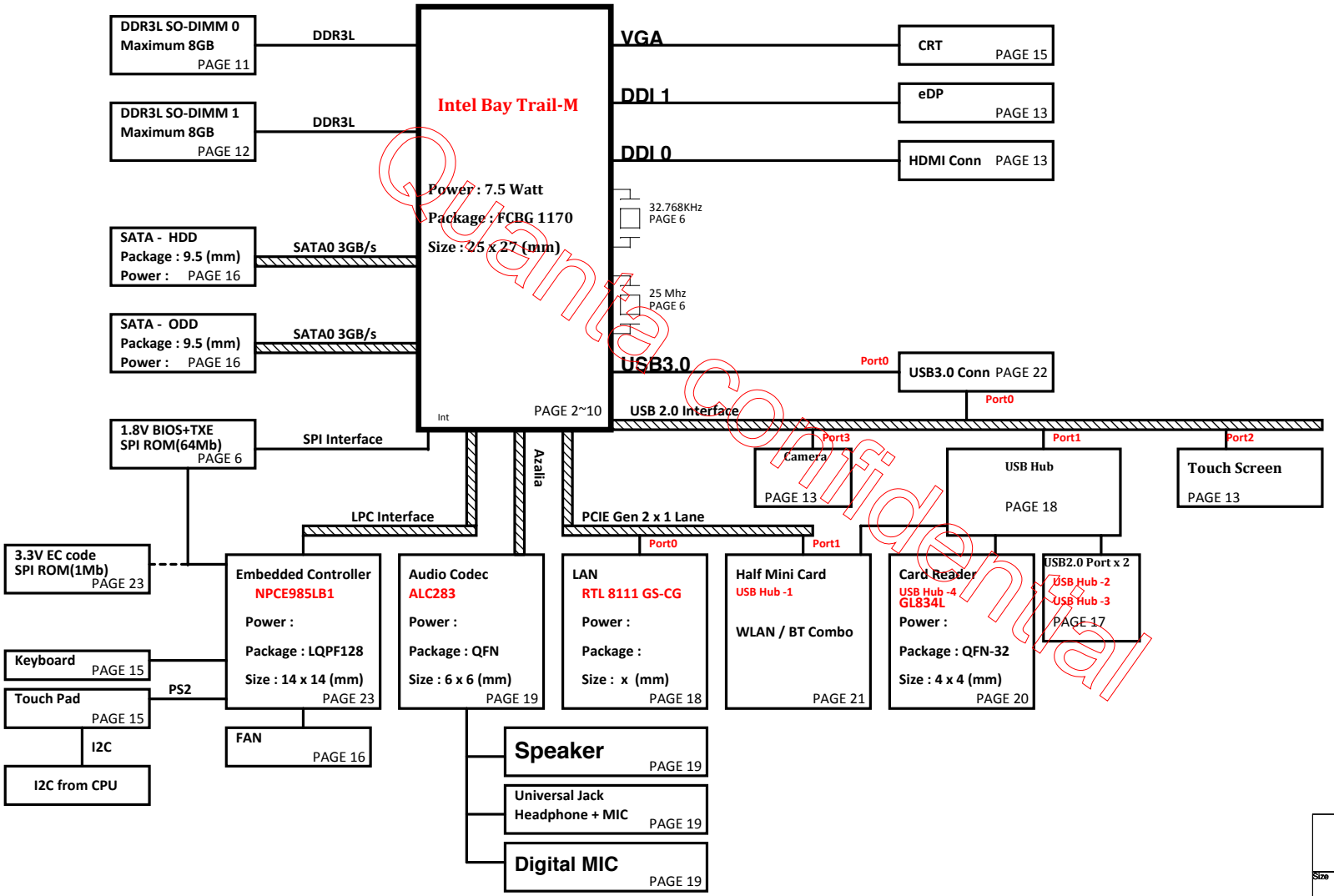
ZQM UMA(14")

Intel Bay Trail-M Platform Block Diagram

PCB 6L STACK UP

LAYER 1 : TOP
LAYER 2 : SVCC
LAYER 3 : IN1(High)
LAYER 4 : IN2(Low)
LAYER 5 : SGND
LAYER 6 : BOT



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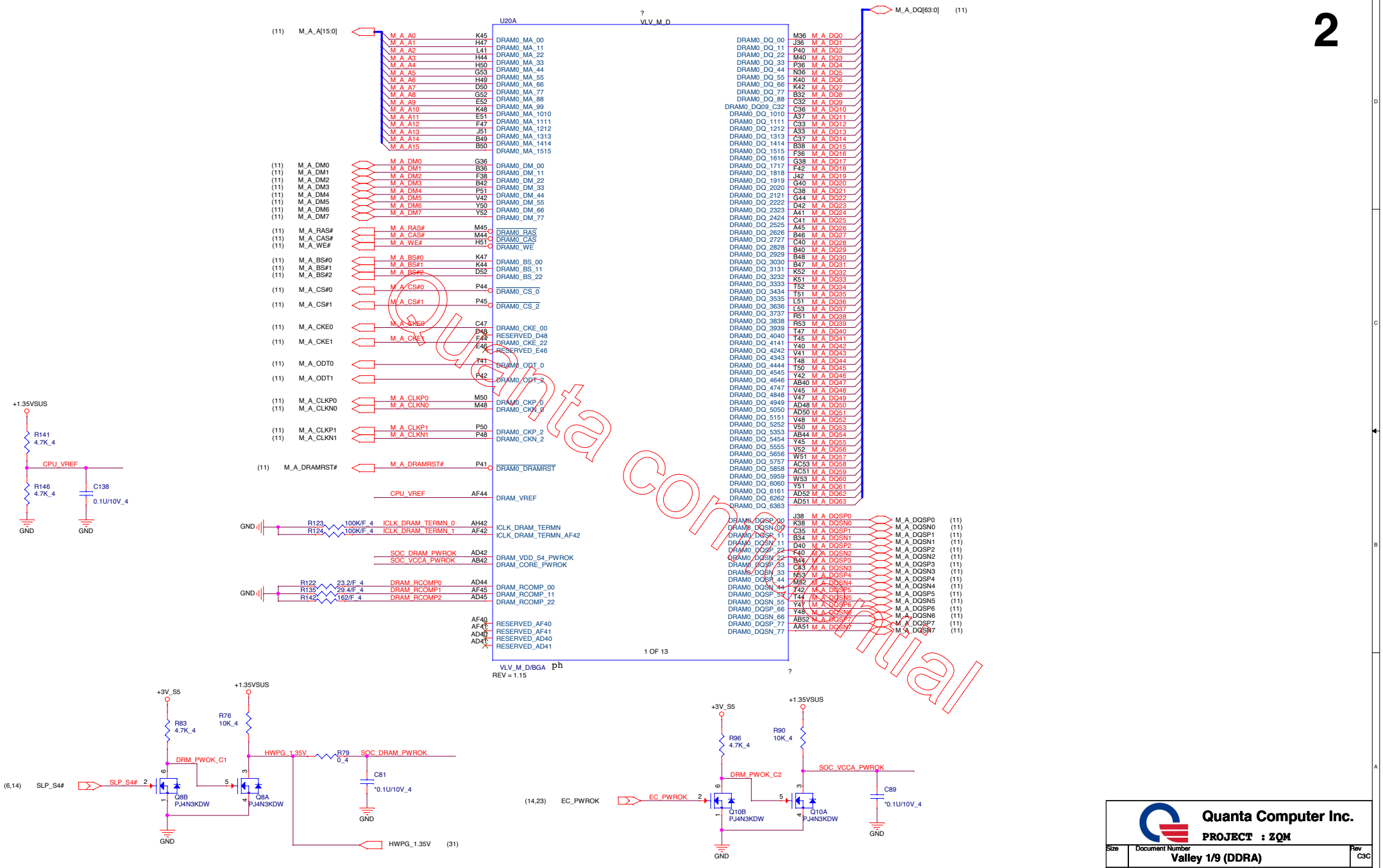
Quanta Computer Inc.
PROJECT : ZQM

Size	Document Number	Rev
	Intel Block Diagram	C3C

Date: Wednesday, April 02, 2014 Sheet 1 of 34


U20A
VLV_M_D
1 OF 13
VLV_M_D/BGA
REV = 1.15
M_A_A[15:0]
M_A_DQ[63:0]
M_A_DM0
M_A_DM1
M_A_DM2
M_A_DM3
M_A_DM4
M_A_DM5
M_A_DM6
M_A_DM7
M_A_RAS#
M_A_CAS#
M_A_WE#
M_A_BS#0
M_A_BS#1
M_A_BS#2
M_A_CS#0
M_A_CS#1
M_A_CKE0
M_A_CKE1
M_A_ODT0
M_A_ODT1
M_A_CLKP0
M_A_CLKN0
M_A_CLKP1
M_A_CLKN1
M_A_DRAMRST#
CPU_VREF
ICLK_DRAM_TERMN_0
ICLK_DRAM_TERMN_1
SOC_DRAM_PWROK
SOC_VCCA_PWROK
DRAM_RCOMP0
DRAM_RCOMP1
DRAM_RCOMP2
RESERVED_AF40
RESERVED_AF41
RESERVED_AD40
RESERVED_AD41
M_A_DQSP0
M_A_DQSN0
M_A_DQSP1
M_A_DQSN1
M_A_DQSP2
M_A_DQSN2
M_A_DQSP3
M_A_DQSN3
M_A_DQSP4
M_A_DQSN4
M_A_DQSP5
M_A_DQSN5
M_A_DQSP6
M_A_DQSN6
M_A_DQSP7
M_A_DQSN7
+1.35VSUS
R141 4.7K_4
R146 4.7K_4
C138 0.1U/10V_4
R123 100K/F_4
R124 100K/F_4
R122 23.2/F_4
R135 29.4/F_4
R142 162/F_4
+3V_S5
R83 4.7K_4
R76 10K_4
HWPG_1.35V
R79 0_4
C81 *0.1U/10V_4
DRM_PWOK_C1
SLP_S4#
Q8B PJ4N3KDW
Q8A PJ4N3KDW
HWPG_1.35V (31)
R96 4.7K_4
R90 10K_4
DRM_PWOK_C2
EC_PWROK
Q10B PJ4N3KDW
Q10A PJ4N3KDW
C89 *0.1U/10V_4
SOC_VCCA_PWROK
GND
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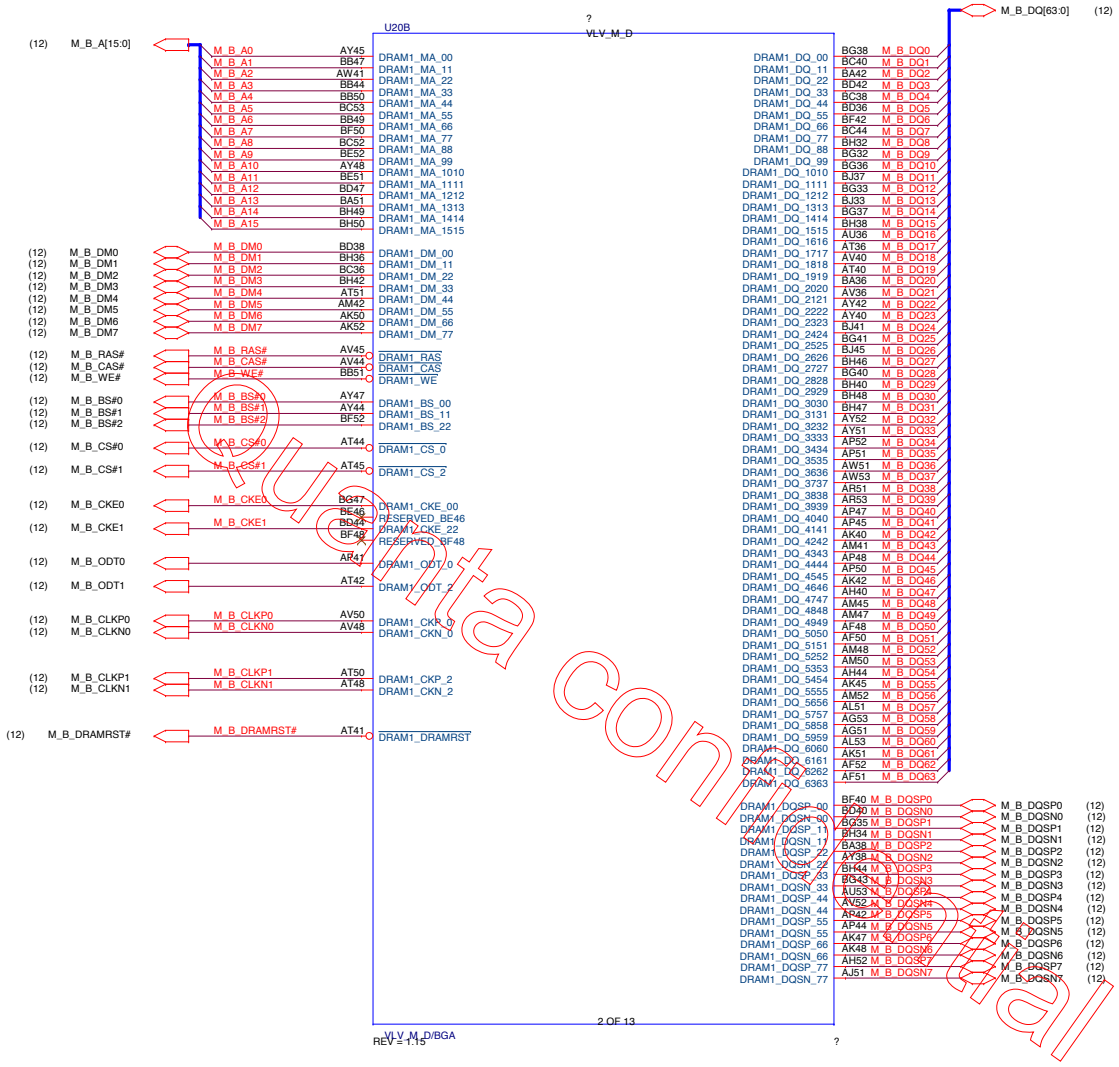
2
Quanta Computer Inc.
PROJECT : ZQM
Valley 1/9 (DDRA)
Size
Document Number
Rev C3C
Date: Wednesday, April 02, 2014
Sheet 2 of 34



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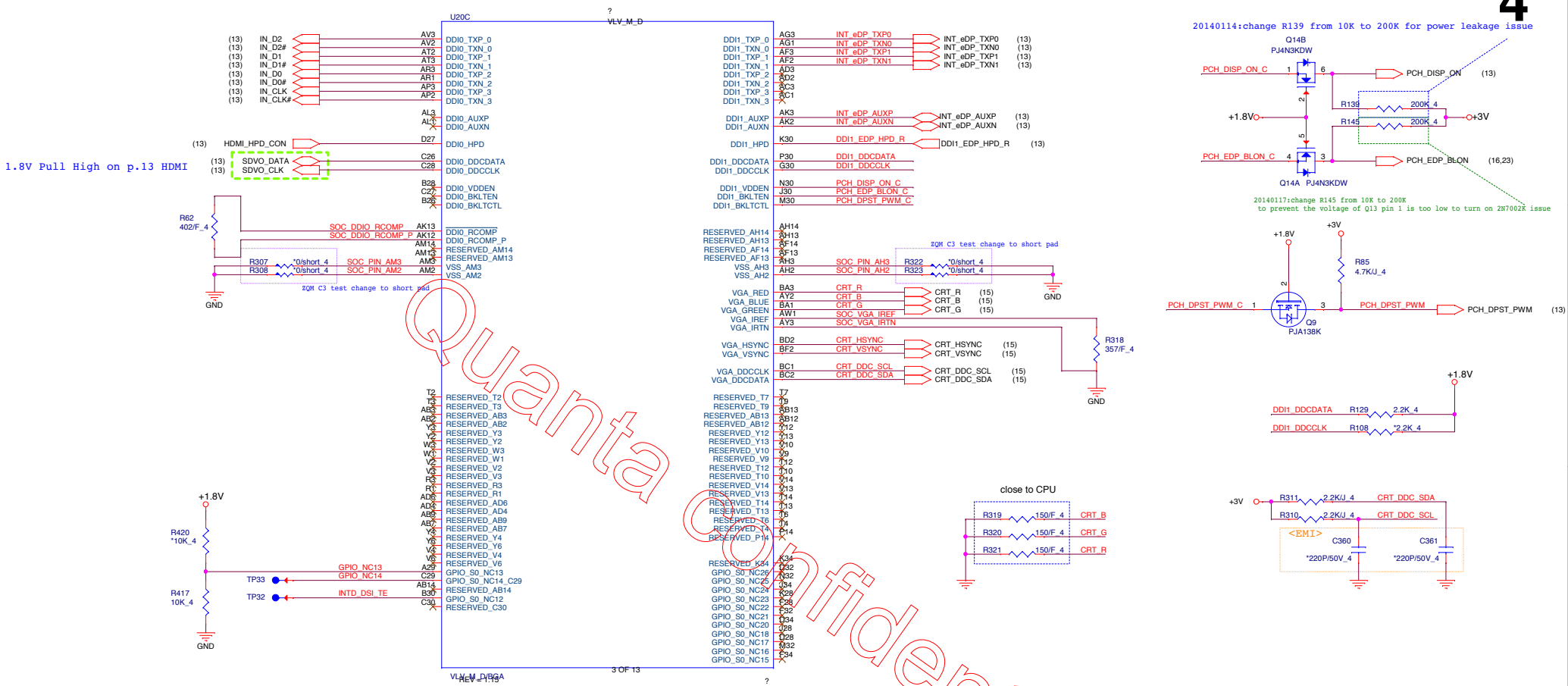
PROJECT : ZQM	
Size	Document Number: Valley 2/9 (DDRB) — Rev: C3C
Date: Wednesday, April 02, 2014	Sheet 3 of 34

