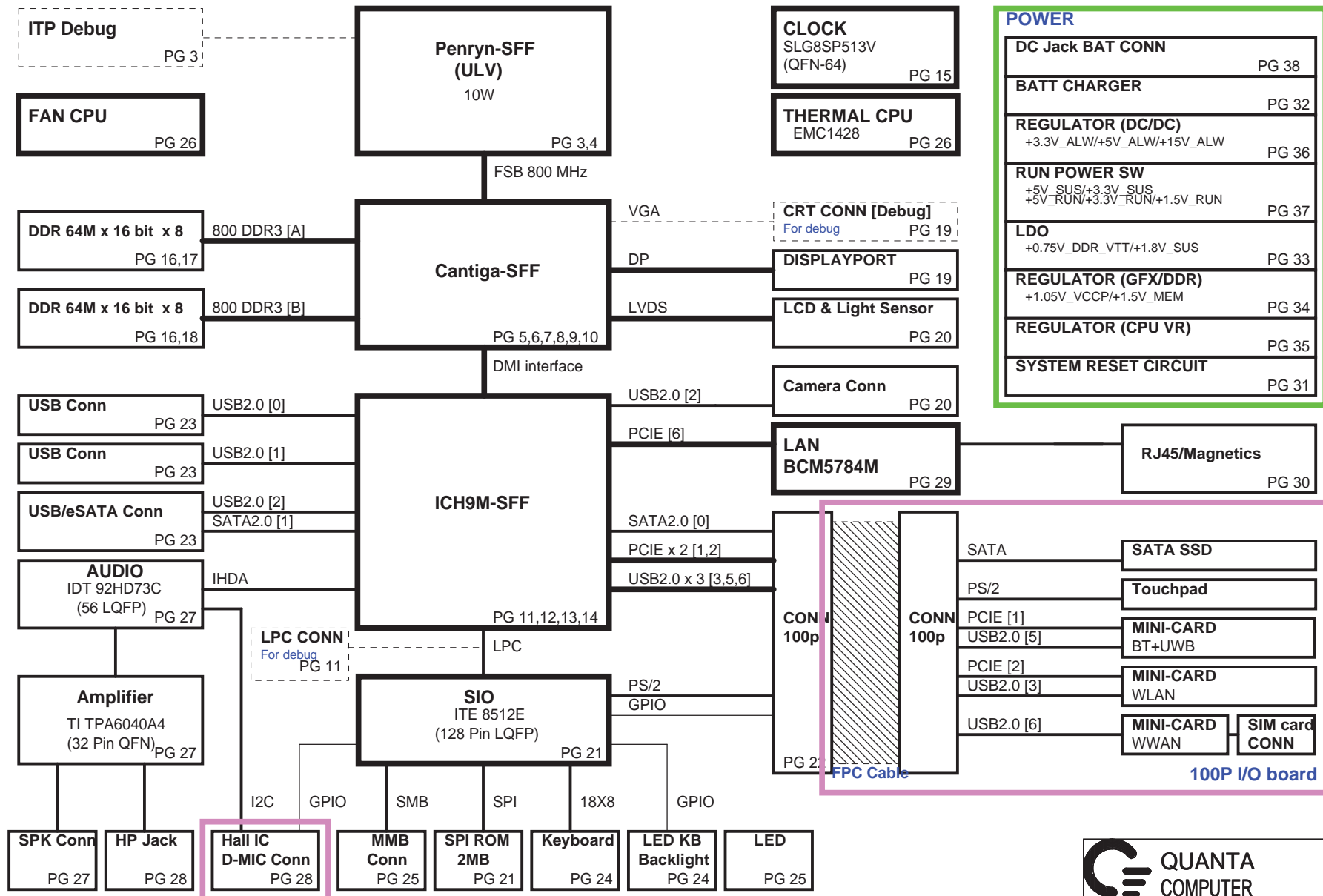



Adamo Montevina SFF Block Diagram

Rev: A00

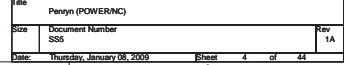


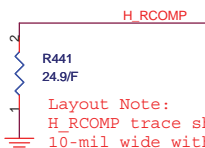
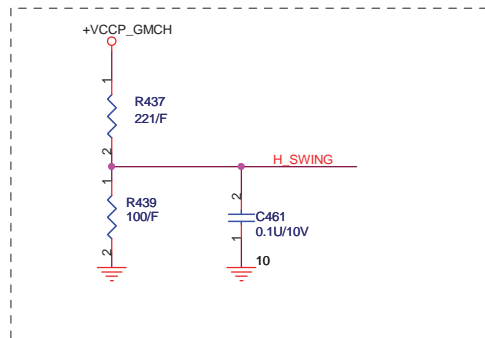
	1	2	3	4	5	6	7	8
A								
B								
C								
D								



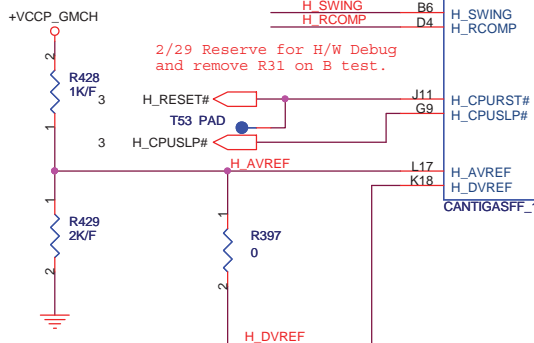
QUANTA
COMPUTER

Title		
Index & Power Status		
Size	Document Number	Rev
	SS5	1A
Date:	Thursday, January 08, 2009	Sheet 2 of 44





Layout Note:
H_RCOMP trace should be
10-mil wide with 20-mil
spacing.



2/29 Reserve for H/W Debug
and remove R31 on B test.

H_RESET#
H_CPUSLP#

H_AVREF
H_DVREF

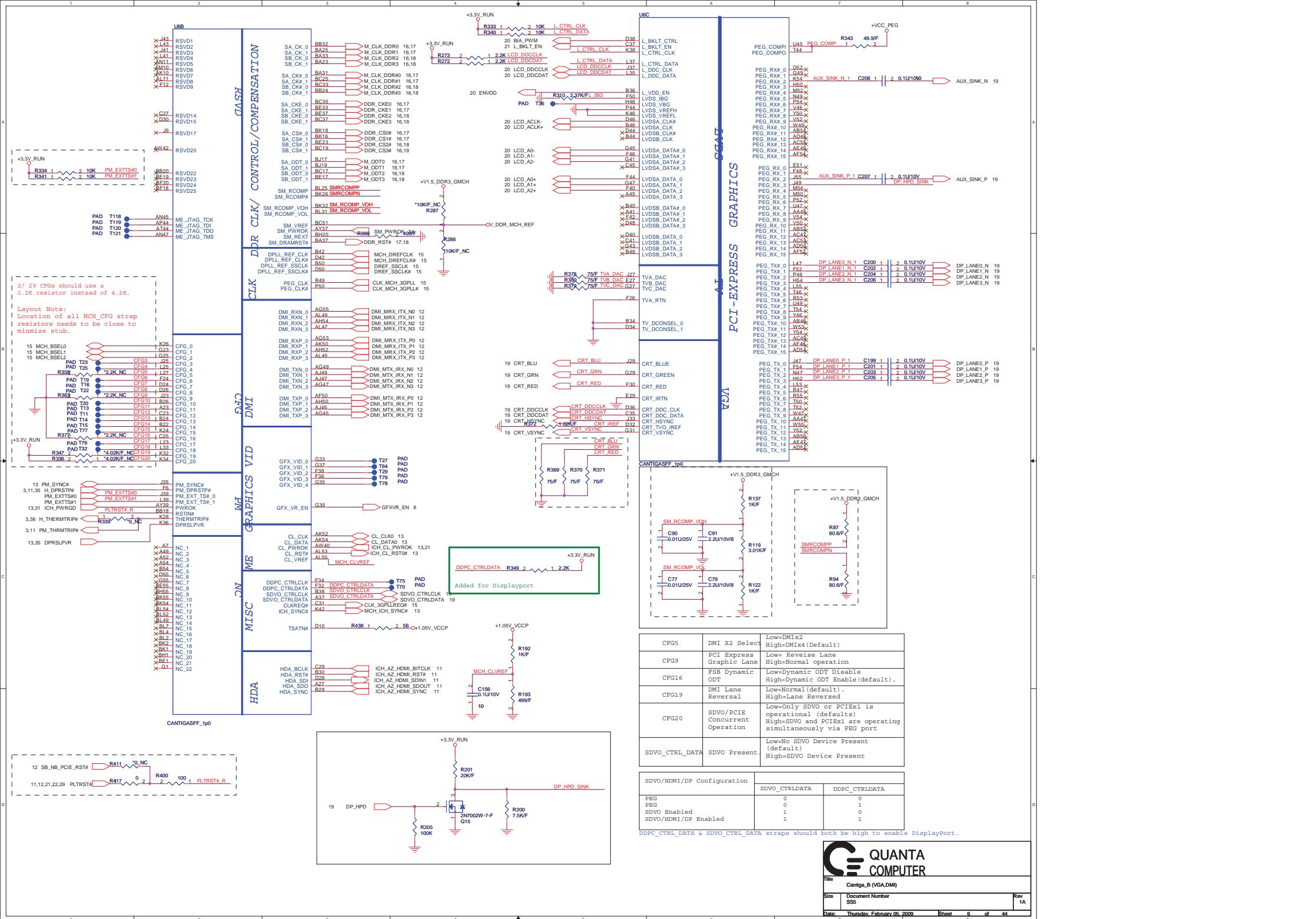
H_D#0	J7	H_D#_0
H_D#1	L11	H_D#_1
H_D#2	L3	H_D#_2
H_D#3	J3	H_D#_3
H_D#4	H4	H_D#_4
H_D#5	G3	H_D#_5
H_D#6	K10	H_D#_6
H_D#7	K12	H_D#_7
H_D#8	L1	H_D#_8
H_D#9	M10	H_D#_9
H_D#10	M6	H_D#_10
H_D#11	N11	H_D#_11
H_D#12	L7	H_D#_12
H_D#13	K6	H_D#_13
H_D#14	M4	H_D#_14
H_D#15	K4	H_D#_15
H_D#16	P6	H_D#_16
H_D#17	W9	H_D#_17
H_D#18	V6	H_D#_18
H_D#19	V2	H_D#_19
H_D#20	P10	H_D#_20
H_D#21	W7	H_D#_21
H_D#22	N9	H_D#_22
H_D#23	P4	H_D#_23
H_D#24	U9	H_D#_24
H_D#25	V4	H_D#_25
H_D#26	U1	H_D#_26
H_D#27	W3	H_D#_27
H_D#28	V10	H_D#_28
H_D#29	U7	H_D#_29
H_D#30	W11	H_D#_30
H_D#31	U11	H_D#_31
H_D#32	AC11	H_D#_32
H_D#33	AC9	H_D#_33
H_D#34	Y4	H_D#_34
H_D#35	Y10	H_D#_35
H_D#36	AB6	H_D#_36
H_D#37	AA9	H_D#_37
H_D#38	AB10	H_D#_38
H_D#39	AA1	H_D#_39
H_D#40	AC3	H_D#_40
H_D#41	AC7	H_D#_41
H_D#42	AD12	H_D#_42
H_D#43	AB4	H_D#_43
H_D#44	Y6	H_D#_44
H_D#45	AD10	H_D#_45
H_D#46	AD11	H_D#_46
H_D#47	AB2	H_D#_47
H_D#48	AD4	H_D#_48
H_D#49	AE7	H_D#_49
H_D#50	AD2	H_D#_50
H_D#51	AD6	H_D#_51
H_D#52	AE3	H_D#_52
H_D#53	AG9	H_D#_53
H_D#54	AG7	H_D#_54
H_D#55	AE11	H_D#_55
H_D#56	AK6	H_D#_56
H_D#57	AF6	H_D#_57
H_D#58	AJ9	H_D#_58
H_D#59	AH6	H_D#_59
H_D#60	AF12	H_D#_60
H_D#61	AH4	H_D#_61
H_D#62	AJ7	H_D#_62
H_D#63	AE9	H_D#_63

HOST

H_A#_3	L15	H_A#3
H_A#_4	B14	H_A#4
H_A#_5	C15	H_A#5
H_A#_6	D12	H_A#6
H_A#_7	E14	H_A#7
H_A#_8	G17	H_A#8
H_A#_9	B12	H_A#9
H_A#_10	J15	H_A#10
H_A#_11	D16	H_A#11
H_A#_12	C17	H_A#12
H_A#_13	D14	H_A#13
H_A#_14	K16	H_A#14
H_A#_15	F16	H_A#15
H_A#_16	B16	H_A#16
H_A#_17	C21	H_A#17
H_A#_18	D18	H_A#18
H_A#_19	J19	H_A#19
H_A#_20	J21	H_A#20
H_A#_21	B18	H_A#21
H_A#_22	D22	H_A#22
H_A#_23	G19	H_A#23
H_A#_24	J17	H_A#24
H_A#_25	L21	H_A#25
H_A#_26	L19	H_A#26
H_A#_27	G21	H_A#27
H_A#_28	D20	H_A#28
H_A#_29	K22	H_A#29
H_A#_30	F18	H_A#30
H_A#_31	K20	H_A#31
H_A#_32	F20	H_A#32
H_A#_33	F22	H_A#33
H_A#_34	B20	H_A#34
H_A#_35	A19	H_A#35
H_ADS#	E10	H_ADS# 3
H_ADSTB#_0	A15	H_ADSTB#0 3
H_ADSTB#_1	C19	H_ADSTB#1 3
H_BNR#	C9	H_BNR# 3
H_BPR#	B8	H_BPR# 3
H_BREQ#	C11	H_BREQ# 3
H_DEFER#	E5	H_DEFER# 3
H_DBSY#	D6	H_DBSY# 3
HPLL_CLK	AH10	CLK_MCH_BCLK 15
HPLL_CLK#	AJ11	CLK_MCH_BCLK# 15
H_DPWR#	G11	H_DPWR# 3
H_DRDY#	H2	H_DRDY# 3
H_HIT#	F8	H_HIT# 3
H_HITM#	A11	H_HITM# 3
H_LOCK#	D8	H_LOCK# 3
H_TRDY#	D8	H_TRDY# 3
H_DINV#_0	L9	H_DINV#0 3
H_DINV#_1	N7	H_DINV#1 3
H_DINV#_2	AA7	H_DINV#2 3
H_DINV#_3	AG3	H_DINV#3 3
H_DSTBN#_0	K2	H_DSTBN#0 3
H_DSTBN#_1	N3	H_DSTBN#1 3
H_DSTBN#_2	AA3	H_DSTBN#2 3
H_DSTBN#_3	AF4	H_DSTBN#3 3
H_DSTBP#_0	L3	H_DSTBP#0 3
H_DSTBP#_1	M2	H_DSTBP#1 3
H_DSTBP#_2	Y2	H_DSTBP#2 3
H_DSTBP#_3	AF2	H_DSTBP#3 3
H_REQ#_0	J13	H_REQ#0 3
H_REQ#_1	L13	H_REQ#1 3
H_REQ#_2	C13	H_REQ#2 3
H_REQ#_3	G13	H_REQ#3 3
H_REQ#_4	G15	H_REQ#4 3
H_RS#_0	F4	H_RS#0 3
H_RS#_1	F2	H_RS#1 3
H_RS#_2	G7	H_RS#2 3



Title			Cantiga_A (HOST)		
Size			Document Number		
Custom			SS5		
Date:			Thursday, January 08, 2009		
Sheet			5 of 44		
Rev			1A		

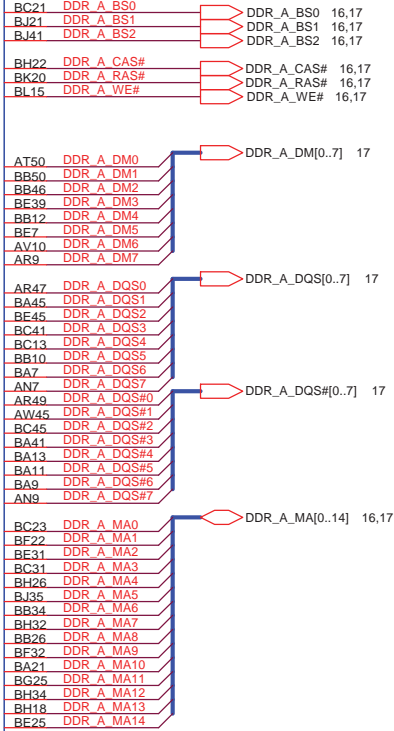


17 DDR_A_D[0..63]



U6D

DDR SYSTEM MEMORY A



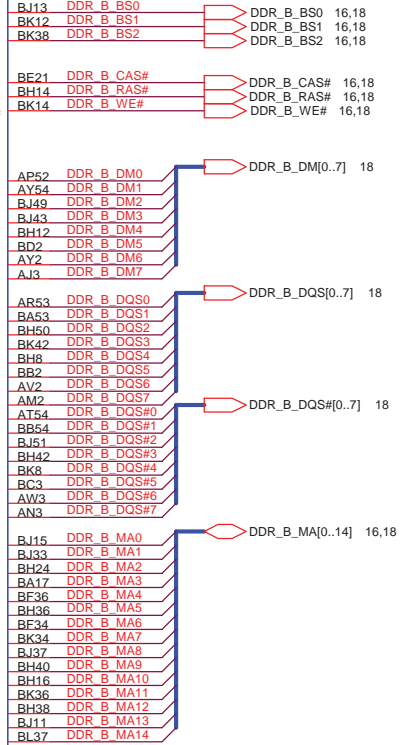
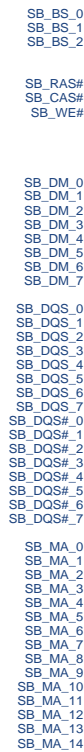
CANTIGASFF_1p0

