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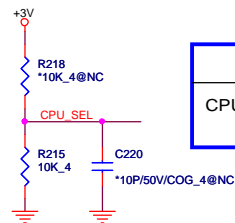
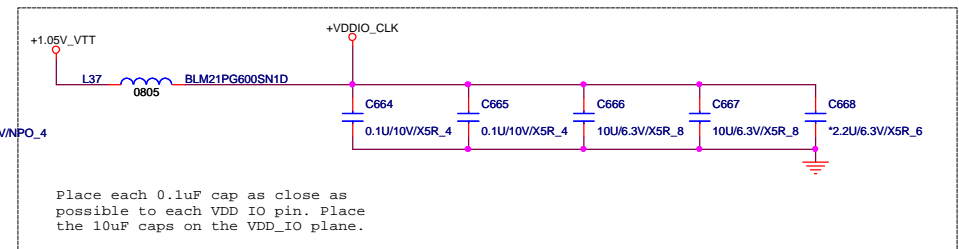
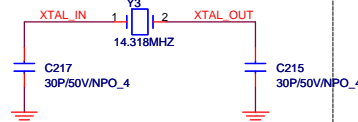
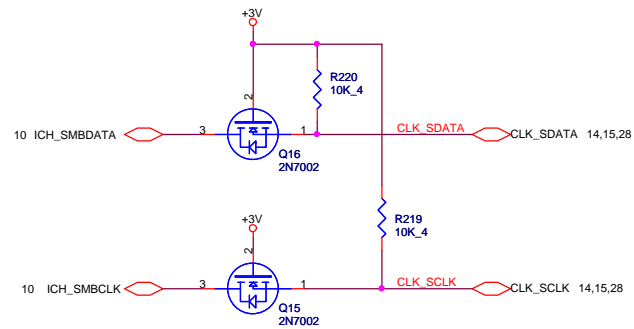
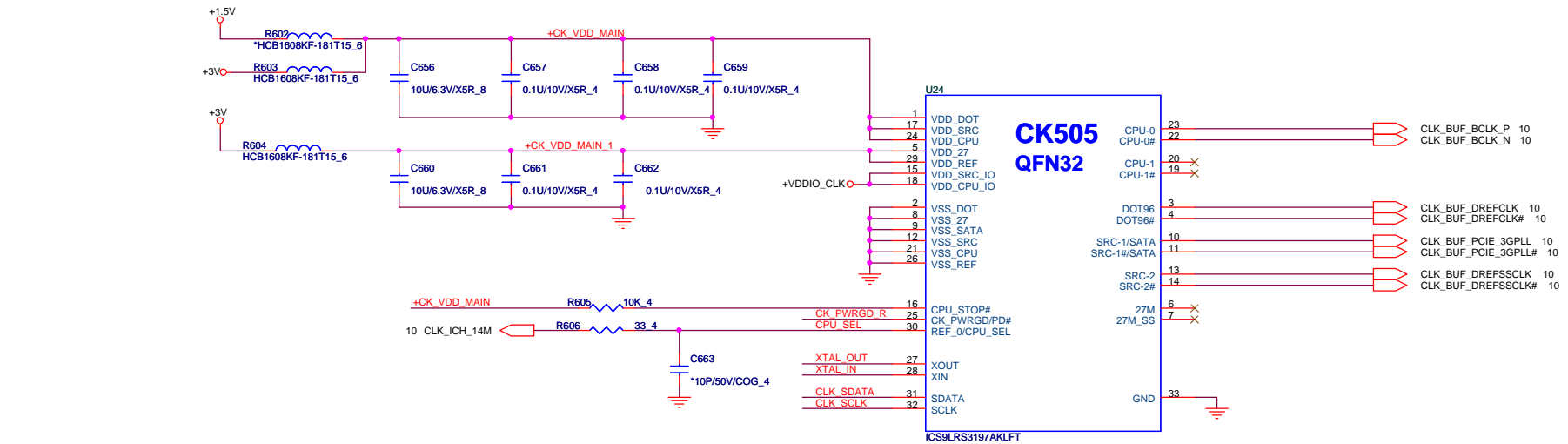
Power States

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

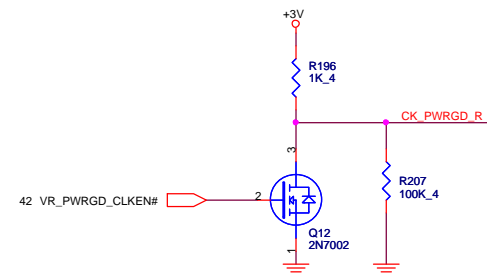


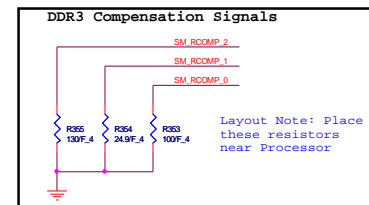
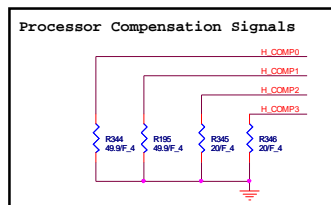
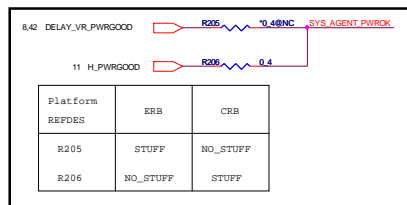
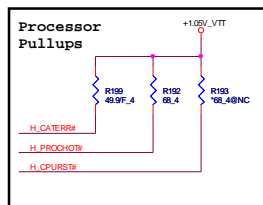
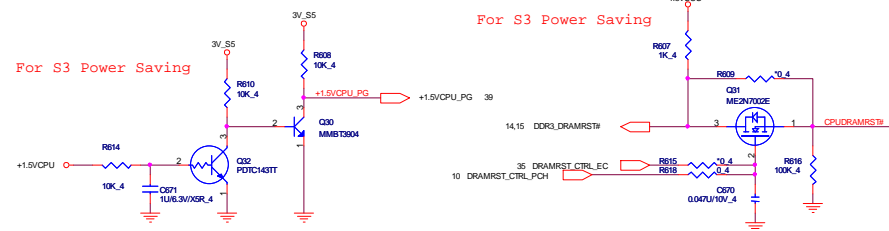
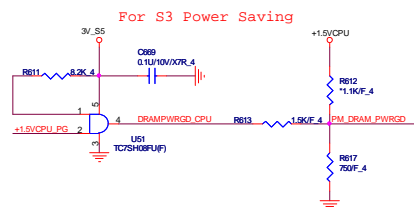
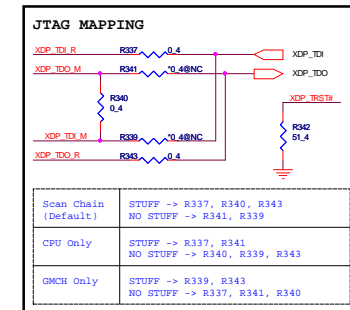
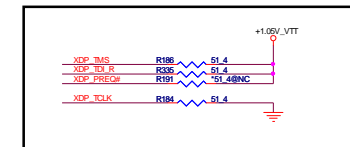
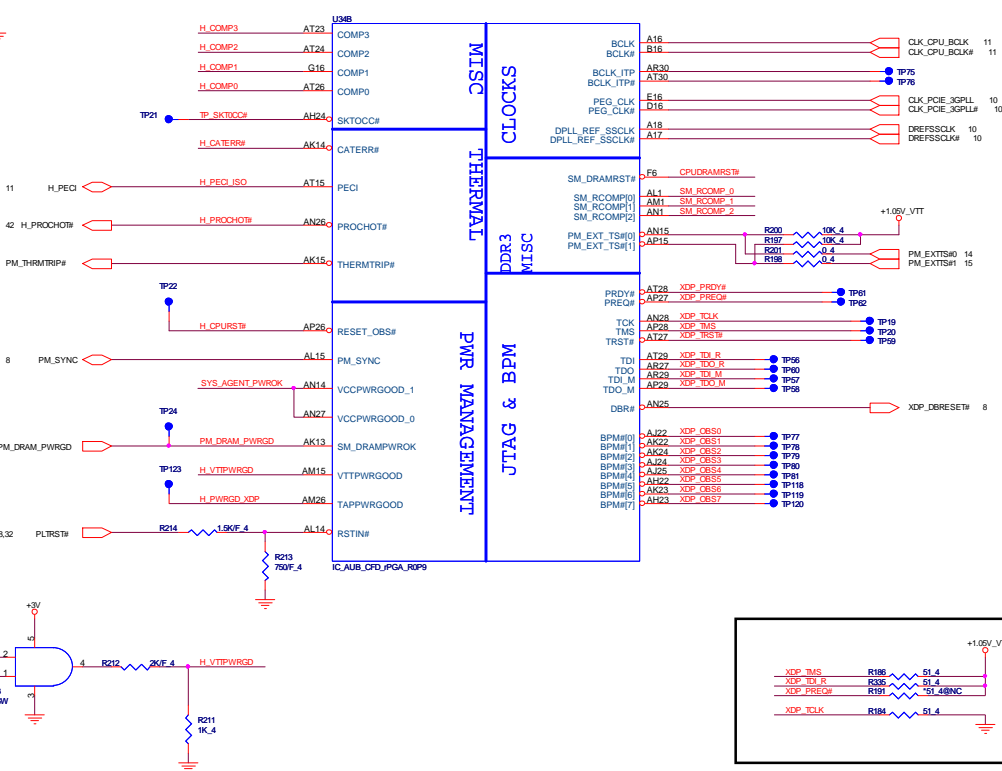
**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