20140114:change R139 from 10K to 200K for power leakage issue

1.8V Pull High on p.13 HDMI



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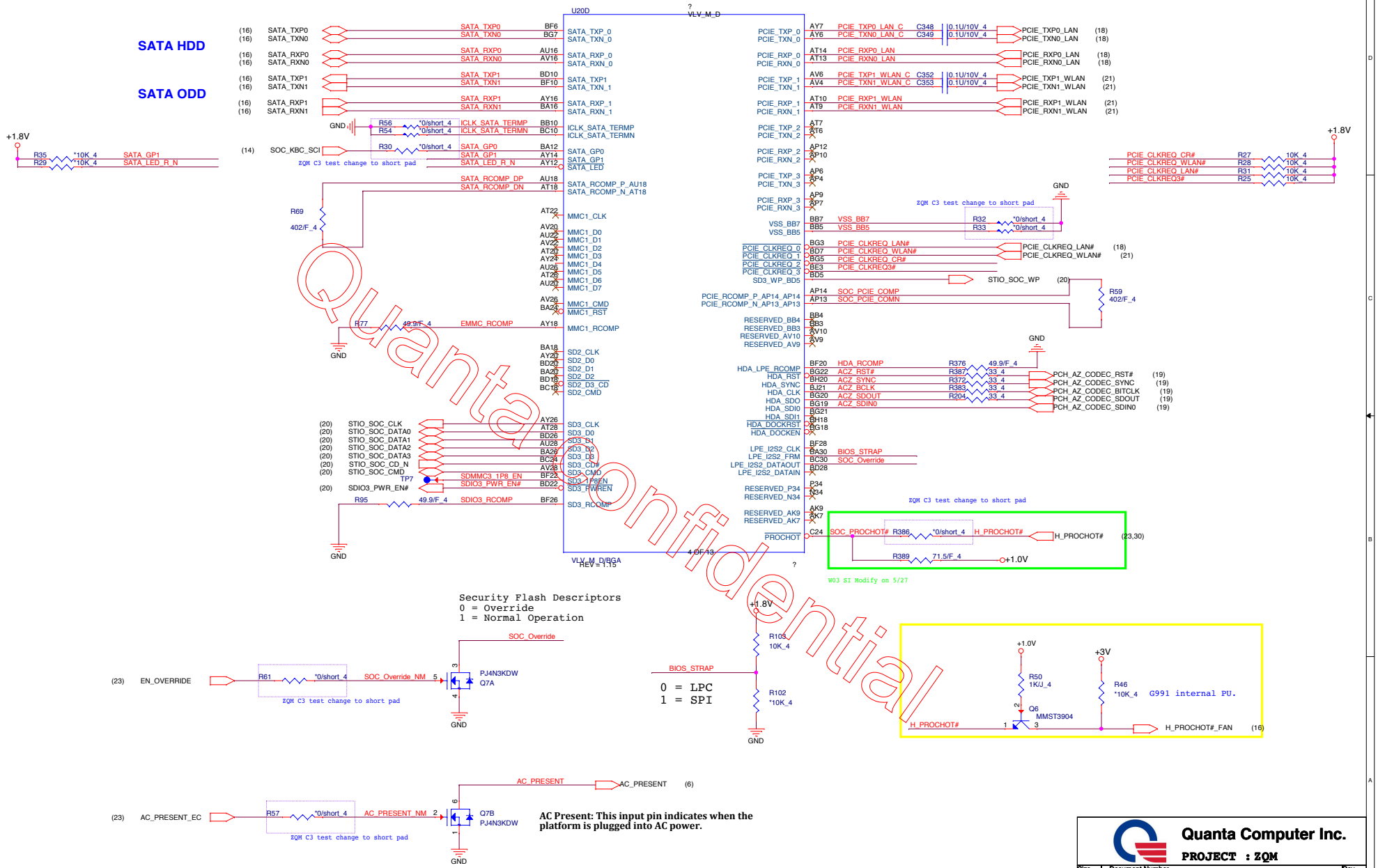
PROJECT : ZQM

Size	Document Number	Rev
	Valley 3/9 (Display)	C3C
Date: Wednesday, April 02, 2014	Sheet 4 of 34	



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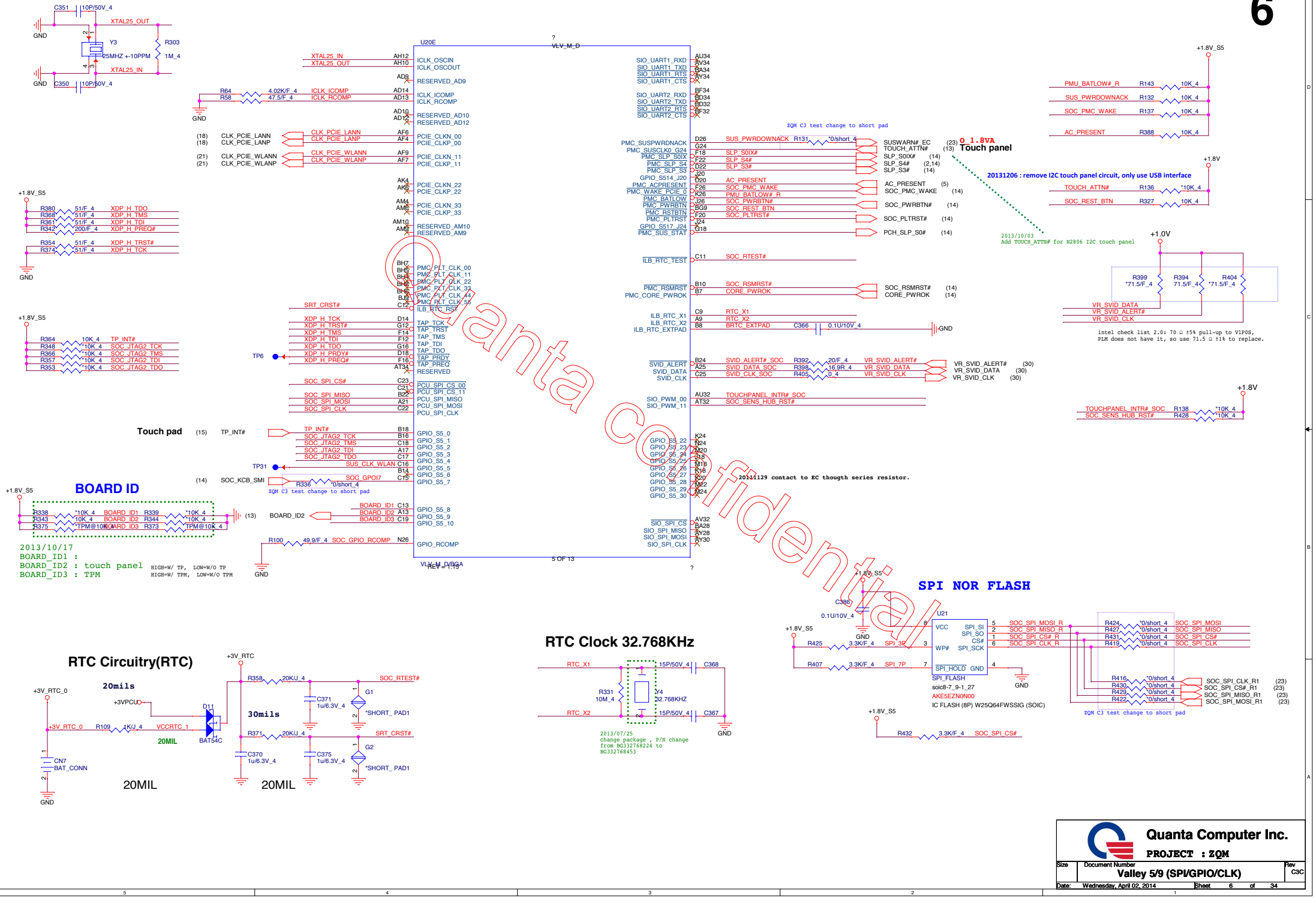
Size	Document Number: Valley 4/9 (SD/PCIE/SATA)	Rev: C3C
Date: Wednesday, April 02, 2014	Sheet 5 of 34	



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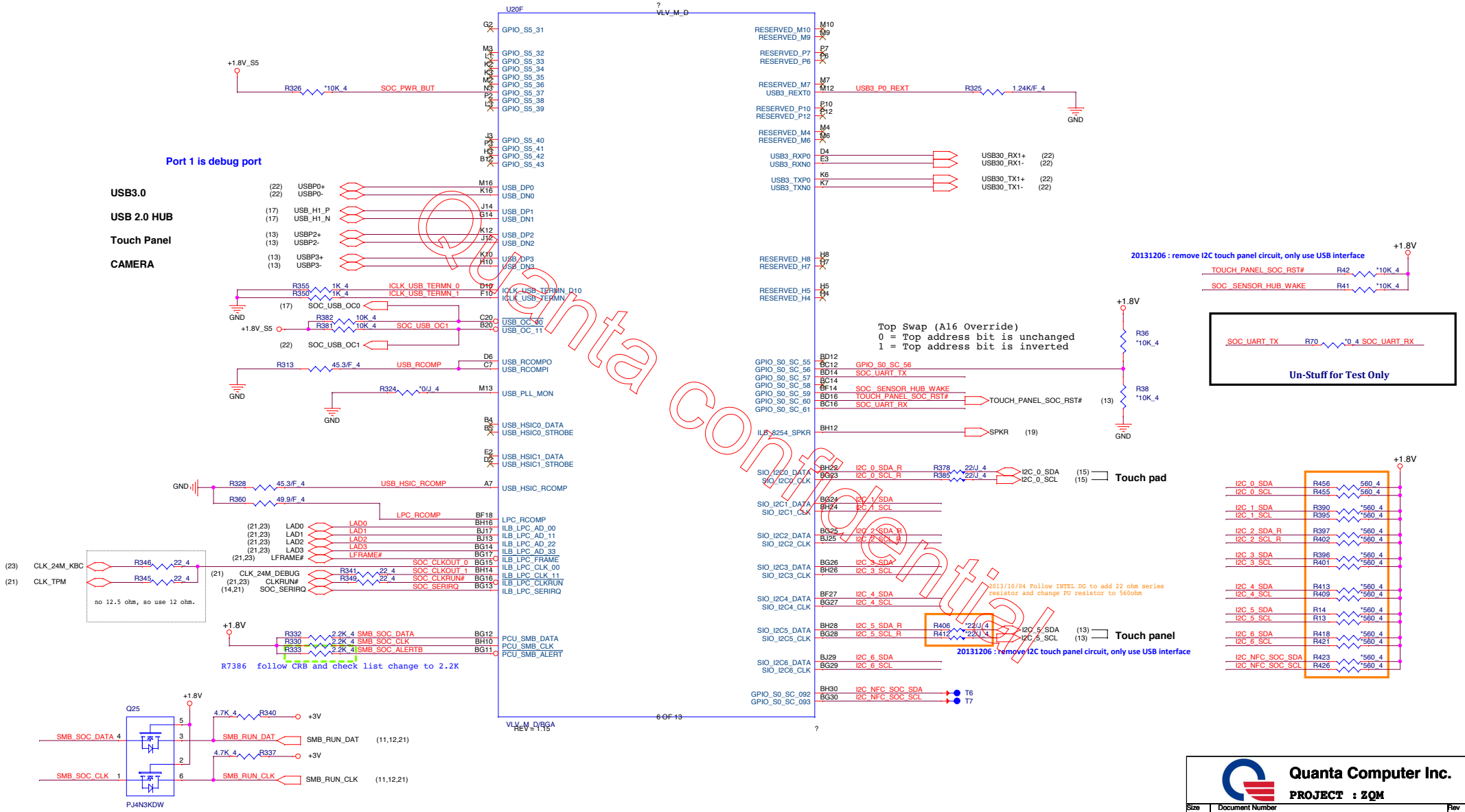
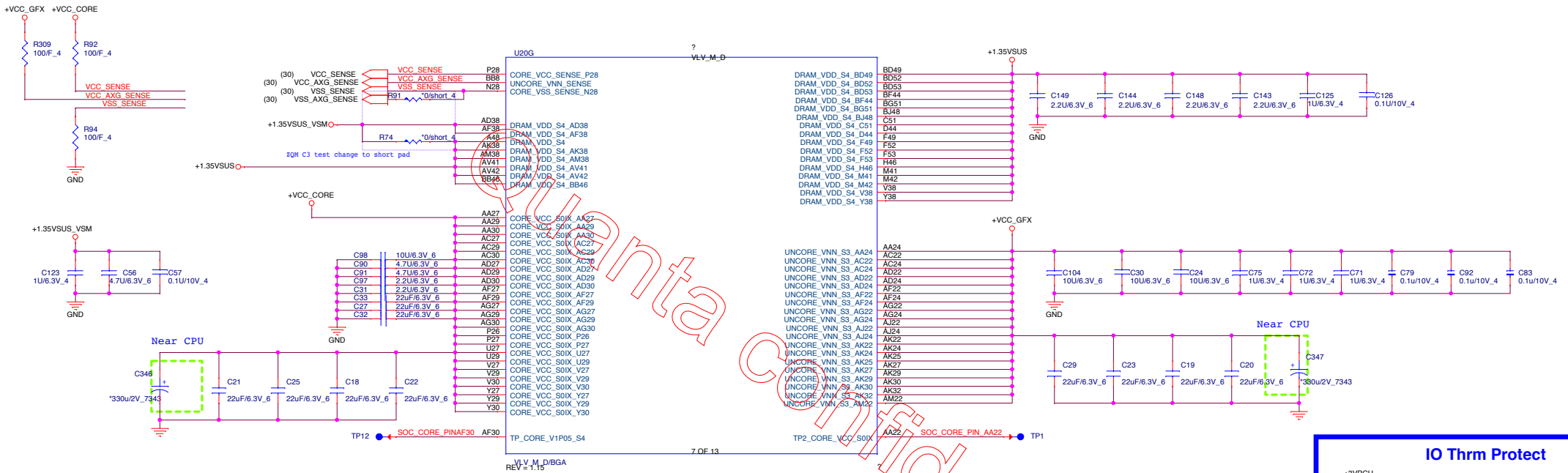
Quanta Computer Inc.	PROJECT : ZQM		
Size	Document Number		Rev
	Valley 5/9 (SPI/GPIO/CLK)		C3C
Date: Wednesday, April 02, 2014		Sheet 6 of 34	



Quanta Computer Inc.	
PROJECT : ZQM	
Size	Document Number: Valley 6/9 (USB/LPC/I2C) — Rev: C3C
Date: Wednesday, April 02, 2014	Sheet 7 of 34



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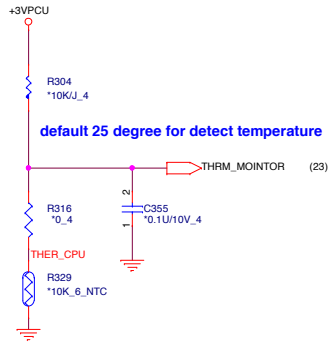
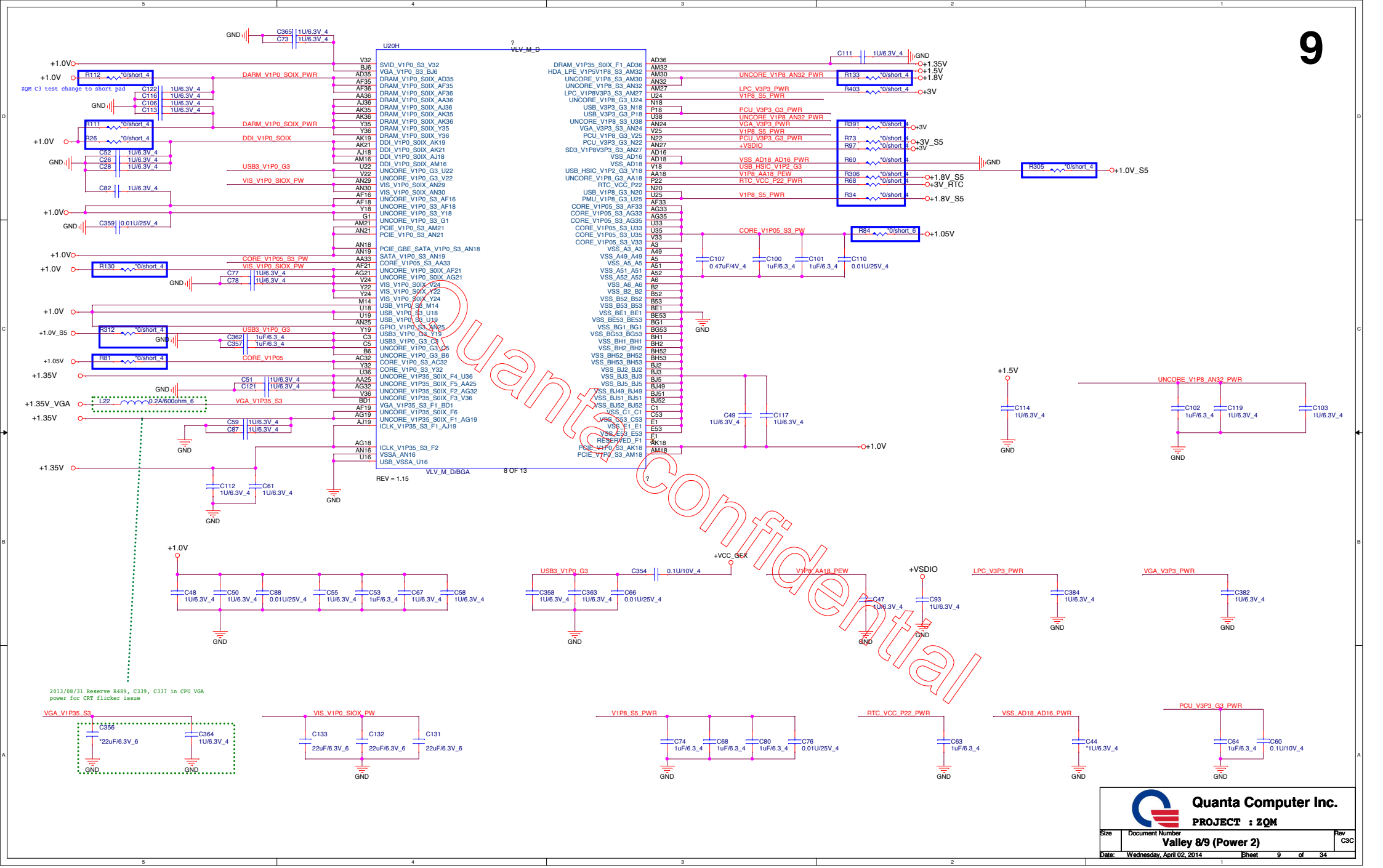
IO Thrm Protect



Quanta Computer Inc.		
PROJECT : ZQM		
Size	Document Number: Valley 7/9 (Power 1)	Rev: C3C
Date: Wednesday, April 02, 2014	Sheet 8 of 34	



