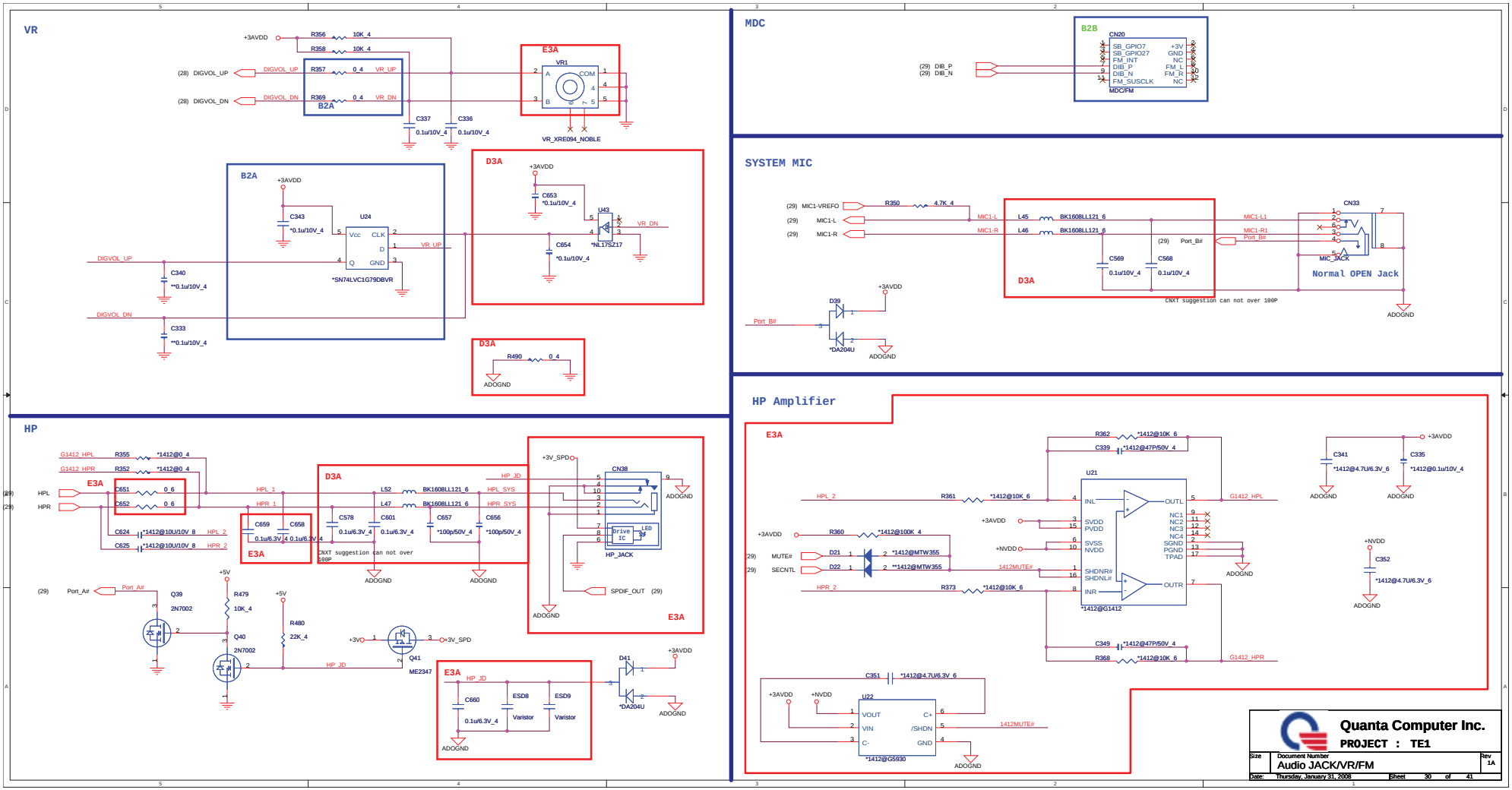
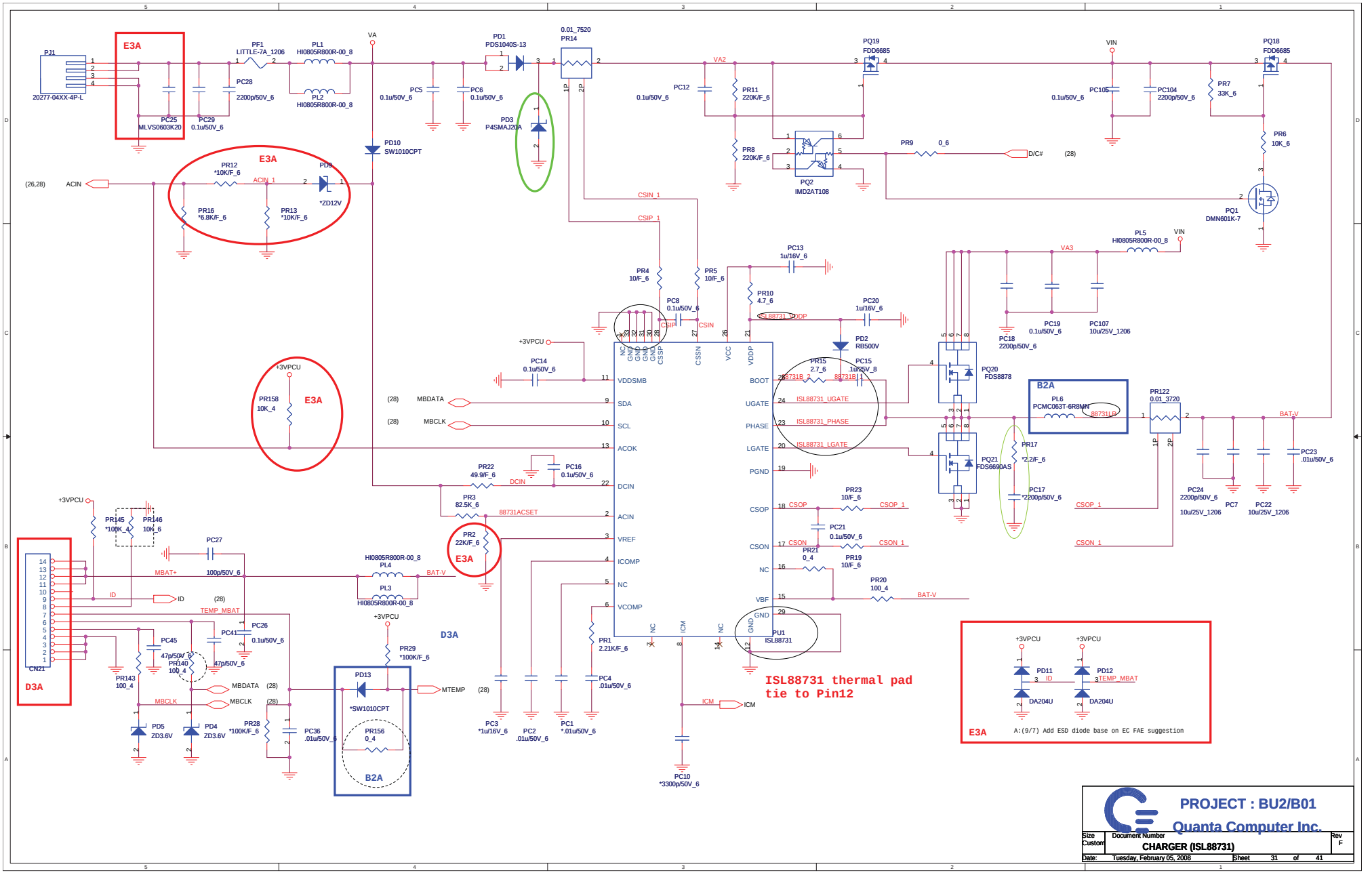

