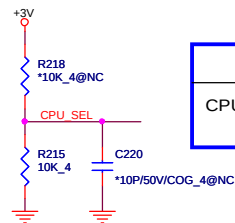
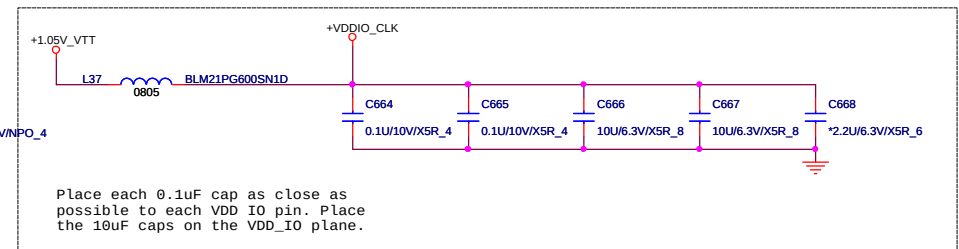
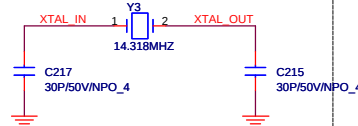
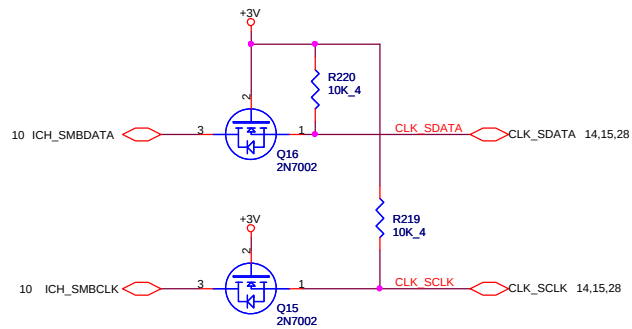
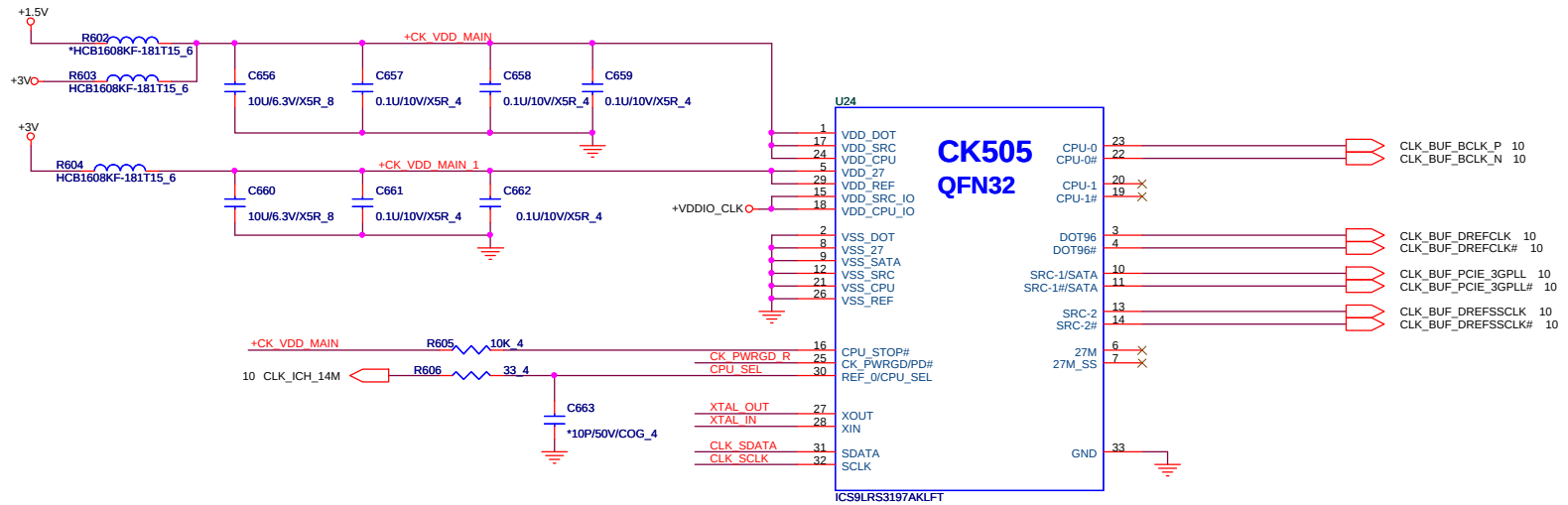


Table of Contents

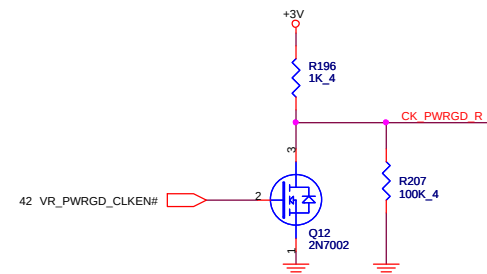
PAGE	DESCRIPTION
01	BLOCK DIAGRAM
02	FRONT PAGE
03	CLOCK GENERATOR
04-07	Auburndale PROCESSOR
08-13	Ibex Peak-M
14-15	DDR3 SO-DIMM
16	LCD & LID CON
17	HDMI PORT(PS8101)
18	CRT CONN
19	AUDIO CODEC(ALC269Q)
20	LAN(8111DL)
21	SATA HDD/CD-ROM
22	USB X2/SIM_CARD/LEDs/RF
23	CARD READER/USB/SIM CONN
24	MINI-Card (WWAN)
25	MINI-Card (WLAN)
26	ONFI
27	Express Card
28	K/B, T/P
29	BlueTooth
30	FAN /THERMAL
31	G-SENSOR
32	B TO B CON
33	TPM & RFID EEPROM
34	KBC IT8502E
35	HOLD & SKEW
36	Discharge
37	Charger (ISL8731)
38	DDR3/0.75V(TPS51116REGR)
39	1.05V_VTT (RT8204)
40	3V/5V (ISL6237IRZ-T)
41	CPU (ISL62882)
42	GFX_VCC (MAX17028)
43	XDP & JTAG
44	Power Block Diagram
45	Schematic Value Descript
46	BOM Matrix Table

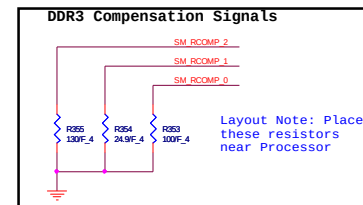
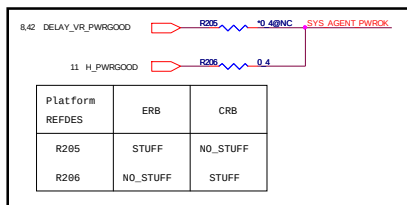
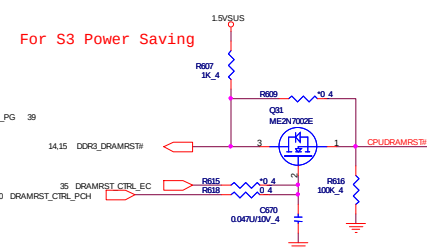
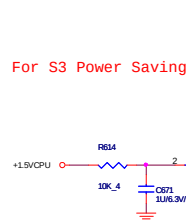
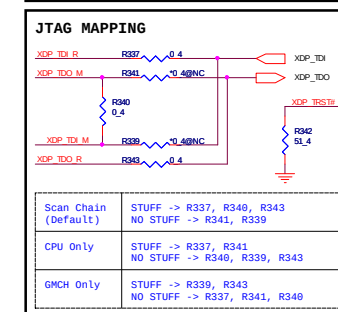
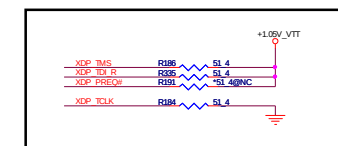
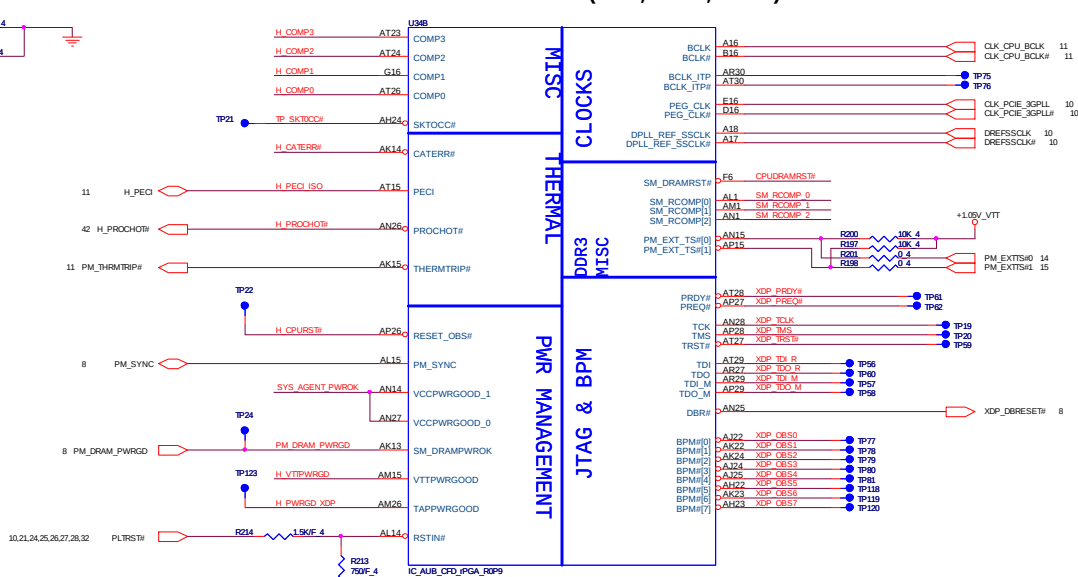
Power States

POWER PLANE	VOLTAGE	PAGE	DESCRIPTION	CONTROL SIGNAL	ACTIVE IN
VIN	10V~+20V	16,36,37,38,39,40,41,42	MAIN POWER		S0~S5
+3VRTC	+3.0V~+3.3V	9,12,34	RTC		S0~S5
3VPCU	+3.3V	9,16,20,23,28,32,34,36,37,40,42	ITE8502 POWER	3V5V_EN	S0~S5
5VPCU	+5V	36,37,38,39,40,42	DC/DC POWER IC SOURCE	3V5V_EN	S0~S5
+15V	+15V	16,31,36,38,39,40	LARGE POWER	3V5V_EN	S0~S5
LANVCC	+3.3V	20,36	LAN POWER	LAN_ON	
5V_S5	+5V	12,22,23,36	PCH SUS POWER	S5_ON	S0~S3
3V_S5	+3.3V	8,9,10,11,12,36	Sys Management,PCH Resume Well, Intel HD Audio,USB,WLAN,WIMAX POWER	S5_ON	S0~S3
5VSUS	+5V	16,32,36,41,42	SLP_S4# CTRLD POWER	SUSON	S0~S3
3VSUS	+3.3V	8,23,27,34,36,42	SLP_S4# CTRLD POWER	SUSON	S0~S3
1.5VSUS	+1.5V	4,6,12,14,15,36,38,39	DDR3 SODIMM POWER	SUSON	S0~S3
0.75VSMDDR_VTERM	+0.75V	14,15,36,38	DDR3 SODIMM REFERENCE POWER	MAINON	S0
+5V	+5V	8,12,16,17,18,19,21,28,30,34,36,37	SLP_S3# CTRLD POWER	MAINON	S0
+3V	+3.3V	3,4,8,9,10,11,12,14,15,16,17,18,19,20,21,22 23,24,25,26,27,29,30,31,32,33,34,36,37,38, 39,40,41,42,43	SLP_S3# CTRLD POWER	MAINON	S0
+1.8V	+1.8V	6,12,26,36,42	LVDS,NVM POWER	MAINON	S0
+1.5V	+1.5V	12,24,25,27,38,39	Mini PCIe,Express Card POWER	MAIND	S0
+1.05V_VTT	+1.05V	3,4,6,8,10,11,12,36,39,41,43	AuBurndale VTT POWER/PCH CORE POWER	MAINON	S0
+VCC_GFX_CORE		6,36,42	VGA CORE POWER	GFXVR_EN	S0
VCC_CORE		6,36,41	CPU CORE POWER	VRON	S0
LCDVCC	+3.3V	16	LCD Power	ENVDD	S0
+5V_ODD	+5V	21	ODD Power	MAINON#	S0
+5V_HDD	+5V	21	HDD Power	MAINON#	S0
BAT-V	+10V~+17V	37	MAIN BATTERY	CHG_PBATT	S0~S5

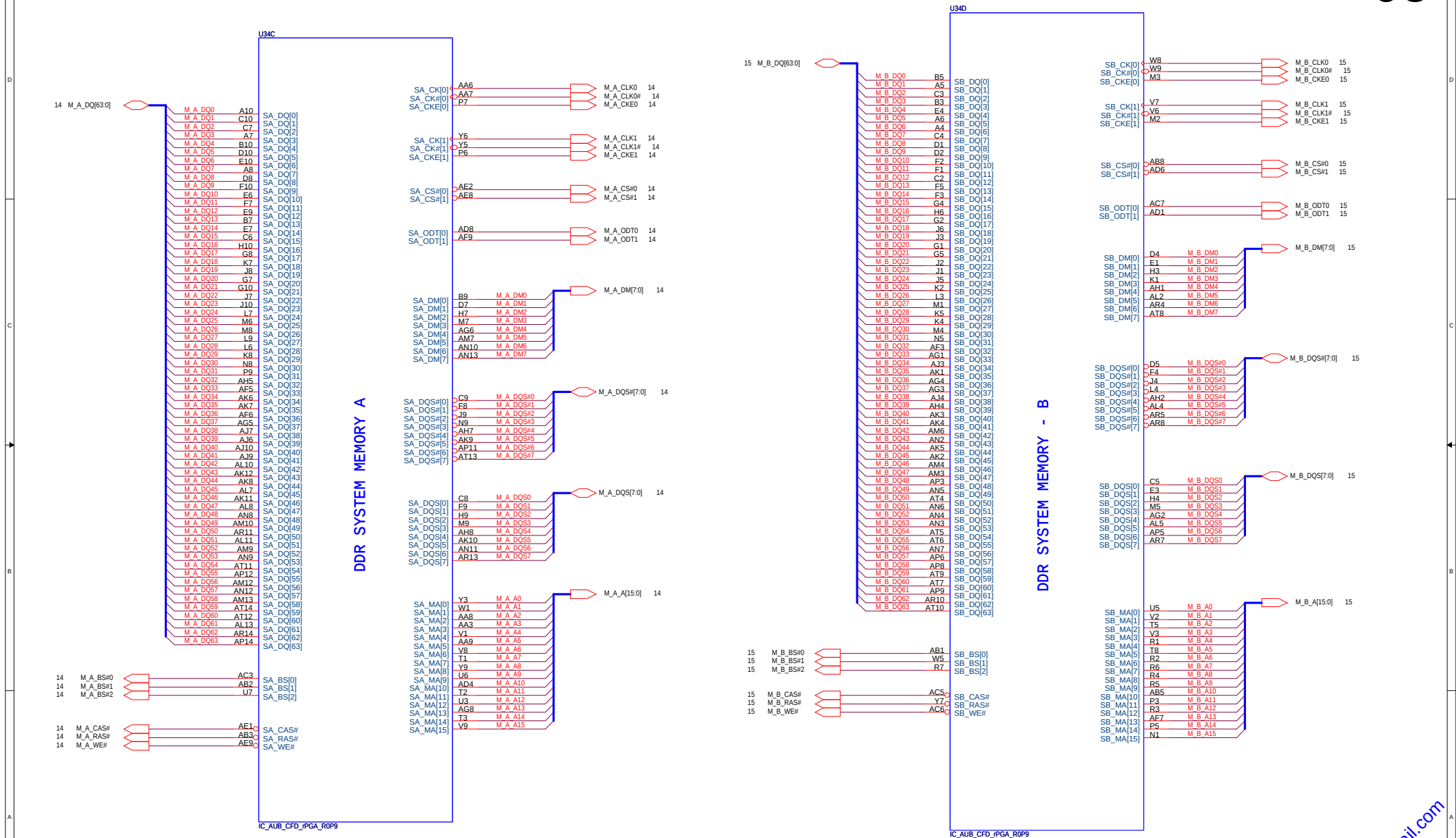


	0	1
CPU_SEL	CPU0/1=133MHz (default)	CPU0/1=100MHz





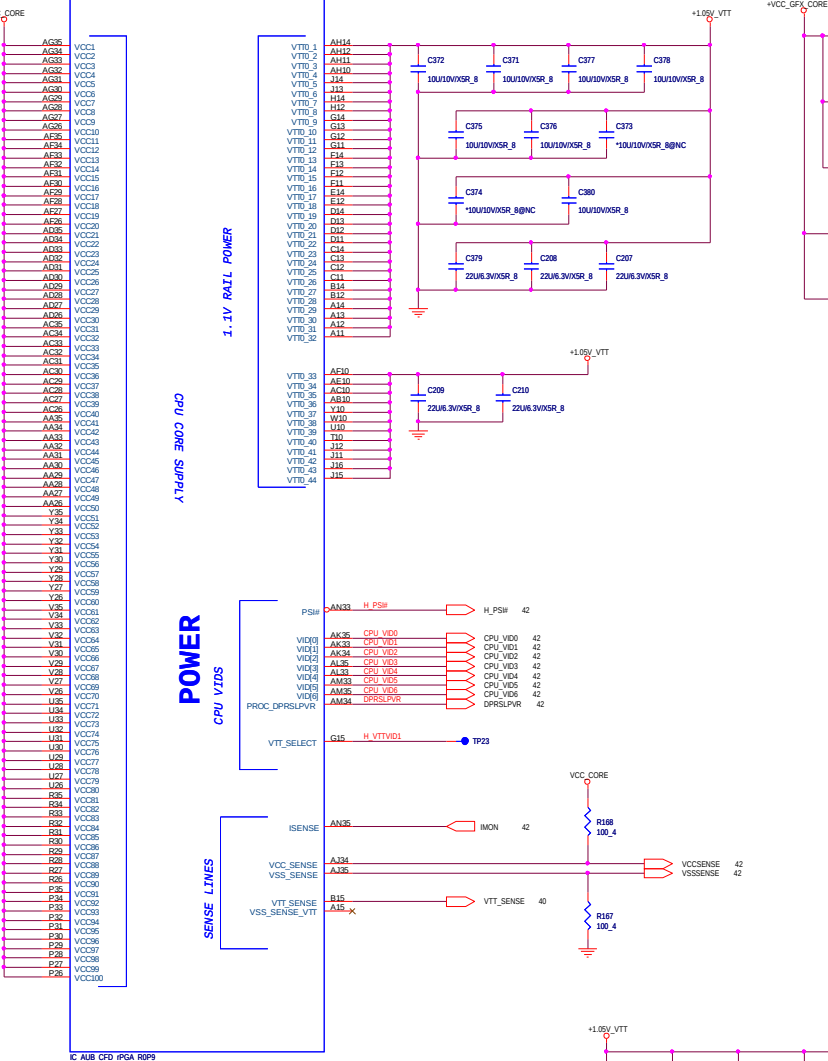
ARRANDALE PROCESSOR (DDR3)



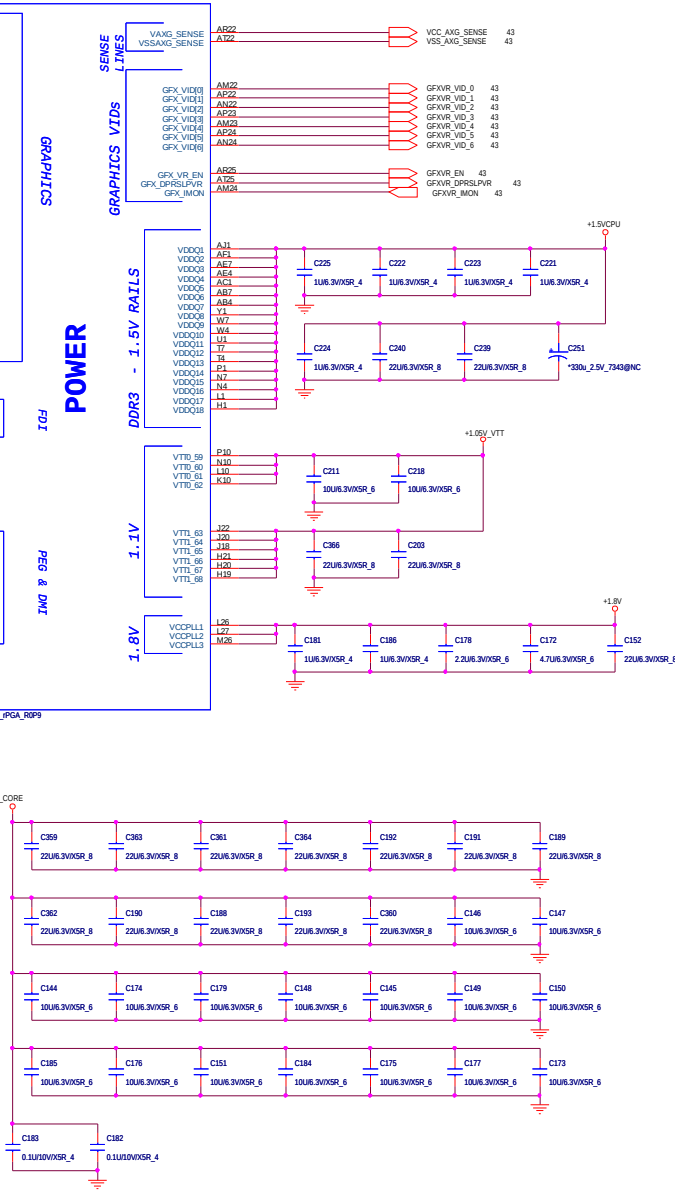
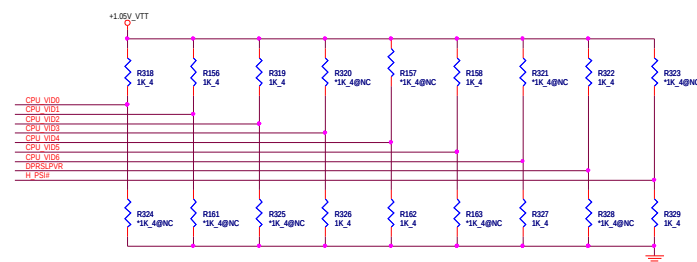
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CPU Core Power