Quanta Computer Inc.
PROJECT : ZQM
Size
Document Number
Valley 8/9 (Power 2)
Rev C3C
Date: Wednesday, April 02, 2014
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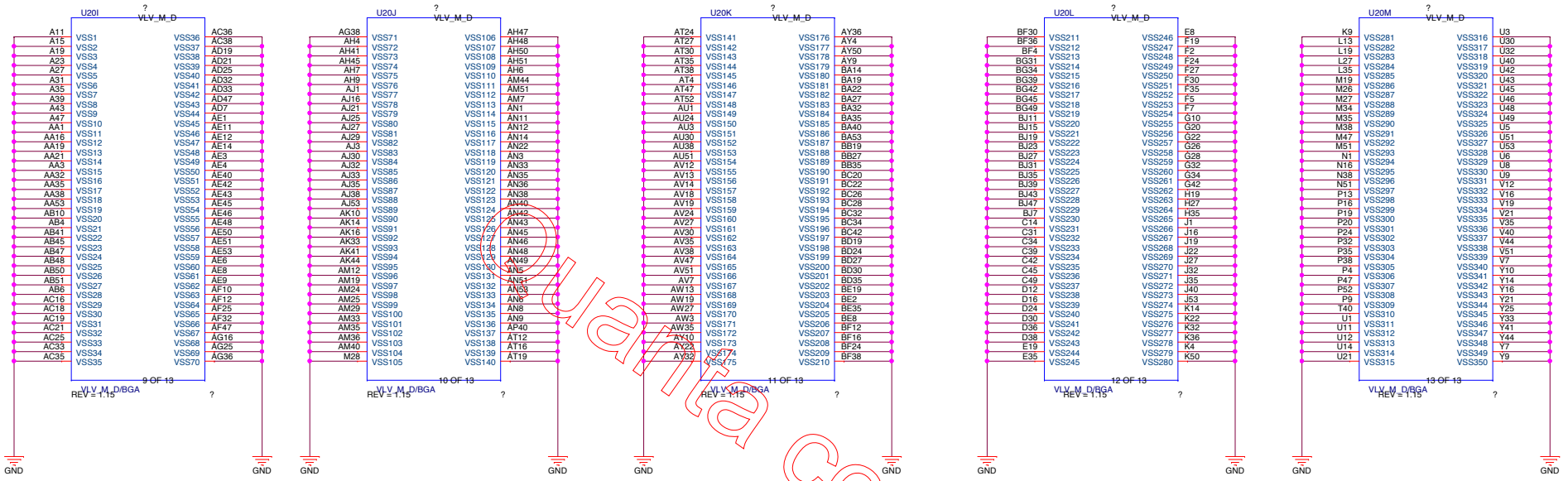

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PROJECT : ZQM

Size	Document Number	Rev
	Valley 9/9 (GND)	C3C

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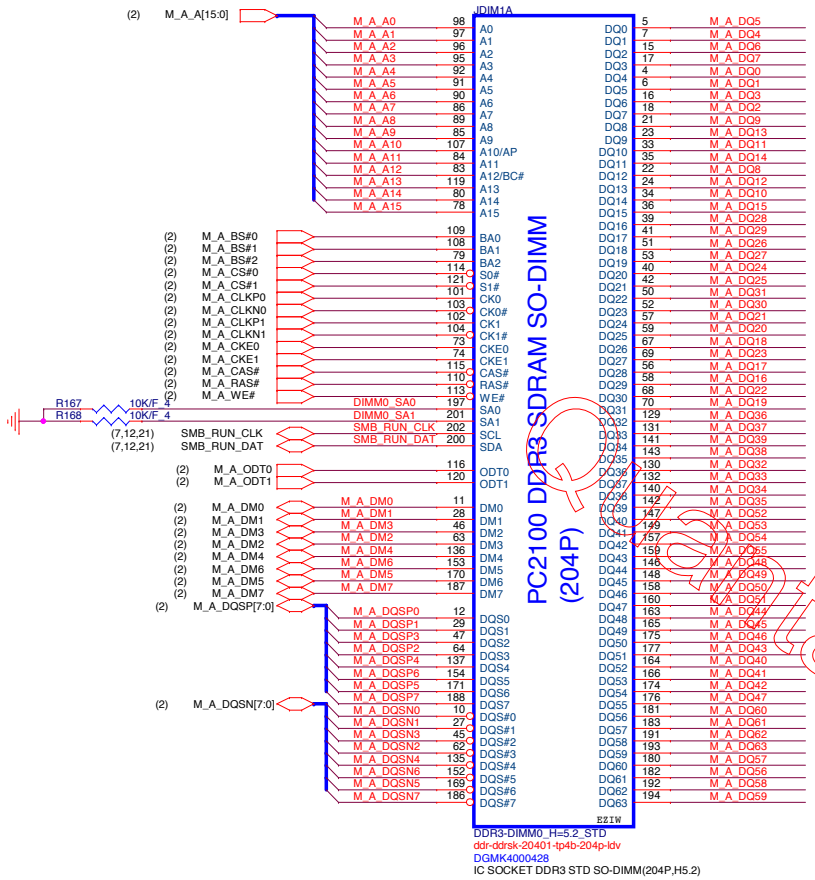
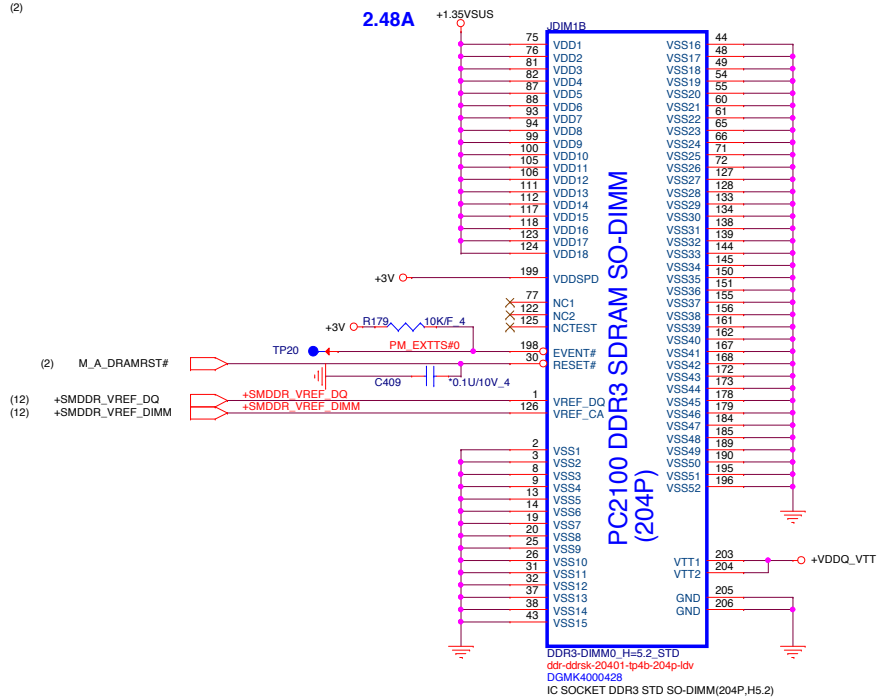
Address A0H





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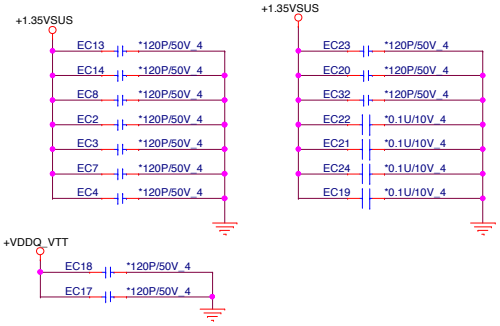
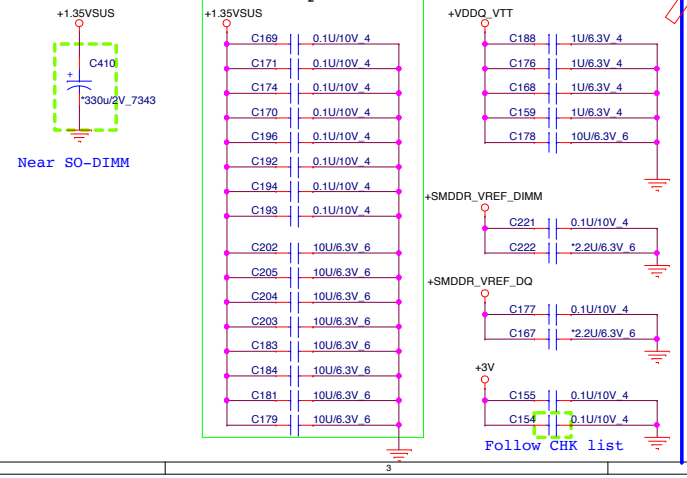
For EMI RESERVE

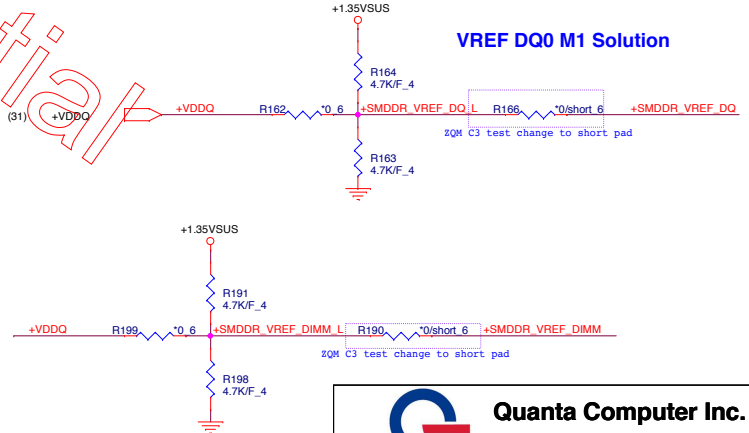


Place these Caps near So-Dimm0.

0.1uF/10uF 4pcs on each side of connector



VREF DQ0 M1 Solution



Quanta Computer Inc.	PROJECT : ZQM	
Size	Document Number: DDR3 DIMM0-STD(5.2H)	Rev: C3C
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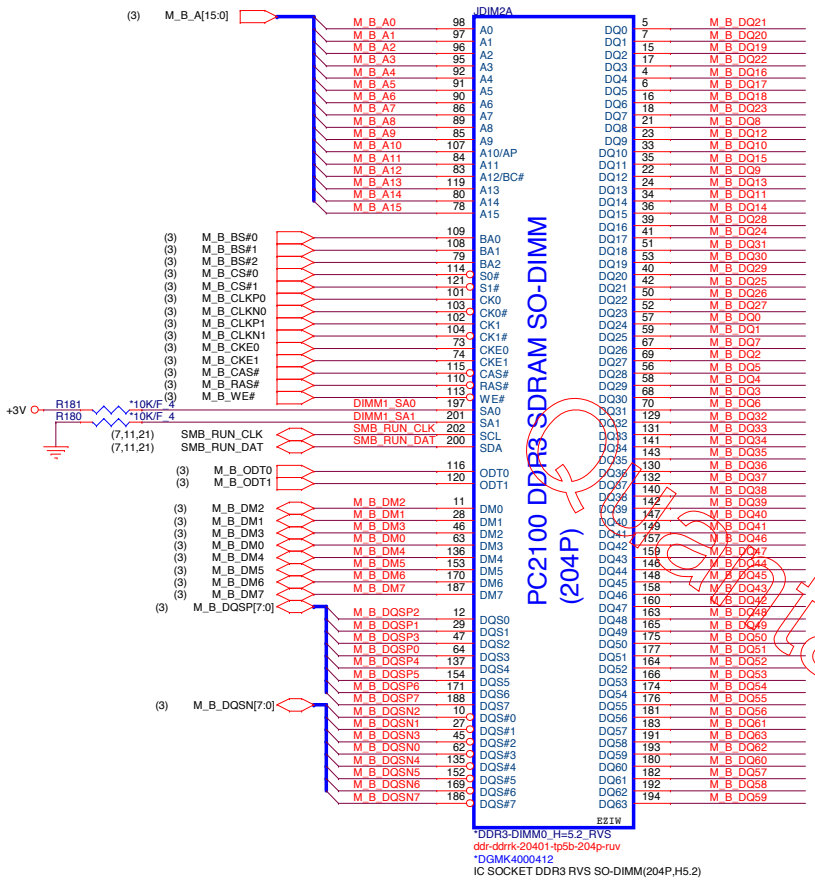
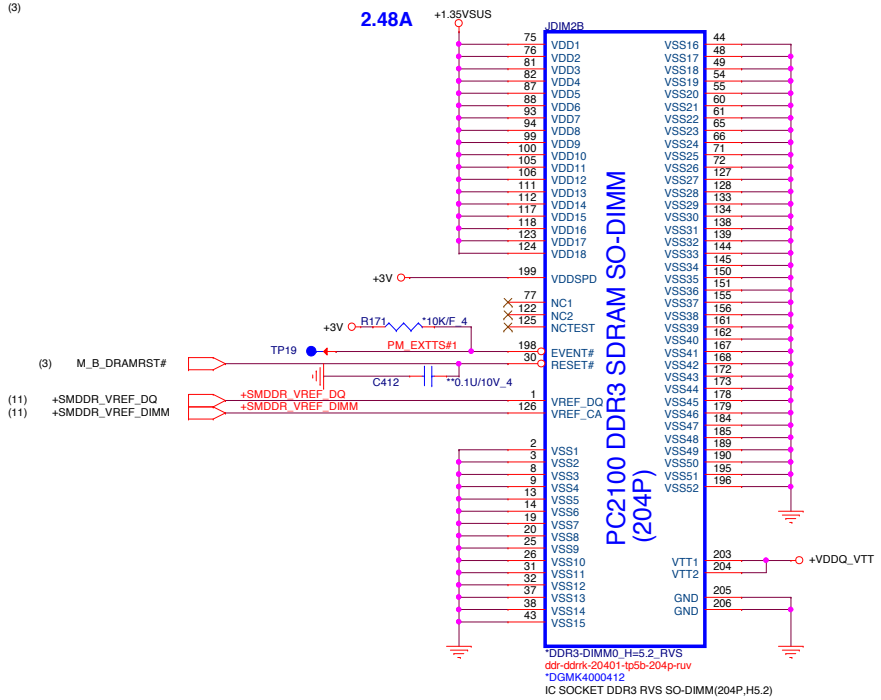
Address A2H





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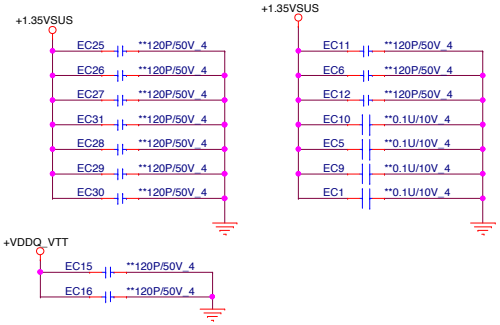
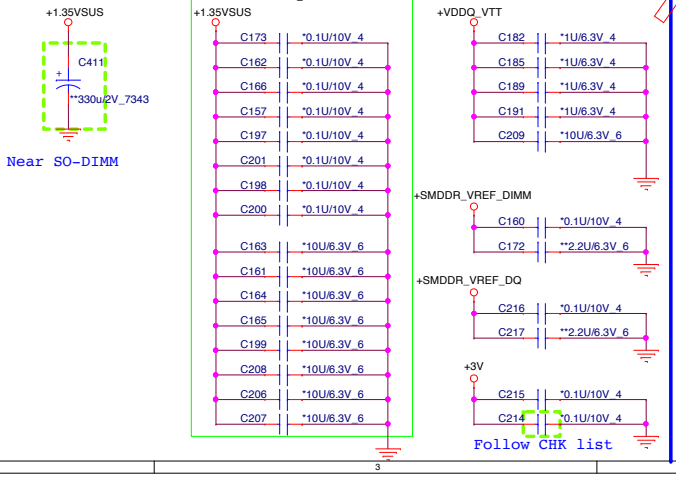
For EMI RESERVE



Place these Caps near So-Dimm1.

0.1uF/10uF 4pcs on each side of connector



Quanta Computer Inc.		
PROJECT : ZQM		
Size	Document Number: DDR3 DIMM1-STD(5.2H)	Rev: C3C
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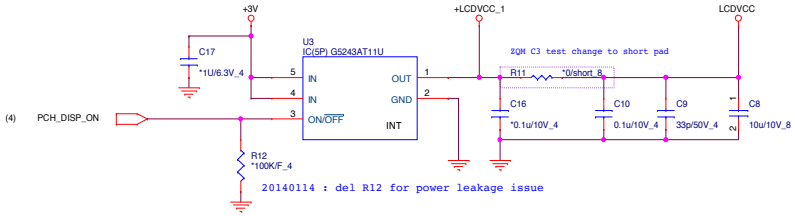
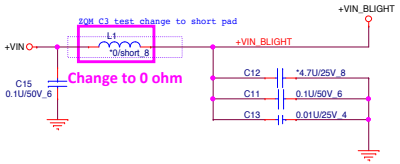
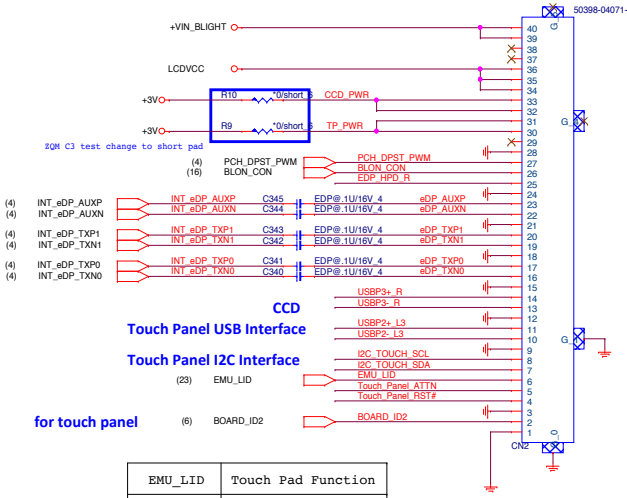
EDP Conn.