INT KeyBoard
E3A
MY16/MY17 for 17"only
CN7
KEYBOARD_CONN
RP69
10KX8
CP4
CP5
CP3
CP2
CP1
*100px4
C19
100p/50V_4
C18
K_LED_P
R25
150_4
+3VPCU
+3V
TP Board
B2A
CN11
TP_CONN
C84
4.7u/6.3V_6
L11
BLM18PG181SN1D_6
C87
0.1u/10V_4
C90
*10P_4
C92
R489
0_4
D3A
CN40
*TP_CONN_ACS
RJ45/USB board
CN6
LAN_CONN_32P
USB_LANboard(ALW) +5VPCU 1.5A
LED Board
D38
BAS316
D37
R478
10K_4
R472
150_4
R470
R461
Q34
MMBT3906
CN13
LED_CONN
MMB
Low cost
CN3
LOW@MMB_LOWCOST
Main strem
CN2
MAIN@MMB_MAINSTREAM
Bluetooth Module Conn
CN10
BT_CONN
BT_RESET
USB_DETACH
R88
R90
Power board
CN4
PB_CONN
Felica
Q17
*FA@AO3413
R189
**FA@0_8
R194
*FA@4.7K_4
Q18
*FA@DTC144EU
CN14
*FA@FELICA_CONN
FP Board
R184
0_8
Q16
*AO3413
C201
10u/6.3V_8
C111
*1000p/50V_4
C110
*0.1u/10V_4
R193
*4.7K_4
Q19
*DTC144EU
CN12
FP_CONN
Quanta Computer Inc.
PROJECT : TE1
New Card/Keyboard/WTB
Rev 1A
Wednesday, February 13, 2008
Sheet 26 of 41

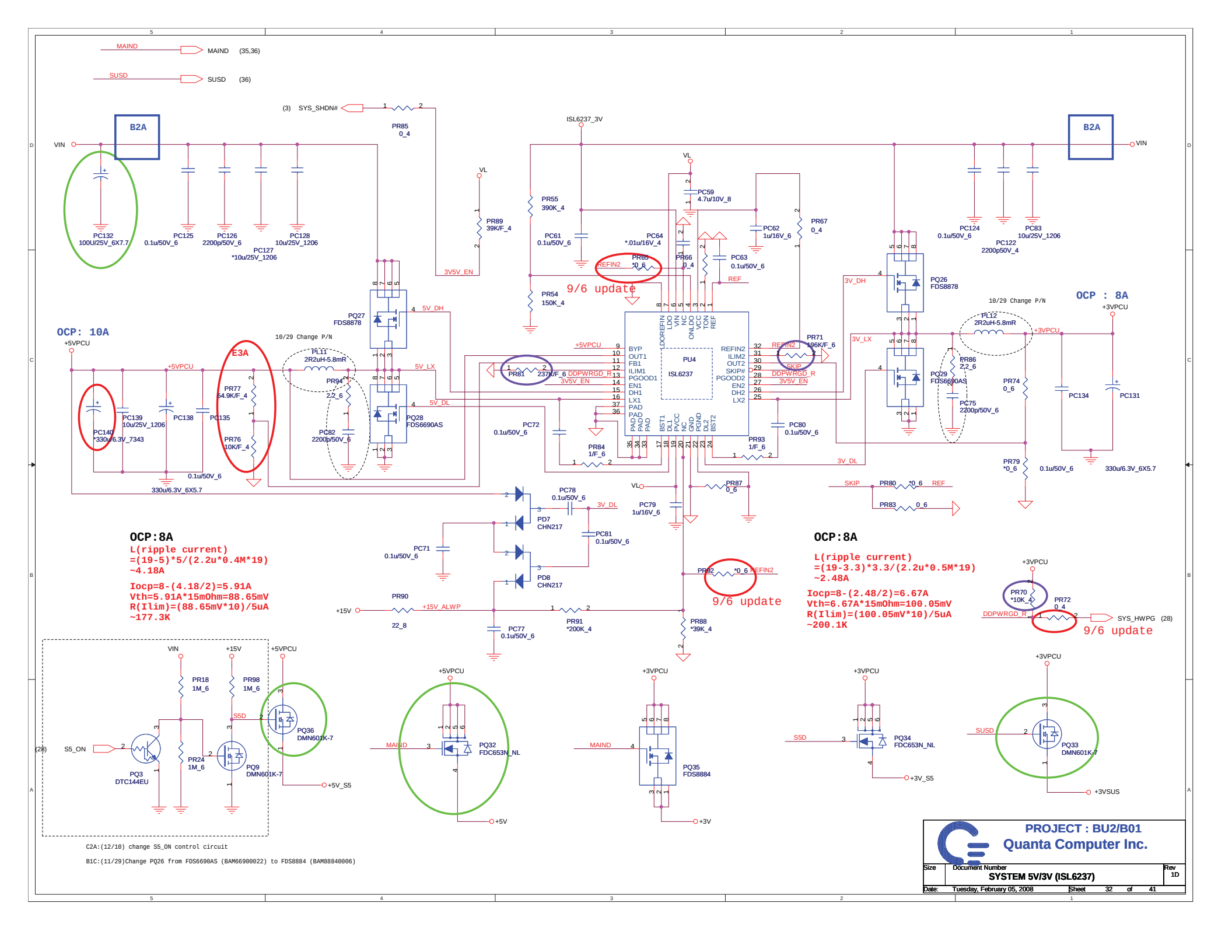

New card (BTO)
E3A
CN15
NEW@NEWCARD
USB
USB 2
USB_CONN
USB2_CONN
W-LAN&BT LED
Mainstream --> Orange
Low Cost --> Orange
WiMAX LED
Kill SW
Satellite LED
Mainstream --> White
Low Cost --> N/A
PC-Beep
Quanta Computer Inc.
PROJECT : TE1
TP/SW/LED
Rev 1A
Monday, February 04, 2008
Sheet 27 of 41


EC
H=1.6mm
LPC
A/D
D/A
GPIO
wake-up capability
no wake-up capability
SER
PWM
TIMER
KB
SPI
FIR
CIR
SMB
FIU
PS/2
B2A
B2B
F3A
SMBUS Table
SMBUS | Devices
1 | Battery
2 | CPU Thermal Sensor 3D Sensor EC EEPROM
3 | VGA Board Thermal Sensor Touch Sensor
To: Battery connector
To: CPU Thermal Sensor, 3D Sensor, EC EEPROM
To: VGA Board Thermal Sensor, Touch Sensor
SM BUS PU
I/O Base Address
I/O Address
BADDR1-0 | Index | Data
0 0 | XOR TREE TEST MODE
0 1 | CORE DEFINED
1 0 | 2Eh | 2Fh
1 1 | 164Eh | 164Fh
SHBM=0: Enable shared memory with host BIOS
Disabled ('1') if using FWH device on LPC.
Enabled ('0') if using SPI flash for both system BIOS and EC firmware
ID
ADDRESS: A0H
SPI FLASH
2nd sorce
MXIC | MX25L8005M2C-15G | AKE5GFK0Z09
Winbond | W25X80VSSIG | AKE3GFP0N08
EON | EN25F80-75HCP | AKE3GZP0Q00
INTERNAL KEYBOARD STRIP SET
CIR
Quanta Computer Inc.
PROJECT : BU1
Size | Document Number | Rev
EC-PC8763 | 3A
Date: Tuesday, February 05, 2008 | Sheet 28 of 41


Codec(CX20561)
INT SPK AMP
INT SPEAKER
Reserve INTMIC
Reserve FM
PC Beep GAIN CONTROL
GAIN | GPIO1 | GPIO2
0dB | 10K | 10K
-6dB | omit | omit
-12dB | 10K | omit
-18dB | omit | 10K
CX20561-12Z
U39
U40
U41
G1441
E3A
D3A
B2A
CN17
CN39
CN30
INT_SPK
Quanta Computer Inc.
PROJECT : TE1
Conexant CX205601
Rev 1A
Size
Document Number
Date: Wednesday, January 23, 2008
Sheet 29 of 41