18 DDR_B_D[0..63]



U6E

DDR SYSTEM MEMORY B

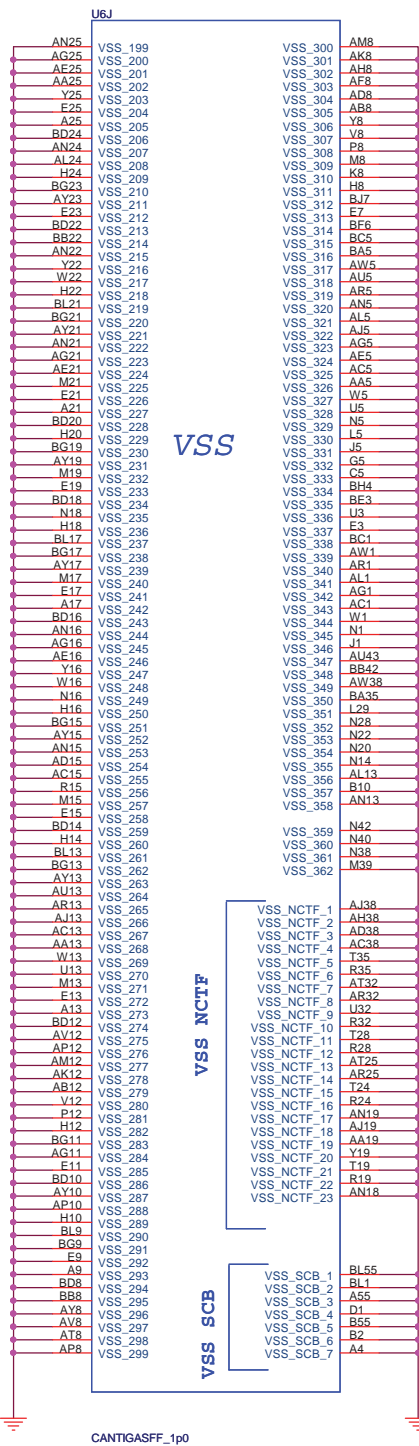
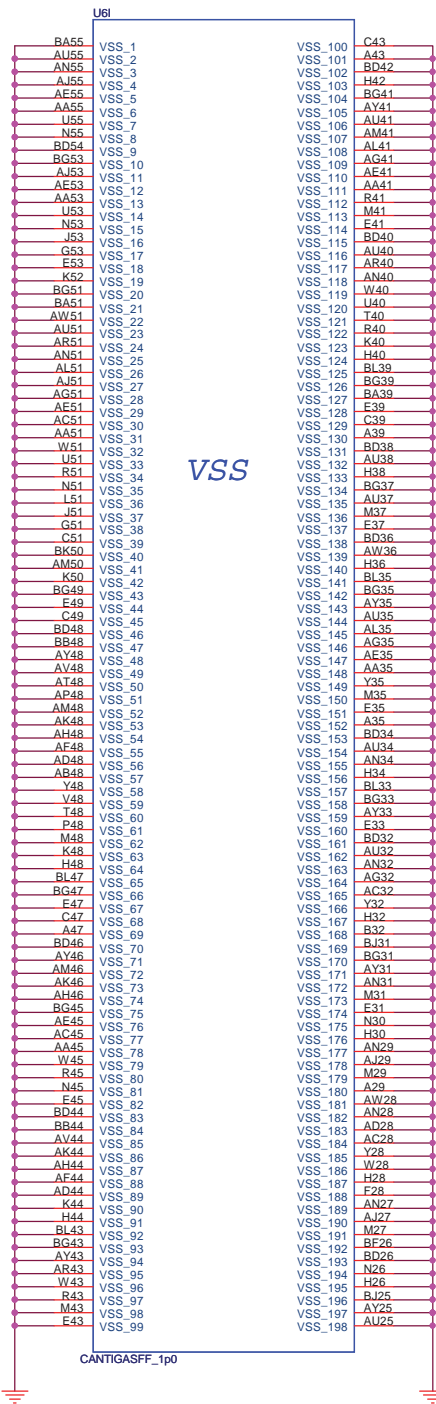


CANTIGASFF_1p0

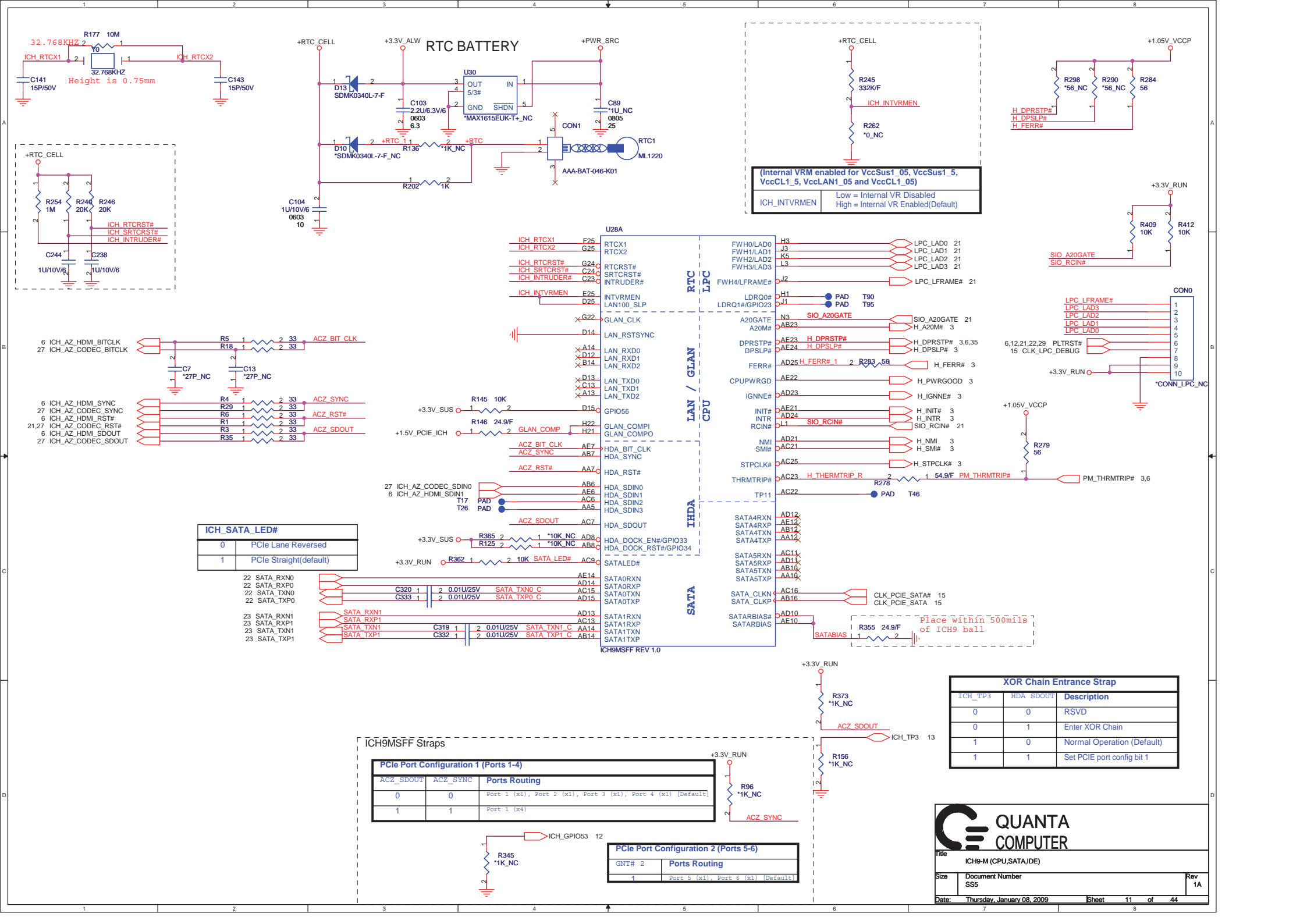


QUANTA
COMPUTER

Title Cantiga_C (DDR3)		
Size	Document Number SS5	Rev 1A
Date: Thursday, January 08, 2009 Sheet 7 of 44		



Title		
Cantiga_F (VSS)		
Size	Document Number	Rev
SS5		1A
Date:	Thursday, January 08, 2009	Sheet 10 of 44



Place TX DC blocking caps close ICH9.

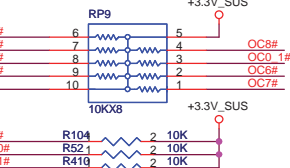
BT & UWB

WLAN

Giga Bit LOM

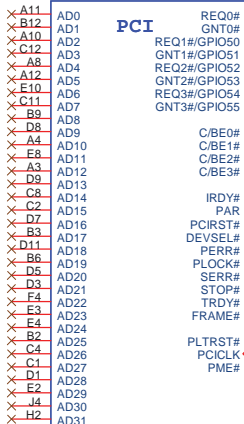
Boot BIOS Strap			
	GNT0#	SPI_CS1#	
LPC	11	No stuff	No stuff
PCI	10	No stuff	Stuff
SPI	01	Stuff	No stuff

Short F2 and F3 at the package and keep length to less than 500mils. Trace Impedance should be 60ohms +/- 15%.



U28B

PCI



Interrupt I/F

ICH9MSFF REV 1.0

U28D

PCI Express

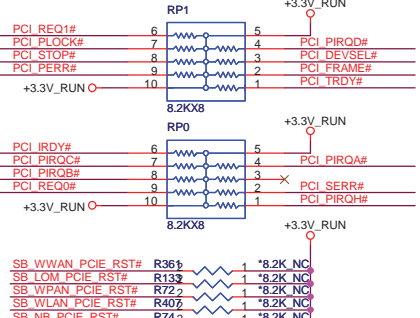
Direct Media Interface

SPI

USB

ICH9MSFF REV 1.0

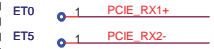
PCI Pullups



Add Buffers as needed for Loading and fanout concerns.

Reserved for EMI. Place resistor and cap close to ICH.

For EA test use



TO Daughter Board

TO Daughter Board

TO Daughter Board

WLAN

Camera

BT&UWB


WWAN

BIOS should not enable the internal GPIO pull up resistor.



A16 away override strap.

Low = A16 swap override enabled. High = Default.



QUANTA
COMPUTER

Title

ICH9-M(USB,PCIE,DMI)

Size

Document Number
SS5

Rev

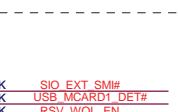
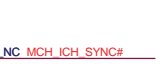
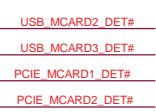
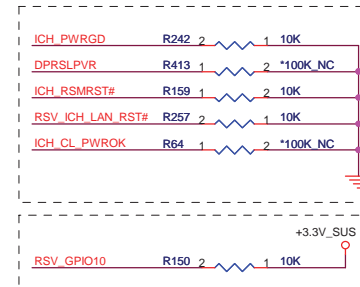
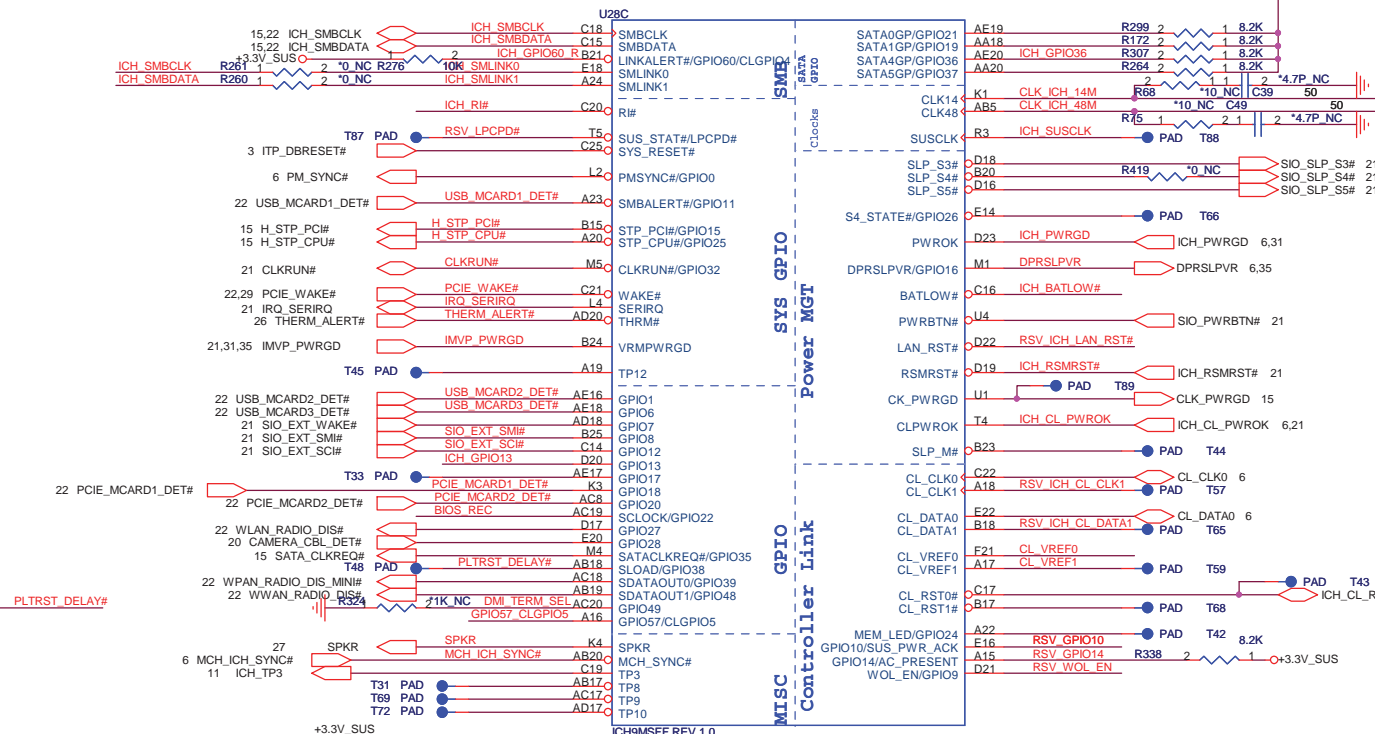
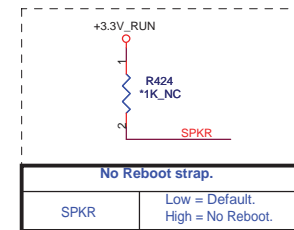
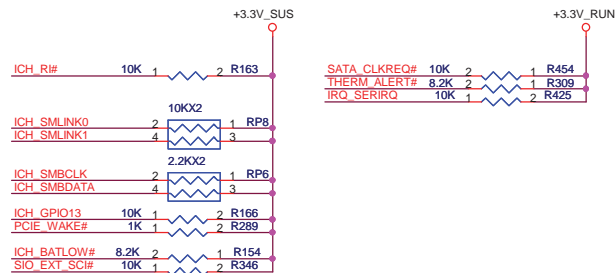
1A

Date:

Friday, February 20, 2009

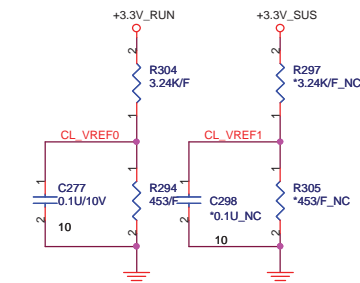
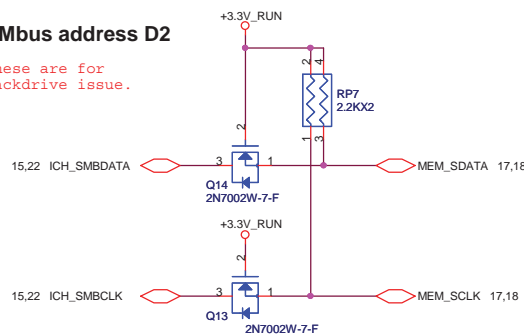
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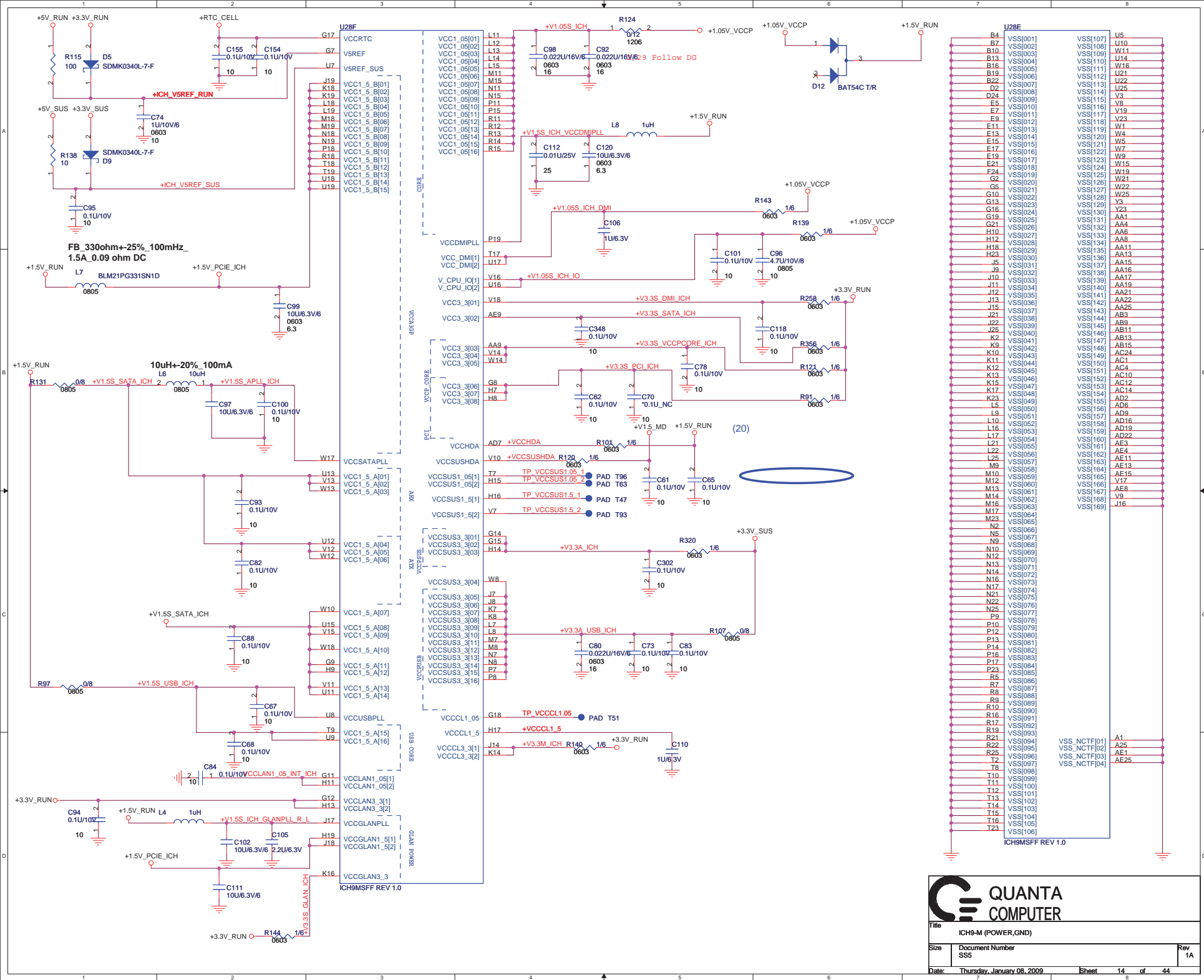
12 of 44

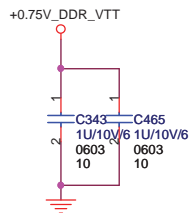


SMbus address D2

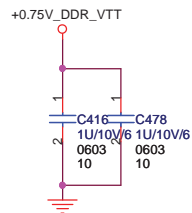
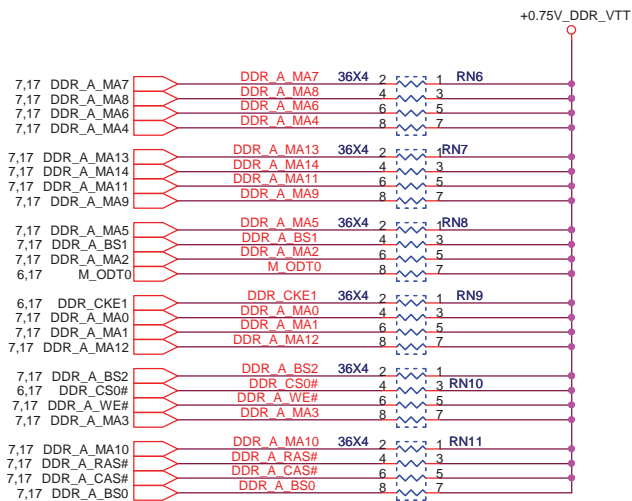
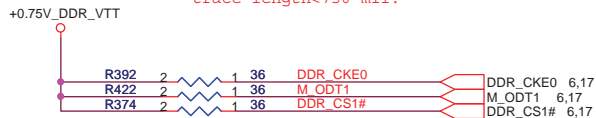
These are for backdrive issue.