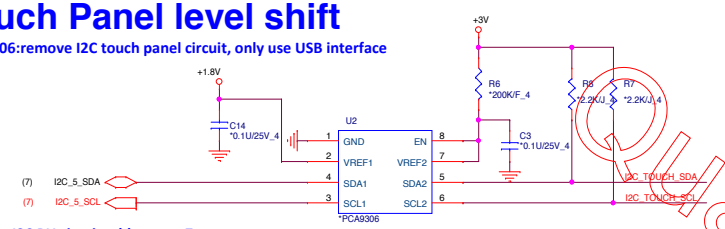




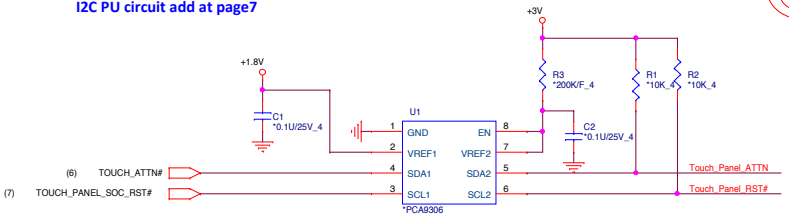


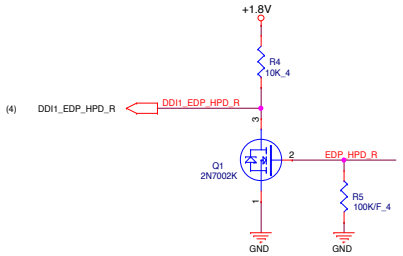
Touch Panel level shift

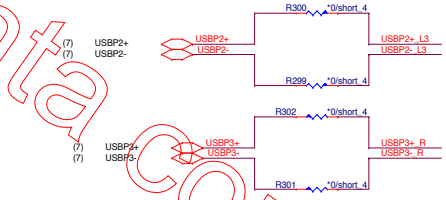
20131206:remove I2C touch panel circuit, only use USB interface



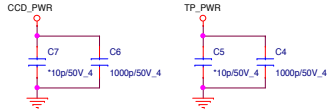
I2C PU circuit add at page7







EMU_LID	Touch Pad Function
H	OK
L	No Function



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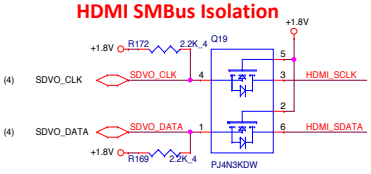
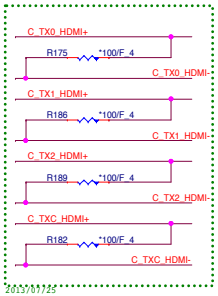
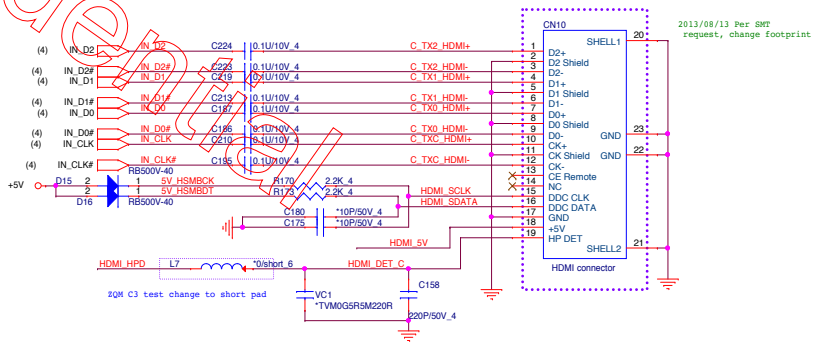
HDMI Conn.

HDMI SMBus Isolation

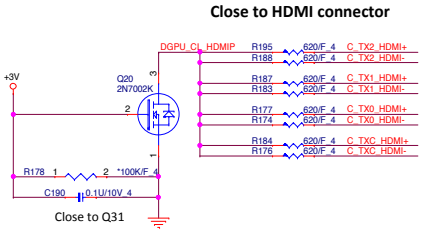


EMI (EMC)

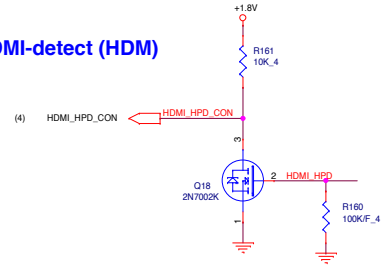


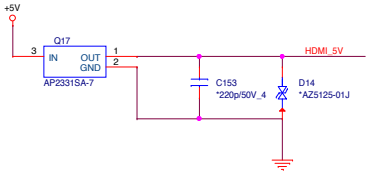


HDMI-Level shift (HDM)



HDMI-detect (HDM)





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PROJECT : ZQM			
Size	Document Number		Rev
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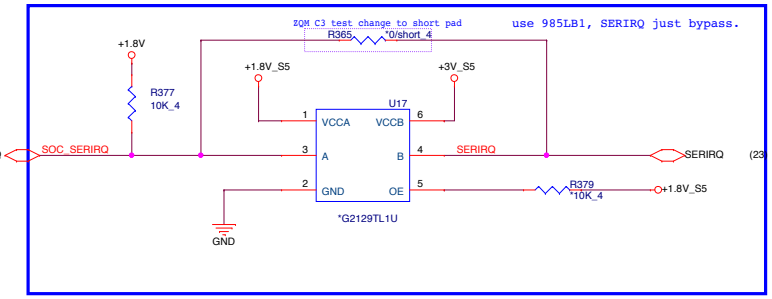

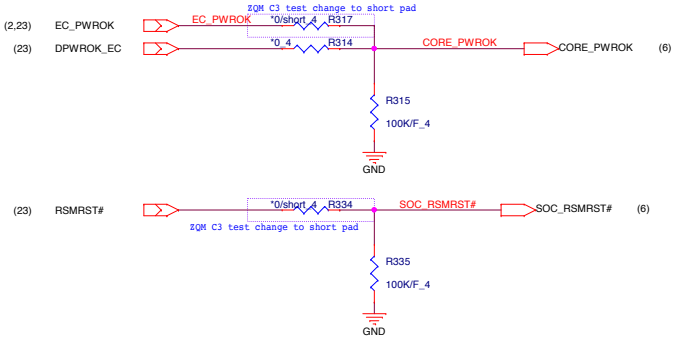

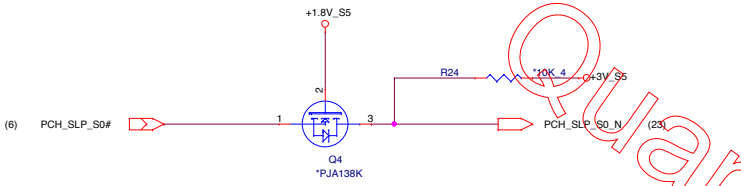

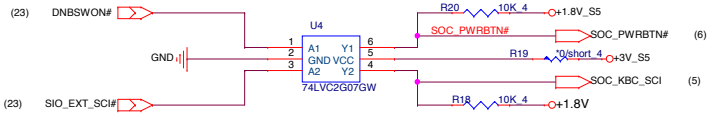

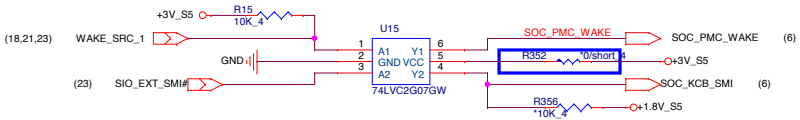

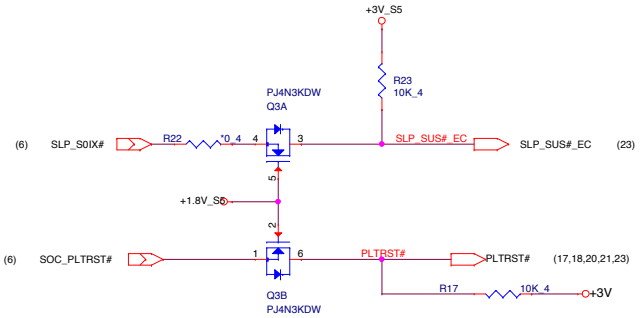

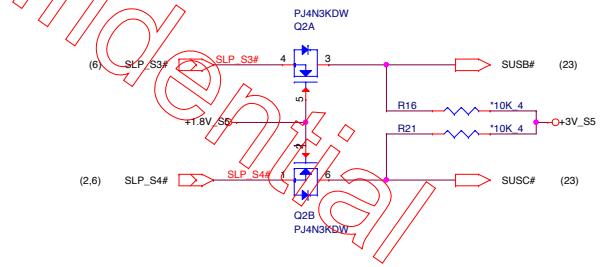

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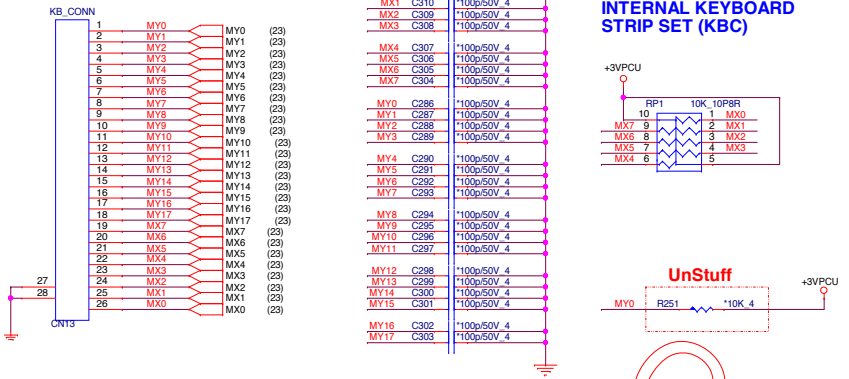
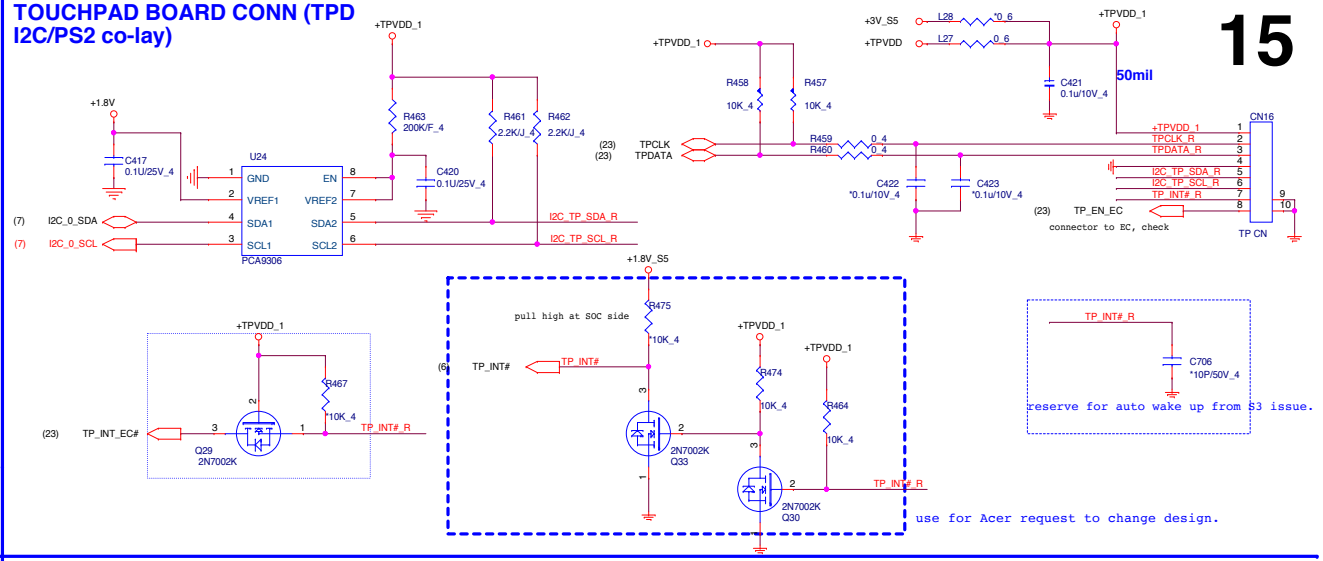
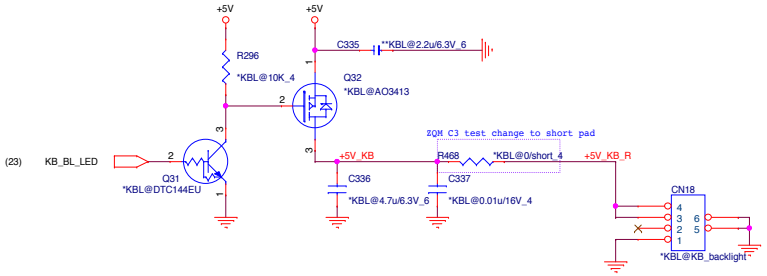
KEYBOARD (KBC)



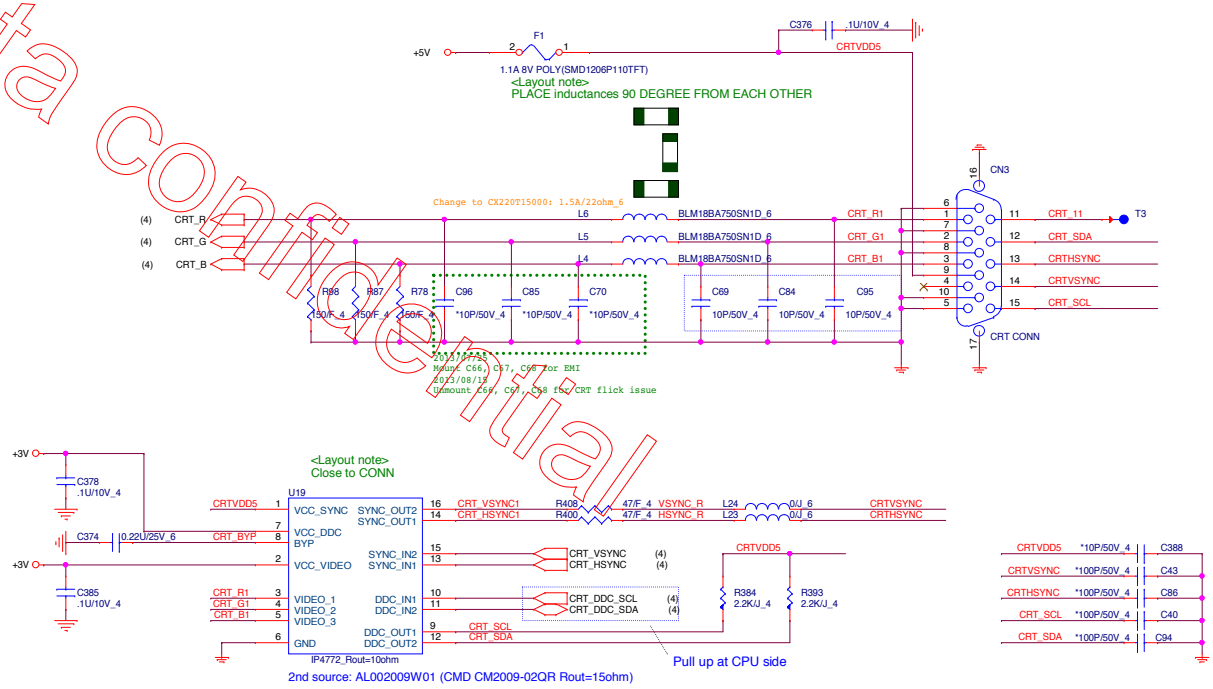
TOUCHPAD BOARD CONN (TPD I2C/PS2 co-lay)



KB_BL LED (KBL)



CRT



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Quanta Computer Inc.			
PROJECT : ZQM			
Size	Document Number		Rev
	KB/BT/TP/LED/Power Connector		C3C
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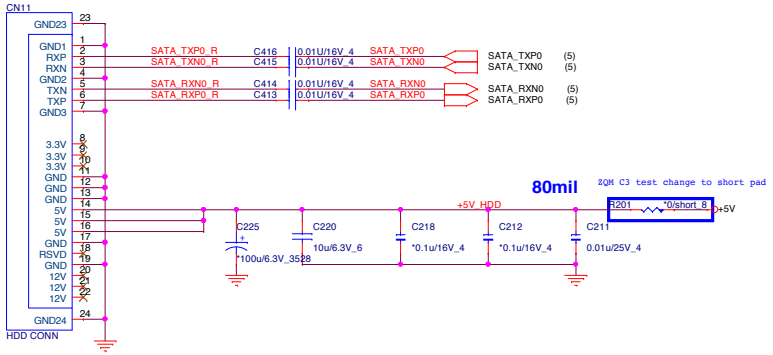
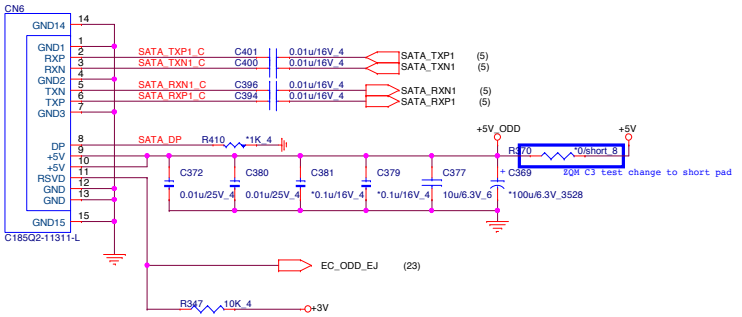
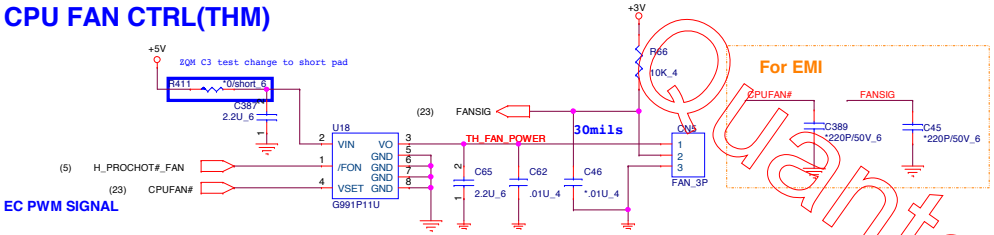
2.5" SATA HDD (HDD)



SATA ODD Connector



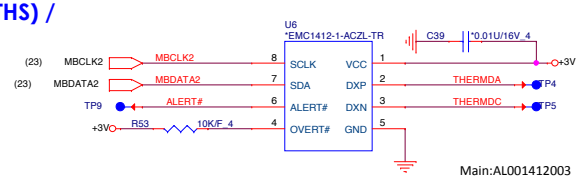
CPU FAN CTRL(THM)



EC PWM SIGNAL

FANPWR = 1.6*VSET

CPU Thermal sensor(THS) / MB Local TEMP

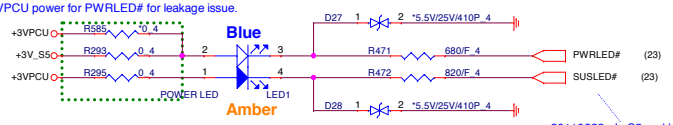


Main:AL001412003 EMC1412-1-ACZL-TR(98h)
2nd:AL000431014 TMP431ADGKR(98h)

LED/SW (UIF)

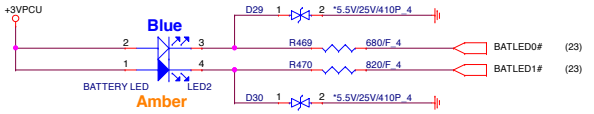
<20130722> Reserve +3VPCU power for PWRLED# for leakage issue.

