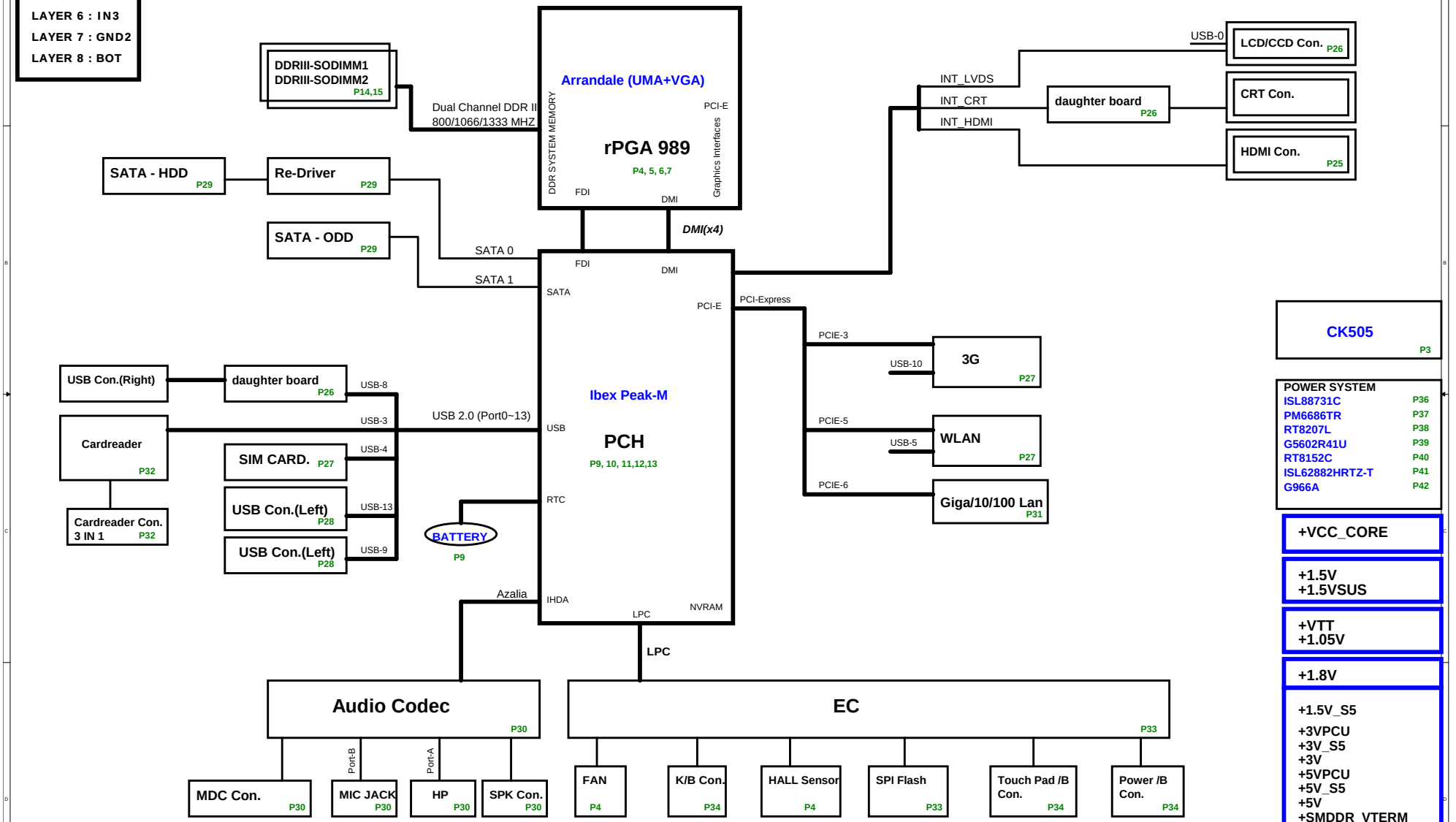
PCB STACK UP

- LAYER 1 : TOP
- LAYER 2 : GND1
- LAYER 3 : IN1
- LAYER 4 : VCC
- LAYER 5 : IN2
- LAYER 6 : IN3
- LAYER 7 : GND2
- LAYER 8 : BOT

TE4 Block Diagram



CK505 P3

POWER SYSTEM

ISL88731C	P36
PM6686TR	P37
RT8207L	P38
G5602R41U	P39
RT8152C	P40
ISL62882HRTZ-T	P41
G966A	P42

+VCC_CORE

+1.5V
+1.5VSUS

+VTT
+1.05V

+1.8V

+1.5V_S5

+3VPCU
+3V_S5
+3V
+5VPCU
+5V_S5
+5V
+SMDDR_VTERM
+SMDDR_VREF

Quanta Computer Inc.
PROJECT : TE4

Size	Document Number	Rev
	Block Diagram	1A

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Table of Contents

POWER PLANE	VOLTAGE	CONTROL SIGNAL	Power States ACTIVE IN
VIN	10V~+19V		S0~S5
+VCCRTC	+3.0V~+3.3V		S0~S5
+3V	+3.3V	MAIN_ON	S0
+3V_S5	+3.3V	S5_ON	S0~S5
+3V_HDP	+3.3V	MAIN_ON	S0
+3VPCU	+3.3V	AC/DC Insert enable	S0
+5V	+5V	MAIN_ON	S0
+5V_S5	+5V	S5_ON	S0~S5
+5VPCU	+5V	AC/DC Insert enable	S0~S5
WIMAX_P	+3.3V	WMAX_P for WLAN	
+1.8V	+1.8V	MAIN_ON	S0
+1.5V	+1.5V	MAIN_ON	S0
+1.5V_SUS	+1.5V	SUSON	S0~S3
+VCC_CORE		VRON	S0
+VTT	+1.05V	MAIN_ON	S0
+1.05V	+1.05V	MAIN_ON	S0
+VAXG		MPWROK	S0

GND PLANE	PAGE
8769AGND	33
Audio_GND	30
Shield_GND	30
GND	ALL
ISL95870A_AGND	30

Quanta Computer Inc.

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	POWER STAGE AND BOI-FUNCTION	1A

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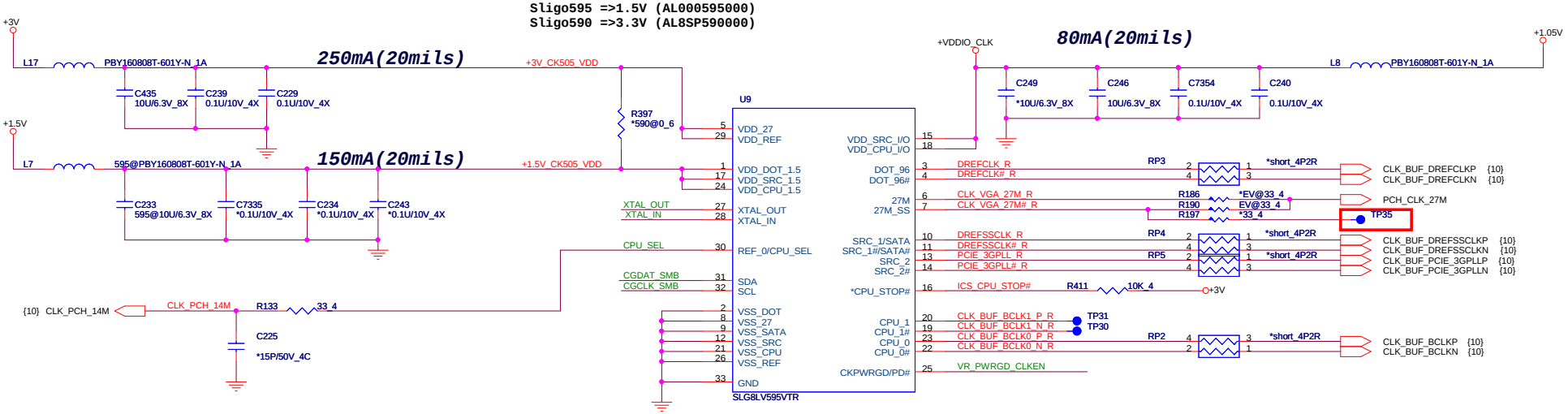
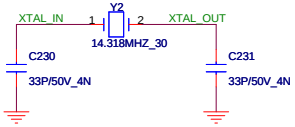
CLOCK Gen [CLK]

Pin1/17/24
Sligo595 =>1.5V (AL000595000)
Sligo590 =>3.3V (AL8SP590000)

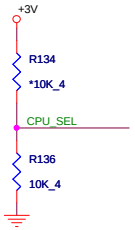
03



CLK CRYSTAL

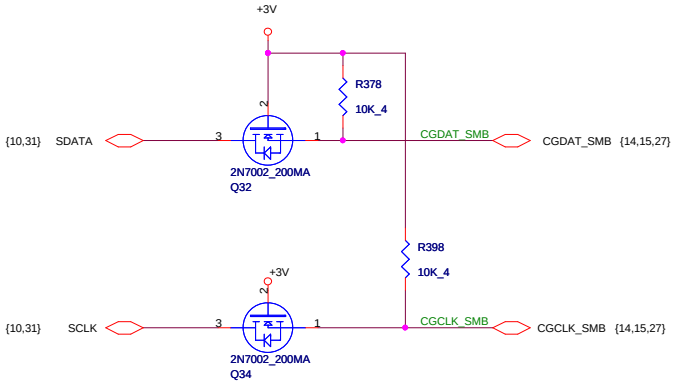


CLK CPU_SEL

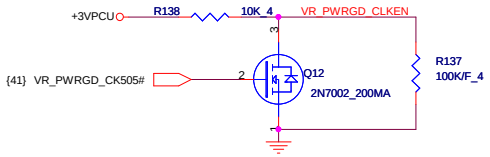


	0	1
CPU_SEL	CPU =133MHz (default)	CPU=100MHz

CLK I2C



CLK POWERGOOD



Quanta Computer Inc.
PROJECT : TE4

Size	Document Number	Rev
	CLOCK GENERATOR	A1A
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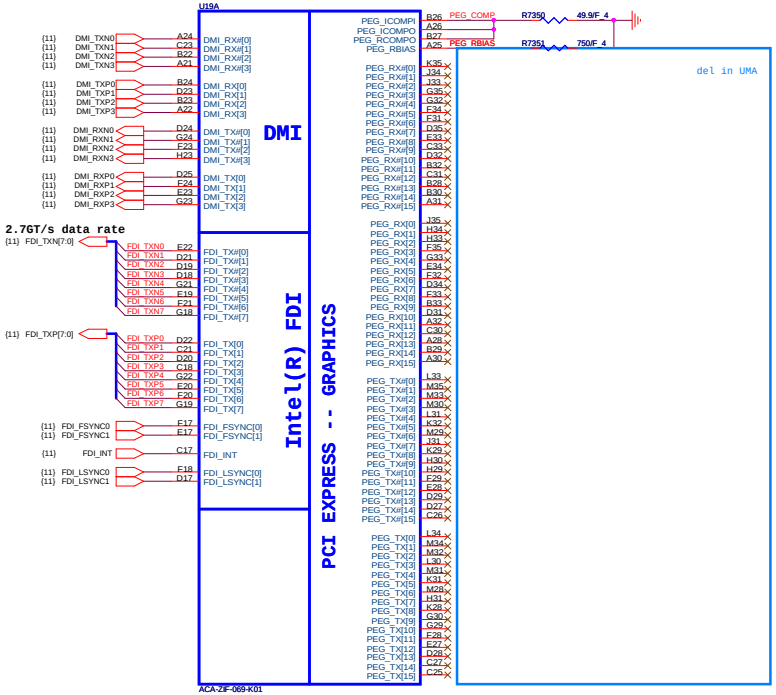
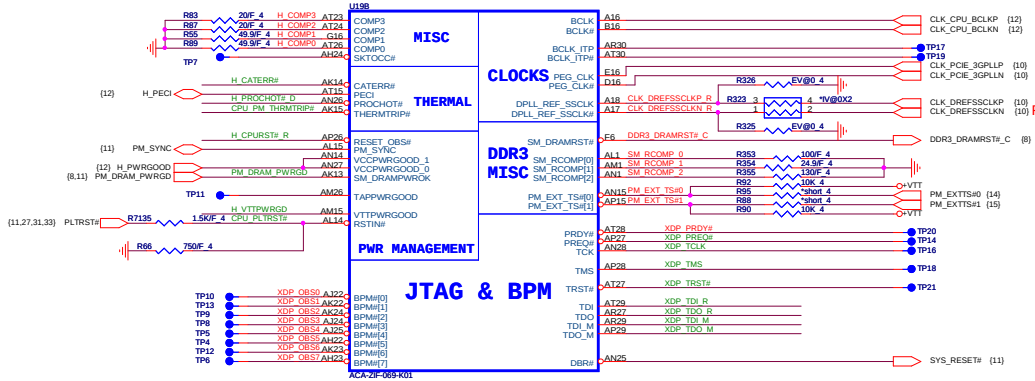
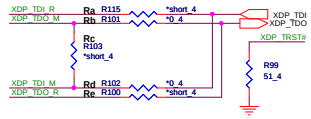




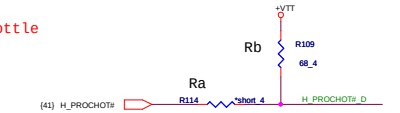
JTAG MAPPING



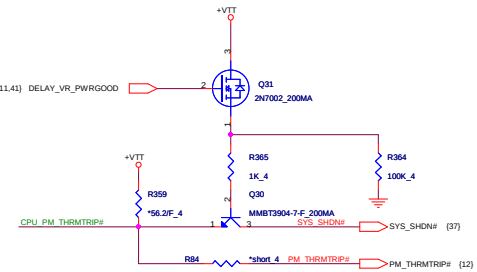
Scan Chain (Default)	STUFF -> Ra, Rc, Re NO STUFF -> Rb, Rd
CPU Only	STUFF -> Ra, Rb NO STUFF -> Rc, Rd, Re
GMCH Only	STUFF -> Rd, Re NO STUFF -> Ra, Rb, Rc

Processor hot

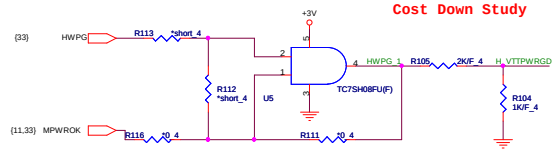
throttle

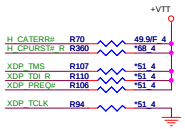


Thermal Trip



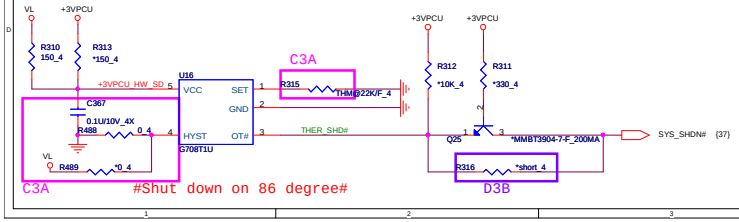
VTT Power Good



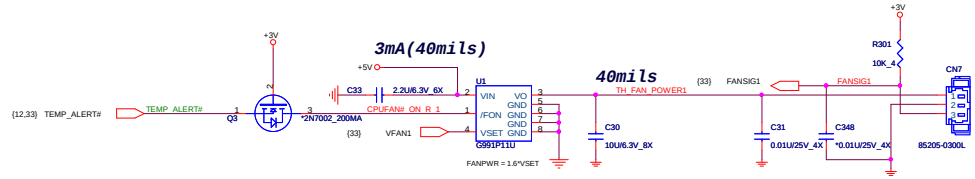


FDI Disable (Discrete only)

Local Temperature



CPU FAN CTRL



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	PROCESSER 1/4(HOST&PEX)	A1A
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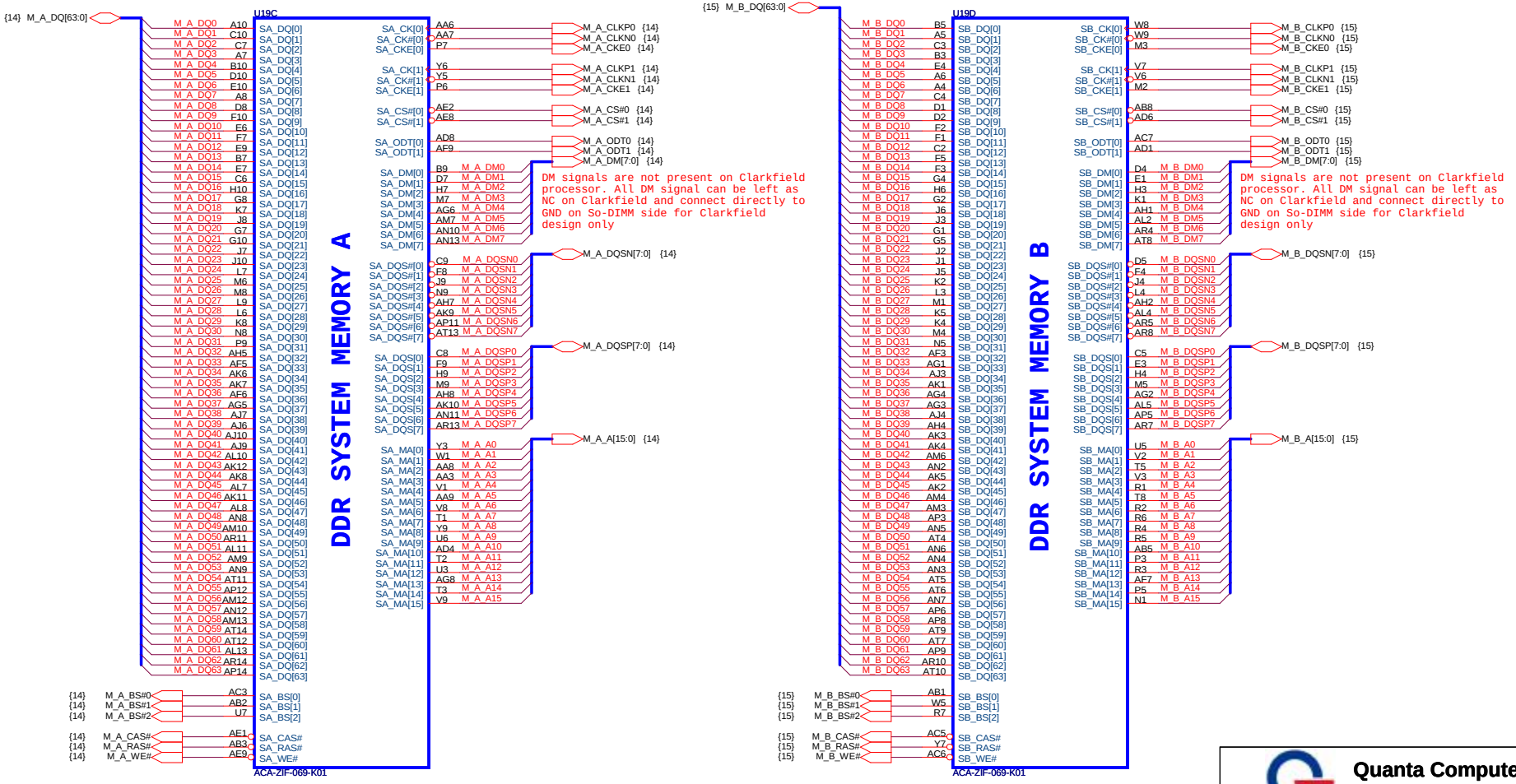
AUBURNDALE/CLARKSFIELD PROCESSOR (DDR3)



Quanta Computer Inc.