VR
MDC
B2B
CN20
SB_GPIO7
SB_GPIO27
FM_INT
DIB_P
DIB_N
FM_SUSCLK
+3V
GND
NC
FM_L
FM_R
MDC/FM
(29) DIB_P
(29) DIB_N
SYSTEM MIC
(29) MIC1-VREFO
(29) MIC1-L
(29) MIC1-R
R350
4.7K_4
L45
L46
BK1608LL121_6
C569
C568
0.1u/10V_4
0.1u/10V_4
(29) Port_B#
MIC1-L1
MIC1-R1
Port_B#
CN33
MIC_JACK
Normal OPEN Jack
CNXT suggestion can not over 100P
D39
*DA204U
HP
G1412_HPL
G1412_HPR
R355
R352
*1412@0_4
E3A
C651
C652
0_6
HPL_1
HPR_1
C659
C658
0.1u/6.3V_4
C624
C625
*1412@10U/10V_8
HPL_2
HPR_2
D3A
L52
L47
HP_JD
HPL_SYS
HPR_SYS
C578
C601
C657
C656
*100p/50V_4
CNXT suggestion can not over 100P
CN38
HP_JACK
LED
Drive IC
SPDIF_OUT (29)
Port_A#
Q39
2N7002
Q40
R479
10K_4
R480
22K_4
Q41
ME2347
ESD8
ESD9
Varistor
C660
*DA204U
HP Amplifier
R362
*1412@10K_6
C339
*1412@47P/50V_4
U21
INL
INR
OUTL
OUTR
SVDD
PVDD
SVSS
NVDD
SHDNR#
SHDNL#
TPAD
*1412@G1412
R361
R360
*1412@100K_4
D21
D22
*1412@MTW355
MUTE#
SECNTL
1412MUTE#
R373
C349
R368
C351
U22
VOUT
VIN
C-
C+
/SHDN
GND
*1412@G5930
C341
C335
*1412@4.7U/6.3V_6
*1412@0.1u/10V_4
C352
Quanta Computer Inc.
PROJECT : TE1
Size
Document Number
Audio JACK/VR/FM
Rev
1A
Date: Thursday, January 31, 2008
Sheet 30 of 41


E3A
PJ1
20277-04XX-4P-L
PF1
LITTLE-7A_1206
PL1
HI0805R800R-00_8
PL2
HI0805R800R-00_8
PC25
MLVS0603K20
PC28
2200p/50V_6
PC29
0.1u/50V_6
VA
PD1
PDS1040S-13
0.01_7520
PR14
PC5
0.1u/50V_6
PC6
0.1u/50V_6
PD3
P4SMAJ20A
PD10
SW1010CPT
PQ19
FDD6685
VA2
PC12
0.1u/50V_6
PR11
220K/F_6
PR8
220K/F_6
PQ2
IMD2AT108
PR9
0_6
D/C#
(28)
VIN
PC105
0.1u/50V_6
PC104
2200p/50V_6
PR7
33K_6
PQ18
FDD6685
PR6
10K_6
PQ1
DMN601K-7
(26,28)
ACIN
PR12
*10K/F_6
ACIN_1
PD9
*ZD12V
PR16
*6.8K/F_6
PR13
*10K/F_6
CSIN_1
CSIP_1
PR4
10/F_6
PR5
10/F_6
PC13
1u/16V_6
PR10
4.7_6
PC8
0.1u/50V_6
CSIP
CSIN
ISL88731_VDDP
PC20
1u/16V_6
PD2
RB500V
PC14
0.1u/50V_6
+3VPCU
PR158
10K_4
(28)
MBDATA
MBCLK
PR22
49.9/F_6
DCIN
PC16
0.1u/50V_6
PR3
82.5K_6
88731ACSET
PR2
22K/F_6
VDDSMB
SDA
SCL
ACOK
DCIN
ACIN
VREF
ICOMP
NC
VCOMP
BOOT
UGATE
PHASE
LGATE
PGND
CSOP
CSON
NC
VBF
GND
PU1
ISL88731
PR15
2.7_6
88731B
PC15
.1u/25V_8
ISL88731_UGATE
ISL88731_PHASE
ISL88731_LGATE
PQ20
FDS8878
PQ21
FDS6690AS
B2A
PL6
PCMC063T-6R8MN
PR17
*2.2/F_6
PC17
*2200p/50V_6
PR122
0.01_3720
BAT-V
PC23
.01u/50V_6
PC24
2200p/50V_6
10u/25V_1206
PC7
PC22
10u/25V_1206
PC18
2200p/50V_6
PC19
0.1u/50V_6
PC107
10u/25V_1206
PL5
HI0805R800R-00_8
VA3
CSOP_1
CSON_1
PR23
10/F_6
PC21
0.1u/50V_6
PR21
0_4
PR19
10/F_6
PR20
100_4
PC1
*.01u/50V_6
PC2
.01u/50V_6
PC3
*1u/16V_6
PC4
.01u/50V_6
PR1
2.21K/F_6
ICM
PC10
*3300p/50V_6
ISL88731 thermal pad
tie to Pin12
CN21
D3A
+3VPCU
PR145
*100K_4
PR146
10K_6
PC27
100p/50V_6
MBAT+
ID
TEMP_MBAT
PC45
47p/50V_6
PR140
100_4
PC41
47p/50V_6
PC26
0.1u/50V_6
PR143
100_4
PD5
ZD3.6V
PD4
ZD3.6V
PR28
*100K/F_6
PC36
.01u/50V_6
HI0805R800R-00_8
PL4
PL3
HI0805R800R-00_8
BAT-V
PD13
*SW1010CPT
MTEMP
PR29
*100K/F_6
PR156
0_4
B2A
PD11
DA204U
PD12
DA204U
A:(9/7) Add ESD diode base on EC FAE suggestion
PROJECT : BU2/B01
Quanta Computer Inc.
CHARGER (ISL88731)
Size
Custom
Document Number
Rev
F
Date:
Tuesday, February 05, 2008
Sheet
31
of
41