PWR LED
SUS LED



<20110223> In S5 and battery only mode, EC will turn off PWRLED#/SUSLED# while EC is idle.

FULL LED
CHG LED



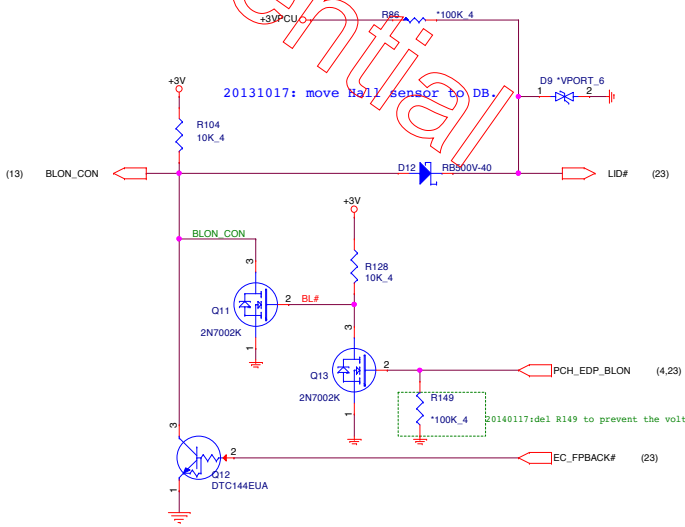
WLAN LED

delete the circuit

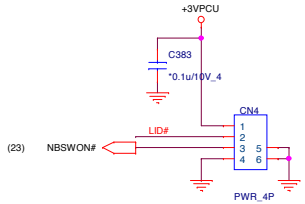
ODD Power (SATA)

HALL IC (HSR)

1st source : EOD
2nd source : AL008251000 -- YBT
3rd source : AL009132001
4th source : AL009249000



PWR button DB CON



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PROJECT : ZQM

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	HDD/FAN/Hall/Power	C3C

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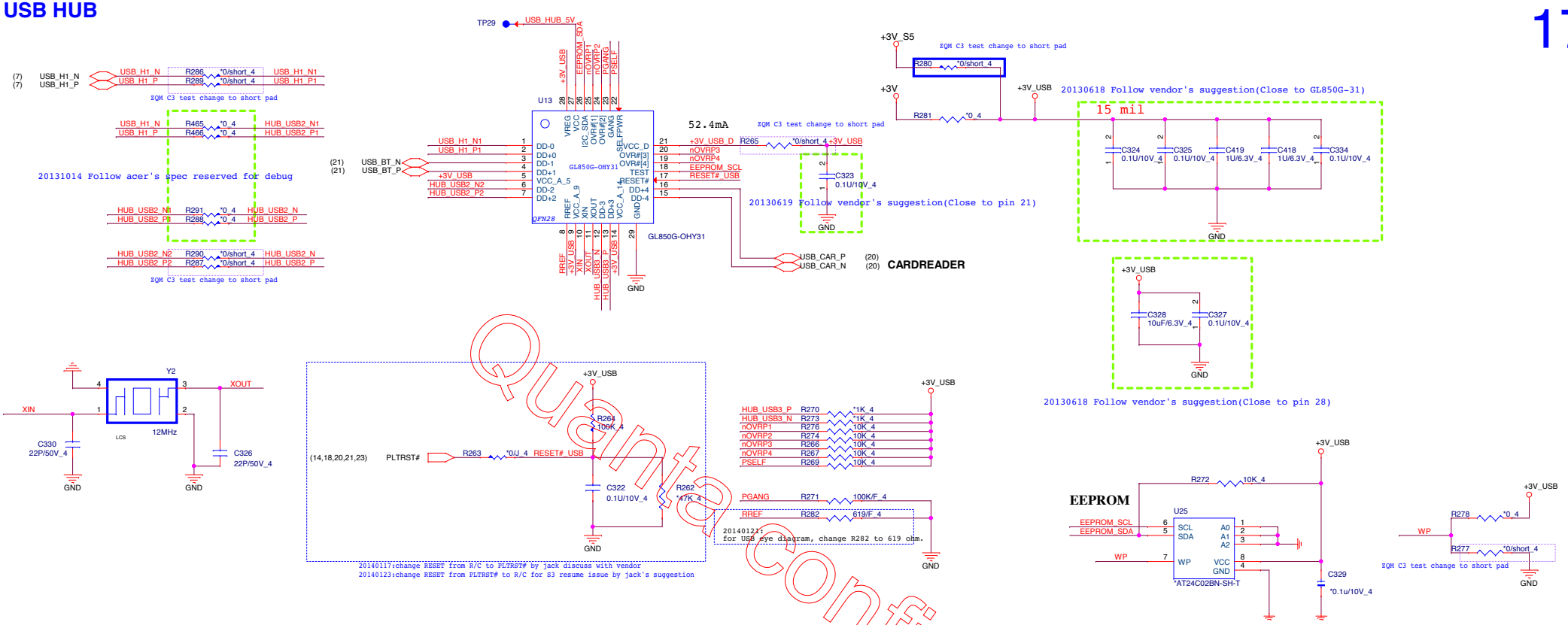
USB HUB



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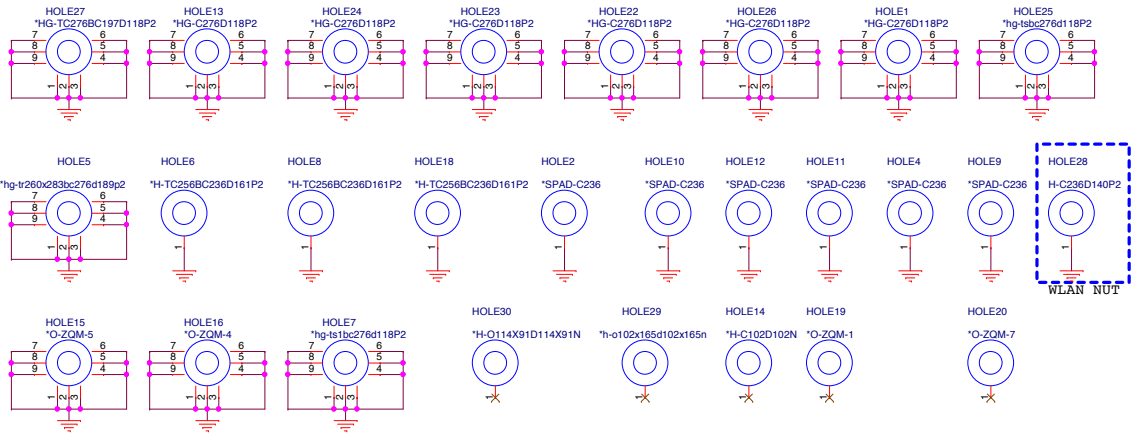
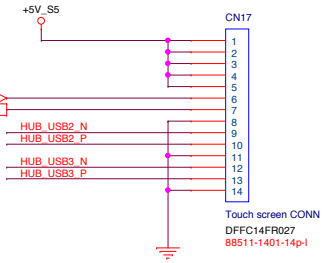
HOLE(OTH)



USB DB CONNECTOR



Quanta Computer Inc.	PROJECT : ZQM	
Size	Document Number: USB BOARD CONN	Rev: C3C
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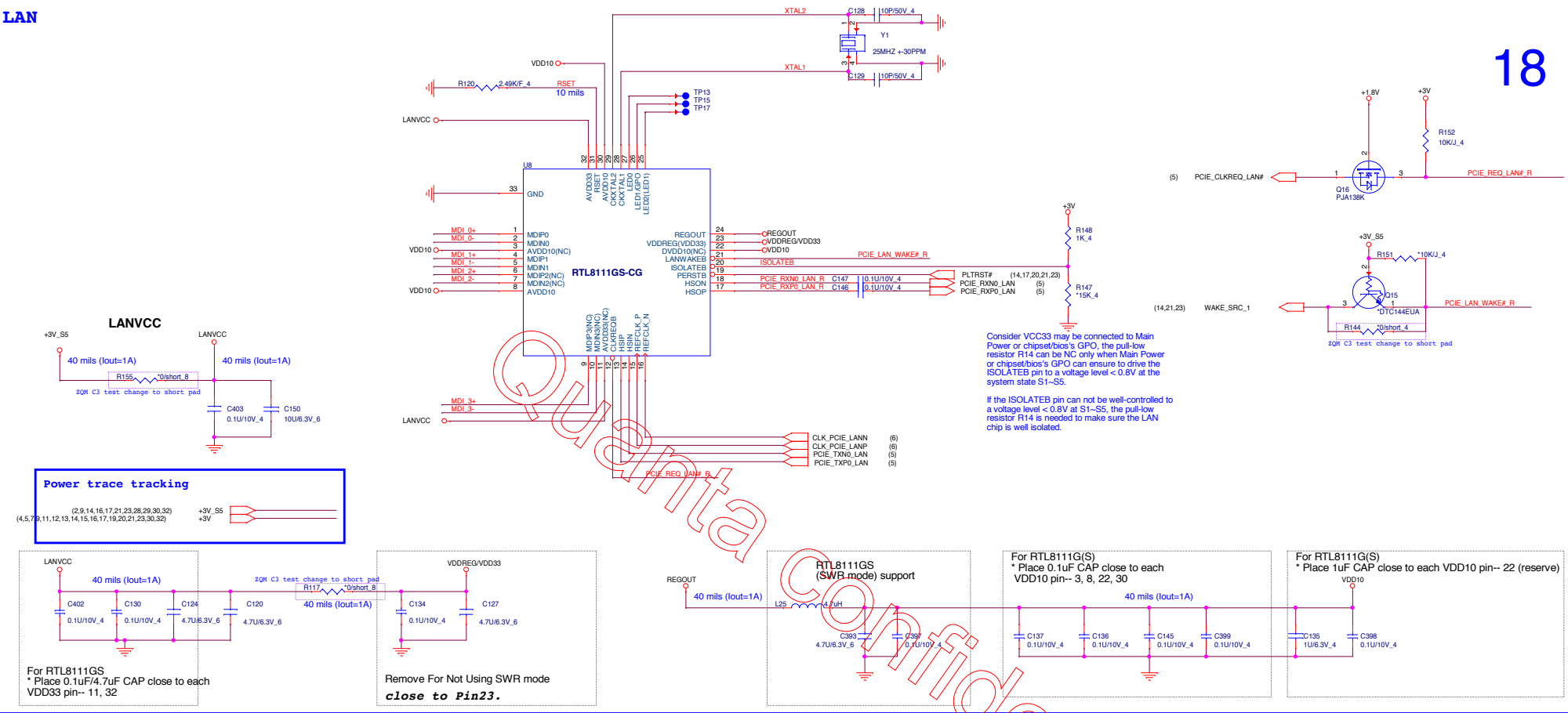
LAN



Consider VCC33 may be connected to Main Power or chipset/bios's GPO, the pull-low resistor R14 can be NC only when Main Power or chipset/bios's GPO can ensure to drive the ISOLATEB pin to a voltage level < 0.8V at the system state S1~S5.

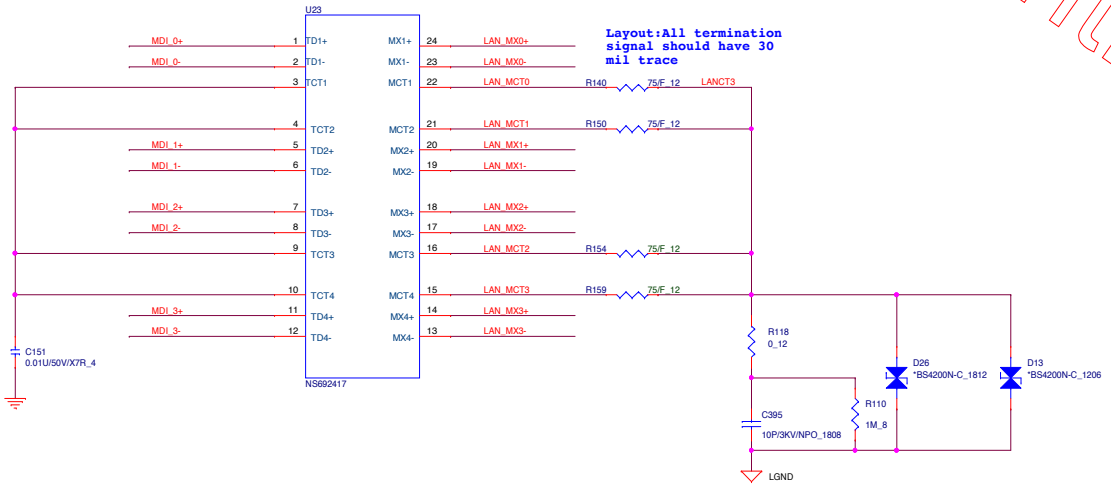
If the ISOLATEB pin can not be well-controlled to a voltage level < 0.8V at S1~S5, the pull-low resistor R14 is needed to make sure the LAN chip is well isolated.

LANVCC

Power trace tracking

(2,9,14,16,17,21,23,28,29,30,32) +3V_S5
(4,5,7,9,11,12,13,14,15,16,17,19,20,21,23,30,32) +3V

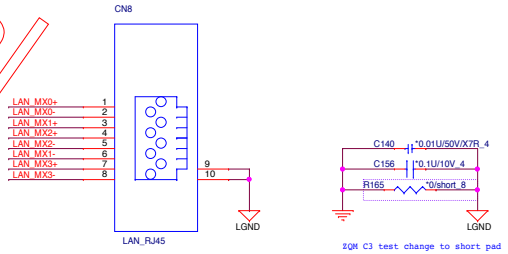
Tramsformer



Layout:All termination signal should have 30 mil trace

RJ45 Connector

Need Check P/N and F/P



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Quanta Computer Inc.
PROJECT : ZQM

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	LAN	C3C
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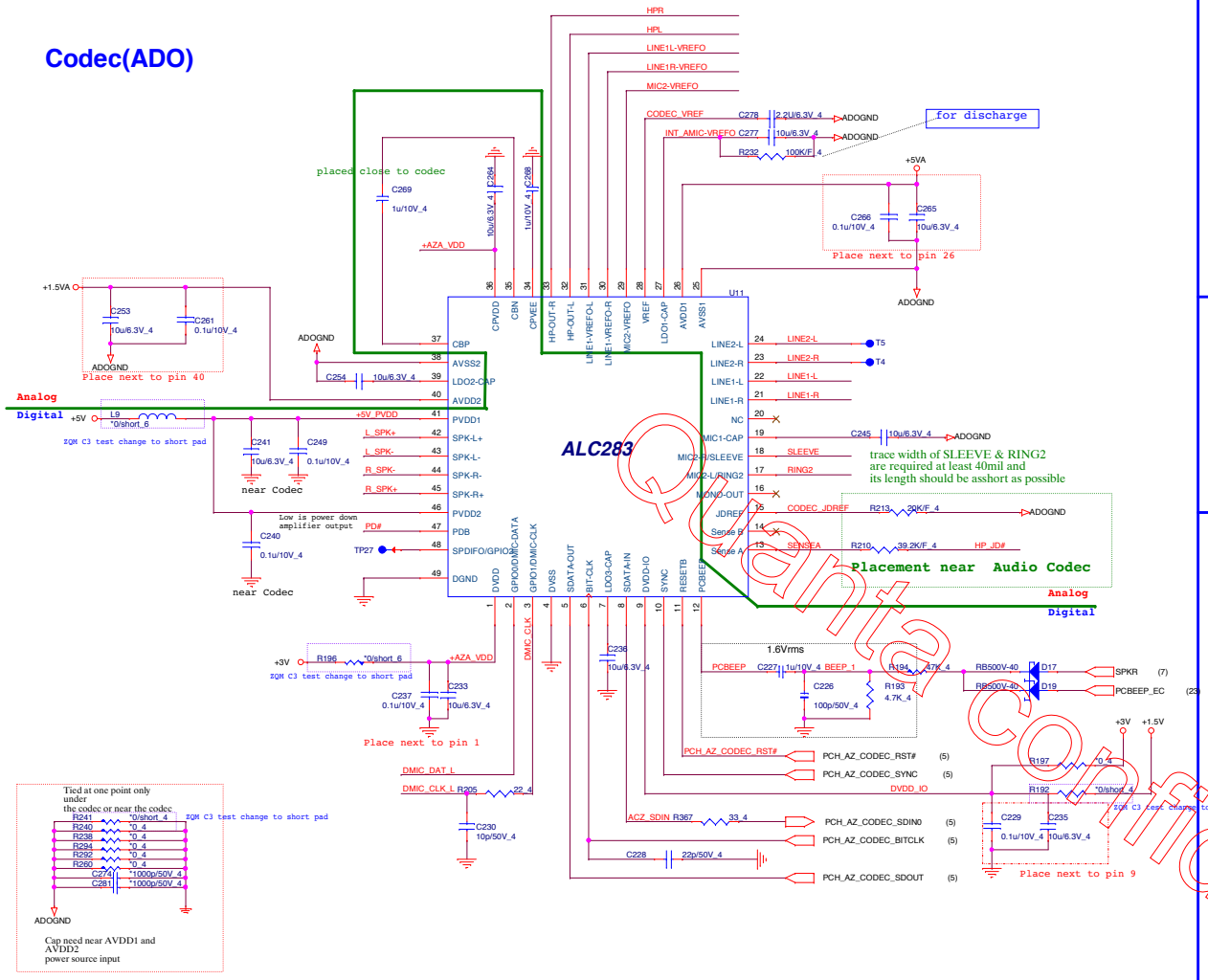
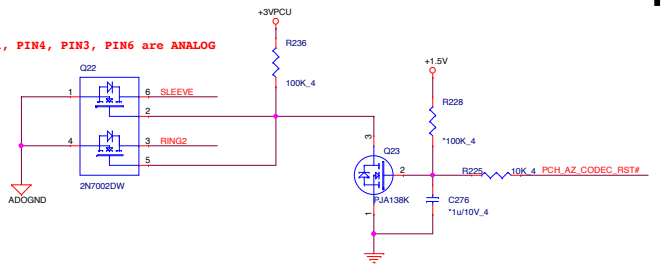
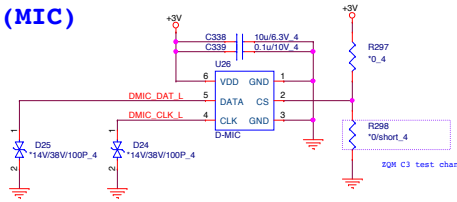
Codec(ADO)



