MODEL:	REV:	CHANGE LIST:
Z01 MotherBoard	1A	FIRST RELEASE
	1B	PAGE02. 1. R447,455,456 MODIFY to EP P/N:CS14752FB11 PAGE03. 1. STUFF HOLE6 P/N:FBZ01007010 , 2. STUFF HOLE7,8,15 P/N:FBED8001016 , 3. STUFF HOLE5 P/N:FBZ01006010 PAGE03. 1. STUFF HOLE23,25 P/N:FBZ01003010 , 2. STUFF HOLE18 P/N:FBZ01004010 , 3. STUFF HOLE31 P/N:FBZ01005010 PAGE05. 1. U22 MODIFY to GM965 P/N:AJ0QN120f04 , 2. R193,194 MODIFY to EP P/N:CS03902FB11 PAGE06. 1. R242 MODIFY to EP P/N:CS33002JB23 PAGE08. 1. L52,53 MODIFY to EP P/N:CV01004KN00 PAGE11. 1. R332 MODIFY to EP P/N:CS23243F930 , 2. U6 MODIFY to ICH8 P/N:AJ0QM740T03 PAGE12. 1. R244,R347,R353 MODIFY to EP P/N:CS00004JA40 , 2. L28 MODIFY to P/N:CV-1005MZ01 PAGE13. 1. CN10 MODIFY to CRT P/N:DFDS15FR611 PAGE15. 1. R467 MODIFY to EP P/N:CS00004JA40,2. R50 MODIFY to EP P/N:CS31003J941,3.CN27 MODIFY to SATA P/N:DFHS22FR005 PAGE16. 1. CN16 MODIFY to RJ45/11 P/N:DFTJ15FR057 PAGE18. 1. R317,323 MODIFY to 0603 P/N:CS31003F949 , 2. R310 MODIFY to EP P/N:CS31003J941 PAGE20. 1. PR100 MODIFY to EP P/N:CS51002FB11 PAGE21. 1. PR86 MODIFY to EP P/N:CS24022FB13 , 2. PR38,82 MODIFY to 1% P/N:CS31002FB26 , 3. PR83 MODIFY to EP P/N:CS00004JA40 PAGE22. 1. PR1 MODIFY to EP P/N:CS32002FB29 , 2. PR6 MODIFY to 1% P/N:CS51003F934 PAGE23. 1. PR106 MODIFY to 0 ohm P/N:CS00002JB38 , 2. UN-STUFF PR107,PC111 PAGE24. 1. PR29 MODIFY to EP P/N:CS31003J941 2. PJ1 MODIFY to BATTERY P/N:DFHD07MR006 PAGE25. 1. PR70 MODIFY to EP P/N:CS32002FB29
	2A	PAGE02. 1. Connect VDDIO_CLK to +1.25V 2. un-stuff R292;R445;R308 3. stuff C575,C574,C576,C578,C573,C546 for EMI issue PAGE06. 1. Connect ICH_PWROK SIGNAL TO NB CLPWROK 2.un-stuff R242;R235;R422;R222;R421;R423 3. R360,R361 only stuff for UMA PAGE07. 1. MODIFY 22u to 10u PAGE08. 1. R489 MODIFY to 0805 2. Stuff L50;R182;C238 for EV@ (MXM) PAGE09. 1. Add PU for SMA_MA14 : SMB_MA14 PAGE10. 1. un-stuff R337,C115,C127,C129,C298,C302,C294,C283,C291 PAGE11. 1. Q18 MODIFY to P/N:AL07SZ04C27 2.R395 connect to VCCRTC 3.R336;R251;R419;R255 un-stuff 4.R226 connect to +3V_S5 5.ICH_PWROK to SB_CLPWROK PAGE11. 1. Stuff C500,C509,C300,C513 33pF P/N:CH03306JB04 2. C507,C508 10pF change to 15pF P/N:CH01506JB06 , 3. stuff R238,R392,C2989 for Contr-LINK1 PAGE12. 1. VCCHDA & VCCSUSHDA change to 3V PAGE13. 1. ADD CRT_DDC IN PU , 2. L8,L9,L10 P/N change to 0.47UH for MXM , 3. C22,C24,C25,C27,C31,C32 P/N change to 47pF for MXM PAGE14. 1. CN6 MODIFY CONN. to 5 PIN P/N:DFHD05MRD98 PAGE15. 1. MODIFY SWITCH BOARD PIN DEFINE 2. Modify FAN circuit , 2. MR1 P/N change to AL000268000 PAGE16. 1. C46,C47 27pF change to 33pF P/N:CH03306JB04 2. stuff C104,C105,C119,C112 0.1uF P/N:CH41003ZB35 PAGE17. 1. CARD READER COLAY TO CN28, DEL CN30 2. C311 change to 27pF P/N:CH02706JB06 3. stuff R209 4. un-stff R213,C325,U11 PAGE18. 1. CHANGE MDC & CODEC to 3V 2.Delete D12 3. stuff R314,R483,C393,C595 PAGE19. 1. SWAP NBSWON# & ACIN 2. C363,C364 5.6pF change to 18pF P/N:CH01806JB07 PAGE20. 1. Modify PQ19 P/N PAGE21. 1. Modify Capacitor P/N to meet ME height limit PAGE22. 1. stuff PR74,PC69 2. Remove JP Pad PAGE23. 1. stuff PR126,PC131,PC137 2. Remove JP_Pad 3. un-stuff +1.8V PAGE25. 1. un-stuff PR101,PQ21,PR22,PQ2,PR26,PR9,PR5,PC33,PC38,PC39,PC19,PC22,PU2
	2B	PAGE02. 1. Change R293 to 2.2K for meet Intel Design checklist PAGE03. 1. Change XDP PU/PD resistors value to meet Intel Design checklist PAGE04. 1. Un-stuff C28,C457 PAGE05. 1. Add LVDS VREF strap PAGE06. 1. Add SDVO I2C strap PAGE07. 1. Remove NB resistors to GND PAGE08. 1. Remove DIODE for D27 2. Remove VCCA_DPLLA&B for external VGA PAGE10. 1. Add CRT & LVDS I2C Strap PAGE11. 1. Un-stuff Control Link Vref1 PAGE12. 1. Remove reserve ICH8 HDA 1.5V power rail PAGE13. 1. Modify LCD_VCC enable power rail 2. Add LVDS INV I2C Strap PAGE14. 1. Add EMI solution for debug port PCI clock PAGE15. 1. Change Q33,Q34 to MOSFET PAGE16. 1. Add PIN 59 & 3 PAGE18. 1. Change CN31 pin2 to +3V_S5 for Modem can't wake up from S3 PAGE19. 1. Add GPIO46 , 47 PAGE20~25. 1. Add EMI solution 2. Update Power component P/N
	3A	PAGE10. 1. Add +2.5V & +1.8V capacitors for nVIDIA MXM card PAGE11. 1. Change C507,C508 to 15pF for RTC PAGE13. 1. Add C609 & C610 to meet CM2009 specification PAGE14. 1. Reserve +5VPCU & Add Q40,R540 for CIR PAGE15. 1. Add C611 for PLC hall IC 2. Stuff R60 for G995 PAGE19. 1. CN24 un-stuff , 2. D322,D332 reserve for ESD PAGE21. 1. Modify PC85 value PAGE22. 1. Modify PR4,PC13 value for sequence PAGE23. 1. Add PQ22 for nVIDIA MXM +1.8V PAGE24. 1. Modify PF1 P/N PAGE25. 1. Add PU2 for nVIDIA MXM +2.5V
	3B	PAGE10. 1. Remove R337 & Add R542,Q41,Q42 for Nvidia ACIN function PAGE13. 1. Add D34~D36,D40 for ESD solution PAGE15. 1. R484,R485,R486 from 330 change to 220 ohm for LED light issue 2. Add D41,D42,D43 for ESD 3. Stuff Q39 PAGE16. 1. Add C621,C622 for EMI solution 2. C112,C119 change to 100pF/50V for EMI PAGE18. 1. Un-Stuff L55, Stuff U16,R470,R471 for internal Mic. issue PAGE19. 1. Modify D32,D33 package to 0402 for ESD PAGE23. 1. Add PR140,PR141 for +1.8V voltage PAGE25. 1. Stuff PR22,PR101,PQ2,PQ21 for nVIDIA MXM +1.8V & +2.5V Discharge

MODEL : Z01 MB

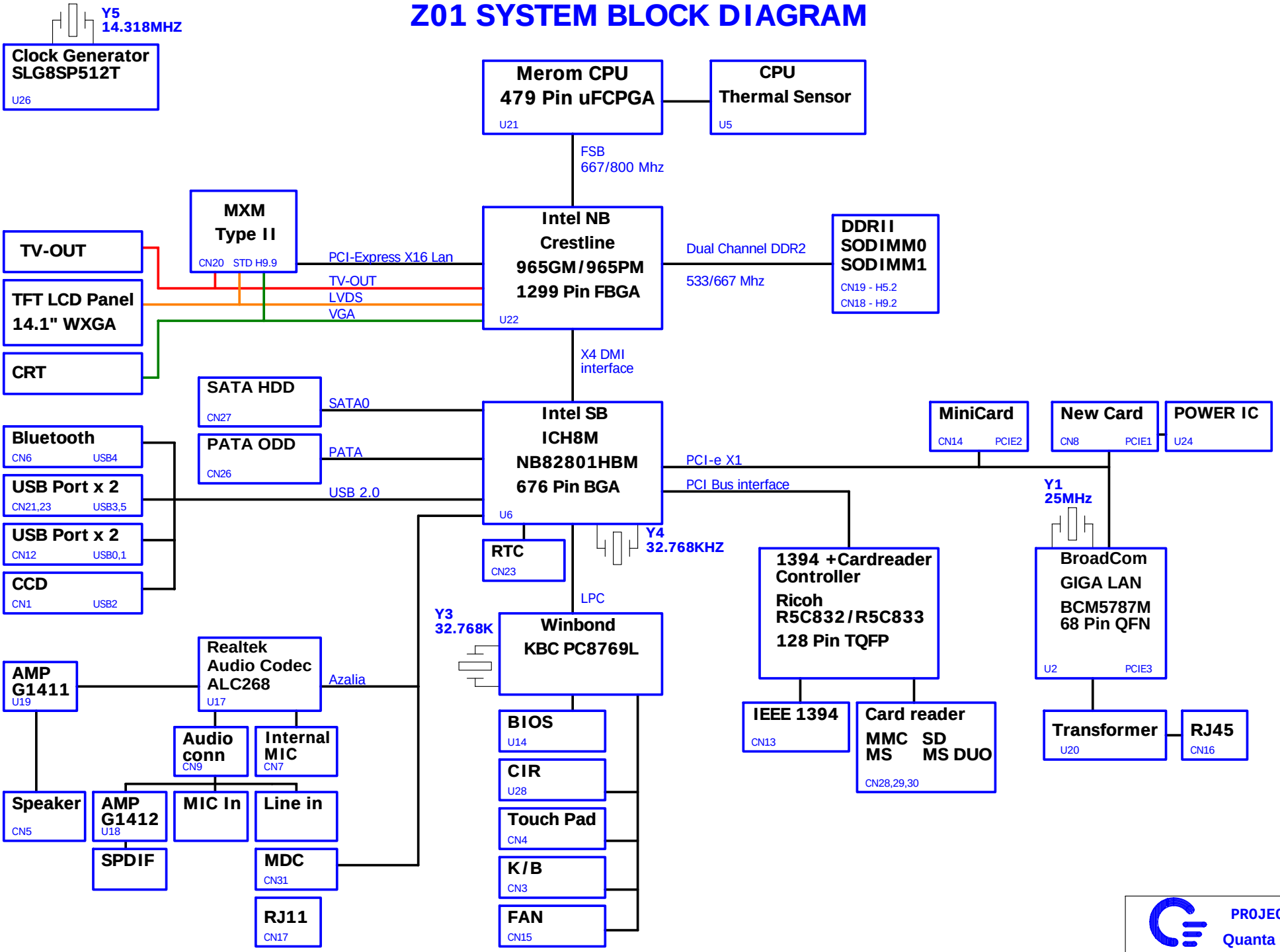
PAGE	FROM	TO
1	1A	
2	2B	
3	2B	
4	2B	
5	2B	
6	2B	
7	2B	
8	2B	
9	2A	
10	3A	3B
11	2B	
12	2B	
13	3A	3B
14	3A	
15	3A	3B
16	3A	3B
17	2A	
18	2B	3A
19	3A	3B
20	2B	
21	3A	
22	3A	
23	3A	3B
24	3A	
25	3A	3B

Quanta Computer Inc.

PROJECT : ZO1	APPROVE BY: JIM HSU	DRAWING BY:JACKY CHENG	REV 3A
MB ASSY'S P/N : 31Z01MB00XX	PROJECT LEADER: JIM HSU	DOCUMENT NO: 204	DATE :2007/04/14

COVER SHEET 1 OF 1

Z01 SYSTEM BLOCK DIAGRAM



PROJECT : Z01

Quanta Computer Inc.

Size	Document Number	Rev
	Block Diagram	1A
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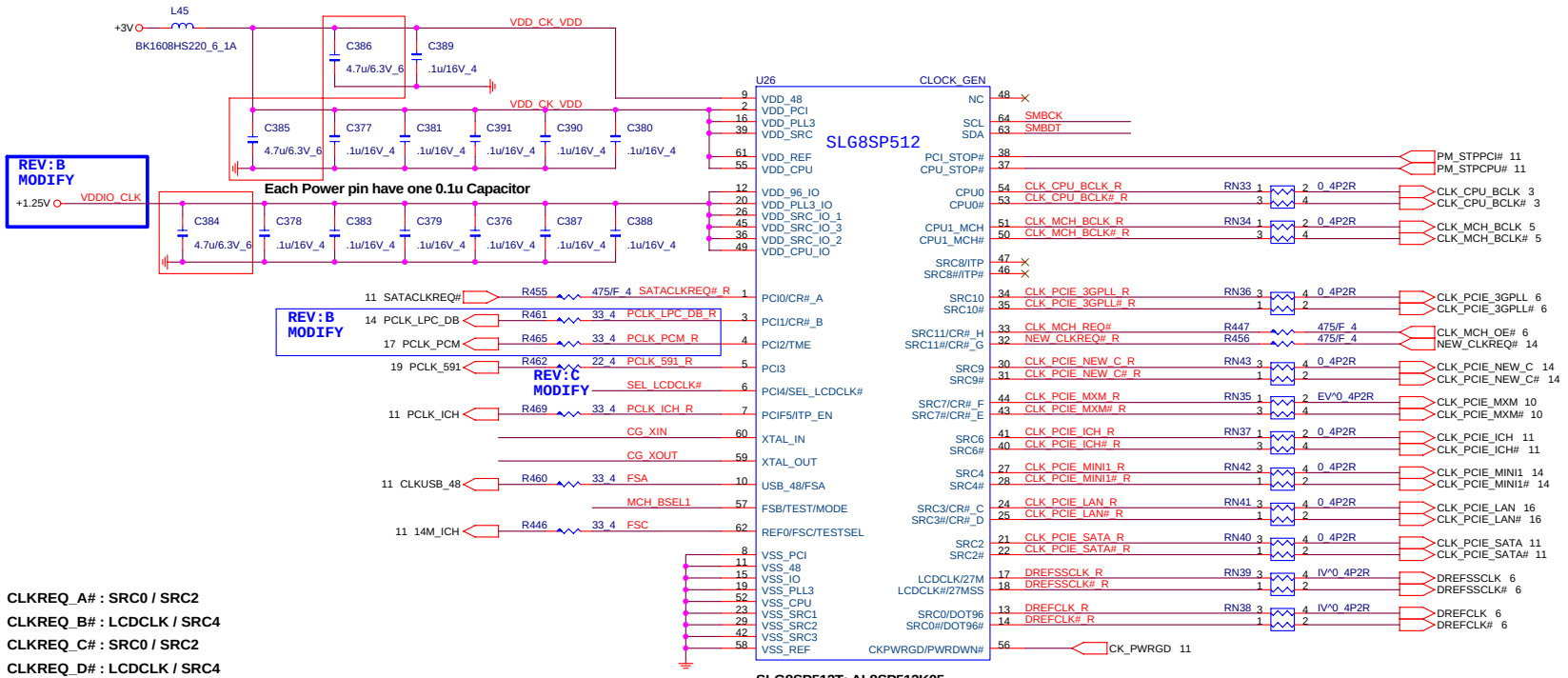
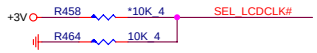
Clock Generator



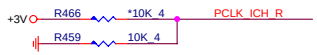
SLG8SP512T: AL8SP512K05

CLKREQ_A# : SRC0 / SRC2
CLKREQ_B# : LCDCLK / SRC4
CLKREQ_C# : SRC0 / SRC2
CLKREQ_D# : LCDCLK / SRC4
CLKREQ_E# : SRC6
CLKREQ_F# : SRC8
CLKREQ_G# : SRC9
CLKREQ_H# : SRC10



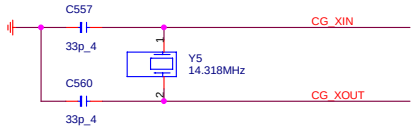
CK505
0 : Pin 37,38 as SRC5 output
1 : pin 37,38 as PCI_STOP# & CPU_STOP

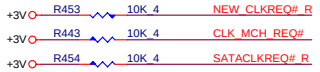
SILEGO
0 : Pin 13,14 & 17,18 for Internal VGA
1 : 27M & 27M_SS & SRC0 for external VGA



CK505
0 : Pin 46,47 as SRC output
1 : Pin 46,47 as CPU output

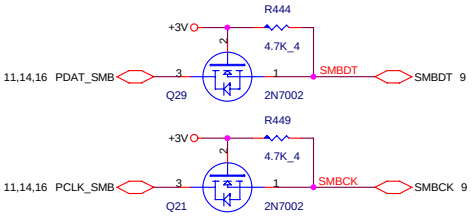
SILEGO
0 : Pin 46,47 as SRC output
1 : Pin 46,47 as CPU output



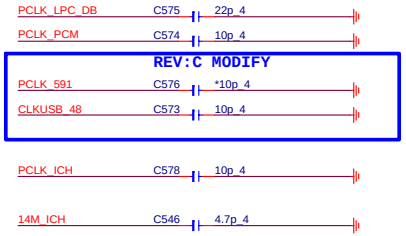


PU for ICS CLK GEN
0 : CPU & SRC overclock allow
1 : CPU & SRC overclock not allow