PROJECT : TE4

Size	Document Number	Rev
	PROCESSER 2/4(DDR)	A1A

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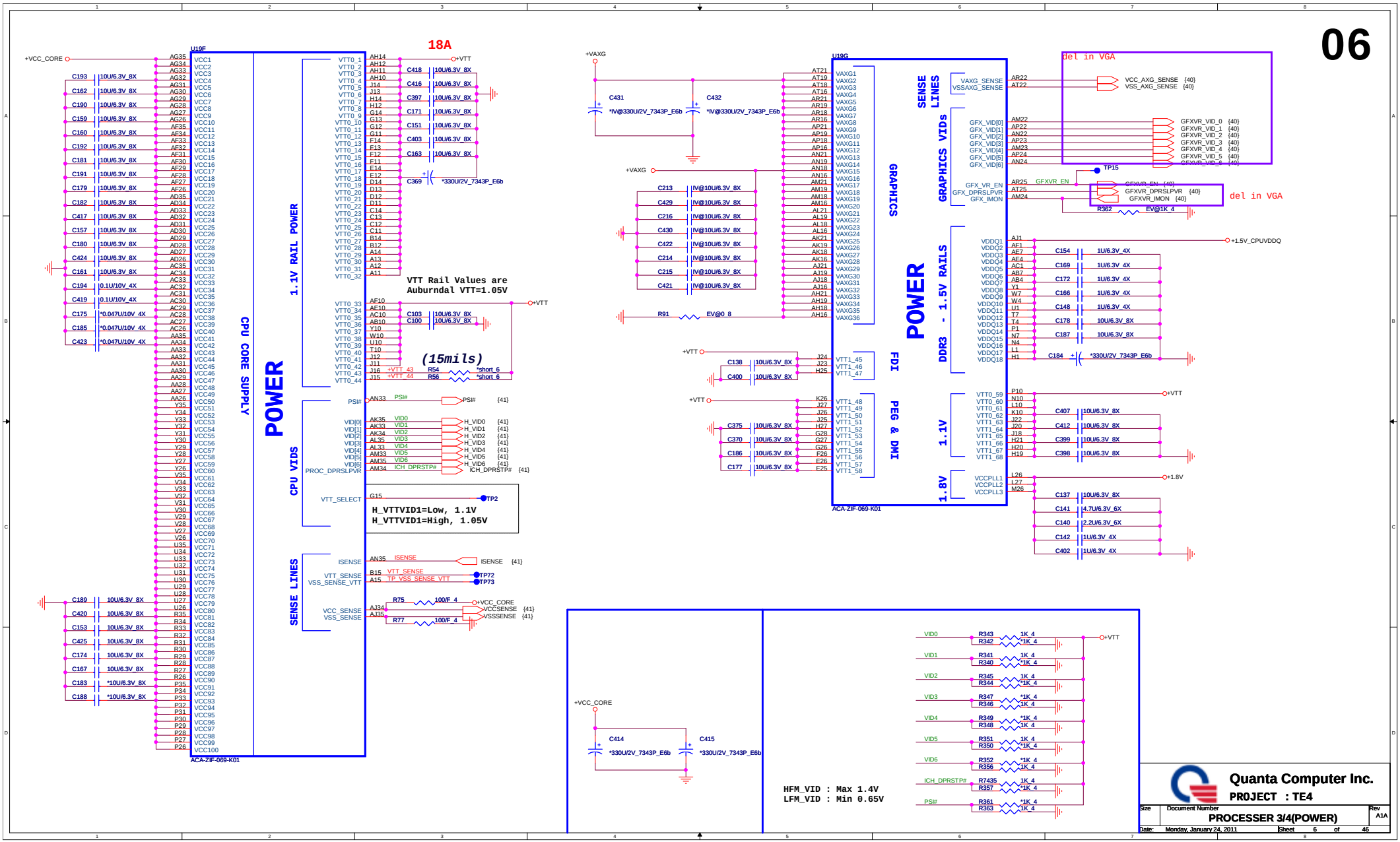
06
18A
U19F
POWER
CPU CORE SUPPLY
1.1V RAIL POWER
CPU VIDS
SENSE LINES
ACA-ZIF-069-K01
+VCC_CORE
+VTT
VTT Rail Values are
Auburndal VTT=1.05V
(15mils)
PSI#
VID[0]
VID[1]
VID[2]
VID[3]
VID[4]
VID[5]
VID[6]
PROC_DPRSLPVR
VTT_SELECT
H_VTTVID1=Low, 1.1V
H_VTTVID1=High, 1.05V
ISENSE
VTT_SENSE
VSS_SENSE_VTT
VCC_SENSE
VSS_SENSE
+VAXG
U19G
POWER
GRAPHICS
FDI
PEG & DMI
SENSE LINES
GRAPHICS VIDs
DDR3 - 1.5V RAILS
1.1V
1.8V
ACA-ZIF-069-K01
del in VGA
VCC_AXG_SENSE
VSS_AXG_SENSE
GFXVR_VID_0
GFXVR_VID_1
GFXVR_VID_2
GFXVR_VID_3
GFXVR_VID_4
GFXVR_VID_5
GFXVR_VID_6
GFXVR_EN
GFXVR_DPRSLPVR
GFXVR_IMON
+1.5V_CPUVDDQ
+1.8V
HFM_VID : Max 1.4V
LFM_VID : Min 0.65V
Quanta Computer Inc.
PROJECT : TE4
PROCESSER 3/4(POWER)
Size
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Rev
A1A
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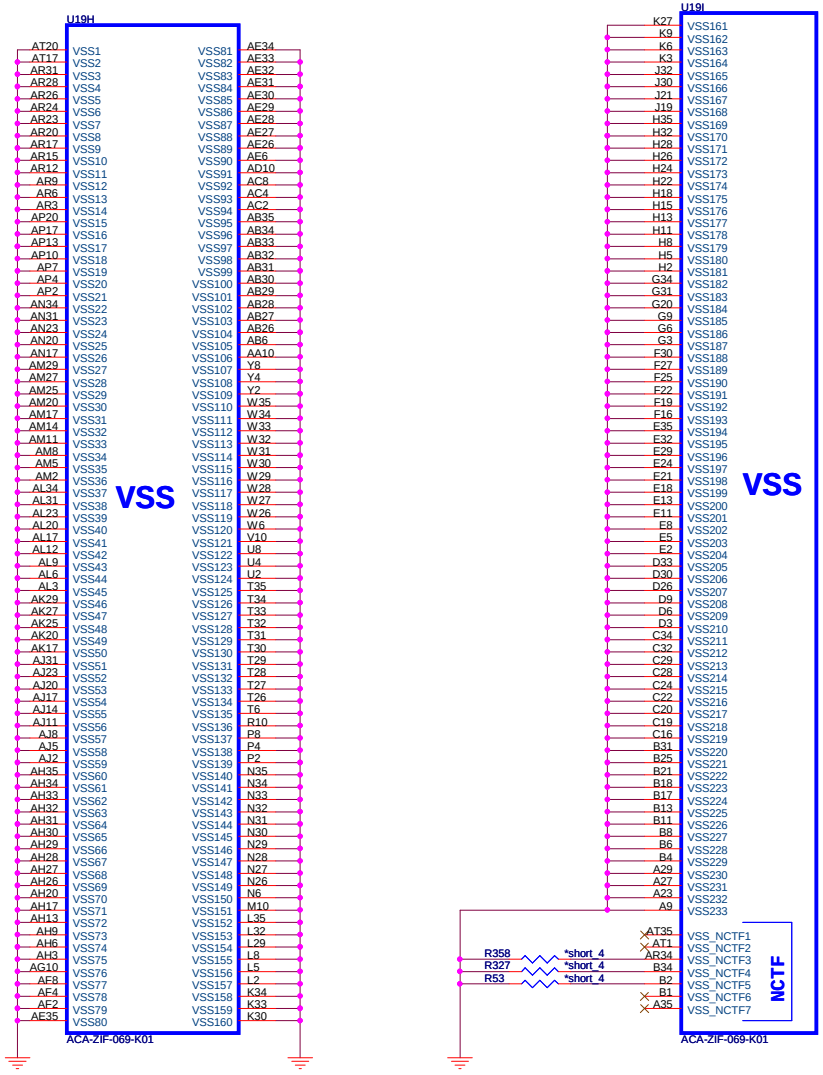
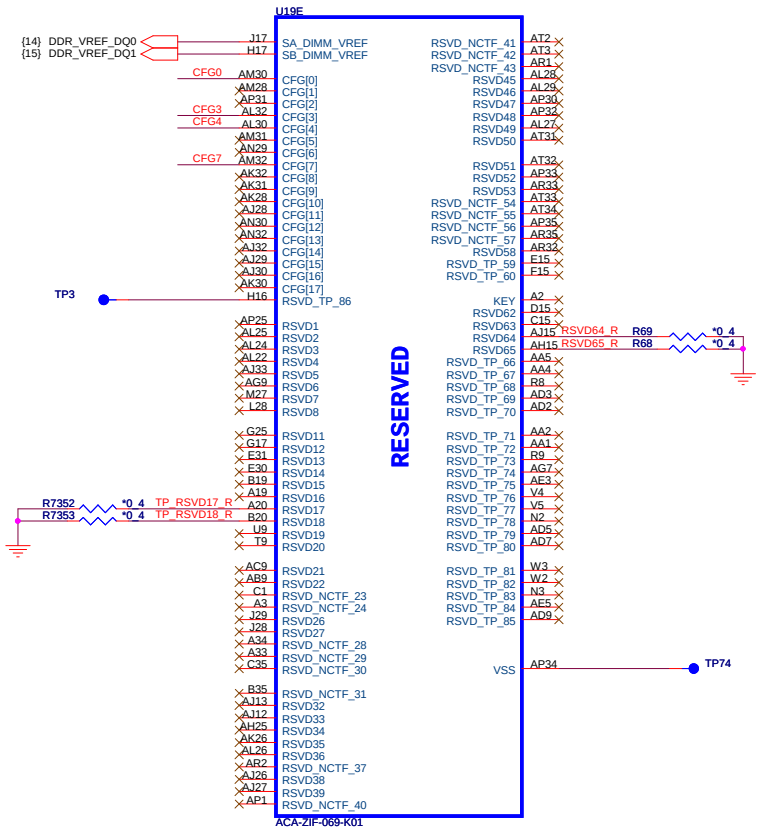
AUBURNDALE/CLARKSFIELD PROCESSOR (GND)



AUBURNDALE/CLARKSFIELD PROCESSOR(RESERVED, CFG)



CFG[1:0] - PCI_Epress Configuration Select
*** 11= 1 x 16 PEG**
*** 10= 2 x 8 PEG**

	1	0
CFG4 (Display Port Presence)	Disabled; No Physical Display Port attached to Embedded Diplay Port	Enabled; An external Display port device is connected to the Embedded Display port
CFG0 (PCI-Epress Configuration Select)	Single PEG	Bifurcation enabled
CFG3 (PCI-Epress Static Lane Reversal)	Normal Operation	Lane Numbers Reversed 15 -> 0 , 14 -> 1

For Discrete only

The Clarkfield processor's PCI Express interface may not meet PCI Express 2.0 jitter specifications. Intel recommends placing a 3.01K +/- 5% pull down resistor to VSS on CFG[7] pin for both rPGA and BGA components. This pull down resistor should be removed when this issue is fixed.

Quanta Computer Inc.
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	PROCESSER 4/4 (GND)	A1A

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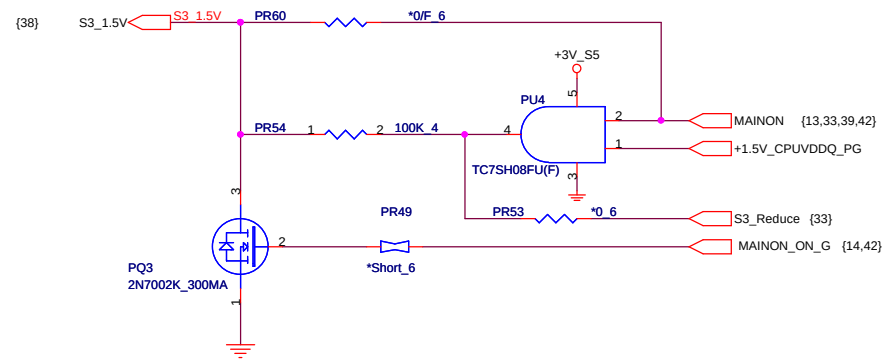
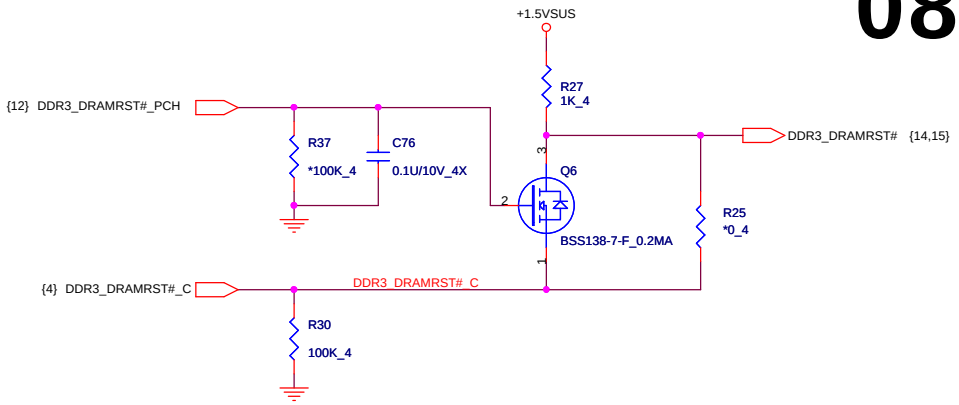
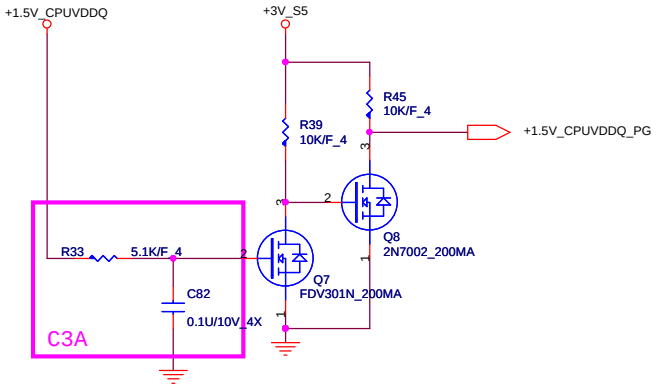
S3 Power Enable



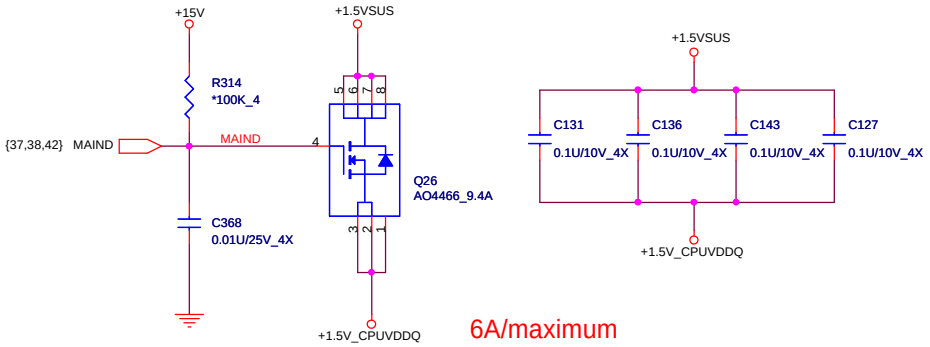
DRAM Reset



VDDQ Power Good



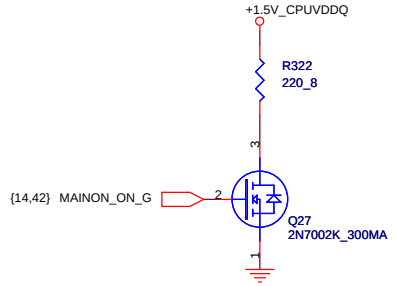
VDDQ Power Switch



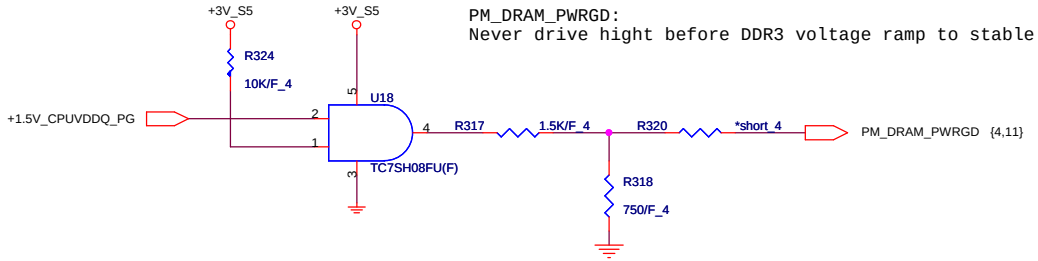
6A/maximum

Q7044可換AO6402A,cost down.

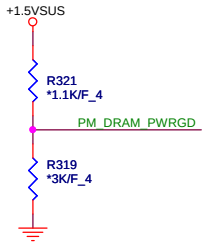
VDDQ Discharge



DRAM Power Good



PM_DRAM_PWRGD:
Never drive hight before DDR3 voltage ramp to stable



08

Quanta Computer Inc.
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	S3 Power Reduction	A1A
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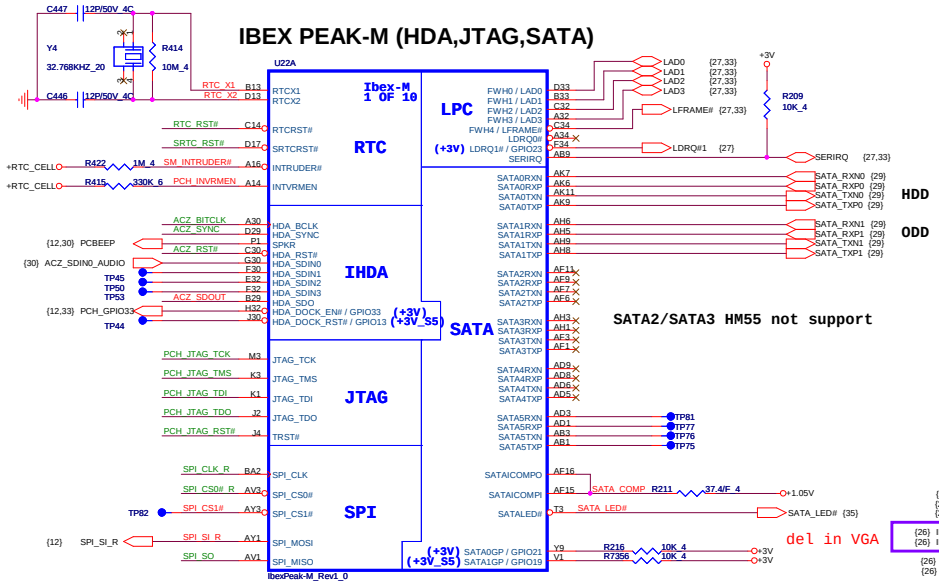
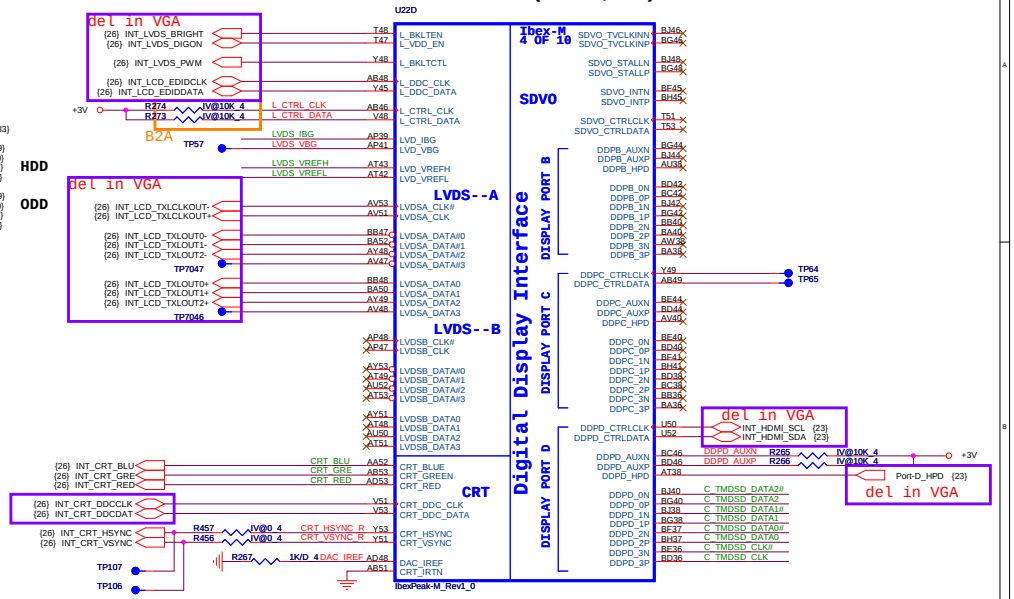
INTVRMEN - Integrated SUS 1.1V VRM Enable
High - Enable Internal VRs

IBEX PEAK-M (HDA,JTAG,SATA)

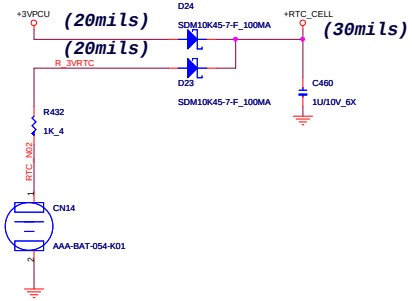


IBEX PEAK-M (LVDS,DDI)



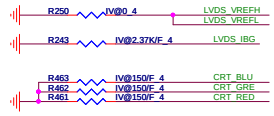
[RTC]

RTC BATTERY

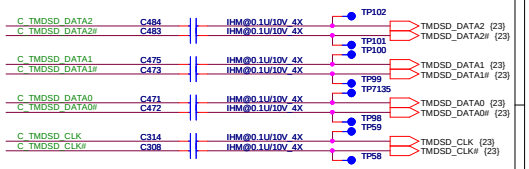


DDP Setting

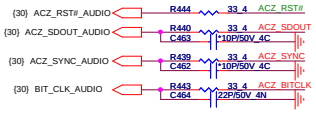
Port	Strap	How to enable Port?	How to disable Port?
LVDS	L_DDC_DATA	PU to 3.3V with 2.2k+/- 5%	NC
Port B	SDVO_CTRLDATA	PU to 3.3V with 2.2k+/- 5%	NC
Port C	DDPC_CTRLDATA	PU to 3.3V with 2.2k+/- 5%	NC
Port D	DDPD_CTRLDATA	PU to 3.3V with 2.2k+/- 5%	NC
eDP	CFG[4]	PD to GND directly	NC

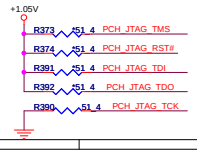


HDMI



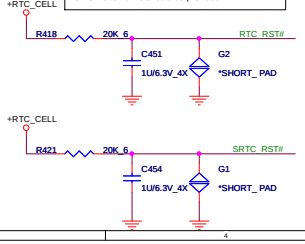
Alzia



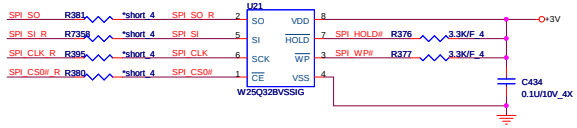


RESET JUMP

An RC delay circuit with a time delay in the range of 18 ms to 25 ms should be provided



4M byte SPI ROM



PCH	2MB	4MB	8MB
PM55	●		
HM55		●	
HM57/PM57		●	●
QM57/QS57			●

Quanta Computer Inc.
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	PCH 1/5 (SATA,HDA,LPC)	A1A
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IBEX PEAK-M (GND)

IBEX PEAK-M (PCI-E,SMBUS,CLK)

