

UM3B/UM6B SYSTEM BLOCK DIAGRAM

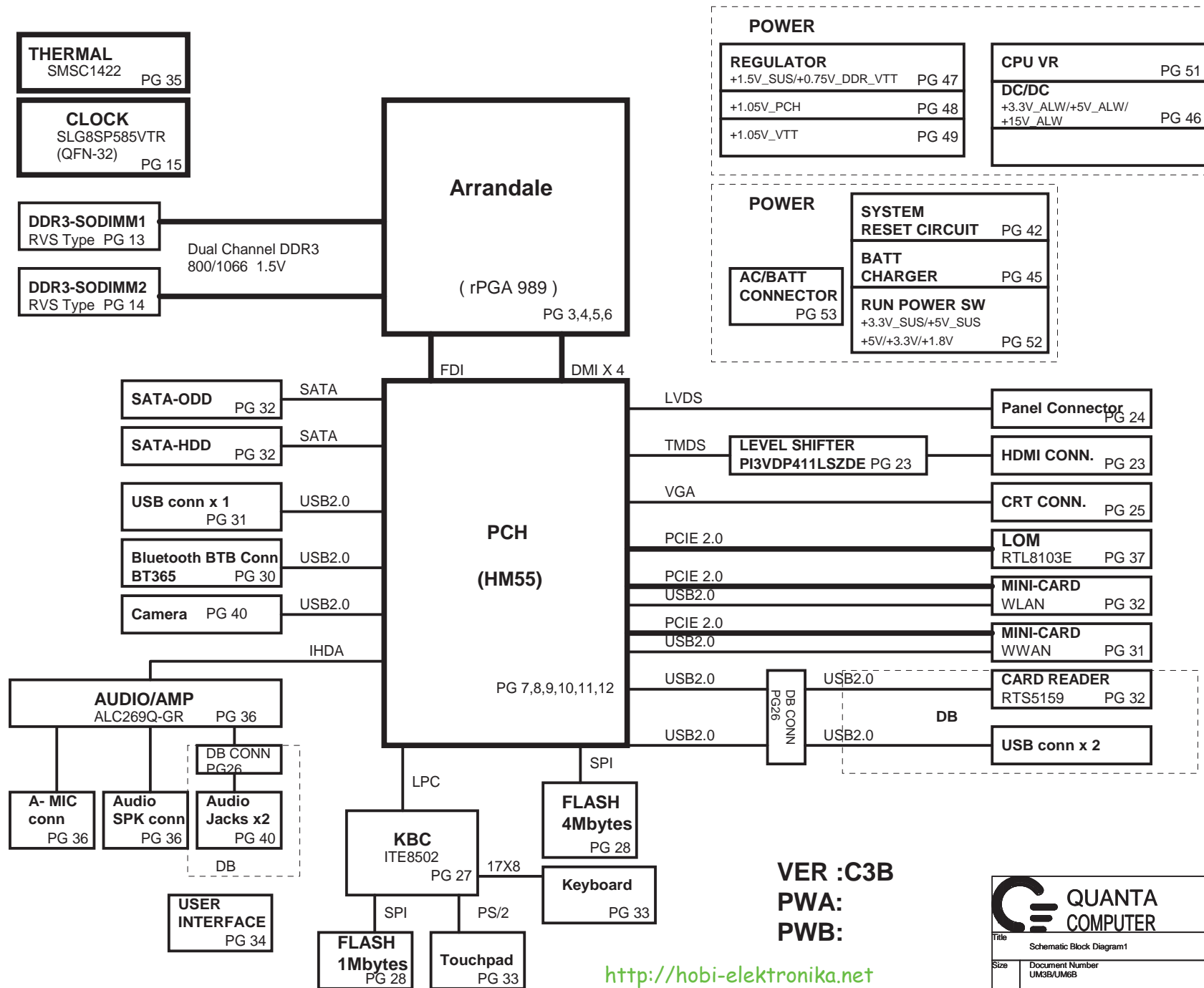



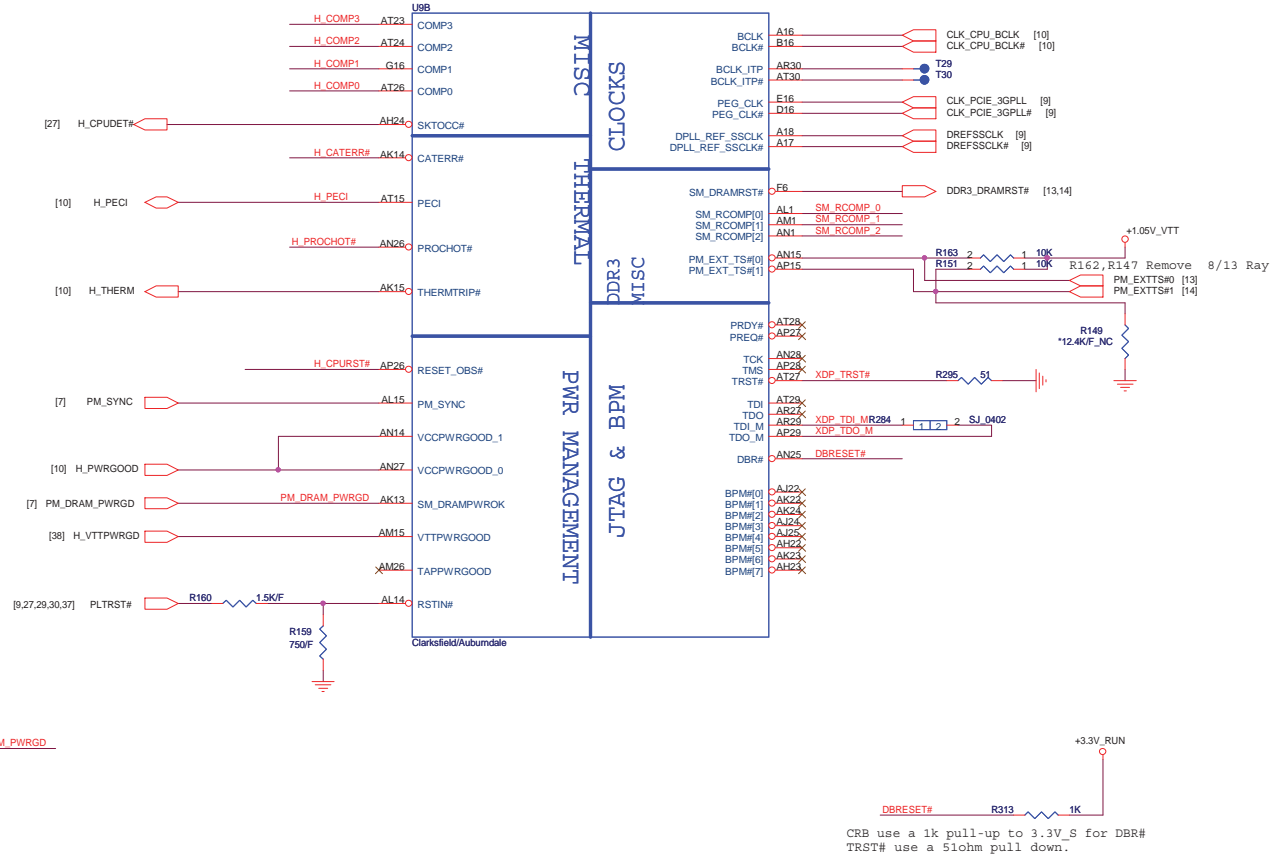
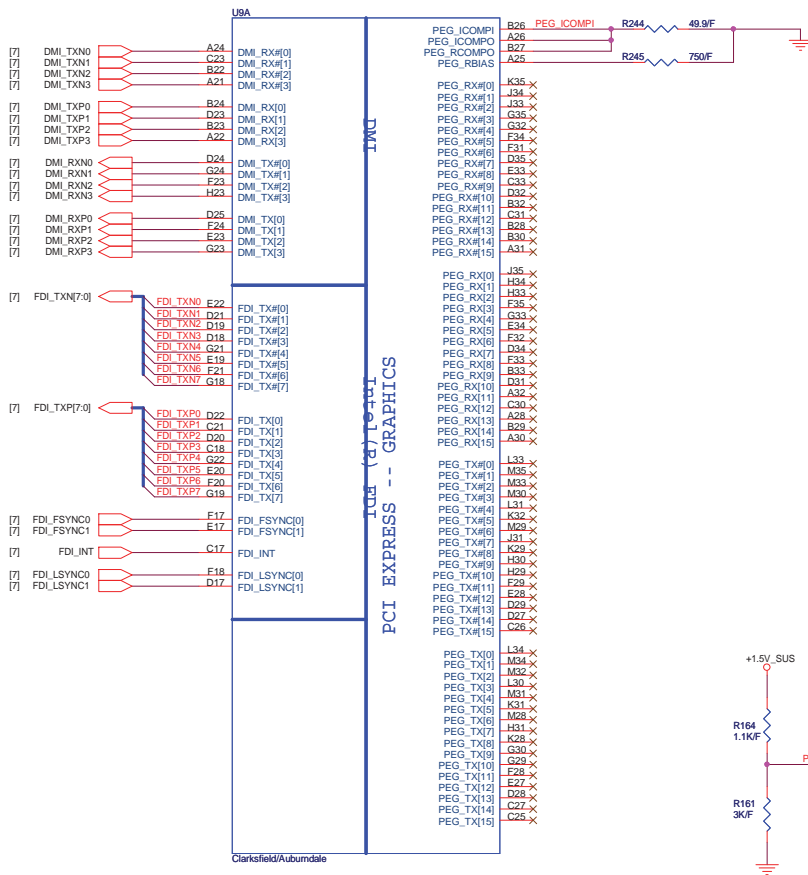
Table of Contents

PAGE	DESCRIPTION
1	Schematic Block Diagram
2	Front Page
3-6	Clarksfield/Auburndale
7-12	PCH
13-14	DDRIII SO-DIMM(204P)
15	Clock Generator
16-22	BLANK PAGE
23	HDMI CONN
24	LCD CONN
25	CRT CONN
26	DB CONN
27	SIO (ITE8502)
28	FLASH / RTC
29	MINI-Card (WWAN)
30	MINI-Card (WLAN/WPAN)
31	USB
32	SATA (HDD & CD-ROM)
33	TP / KEYBOARD
34	PWR SWITCH / LED
35	FAN / THERMAL
36	CODEC ALC269
37	LAN(RTL8103M/RJ-45)
38	System Reset Circuit
39	BLANK PAGE
40	1.8V_RUN(RT9018/RT9024)
41	Charger (MAX8731)
42	3V/5V (TPS51427A)
43	1.5_DDR/0.75(TPS51116)
44	1.05V_PCH(TPS51218)
45	1.05_VTT(TPS51218)
46	GFX_VCORE (MAX17028)
47	CPU CORE(MAX17036)
48	Run Power Switch
49	DCin & Batt
50	PAD & SCREW
51	EMI CAP
52	SMBUS BLOCK
53	THERMAL MAP
54	Power Block Diagram
55	Power sequence Block
56	XDP
57	
58	
59	
60	

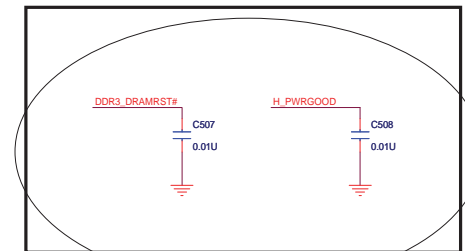
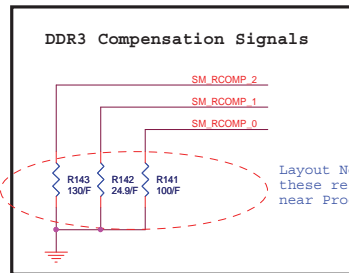
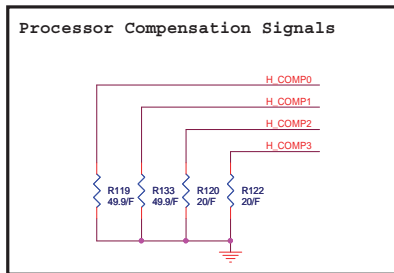
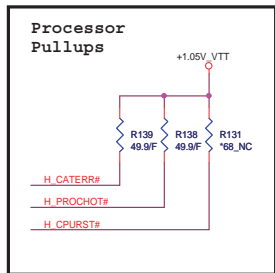
Power States

POWER PLANE	VOLTAGE	PAGE	DESCRIPTION	CONTROL SIGNAL	ACTIVE IN
+PWR_SRC	10V~+19V	24,30,45,46,47,48,49,50,51	MAIN POWER		S0~S5
+RTC_CELL	+3.0V~+3.3V	08,11,29,30	RTC		S0~S5
+5V_ALW2	+5V	37,46,52,53	LARGE POWER	MAIN POWER	S0~S5
+5V_ALW	+5V	13,33,44,46,47,48,49,50,51,52	LARGE POWER	ALW_ON	S0~S5
+3.3V_ALW	+3.3V	29,30,35,36,37,42,44,45,46,47,51,52,53	8051 POWER	3.3V_ALW_ON	S0~S5
+5V_SUS	+5V	11,33,34,37,51,52	SLP_S5# CTRLD POWER	SUS_ON	
+3.3V_SUS	+3.3V	07,08,09,10,11,13,14,19,24,28,29,37,41,42,44,48,49,50,52	SLP_S5# CTRLD POWER	SUS_ON	
+1.5V_SUS	+1.5V	03,05,13,14,47,50,52	SODIMM POWER	SUS_ON	
+0.75V_DDR_VTT	+0.75V	13,14,47,52	SODIMM POWER	RUN_ON	
+5V_RUN	+5V	11,18,24,25,35,36,38,39,40,51,52	SLP_S3# CTRLD POWER	RUN_ON	
+3.3V_RUN	+3.3V	3,7,8,9,10,11,13,14,15,17,24,25,26,28,29,30,31,32,33,35,37,38,39,40,41,42,46,51,52,60	SLP_S3# CTRLD POWER	RUN_ON	
+1.8V_RUN	+1.8V	05,11,44,52	SDVO POWER	RUN_ON	
+1.05V_VTT	+1.1V	03,05,10,11,49,60	CPU POWER	RUN_ON	
+1.5V_RUN	+1.5V	11,28,31,32,52	Express Card/Min Card	RUN_ON	
+5V_HDD	+5V	35	HDD Power	HDDC_EN	
+1.05V_PCH	+1.05V	08,09,11,15,48	PCH POWER	RUN_ON	
+VCC_CORE	+0.7V~+1.77V	05,51	CPU CORE POWER	IMVP_VR_ON	
+LCDVCC	+3.3V	24	LCD Power	LCDVCC_TST_EN & ENVDD	
+5V_MOD	+5V	35	MOD Power	MODC_EN	

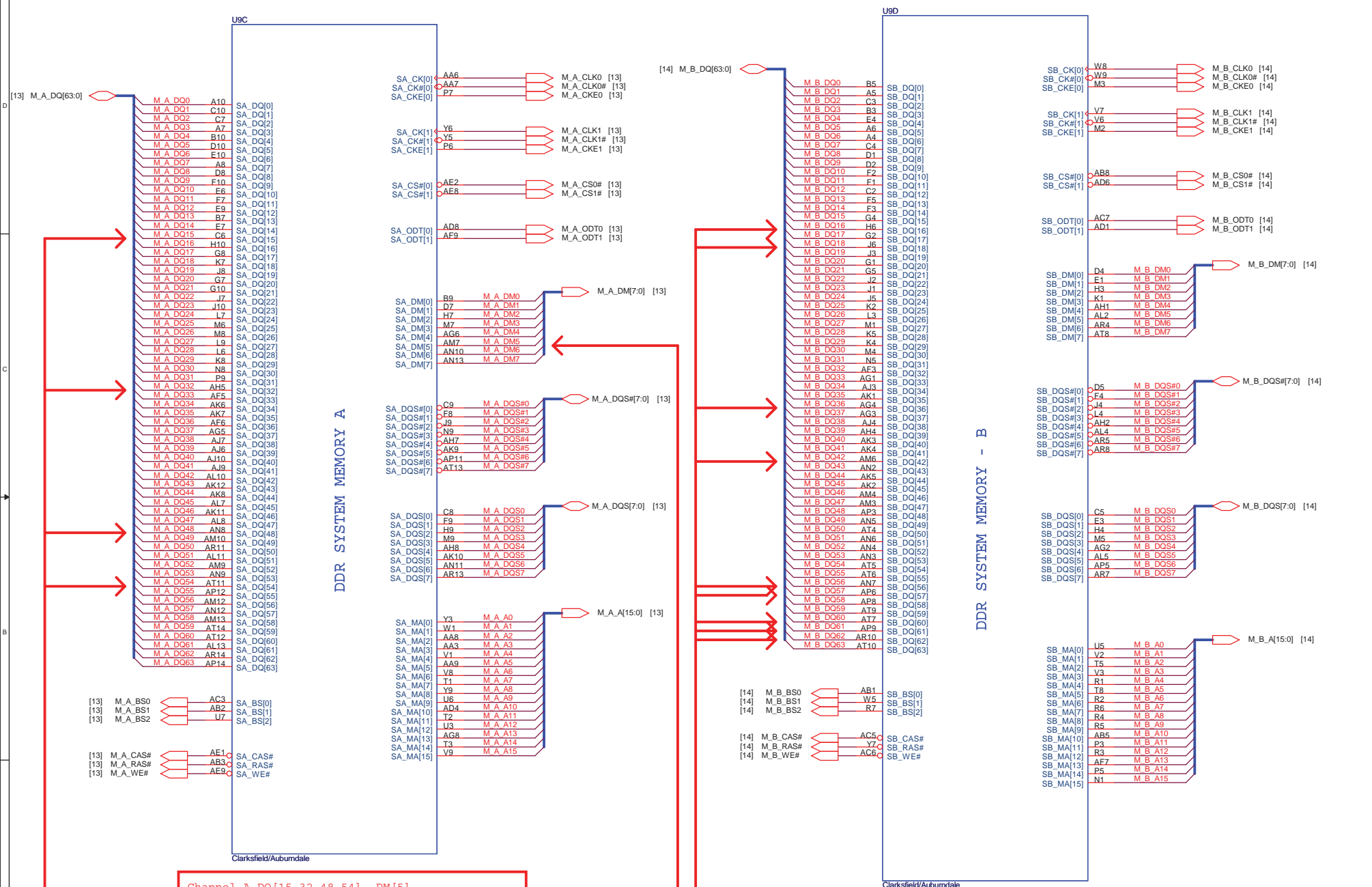
GND PLANE	PAGE	DESCRIPTION
 GND	ALL	



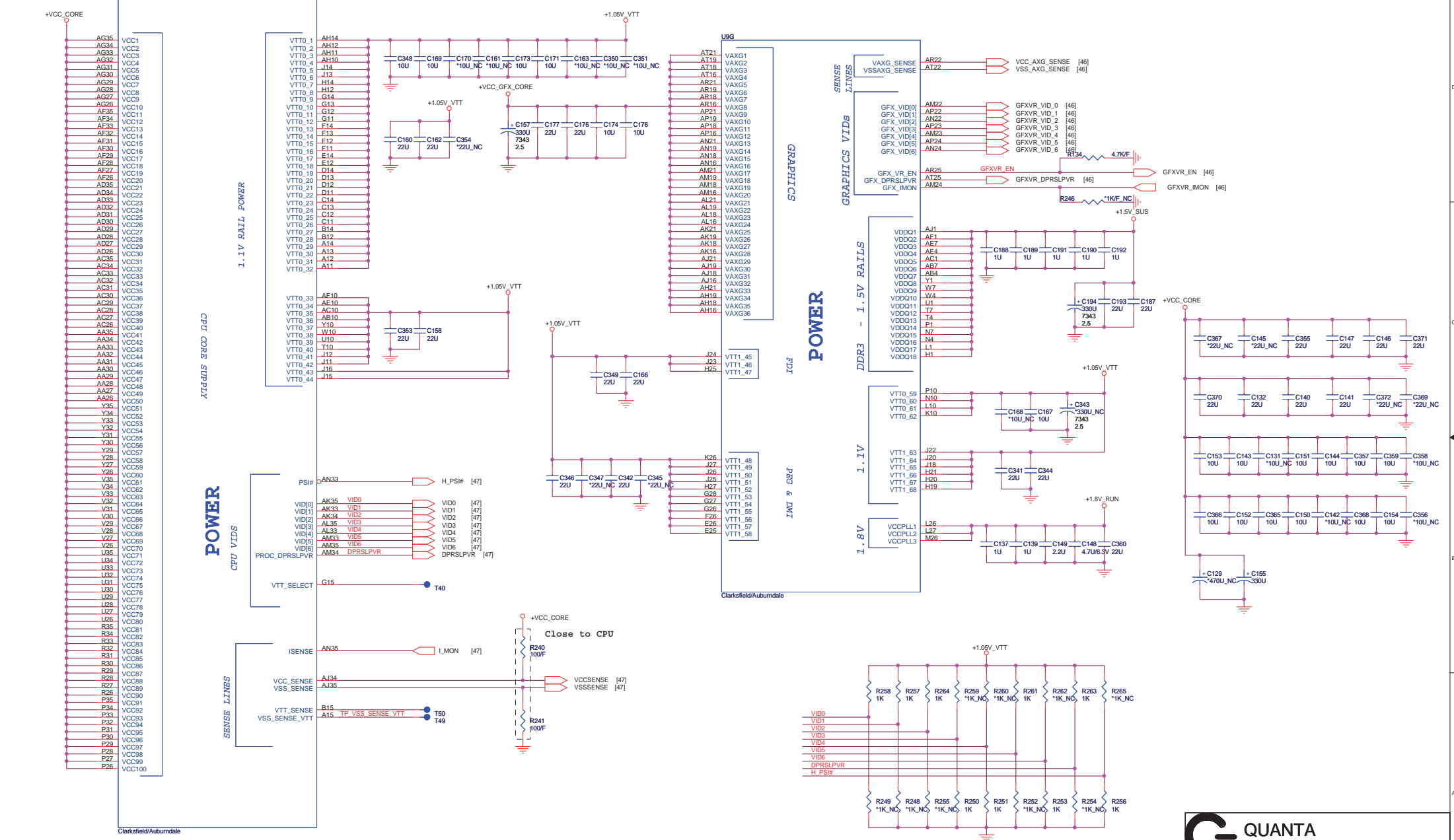
CBP use a 1k pull-up to 3.3V_S for DBR#
TRST# use a 51ohm pull down.