ARRANDALE PROCESSOR (GRAPHICS POWER)



AUBURNDALE PROCESSOR (POWER)



37.42 VCC CORE
34.8,9,10,11,12,37,40,42,43 +1.05V_VTT
4,14,15,37,39 1.5V_CPU
10,12,37,43 +1.8V
37.43 +VCC_GFX_CORE

06

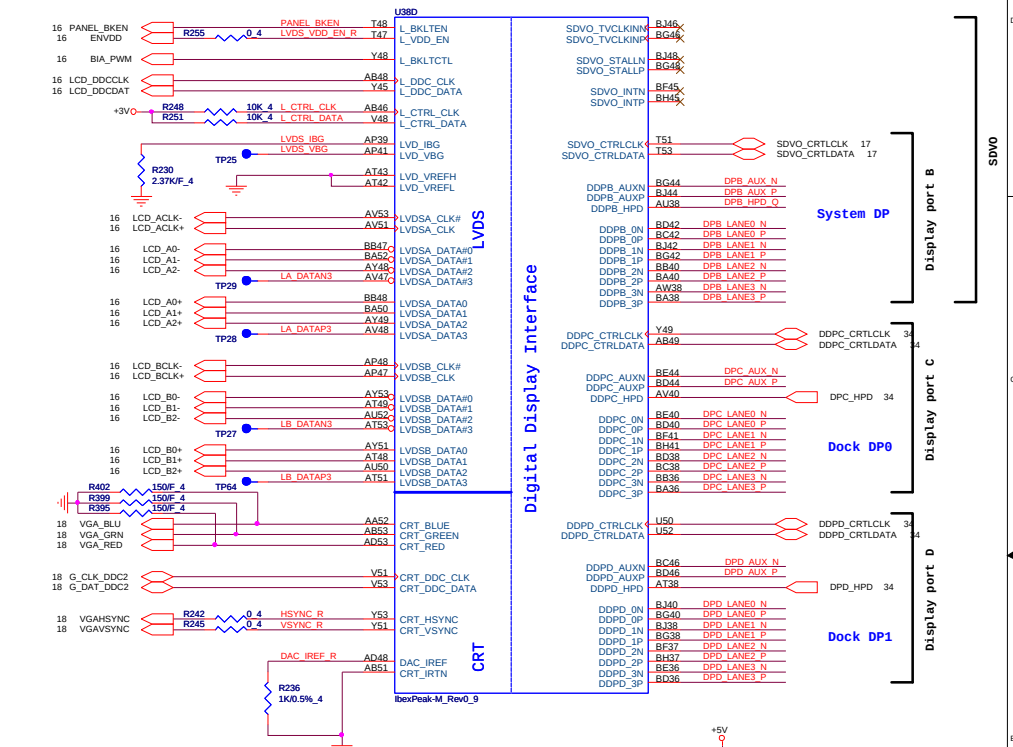
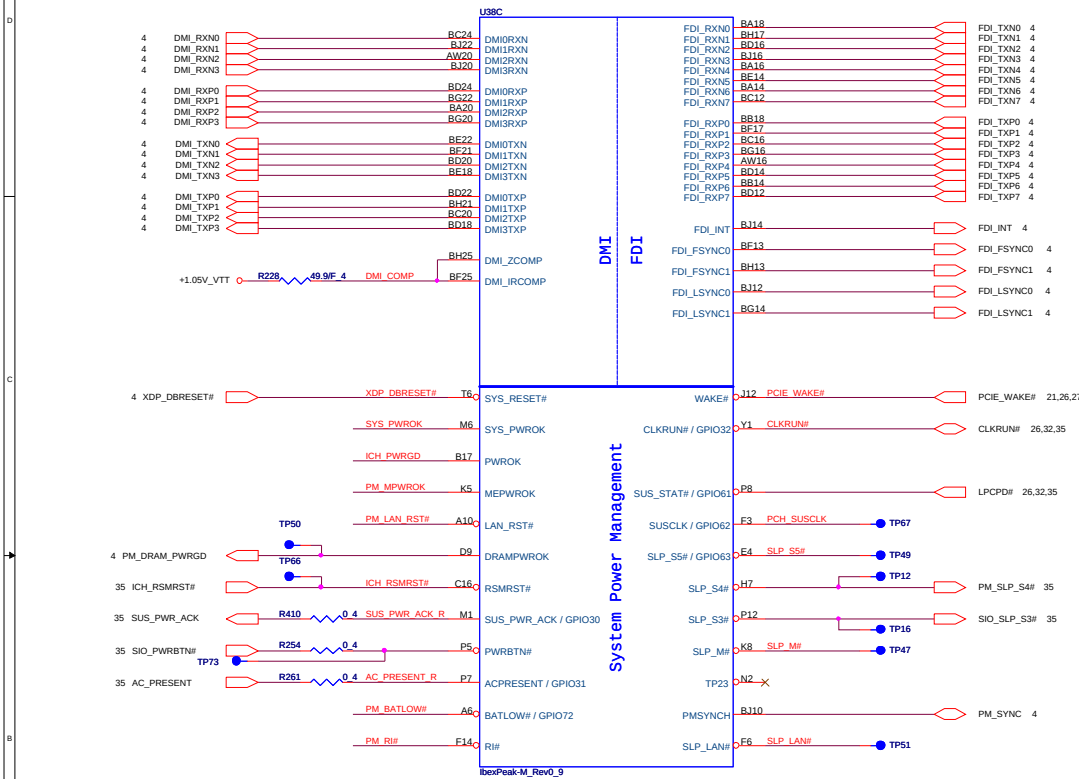
[illegible]

	1	0
CFG4 (Display Port Presence)	Disabled; No Physical Display Port attached to Embedded Display Port	Enabled; An external Display port device is connected to the Embedded Display port
CFG0 (PCI-Epress Configuration Select)	Single PEG	Bifurcation enabled
CFG3 (PCI-Epress Static Lane Reversal)	Normal Operation	Lane Numbers Reversed

IBEX PEAK-M (DMI, FDI, GPIO)

IBEX PEAK-M (LVDS, DDI)

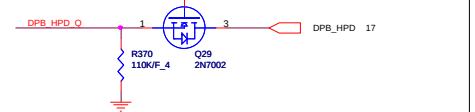
08



DPB_LANE0_N	C245	0.1u10V/KSR 4	DPB_LANE0_N_C	17
DPB_LANE0_P	C244	0.1u10V/KSR 4	DPB_LANE0_P_C	17
DPB_LANE1_N	C391	0.1u10V/KSR 4	DPB_LANE1_N_C	17
DPB_LANE1_P	C390	0.1u10V/KSR 4	DPB_LANE1_P_C	17
DPB_LANE2_N	C247	0.1u10V/KSR 4	DPB_LANE2_N_C	17
DPB_LANE2_P	C246	0.1u10V/KSR 4	DPB_LANE2_P_C	17
DPB_LANE3_N	C254	0.1u10V/KSR 4	DPB_LANE3_N_C	17
DPB_LANE3_P	C253	0.1u10V/KSR 4	DPB_LANE3_P_C	17
DPB_AUX_N	C684	0.1u10V/KSR 4	DPB_AUX_SINK_N	17
DPB_AUX_P	C685	0.1u10V/KSR 4	DPB_AUX_SINK_P	17

DPC_LANE0_N	C265	0.1u10V/KSR 4	DPC_LANE0_N_C	34
DPC_LANE0_P	C337	0.1u10V/KSR 4	DPC_LANE0_P_C	34
DPC_LANE1_N	C393	0.1u10V/KSR 4	DPC_LANE1_N_C	34
DPC_LANE1_P	C392	0.1u10V/KSR 4	DPC_LANE1_P_C	34
DPC_LANE2_N	C339	0.1u10V/KSR 4	DPC_LANE2_N_C	34
DPC_LANE2_P	C248	0.1u10V/KSR 4	DPC_LANE2_P_C	34
DPC_LANE3_N	C290	0.1u10V/KSR 4	DPC_LANE3_N_C	34
DPC_LANE3_P	C338	0.1u10V/KSR 4	DPC_LANE3_P_C	34
DPC_AUX_N	C686	0.1u10V/KSR 4	DPC_AUX_SINK_N	34
DPC_AUX_P	C687	0.1u10V/KSR 4	DPC_AUX_SINK_P	34

DPD_LANE0_N	C341	0.1u10V/KSR 4	DPD_LANE0_N_C	34
DPD_LANE0_P	C344	0.1u10V/KSR 4	DPD_LANE0_P_C	34
DPD_LANE1_N	C495	0.1u10V/KSR 4	DPD_LANE1_N_C	34
DPD_LANE1_P	C492	0.1u10V/KSR 4	DPD_LANE1_P_C	34
DPD_LANE2_N	C367	0.1u10V/KSR 4	DPD_LANE2_N_C	34
DPD_LANE2_P	C340	0.1u10V/KSR 4	DPD_LANE2_P_C	34
DPD_LANE3_N	C342	0.1u10V/KSR 4	DPD_LANE3_N_C	34
DPD_LANE3_P	C357	0.1u10V/KSR 4	DPD_LANE3_P_C	34
DPD_AUX_N	C688	0.1u10V/KSR 4	DPD_AUX_SINK_N	34
DPD_AUX_P	C689	0.1u10V/KSR 4	DPD_AUX_SINK_P	34



12,35 +3VRTC
16,21,24,33,34,35,37,38,41,43 3VPCU
4,8,10,11,12,14,15,16,17,18,19,21,22,23,24,25,26,27,28,29,31,32,33,34,35,37,39,40,41,42 +3V
4,8,10,11,12,23,26,28,37 3V_S5
3,4,6,8,10,11,12,37,40,42,43 +1.05V_VTT

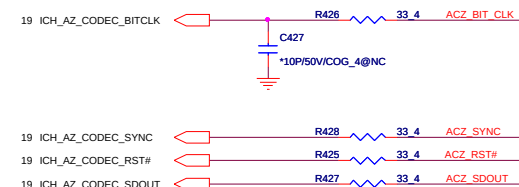
RTC Circuitry

CMOS Settings	J2
Clear CMOS	1-2
Save CMOS	1-X (Default)

TPM Settings	J3
Clear ME RTC registers	1-2
Save ME RTC registers	1-X (Default)

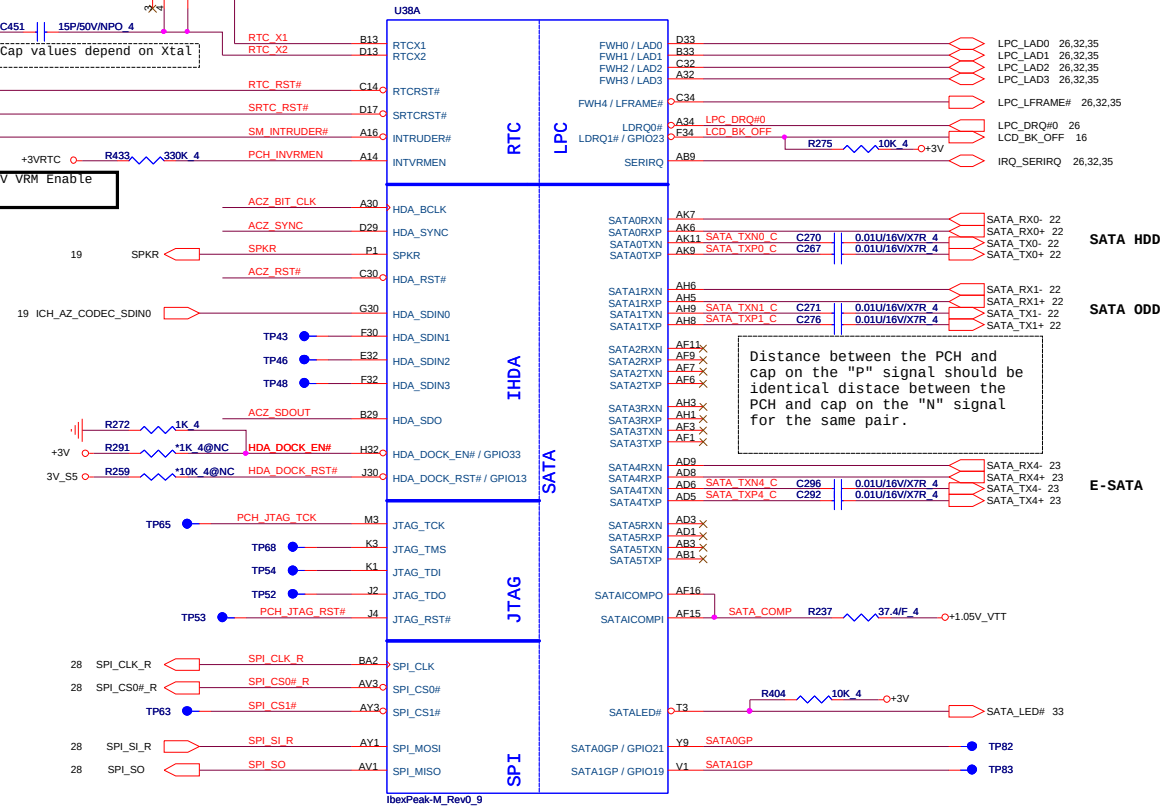
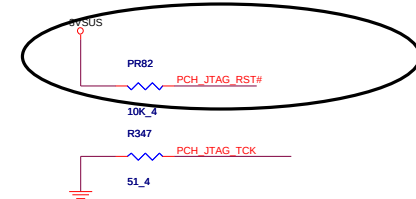
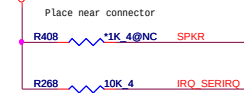
IBEX PEAK-M (HDA, JTAG, SATA)

INTVRMEN - Integrated SUS 1.1V VRM Enable
High - Enable Internal VRs



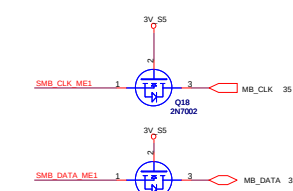
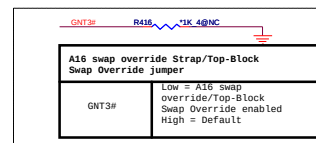
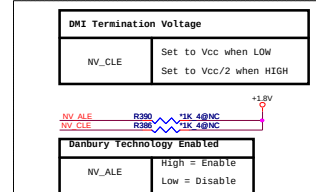
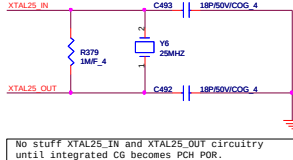
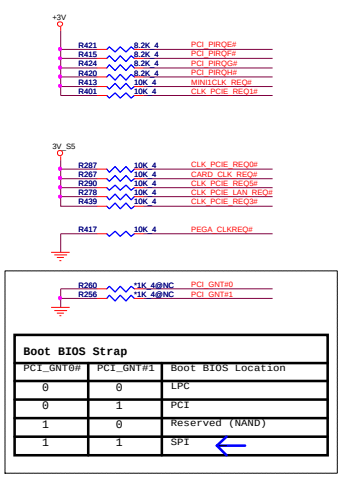
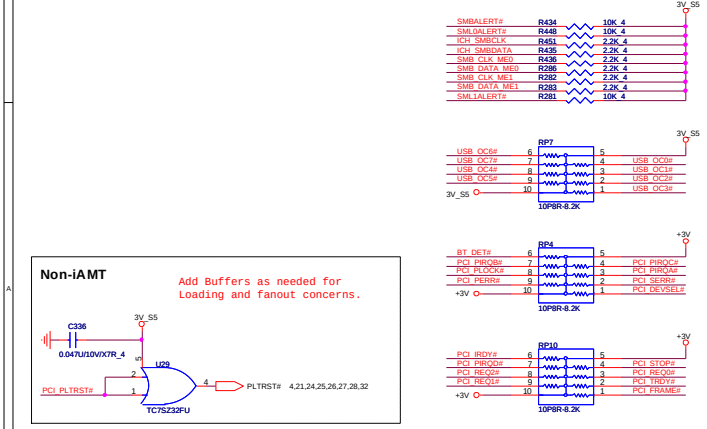
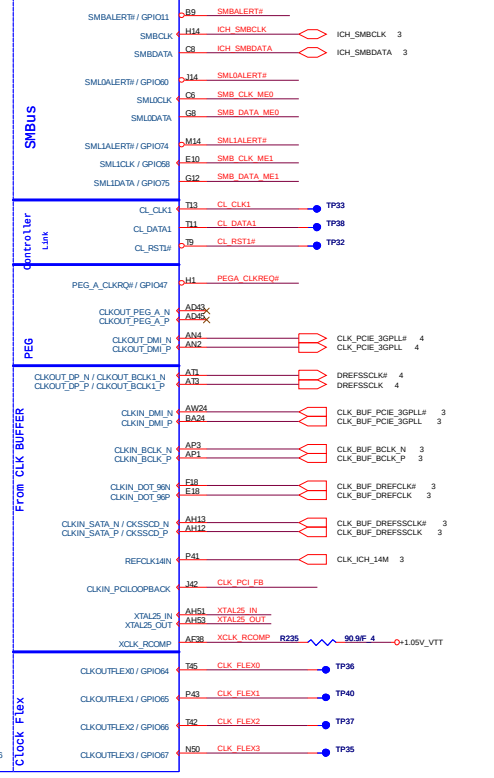
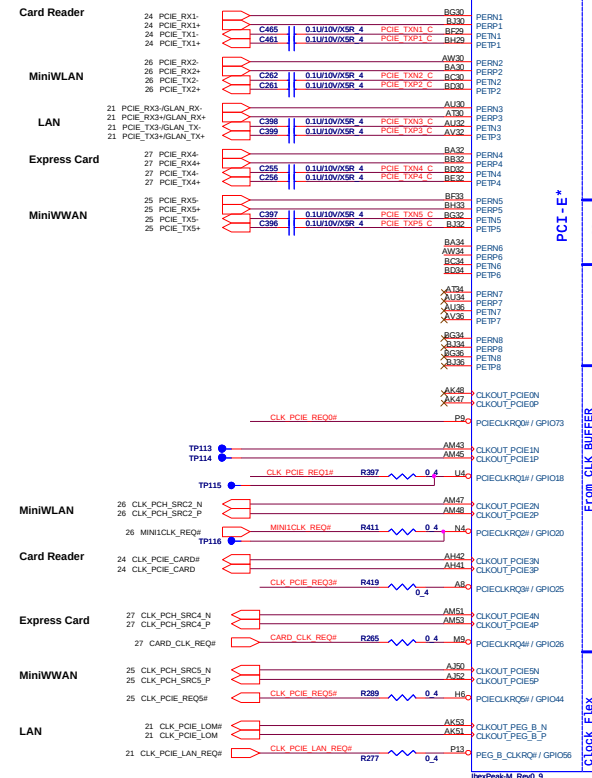
Place all series terms close to PCH except for SDIN input lines, which should be close to source. Placement of R651, R652, R650 & R653 should equal distance to the T split trace point. Basically, keep the same distance from T for all series termination resistors.