10

U22I

AY7	VSS[159]	VSS[259]	H49
B11	VSS[160]	VSS[260]	H5
B15	VSS[161]	VSS[261]	J24
B19	VSS[162]	VSS[262]	K11
B23	VSS[163]	VSS[263]	K43
B31	VSS[164]	VSS[264]	K47
B35	VSS[165]	VSS[265]	K7
B39	VSS[166]	VSS[266]	L14
B43	VSS[167]	VSS[267]	L18
B47	VSS[168]	VSS[268]	L2
B7	VSS[169]	VSS[269]	L22
BG12	VSS[170]	VSS[270]	L32
BB12	VSS[171]	VSS[271]	L36
BB16	VSS[172]	VSS[272]	L40
BB20	VSS[173]	VSS[273]	L52
BB24	VSS[174]	VSS[274]	M12
BB30	VSS[175]	VSS[275]	M16
BB34	VSS[176]	VSS[276]	M20
BB38	VSS[177]	VSS[277]	N38
BB42	VSS[178]	VSS[278]	M34
BB49	VSS[179]	VSS[279]	M38
BB5	VSS[180]	VSS[280]	M42
BC10	VSS[181]	VSS[281]	M46
BC14	VSS[182]	VSS[282]	M49
BC18	VSS[183]	VSS[283]	M5
BC2	VSS[184]	VSS[284]	M8
BC22	VSS[185]	VSS[285]	N24
BC32	VSS[186]	VSS[286]	P11
BC36	VSS[187]	VSS[287]	AD15
BC40	VSS[188]	VSS[288]	P22
BC44	VSS[189]	VSS[289]	P30
BC52	VSS[190]	VSS[290]	P32
BH9	VSS[191]	VSS[291]	P34
BD48	VSS[192]	VSS[292]	P42
BD49	VSS[193]	VSS[293]	P45
BD5	VSS[194]	VSS[294]	P47
BE12	VSS[195]	VSS[295]	R2
BE16	VSS[196]	VSS[296]	R52
BE20	VSS[197]	VSS[297]	T12
BE24	VSS[198]	VSS[298]	T41
BE30	VSS[199]	VSS[299]	T46
BE34	VSS[200]	VSS[300]	T49
BE38	VSS[201]	VSS[301]	T5
BE42	VSS[202]	VSS[302]	T8
BE46	VSS[203]	VSS[303]	U30
BE48	VSS[204]	VSS[304]	U31
BE50	VSS[205]	VSS[305]	U32
BE6	VSS[206]	VSS[306]	U34
BE8	VSS[207]	VSS[307]	P38
BF3	VSS[208]	VSS[308]	V11
BF49	VSS[209]	VSS[309]	F16
BF51	VSS[210]	VSS[310]	V19
BG18	VSS[211]	VSS[311]	V20
BG24	VSS[212]	VSS[312]	V22
BG4	VSS[213]	VSS[313]	V30
BG50	VSS[214]	VSS[314]	V31
BH11	VSS[215]	VSS[315]	V32
BH15	VSS[216]	VSS[316]	V34
BH19	VSS[217]	VSS[317]	V35
BH23	VSS[218]	VSS[318]	V38
BH31	VSS[219]	VSS[319]	V43
BH35	VSS[220]	VSS[320]	V45
BH39	VSS[221]	VSS[321]	V46
BH43	VSS[222]	VSS[322]	V47
BH47	VSS[223]	VSS[323]	V49
BH7	VSS[224]	VSS[324]	V5
C12	VSS[225]	VSS[325]	V7
C50	VSS[226]	VSS[326]	V8
D51	VSS[227]	VSS[327]	W2
E12	VSS[228]	VSS[328]	W52
E16	VSS[229]	VSS[329]	Y11
E20	VSS[230]	VSS[330]	Y12
E24	VSS[231]	VSS[331]	Y15
E30	VSS[232]	VSS[332]	Y19
E34	VSS[233]	VSS[333]	Y23
E38	VSS[234]	VSS[334]	Y28
E42	VSS[235]	VSS[335]	Y30
E46	VSS[236]	VSS[336]	Y31
E48	VSS[237]	VSS[337]	Y32
E6	VSS[238]	VSS[338]	Y38
E8	VSS[239]	VSS[339]	Y43
F49	VSS[240]	VSS[340]	Y46
F5	VSS[241]	VSS[341]	P49
G10	VSS[242]	VSS[342]	Y5
G14	VSS[243]	VSS[343]	Y6
G18	VSS[244]	VSS[344]	Y8
G2	VSS[245]	VSS[345]	P24
G22	VSS[246]	VSS[346]	T43
G32	VSS[247]	VSS[347]	AD51
G36	VSS[248]	VSS[348]	AT8
G40	VSS[249]	VSS[349]	AD47
G44	VSS[250]	VSS[350]	Y47
G52	VSS[251]	VSS[351]	AT12
AF39	VSS[252]	VSS[352]	AM6
H16	VSS[253]	VSS[353]	AT13
H20	VSS[254]	VSS[354]	AM5
H30	VSS[255]	VSS[355]	AK45
H34	VSS[256]	VSS[356]	AK39
H38	VSS[257]	VSS[366]	AV14
H42	VSS[258]		

IbexPeak-M_Rev1_0

U22B

Ibex-M 2 OF 10

PCI-E*

TP93 TP92 TP90 TP91 → BG30 BJ30 BF29 BH29 PERN1 PERP1 PETN1 PETP1

TP56 TP52 TP46 TP47 → AW30 BA30 BC30 BD30 PERN2 PERP2 PETN2 PETP2

3G: {27} PCIE_RXN3 / {27} PCIE_RXP3 / {27} PCIE_TXN3 / {27} PCIE_TXP3; C304 3G@0.1U/10V_4X; C302 3G@0.1U/10V_4X; PCIE_TXN3_C PCIE_TXP3_C → AU30 AT30 AU32 AV32 PERN3 PERP3 PETN3 PETP3

TP55 TP54 TP49 TP48 → BA32 BB32 BD32 BE32 PERN4 PERP4 PETN4 PETP4

WLAN: {27} PCIE_RXN5 / {27} PCIE_RXP5 / {27} PCIE_TXN5 / {27} PCIE_TXP5; C467 0.1U/10V_4X; C470 0.1U/10V_4X; PCIE_TXN5_C PCIE_TXP5_C → BF33 BH33 BG32 BJ32 PERN5 PERP5 PETN5 PETP5

LAN: {31} PCIE_RXN6 / {31} PCIE_RXP6 / {31} PCIE_TXN6 / {31} PCIE_TXP6; C298 0.1U/10V_4X; C291 0.1U/10V_4X; PCIE_TXN6_C PCIE_TXP6_C → BA34 AW34 BC34 BD34 PERN6 PERP6 PETN6 PETP6

AT34 AU34 AU36 AV36 PERN7 PERP7 PETN7 PETP7

TP96 TP95 TP7035 TP97 → BG34 BJ34 BG36 BJ36 PERN8 PERP8 PETN8 PETP8

AK48 AK47 CLKOUT_PCIE0N CLKOUT_PCIE0P

PCIE_CLK_REQ0# → P9 PCIECLKRQ0# / GPIO73 (+3V_S5); TP60 TP68 → AM43 AM45 CLKOUT_PCIE1N CLKOUT_PCIE1P

PCIE_CLK_REQ1# → U4 PCIECLKRQ1# / GPIO18 (+3V); TP63 TP67 → AM47 AM48 CLKOUT_PCIE2N CLKOUT_PCIE2P

PCIE_CLK_REQ2# → N4 PCIECLKRQ2# / GPIO20 (+3V)

LAN: {31} CLK_PCIE_LAN# / {31} CLK_PCIE_LAN → AH42 AH41 CLKOUT_PCIE3N CLKOUT_PCIE3P

LAN: {31} PCIE_CLK_REQ3# → A8 PCIECLKRQ3# / GPIO25 (+3V_S5)

3G: {27} CLK_PCIE_3G# / {27} CLK_PCIE_3G → AM51 AM53 CLKOUT_PCIE4N CLKOUT_PCIE4P

3G: {27} PCIE_CLK_REQ4# → M9 PCIECLKRQ4# / GPIO26 (+3V_S5)

WLAN: {27} CLK_PCIE_MINI# / {27} CLK_PCIE_MINI → AJ50 AJ52 CLKOUT_PCIE5N CLKOUT_PCIE5P

WLAN: {27} PCIE_CLK_RQ5# → H6 PCIECLKRQ5# / GPIO44 (+3V_S5)

TP104 TP103 → AK53 AK51 CLKOUT_PEG_B_N CLKOUT_PEG_B_P

PCIE_CLK_REQB# → P13 PEG_B_CLKRQ# / GPIO56 (+3V_S5)

IbexPeak-M_Rev1_0

SMBus

(+3V_S5) SMBALERT# / GPIO11 → B9 SMBALERT#

SMBCLK → H14 SCLK → SCLK {3,31}

SMBDATA → C8 SDATA → SDATA {3,31}

(+3V_S5) SML0ALERT# / GPIO60 → J14 SMBL0ALERT#

SML0CLK → C6 SMB_CLK_ME0

SML0DATA → G8 SMB_DATA_ME0

(+3V_S5) SML1ALERT# / GPIO74 → M14 SML1ALERT#

(+3V_S5) SML1CLK / GPIO58 → E10 MBCLK2

(+3V_S5) SML1DATA / GPIO75 → G12 MBDATA2

Controller Link

CL_CLK1 → T13 → T3

CL_DATA1 → T11 → T2

CL_RST1# → T9 → T1

PEG

(+3V_S5) PEG_A_CLKRQ# / GPIO47 → H1 CLK_PEGA_REQ# → CLK_PEGA_REQ#

CLKOUT_PEG_A_N → AD43

CLKOUT_PEG_A_P → AD45

CLKOUT_DMI_N → AN4 → CLK_PCIE_3GPLLN {4}

CLKOUT_DMI_P → AN2 → CLK_PCIE_3GPLLP {4}

del in UMA

From CLK BUFFER

CLKOUT_DP_N / CLKOUT_BCLK1_N → AT1 → CLK_DREFSSCLKN {4}

CLKOUT_DP_P / CLKOUT_BCLK1_P → AT3 → CLK_DREFSSCLKP {4}

CLKIN_DMI_N → AW24 → CLK_BUF_PCIE_3GPLLN {3}

CLKIN_DMI_P → BA24 → CLK_BUF_PCIE_3GPLLP {3}

CLKIN_BCLK_N → AP3 → CLK_BUF_BCLKN {3}

CLKIN_BCLK_P → AP1 → CLK_BUF_BCLKP {3}

CLKIN_DOT_96N → F18 → CLK_BUF_DREFCLKN {3}

CLKIN_DOT_96P → E18 → CLK_BUF_DREFCLKP {3}

CLKIN_SATA_N / CKSSCD_N → AH13 → CLK_BUF_DREFSSCLKN {3}

CLKIN_SATA_P / CKSSCD_P → AH12 → CLK_BUF_DREFSSCLKP {3}

REFCLK14IN → P41 R256 *short_4 → CLK_PCH_14M {3}

CLKIN_PCILOOPBACK → J42 CLK_PCI_FB → CLK_PCI_FB {11}; C317 *22P/50V_4N

XTAL25_IN → AH51 XTAL25_IN

XTAL25_OUT → AH53 XTAL25_OUT

XCLK_RCOMP → AF38 XCLK_RCOMP R254 90.9/F_4 +1.05V

Clock Flex

(+3V) CLKOUTFLEX0 / GPIO64 → T45 CLK_FLEX0 R272 10K_4 +3V

(+3V) CLKOUTFLEX1 / GPIO65 → P43 CLK_FLEX1 → T18

(+3V) CLKOUTFLEX2 / GPIO66 → T42 CLK_FLEX2 → T13

(+3V) CLKOUTFLEX3 / GPIO67 → N50 CLK_CARD_5159 → CLK_CARD_5159 {32}

C493 22P/50V_4N

+3V

PCIE_CLK_REQ1# R385 10K_4

PCIE_CLK_REQ2# R389 10K_4

+3V_S5

PCIE_CLK_REQ0#	R124	10K_4
PCIE_CLK_REQ3#	R404	*10K_4
PCIE_CLK_REQ4#	R173	10K_4
PCIE_CLK_REQB#	R144	10K_4
PCIE_CLK_RQ5#	R172	10K_4
SMBALERT#	R406	10K_4
SMBL0ALERT#	R198	10K_4
SMB_CLK_ME0	R399	2.2K_4
SMB_DATA_ME0	R170	2.2K_4
SML1ALERT#	R125	10K_4
MBCLK2	R188	4.7K_4
MBDATA2	R189	4.7K_4
SCLK	R156	2.2K_4
SDATA	R401	2.2K_4

CLK_PEGA_REQ# R393 IV@10K_4

R367 *EV@10K_4

SMBUS

MBCLK2 → Q15 (1, 3, 2) 2N7002_200MA → 2ND_MBCLK {33}

+3V_S5

MBDATA2 → Q13 (1, 3, 2) 2N7002_200MA → 2ND_MBDATA {33}

CRYSTAL

Placement close

R464 EV@0_4

XTAL25_IN → C491 IV@27P/50V_4N

R455 IV@1M/F_4

Y5 IV@25MHZ_30

XTAL25_OUT → C495 IV@27P/50V_4N

Quanta Computer Inc.

PROJECT : TE4

Size	Document Number	Rev
	PCH 2/5 (PCIE, SMBUS, CK)	A1A
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IBEX PEAK-M (PCI,USB,NVRAM)

IBEX PEAK-M (DMI,FDI,GPIO)

PCI

NVRAM

USB

DMI

FDI

System Power Management

EMI

SUS_PWR_ACK

PWROK

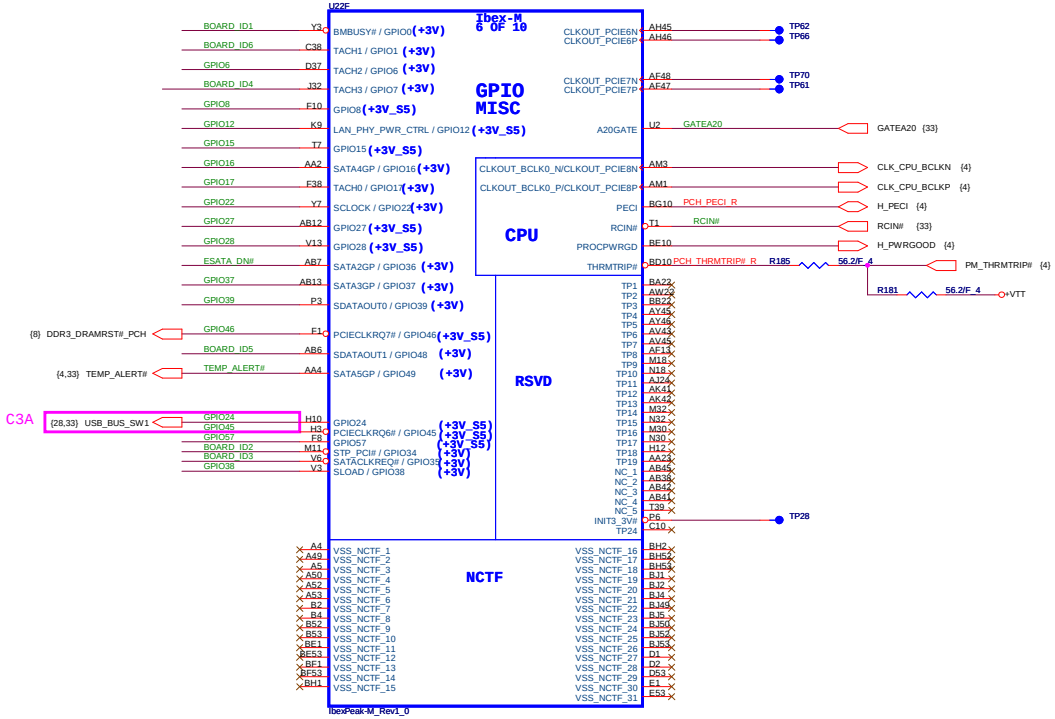
RESET

Study Cost Down

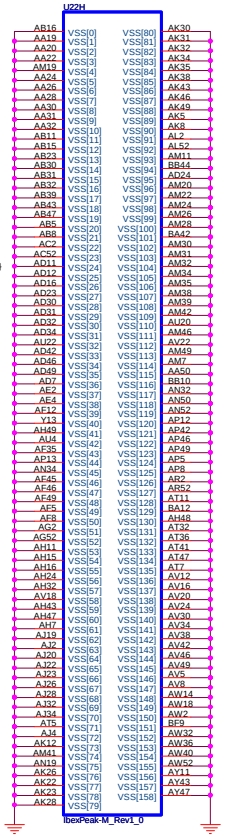
Quanta Computer Inc.
PROJECT : TE4

Size	Document Number	Rev
	PCH 3/5 (PCI,ONFI,USB,DMI)	A1A
Date: Monday, January 24, 2011	Sheet 11 of 46	

IBEX PEAK-M (GPIO,VSS_NCTF,RSVD)



IBEX PEAK-M (GND)



PCH Strap Pin Configuration Table

SPKR

{9,30} PCBEEP — *1K/F_4 — R388 — +3V

0 = Default Mode (Internal weak Pull-down)
1 = No Reboot Mode with TCO Disabled

GNT3#/ GPIO55

{11} GNT3# — R460 — *10K/F_4

0 = Default Mode (Internal weak Pull-down)
1 = No Reboot Mode with TCO Disabled

HDA_DOCK_EN #/GPIO33

{9,33} PCH_GPIO33 — R237 — 1K/F_4 — JP1 — *SHORT PAD

0 = Top Block Swap Mode
1 = Default Mode (Internal pull-up)

GNT0#, GNT1#

{11} GNT0# — GNT0# R270 *1K/F_4
{11} GNT1# — GNT1# R271 *1K/F_4

Boot BIOS Strap		
PCI_GNT0#	GNT#1	Boot BIOS Location
0	0	LPC
0	1	Reserved (NAND)
1	0	PCI
1	1	SPI

SPI_MOSI

{9} SPI_SI_R — R7355 — *1K_4 — +3V

NV_ALE

{11} NV_ALE — R403 — *10K_4 — +1.8V

1 = Enabled
0 = Disabled (Default)

GPIO8

GPIO8 — R149 — 10K_4 — +3V_S5

This signal has a weak internal pull up.
NOTE: This signal should not be pulled low

GPIO15

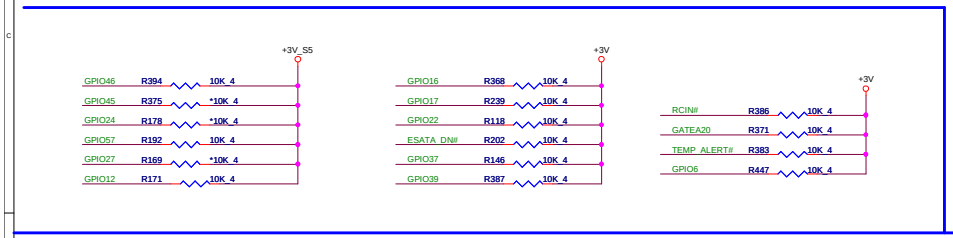
GPIO15 — R126 — 1K_4 — +3V_S5

0 = Intel ME Crypto Transport Layer Security (TLS) cipher suite with no confidentiality
1 = Intel ME Crypto Transport Layer Security (TLS) cipher suite with confidentiality

GPIO27

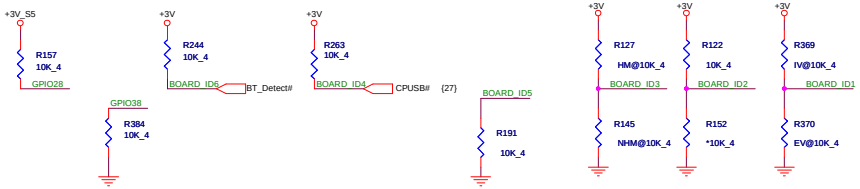
GPIO27 — R182 — *10K_4

0 = Disables the VccVRM. Need to use on-board filter circuits for analog rails.
1 = Enables the internal VccVRM to have a clean supply for analog rails. No need to use on-board filter circuit.
This signal has a weak internal pull-up.



BOARD ID SETTING

Board ID	ID1	ID2	ID3	ID4	ID5	ID6	GPIO28	GPIO38
UMA SKU VGA SKU	H L							
W/ MDC W/O MDC		H L						
W/ HDMI W/O HDMI			H L					
W/O 3G W/ 3G				H L				
15" 14"					H L			
W/O BT W/ BT						H L		
14 or 15 13							H L	
Old HW(2010) New HW(2011)								H L



Quanta Computer Inc.
PROJECT : TE4D

Size	Document Number	Rev
	PCH 4/5 (GPIO & Strap)	A1A
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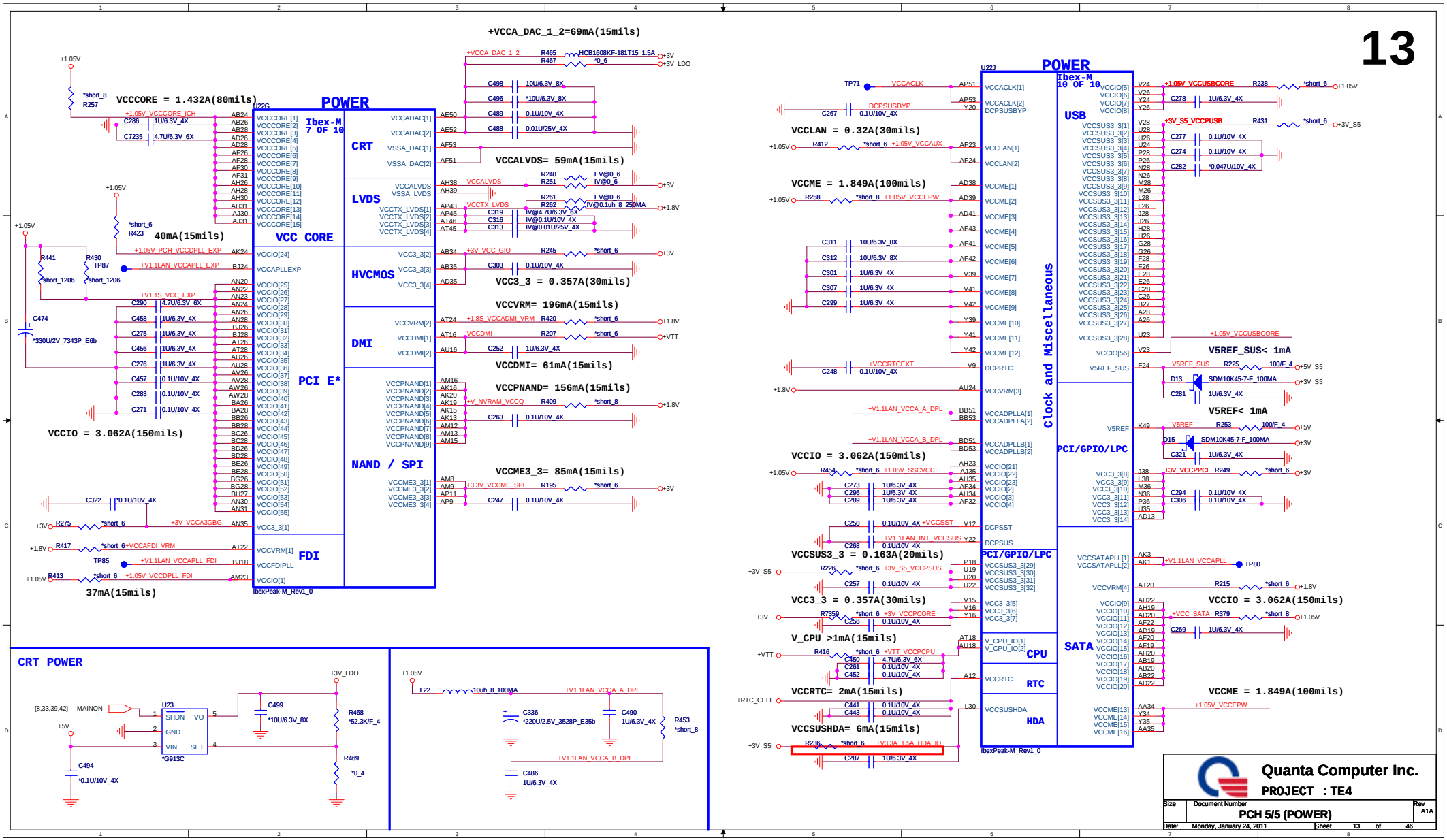