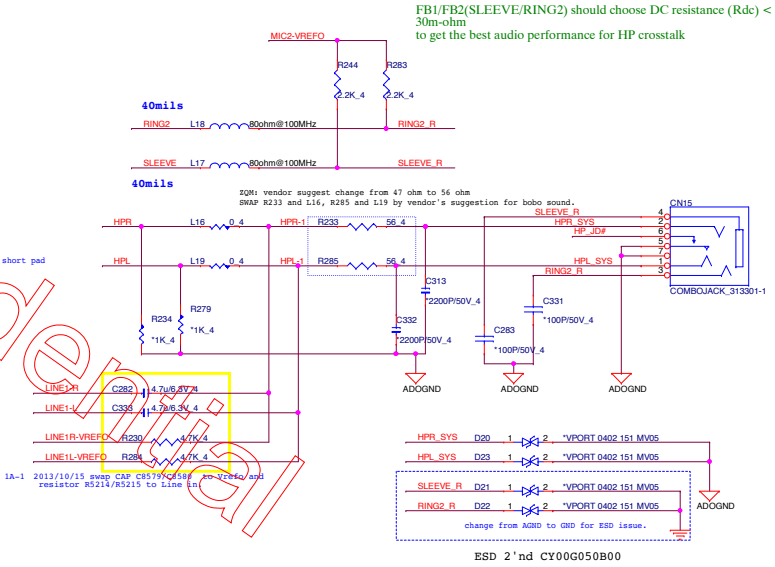
Grounding circuit(ADO)



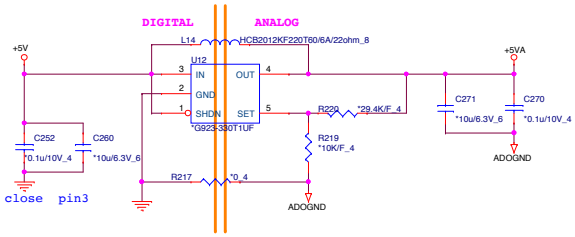
D-Mic(MIC)



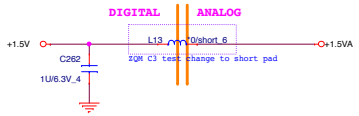
HEADPHONE/MIC/LINE combo



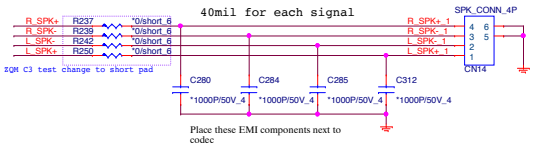
Codec PWR 5V(ADO)



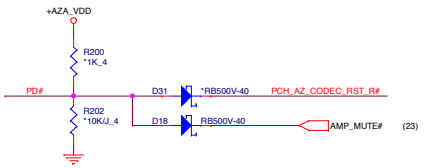
Codec PWR 1.5V(ADO)



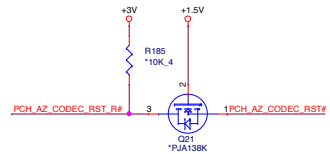
Internal Speaker



Mute(ADO)



Level shift



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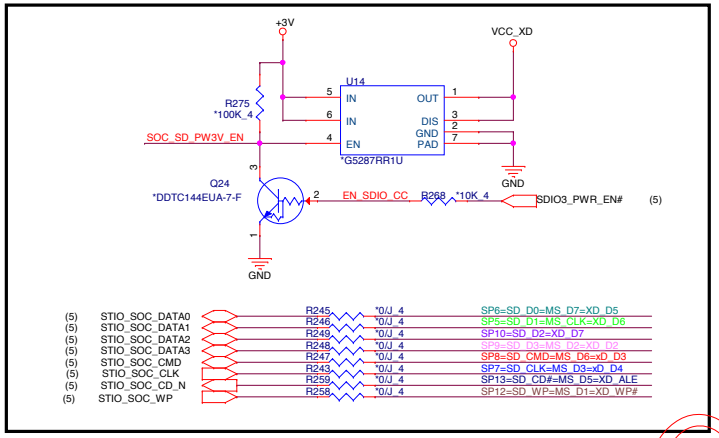
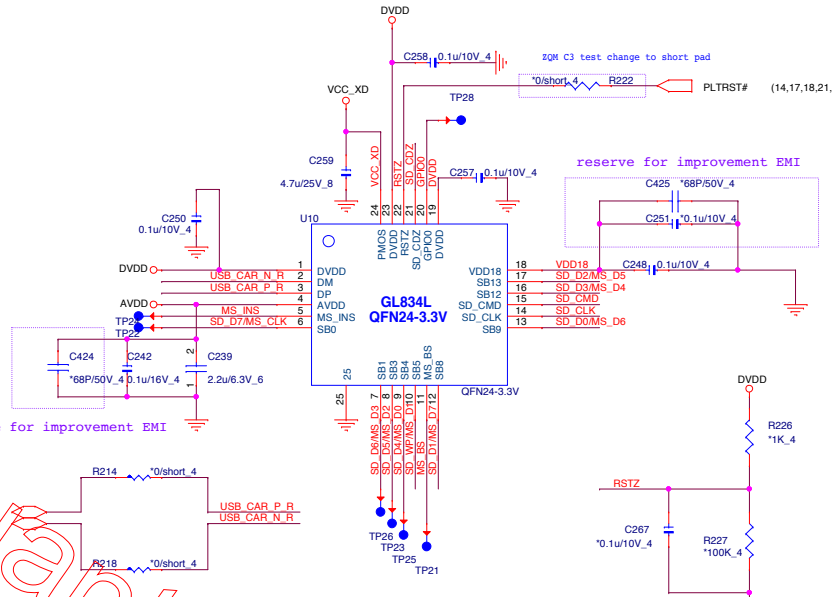
SD

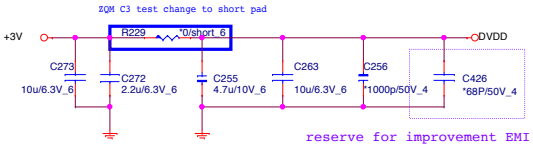


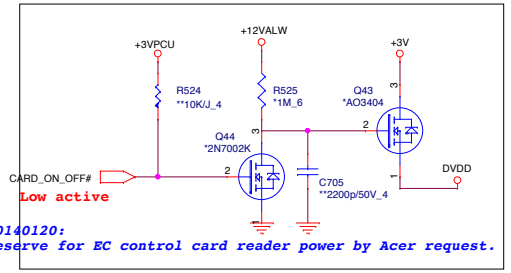
CARD READER CONNECTOR (CRD)

Share Pin

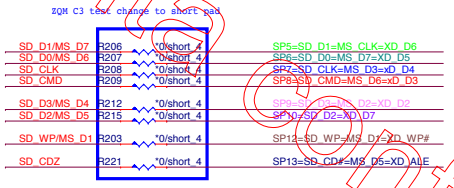
SP1	SD_D7		xD_RDY
SP2	SD_D6	MS_INS#	xD_RE#
SP3	SD_D5		xD_CE#
SP4	SD_D4		xD_WE#
SP5	SD_D1	MS_CLK	xD_D6
SP6	SD_D0	MS_D7	xD_D5
SP7	SD_CLK	MS_D3	xD_D4
SP8	SD_CMD	MS_D6	xD_D3
SP9	SD_D3	MS_D2	xD_D2
SP10	SD_D2		xD_D7
SP11		MS_BS	xD_CLE
SP12	SD_WP	MS_D1	xD_WP#
SP13	SD_CD#	MS_D5	xD_ALE
SP14		MS_D4	xD_D0
SP15		MS_D0	xD_D1
SP16			xD_CD#



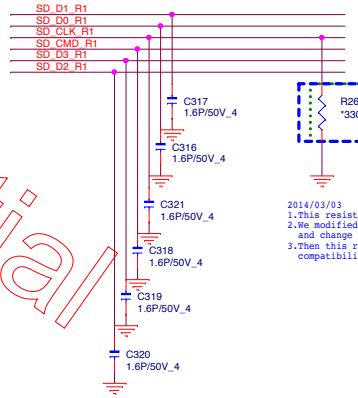


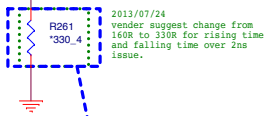


DVDD — L8 — AVDD
BLM18PG121SN



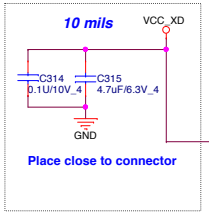
reserve C for improvement EMI

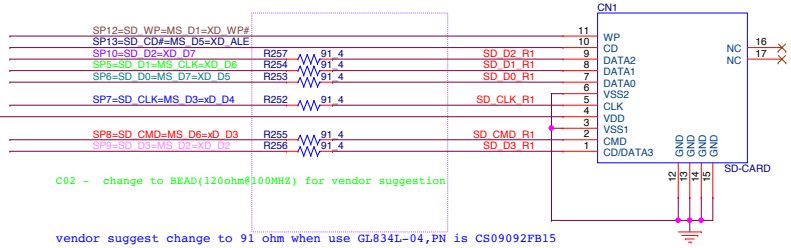




2014/03/03
1.This resister is for Bead solution to reduce signal voltage in GL834L-03.
2.We modified SD signal driving ability from GL834L-03 to GL834L-04 and change solution from bead to resister
3.Then this resister maybe make some UHS-I card compatibility fail in GL834L-04, so must remove this resister.

SD/MMC CARD READER (CRD)





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PROJECT : ZQM

Size	Document Number	Rev
	Cardreader GL834L	C3C
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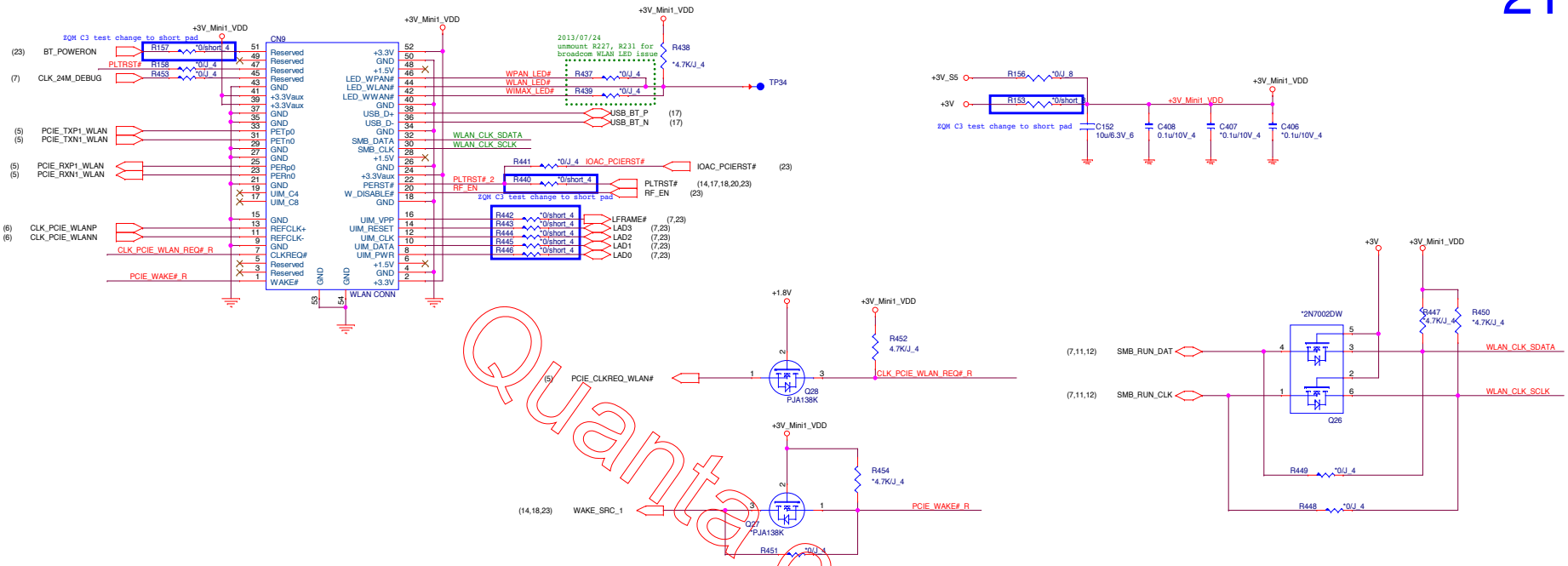
WLAN(MNC)



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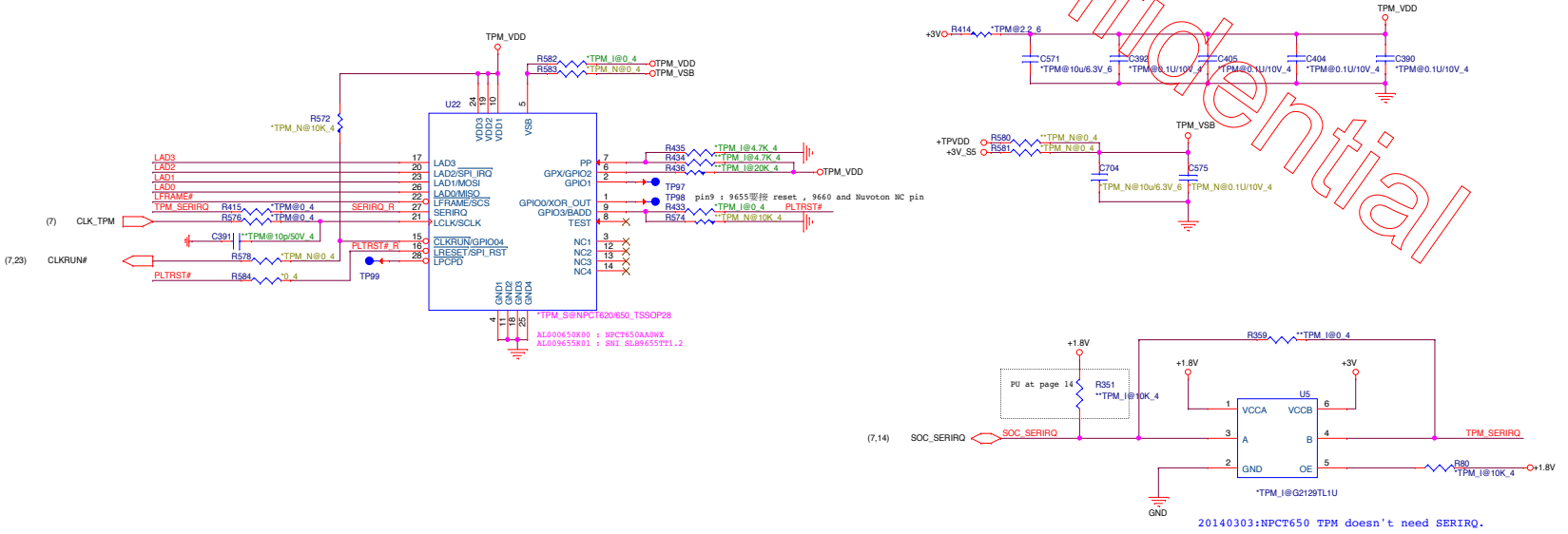
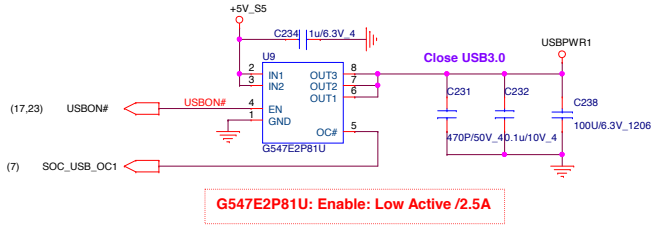
TPM (TPM)

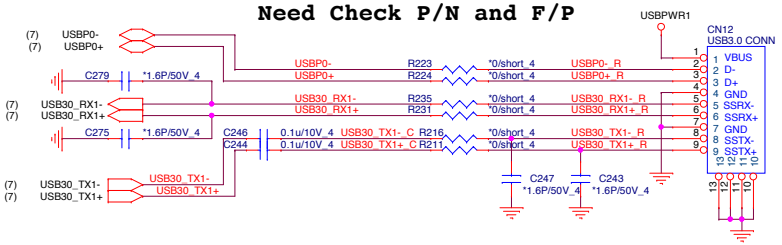


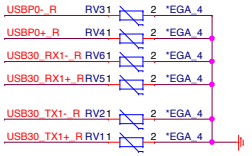
USB 3.0 Connector



G547E2P81U: Enable: Low Active /2.5A

del choke





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Quanta Computer Inc.