No Reboot Strap



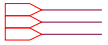
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Size: Custom Document Number: IBEX PEAK-M 2/6 Rev: Date: Tuesday, November 17, 2009 Sheet: 9 of 46

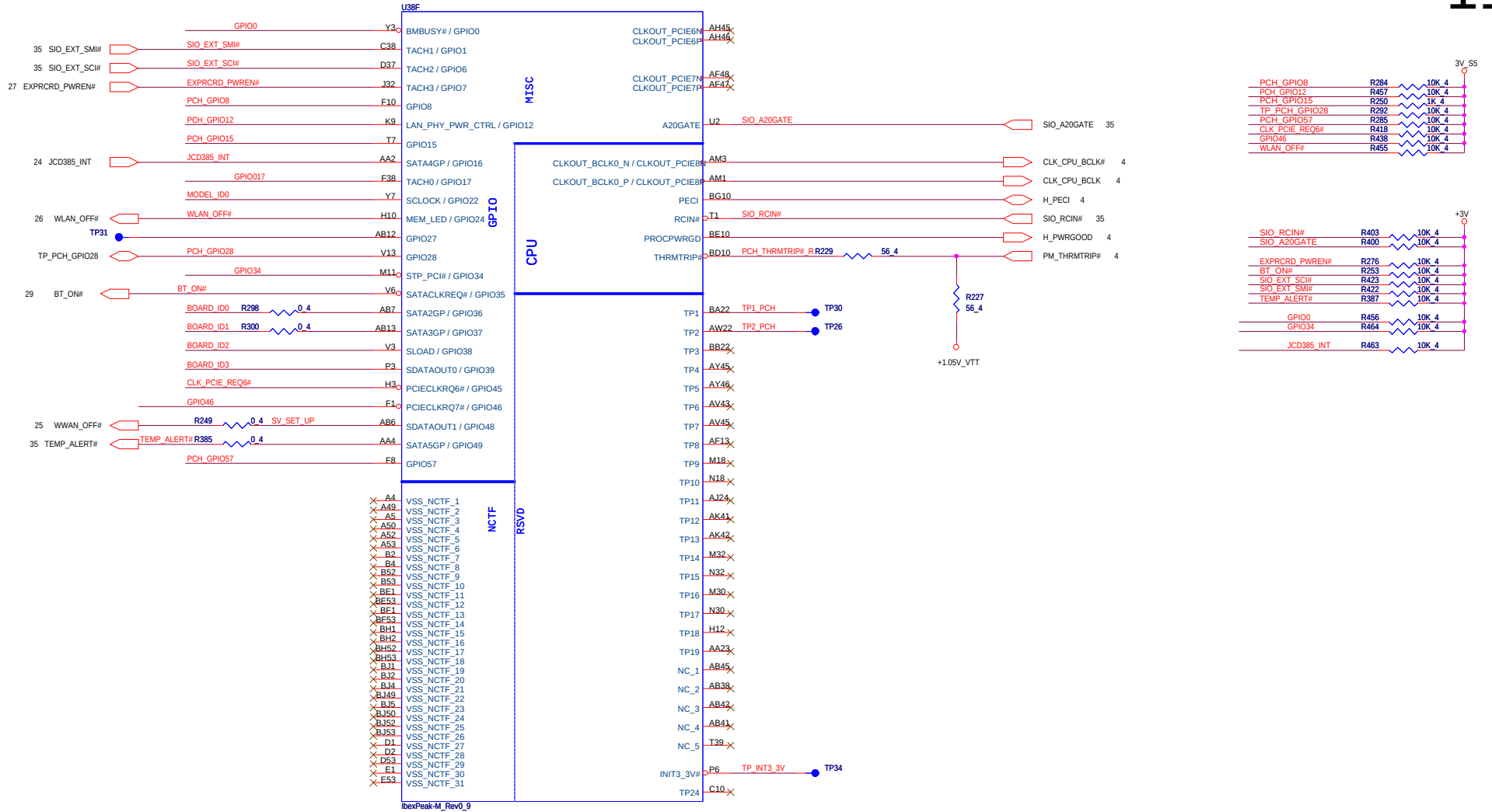


IBEX PEAK-M (GPIO, VSS_NCTF, RSVD)

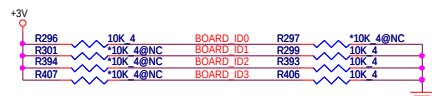
3,4,8,9,10,12,14,15,16,17,18,19,21,22,23,24,25,26,27,28,29,31,32,33,34,35,37,39,40,41,42
4,8,9,10,12,23,26,28,37
+3V
3V_SS
+1.05V_VTT



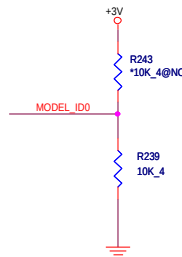
11



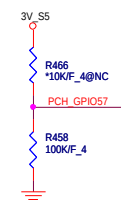
Board ID For Function	ID3 GPIO39	ID2 GPIO38	ID1 GPIO37	ID0 GPIO36
SDV	0	0	0	0
SIV	0	0	0	1
SIT	0	0	1	0
SVT	0	0	1	1
SOVP	0	1	0	0



Model ID	MODEL_ID0
14"	0
15"	1



TPM physical presence	
PCH_GPIO57	Low: Default



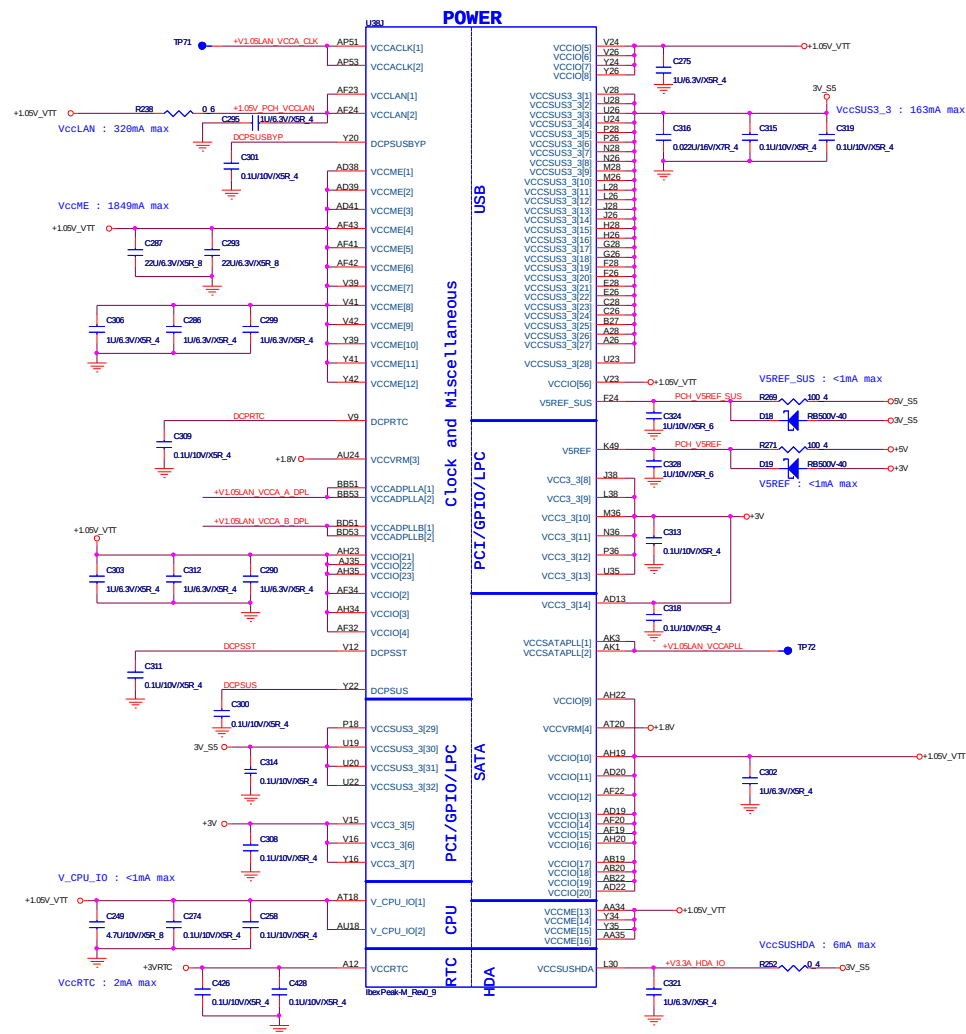
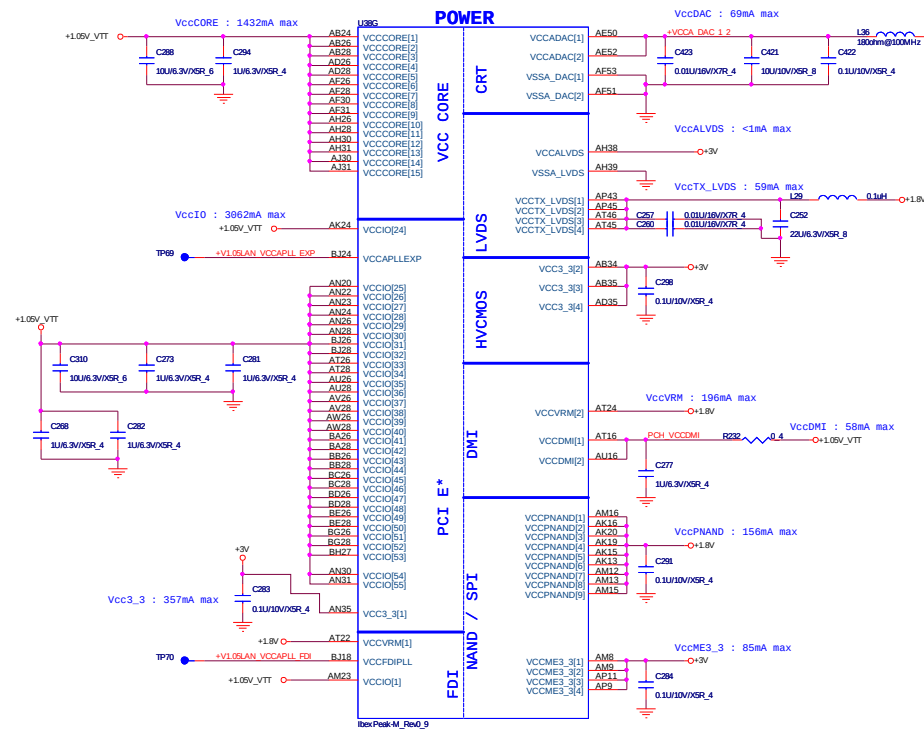
SV_SET_UP	1-X High = Strong (Default)
-----------	-----------------------------

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Size: Custom
Document Number: **IBEX PEAK-M 4/6**
Date: Tuesday, November 17, 2009
Sheet: 11 of 46

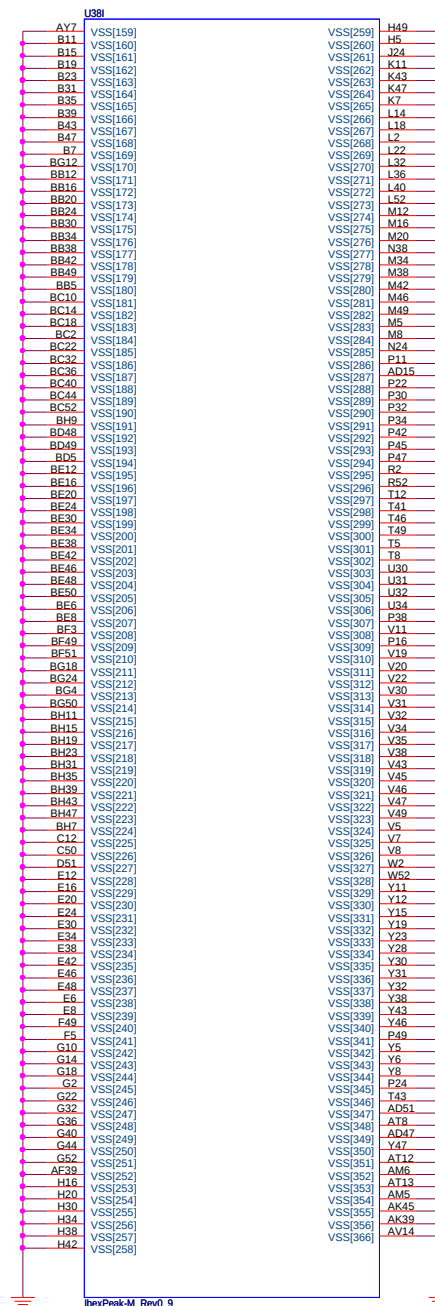
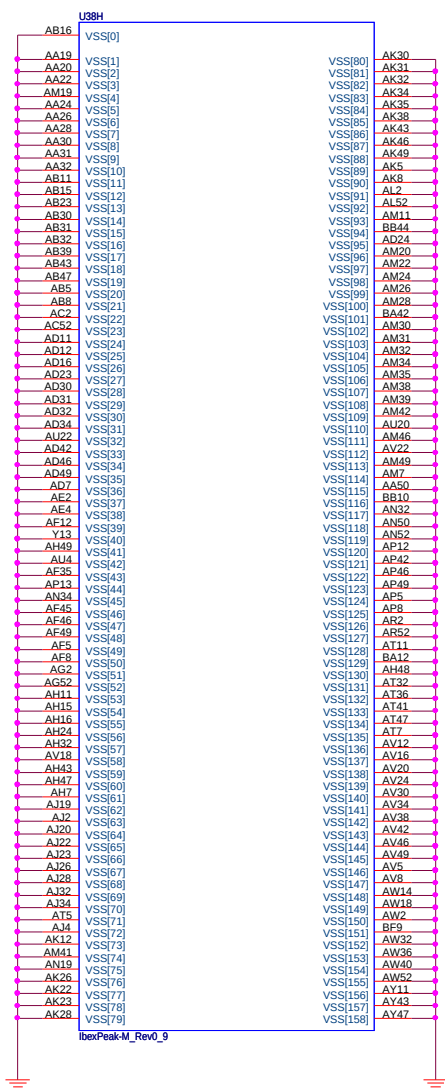
Rev: _____

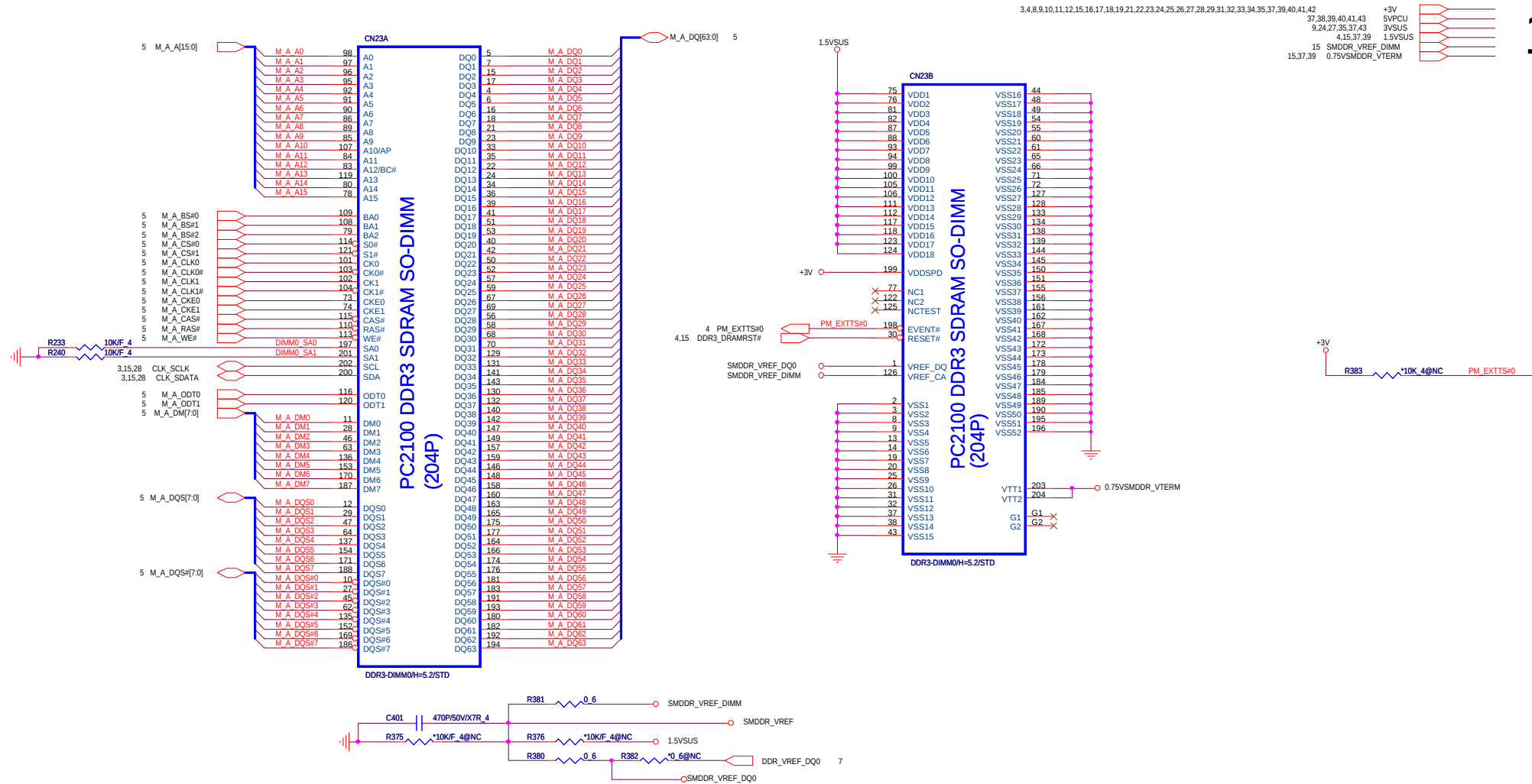
IBEX PEAK-M (POWER)



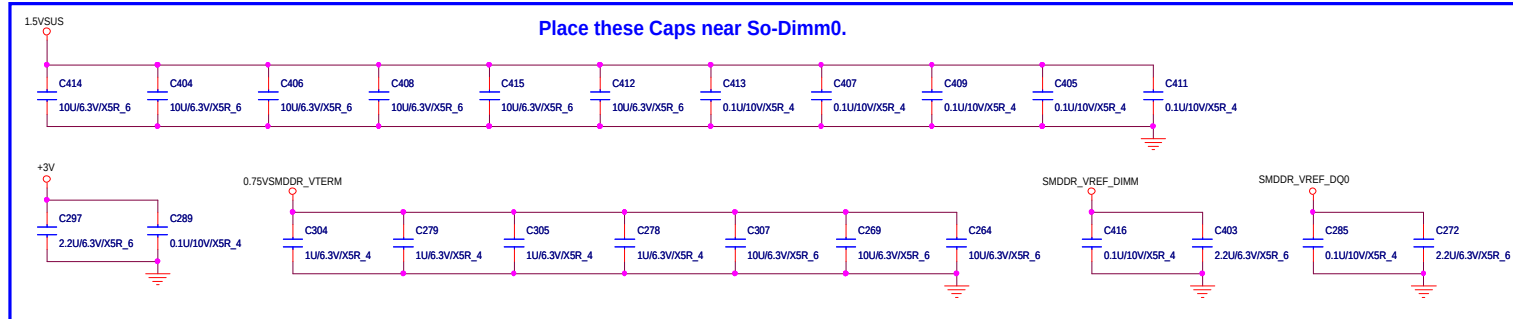
IBEX PEAK-M (GND)