Quanta Computer Inc.
PROJECT : TE4

Size	Document Number	Rev
	PCH 5/5 (POWER)	A1A
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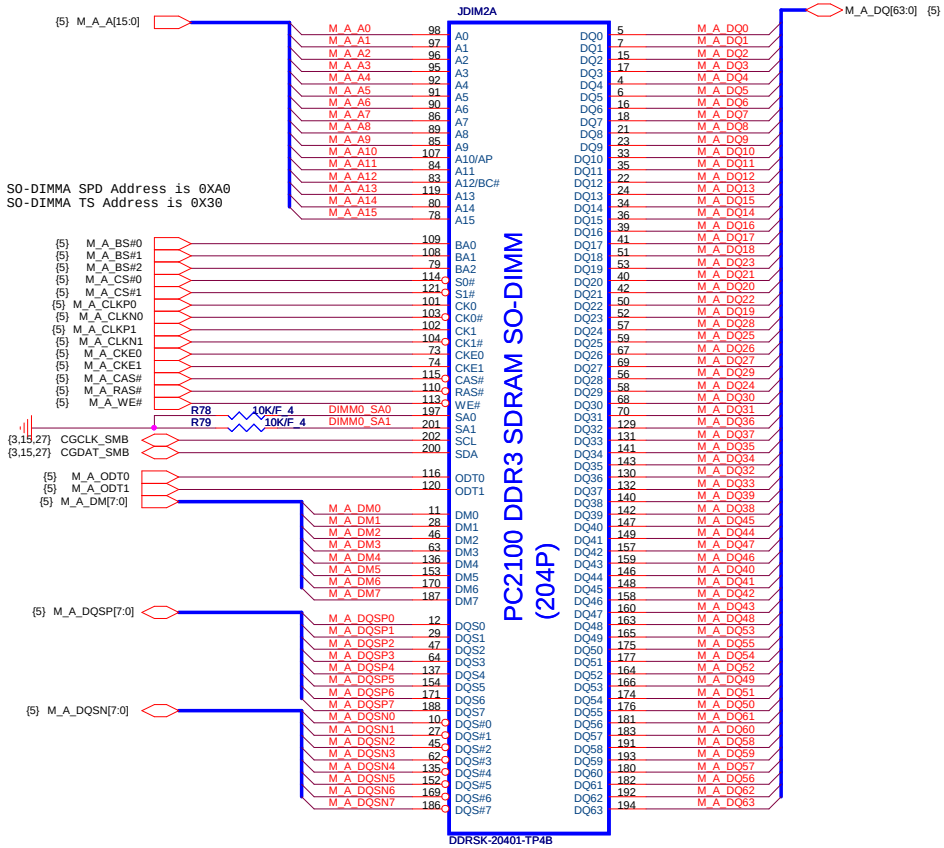
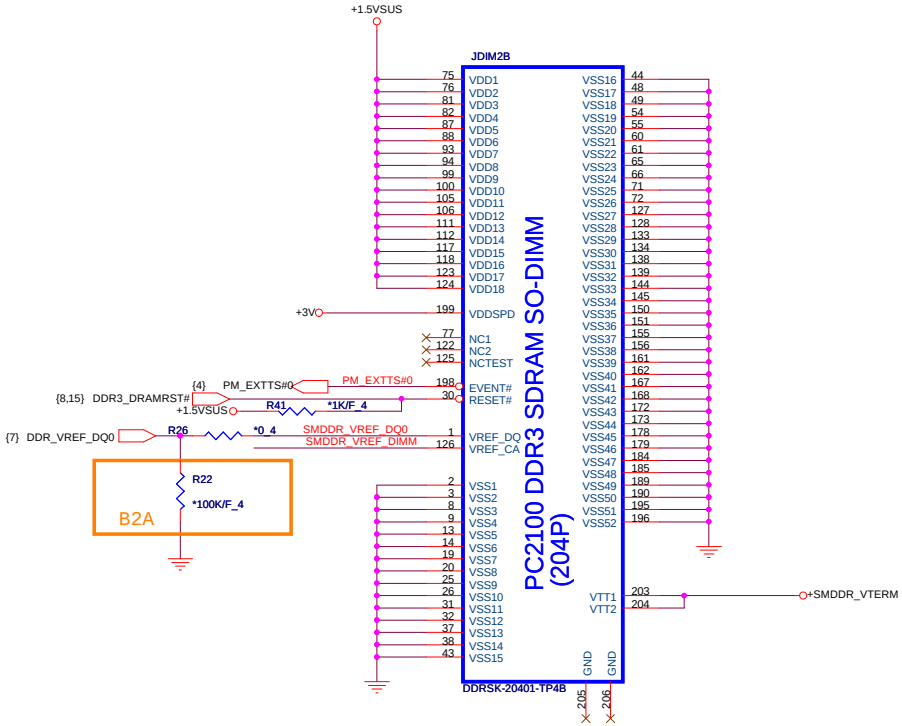
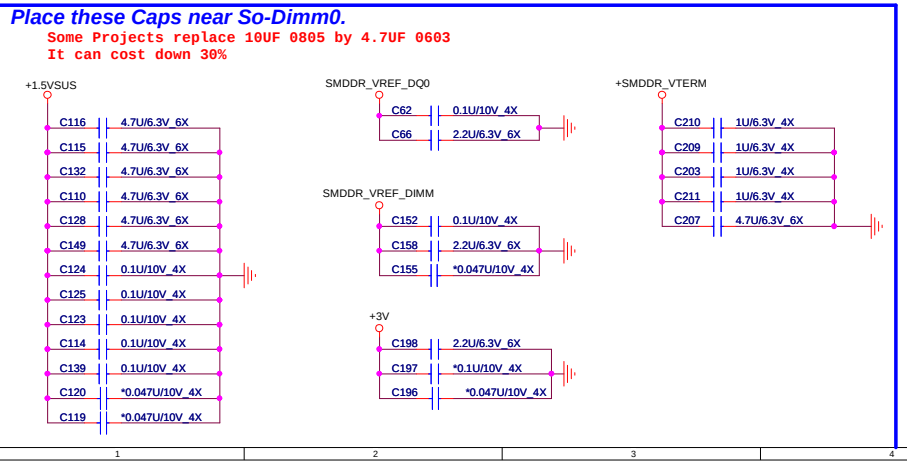
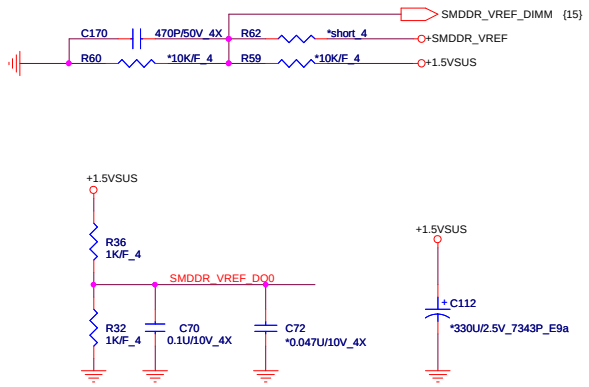
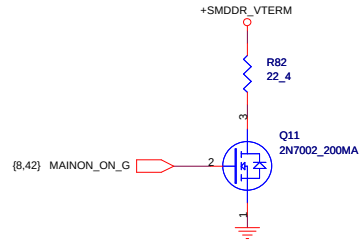
H=4











Quanta Computer Inc.
PROJECT : TE4

Size	Document Number	Rev
	DDR3 DIMM-0	A1A

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H=8

JDIM1A

PC2100 DDR3 SDRAM SO-DIMM (204P)

DDRSK-20401-TP8D

SO-DIMMB SPD Address is 0XA4
SO-DIMMB TS Address is 0X34

JDIM1B

PC2100 DDR3 SDRAM SO-DIMM (204P)

DDRSK-20401-TP8D

B2A

Place these Caps near So-Dimm1.

Some Projects replace 10UF 0805 by 4.7UF 0603

It can cost down 30%

+1.5VSUS

C129 4.7U/6.3V_6X
C111 4.7U/6.3V_6X
C147 4.7U/6.3V_6X
C133 4.7U/6.3V_6X
C146 4.7U/6.3V_6X
C117 4.7U/6.3V_6X
C121 0.1U/10V_4X
C122 0.1U/10V_4X
C113 0.1U/10V_4X
C118 0.1U/10V_4X
C134 0.1U/10V_4X
C126 *0.047U/10V_4X
C130 *0.047U/10V_4X

SMDDR_VREF_DIMM

C164 0.1U/10V_4X
C168 2.2U/6.3V_6X
C156 *0.047U/10V_4X

SMDDR_VREF_DQ1

C60 0.1U/10V_4X
C57 2.2U/6.3V_6X

+3V

C199 2.2U/6.3V_6X
C202 *0.1U/10V_4X
C201 *0.047U/10V_4X

+SMDDR_VTERM

C204 1U/6.3V_4X
C205 1U/6.3V_4X
C208 1U/6.3V_4X
C206 1U/6.3V_4X
C212 4.7U/6.3V_6X

+1.5VSUS

R31 1K/F_4
SMDDR_VREF_DQ1
R7035 1K/F_4
C64 0.1U/10V_4X
C67 *0.047U/10V_4X

+1.5VSUS

C108 *330U/2.5V_7343P_E9a

Quanta Computer Inc.			
PROJECT : TE4			
Size	Document Number		Rev
	DDR3 DIMM-1		A1A
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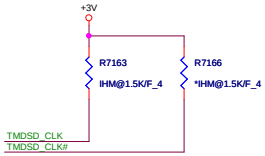
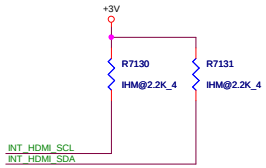
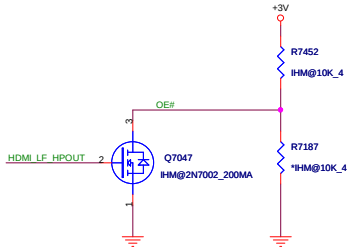
Display Port Enable [HDM]



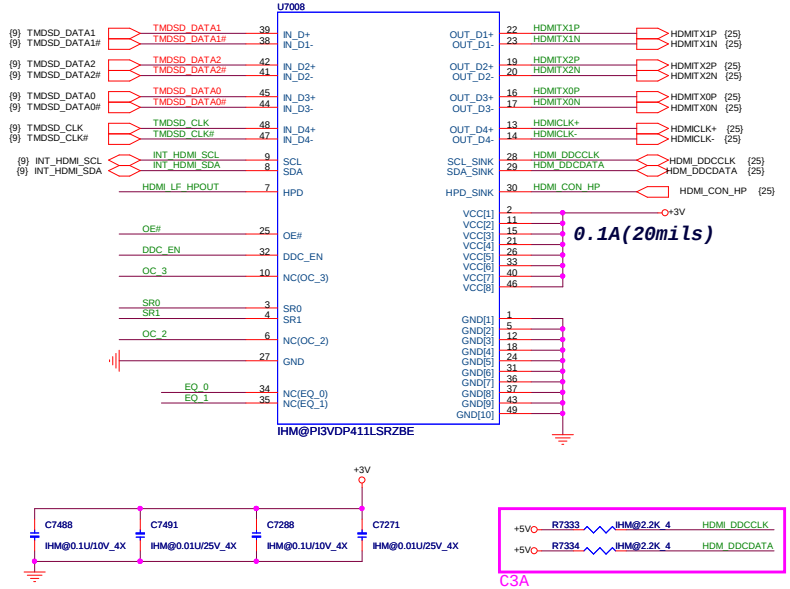
I2C PU



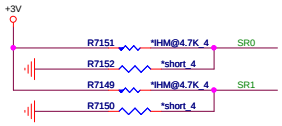
LEVEL SHIFT ENABLE

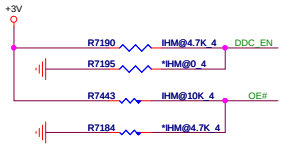


HDMI LEVEL SHIFT (UMA)



LEVEL SHIFT SETTING



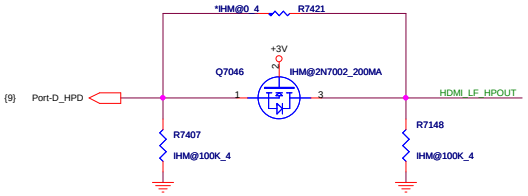


Slew Rate Control Function

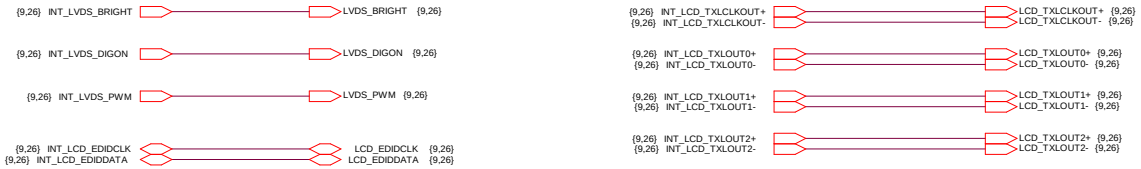
SR1	SR0	Rise/Fall Time
1	1	140ps
1	0	130ps
0	1	120ps
0	0	110ps

Reserve

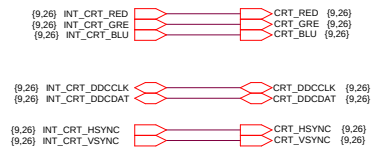
Hot Plug Detector (UMA)



LVDS (UMA)



CRT (UMA)



Quanta Computer Inc.
PROJECT : TE4

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	UMA	A1A

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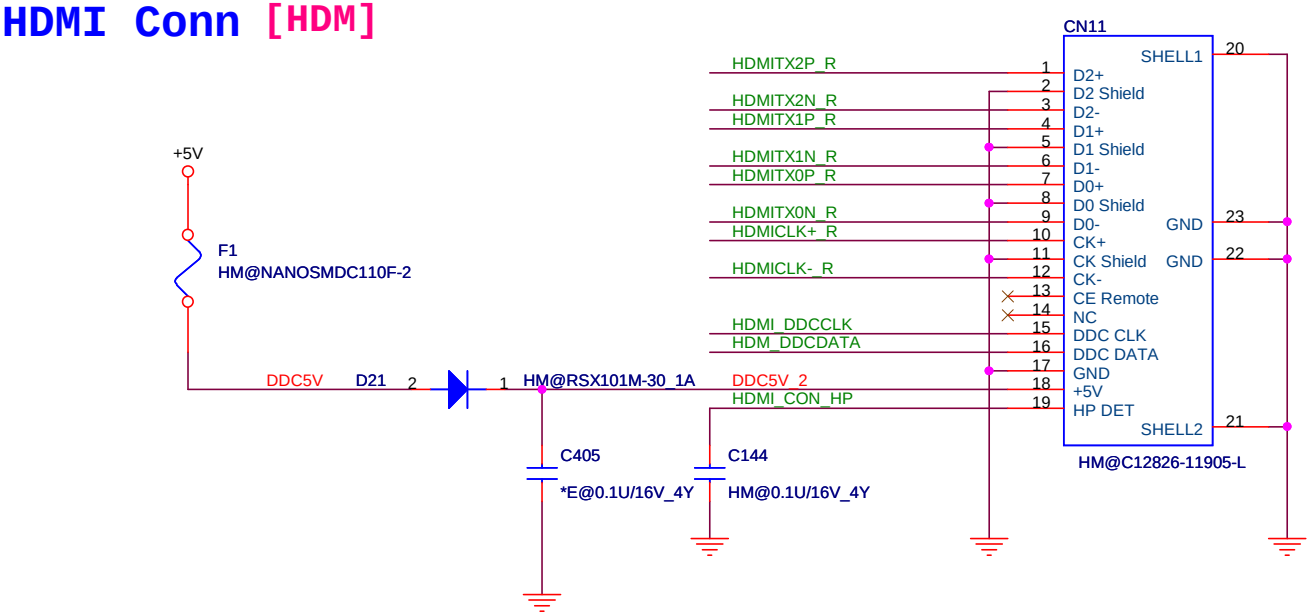
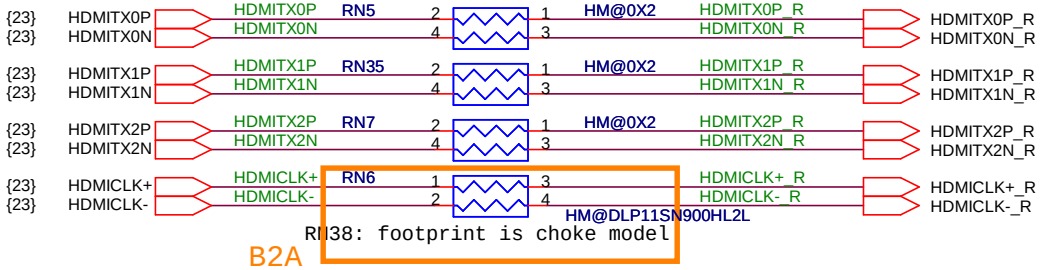
HDMI Conn [HDM]

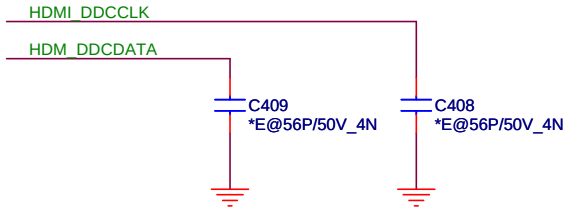




near to CN13

B2A EMI

此組之後可以刪掉，重覆到了



Quanta Computer Inc.

PROJECT : TE4

Size	Document Number	Rev
	HDMI CONN	A1A
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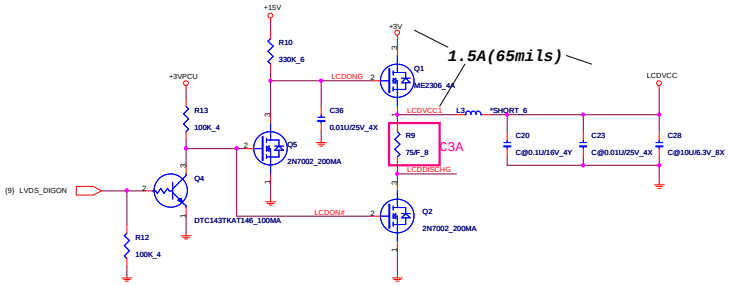
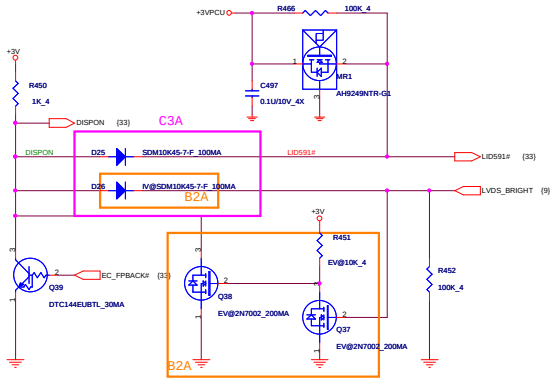
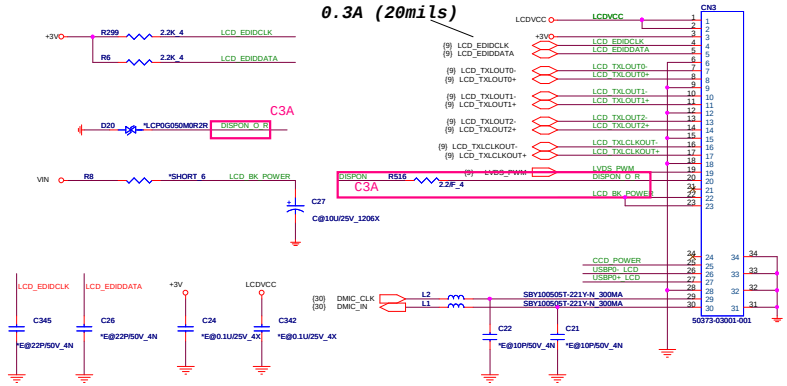
LCD POWER SWITCH
<LDS>



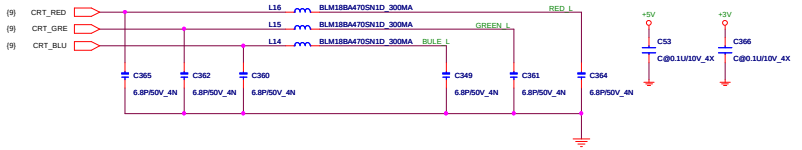
HALL Sensor
<HSR>



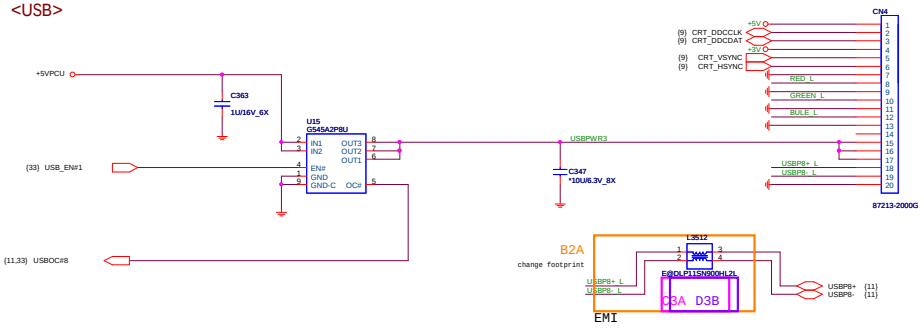
LCD Panel Module
[LDS]



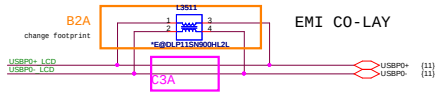
CRT

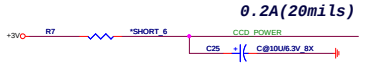


USB for CRT BOARD (Right) <USB>



CCD
[CCD]