MAIND
MAIND (35,36)
SUSD
SUSD (36)
(3) SYS_SHDN#
PR85 0_4
B2A
VIN
PC132 100U/25V_6X7.7
PC125 0.1u/50V_6
PC126 2200p/50V_6
PC127 *10u/25V_1206
PC128 10u/25V_1206
VL
PR89 39K/F_4
3V5V_EN
ISL6237_3V
PR55 390K_4
PC61 0.1u/50V_6
PC64 *.01u/16V_4
PR65 *0_6
PR66 0_4
PC59 4.7u/10V_8
PC62 1u/16V_6
PR67 0_4
PC63 0.1u/50V_6
REF
REFIN2
PR54 150K_4
9/6 update
PC124 0.1u/50V_6
PC122 2200p50V_4
PC83 10u/25V_1206
B2A
VIN
OCP: 10A
+5VPCU
E3A
10/29 Change P/N
PL11 2R2uH-5.8mR
PR94 2_2_6
PC82 2200p/50V_6
PQ27 FDS8878
5V_DH
5V_LX
5V_DL
PQ28 FDS6690AS
PR77 64.9K/F_4
PR76 10K/F_4
PC140 *330u/6.3V_7343
PC139 10u/25V_1206
PC138
PC135
0.1u/50V_6
330u/6.3V_6X5.7
PR81 237K/F_6
DDPWRGD_R
3V5V_EN
PU4
ISL6237
PC72 0.1u/50V_6
PR84 1/F_6
PR93 1/F_6
PC80 0.1u/50V_6
PR71 196K/F_6
PQ26 FDS8878
3V_DH
3V_LX
3V_DL
SKIP
PR80 *0_6
PR83 0_6
REF
OCP : 8A
10/29 Change P/N
PL12 2R2uH-5.8mR
PR86 2_2_6
PQ29 FDS6690AS
PC75 2200p/50V_6
PR74 0_6
PR79 *0_6
PC134
PC131
330u/6.3V_6X5.7
PR87 0_6
PC78 0.1u/50V_6
PC79 1u/16V_6
PD7 CHN217
PD8 CHN217
PC81 0.1u/50V_6
PC71 0.1u/50V_6
PR92 *0_6
9/6 update
PR90 22_8
+15V_ALWP
PR91 *200K_4
PC77 0.1u/50V_6
PR88 *39K_4
OCP:8A
L(ripple current)
=(19-5)*5/(2.2u*0.4M*19)
~4.18A
Iocp=8-(4.18/2)=5.91A
Vth=5.91A*15mOhm=88.65mV
R(Ilim)=(88.65mV*10)/5uA
~177.3K
OCP:8A
L(ripple current)
=(19-3.3)*3.3/(2.2u*0.5M*19)
~2.48A
Iocp=8-(2.48/2)=6.67A
Vth=6.67A*15mOhm=100.05mV
R(Ilim)=(100.05mV*10)/5uA
~200.1K
PR70 *10K_4
PR72 0_4
SYS_HWPG (28)
9/6 update
PR18 1M_6
PR98 1M_6
PR24 1M_6
S5D
S5_ON
(28)
PQ3 DTC144EU
PQ9 DMN601K-7
PQ36 DMN601K-7
+5V_S5
PQ32 FDC653N_NL
PQ35 FDS8884
PQ34 FDC653N_NL
+3V_S5
PQ33 DMN601K-7
+3VSUS
C2A:(12/10) change S5_ON control circuit
B1C:(11/29)Change PQ26 from FDS6690AS (BAM66900022) to FDS8884 (BAM88840006)
PROJECT : BU2/B01
Quanta Computer Inc.
Size
Document Number
SYSTEM 5V/3V (ISL6237)
Rev 1D
Date: Tuesday, February 05, 2008
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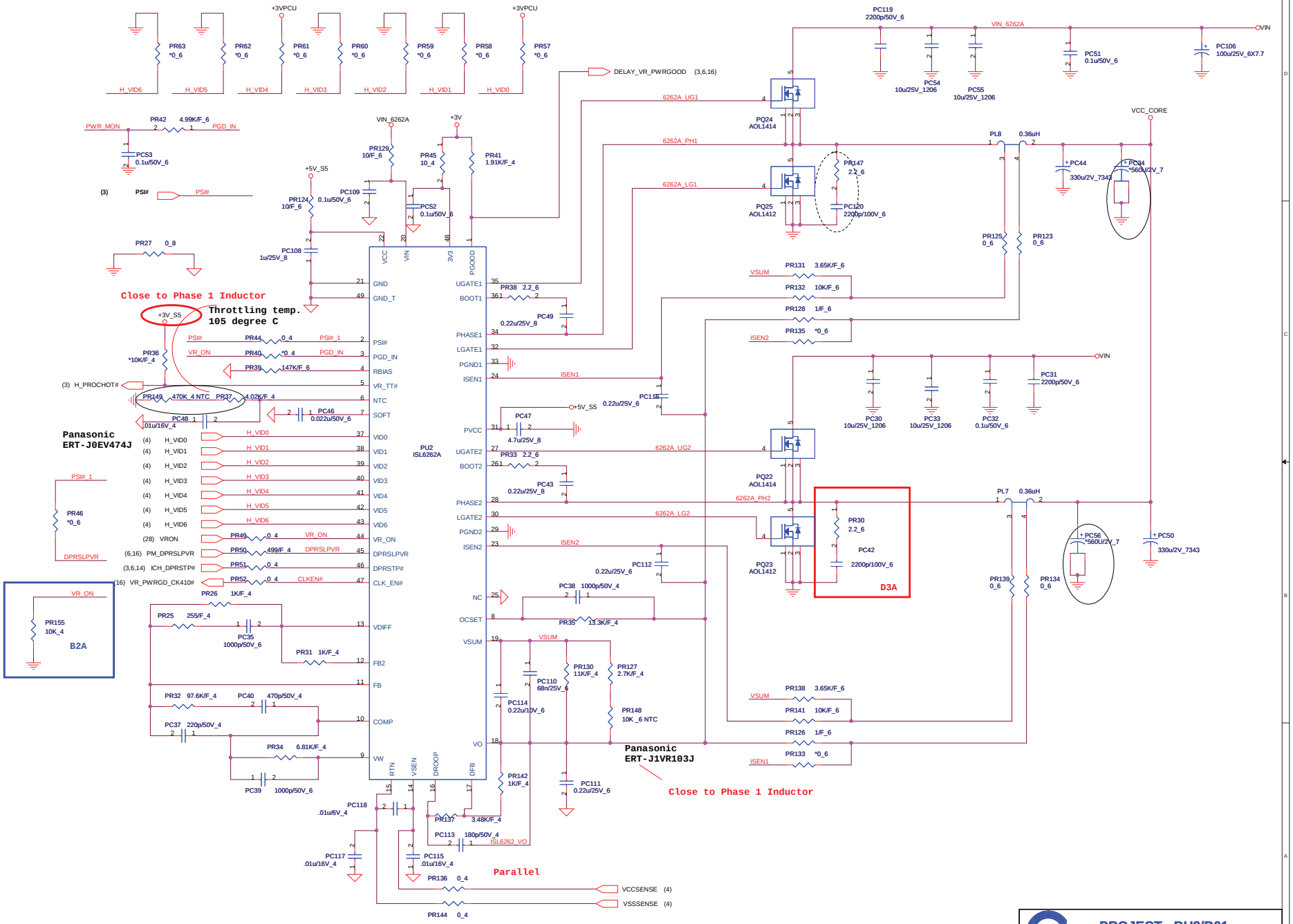
+3VPCU
PR63 *0_6
PR62 *0_6
PR61 *0_6
PR60 *0_6
PR59 *0_6
PR58 *0_6
PR57 *0_6
H_VID6
H_VID5
H_VID4
H_VID3
H_VID2
H_VID1
H_VID0
DELAY_VR_PWRGOOD (3,6,16)
PC119 2200p/50V_6
VIN_6262A
VIN
PC54 10u/25V_1206
PC55 10u/25V_1206
PC51 0.1u/50V_6
PC106 100u/25V_6X7.7
6262A_UG1
PQ24 AOL1414
VCC_CORE
PWR_MON
PR42 4.99K/F_6
PGD_IN
PC53 0.1u/50V_6
(3) PSI#
PSI#
VIN_6262A
+3V
PR129 10/F_6
PR45 10_4
PR41 1.91K/F_4
+5V_S5
PR124 10/F_6
PC109 0.1u/50V_6
PC52 0.1u/50V_6
6262A_PH1
PL8 0.36uH
PC44 330u/2V_7343
PC34 *560U/2V_7
6262A_LG1
PQ25 AOL1412
PR147 2.2_6
PC120 2200p/100V_6
PR27 0_8
PC108 1u/25V_8
PR125 0_6
PR123 0_6
Close to Phase 1 Inductor
Throttling temp. 105 degree C
+3V_S5
PR36 *10K/F_4
PSI#
PR44 0_4
PSI#_1
VR_ON
PR40 *0_4
PGD_IN
PR39 147K/F_6
(3) H_PROCHOT#
PR149 470K_4 NTC
PR37 4.02K/F_4
PC48 .01u/16V_4
PC46 0.022u/50V_6
Panasonic ERT-J0EV474J
(4) H_VID0
(4) H_VID1
(4) H_VID2
(4) H_VID3
(4) H_VID4
(4) H_VID5
(4) H_VID6
(28) VRON
(6,16) PM_DPRSLPVR
(3,6,14) ICH_DPRSTP#
(16) VR_PWRGD_CK410#
PR46 *0_6
DPRSLPVR
PR49 0_4
PR50 499/F_4
PR51 0_4
PR52 0_4
CLKEN#
PR26 1K/F_4
VR_ON
PR155 10K_4
B2A
PR25 255/F_4
PC35 1000p/50V_6
PR31 1K/F_4
PR32 97.6K/F_4
PC40 470p/50V_4
PC37 220p/50V_4
PR34 6.81K/F_4
PC39 1000p/50V_6
PU2 ISL6262A
GND
GND_T
VCC
VIN
3V3
PGOOD
UGATE1
BOOT1
PHASE1
LGATE1
PGND1
ISEN1
PVCC
UGATE2
BOOT2
PHASE2
LGATE2
PGND2
ISEN2
NC
OCSET
VSUM
VO
VDIFF
FB2
FB
COMP
VW
RTN
VSEN
DROOP
DFB
PR38 2_2_6
PC49 0.22u/25V_8
PC47 4.7u/25V_8
PR33 2_2_6
PC43 0.22u/25V_8
PC112 0.22u/25V_6
PC38 1000p/50V_4
PR35 13.3K/F_4
PC110 68n/25V_6
PR130 11K/F_4
PR127 2.7K/F_4
PC114 0.22u/10V_6
PR148 10K_6 NTC
PR142 1K/F_4
PC111 0.22u/25V_6
PC118 .01u/6V_4
PR137 3.48K/F_4
PC113 180p/50V_4
ISL6262_VO
PC117 .01u/16V_4
PC115 .01u/16V_4
PR136 0_4
PR144 0_4
VCCSENSE (4)
VSSSENSE (4)
Parallel
Panasonic ERT-J1VR103J
Close to Phase 1 Inductor
PR131 3.65K/F_6
PR132 10K/F_6
PR128 1/F_6
PR135 *0_6
PC30 10u/25V_1206
PC33 10u/25V_1206
PC32 0.1u/50V_6
PC31 2200p/50V_6
6262A_UG2
PQ22 AOL1414
6262A_PH2
PL7 0.36uH
PR30 2.2_6
PC42 2200p/100V_6
D3A
6262A_LG2
PQ23 AOL1412
PC56 *560U/2V_7
PC50 330u/2V_7343
PR139 0_6
PR134 0_6
PR138 3.65K/F_6
PR141 10K/F_6
PR126 1/F_6
PR133 *0_6
PROJECT : BU2/B01
Quanta Computer Inc.
Size Custom
Document Number CPU CORE(ISL6262A)
Rev F
Date: Wednesday, January 23, 2008
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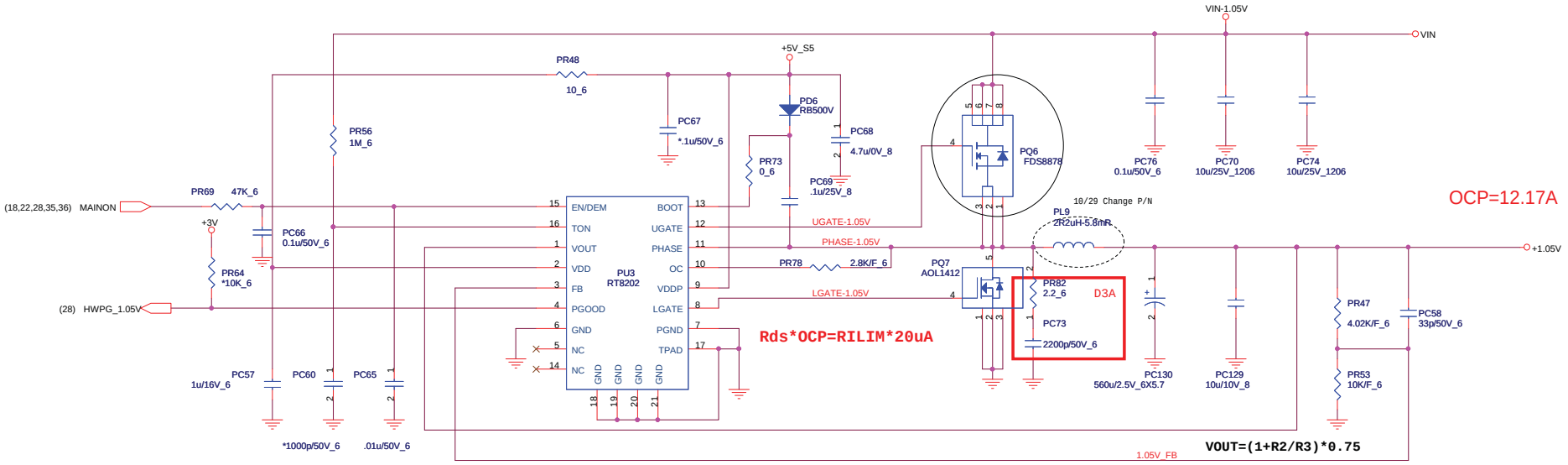