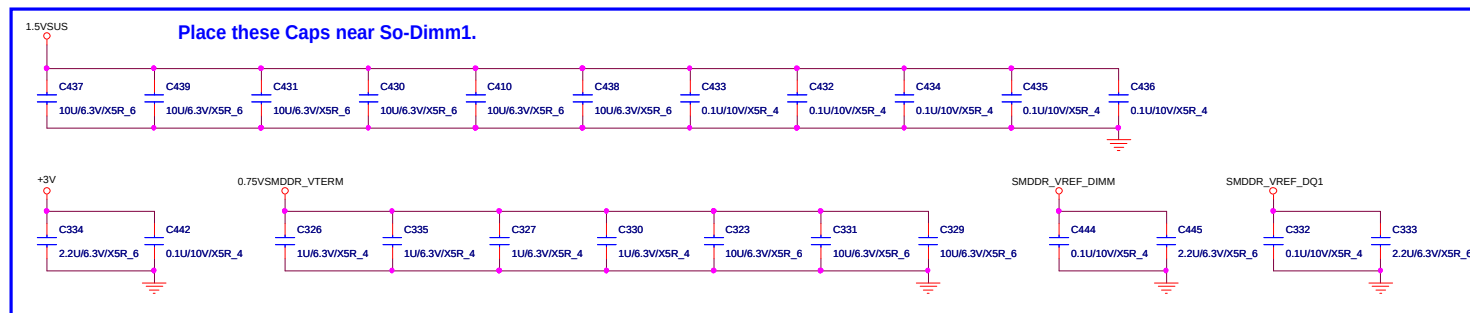
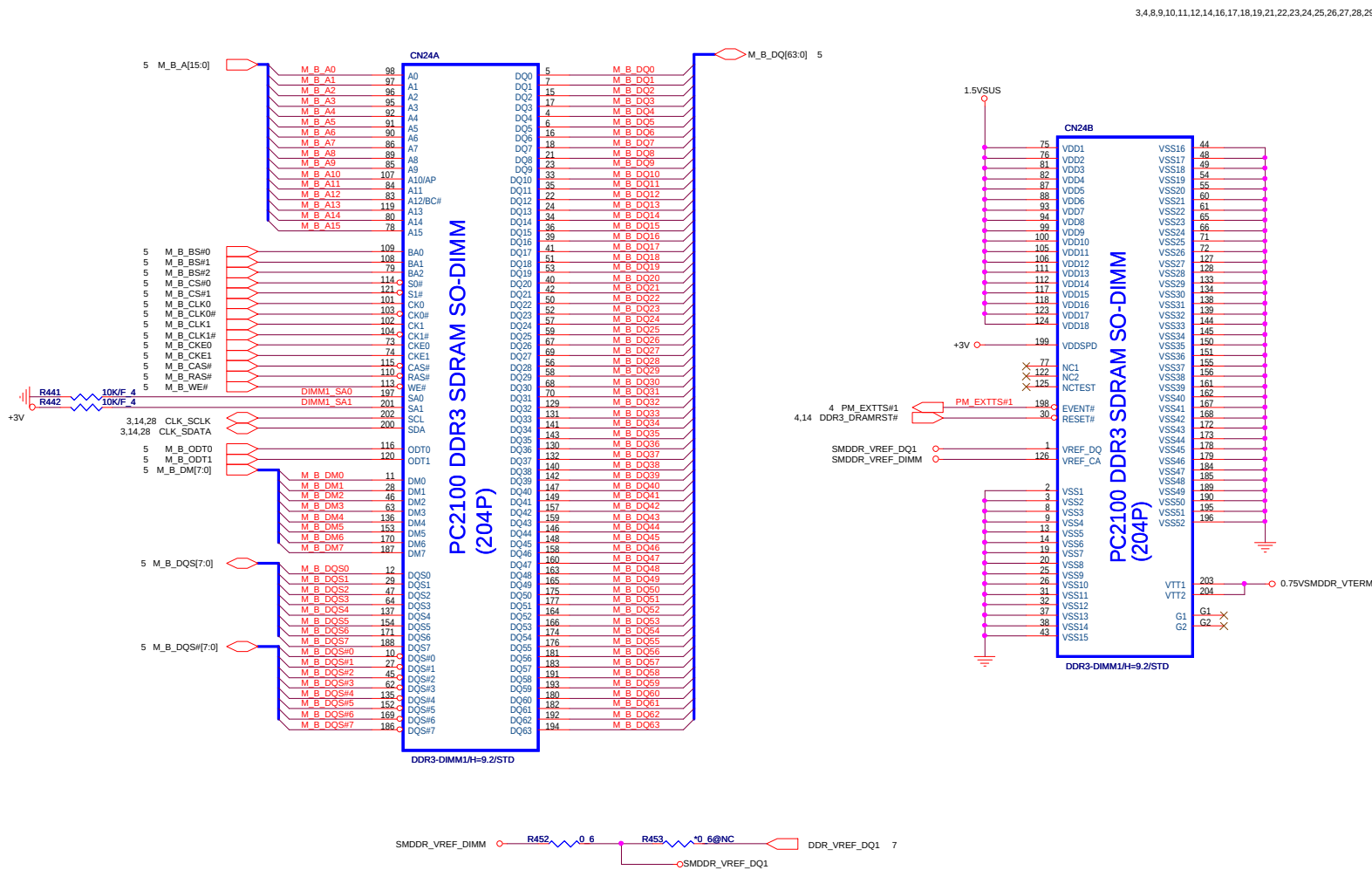
13



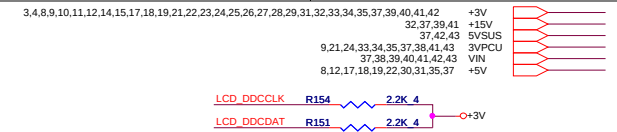
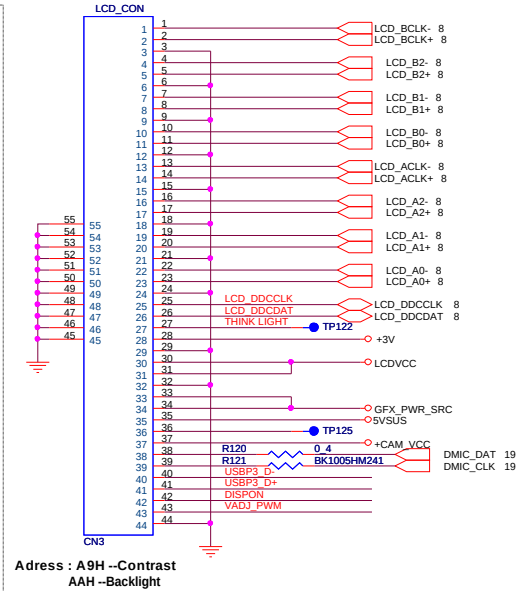
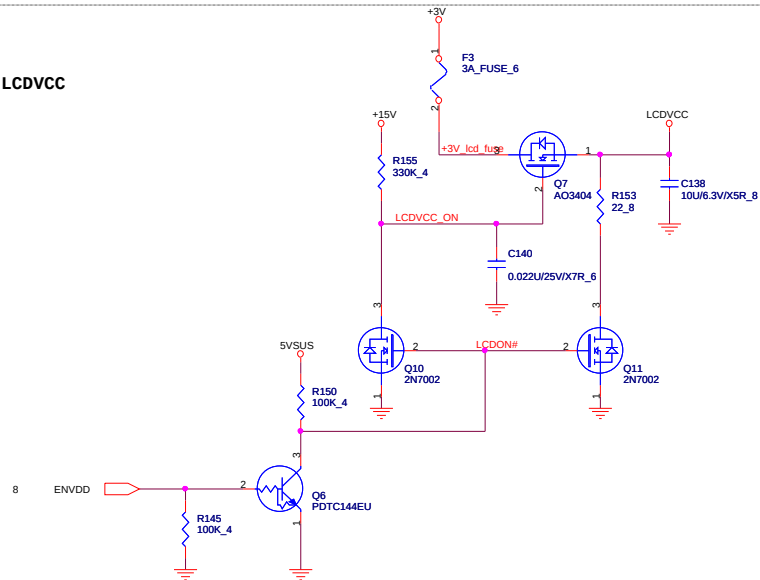


Place these Caps near So-Dimm0.

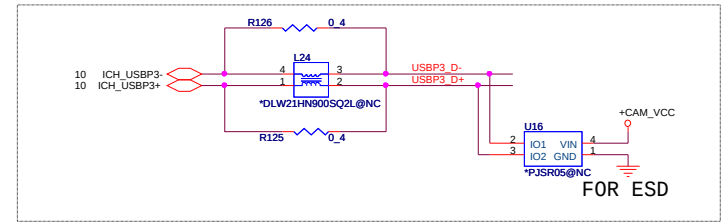
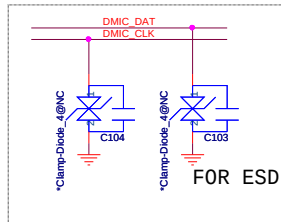
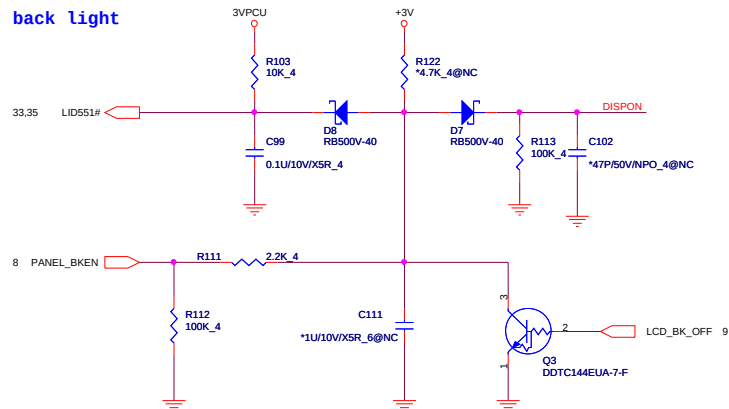




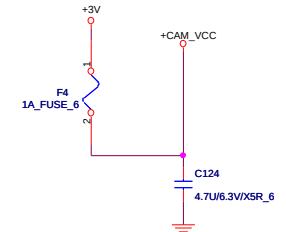
LCDVCC

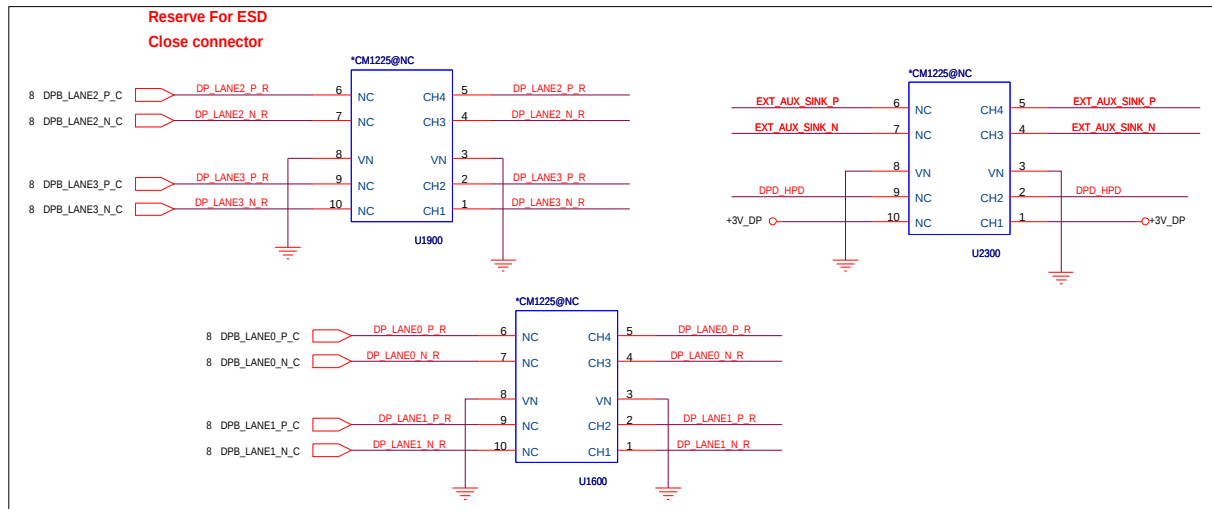
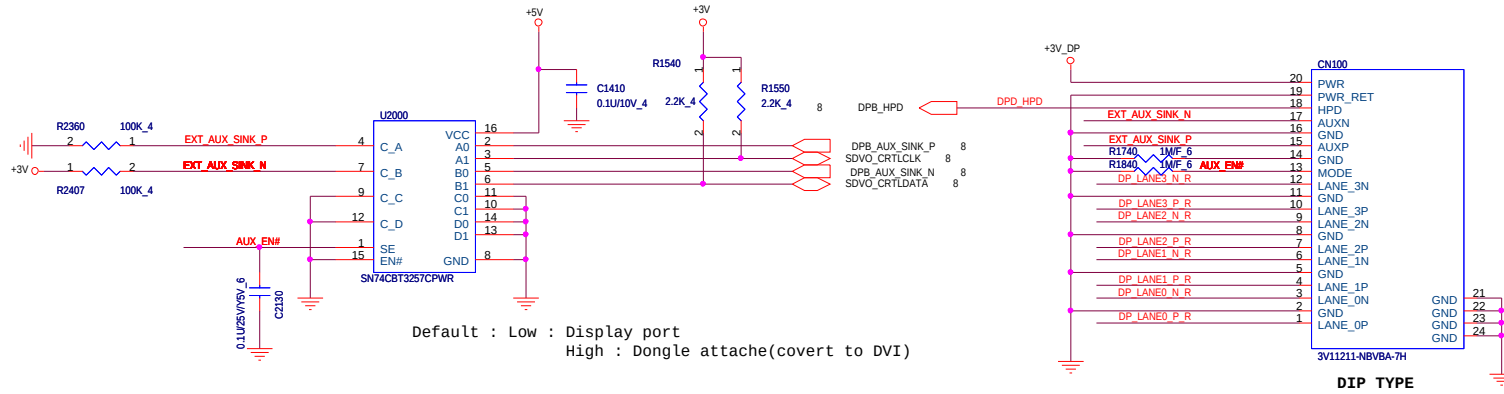


back light

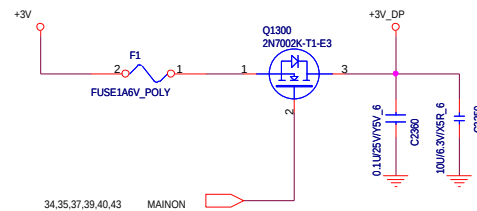
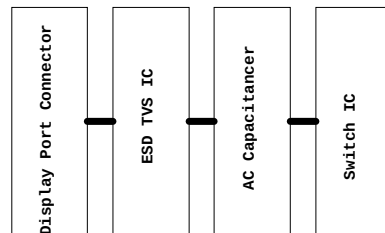


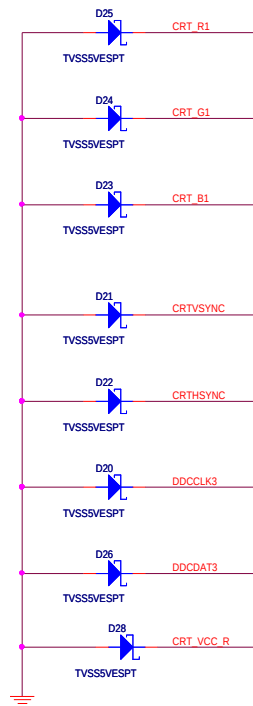
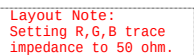
CAMERA VCC Control



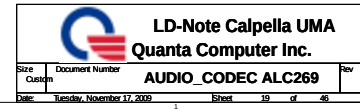


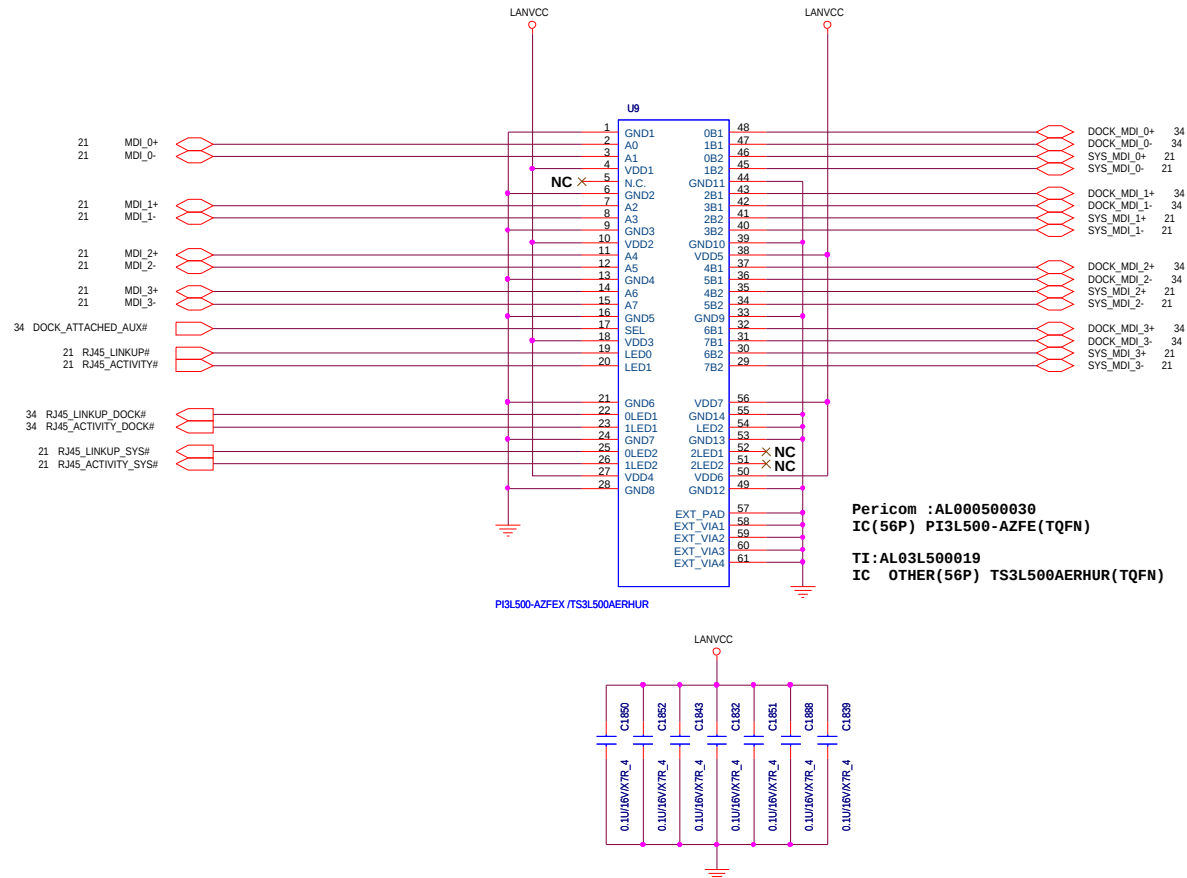
Layout Topology

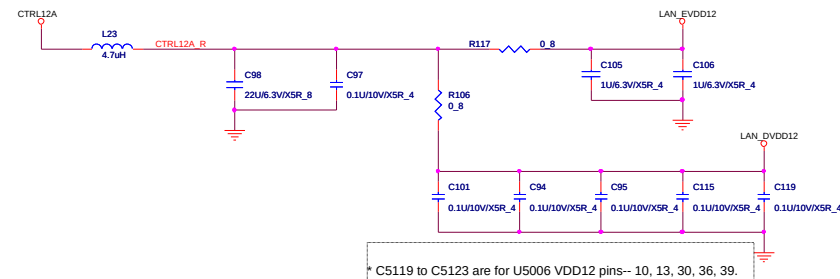
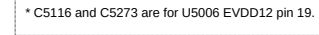




SEL	FUNCTION(COM)
LOW	IN_x0
HIGH	IN_x1







* C5119 to C5123 are for U5006 VDD12 pins-- 10, 13, 30, 36, 39.

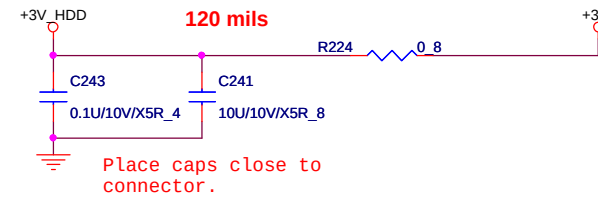
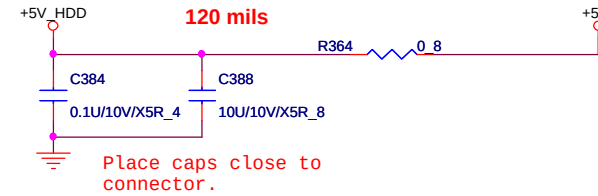
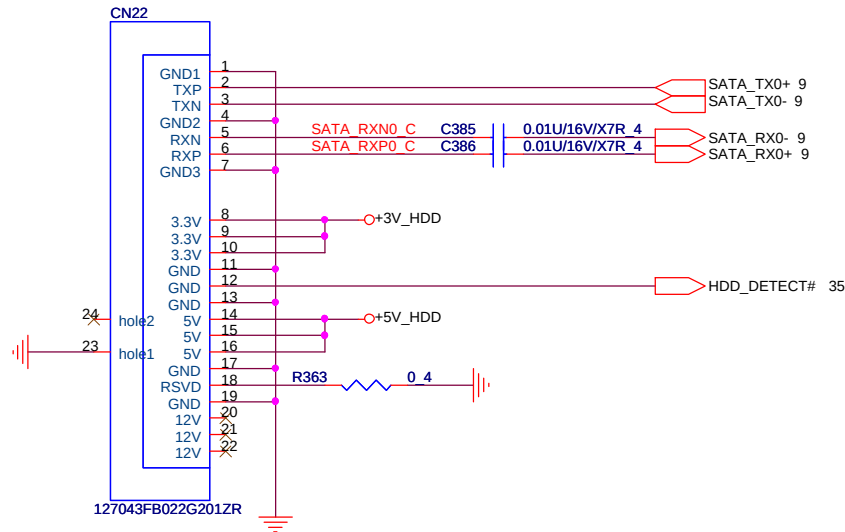
		LD-Note Calpella UMA Quanta Computer Inc.	
Size Custom	Document Number RTL8111DL		Rev
Date:	Tuesday, November 17, 2009	Sheet	21 of 46

SATA Connector.