Quanta Computer Inc.
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Size	Document Number	Rev
	LCD/LED Panel/CCD	A1A
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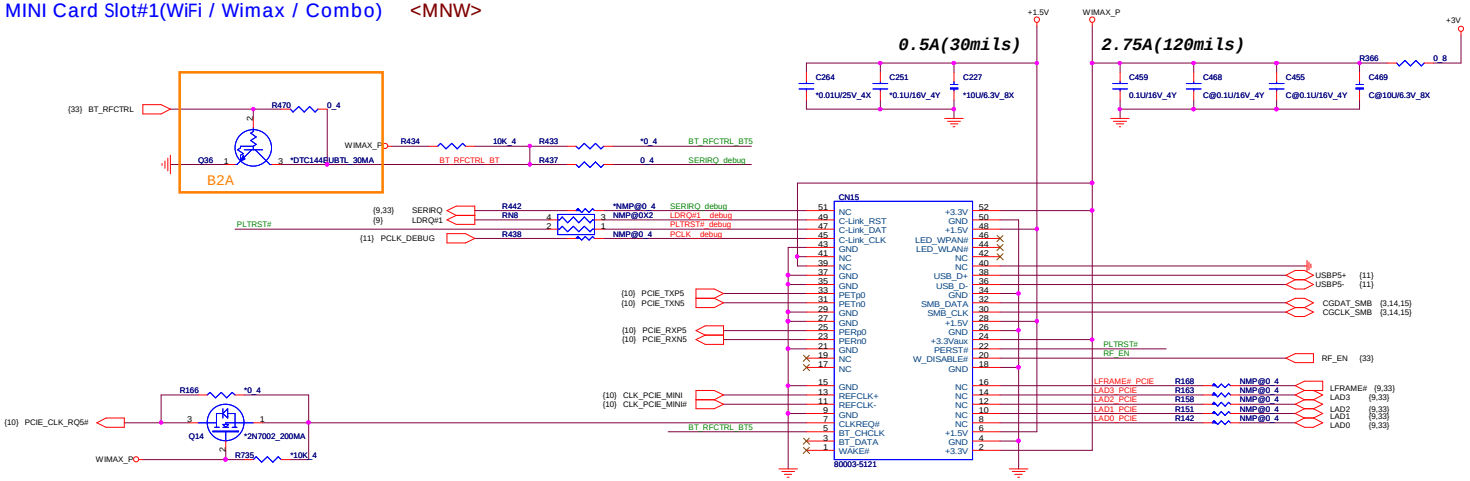
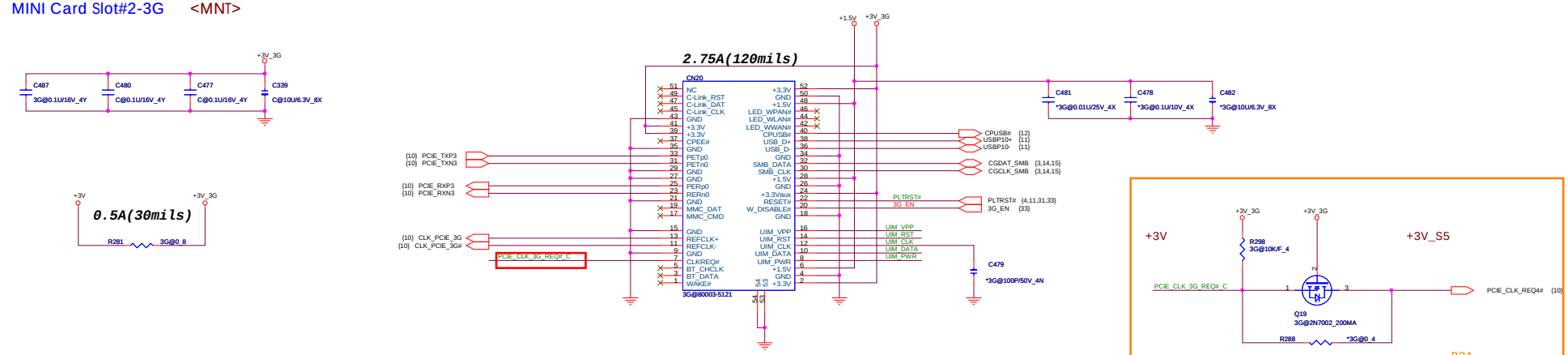
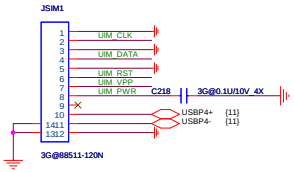
MINI Card Slot#1(WiFi / Wimax / Combo) <MNW>



MINI Card Slot#2-3G <MNT>



SIM CARD



Quanta Computer Inc.
PROJECT : TE4D
Size: Document Number: MINI CARD(WLAN/3G/SIM Card) Rev: A1A
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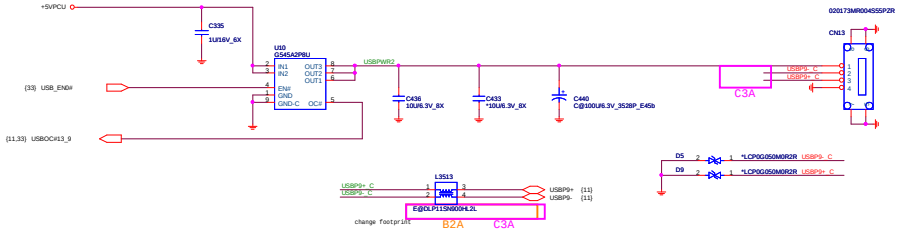
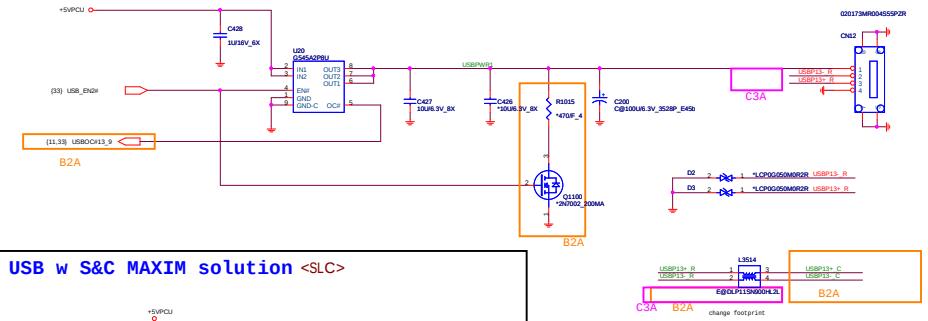
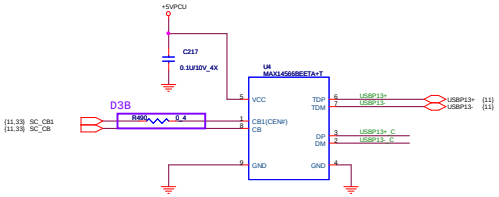
USB2.0 MB SIDE (Left) 1 <USB>



USB2.0 MB SIDE (Left) 2 <USB>

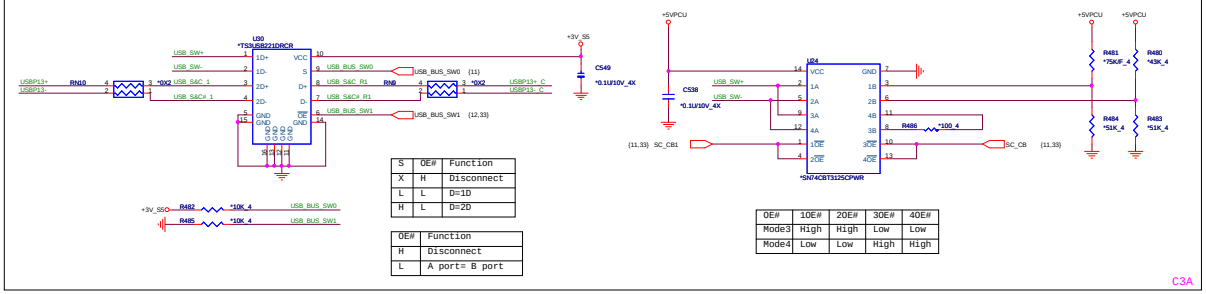


USB w S&C MAXIM solution <SLC>



CB0	CB1	Status
0	0	Auto mode
0	1	Force dedicated charger mode
1	X	Pass-Through(USB) mode: Connect DP/DM to TDP/TDM

USB w S&C TI solution <SLC>



S	OE#	Function
X	H	Disconnect
L	L	D=1D
H	L	D=2D

OE#	Function
H	Disconnect
L	A port= B port

OE#	1OE#	2OE#	3OE#	4OE#
Mode3	High	High	Low	Low
Mode4	Low	Low	High	High

C3A

Quanta Computer Inc.
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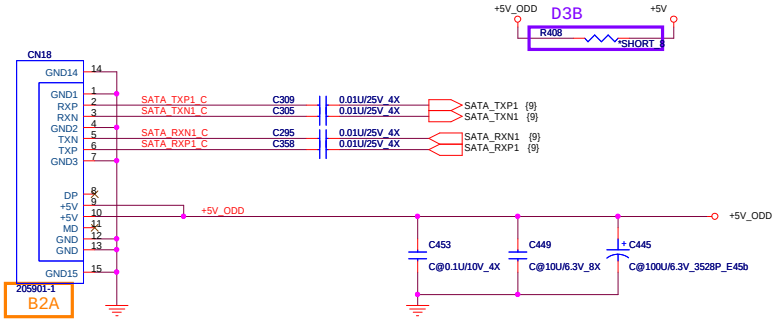
SATA ODD

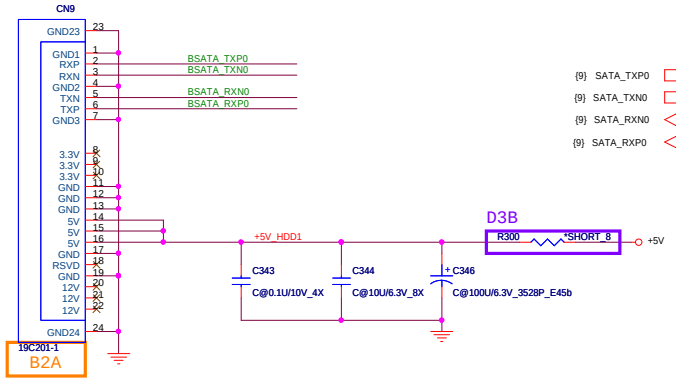
[ODD]



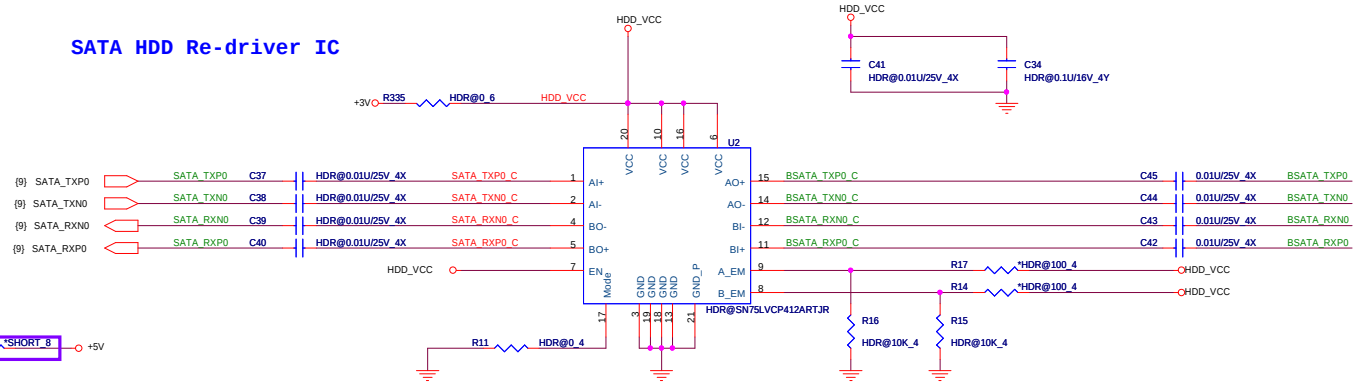
ODD Zero power . (Only for Intel)<OZP>

SATA HDD

[HDD]

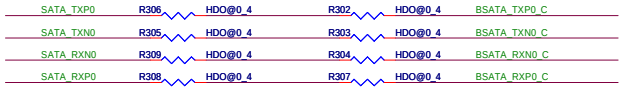


SATA HDD Re-driver IC



SATA Re-driver Bypass

Colay with Redriver IC



Quanta Computer Inc.

PROJECT : TE4

Size	Document Number	Rev
	HDD/ODD/MDC	A1A

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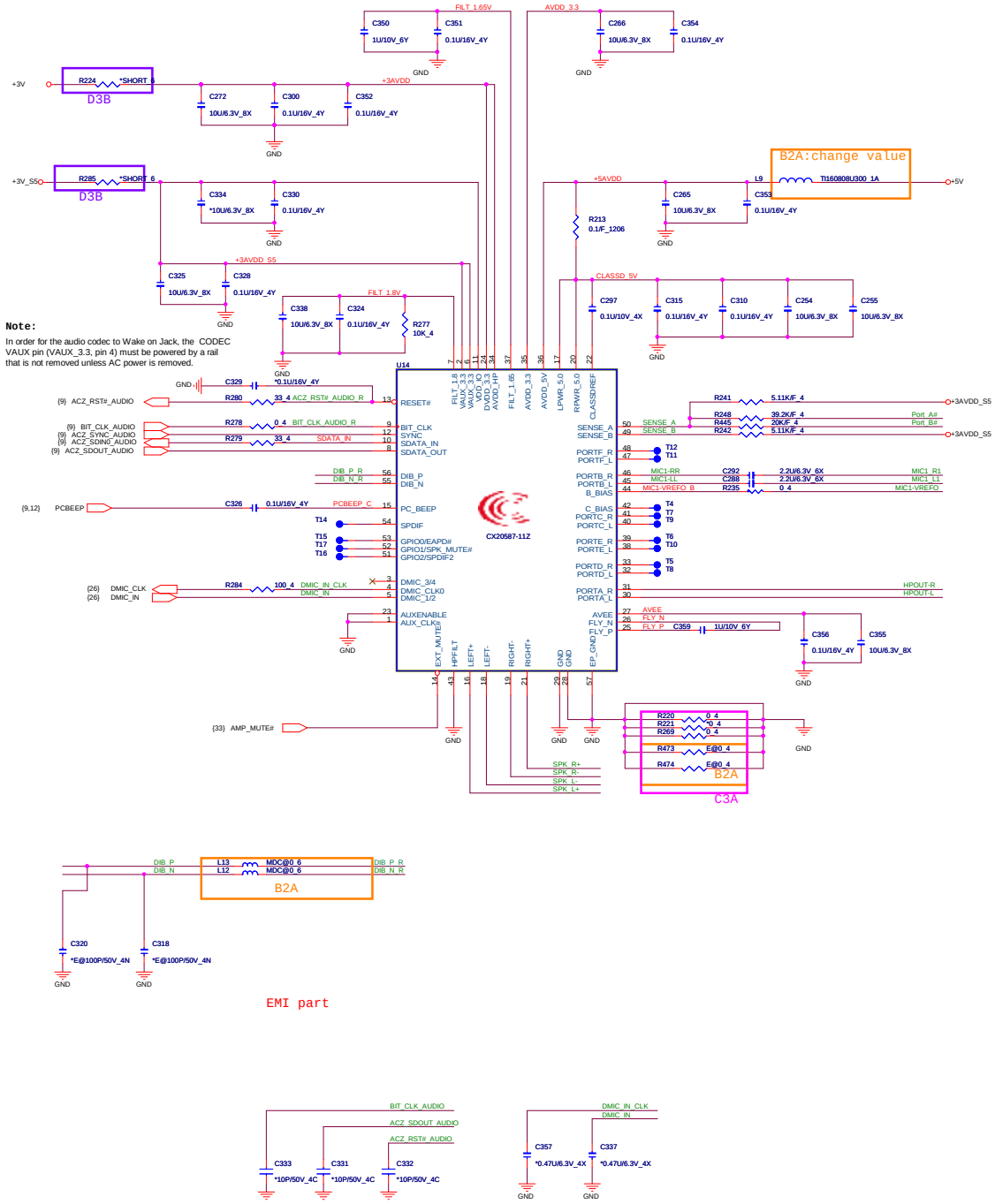
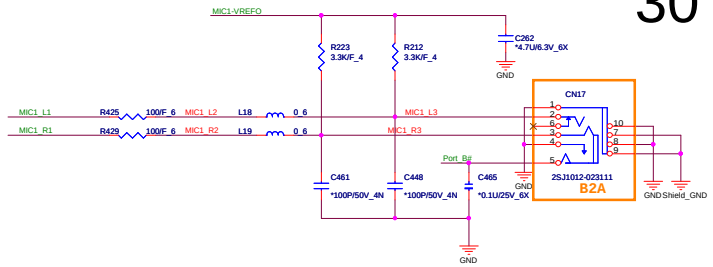
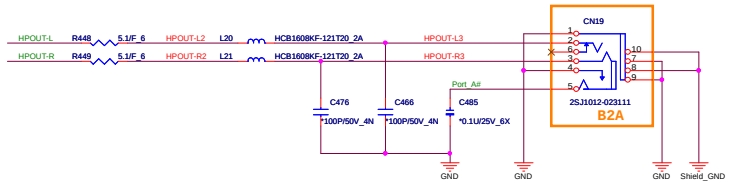
Codec(CX20587-11Z) <ADO/MDC/AMP>



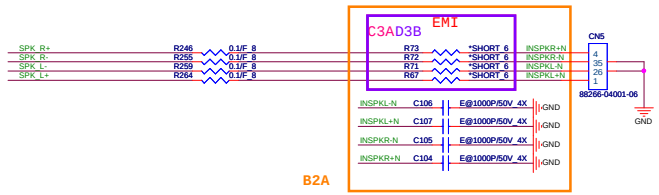
EXT MIC <ADO/AMP>



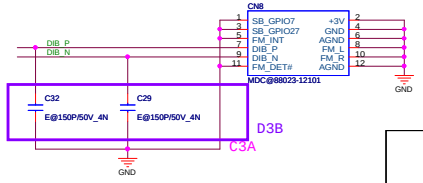
EXT H.P / Beats <ADO/AMP>



INT SPK <ADO/AMP>



MDC <MDC>



Quanta Computer Inc.			
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Size	Document Number		Rev
	Codec (CX20587)		A1A
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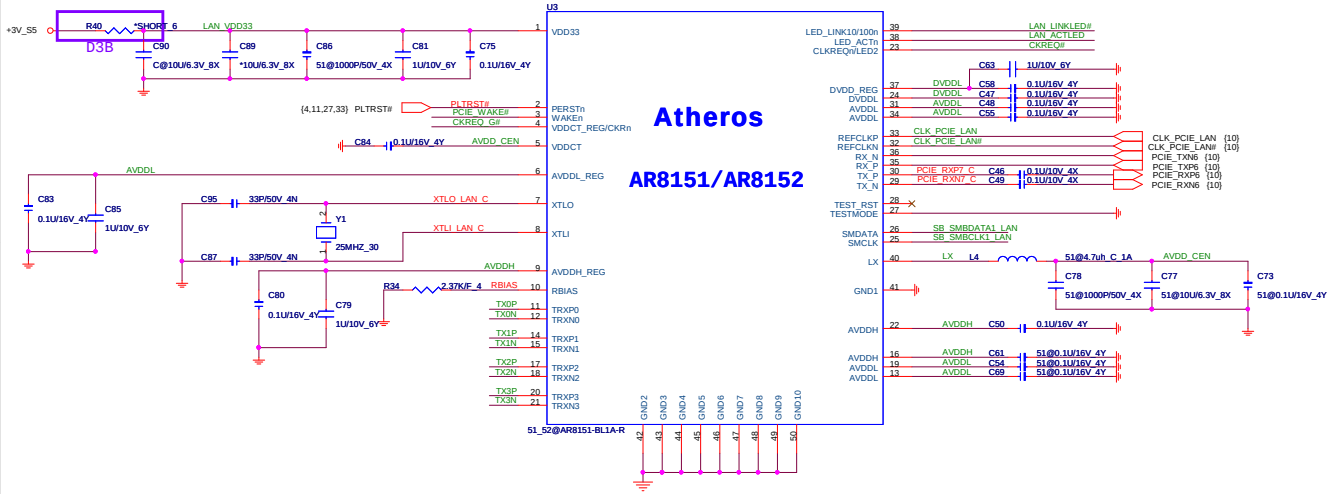
Atheros Lan <LAN/LN1/LNG>

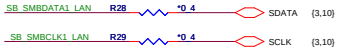


GIGA:AR8151-BL1A-R = AL008151005

10/100:AR8152-BL1A-R = AL008152009

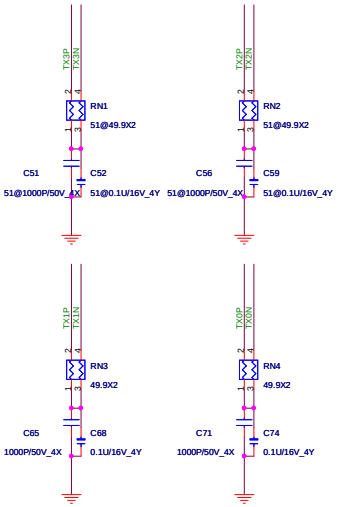
LAN-Wake up function<LAN>

LAN-SM-Bus <LAN>

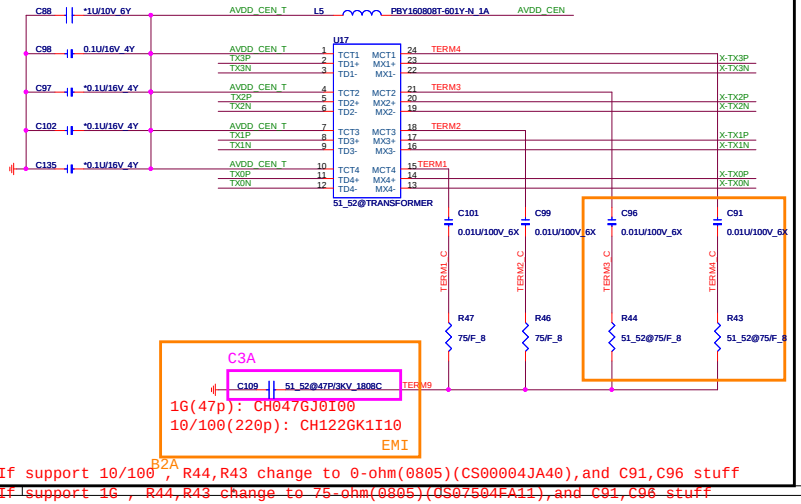


LAN-terminator<LAN/LN1/LNG>

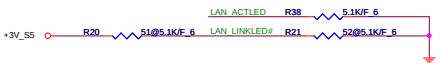
PLACE NEAR LAN IC SIDE



LAN-Transformer <LAN/LN1/LNG>

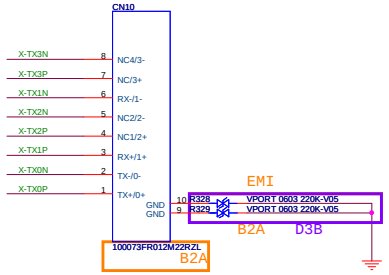


LAN-Strap function <LAN/LN1/LNG>



LED0 = LAN_ACTLED	1	Over-clocking enable (default = 1)
	0	Over-clocking disable
LED1 = LAN_LINKLED#	1	SWR switch-mode regulator select Giga LAN pull High (default = 1)
	0	LDO linear regulator select 10/100M LAN pull Low
CKREQ# or CKREQ_G#	1	Normal function
	0	ATE test mode

LAN(RJ45)-CONN Interface <LAN>



Quanta Computer Inc.