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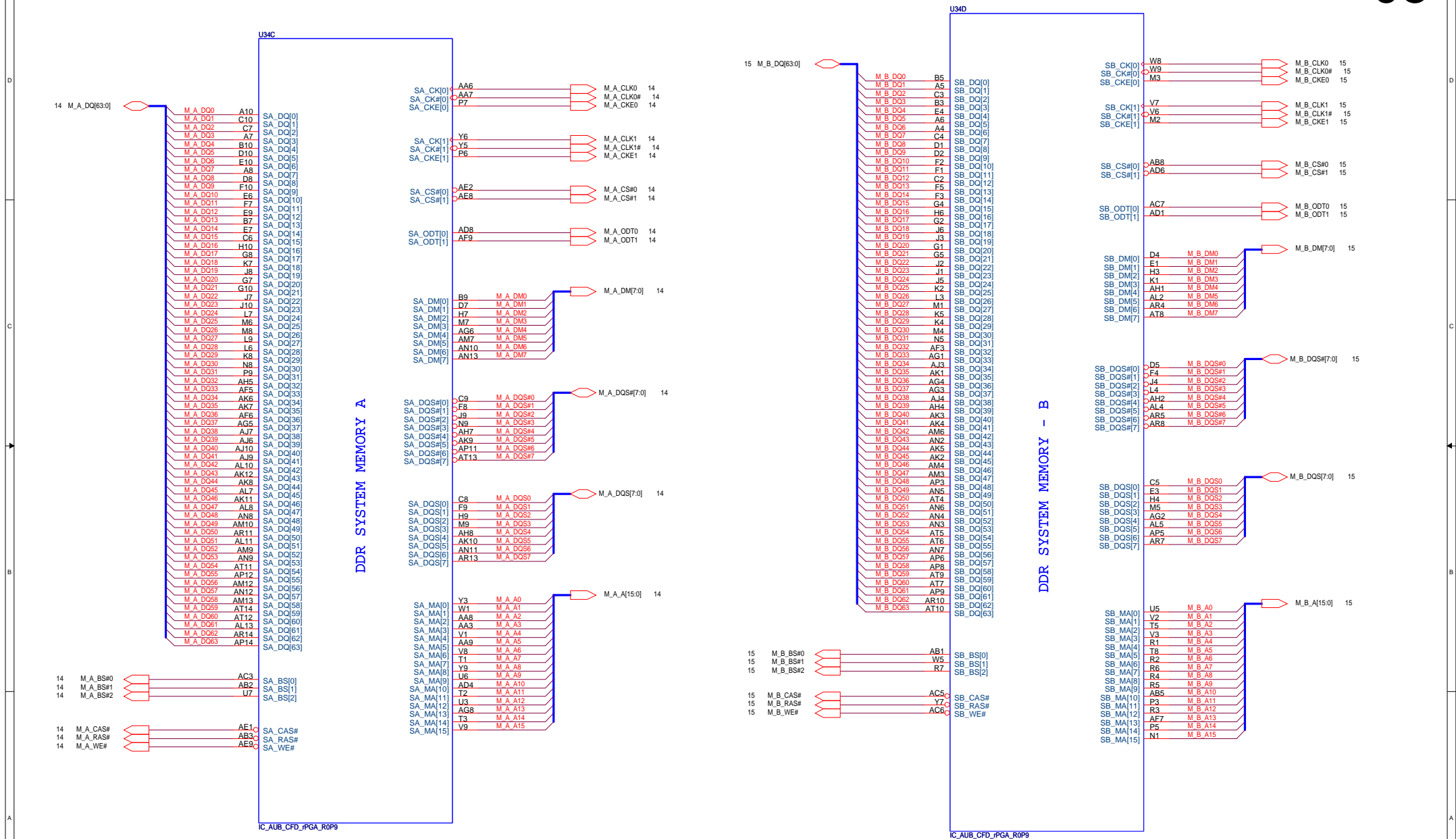
	0	1
CPU_SEL	CPU0/1=133MHz (default)	CPU0/1=100MHz





Scan Chain (Default)	STUFF -> R337, R340, R343 NO STUFF -> R341, R339
CPU Only	STUFF -> R337, R341 NO STUFF -> R340, R339, R343
GMCH Only	STUFF -> R339, R343 NO STUFF -> R337, R341, R340

## ARRANDALE PROCESSOR (DDR3)



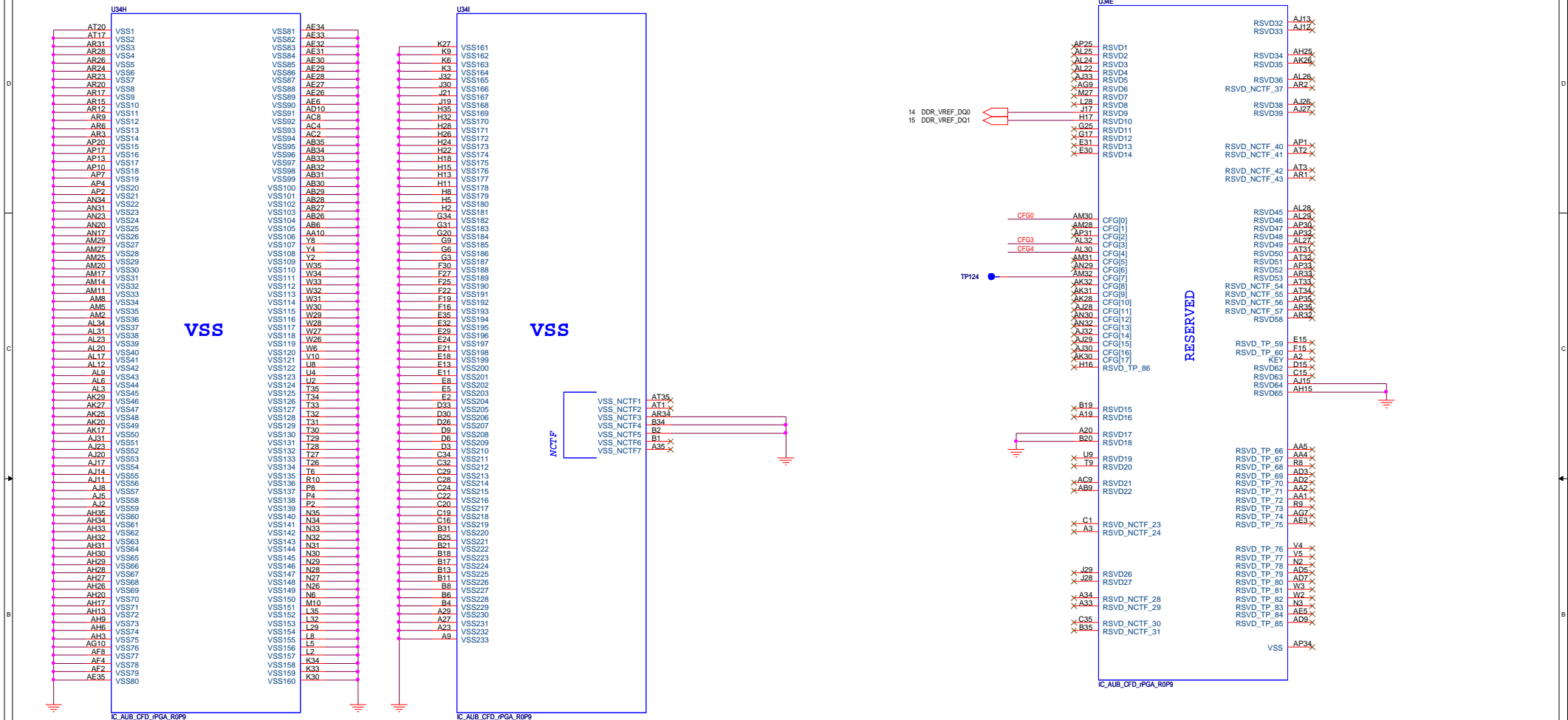
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## ARRANDALE PROCESSOR (GND)