TON=3.85p*RTON*Vout/(Vin-0.5)

Frequency=Vout/(Vin*TON)

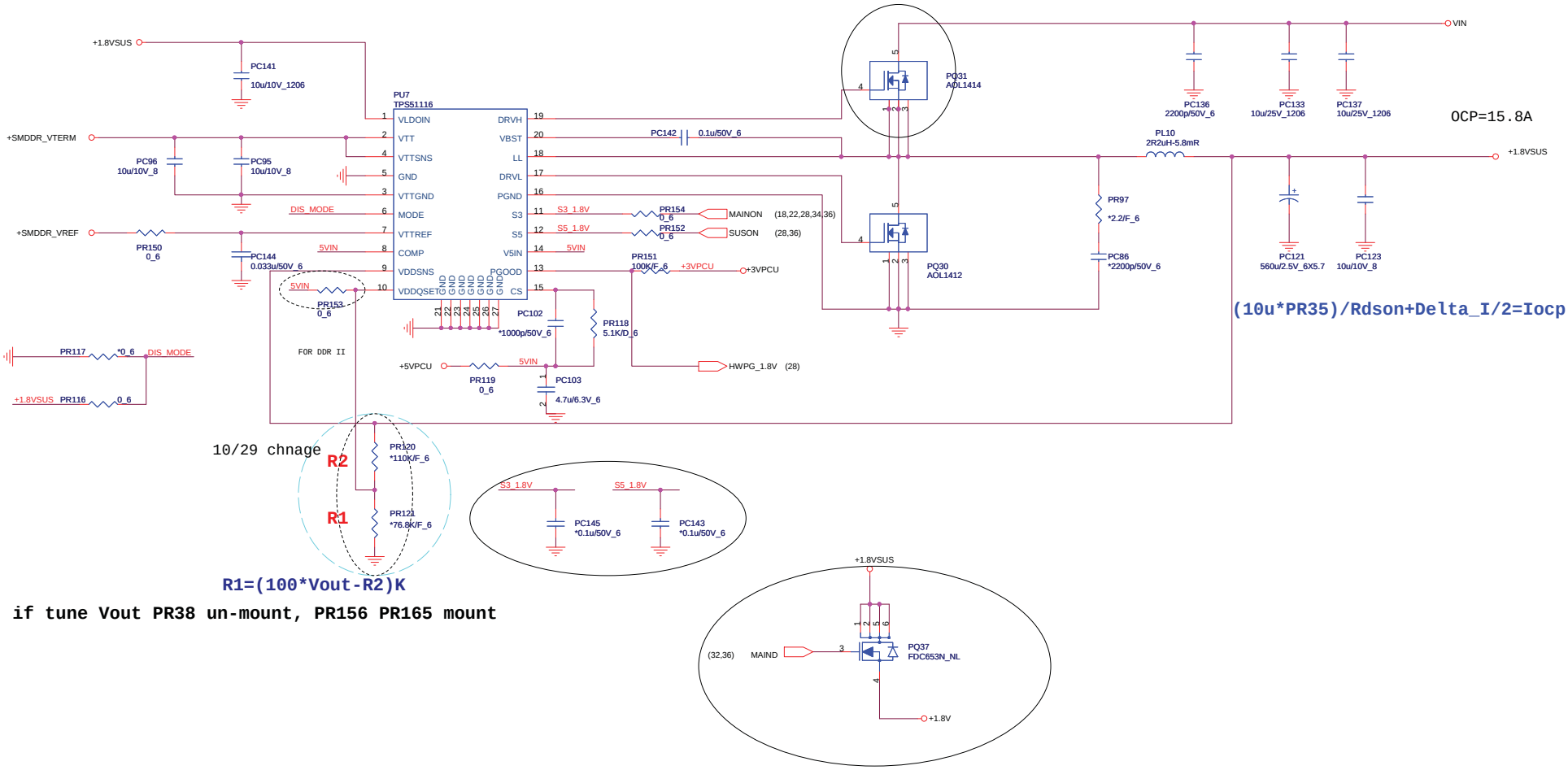
AO1412 Rds=4.6mOhm

12.17A OCP --- OC=2.8K(CS22803F914)