PROJECT : ZQM

Size	Document Number	Rev
	Touch Panel	C3C

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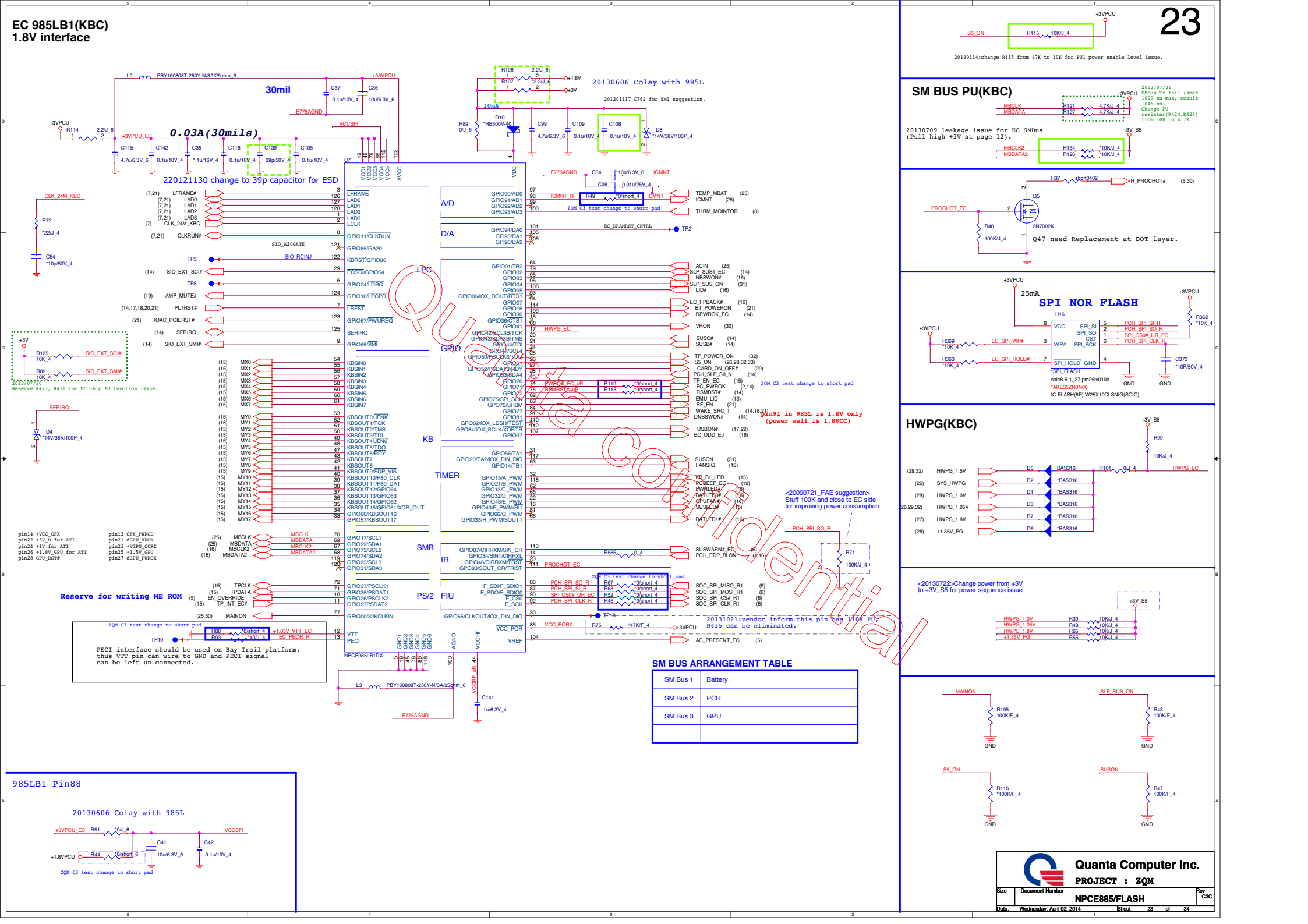
EC 985LB1(KBC)
1.8V interface



SM BUS PU(KBC)

HWPG(KBC)

Quanta Computer Inc.	PROJECT : ZQM
Size	Document Number: NPCE885/FLASH	Rev: C3C
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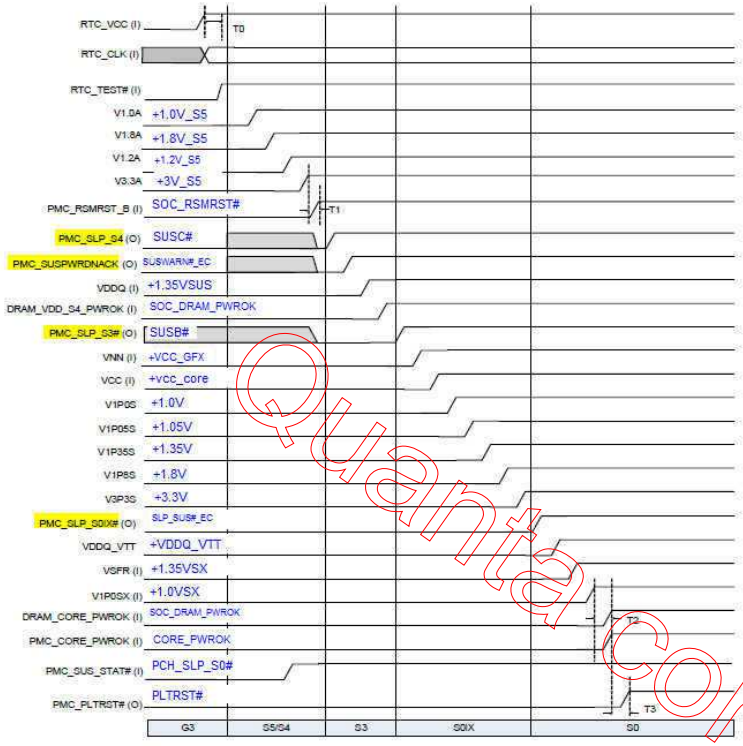
Bay Trail-M S4/S5 to S0 (Power Up) Sequence



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Quanta Computer Inc.

PROJECT : ZQM

Size	Document Number	Rev
	Power sequence	C3C

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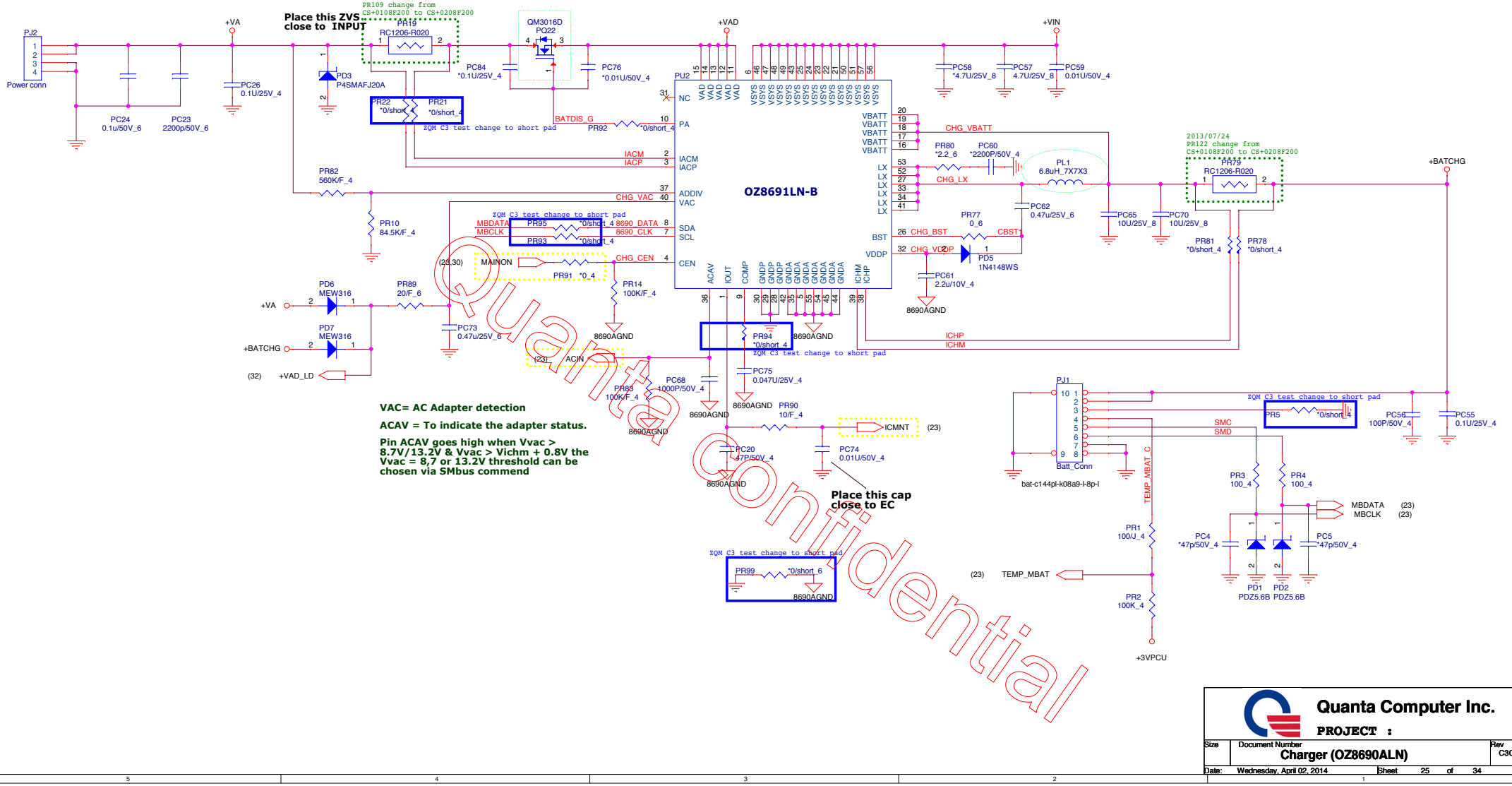

Quanta Computer Inc.		
PROJECT :		
Size	Document Number: Charger (OZ8690ALN)	Rev: C3C
Date: Wednesday, April 02, 2014	Sheet 25 of 34	

DC/DC +3VPCU/+5V_S5

2QM C3 test change to short pad

+3VPCU (6,8,15,16,19,20,23,25,27,28,32)
+5V_S5 (17,22,28,29,30,31,32)
SYS_SHDN# (27,33)

LDO(MAX)=100mA

+3.3 Volt +/- 5%
Countinue current:2.7A
Peak current:3.6A
OCP minimum:A

PU5 NB670
PR106 10K/F_4
+3V_LDO
SYS_SHDN#
PC97 10U/6.3V_6
PR107 10K/F_4
+3VPCU
(23) SYS_HWPG
PR30 *0/short_4
NB670PG
PR100 *665K/F_4
+VIN
PR26 *330K/F_4
NB670ENLDO
SYS_SHDN#
PR27 *0/short_4
(23,28,32,33) S5_ON
PR28 *0_4
NB670EN
PC86 *0.1U/10V_4
unstuff
LDO, NC, CLK, PGOOD, ENLDO, EN, VIN, AGND, PGND, BST, SW, VCC, VOUT
670AGND
PC90 0.1U/25V_4
PC92 4.7U/25V_8
PC91 4.7U/25V_8
PC89 2200P/50V_4
PC94 0.1U/25V_4
NB670BST
PR102 0_6
NB670BST_S
PC87 0.1U/25V_4
NB670SW
PL2 3.3uH_7X7X3
PR29 *2.2_6
PC29 *2200P/50V_4
PC85 1U/6.3V_4
PR101 *0/short_4
NB670VOUT
PC96 *0.1U/10V_4
PR103 *0/short_4
PC88 220uF/6.3V_6X4.2
PC102 0.1U/10V_4
PC98 22uF/6.3V_6
PC99 22uF/6.3V_6
PC100 22uF/6.3V_6
PC101 22uF/6.3V_6
+3VPCU

+5 Volt +/- 5%
Countinue current:5.5A
Peak current:7.3A
OCP minimum: A

PU6 NB671L
PR104 *0/short_4
SYS_HWPG
PR105 *0/short_4
NB671PG
PC129 10U/6.3V_4
PR120 *0/short_4
671AGND
S5_ON
PR33 *0/short_4
NB671EN
PC128 *0.1U/10V_4
NC, LP#, NC, PGOOD, VCC, EN, VIN, AGND, PGND, BST, SW, VOUT, FB
671AGND
PC111 0.1U/25V_4
PC114 4.7U/25V_8
PC113 4.7U/25V_8
PC112 2200P/50V_4
PC130 0.1U/25V_4
PC93 33U/25V_6x4.5
+VIN
+5V_S5
NB671BST
PR121 0_6
NB671BST_S
PC126 0.1U/25V_4
NB671SW
PL3 3.3uH_7X7X3
PR31 *2.2_6
PC30 *2200P/50V_4
PR130 *0/short_4
PC125 0.1U/10V_4
PC95 220uF/6.3V_6X4.2
PC105 22uF/6.3V_6
PC109 22uF/6.3V_6
PC121 22uF/6.3V_6
PC119 22uF/6.3V_6
PR32 82K/F_4
NB671FB
PR119 11K/F_4
671AGND

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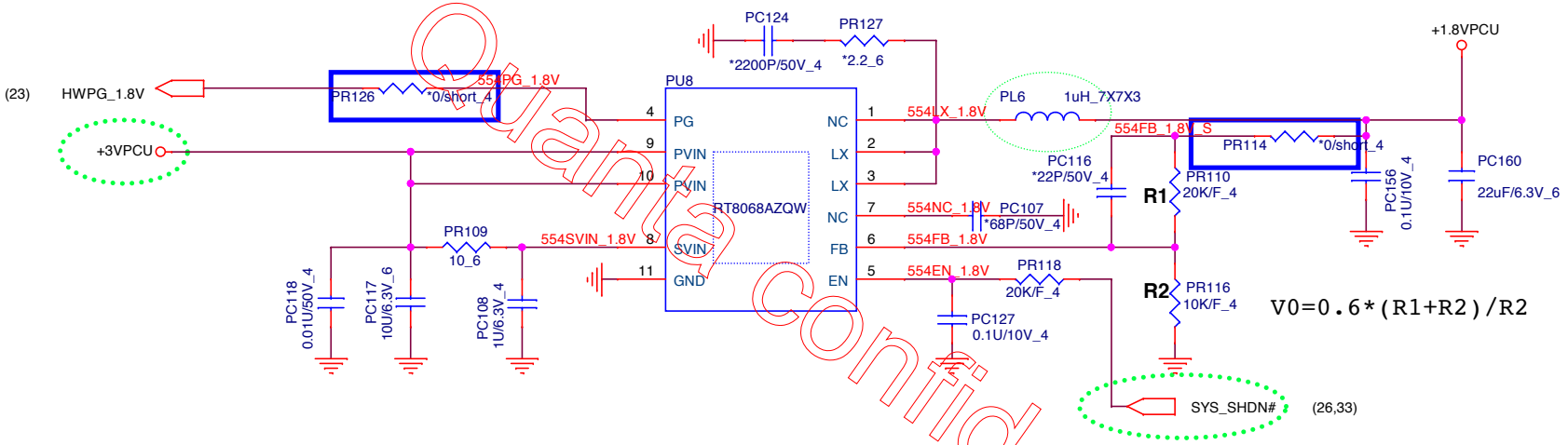
Quanta Computer Inc.
PROJECT :

Size	Document Number	Rev
	+3VPCU/+5VS5 (NB670/NB671L)	C3C
Date: Wednesday, April 02, 2014	Sheet 26 of 34	

ZQM C3 test change to short pad

+1.8V Volt +/- 5%
Countinue current:0.08A
Peak current:0.11A
OCP minimum:A



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NB5

PROJECT : W03Z
Quanta Computer Inc.

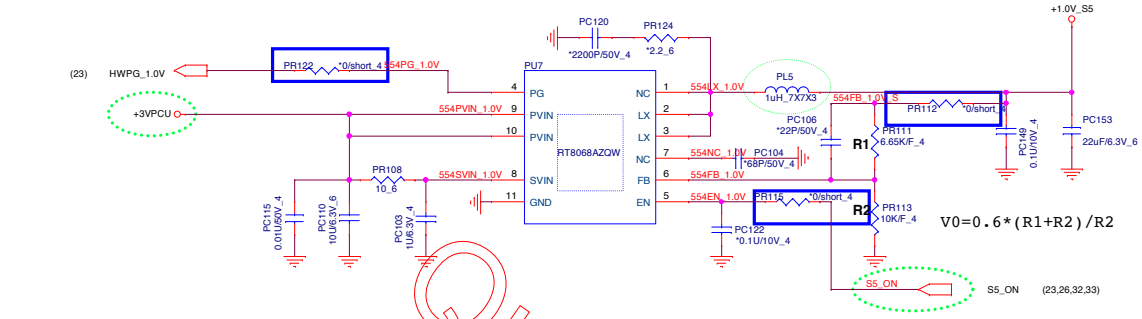
Size	Document Number	Rev
Custom	+1.8VPCU	C3C

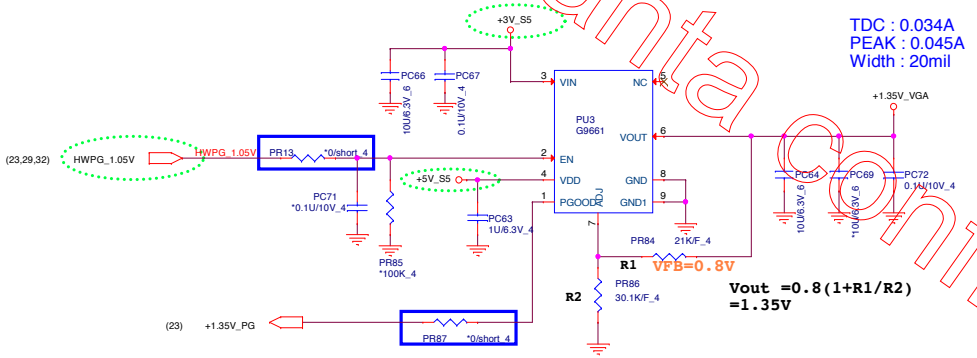
Date: Wednesday, April 02, 2014 Sheet 27 of 34

ZQM C3 test change to short pad

28

+1.0V Volt +/- 5%
Countinue current:2.3A
Peak current:3.1A
OCP minimum:A





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2013/09/09 LDO for 1.35V

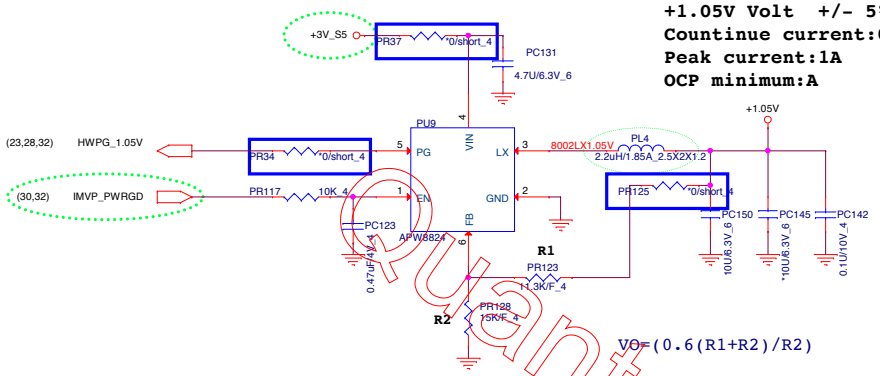
Quanta Computer Inc.
PROJECT :

Size	Document Number	Rev
	+1.0V/+1.35V_VGA	C3C

Date: Wednesday, April 02, 2014 Sheet 28 of 34

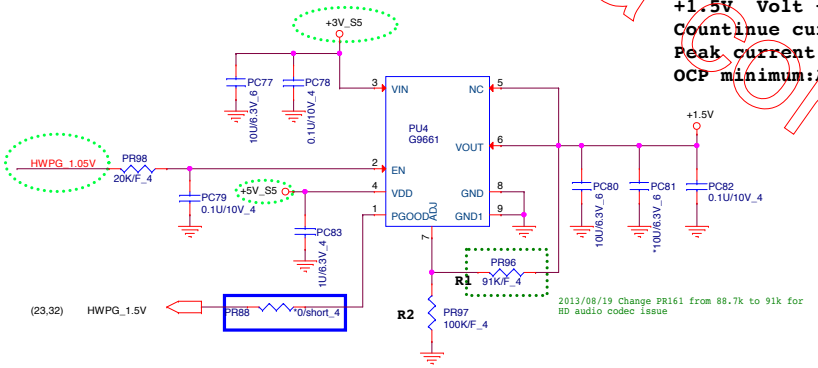
ZQM C3 test change to short pad

+1.05V Volt +/- 5%
Countinue current:0.75A
Peak current:1A
OCP minimum:A



VO=(0.6(R1+R2)/R2)

+1.5V Volt +/- 5%
Countinue current:0.386A
Peak current:0.515A
OCP minimum:A



2013/08/19 Change PR161 from 88.7k to 91k for HD audio codec issue

VO=(0.8(R1+R2)/R2)
R2<120Kohm

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Quanta Computer Inc.
PROJECT : ZQM

Size	Document Number	Rev
	+1.05V/1.5V	C3C
Date: Wednesday, April 02, 2014	Sheet 29 of 34	

20130617 Change +1.05V to +1.0V

ZQM C3 test change to short pad

Close to VR

+1.0V

PC132 0.1u/10V_4

PR135 71.5/F_4

PR133 71.5/F_4

PR134 71.5/F_4

VR_SVID_ALERT# close to CPU

intel check list 2.0: 70 Ω ±5% pull-up to V1P0S,
PLM does not have it in 0402, so use 71.5 Ω ±1% to replace.