## ARRANDALE PROCESSOR( RESERVED, CFG)

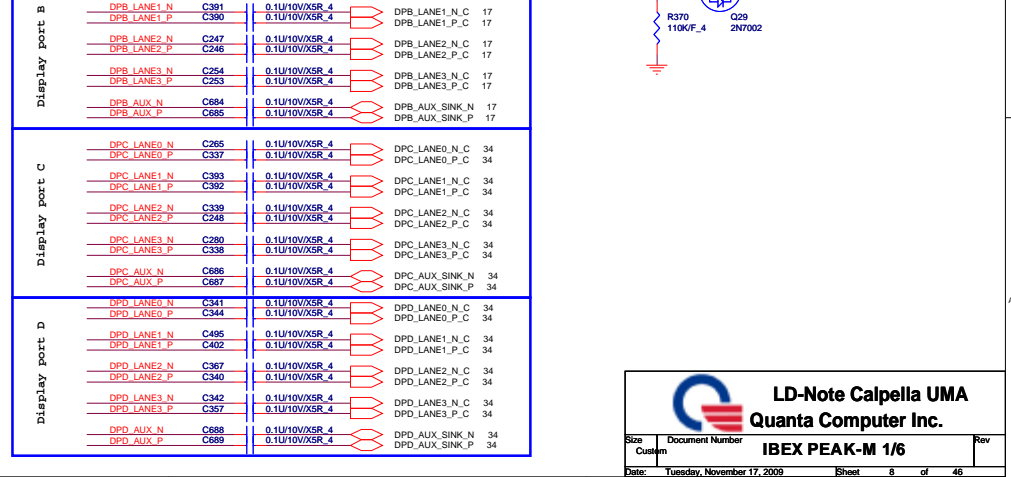
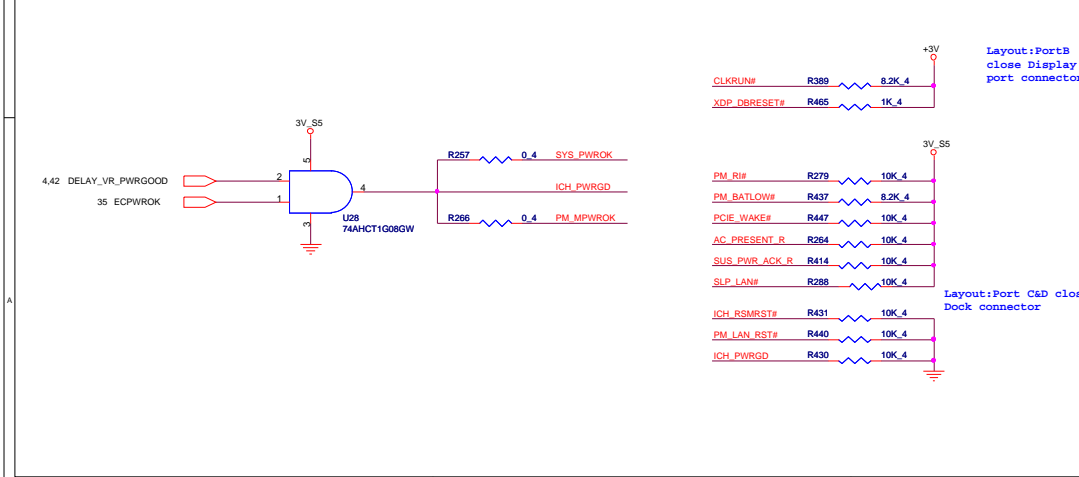
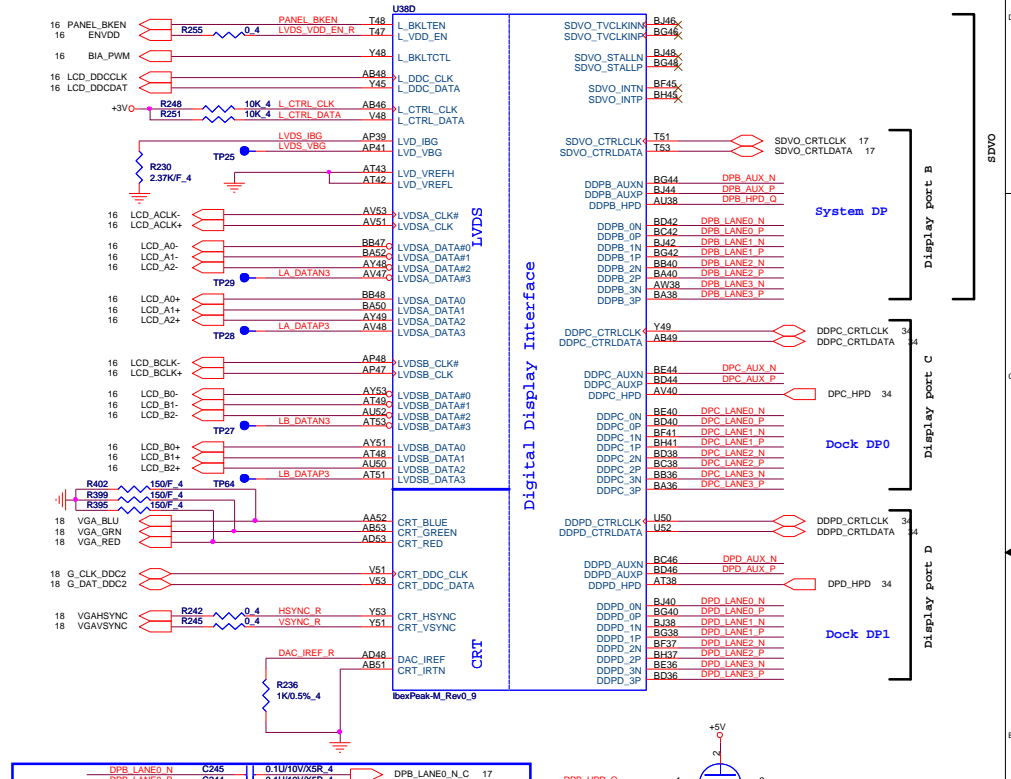
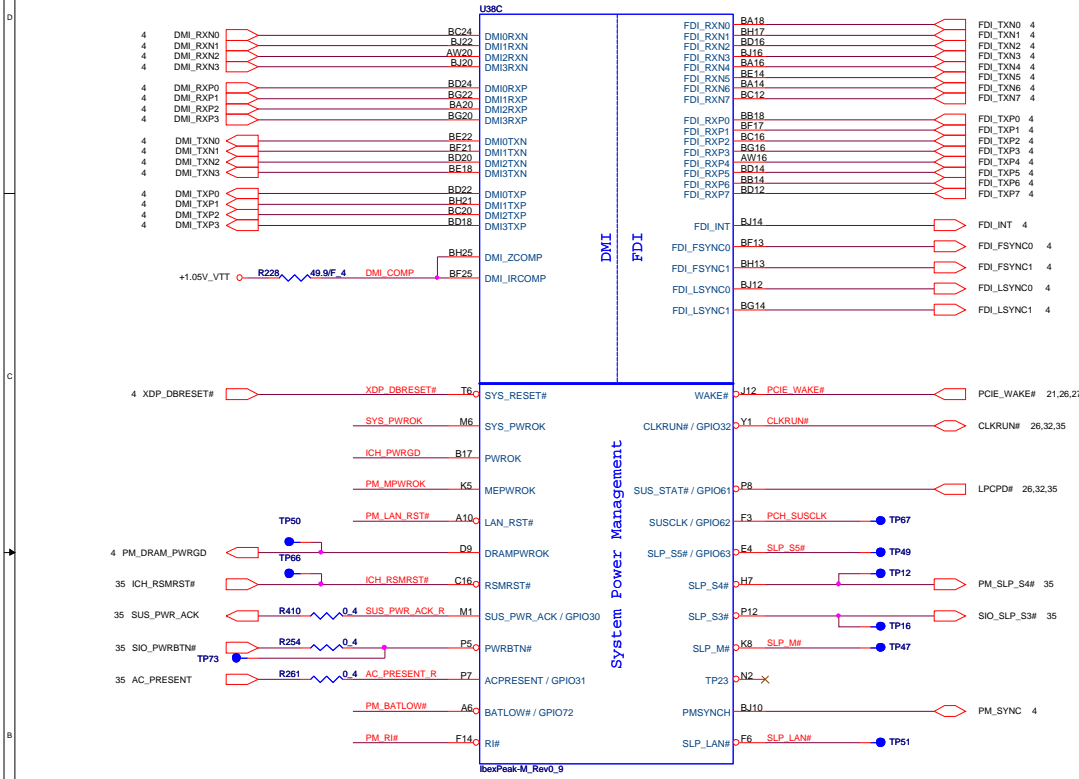


	1	0
CFG4 (Display Port Presence)	Disabled; No Physical Display Port attached to Embedded Display Port	Enabled; An external Display port device is connected to the Embedded Display port
CFG0 (PCI-Epress Configuration Select)	Single PEG	Bifurcation enabled
CFG3 (PCI-Epress Static Lane Reversal)	Normal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



IBEX PEAK-M (DMI, FDI, GPIO)

IBEX PEAK-M (LVDS, DDI)





12,35 +3VRTC  
16,21,24,33,34,35,37,38,41,43 3VPCU  
4,8,10,11,12,23,26,28,37 +3V  
3,4,6,8,10,11,12,37,40,42,43 +1.05V\_VTT

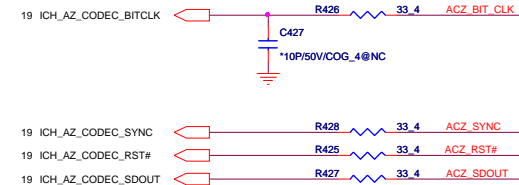
## RTC Circuitry

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)

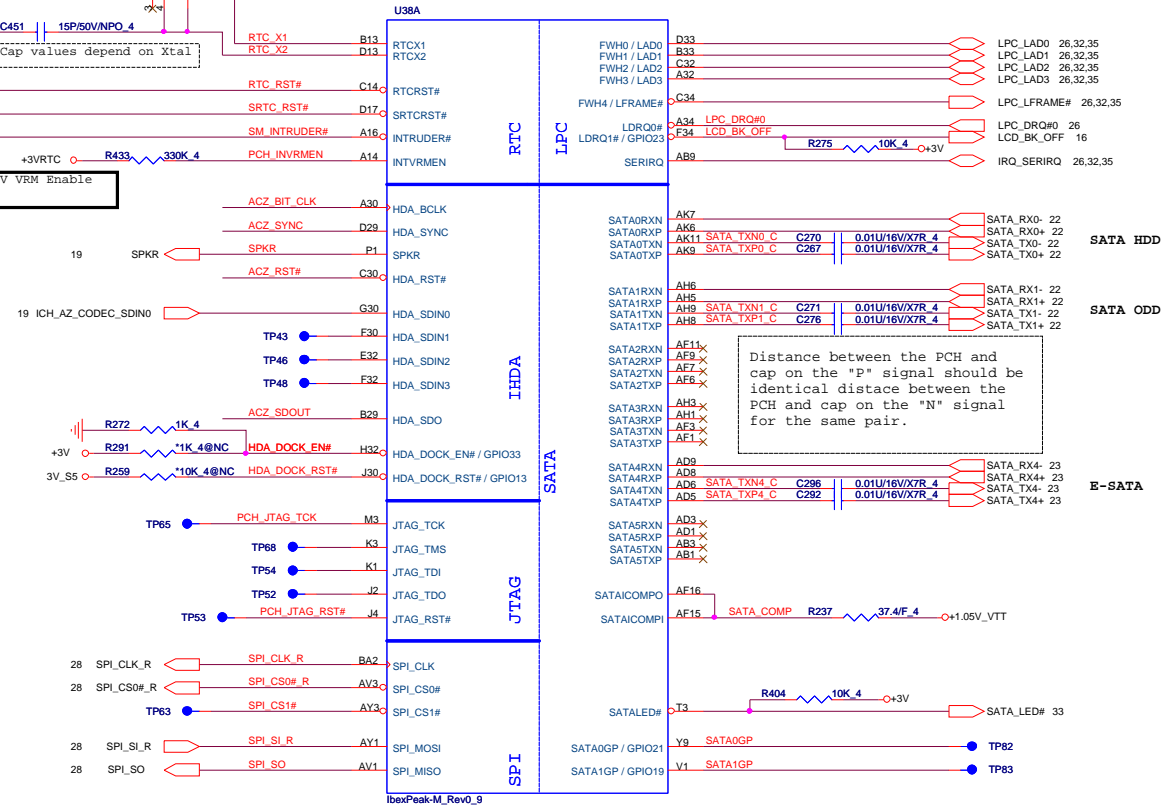
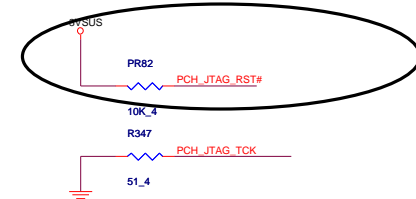
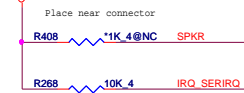
## IBEX PEAK-M (HDA,JTAG,SATA)