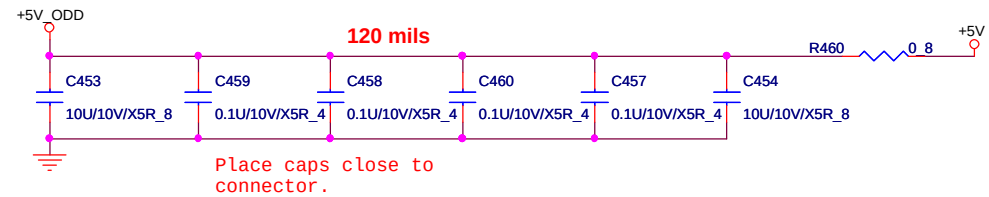
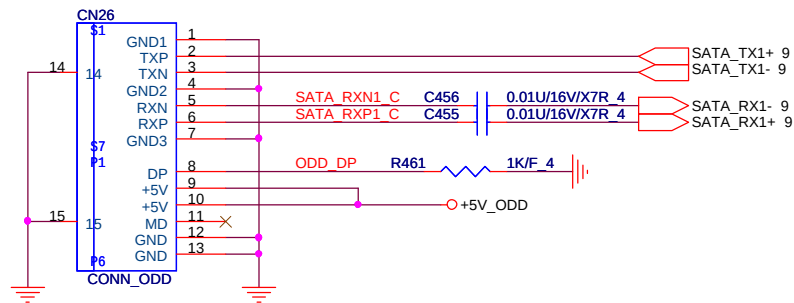
3,4,8,9,10,11,12,14,15,16,17,18,19,21,23,24,25,26,27,28,29,31,32,33,34,35,37,39,40,41,42

8,12,17,18,19,30,31,35,37
+5V
+3V

22



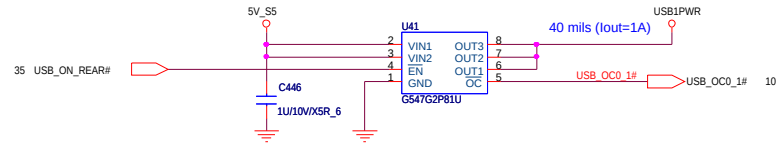
ODD Connector



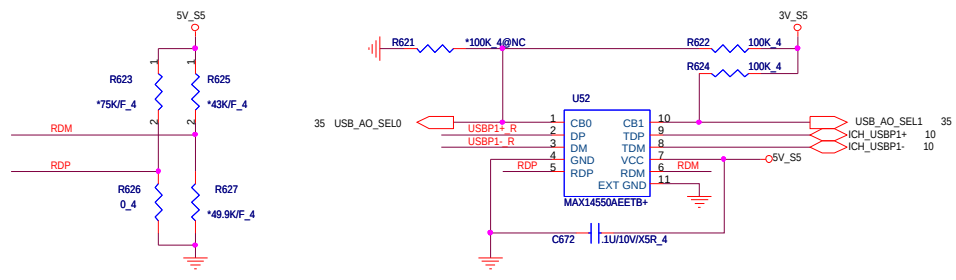
LD-Note Calpella UMA
Quanta Computer Inc.

Size Custom	Document Number SATA (HDD&CD_ROM)	Rev
Date: Tuesday, November 17, 2009	Sheet 22 of 46	

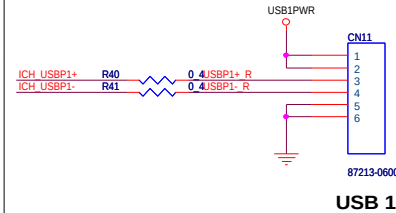
USBX1



Support Black-berry function

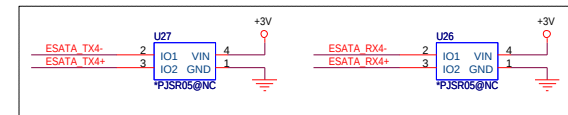
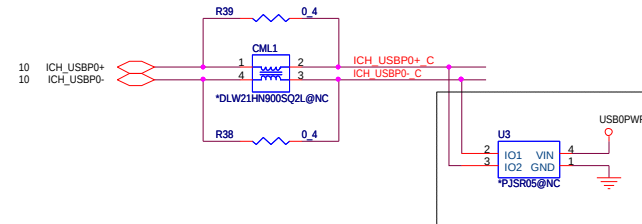
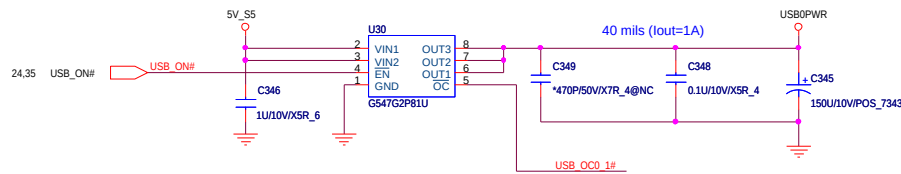


USB X1----> Wire to board conn

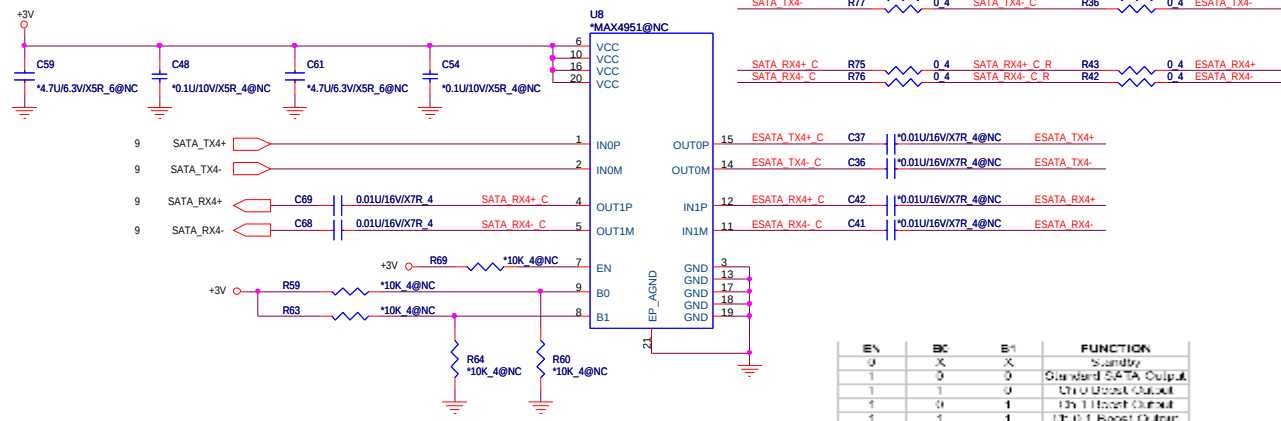


	w/ AOU3	w/o AOU3
R40	NO ASM	ASM
R41	NO ASM	ASM
U52	ASM	NO ASM
R622	ASM	NO ASM
R624	ASM	NO ASM
R626	ASM	NO ASM
C676	ASM	NO ASM

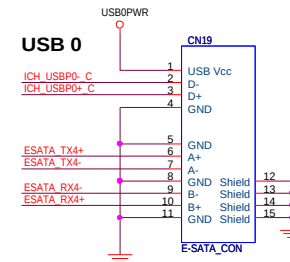
USB + E-SATA



E-SATA RE-DRIVER

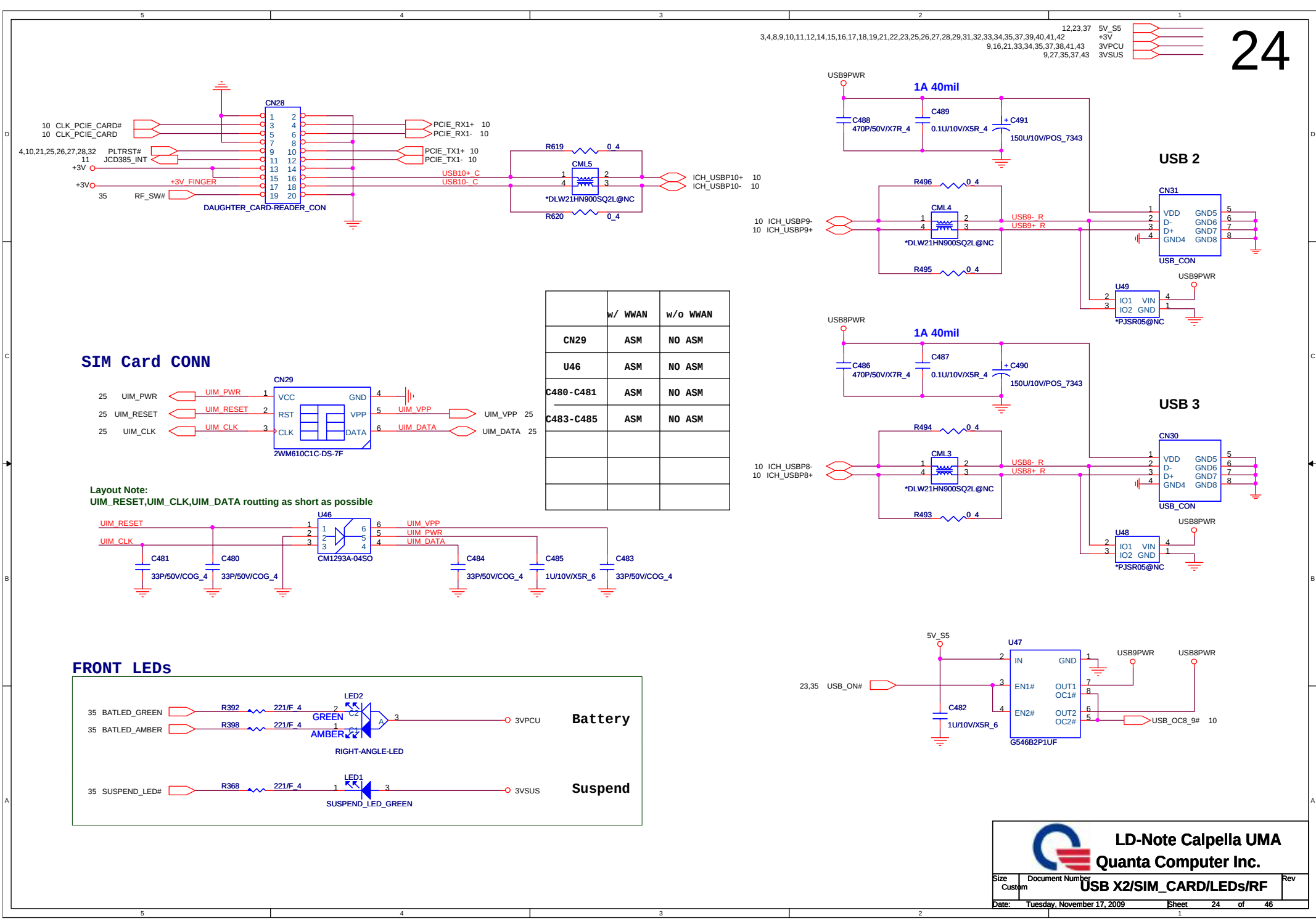


EN	BC	B1	FUNCTION
0	X	X	Standby
1	0	0	Standard SATA Output
1	1	0	Ch 0 Boost Output
1	0	1	Ch 1 Boost Output
1	1	1	Ch 0,1 Boost Output



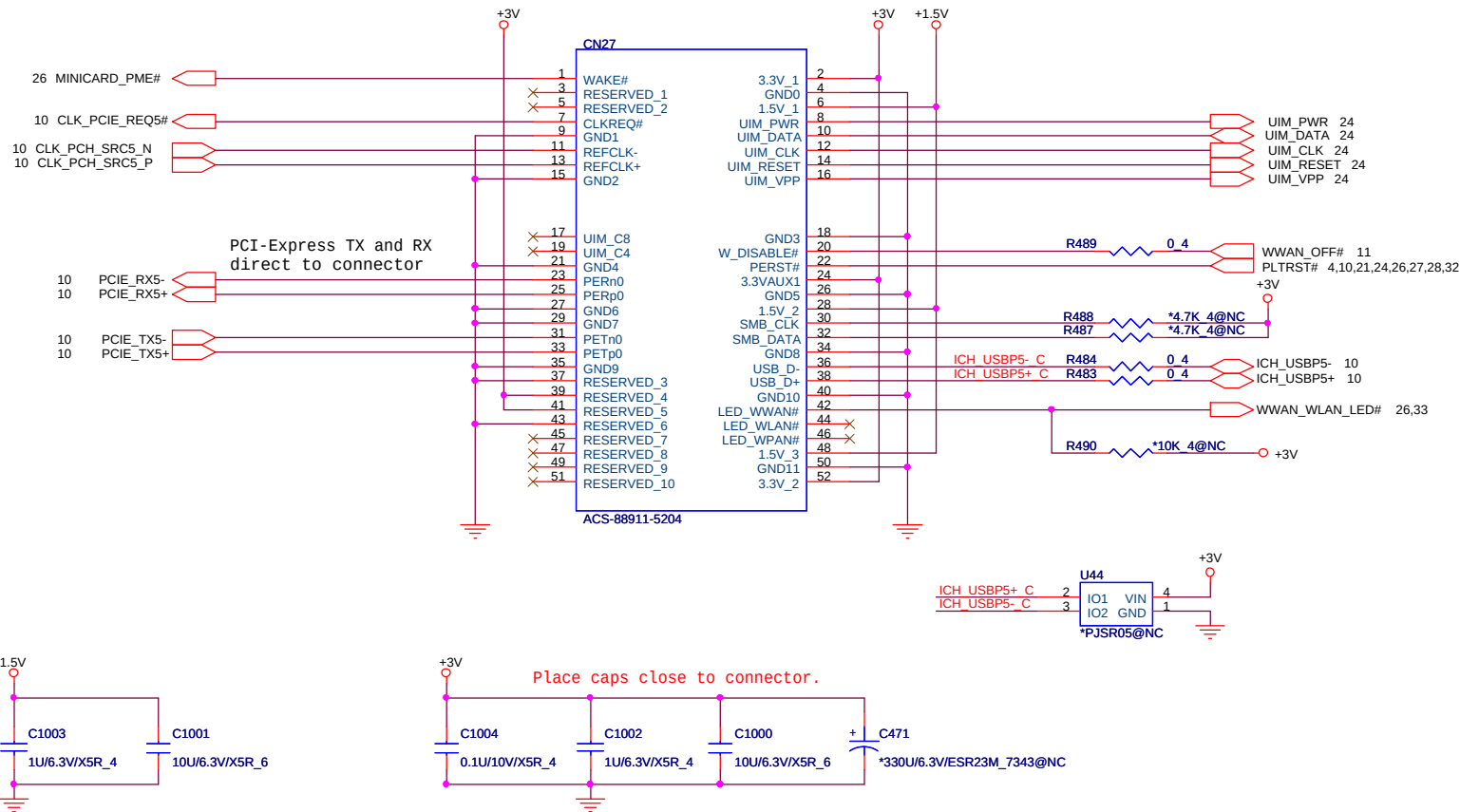
LD-Note Calpella UMA
Quanta Computer Inc.

Size	Document Number	Rev
Custom	USB X1/USB+ESATA	
Date:	Tuesday, November 17, 2009	Sheet 23 of 46



MiniCard WWAN connector

25

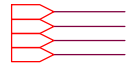


	w/ WWAN	w/o WWAN
CN27	ASM	NO ASM
R489	ASM	NO ASM
R484	ASM	NO ASM
R483	ASM	NO ASM
C1000~C1004	ASM	NO ASM

MiniCard WLAN/WiMAX connector

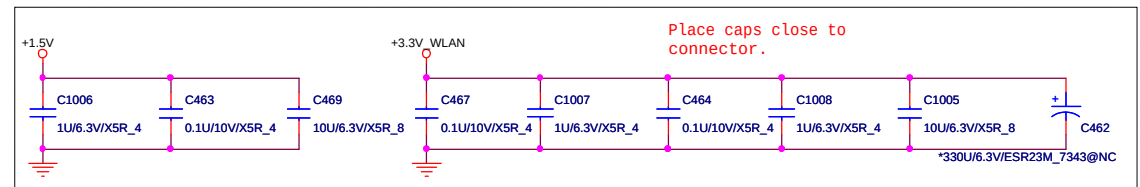
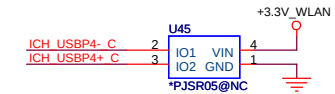
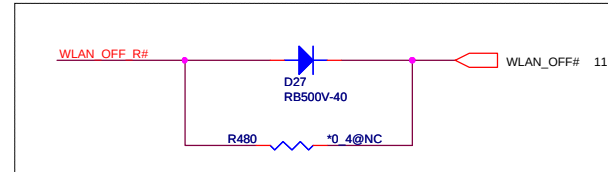
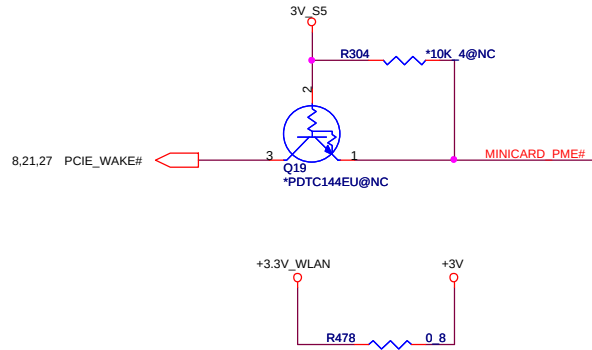
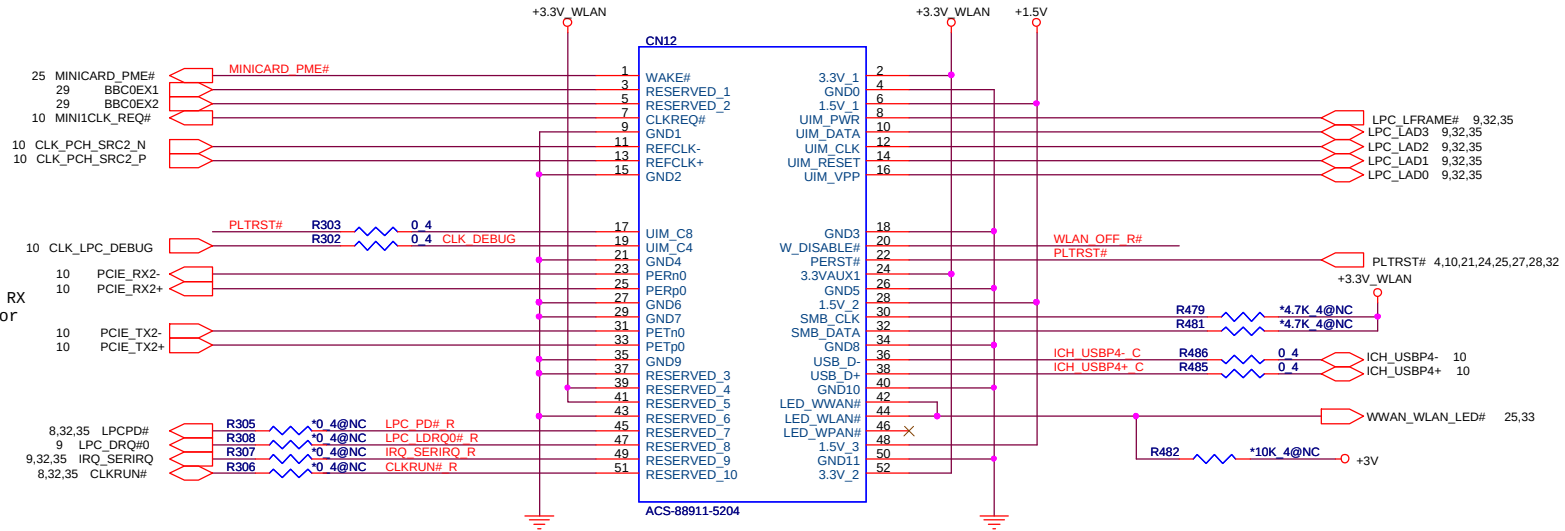
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 9,16,21,24,33,34,35,37,38,41,43
 16,37,38,39,40,41,42,43