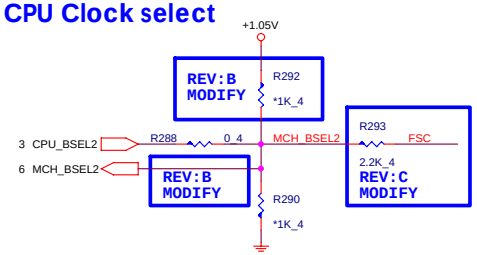
Clock Gen I2C

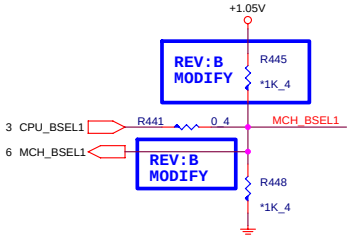


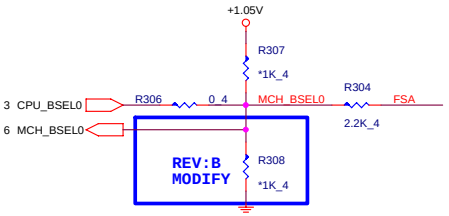
Reserved for EMI



CPU Clock select







BSEL Frequency Select Table

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

PROJECT : ZO1
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Size	Document Number	Rev
	CLOCK GENERATOR CK505 W/REGULATOR	2B
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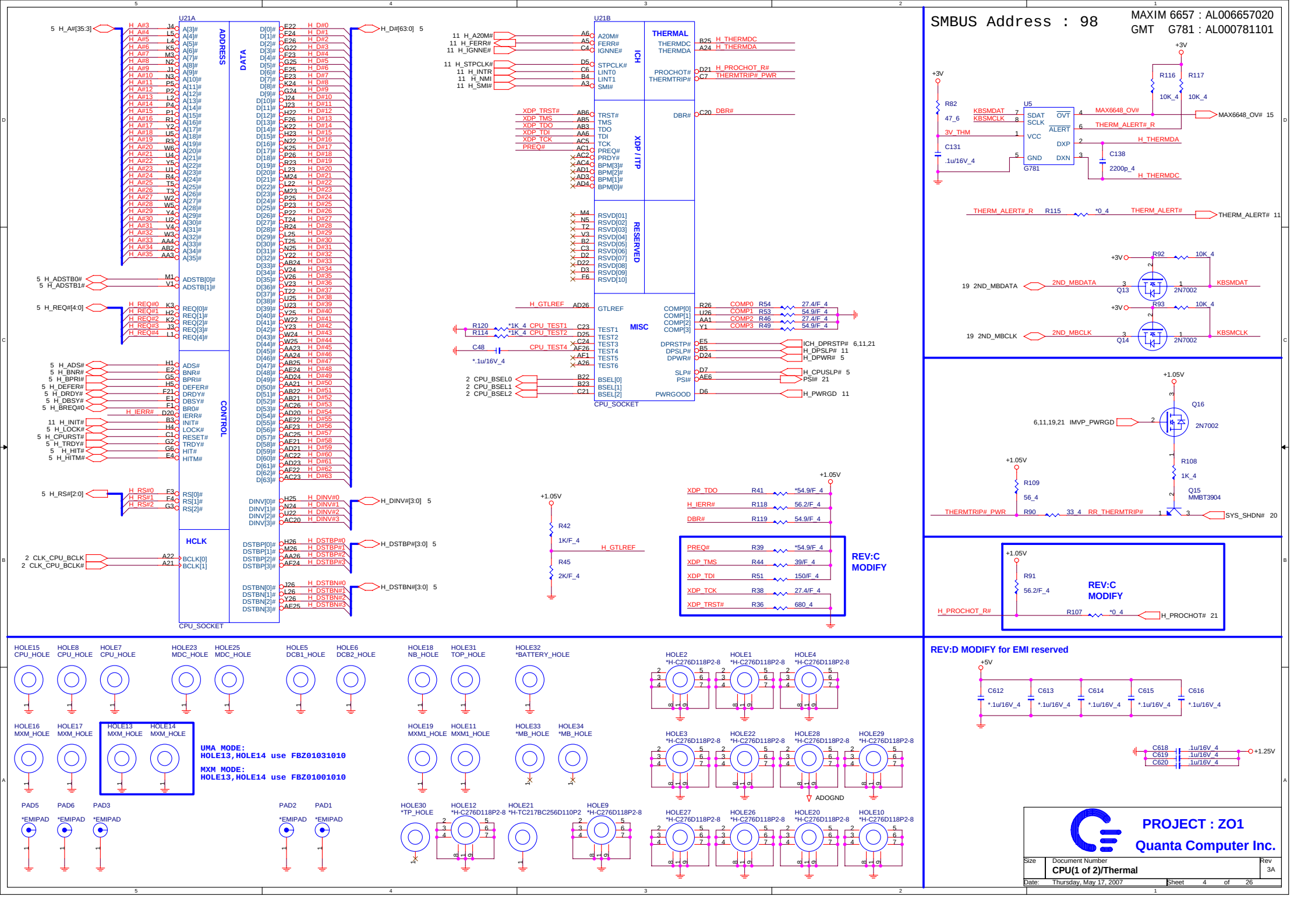
SMBUS Address : 98
MAXIM 6657 : AL006657020
GMT G781 : AL000781101
U21A
ADDRESS
DATA
CONTROL
HCLK
CPU_SOCKET
U21B
ICH
THERMAL
XDP / ITP
RESERVED
MISC
CPU_SOCKET
REV:C MODIFY
REV:C MODIFY
REV:D MODIFY for EMI reserved
UMA MODE:
HOLE13,HOLE14 use FBZ01031010
MXM MODE:
HOLE13,HOLE14 use FBZ01001010
ADOGND
PROJECT : ZO1
Quanta Computer Inc.
Document Number
CPU(1 of 2)/Thermal
Rev
3A
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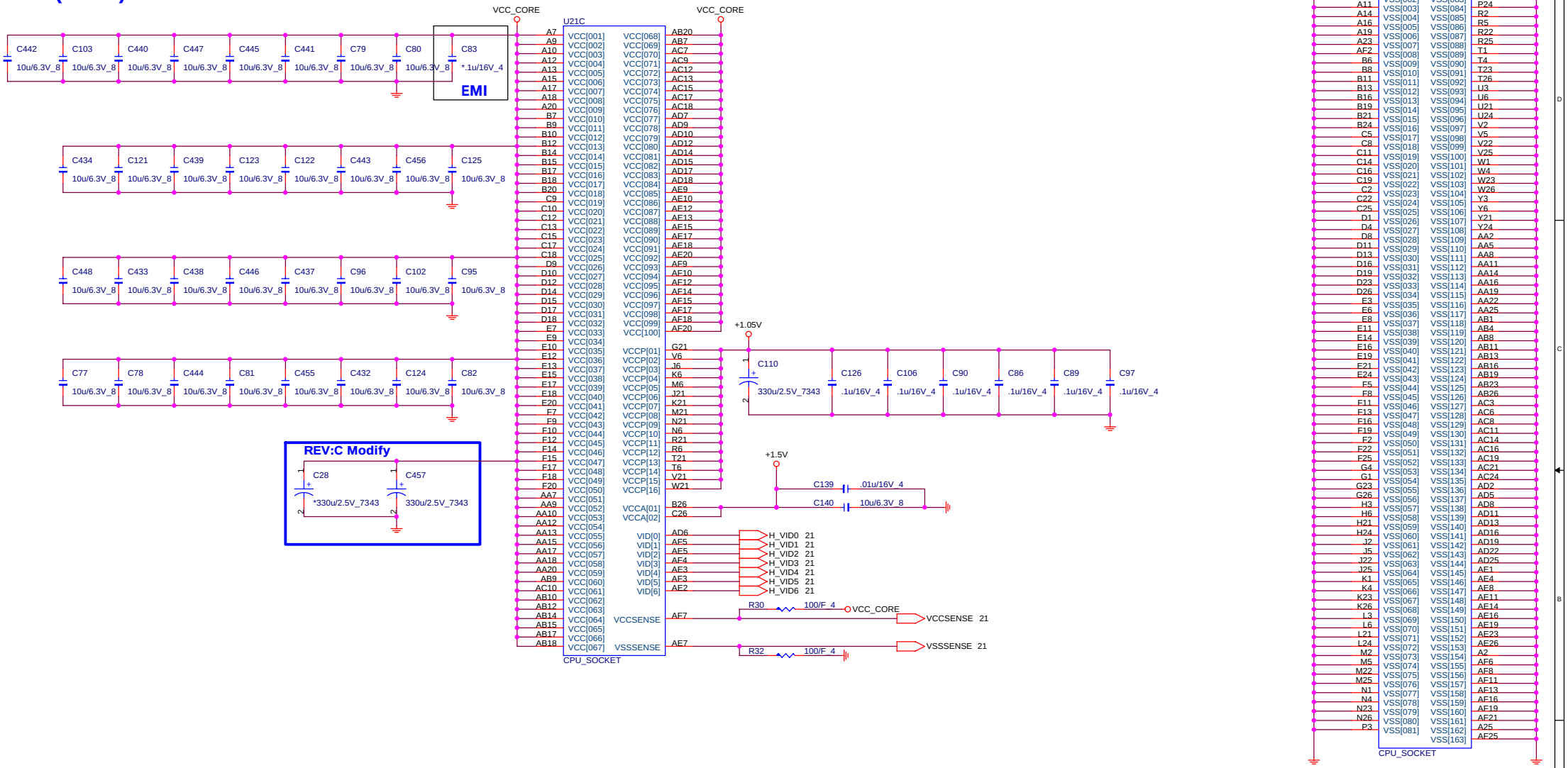
Sheet 4 of 26

CPU(Power)



PROJECT : ZO1

Quanta Computer Inc.

Size	Document Number	Rev
	CPU(2 of 2)Power	2B
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GM965 QN12 : AJ0QN120T04
PM965 QN14 : AJ0QN140T04

U22A

HOST

CRESTLINE

U22C

PCI-EXPRESS GRAPHICS SDVO

CRESTLINE

W: 10 mil

REV:C MODIFY

REV:B MODIFY

<check list>
For EV@
Connect to GND
CRT R/G/B
TV A/B/C
HSYNC/VSYNC

<check list>
For IV@
Connect to 150ohm:
CRT R/G/B
TV A/B/C
Connect to 30ohm:
HSYNC/VSYNC

0OHM (PD) FOR EV (TV)

0OHM (PD) FOR EV (RGB)

<check list & CRB> REV:C MODIFY
For Calero : 1.5K
For Cressline:2.4K

IV&EV Dis/Enable setting

<check list & CRB>
For Calero : 255
For Cressline:1.3K/F
For external VGA:0

<FAE>
Flexible and safe

W: 10 mil / S: 20 mil

HVREF
Width : 20mil
Length < 100mil

REV:C MODIFY

PROJECT : ZO1
Quanta Computer Inc.

Size	Document Number	Rev
	GMCH HOST & GRAPHICS	2B

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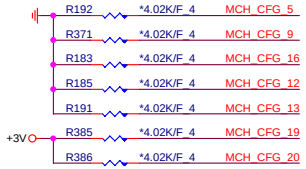
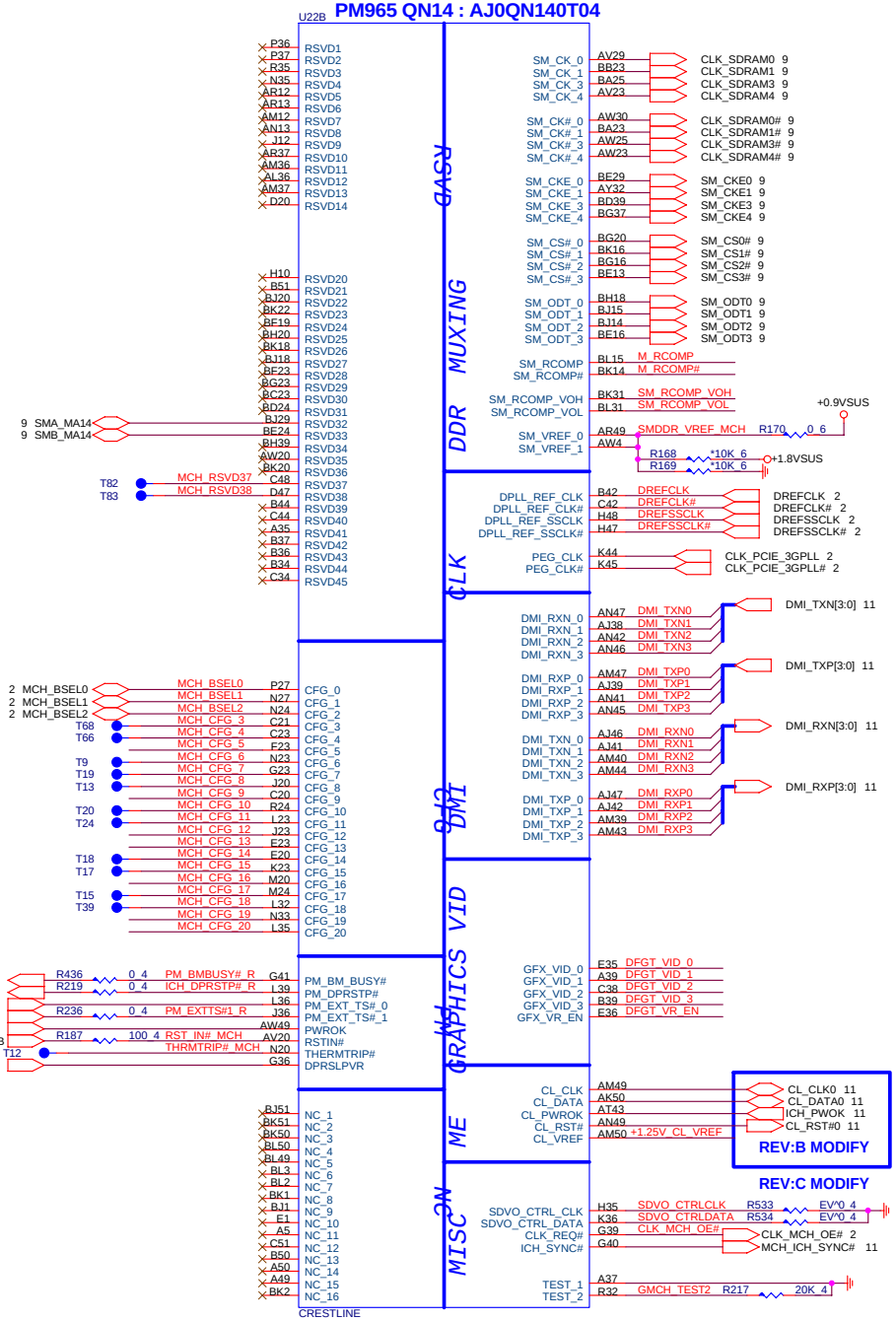
All strap are sampled with respect to the leading edge of the GMCH PWROK Signal
CFG[17:3] Have internal Pull-up
CFG[18:19] Have internal Pull-down
Any CFG signal strapping option not list below should be left NC Pin

CFG[2:0]	FSB Frequency Select	001 = FSB 533 MHz 010 = FSB 800 MHz 011 = FSB 667 MHz
CFG[4:3]	Reserved	
CFG5	DMI X2 Select	0 = DMI X2 1 = DMI X4(Default)
CFG6	Reserved	
CFG7	CPU Strap	0 = Reserved 1 = Mobile CPU(Default)
CFG8	Low power PCI Express	0 = Normal mode 1 = Low Power mode
CFG9	PCI Express Graphics Lane Reversal	0 = Reverse Lanes 1 = Normal operation(Default)
CFG[11:10]	Reserved	
CFG[13:12]	XOR/ALLZ	00 = Reserved 01 = XOR Mode Enable 10 = All-Z Mode Enabled 11 = Normal operation(Default)
CFG[15:14]	Reserved	
CFG16	FSB Dynamic ODT	0 = Dynamic ODT disable 1 = Dynamic ODT Enable(Default)
CFG[18:17]	Reserved	
CFG18	VCC select	0 = 1.05V (Default) 1 = 1.5V
SDVO_CTRLDATA	SDVO Present	0 = No SDVO Card present(Default) 1 = SDVO Card Present
CFG19	DMI Lane Reversal	0 = Normal operation(Default) 1 = Reverse Lanes
CFG20	SDVO/PCIe concurrent	0 = Only SDVO or PCIE x1 is operation(Default) 1 = SDVO and PCIE x1 are operating simultaneously via the PEG port



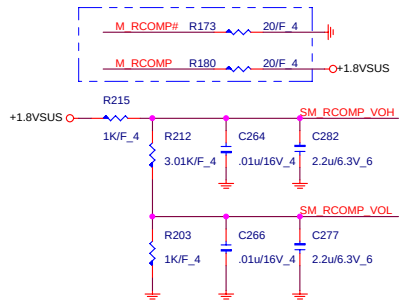
GM965 QN12 : AJ0QN120T04
PM965 QN14 : AJ0QN140T04

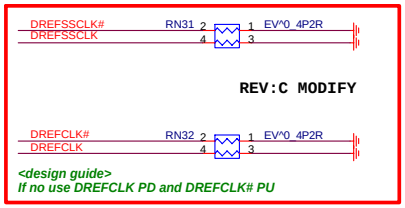
U22B

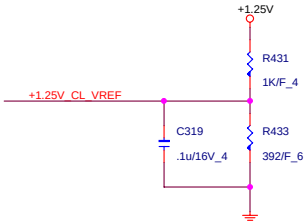


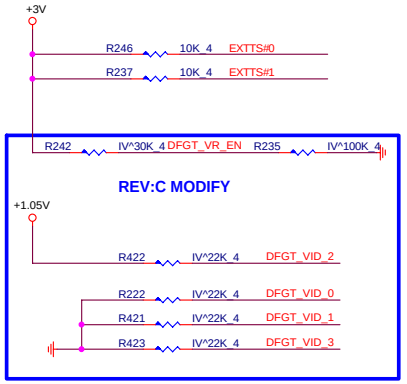
Width : 20mil
Length < 500mil

<check list & CRB>
R Value select
For Calero : 80.6ohm
For Cresstline:20ohm
But check list use 80.6ohm









PROJECT : ZO1
Quanta Computer Inc.

Size	Document Number	Rev
	GMCH DMI & STRAP	2B
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GM965 QN12 : AJ0QN120T04
PM965 QN14 : AJ0QN140T04

9 SMA_MD[63..0]

U22D

SMA_MD0 AR43
SMA_MD1 AW44
SMA_MD2 BA45
SMA_MD3 AY46
SMA_MD4 AR41
SMA_MD5 AR45
SMA_MD6 AT42
SMA_MD7 AW47
SMA_MD8 BB45
SMA_MD9 BF48
SMA_MD10 BG47
SMA_MD11 BJ45
SMA_MD12 BB47
SMA_MD13 BG50
SMA_MD14 BH49
SMA_MD15 BE45
SMA_MD16 AW43
SMA_MD17 BE44
SMA_MD18 BG42
SMA_MD19 BE40
SMA_MD20 BF44
SMA_MD21 BH45
SMA_MD22 BG40
SMA_MD23 BF40
SMA_MD24 AR40
SMA_MD25 AW40
SMA_MD26 AT39
SMA_MD27 AW36
SMA_MD28 AW41
SMA_MD29 AY41
SMA_MD30 AV38
SMA_MD31 AT38
SMA_MD32 AV13
SMA_MD33 AT13
SMA_MD34 AW11
SMA_MD35 AV11
SMA_MD36 AU15
SMA_MD37 AT11
SMA_MD38 BA13
SMA_MD39 BA11
SMA_MD40 BE10
SMA_MD41 BD10
SMA_MD42 BD8
SMA_MD43 AY9
SMA_MD44 BG10
SMA_MD45 AW9
SMA_MD46 BD7
SMA_MD47 BB9
SMA_MD48 BB5
SMA_MD49 AY7
SMA_MD50 AT5
SMA_MD51 AT7
SMA_MD52 AY6
SMA_MD53 BB7
SMA_MD54 AR5
SMA_MD55 AR8
SMA_MD56 AR9
SMA_MD57 AN3
SMA_MD58 AM8
SMA_MD59 AN10
SMA_MD60 AT9
SMA_MD61 AN9
SMA_MD62 AM9
SMA_MD63 AN11

SA_DQ_0 … SA_DQ_63

SA_BS_0 BB19
SA_BS_1 BK19
SA_BS_2 BF29
SA_CAS# BL17
SA_RAS# BE18
SA_RCVEN# AY20
SA_WE# BA19

SA_DM_0 AT45 SMA_DM0
SA_DM_1 BD44 SMA_DM1
SA_DM_2 BD42 SMA_DM2
SA_DM_3 AW38 SMA_DM3
SA_DM_4 AW13 SMA_DM4
SA_DM_5 BG8 SMA_DM5
SA_DM_6 AY5 SMA_DM6
SA_DM_7 AN6 SMA_DM7

SA_DQS_0 AT46 SMA_DQS0
SA_DQS_1 BE48 SMA_DQS1
SA_DQS_2 BB43 SMA_DQS2
SA_DQS_3 BC37 SMA_DQS3
SA_DQS_4 BB16 SMA_DQS4
SA_DQS_5 BH6 SMA_DQS5
SA_DQS_6 BB2 SMA_DQS6
SA_DQS_7 AP3 SMA_DQS7
SA_DQSF_0 AT47 SMA_DQS0#
SA_DQSF_1 BD47 SMA_DQS1#
SA_DQSF_2 BC41 SMA_DQS2#
SA_DQSF_3 BA37 SMA_DQS3#
SA_DQSF_4 BA16 SMA_DQS4#
SA_DQSF_5 BH7 SMA_DQS5#
SA_DQSF_6 BC1 SMA_DQS6#
SA_DQSF_7 AP2 SMA_DQS7#