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



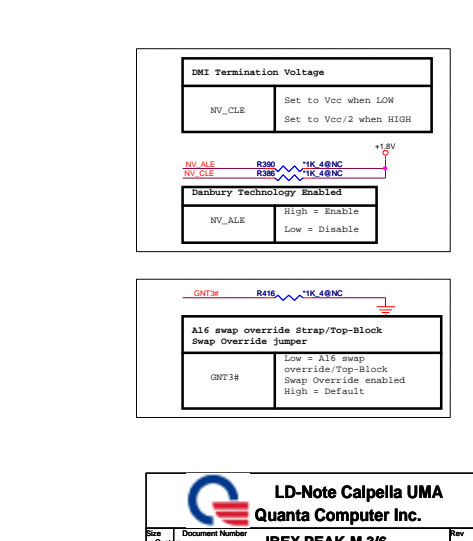
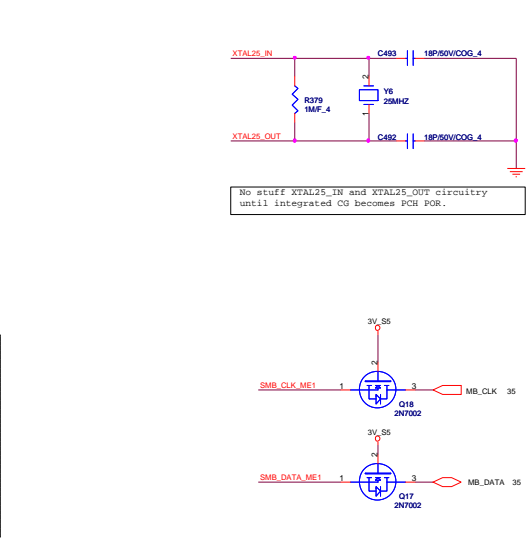
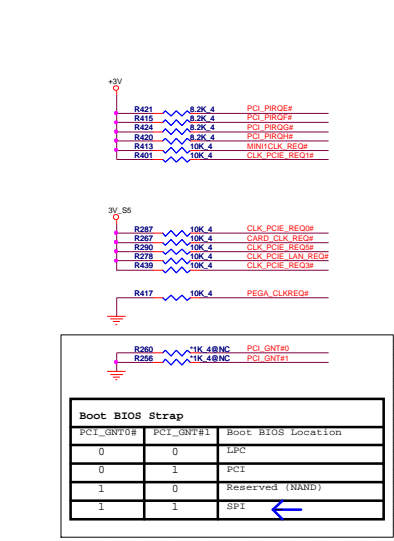
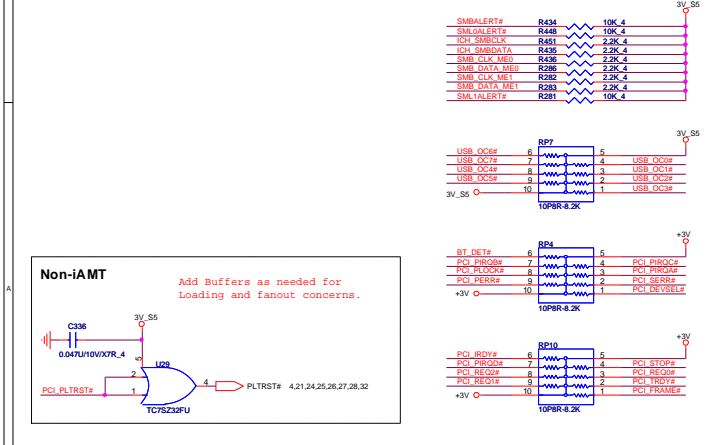
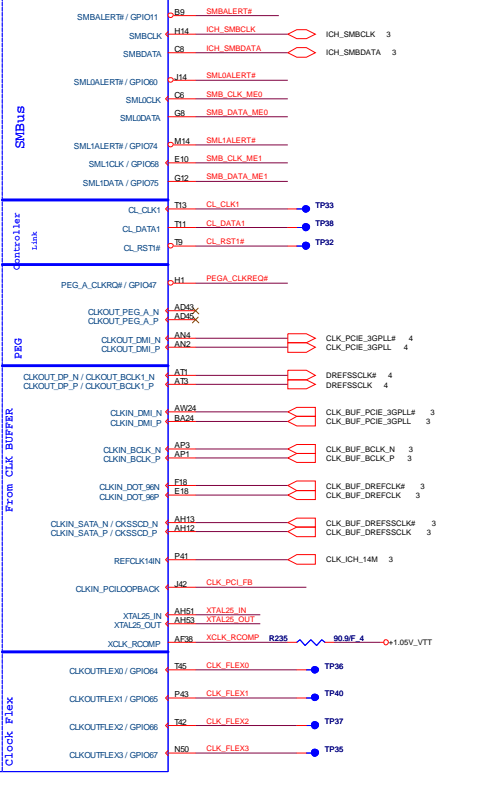
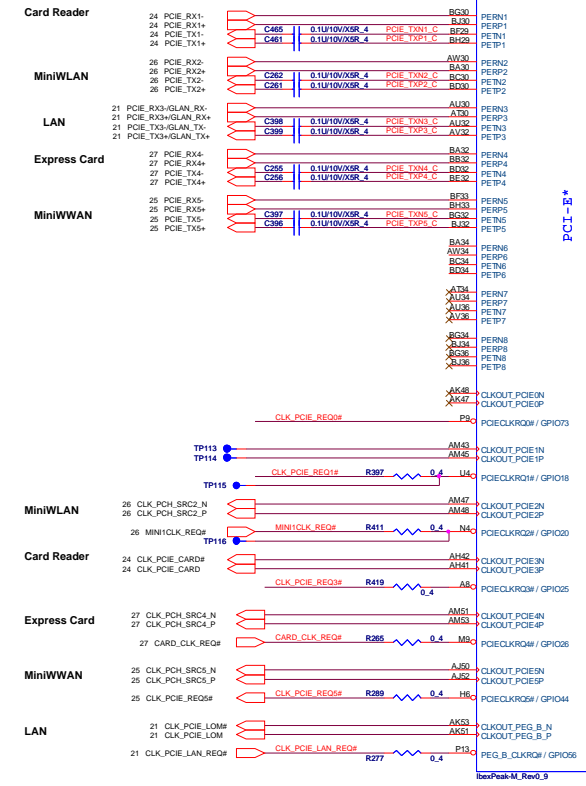
Place all series terms close to PCH except for SDIN input lines, which should be close to source. Placement of R651, R652, R650 & R653 should equal distance to the T split trace point. Basically, keep the same distance from T for all series termination resistors.

## No Reboot Strap



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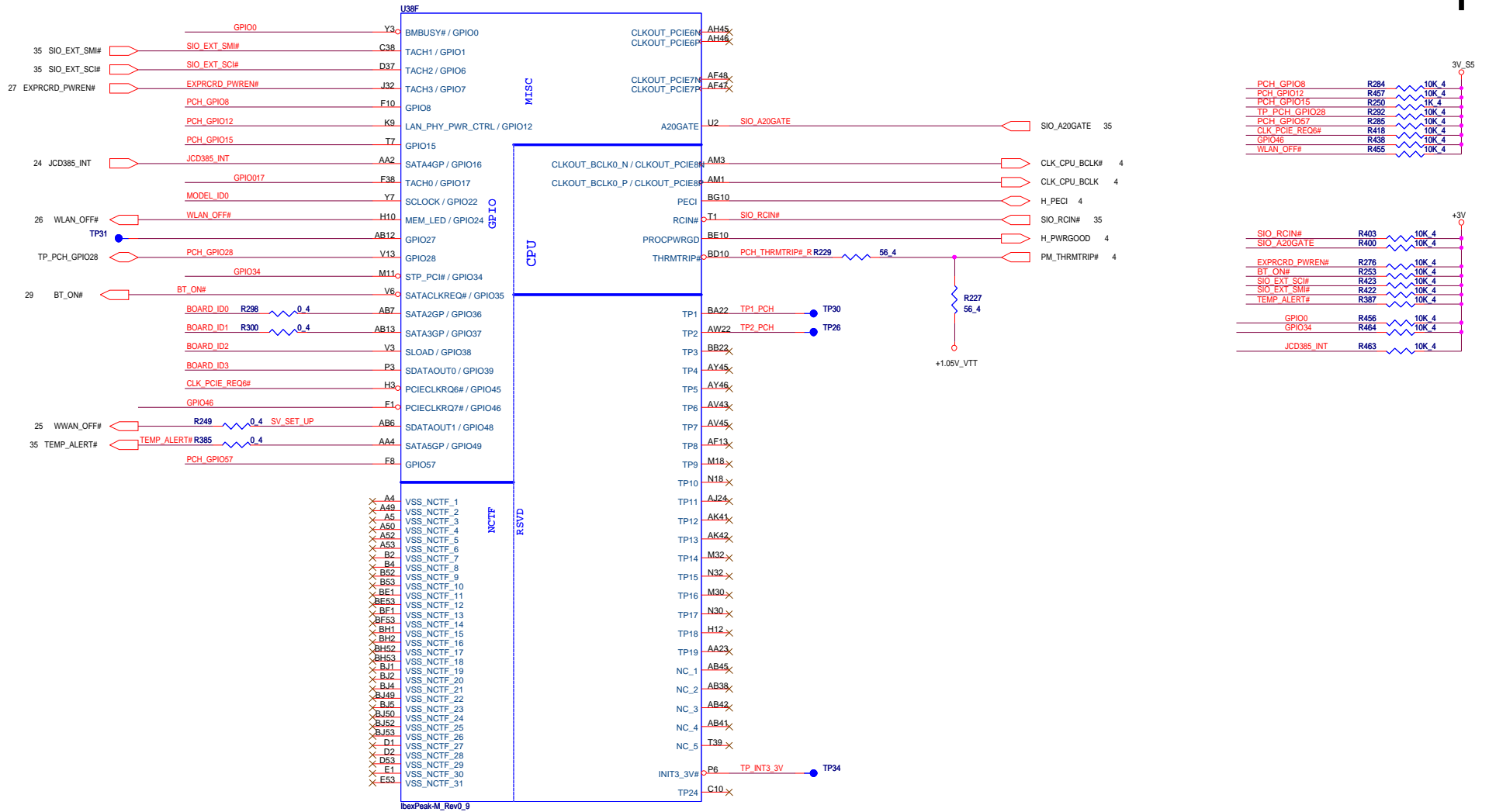