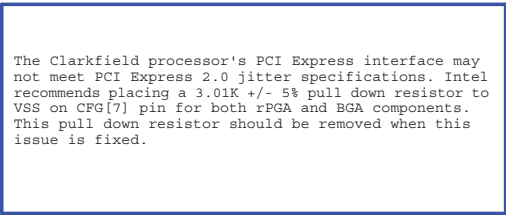
AUBURNDALE/CLARKSFIELD PROCESSOR (DDR3)



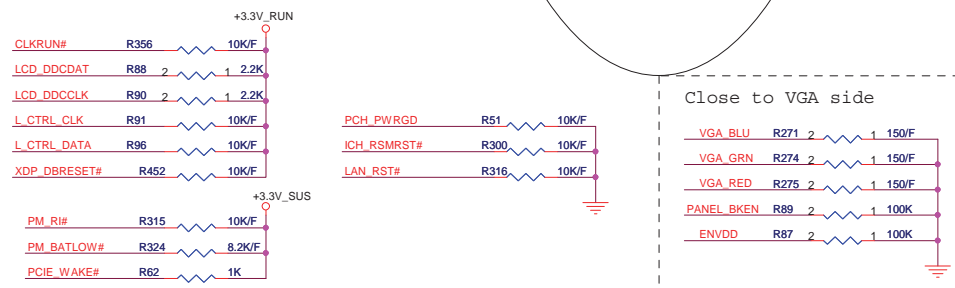
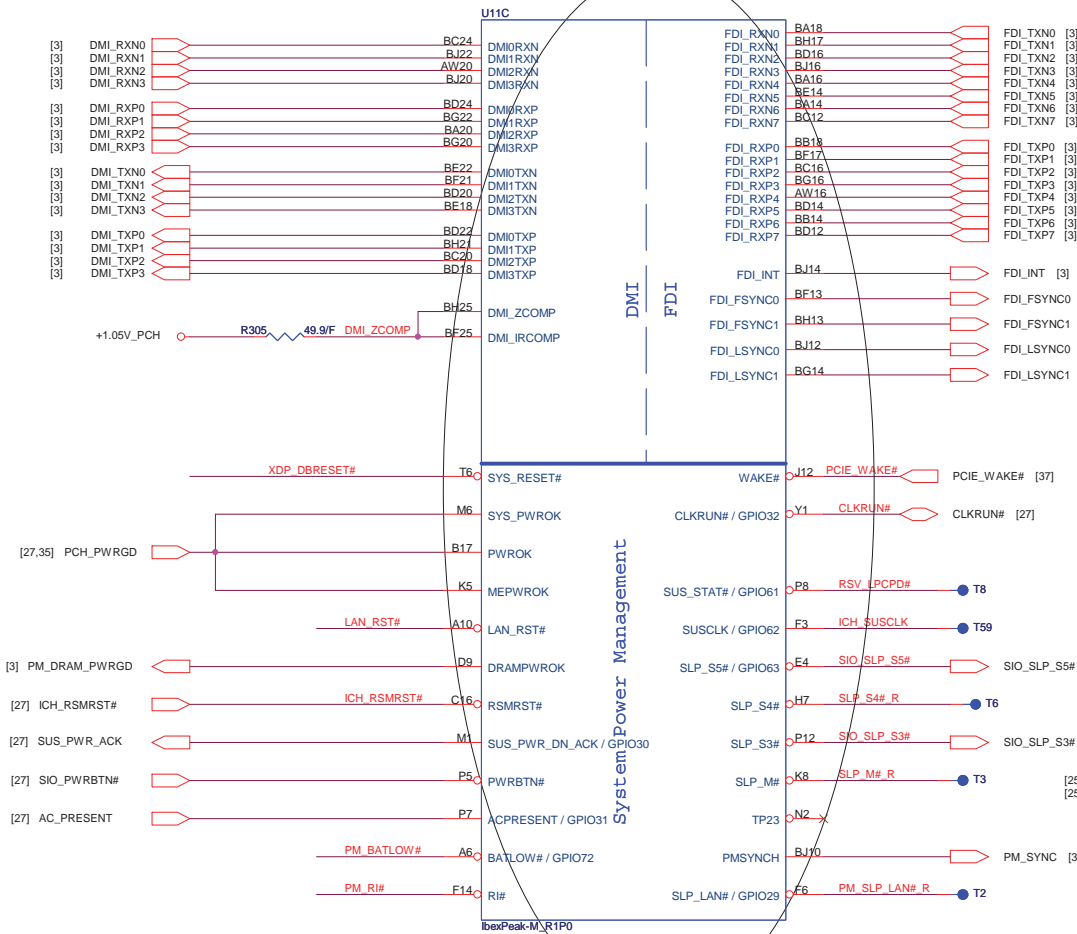
Title AUBURND 2/4		
Size	Document Number UM3B/UM6B	Rev 1A
Date:	Friday, October 02, 2009	Sheet 4 of 59



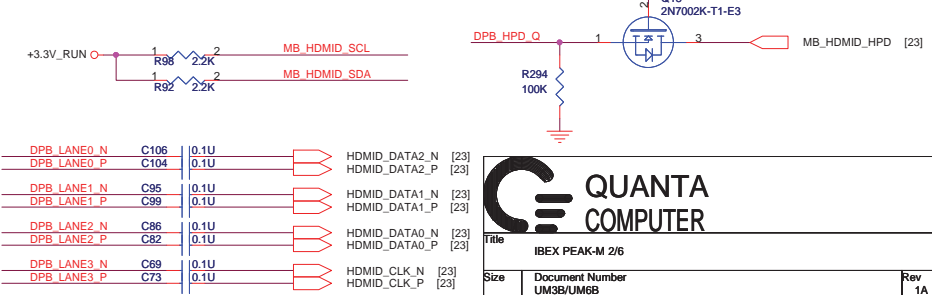
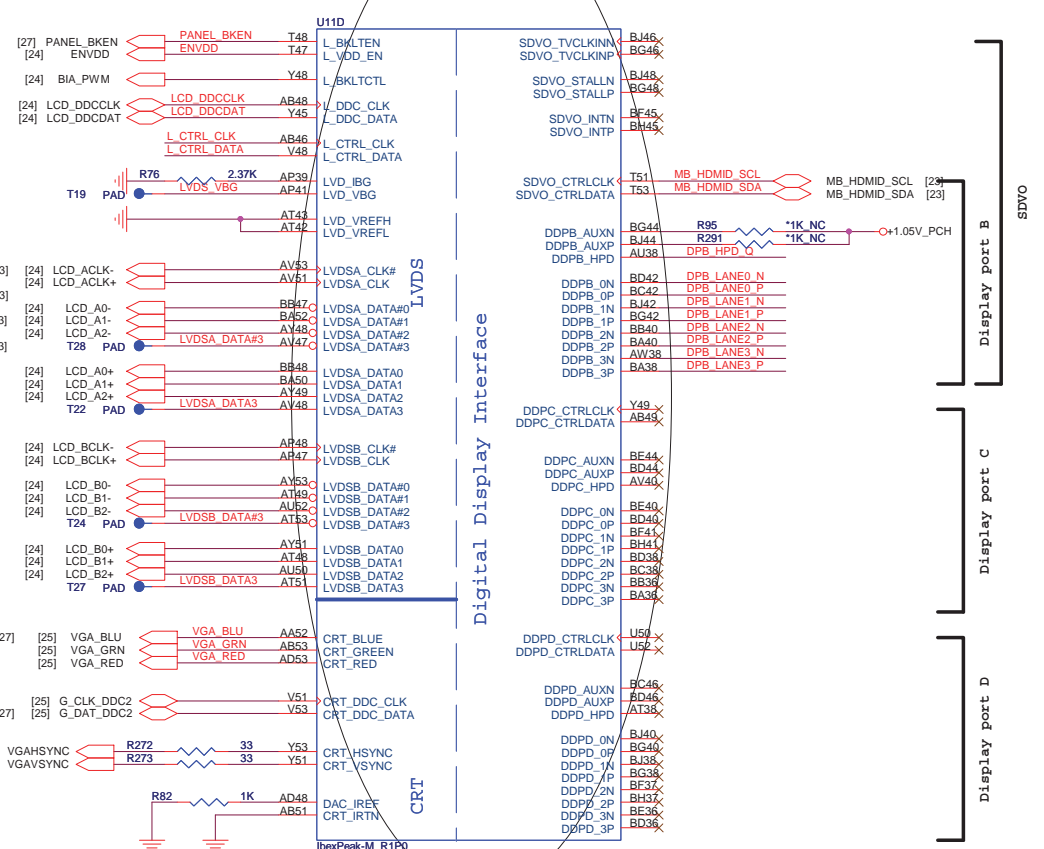
AUBURNDALE/CLARKSFIELD PROCESSOR(RESERVED, CFG)



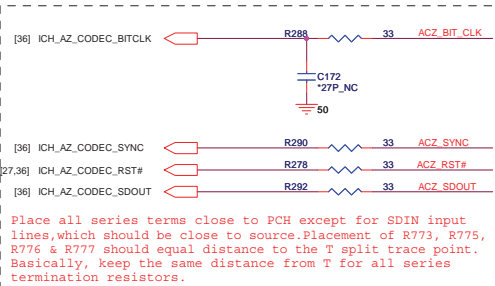
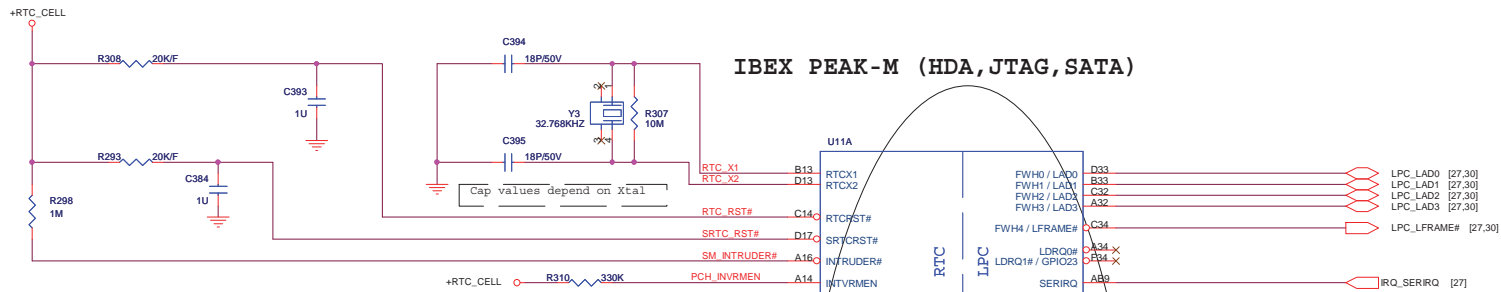
IBEX PEAK-M (DMI, FDI, GPIO)



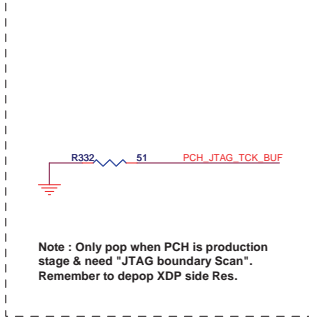
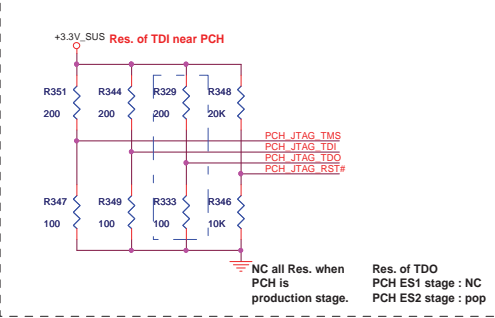
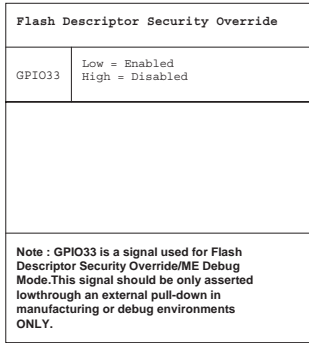
~~IBEX PEAK-M (LVDS, DDI)~~



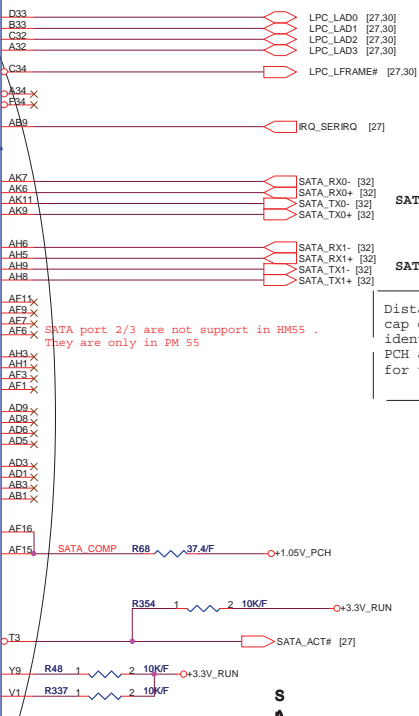
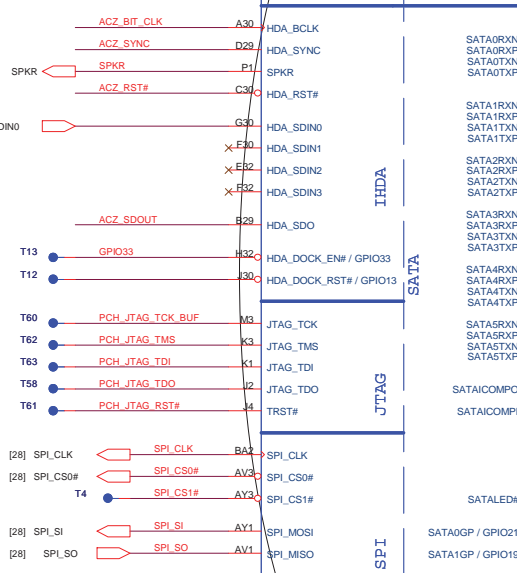
IBEX PEAK-M (HDA, JTAG, SATA)



INTVRMEN (Internal Voltage Regulator Enable) : This signal enables the internal 1.05 V regulators. This signal must be always pulled-up to VccRTC.



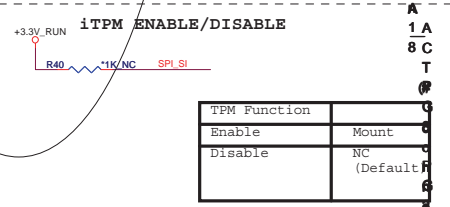
JTAG Test Pads are need to put on the same side of mother board.



SATA HDD

SATA ODD

Distance between the PCH and cap on the "P" signal should be identical distance between the PCH and cap on the "N" signal for the same pair.



QUANTA COMPUTER

IBEX PEAK-M 1/6

File: UM38/UM68

Size: Document Number: Rev 1A

Date: Friday, October 02, 2009 Sheet 8 of 59

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

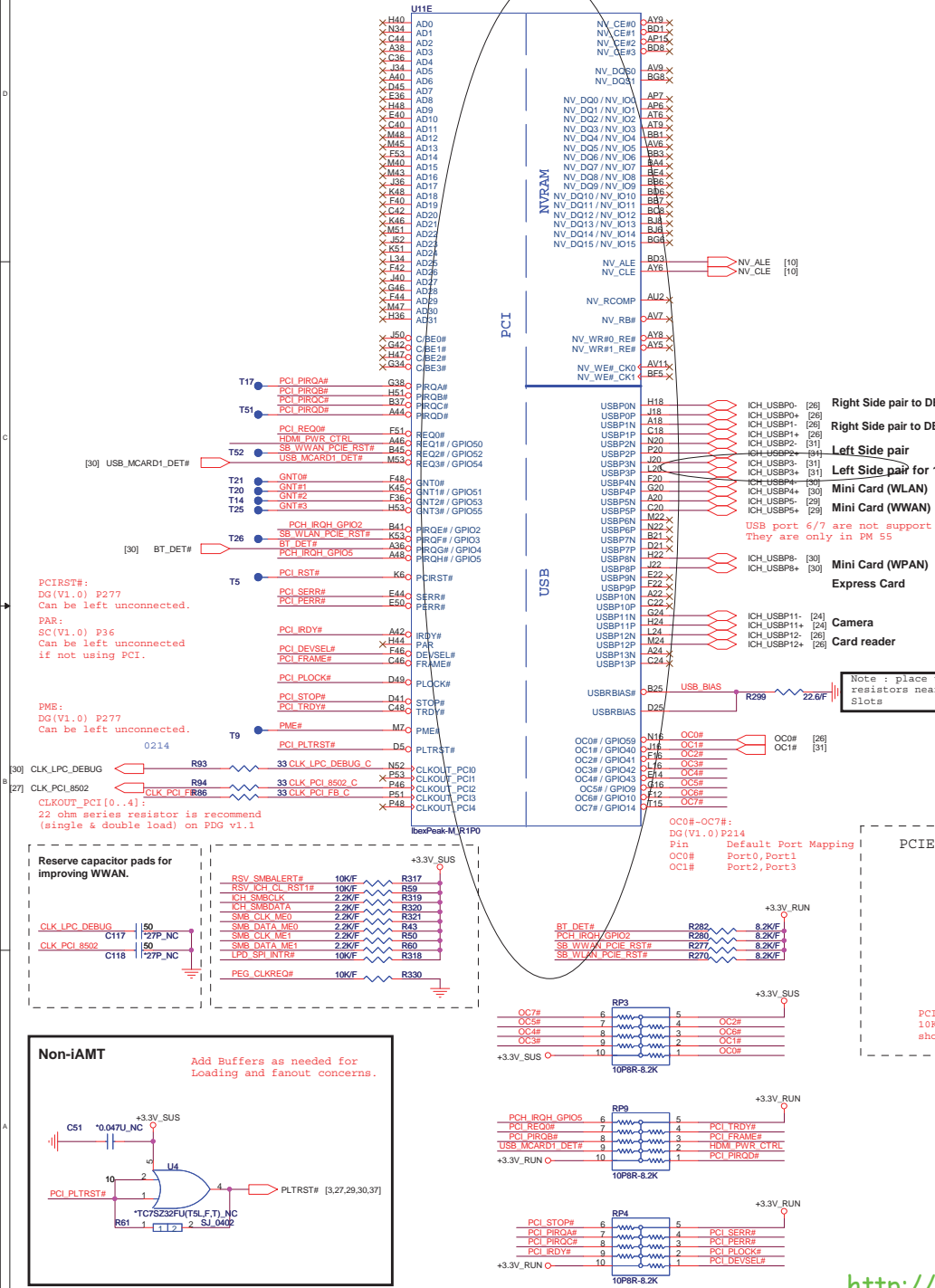
The diagram illustrates the internal connections of the iSoPeak-M R1P0 module, specifically focusing on the PCIE1-* controller and its interfaces with the SMBus and Clock Flex blocks.

PCIE1-* Controller:

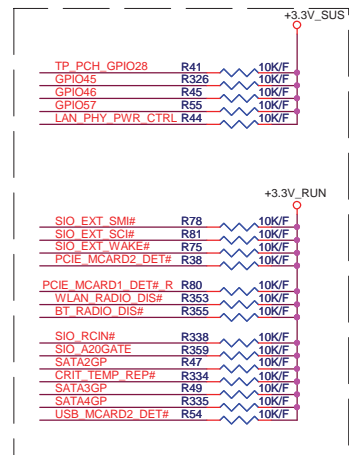
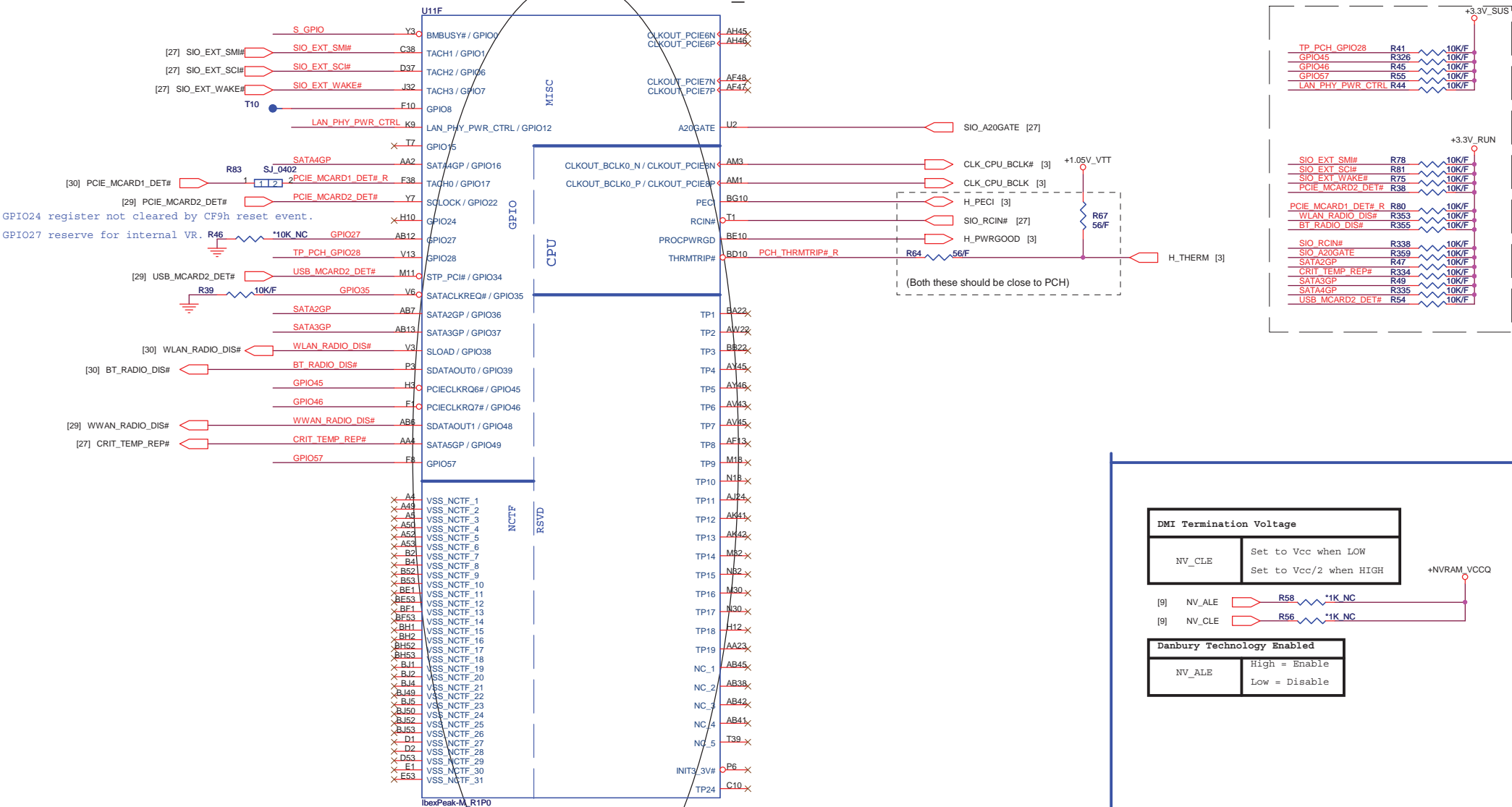
- SMBus Interface:**
 - SMBALERT# / GPIO11:** Connected to T56 (RSV SMBALERT#).
 - SMBCLK:** Connected to H14 (ICH_SMBCLK [30]) and C8 (ICH_SMBDATA [30]).
 - SMB0ALERT# / GPIO60:** Connected to J14 (RSV ICH_CL_RST1#) and C8 (SMB_CLK_MEO).
 - SMBLOCK:** Connected to G8 (SMB_DATA_MEO).
 - SMB1ALERT# / GPIO74:** Connected to M14 (LPD_SPI_INTR#) and E10 (SMB_CLK_ME1).
 - SMB1CLK / GPIO58:** Connected to G12 (SMB_DATA_ME1).
 - SMB1DATA / GPIO75:** Connected to T13 (CL_CLK1), T11 (CL_DATA1), and T9 (CL_RST1#).
- PB0 Interface:**
 - PEG_A_CLKREQ# / GPIO43:** Connected to H1 (PEG_CLKREQ#).
 - CLKOUT_PEG_A_N / CLKOUT_PEG_A_P:** Connected to AD43 and AD45.
 - CLKOUT_DMI_N / CLKOUT_DMI_P:** Connected to AN4 and AN2.
 - CLKOUT_DP_N / CLKOUT_BCLK1_N / CLKOUT_DP_P / CLKOUT_BCLK1_P:** Connected to AT1 and AT3.
 - CLKIN_DMI_N / CLKIN_DMI_P:** Connected to AW24 and BA24.
 - CLKIN_BCLK_N / CLKIN_BCLK_P:** Connected to AP3 and AP1.
 - CLKIN_DT_96N / CLKIN_DT_96P:** Connected to F18 and E18.
 - CLKIN_SATA_N / CKSSCD_N / CLKIN_SATA_P / CKSSCD_P:** Connected to AH13 and AH12.
 - REFCLK14M:** Connected to P41.
 - CLKIN_PCIL0BACK:** Connected to J42 (CLK_PCI_FB).
 - XTAL25_IN / XTAL25_OUT:** Connected to AH51 and AH53.
 - XCLK_ROMP:** Connected to AF38 (XCLK_ROMP).
- From CLK BUFFER:**
 - PCIECLKRQ0# / GPIO73:** Connected to P8 (PCIECLKRQ0#).
 - PCIECLKRQ1# / GPIO18:** Connected to U4 (PCIECLKRQ1#).
 - PCIECLKRQ2# / GPIO20:** Connected to N4 (PCIECLKRQ2#).
 - PCIECLKRQ3# / GPIO25:** Connected to AH42 and AH41.
 - PCIECLKRQ4# / GPIO26:** Connected to M51 and M53.
 - PCIECLKRQ5# / GPIO44:** Connected to H6.
 - PCIECLKRQ6# / GPIO56:** Connected to P13.
- Clock Flex:**
 - CLKOUT_FLEX0 / GPIO64:** Connected to T46 (CLK_FLEX0).
 - CLKOUT_FLEX1 / GPIO65:** Connected to P43 (CLK_FLEX1).
 - CLKOUT_FLEX2 / GPIO66:** Connected to T42 (CLK_FLEX2).
 - CLKOUT_FLEX3 / GPIO67:** Connected to N50 (CLK_FLEX3).

Other Components:

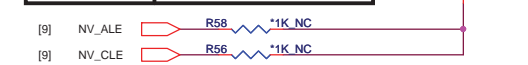
- Resistors:** R77 (90.0k), R455 (1M), R456 (250k).
- Capacitors:** C122 (27pF), C121 (27pF), C120 (50nF).
- Connectors:** J14, J2, J1, J3, J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18, J19, J20, J21, J22, J23, J24, J25, J26, J27, J28, J29, J30, J31, J32, J33, J34, J35, J36, J37, J38, J39, J40, J41, J42, J43, J44, J45, J46, J47, J48, J49, J50, J51, J52, J53, J54, J55, J56, J57, J58, J59, J60, J61, J62, J63, J64, J65, J66, J67, J68, J69, J70, J71, J72, J73, J74, J75, J76, J77, J78, J79, J80, J81, J82, J83, J84, J85, J86, J87, J88, J89, J90, J91, J92, J93, J94, J95, J96, J97, J98, J99, J100, J101, J102, J103, J104, J105, J106, J107, J108, J109, J110, J111, J112, J113, J114, J115, J116, J117, J118, J119, J120, J121, J122, J123, J124, J125, J126, J127, J128, J129, J130, J131, J132, J133, J134, J135, J136, J137, J138, J139, J140, J141, J142, J143, J144, J145, J146, J147, J148, J149, J150, J151, J152, J153, J154, J155, J156, J157, J158, J159, J160, J161, J162, J163, J164, J165, J166, J167, J168, J169, J170, J171, J172, J173, J174, J175, J176, J177, J178, J179, J180, J181, J182, J183, J184, J185, J186, J187, J188, J189, J190, J191, J192, J193, J194, J195, J196, J197, J198, J199, J200, J201, J202, J203, J204, J205, J206, J207, J208, J209, J210, J211, J212, J213, J214, J215, J216, J217, J218, J219, J220, J221, J222, J223, J224, J225, J226, J227, J228, J229, J230, J231, J232, J233, J234, J235, J236, J237, J238, J239, J240, J241, J242, J243, J244, J245, J246, J247, J248, J249, J250, J251, J252, J253, J254, J255, J256, J257, J258, J259, J260, J261, J262, J263, J264, J265, J266, J267, J268, J269, J270, J271, J272, J273, J274, J275, J276, J277, J278, J279, J280, J281, J282, J283, J284, J285, J286, J287, J288, J289, J290, J291, J292, J293, J294, J295, J296, J297, J298, J299, J300, J301, J302, J303, J304, J305, J306, J307, J308, J309, J310, J311, J312, J313, J314, J315, J316, J317, J318, J319, J320, J321, J322, J323, J324, J325, J326, J327, J328, J329, J330, J331, J332, J333, J334, J335, J336, J337, J338, J339, J340, J341, J342, J343, J344, J345, J346, J347, J348, J349, J350, J351, J352, J353, J354, J355, J356, J357, J358, J359, J360, J361, J362, J363, J364, J365, J366, J367, J368, J369, J370, J371, J372, J373, J374, J375, J376, J377, J378, J379, J380, J381, J382, J383, J384, J385, J386, J387, J388, J389, J390, J391, J392, J393, J394, J395, J396, J397, J398, J399, J400, J401, J402, J403, J404, J405, J406, J407, J408, J409, J410, J411, J412, J413, J414, J415, J416, J417, J418, J419, J420, J421, J422, J423, J424, J425, J426, J427, J428, J429, J430, J431, J432, J433, J434, J435, J436, J437, J438, J439, J440, J441, J442, J443, J444, J445, J446, J447, J448, J449, J450, J451, J452, J453, J454, J455, J456, J457, J458, J459, J460, J461, J462, J463, J464, J465, J466, J467, J468, J469, J470, J471, J472, J473, J474, J475, J476, J477, J478, J479, J480, J481, J482, J483, J484, J485, J486, J487, J488, J489, J490, J491, J492, J493, J494, J495, J496, J497, J498, J499, J500, J501, J502, J503, J504, J505, J506, J507, J508, J509, J510, J511, J512, J513, J514, J515, J516, J517, J518, J519, J520, J521, J522, J523, J524, J525, J526, J527, J528, J529, J530, J531, J532, J533, J534, J535, J536, J537, J538, J539, J540, J541, J542, J543, J544, J545, J546, J547, J548, J549, J550, J551, J552, J553, J554, J555, J556, J557, J558, J559, J560, J561, J562, J563, J564, J565, J566, J567, J568, J569, J570, J571, J572, J573, J574, J575, J576, J577, J578, J579, J580, J581, J582, J583, J584, J585, J



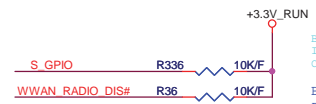
IBEX PEAK-M (GPIO,VSS_NCTF,RSVD)



DMI Termination Voltage	
NV_CLE	Set to Vcc when LOW Set to Vcc/2 when HIGH



Danbury Technology Enabled	
NV_ALE	High = Enable Low = Disable



EMBUSY#:
If not used, require a weak pull-up (8.2- KΩ to 10 kΩ) to Vcc3.3.
CRB(V1.0)P28: it has 1K PU and 100 ohm on this net for validation purpose.

EMBUSY#:(Intel feedback)
Follow CRB checklist, 1K is
for intel BIOS validation purpose.

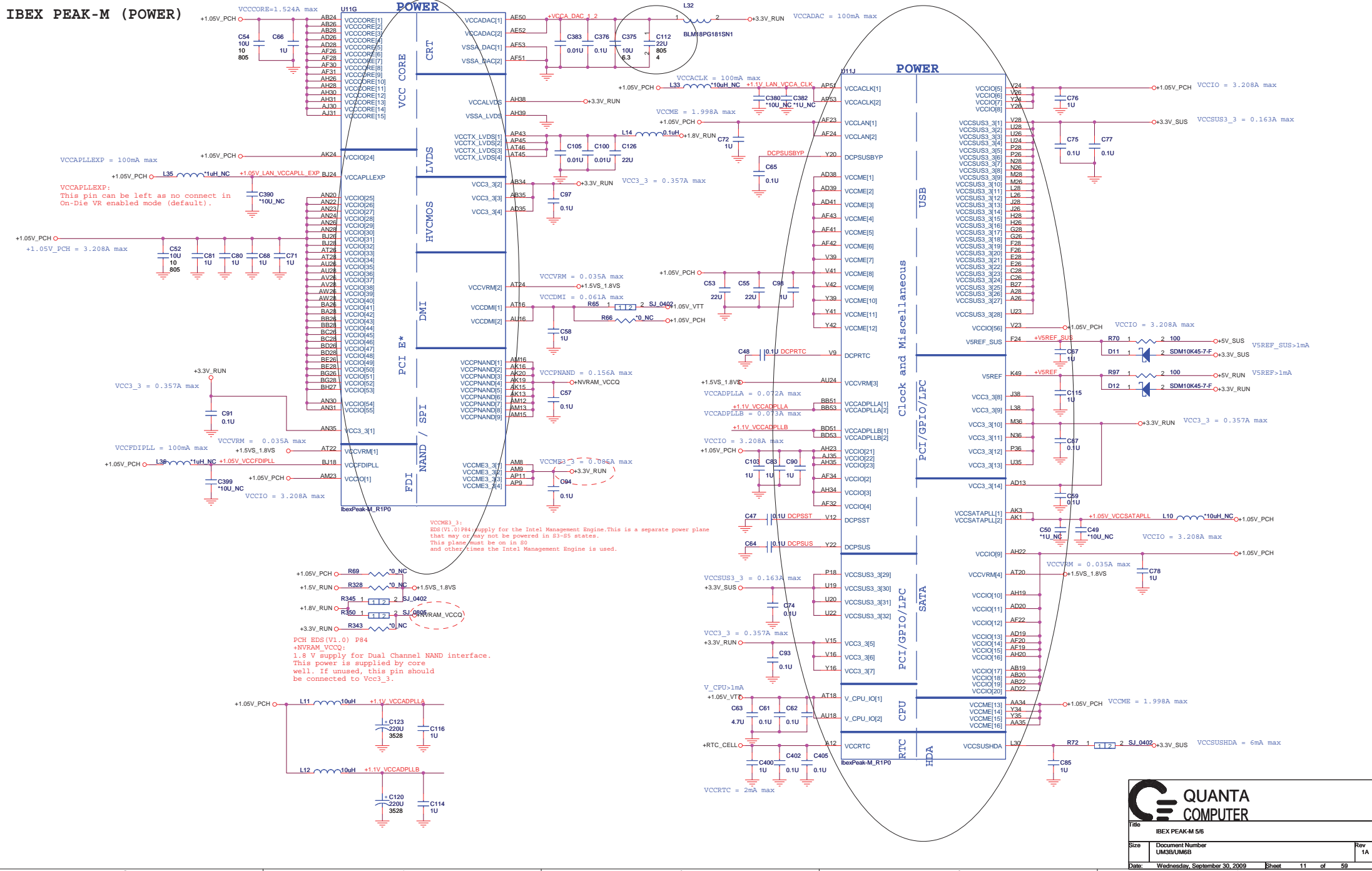
WWAN_RADIO_DIS#	1-X High = Strong (Default)
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<http://hobi-elektronika.net>



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Size	Document Number	Rev	
	UM3B/UM6B	1A	
Date:	Friday, October 02, 2009	Sheet	10 of 59

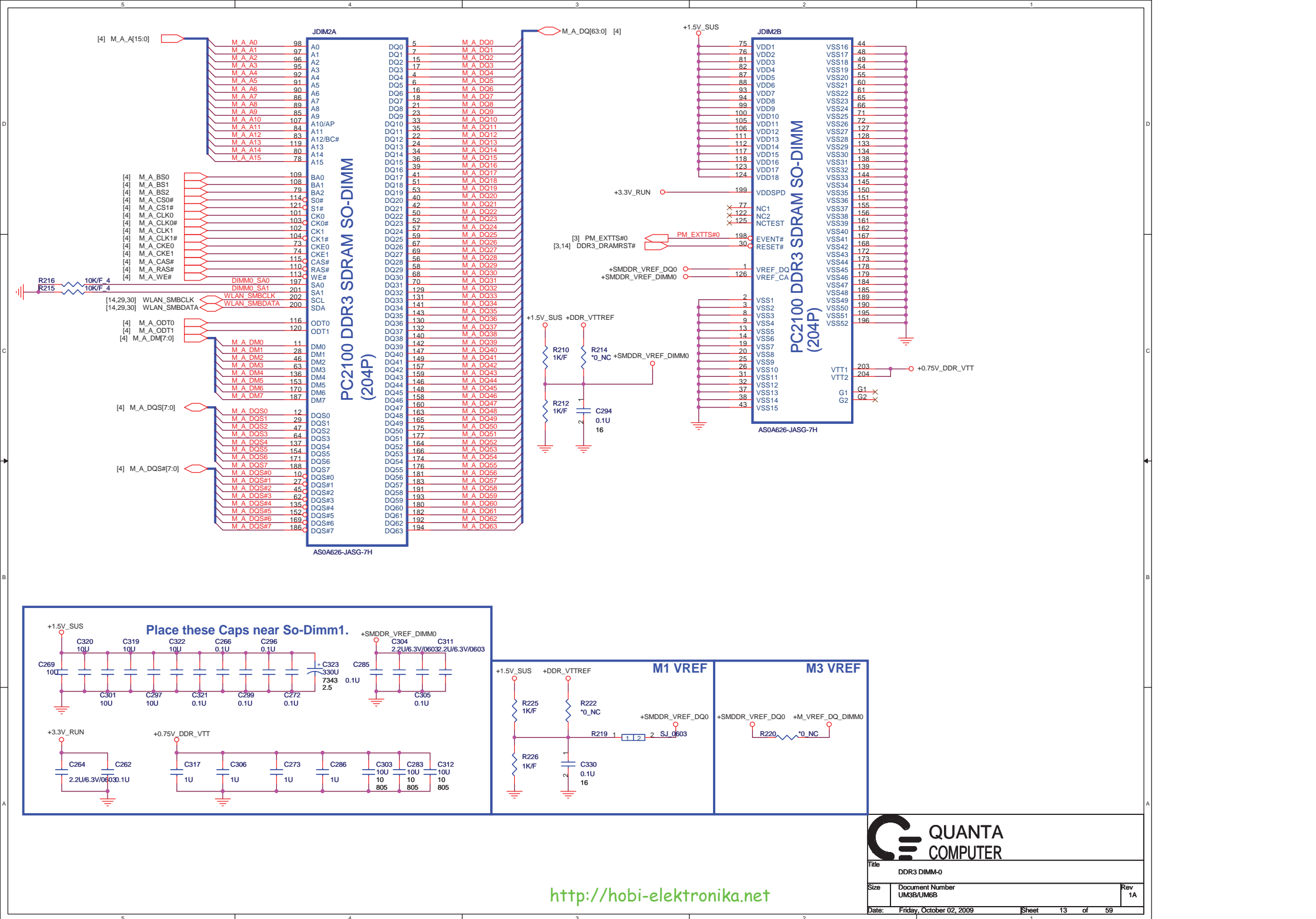
IBEX PEAK-M (POWER)

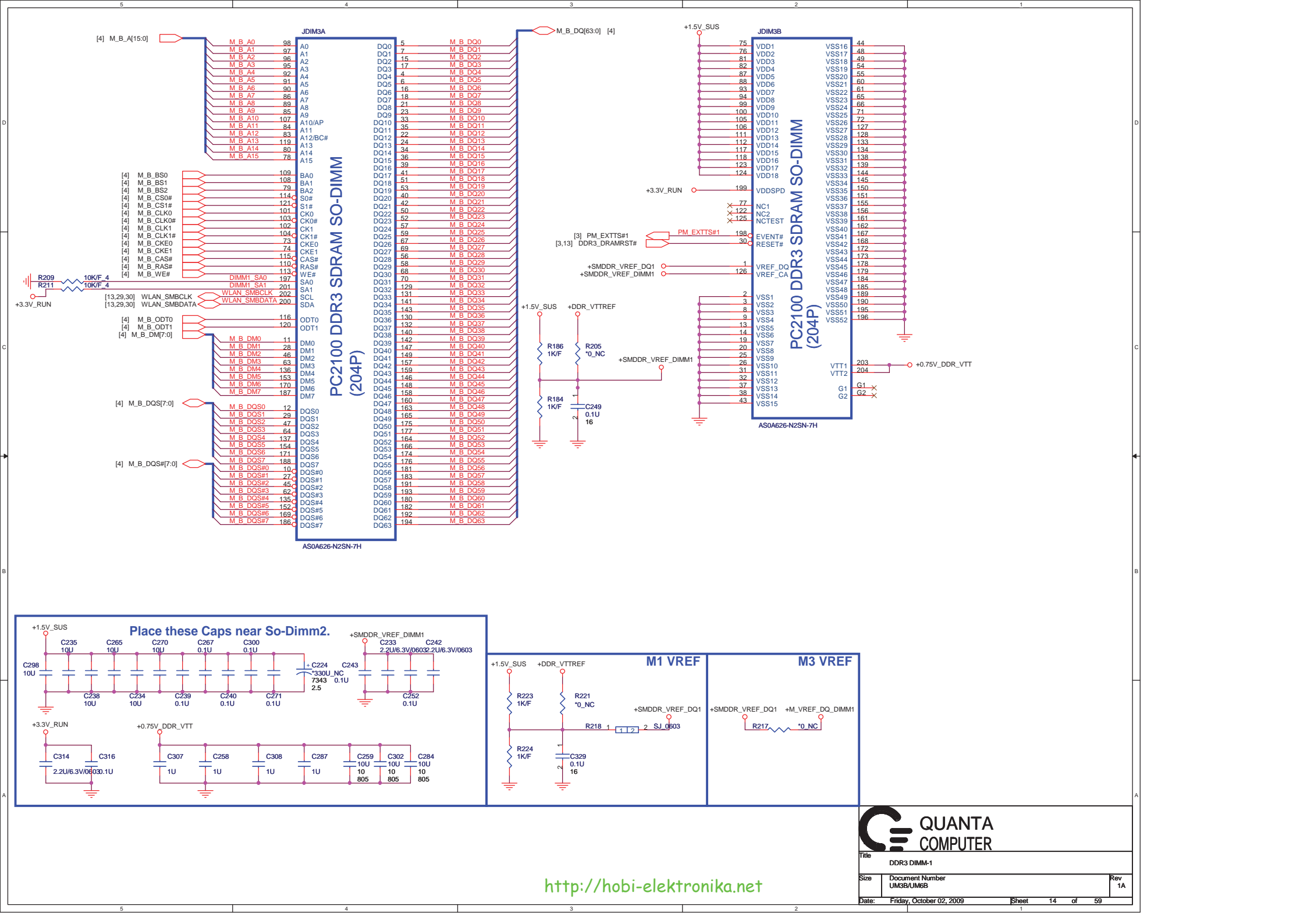


IBEX PEAK-M (GND)

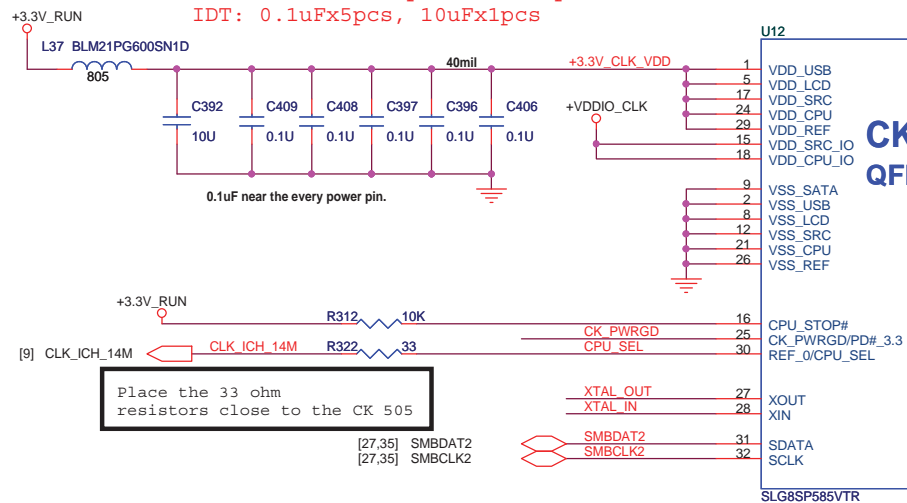
AB16	VSS[0]	
AA10	VSS[1]	VSS[80]
AA20	VSS[2]	VSS[81]
AA22	VSS[3]	VSS[82]
AM10	VSS[4]	VSS[83]
AA24	VSS[5]	VSS[84]
AA26	VSS[6]	VSS[85]
AA28	VSS[7]	VSS[86]
AA30	VSS[8]	VSS[87]
AA32	VSS[9]	VSS[88]
AB17	VSS[10]	VSS[89]
AB18	VSS[11]	VSS[90]
AB19	VSS[12]	VSS[91]
AB20	VSS[13]	VSS[92]
AB21	VSS[14]	VSS[93]
AB22	VSS[15]	VSS[94]
AB23	VSS[16]	VSS[95]
AB24	VSS[17]	VSS[96]
AB25	VSS[18]	VSS[97]
AB26	VSS[19]	VSS[98]
AB27	VSS[20]	VSS[99]
AC2	VSS[21]	VSS[100]
AC22	VSS[22]	VSS[101]
AC24	VSS[23]	VSS[102]
AD12	VSS[24]	VSS[103]
AD18	VSS[25]	VSS[104]
AD23	VSS[26]	VSS[105]
AD30	VSS[27]	VSS[106]
AD32	VSS[28]	VSS[107]
AD34	VSS[29]	VSS[108]
AD36	VSS[30]	VSS[109]
AD38	VSS[31]	VSS[110]
AD40	VSS[32]	VSS[111]
AD42	VSS[33]	VSS[112]
AD44	VSS[34]	VSS[113]
AD46	VSS[35]	VSS[114]
AD7	VSS[36]	VSS[115]
AE2	VSS[37]	VSS[116]
AE4	VSS[38]	VSS[117]
AE12	VSS[39]	VSS[118]
AE14	VSS[40]	VSS[119]
AE16	VSS[41]	VSS[120]
AE18	VSS[42]	VSS[121]
AE20	VSS[43]	VSS[122]
AE22	VSS[44]	VSS[123]
AE24	VSS[45]	VSS[124]
AE26	VSS[46]	VSS[125]
AE28	VSS[47]	VSS[126]
AE30	VSS[48]	VSS[127]
AE32	VSS[49]	VSS[128]
AE34	VSS[50]	VSS[129]
AE36	VSS[51]	VSS[130]
AG2	VSS[52]	VSS[131]
AG22	VSS[53]	VSS[132]
AG24	VSS[54]	VSS[133]
AG26	VSS[55]	VSS[134]
AG28	VSS[56]	VSS[135]
AG30	VSS[57]	VSS[136]
AG32	VSS[58]	VSS[137]
AG34	VSS[59]	VSS[138]
AG36	VSS[60]	VSS[139]
AG38	VSS[61]	VSS[140]
AG40	VSS[62]	VSS[141]
AG42	VSS[63]	VSS[142]
AG44	VSS[64]	VSS[143]
AG46	VSS[65]	VSS[144]
AG48	VSS[66]	VSS[145]
AG50	VSS[67]	VSS[146]
AG52	VSS[68]	VSS[147]
AG54	VSS[69]	VSS[148]
AG56	VSS[70]	VSS[149]
AG58	VSS[71]	VSS[150]
AG60	VSS[72]	VSS[151]
AG62	VSS[73]	VSS[152]
AG64	VSS[74]	VSS[153]
AG66	VSS[75]	VSS[154]
AG68	VSS[76]	VSS[155]
AG70	VSS[77]	VSS[156]
AG72	VSS[78]	VSS[157]
AG74	VSS[79]	VSS[158]

AY7	VSS[159]	VSS[259]
B11	VSS[160]	VSS[260]
B15	VSS[161]	VSS[261]
B17	VSS[162]	VSS[262]
B20	VSS[163]	VSS[263]
B21	VSS[164]	VSS[264]
B30	VSS[165]	VSS[265]
B43	VSS[166]	VSS[266]
B47	VSS[167]	VSS[267]
B7	VSS[168]	VSS[268]
B12	VSS[169]	VSS[269]
B12	VSS[170]	VSS[270]
B12	VSS[171]	VSS[271]
B16	VSS[172]	VSS[272]
B20	VSS[173]	VSS[273]
B24	VSS[174]	VSS[274]
B30	VSS[175]	VSS[275]
B34	VSS[176]	VSS[276]
B38	VSS[177]	VSS[277]
B42	VSS[178]	VSS[278]
B46	VSS[179]	VSS[279]
B5	VSS[180]	VSS[280]
BC10	VSS[181]	VSS[281]
BC14	VSS[182]	VSS[282]
BC18	VSS[183]	VSS[283]
BC2	VSS[184]	VSS[284]
BC22	VSS[185]	VSS[285]
BC32	VSS[186]	VSS[286]
BC36	VSS[187]	VSS[287]
BC40	VSS[188]	VSS[288]
BC44	VSS[189]	VSS[289]
BC48	VSS[190]	VSS[290]
BC52	VSS[191]	VSS[291]
BD48	VSS[192]	VSS[292]
BD49	VSS[193]	VSS[293]
BD5	VSS[194]	VSS[294]
BE12	VSS[195]	VSS[295]
BE16	VSS[196]	VSS[296]
BE20	VSS[197]	VSS[297]
BE24	VSS[198]	VSS[298]
BE30	VSS[199]	VSS[299]
BE38	VSS[200]	VSS[300]
BE42	VSS[201]	VSS[301]
BE46	VSS[202]	VSS[302]
BE48	VSS[203]	VSS[303]
BE50	VSS[204]	VSS[304]
BE52	VSS[205]	VSS[305]
BE54	VSS[206]	VSS[306]
BE58	VSS[207]	VSS[307]
BE6	VSS[208]	VSS[308]
BE64	VSS[209]	VSS[309]
BE68	VSS[210]	VSS[310]
BE72	VSS[211]	VSS[311]
BE76	VSS[212]	VSS[312]
BE80	VSS[213]	VSS[313]
BE84	VSS[214]	VSS[314]
BE88	VSS[215]	VSS[315]
BE92	VSS[216]	VSS[316]
BE96	VSS[217]	VSS[317]
BE100	VSS[218]	VSS[318]
BE104	VSS[219]	VSS[319]
BE108	VSS[220]	VSS[320]
BE112	VSS[221]	VSS[321]
BE116	VSS[222]	VSS[322]
BE120	VSS[223]	VSS[323]
BE124	VSS[224]	VSS[324]
BE128	VSS[225]	VSS[325]
BE132	VSS[226]	VSS[326]
BE136	VSS[227]	VSS[327]
BE140	VSS[228]	VSS[328]
BE144	VSS[229]	VSS[329]
BE148	VSS[230]	VSS[330]
BE152	VSS[231]	VSS[331]
BE156	VSS[232]	VSS[332]
BE160	VSS[233]	VSS[333]
BE164	VSS[234]	VSS[334]
BE168	VSS[235]	VSS[335]
BE172	VSS[236]	VSS[336]
BE176	VSS[237]	VSS[337]
BE180	VSS[238]	VSS[338]
BE184	VSS[239]	VSS[339]
BE188	VSS[240]	VSS[340]
BE192	VSS[241]	VSS[341]
BE196	VSS[242]	VSS[342]
BE200	VSS[243]	VSS[343]
BE204	VSS[244]	VSS[344]
BE208	VSS[245]	VSS[345]
BE212	VSS[246]	VSS[346]
BE216	VSS[247]	VSS[347]
BE220	VSS[248]	VSS[348]
BE224	VSS[249]	VSS[349]
BE228	VSS[250]	VSS[350]
BE232	VSS[251]	VSS[351]
BE236	VSS[252]	VSS[352]
BE240	VSS[253]	VSS[353]
BE244	VSS[254]	VSS[354]
BE248	VSS[255]	VSS[355]
BE252	VSS[256]	VSS[356]
BE256	VSS[257]	VSS[357]
BE260	VSS[258]	VSS[358]

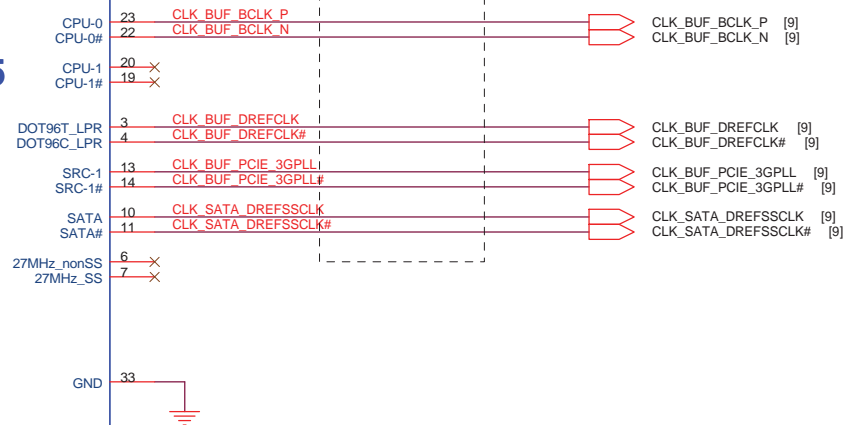




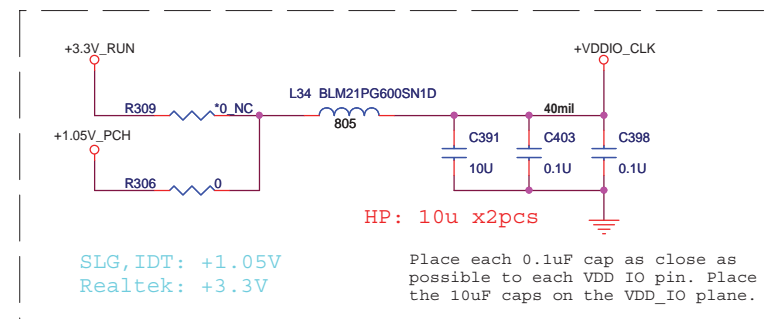
Realtek: 0.1uFx6pcs, 22uFx1pcs
IDT: 0.1uFx5pcs, 10uFx1pcs



Place within 0.5" of CLKGEN

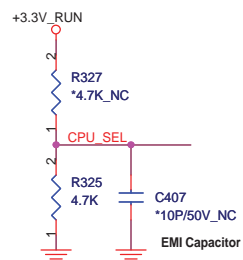
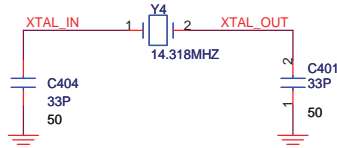


Realtek: 0.1uFx3pcs, 22uFx1pcs
IDT: 0.1uFx2pcs, 10uFx1pcs



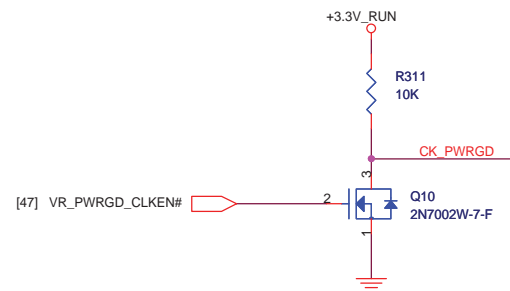
+VDDIO_CLK:
SLG date sheet (V0.2) P15: Min 1.05V, Max 3.465V.
Realtek date sheet (V1.2) P11: Min 1.05V, Max 3.3V.
IDT date sheet (V0.7) P10: Min 0.9975V, Max 3.465V.

Add capacitor pads for improving WWAN.




PIN 30	CPU_0	CPU_1
0 (default)	133MHz	133MHz
1 (0.7V-1.5V)	100MHz	100MHz


CPU_SEL:
SLG date sheet (V0.2) P15:
High Voltage: Min 0.7V, Max 1.5V.
Low Voltage: Min Vss-0.3V, Max 0.35V.
Realtek date sheet (V1.2) P11:
High Voltage: Min 0.7V, Max 1.5V.
Low Voltage: Min Vss-0.3V, Max 0.35V.
IDT date sheet (V0.7) P10:
High Voltage: Min 0.7V, Max 1.5V.
Low Voltage: Min Vss-0.3V, Max 0.35V.



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 QUANTA COMPUTER		
Title VGA-M92-XT (PCIe)		
Size	Document Number UM3B/UM6B	Rev 1A
Date: Wednesday, September 30, 2009 Sheet 16 of 59		

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		QUANTA COMPUTER	
Title VGA-M62-KT (PCIe)			
Size	Document Number		Rev
	UM35B/UM6B		1A
Date: Wednesday, September 30, 2009 Sheet 17 of 69			

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 QUANTA COMPUTER		
Title: VGA-M62-XT (PCIe)		
Size	Document Number UM6B/UM6B	Rev 1A
Date: Wednesday, September 30, 2009 Sheet 18 of 59		

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 QUANTA COMPUTER	
Title: VGA-M82-XT (PCIe)	
Size:	Document Number: UM38/UM68
Date: Wednesday, September 30, 2009	
Sheet: 19 of 59	
Rev: 1A	


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Title VGA-M92-S (VRAM)		
Size	Document Number UM06UUMS	Rev 1A
Date	Wednesday, September 30, 2009	Sheet 20 of 69

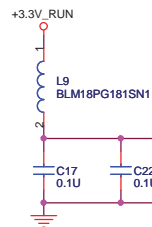
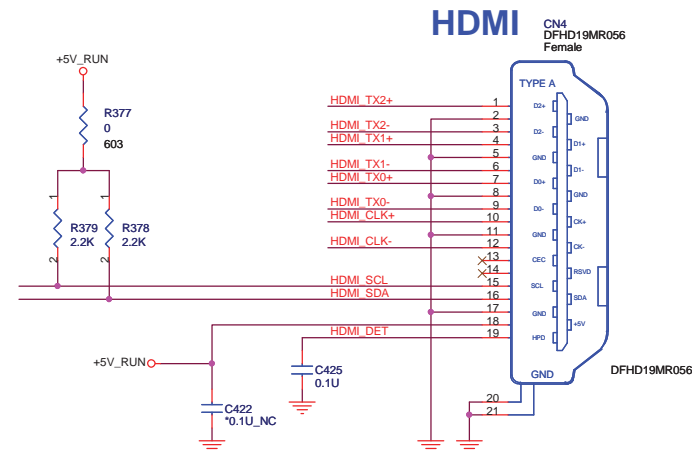
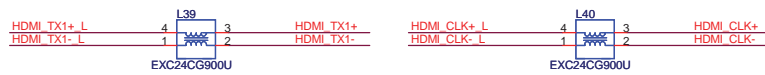
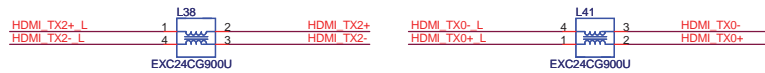
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Title VGA-M92-XT (PCIe)			
Size	Document Number UM3B/UM6B		Rev 1A
Date Wednesday, September 30, 2009		Sheet 21	of 59

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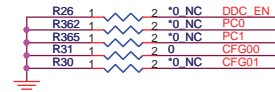
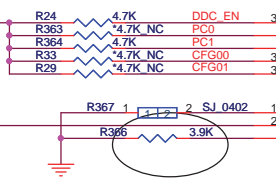
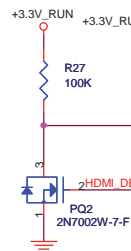
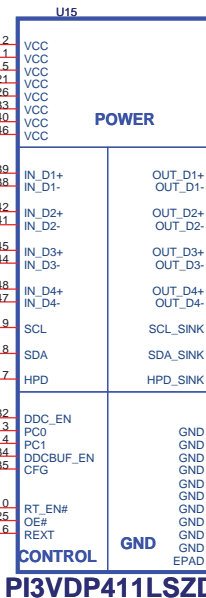
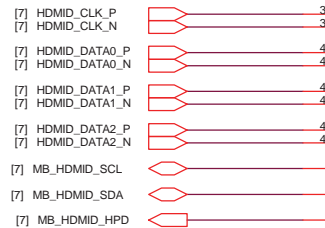
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Title VGA-M92-XT (PCIe)		
Size	Document Number UM3B/UM6B	Rev 1A
Date:	Wednesday, September 30, 2009	Sheet 22 of 59



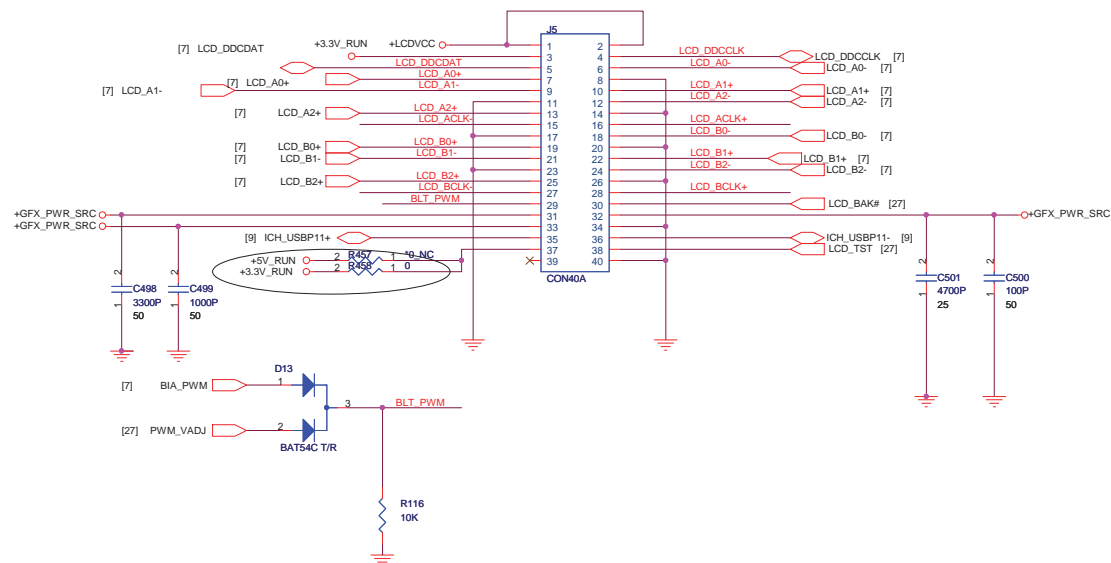
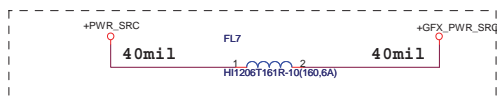
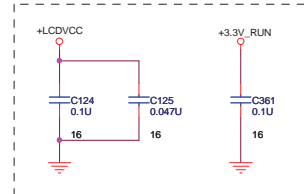
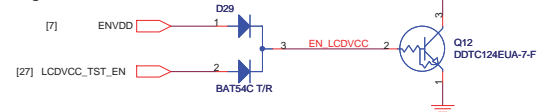
EQUALIZATION SETTING
 PC1:PC0=0:0 8dB
 PC1:PC0=0:1 4dB Recommended
 PC1:PC0=1:0 12dB
 PC1:PC0=1:1 0dB

SCLZ/SDAZ Low-level input/output Voltage
 CFG01:CFG00=0:0 VIL:<0.4V VOL:0.6V (Default)
 CGF01:CGF00=0:1 VIL:<0.36V VOL:0.55V
 CGF01:CGF00=1:0 VIL:<0.44V VOL:0.65V
 CGF01:CGF00=1:1 VIL:<0.36V VOL:0.6V

HDMI_PWR_CTRL
 0 is Enable
 1 is Disable

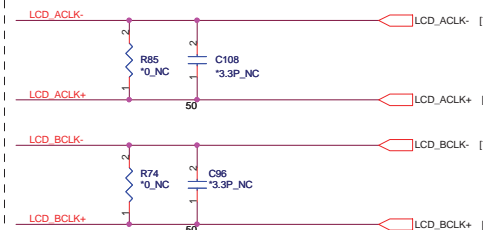


Support the new imbedded diagnostics.

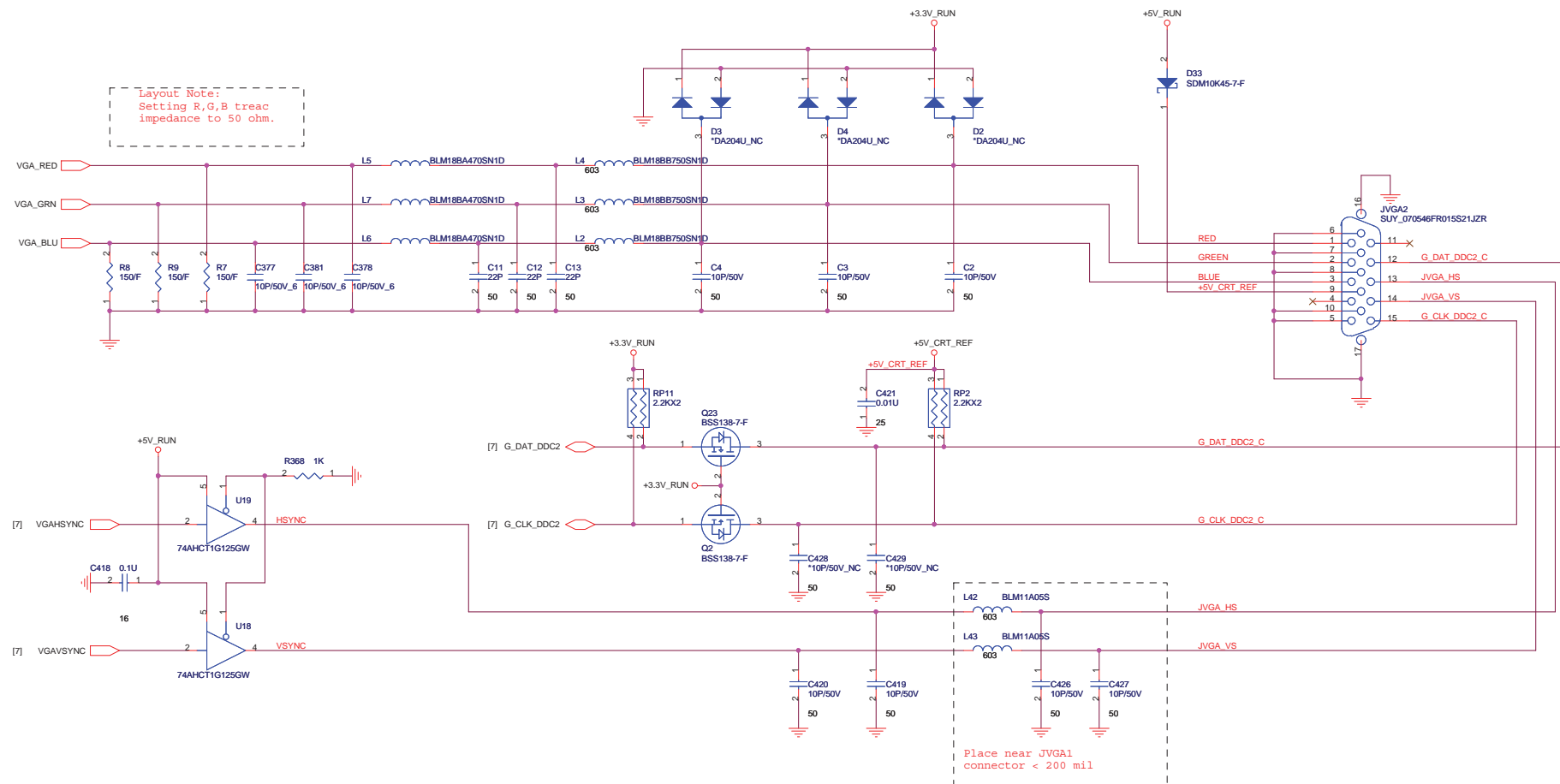


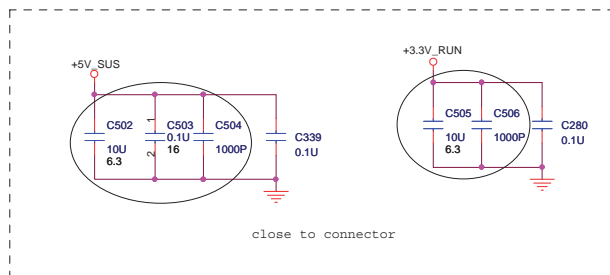
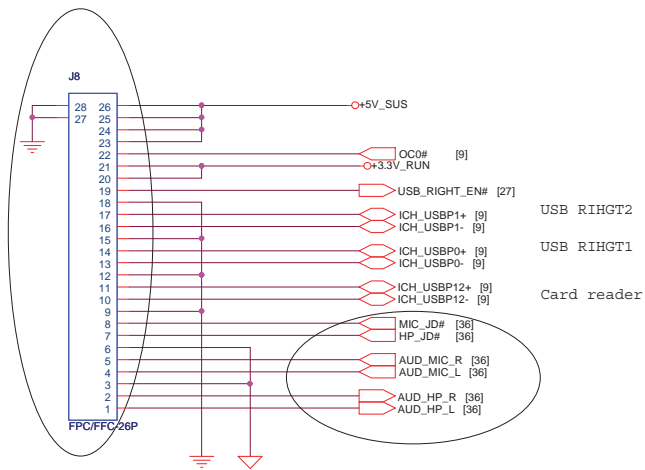
Shunt capacitors on LVDS for improving WWAN.

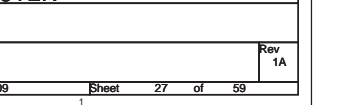
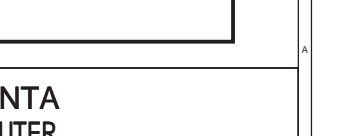
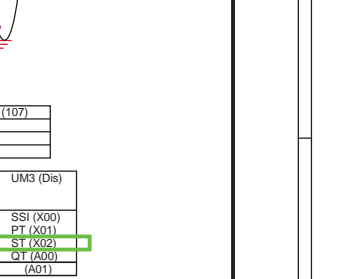
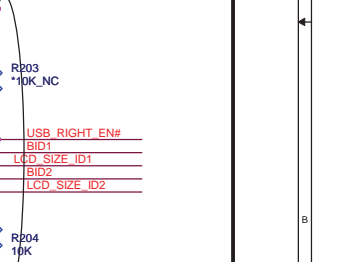
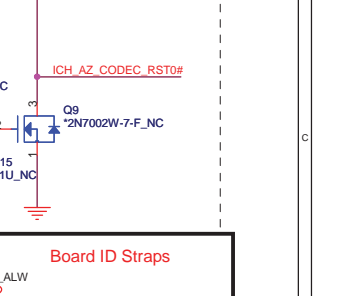
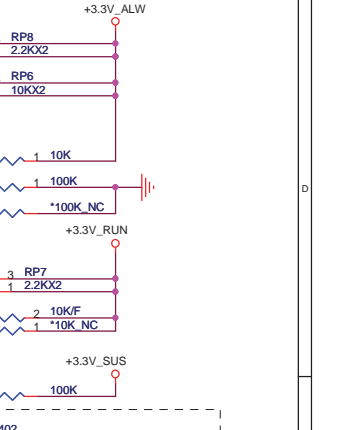
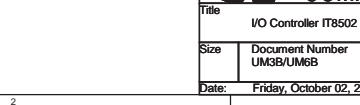
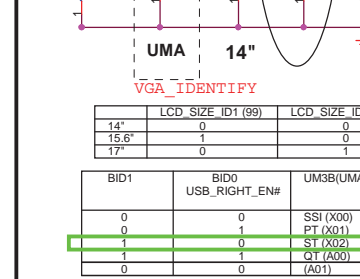
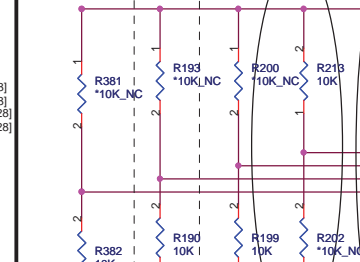
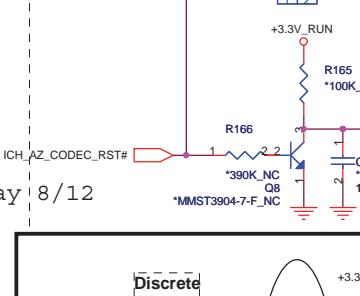
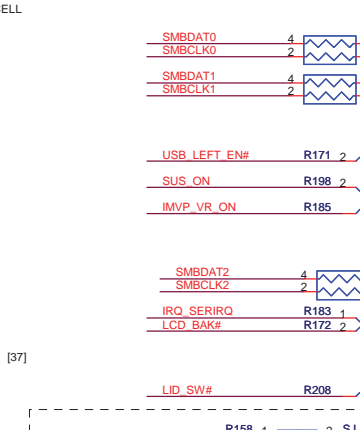
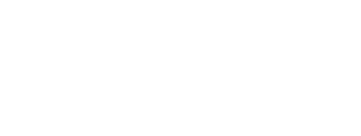
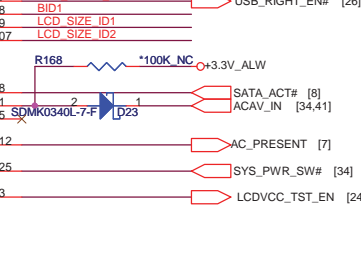
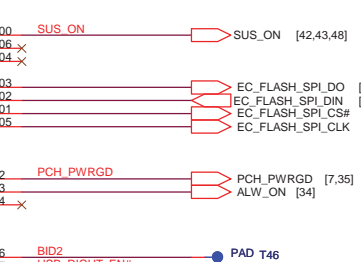
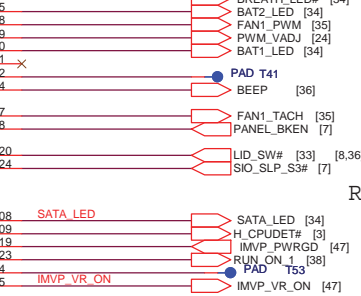
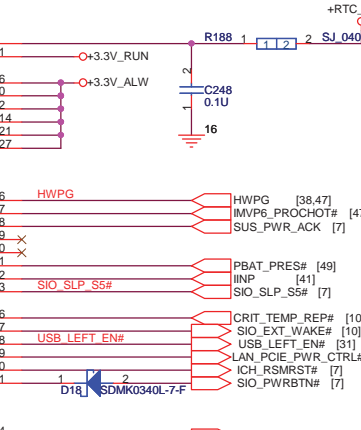
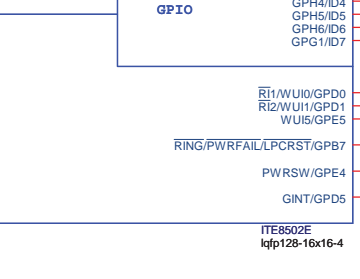
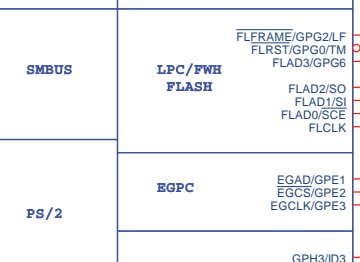
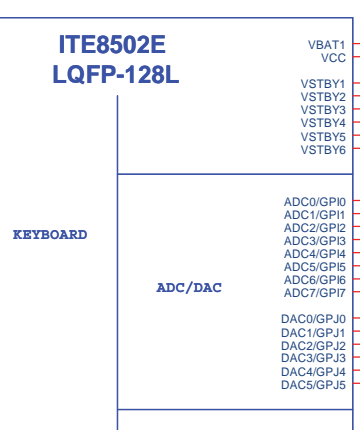
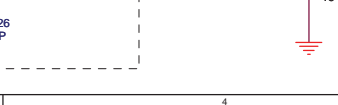
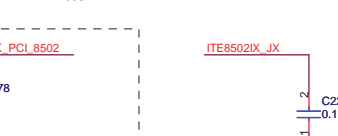
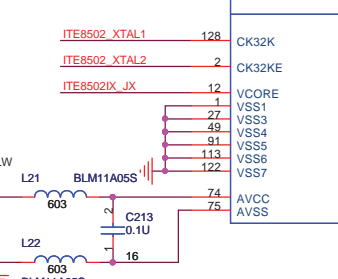
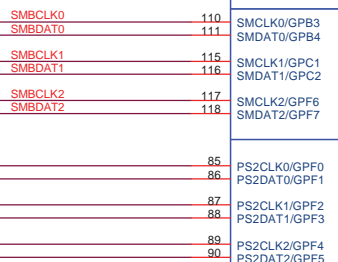
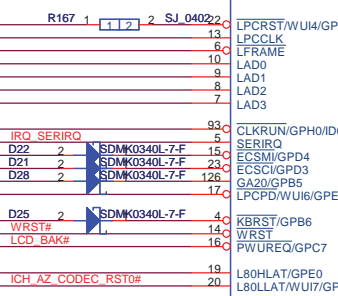
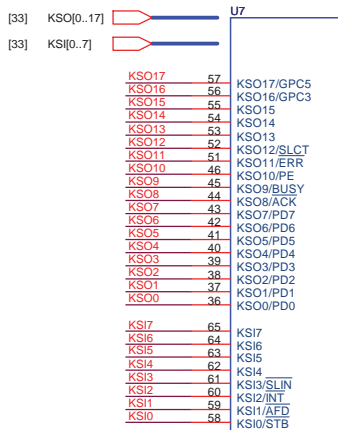
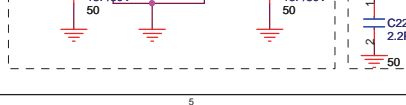
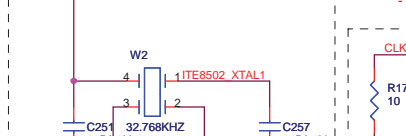
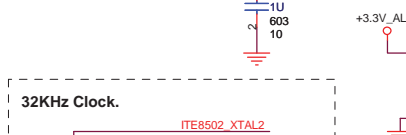
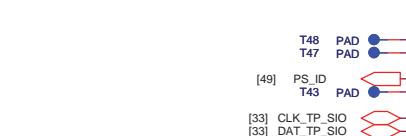
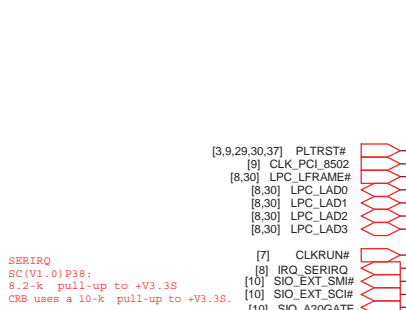
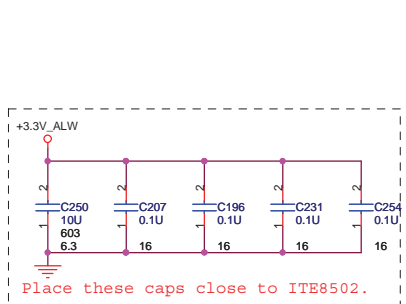
LCD B0-	C109	1	2	*3.3P_NC	50	LCD B0+
LCD B1-	C107	1	2	*3.3P_NC	50	LCD B1+
LCD B2-	C101	1	2	*3.3P_NC	50	LCD B2+
LCD A0-	C119	1	2	*3.3P_NC	50	LCD A0+
LCD A1-	C113	1	2	*3.3P_NC	50	LCD A1+
LCD A2-	C111	1	2	*3.3P_NC	50	LCD A2+