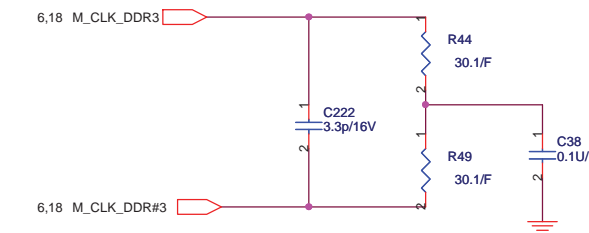
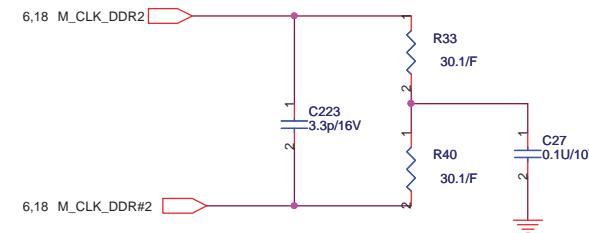
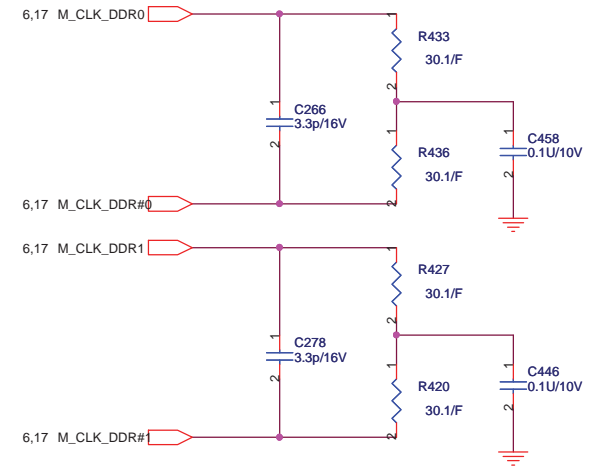
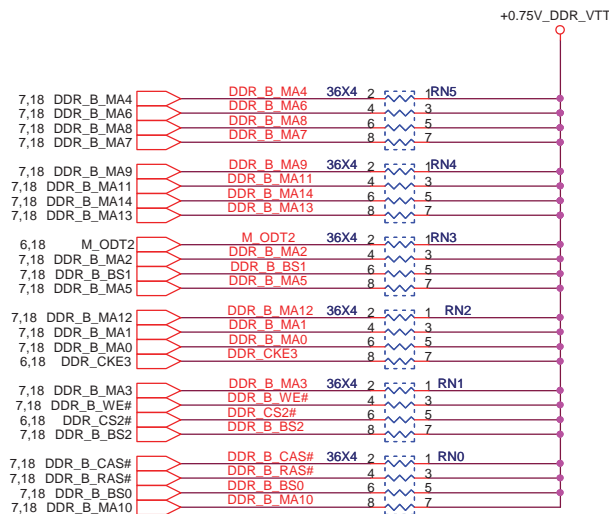
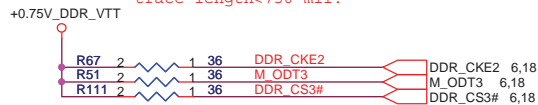




Please these resistor
closely DIMMA,all
trace length<750 mil.



Please these resistor
closely DIMMB,all
trace length<750 mil.



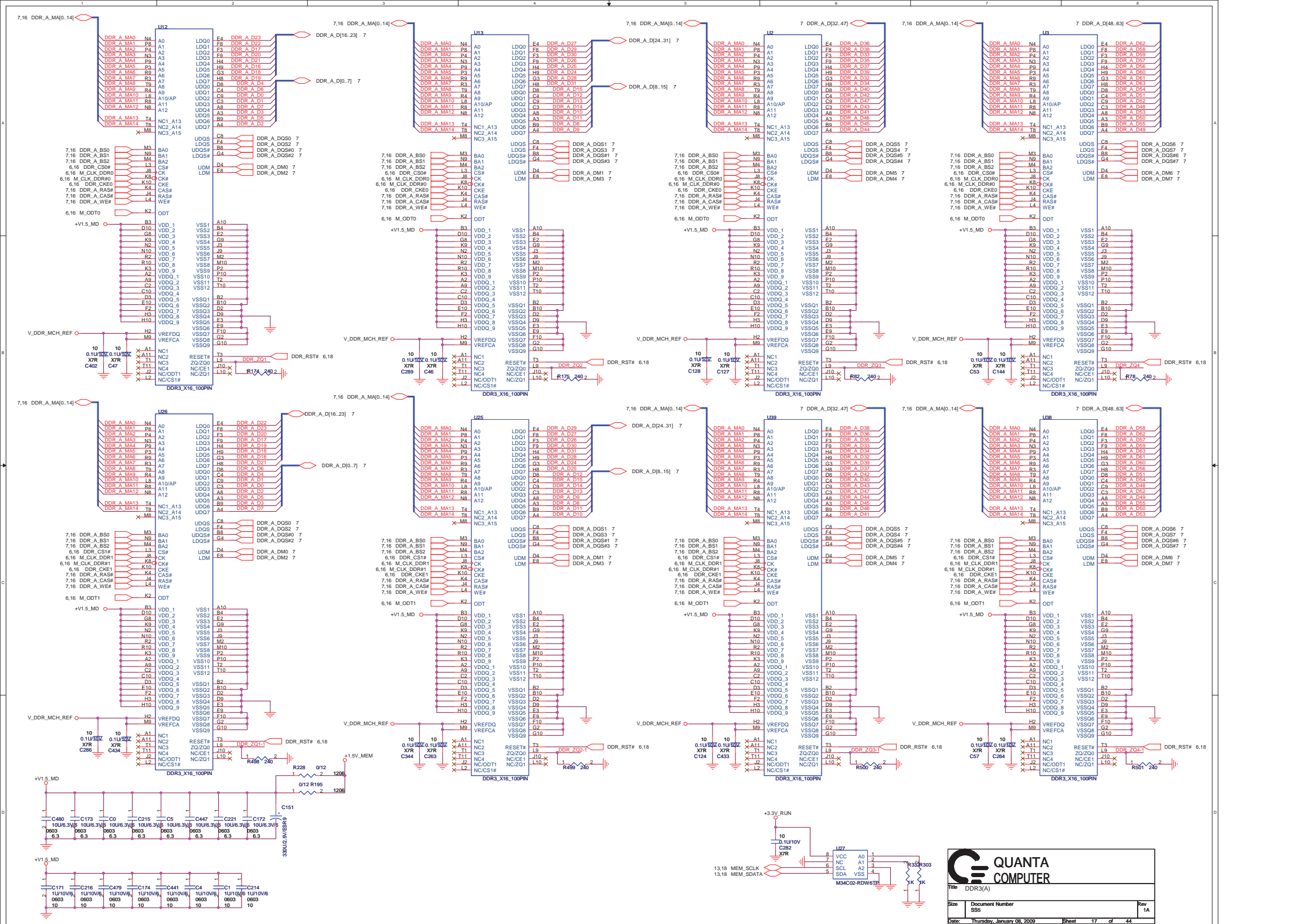
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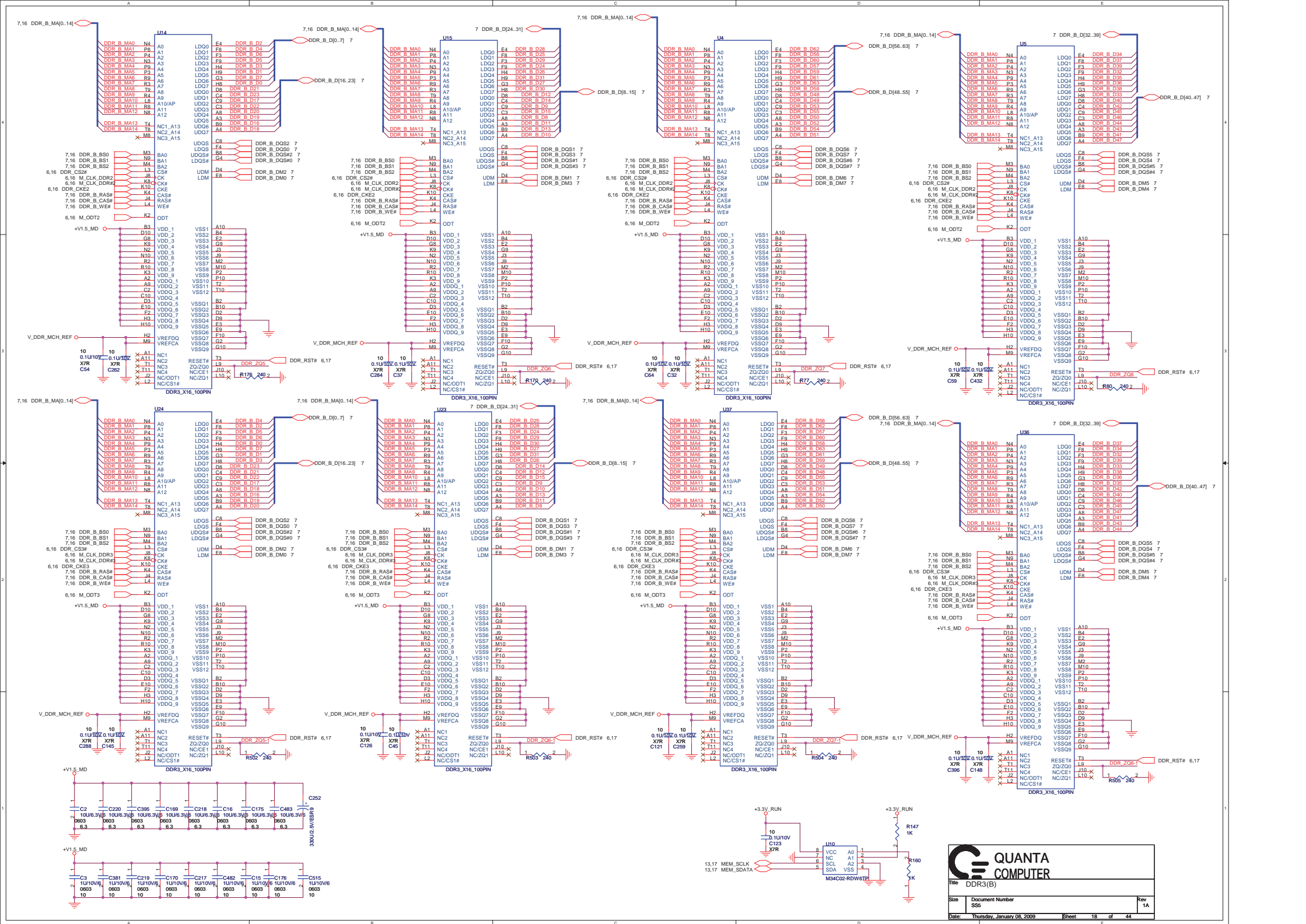
Size Document Number
SS5

Date: Thursday, January 08, 2009

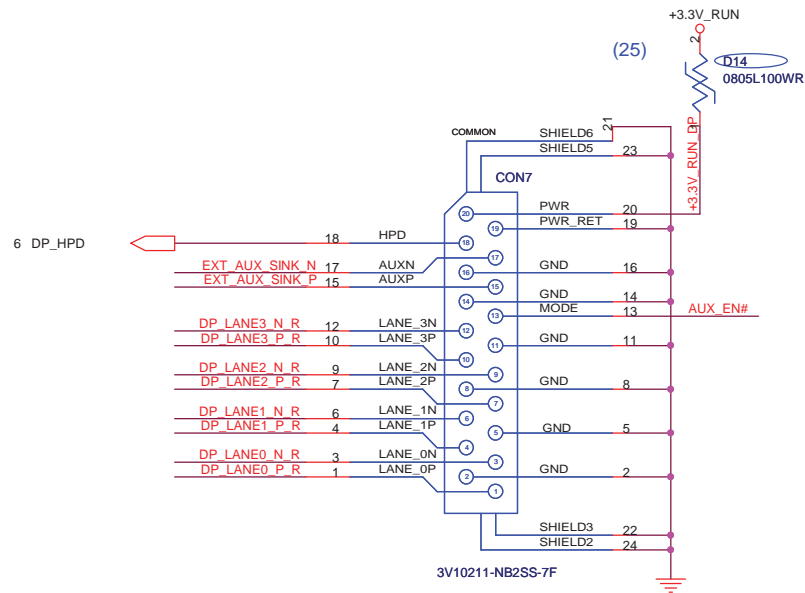
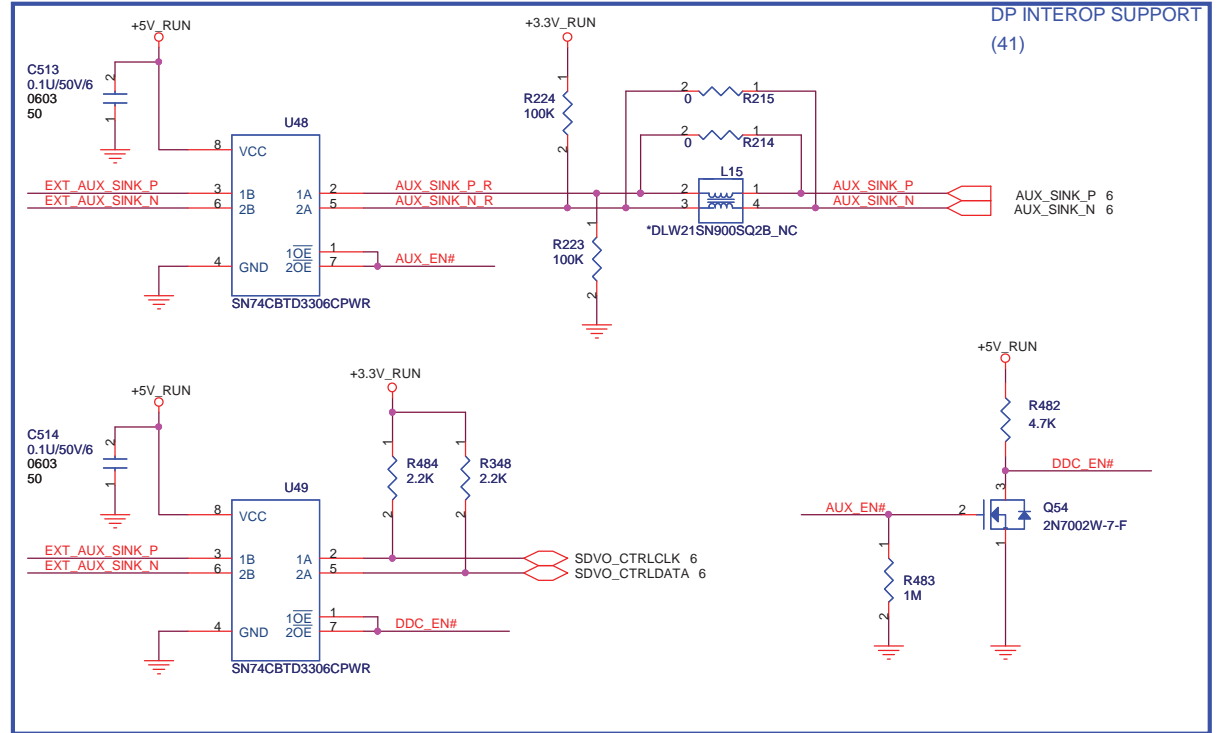
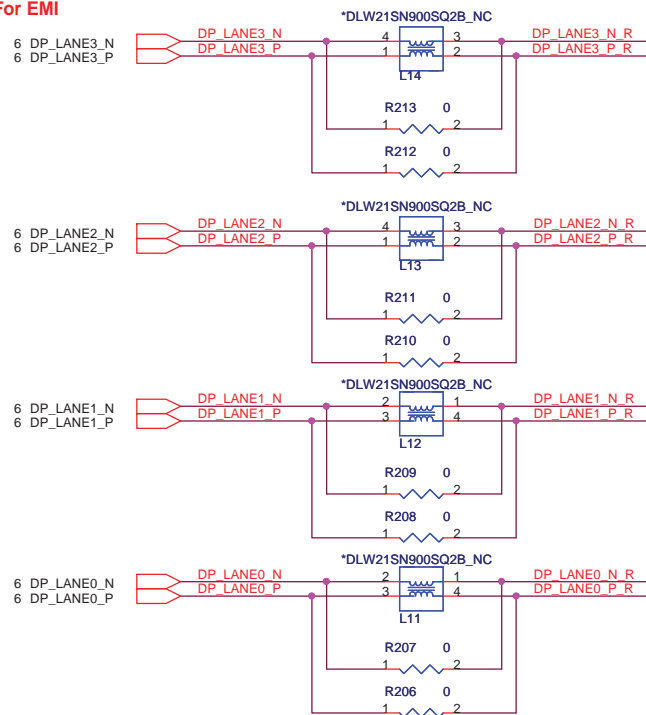
Sheet 16 of 44

Rev 1A

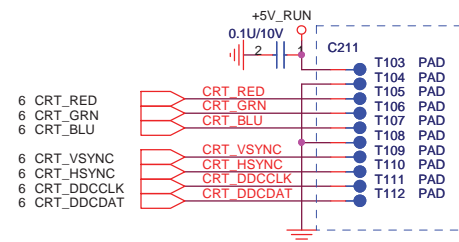




Reserve For EMI



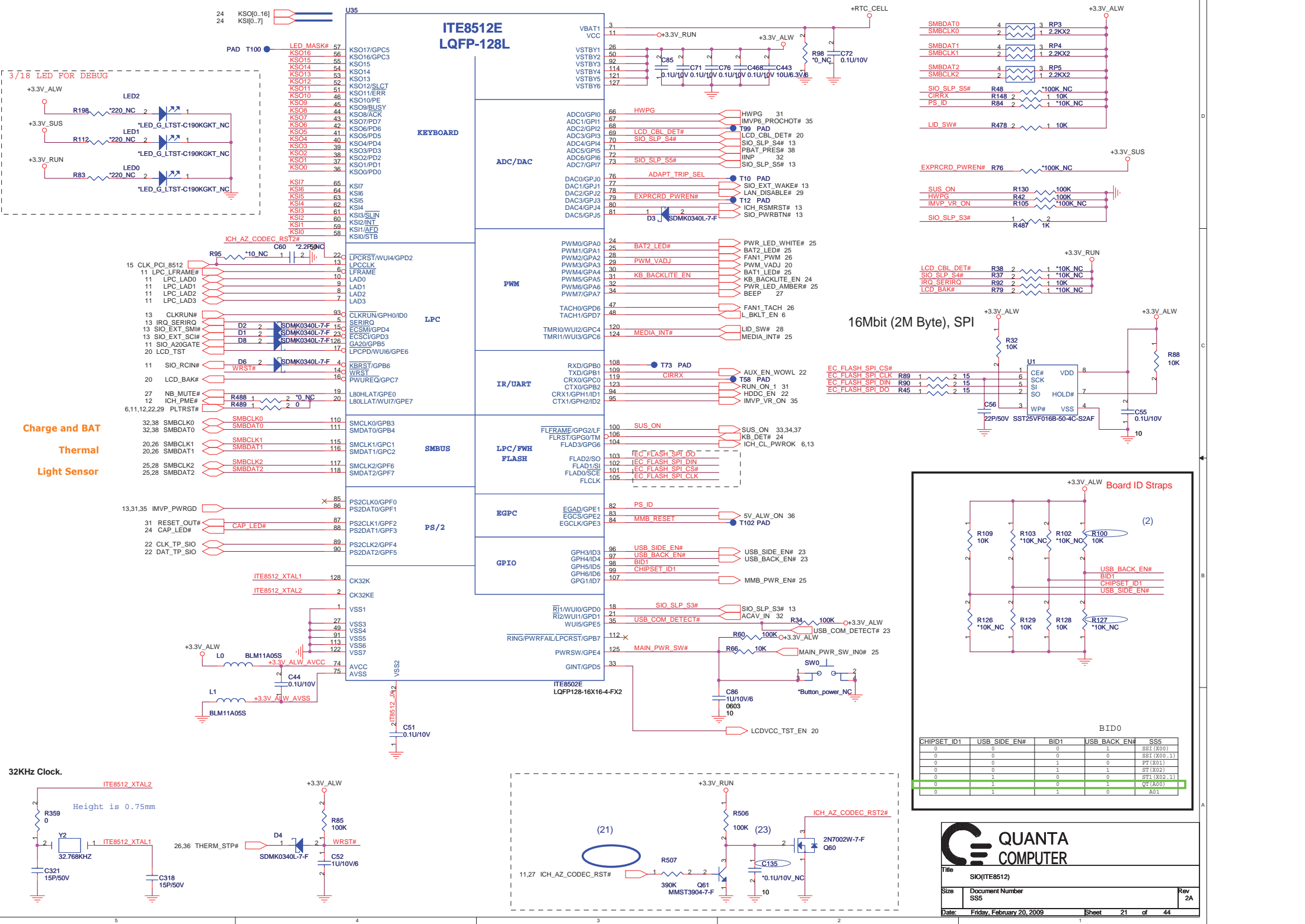
CRT OUT For debug

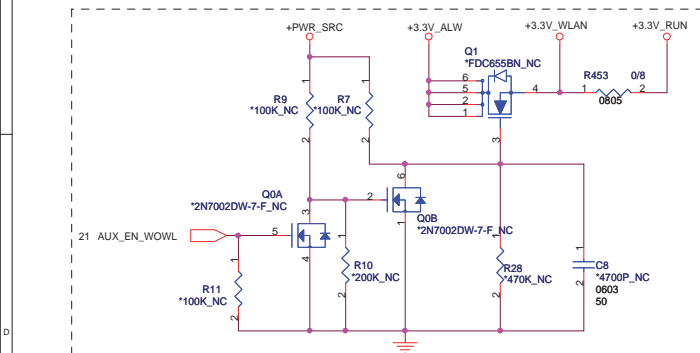
Title
Display port/CRT ConnSize
Document Number
SS5