SA_MA_0 BJ19 SMA_MA0
SA_MA_1 BD20 SMA_MA1
SA_MA_2 BK27 SMA_MA2
SA_MA_3 BH28 SMA_MA3
SA_MA_4 BL24 SMA_MA4
SA_MA_5 BK28 SMA_MA5
SA_MA_6 BJ27 SMA_MA6
SA_MA_7 BJ25 SMA_MA7
SA_MA_8 BL28 SMA_MA8
SA_MA_9 BA28 SMA_MA9
SA_MA_10 BC19 SMA_MA10
SA_MA_11 BE28 SMA_MA11
SA_MA_12 BG30 SMA_MA12
SA_MA_13 BJ16 SMA_MA13

SMA_MA[13..0] 9
SMA_BA0 9
SMA_BA1 9
SMA_BA2 9
SMA_CAS# 9
SMA_RAS# 9
SMA_WE# 9
SMA_DM0 9 … SMA_DM7 9
SMA_DQS0 9 … SMA_DQS7 9
SMA_DQS0# 9 … SMA_DQS7# 9

DDR SYSTEM MEMORY A

CRESTLINE

9 SMB_MD[63..0]

U22E

SMB_MD0 AP49
SMB_MD1 AR51
SMB_MD2 AW50
SMB_MD3 AW51
SMB_MD4 AN51
SMB_MD5 AN50
SMB_MD6 AV50
SMB_MD7 AV49
SMB_MD8 BA50
SMB_MD9 BB50
SMB_MD10 BA49
SMB_MD11 BE50
SMB_MD12 BA51
SMB_MD13 AY49
SMB_MD14 BF50
SMB_MD15 BF49
SMB_MD16 BJ50
SMB_MD17 BJ44
SMB_MD18 BJ43
SMB_MD19 BL43
SMB_MD20 BK47
SMB_MD21 BK49
SMB_MD22 BK43
SMB_MD23 BK42
SMB_MD24 BJ41
SMB_MD25 BL41
SMB_MD26 BJ37
SMB_MD27 BJ36
SMB_MD28 BK41
SMB_MD29 BJ40
SMB_MD30 BL35
SMB_MD31 BK37
SMB_MD32 BK13
SMB_MD33 BE11
SMB_MD34 BK11
SMB_MD35 BC11
SMB_MD36 BC13
SMB_MD37 BE12
SMB_MD38 BC12
SMB_MD39 BG12
SMB_MD40 BJ10
SMB_MD41 BL9
SMB_MD42 BK5
SMB_MD43 BL5
SMB_MD44 BK9
SMB_MD45 BK10
SMB_MD46 BJ8
SMB_MD47 BJ6
SMB_MD48 BF4
SMB_MD49 BH5
SMB_MD50 BC1
SMB_MD51 BC2
SMB_MD52 BK3
SMB_MD53 BF4
SMB_MD54 BD3
SMB_MD55 BJ2
SMB_MD56 BA3
SMB_MD57 BB3
SMB_MD58 AR1
SMB_MD59 AT3
SMB_MD60 AY2
SMB_MD61 AV3
SMB_MD62 AU2
SMB_MD63 AT2

SB_DQ_0 … SB_DQ_63

SB_BS_0 AY17
SB_BS_1 BG18
SB_BS_2 BG36
SB_CAS# BE17
SB_RAS# AV16
SB_RCVEN# AY18
SB_WE# BC17

SB_DM_0 AR50 SMB_DM0
SB_DM_1 BD49 SMB_DM1
SB_DM_2 BK45 SMB_DM2
SB_DM_3 BL39 SMB_DM3
SB_DM_4 BH12 SMB_DM4
SB_DM_5 BJ7 SMB_DM5
SB_DM_6 BF3 SMB_DM6
SB_DM_7 AW2 SMB_DM7

SB_DQS_0 AT50 SMB_DQS0
SB_DQS_1 BD50 SMB_DQS1
SB_DQS_2 BK46 SMB_DQS2
SB_DQS_3 BK39 SMB_DQS3
SB_DQS_4 BJ12 SMB_DQS4
SB_DQS_5 BL7 SMB_DQS5
SB_DQS_6 BF2 SMB_DQS6
SB_DQS_7 AV2 SMB_DQS7
SB_DQSF_0 AU50 SMB_DQS0#
SB_DQSF_1 BC50 SMB_DQS1#
SB_DQSF_2 BL45 SMB_DQS2#
SB_DQSF_3 BK38 SMB_DQS3#
SB_DQSF_4 BK12 SMB_DQS4#
SB_DQSF_5 BK7 SMB_DQS5#
SB_DQSF_6 BF2 SMB_DQS6#
SB_DQSF_7 AV3 SMB_DQS7#

SB_MA_0 BC18 SMB_MA0
SB_MA_1 BG28 SMB_MA1
SB_MA_2 BG25 SMB_MA2
SB_MA_3 AW17 SMB_MA3
SB_MA_4 BF25 SMB_MA4
SB_MA_5 BE25 SMB_MA5
SB_MA_6 BA29 SMB_MA6
SB_MA_7 BC28 SMB_MA7
SB_MA_8 AY28 SMB_MA8
SB_MA_9 BD37 SMB_MA9
SB_MA_10 BG17 SMB_MA10
SB_MA_11 BE37 SMB_MA11
SB_MA_12 BA39 SMB_MA12
SB_MA_13 BG13 SMB_MA13

SMB_MA[13..0] 9
SMB_BA0 9
SMB_BA1 9
SMB_BA2 9
SMB_CAS# 9
SMB_RAS# 9
SMB_WE# 9
SMB_DM0 9 … SMB_DM7 9
SMB_DQS0 9 … SMB_DQS7 9
SMB_DQS0# 9 … SMB_DQS7# 9

DDR SYSTEM MEMORY B

CRESTLINE

REV:C MODIFY
C334
330u/2.5V_7343

REV:B MODIFY
C271
10u/6.3V_8

C270 .22u/10V_4
C269 .22u/10V_4
C251 .1u/16V_4

REV:B MODIFY
C273
10u/6.3V_8

C208 .22u/10V_4
C186 .22u/10V_4
C183 .1u/16V_4
C287 .1u/16V_4
C222 .1u/16V_4

+1.05V

U22F

VCC_NCTF_1 … VCC_NCTF_50 (AB33 … V37)

VCC_AXM_NCTF_1 AL24
VCC_AXM_NCTF_2 AL26
VCC_AXM_NCTF_3 AL28
VCC_AXM_NCTF_4 AM26
VCC_AXM_NCTF_5 AM28
VCC_AXM_NCTF_6 AM29
VCC_AXM_NCTF_7 AM31
VCC_AXM_NCTF_8 AM32
VCC_AXM_NCTF_9 AM33
VCC_AXM_NCTF_10 AP29
VCC_AXM_NCTF_11 AP31
VCC_AXM_NCTF_12 AP32
VCC_AXM_NCTF_13 AP33
VCC_AXM_NCTF_14 AL29
VCC_AXM_NCTF_15 AL31
VCC_AXM_NCTF_16 AL32
VCC_AXM_NCTF_17 AR31
VCC_AXM_NCTF_18 AR32
VCC_AXM_NCTF_19 AR33

CRESTLINE

VCC NCTF

VSS_NCTF_1 T27
VSS_NCTF_2 T37
VSS_NCTF_3 U24
VSS_NCTF_4 U28
VSS_NCTF_5 V31
VSS_NCTF_6 V35
VSS_NCTF_7 AA19
VSS_NCTF_8 AB17
VSS_NCTF_9 AB35
VSS_NCTF_10 AD19
VSS_NCTF_11 AD37
VSS_NCTF_12 AF17
VSS_NCTF_13 AF35
VSS_NCTF_14 AK17
VSS_NCTF_15 AM17
VSS_NCTF_16 AM24
VSS_NCTF_17 AP26
VSS_NCTF_18 AP28
VSS_NCTF_19 AR15
VSS_NCTF_20 AR19
VSS_NCTF_21 AR28

VSS NCTF

POWER

VSS_SCB1 A3
VSS_SCB2 B2
VSS_SCB3 C1
VSS_SCB4 BL1
VSS_SCB5 AL51
VSS_SCB6 A51

VSS SCB

VCC_AXM_1 AT33
VCC_AXM_2 AT31
VCC_AXM_3 AK29
VCC_AXM_4 AK24
VCC_AXM_5 AK23
VCC_AXM_6 AJ26
VCC_AXM_7 AJ23

VCC AXM

VCC AXM NCTF

U22I

VSS_1 … VSS_198 (A13 … AW16)

VSS

U22J

VSS_199 … VSS_313 (C46 … H50)

REV:C MODIFY

VSS

CRESTLINE

PROJECT : ZO1
Quanta Computer Inc.

Size	Document Number	Rev
	GMCH DDR & GND	2B

Date: Thursday, May 17, 2007 Sheet 8 of 26

GM965 QN12 : AJ0QN120T04
PM965 QN14 : AJ0QN140T04

REV:B MODIFY

Ball	Enable	Disable	Ball	Enable	Disable
VCCA_CRT	3.3V	GND	VCCA_C_TVO	3.3V	GND
VCCD_CRT	1.5V	GND	VCCD_TVO	1.5V	1.5V
VCCDQ_CRT	1.5V	GND	VCCABG_DAC	3.3V	GND
VCCA_A_TVO	3.3V	GND	VSSABG_DAC	GND	GND
VCCA_B_TVO	3.3V	GND	VCC_SYNC	3.3V	GND

CRT/TV Disable/Enable guideline

External VGA with EV@part, Internal VGA with IV@ part

LVDS Disable/Enable guideline

External VGA with EV@part,Internal VGA with IV@ part

Signal	If SDVO Disable LVDS Disable	If SDVO enable LVDS Disable	If SDVO enable LVDS enable
VCCD_LVDS	GND	1.8V	1.8V
VCCA_LVDS	GND	GND	1.8V
VCCTX_LVDS	GND	GND	1.8V

EXTERNAL | INTERNAL

POWER

VCC CORE | VCC SM | VCC GFX NCTF | VCC GFX | VCC SM LF | VCC AXG | VCC AXG NCTF | VCC SM | VCC SM CK | VCC AXF | VCC AXD | VCC PEG | VCC HV | VCC DMI | VTTLF | VTT | CRT | LVDS PLL | LVDS A PEG | LVDS A SM | LVDS A CK | LVDS TV | LVDS D TV/CRT

CRESTLINE

Stuff 0 ohm for External VGA

VOUT = 1.25 (1+R1/R2)

	R1	R2
3.3V	33K	20K

2nd source : G923-330T1U AL000923003

SUSB# 11.19

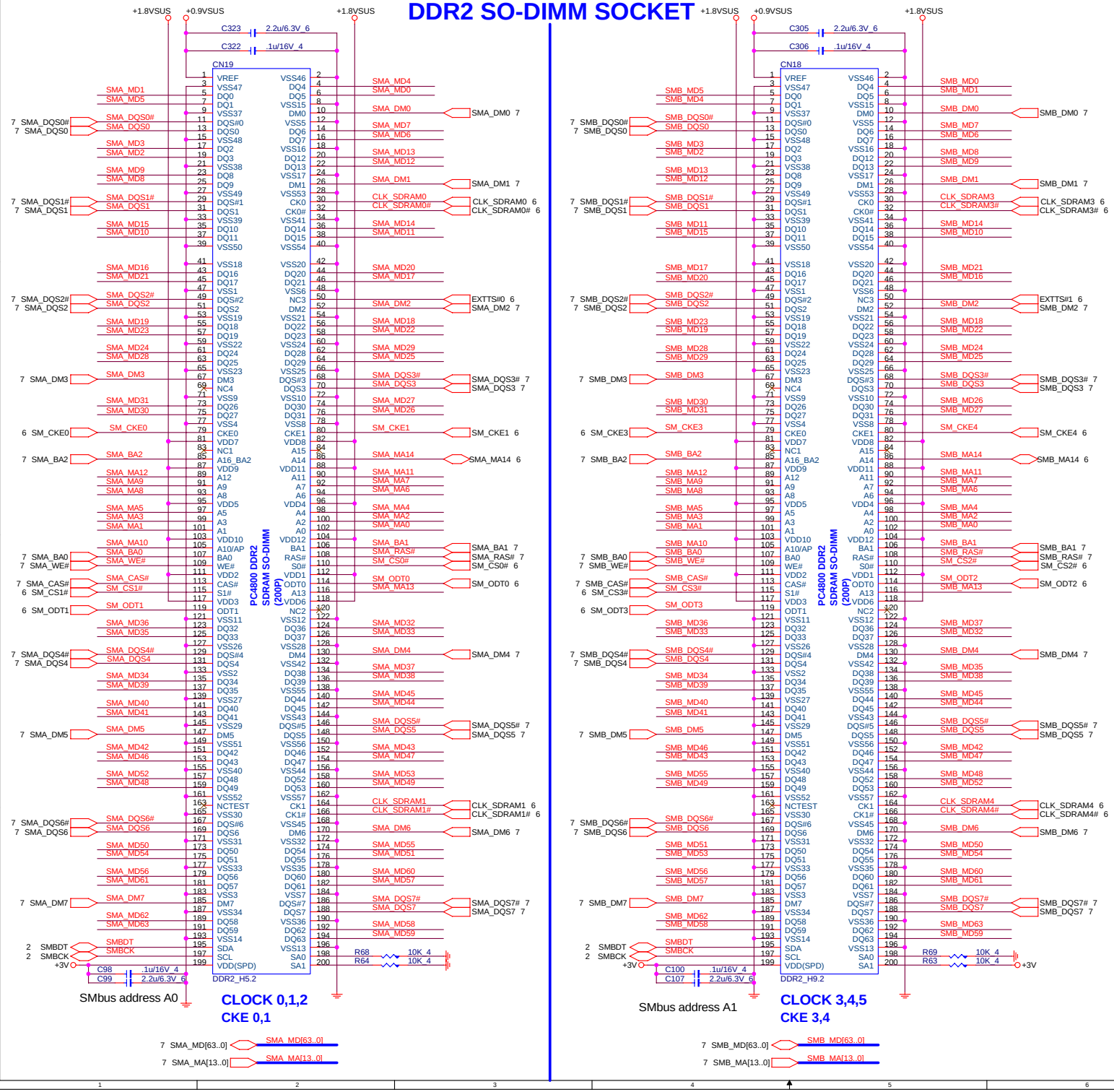
PROJECT : ZO1

Quanta Computer Inc.

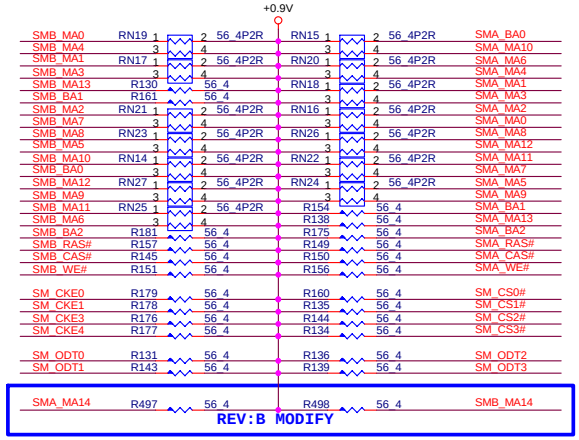
Size	Document Number	Rev
	GMCH Power-1(4 of 7)	2B