# IBEX PEAK-M (GPIO,VSS\_NCTF,RSVD)

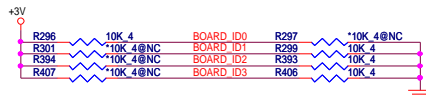
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4,8,9,10,12,23,26,28,37  
3,4,6,8,9,10,12,37,40,42,43

+3V  
3V\_SS  
+1.05V\_VTT

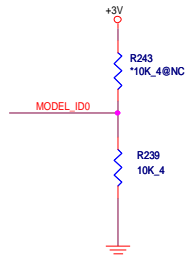
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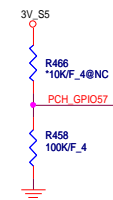
Board ID For Function	ID3 GPIO39	ID2 GPIO38	ID1 GPIO37	ID0 GPIO36
SDV	0	0	0	0
SIV	0	0	0	1
SIT	0	0	1	0
SVT	0	0	1	1
SOVP	0	1	0	0



Model ID	MODEL_ID0
14 "	0
15 "	1



TPM physical presence	
PCH_GPIO57	Low: Default



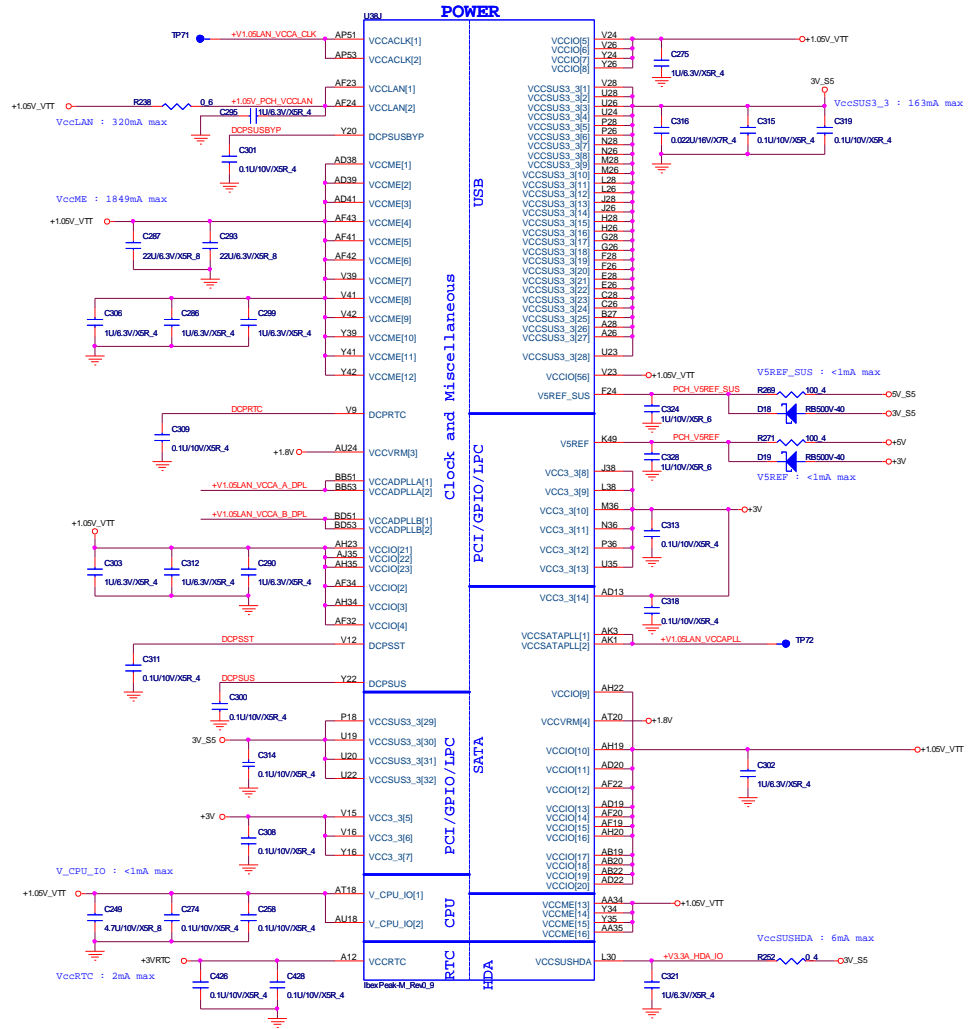
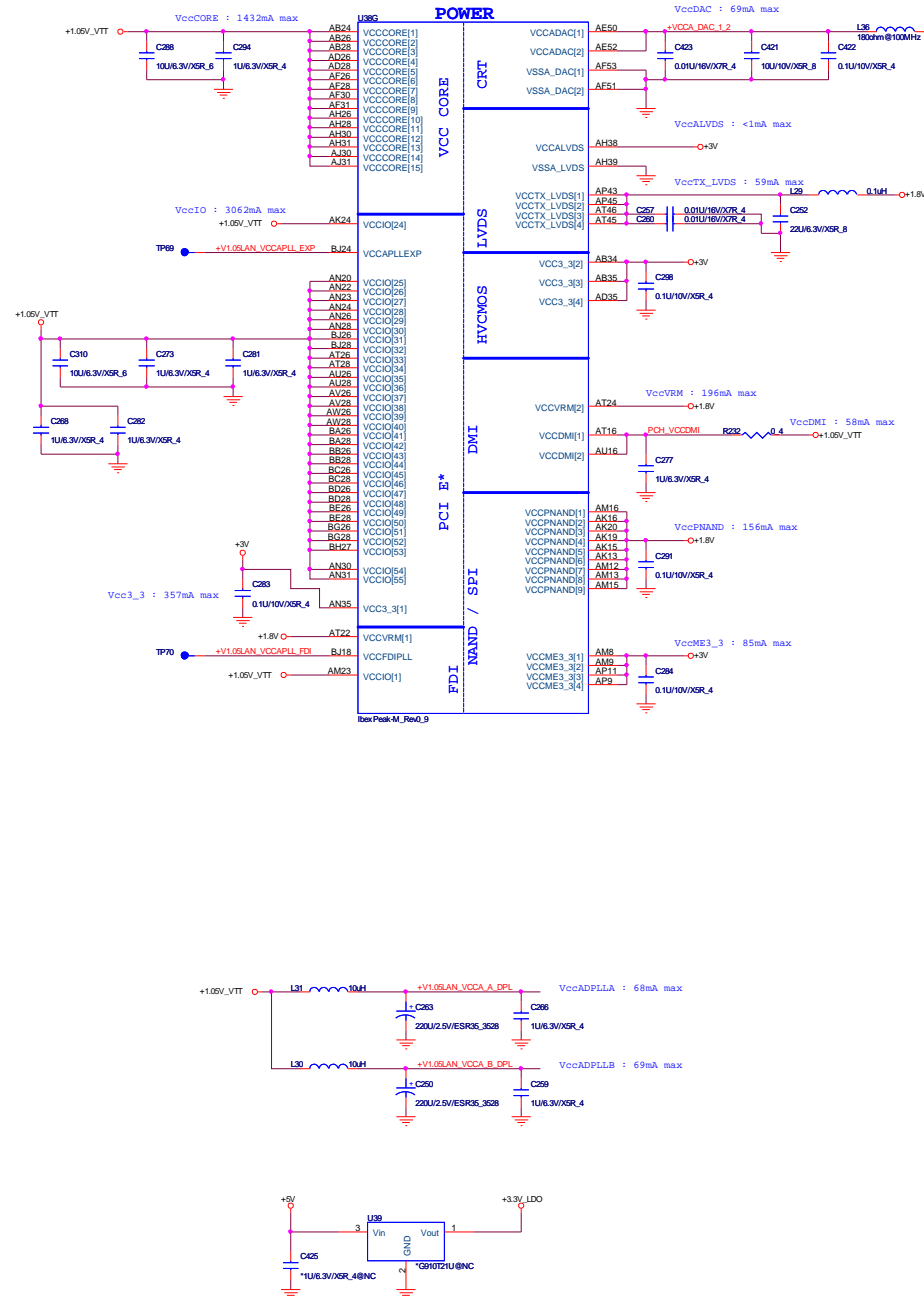
SV_SET_UP	1-X High = Strong (Default)
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**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

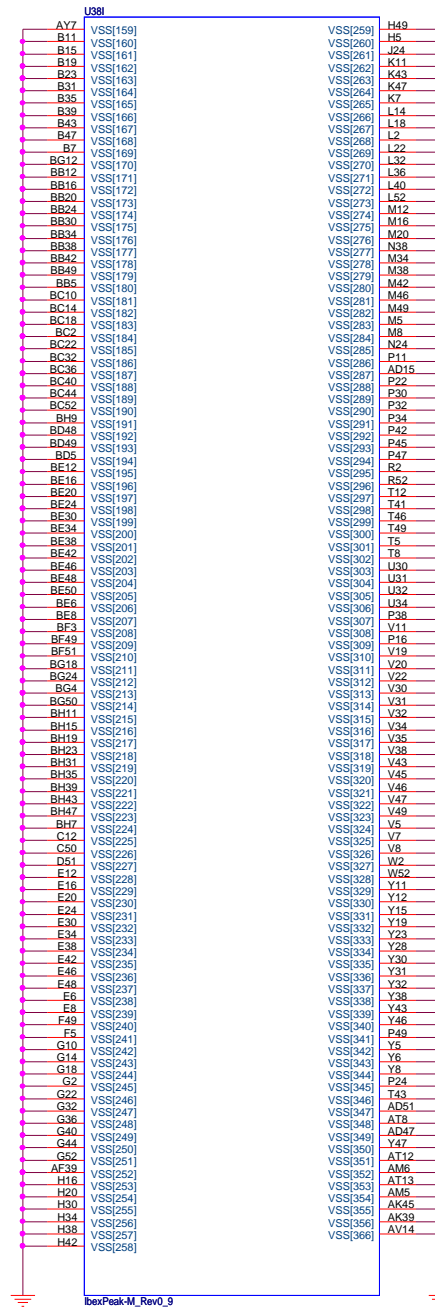
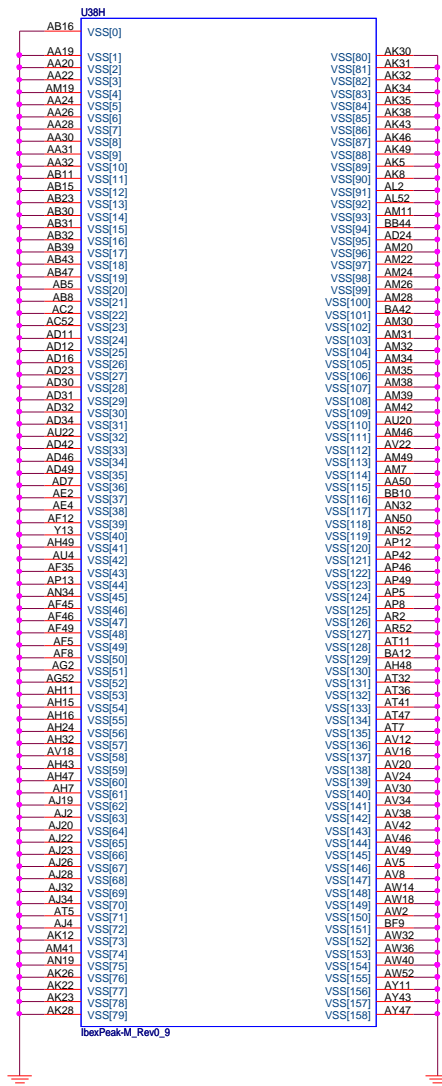
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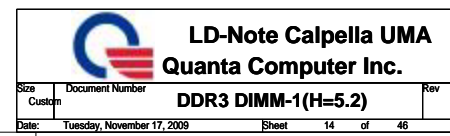
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## IBEX PEAK-M (POWER)