Date: Friday, February 20, 2009

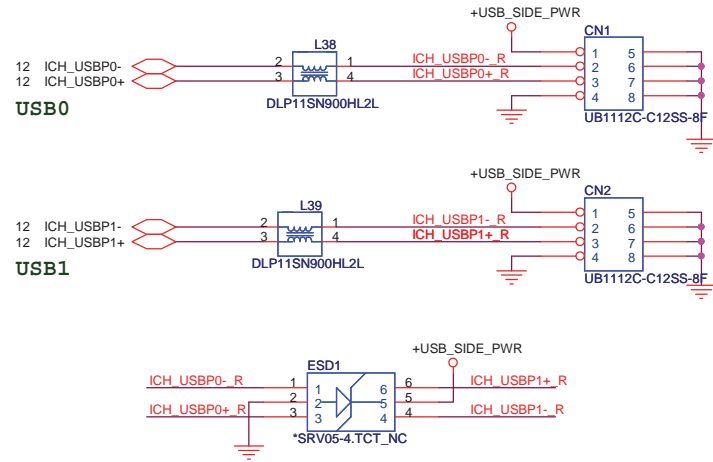
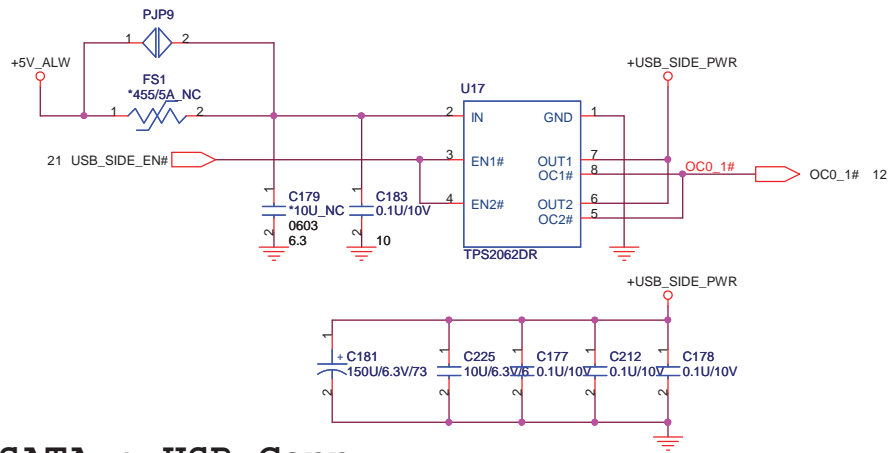
Sheet 19 of 44

Rev
1A

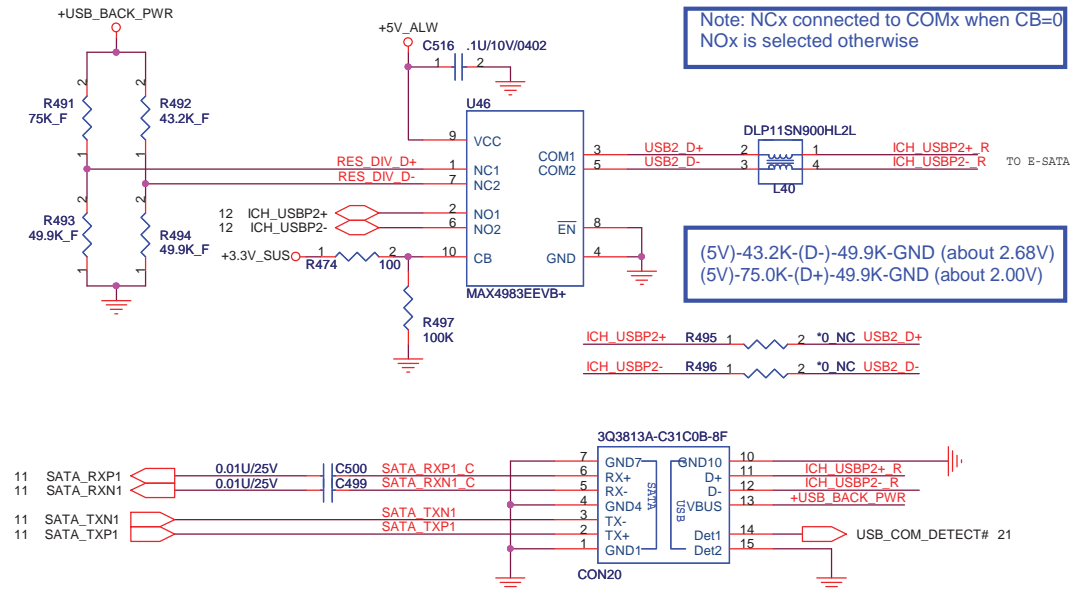
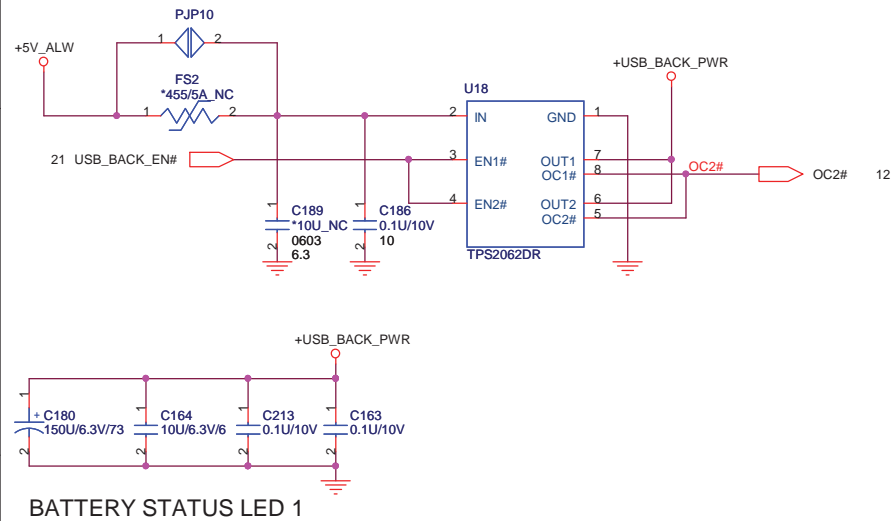


Rev
1A

USB x2 Conn



SATA + USB Conn



Note: NCx connected to COMx when CB=0
NOx is selected otherwise

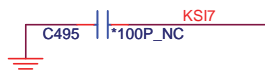
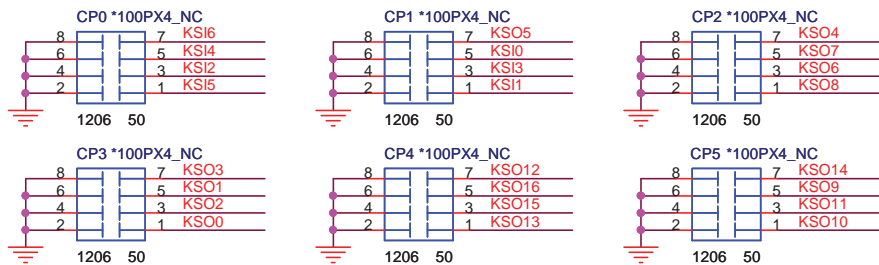
(5V)-43.2K-(D-)-49.9K-GND (about 2.68V)
(5V)-75.0K-(D+)-49.9K-GND (about 2.00V)

BATTERY STATUS LED 1

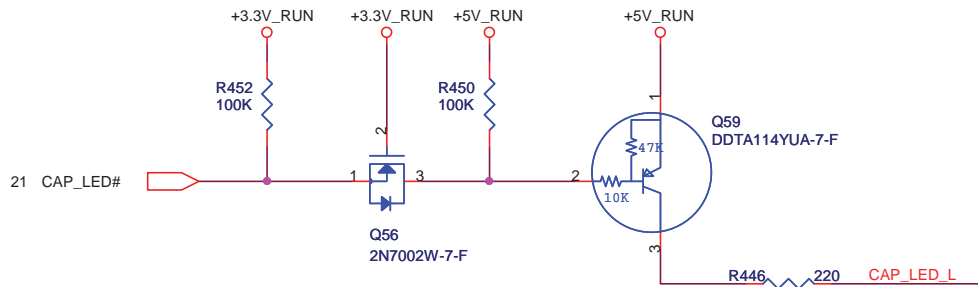


Title		
SERIAL PORT & USB		
Size	Document Number	Rev
SS5		1A
Date:	Thursday, February 05, 2009	Sheet 23 of 44

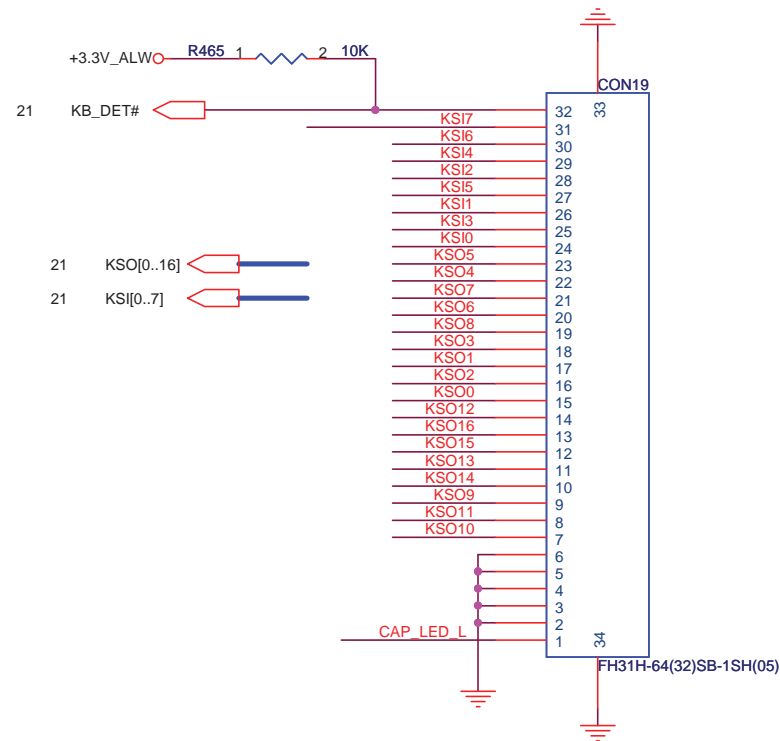
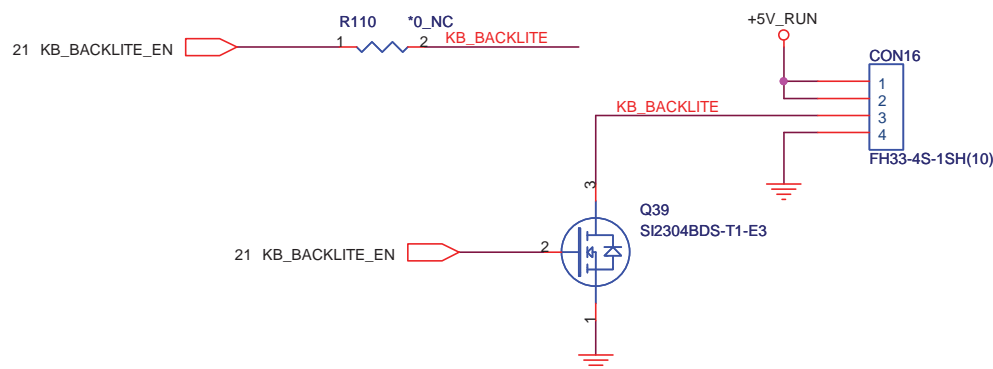
KEYBOARD CONNECTOR



CAP_LED#

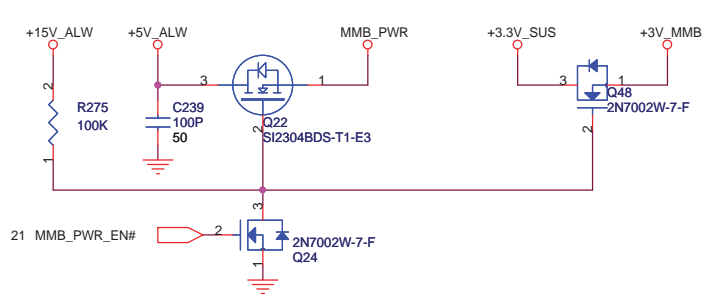


KB LED CONN



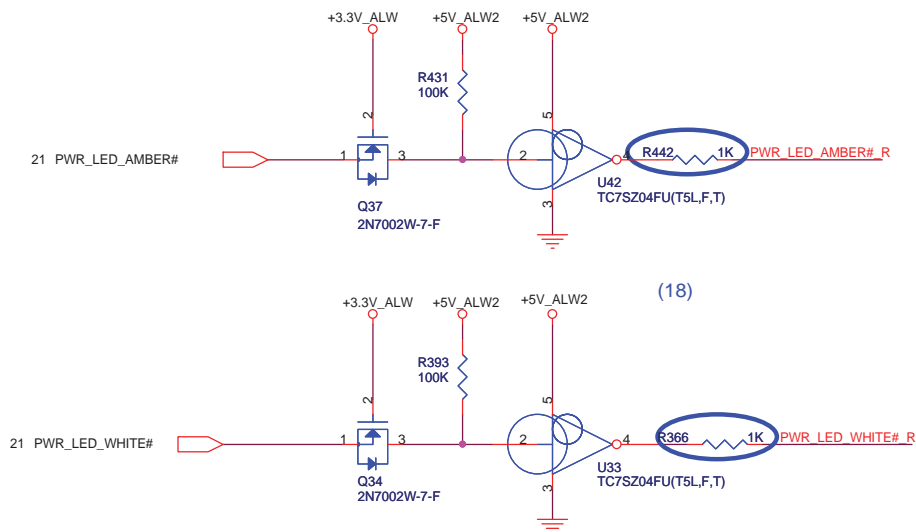
100P CAPS CLOSE TO JKB1

QUANTA COMPUTER		
Title TOUCH PAD, BULE TOOTH & FIR		
Size	Document Number	Rev
SS5		2A
Date:	Thursday, January 08, 2009	Sheet 24 of 44

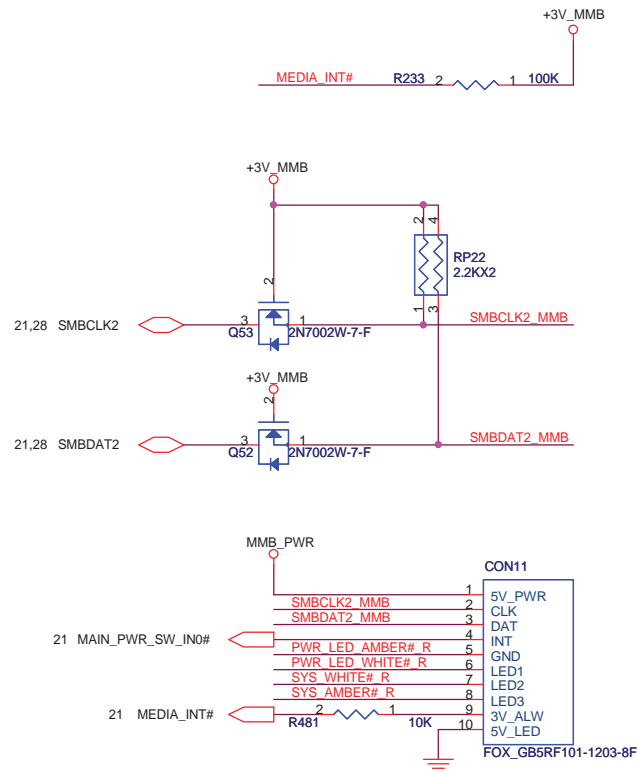
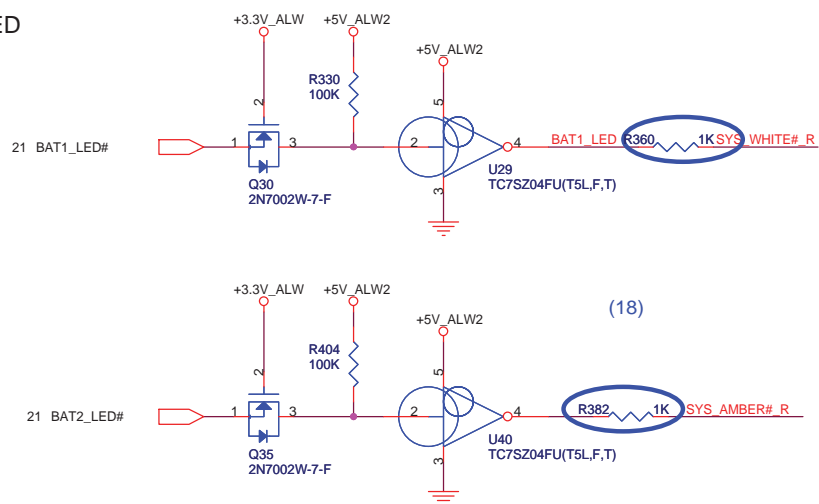


POWER LED

Function board CONN



System LED



System Power State	Power Source	Battery Charge State	LED Behavior
On (S0)	AC	0-100%	Off
On (S0)	DC	< 10%	Flash Amber
On (S0)	DC	> 10%	Off
Standby (S3)	AC	0-100%	"Breathe" White
Standby (S3)	DC	< 10%	Flash Amber
Standby (S3)	DC	> 10%	"Breathe" White
Off or Hibernate (S4/S5)	AC	< 90%	Solid Amber
Off or Hibernate (S4/S5)	AC	> 90%	Solid White
Off or Hibernate (S4/S5)	DC	0-100%	Off