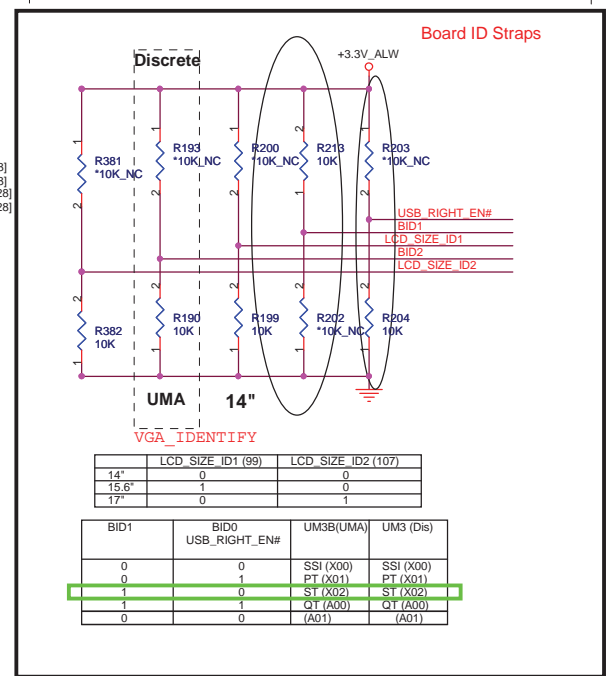
Layout Note:
Setting R,G,B treac
impedance to 50 ohm.







Ray 8/12



QUANTA
COMPUTER

Title: I/O Controller IT8502

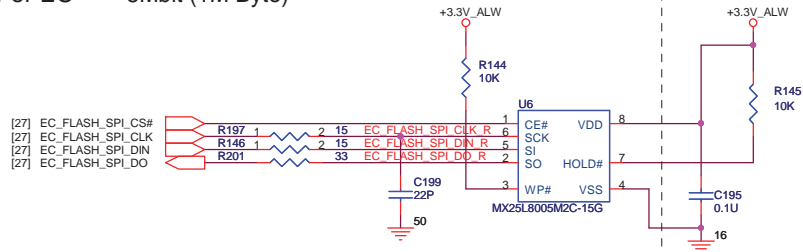
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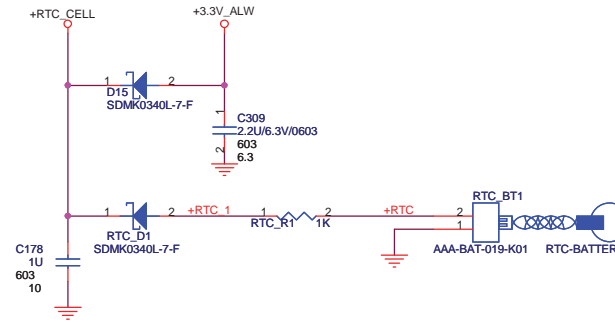
Rev: 1A

Sheet: 27 of 59

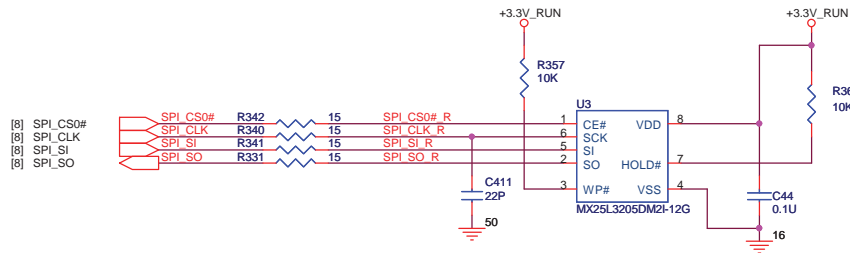
For EC 8Mbit (1M Byte)



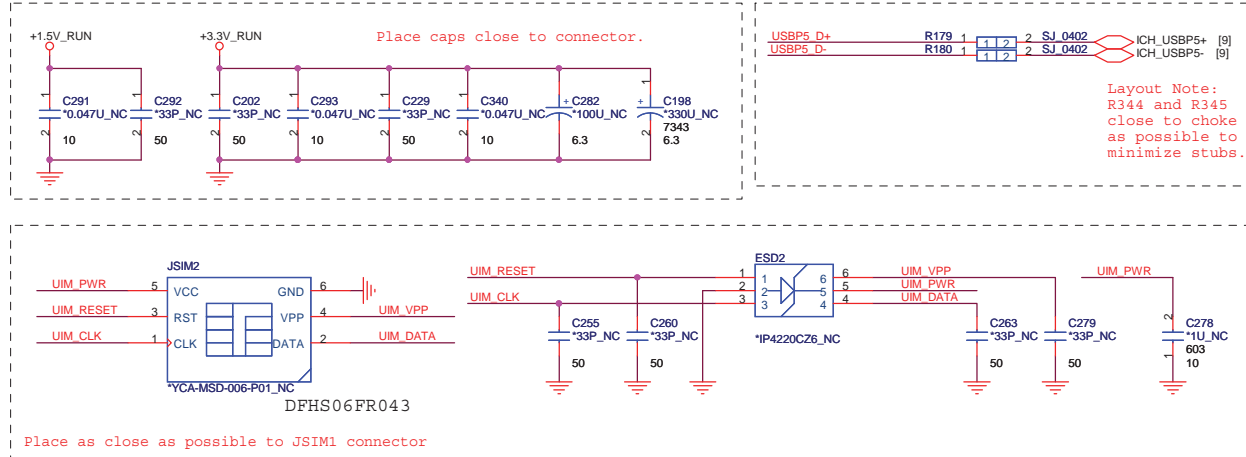
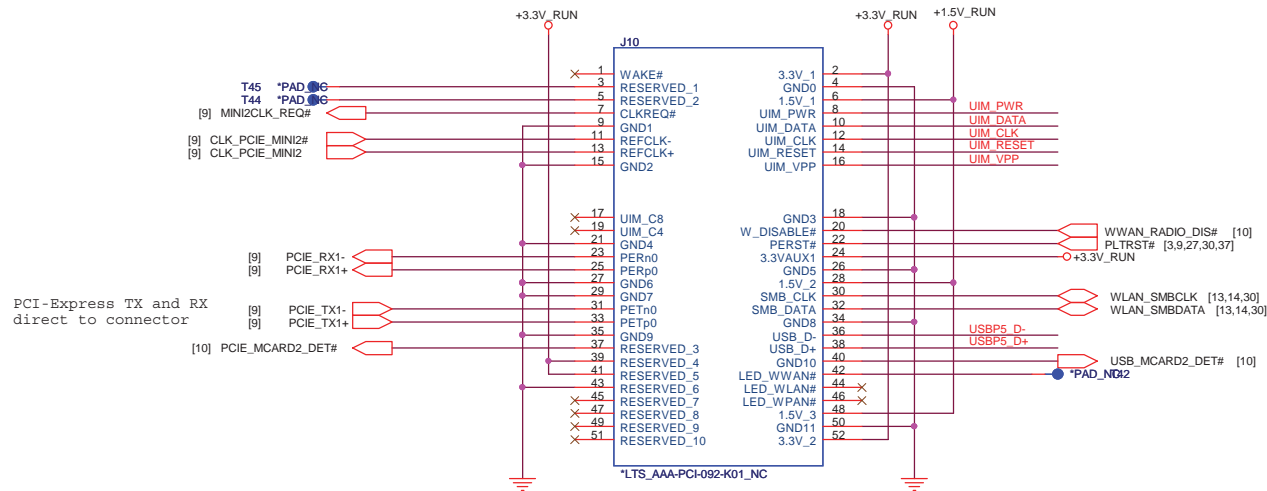
RTC BATTERY



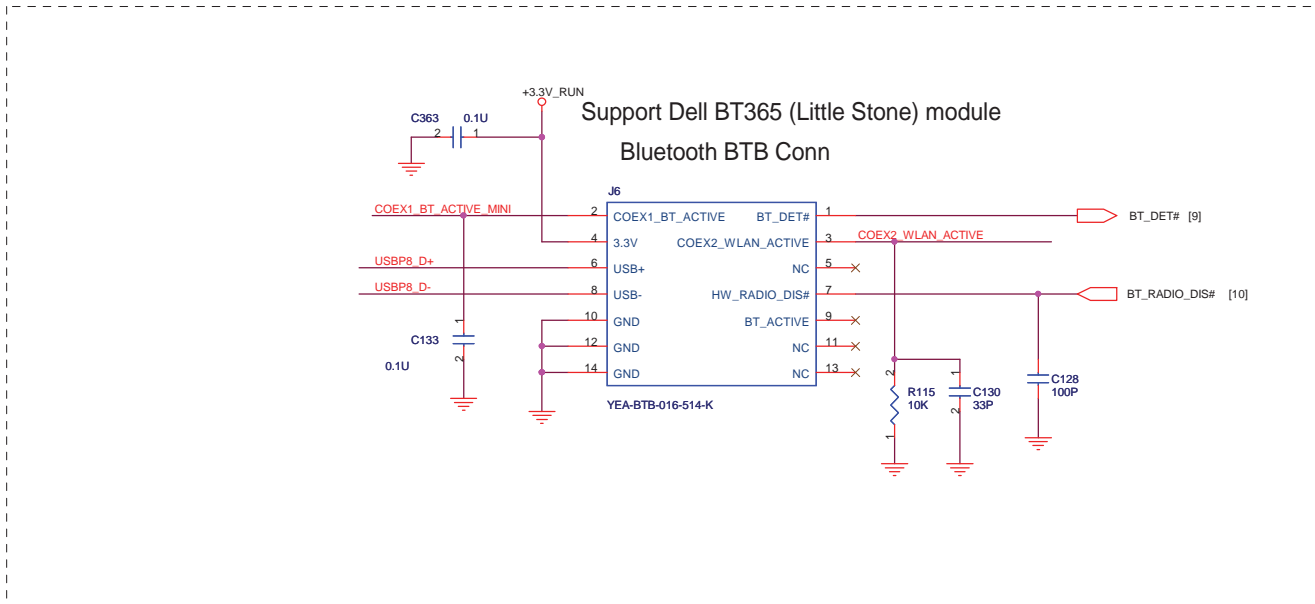
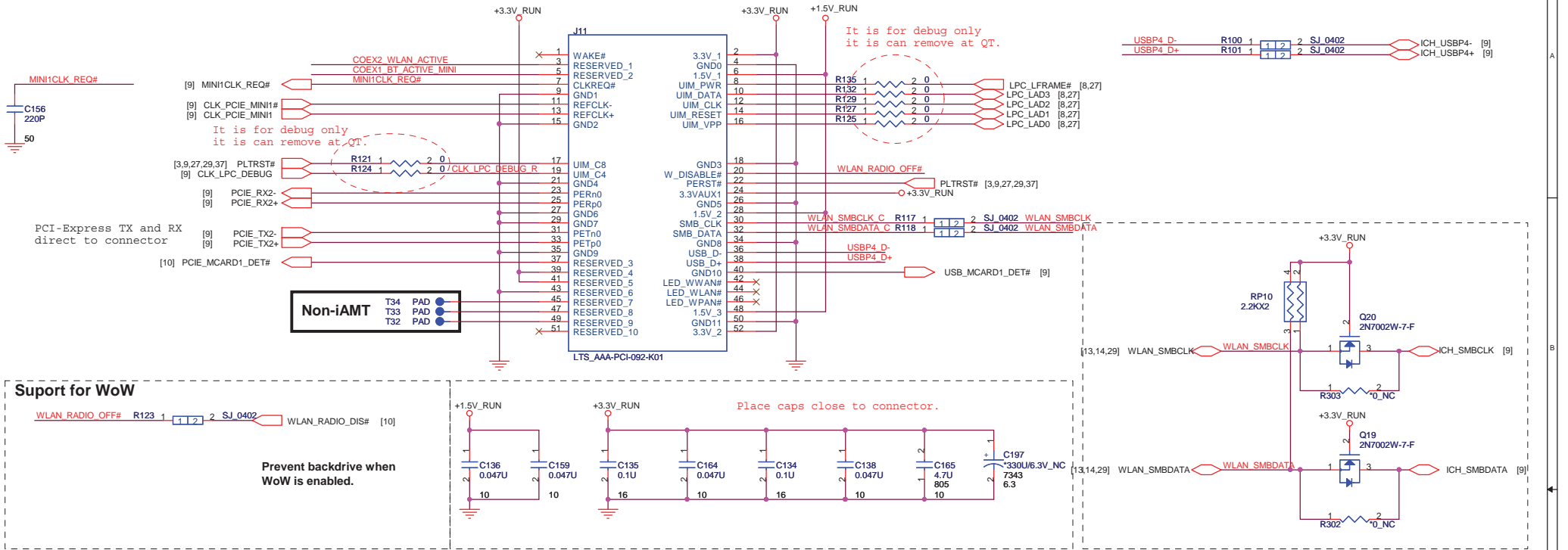
For PCH 32Mbit (4M Byte)

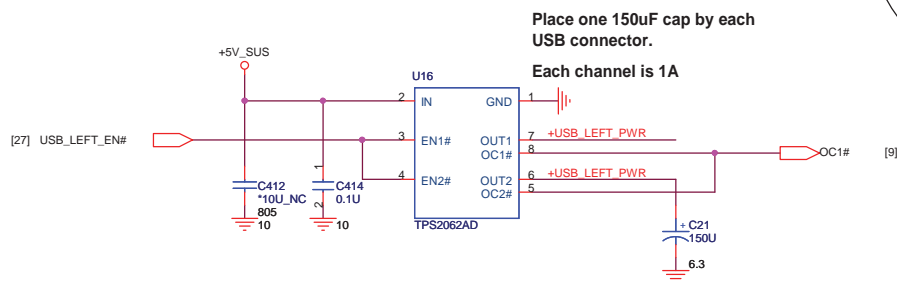
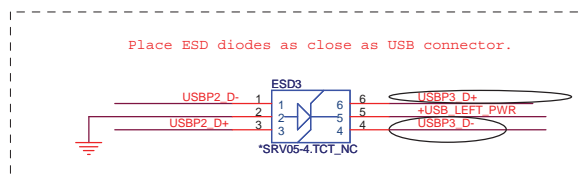
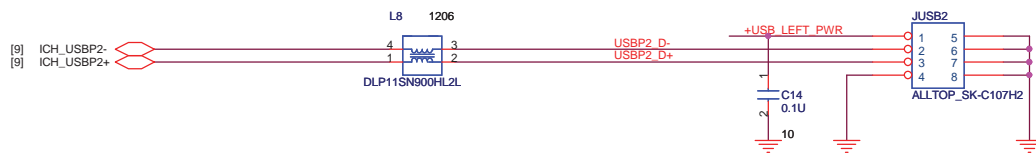


MiniCard WWAN connector



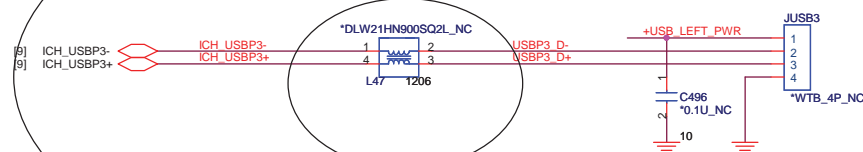
MiniCard WLAN connector





REV FOR 17"

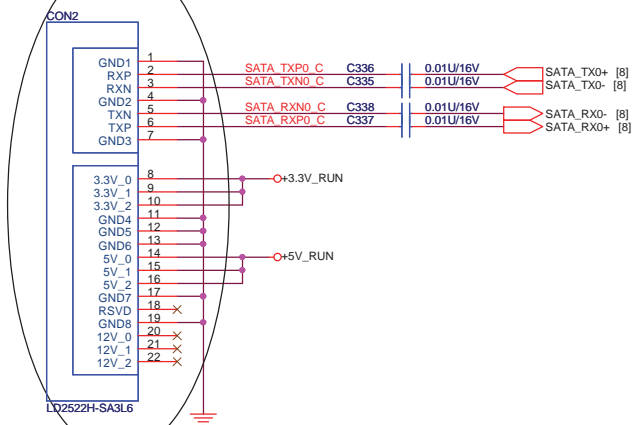
Add L47 ,C496 , JUSB3 for UM5



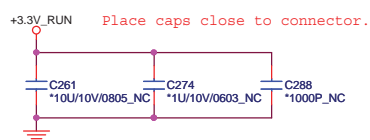
EDISON 8/10

Title USB	
Size	Document Number UMGB/UM6B
Date:	Rev 1A
Friday, October 02, 2009	Sheet 31 of 59

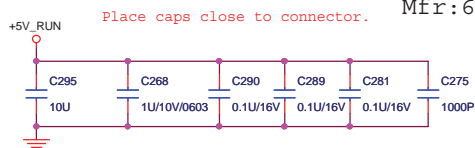
HDD Connector.



UM5與UM3/6不同，只差在高度，footprint沒變

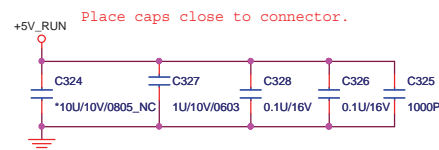
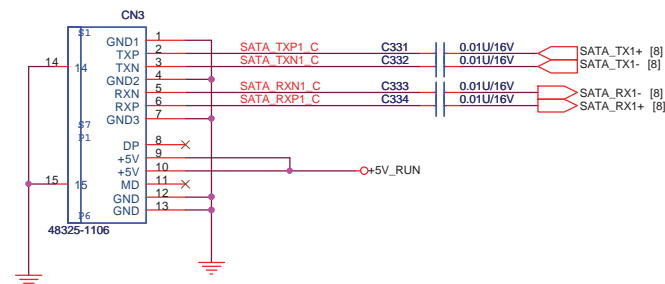


UM5/UM5B
PN:DFHS22FR137
Mfr:67492-1224

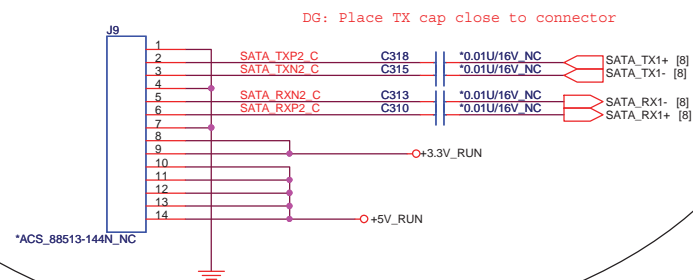


UM3/UM3B/UM6/UM6B
PN:
Mfr:67492-1730

ODD Connector



REV FOR 15.6"



DG: Place TX cap close to connector

<http://hobi-elektronika.net>

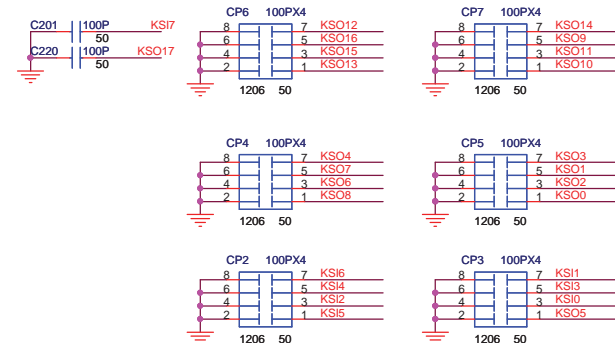
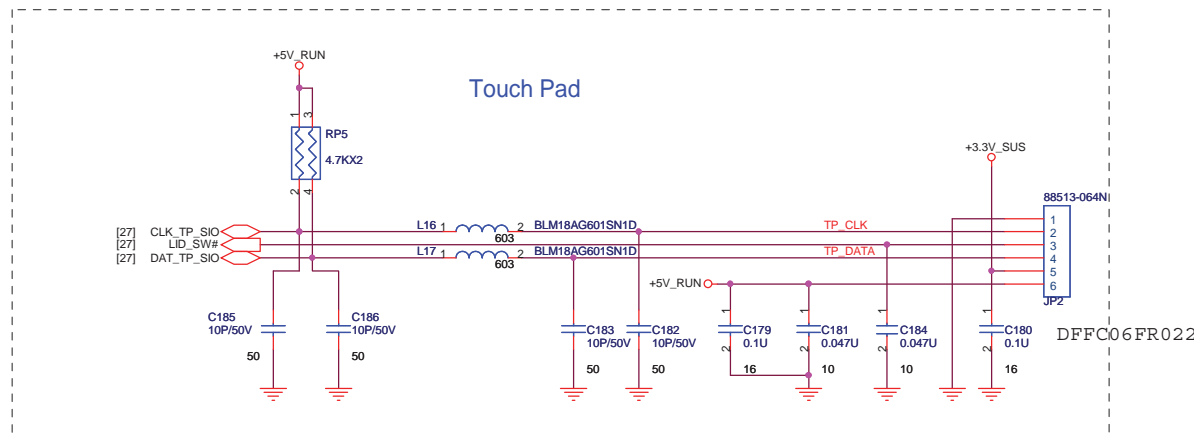
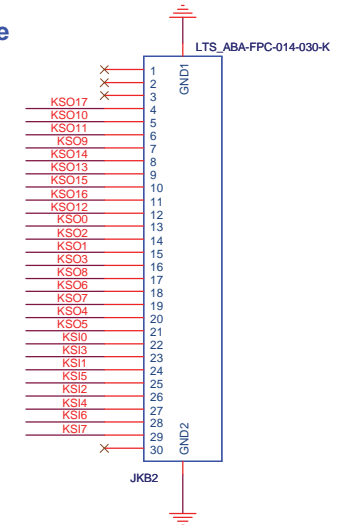


Title			SATA (HDD&CD_ROM)
Size	Document Number	UM3B/UM6B	Rev 1A
Date:	Friday, October 02, 2009	Sheet	32 of 59

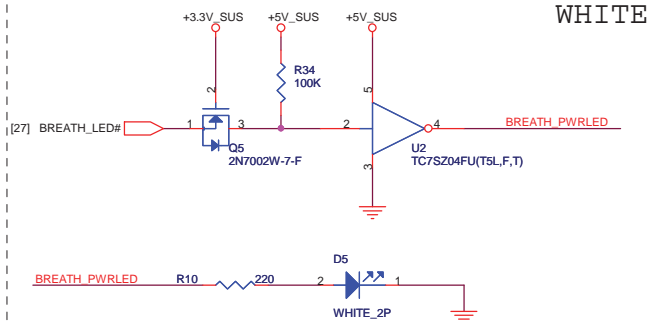
KEYBOARD CONNECTOR

Top side

[27] KSO[0..17]
[27] KSI[0..7]

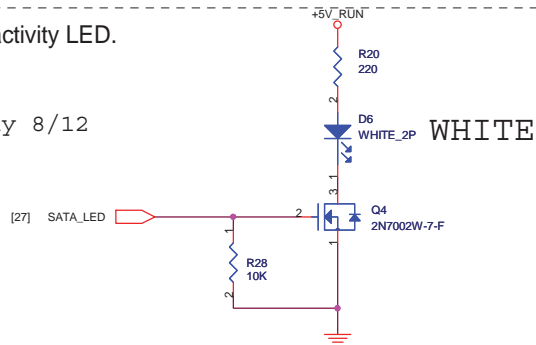


Power



HDD activity LED.