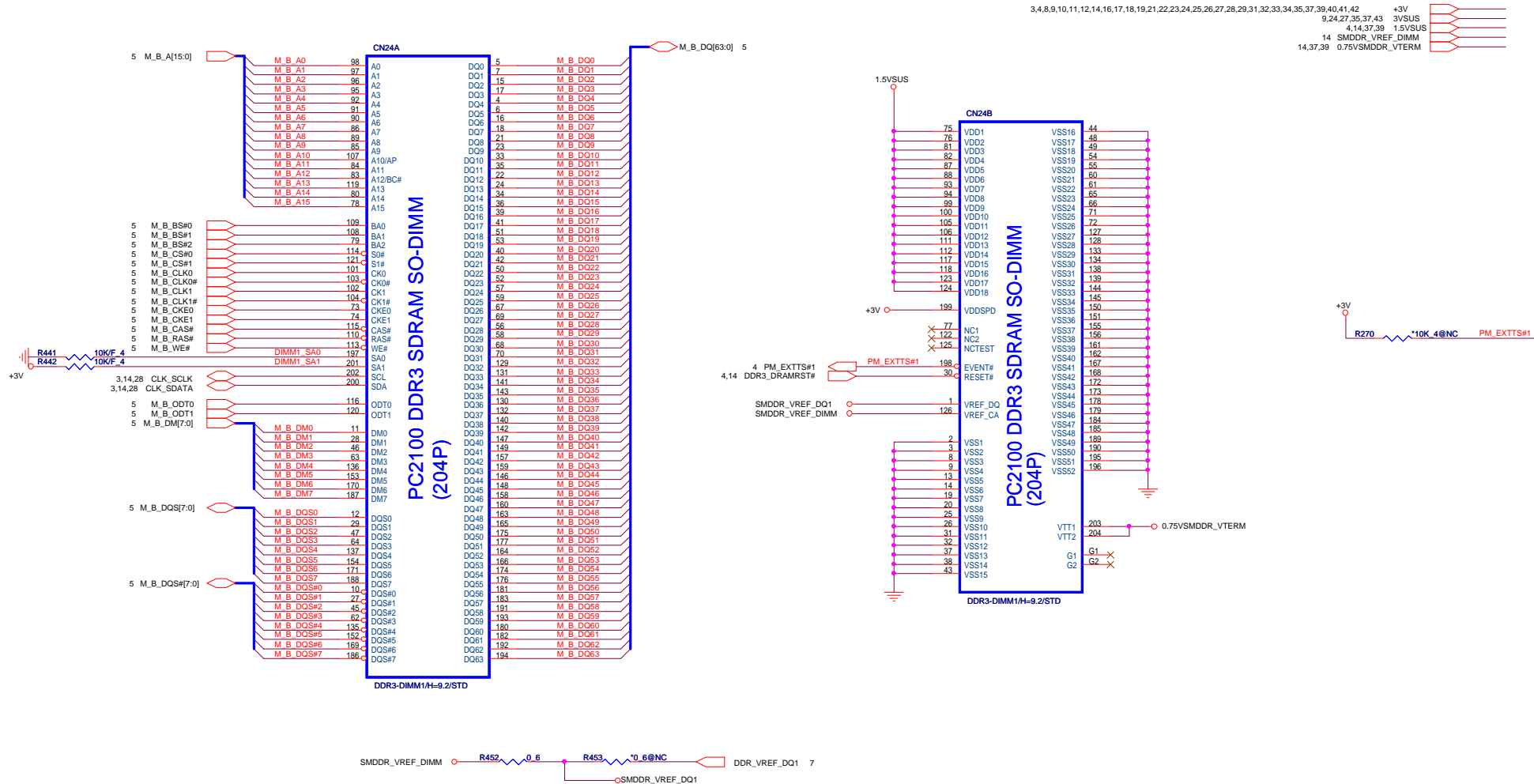


## IBEX PEAK-M (GND)

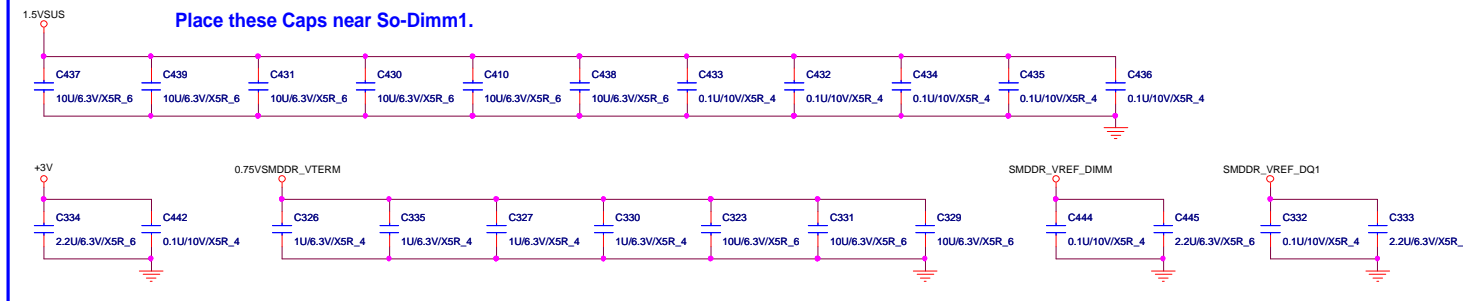






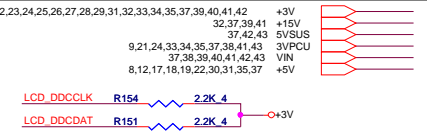
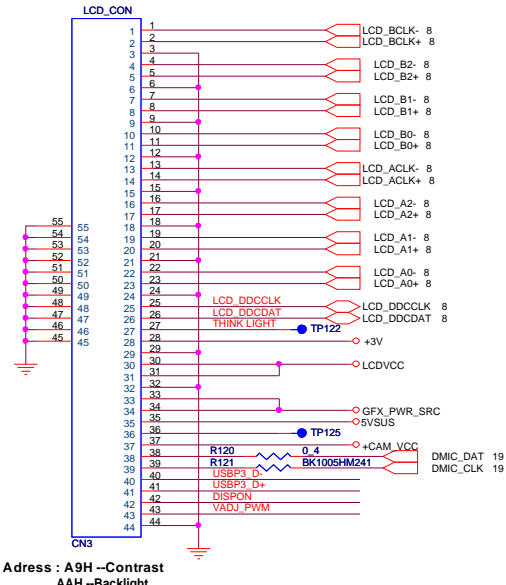
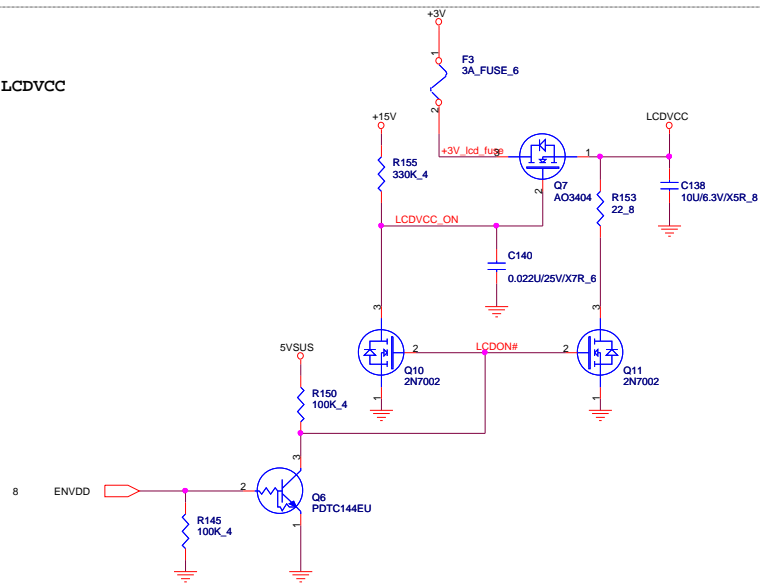


Place these Caps near So-Dimm1.