QUANTA
COMPUTER

Title	SWITCH, KEYBOARD & LED		
Size	Document Number	Rev	
SS5		1A	
Date:	Thursday, February 05, 2009	Sheet	25 of 44

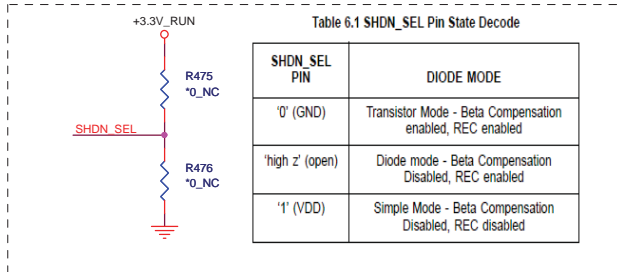
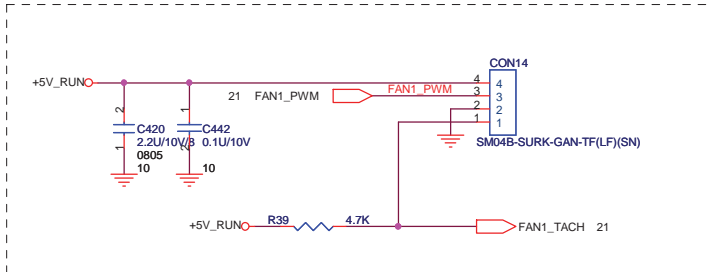
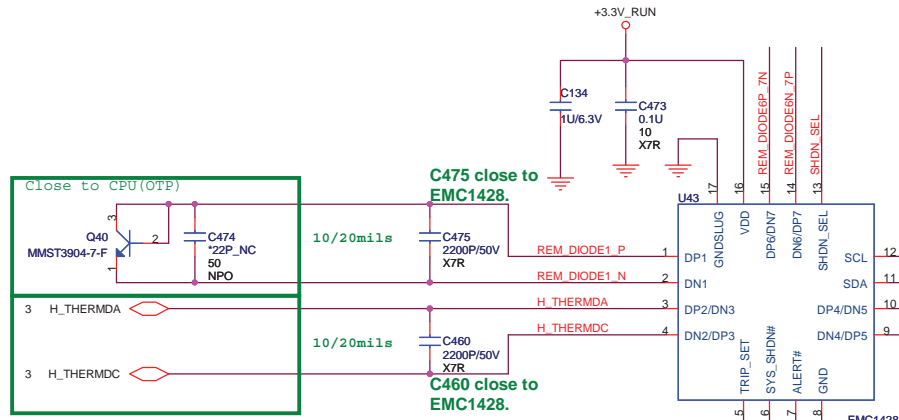


Table 6.1 SHDN_SEL Pin State Decode

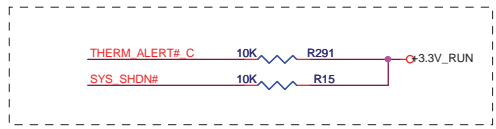
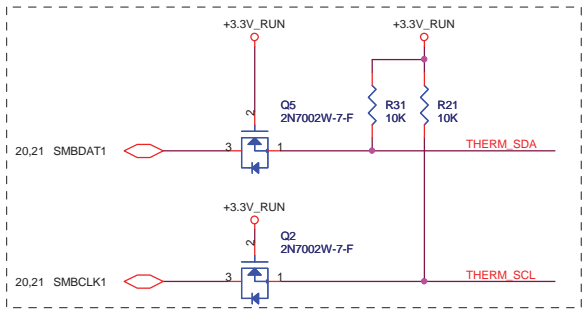
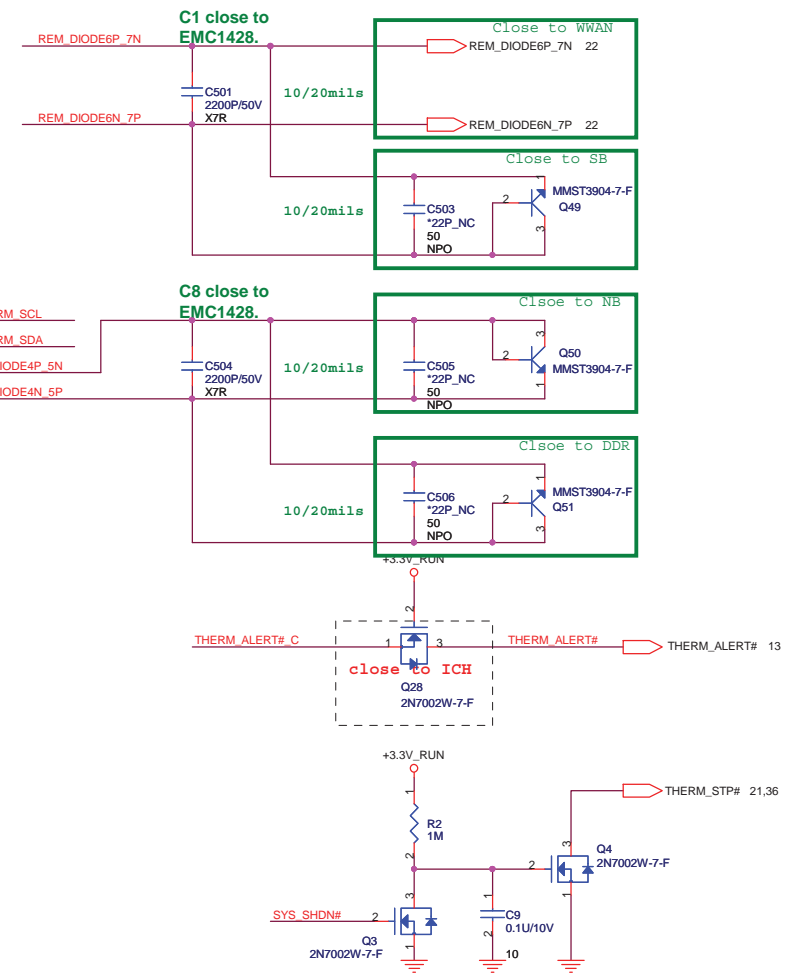
SHDN_SEL PIN	DIODE MODE
'0' (GND)	Transistor Mode - Beta Compensation enabled, REC enabled
'high z' (open)	Diode mode - Beta Compensation Disabled, REC enabled
'1' (VDD)	Simple Mode - Beta Compensation Disabled, REC disabled



OTP 83 degree C

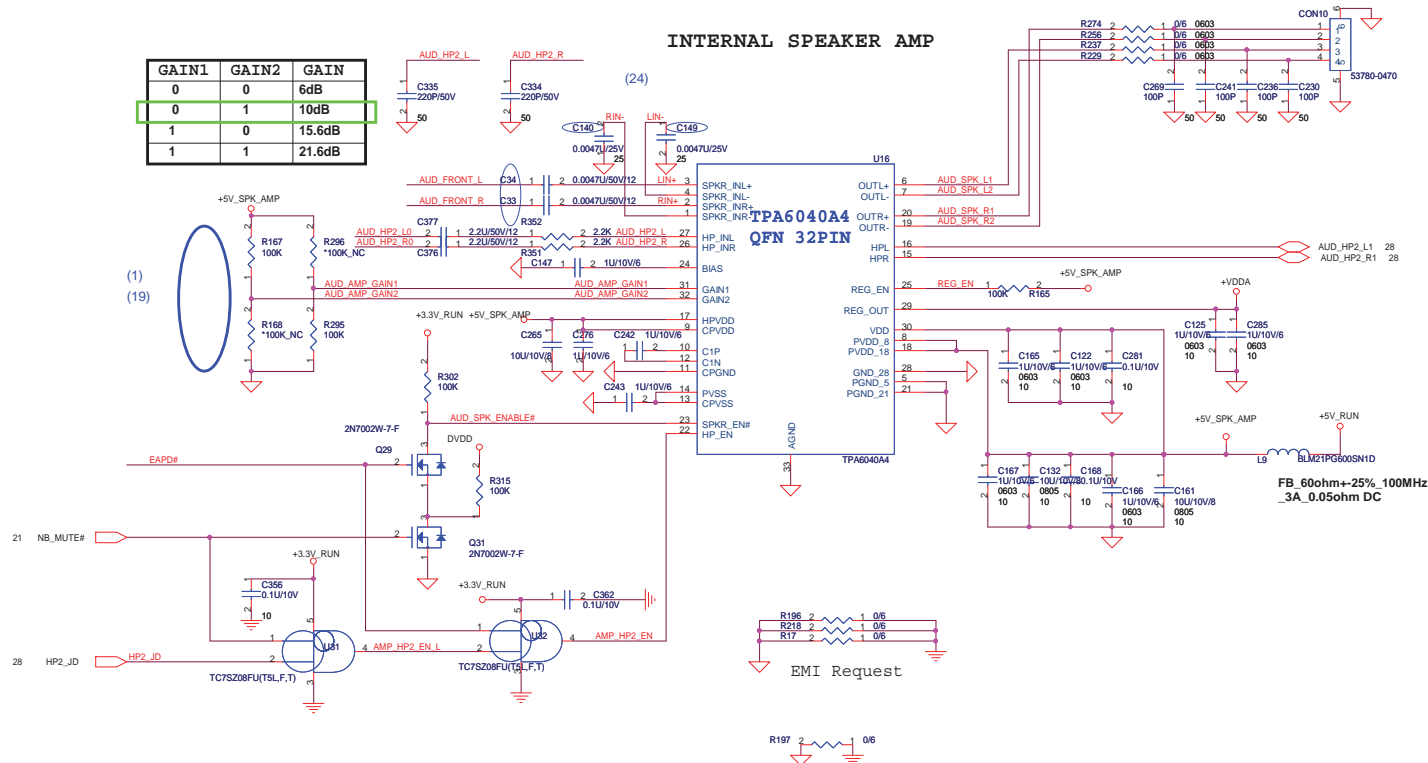
Example set points:
T_{Trip_RSet}

Degree C	R477
65	0
75	237
83	487
85	562
95	1100
121	9090

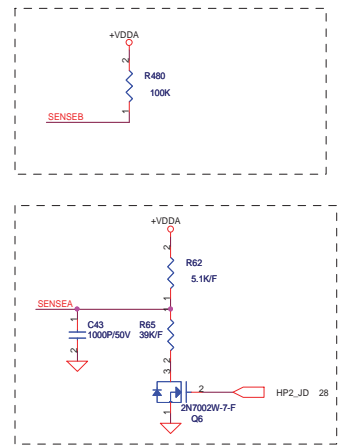
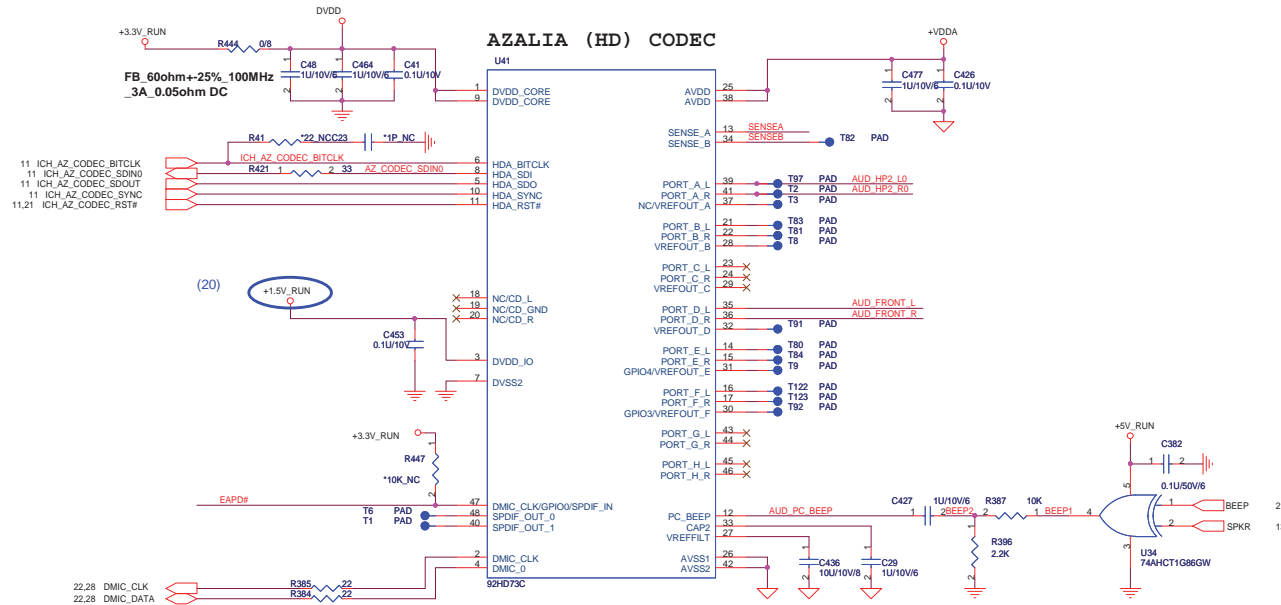


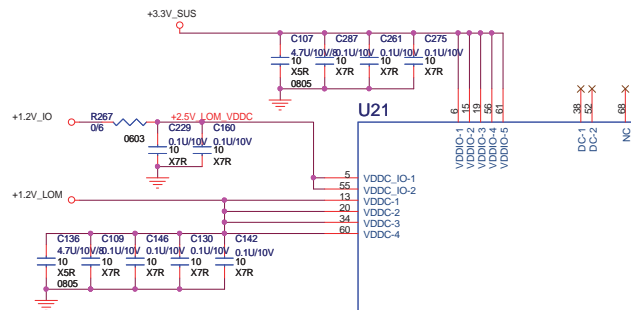
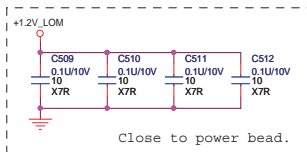
GAIN1	GAIN2	GAIN
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB

INTERNAL SPEAKER AMP

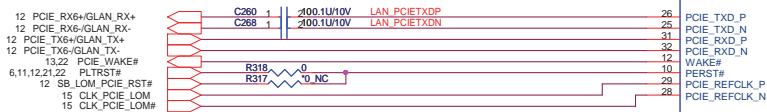
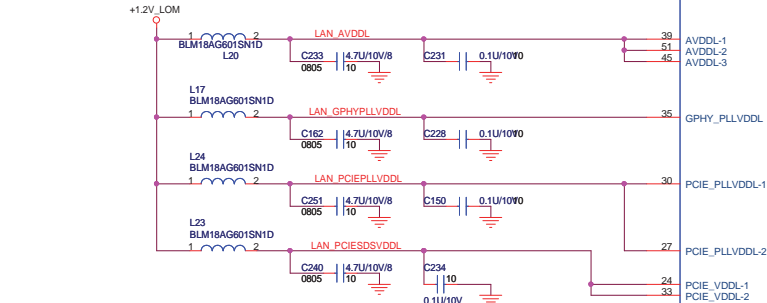


AZALIA (HD) CODEC

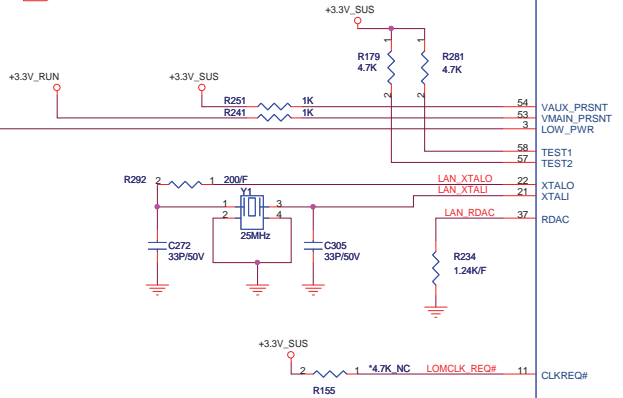




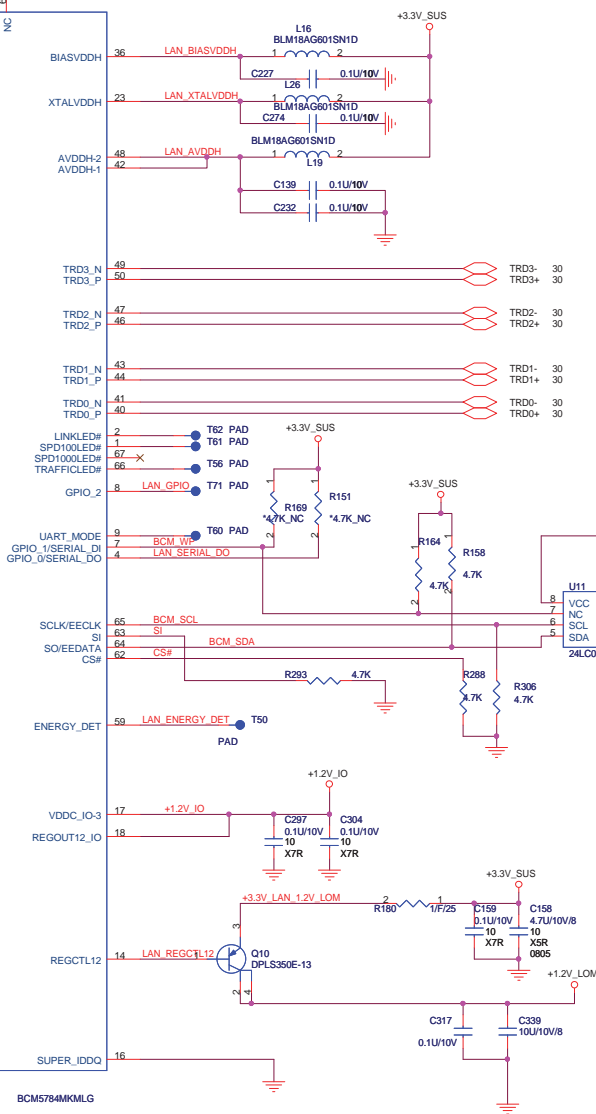
BCM5784M
10mm x 10mm
68-Pin QFN

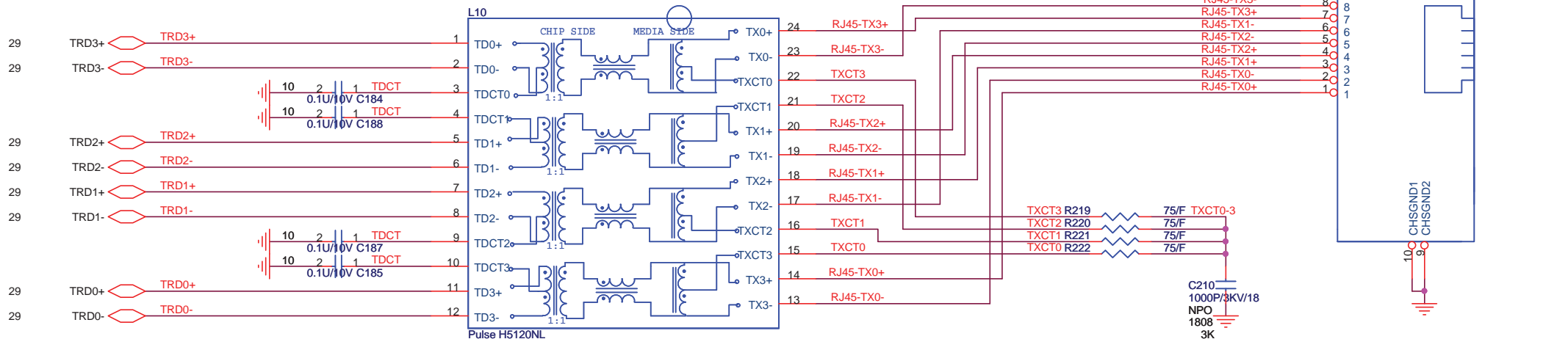


LAN_DISABLE#
is active
high.