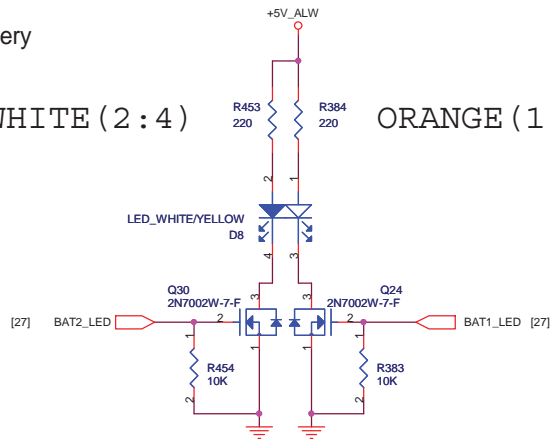
Ray 8/12



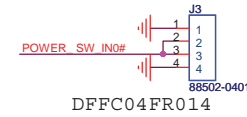
Battery

WHITE (2:4)

ORANGE (1:3)

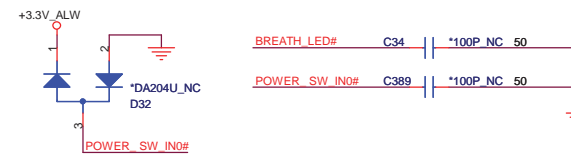
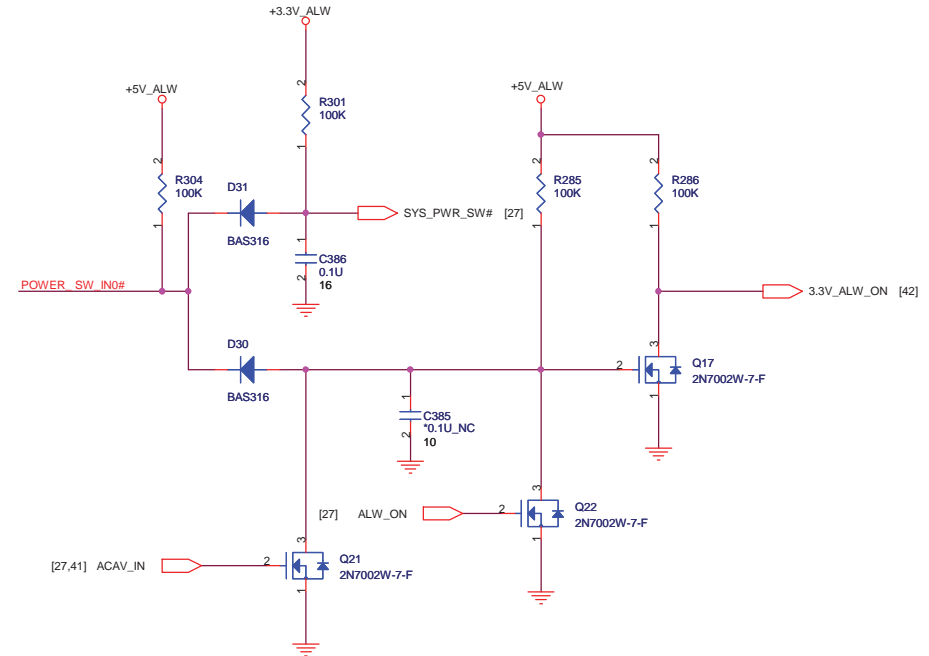


Power button Cable



PIN2,3 connect to POWER_SW_IN0#

3VALW ON POWER LOGIC



Title
SWITCH, KEYBOARD & LED&Touch Screen Module

Size
Document Number
UMGB/UM6B

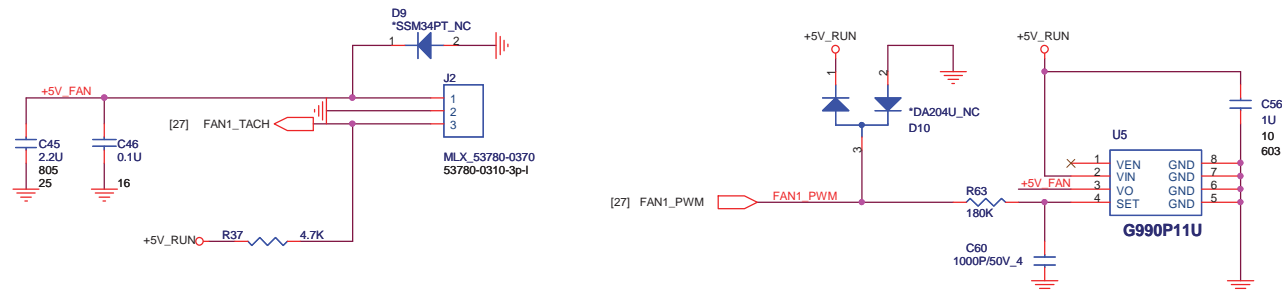
Rev
1A

Date: Friday, October 02, 2009

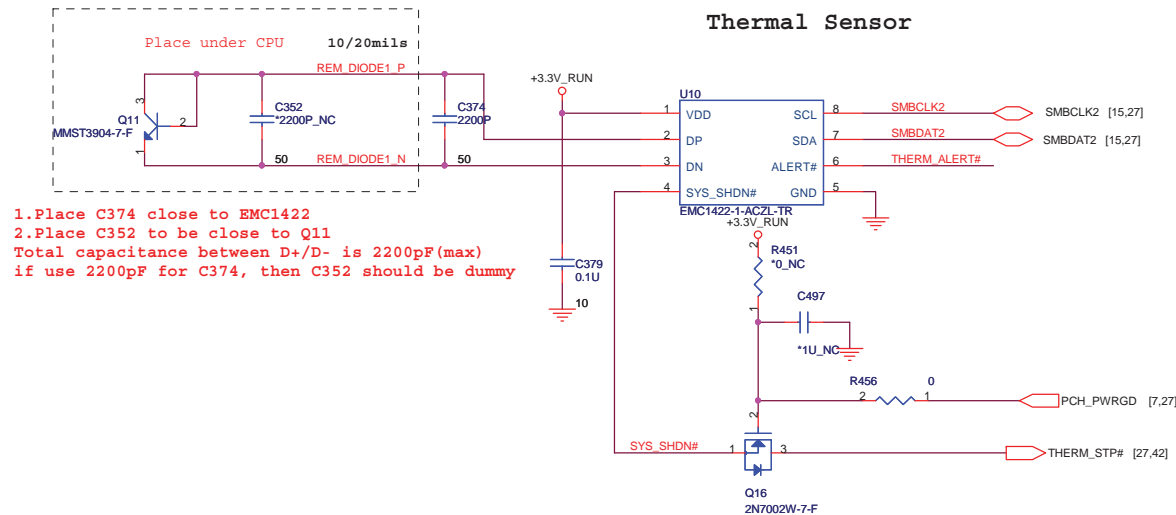
Sheet 34 of 59

FAN CONTROL

6/23 COPY FROM RM6

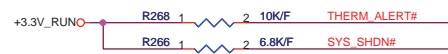


Thermal Sensor

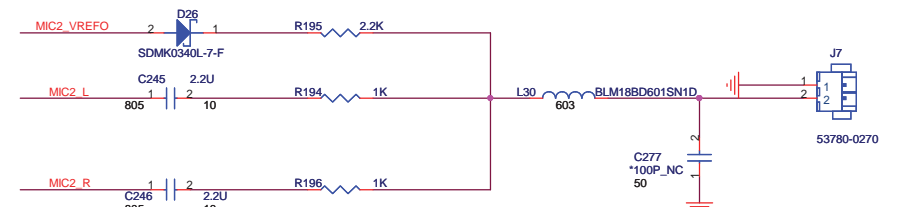
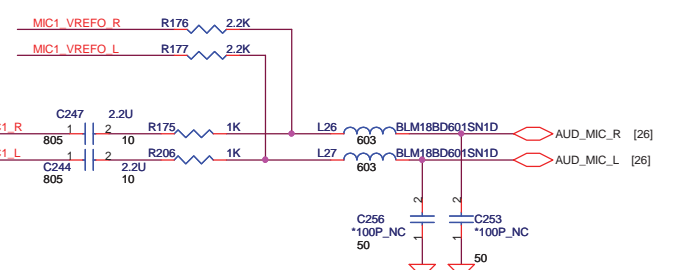
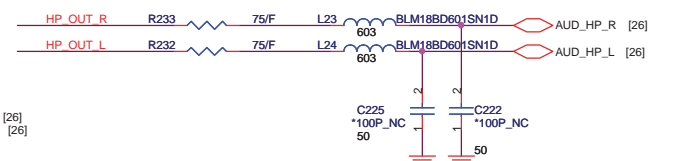
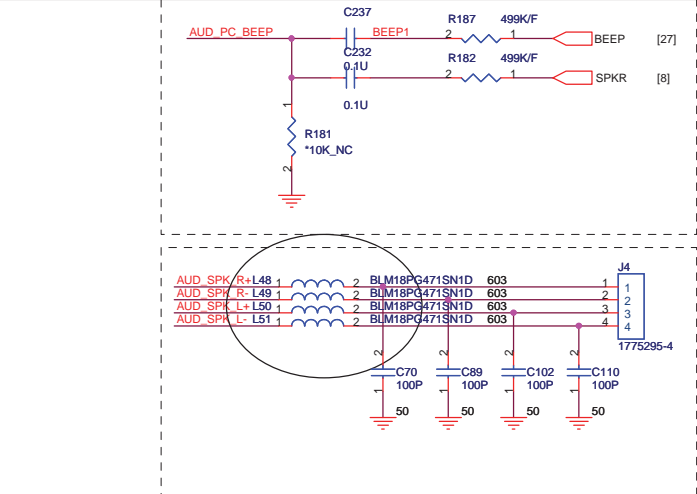
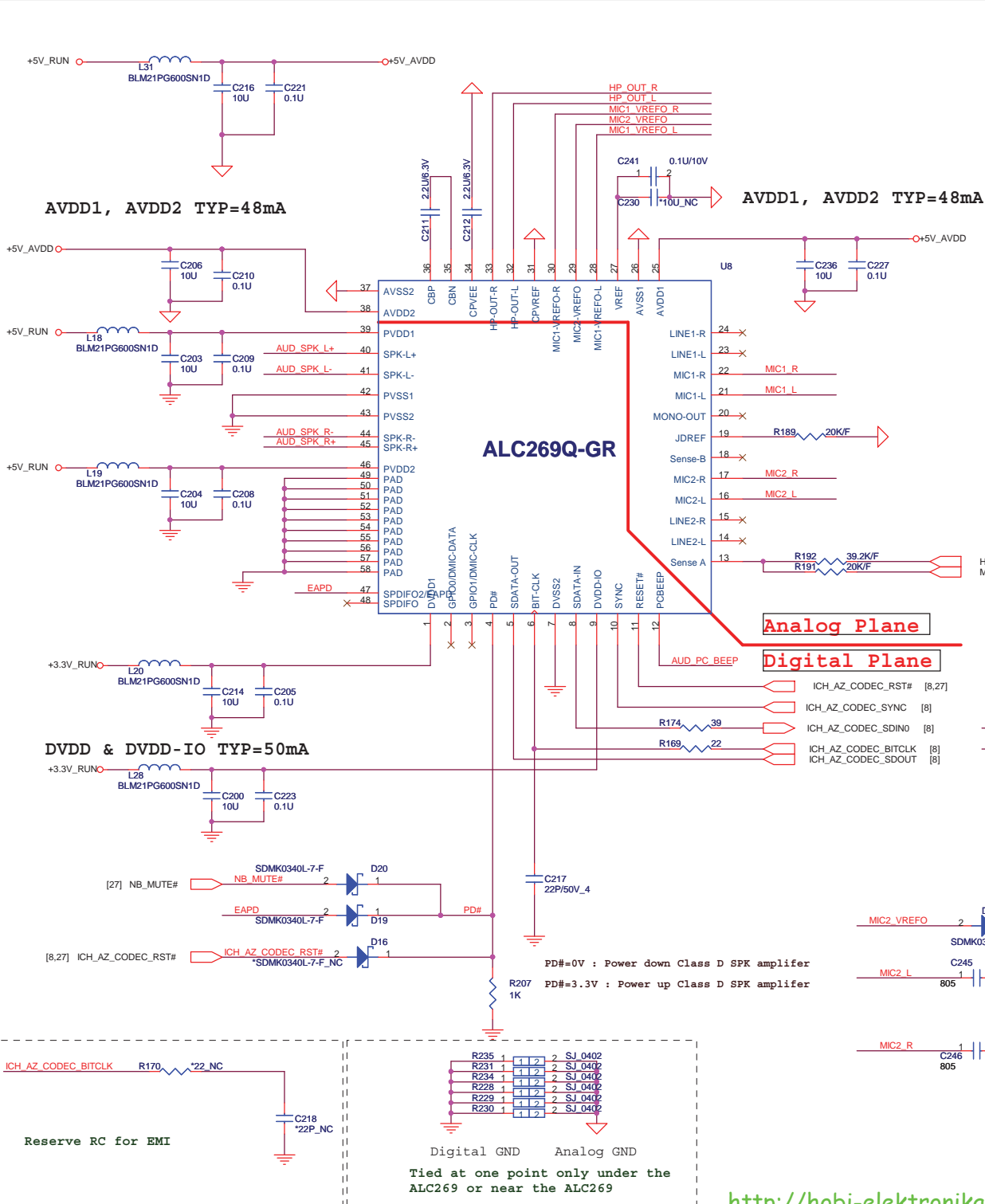



1. Place C374 close to EMC1422
 2. Place C352 to be close to Q11
- Total capacitance between D+/D- is 2200pF(max)
if use 2200pF for C374, then C352 should be dummy

OTP 85 degree C

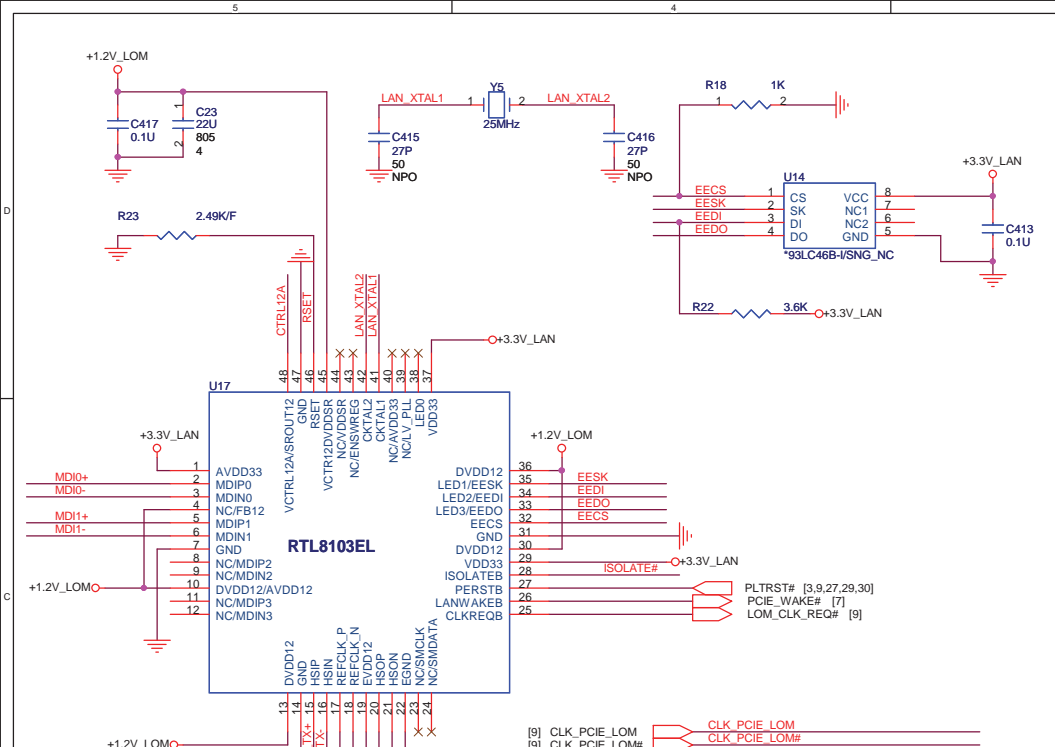


Title			FAN & THERMAL
Size	Document Number	Rev	
	UMGB/UM6B	1A	
Date:	Friday, October 02, 2009	Sheet	35 of 59



**QUANTA
COMPUTER**

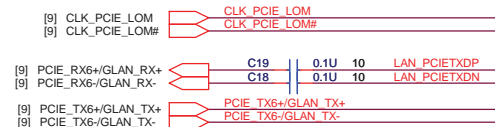
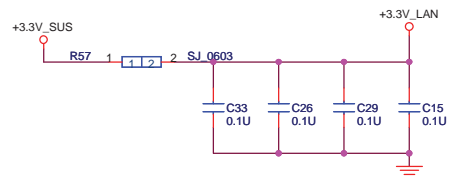
Title		
AUDIO CODEC		
Size	Document Number	Rev
UM35/UM6B		1A
Date:	Friday, October 02, 2009	Sheet 36 of 59



Note 1: The Trace length between R111 and 8111DL's Pin 1 must be within 0.5 cm. C199 and C171 to R111 must be within 0.5cm. Refer to Layout guide for more detail.

Change R111 to 0 ohm in RTL8102EL application.

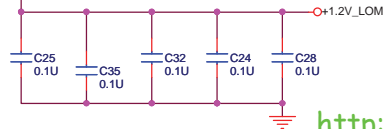
These Caps close U4 VDD33 pins-- 1, 29, 37 and 40.



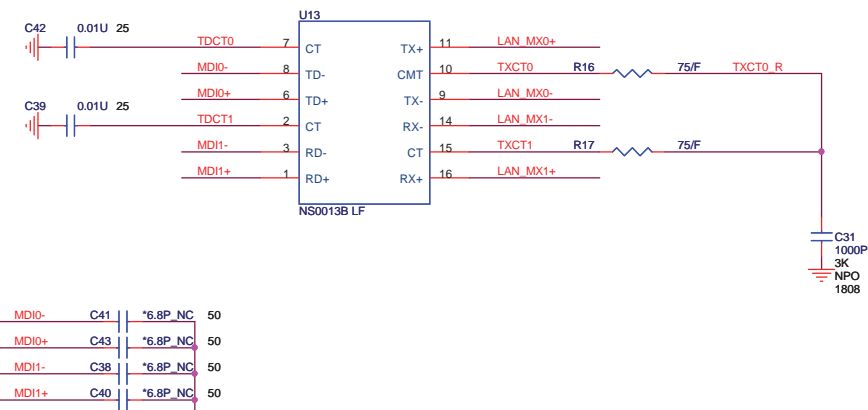
Remove R334 & R130 in RTL8102EL application.



These Caps close U4 VDD12 pins-- 10, 13, 30, 36, 39.