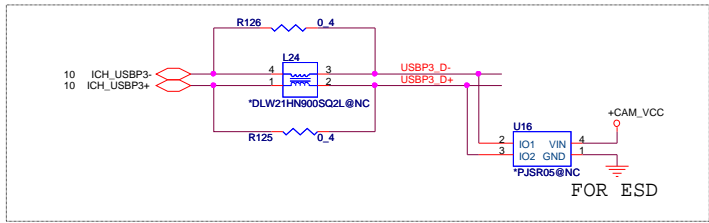
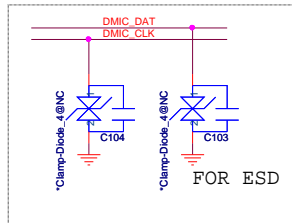
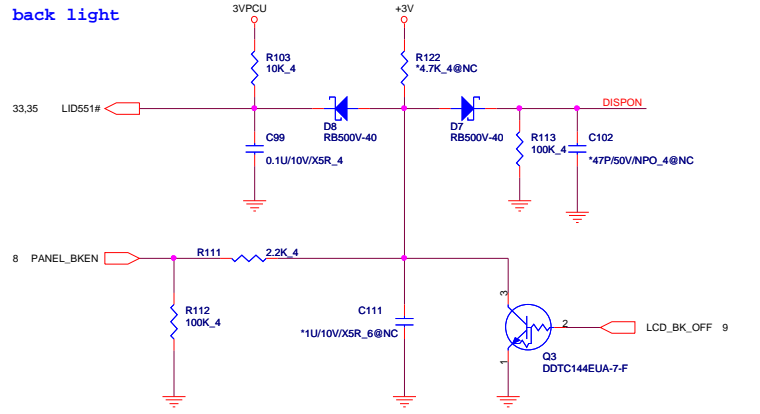




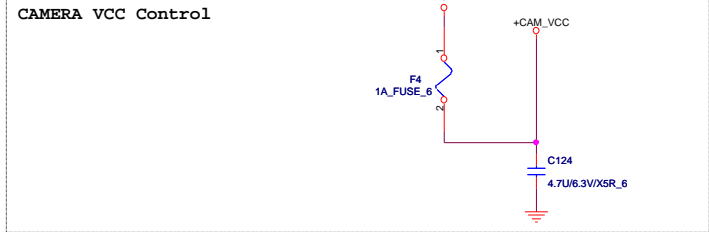
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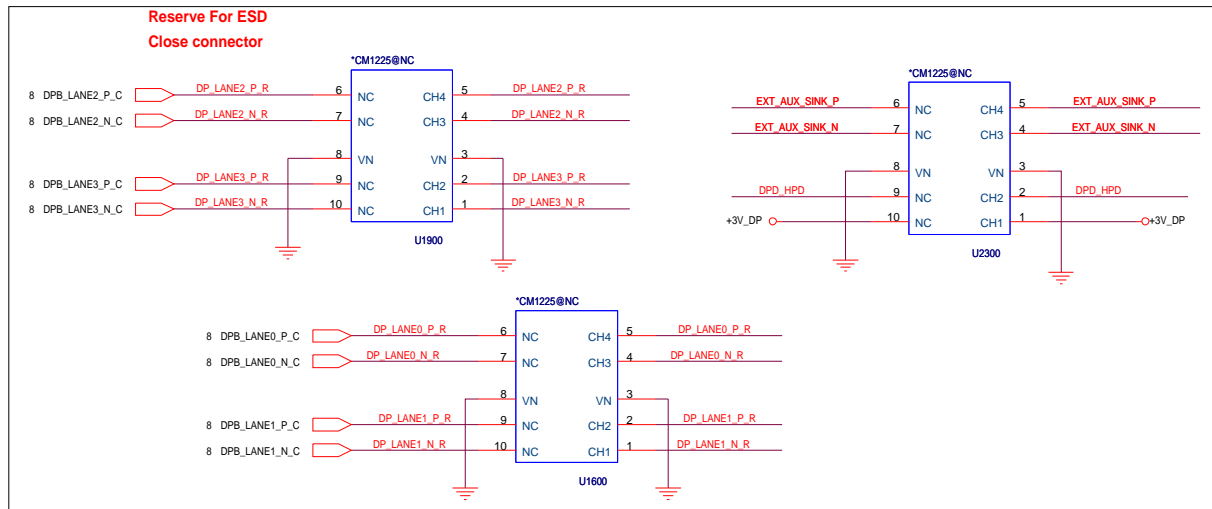
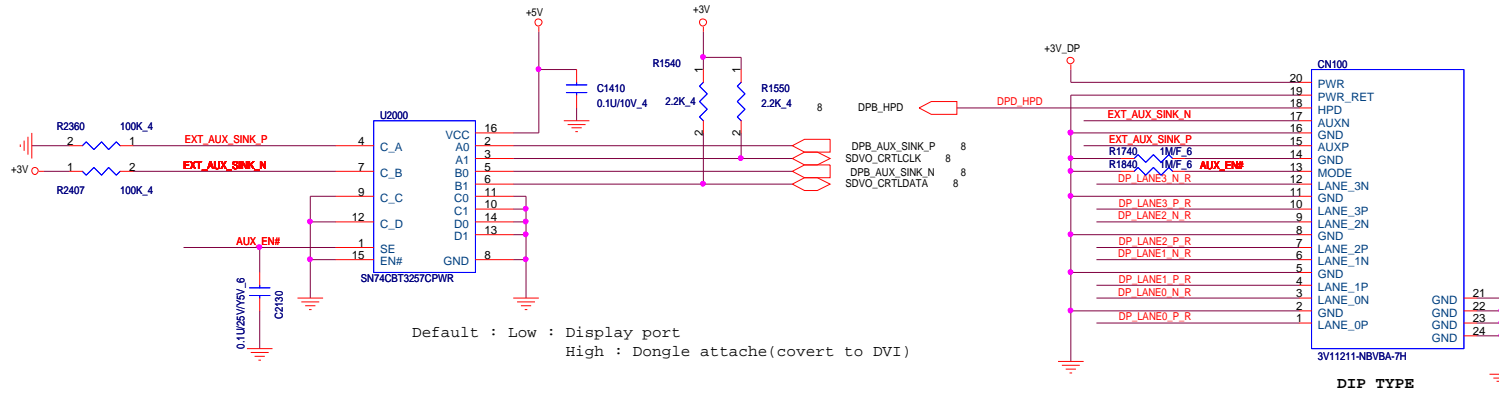


### back light

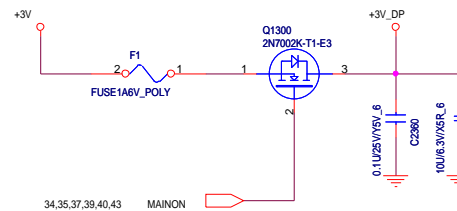
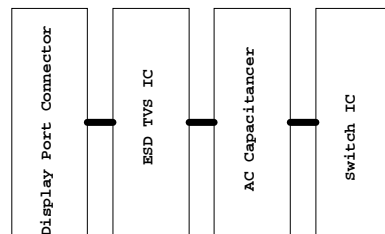