Package Body
Note: thermal pad






Reserved for EMI.

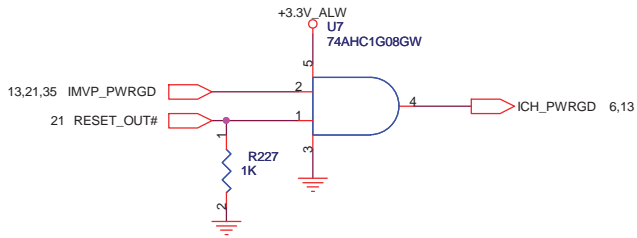
TRD3+	C191	6.8P/50V
TRD3-	C190	6.8P/50V
TRD2+	C194	6.8P/50V
TRD2-	C195	6.8P/50V
TRD1+	C196	6.8P/50V
TRD1-	C197	6.8P/50V
TRD0+	C192	6.8P/50V
TRD0-	C193	6.8P/50V

LAYOUT NOTE:
CAP CLOSE TO TRANSFORMER
one cap for each pin

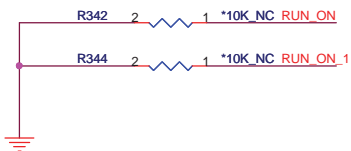
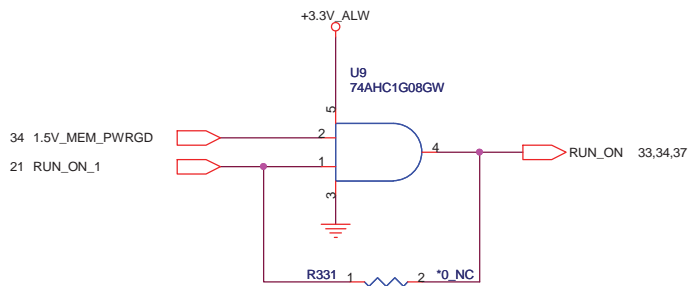
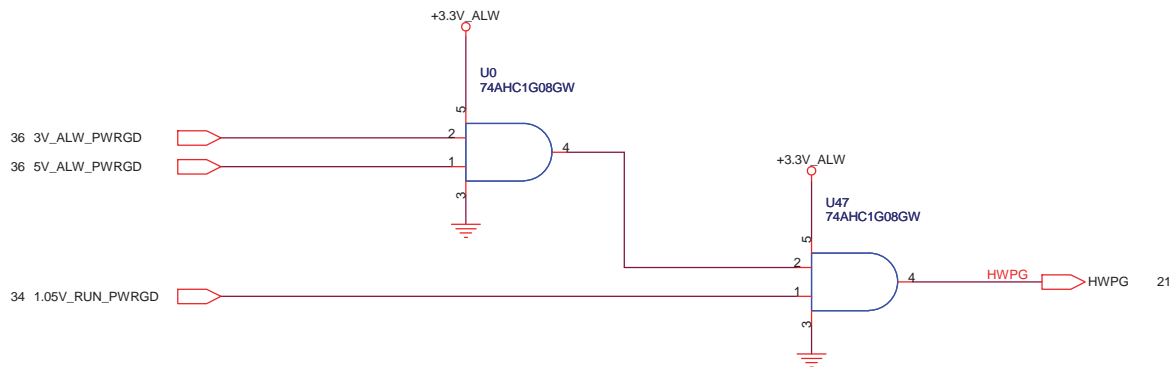



QUANTA
COMPUTER

Title LAN SWITCH		
Size	Document Number SS5	Rev 1A
Date:	Thursday, January 08, 2009	Sheet 30 of 44



Keep Away from high speed buses

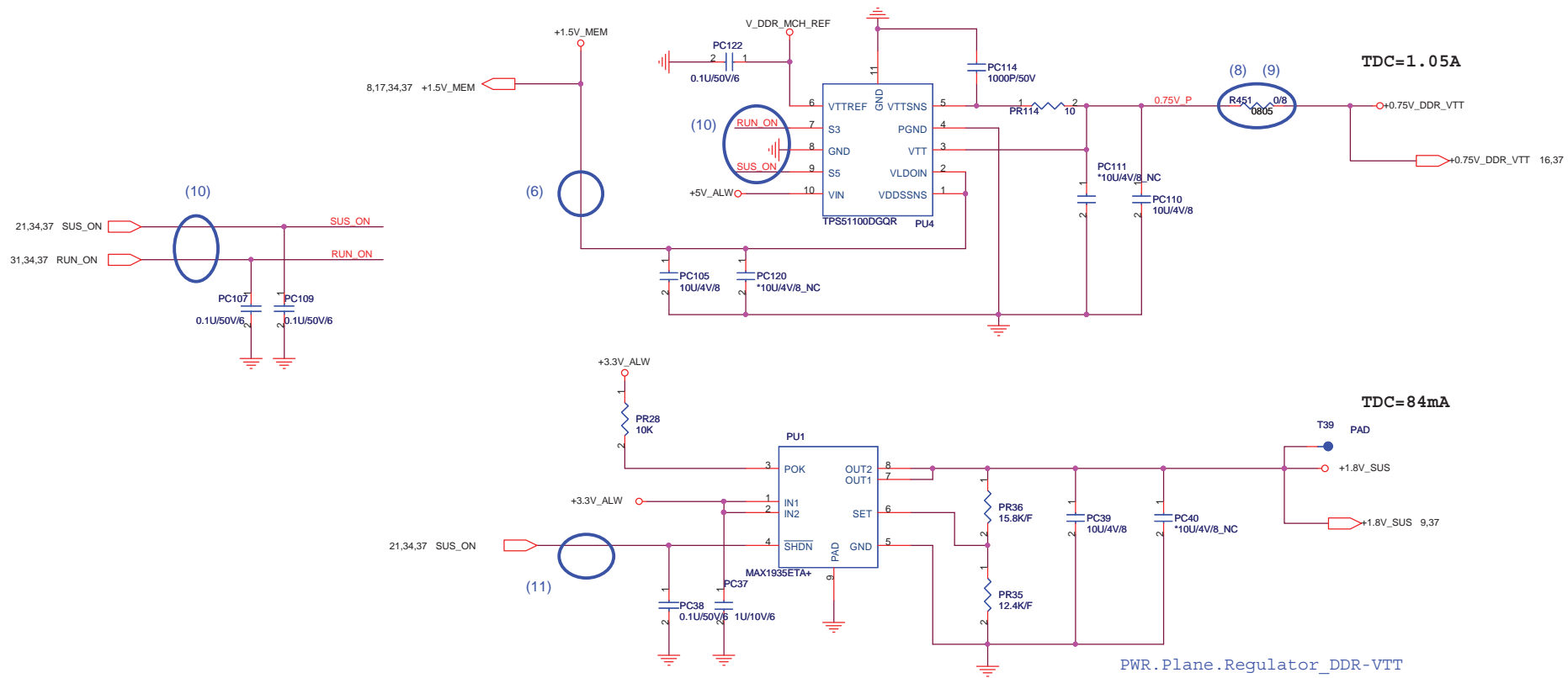




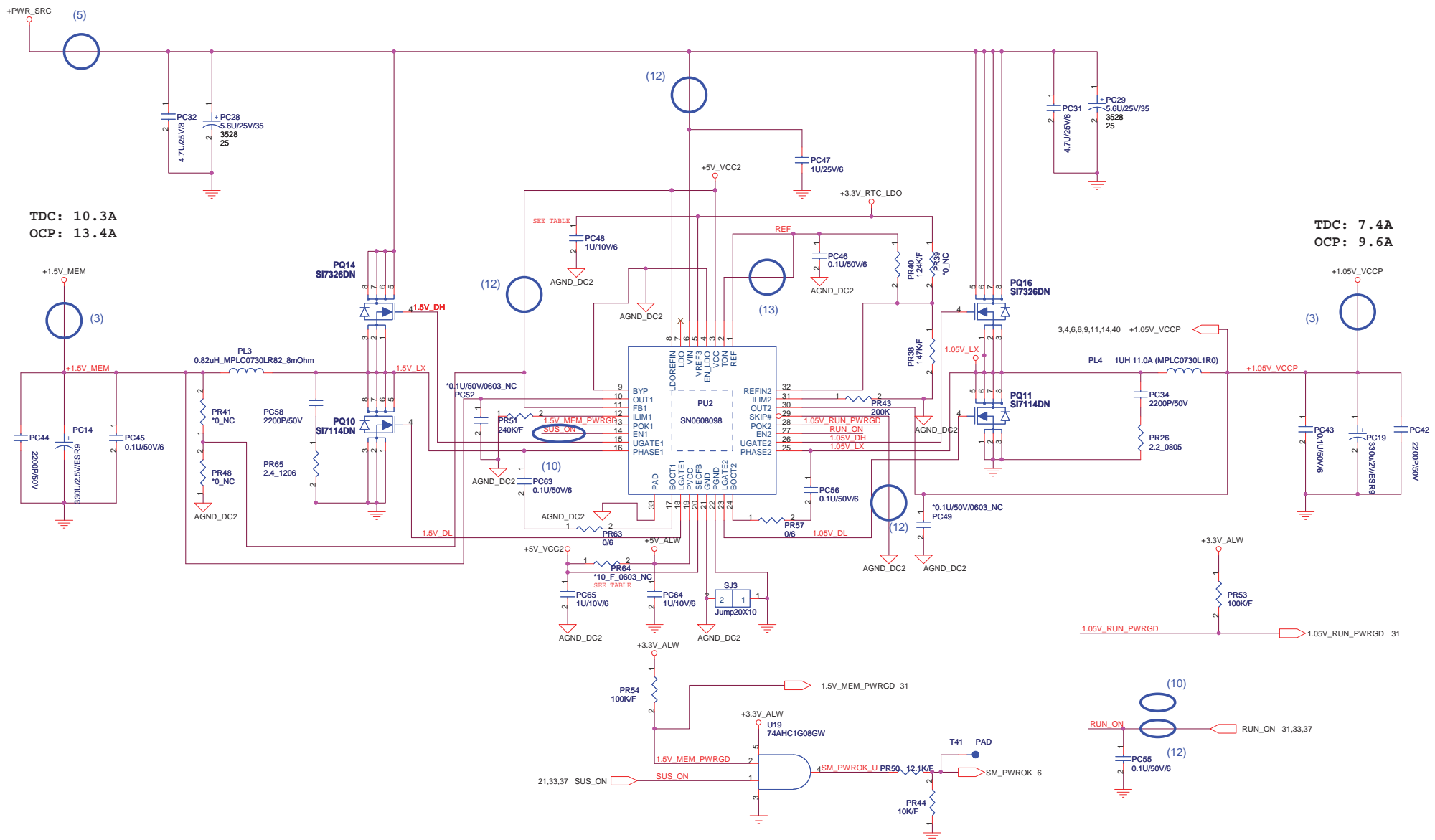
QUANTA

COMPUTER

Title System Reset Circuit		
Size	Document Number SSS	Rev 1A
Date:	Thursday, January 08, 2009	Sheet 31 of 44



M'09
+1.5V_MEM /+1.05V_VCCP /+3.3_RTC_LDO



REF DESIGNATOR	MAXIM	INTERSIL	TI
PR64	10, 0603	NO STUFF	NO STUFF
PC48	1uF	0.1uF	1uF

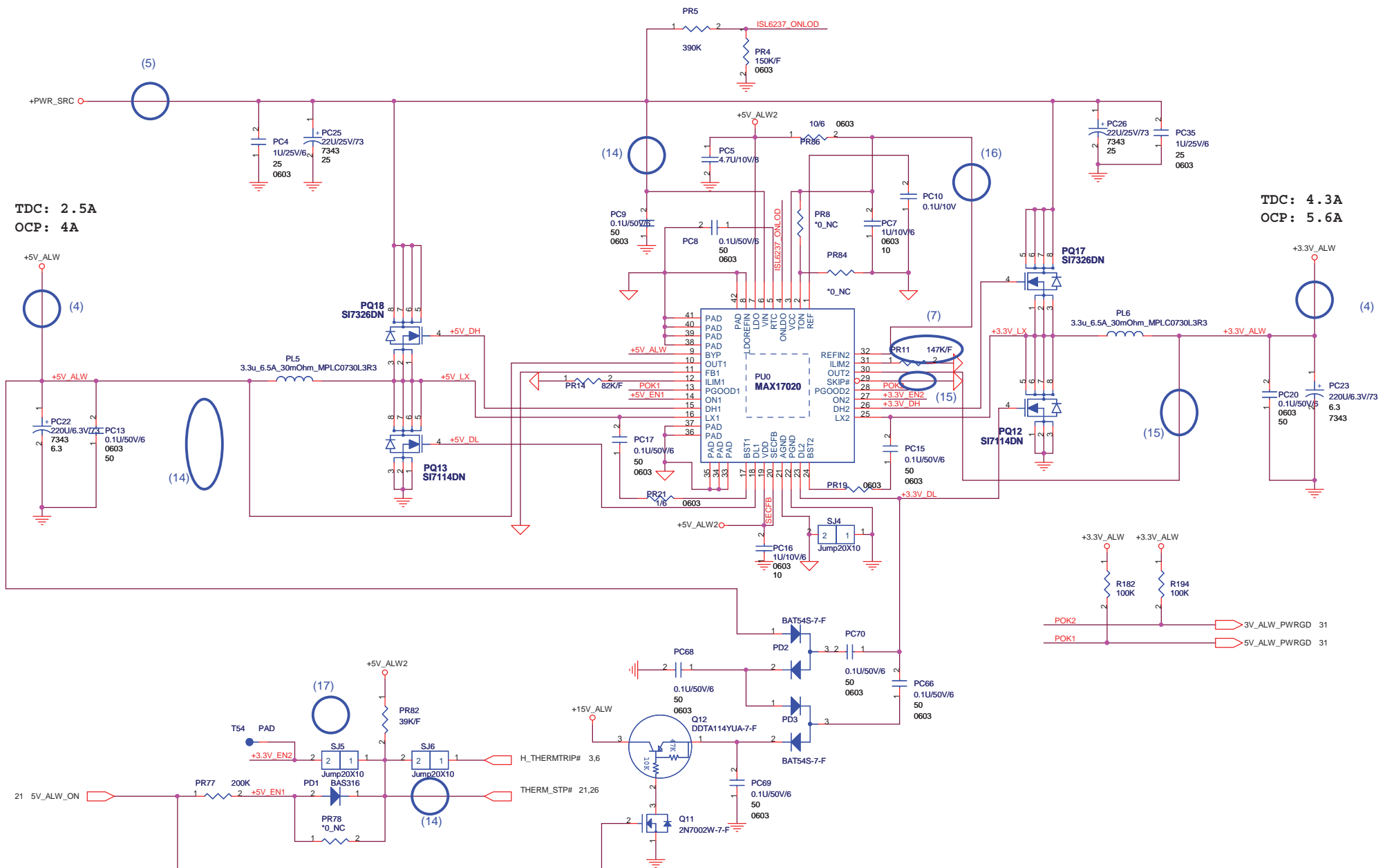
QUANTA COMPUTER

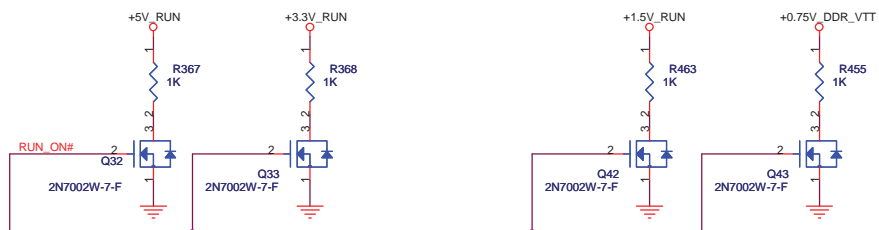
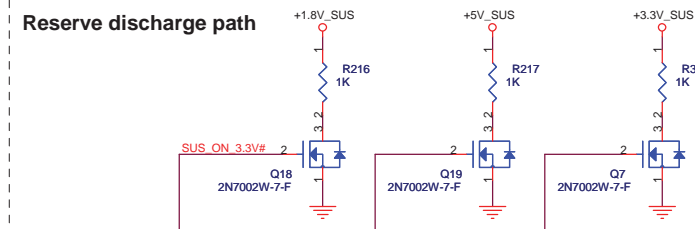
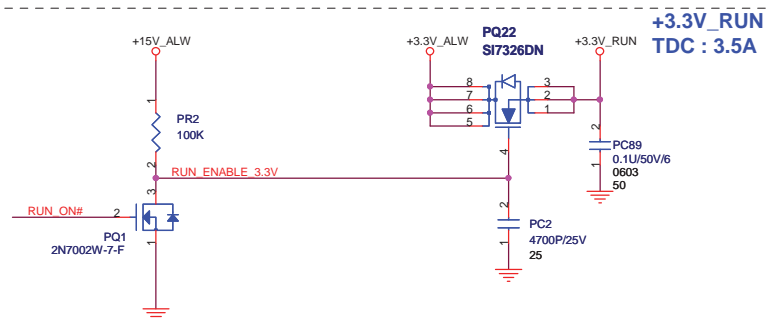
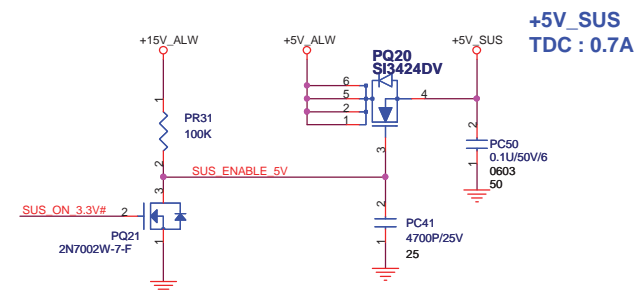
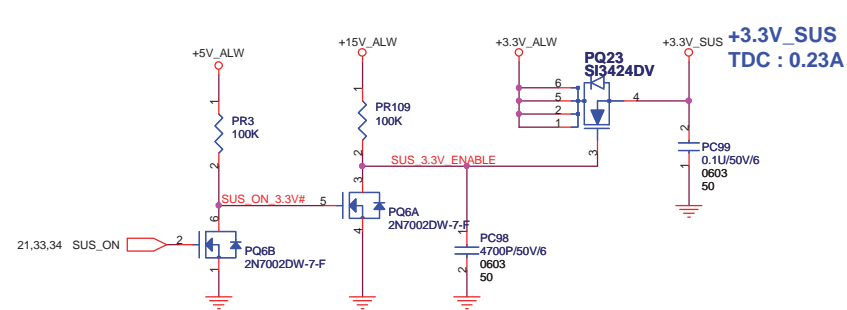
Title: 1.05V_VCCP & 1.5V_MEM

Size: Document Number SS5 Rev 1A

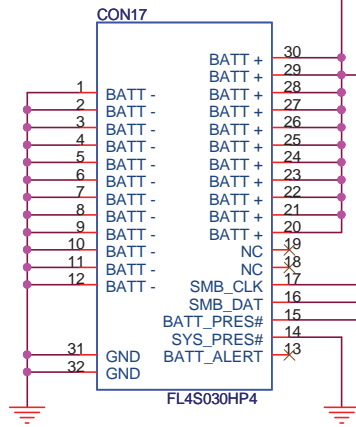
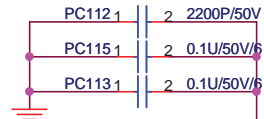
Date: Friday, February 20, 2009 Sheet 34 of 44