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	Atheros Lan	A1A

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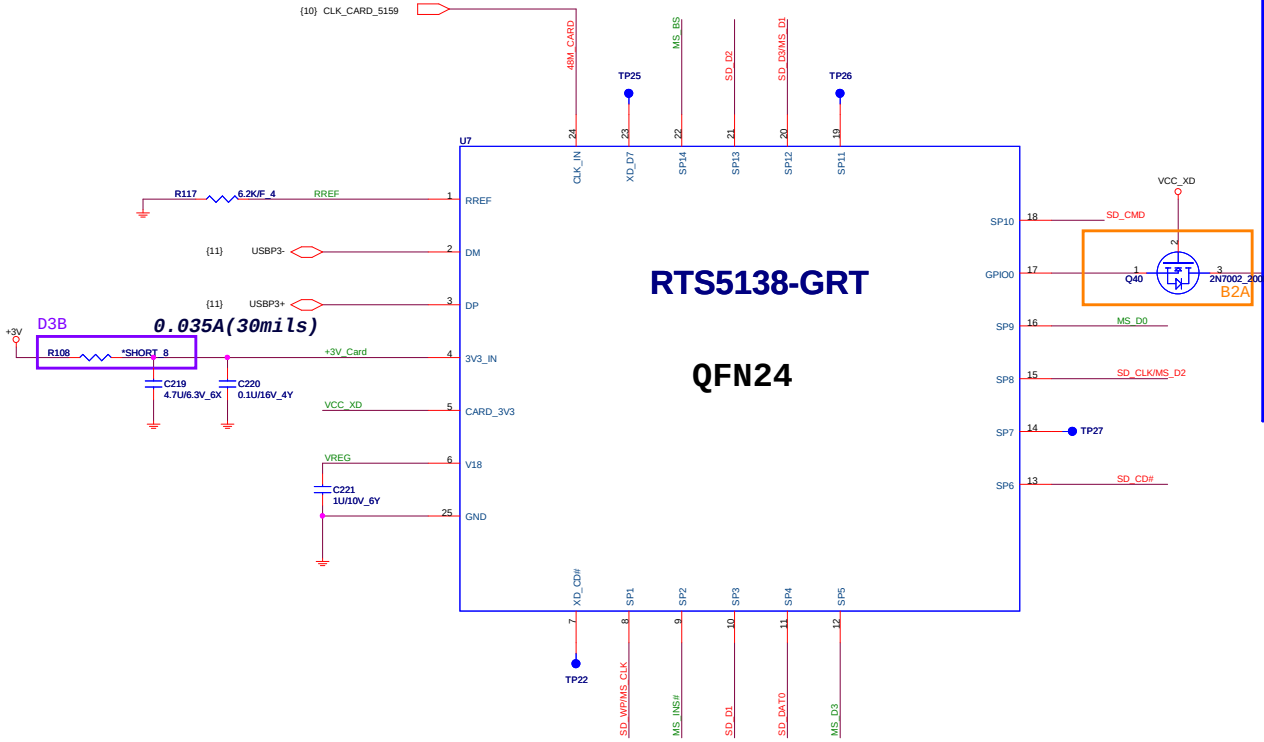
3 IN 1 CARD READER

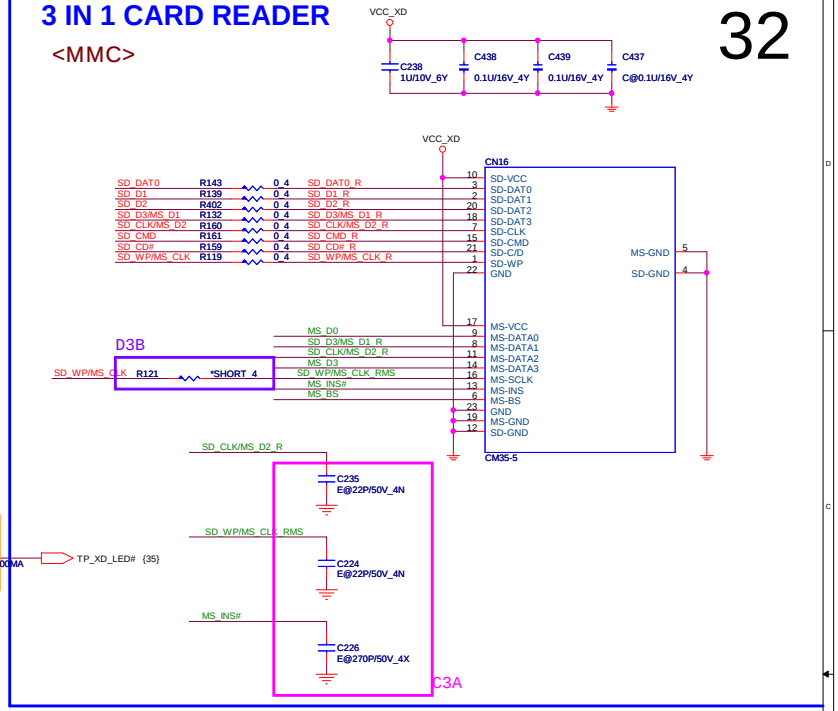
Card reader controller <MMC>



3 IN 1 CARD READER

<MMC>

32



Quanta Computer Inc.		
PROJECT : TE4D		
Size	Document Number: RTS5138 (Card Reader)	Rev: A1A
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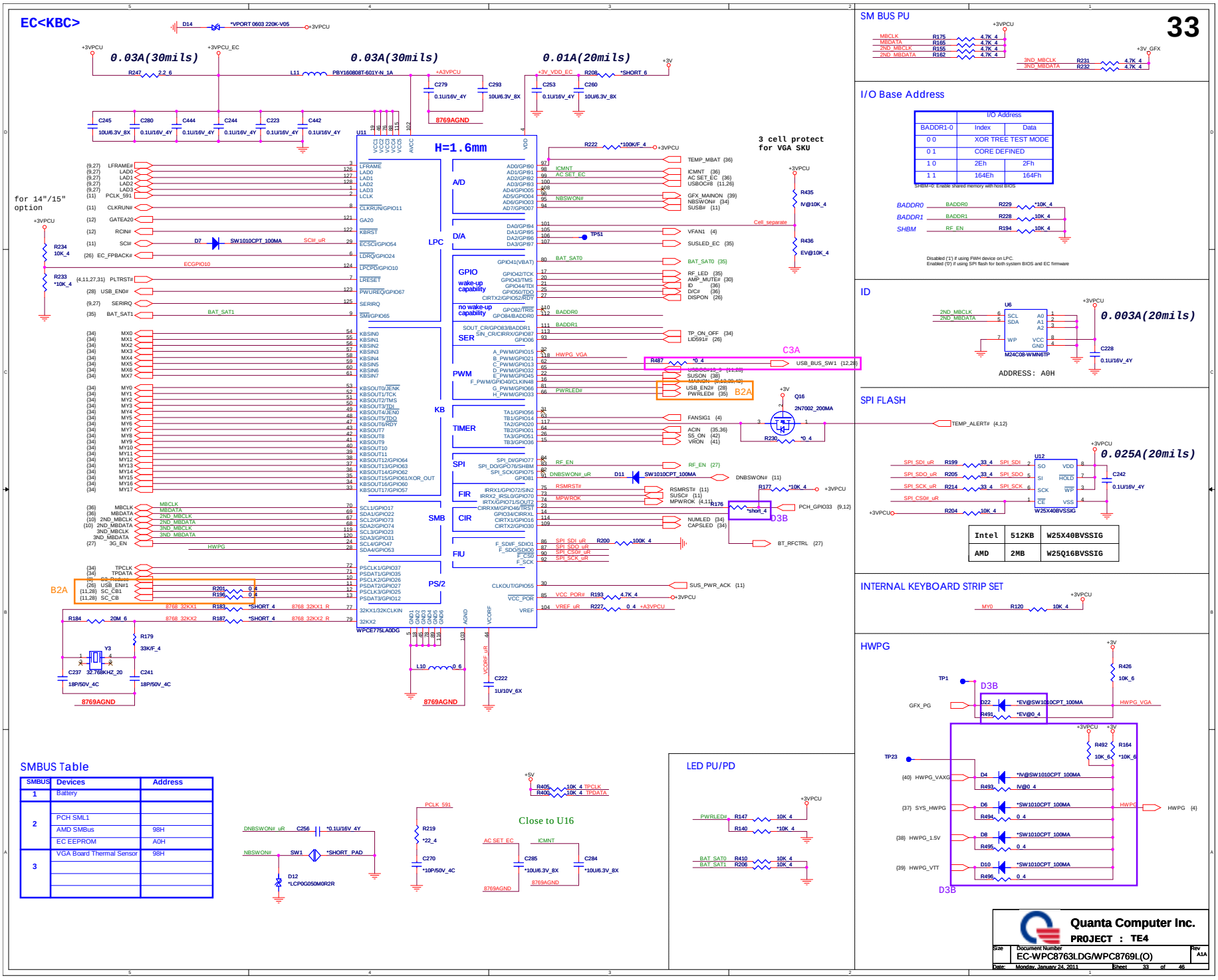
EC<KBC>
H=1.6mm
WPCE775LA0DG
LPC
SMB
PS/2
KB
TIMER
SPI
FIR
CIR
FIU
PWM
GPIO
wake-up capability
no wake-up capability
A/D
D/A
SER
3 cell protect for VGA SKU
for 14"/15" option
0.03A(30mils)
0.03A(30mils)
0.01A(20mils)
8769AGND
B2A
C3A
D3B
SMBUS Table
SMBUS
Devices
Address
Battery
PCH SML1
AMD SMBus
98H
EC EEPROM
A0H
VGA Board Thermal Sensor
98H
Close to U16
LED PU/PD
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
ID
0.003A(20mils)
ADDRESS: A0H
SPI FLASH
0.025A(20mils)
Intel
512KB
W25X40BVSSIG
AMD
2MB
W25Q16BVSSIG
INTERNAL KEYBOARD STRIP SET
HWPG
33
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EC-WPC8763LDG/WPC8769L(O)
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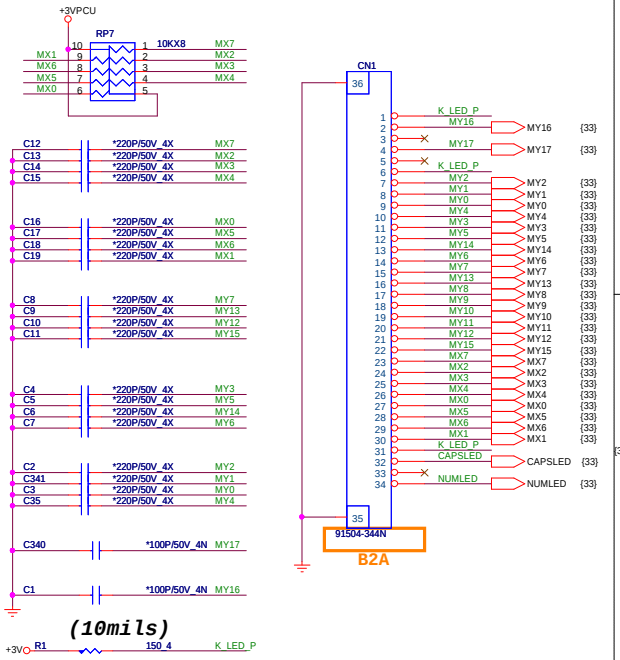
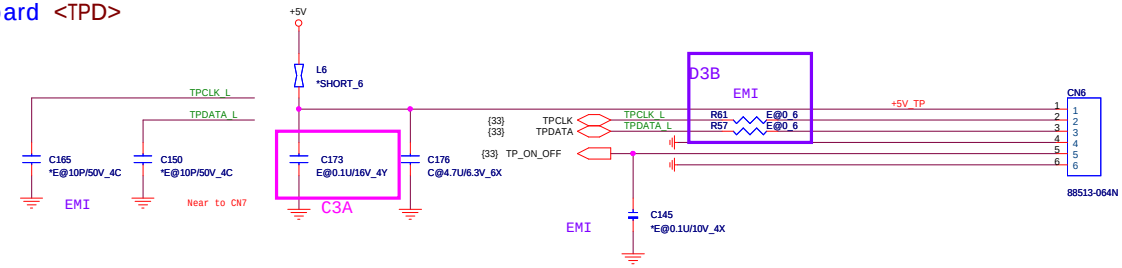
INT KeyBoard <KBC>



TP board <TPD>



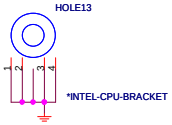
Power board <PSW>

K/B LED power <KBP>

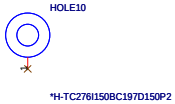
Only for Huron River

HOLE

CPU



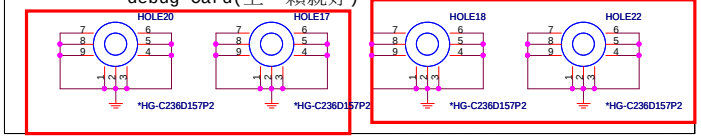
HDD&ODD



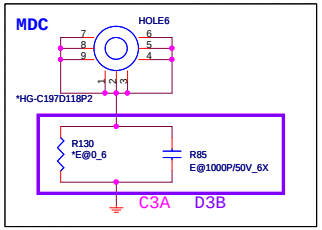
MINI CARD

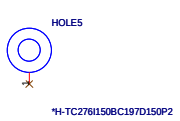
debug Card(上一顆就好)

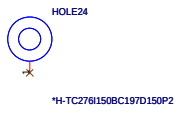
3G Card(上一顆就好)

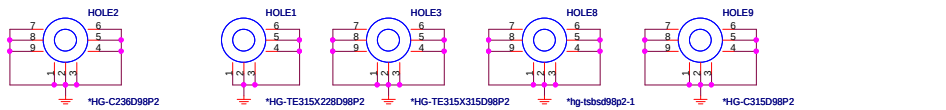


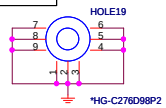
MDC

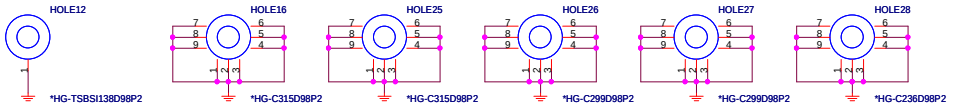


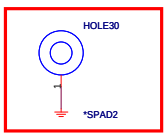


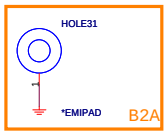












Quanta Computer Inc.

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	KB/TP&TP/PB/FL/LEB/MMB/B-CAS	A1A

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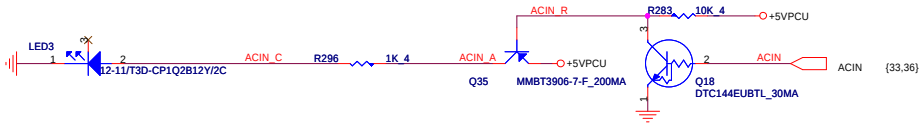
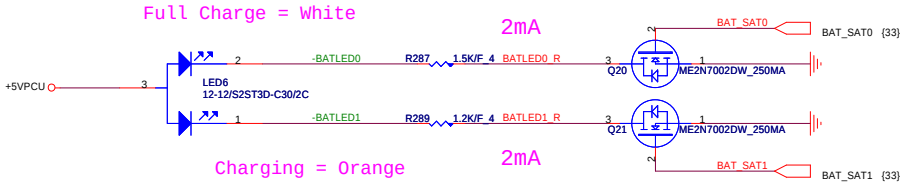
LED

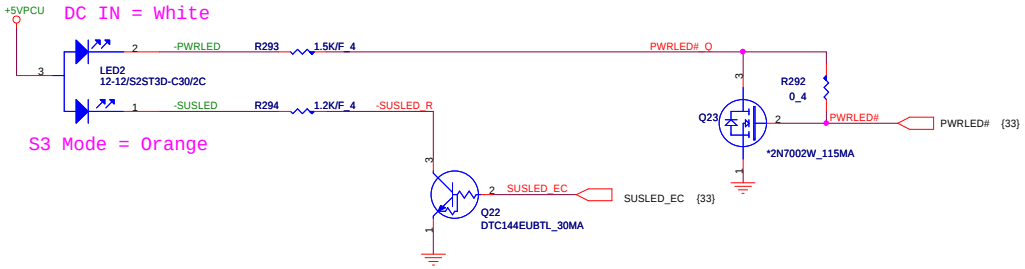
AC-IN



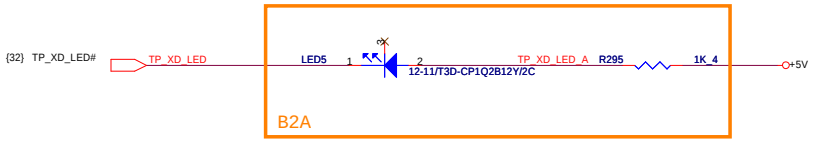
BATERRY



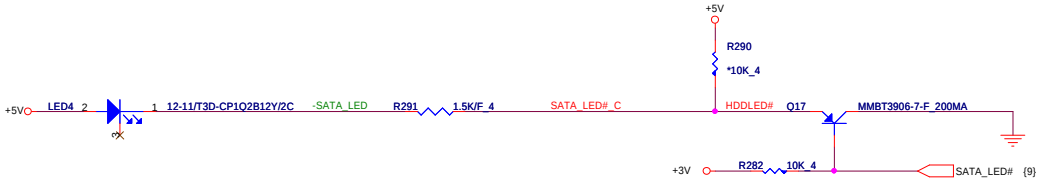
POWER



CARDREADER

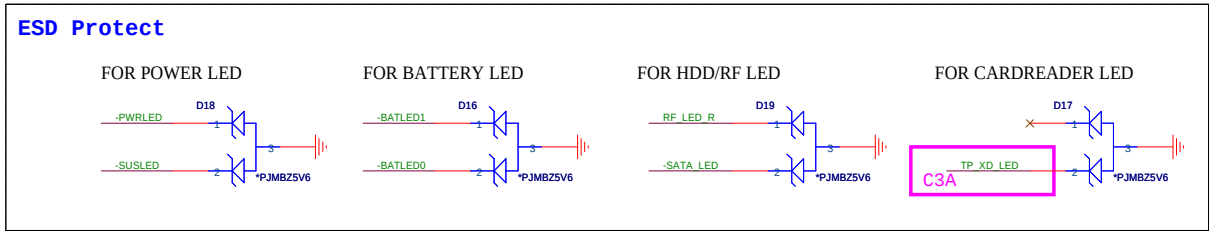


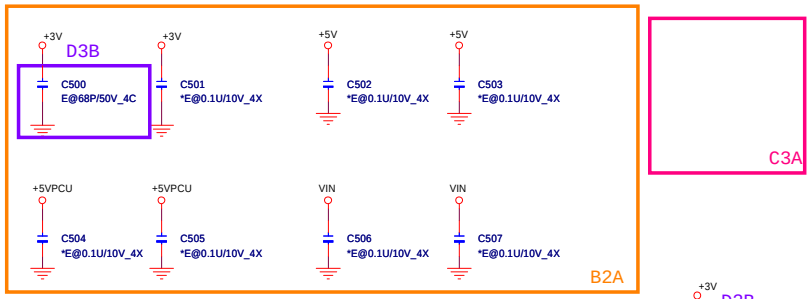
HDD/ODD



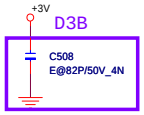
RF LED

ESD Protect





EMI



EMI

Quanta Computer Inc.