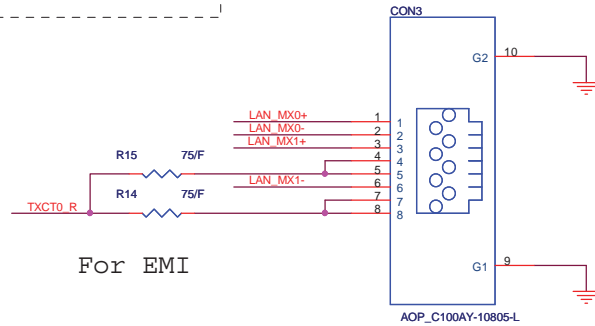


TRANSFORMER



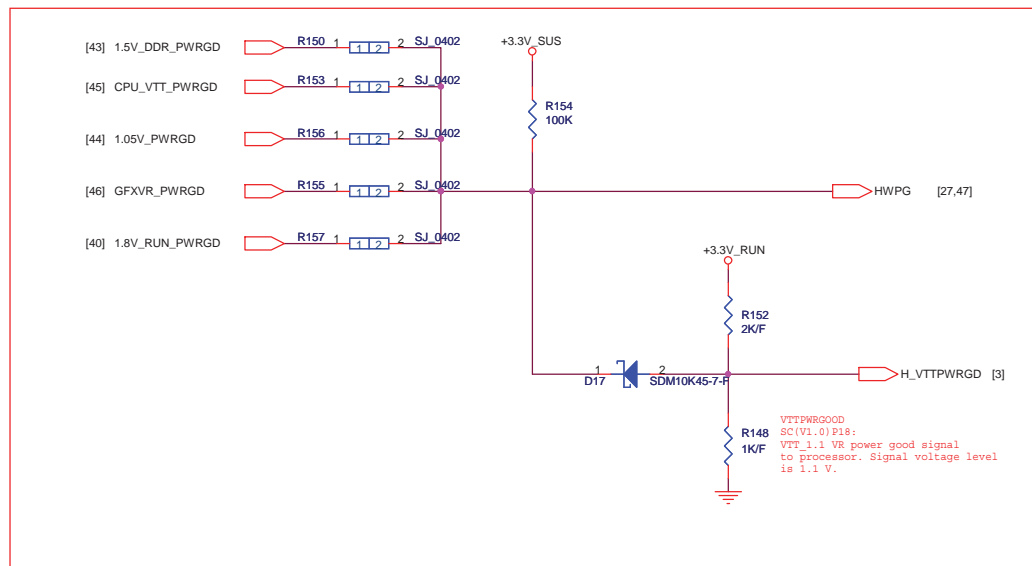
ISOLATE#
Datasheet (V1.4) P5:
Used to isolate the RTL8111DL from the PCI-E bus. RTL8111DL will not drive its PCI-E outputs(excluding LANWAKEB) and will not sample its PCI-E input as long as the isolate pin is asserted.
Realtek feed back:
進入S3,S4,S5要拉low 離開S3,S4,S5要拉high for WOL support


RJ-45 Connector COPY FROM UM2



For EMI

[27] RUN_ON_1 R32 1 1 2 SJ_0402 RUN_ON [40,43,44,45,48]



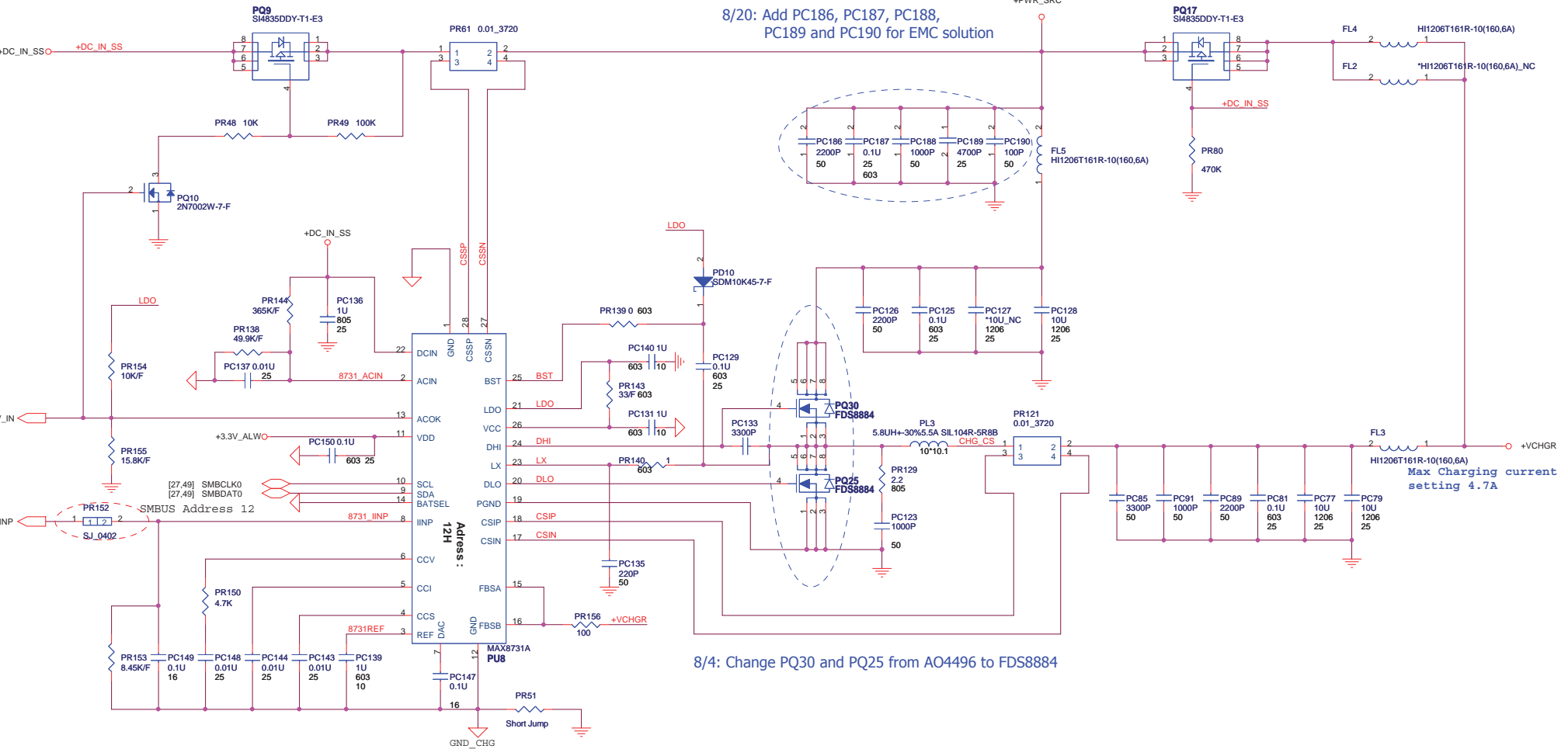
 QUANTA COMPUTER		
Title Battery Selector		
Size	Document Number UMGB/UMGB	Rev 1A
Date:	Wednesday, September 30, 2009	Sheet 39 of 59

Continuous current : 13A
Rds(on) : 18mohm

Continuous current : 13A
Rds(on) : 18mohm

8/20: Add PC186, PC187, PC188,
PC189 and PC190 for EMC solution

8/4: Change PQ30 and PQ25 from AO4496 to FDS8884

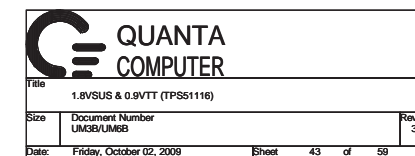


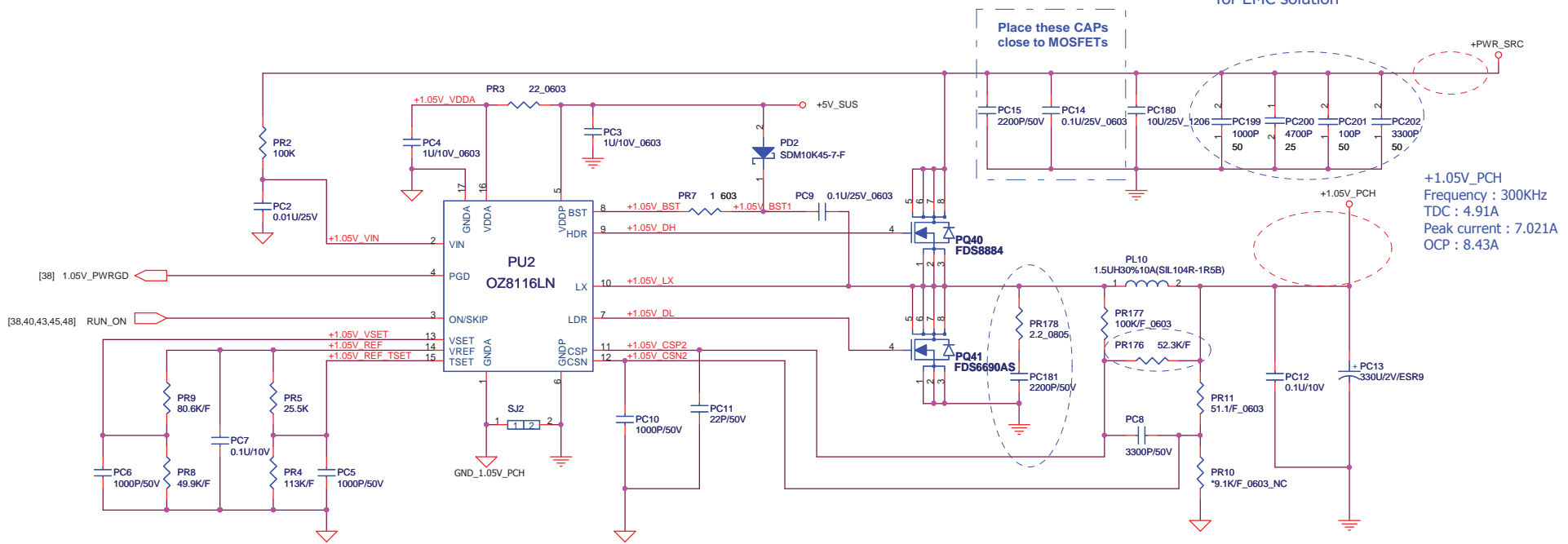
09/08: change PR152 from 0 ohm to shot jump

for EMC solution

for EMC solution

8/20: Add PC211, PC212, PC213 and PC214 for EMC solution

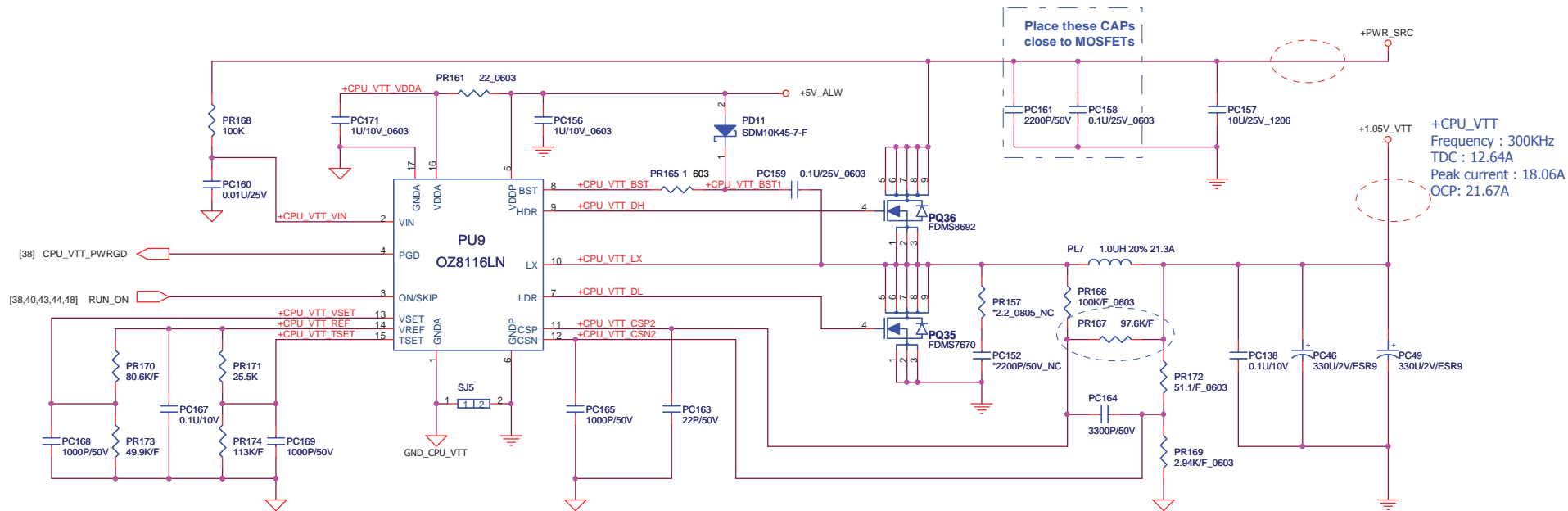




09/08: remove PJP21 and PJP22
8/20: Add PC199, PC200, PC201 and PC202
for EMC solution

+1.05V_PCH
Frequency : 300KHz
TDC : 4.91A
Peak current : 7.021A
OCP : 8.43A

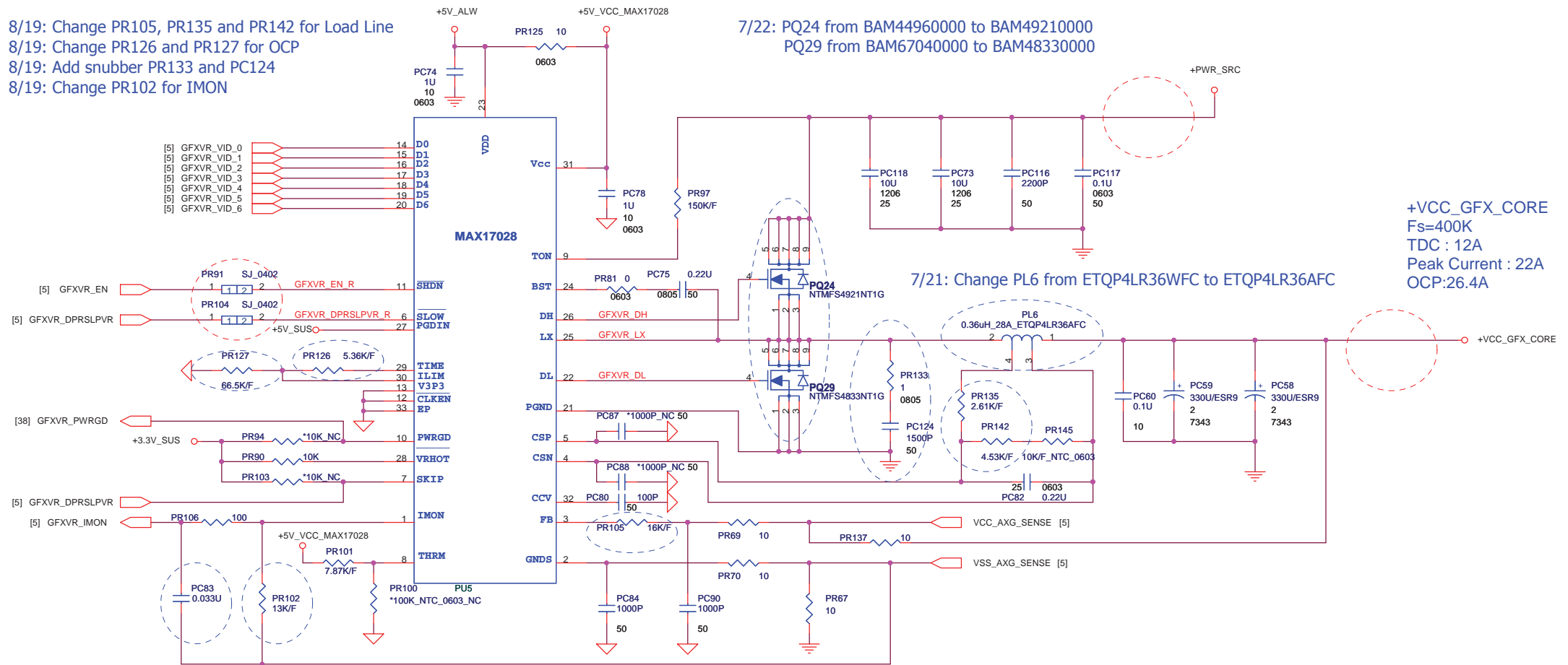
7/20: Change PR176 from 47k to 52.3k
8/19: Add snubber PR178 and PC181
8/19: Remove PJP20



7/20: Change PR167 from 47k to 97.6k
 09/08: remove PJP14, PJP17 and PJP19

8/19: Change PR105, PR135 and PR142 for Load Line
 8/19: Change PR126 and PR127 for OCP
 8/19: Add snubber PR133 and PC124
 8/19: Change PR102 for IMON

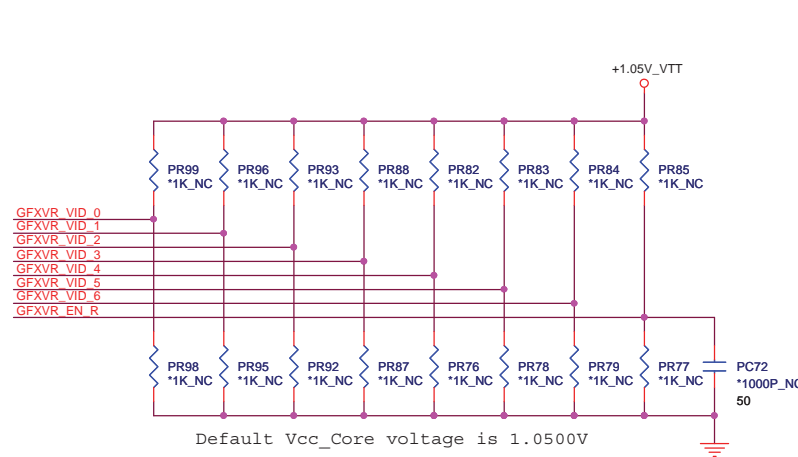
7/22: PQ24 from BAM44960000 to BAM49210000
 PQ29 from BAM67040000 to BAM48330000



+VCC_GFX_CORE
 Fs=400K
 TDC : 12A
 Peak Current : 22A
 OCP:26.4A

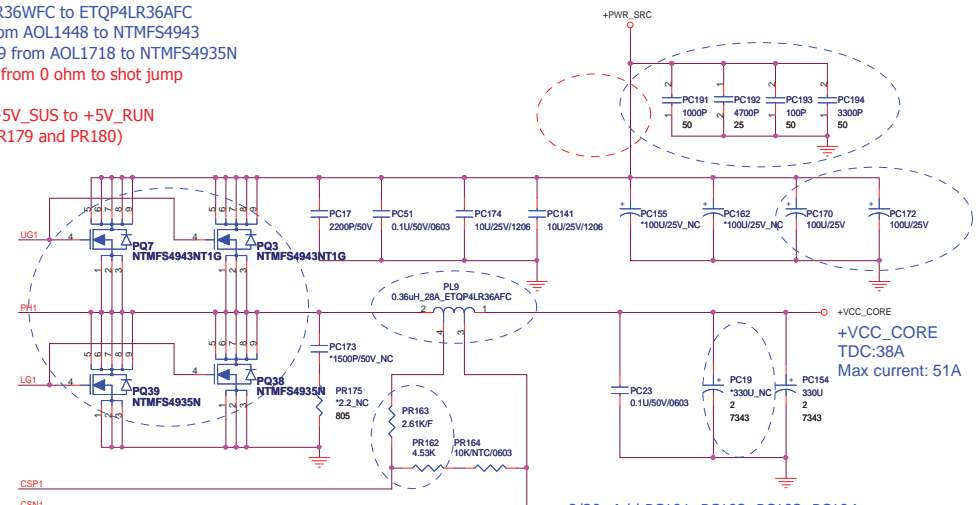
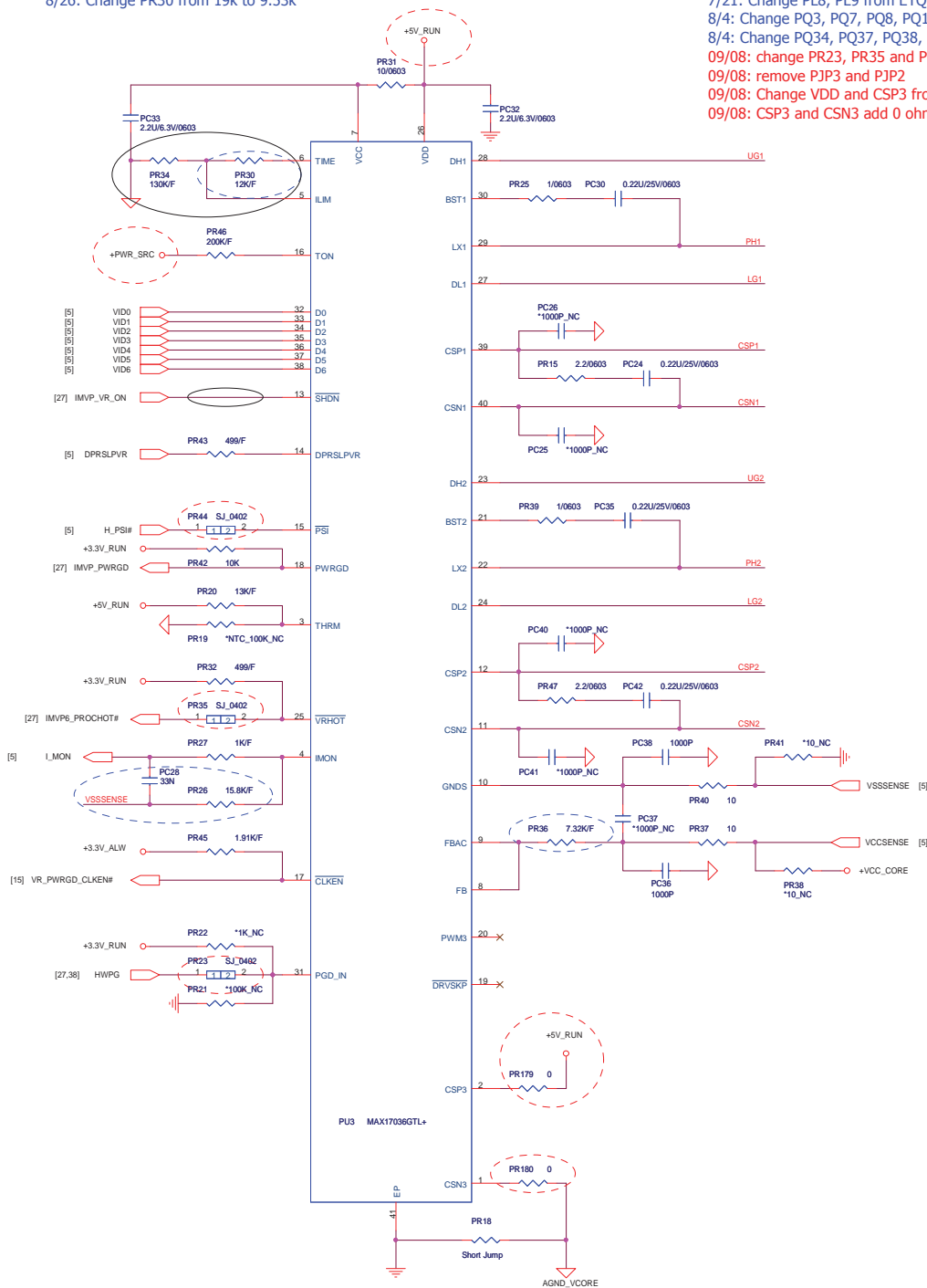
7/21: Change PL6 from ETQP4LR36WFC to ETQP4LR36AFC

8/26: Change PC83 and PR102 for IMON
 09/08: change PR91 and PR104 from 0 ohm to shot jump
 09/08: remove PJP10, PJP13 and PJP16

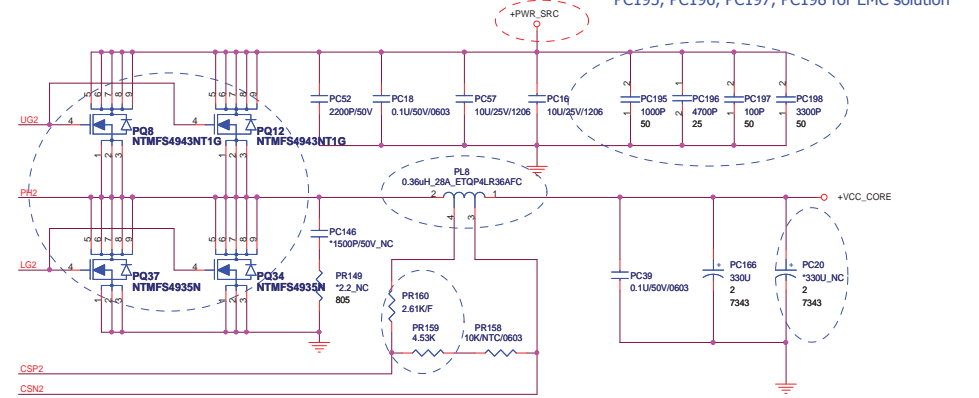


8/26: Change PR30 from 19k to 9.53k

7/21: Change PL8, PL9 from ETQP4LR36WFC to ETQP4LR36AFC
 8/4: Change PQ3, PQ7, PQ8, PQ12 from AOL1448 to NTMFS4943
 8/4: Change PQ34, PQ37, PQ38, PQ39 from AOL1718 to NTMFS4935N
 09/08: change PR23, PR35 and PR44 from 0 ohm to shot jump
 09/08: remove PJP3 and PJP2
 09/08: Change VDD and CSP3 from +5V_SUS to +5V_RUN
 09/08: CSP3 and CSN3 add 0 ohm (PR179 and PR180)

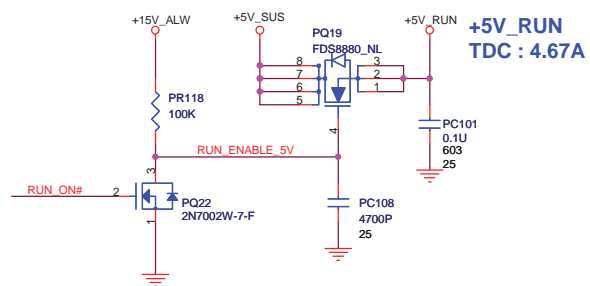
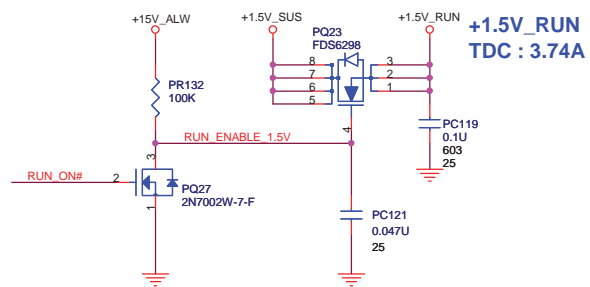
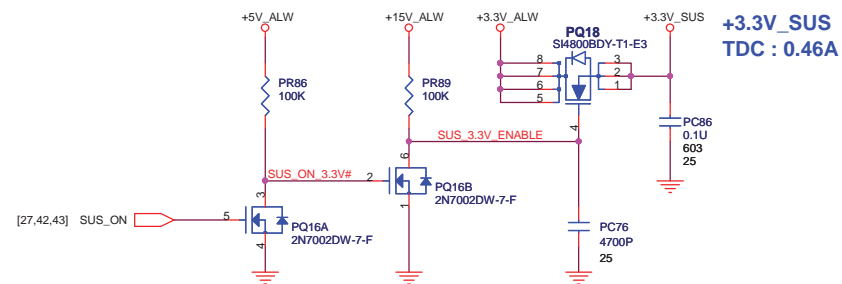


8/20: Add PC191, PC192, PC193, PC194, PC195, PC196, PC197, PC198 for EMC solution