PROJECT : BU2/B01

Quanta Computer Inc.

Size	Document Number	Rev
	VTT 1.05V (RT8202)	1D
Date: Wednesday, January 23, 2008	Sheet 34 of 41	



PROJECT : BU2/B01

Quanta Computer Inc.

Size	Document Number	Rev
	DDR 1.8V(TPS51116)	F
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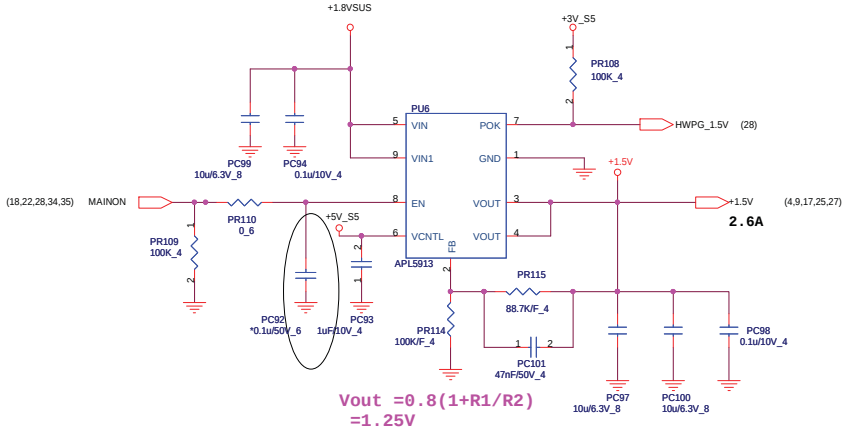

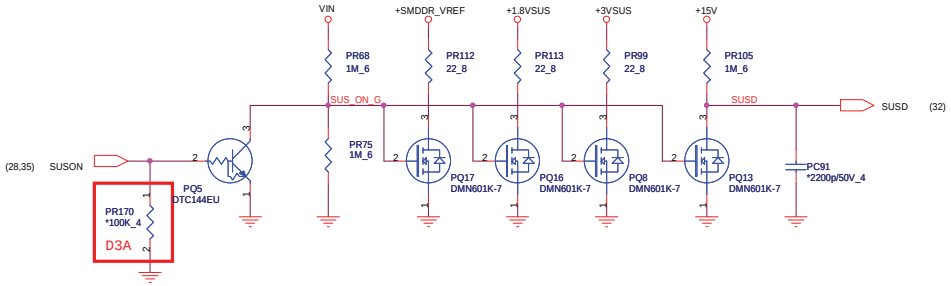

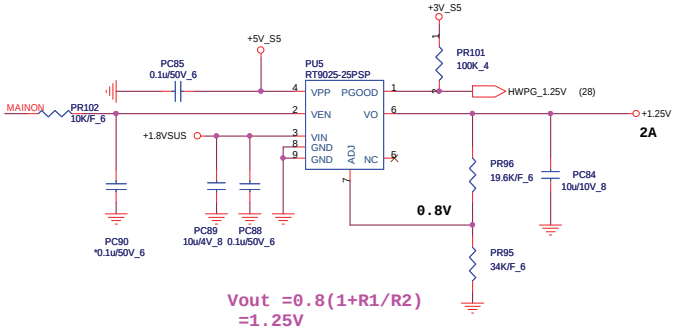

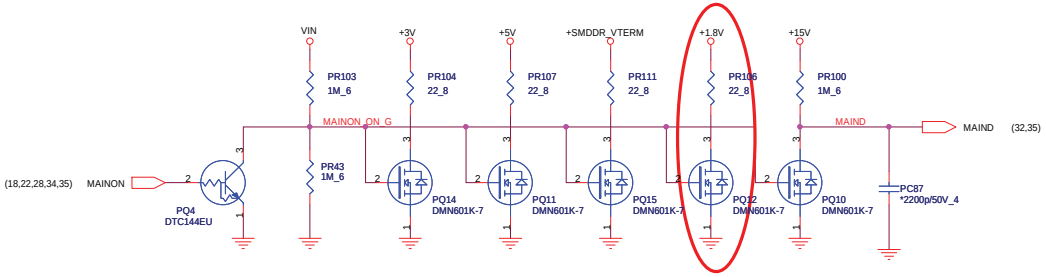

PROJECT : BU2/B01

Quanta Computer Inc.