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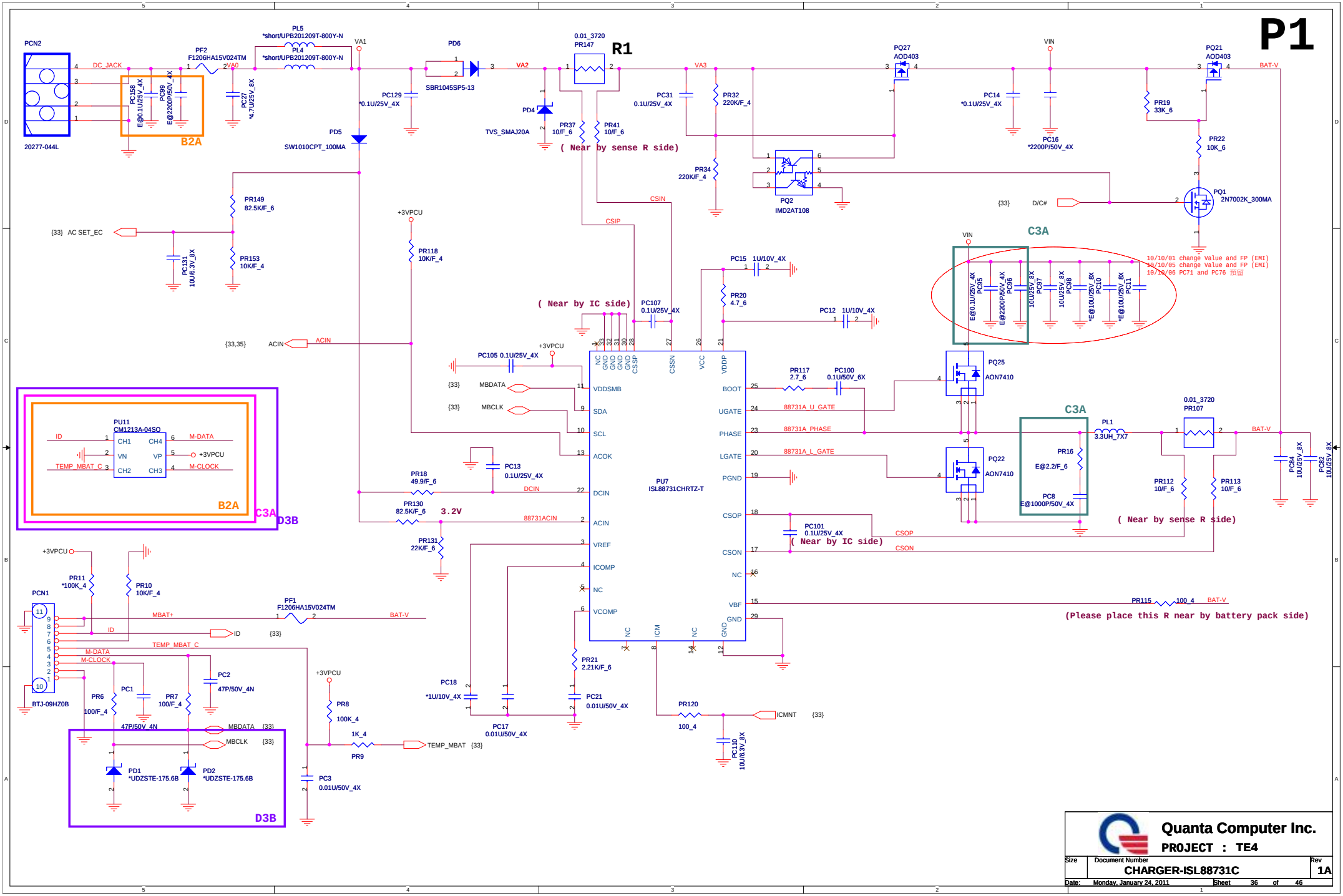
P1
PCN2
20277-044L
DC_JACK
PF2
F1206HA15V024TM
PL5
*short/UPB201209T-800Y-N
PL4
*short/UPB201209T-800Y-N
VA1
VA0
B2A
PC158
E@0.1U/25V_4X
PC99
E@220P/50V_4X
PC27
*4.7U/25V_8X
PD6
SBR1045SP5-13
VA2
PD4
TVS_SMAJ20A
PD5
SW1010CPT_100MA
PC129
*0.1U/25V_4X
0.01_3720
PR147
R1
VA3
PR37
10/F_6
PR41
10/F_6
(Near by sense R side)
PC31
0.1U/25V_4X
PR32
220K/F_4
PR34
220K/F_4
PQ2
IMD2AT108
PQ27
AOD403
VIN
PC14
*0.1U/25V_4X
PC16
*2200P/50V_4X
PQ21
AOD403
BAT-V
PR19
33K_6
PR22
10K_6
PQ1
2N7002K_300MA
{33} D/C#
PR149
82.5K/F_6
{33} AC SET_EC
PC151
10U/6.3V_8X
PR153
10K/F_4
+3VPCU
PR118
10K/F_4
CSIN
CSIP
C3A
10/10/01 change Value and FP (EMI)
10/10/05 change Value and FP (EMI)
10/10/06 PC71 and PC76 預留
E@0.1U/25V_4X
PC95
E@2200P/50V_4X
PC96
10U/25V_8X
PC97
10U/25V_8X
PC98
*E@10U/25V_8X
PC10
*E@10U/25V_8X
PC11
(Near by IC side)
PC107
0.1U/25V_4X
PC15 1U/10V_4X
PR20
4.7_6
PC12 1U/10V_4X
{33,35} ACIN
PC105 0.1U/25V_4X
PU7
ISL88731CHRTZ-T
NC
GND
GND
GND
GND
CSSP
CSSN
VCC
VDDP
VDDSMB
SDA
SCL
ACOK
DCIN
ACIN
VREF
ICOMP
NC
VCOMP
BOOT
UGATE
PHASE
LGATE
PGND
CSOP
CSON
NC
VBF
GND
NC
ICM
NC
GND
{33} MBDATA
{33} MBCLK
PR117
2.7_6
PC100
0.1U/50V_6X
88731A_U_GATE
88731A_PHASE
88731A_L_GATE
PQ25
AON7410
PQ22
AON7410
C3A
PL1
3.3UH_7X7
0.01_3720
PR107
PR16
E@2.2/F_6
PC8
E@1000P/50V_4X
PR112
10/F_6
PR113
10/F_6
PC84
10U/25V_8X
PC82
10U/25V_8X
(Near by sense R side)
PC13
0.1U/25V_4X
DCIN
PR18
49.9/F_6
PR130
82.5K/F_6
3.2V
88731ACIN
PR131
22K/F_6
PC101
0.1U/25V_4X
(Near by IC side)
CSOP
CSON
PR115
100_4
BAT-V
(Please place this R near by battery pack side)
PR21
2.21K/F_6
PC21
0.01U/50V_4X
PC18
*1U/10V_4X
PC17
0.01U/50V_4X
PR120
100_4
ICMNT {33}
PC110
10U/6.3V_8X
PCN1
BTJ-09HZ0B
PR11
*100K_4
PR10
10K/F_4
PF1
F1206HA15V024TM
MBAT+
BAT-V
ID
{33}
TEMP_MBAT_C
M-DATA
M-CLOCK
PC2
47P/50V_4N
PR6
100/F_4
PC1
PR7
100/F_4
47P/50V_4N
MBDATA {33}
MBCLK {33}
PD1
*UDZSTE-175.6B
PD2
*UDZSTE-175.6B
D3B
PR8
100K_4
1K_4
PR9
TEMP_MBAT {33}
PC3
0.01U/50V_4X
PU11
CM1213A-04SO
ID
TEMP_MBAT_C
CH1
CH4
VN
VP
CH2
CH3
M-DATA
+3VPCU
M-CLOCK
B2A
C3A
D3B
Quanta Computer Inc.
PROJECT : TE4
Size
Document Number
CHARGER-ISL88731C
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1A
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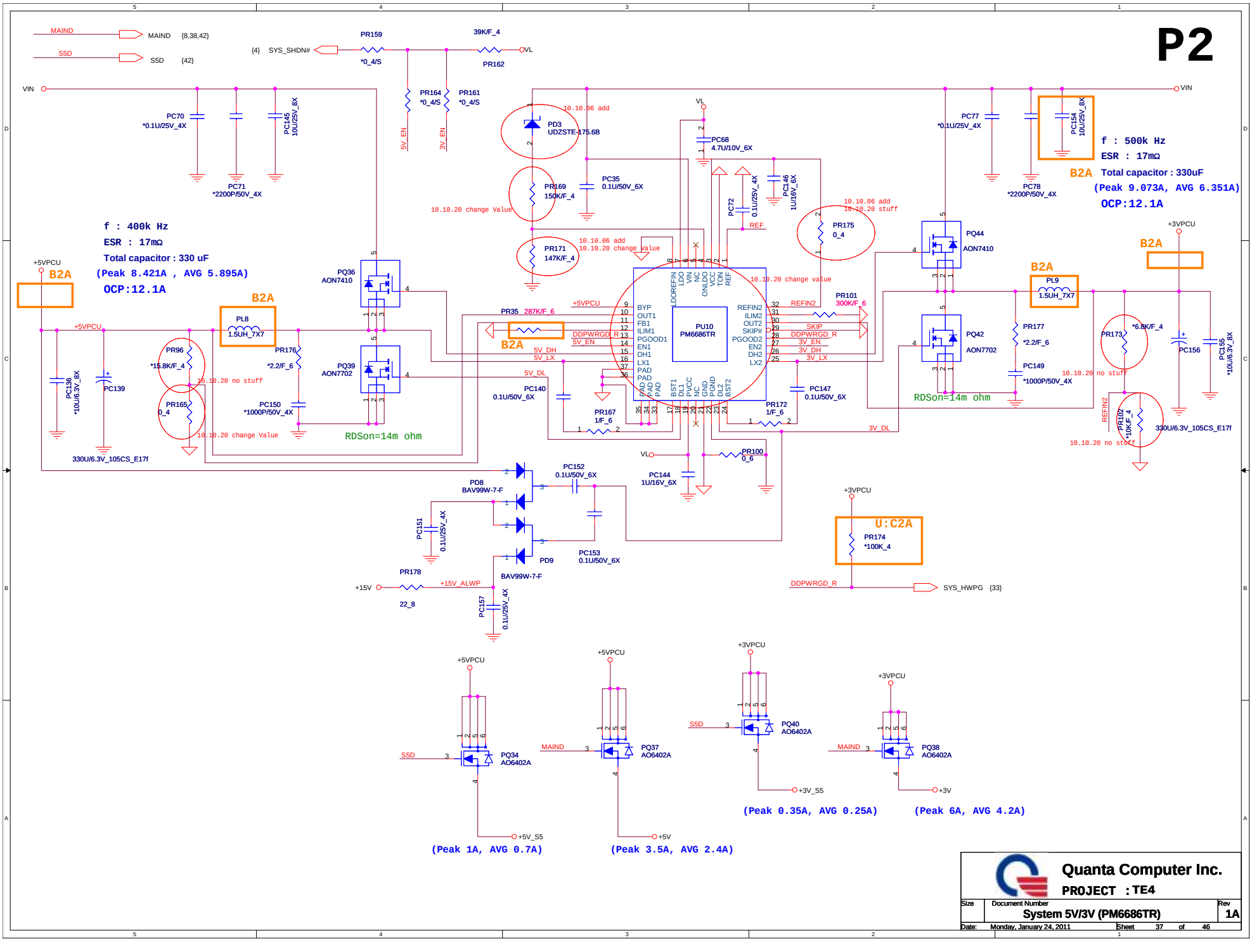
P2



Quanta Computer Inc.		
PROJECT : TE4		
Size	Document Number: System 5V/3V (PM6686TR)	Rev: 1A
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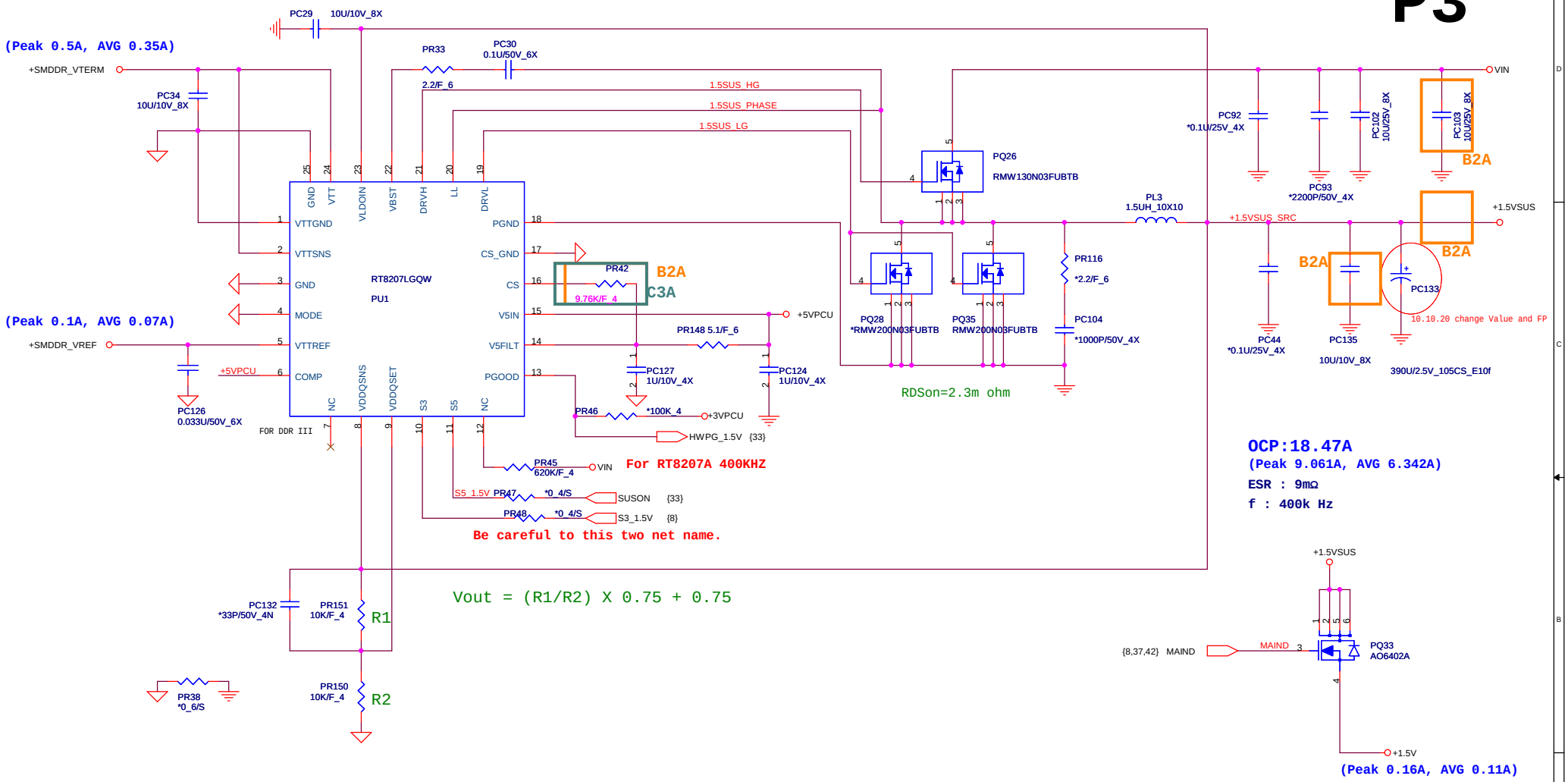
P3