Date: Thursday, May 17, 2007 Sheet 9 of 26

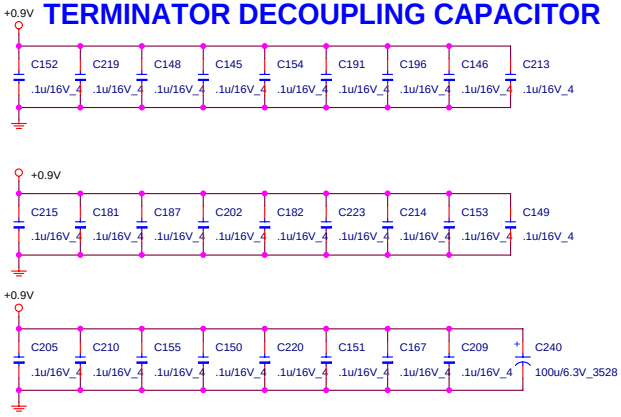
DDR2 SO-DIMM SOCKET



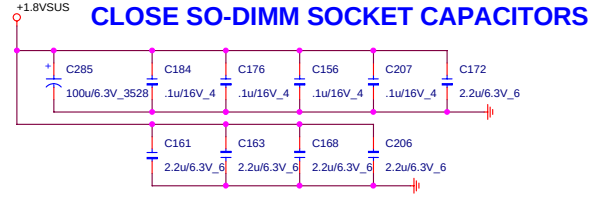
DDR2 TERMINATOR



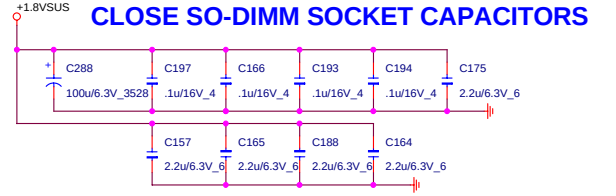
TERMINATOR DECOUPLING CAPACITOR



CLOSE SO-DIMM SOCKET CAPACITORS



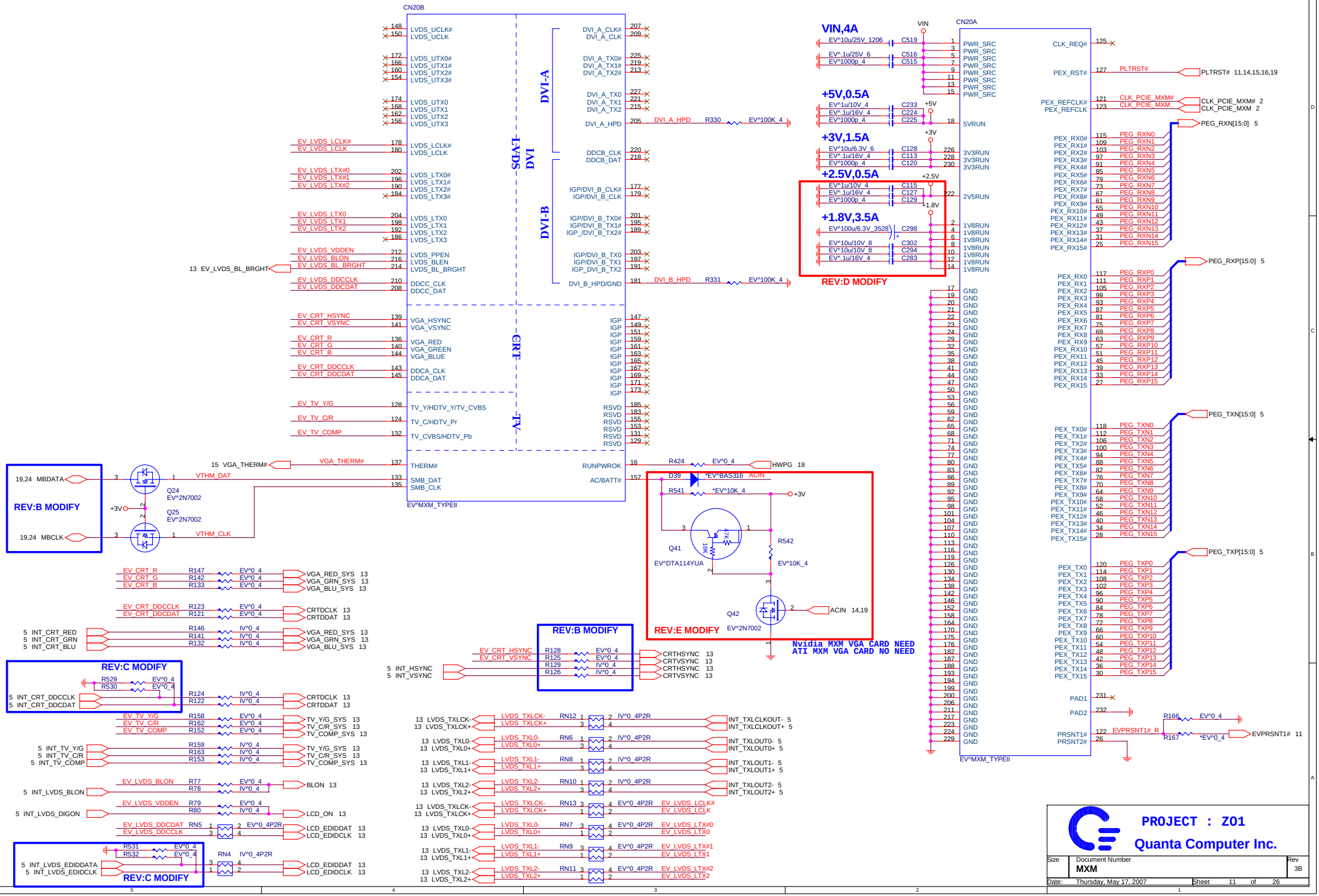
CLOSE SO-DIMM SOCKET CAPACITORS

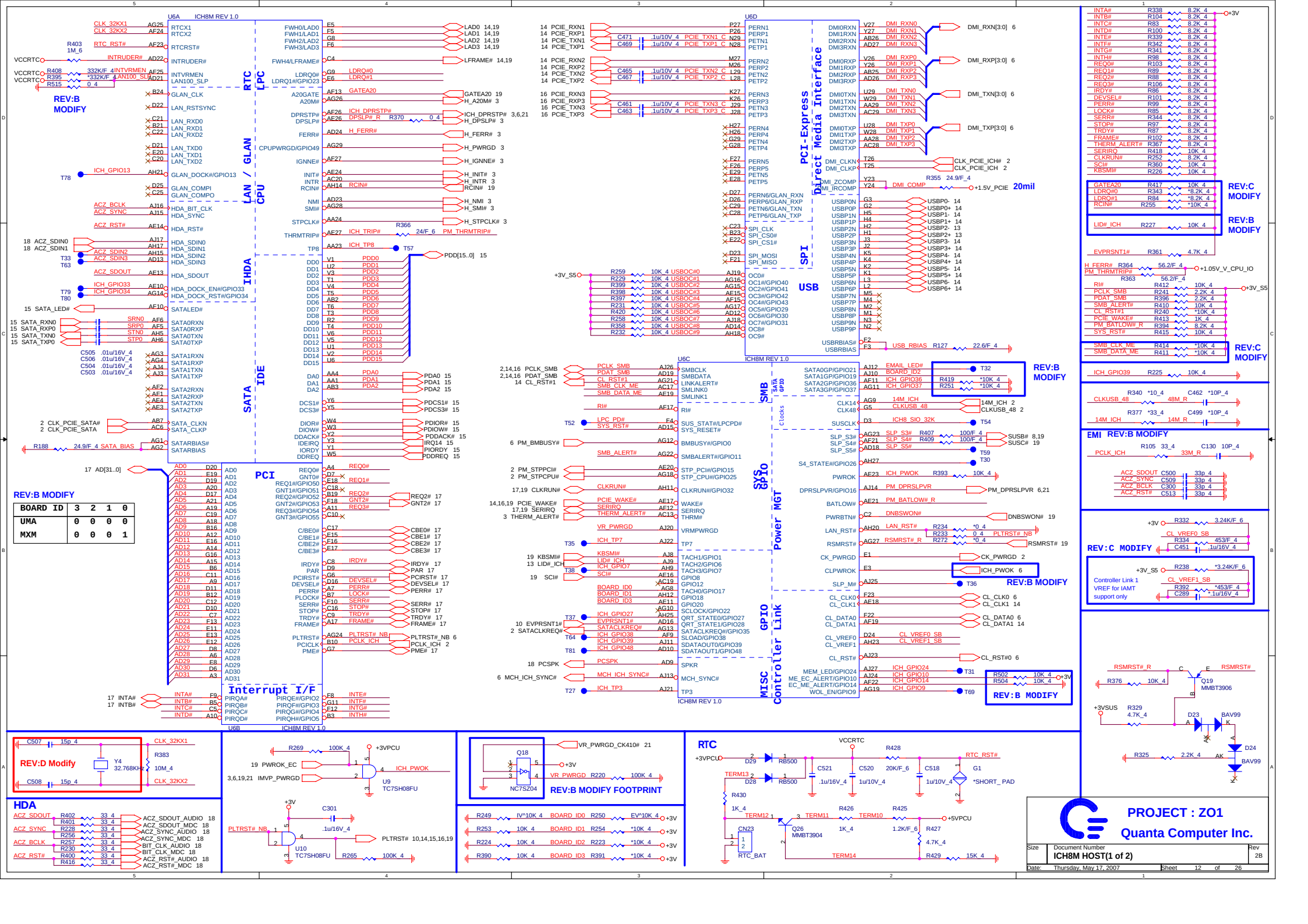


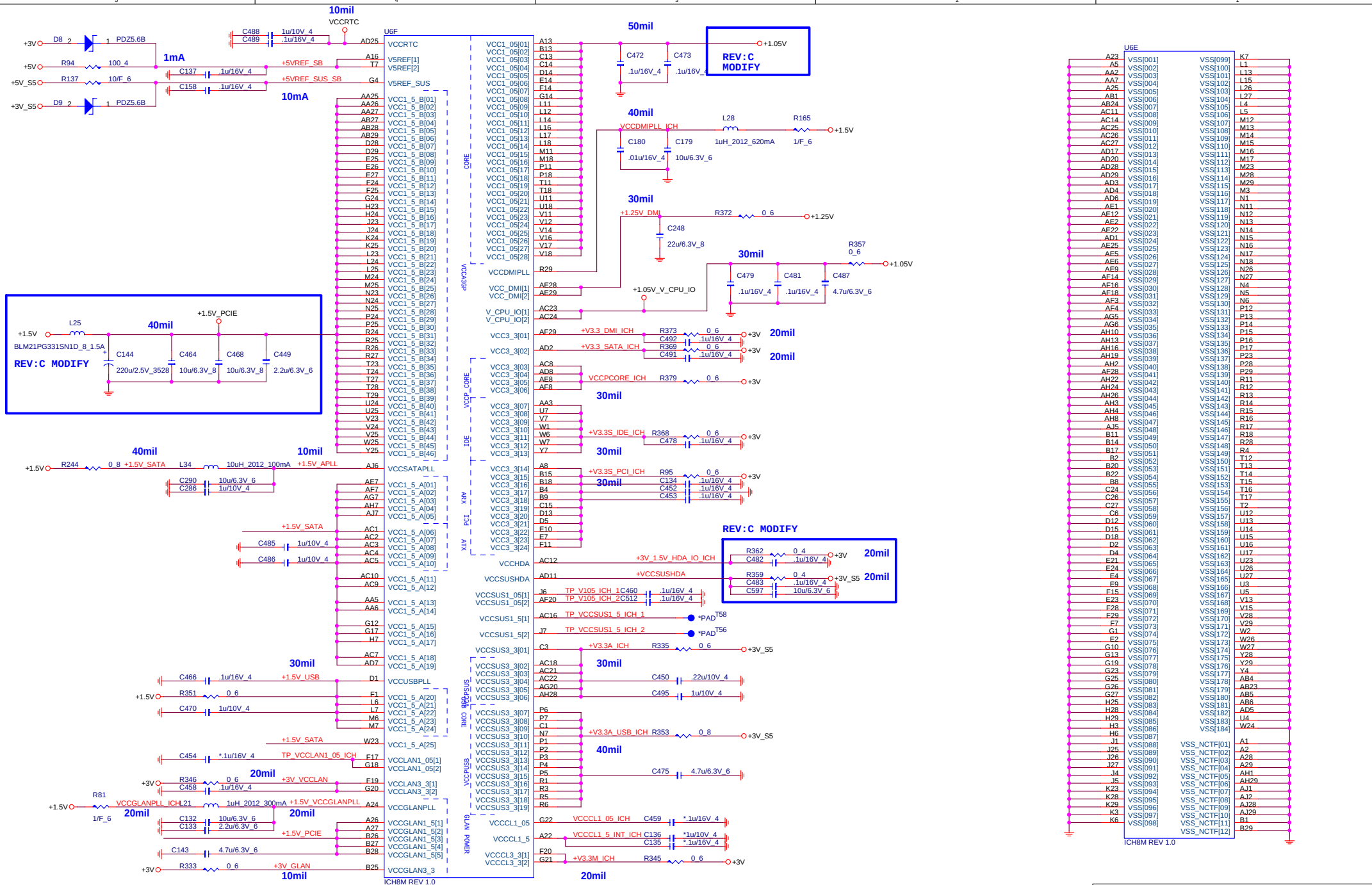
PROJECT : ZO1
Quanta Computer Inc.

Size	Document Number	Rev
	DDR SO-DIMM(200P)	2A

Date: Thursday, May 17, 2007 Sheet 10 of 26


CN20B
DVI-A
DVI-B
LVDS
DVI
CRT
TV
EV^MXM_TYPEII
CN20A
VIN,4A
+5V,0.5A
+3V,1.5A
+2.5V,0.5A
+1.8V,3.5A
REV:D MODIFY
REV:B MODIFY
REV:E MODIFY
REV:C MODIFY
Nvidia MXM VGA CARD NEED
ATI MXM VGA CARD NO NEED
PROJECT : Z01
Quanta Computer Inc.
Size
Document Number
MXM
Rev
3B
Date: Thursday, May 17, 2007
Sheet 11 of 26


U6A ICH8M REV 1.0
RTC
LPC
LAN / GLAN
CPU
IHDA
SATA
IDE
PCI
Interrupt I/F
U6B ICH8M REV 1.0
U6D
PCI-Express
Direct Media Interface
SPI
USB
U6C ICH8M REV 1.0
SMB
SATA GPIO
Clocks
SYS PWR MGT
GPIO
Controller Link
MISC
ICH8M REV 1.0
REV:B MODIFY
REV:C MODIFY
REV:D Modify
REV:B MODIFY FOOTPRINT
20mil
EMI REV:B MODIFY
RTC
HDA
PROJECT : ZO1
Quanta Computer Inc.
ICH8M HOST(1 of 2)
Thursday, May 17, 2007


U6F
VCCRTC
10mil
C488 1u/10V_4
C489 .1u/16V_4
+3V D8_2 PDZ5.6B
+5V R94 100_4
+5V_S5 R137 10/F_6
+3V_S5 D9_2 PDZ5.6B
1mA
C137 .1u/16V_4
C158 .1u/16V_4
+5VREF_SB
+5VREF_SUS_SB
10mA
V5REF[1]
V5REF[2]
V5REF_SUS
VCC1_5_B[01]
VCC1_5_B[02]
VCC1_5_B[03]
VCC1_5_B[04]
VCC1_5_B[05]
VCC1_5_B[06]
VCC1_5_B[07]
VCC1_5_B[08]
VCC1_5_B[09]
VCC1_5_B[10]
VCC1_5_B[11]
VCC1_5_B[12]
VCC1_5_B[13]
VCC1_5_B[14]
VCC1_5_B[15]
VCC1_5_B[16]
VCC1_5_B[17]
VCC1_5_B[18]
VCC1_5_B[19]
VCC1_5_B[20]
VCC1_5_B[21]
VCC1_5_B[22]
VCC1_5_B[23]
VCC1_5_B[24]
VCC1_5_B[25]
VCC1_5_B[26]
VCC1_5_B[27]
VCC1_5_B[28]
VCC1_5_B[29]
VCC1_5_B[30]
VCC1_5_B[31]
VCC1_5_B[32]
VCC1_5_B[33]
VCC1_5_B[34]
VCC1_5_B[35]
VCC1_5_B[36]
VCC1_5_B[37]
VCC1_5_B[38]
VCC1_5_B[39]
VCC1_5_B[40]
VCC1_5_B[41]
VCC1_5_B[42]
VCC1_5_B[43]
VCC1_5_B[44]
VCC1_5_B[45]
VCC1_5_B[46]
CORE
VCCP
VCCA3GP
VCC1_05[01]
VCC1_05[02]
VCC1_05[03]
VCC1_05[04]
VCC1_05[05]
VCC1_05[06]
VCC1_05[07]
VCC1_05[08]
VCC1_05[09]
VCC1_05[10]
VCC1_05[11]
VCC1_05[12]
VCC1_05[13]
VCC1_05[14]
VCC1_05[15]
VCC1_05[16]
VCC1_05[17]
VCC1_05[18]
VCC1_05[19]
VCC1_05[20]
VCC1_05[21]
VCC1_05[22]
VCC1_05[23]
VCC1_05[24]
VCC1_05[25]
VCC1_05[26]
VCC1_05[27]
VCC1_05[28]
50mil
C472 .1u/16V_4
C473 .1u/16V_4
+1.05V
REV:C MODIFY
40mil
VCCDMIPLL_ICH
L28 1uH_2012_620mA
R165 1/F_6
+1.5V
C180 .01u/16V_4
C179 10u/6.3V_6
VCCDMIPLL
30mil
+1.25V_DMI
R372 0_6
+1.25V
C248 22u/6.3V_8
VCC_DMI[1]
VCC_DMI[2]
V_CPU_IO[1]
V_CPU_IO[2]
+1.05V_V_CPU_IO
30mil
C479 .1u/16V_4
C481 .1u/16V_4
C487 4.7u/6.3V_6
R357 0_6
+1.05V
REV:C MODIFY
L25 BLM21PG331SN1D_8_1.5A
+1.5V
40mil
+1.5V_PCIE
C144 220u/2.5V_3528
C464 10u/6.3V_8
C468 10u/6.3V_8
C449 2.2u/6.3V_6
VCC3_3[01]
VCC3_3[02]
VCC3_3[03]
VCC3_3[04]
VCC3_3[05]
VCC3_3[06]
VCC3_3[07]
VCC3_3[08]
VCC3_3[09]
VCC3_3[10]
VCC3_3[11]
VCC3_3[12]
VCC3_3[13]
VCC3_3[14]
VCC3_3[15]
VCC3_3[16]
VCC3_3[17]
VCC3_3[18]
VCC3_3[19]
VCC3_3[20]
VCC3_3[21]
VCC3_3[22]
VCC3_3[23]
VCC3_3[24]
IDE
AXA
PCI
ATX
+V3.3_DMI_ICH R373 0_6 C492 .1u/16V_4 +3V 20mil
+V3.3_SATA_ICH R369 0_6 C491 .1u/16V_4 +3V 20mil
VCCPCORE_ICH R379 0_6 +3V
30mil
+V3.3S_IDE_ICH R368 0_6 C478 .1u/16V_4 +3V
30mil
+V3.3S_PCI_ICH R95 0_6 C134 .1u/16V_4 C452 .1u/16V_4 C453 .1u/16V_4 +3V
30mil
REV:C MODIFY
+3V_1.5V_HDA_IO_ICH R362 0_4 C482 .1u/16V_4 +3V 20mil
+VCCSUSHDA R359 0_4 C483 .1u/16V_4 C597 10u/6.3V_6 +3V_S5 20mil
VCCSATAPLL
L34 10uH_2012_100mA
R244 0_8 +1.5V_SATA
+1.5V_APLL
C290 10u/6.3V_6
C286 1u/10V_4
40mil
10mil
+1.5V_SATA
C485 1u/10V_4
C486 1u/10V_4
VCCHDA
VCCSUSHDA
VCCSUS1_05[1]
VCCSUS1_05[2]
VCCSUS1_5[1]
VCCSUS1_5[2]
VCCSUS3_3[01]
VCCSUS3_3[02]
VCCSUS3_3[03]
VCCSUS3_3[04]
VCCSUS3_3[05]
VCCSUS3_3[06]
VCCSUS3_3[07]
VCCSUS3_3[08]
VCCSUS3_3[09]
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VCCSUS3_3[11]
VCCSUS3_3[12]
VCCSUS3_3[13]
VCCSUS3_3[14]
VCCSUS3_3[15]
VCCSUS3_3[16]
VCCSUS3_3[17]
VCCSUS3_3[18]
VCCSUS3_3[19]
SUS
CORE
VCCPUSB
VCCCL1_05
VCCCL1_5
VCCCL3_3[1]
VCCCL3_3[2]
GLAN POWER
TP_V105_ICH_1 C460 .1u/16V_4
TP_V105_ICH_2 C512 .1u/16V_4
TP_VCCSUS1_5_ICH_1 *PAD T58
TP_VCCSUS1_5_ICH_2 *PAD T56
+V3.3A_ICH R335 0_6 +3V_S5
30mil
C450 .22u/10V_4
C495 1u/10V_4
+V3.3A_USB_ICH R353 0_8 +3V_S5
40mil
C475 4.7u/6.3V_6
VCCCL1_05_ICH C459 *.1u/16V_4
VCCCL1_5_INT_ICH C136 *1u/10V_4
C135 *.1u/16V_4
+V3.3M_ICH R345 0_6 +3V
20mil
30mil
C466 .1u/16V_4
+1.5V_USB
R351 0_6
+1.5V
C470 1u/10V_4
D1
F1
L6
L7
M6
M7
+1.5V_SATA
W23
C454 *.1u/16V_4
TP_VCCLAN1_05_ICH
F17
G18
20mil
+3V
R346 0_6
C458 .1u/16V_4
+3V_VCCLAN
F19
G20
R81 1/F_6
+1.5V
VCCGLANPLL_ICH
L21 1uH_2012_300mA
+1.5V_VCCGLANPLL
20mil
20mil
A24
C132 10u/6.3V_6
C133 2.2u/6.3V_6
+1.5V_PCIE
C143 4.7u/6.3V_6
+3V
R333 0_6
+3V_GLAN
10mil
A26
A27
B26
B27
B28
B25
VCCLAN1_5[1]
VCCLAN1_5[2]
VCCLAN1_5[3]
VCCLAN1_5[4]
VCCLAN1_5[5]
VCCLAN3_3
VCCLAN1_05[1]
VCCLAN1_05[2]
VCCLAN3_3[1]
VCCLAN3_3[2]
VCCGLANPLL
VCCUSBPLL
VCC1_5_A[01]
VCC1_5_A[02]
VCC1_5_A[03]
VCC1_5_A[04]
VCC1_5_A[05]
VCC1_5_A[06]
VCC1_5_A[07]
VCC1_5_A[08]
VCC1_5_A[09]
VCC1_5_A[10]
VCC1_5_A[11]
VCC1_5_A[12]
VCC1_5_A[13]
VCC1_5_A[14]
VCC1_5_A[15]
VCC1_5_A[16]
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VCC1_5_A[18]
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VCC1_5_A[20]
VCC1_5_A[21]
VCC1_5_A[22]
VCC1_5_A[23]
VCC1_5_A[24]
VCC1_5_A[25]
ICH8M REV 1.0
U6E
VSS[001]
VSS[002]
VSS[003]
VSS[004]
VSS[005]
VSS[006]
VSS[007]
VSS[008]
VSS[009]
VSS[010]
VSS[011]
VSS[012]
VSS[013]
VSS[014]
VSS[015]
VSS[016]
VSS[017]
VSS[018]
VSS[019]
VSS[020]
VSS[021]
VSS[022]
VSS[023]
VSS[024]
VSS[025]
VSS[026]
VSS[027]
VSS[028]
VSS[029]
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VSS_NCTF[11]
VSS_NCTF[12]
ICH8M REV 1.0
PROJECT : ZO1
Quanta Computer Inc.
Size
Document Number
ICH8M Power(2 of 2)
Rev
2B
Date: Thursday, May 17, 2007
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CRT