Size	Document Number	Rev
	Discharge (1.25V/1.5V)	F
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Model	REV	DATE	CHANGE LIST	NOTE
TE1	01	20070824	FIRST RELEASED : 20070824	
	A1A	20070927	FIRST RELEASED : 20070927	
	B2A		Page 22 : U31 for G-sensor SKU must stuff,and add GS@ for BOM clear.	
			Page 22 : Change Y4/C476/C485 Value from * to **,because Gensor function default not need that.	
			Page 3/14 : Q6/Q9/Q33 BA039040039 change to BA0390400H0 for before BA039040039 cause RTC charger issue	
			Page 28 : Change SW1 to short PAD for debug only	
			Page 19 : For LED Panel C9/R10 always reserve	
			Page 14/28 : Y1/Y6 shortage issue change from BG332768909 to BG332768224	
			Page 3 : R81 stuff 10K for OD pin	
			Page 31 : CN21 BOM error,change DFHD07MR000 to DFHD14MS011	
			Page 17 : C540/C606/C289 CH6102ME904(EOL) change to CH6102M1909	
			Page 22 : U34 G-sensor P/N change same as BU1 from AL021174C00 to AR0BU1R0000	
			Page 21 : ESD1/ESD2/ESD3 always reserve for ESD solution.Change value to **	
			Page 18 : CN31/R471/R459/C530/C531/C553/C552/C486/R453/R457/R452/R458 add EV@	
			Page 27 : CN15(New card) change PCB Footprint to "ncard-13180151-u-26p-l "	
			Page 27 : U17 Value change from NEW@OZ27C10LN-B1 to NEW@OZ27C10LN-C1.Let P/N and Value match.	
			Page 21 : U11 P/N error. so change to "new part number" avoid before use error BOM.U11 reserve for sil1392.	
			Page 21 : U12 Value add IHM@ fo BOM clear.To avoid BOM build error.	
			Page 21 : U9 Value must modify from *CEC@R5F211A4SP to CEC@R5F211A4SP.To clear BOM.	
			Page 25 : CN27/CN34 MINI Card clock connect error.CN27 must connect to CLK_PCIE_MINI3/3#.CN34 must connect to CLK_PCIE_MINI2/2#.	
			Page 24/25 : C261/C246 must stuff.Before NC for A-test layout issue only.	
			Page3 : RP45 Value add NEW@ for new card clock BOM clear and better EMI result.	
			Page2 : R226 Value add *CB@ for PCMCIA clock BOM clear and better EMI result.	
			Page31 : PL6 Change PCB Footprint to "CHOKE-PCMC063T-3R3MN-BD3A" for SMT issue.	
			Page19 : U1 add pin27 to GND to meet PCB Footprint.	
			Page20 : U25 Pin3/Pin5 SWAP for layout smooth	
			Page30 : Del FM interface,Move to LAN/B.and Del C400.	
			Page26 : LAN/B CONN change to 30pin(BL121-30R-30P-L-TE1,DFFC30FR009),and add FM interface	
			Page22 : C31 change Footprint from 7343 to 3528 for placement no space for EC Xtal move.	
			Page26 : CN13 Change Footprint to 88060-12001-12P-L for ME assembly issue.	
			Page28 : U42(CIR) Change PCB Footprint for SMT suggestion,And change P/N from BEBK0076Z00 to BEBK0038Z00	
			Page29/30 : HP AMP NC,Reserve only.	
			Page26 : Del R103, TP(Mainstrem/low cost control by TP/B)	
			Page15/27 : Add R592/R593 for USB port match OC port	
			Page21 : Add R103/R594/Q46/Q47/R600/R601 for CEC level shift(BOI mail).And adjust net name for ESD protect ESD1 close to connector.	
			Page29 : Reserve R595~R598 for Audio WHQL issue.(Can not mulite strem when FM not support.	
			Page27 : LED1/LED2 change type for ME.And modify LED4 Wimax LED circuit	
			Page20 : HOLE 16 add GND for ESD	
			Page21 : Del D13/R115/R116/D14 same as BL5S	
			Page28 : EC del MMB(10pin)LED0#/1#/2#.And move BT_EN/CRT_SENSE#	
			Page26 : CN2 modify Footprint to BL123-06R-6P-L-BL5,P/N to DFFC06FR336	
			Page26 : CN4 modify Footprint to BL123-04R-4P-L-BL5,P/N to DFFC04FR012.And SWAP pin list for different Footprint	
			Page26 : CN11/CN14 modify Footprint to BL121-06R-6P-L-BL5,P/N to DFFC06FR003.	
			Page25 : CN8 modify Footprint to BL123-14R-14P-L-TE1,P/N to DFFC14FR009.	
			Page22 : CN19 change HDD Footprint to SATA-070820-QU001-22P-R-TE1	
			Page2 : C231/C234 for Y3 TXC measurement suggestion change from 33p to 30p	
			Page24 : C580/C575 for Y3 TXC measurement suggestion change from 10p to 15p	
			Page20 : Del HOLE3 for ME request	
			Page26/28 : Add LOM_DISABLE# for LAN power consumption	
			Page2 : Change R214/R211 from 33ohm to 47ohm for EA fail.	
			Page29 : CN30 use same parts for BOI project. Change to SCY DFWF04MS002.	
			Page20 : HOLE14/HOLE18 modify footprint for new card move 2mm for BOI request.	
			Page27 : Kill switch(SW2) change part for ME request.P/N is DHLLSS12P07	
			Page14 : RTC Circuit R455/R456/R449/R450 follow standar circuit value(Eric Lee)	
			Page13 : CN24 Chnage Footprint from DDR-C-292564-200P to DDR-C-292564-200P-TE1 for connector fixed pad not meet Footprint.	
			Page15/25 : Not support TV,Del USB8 and add T71/T73/T74/T75	
			Page24 : C542 stuff 22p for EMI issue.	
			Page29 : Add R517/R518 0 ohm for EMI issue.	
			Page20 : +5V/VIN add 0.1u to shape for EMI issue	
			Page17 : SB CAP cost down C579/C267	
			Page8/9 : NB CAP cost down C118/C458/C69/C155/C403/C149/C443/C436	
			Page2 : CLK CAP cost down C541	
			Page24 : Card reader cost down,del 0 ohm	
			Page19 : C16 change BOM/Footprint from CH6101M9905 to CH61001ME96 for cost down	
			Page27 : C262/C266/C84 change BOM/Footprint from CH5472K9A02 to CH5471M9907 for cost down	

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PROJECT : TE1

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	Change list	1A

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Model	REV	DATE	CHANGE LIST	NOTE
TE1	B2A		Page2429 : C567/C338/C610/C605 change BOM from CH5102K9B06 to CH5101K9B01 for cost down	
			Page?? : C596/C261/C607/C321/C482/C532/C201/C583/C582/C345/C626/C325/C623/C360/C24/C281 change BOM from CH6102K9A01 to CH61001ME96 for cost down	
			Page4 : CPU CAP C35 BOM change for cost down from CH733LM8812 to CH733RM8858	
			Page9/17 : C293/C254/C283/C102 cost down from CH5472M9901 to CH5471M9907	
			Page19 : C27 change BOM/Footprint from CH61004M398 to CH61004M291 for cost down	
			Page16 : Add FM_Detect pin to GPIO12	
			Page3 : Del C50,Add R115/R116 for shut down circuit	
			Page16 : Add FM_Detect pin to GPIO12	
			Page20 : HOLE11/HOLE28 modify Footprint for ME issue	
			Page29 : Del R528 for no space adjust modem trace	
			Page32 : Del JP1/JP2	
			Page19 : Reserve R473/R474 200K for LED drive IC	
			Page33 : Add PR155 for VRON stable	
			Page31 : MTEMP add PD13/PR156	
			Page21 : CN23(HDMI) Connect chnge Footprint and library pin define for correct library from HDMI-C12815-119A5-L-19P-V to HDMI-C12815-119A5-L-19P-V-TE1	
			Page26 : CN6 apply pin 31 and pin32. modify new footprint : BL121-32R-32P-L-TE1	
			Page29 : Change C224, C226, C227 and C228 to ESD PROTECT (ESD4, ESD5, ESD6 and ESD7 : DIODE SMD V-PORT-0603-220K-V05)	
			Page20 : C650 change to 1000P from EMI request	
			Page28 : Apply isolate TP_LED_ON from EC to Mainstream TP	
			Page20 : C641 ~ C649 apply to CC0402 = CH4104K9B03	
			Page31-38 : Update power circuit to TE1_965PM_B2A-1030-1030	
			Page20 : L1-L3 change to CX8LL470000 from EMI suggestion	
			Page20 : Modify Hole26, NC GND net for layout issue	
			Page21 : *IHM@1000p/16V_4 change to *IHM@1000p/50V_4	
			Page25 : C468 change Value from 0.01u/25V_4 to 0.01u/16V_4	
			Page25 : CN27 change to DFHD52MS146	
			Page19, 29 : INT_MIC change PN to DFHD02MR003	
			Page29 : CN39 change to DFHD04MR012	
			Page26 : CN13 change to DFFC12FR006	
			Page14 : CN28 change to DFWF02MS000	
			Page29 : R351, R354 change footprint to RC0603	
			Page26 : modify Low cost MMB pin define, CN3 pin2 change to MX5	
			Page28 : apply R486, R485 and R477 PU for Battery LED issue follow BL5	
			Page15 : Del T73, T71 for layout isse (use via to measure)	
			Page20 : del Hole10 and Hole 27 GND pin (layout issue)	
			Page30 : Stuff R357 and R369, reserve C343 U24 R367 Q24 for VR smooth modify	
			Page21 : R144 Value add /F	
	B2B		Page21 : Q7/Q8 Value add CEC@ for BOM option	
			Page21 : F3 Value add IEHM@ for BOM option	
			Page4 : C40/C41 stuff for power measurement issue	
			Page28/31 : PR29 NC / R54 stuff 100K/F for S.Y request	
			Page30 : R516/R543 stuff 1K / R354/R351 stuff 10u/10v_6	
			Page30 : VR1 change P/N from CK0000RZ004 to CK0000RZ005	
			Page15 : R569 Value add EV@ for BOM option	
			Page14 : R300/R330/R561/R562 Value add *IHM for BOM option	
			Page19 : C13 change to 33n / R14 change to 499/F. and reserve R473 and R474	
			Page- : C289, C540, C606, R351, R354 change to CH6101M9905 for Buyer issue	
			Page16 : Stuff R248 and change 0_4, and Stuff C242 change to 10p_4 for CLKUSB_48 EA fail issue	
			Page30 : CN20 change PN to DFHS12FS000 with SUY forbidden issue	
			Page28 : Add R385 and NC R56 for Boardcom BT issue	
	C2A		Page04 : C40 change Value to PC146. C41 change to PC147	
			Page30 : R354 change Value to C651. R351 change to C652.	
			Page31 : Mirror CN21 Pin define	
			Page25 : CN35 change footprint:MIPCI-88958-5204M-52P-H	
			Page28 : C379 and C401 change PN to CH6102K9A19 with BOI issue	
			Page25 : CN35 change to DIP type (footprint:MIPCI-88958-5204M-52P-V), Part Number (DFHS52FR013)	
			Page24 : CN37 change footprint to (4IN1-CM4R-118-43P-L-V), Part Number (DFHD42MS005)	