+3V
 +1.5V
 3VPCU
 VIN



26

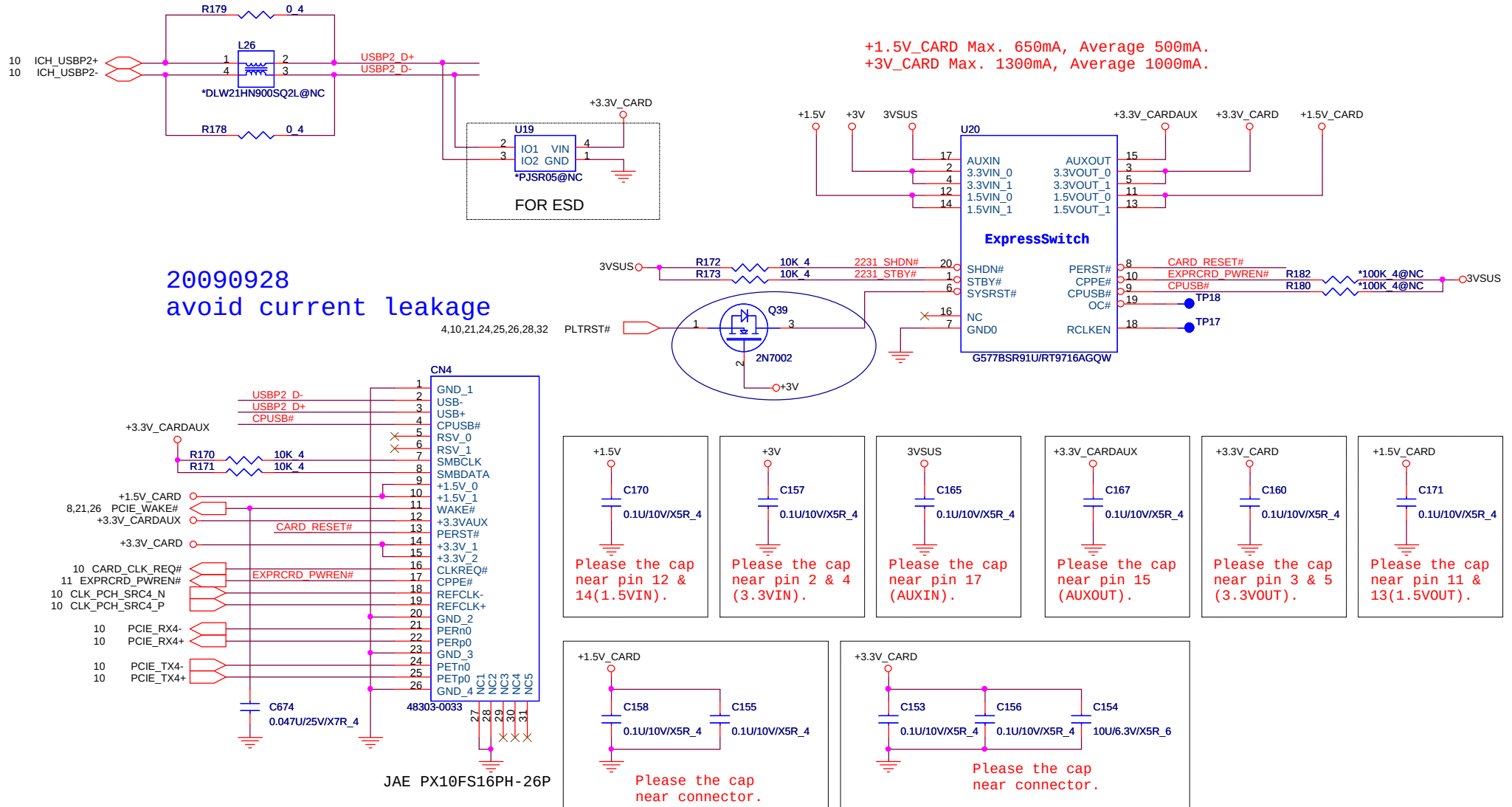
PCI-Express TX and RX
 direct to connector



Express Card

3,4,8,9,10,11,12,14,15,16,17,18,19,21,22,23,24,25,26,28,29,31,32,33,34,35,37,39,40,41,42
+3V
3,25,26,39
+1.5V
9,24,35,37,43
3VSUS

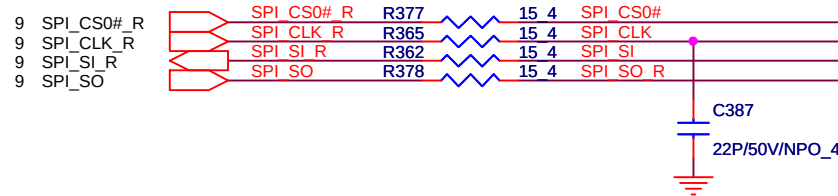
27



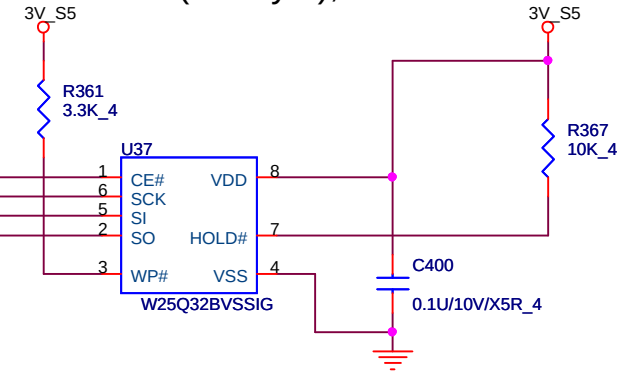
iTPM ENABLE/DISABLE



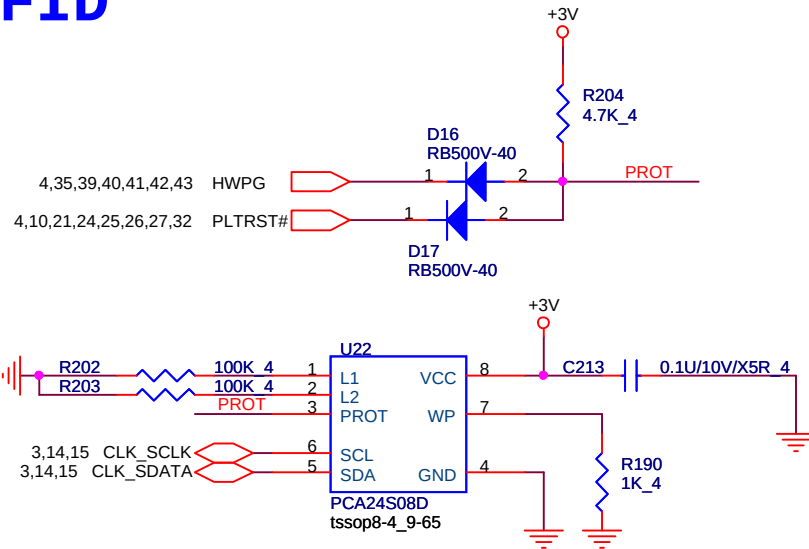
iTPM Function	R366
Enable	1K
Disable	NC



For PCH
32Mbit (4M Byte), SPI



RFID



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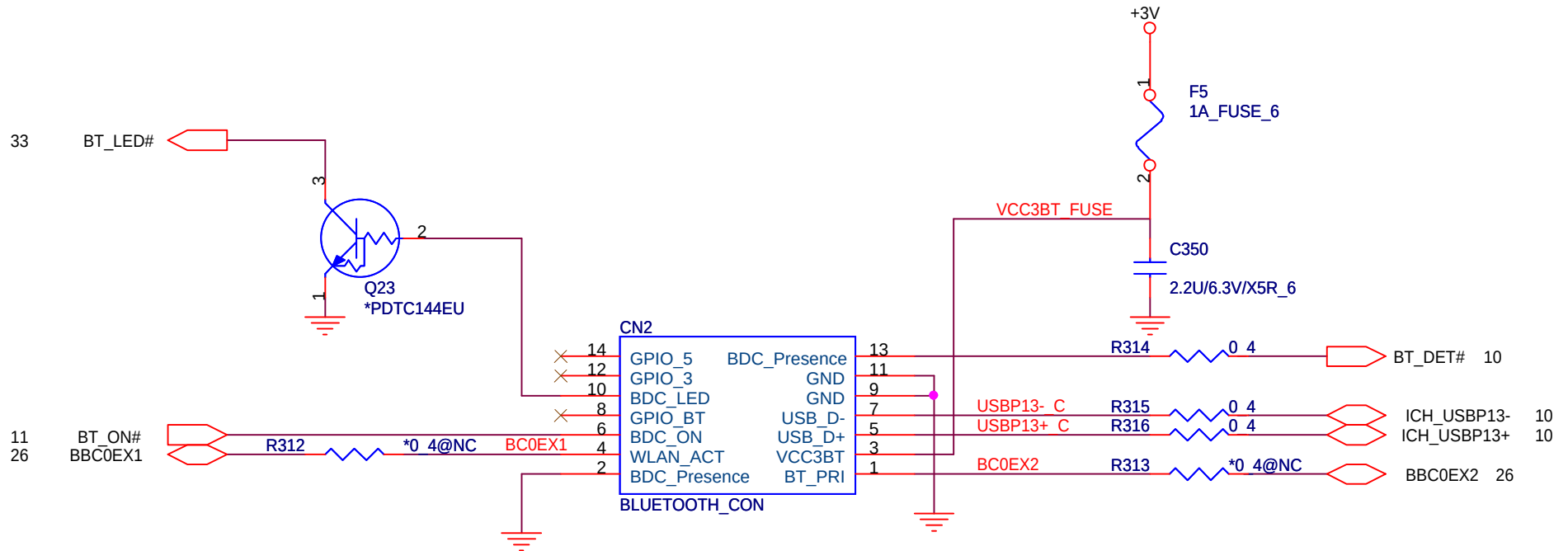
Size Custom	Document Number iTPM & RFID EEPROM	Rev
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BLUETOOTH

3,4,8,9,10,11,12,14,15,16,17,18,19,21,22,23,24,25,26,27,28,31,32,33,34,35,37,39,40,41,42

+3V

29

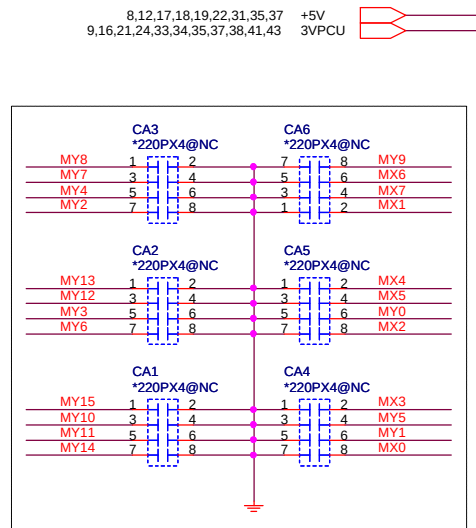
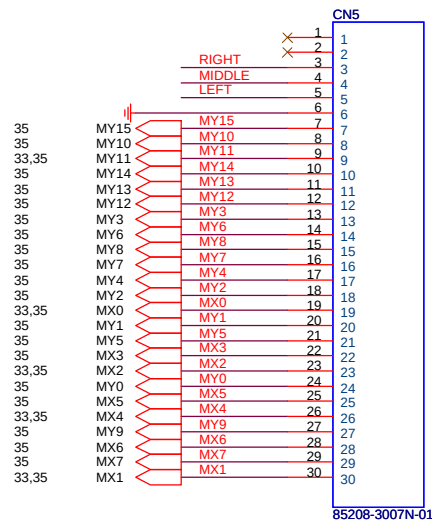


LD-Note Calpella UMA
Quanta Computer Inc.

Size Custom	Document Number B/T	Rev
Date: Tuesday, November 17, 2009	Sheet 29 of 46	

KEYBOARD

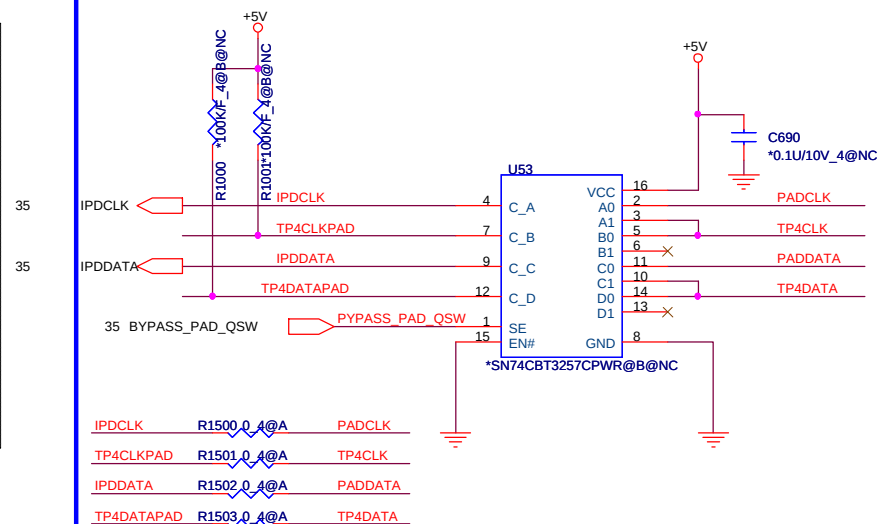
KEYBOARD connector



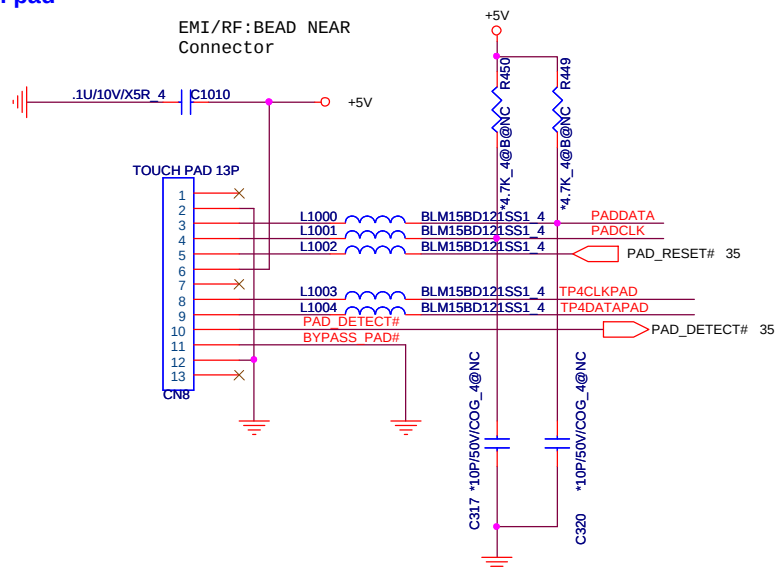
For EMI request

Touch pad/Track point Switch

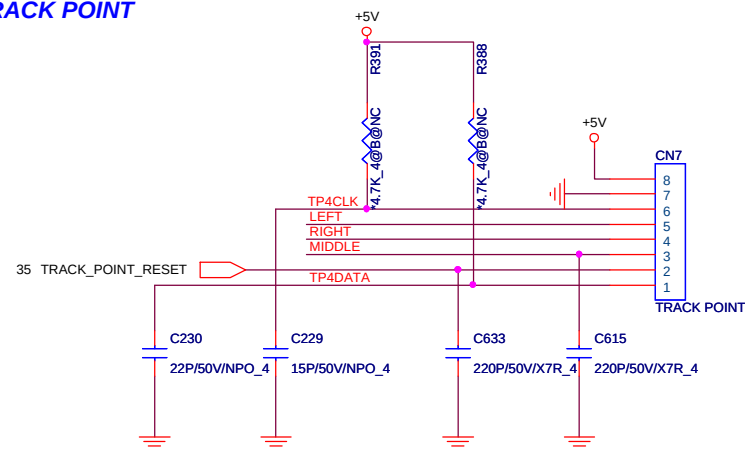
30



Touch pad



TRACK POINT



LD-Note Calpella UMA
Quanta Computer Inc.

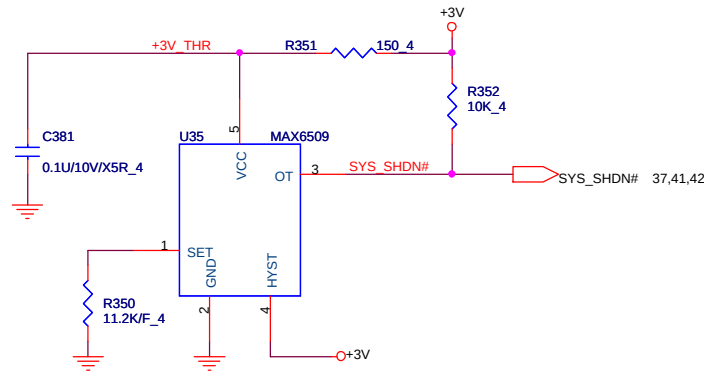
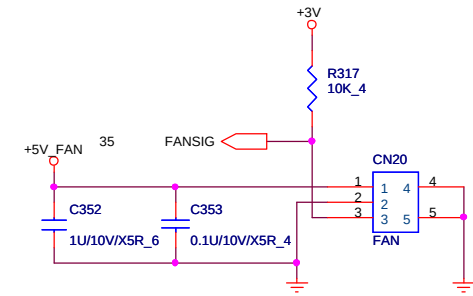
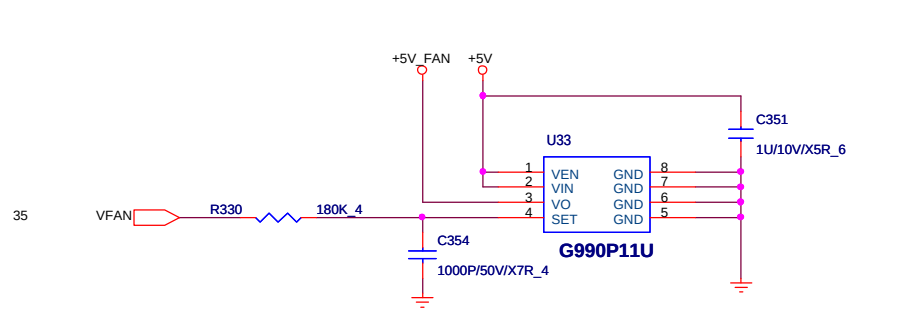
Size Custom	Document Number K/B, T/P	Rev
Date: Tuesday, November 17, 2009	Sheet 30 of 47	

FAN CONTROL

3,4,8,9,10,11,12,14,15,16,17,18,19,21,22,23,24,25,26,27,28,29,32,33,34,35,37,39,40,41,42
8,12,17,18,19,22,30,35,37

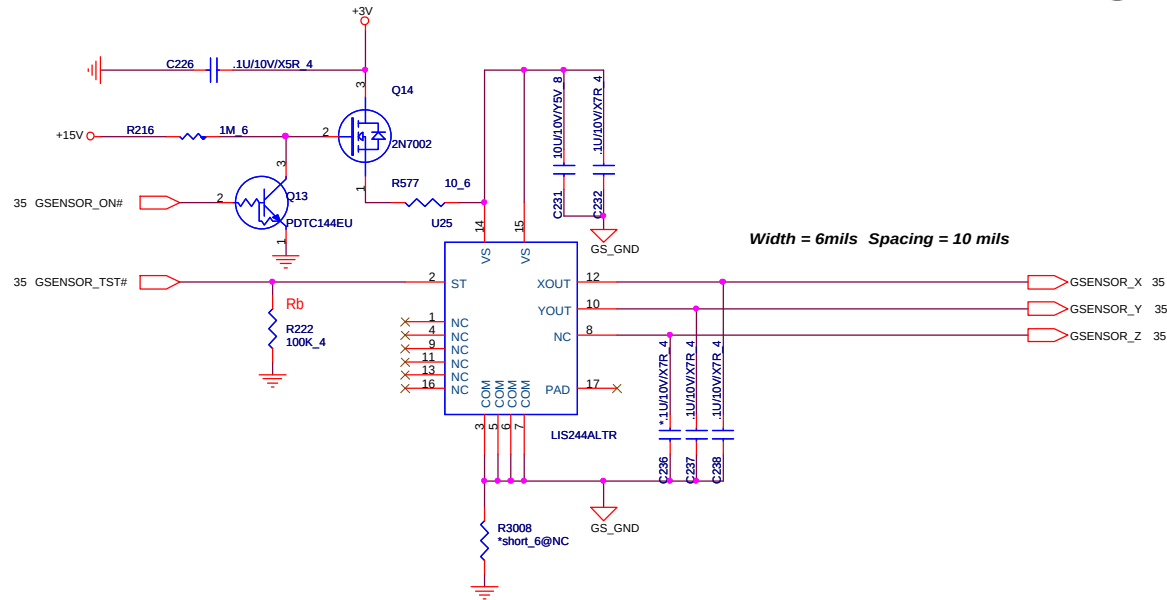
+3V
+5V

31

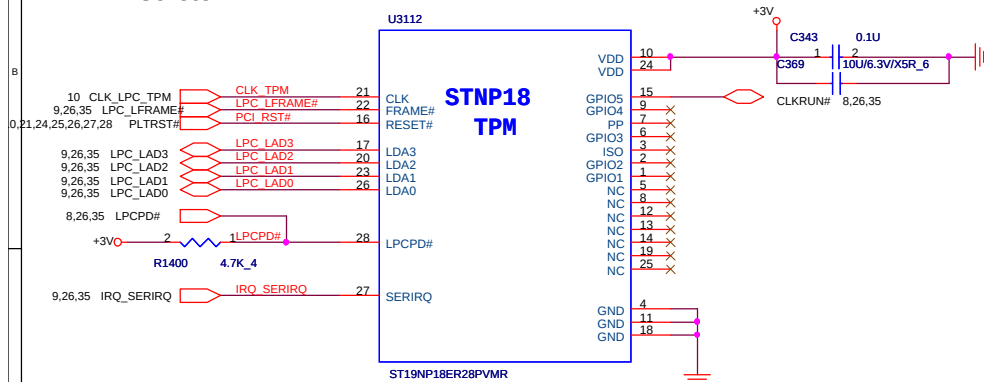


G-SENSOR (2-Axial)

32



Discrete TPM



supplier P/N:ST19NP18ER28PVMR
Quanta P/N:AL19NP18K13
F/P:tssop28-6_4-65-1_2h

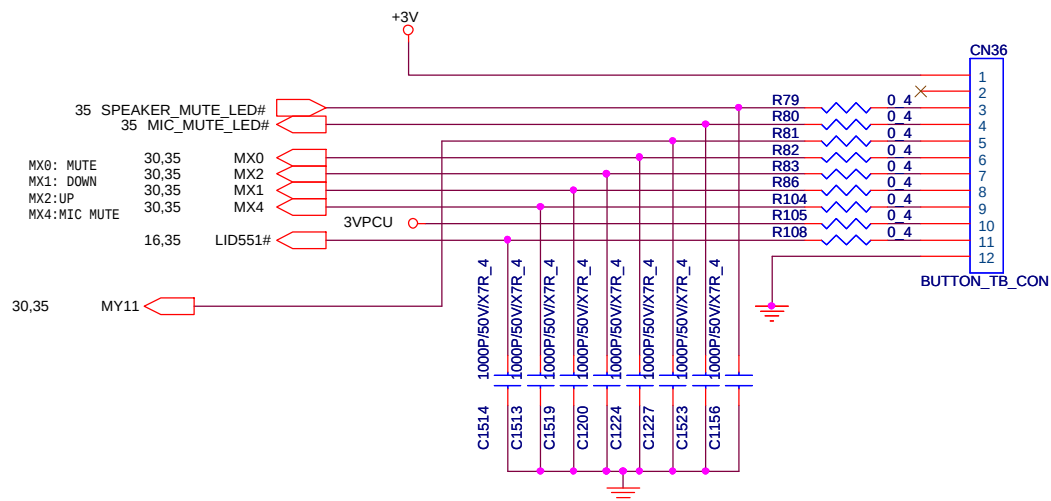


G-Note Montevina
Quanta Computer Inc.