UMA mode
1. C8,9,11,12,15,17
use 4.7pF CH-4716TB06
2. L2,L4,L5 use CX8BA470003

MXM mode
1. C8,9,11,12,15,17
use 10pF CH01006JB08
2. L2,L4,L5 use
CX8BA220007

REV:B MODIFY

25 MIL

REV:D MODIFY

CM2009-02 have internal 15 ohm

REV:C MODIFY

REV:C MODIFY

REV:D
MODIFY

REV:E MODIFY

S-VIDEO

UMA mode
1. C22,C24,C25,C27,C31,C32
use 6pF CH00606TB04
2. L8,L9,L10 use CX8LL121002

MXM mode
1. C22,C24,C25,C27,C31,C32
use 47pF CH04706JB01
2. L8,L9,L10 use CV+4701JN00

REV:E MODIFY

LVDS

Backlight Control

REV:B MODIFY

REV:C
MODIFY

65mil

LCD_ON

LCD EDID SMBus PU

DPST

REV:C MODIFY

REV:C MODIFY

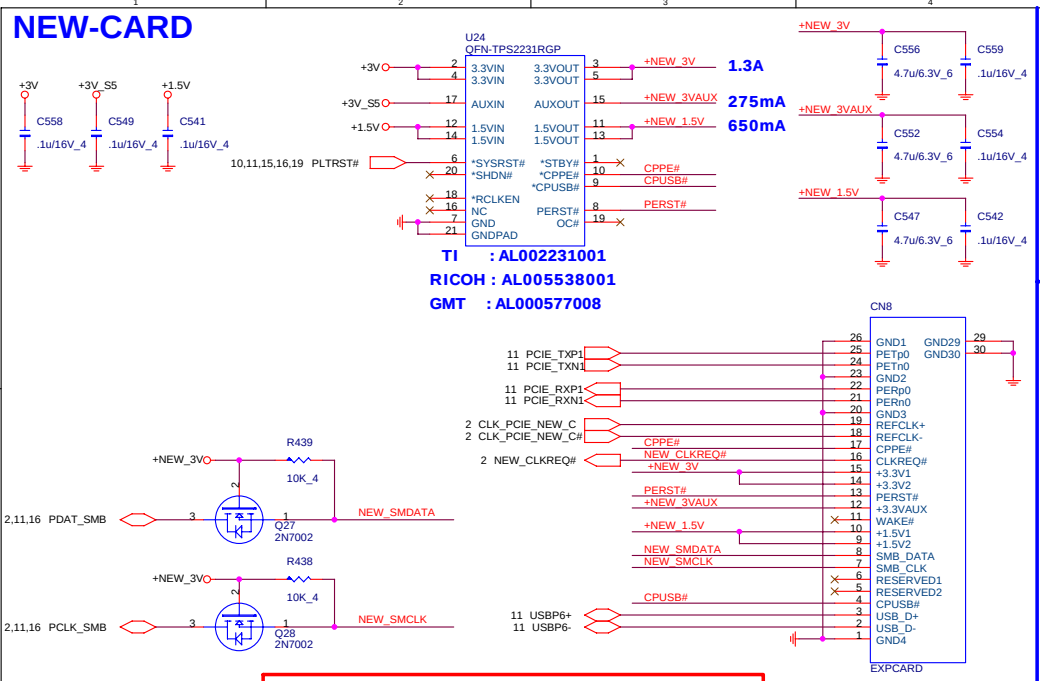
Camera

20mil

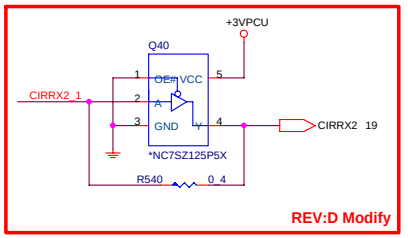
65mil

PROJECT : Z01			
Quanta Computer Inc.			
Size	Document Number		Rev
	LVDS/CRT/TVOUT/CCD		3B
Date: Thursday, May 17, 2007		Sheet 14 of 26	

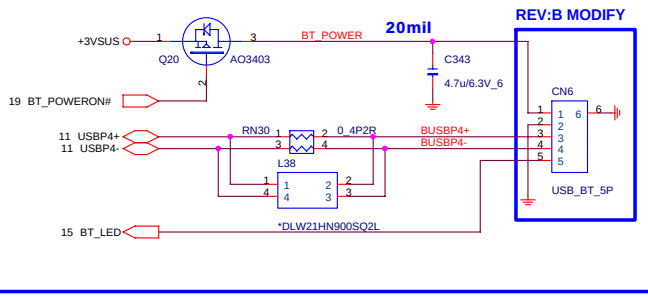
NEW-CARD

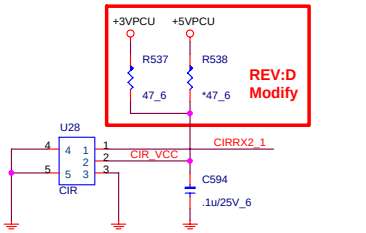


CIR



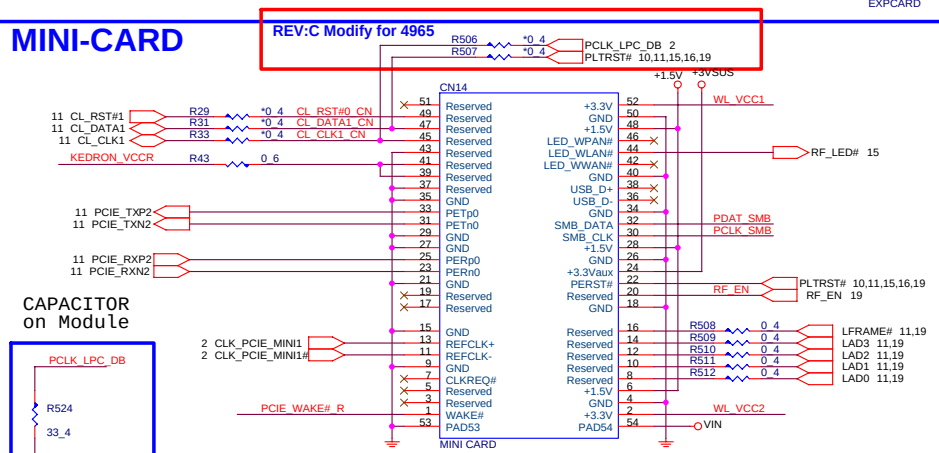
Bluetooth



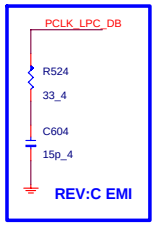


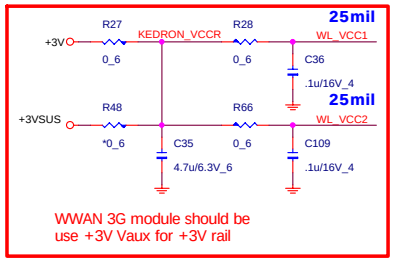
MINI-CARD

REV:C Modify for 4965

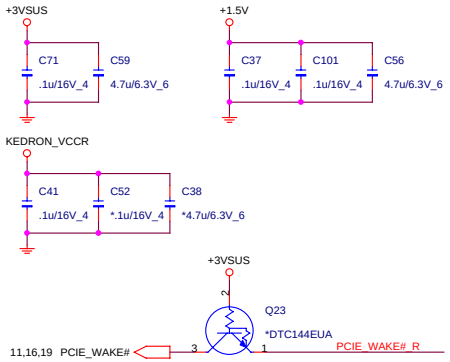


CAPACITOR on Module

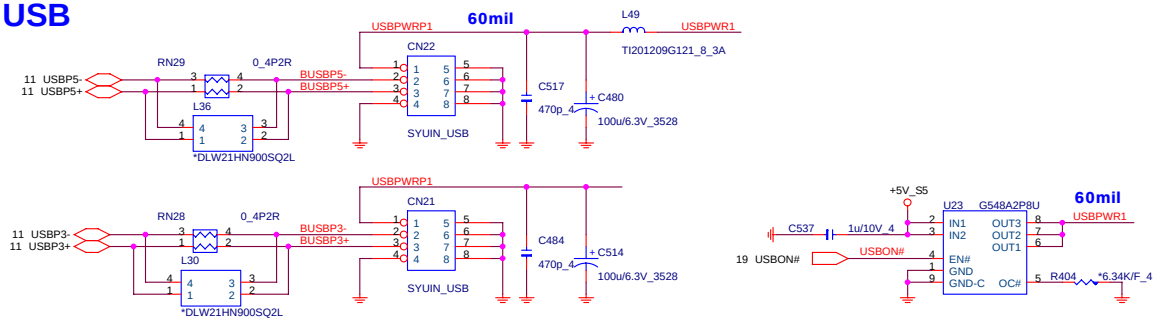




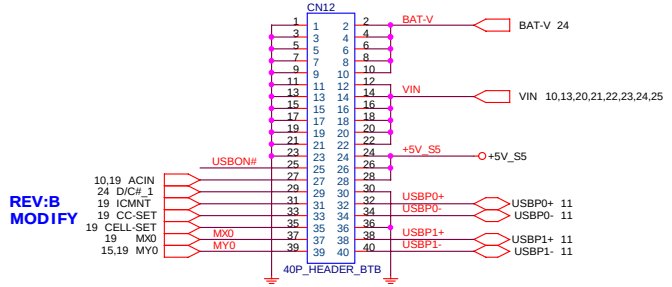
+3V_S5 for WWAN card is 2.75A

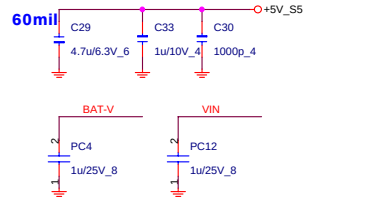


USB



TO POWER/B





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Quanta Computer Inc.
Size
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NEW&MINICARD/USB/BT/CIR/ACIN
Rev
3A
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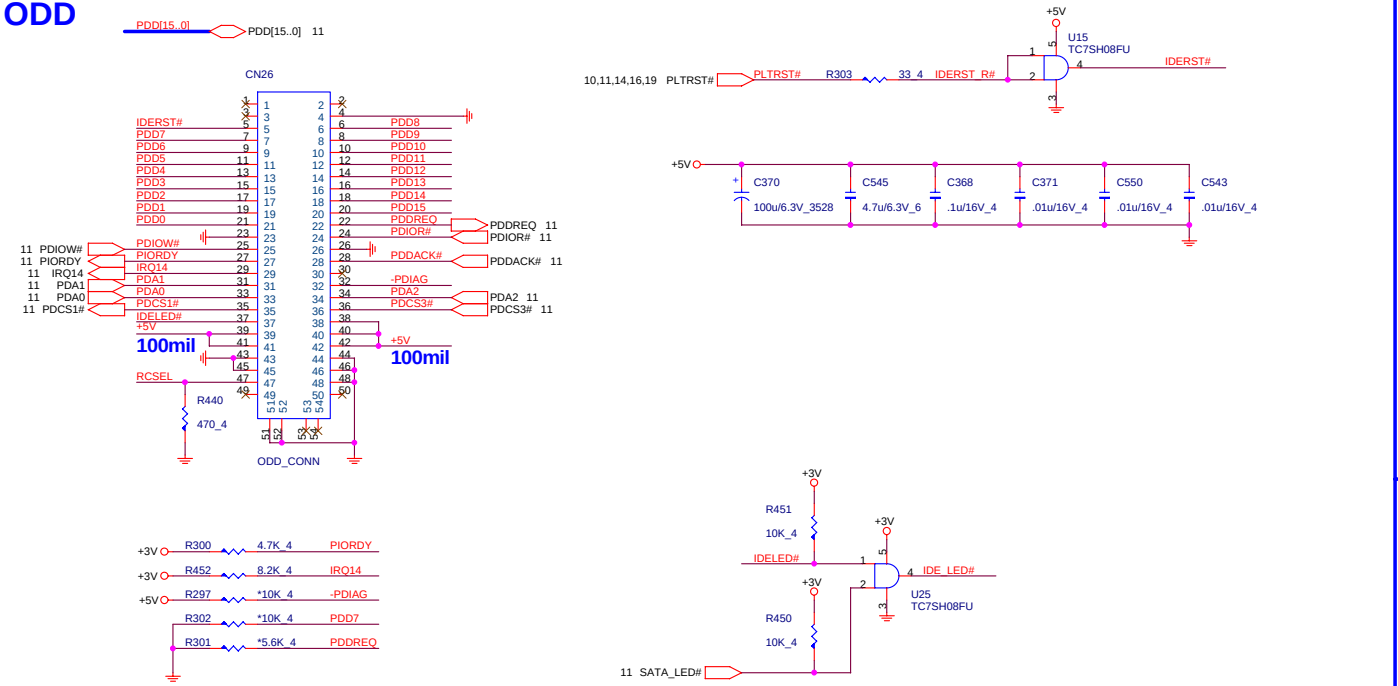
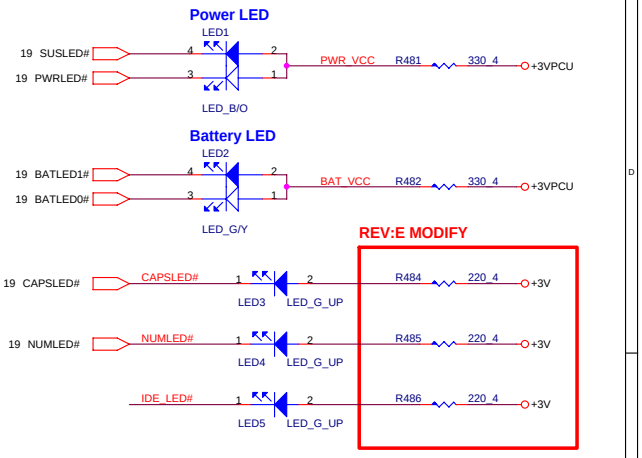
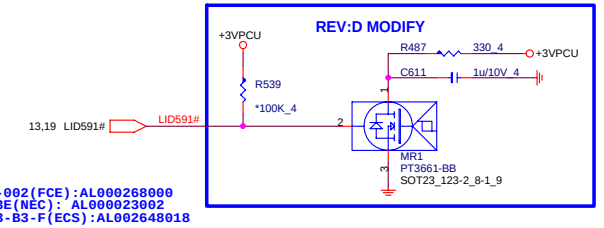
ODD



LED

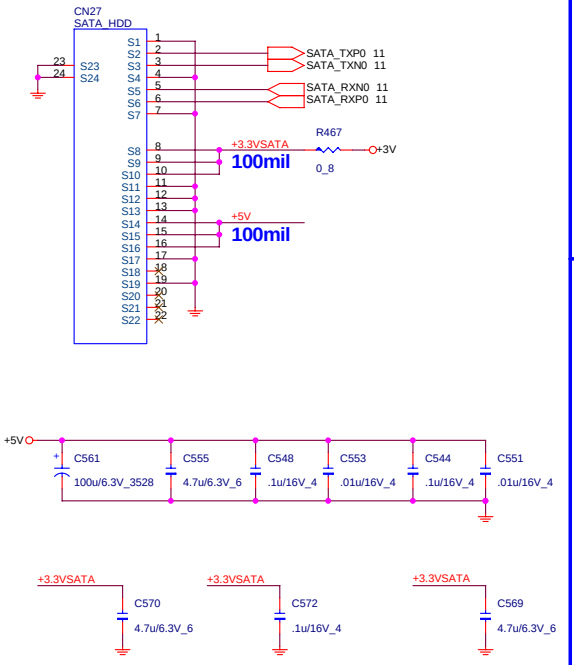


LID

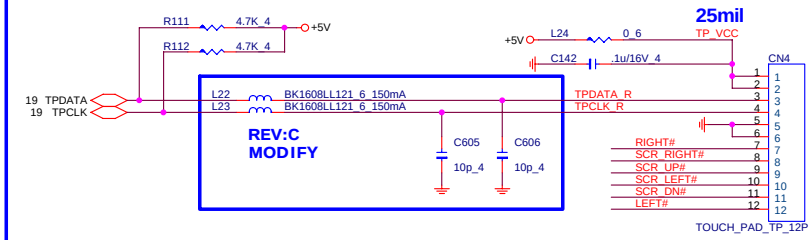


ME268-002(FCE):AL000268000
MRSS23E(NEC): AL000023002
EC2648-B3-F(ECS):AL002648018

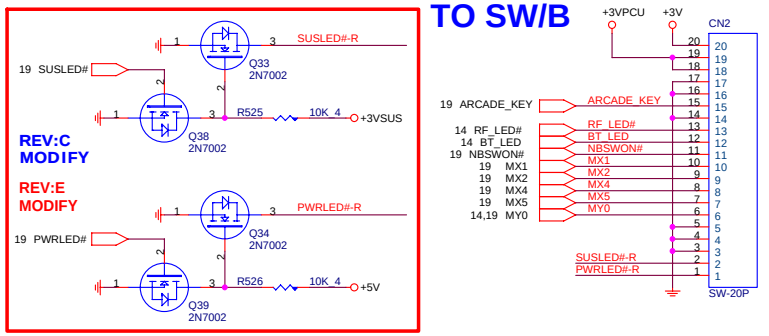
SATA



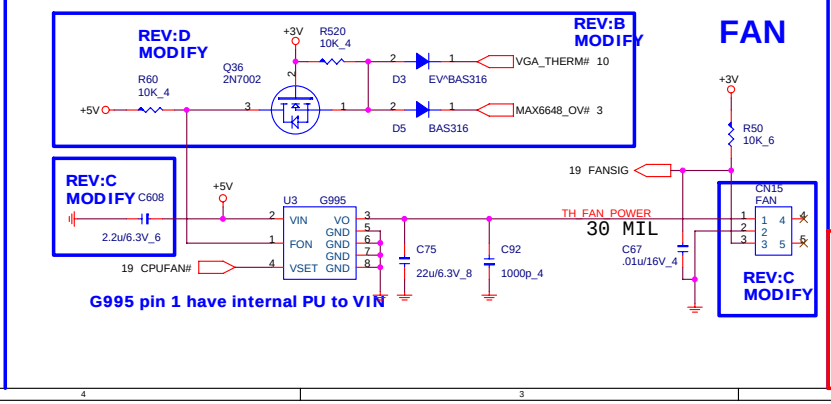
TP CONN



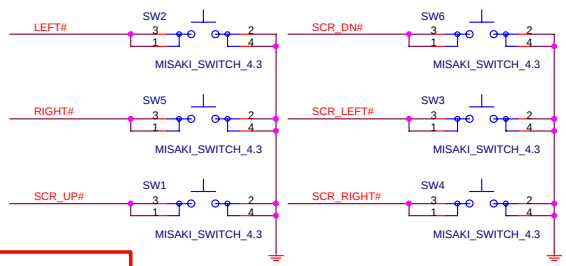
TO SW/B



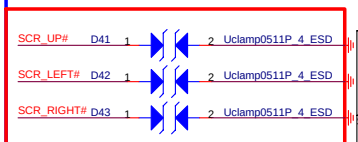
FAN



TP SWITCH



REV:E Modify



PROJECT : ZO1
Quanta Computer Inc.