VR_SVID_ALERT#

VR_SVID_DATA

VR_SVID_CLK

VR_SVID_DATA and VR_SVID_CLK close to VR

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+VCC_GFX

PR159 *10_4

PC154 *330p/50V_4

(8) VCC_AXG_SENSE

(8) VSS_AXG_SENSE

PR162 *0/short_4

PR163 *0/short_4

Parallel

PR160 *10_4

PC146 *0.01u/50V_4

Close to the CPU side.

PR55 2K/F_4

PC34 330p/50V_4

PR148 21K/F_4

PC158 1000p/50V_4

PR53 21K/F_4

PR51 1.78K/F_4

PR146 499/F_4

PC151 470p/50V_4

PC155 220P/50V_4

95833_ISUMNG

PR144 649/F_4

PC143 4700P/25V_4

PR49 732/F_4

95833_ISUMPG

95833_COMPG

95833_NTCG

+5V_S5

PR60 0.6

PR62 1/F_6

PC139 1u/10V_4

PC163 1u/10V_6

+1.0V

+3V_S5

+3V

PR40 *499/F_4

PR152 1.5K/F_4

PR150 1.5K/F_4

PR143 *100K/F_4

(23) VRON

PR139 *0_4

(23,25) MAINON

PR41 *0/short_4

(25,32) IMVP_PWRGD

TP30

PR151 *0/short_4

(5,23) H_PROCHOT#

PC133 43p/50V_4

(6) VR_SVID_CLK

VR_SVID_CLK PR140 29/F_4

(6) VR_SVID_ALERT#

VR_SVID_ALERT# PR142 *0/short_4

(6) VR_SVID_DATA

VR_SVID_DATA PR141 16.9/F_4

PU11
ISL95833HRTZ-T

PAD 33
NTCG 1
ISUMPG 32
ISUMNG 31
RTNG 30
FBG 29
COMPG 28

VR_ON 2
PGOOD 15
PGOODG 27
VR_HOT# 6
SCLK 3
ALERT# 4
SDA 5

VCCP 22
VDD 21
BOOTG 26 — 95833_BOOTG
UGATEG 25 — 95833_UGATEG
PHASEG 24 — 95833_PHASEG
LGATEG 23 — 95833_LGATEG
PWM2 20
LGATE1 19 — 95833_LGATE1
PHASE1 18 — 95833_PHASE1
UGATE1 17 — 95833_UGATE1
BOOT1 16 — 95833_BOOT1

ISEN2 8
ISEN1 9
NTC 7
ISUMP 10
ISUMN 11
RTN 12
FB 13
COMP 14

PR138 *0/short_4

+5V

95833_NTC

95833_ISUMP

95833_COMP

PR147 499/F_4

PC152 470p/50V_4

PC157 220P/50V_4

PR54 64.9K/F_4

PR52 1.78K/F_4

PR149 21K/F_4

PC159 1000p/50V_4

PR56 2K/F_4

PC35 330p/50V_4

PR50 787/F_4

PC144 4700P/25V_4

PR145 649/F_4

95833_ISUMN

+VCC_CORE

Parallel

(8) VCC_SENSE

(8) VSS_SENSE

PR166 *0/short_4

PR167 *0/short_4

PR164 *10_4

PR165 *10_4

PC148 *330p/50V_4

PC147 *0.01u/50V_4

Close to the CPU side.

95833_NTCG

PR155 470K_4 NTC

PR66 27.4K/F_4

PR67 3.83K/F_4

95833_NTCG

PR156 470K_4 NTC

PR69 27.4K/F_4

PR68 3.83K/F_4

AXG

PR154 2.2/F_6

PC162 0.22u/25V_6

95833_BOOTG

95833_UGATEG

95833_PHASEG

95833_LGATEG

+VIN

PC164 0.1u/50V_6

PC39 4.7u/25V_8

PC41 4.7u/25V_8

PC167 2200p/50V_4

PC165 33U/25V_6x4.5

PL7 0.47uH_7X7x3

DCR=4.2mOhm

+VCC_GFX

PQ23

AON6978(30V,20A,2.3W)

PR65 2.2_6

PC47 2200p/50V_6

PR39 3.65K/F_6

PR45 1/F_4

PC169 0.1u/10V_4

PC170 10u/6.3V_8

PC177 330u/2V_7343

95833_ISUMPG

95833_ISUMNG

PC137 *0.1u/25V_4

PC135 33n/25V_4

PC134 47n/16V_4

PR57 2.61K/F_4

PR43 11K/F_4

PR58 4.42K/NTC

PC140 0.1u/25V_4

Close to the VR side.

Close with AXG inductor

+VCC_GFX
TDC : A
PEAK : 14A
OCP : A
Width : mil

GFX_CORE Load Line :
-5.9mV/A for 2.xW SDP

Core

PR153 2.2/F_6

PC161 0.22u/25V_6

95833_BOOT1

95833_UGATE1

95833_PHASE1

95833_LGATE1

+VIN

PC166 0.1u/50V_6

PC42 4.7u/25V_8

PC40 4.7u/25V_8

PC168 2200p/50V_4

PL8 0.47uH_7X7x3

DCR=4.2mOhm

+VCC_CORE

PQ24

AON6978(30V,20A,2.3W)

PR64 2.2_6

PC46 2200p/50V_6

PR36 3.65K/F_6

PR48 1/F_4

PC172 0.1u/10V_4

PC173 10u/6.3V_8

PC176 330u/2V_7343

95833_ISUMP

95833_ISUMN

PC136 *0.1u/25V_4

PC139 33n/25V_4

PC138 47n/16V_4

PR44 2.61K/F_4

PR46 1K/F_4

PR47 4.42K/NTC

PC141 0.1u/25V_4

Close to the VR side.

Close with phase1 inductor

+VCC_CORE
TDC : A
PEAK : 12A
OCP : A
Width : mil

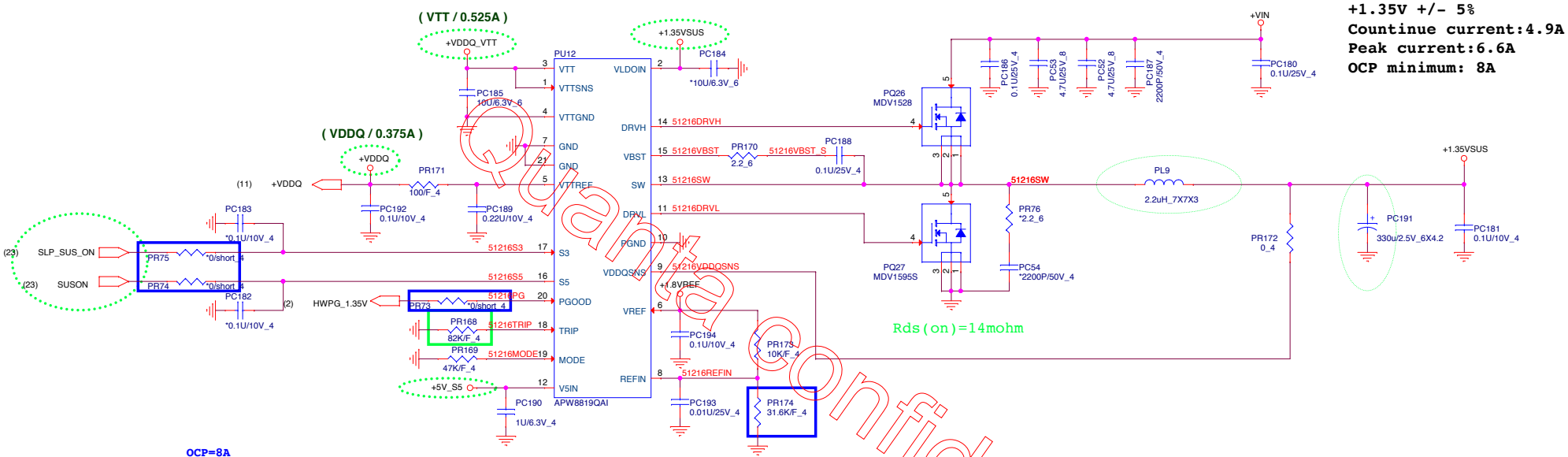
VCORE Load Line :
-5.9mV/A for 2.xW SDP

Quanta Computer Inc.

PROJECT :

Size	Document Number	Rev
	+VCC_CORE/+VGFX (ISL95833)	C3C
Date: Wednesday, April 02, 2014	Sheet 30 of 34	

ZQM C3 test change to short pad



+1.35V +/- 5%
Countinue current:4.9A
Peak current:6.6A
OCP minimum: 8A

Rds(on)=14mohm

OCP=8A
L ripple current
=(19-1.35)*1.35/(2.2u*400k*19)
=1.425A
Vtrip=8-(1.425/2)*14mohm
=102.024mV
Rlimit=102.024mV/10uA*8=81.62Kohm

Fsw = 400KHz

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PROJECT :

Size	Document Number	Rev
	DDR3 (APW8819)	C3C
Date: Wednesday, April 02, 2014	Sheet 31 of 34	

ZQM C3 test change to short pad

20130620 Reserved RC delay

PU1
G5934RZ1U

TDC=1.524A

TDC=3.23A

TDC=0.853A

TDC=0.030A

TDC=0.049A

TDC=0.008A

TDC=0.281A

TDC=2.1A

1/10 Adding +3VSUS power for touch pad
By acer request

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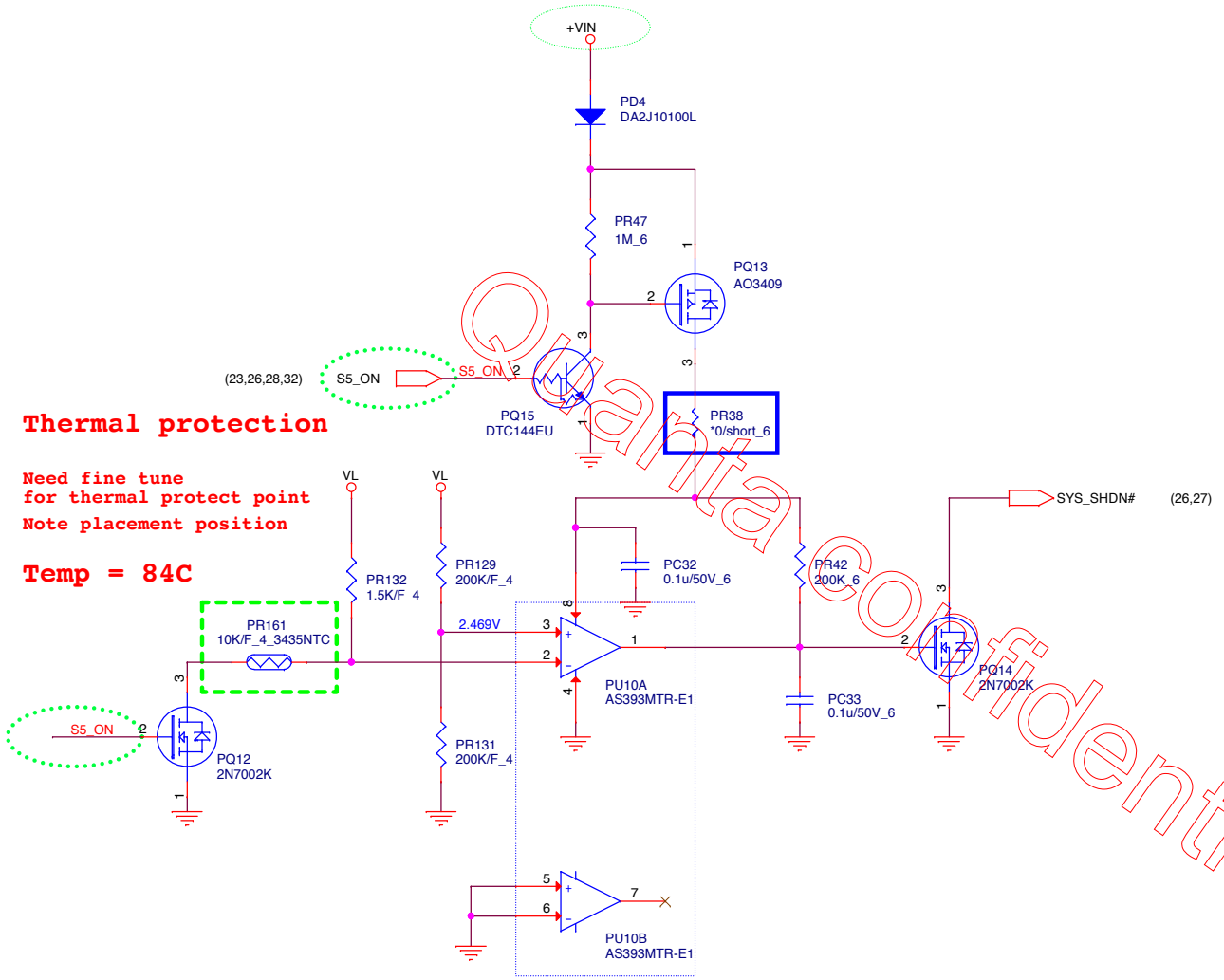
Quanta Computer Inc.	PROJECT :
Size	Document Number: Dis-charge IC (G5934)
Rev	C3C
Date: Wednesday, April 02, 2014	Sheet 32 of 34



For EC control thermal protection (output 3.3V)

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Quanta Computer Inc.		
PROJECT :		
Size	Document Number: Thermal	Rev: C3C
Date: Wednesday, April 02, 2014	Sheet 33 of 34	

Model	Date	CHANGE LIST
ZQM REV:A		1. FIRST RELEASED
ZQM REV:B	12/12	Change SPK connector,power FFC connector,LED footprint Change audio jack PN change audio RST circuit back to previous version and reserve D31,R185 and Q21
	12/16	Delete PC171 for power space not enough issue.
	12/18	SWAP CN14, Del Hole17 change Hole27 footprint change Hole5,Hole7,Hole25,Hole29 footprint stuff R175,R182,R186,R189 of HDMI for EMI stuff C228 for AudioI for EMI
ZQM REV:C	01/10	reserve 3V_S5 for touch pad power for Acer request to design design power add 3VSUS circuit for touch pad to use
	01/14	change R139 from 10K to 200K and del R12 for 3V power leakage issue change R115 from 47K to 10K for S5_ON signal, for PU1 power enable level issue.
	01/16	change D11 PN to BCBAT54CZ13, footprint to sot323_213-2_1-1_3-2n7002w for small package and cost down change R461,R462 from 4.7K to 2.2K for intel document suggestion for 400KHz pull high signal. add Nuvoton TPM NPCT650 to colay with SLB9655
	01/17	change CN9 footprint to mipci-800055fb052gx00pl-52p-smt for SMT request change PU11 footprint to qfn32-4x4-4-33p-isl95812hrz-smt for SMT request change USB hub RESET pin from R/C to PLTRST#, because +3V_S5 power will keep even power off system in AC mode change R145 from 10K to 200K and del R149 to prevent the voltage of Q13 pin 1 is too low to turn on 2N7002K issue for PCH_EDP_BLON
	01/20	reserve power control circuit by EC card reade for Acer's request reserve power control signal of EC GPIO 52 for card reade for Acer's request modify U5 power to main level
	01/21	del power jumper change PU7 and PU8 PN to AL008068000 change R282 to 619 ohm for USB eye diagram.
	01/23	change card reader RESET from PLTRST# to R/C for S3 resume issue by jack's suggestion
	02/05	change R469 and R471 from 33 ohm to 220 ohm for ME request change U10 to Rev 4 and change R252~R257 from bead to 91 ohm for vendor's suggestion. update function code.
	02/07	reserve R175,R182,R186,R189 of HDMI for SDA HDMI fail.
	02/13	change PU1.2 from SUSON to TP_POWER_ON change PQ28.1 from +3VSUS to +TPVDD change all +3VSUS to +TPVDD.(TP and TPM) use EC GPIO50 to control TP power for Acer's request reserve +3VPCU for LED1.2 for leakage issue
	02/18	change 0 ohm to short pad SWAP R233 and L16, R285 and L19 by vendor's suggestion.
	02/19	change L16 and L19 footprint to 0402 size
	02/24	reserve GPIO34 as PCH_EDP_BLON for EC checking backlight on timing
	02/25	add hole 30 and del hole 21 for ME request
	02/27	change LED PN from BEB00028ZA0 to BEB00011ZA5 for Vf issue. change R469 and R471 from 220 ohm to 330 ohm for test result change R470 and R472 from 220 ohm to 680 ohm for test result
	03/03	remove R261 for this resister maybe make some UHS-I card compatibility fail in GL834L-04, so must remove this resister. remove U5 and R80 for Nuvoton FAE Mark said that TPM doesn't SERIRQ.
	03/04	change C316~C321 to 1.6pF by vendor's suggestion.(don't large than 2.7P)
ZQM REV:Ramp	03/04	reserve C706 for PTP touch pad sometimes will auto resume from S3.
	03/06	change R469 and R471 from 330 ohm to 680 ohm for test result change R470 and R472 from 680 ohm to 820 ohm for test result
	03/12	change Q16 to PJA138K
	03/18	reserve 3V_S5 power for TP to use.
	03/20	change SLEEVE_R and RING2_R from ADOGND to GND for ESD issue. del all USB signal choke and change to short pad.
	03/21	change PR102 and PR121 from short pad to 0 ohm for power drop issue.
	03/24	Delete 1.35VSUS short jumper JP11

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Quanta Computer Inc. PROJECT : ZQM Size / Document Number / Rev: Change list / C3C Date: Wednesday, April 02, 2014 Sheet 34 of 34	DOC NO.	PROJECT MODEL :	ZQM	APPROVED BY:	DATE:
		PART NUMBER:		DRAWING BY:	REVISON: