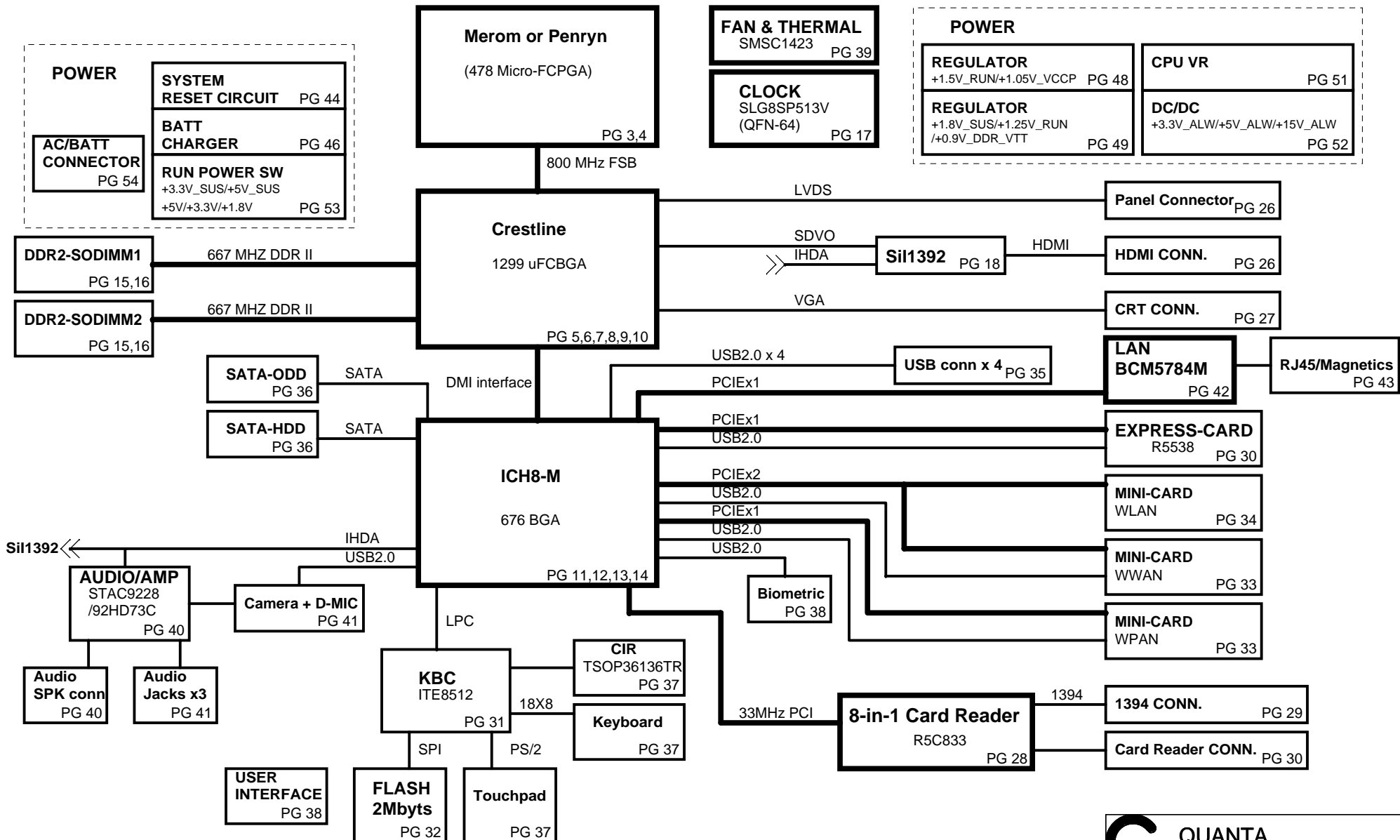
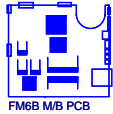



FM6B Hepburn Intel UMA VER : 3B

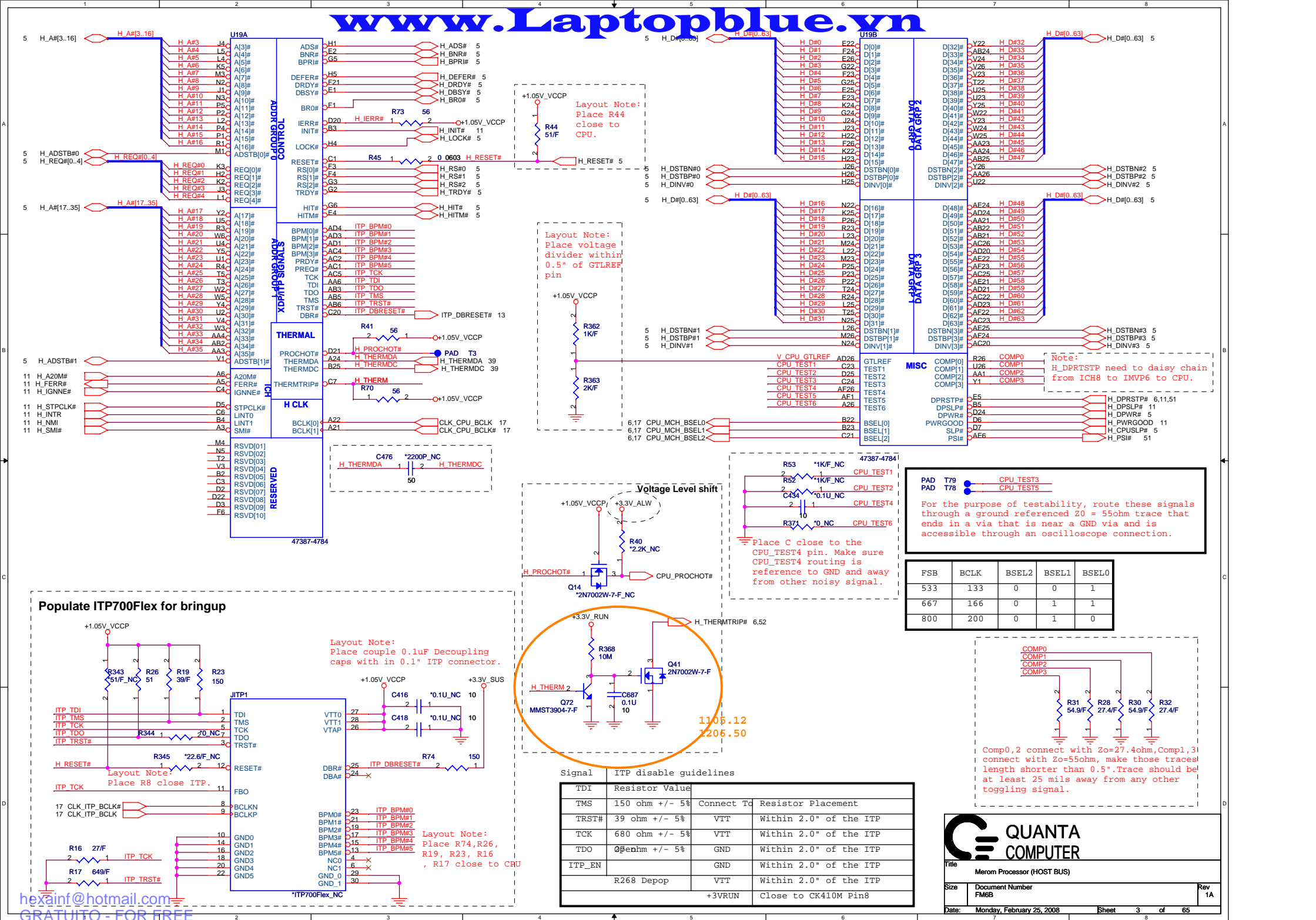


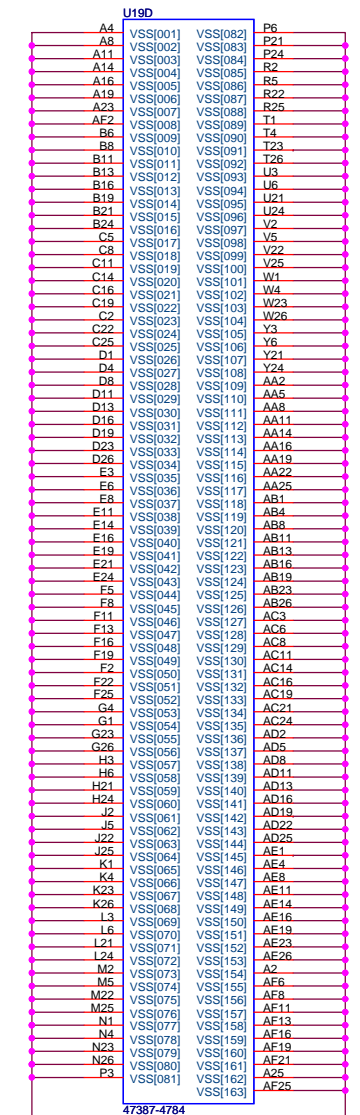
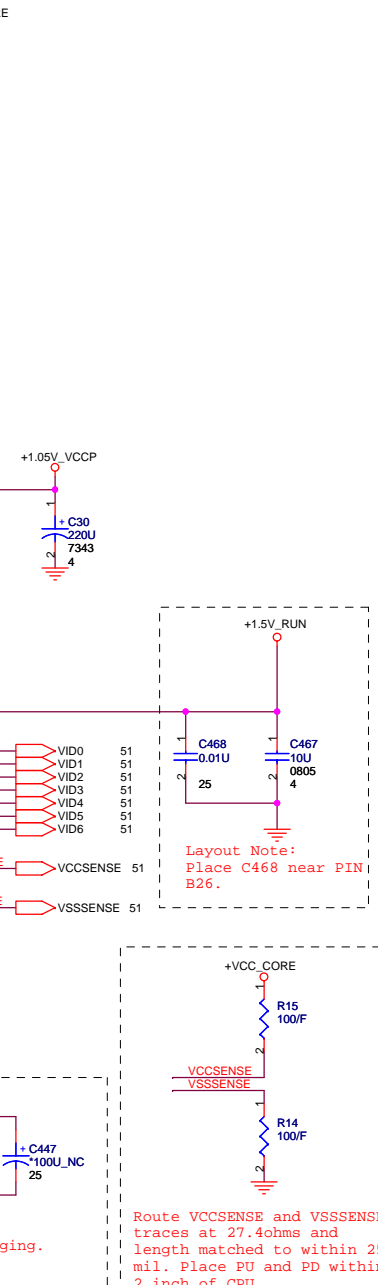
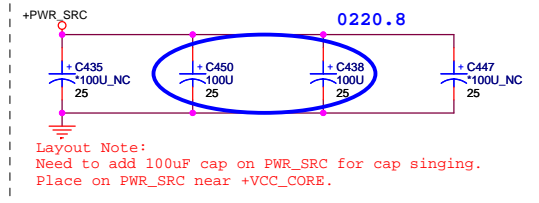
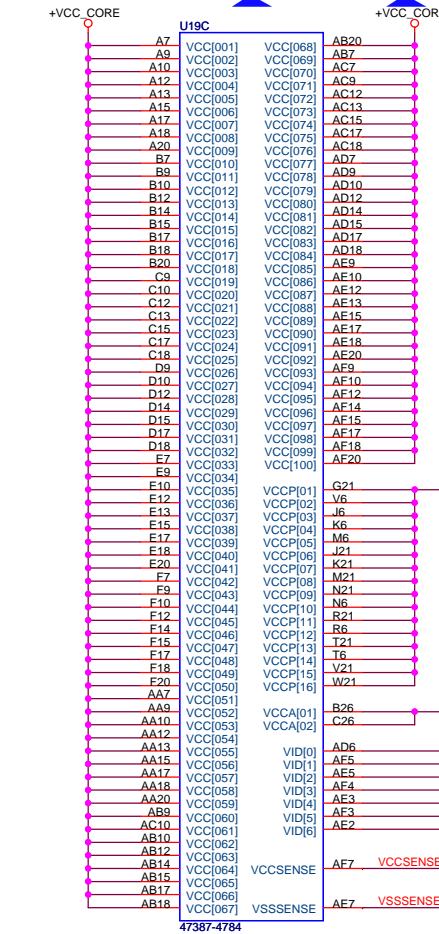
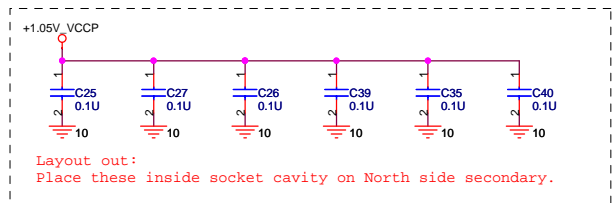
PAGE	DESCRIPTION
1	Schematic Block Diagram
2	Front Page
3-4	Merom
5-10	Crestline
11-14	ICH8M
15-16	DDRII SO-DIMM(200P)
17	Clock Generator
18	HDMI
23	LCD Conn. & SSP
24	CRT Conn
25	SATA Conn
26-27	CARD READER/Conn & 1394
28	Express Card & Smart Card
29-30	Mini Card
31	SIO (ITE8512)
32	FLASH/RTC
33	USB
35	TP / KEYBOARD
36	SWITCH /LED
37	FAN & Thermal
38-39	Audio CODEC(ALC888)/Phone Jack
40-41	LOM / Switch
44	System Reset Circuit
46	Battery Selector & Charger
48	1.05VCCP / 1.5VRUJN
49	DDR2_1.8VSUS, 0.9V
51	CPU_ISL6266(2phase)
52	MAX8744 (+5.5V,+3.3V)
53	RUN Power Switch
54	DCIN,Batt
55	PAD& SCREW
56	EMI CAP
57	SMBUS BLOCK
58	Power Block Dianram

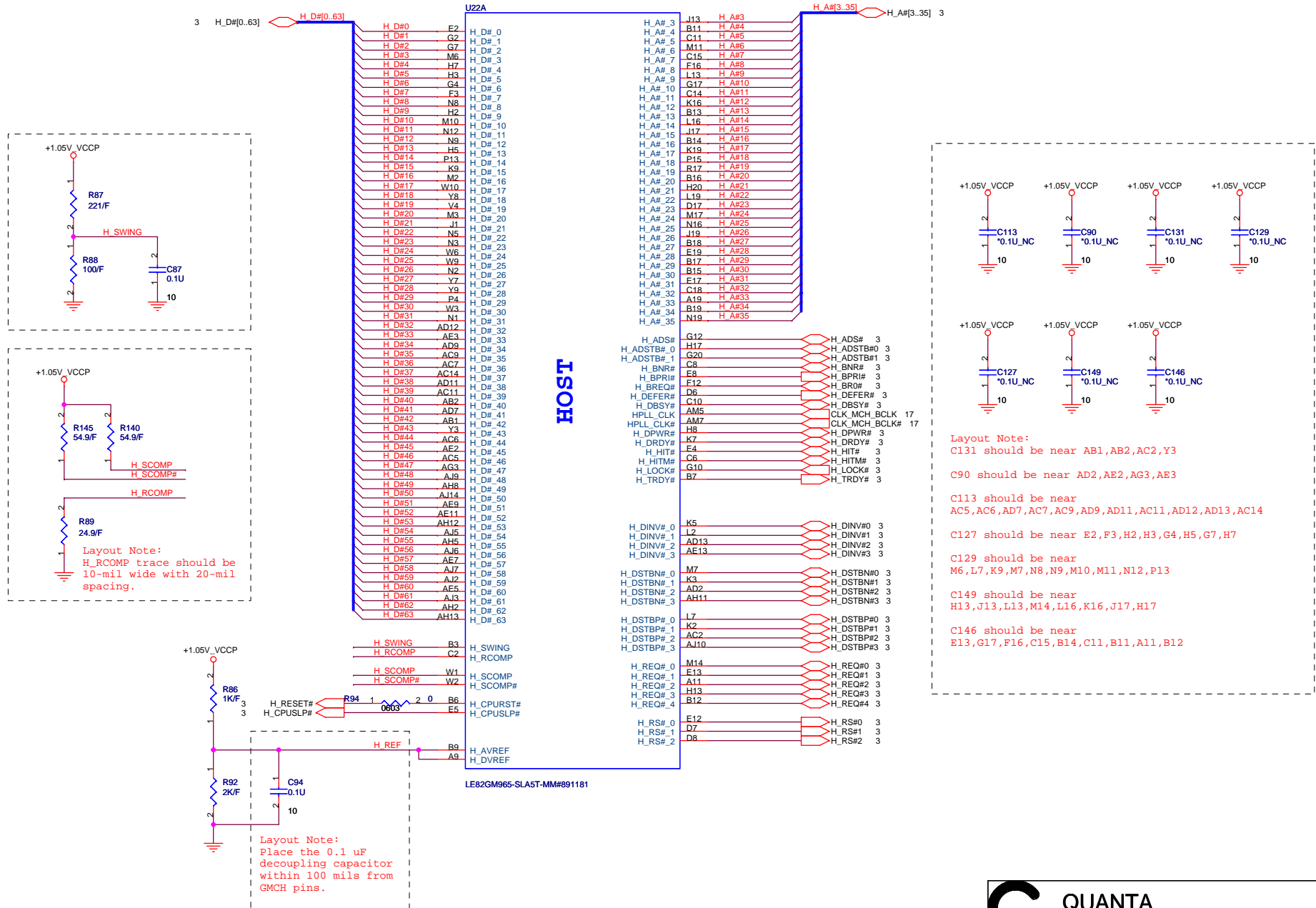
POWER PLANE	VOLTAGE	PAGE	DESCRIPTION	CONTROL SIGNAL	ACTIVE IN
+PWR_SRC	10V~+19V	4,26,32,34,46,48,49,51,52,56	MAIN POWER		S0~S5
+RTC_CELL	+3.0V~+3.3V	11,14,31,32	RTC		S0~S5
+3.3V_ALW	+3.3V	3,31,32,34,36,37,38,44,46,49,52,53,54	8051 POWER	ALWON	S0~S5
+5V_ALW	+5V	35,36,46,48,49,52,53,54,56	LCD/CHARGE POWER	ALWON	S0~S5
+15V_ALW	+15V	26,36,37,52,53	LARGE POWER	+5V_ALW	S0~S5
+3.3V_LAN	+3.3V	42,43	LAN POWER	AUX_ON	
+5V_SUS	+5V	14,38,51,53	SLP_S5# CTRLD POWER	SUS_ON	
+3.3V_SUS	+3.3V	3,11,12,13,14,26,30,37,38,43,48,49,51,53	SLP_S5# CTRLD POWER	3.3V_SUS_ON	
+1.8V_SUS	+1.8V	6,8,9,15,48,49,53	SODIMM POWER	DDR_ON	
+0.9V_DDR_VTT	+0.9V	16,49,53	SODIMM POWER	0.9V_DDR_VTT_ON	
+5V_RUN	+5V	14,18,27,36,37,38,39,40,41,53	SLP_S3# CTRLD POWER	RUN_ON	
+3.3V_RUN	+3.3V	14,18,27,36,37,38,39,40,41,53	SLP_S3# CTRLD POWER	3.3V_RUN_ON	
+1.8V_RUN	+1.8V	18,38,53	SDVO POWER	RUN_ON	
+1.5V_RUN	+1.5V	4,9,14,30,33,34,48,53,56	CALISTOGA/ICH8 POWER	1.5V_RUN_ON	
+1.25V_RUN	+1.25V	6,9,14,49,53	CALISTOGA/ICH8 POWER	1.25V_RUN_ON	
+1.05V_VCCP	+1.05V	3,4,5,6,8,9,11,14,48,56	CPU/CALISTOGA/ICH8 POWER	1.05V_RUN_ON	
+VCC_CORE	+0.7V~+1.77V	4,51,56	CPU CORE POWER	IMVP_VR_ON	
+LCDVCC	+3.3V	26	LCD Power	LCDVCC_TST_EN & ENVDD	
+5V_MOD	+5V	36	Module Power	MODC_EN#	
+5V_HDD	+5V	36	HDD Power	HDDC_EN#	
+PBATT	+10V~+17V		MAIN BATTERY	CHG_PBATT	
+SBATT	+10V~+17V		SECOND BATTERY	CHG_SBATT	

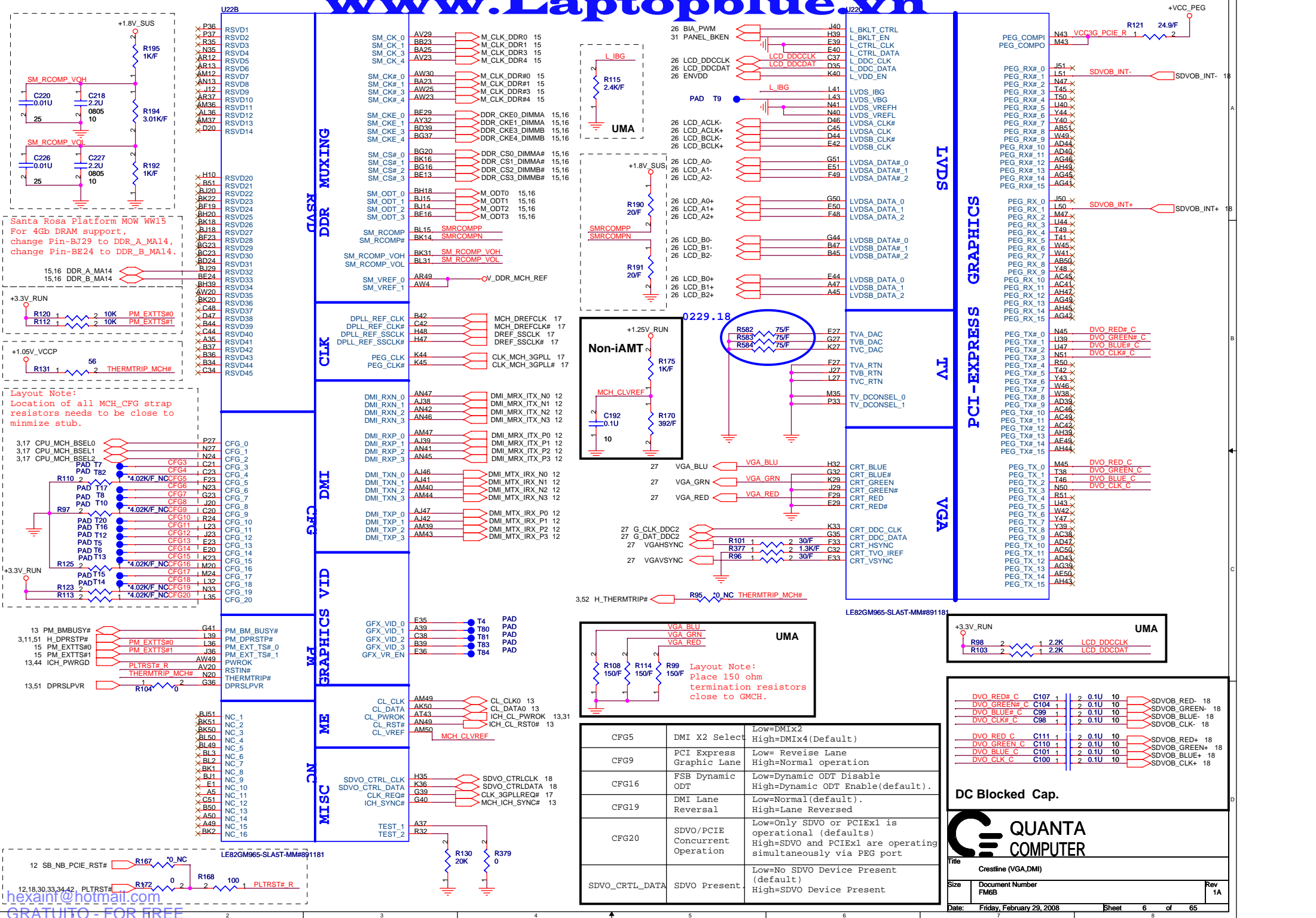
GND PLANE	PAGE	DESCRIPTION
⏚ 8731AGND	46	
⏚ AGND_0.9V	49	
⏚ AGND_DC/DC	52	
⏚ AGND_DC2	48	
⏚ AGND_DDR	49	
⏚ AGND_ISL6260	51	
⏚ GND	ALL	

 QUANTA COMPUTER		
Title Index & Power Status		
Size	Document Number FM6B	Rev 1A
Date: Wednesday, February 27, 2008	Sheet 2	of 65





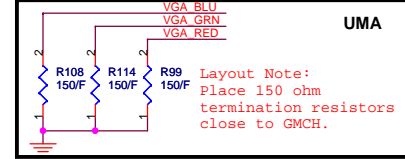




Santa Rosa Platform MOW WW15
For 4Gb DRAM support,
change Pin-BJ29 to DDR_A_MA14,
change Pin-BE24 to DDR_B_MA14.

Layout Note:
Location of all MCH_CFG strap
resistors needs to be close to
minimize stub.

0229.18



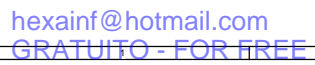
CFG5	DMI X2 Select	Low=DMiX2 High=DMiX4(Default)
CFG9	PCI Express Graphic Lane	Low= Reverse Lane High=Normal operation
CFG16	FSB Dynamic ODT	Low=Dynamic ODT Disable High=Dynamic ODT Enable(default).
CFG19	DMI Lane Reversal	Low=Normal(default). High=Lane Reversed
CFG20	SDVO/PCIE Concurrent Operation	Low=Only SDVO or PCIEx1 is operational (defaults) High=SDVO and PCIEx1 are operating simultaneously via PEG port
SDVO_CTRL_DATA	SDVO Present	Low=No SDVO Device Present (default) High=SDVO Device Present

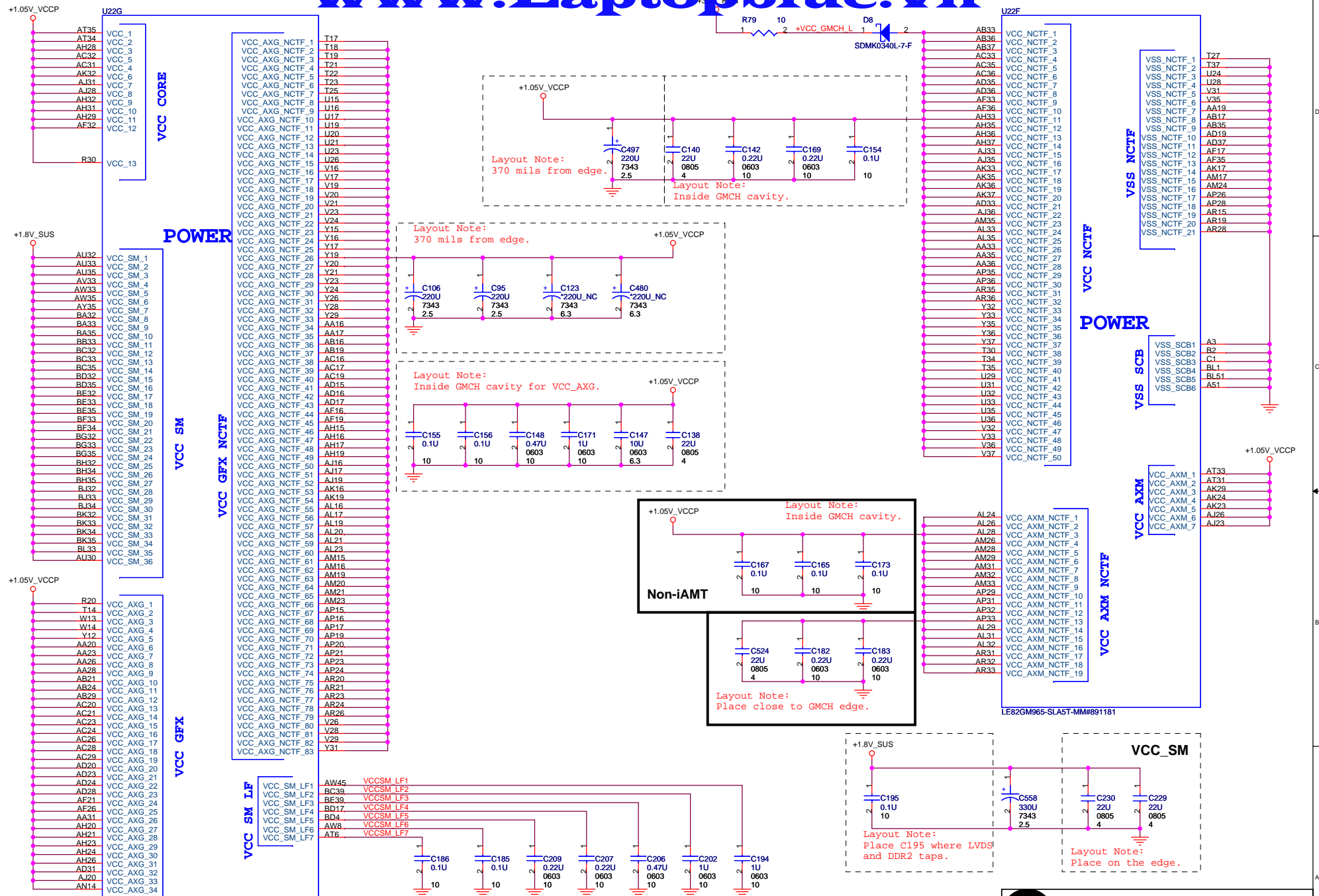
DVO RED# C	C107	1	2	0.1U	10	SDVOB_RED- 18
DVO GREEN# C	C104	1	2	0.1U	10	SDVOB_GREEN- 18
DVO BLUE# C	C99	1	2	0.1U	10	SDVOB_BLUE- 18
DVO CLK# C	C98	1	2	0.1U	10	SDVOB_CLK- 18
DVO RED# C	C111	1	2	0.1U	10	SDVOB_RED+ 18
DVO GREEN# C	C110	1	2	0.1U	10	SDVOB_GREEN+ 18
DVO BLUE# C	C101	1	2	0.1U	10	SDVOB_BLUE+ 18
DVO CLK# C	C100	1	2	0.1U	10	SDVOB_CLK+ 18

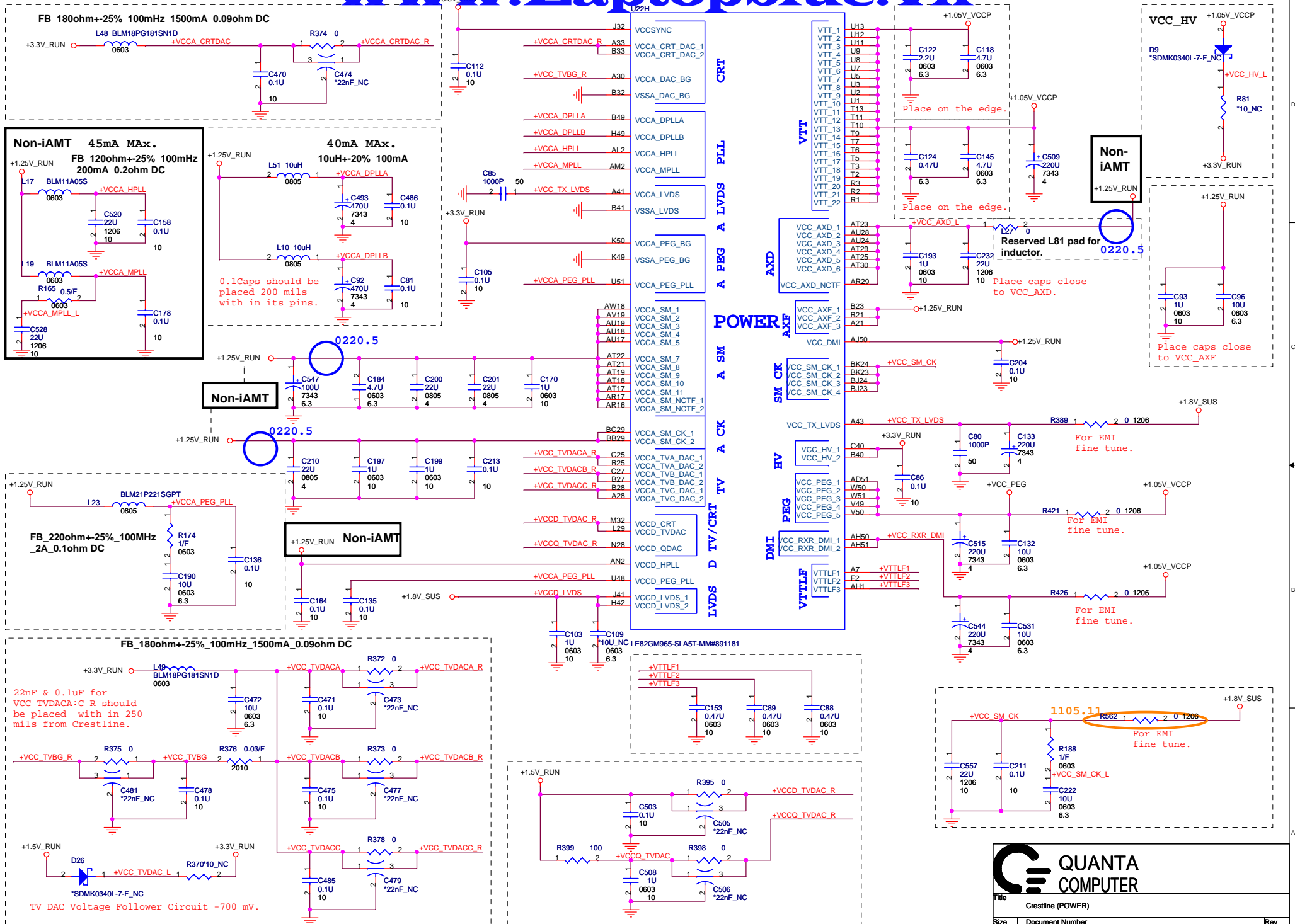
DC Blocked Cap.

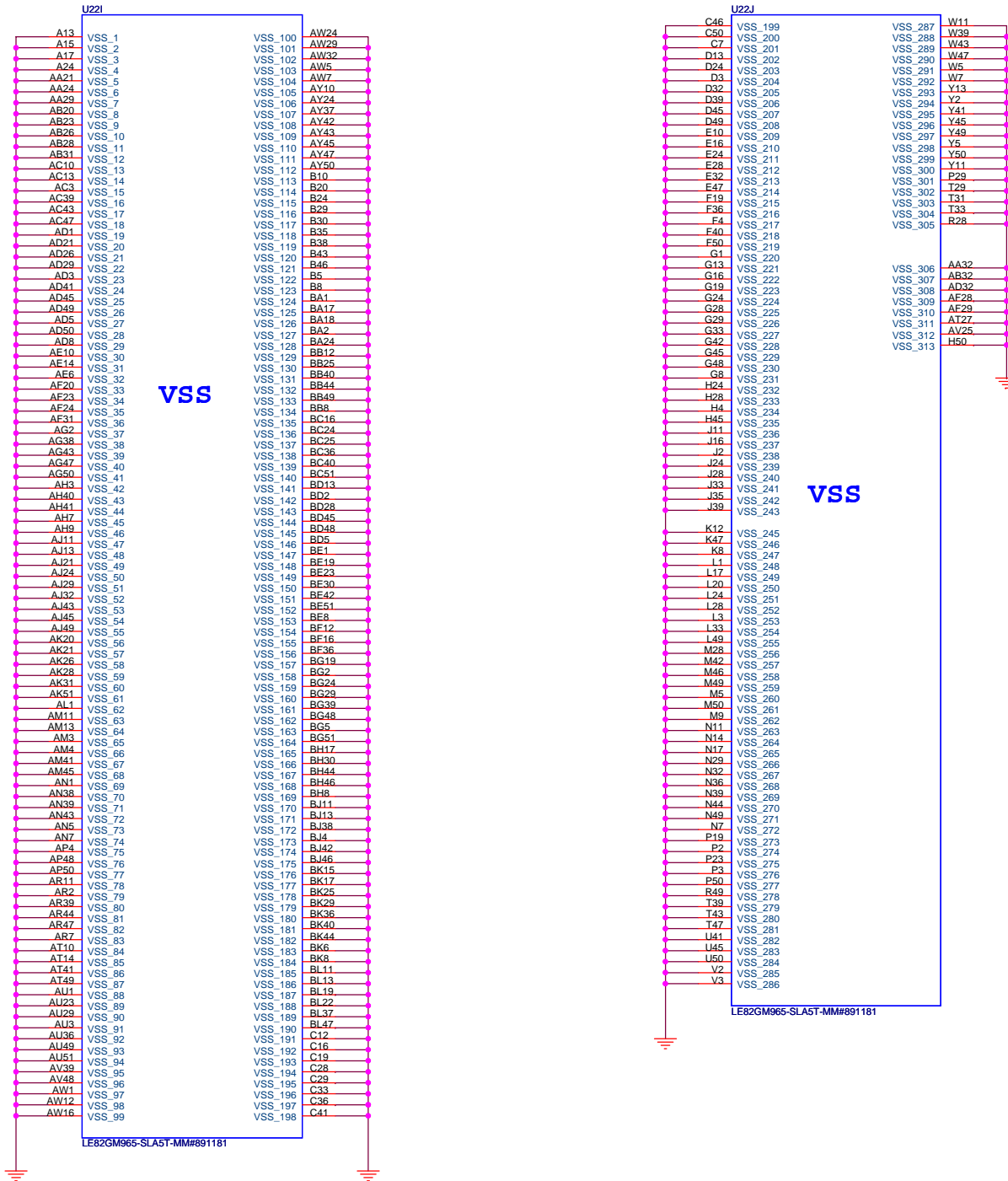


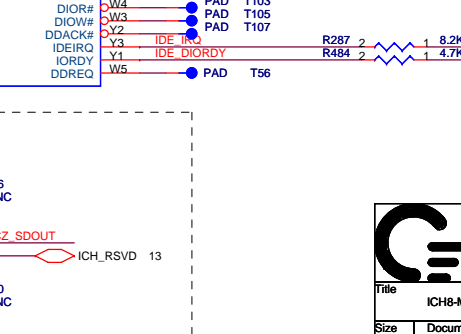
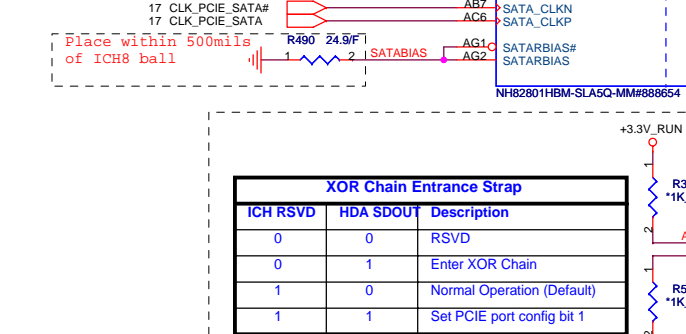
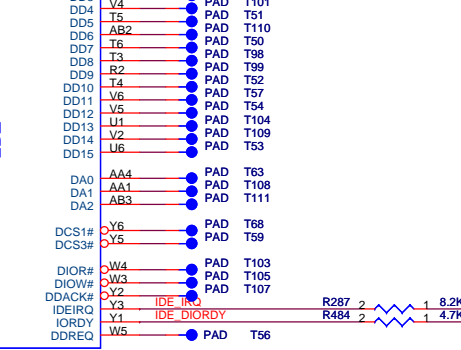
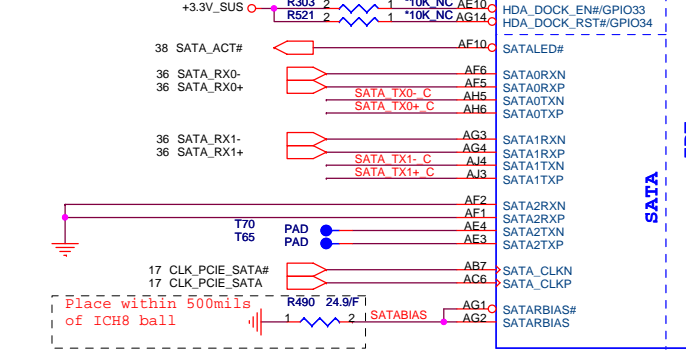
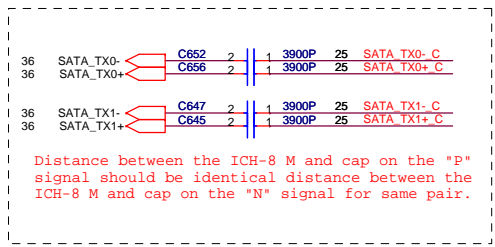
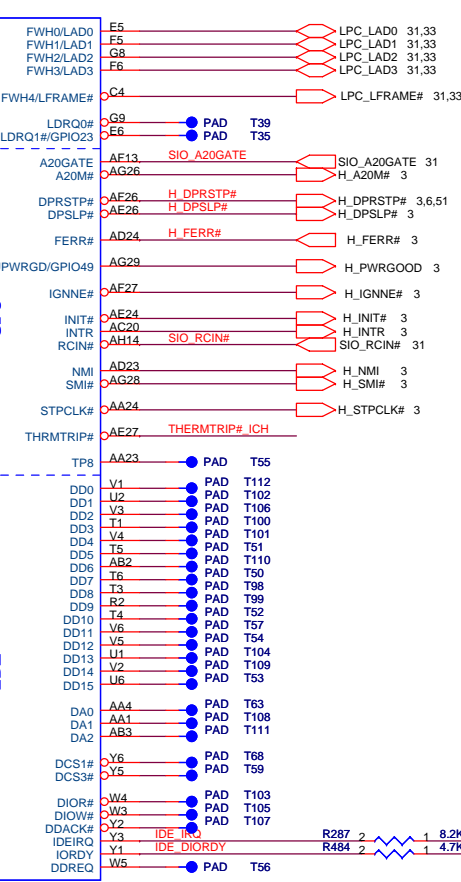
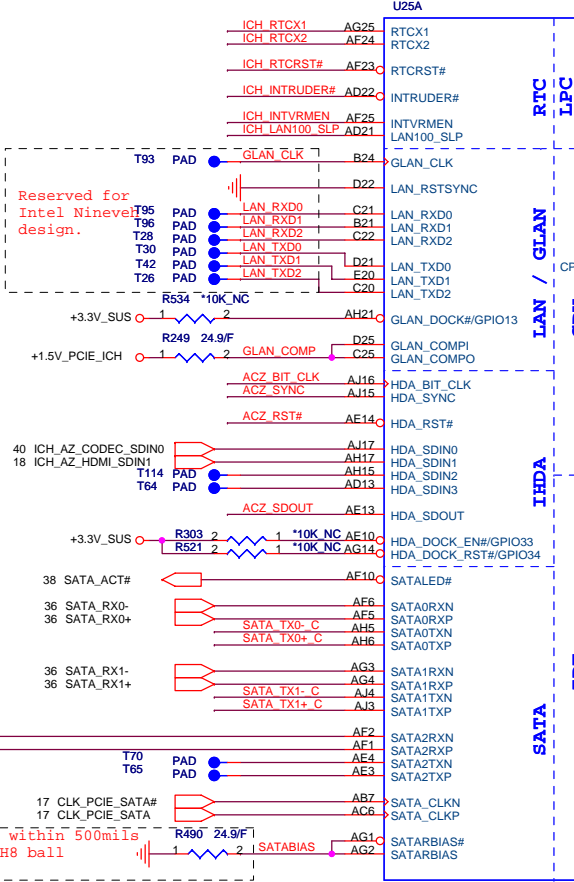
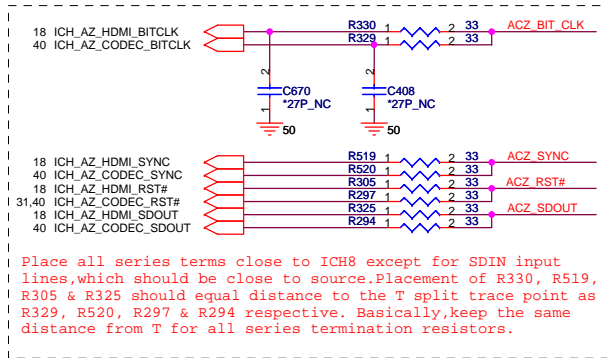
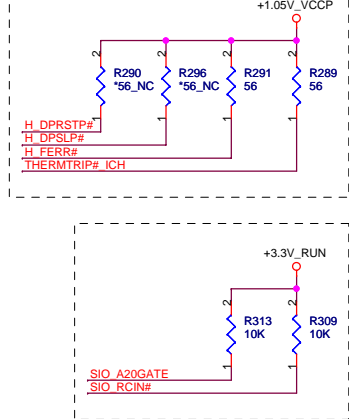
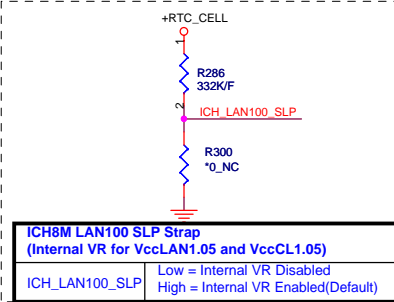
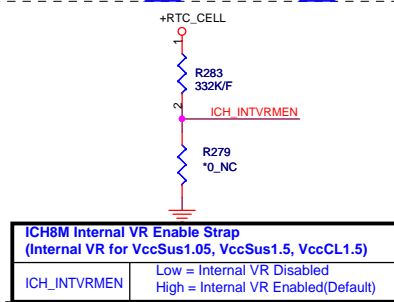
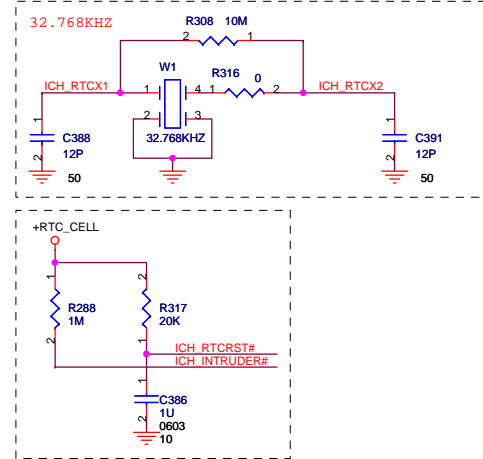
Title	Crestline (VGA,DMI)
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Sheet	6 of 65
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ICH RSVD	HDA SDOUT	Description
0	0	RSVD
0	1	Enter XOR Chain
1	0	Normal Operation (Default)
1	1	Set PCIE port config bit 1

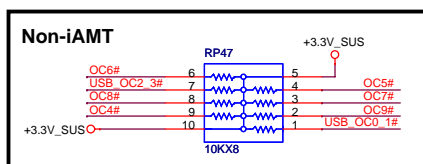
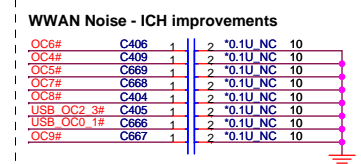
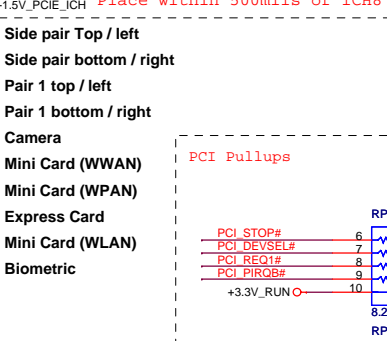
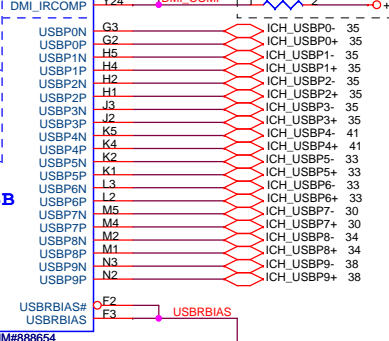
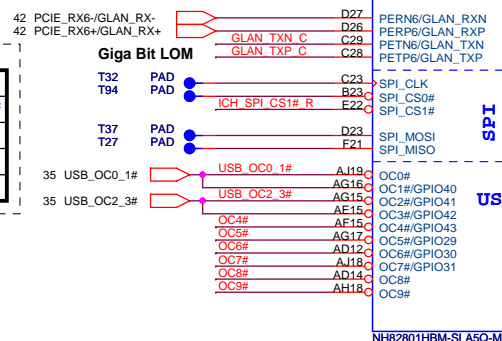
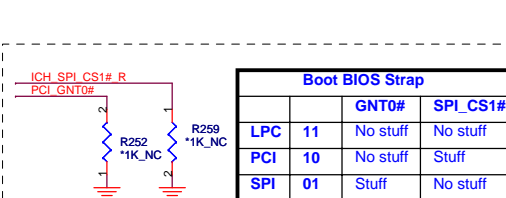
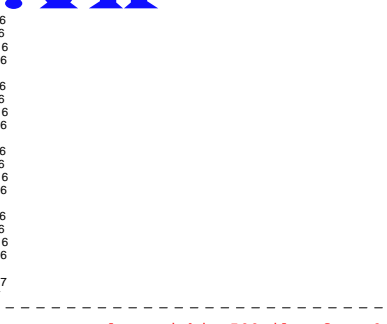
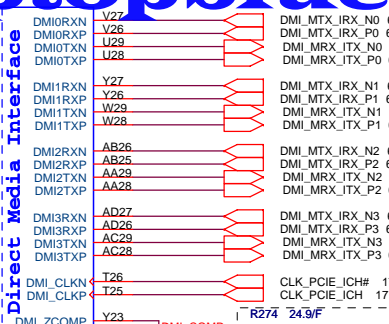
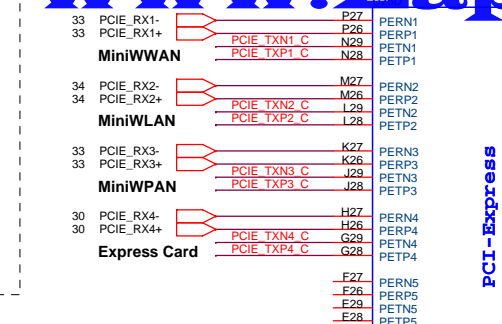
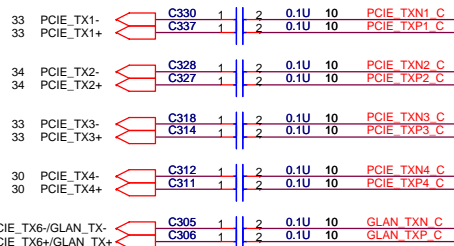
QUANTA COMPUTER

Title: ICH8-M (CPU,IDE,SATA,LPC,AC97,LAN)

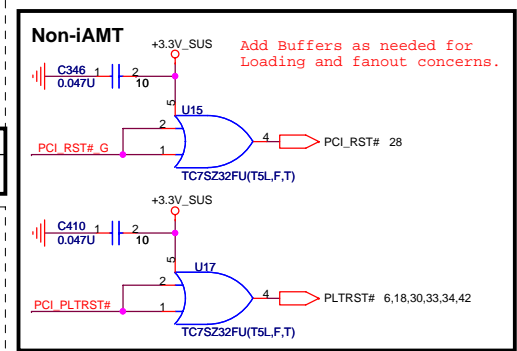
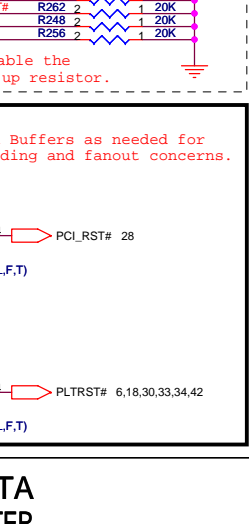
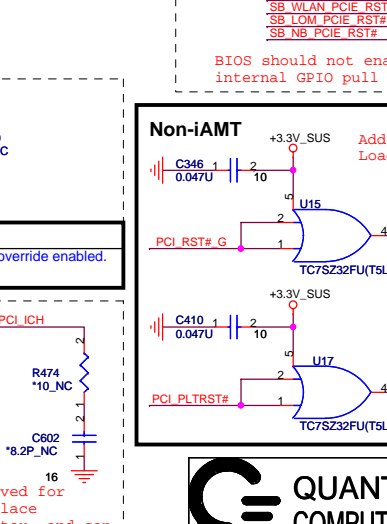
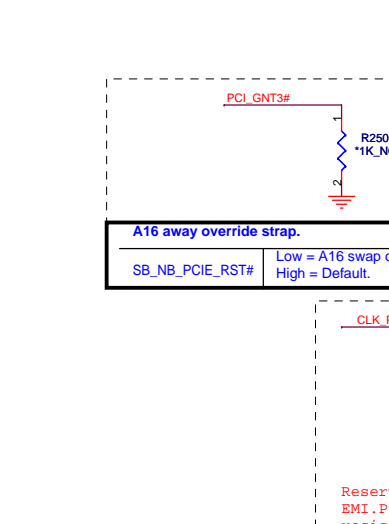
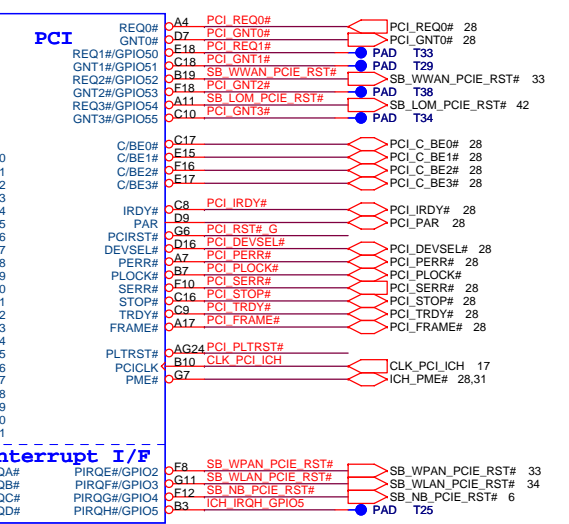
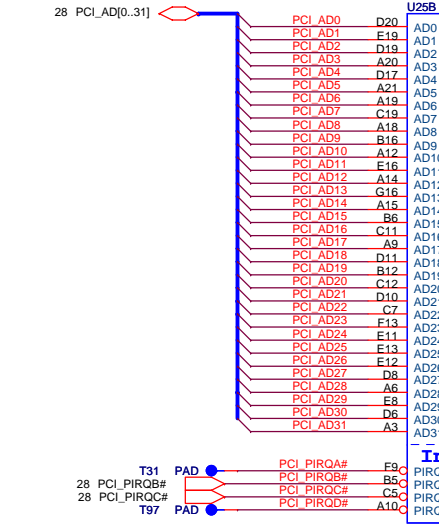
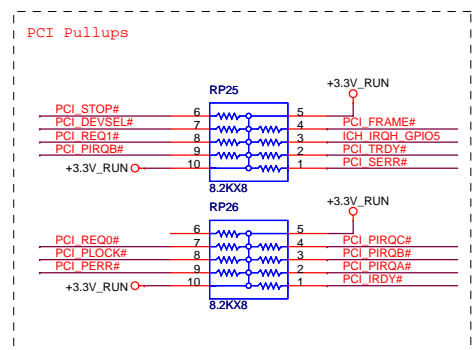
Size: Document Number FM6B Rev 1A

Date: Friday, February 22, 2008 Sheet 11 of 65

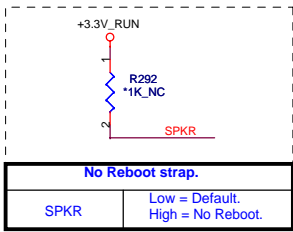
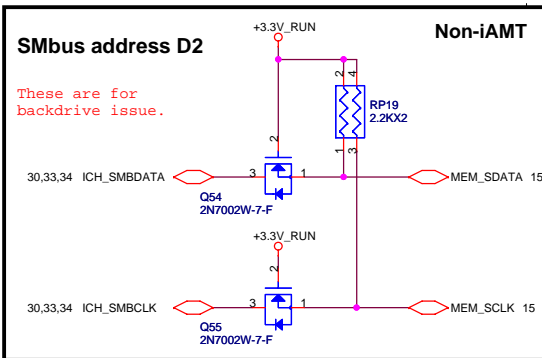
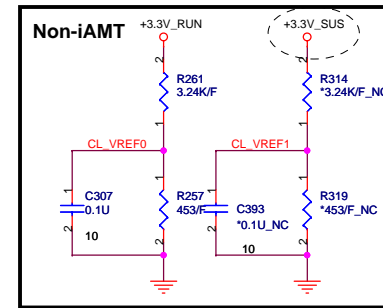
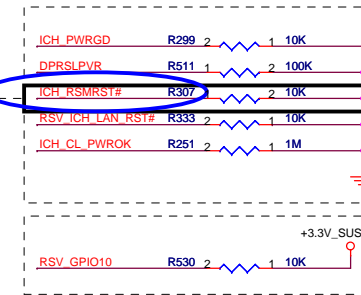
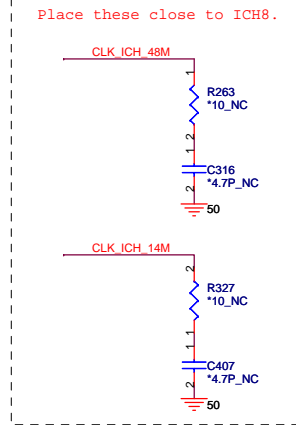
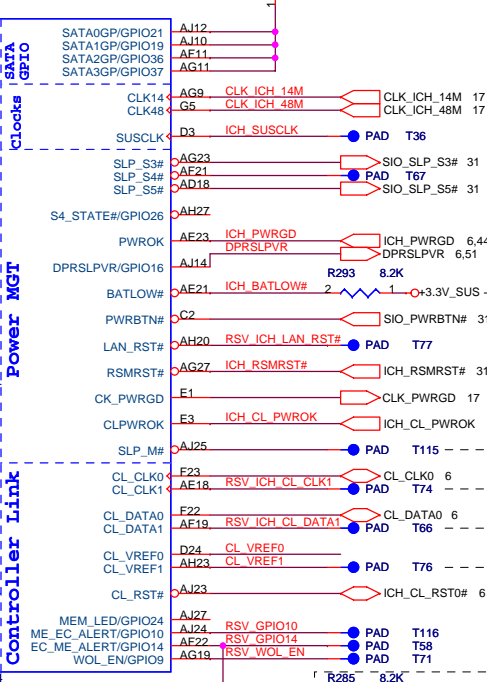
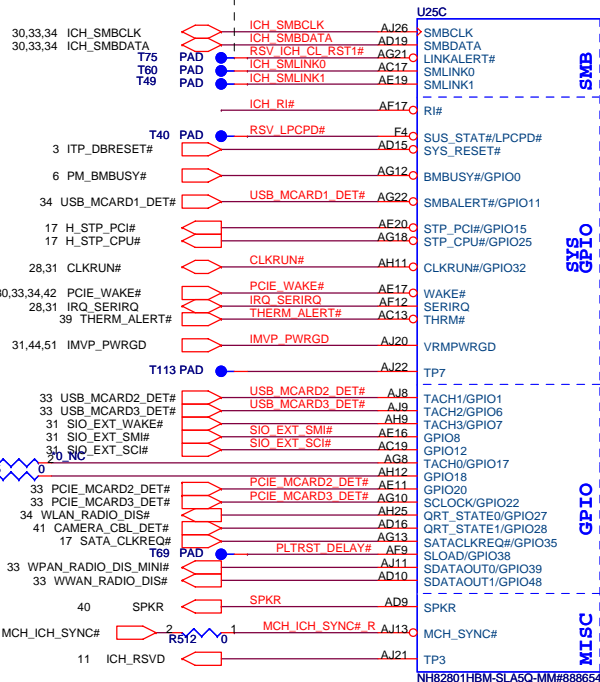
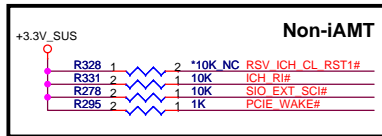
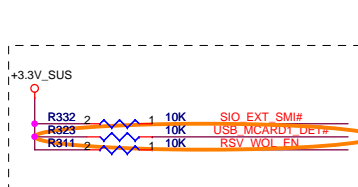
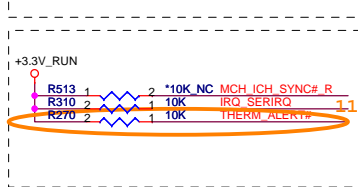
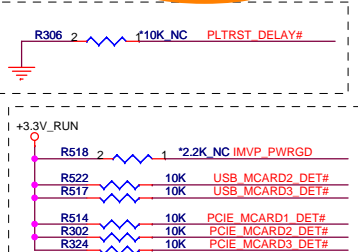
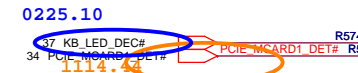
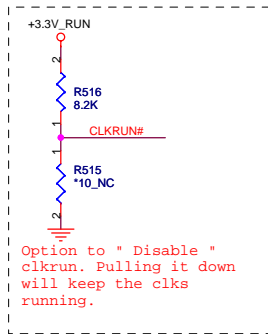
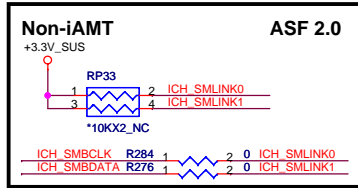
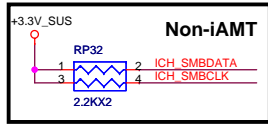
Place TX DC blocking caps close ICH8.

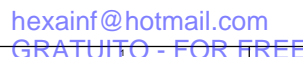


Short F2 and F3 at the package and keep length to less than 500mils. Trace Impedance should be 60ohms +/- 15%.

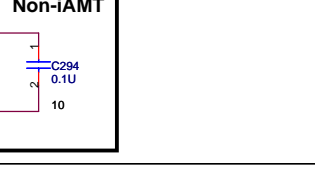
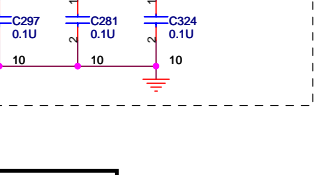
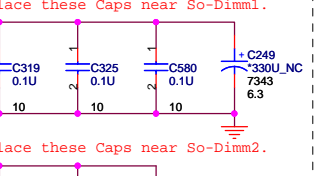
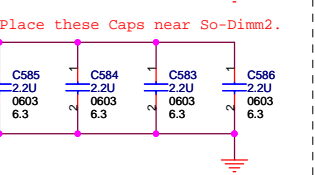
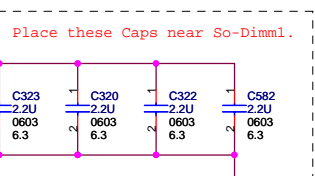
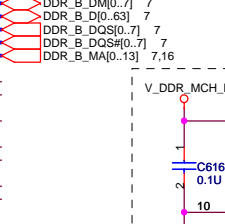
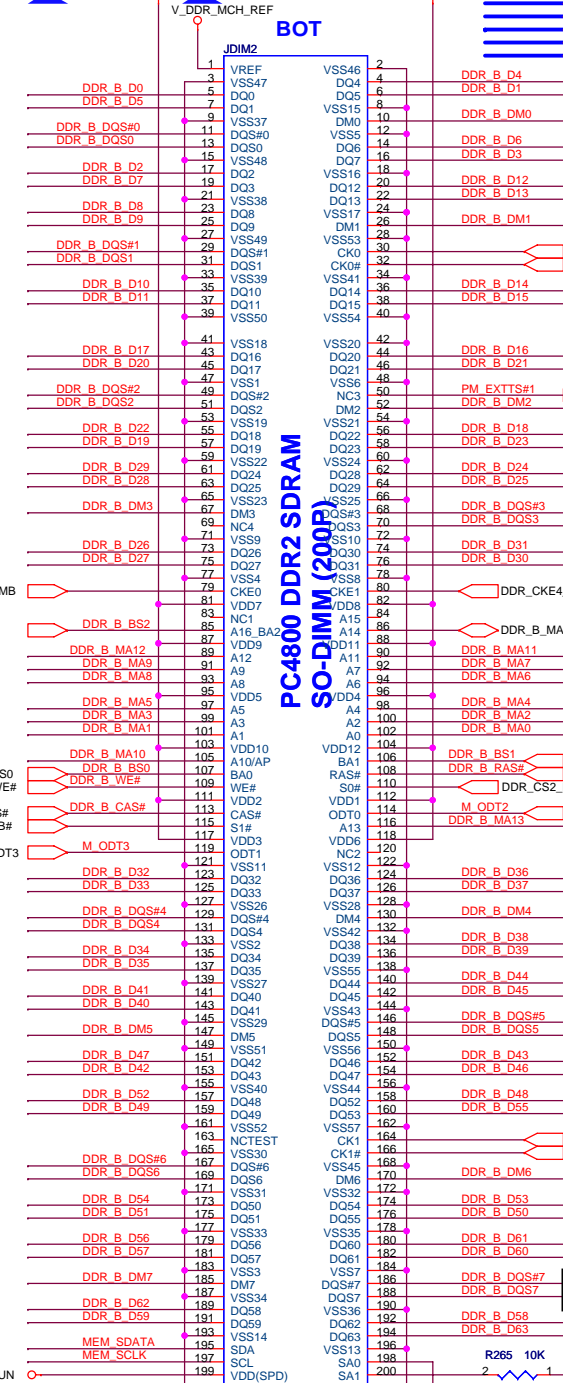
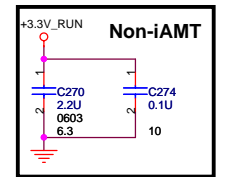
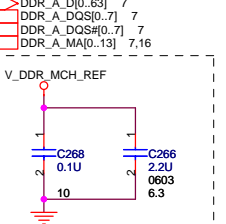
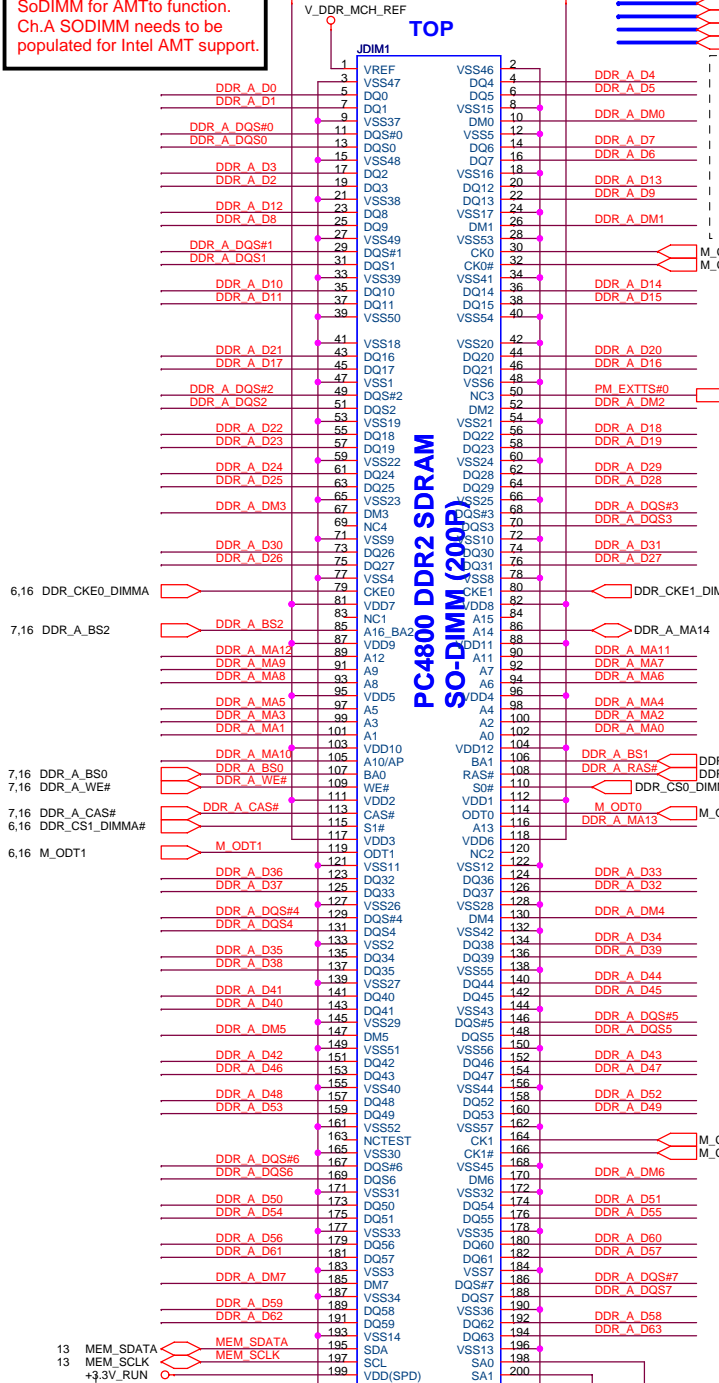


Title	ICH8-M (USB,DMI,PCIE,PCI)		
Size	Document Number		Re
	FM6B		
Date:	Tuesday, February 26, 2008	Sheet	12 of 65





A is required to route to Top SoDIMM for AMTto function. Ch.A SODIMM needs to be populated for Intel AMT support.



Non-iAMT SMbus address A0

hexainf@hotmail.com

GRATUITO - FOR FREE

CLOCK 0,1
CKE 0,1

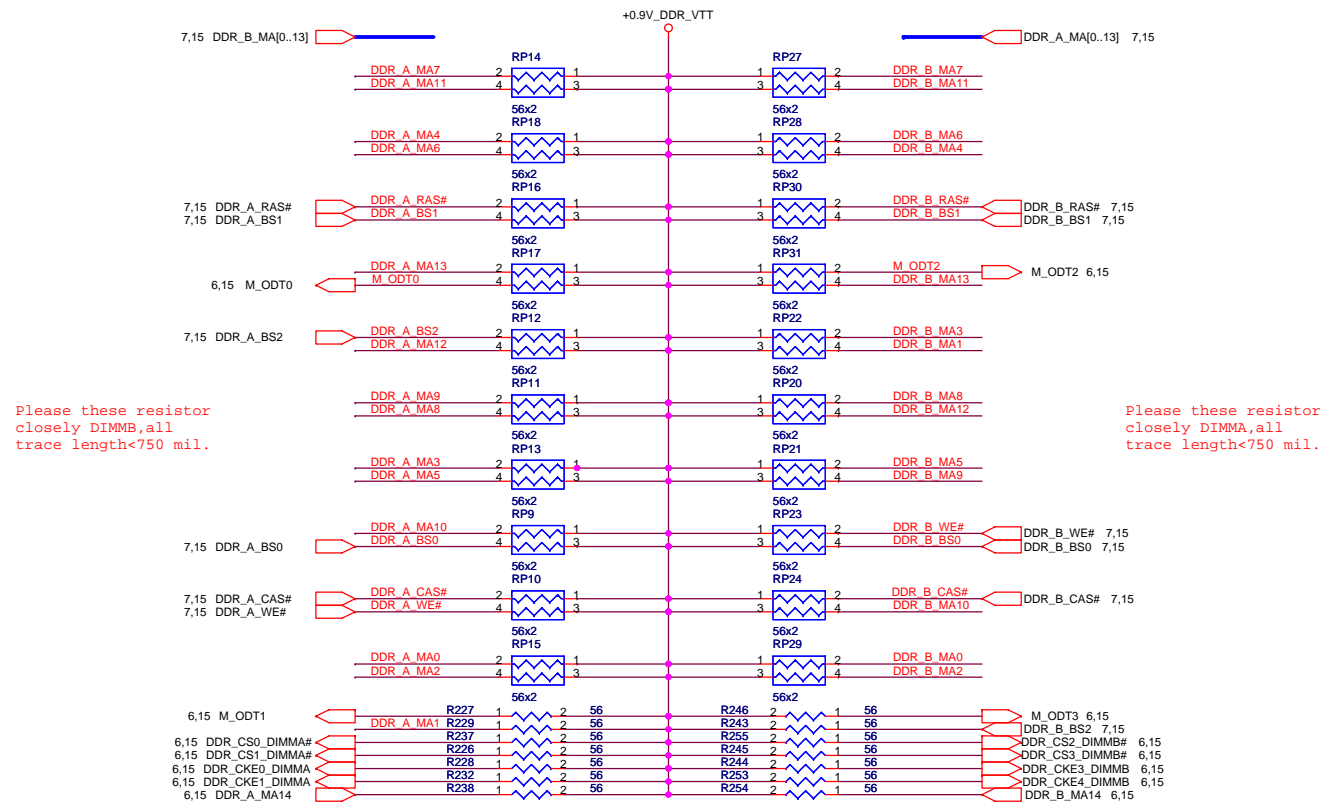
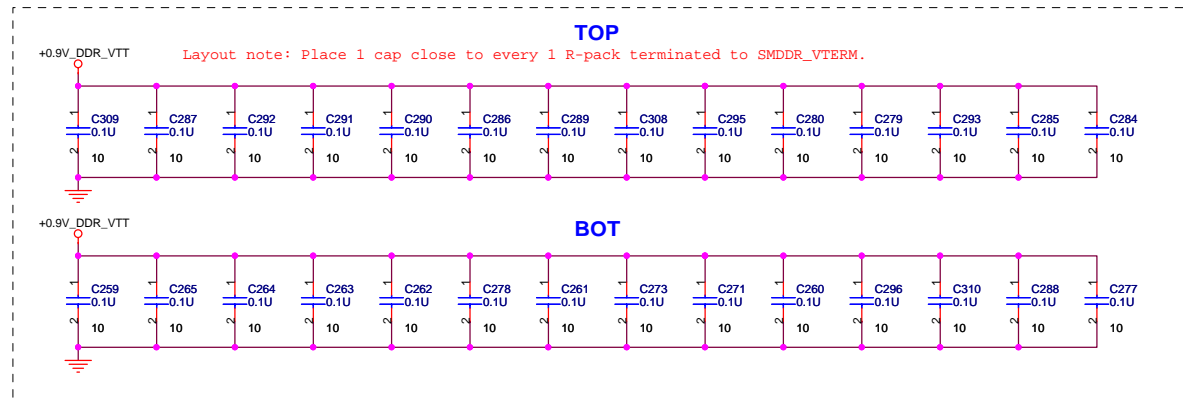
Non-iAMT

AS0A426-N4SN-7F
CLOCK 2,3
CKE 2,3

7 Non-iAMT

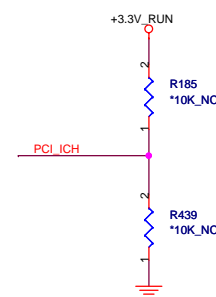
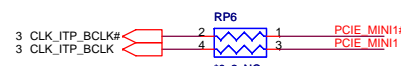
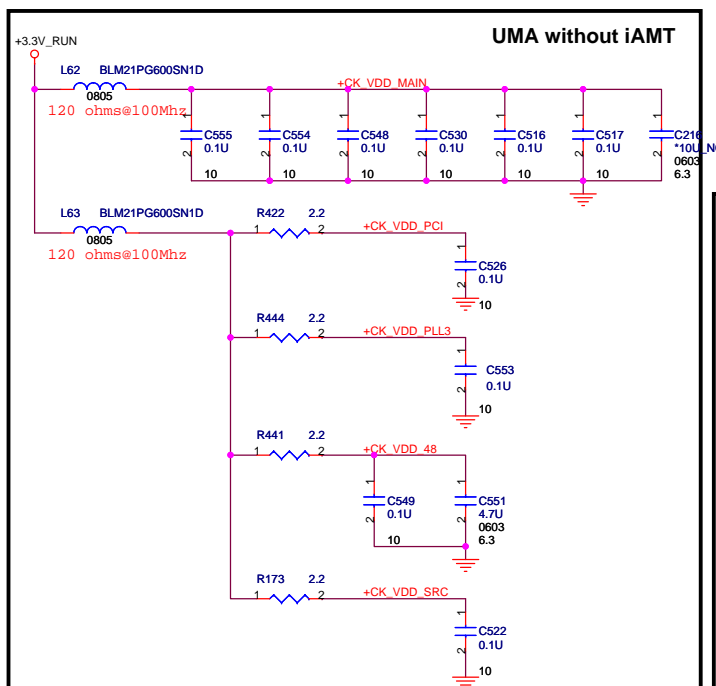
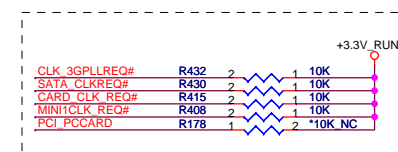
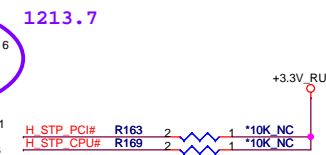
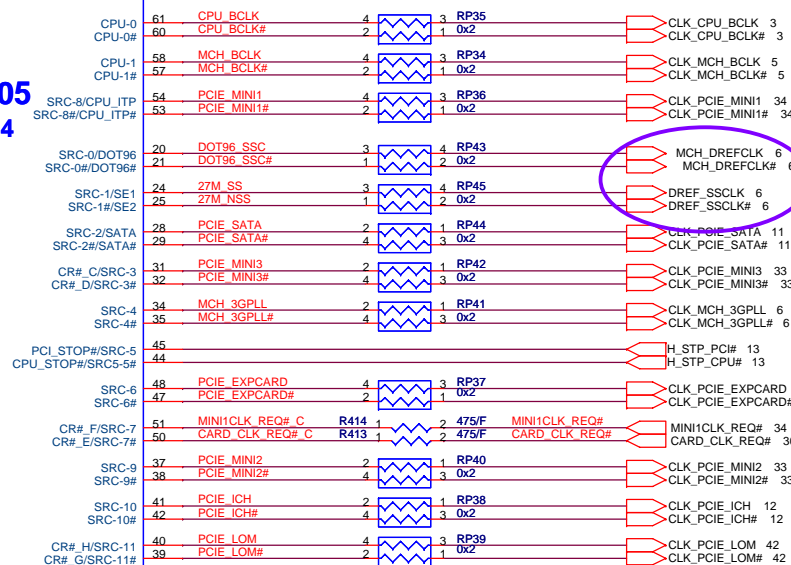
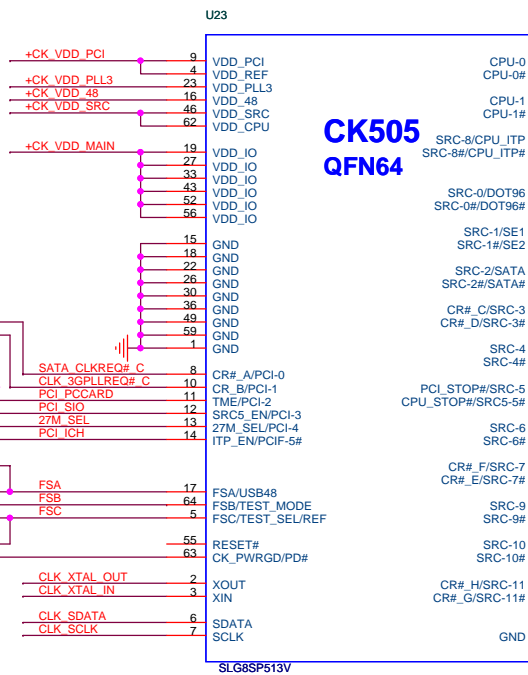
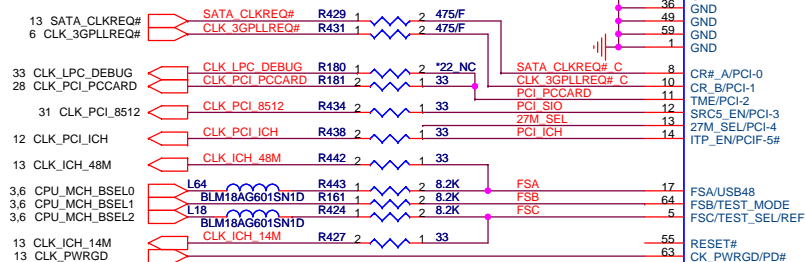
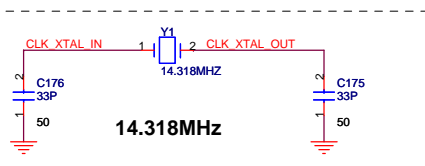
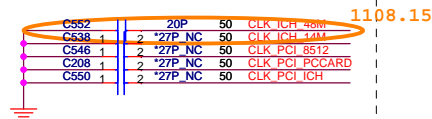


Title			
DDR2 SO-DIMM (200P) X 2			
Size	Document Number		Rev
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Date:	Thursday, March 27, 2008	Sheet	15 of 65

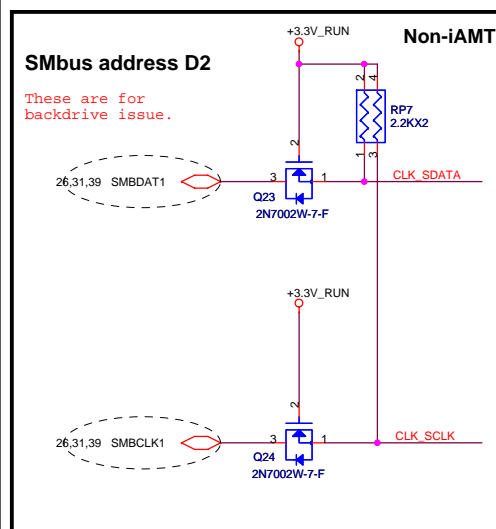
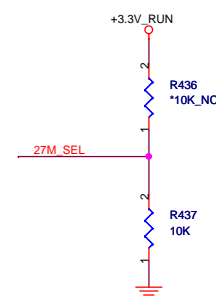


Title: DDR2 RES ARRAY		
Size: FM6B	Document Number: 16	Rev: 1A
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Add capacitor pads for improving WWAN.



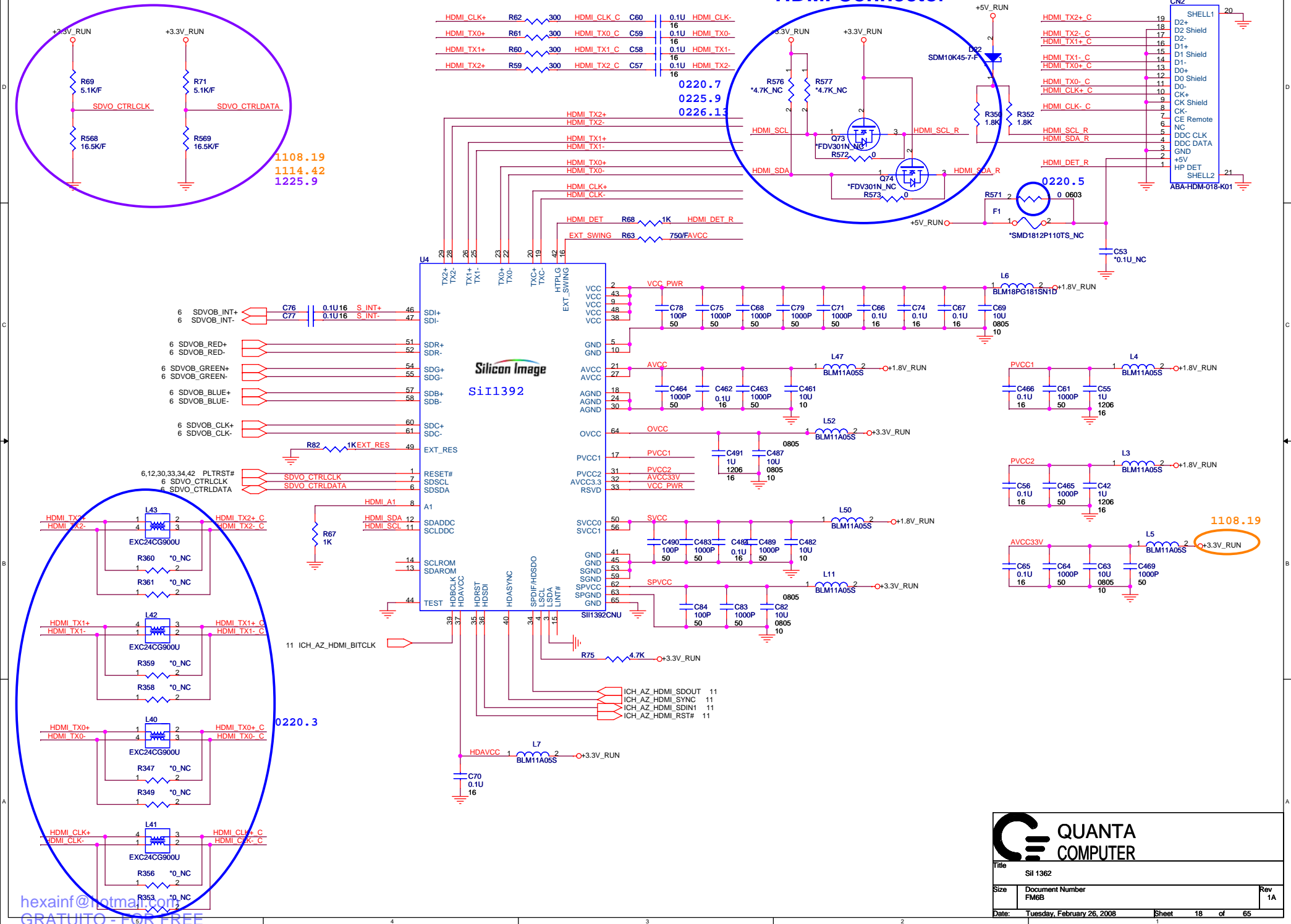
R185 POP: For Internal pull-low.
R439 POP: For internal pull-high.




FSC	FSB	FSA	CPU	SRC	PO
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	1	0	200	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	RSVD	100	33

27M_SEL


27M_SEL (PIN13)	PIN20	PIN21	PIN24	PIN25
0=UMA	DOT96T	DOT96C	96/ 100M_T	96/ 100M_C
1 = Disc. GRFX down	SRCT0	SRCC0	27Mout	27MSSout




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Title		
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 QUANTA COMPUTER		
Title FLASH, RTC & KC		
Size	Document Number FM6B	Rev 1A
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A

A

B


B


C

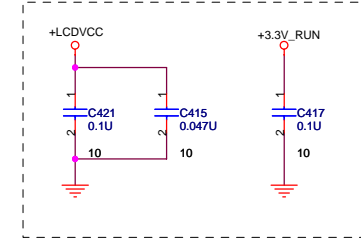
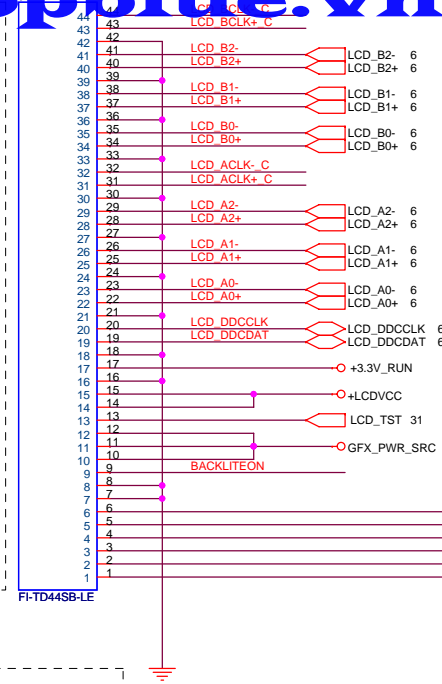
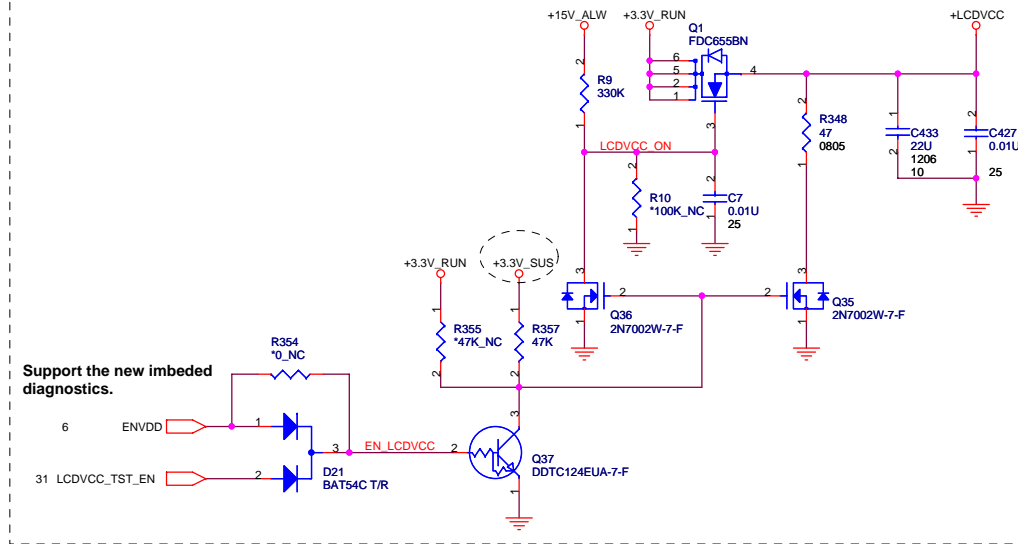
C

D

D

 QUANTA COMPUTER		
Title Battery Selector		
Size	Document Number FM6B	Rev 1A
Date: Friday, February 22, 2008	Sheet 24 of 65	

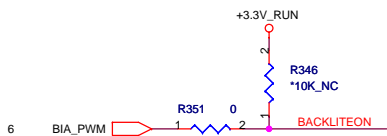
 QUANTA COMPUTER		
Title Docking Station CONN.		
Size	Document Number FM6B	Rev 1A
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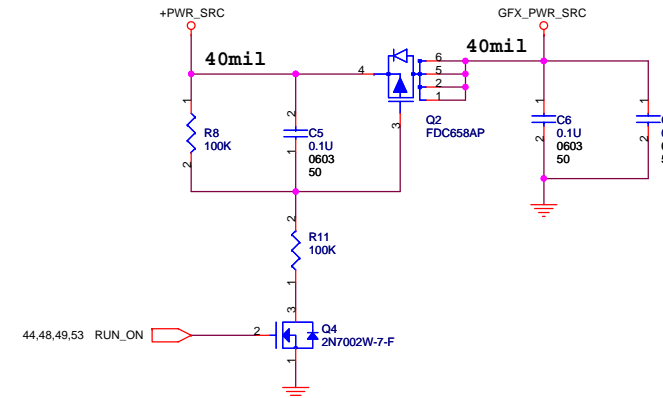
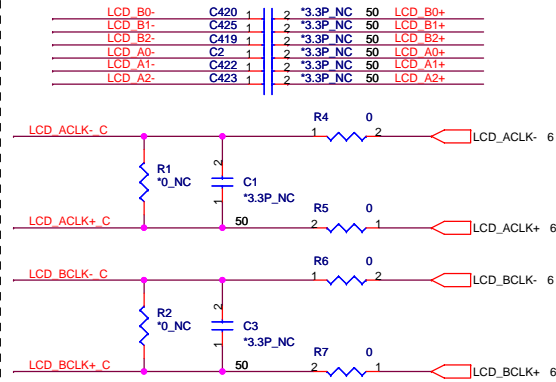
UMA

Populate R351 for DPST implementation only.

Populate R346 for platform without DPST support. No Stuff for Discrete DSPT support due to back up plan.



Shunt capacitors on LVDS for improving WWAN.



Title LCD CONN & CK-SSCD

Size

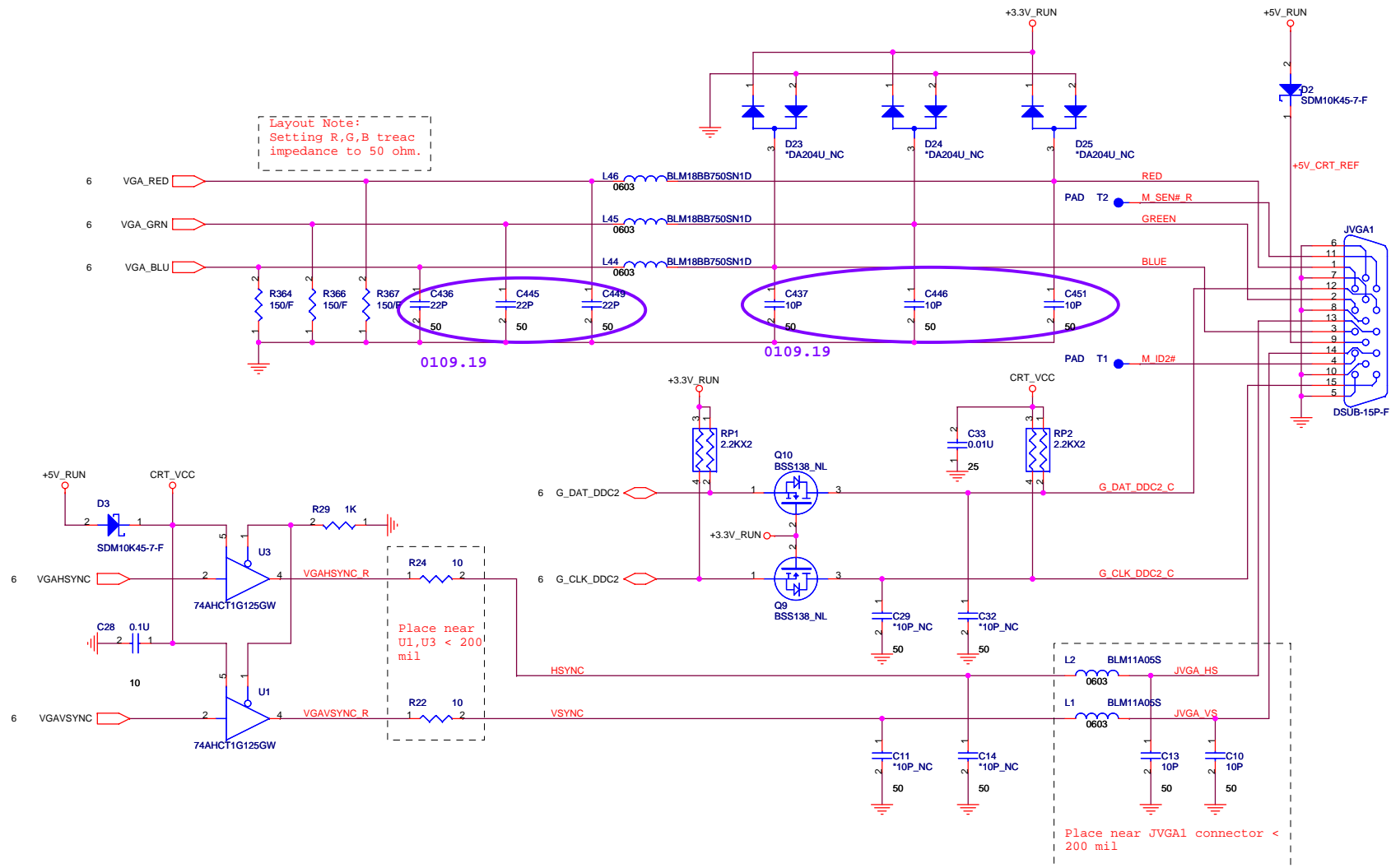
Document Number FM6B

Rev 1A

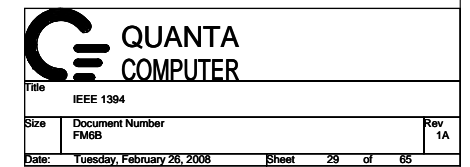
Date: Friday, February 22, 2008

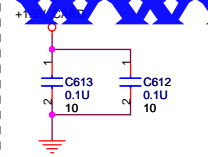
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of 65



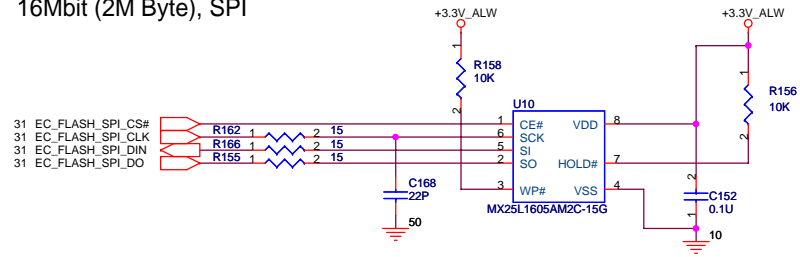




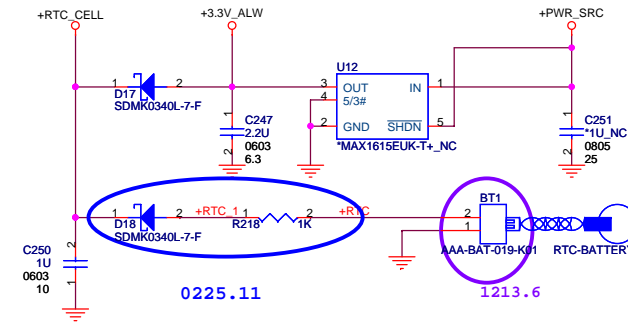


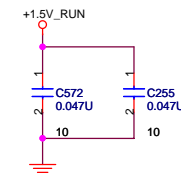
Date: Wednesday, February 27, 2008 Sheet 30 of 65

16Mbit (2M Byte), SPI

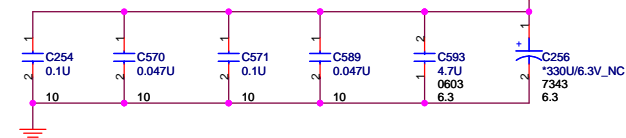


RTC BATTERY





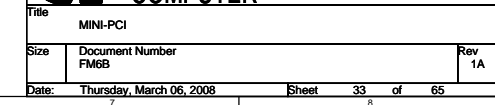
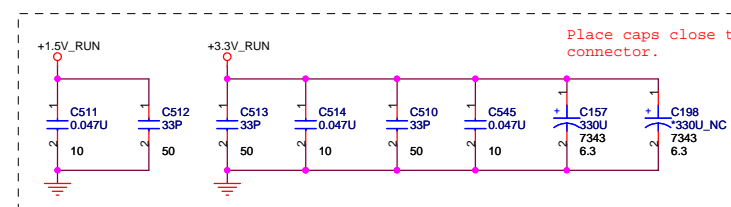
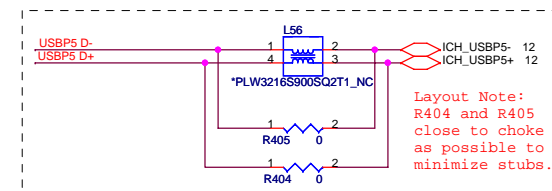
+3.3V_WLAN +3.3V_WLAN +1.5V_RUN



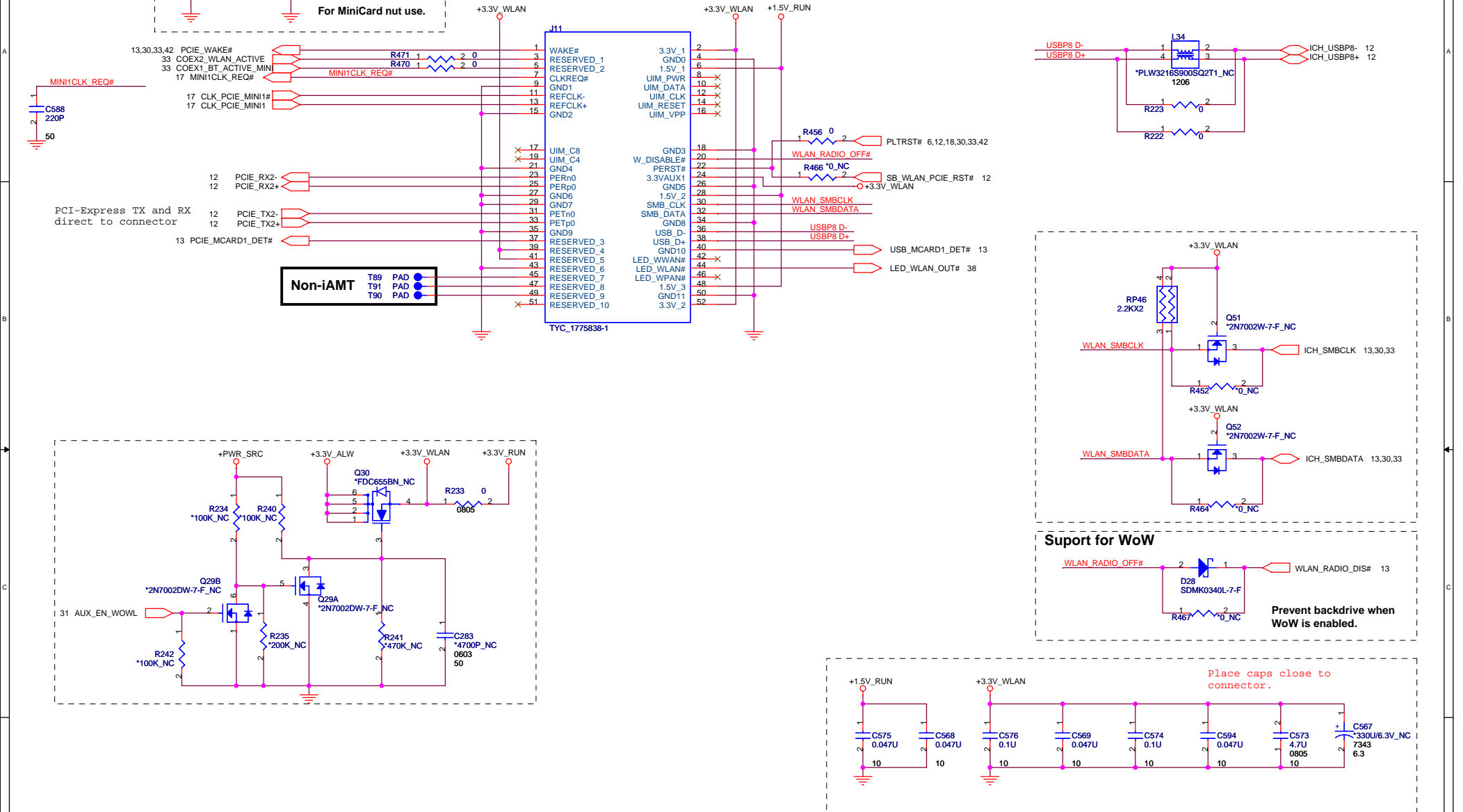
TH4
H-TC118BC197D63P2

TH3
H-TC177BC197D83P2

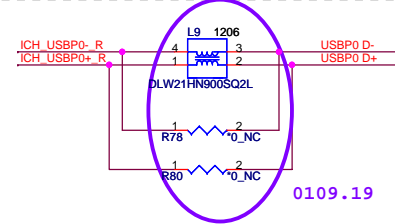
For MiniCard nut use



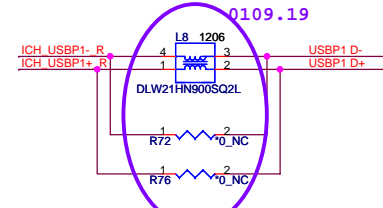
MiniCard WLAN connector



External USB PORT hookup reference. Your design may need more or less external ports and may be mapped differently



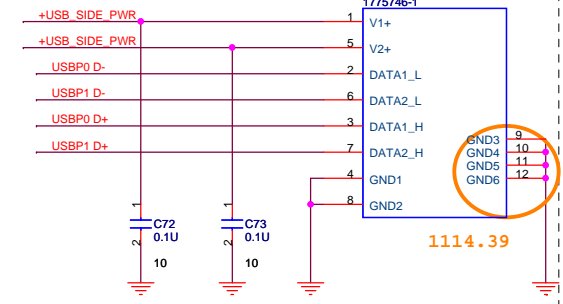
0109.19



0109.19

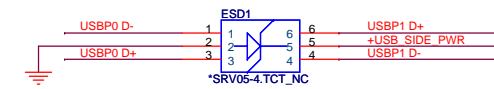
Platforms should put in PADS for the USB chokes if they have the room. Chokes should be NOPOP.

File path: Top Left

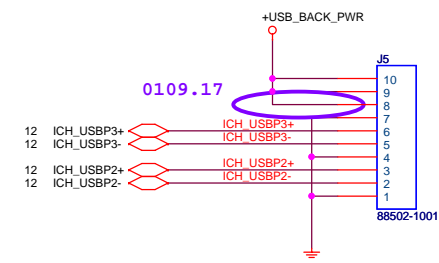


1114.39

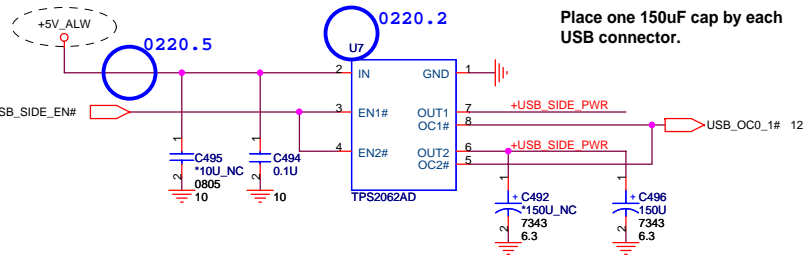
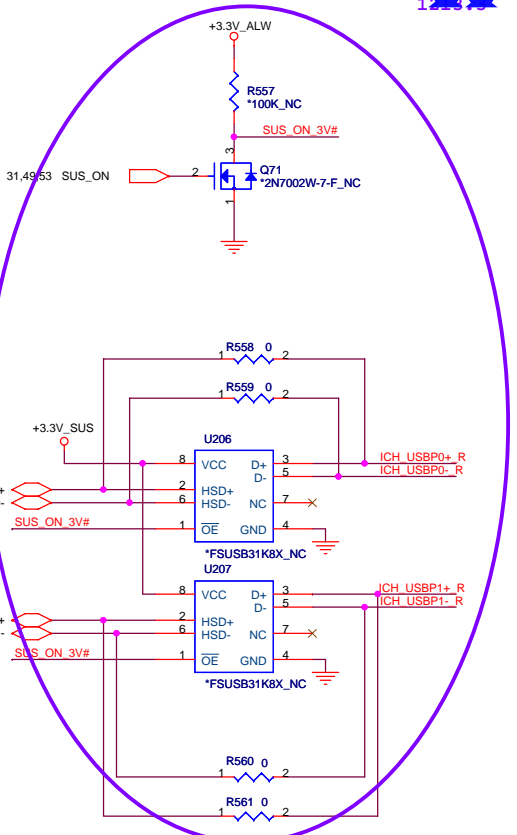
Place ESD diodes as close as USB connector.



MB side



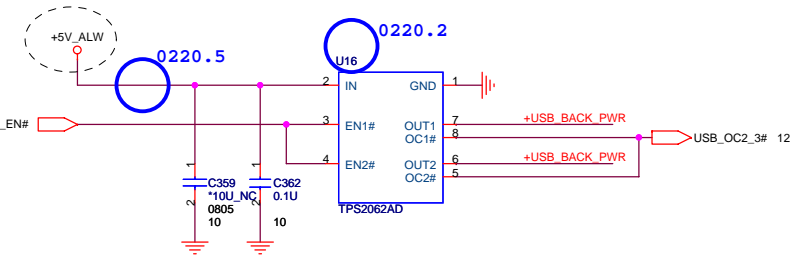
0109.17



Place one 150uF cap by each USB connector.

0220.2

0220.5



Each channel is 1A

0220.2

0220.5

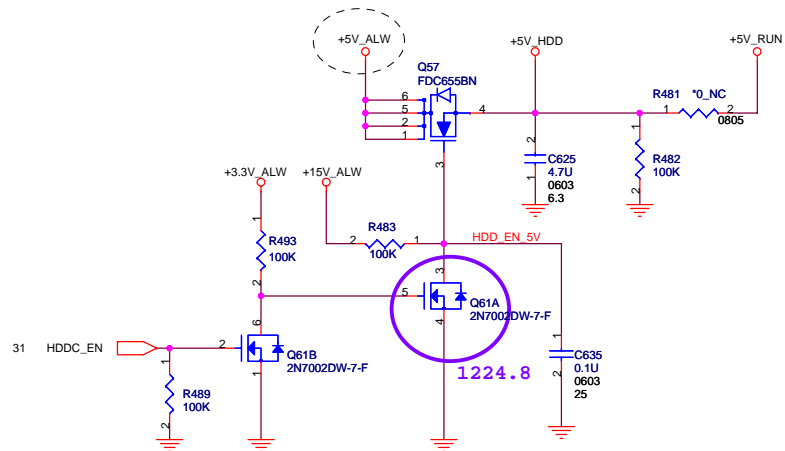
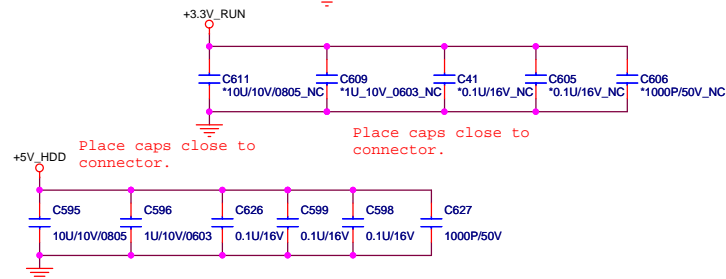
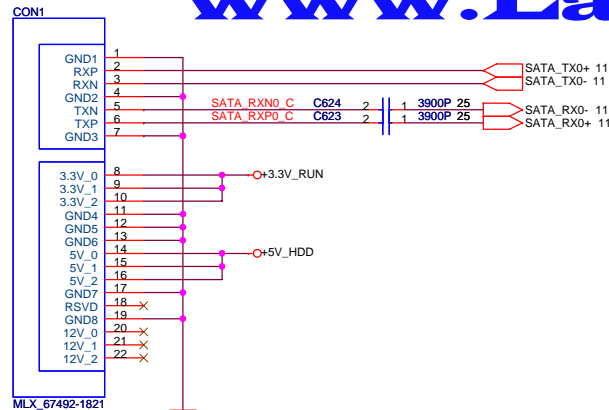
QUANTA COMPUTER

Title: SERIAL PORT & USB

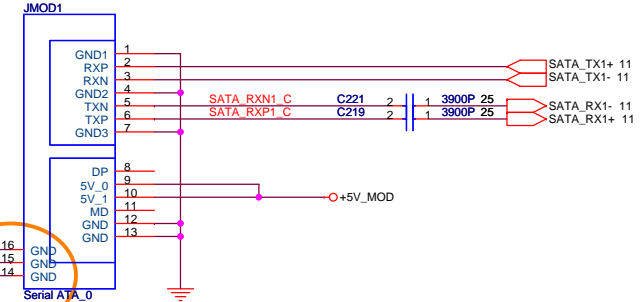
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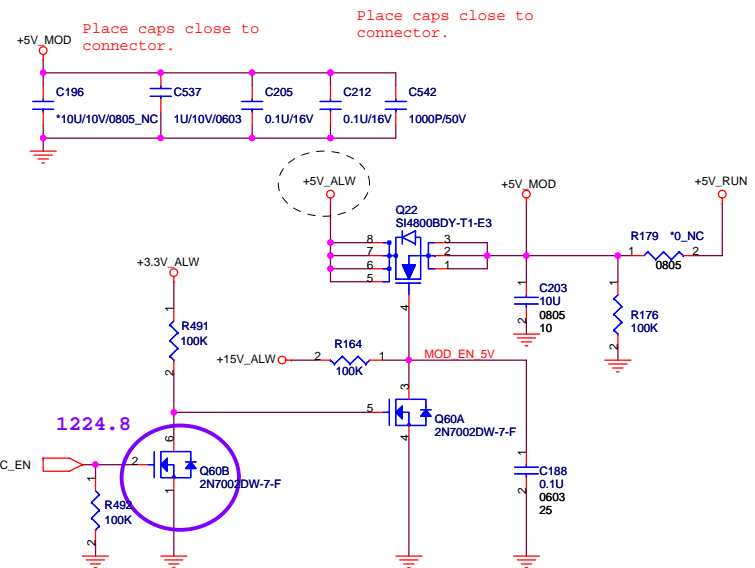
SATA Connector.



SDD Connector

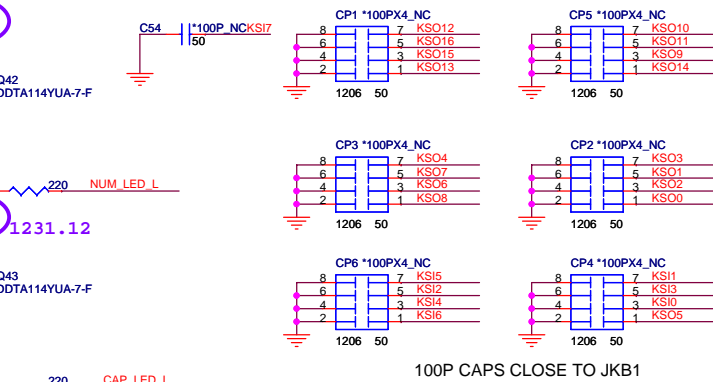
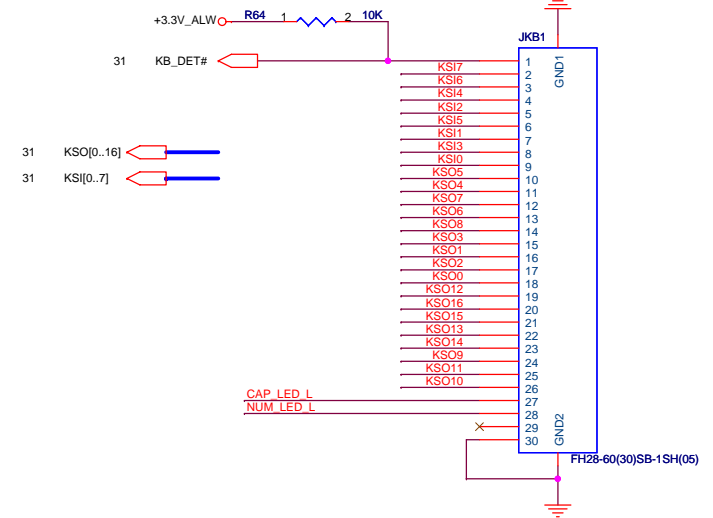


1029.1

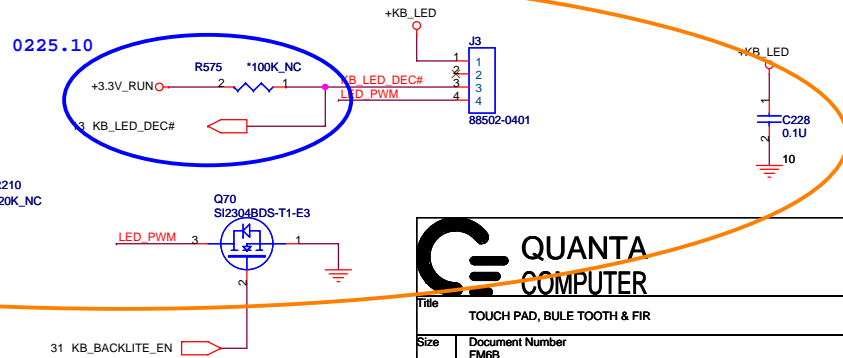


Title		
SATA (HDD&CD_ROM)		
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KEYBOARD CONNECTOR

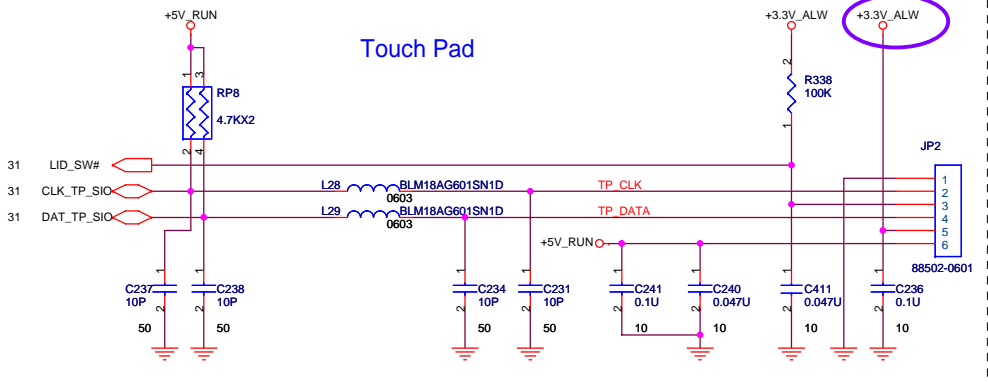


Key board Illumination



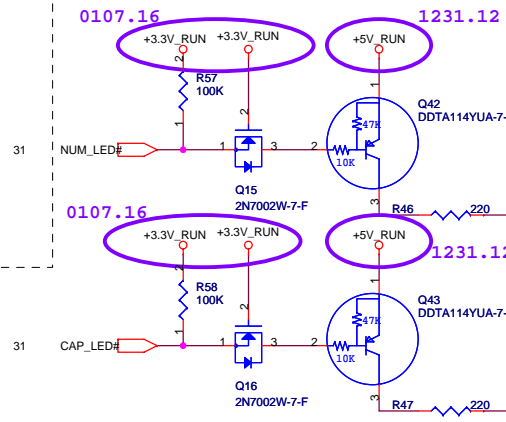
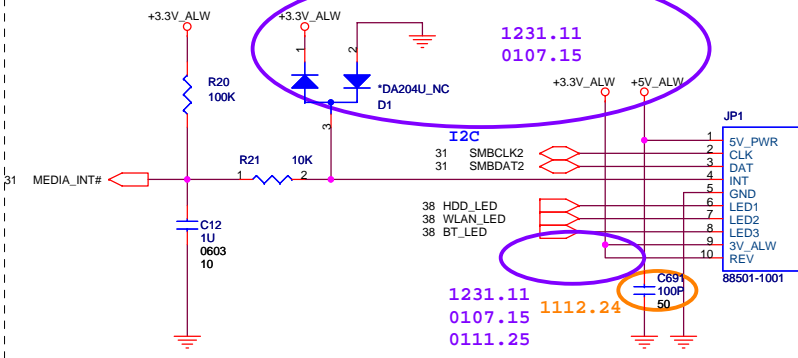
Title TOUCH PAD, BULE TOOTH & FIR		
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Touch Pad

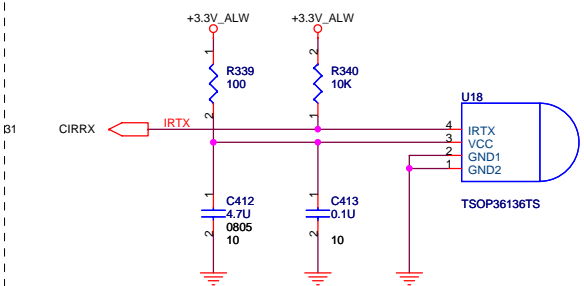


Media Button

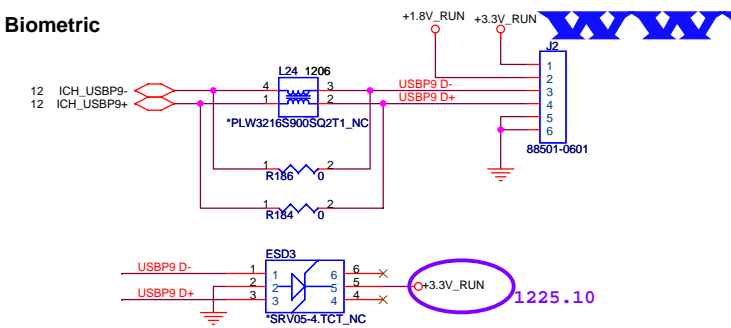
Change to P/N:DFFC10FR138
F/T:88501-1001-10P-L(0816)



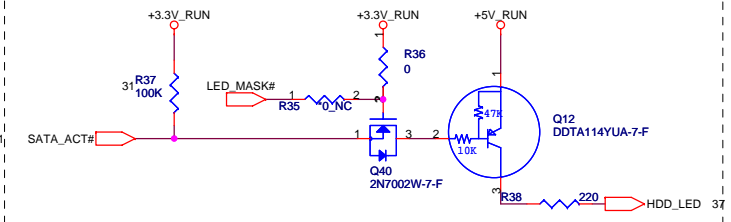
Consumer IR



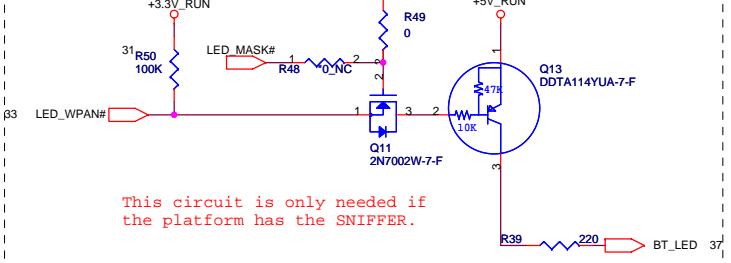
Biometric



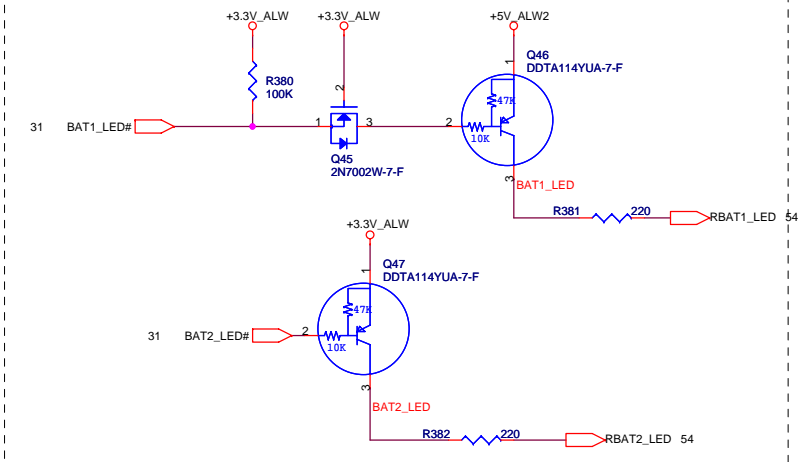
HDD activity LED.



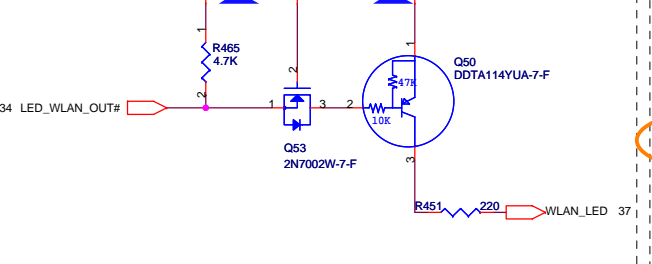
BT / UWB LED



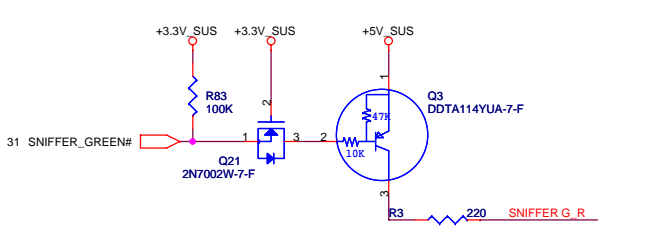
Battery status.



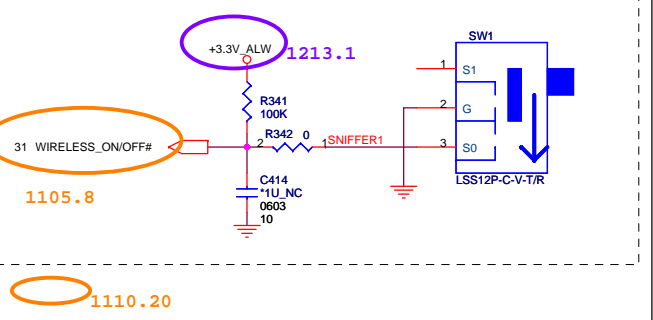
WLAN



Sniffer Bottom



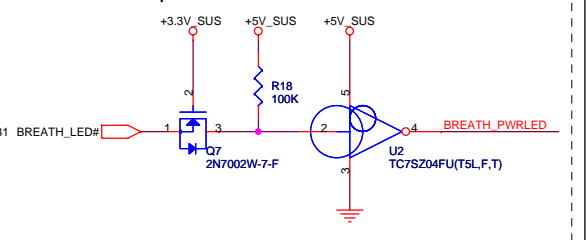
Sniffer Switch ON/OFF Sniffer Switch



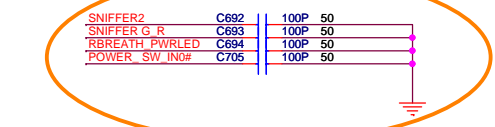
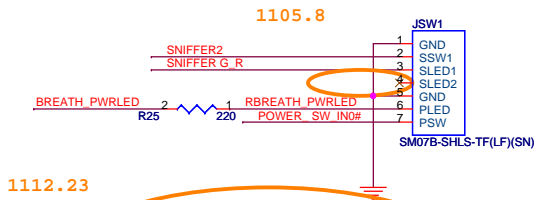
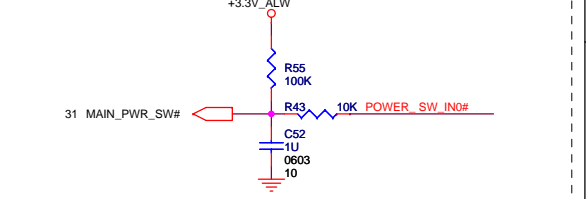
1105.8

1105.8

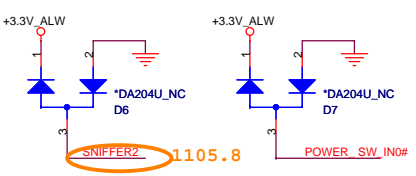
Power & Suspend.

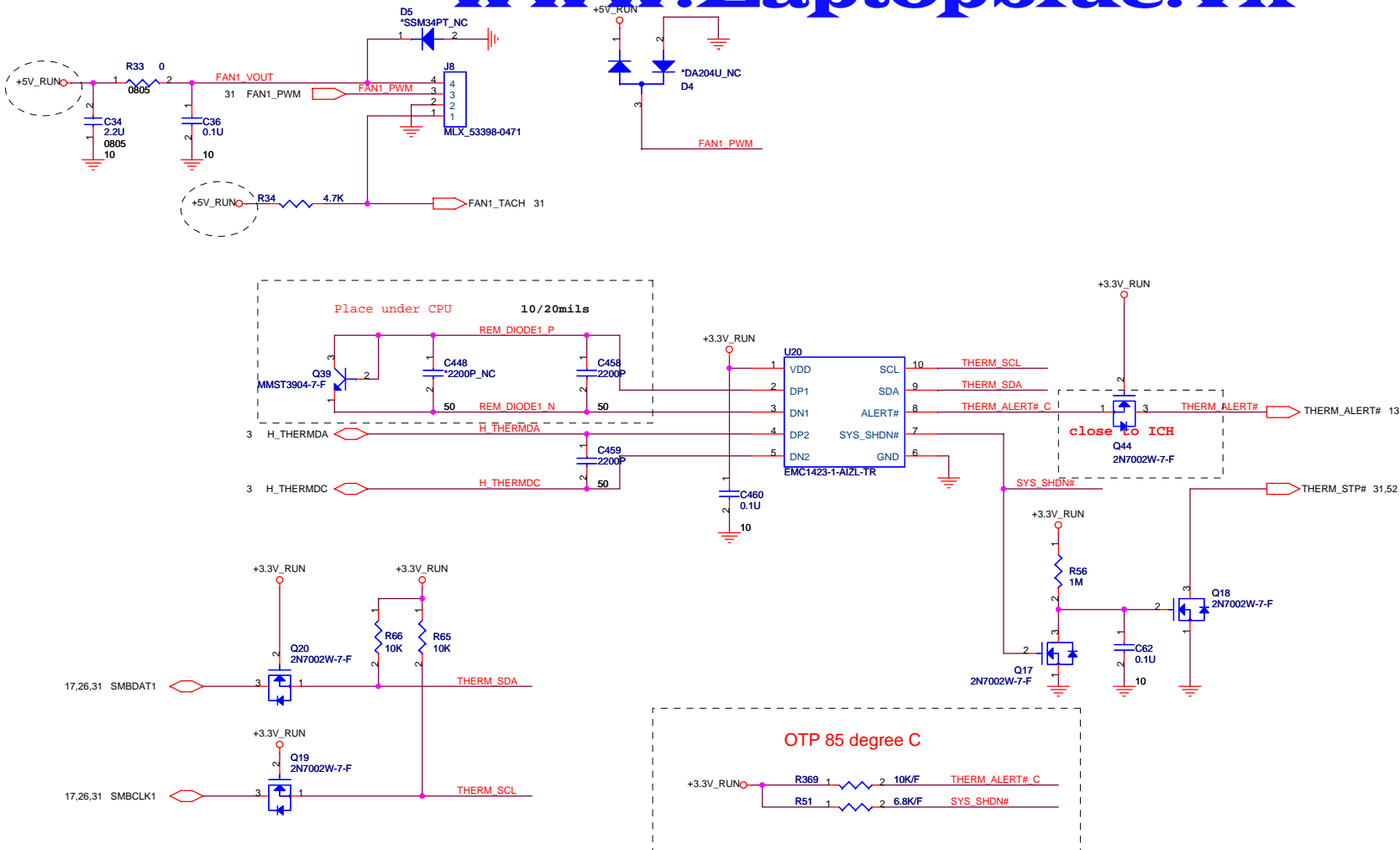


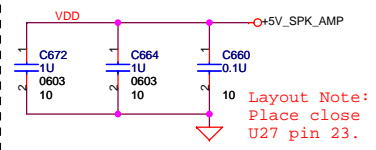
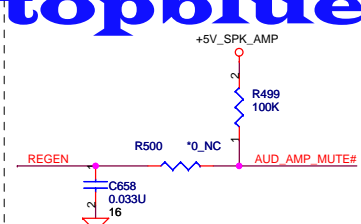
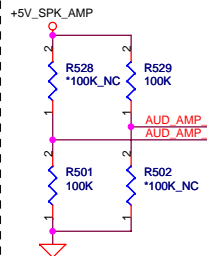
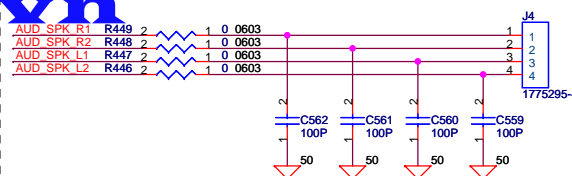
Power Switch



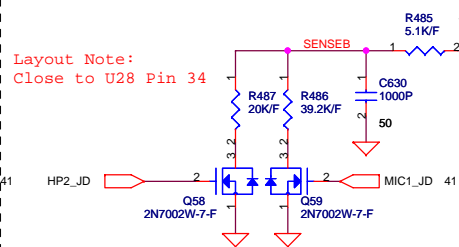
SNIFFER Y_R:WLAN on/off
SNIFFER G_R:AP detection



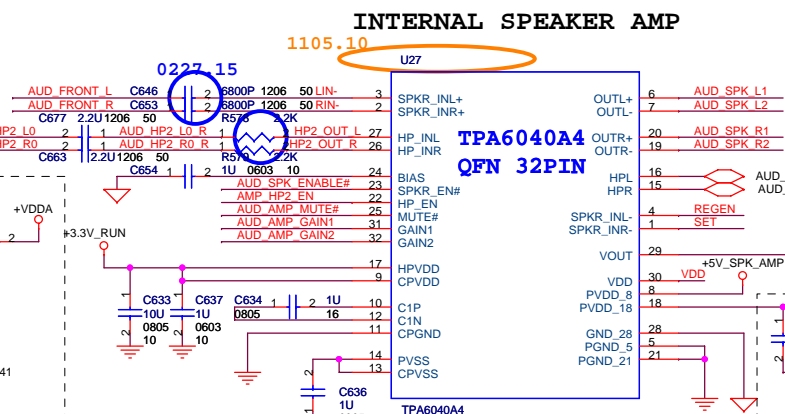




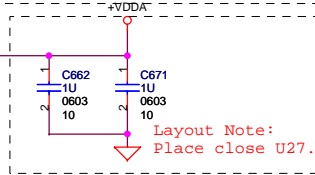
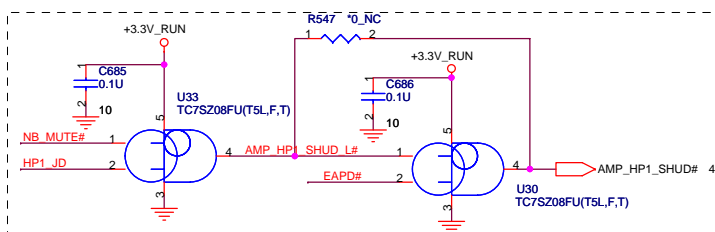
Layout Note:
Place close
U27 pin 23.



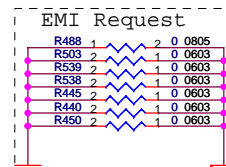
Layout Note:
Close to U28 Pin 34



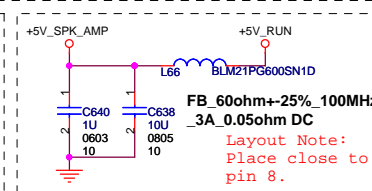
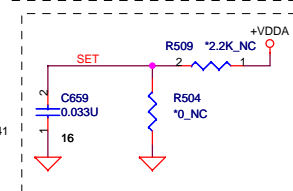
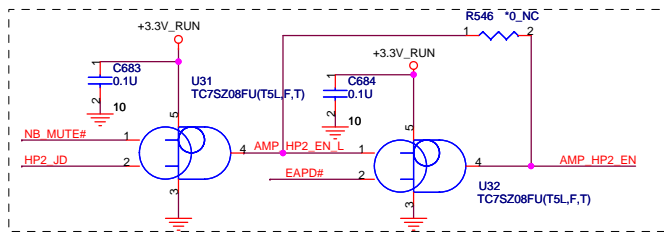
INTERNAL SPEAKER AMP

TPA6040A4
QFN 32PIN

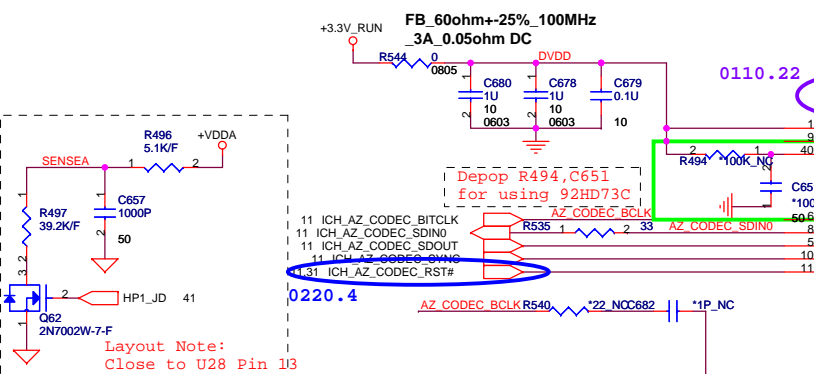
Layout Note:
Place close U27.



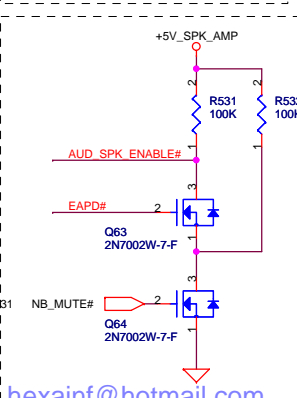
EMI Request



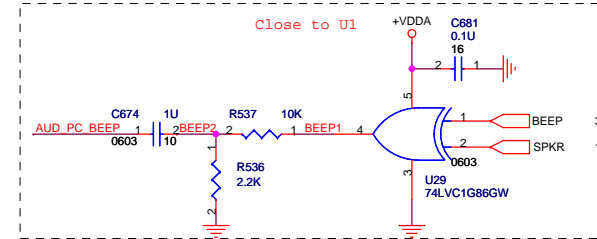
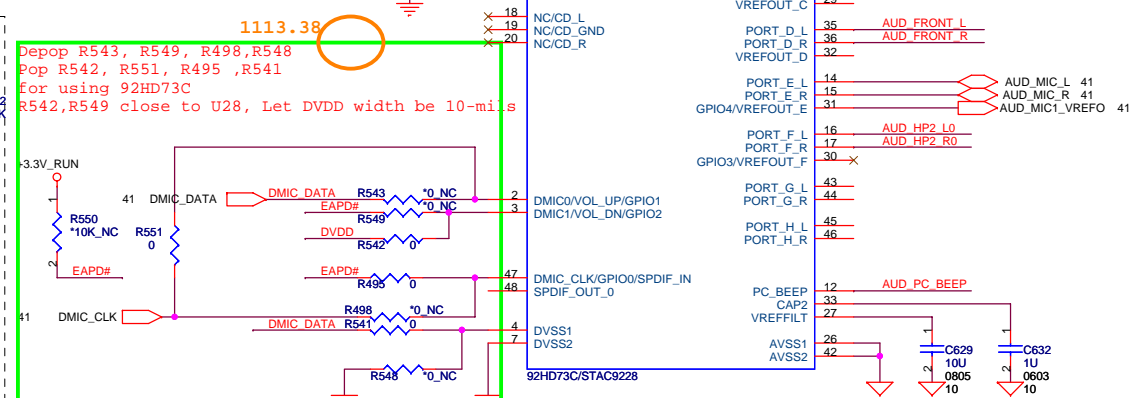
Layout Note:
Place close to
pin 8.



AZALIA (HD) CODEC



hexainf@hotmail.com
GRATUITO - FOR FREE

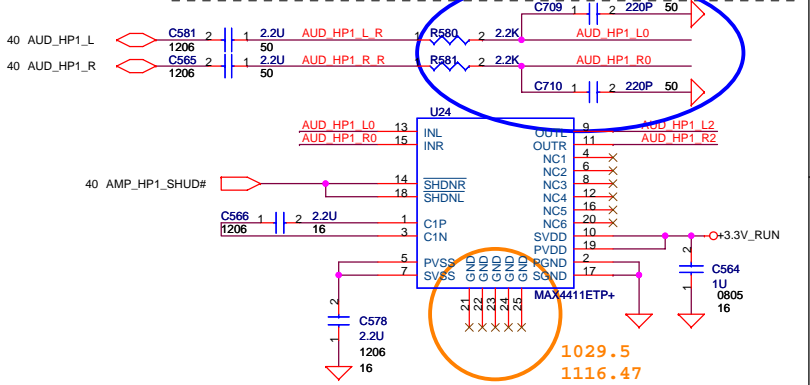
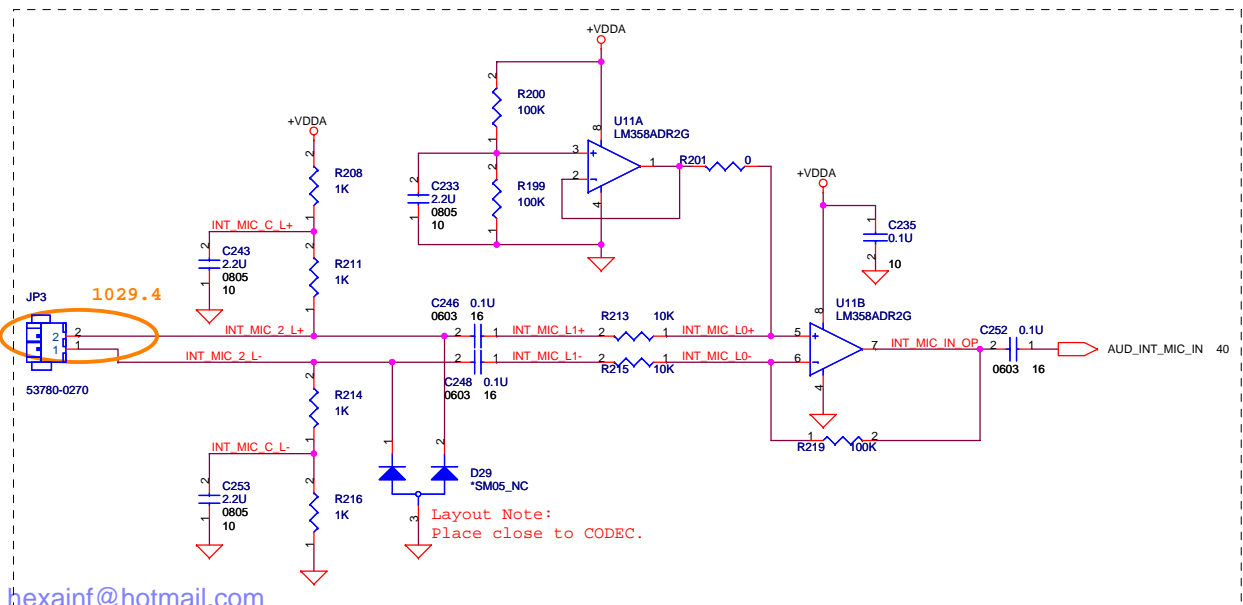
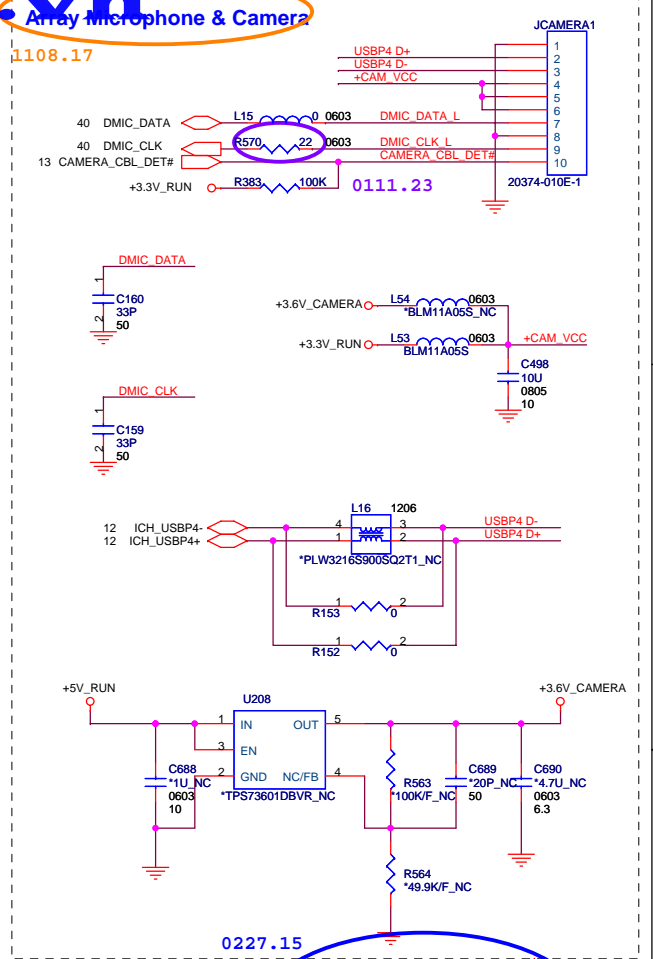
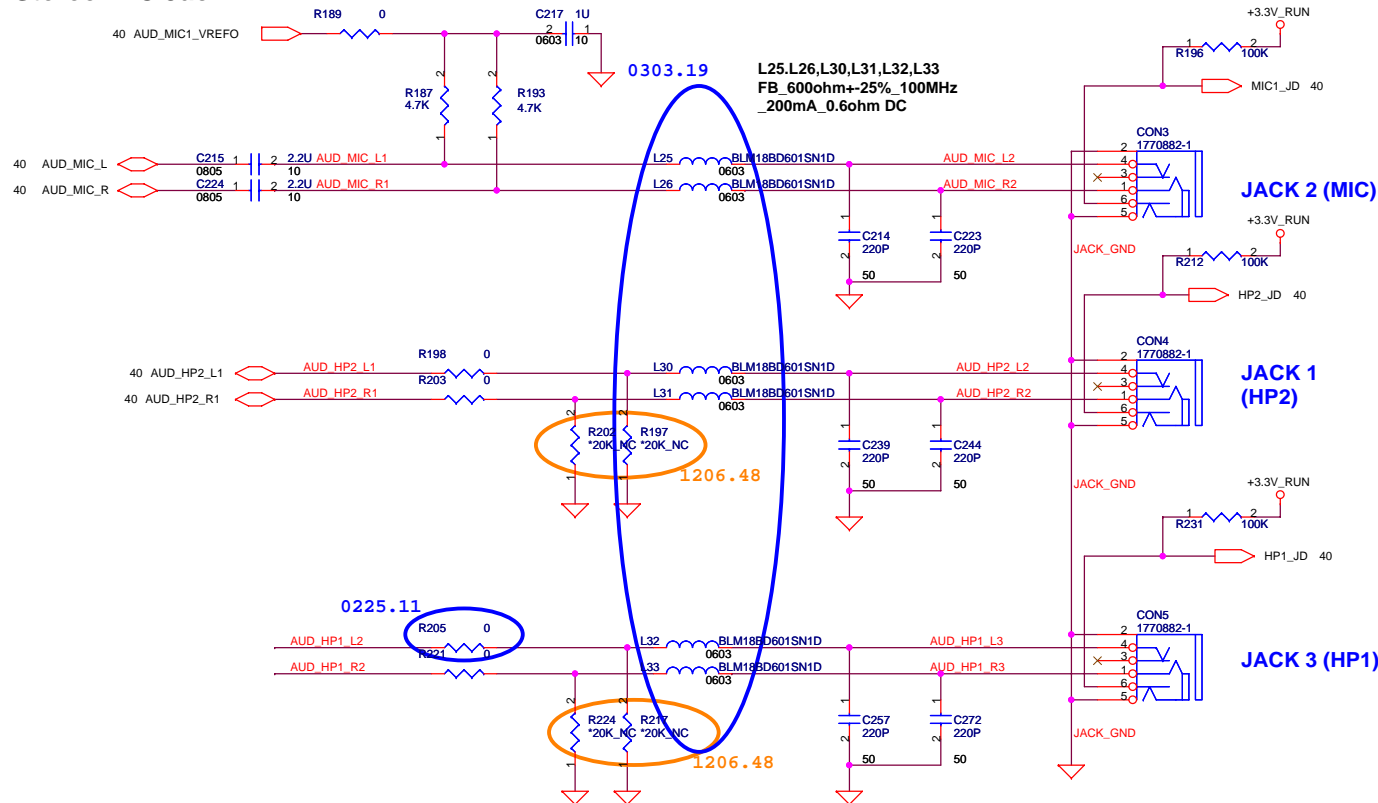


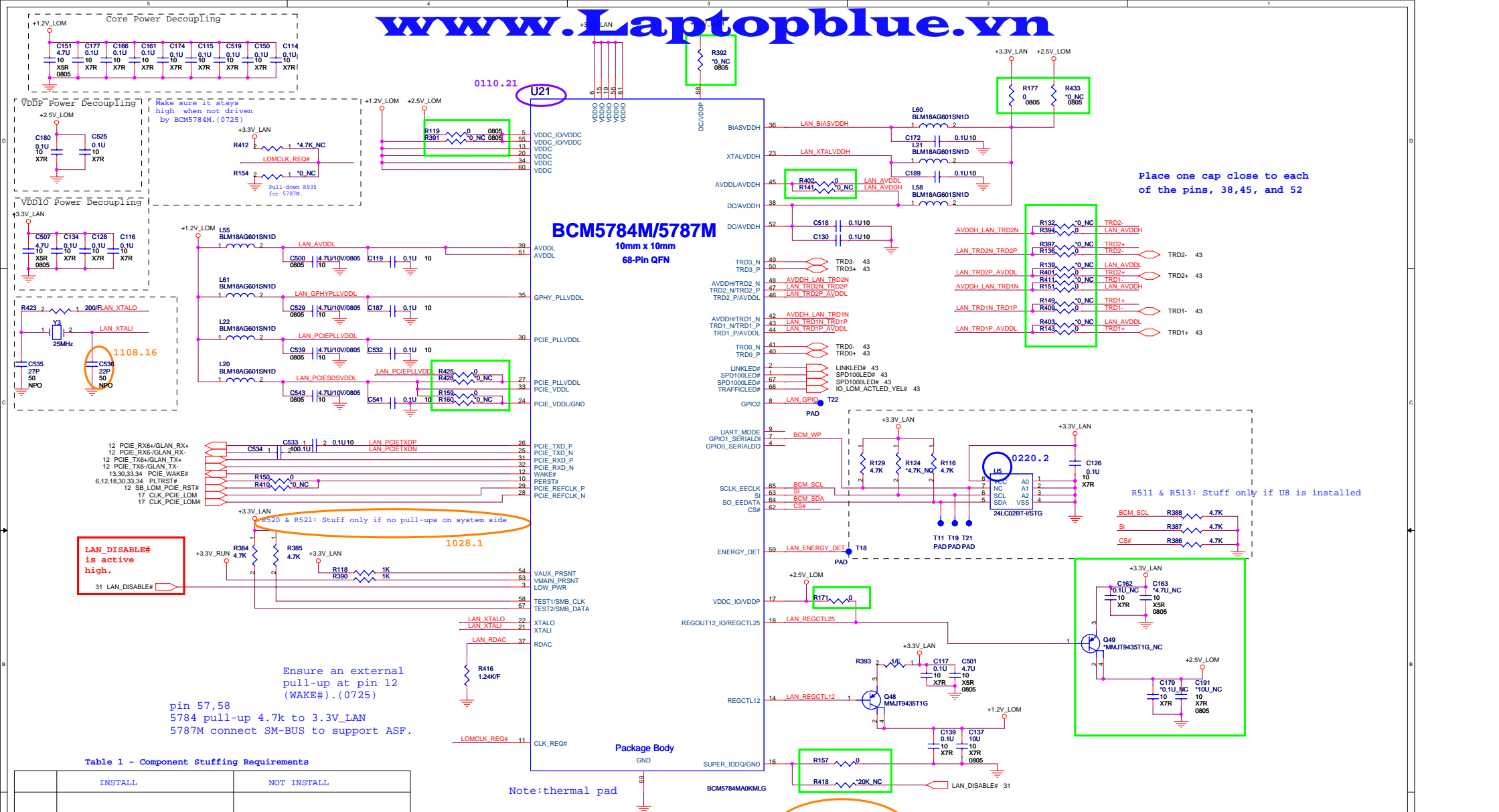
Close to U1



Title		Azelia CODEC	
Size	Document Number	Rev	
	FM6B	1A	
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Headphone Jack Stereo MIC Jack





Place one cap close to each of the pins, 38, 45, and 52

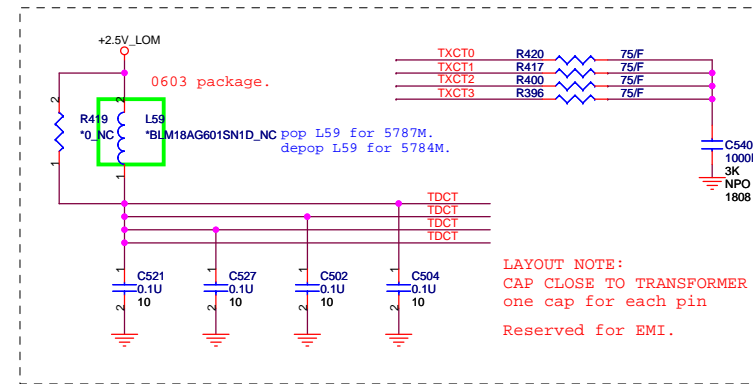
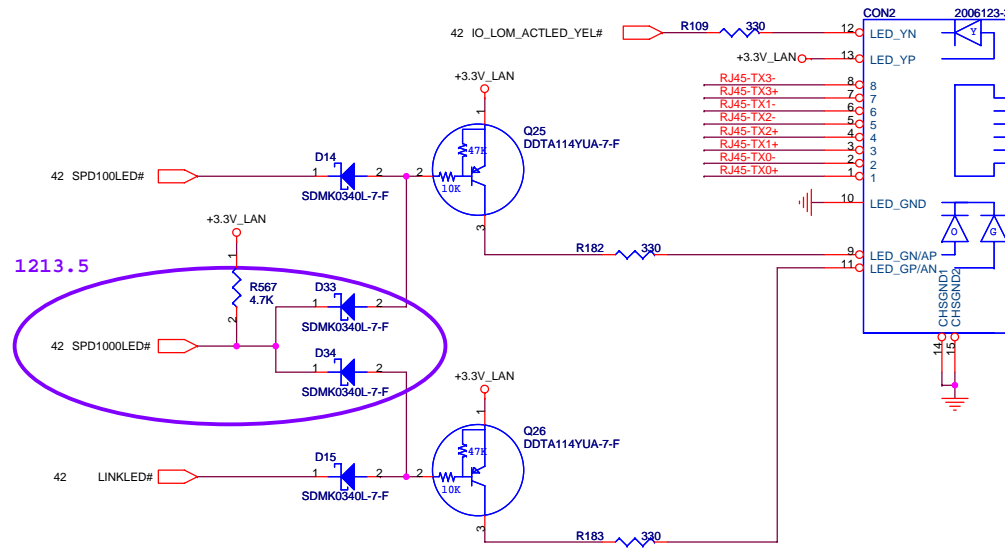
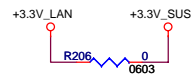
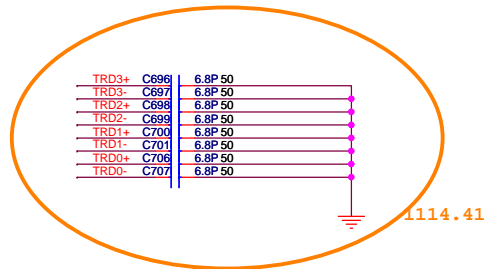
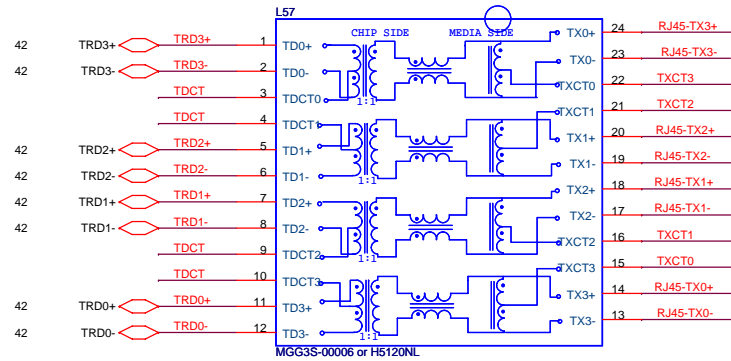
R511 & R513: Stuff only if U8 is installed

1029.6

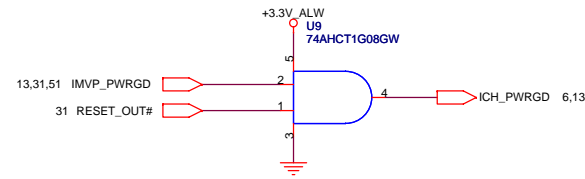


TRANSFORM

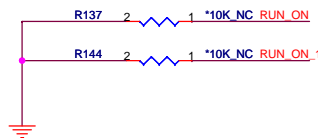
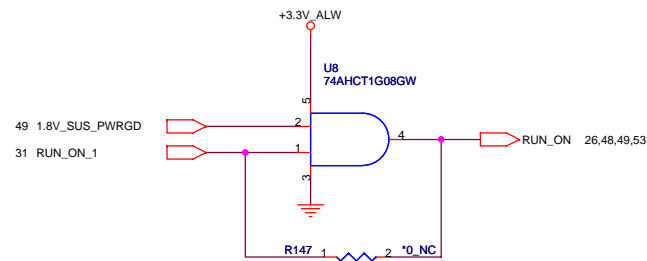
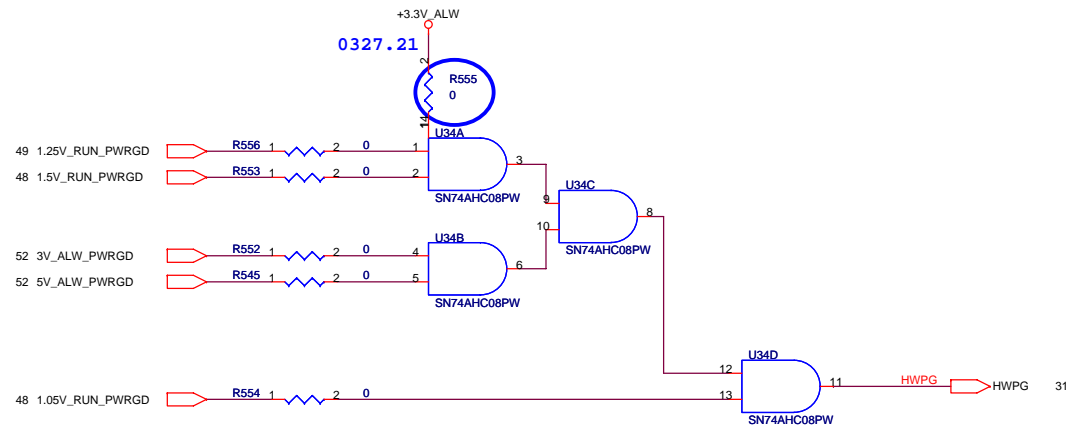
TRANSFORM





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



Keep Away from high speed buses



		QUANTA COMPUTER	
Title System Reset Circuit			
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 QUANTA COMPUTER		
Title Docking Q-SWITCH		
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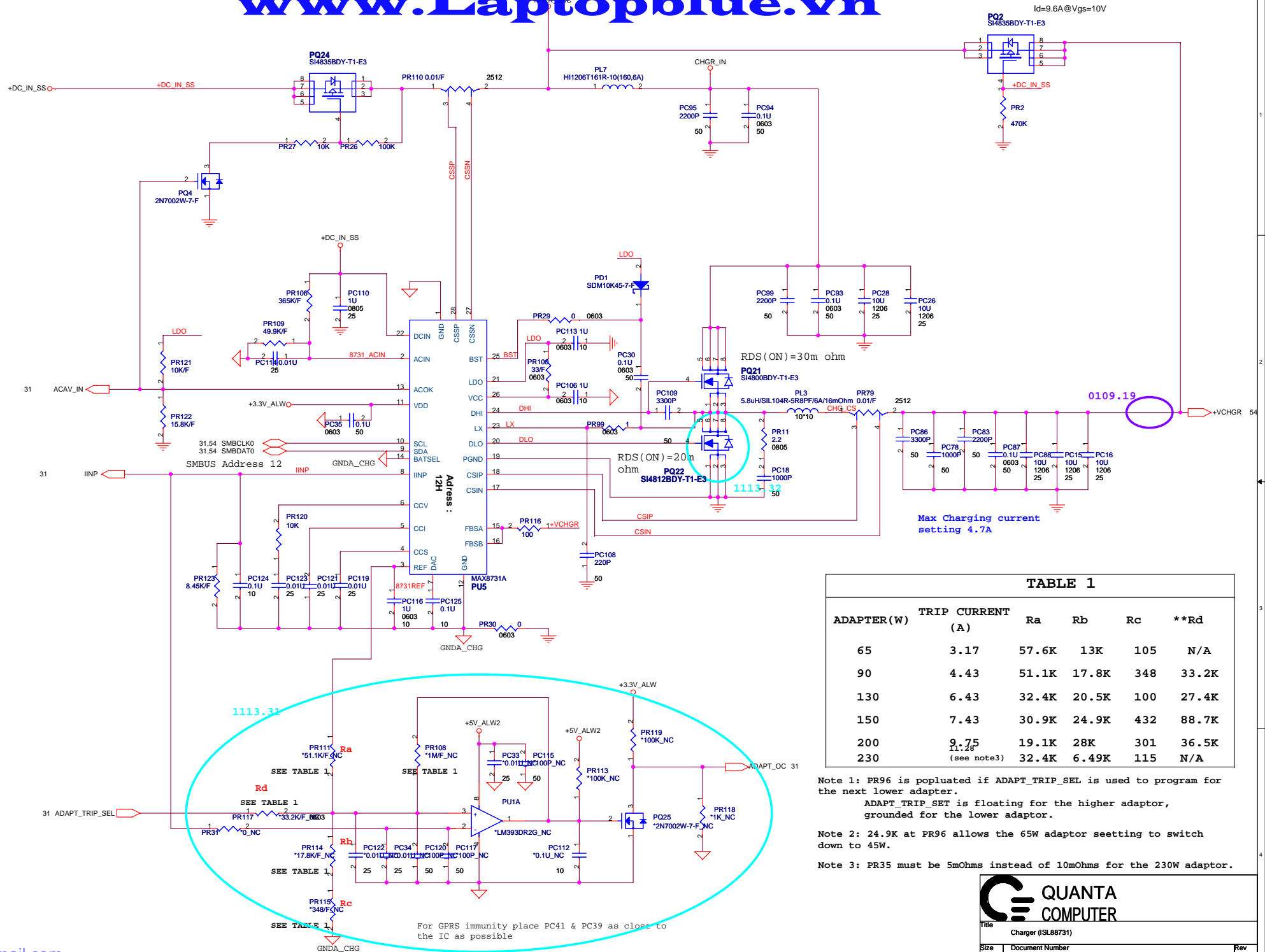


TABLE 1

ADAPTER(W)	TRIP CURRENT (A)	Ra	Rb	Rc	**Rd
65	3.17	57.6K	13K	105	N/A
90	4.43	51.1K	17.8K	348	33.2K
130	6.43	32.4K	20.5K	100	27.4K
150	7.43	30.9K	24.9K	432	88.7K
200	9.75	19.1K	28K	301	36.5K
230	(see note3)	32.4K	6.49K	115	N/A

Note 1: PR96 is populated if ADAPT_TRIP_SEL is used to program for the next lower adaptor.

ADAPT_TRIP_SET is floating for the higher adaptor, grounded for the lower adaptor.


Note 2: 24.9K at PR96 allows the 65W adaptor setting to switch down to 45W.

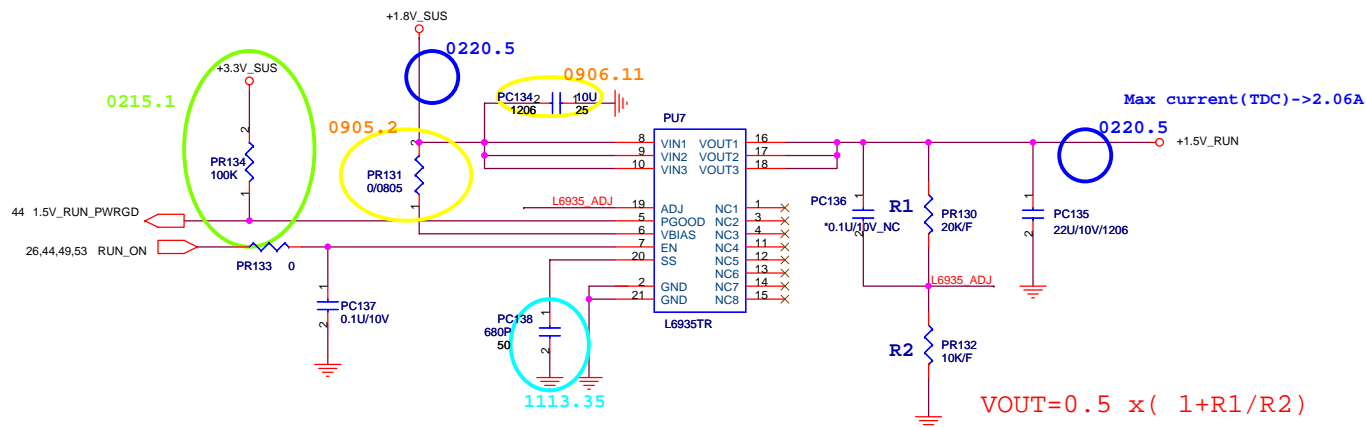
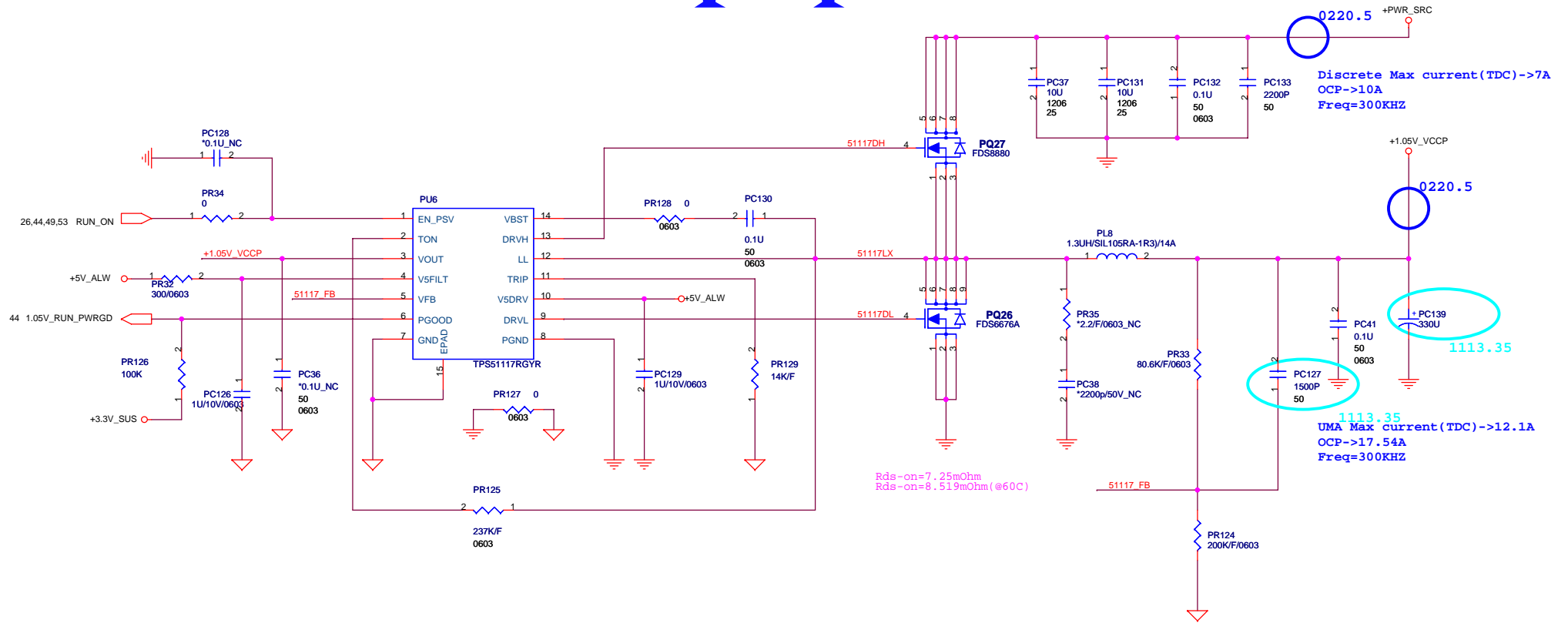
Note 3: PR35 must be 5mOhms instead of 10mOhms for the 230W adaptor.



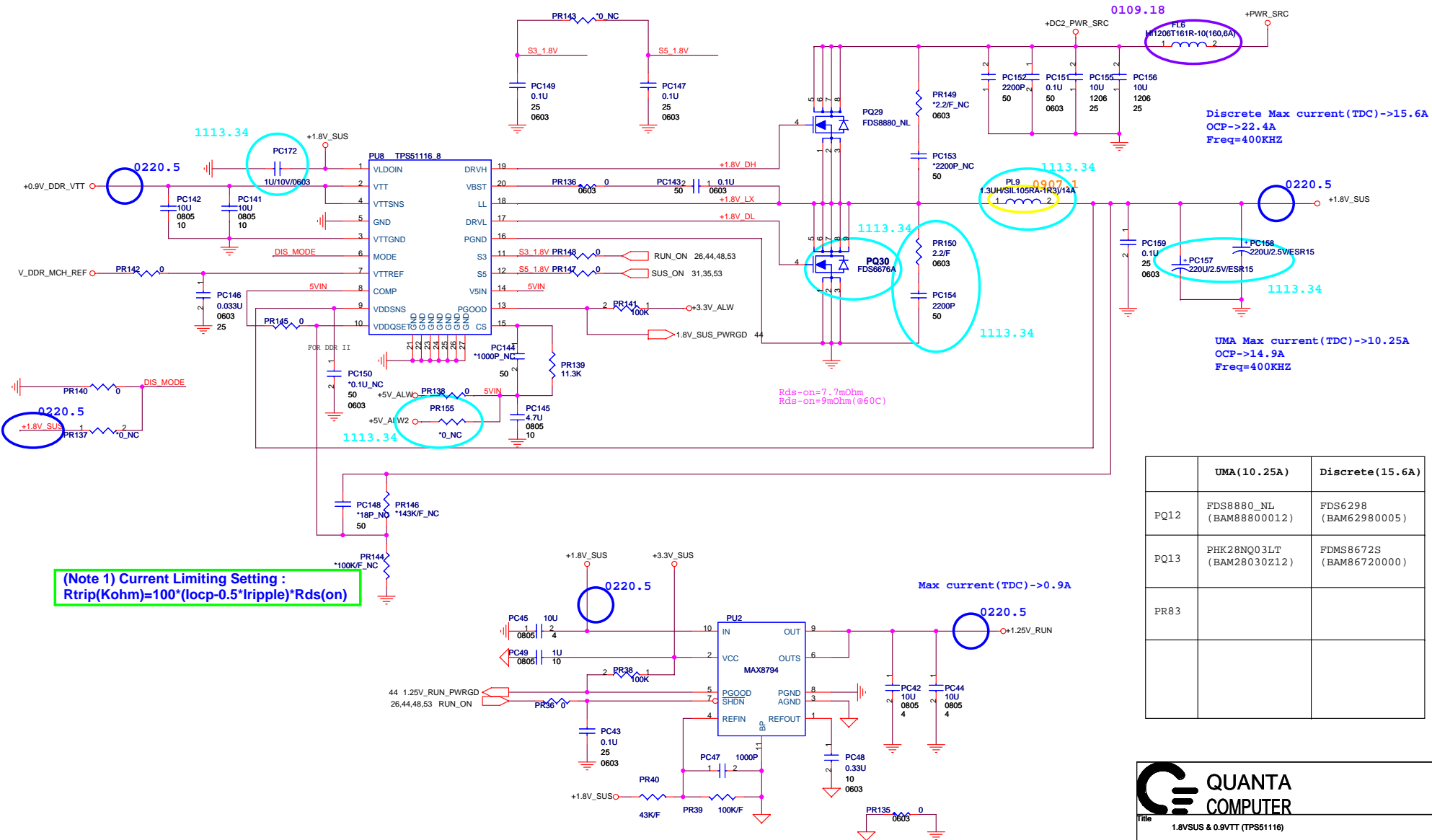
Charger (ISL88731)

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 QUANTA COMPUTER		
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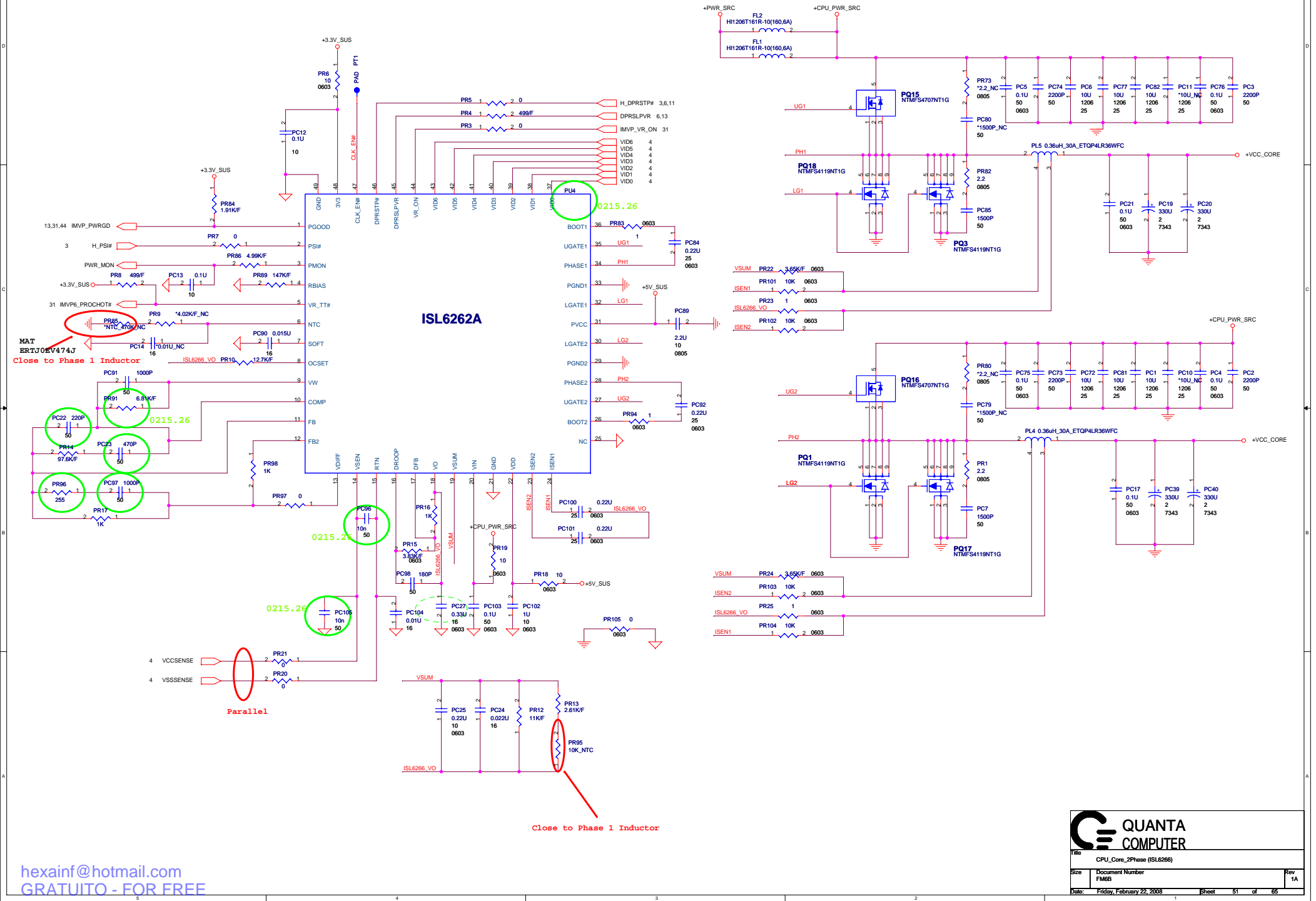
	UMA (12.1A)	Discrete (7A)
PQ22	FDS8880_NL (BAM88800012)	FDS8878 (BAM88780020)
PQ25	FDS6676AS_NL (BAM66760026)	FDS6680AS (BAM66800061)
PL25	SIL105RA-1R5-R (CV-15F0MZ08)	SIL104R-1R5PF (DC-15A00010)
PR452		

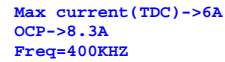


	UMA (10.25A)	Discrete (15.6A)
PQ12	FDS8880_NL (BAM88800012)	FDS6298 (BAM62980005)
PQ13	PHK28NQ03LT (BAM28030212)	FDMS8672S (BAM86720000)
PR83		

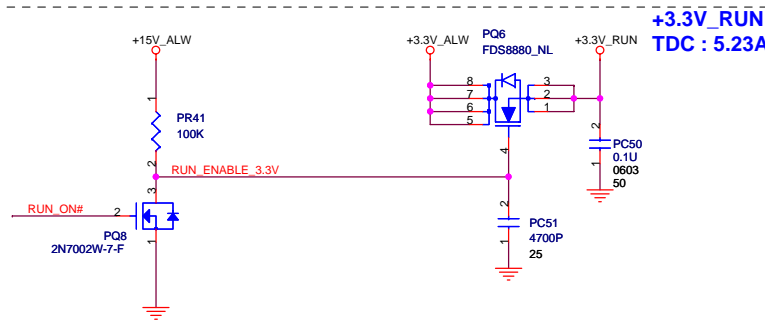
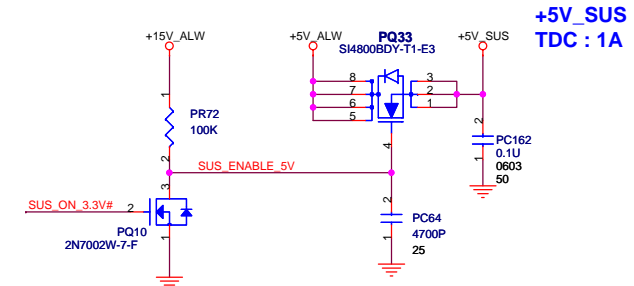
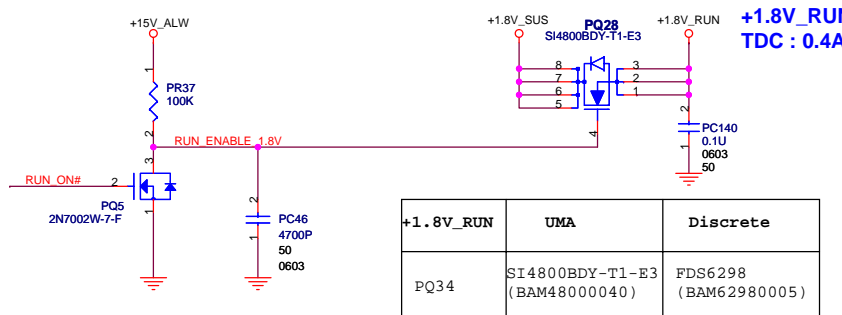
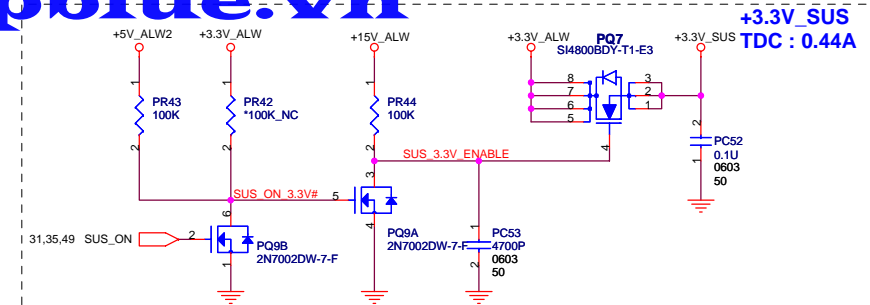
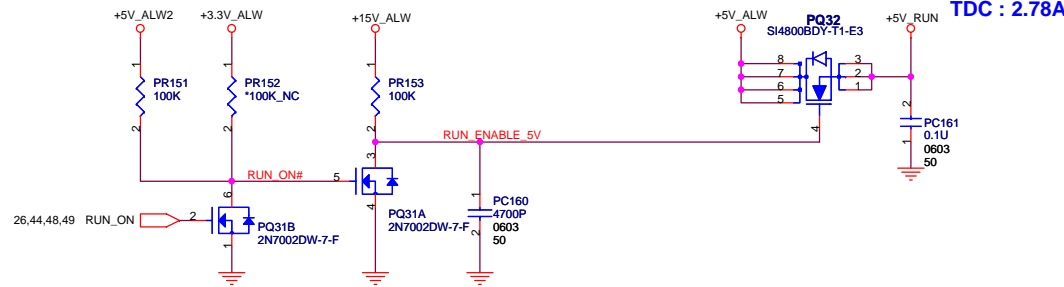
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NUMBER SAME AS DISCRETE

 QUANTA COMPUTER		
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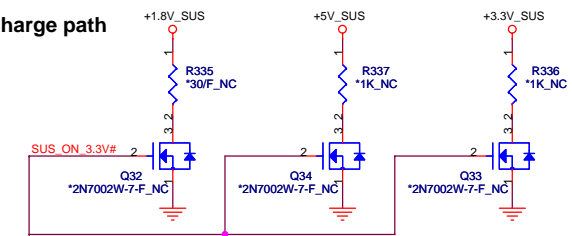




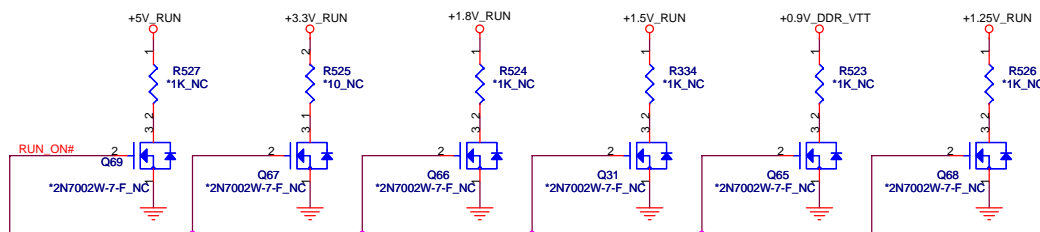
Max current(TDC)->6.2A
OCP->8.63A
Freq=300KHZ



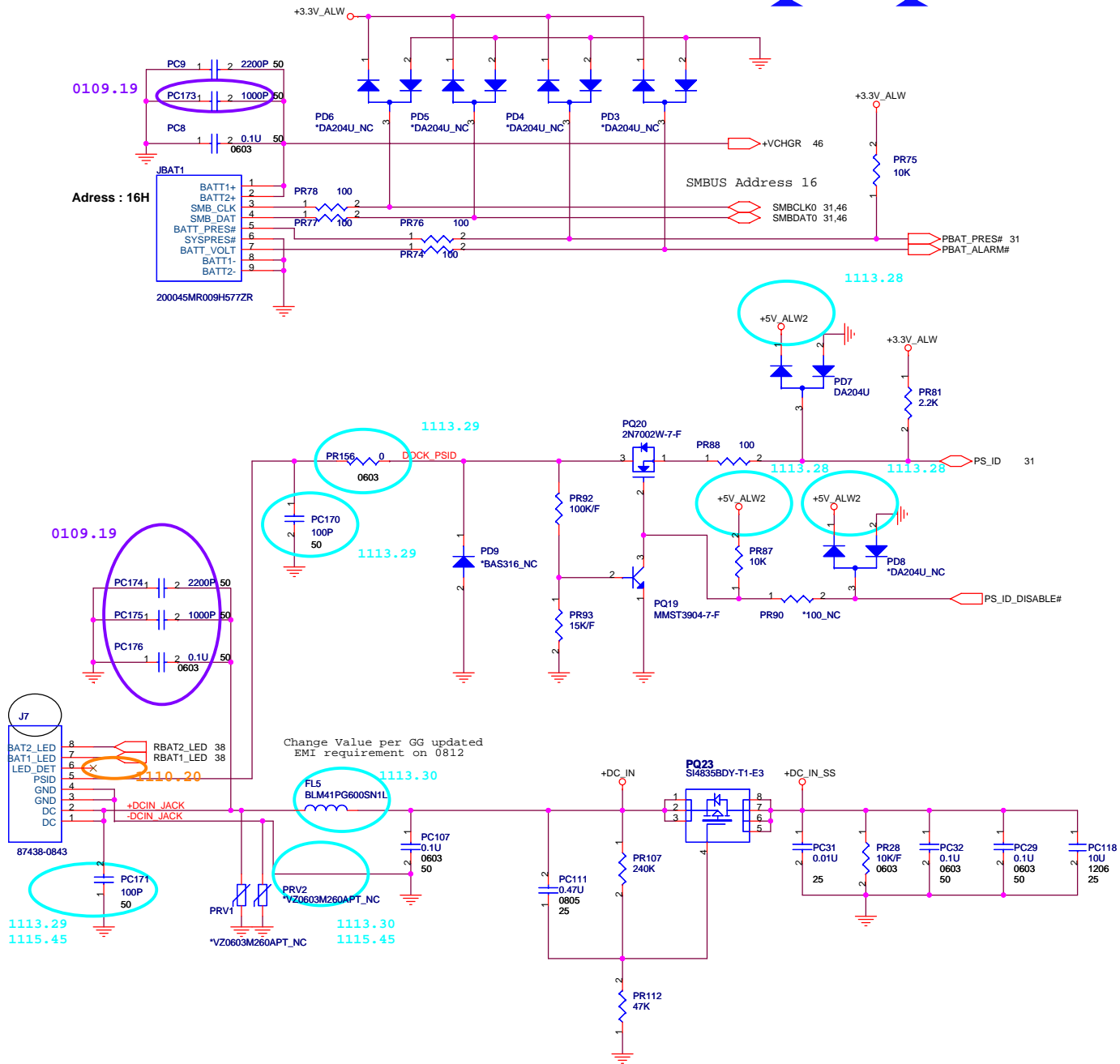
Reserve discharge path

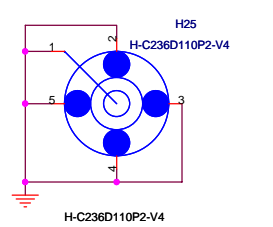
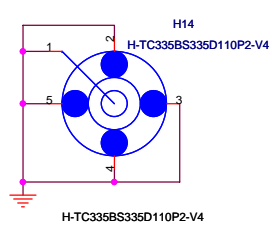
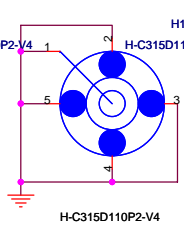
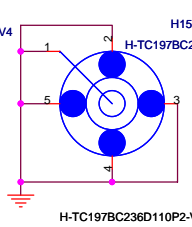
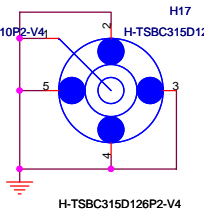
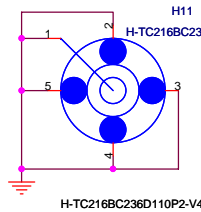
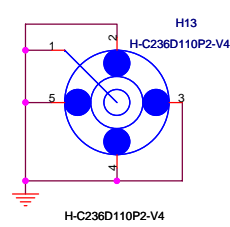
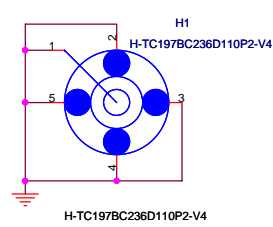
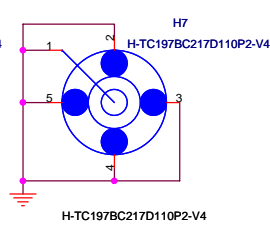
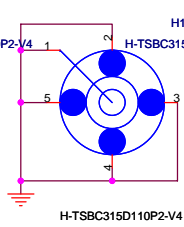
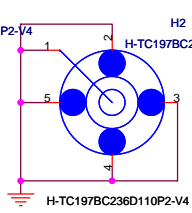
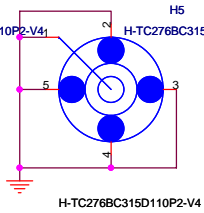
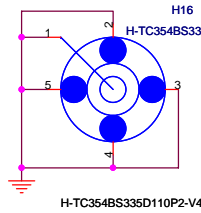
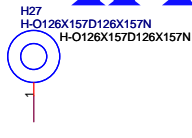
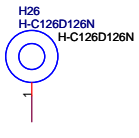
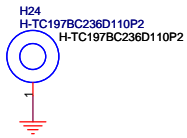


Reserve discharge path

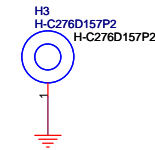
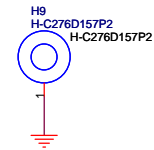
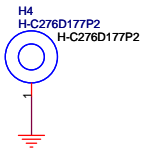
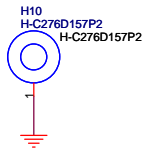


Title RUN POWER SW		
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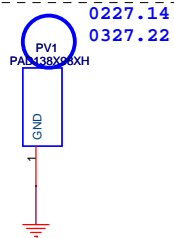
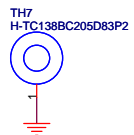




FOR CPU use



For FAN nut use.

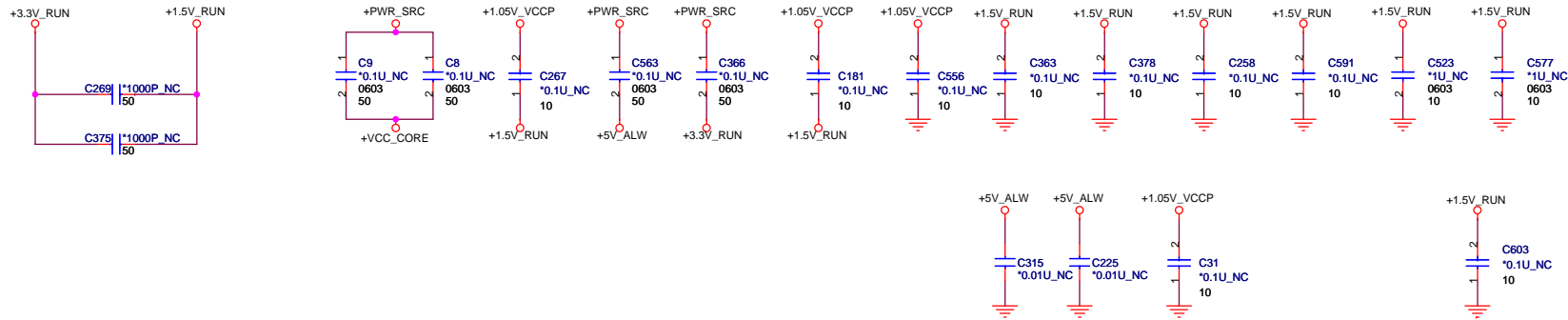



0227.14
0327.22

Title SCREW PAD		
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Reserved for EMI.

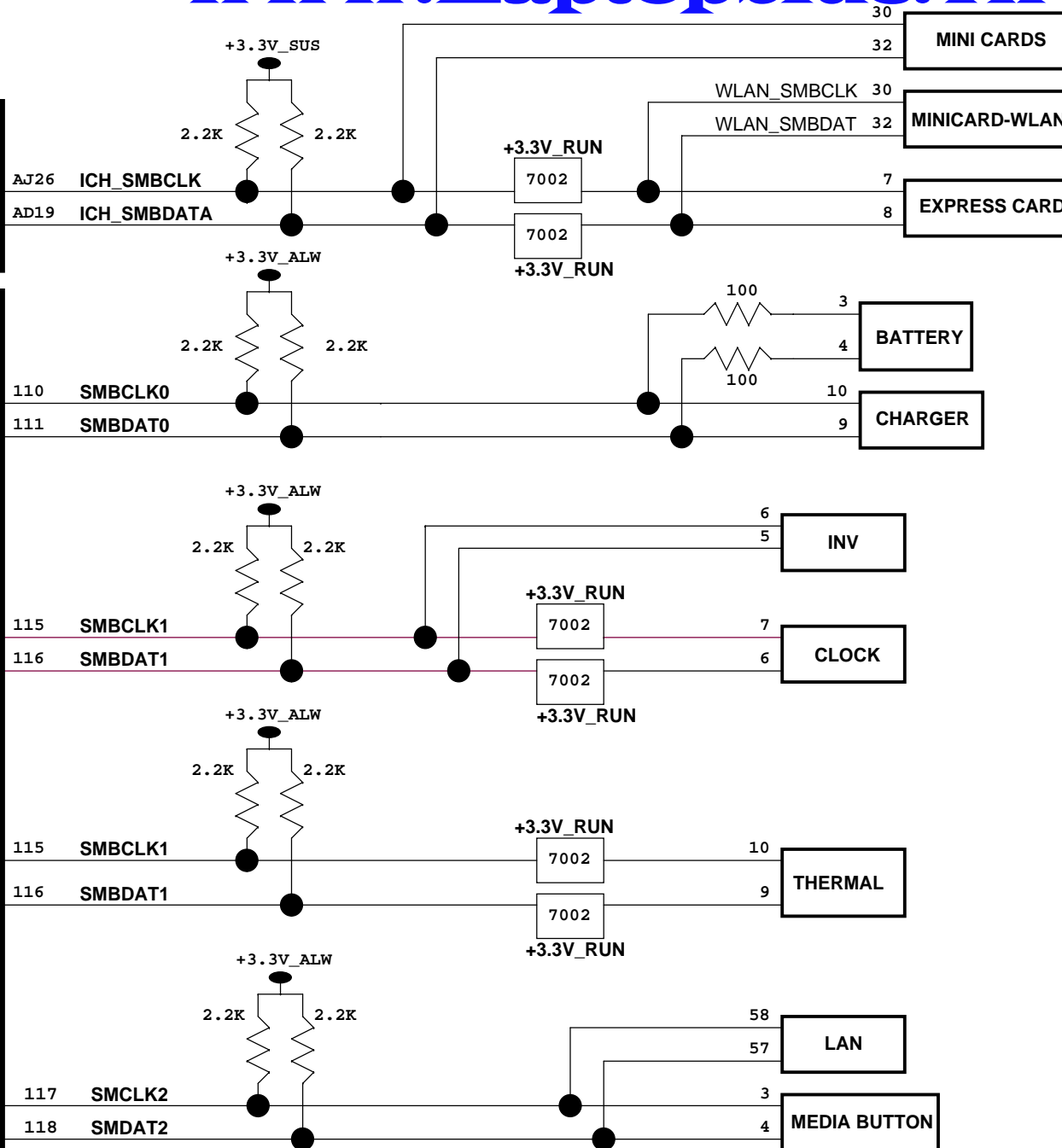
Stitching caps.

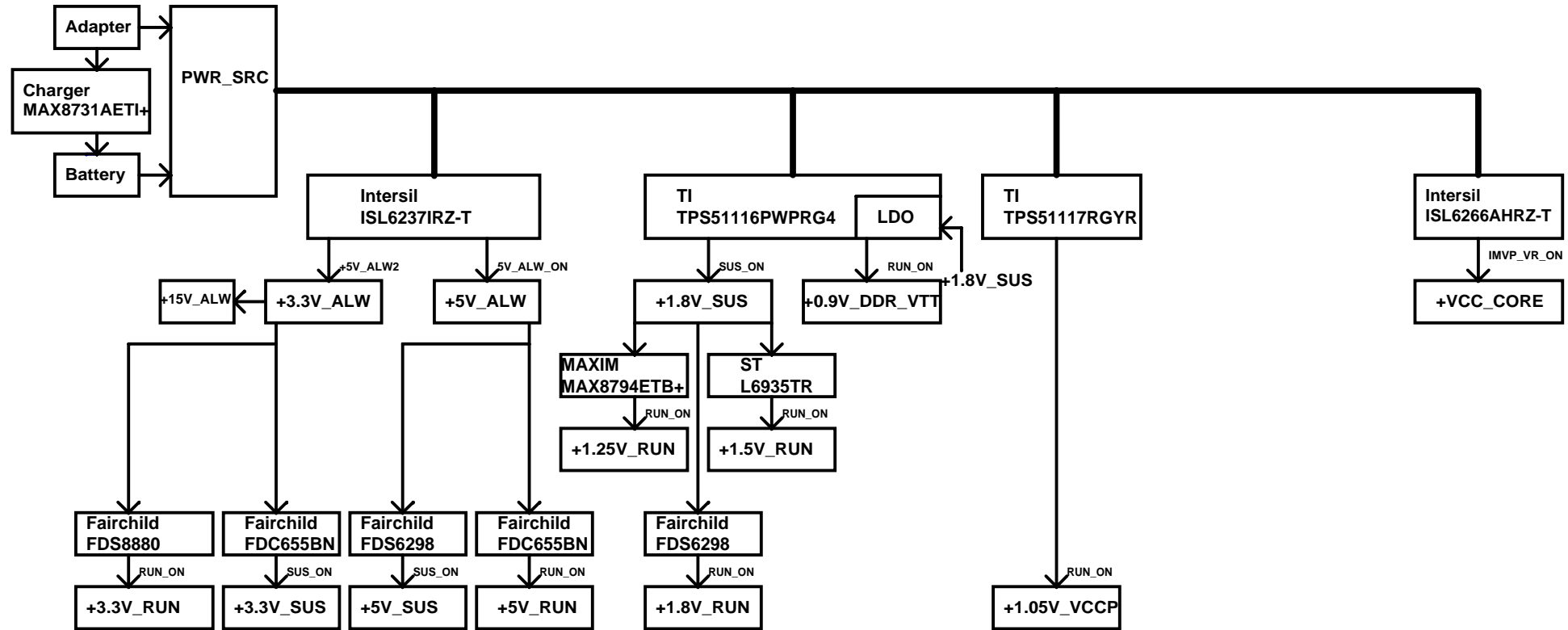


 QUANTA COMPUTER	
Title EMI CAP	
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ICH8-M


SIO
ITE8512





MODEL		REV	CHANGE LIST		
FM6B MB	1A	Refer to ECN No.	1	2A	3A
			2	1A	
			3	2A	
			4	1A	
			5	1A	
			6	1A	
			7	1A	
			8	1A	
			9	2A	
			10	1A	
			11	1A	
			12	1A	
			13	2A	
			14	1A	
			15	1A	
			16	1A	
			17	2A	3A
			18	2A	3A
			19	1A	
			20	1A	
			21	1A	
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PROJECT : FM6B			DOC. NO.	REV:	ASSY:
APPROVED BY : Kevin Chang			CHECKED BY: Kevin Yu	DRAWN BY : Kevin Yu	DATE :


Model	Item	Page	Date	ECN Number	Item Id	Rev.	Issue Description	Solution Description
FM6B	1	36	29.Oct.07				Modify "JMOD1" symbol	Done.
	2	29	29.Oct.07				Add 2 ground pin on J6 symbol	Done.
	3	55	29.Oct.07				Modify symbol UMA: H2,H5,H7,H8,H16,H18,H19	Done.
	4	41	29.Oct.07				Remove M1.	Done.
	5	41	29.Oct.07				Add 4 analog ground pins for U24	Done.
	6	42	29.Oct.07				change SUPER_IDDQ resistor setting R497 from "*39K_NC" to "*20K_NC" (At this moment this function not support).	Done.
	7	31 37	05.Nov.07				modify LED Key board Illumination schematic	1, Remove EC pin 68 2, Depop R204,Q27,R209,Q28,C245,C242,R210 pop R207, add Q70 and Q70.2 connect "KB_BACKLITE_EN" and remoce "KB_BACKLITE_SET" on J3, and add "LED_PWM" between Q70.3 and J3.4
	8	38	05.Nov.07				Depop SNIFFER_YELLOW LED circuit. and Swap WIRELESS_ON/OFF#, SNIFFER_PWR_SW# circuit.	1, Depop R365, Q38, Q8, R27 2, Swap R341, R54 signals
	9	35	05.Nov.07				Added USB charge co-lay circuit for prevent leakage.	1, Reserve Q71,R557,U206,U207 for NC. 2, Add R558,R559,R560,R561 for Co-lay.
	10	40	05.Nov.07				change TPA6040A4 symbol design to meet SPEC definition	Done.
	11	9	05.Nov.07				Add one 0ohm between +1.8V_SUS and "+VCC_SM_CK" for EMI fine tune.	Add R562, Done.
	12	3 52	05.Nov.07				Modify H_THERMTRIP# Voltage Level shift circuit.	1, Add Q72, C687. 2, Pop PR52,PR53.
	13	33	05.Nov.07				Modify JSIM1 connector.	Done.
	14	13	08.Nov.07				Can not enter S3 mode.	change,"USB_MCARD1_DET#", the power rail of pull up circuit from "+3.3V_RUN" to "+3.3V_SUS".
	15	17	08.Nov.07				To match EA spec for "CLK_ICH_48M" item.	change C552 from "27P_NC" to "20p".
	16	31 42	08.Nov.07				To match the frequency stability of oscillation circuit. (By TXC test and Recommend).	1, Adjust C125,C143 from "10pF" to "18pF". 2, Adjust C536 from "27pF" to "22pF".
	17	41	08.Nov.07				Added +3.6V_CAMERA Camera power circuit	1, Added U208,C688,R563,R564,C689,C690 2, Remove C499 and Pop C159,C160. 3, Modify JCAMERA1 pin define and L54 power rail.
	18	31	08.Nov.07				Adjust "NUM_LED#" and "KB_BACKLITE_EN" and "5V_ALW_ON" position.	1, U6.31 for "KB_BACKLITE_EN" 2, U6.98 for "5V_ALW_ON" 3, U6.88 for "NUM_LED#"
	19	18	08.Nov.07				when plug-in HDMI signal, there are no HDMI option inside Windows Vista.	1, change AVCC33V working voltage from +1.8V_RUN to +3.3V_RUN. 2, Change SDVO_CTRLCLK/ SDVO_CTRLDATA pull-high resistors from 3.3K to 3.9K
	20	31 38 54	10.Nov.07				Remove DC IN LED circuit and change signal name DCIN_DETECT_LED# to CHIPSET_ID1.	Remove R12,Q6,Q5,R13



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Title		
Change List		
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	FM6B	2B
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Model	Item	Page	Date	ECN Number	Item Id	Rev.	Issue Description	Solution Description
FM6B	21	31	10.Nov.07				Move "5V_ALW_ON" from U8.98 to U8.83 and add BID1 to EC pin98.	Done.
	22	31	10.Nov.07				Board ID implementation needs to be updated. Update UMA Board ID Straps table to reflect the following: BID1 BID0 Board Rev 0 0 X00 0 1 X01	Pop R127 and depop R128.
	23	38	12.Nov.07				EMI Solution: Create five capacitances 100pF at the 2, 3, 4, 6, 7 pin separately for JSW1 Connector	Done.
	24	37	12.Nov.07				EMI Solution: Create two capacitances 100pF at the 1, 10 pin separately for JP1 connector.	Done.
	25	35	12.Nov.07				EMI Solution: Remove R72, R76, R78, R80 and add L9, L8	Done.
	26	41	12.Nov.07				Reserve +3.6V_CAMERA for camera module first.	Depop U208,C688,R563,R564.
	27	13	12.Nov.07				"THERM_ALERT#" should change the power rail from ""+3.3V_SUS" to "+3.3V_RUN" according datasheet.	Done.
	28	54	13.Nov.07				Change PD7,PD8,PR87 connection to connect +5V_ALW2	Done.
	29	54	13.Nov.07				Add PR156,PC170,PC171,PR157 for EMI	Done.
	30	54	13.Nov.07				Change FL5 to BLM41PG600SN1L and del FL4(add PJP21)	Done.
	31	46	13.Nov.07				Depop PR117 ,PR31 ,PR111 ,PR114 ,PR115 ,PC122 ,PC34 ,PC120 ,PC117 ,PR108 ,PC33 ,PC115 ,PU1 ,PC112 ,PR113 ,PR119 ,PR118 and PR25	Done.
	32	46	13.Nov.07				Change PQ22 to SI4812BDY	Done.
	33	52	13.Nov.07				Change PL1 ,PL2 to CV-3380TZ00 and PQ13 ,PQ14 to SI4812BDY	Done.
	34	49	13.Nov.07				1. Change PC157 ,PC158 to 220U/2.5V/ESR15 and PL9 to 1.3UH/ SIL1045RA-1R3 and PQ30 to FDS6676A 2. Pop PR150,PC154 3. Add PR155, PC172	Done.
	35	48	13.Nov.07				1. Change PR134 to connect RUN_ON and PC138 to 680PF 2. Pop PC127 to 1500PF 3. Change PC139 to 330U/2V/ESR12	Done.
	36	51	13.Nov.07				Change PU4 footprint	Done.
	37	31	13.Nov.07				Connect "THERM_STP#" with ITE8512.	Done.
	38	40	13.Nov.07				Change Codec IC from STAC9228 to 92HD73C.	1, Depop R494,C651. 2, Depop R543, R549, R498,R548 and pop R542, R551, R495 ,R541.



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COMPUTER

TitleChange List

Size


Document Number
FM6B

Rev
2B

Date: Thursday, March 06, 2008

Sheet 1 of 6

Model	Item	Page	Date	ECN Number	Item Id	Rev.	Issue Description	Solution Description
FM6B	39	30 35	14.Nov.07				EMI Solution: 1, Define Card Reader shielding into Analog GND. 2, Define express card reader shielding into Digital GND. 3, Define USB connector shielding into Digital GND.	Done.
	40	18	14.Nov.07				EMI Solution: Add L40, L41, L42, L43 and depop R360,R361,R359,R358, R347,R349,R356,R353.	Done.
	41	43	14.Nov.07				EMI Solution: Create 8 capacitances 6.8pF between the TRD3+, TRD3-, TRD2+, TRD2-, TRD1+, TRD1-, TRD0+, TRD0- (1, 2, 5, 6, 7, 8, 11, 12pin) and GND separately.	Done.
	42	18	14.Nov.07				when plug-in HDMI signal, there are no HDMI option inside Windows Vista.	Change SDVO_CTRLCLK/ SDVO_CTRLDATA pull-high resistors from 3.3K to 5.6K
	43	37	14.Nov.07				Change R207 to FS3 for "Key board Illumination" circuit.	Done.
	44	13	14.Nov.07				Reserve 0ohm for GPIO18 of ICH8M for PCIE_MCARD1_DET# debug.	Done.
	45	54	15.Nov.07				Remove PR157 and PJP21 to fulfill EMI request.	Done.
	46	40 41	15.Nov.07				Change C677,C663,C581 and C565 to 2.2u for batter Audio precision. (per IDT suggestion)	Done.
	47	41	16.Nov.07				Leave U24.pin 21,22,23,24,25 unconnected by FAE suggestion.	Done.
	48	41	06.Dec.07				Remove these 20K ohm resistors because it is for desktop design or codec internal headphone amplifier.	Depop R197, R202, R217, R224, done.
	49	42	06.Dec.07				Change BCM5787M to BCM5784M.	Done.
	50	3	06.Dec.07				Modify H_THERMTRIP# Voltage Level shift circuit.	Adjust R368 from 1Mohm to 10Mohm,done.
	51	31	06.Dec.07				Change SMBDAT1/SMBCLK1 pull-up resistors with 10Kohm from 2.2Kohm.	Done.



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FM6B	1	38	13.Dec.07				Sniffer should be during S5.Dell define our Sniffer switch need to stay 'ON' after the WiFi can be enable.	change R341 to +3.3V_ALW.
	2	31	13.Dec.07				Follow ITE feedback to reserve caps for ITE8512JX.	Add C704,R566 to U6 pin.12.
	3	35	13.Dec.07				Change USB Q-switch power rail from +3.3V_RUN to +3.3V_SUS.	Change U206 pin.8, U207 pin.8 from +3.3V_RUN to +3.3V_SUS, Q71 pin.2 from RUN_ON to SUS_ON.
	4	31	13.Dec.07				Sniffer power switch needs to wake up EC, when battery only. So it needs to use WUI pin.	Swap U6.108 SNIFFER_PWR_SW# and U6.35 WIRELESS_ON/OFF#
	5	42 43	13.Dec.07				Modify LAN 1000 LED circuit to solve BCM5784M LED issue.	Add D33,D34,R567 to solve BCM5784M 1000 LED issue.
	6	32	13.Dec.07				BT1 connector pin define is different before.	Change BT1 pin.1 to GND, pin.2 to +RTC.
	7	17	13.Dec.07				MCH DPLL clock trace connection is not correct.	MCH_DREFCLK connect with U23 Pin.20 MCH_DREFCLK# connect with U23 Pin.21 DREF_SSCLK connect with U23 Pin.24 DREF_SSCLK# connect with U23 Pin.25
	8	36	24.Dec.07				Exchange Q61A and Q60B position inside schematic.	Done.
	9	18	25.Dec.07				Setup SDSCL/SDSDA pull up voltage more achieve spec.	Add R568,R569 and change R69, R71 to get 2.52V pull up voltage.
	10	38	25.Dec.07				Change ESD3 power rail from +3.3V_ALW to +3.3V_RUN.	Done.
	11	37	31.Dec.07				1, Change MMB LED power source from ALW plane to RUN plane for power saving .added one 5V_ALW2 power plane for PAID diag used. 2, Change the Media board power from 3V_ALW to 5V_ALW2 to solve LED flash issue when AC/Bat plug in.	Done.
	12	37	31.Dec.07				WLAN and BT LED need to show function at factory side.	Change power supply of Cap and Num LED from 5V_ALW2 to 5V_RUN.
	13	37	31.Dec.07				Avoid system can enter S3 mode but wake up fail problem.	Change the lid switch IC power source from 3.3V_SUS to 3.3V_ALW.
	14	31	31.Dec.07				Board ID implementation needs to be updated. Update UMA Board ID Straps table to reflect the following: BID1 BID0 Board Rev 0 1 X01 1 0 X02	Pop R128 and depop R127. Pop R133 and depop R134.
	15	37	7.Jan.08				MMB vendor will change F/W to fix the issue that LED flash issue when AC/Bat plug in. So change the circuit back to original.	Done.
	16	37	7.Jan.08				Prevent the leakage from +3.3V_ALW to +5V_RUN inside Num/Cap LED circuit.	Change Q15.pin2, Q16.pin2, R57 and R58 from +3.3V_ALW to +3.3V_RUN.
	17	35	9.Jan.08				Fulfill Reliability team request.	Connect J5.Pin8 to +USB_BACK_PWR.
	18	49	9.Jan.08				Change PJP18 to FL6, According POWER team request.	Done.
	19	35 46	9.Jan.08				Fulfill EMI team request. FI3 change to short-circuit USB CONN.: use Murata Common mode Choke (P/N: DL W 21 S N 900 H Q 2 L) L8 , L9 , LN1 , LN2	Done.




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FM6B	1	48	15.Feb.08				Solve 1.5V PWRGD issue.	change to pull high PR154 to +3.3V_SUS.
	2	28,29 35,42	20.Feb.08				Fulfill safety team request, change USB control IC (TPS2062) location of UMA same as Discrete platform.	ORINIGAL U5, U13 -> TPS2062AD U7-> 24LC02BT-I/STG in P.42 U16-> R5C833 in P.28,29 AFTER SAFETY TEAM REQUEST, U7, U16 -> TPS2062AD U5-> 24LC02BT-I/STG in P.42 U13-> R5C833 in P.28,29
	3	18	20.Feb.08				Fulfill EMI team request, change common choke for HDMI CONN.: use Panasonic Common mode Choke (P/N: EXC24CG900U) L40 , L41 , L42 , L43	Done.
	4	31	20.Feb.08				Use ITE8512 pin 22 detect ICH_AZ_CODEC_RST# to mute speaker pop noise.	Connect ICH_AZ_CODEC_RST# and U6 pin 22.
	5	9,18 35,48 49,52	20.Feb.08				Delete all debug power jump.	Done.
	6	31	20.Feb.08				Board ID implementation needs to be updated. Update UMA Board ID Straps table to reflect the following: BID1 BID0 Board Rev 1 0 X02 1 1 A00	Depop R128 and pop R127.
	7	18	20.Feb.08				DDC Capacitance over spec 50pf. We will add level shift circuit to reduce Capacitance.	Add level shift Q73, Q74 2N7002 to reduce the DDC Capacitance.
	8	4	20.Feb.08				Acoustic team suggest to resolve Acoustic issue.	Pop C438 and C450.
	9	18	25.Feb.08				Update HDMI level shift circuit.	Add R572,R573,R576,R577.
	10	13 37	25.Feb.08				Install LED keyboard detect pin between GPIO17 of ICH8 and J3.pin3	Done.
	11	14,32 41	25.Feb.08				Fulfill safety team request, change RTC resistor and diode location of UMA same as Discrete platform.	Swap D18 and D16, R218 and R205.
	12	3,6 7,12	25.Feb.08				Delete all EA test pad.	Delete ET1 ~ET68.
	13	18	26.Feb.08				Update HDMI level shift circuit.	Change Q73,Q74 from 2N7002 to FDV301N.
	14	55	27.Feb.08				Fulfill EMI team request, add one EMI SPRING near sniffer switch area.	Install PV1, done.
	15	40,41	27.Feb.08				Need to meet WLP4.0 1, Add 2.2K-ohm resistors to prevent amplifier clipping. 2, Add 220PF capacitors to allow proper dynamic range measurent.	1. Add 2.2K series resistance (R578,R579,R580,R581) between the codec and the headphone amplifier inputs. 2. Add 220pF capacitors (C665,C676,C709,C710) to ground on the headphone amplifier inputs. 3. Change cap from 0.0033U to 6800p for AUD_FRONT_L/AUD_FRONT_R.
	16	30	27.Feb.08				Fulfill EMI team request, add a 22p capacitor in mini SD circuit.	Install C711, done.
	17	13	27.Feb.08				Update ICH_RSMRST# Pd resister	Done.
	18	6	29.Feb.08				Follow Intel design guide, TVA_DAC, TVB_DAC, TVC_DAC connect 75 ohm to GND.	Done.



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FM6B	19	41	03.Mar.08				Need to meet WLP4.0 to avoid create large amounts of distortion, change the Bead according IDT's suggest.	Change L25, L26, L30, L31, L32, L33 to Murata BLM18BD601SN1.
	20	31	27.Mar.08				Fix RTC issue.	Depop C704.
	21	44	27.Mar.08				Update HWPG circuit.	Change R555 from 10Kohm to 0 ohm.
	22	55	27.Mar.08				Fulfil EMI team request, add one EMI SPRING near sniffer switch area.	Pop PV1.



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