Quanta Computer Inc.		
PROJECT : TE4		
Size	Document Number: DDR 1.5V(RT8207L)/1.05VSUS	Rev 1A
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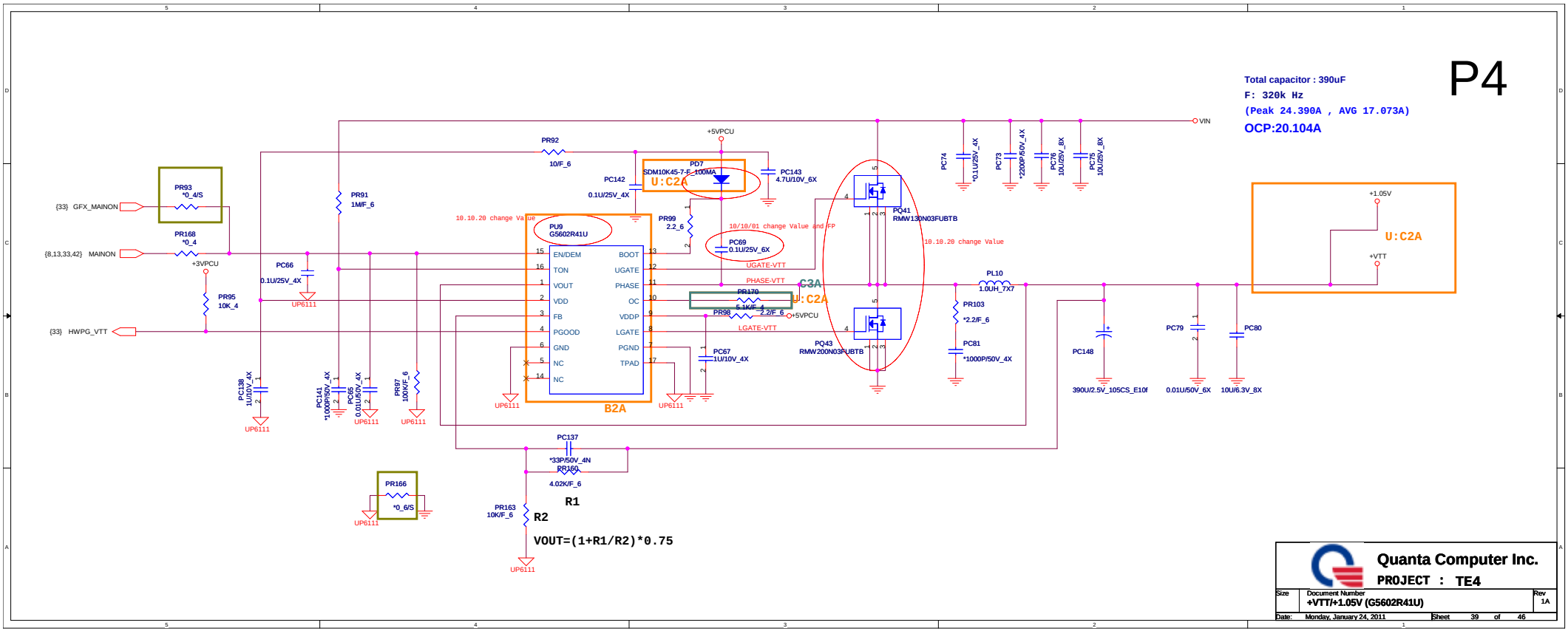
P4
Total capacitor : 390uF
F: 320k Hz
(Peak 24.390A , AVG 17.073A)
OCP:20.104A
VIN
+5VPCU
+3VPCU
+1.05V
+VTT
{33} GFX_MAINON
{8,13,33,42} MAINON
{33} HWPG_VTT
PR93 *0_4/S
PR168 *0_4
PR95 10K_4
PR91 1M/F_6
PR92 10/F_6
PR99 2.2_6
PR98 2.2/F_6
PR170 5.1K/F_4
PR103 *2.2/F_6
PR97 100K/F_6
PR166 *0_6/S
PR163 10K/F_6
PR160 4.02K/F_6
PC66 0.1U/25V_4X
PC142 0.1U/25V_4X
PC143 4.7U/10V_6X
PC69 0.1U/25V_6X
PC67 1U/10V_4X
PC137 *33P/50V_4N
PC138 1U/10V_4X
PC141 *1000P/50V_4X
PC65 0.01U/50V_4X
PC74 *0.1U/25V_4X
PC73 *2200P/50V_4X
PC76 10U/25V_8X
PC75 10U/25V_8X
PC81 *1000P/50V_4X
PC148 390U/2.5V_105CS_E10f
PC79 0.01U/50V_6X
PC80 10U/6.3V_8X
PD7 SDM10K45-7-F_100MA
PQ41 RMW130N03FUBTB
PQ43 RMW200N03FUBTB
PL10 1.0UH_7X7
PU9 G5602R41U
EN/DEM
TON
VOUT
VDD
FB
PGOOD
GND
NC
NC
BOOT
UGATE
PHASE
OC
VDDP
LGATE
PGND
TPAD
UGATE-VTT
PHASE-VTT
LGATE-VTT
10.10.20 change Value
10/10/01 change Value and FP
U:C2A
C3A
B2A
UP6111
R1
R2
VOUT=(1+R1/R2)*0.75
Quanta Computer Inc.
PROJECT : TE4
Size
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+VTT/+1.05V (G5602R41U)
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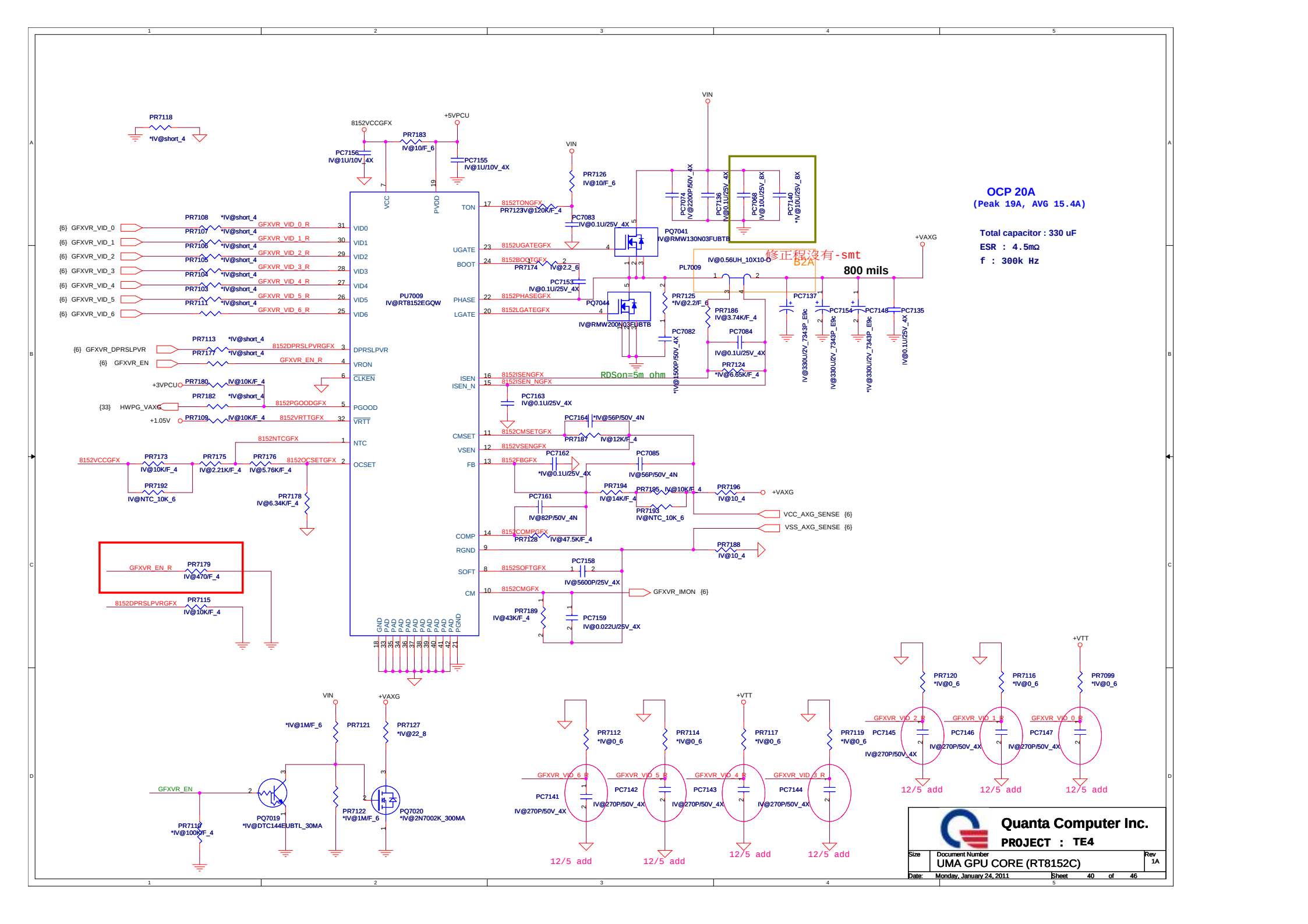
OCP 20A
(Peak 19A, AVG 15.4A)
Total capacitor : 330 uF
ESR : 4.5mΩ
f : 300k Hz
修正程沒有-smt
B2A
800 mils
RDSon=5m ohm
PU7009
IV@RT8152EGQW
VIN
+VAXG
+5VPCU
+VTT
8152VCCGFX
PR7118
*IV@short_4
PR7183
IV@10/F_6
PC7156
IV@1U/10V_4X
PC7155
IV@1U/10V_4X
PR7126
IV@10/F_6
PC7074
IV@2200P/50V_4X
PC7136
IV@0.1U/25V_4X
PC7068
IV@10U/25V_8X
PC7140
*IV@10U/25V_8X
PQ7041
IV@RMW130N03FUBTB
PL7009
IV@0.56UH_10X10-D
PC7083
IV@0.1U/25V_4X
PC7153
IV@0.1U/25V_4X
PQ7044
IV@RMW200N03EUBTB
PR7125
*IV@2.2/F_6
PR7186
IV@3.74K/F_4
PC7082
*IV@1500P/50V_4X
PC7084
IV@0.1U/25V_4X
PR7124
*IV@6.65K/F_4
PC7137
PC7154
PC7148
PC7135
IV@330U/2V_7343P_E9c
IV@0.1U/25V_4X
PR7174
IV@2.2_6
PR7108 *IV@short_4
PR7107 *IV@short_4
PR7106 *IV@short_4
PR7105 *IV@short_4
PR7104 *IV@short_4
PR7103 *IV@short_4
PR7111 *IV@short_4
{6} GFXVR_VID_0
{6} GFXVR_VID_1
{6} GFXVR_VID_2
{6} GFXVR_VID_3
{6} GFXVR_VID_4
{6} GFXVR_VID_5
{6} GFXVR_VID_6
GFXVR_VID_0_R
GFXVR_VID_1_R
GFXVR_VID_2_R
GFXVR_VID_3_R
GFXVR_VID_4_R
GFXVR_VID_5_R
GFXVR_VID_6_R
VID0
VID1
VID2
VID3
VID4
VID5
VID6
PR7113 *IV@short_4
PR7177 *IV@short_4
{6} GFXVR_DPRSLPVR
{6} GFXVR_EN
8152DPRSLPVRGFX
GFXVR_EN_R
DPRSLPVR
VRON
CLKEN
+3VPCU
PR7180 IV@10K/F_4
PR7182 *IV@short_4
{33} HWPG_VAXG
+1.05V
PR7109 IV@10K/F_4
8152PGOODGFX
8152VRTTGFX
PGOOD
VRTT
8152NTCGFX
NTC
8152VCCGFX
PR7173 IV@10K/F_4
PR7175 IV@2.21K/F_4
PR7176 IV@5.76K/F_4
8152OCSETGFX
OCSET
PR7192 IV@NTC_10K_6
PR7178 IV@6.34K/F_4
GFXVR_EN_R
PR7179 IV@470/F_4
8152DPRSLPVRGFX
PR7115 IV@10K/F_4
8152TONGFX
PR7123V@120K/F_4
TON
8152UGATEGFX
UGATE
8152BOOTGFX
BOOT
8152PHASEGFX
PHASE
8152LGATEGFX
LGATE
8152ISENGFX
8152ISEN_NGFX
ISEN
ISEN_N
PC7163
IV@0.1U/25V_4X
PC7164 *IV@56P/50V_4N
PR7187 IV@12K/F_4
8152CMSETGFX
CMSET
8152VSENGFX
VSEN
8152FBGFX
FB
PC7162
*IV@0.1U/25V_4X
PC7085
IV@56P/50V_4N
PR7194 IV@14K/F_4
PR7195 IV@10K/F_4
PR7196 IV@10_4
PR7193 IV@NTC_10K_6
PC7161
IV@82P/50V_4N
8152COMPGFX
PR7128 IV@47.5K/F_4
COMP
RGND
PR7188 IV@10_4
PC7158
IV@5600P/25V_4X
8152SOFTGFX
SOFT
8152CMGFX
CM
GFXVR_IMON {6}
PR7189 IV@43K/F_4
PC7159 IV@0.022U/25V_4X
VCC_AXG_SENSE {6}
VSS_AXG_SENSE {6}
GND PAD PAD PAD PAD PAD PAD PAD PAD PAD PGND
PR7120 *IV@0_6
PR7116 *IV@0_6
PR7099 *IV@0_6
GFXVR_VID_2_R
GFXVR_VID_1_R
GFXVR_VID_0_R
PC7145 IV@270P/50V_4X
PC7146 IV@270P/50V_4X
PC7147 IV@270P/50V_4X
12/5 add
*IV@1M/F_6
PR7121
PR7127 *IV@22_8
GFXVR_EN
PQ7019 *IV@DTC144EUBTL_30MA
PR7122 *IV@1M/F_6
PQ7020 *IV@2N7002K_300MA
PR7110 *IV@100K/F_4
PR7112 *IV@0_6
PR7114 *IV@0_6
PR7117 *IV@0_6
PR7119 *IV@0_6
GFXVR_VID_6_R
GFXVR_VID_5_R
GFXVR_VID_4_R
GFXVR_VID_3_R
PC7141 IV@270P/50V_4X
PC7142 IV@270P/50V_4X
PC7143 IV@270P/50V_4X
PC7144 IV@270P/50V_4X
Quanta Computer Inc.
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UMA GPU CORE (RT8152C)
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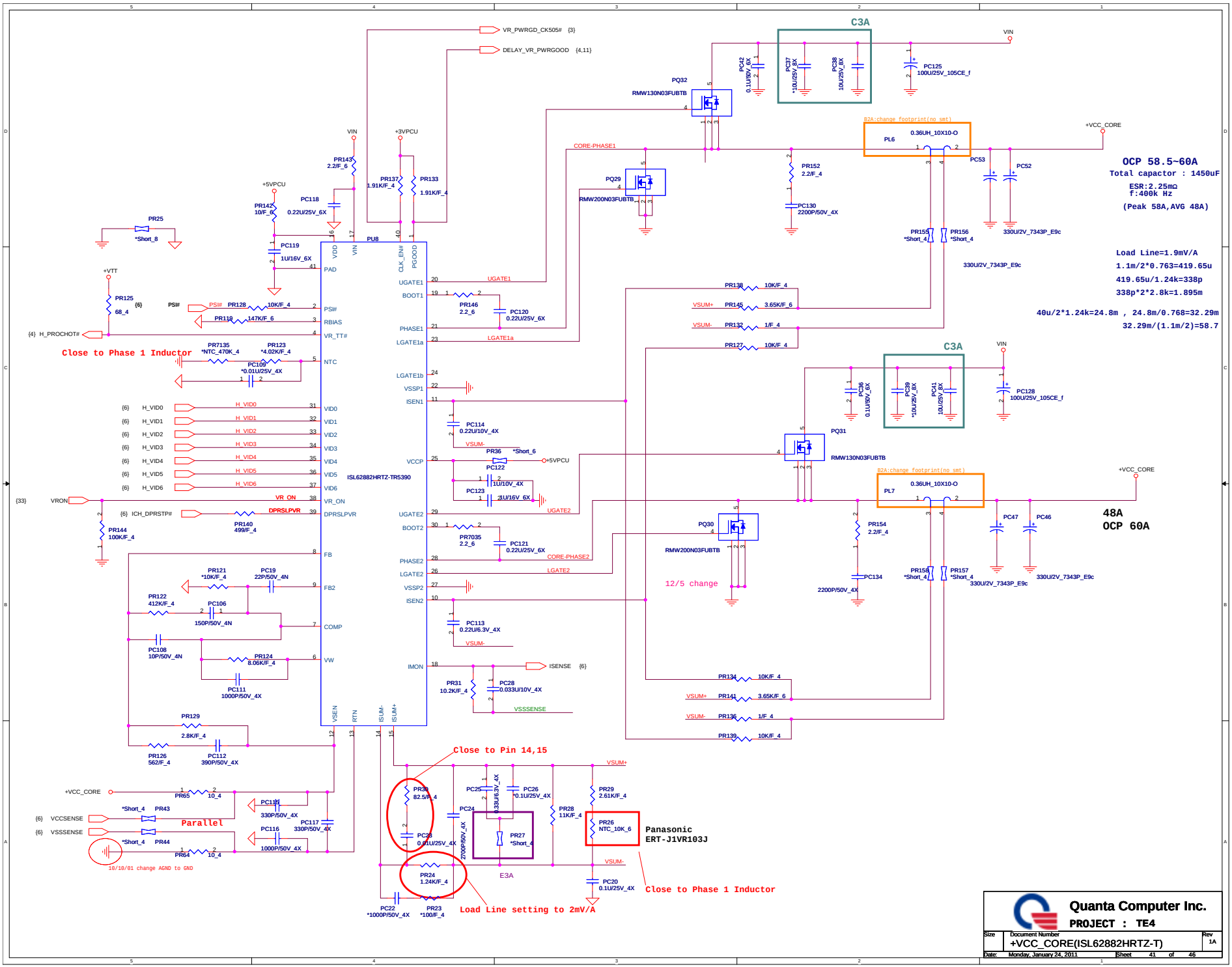
C3A
VIN
PC125 100U/25V_105CE_f
PQ32 RMW130N03FUBTB
PC42 0.1U/50V_6X
PC37 *10U/25V_8X
PC38 10U/25V_8X
B2A:change footprint(no smt)
PL6 0.36UH_10X10-O
+VCC_CORE
CORE-PHASE1
PQ29 RMW200N03FUBTB
PR152 2.2/F_4
PC130 2200P/50V_4X
PC53
PC52
330U/2V_7343P_E9c
PR155 *Short_4
PR156 *Short_4
OCP 58.5~60A
Total capactor : 1450uF
ESR:2.25mΩ
f:400k Hz
(Peak 58A,AVG 48A)
Load Line=1.9mV/A
1.1m/2*0.763=419.65u
419.65u/1.24k=338p
338p*2*2.8k=1.895m
40u/2*1.24k=24.8m , 24.8m/0.768=32.29m
32.29m/(1.1m/2)=58.7
VR_PWRGD_CK505# {3}
DELAY_VR_PWRGOOD {4,11}
+3VPCU
+5VPCU
PR143 2.2/F_6
PR137 1.91K/F_4
PR133 1.91K/F_4
PR142 10/F_6
PC118 0.22U/25V_6X
PR25 *Short_8
PC119 1U/16V_6X
PU8
VDD
VIN
CLK_EN#
PGOOD
PAD
+VTT
PR125 68_4
{6} PSI#
PR128 10K/F_4
PR119 147K/F_6
{4} H_PROCHOT#
Close to Phase 1 Inductor
PR7135 *NTC_470K_4
PR123 *4.02K/F_4
PC109 *0.01U/25V_4X
{6} H_VID0
{6} H_VID1
{6} H_VID2
{6} H_VID3
{6} H_VID4
{6} H_VID5
{6} H_VID6
ISL62882HRTZ-TR5390
{33} VRON
VR_ON
{6} ICH_DPRSTP#
DPRSLPVR
PR140 499/F_4
PR144 100K/F_4
PR121 *10K/F_4
PC19 22P/50V_4N
PR122 412K/F_4
PC106 150P/50V_4N
PC108 10P/50V_4N
PR124 8.06K/F_4
PC111 1000P/50V_4X
PR129 2.8K/F_4
PR126 562/F_4
PC112 390P/50V_4X
UGATE1
BOOT1
PR146 2.2_6
PC120 0.22U/25V_6X
PHASE1
LGATE1a
LGATE1b
VSSP1
ISEN1
PC114 0.22U/10V_4X
VSUM-
PR36 *Short_6
VCCP
PC122 1U/10V_4X
PC123 2.2U/16V_6X
UGATE2
BOOT2
PR7035 2.2_6
PC121 0.22U/25V_6X
PHASE2
LGATE2
VSSP2
ISEN2
PC113 0.22U/6.3V_4X
IMON
PR31 10.2K/F_4
PC28 0.033U/10V_4X
ISENSE {6}
VSSSENSE
VSEN
RTN
ISUM-
ISUM+
Close to Pin 14,15
PR30 82.5/F_4
PC25 0.33U/6.3V_4X
PC26 *0.1U/25V_4X
PR29 2.61K/F_4
PC24 2700P/50V_4X
PC23 0.01U/25V_4X
PR27 *Short_4
PR28 11K/F_4
PR26 NTC_10K_6
Panasonic ERT-J1VR103J
E3A
PR24 1.24K/F_4
PC20 0.1U/25V_4X
Close to Phase 1 Inductor
PC22 *1000P/50V_4X
PR23 *100/F_4
Load Line setting to 2mV/A
+VCC_CORE
PR65 10_4
PR64 10_4
*Short_4 PR43
*Short_4 PR44
{6} VCCSENSE
{6} VSSSENSE
Parallel
PC115 330P/50V_4X
PC117 330P/50V_4X
PC116 1000P/50V_4X
10/10/01 change AGND to GND
PR138 10K/F_4
VSUM+ PR145 3.65K/F_6
VSUM- PR132 1/F_4
PR127 10K/F_4
C3A
VIN
PC128 100U/25V_105CE_f
PC36 0.1U/50V_6X
PC39 *10U/25V_8X
PC41 10U/25V_8X
PQ31 RMW130N03FUBTB
B2A:change footprint(no smt)
PL7 0.36UH_10X10-O
+VCC_CORE
48A
OCP 60A
PQ30 RMW200N03FUBTB
12/5 change
PR154 2.2/F_4
PC134 2200P/50V_4X
PC47
PC46
330U/2V_7343P_E9c
PR158 *Short_4
PR157 *Short_4
330U/2V_7343P_E9c
PR134 10K/F_4
VSUM+ PR141 3.65K/F_6
VSUM- PR136 1/F_4
PR139 10K/F_4
Quanta Computer Inc.
PROJECT : TE4
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Document Number
+VCC_CORE(ISL62882HRTZ-T)
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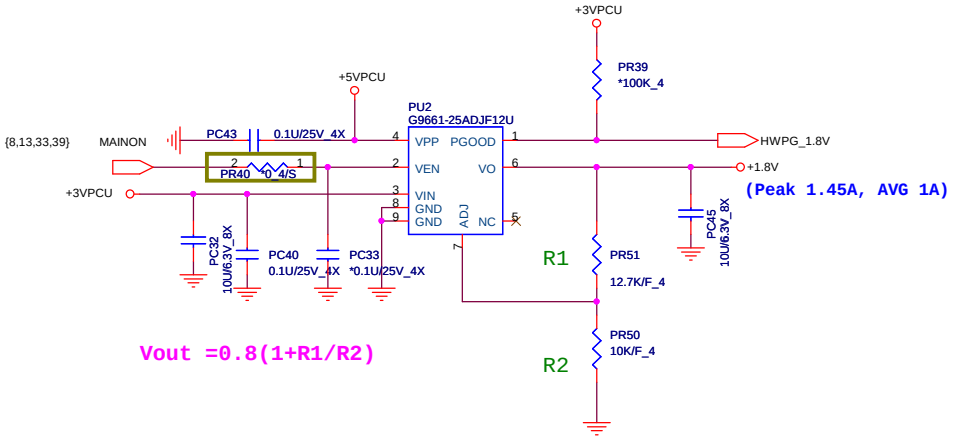
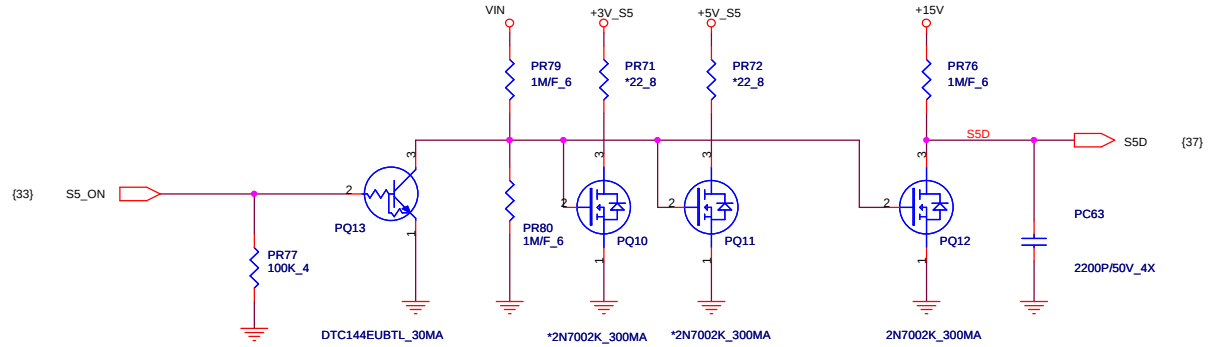
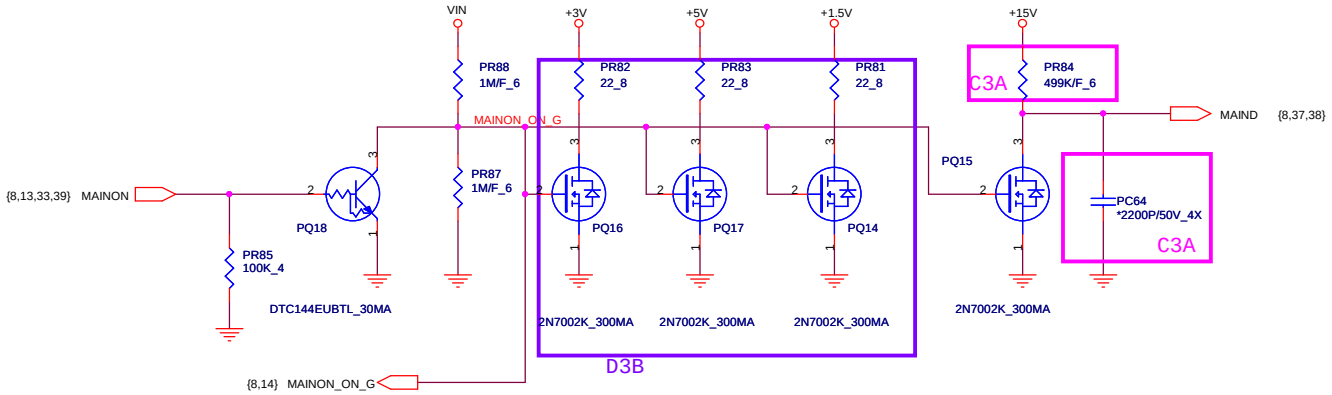
P7







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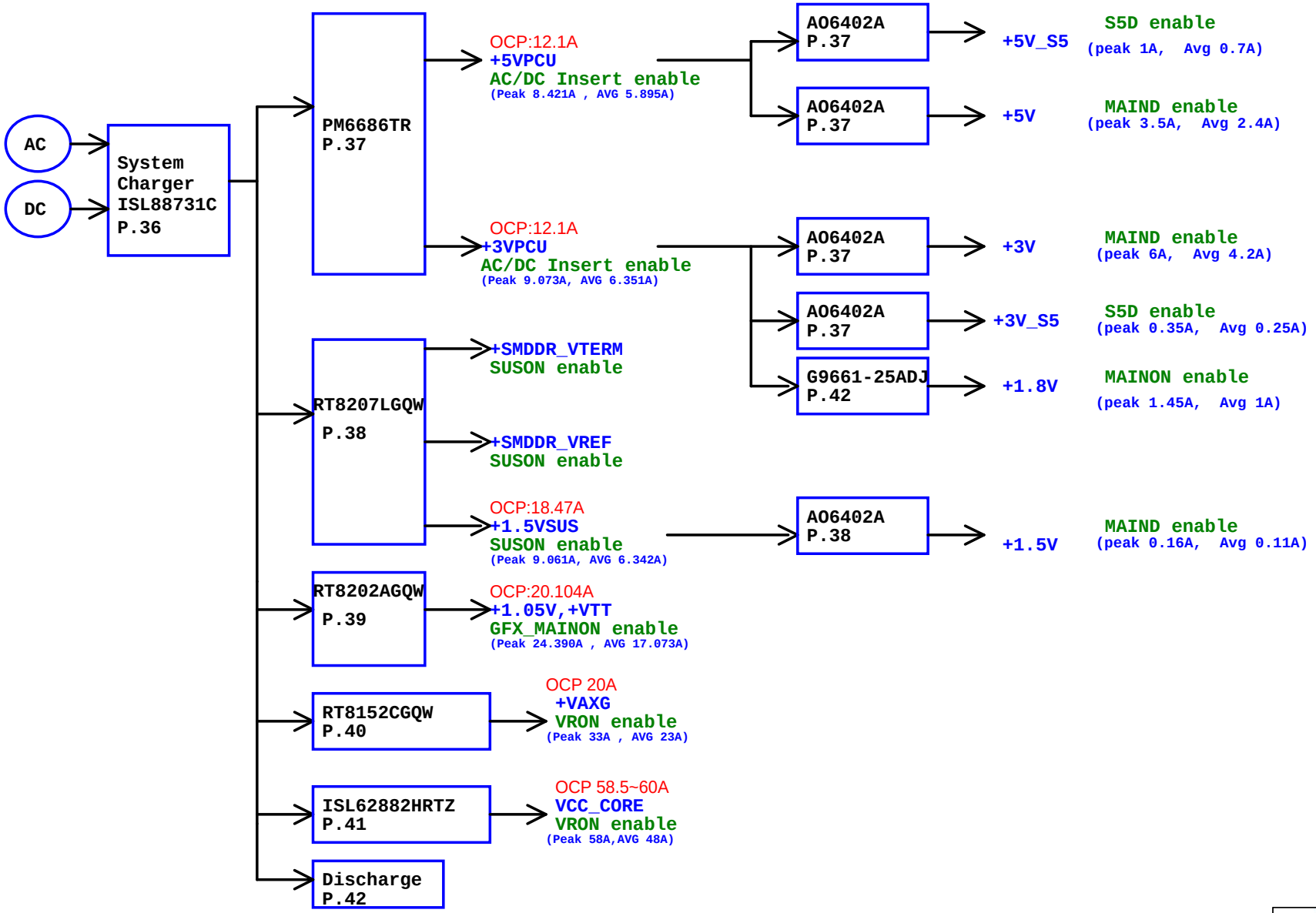
Size	Document Number	Rev
	+1.8V (G966A)/Discharge	1A
Date: Monday, January 24, 2011	Sheet 42 of 46	



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Size	Document Number	Rev
	POWER TREE TABLE	1A

Date: Thursday, January 20, 2011 Sheet 44 of 46

Model	REV	CHANGE LIST
TE4 MB	2A	PAGE 14: R22 no stuff PAGE 15: R23 no stuff PAGE 27: add R470 PAGE 28: add Q1100/R1015 and no stuff PAGE 32: add Q40

MODEL	TE4	
PAGE	FROM	To
1	1A	
2	1A	
3	1A	
4	1A	
5	1A	
6	1A	
7	1A	
8	1A	
9	1A	
10	1A	
11	1A	
12	1A	
13	1A	
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25	1A	
26	1A	
27	1A	
28	1A	
29	1A	
30	1A	

DOC NO. 204					
PROJECT MODEL :	TE4	APPROVED BY:	Kent Su	DATE:	2010/11/12
PART NUMBER:		DRAWING BY:	Kent Su	REVISON:	1A

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Size	Document Number	Rev
	Block Diagram	1A

Date: Thursday, December 02, 2010 Sheet 45 of 46

Model	REV	CHANGE LIST
TE4 MB	1A	PAGE 38: PC212 change value and FP to 0.1U/25V_6X ; add PD9 (10.10.06)
		PAGE 35: add PC71 and PC76 for EMI Sol. (10.10.06)
		PAGE 36: add PD12 , PR142 and PR139 (10.10.06)
		Rename
		PAGE 36: PR169 , PR171, PR165 , PU10 , PR101 change Value ; PR173 , PR102 , PR96 no stuff ; PR175 stuff (10.10.20)
		PAGE 37: PC133 change Value and FP (10.10.20)
		PAGE 38: PU9 , PQ41 , PQ43 change Value (10.10.20)
		PAGE 35: add PC158 and PC99 for EMI sol. (10.11.5)
		PAGE 35: add PU11 (10.11.5)
		PAGE 36: delete PJP5 , PJP6 (10.11.5)
		PAGE 36: change PL8 , PL9 , PR35 Value (10.11.5)
		PAGE 37: delete PJP4 , PC135 stuff , PR42 change Value (10.11.5)
		PAGE 38: PU9 change Value (10.11.5)

MODEL: TE2

PAGE	FROM	To
1	1A	
2	1A	
3	1A	
4	1A	
5	1A	
6	1A	
7	1A	
8	1A	
9	1A	
10	1A	
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23	1A	
24	1A	
25	1A	
26	1A	
27	1A	
28	1A	
29	1A	
30	1A	

DOC NO. 204						
	PROJECT MODEL :	TE2	APPROVED BY:	Mosy Li	DATE:	2009/11/13
	PART NUMBER:		DRAWING BY:	Mosy Li	REVISON:	1A

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PROJECT : TE4
Size: | Document Number: GPU | Rev: 1A
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