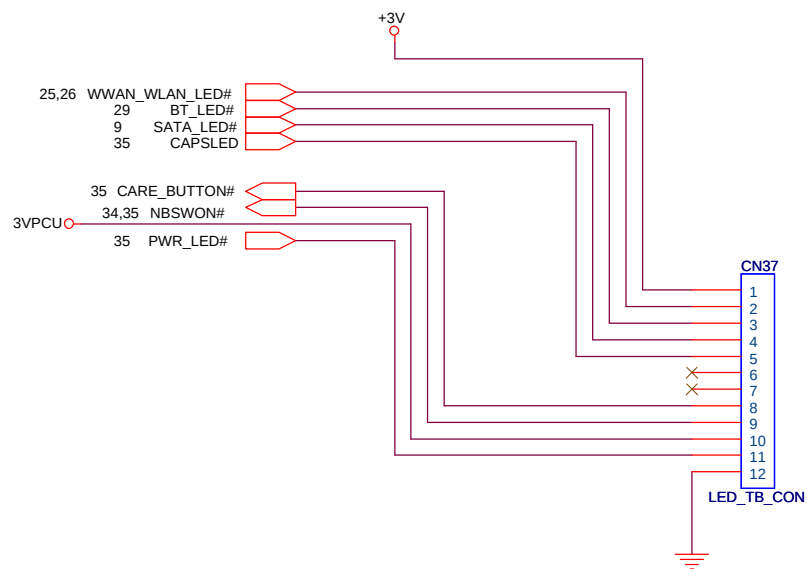
Daughter Boards for LEDs & Ports

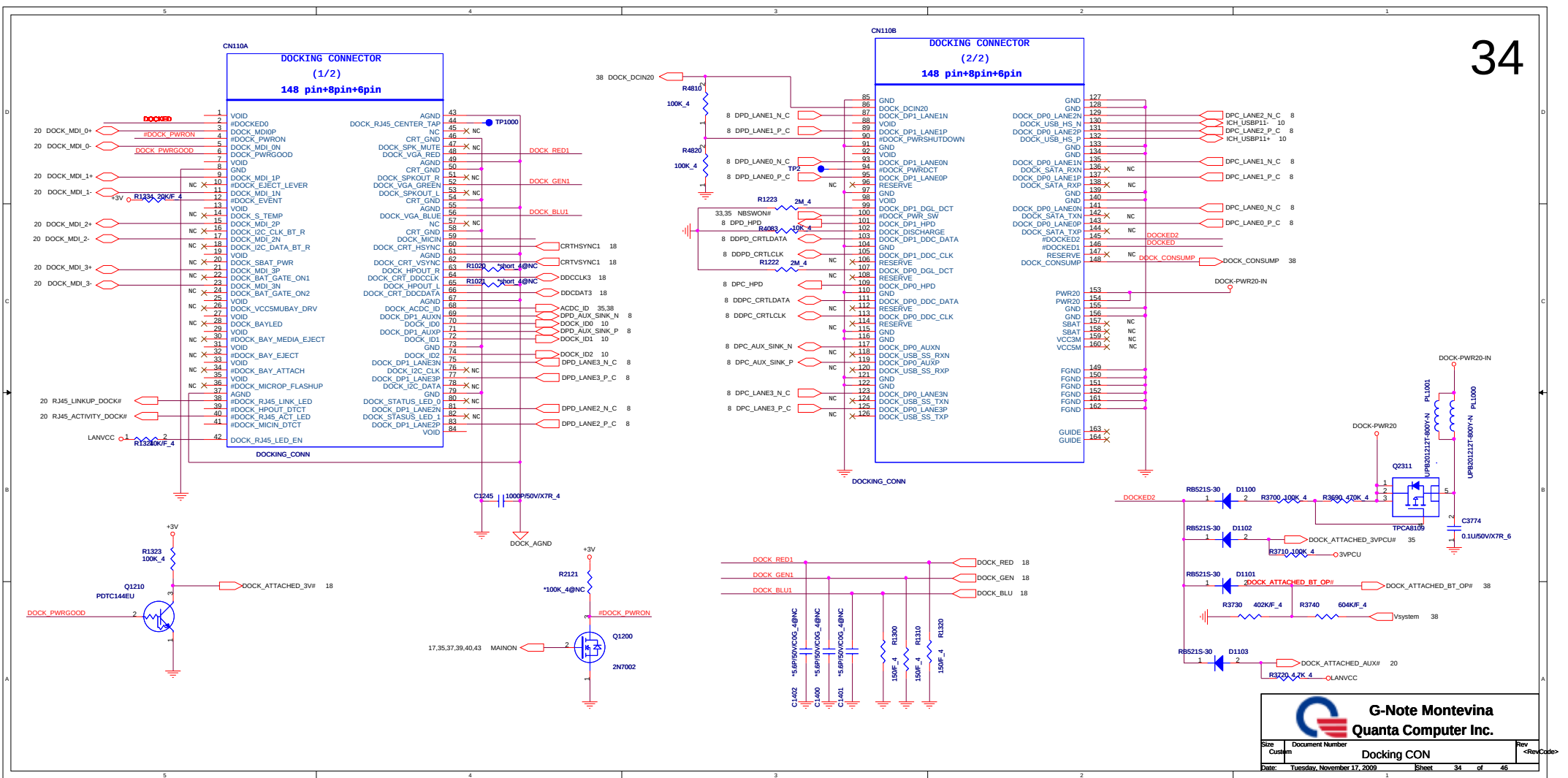
33

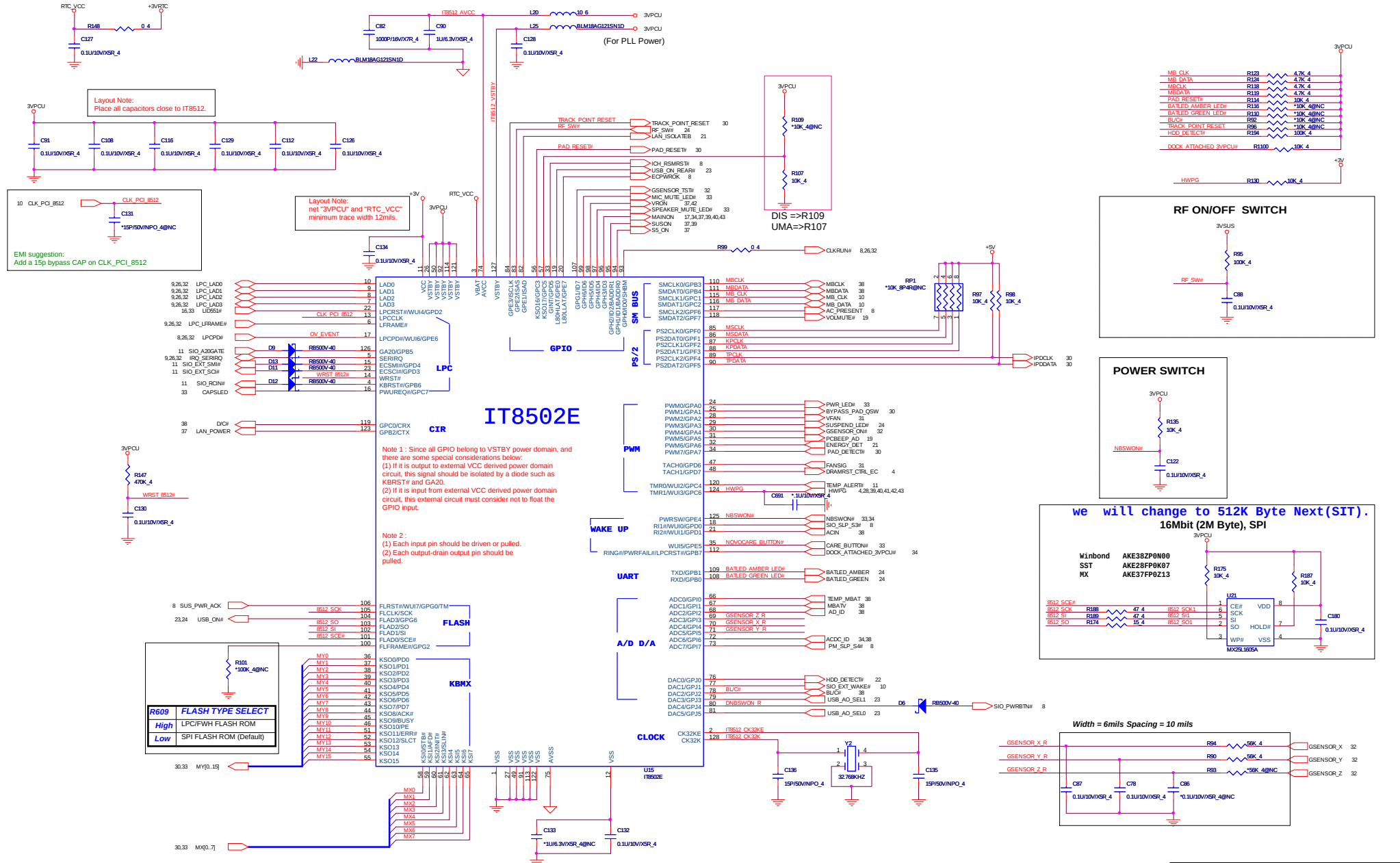
FFC TO KBD LEFT SIDE CONNECTOR

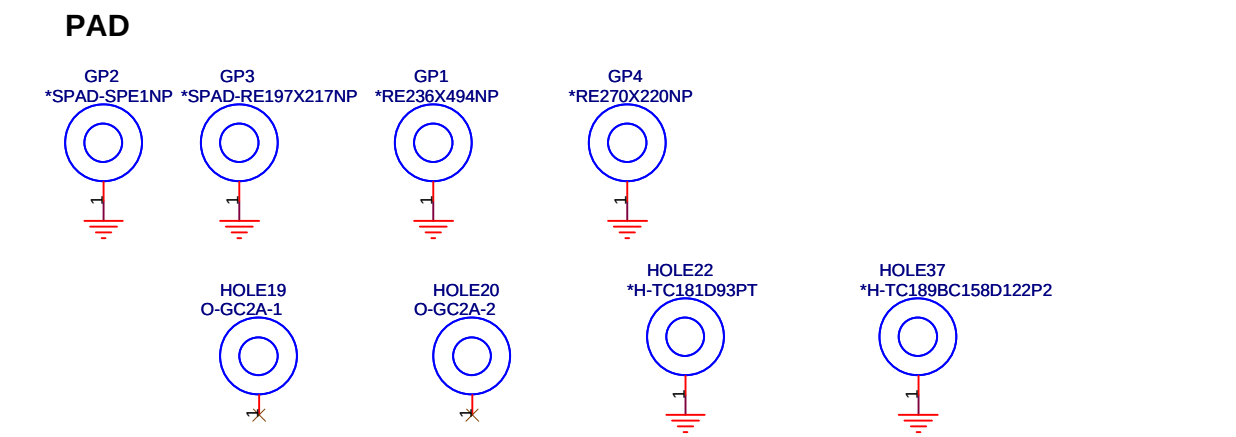
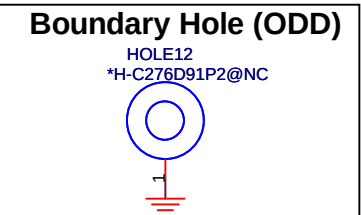
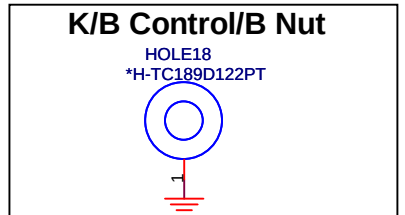
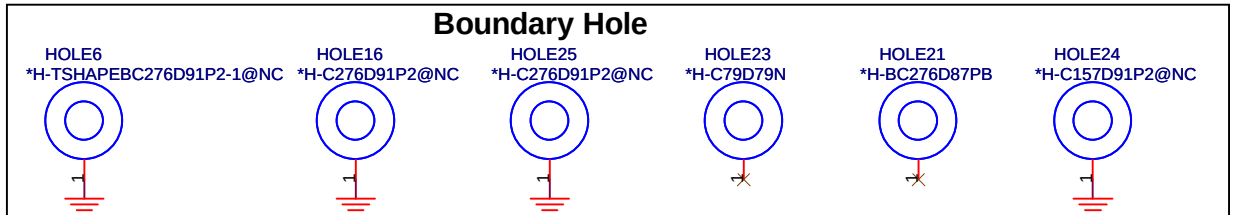
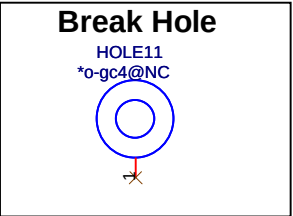
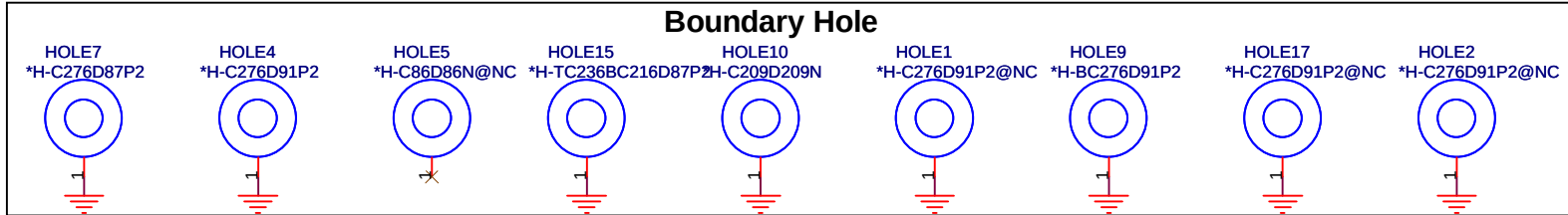
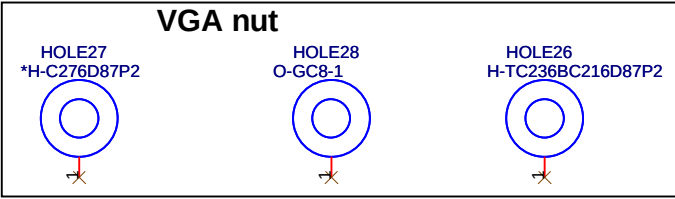
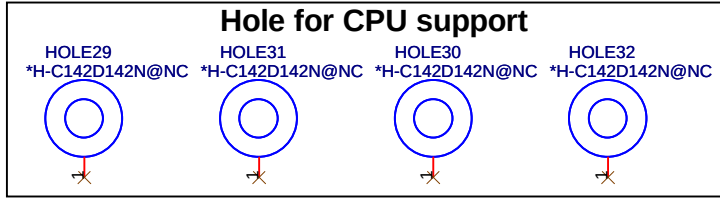
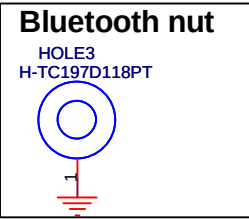
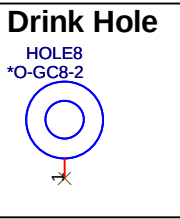
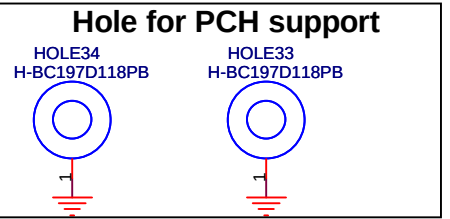
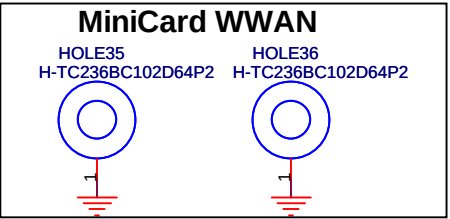
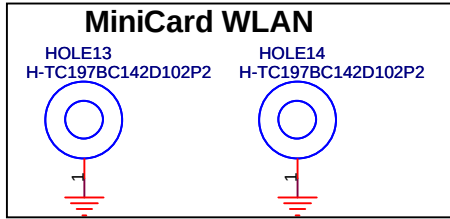