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Model	REV	DATE	CHANGE LIST	NOTE
TE1	D3A		Page19 : modify MR seneor with BLON circuit to solve flashing issue when system shut-down	
			Page30 : Change Q24 to U43 to solve VR not smooth	
			Page31,32 : Change Charger circuit to use ACOK to inform EC	
			Page29 : NC D44 to solve switch mute to un-mute, sound will delay about 2seconds	
			Page24 : Apply R351, R354, R367, R487 and R488 for EMI request	
			Page20 : EMI suggest used LL680 + 4.7 pf x6 cap to avoide CRT issue	
			Page19 : Apply U44 circuit for LED panel black light issue	
			Page27 : Change LED1 and LED2 to new part	
			Page3,5 : Apply L54 near CPU side and C666 near NB side for ESD issue	
			Page36 : Reserve SUSON PD resistor	
			Page28 : Apply R489 reserve for TP_LED_ON enable(Low Cost ID)	
			Page03 : NC C71 for Fansing speed issue follow BL5S	
			Page-- : Logo LED, function board conn and Board ID Value apply function option	
			Page21 : HDMI conn change footprint to HDMI-C12815-119A5-L-19P-V-BU2	
			Page25 : Led board conn change PN and Footprint : DFFC12FR285	
			Page25 : Function board conn (mainstream and lowcost) change PN	
			Page20 : Hole26 change footprint to h-te327x313bc295d98p2-7	
			Page22 : SATA conn change Footprint to SATA-070820-QU001-22P-R-TE1	
			Page-- : DDR socket CN24 change PN to DGMK0000040	
			WLAN minicard conn change PN to DFHS52FR016	
			Battery conn change PN to DFHD14MS014	
			ODD conn change PN to DFHS50FR034	
			1394 conn change PN to DFHS04FR109	
			Kill switch change PN to DHLLSS12P02	
			FP board conn change PN to DFHD04MRA75	
			BT conn change PN to DFHD10MR008	
			CN3 change PN and Footprint is BL136-10R-10P-L	
			CN2 chaneg PN and Footprint is BL136-06R-6P-R	
			Page-- : R275, C307, C308 , R326, R293, R248 change Footprint to -C (circle pad)	
			Page30 : Reserve R490 near VR for ESD portect	
			Page28 : Reserve D33 near CIR for ESD portect	
			Page30 : Reserve C656, C657 for audio noise debug	
			Page21 : NC R136 and C131 to solve HDMI I-diagram fail	
			Page30 : Stuff AMP1412 circut for audio noise test.	
			Page30 : Change L52, L47 to BK1608LL121 and C578 and C601 to 0.1uF to test 3G/GPRS ExpressCard noise in HP.	
			Page29-30 : C599, C598, C569, C568 apply to CH41002KB93, And L45, L46 change to CX8LL121002 for INT MIC recording noise.	
			Page30 : NC R516 and R543 to meet HP Jack signal measure and HP plug- unplug haven't happen bobo-sound too.	
			Page30 : Change C578 and C691 for 0.1u to 0.22u to enhance avoid 3G noise and meet HP Jack signal measure	
			Page25 : 刪Mini card 故障 , MB8~MB11	

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Model	REV	DATE	CHANGE LIST	NOTE
TE1	D3A			
			Inner Document	
			Change C221 to CH01506JBD9, and NC R248, C242 for CLKUSB48 measure pass	
			Add R353 to CS00002JB38 for ESD request	
			Change CN4 PN to DFFC04FR213	
			Add R459 and R471 to CS00002JB38 for EV request	
			Remove Felica function at EV sku	
			Remove MAIN@ parts at Low Cost ID Q26,Q27,R374 and R375	
			Add R542 and R490 for ESD request	
			Change R516, R543, C578 and C601 to CH41002KB93	
	E3A	20080116	Page21 : Change HDMI connector footprint to B test (HDMI-C12815-119A5-L-19P-V-TE1)	
			Page26 : Change CN6 to BL134-32RL-TA1G-32P-L	
			Page20 : Hole26 apply AGND pin for ESD	
			Page30 : HP jack pin9,10 apply GND for ESD	
			Page19,31 : Power modify for LED panel	
			Page26 : Apply CN40 for TP connector 2nd source(ACS)	
			Page21 : Change U9 PN to ARBL5MV0000	
			Page24 : PD XD_WPO#_C with R491(reserve) for XD measure	
			Page26 : Change the footprint of DFFC34FR003 from 88171-3400L-34P-L to 91504-340N-34P-L.	
			Page20 : Change L1, L2 and L3 to CX8LL470000. Change C1, C2, C4, C5, C6 and C8 to CH-686T0B07 for EA CRT measure pass	
			Page16 : Change R345 Value to WOHM@10K_4 and Change R548 to WOGS@10K_4	
			Page26: Apply FA@ at Felica function Parts Value	
			Page27 : Apply MAIN@ at Q26,Q27,R374 and R375	
			Page30 : R516 change to C659, R543 change to C658	
			Page31 : Apply varistor PD11 and PD12 to BCDA204UZ09 for ESD request	
			Page30 : Apply ESD8, ESD9(BC03220KZ19) and C660 in HP_JP for ESD solution.	
			Page27 : Change R374 and R375 from 390ohm to 150ohm base on ME request for LED light not enough	
			Page27 : Modify New card footprint to NCARD-13180151-U-26P-L-TE1	
			Page26 : NC CN13 pin3 to follow LED board	
			Page31 : PL6 change PN to CDRH104R-TE1	
			Page19 : Apply PN in R10 to CS33742FB17	
			Page14 : Modify RTC circuit to follow BL5S	
			Page30 : Remove 1412 Amp circuit	
			Page29 : Modify speaker gain to 9.7dB, R334 and R348 change to CS31053F909, R572 and R576 change to CS31603F916	
			Page27 : Change new card power switch to TI (AL002231000)	
			Page24 : NC C542 for customer request. O2 spec can't oevr 10p	
	E3A-01	20080125	BOM release	
			E3A-01	
			Page30 : Change C651 and C652 to 0_6	
			Page24 : Change R488 to 33_4	
			Page32 : Change PR76 to 10K/F and stuff PR77 to 64.9K/F	
			Page24 : Change VR1 PN to CK0000RZ006	
			E3B	
			Page14 : remove T50	
			Page19 : apply R14 Value to LED@	
			Page25 : remove R312, R301 and R327	
			Page21 : CN23 apply IEHM@ in Value	
			Page31 : PC25 change to CY060320901 for ESD	
			Page27 : NC C264 and R253 from CS32872FB11 change to CS00002JB38	
			F3A	
			Page? : EC Pin 27 connect to DISPON	
			Page22 : Q38 pin2 change to +3V_S5	
			Page19 : Change CN4 to DFFC04FR012	

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