DC/DC +3V ALW/+5V SUS/+5V ALW /+15V ALW





Address : 16H

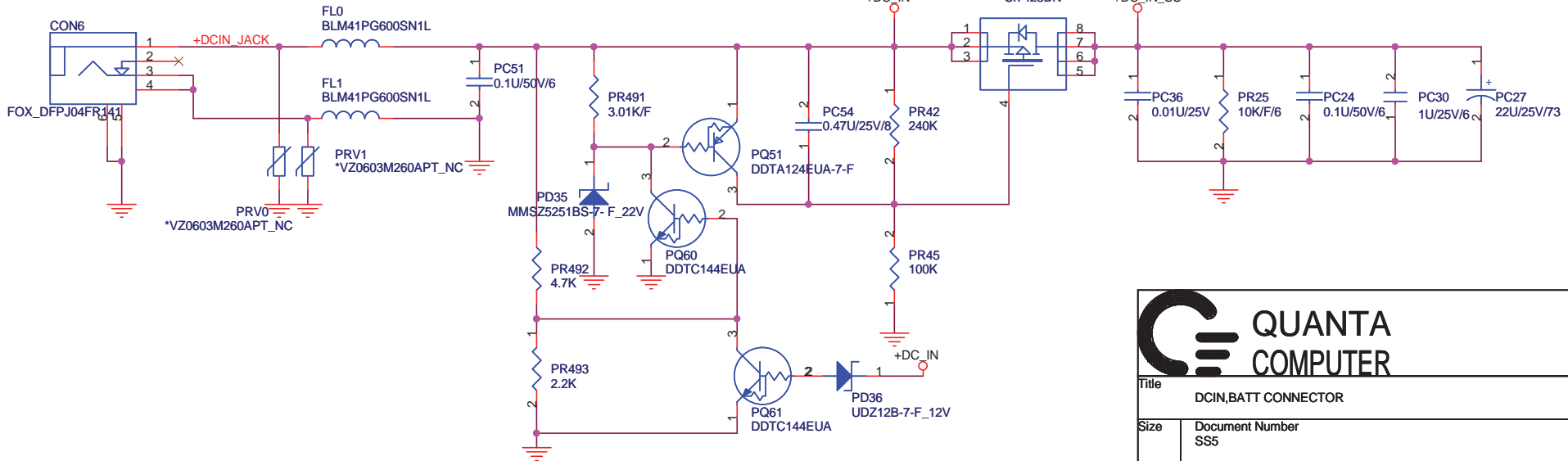



SMBUS Address 16

+3.3V_ALW

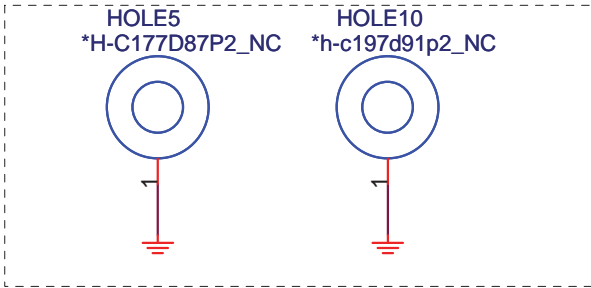
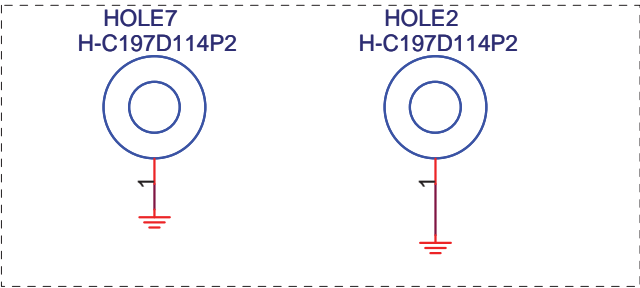
PR111
10K

PBAT_PRES# 21

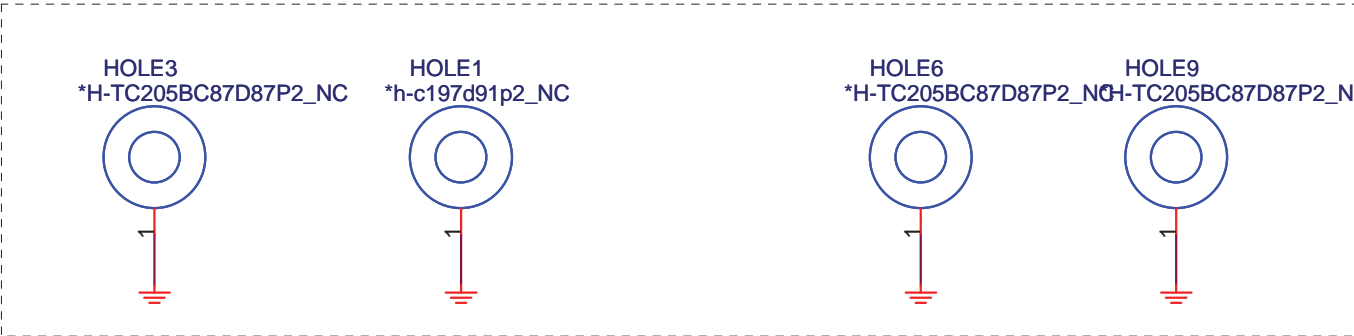


 QUANTA COMPUTER		
Title DCIN,BATT CONNECTOR		
Size	Document Number SS5	Rev 1A
Date:	Thursday, February 05, 2009	Sheet 38 of 44

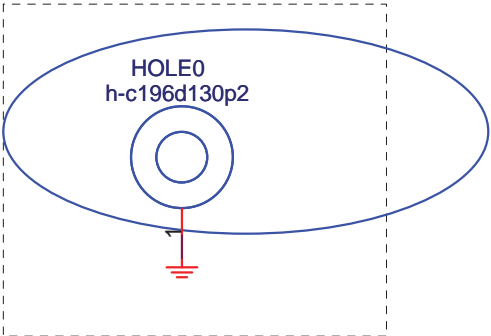
Thermal Screw




Housing Screw



Outer diameter = 4.5mm



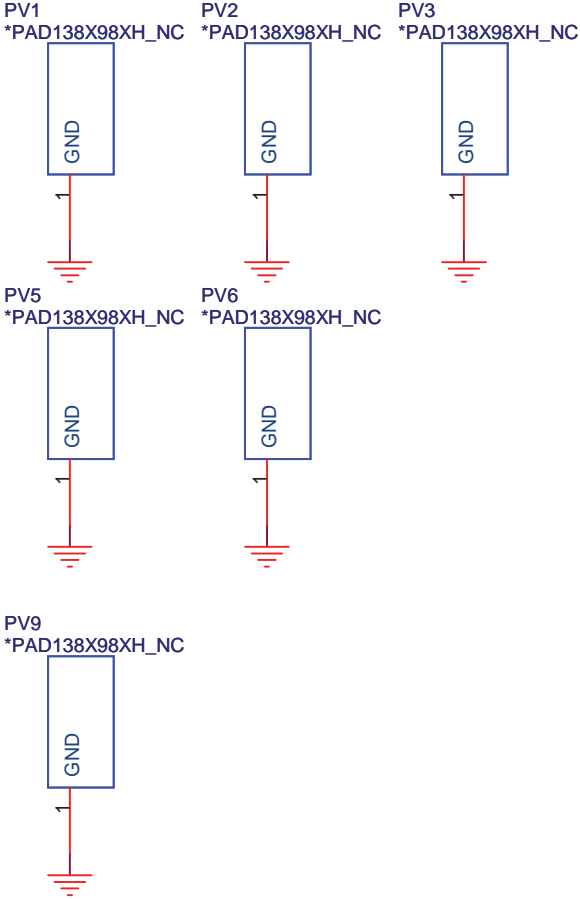
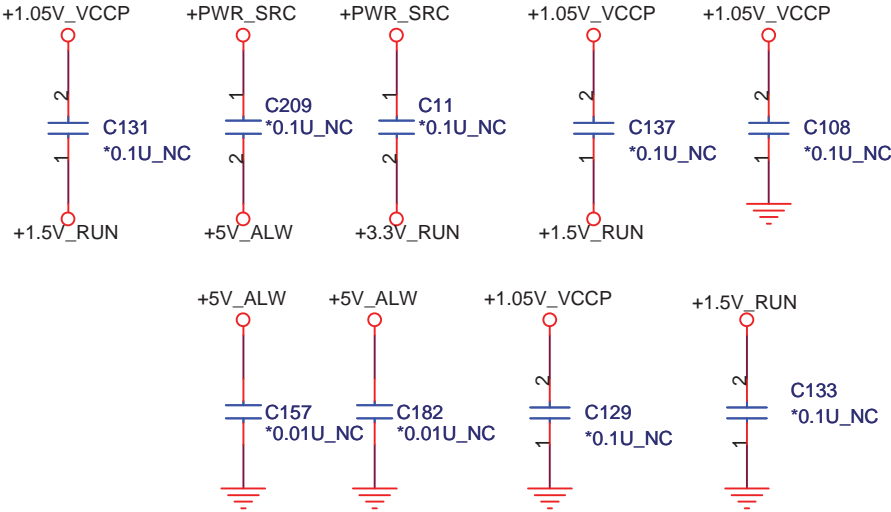
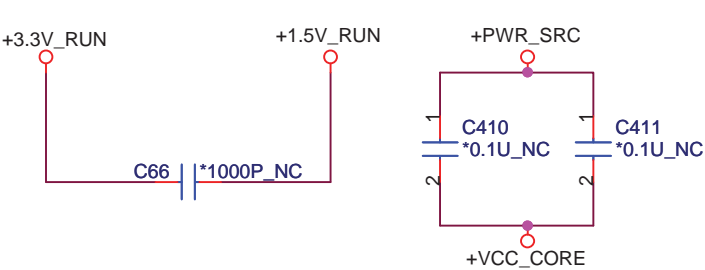
P/N is ok.
Also need change FP 12/29.




QUANTA
COMPUTER

Title SCREW PAD		
Size	Document Number SS5	Rev 1A
Date:	Thursday, January 08, 2009	Sheet 39 of 44

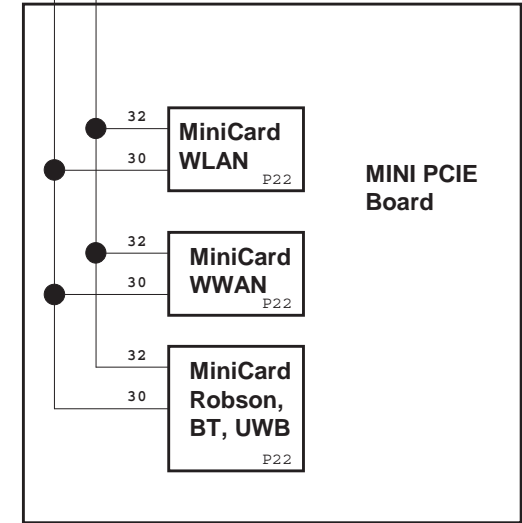
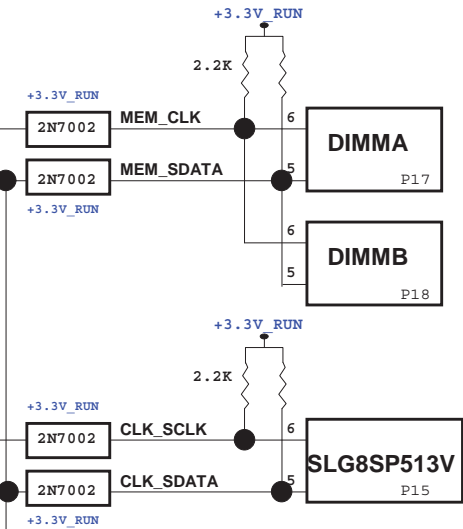
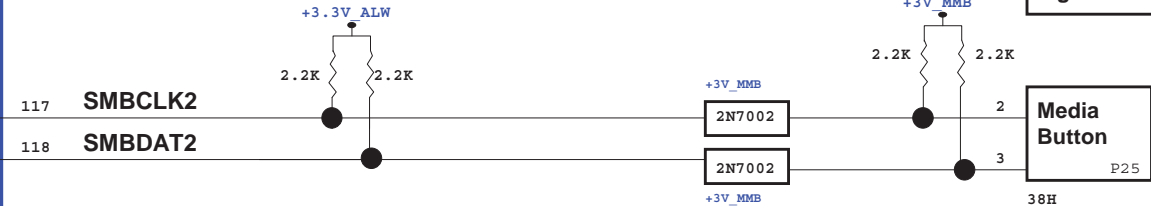
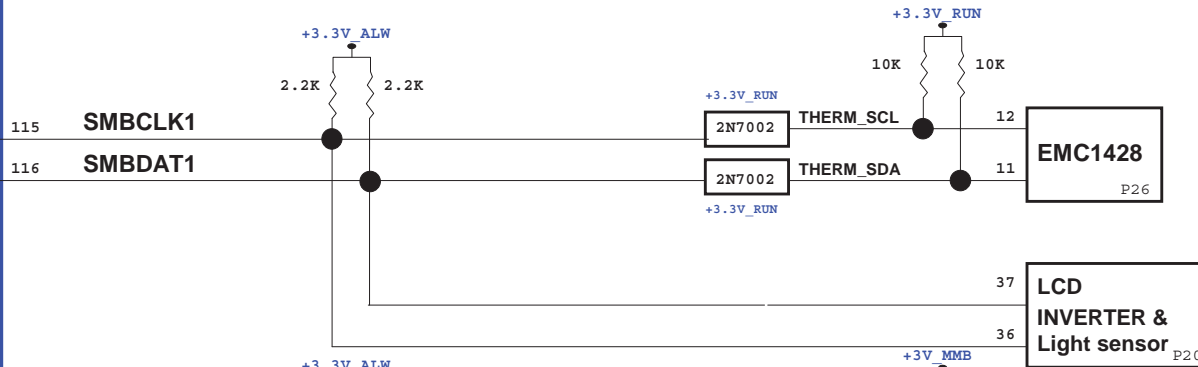
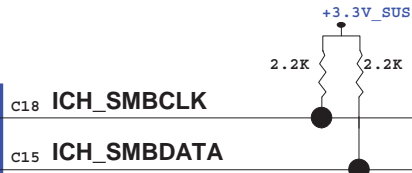
Reserved for EMI. Stitching caps.






QUANTA
COMPUTER

Title EMI CAP		
Size	Document Number SS5	Rev 1A
Date:	Thursday, January 08, 2009	Sheet 40 of 44




Change List						
Item	Page#	Date	T	Issue Description	Solution Description	Rev
				X00 change to X00.1		
1	12	5/20/2008	EE	Schematic have pull up resistor and pull down resistor. Remove all pull up resistor for those signal. SB_WWAN_PCIE_RST#, SB_LOM_PCIE_RST#, SB_WPAN_PCIE_RST#, SB_WLAN_PCIE_RST# and SB_NB_PCIE_RST#.	Depop R361, R133, R72, R407, R74.	X00.1
2	20, 28	5/20/2008	EE	LCD and CCD connect need combin as one connect. Del Camera connect (P28) and change (P20)J1 from 30pin to 44pin. Move 2 USB and 1 Combo connect to MB.	Del CON12(P28) and move rest of Camera componets to P20. Change J1 from 30pin to 44pin.	X00.1
3	23	5/20/2008	EE	Move IO Board connect (2 USB and 1 E-Sata) to Mother Board side.	Add L38, R468, R469, CN1 For USB0 Add L39, R470, R471, CN2 and ESD1 for USB1. Add L40, R472, R473, CON20 for USB2 & E-SATA	X00.1
4	23	5/20/2008	EE	To support USB charger function, Added USB Switch to solve leakage issue.	Added U46 and R474 USB Switch circuit.	X00.1
5	23	5/20/2008	EE	Follow safety design, added Fuse on USB power avoide TPS2062DR no function.	Added PJP9 and FS1_NC for USB0 and USB1. Added PJP10 and FS2_NC for USB3.	X00.1
6	3, 26	5/20/2008	EE	Follow Thermal requirement to measured OTP, CPU, NB, DDR, SB and WWAN temperature.	Added C501, C502, Q48, C503, Q49 for DDR and NB. Added C504, C505, Q50, C506, Q51 for SB and WWAN Added rest of EMC1428 components C508, R477, R475, R476	X00.1
7	12, 23	5/20/2008	EE	For USB P0/P1 use same power rail. Change over current design. Change net OC0# and OC1# to OC0_1#.	Change U17.5 and U17.8 to net OC0_1#. Remove R132.	X00.1
8	25	5/21/2008	EE	Change MMB connect from 15pin to 10pin. Remove Media Buttom function. Added System LED signal on MMB connect.	Change CON11 from 15pin to 10pin. Added SYS_WHITE#_R and SYS_AMBER#_R signal MMB connect.	X00.1
9	28	5/21/2008	EE	Follow ME/ID requirement. Change Audio connect type.	Udate CON2 symbol and footprint.	X00.1
10	38	5/21/2008	EE	Follow ME/ID requirement. Change DC_IN Jack connect type.	Udate CON6 symbol and footprint.	X00.1
11	11	5/23/2008	EE	ME Z-Hing limite, need change RTC type to small size. It need support charge function.	Chnge CON1 footprint and Added R202 1kohm support charge.	X00.1
12	13, 22	5/23/2008	EE	Added USB_MCARD3 detect pin for WWAN card.	Added input port on USSB_MCARD3 and connect to CON15.21	X00.1
13	18	5/23/2008	EE	Memory A and B chanel have same SMBUS address. Change SMBUS address to A4.	Change R147 from pull low to pull up +3.3V_RUN.	X00.1
14	19	5/23/2008	EE	Display Port need chnge to TOP mount type. Change new Connect Footprint.	Change CON7 symbol and Footprint.	X00.1
15	20, 21	5/23/2009	EE	Added SMBUS signal and connection to LCD Connect(J1).	Added SMB_CLK1 form U35.115 to J1.6. SMB_DAT1 from U35.116 to J1.5.	X00.1
16	21, 31	5/23/2009	EE	Remove GPIO diode on GPD0, GPF1 and GPF2.	GPF0 -> SIO_SLP_S3# solve S5 can enter issue. (Remove D0) GPF1 -> IMVP_PWRGD input pin, can't havd diode. (Remove D17) GPF2 -> RESET_OUT# out put pin, don't have leakage concern. (Remove D7 and R110)	X00.1
17	22, 27	5/23/2009	EE	ME define MIC connect on MB side.Remove MIC signal to 100 pin connect. Change those 2 pin for Thermal Diode signal(WWAN).	REM_DIODE6P_7N -> CON15.98 connection to U43.15 REM_DIODE6N_7P -> CON15.99 connection to U43.14	X00.1
18	22	5/23/2009	EE	ID don't support WLAN/WWAN/WPAN LED. Remove LED signal from CON15. Added 1 pin +5VRUN.	Remove out LED_WWAN#/ LED_BT_UWB# / LED_WLAN_OUT#. CON15-21,56 and 87pin	X00.1
19	23	5/23/2009	EE	Change USB connect layout footprint.	Change CN1 schematic symbol and layout footprint. Change CN2 schematic symbol and layout footprint.	X00.1
20	23	5/23/2009	EE	Change E-Sata/USB connect layout footprint. Added detect# signal for detect USB plug in.	Change CON20 E-Sata/USB connect layout footprint. Connection CON20.14 (USB_COM_DETECT#) to EC.	X00.1
21	24	5/23/2009	EE	Sync with ME and EE keyboard Matrix. Update Footprint.	Update CON19 layout footprint and reserve keyboard pin to match M09 keyboard.	X00.1
22	25	5/23/2009	EE	Power LED and System LED need light during S5. Due to S5 state, +5V-ALW will turn off.	Change R431, U42.5, R393, U33.5, R330, U29.5, R404, U40.5 from +5V_ALW to +5V_ALW2.	X00.1
23	21	5/23/2009	EE	Move Back R233 to MB. Reserved GPIO pull up for EC WUI pin.	Move R233 pull up (+3.3V_ALW) to U35.124 Media_INT#.	X00.1
24	9	5/23/2009	EE	Follow Intel Reference Design. Added AC terminal RC.	Added R479 (0.51ohm) and C502 (22uF) on +1.05M_MPLL	X00.1
25	27	5/23/2009	EE	Add R480 100k on 92HD73C pin 13 SENSEA.	Add R480 100k on 92HD73C pin 13 SENSEA.	X00.1
26	32	5/23/2009	P	Change ACIN threshole to 11.9V from 17V	Change PR116 from 365K/F ohm to 240K/F ohm.	X00.1
27	38	5/23/2009	P	Change to +5V_ALW from +5V_ALW2.	Chanage PR3 pin1 to +5V_ALW from +5V_ALW2.	X00.1
28	38	5/26/2009	P	Change CON17 to FLS030HP1 and update footprint.	Change CON17 footprint to fl4sxxxhp1-30p-r	X00.1
29	38	5/26/2009	EE	Follow layout request to exchange signals.	Exchange CP0, CP2, CP3, CP4, CP5, L18 signals for layout request.	X00.1
30	29	5/28/2009	EE	Follow BCM recommand. Change Pin 27 to correct power rail and add 0.1uF*4 for π type filter.	Change U21.27 to U21.30 and Add C509~C512 at +1.2V_LOM.	X00.1
31	9	5/29/2009	EE	Depop R118 to let VCC_HDA connect to GND.	Depop R118 0 ohm.	X00.1
32	25	5/29/2009		The different power rail between MMB and SIO. Need added level circuit.	Added Q48, Q53, Q52, RP22level shift circuit.	X00.1
PROJECT : SS5		DOC. NO. : 204		REV: X00	Title Change List1 QUANTA	
APPROVED BY : Cory Lin		CHECKED BY: Cory Lin		DRAWN BY : Leo Tseng	DATE : May. 19, 2008	Size Document Number SS5 Rev 1A
SHEET 9 OF 11		DATE: Thursday, January 08, 2009		Sheet 42 of 44		