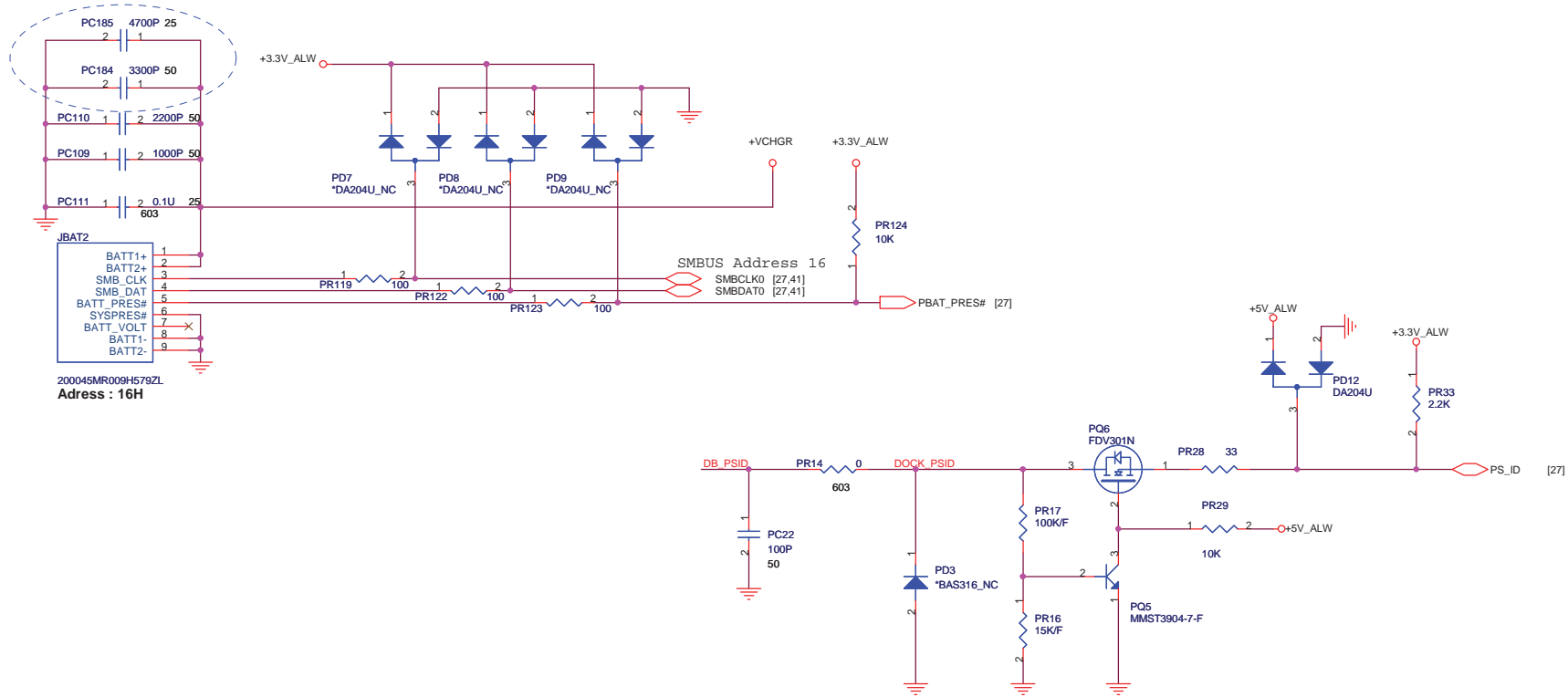


8/13: NC output cap PC19 and PC20

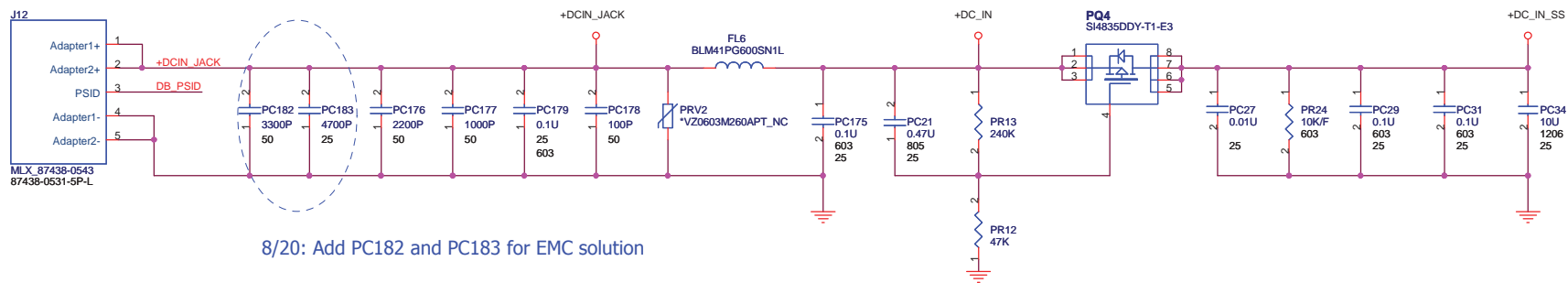
8/13: Change for Load Line and IMON regulator
 change PR26 from 9.53k to 15.8k
 change PR36 from 6.8k to 7.32k
 change PR159, PR162 from 3.4k to 4.53k
 change PR160, PR163 from 1.8k to 2.61k
 change PC28 from 0.1uF to 33nF




8/20: Add PC184 and PC185 for EMC solution

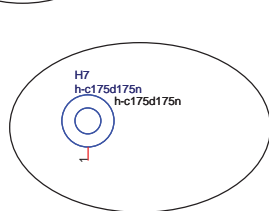
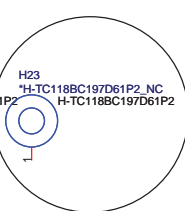
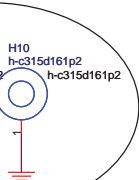
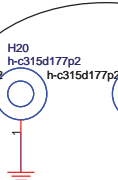
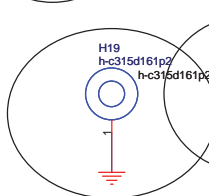
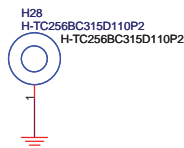
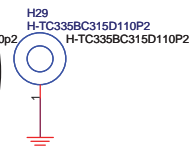
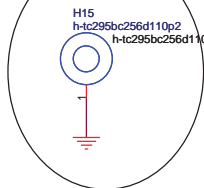
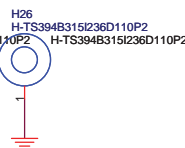
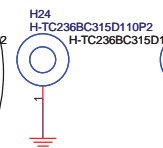
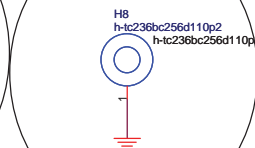
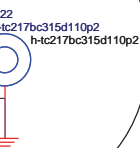
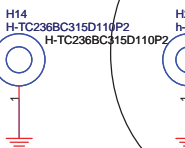
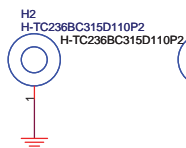
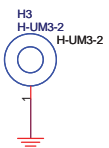
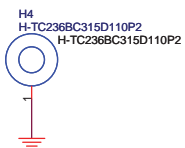
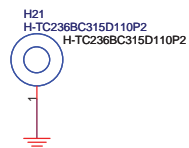
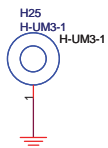
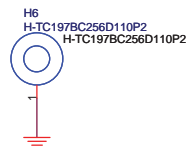


ZM1



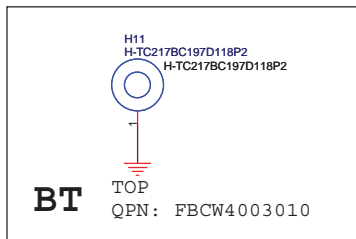
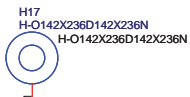
8/20: Add PC182 and PC183 for EMC solution

 QUANTA COMPUTER		
Title DCIN,BATT CONNECTOR		
Size	Document Number UMGB/UM6B	Rev 1A
Date:	Friday, October 02, 2009	Sheet 49 of 59

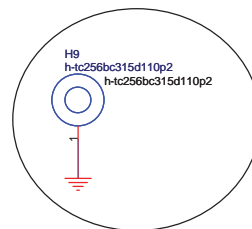
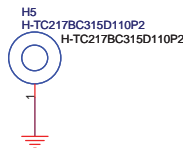



WLAN

BOT
QPN: FBFM8001010




BT TOP
QPN: FBCW4003010



 QUANTA COMPUTER		
Title: SCREW PAD		
Size:	Document Number: UM3B/UM6B	Rev: 1A
Date:	Wednesday, September 30, 2009	Sheet: 50 of 59

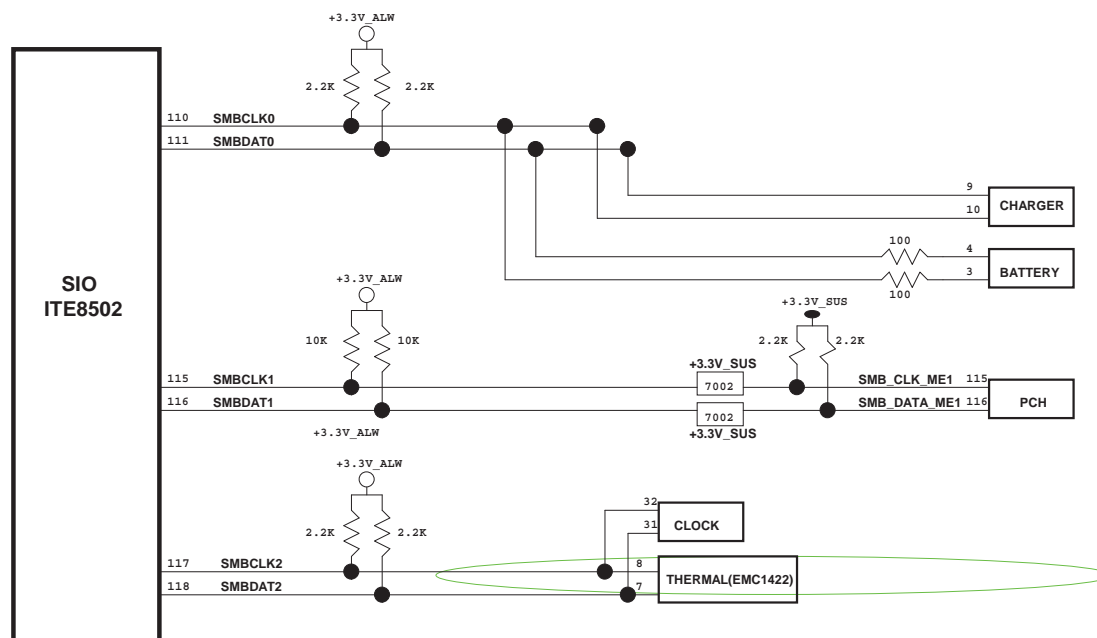
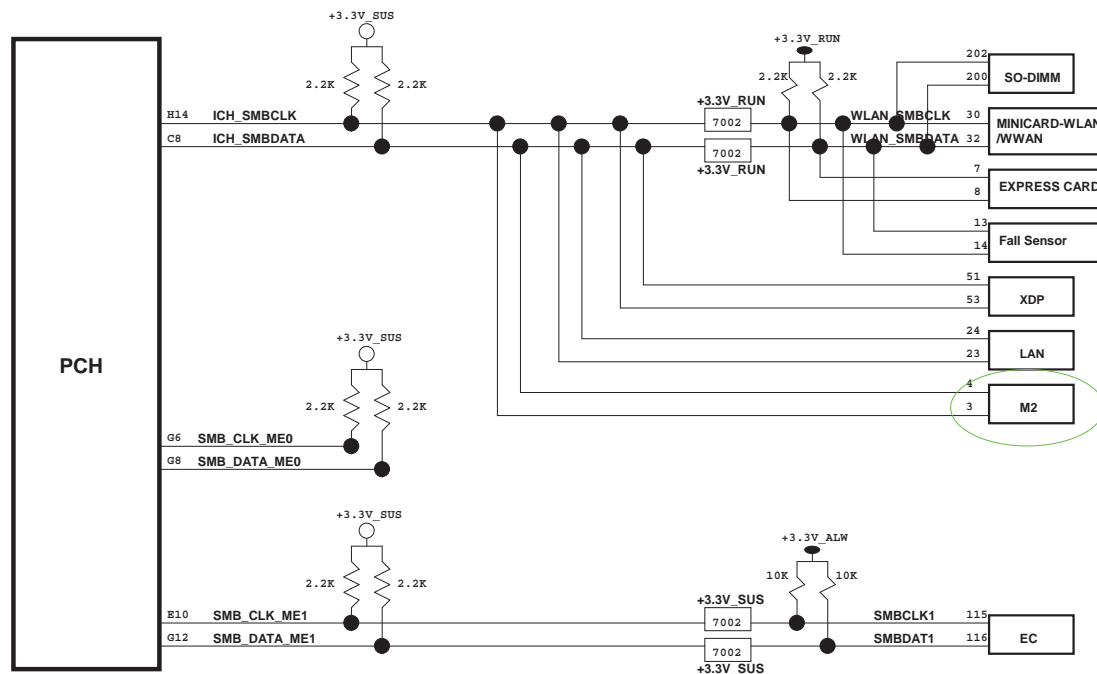
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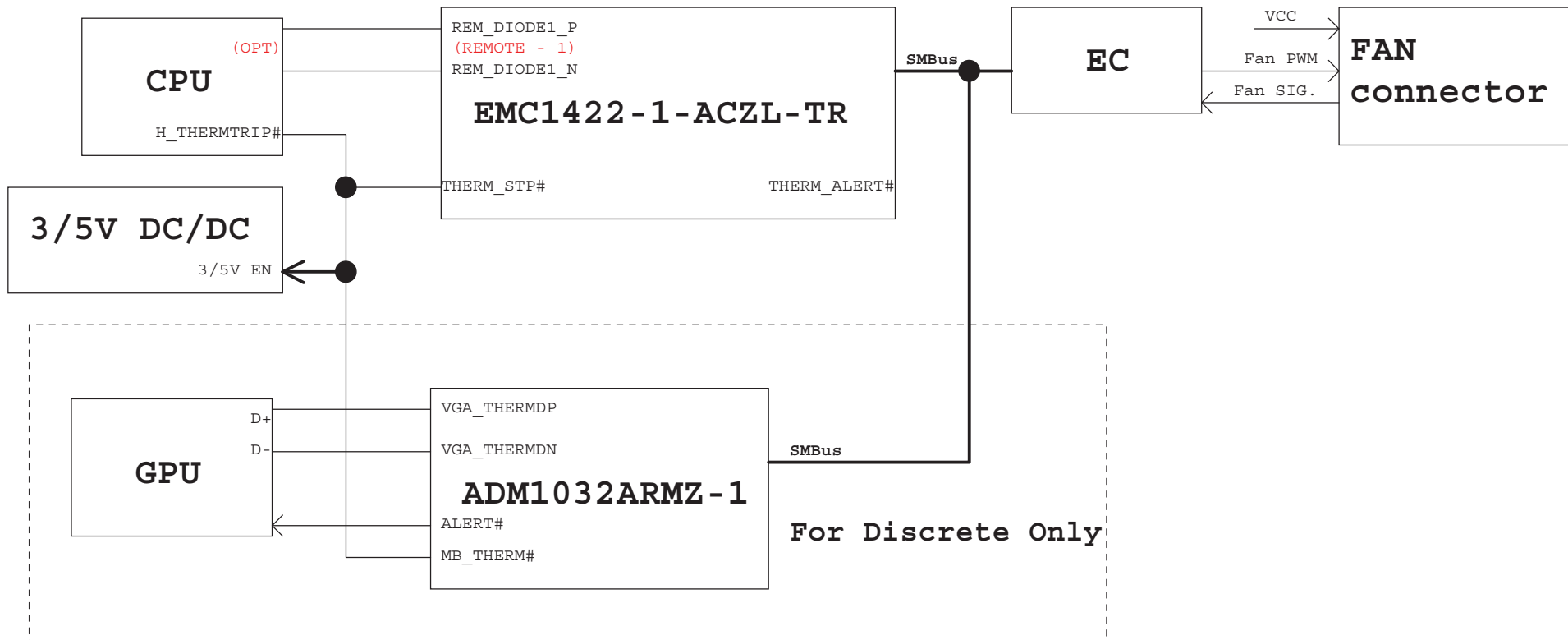
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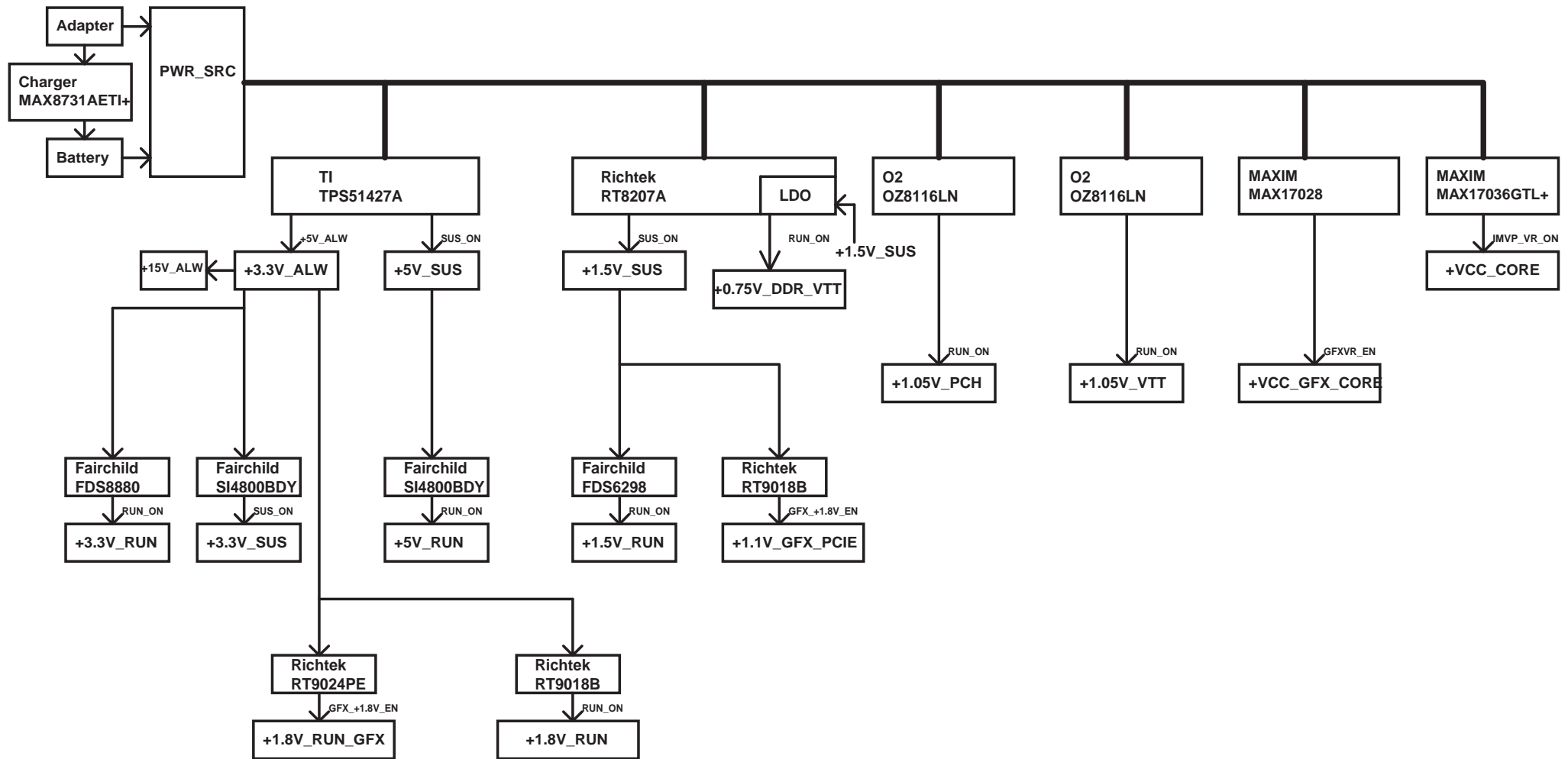


QUANTA
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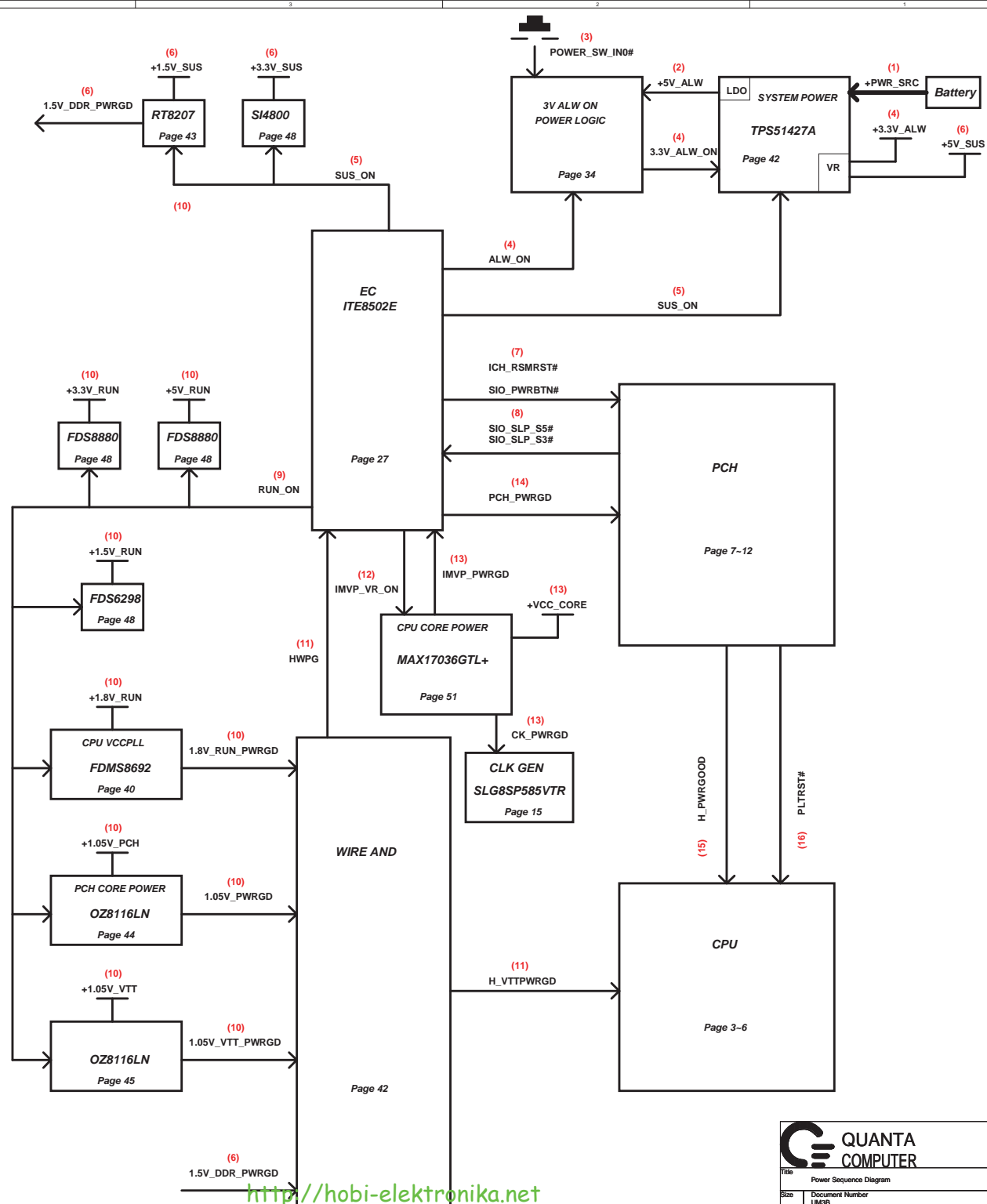
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Size	Document Number	Rev
	UMGB/UMGB	1A
Date:	Wednesday, September 30, 2009	Sheet 51 of 59







UM3 Power Design Block Diagram 2009/07/28




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QUANTA
COMPUTER

Title		Power Sequence Diagram	
Size	Document Number	Rev	
UM3B		1A	
Date:	Wednesday, September 30, 2009	Sheet	55 of 59



		QUANTA COMPUTER	
Title SMBUS BLOCK			
Size	Document Number UM3B/UM6B		Rev 1A
Date:	Wednesday, September 30, 2009	Sheet	56 of 59