Size	Document Number	Rev
	HDD/ODD/LED/SW/TP/FAN	3B
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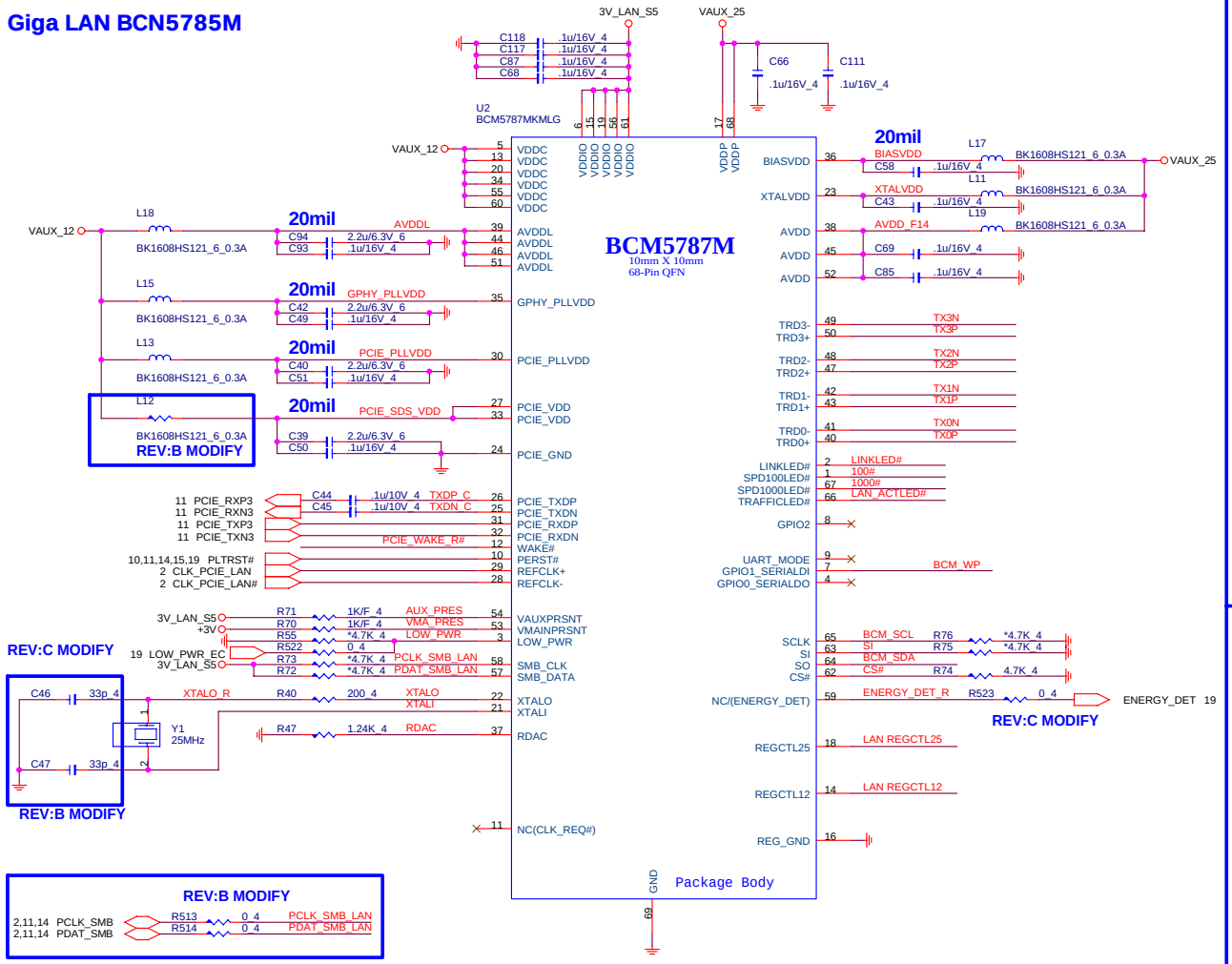
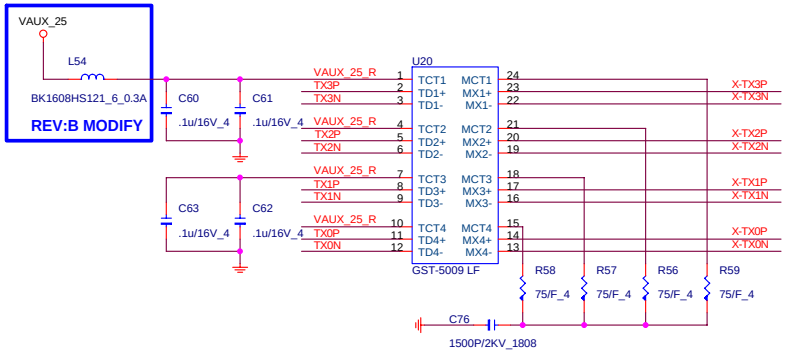
Giga LAN BCN5785M

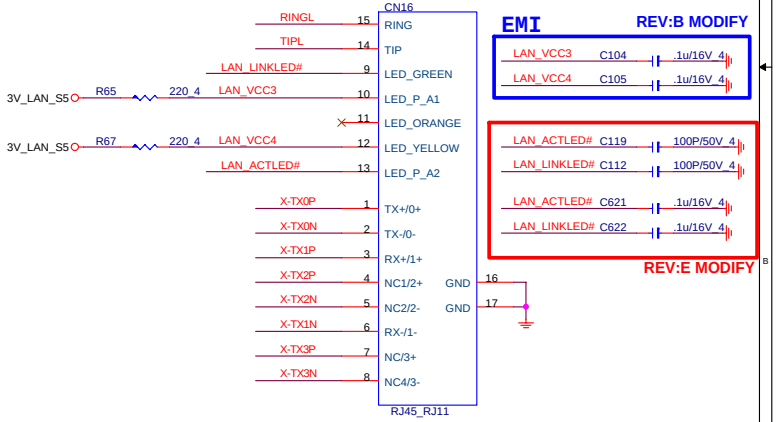


Transfomer

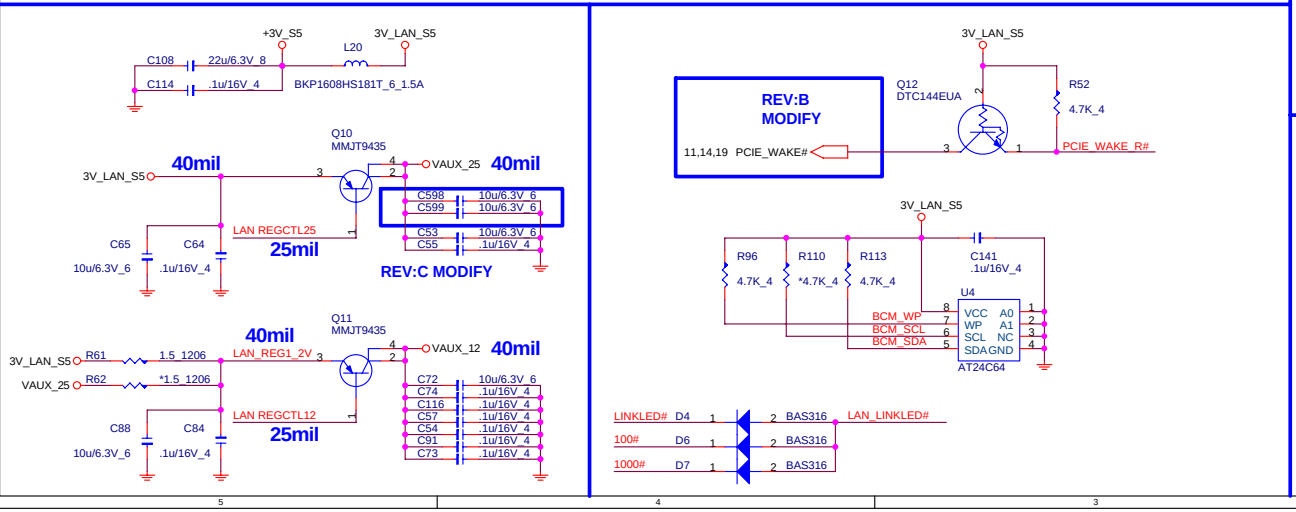
Source 1:	DELTA	LFE9249	DB0ZR1LAN11
Source 2:	Bothand	GST5009	DBKN1NLAN03
Source 3:	FCE	NS892402	DB0ZH1LAN06

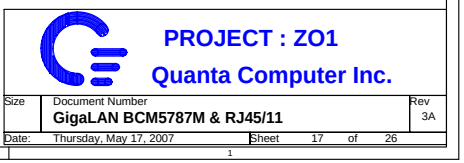


RJ45 & RJ11 connector



RJ11 cable





R5C832 : AJ5C8320H26
R5C833 : AJ5C8330H05

U8B R5C832T_V00

PCI / OTHER

REQ2# GNT2# AD25 INTA#,B#

AD25 R171 150/F_4 PCM_IDSEL

PowerOnReset for VccCore

When GRESET# is controlled by system, the pull-up resistor(R4066) and capacitor(C4093) do not need to apply.

REV:B MODIFY

When HWSPND# is controlled by system, the pull-up resistor(R4059) dose not need to apply.

REV:B MODIFY

REV:B MODIFY

Ground guard

AS CLOSE AS POSSIBLE TO R5C833 and GUARD GND

IEEE1394/SD

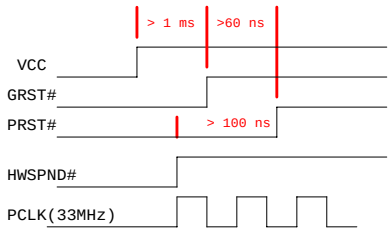
XD_RE#/CLK should shield GND.

REV:B MODIFY

* NOT Use EEPROM :
R4063 : installed
R4064,U38,C4106 : NOT installed
* Use EEPROM :
R4064,U38,C4106 : installed
R4063 : NOT installed

*24LC08

R5C832T_V00



1394

AS CLOSE AS POSSIBLE TO R5C833

*CL-2M2012-900JT

COMMON MODE CHOKE NEAR CONN.

SUYIN_1394

Shield GND Required Separatedly, for Pairs of TPA+/- and TPB+/-

GND
TPB0-
TPB0+
GND
TPA0-
TPA0+
GND

5 IN 1 CARD READER

*CARD_READER_TTN

Memory Card Power Supply

30mil

CARD_READER_PROCONN

EMI REV:B MODIFY

MS_SD_CLK C308 22p_4

PROJECT : Z01

Quanta Computer Inc.

Size	Document Number	Rev
	R5C832/833(5IN1/1394)	2A
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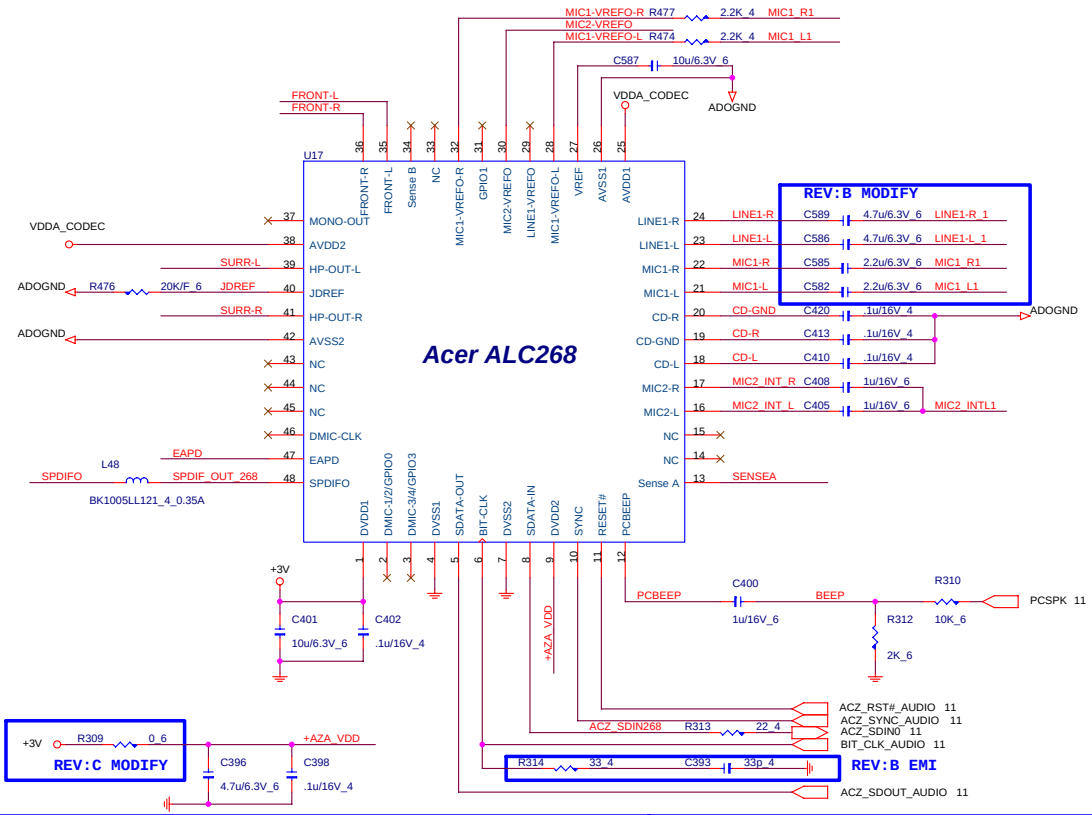
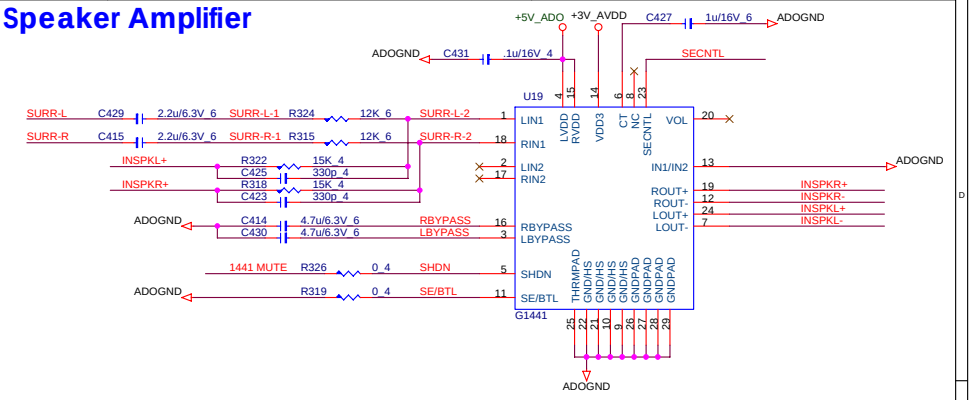
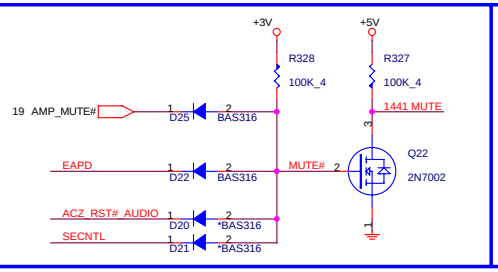
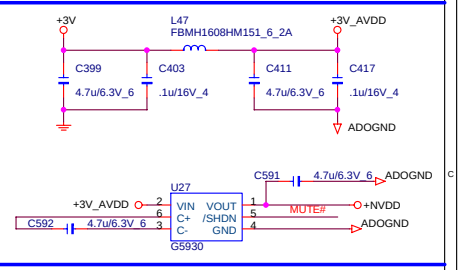
CODEC(ALC268)



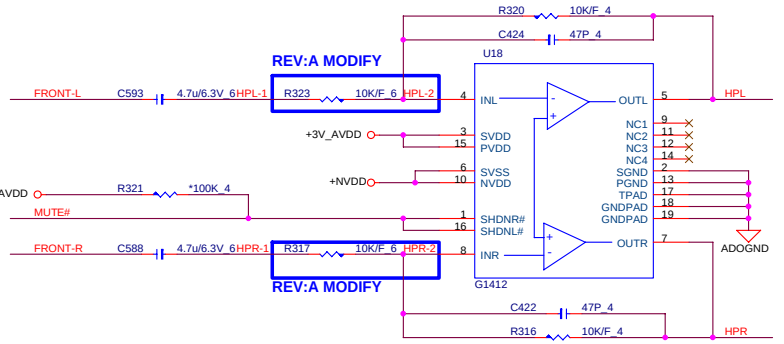
Speaker Amplifier



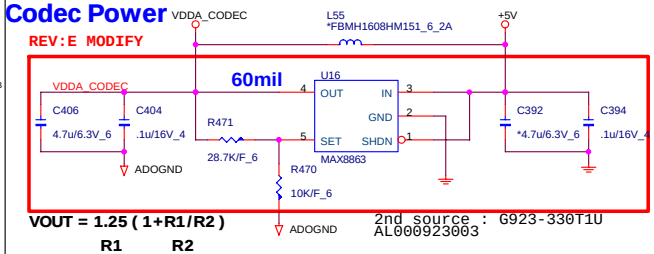




LINE OUT Amplifier



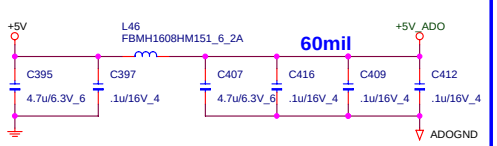
Codec Power



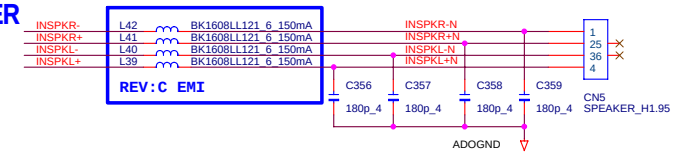
VOUT = 1.25 (1+R1/R2)