Change List

Item	Page#	Date	T	Issue Description	Solution Description	Rev
				X00.1 change to X01		
33	32	6/10/2008	EE	Change AC_IN volt threshold on 13.5V with a 280K resister of PR116	Change PR116 from 240K to 280K	X01
34	32	6/11/2008	EE	Change to SI7326 for 2.2A charging	Change PQ24 from SI7114DN to SI7326DN	X01
35	32	6/11/2008	EE	No need to populate them	unpop PR1 and PC0	X01
36	35	6/11/2008	EE	Adjust the slew rate of load line	Chagne PR93 and PR66 from 3.83K to 11.8K Chagne PR104 from 1K to 4.99K, PR108 from 3.83K to 6.49K Chagne PC18 from 0.22u to 0.033u, PC21 from 0.022u to 3300P	X01
37	32-36	6/11/2008	EE	Replace 0R/0603 resister by power jumper	Chagne 0R/0603 to power jumper as the SJ1, SJ2, , SJ3, SJ4	X01
38	32-36	6/11/2008	EE	Replace 0R/0606 resister by short	Replace 0R/0606 resister by short as the PR102, PR103, PR59 , PR68	X01
39	34	6/11/2008	EE	Adjust controller Freq on 400K/300K from 200K/300K	PR32 NC and pop PR33	X01
40	20	6/11/2008	EE	Follow ME define Camera routing. Added Camera connect.	Added CON12 camera connect.	X01
41	19	6/11/2008	EE	DVI monitor can not detected by DVI dongle.	Follow Intel reference Board, added MUX to select I2C or AUX signal.	X01
42	3	6/16/2008	EE	Move CPU ITP Debug test pad to bottom side for ICT engineer requirement.	Added T113, T114, T115, T116 and T117 put on Bottom side.	X01
43	6	6/16/2008	EE	Added NB JTAG Debug test pad on bottom side for ICT engineer requirement.	Added T118, T119, T120 and T121 put on Bottom side.	X01
44	8	6/16/2008	EE	Modify +VDD_GFXCORE power enable pin follow intel CRB design.	Added R485, Q55 and R486.	X01
45	21	6/16/2008	EE	Follow Quanta M09 lesson learn. Connect HD_RST# signal to EC for Mute timing control.	Added ICH_AZ_CODEC_RST# connect to SIO(U35.22)	X01
46	21,24	6/22/2008	EE	Follow MRD design added CAP LED circuit.	ITE8512 (U35.88) GPIO for Cap_LED#. Added R453, R450, Q56, Q59 and R446.	X01
47	24	6/22/2008	EE	Change LED_KB circuit. Change to PWM control.	Modify Q39.	X01
48	31	6/22/2008	EE	Solve Bits issue DF225364, CMOS load defalut when disconnect AC.	Added Pull down on RESET_OUT# to avoid ICH_PWRGD glitch in inital state.	X01
49	3	6/22/2008	EE	H_RESET leakage from pull up resisrtor. Follow Intel remove out it.	Depop R300.	X01
50	3	6/24/2008	EE	+3.3V_RUN faster then H_THERM. H_THERMTRIP will cause +3.3V_ALW shut down.	Change R204 to form 1M to 10M. It will delay Q17 turn on timing.	X01
51	21	6/24/2008	EE	SIO_SLP_S3# have glitch from EC when system power up. Add PD resistor to solve it.	Pull down R487 1k ohm at SIO_SLP_S3#.	X01
52	8	6/24/2008	EE	GFX_VR_EN(0.9V) can't meet 2N7002W-7-F(Vgs=1V~2V). Need change to FDV301N(Vgs=0.85V).	Chagne Q55 from 2N7002W-7-F to FDV301N.	X01
53	29	6/25/2008	EE	Follow Crystal test report. Chagne LAN Crystal caps from 22pF to 33pF.	Chagne C272, C305 from 22pF to 33pF.	X01
54	21	6/25/2008	EE	Reserve PLTRST# option at for U35 pin 20 to detect SIO_A20.	Add R488, R489 to option ICH_PME#, PLTRST#.	X01
55	28	6/25/2008	EE	Follow IDT feedback. Change L3, L5 to BLM18BD601SN1D for AP test.	Change L3, L5 to BLM18BD601SN1D.	X01
56	40	6/25/2008	EE	Follow EMI team feedback. Reserve spring for EMI.	Add PV1~PV10.	X01
57	23	6/25/2008	EE	Follow EMI team feedback. Connect USB connecot dip pin to GND.	Connect CN1, CN2 pin 7, 8 to GND.	X01
58	3	6/26/2008	EE	Reserve R490 1M ohm for Q17 compatiable FDV301V.	Add R490 1M ohm and pull up +V1.05S_CPU.	
				X01 change to X02		
1	27	7/22/2008	EE	Change port F to port A for Microsoft default drive support port A only.	Change port F to port A also swap SENSEA, SENSEB circuit.	X02
2	3,5,6,8,11,13 20,21,28,29,31	8/13/2008	EE	Remove 0 ohm.	Remove R173, R430, R354, R239, R282, R405, R178, R243, R244, R277, R47, R488, R132, R203, R152, R153, R311, R16, R19, R30	X02
3	6,9,13,17,18,21 27,29,34,35	8/14/2008	EE	Remove 0 ohm.	R134, R435, R448, R70, R199, R394, PR58, R161, R319, R260, R261, R353, R357, R313, R329, PR56, R61, R322, R323, R335, R337, R383, R106, R43, PR98	X02
4	23	8/15/2008	EE	Change USB choke to DLP11SN900HL2L for Z-high form 1.6mm to 0.6mm.	Change L38, L39, L40 fp and remove R468, R469, R470, R471, R472, R473.	X02
5	26	8/28/2008	EE	System can't shut down during OTP sest to 85 degree C.Follow SDA to modify OTP to 83 degree C.	Change R477 from 562 ohm to 487 ohm.	X02
6	11	8/29/2008	EE	Confirm Safty team to depop D10 and R136 for RTC charge function.	Depop D10 and R136 10k ohm.	X02
7	35	9/3/2008	EE	Changes for cost down (CPU regulator from two to one phase)	Depop PC53, PR67, PR73, FL3, PC100, PC101, PC93, PC97, PC1, PR107, PC92, PQ3, PQ2, PR106, PC94, PL1, PC95, PC3, PR93, PR90, PR101, PR95, PC77, PR88, PC86, PC85, and PR96 Change PR66 from 11.8K to 1.8K, PR104 from 4.99K to 4.02K, PR108 from 6.49K to 1.8K, PC21 from 3300P to 0.01u, PC18 from 0.033 to 0.068, PR81 from 12.7K to 20K, PR87 from 6.81K to 4.99K, PR91 from 1K to 2K Add a resister of PR20(0R)	X02
8	33, 36, 37	9/3/2008	EE	Changes for cost down	Depop PC25, PC105, PC110, PC39 and PC40 Change PQ23 from SI7326DN to SI3424DV, PQ20 from SI7326DN to SI3424DV, PQ22 from SI7114DN to SI7326DN,	X02
						
PROJECT : SS5				DOC. NO. : 204	REV: X00	<div>TitleChange List1QUANTA</div> <div>SizeDocument NumberSS5COMPUTER</div> <div>Date: Thursday, January 08, 2009Sheet43 of 44</div>
APPROVED BY : Cory Lin				CHECKED BY: Cory Lin	DRAWN BY : Leo Tseng	
				DATE : May. 19, 2008	SHEET 9 OF 11	

Change List

Item	Page#	Date	T	Issue Description	Solution Description	Rev																		
9	38	9/3/2008	PR	Reserve a protection circuit to avoid vottage variation of input (13<Vin<20)	Add some parts of PR492, Pr493, PR491, PD35, PD36, PQ51, PQ61 and PQ62	X02																		
10	21	9/4/2008	EE	H/W workaround for DOS re-boot commend.	Depop R489 and Pop R488 0 ohm resistor.	X02																		
11	6, 8, 20, 21	9/4/2008	EE	Remove R250, R467, R157 0 ohm.	Remove R250, R467, R157 0 ohm.	X02																		
12	22	9/8/2008	EE	Reserve DMIC DATA/CLK to Minipcie board.	Reserve DMIC DATA/CLK to CON15 pin 56, 93	X02																		
13	33	9/8/2008	EE	Short PJP6 for thermal module have latch in Power jump.	Remove PJP6 and change +1.8V_RUN_P to +1.8V_SUS.	X02																		
14	18	9/8/2008	EE	Add C515 for memory +1.5V_MD.	Add C515 for memory +1.5V_MD.	X02																		
15	23	9/8/2008	EE	To fix USB charge on Blackberry and Ipod in S5 issue.	Change U46 to MAX4983E. Add R491, R492, R493, R494, C516, R495, R496, R497. Remove ESD2.	X02																		
16	20	9/15/2008	EE	Supply DPST function	Depop R270 and Pop R271 resistor.	X02																		
17	21	9/15/2008	EE	For cost down ,remove debug LED	Depop R83,R112,R198,LED0,LED1,LED2	X02																		
X02 change to X02.1																								
18	38	9/18/2008	EE	For Safty to add fuse at battery connector.	Add FS3 at CON17	X02.1																		
19	6, 21	9/26/2008	EE	Add L_BKLT_EN connect NB's L_BKLT_EN and EC pin 48 to slove LCD can't dispaly issue.	Add L_BKLT_EN connect U6 pin C37 to EC pin 48.	X02.1																		
20	17, 18	10/02/2008	EE	Follow Intel feedback. Each DRAM device needs to have its own ZQ cal resistor.	Add R498~R505 240 ohm to DRAM U23, U24, U25, U26, U36, U37, U38, U39.	X02.1																		
21	21	10/07/2008	EE	Change BID from X02 to X02.1	Depop R102, R100, R126 and pop R109, R126, R127 100k ohm.	X02.1																		
22	13	10/07/2008	EE	Re-add ICH_SMLINK0/1 PU resistor and reserve R260, R261.	Reserve and depop R260, R261 0 ohm and Add RP8 PU resistor for ICH_SMLINK0/1.	X02.1																		
23	38	10/08/2008	EE	Confimr Power team to remvoee fuse. fuse move on battery.	Rmove FS3 and short by shape.	X02.1																		
24	33	10/16/2008	PR	rise center voltage from 1.79V to 1.82V	change PR36 from 12.4KF to 15.8KF, and PR35 from 10KF to 12.4K, and pop PC39	X02.1																		
25	35	10/16/2008	PR	PL2 is not in PSL, so channg it to Toko which is in PSL. And adjust some values for PL2's change.	change PR92 from 97.6K to 200K, PR91 from 2K to 499R, PR104 from 4.02K to 2K, PR108 from 1.8K to 2.61K, PC21 from 0.01uF to 0.1uF, PC18 from 0.068uF to 0.022uF, pop PC3	X02.1																		
X02.1 change to A00																								
1	27	11/10/2008	EE	Change TPA6040A4 GAIN from 15.6dB to 6dB for speaker midified.	Depop R296 and pop R295 100k ohm.	A00																		
2	21	11/10/2008	EE	Change Board ID to A00.	Depop R217 and pop R100 10k ohm.	A00																		
3	3, 34	11/10/2008	EE	Remove PJP0, PJP2 and short by trace for 1.05V, 1.5V.	Remove PJP0, PJP2 and short by trace for 1.05V, 1.5V.	A00																		
4	36	11/10/2008	EE	Remove PJP1, PJP3 and short by trace for 3.3V, 5V.	Remove PJP1, PJP3 and short by trace for 3.3V, 5V.	A00																		
5	34, 36	11/10/2008	EE	Remove PJP4, PJP5 and short by trace for +PWR_SRC.	Remove PJP4, PJP5 and short by trace for +PWR_SRC.	A00																		
6	33	11/10/2008	EE	Remove PJP8 and short by trace. Change PU4.1, PU4.2 to +1.5V_MEM.	Remove PJP8 and short by trace. Change PU4.1, PU4.2 to +1.5V_MEM.	A00																		
7	36	12/22/2008	EE	Rising up OCP point to cover second source controller IC of PU0	Change PR11 from 110k ohm to 147k ohm.	A00																		
8	33	12/22/2008	EE	Remove R451 0 ohm and short by trace. Change 0.75V_P to for +0.75V_DDR_VTT.	Remove R451 0 ohm and short by trace. Change 0.75V_P to for +0.75V_DDR_VTT.	A00																		
9	33	12/29/2008	EE	Remove R451 will effect DDR reference voltage trace.	Restore the R451 0 ohm.	A00																		
10	33, 34	12/29/2008	P	Remove PR118, PR117 0 ohm and short by trace. Change S5_1.8V to SUS_ON, S3_1.8V to RUN_ON.	Remove PR118, PR117 0 ohm and short by trace. Change S5_1.8V to SUS_ON, S3_1.8V to RUN_ON.	A00																		
11	33	12/29/2008	P	Remove PR29 0 ohm and short by trace. Remove PR30 *0_NC and NC.	Remove PR29 0 ohm and short by trace. Remove PR30 *0_NC and NC.	A00																		
12	34	12/29/2008	P	Remove PR34, PR47, PR49, PR55 0 ohm and short by trace. Change EN_2 to RUN_ON.	Remove PR34, PR47, PR49, PR55 0 ohm and short by trace. Change EN_2 to RUN_ON.	A00																		
13	34	12/29/2008	P	Remove PR33 0 ohm and short by trace. Remove PR32, PR37 *0_NC and NC.	Remove PR33 0 ohm and short by trace. Remove PR32, PR37 *0_NC and NC.	A00																		
14	36	12/29/2008	P	Remove PR85, PR83, PR12 0 ohm and short by trace. Remove PR10 *0_NC and NC.	Remove PR85, PR83, PR12 0 ohm and short by trace. Remove PR10 *0_NC and NC.	A00																		
15	36	12/29/2008	P	Remove PR13, PR17 0 ohm and short by trace. Remove PR16 *0_NC and NC.	Remove PR13, PR17 0 ohm and short by trace. Remove PR16 *0_NC and NC.	A00																		
16	36	12/29/2008	P	Remove PR9 0 ohm and short by trace. Remove PR6, PR7 *0_NC and NC.	Remove PR9 0 ohm and short by trace. Remove PR6, PR7 *0_NC and NC.	A00																		
17	36	12/29/2008	P	Change PR79, PR80 to short jump SJ5, SJ6.	Change PR79, PR80 to short jump SJ5, SJ6.	A00																		
18	25	12/29/2008	EE	Change Power/System LED resistor from 220 to 1k ohm to reduce LED brightness.	Change R360 , R382, R366, R442 from 220 to 1k ohm.	A00																		
19	27	12/29/2008	EE	Follow Dell request. Change TPA6040A4 GAIN from 6dB to 10dB for speaker midified.	Depop R168 and pop R167 100k ohm.	A00																		
20	9, 14, 27	01/05/2009	EE	Change GMH, ICH, IDT HDA power to 1.5V for slove HDMI no sound issue.	Depop R117 and pop R118 0 ohm. Change U41.3, R101.1 to +1.5V_RUN and R120.1 to +V1.5_MD.	A00																		
21	21	01/06/2009	EE	HDA bus are +1.5V power rail. The ICH_AZ_CODEC_RST# also need add level shift to connect EC.	Add R506 100k ohm , R507 390k ohm, C135 0.1uF, Q60 3904, Q61 2N7002.	A00																		
22	20	02/05/2009	EE	Add DPST funtion in ST build.	Depop R271 10k ohm and pop R269 0 ohm.	A00																		
23	21	02/05/2009	EE	Remove C135 to reduce Q60 pin 2 rise time. It will effect ICH_AZ_CODEC_RST2# asserted.	Depop C135 0.1uF.	A00																		
24	27	02/05/2009	EE	Follow Speaker Vendor NXP to moidfy AMP caps.	Change C33, C34 from 0.033U to 0.0047U and C140, C149 from 0.033U to 0.0047U.	A00																		
25	19	02/05/2009	EE	Diode causing voltage drop. The VGA controller on the dongle goes into reset and stops functioning	Change D14 Diode to Fuse 0805L100WR and there is no voltage drop on VGA controller.	A00																		
26	20	02/23/2009	EE	LCD self test function lose (D + Power Button) when enable DPST function.	Pop R270 0 ohm and change R260 to 100 ohm.																			
					<div><div>QUANTA COMPUTER</div></div> <table><tr><td colspan="2">Title</td><td colspan="2">Change List1</td><td colspan="2">QUANTA</td></tr><tr><td>Size</td><td>Document Number</td><td>SS5</td><td></td><td>Rev</td><td>1A</td></tr><tr><td colspan="2">Date:</td><td colspan="2" rowspan="4">Monday, February 23, 2009</td><td>Sheet</td><td>44 of 44</td></tr></table>	Title		Change List1		QUANTA		Size	Document Number	SS5		Rev	1A	Date:		Monday, February 23, 2009		Sheet	44 of 44	
Title		Change List1		QUANTA																				
Size	Document Number	SS5		Rev	1A																			
Date:		Monday, February 23, 2009		Sheet	44 of 44																			
PROJECT : SS5				DOC. NO. : 204			REV: A00																	
APPROVED BY : Cory Lin				CHECKED BY: Cory Lin			DRAWN BY : Leo Tseng			DATE : May. 19, 2008			SHEET 9 OF 11											