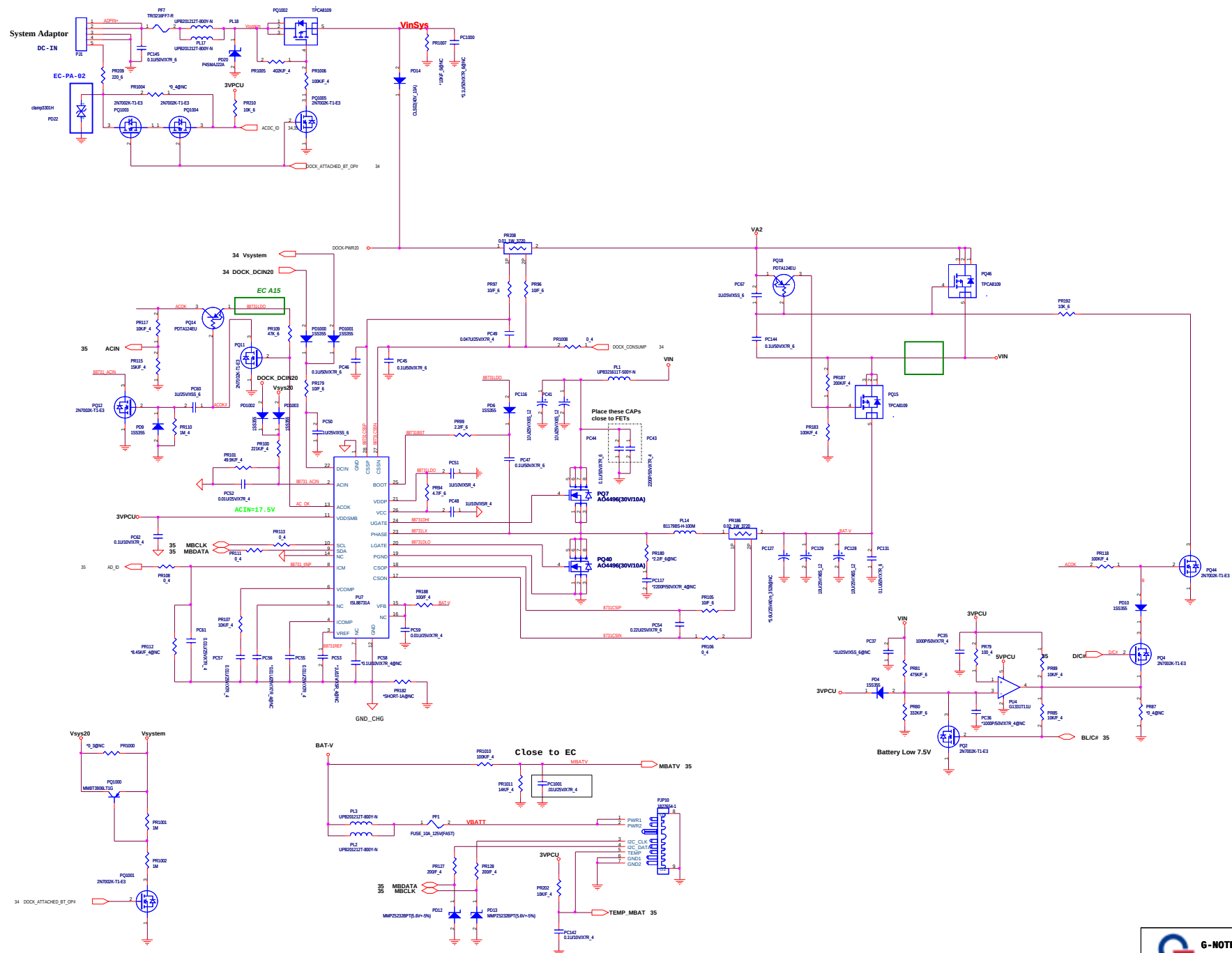
FFC TO LED RIGHT SIDE CONNECTOR

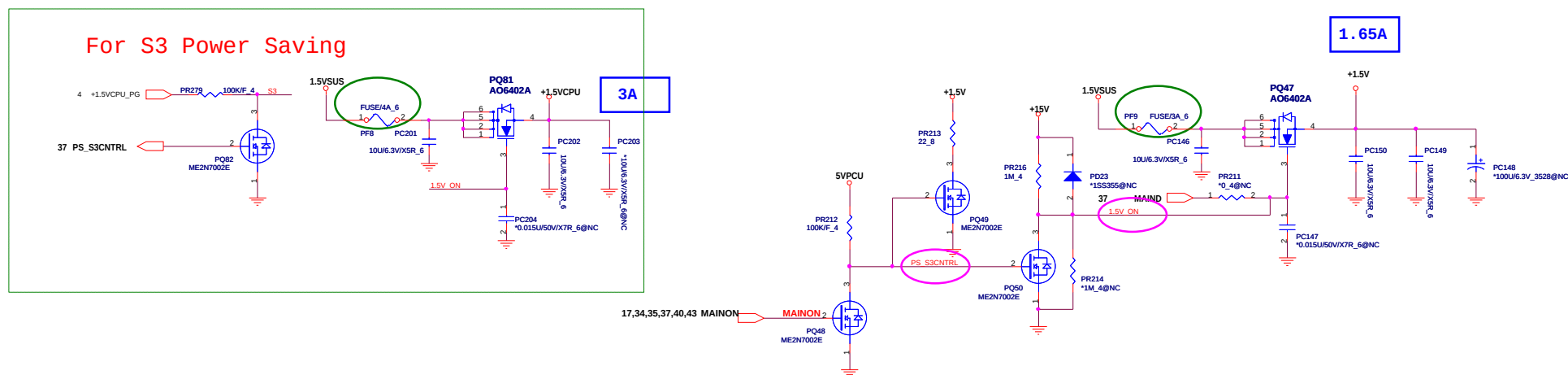
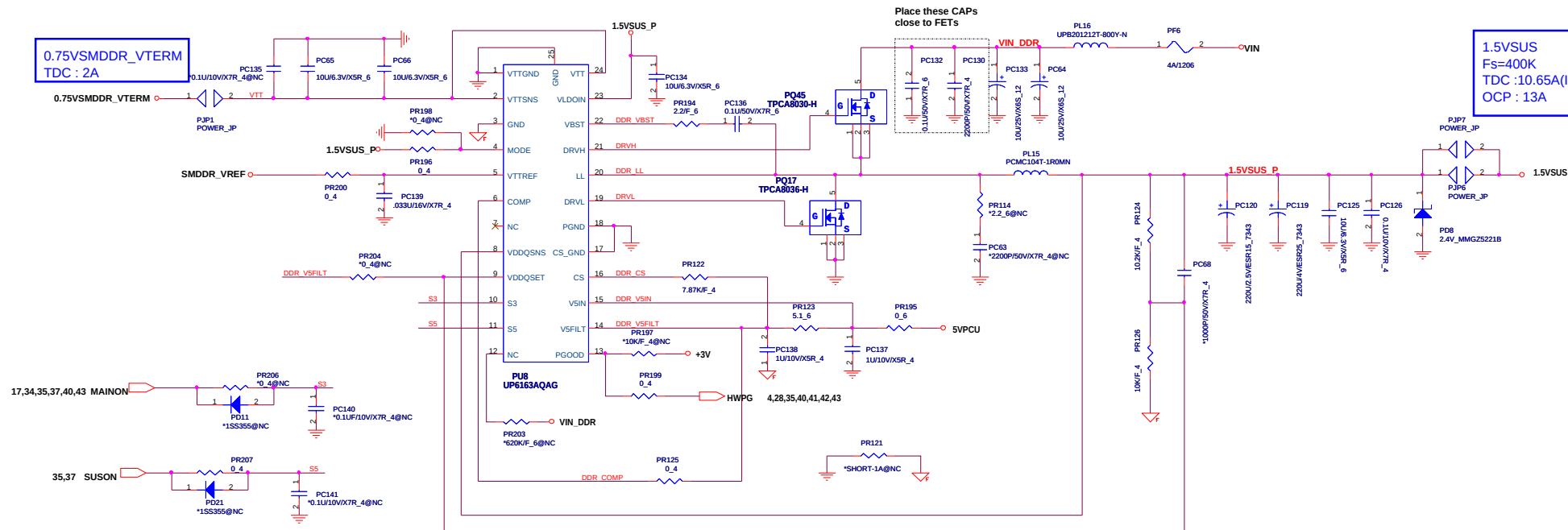


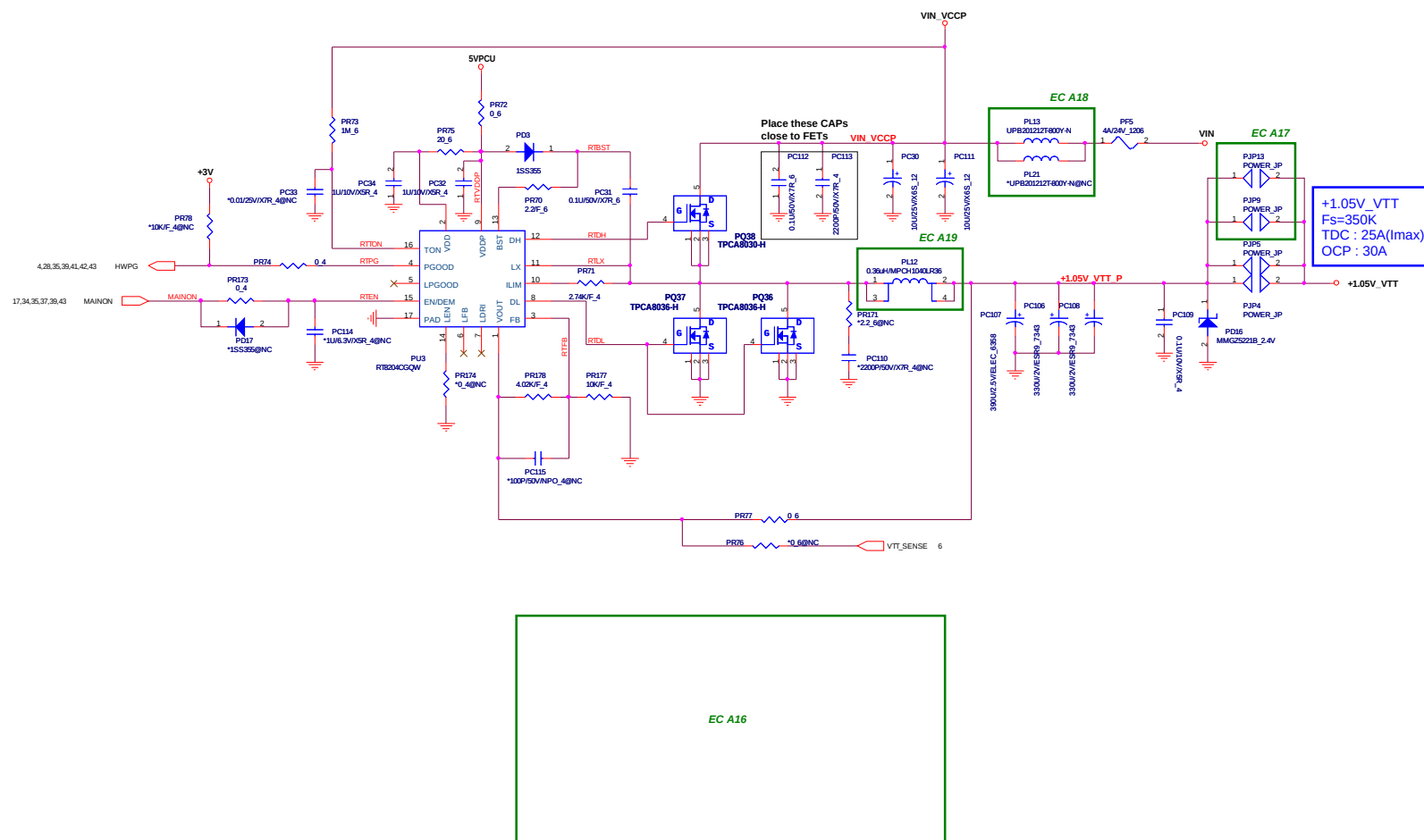






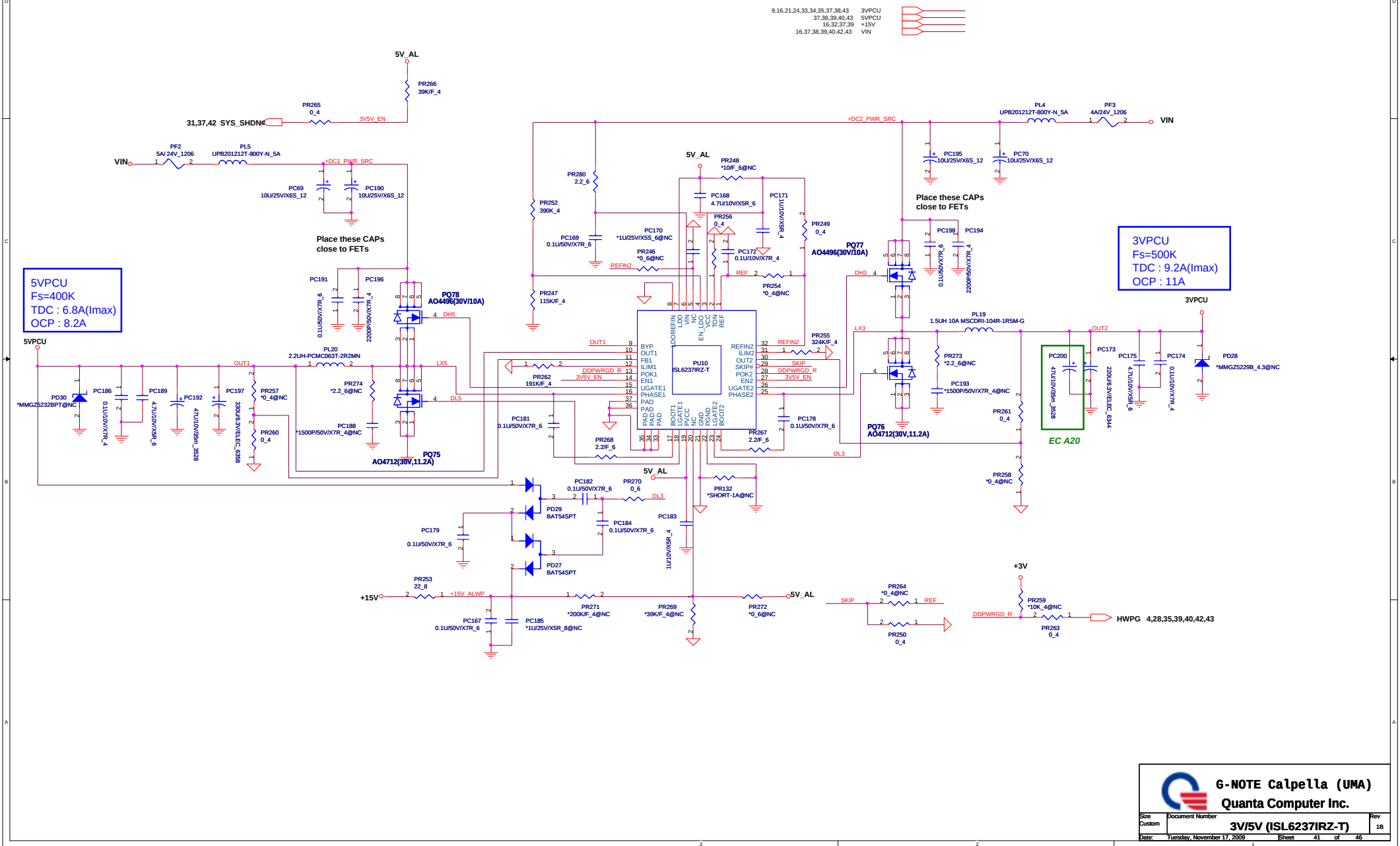


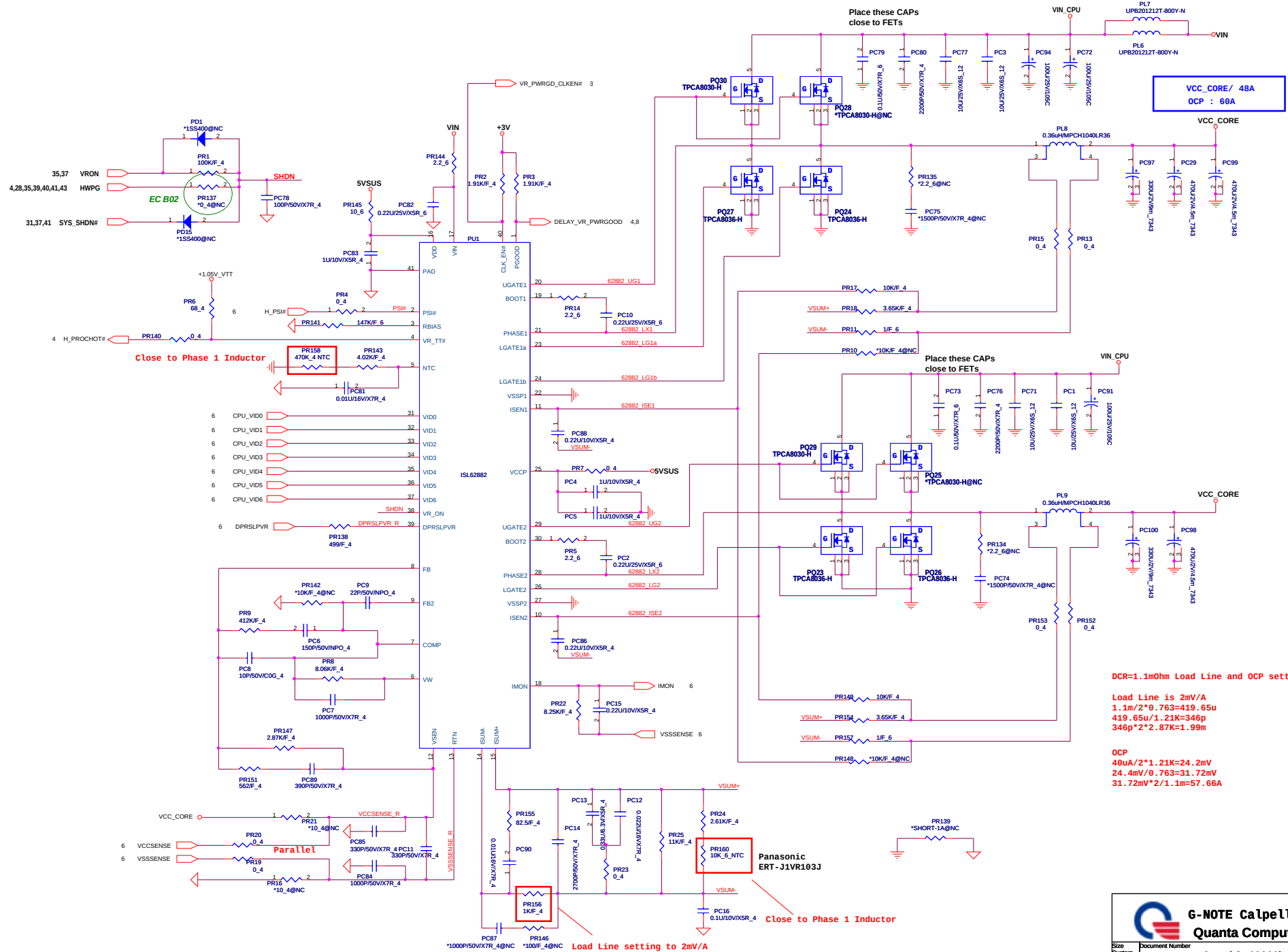


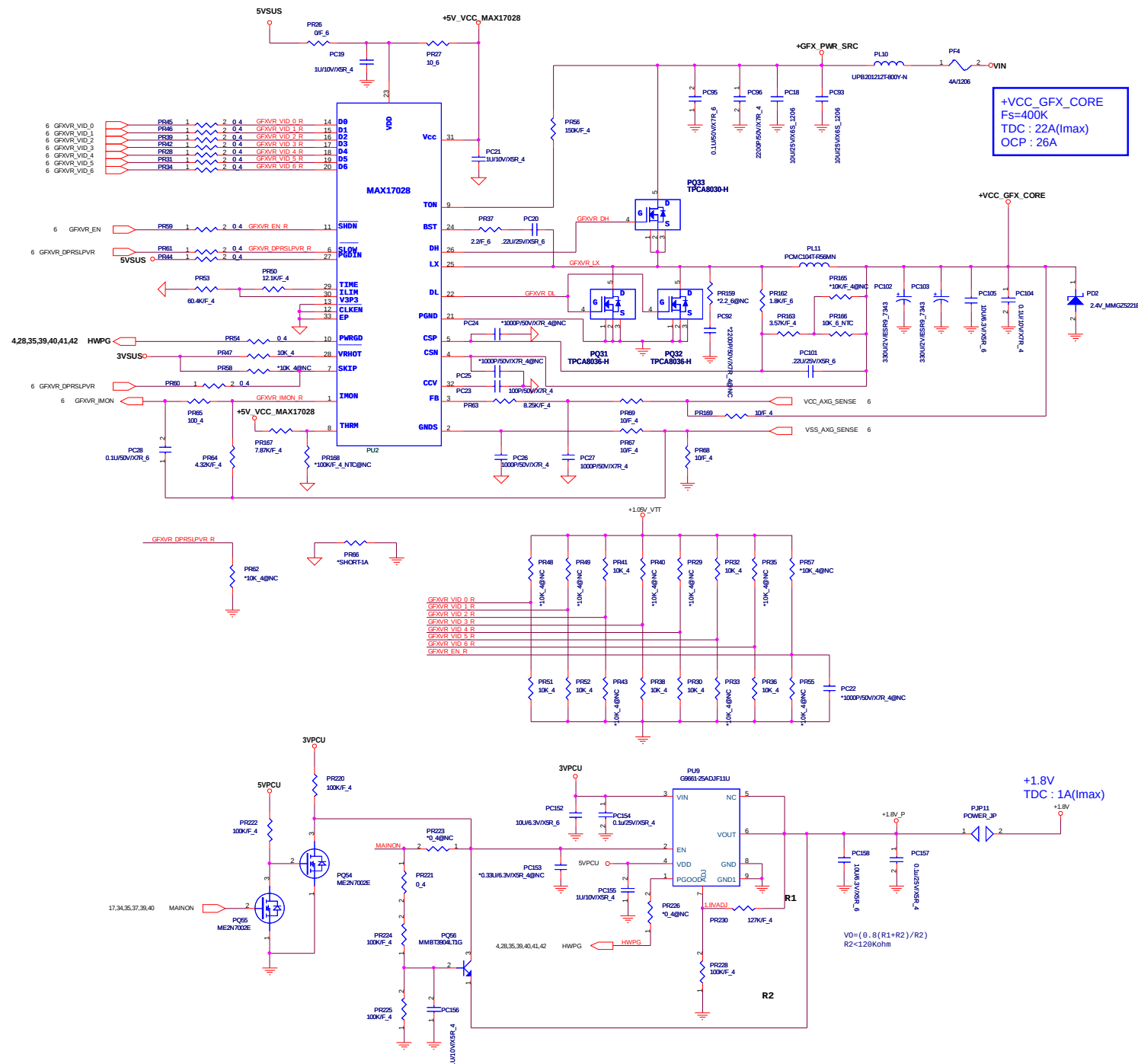


6-NOTE Calpella (UMA)
Quanta Computer Inc.

File	Document Number	Rev
C	1.05V_VTT/1.05_PCH (RT8204)	10
Date	Tuesday, November 17, 2009	Sheet 40 of 40







Revision History

Revision	Date	Phase	Change List	Release Schematic Date	Release Gerber File Date
1A		DV	Initial release		

Schematic Value Explanation Description :

RESISTOR

Value	F	4	6	8	12	1210	*	Description
*1K/F_4	1%	0402 (1005)					DE POP	1K ohm 1% SMD 0402 package and DE POP
1K_6	5%		0603 (1608)				POP	1K ohm 5% SMD 0603 package and POP
1K_8	5%			0805 (2125)			POP	1K ohm 5% SMD 0805 package and POP
1K_12	5%				1206 (3216)		POP	1K ohm 5% SMD 1206 package and POP
1K_1210	5%					1210 (3225)	POP	1K ohm 5% SMD 1210 package and POP

CAPACITOR

Value	Voltage	Material	6				*	Description
*0.1U/10V/X5R_4	10V	X5R	0402 (1005)				DE POP	0.1UF 10V X5R SMD 0402 package DE POP
1U/25V/X7R_6	25V	X7R	0603 (1608)				POP	0.1UF 25V X7R SMD 0603 package POP