R1	R2
4.8375V	28.7K
	10K

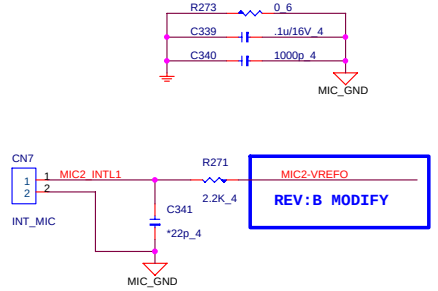
2nd source : G923-330T1U
AL000923003



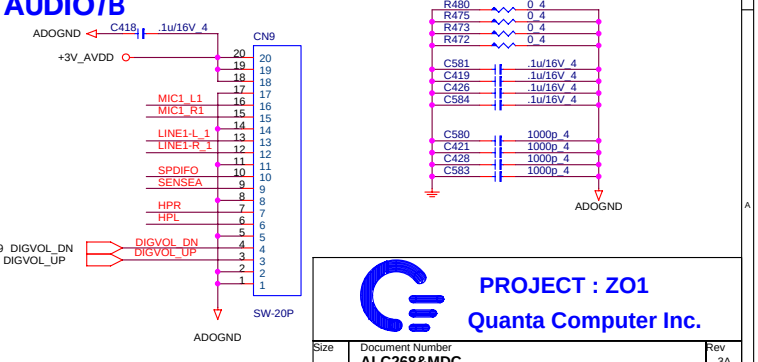
SPEAKER



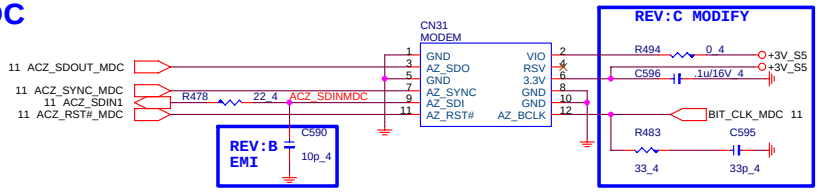
INT MIC array



AUDIO/B



MDC



PROJECT : ZO1			
Quanta Computer Inc.			
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	ALC268&MDC		3A
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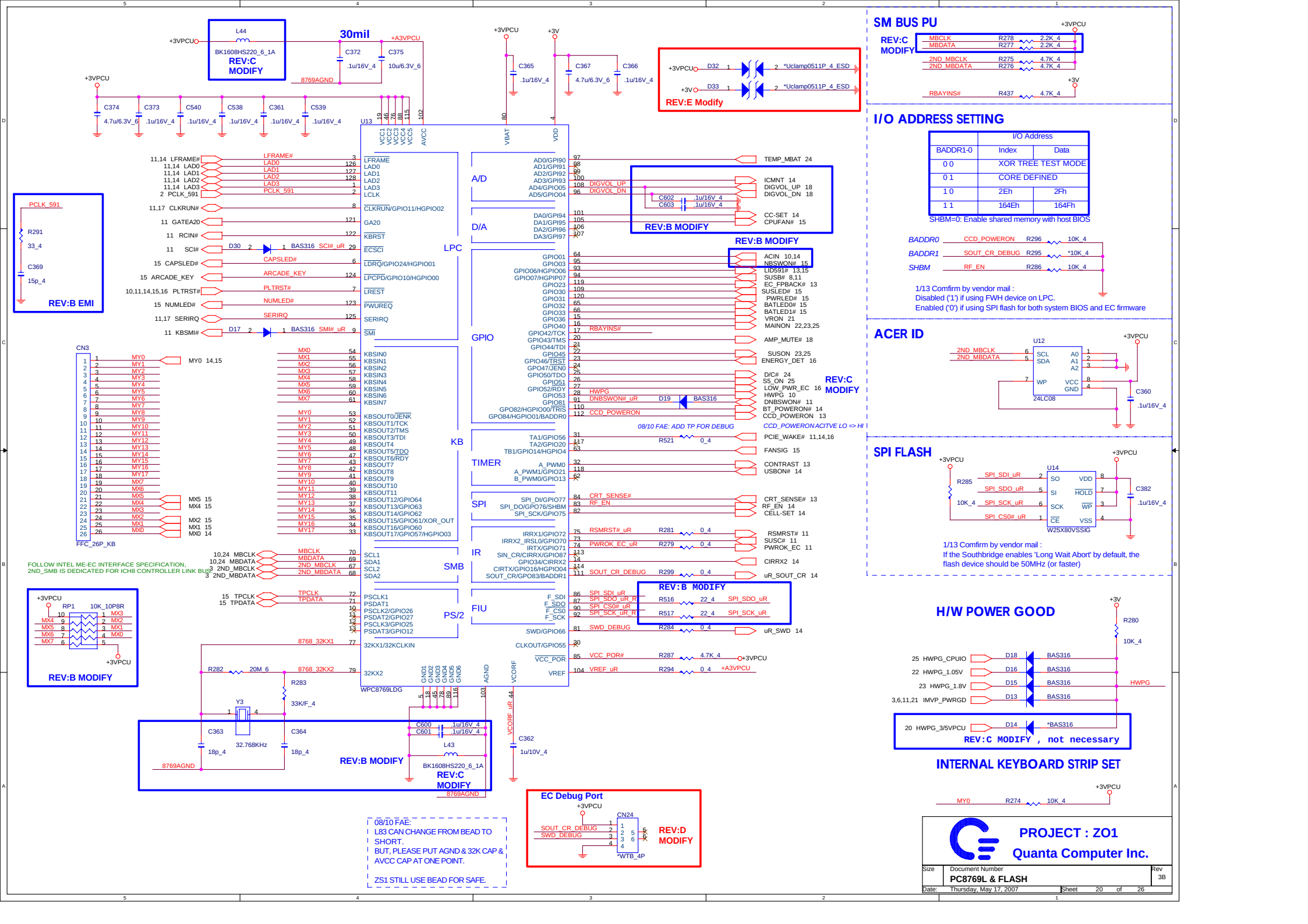
SM BUS PU
REV:C MODIFY
I/O ADDRESS SETTING
I/O Address
BADDR1-0
Index
Data
0 0
XOR TREE TEST MODE
0 1
CORE DEFINED
1 0
2Eh
2Fh
1 1
164Eh
164Fh
SHBM=0: Enable shared memory with host BIOS
1/13 Comfirm by vendor mail :
Disabled ('1') if using FWH device on LPC.
Enabled ('0') if using SPI flash for both system BIOS and EC firmware
ACER ID
24LC08
SPI FLASH
W25X80VSSIG
1/13 Comfirm by vendor mail :
If the Southbridge enables 'Long Wait Abort' by default, the flash device should be 50MHz (or faster)
H/W POWER GOOD
REV:C MODIFY , not necessary
INTERNAL KEYBOARD STRIP SET
REV:B EMI
REV:B MODIFY
REV:E Modify
REV:C MODIFY
REV:D MODIFY
30mil
LPC
A/D
D/A
GPIO
KB
TIMER
SPI
IR
SMB
PS/2
FIU
WPC8769LDG
FFC_26P_KB
EC Debug Port
08/10 FAE:
L83 CAN CHANGE FROM BEAD TO SHORT.
BUT, PLEASE PUT AGND & 32K CAP & AVCC CAP AT ONE POINT.
ZS1 STILL USE BEAD FOR SAFE.
FOLLOW INTEL ME-EC INTERFACE SPECIFICATION, 2ND_SMB IS DEDICATED FOR ICH8 CONTROLLER LINK BUS
PROJECT : ZO1
Quanta Computer Inc.
PC8769L & FLASH
Thursday, May 17, 2007
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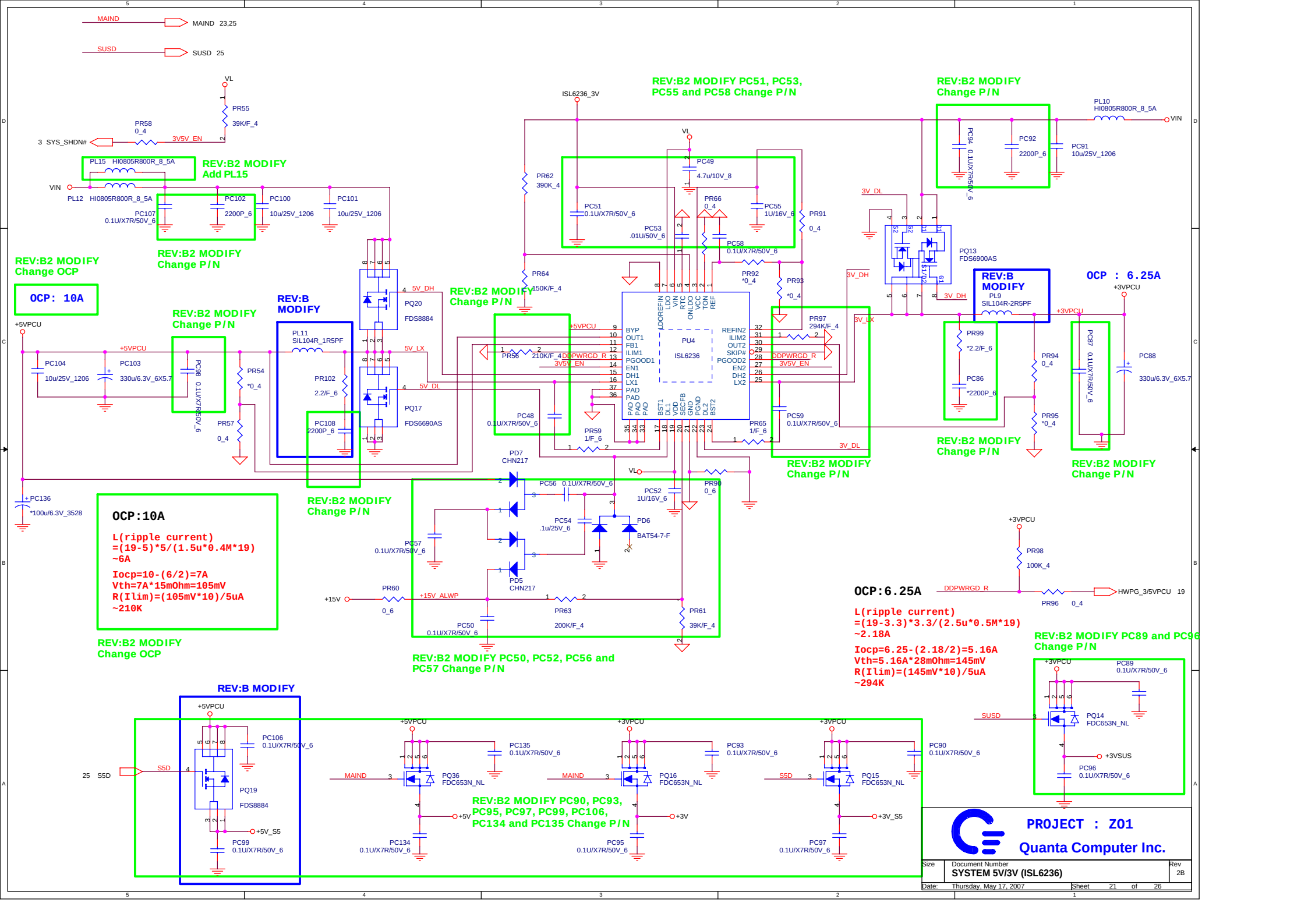
MAIND
MAIND 23,25
SUSD
SUSD 25
VL
PR55
39K/F_4
PR58
0_4
3 SYS_SHDN#
3V5V_EN
PL15 HI0805R800R_8_5A
REV:B2 MODIFY
Add PL15
VIN
PL12 HI0805R800R_8_5A
PC102
2200P_6
PC100
10u/25V_1206
PC101
10u/25V_1206
PC107
0.1U/X7R/50V_6
REV:B2 MODIFY
Change P/N
REV:B2 MODIFY
Change OCP
OCP: 10A
+5VPCU
PC104
10u/25V_1206
PC103
330u/6.3V_6X5.7
PC98
0.1U/X7R/50V_6
REV:B2 MODIFY
Change P/N
PR54
*0_4
PR57
0_4
REV:B
MODIFY
PL11
SIL104R_1R5PF
PR102
2.2/F_6
PC108
2200P_6
REV:B2 MODIFY
Change P/N
PC136
*100u/6.3V_3528
OCP:10A
L(ripple current)
=(19-5)*5/(1.5u*0.4M*19)
~6A
Iocp=10-(6/2)=7A
Vth=7A*15mOhm=105mV
R(Ilim)=(105mV*10)/5uA
~210K
REV:B2 MODIFY
Change OCP
5V_DH
PQ20
FDS8884
5V_LX
5V_DL
PQ17
FDS6690AS
ISL6236_3V
REV:B2 MODIFY PC51, PC53,
PC55 and PC58 Change P/N
PR62
390K_4
PC49
4.7u/10V_8
PC51
0.1U/X7R/50V_6
PC53
.01U/50V_6
PR66
0_4
PC55
1U/16V_6
PR91
0_4
PC58
0.1U/X7R/50V_6
PR64
150K/F_4
PR92
*0_4
PR93
*0_4
REV:B2 MODIFY
Change P/N
PR56
210K/F_4
DDPWRGD_R
3V5V_EN
PU4
ISL6236
LDOREFIN
LDO
VIN
RTC
ONLDO
VCC
TON
REF
BYP
OUT1
FB1
ILIM1
PGOOD1
EN1
DH1
LX1
PAD
REFIN2
ILIM2
OUT2
SKIP#
PGOOD2
EN2
DH2
LX2
BST1
DL1
VDD
SECFB
GND
PGND
DL2
BST2
PC48
0.1U/X7R/50V_6
PR59
1/F_6
PR65
1/F_6
PC59
0.1U/X7R/50V_6
PR97
294K/F_4
3V_DH
3V_LX
3V_DL
REV:B2 MODIFY
Change P/N
PD7
CHN217
PC56
0.1U/X7R/50V_6
PC54
.1u/25V_6
PD6
BAT54-7-F
PC52
1U/16V_6
PR90
0_6
PC57
0.1U/X7R/50V_6
PR60
0_6
+15V
+15V_ALWP
PR63
200K/F_4
PR61
39K/F_4
PC50
0.1U/X7R/50V_6
REV:B2 MODIFY PC50, PC52, PC56 and
PC57 Change P/N
REV:B2 MODIFY
Change P/N
PC94
0.1U/X7R/50V_6
PC92
2200P_6
PC91
10u/25V_1206
PL10
HI0805R800R_8_5A
VIN
PQ13
FDS6900AS
REV:B
MODIFY
PL9
SIL104R-2R5PF
PR99
*2.2/F_6
PC86
*2200P_6
PR94
0_4
PR95
*0_4
REV:B2 MODIFY
Change P/N
OCP : 6.25A
+3VPCU
PC87
0.1U/X7R/50V_6
PC88
330u/6.3V_6X5.7
REV:B2 MODIFY
Change P/N
OCP:6.25A
L(ripple current)
=(19-3.3)*3.3/(2.5u*0.5M*19)
~2.18A
Iocp=6.25-(2.18/2)=5.16A
Vth=5.16A*28mOhm=145mV
R(Ilim)=(145mV*10)/5uA
~294K
+3VPCU
PR98
100K_4
DDPWRGD_R
PR96
0_4
HWPG_3/5VPCU 19
REV:B2 MODIFY PC89 and PC96
Change P/N
PC89
0.1U/X7R/50V_6
SUSD
PQ14
FDC653N_NL
+3VSUS
PC96
0.1U/X7R/50V_6
REV:B MODIFY
+5VPCU
PC106
0.1U/X7R/50V_6
25 S5D
S5D
PQ19
FDS8884
+5V_S5
PC99
0.1U/X7R/50V_6
REV:B2 MODIFY PC90, PC93,
PC95, PC97, PC99, PC106,
PC134 and PC135 Change P/N
PC135
0.1U/X7R/50V_6
MAIND
PQ36
FDC653N_NL
+5V
PC134
0.1U/X7R/50V_6
PC93
0.1U/X7R/50V_6
PQ16
FDC653N_NL
+3V
PC95
0.1U/X7R/50V_6
PC90
0.1U/X7R/50V_6
PQ15
FDC653N_NL
+3V_S5
PC97
0.1U/X7R/50V_6
PROJECT : Z01
Quanta Computer Inc.
Size
Document Number
SYSTEM 5V/3V (ISL6236)
Rev
2B
Date: Thursday, May 17, 2007
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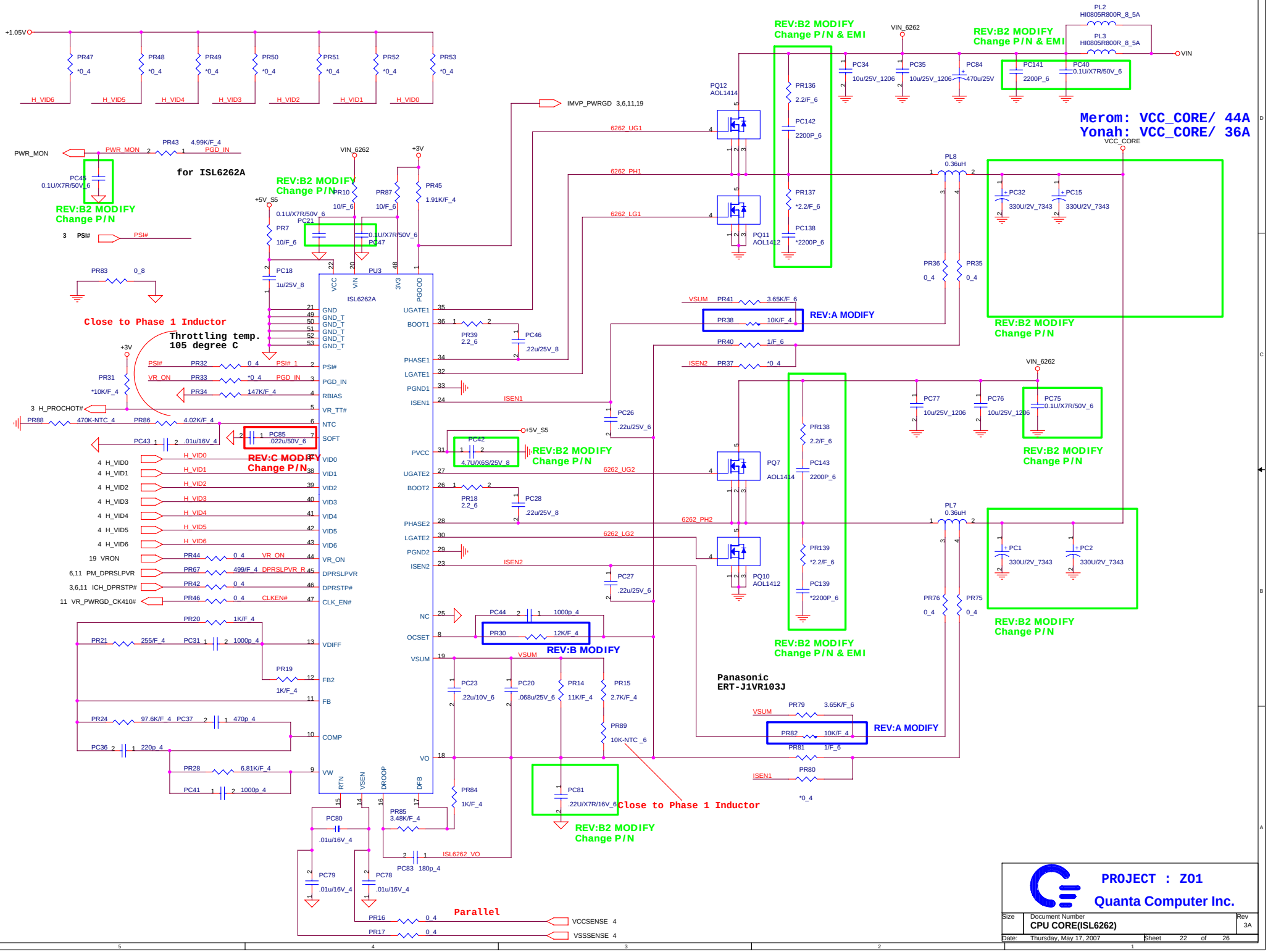
+1.05V
PR47 *0_4 H_VID6
PR48 *0_4 H_VID5
PR49 *0_4 H_VID4
PR50 *0_4 H_VID3
PR51 *0_4 H_VID2
PR52 *0_4 H_VID1
PR53 *0_4 H_VID0
PWR_MON
PR43 4.99K/F_4
PGD_IN
PC45 0.1U/X7R/50V_6
for ISL6262A
REV:B2 MODIFY Change P/N
PSI#
PR83 0_8
Close to Phase 1 Inductor
Throttling temp. 105 degree C
REV:C MODIFY Change P/N
ISL6262A
VCC VIN 3V3 PGOOD
GND GND_T
VID0 VID1 VID2 VID3 VID4 VID5 VID6
VRON VR_ON
DPRSLPVR
DPRSTP#
CLK_EN#
VDIFF FB2 FB COMP VW RTN VSEN DROOP DFB
UGATE1 BOOT1 PHASE1 LGATE1 PGND1 ISEN1
PVCC UGATE2 BOOT2 PHASE2 LGATE2 PGND2 ISEN2
NC OCSET VSUM VO
IMVP_PWRGD 3,6,11,19
6262_UG1 6262_PH1 6262_LG1
6262_UG2 6262_PH2 6262_LG2
PQ12 AOL1414
PQ11 AOL1412
PQ7 AOL1414
PQ10 AOL1412
REV:B2 MODIFY Change P/N & EMI
VIN_6262
PL2 HI0805R800R_8_5A
PL3 HI0805R800R_8_5A
VIN
Merom: VCC_CORE/ 44A
Yonah: VCC_CORE/ 36A
VCC_CORE
PL8 0.36uH
PL7 0.36uH
330U/2V_7343
REV:A MODIFY
Panasonic ERT-J1VR103J
Parallel
VCCSENSE 4
VSSSENSE 4
PROJECT : Z01
Quanta Computer Inc.
CPU CORE(ISL6262)
Thursday, May 17, 2007
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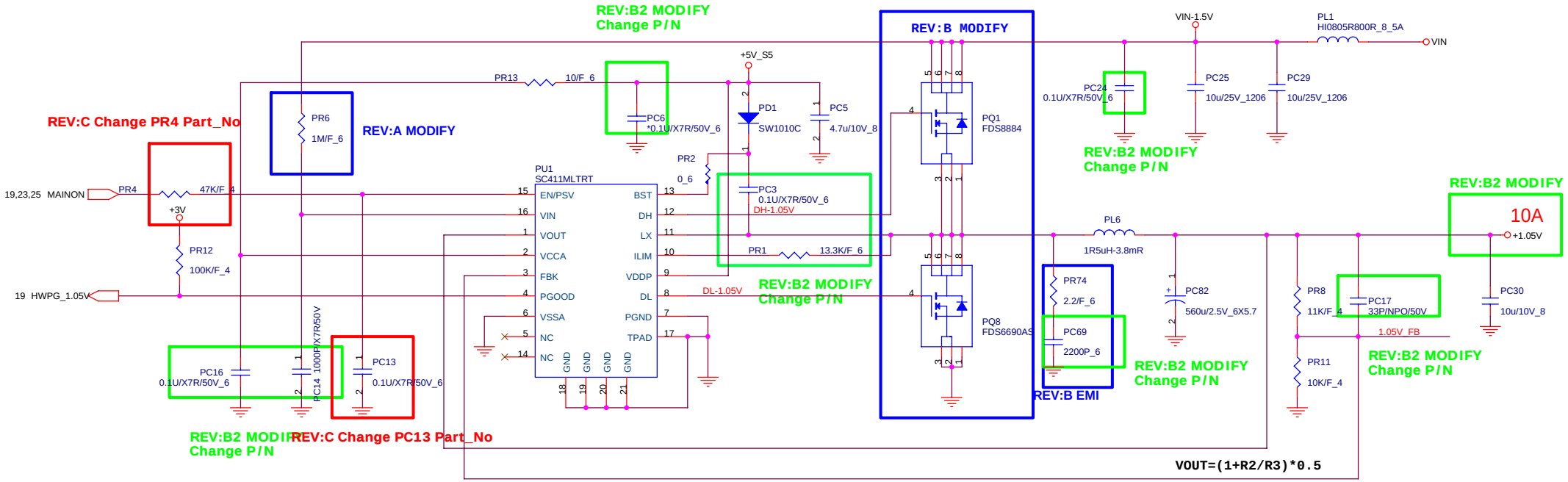
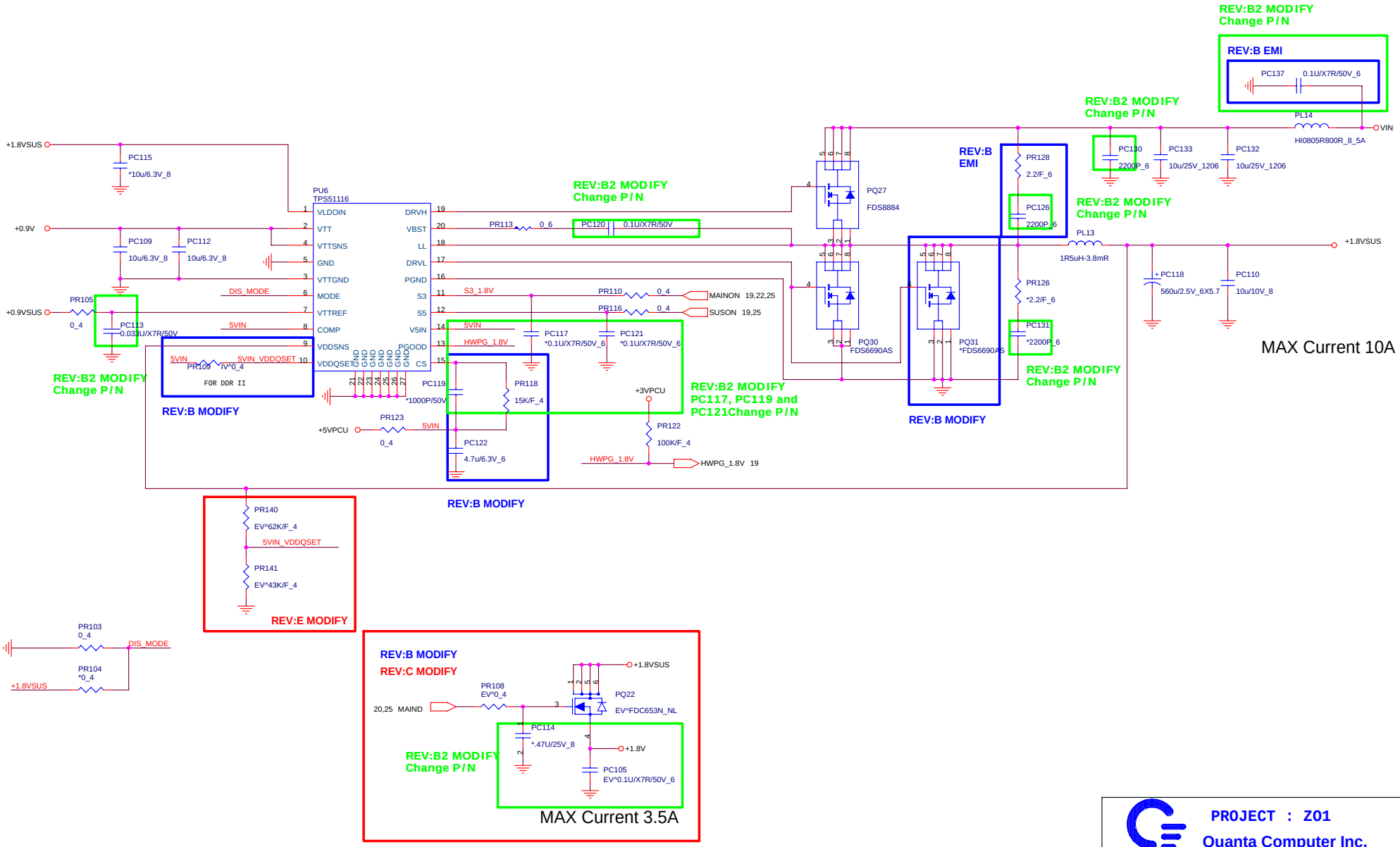


PROJECT : Z01		
Quanta Computer Inc.		
Size	Document Number: VTT 1.05V(SC411)	Rev: 3A
Date: Thursday, May 17, 2007	Sheet 23 of 26	


REV:B2 MODIFY
Change P/N
REV:B EMI
PC137
0.1U/X7R/50V_6
REV:B2 MODIFY
Change P/N
PL14
HI0805R800R_8_5A
VIN
+1.8VSUS
PC115
*10u/6.3V_8
PU6
TPS51116
VLDOIN
VTT
VTTSNS
GND
VTTGND
MODE
VTTREF
COMP
VDDSNS
VDDQSET
DRVH
VBST
LL
DRVL
PGND
S3
S5
V5IN
PGOOD
CS
+0.9V
PC109
10u/6.3V_8
PC112
10u/6.3V_8
PR113
0_6
PC120
0.1U/X7R/50V
REV:B2 MODIFY
Change P/N
PQ27
FDS8884
REV:B
EMI
PR128
2.2/F_6
PC126
2200P_6
REV:B2 MODIFY
Change P/N
PC130
2200P_6
PC133
10u/25V_1206
PC132
10u/25V_1206
PL13
1R5uH-3.8mR
+1.8VSUS
DIS_MODE
S3_1.8V
PR110
0_4
MAINON 19,22,25
PR116
0_4
SUSON 19,25
PR105
0_4
+0.9VSUS
PC113
0.033U/X7R/50V
5VIN
HWPG_1.8V
PC117
*0.1U/X7R/50V_6
PC121
*0.1U/X7R/50V_6
PQ30
FDS6690AS
PQ31
*FDS6690AS
PR126
*2.2/F_6
PC131
*2200P_6
REV:B2 MODIFY
Change P/N
PC118
560u/2.5V_6X5.7
PC110
10u/10V_8
MAX Current 10A
5VIN
PR109
1V^0_4
5VIN_VDDQSET
FOR DDR II
REV:B MODIFY
REV:B2 MODIFY
Change P/N
PC119
*1000P/50V
PR118
15K/F_4
REV:B2 MODIFY
PC117, PC119 and
PC121Change P/N
+3VPCU
PR123
0_4
5VIN
PC122
4.7u/6.3V_6
PR122
100K/F_4
HWPG_1.8V
HWPG_1.8V 19
REV:B MODIFY
REV:B MODIFY
PR140
EV^62K/F_4
5VIN_VDDQSET
PR141
EV^43K/F_4
REV:E MODIFY
PR103
0_4
DIS_MODE
PR104
*0_4
+1.8VSUS
REV:B MODIFY
REV:C MODIFY
PR108
EV^0_4
20,25 MAIND
PQ22
EV^FDC653N_NL
+1.8VSUS
PC114
*.47U/25V_8
+1.8V
PC105
EV^0.1U/X7R/50V_6
REV:B2 MODIFY
Change P/N
MAX Current 3.5A
PROJECT : Z01
Quanta Computer Inc.
Size
Document Number
DDR 1.8V(TPS51116)
Rev
3B
Date: Thursday, May 17, 2007
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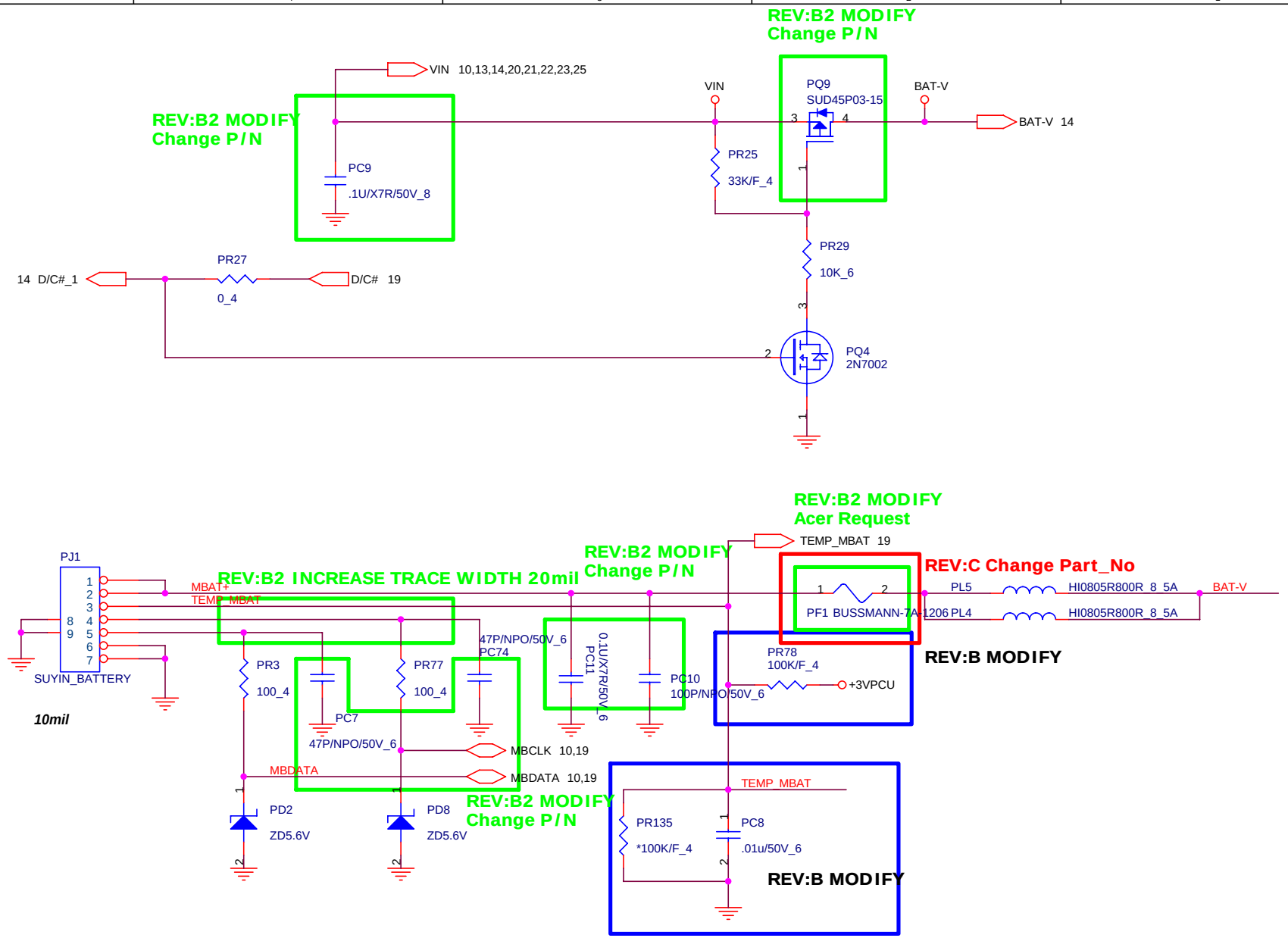
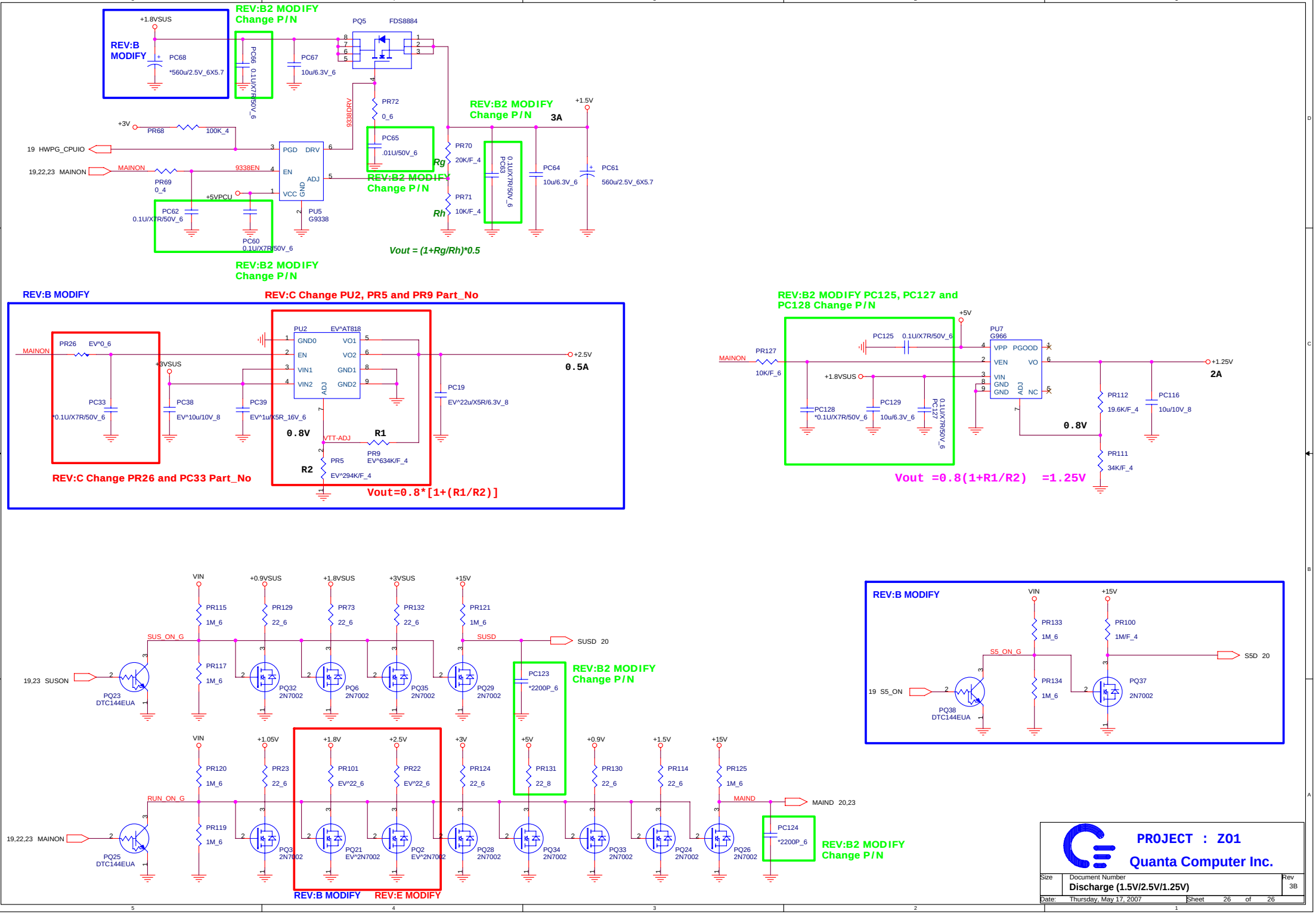


PROJECT : Z01

Quanta Computer Inc.

Size	Document Number	Rev
	CHARGER (ISL6251A)	3A
Date: Thursday, May 17, 2007	Sheet 25 of 26	


REV:B MODIFY
+1.8VSUS
PC68
*560u/2.5V_6X5.7
PC66 0.1U/X7R/50V_6
PC67
10u/6.3V_6
REV:B2 MODIFY
Change P/N
PQ5
FDS8884
PR72
0_6
9338DRV
PC65
.01U/50V_6
Rg
REV:B2 MODIFY
Change P/N
REV:B2 MODIFY
Change P/N
3A
+1.5V
PR70
20K/F_4
PC63
0.1U/X7R/50V_6
PR71
10K/F_4
Rh
PC64
10u/6.3V_6
PC61
560u/2.5V_6X5.7
+3V
PR68
100K_4
19 HWPG_CPUIO
19,22,23 MAINON
MAINON
PR69
0_4
9338EN
+5VPCU
PC62
0.1U/X7R/50V_6
PC60
0.1U/X7R/50V_6
PU5
G9338
PGD
DRV
EN
ADJ
VCC
GND
Vout = (1+Rg/Rh)*0.5
REV:B2 MODIFY
Change P/N
REV:B MODIFY
REV:C Change PU2, PR5 and PR9 Part_No
MAINON
PR26
EV^0_6
PC33
*0.1U/X7R/50V_6
+3VSUS
PC38
EV^10u/10V_8
PC39
EV^1u/X5R_16V_6
PU2
EV^AT818
GND0
EN
VIN1
VIN2
VO1
VO2
GND1
GND2
ADJ
+2.5V
0.5A
PC19
EV^22u/X5R/6.3V_8
0.8V
VTT-ADJ
R1
R2
PR5
EV^294K/F_4
PR9
EV^634K/F_4
REV:C Change PR26 and PC33 Part_No
Vout=0.8*[1+(R1/R2)]
REV:B2 MODIFY PC125, PC127 and
PC128 Change P/N
+5V
MAINON
PR127
10K/F_6
PC125
0.1U/X7R/50V_6
PU7
G966
VPP
PGOOD
VEN
VO
VIN
GND
GND
NC
ADJ
+1.25V
2A
+1.8VSUS
PC128
*0.1U/X7R/50V_6
PC129
10u/6.3V_6
PC127
0.1U/X7R/50V_6
0.8V
PR112
19.6K/F_4
PC116
10u/10V_8
PR111
34K/F_4
Vout =0.8(1+R1/R2) =1.25V
VIN
+0.9VSUS
+1.8VSUS
+3VSUS
+15V
PR115
1M_6
PR129
22_6
PR73
22_6
PR132
22_6
PR121
1M_6
SUS_ON_G
SUSD
SUSD 20
19,23 SUSON
PR117
1M_6
PQ23
DTC144EUA
PQ32
2N7002
PQ6
2N7002
PQ35
2N7002
PQ29
2N7002
PC123
*2200P_6
REV:B2 MODIFY
Change P/N
VIN
+1.05V
+1.8V
+2.5V
+3V
+5V
+0.9V
+1.5V
+15V
PR120
1M_6
PR23
22_6
PR101
EV^22_6
PR22
EV^22_6
PR124
22_6
PR131
22_8
PR130
22_6
PR114
22_6
PR125
1M_6
RUN_ON_G
MAIND
MAIND 20,23
19,22,23 MAINON
PR119
1M_6
PQ25
DTC144EUA
PQ3
2N7002
PQ21
EV^2N7002
PQ2
EV^2N7002
PQ28
2N7002
PQ34
2N7002
PQ33
2N7002
PQ24
2N7002
PQ26
2N7002
PC124
*2200P_6
REV:B2 MODIFY
Change P/N
REV:B MODIFY
REV:E MODIFY
REV:B MODIFY
VIN
+15V
PR133
1M_6
PR100
1M/F_4
S5_ON_G
S5D 20
19 S5_ON
PR134
1M_6
PQ38
DTC144EUA
PQ37
2N7002
PROJECT : Z01
Quanta Computer Inc.
Size
Document Number
Discharge (1.5V/2.5V/1.25V)
Rev
3B
Date: Thursday, May 17, 2007
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