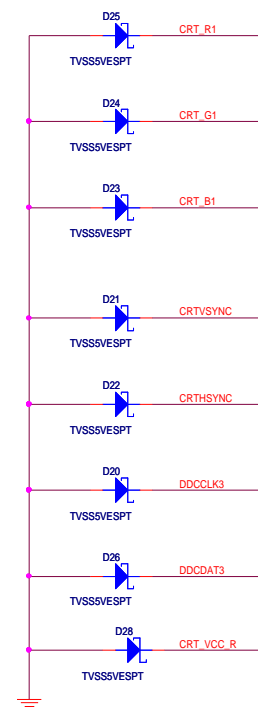
### CAMERA VCC Control





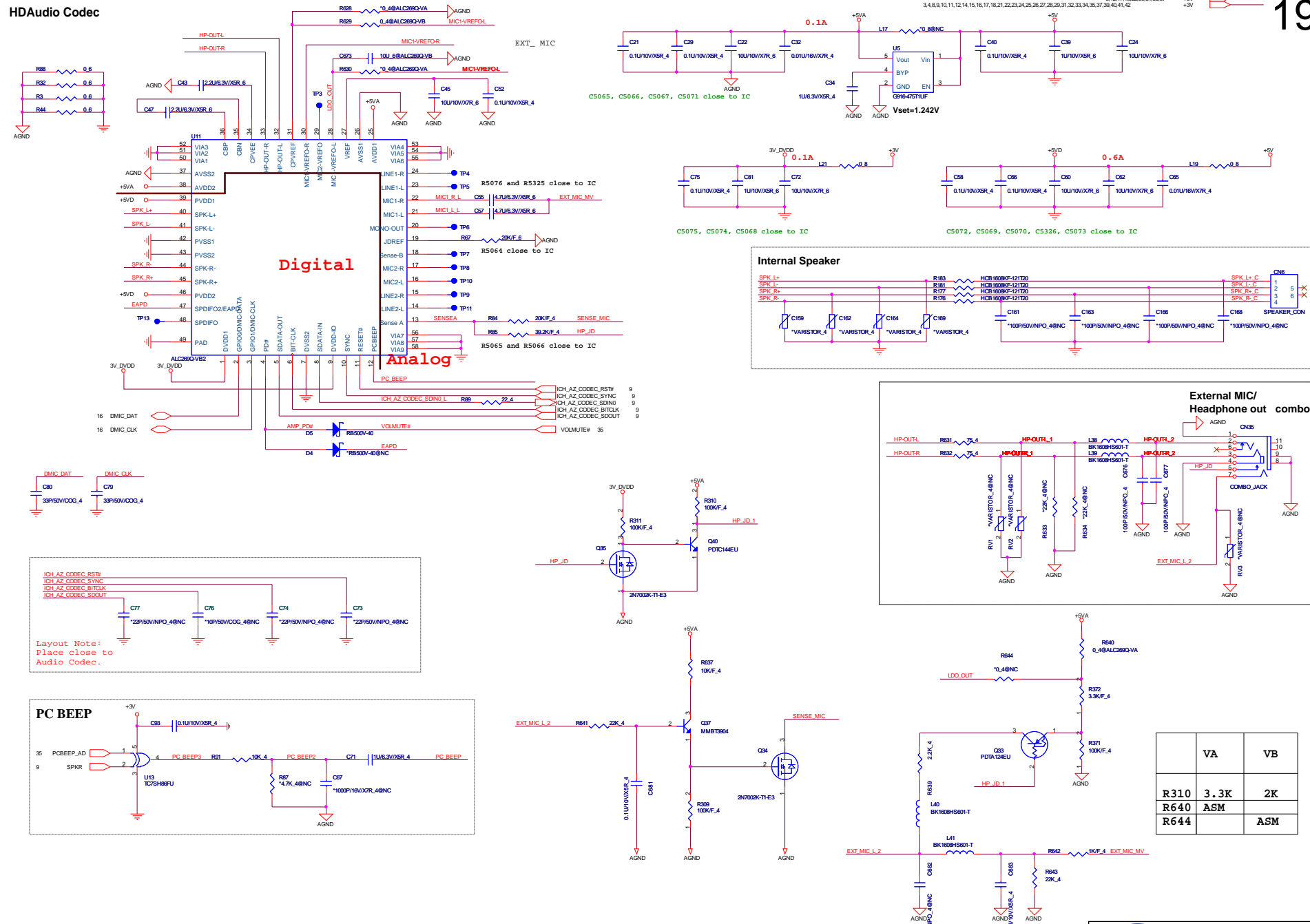
Layout Topology



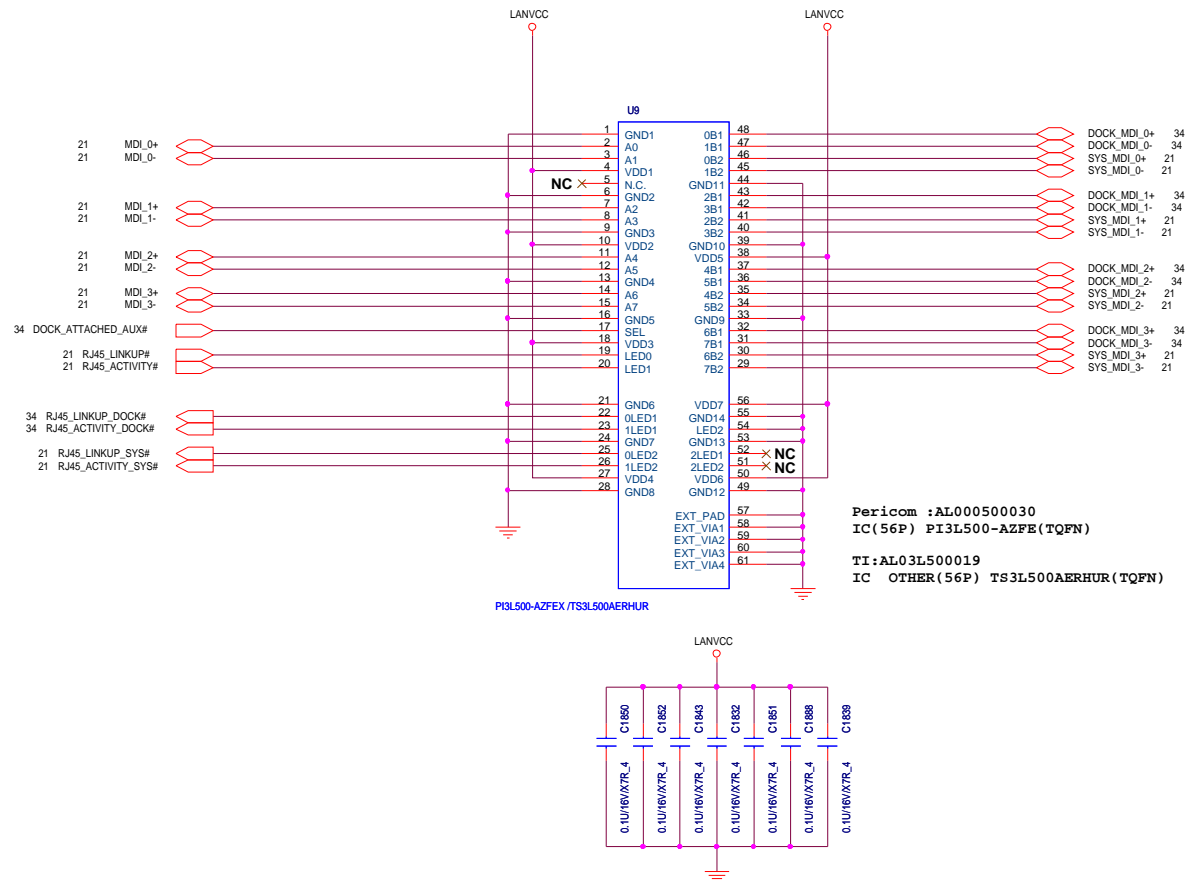


SEL	FUNCTION(COM)
LOW	IN_x0
HIGH	IN_x1

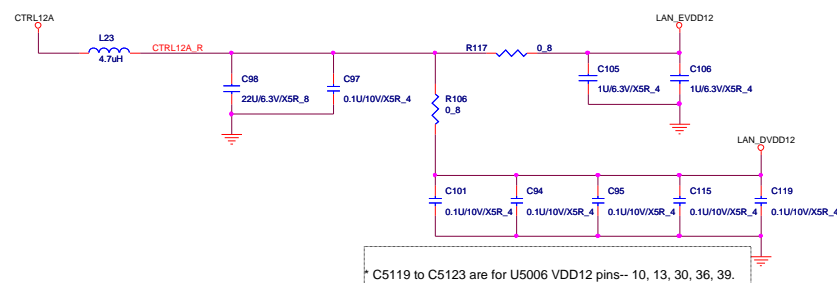
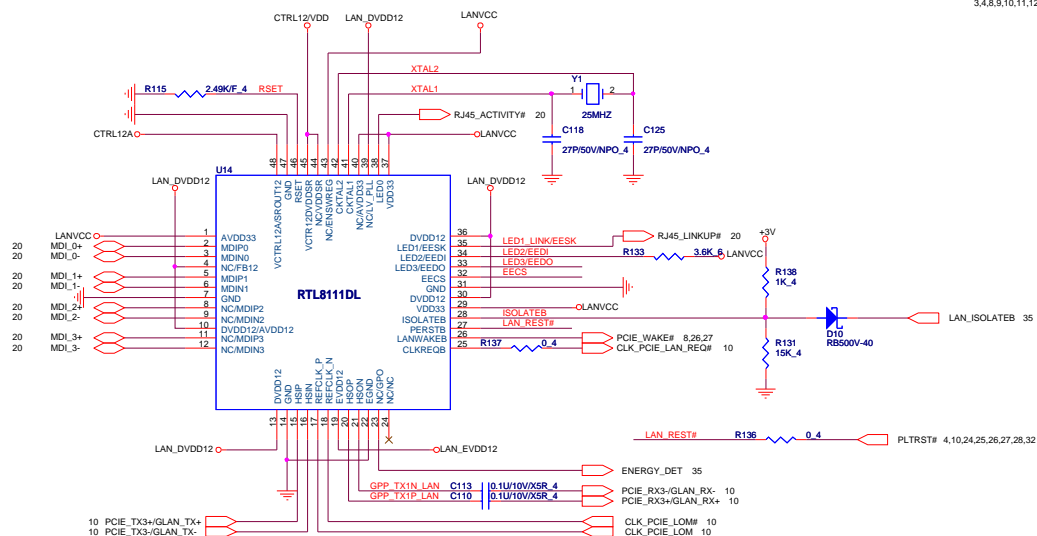
## HDAudio Codec



	VA	VB
R310	3.3K	2K
R640	ASM	
R644		ASM



Pericom :AL000500030  
 IC(56P) PI3L500-AZFE(TQFN)  
 TI:AL03L500019  
 IC OTHER(56P) TS3L500AERHUR(TQFN)

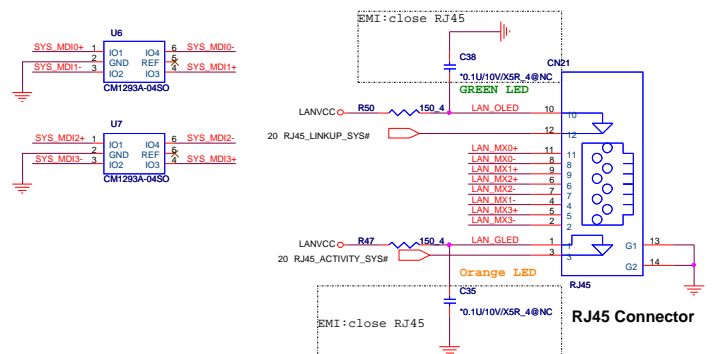


Place C5113 ,C5094 closed to U5006 pins44,45.

\* C5116 and C5273 are for U5006 EVDD12 pin 19.

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

## Transformer

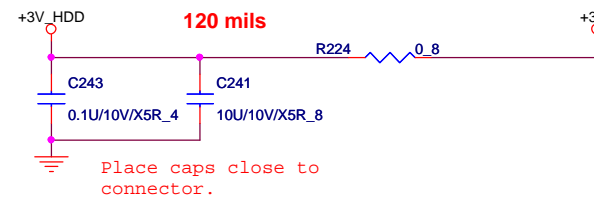
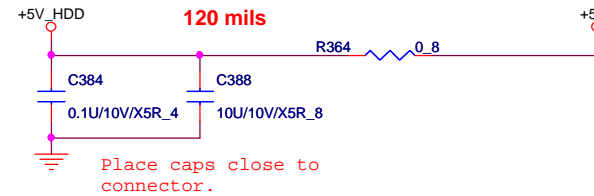
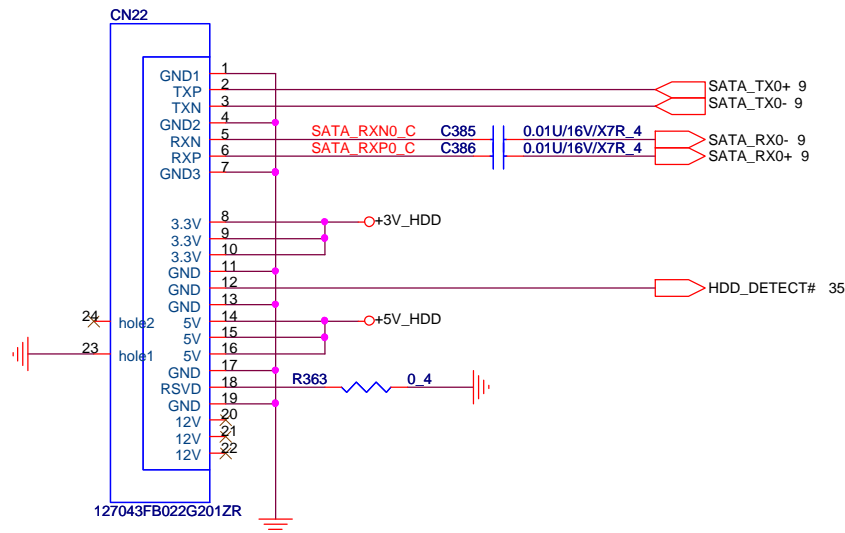


## SATA Connector.

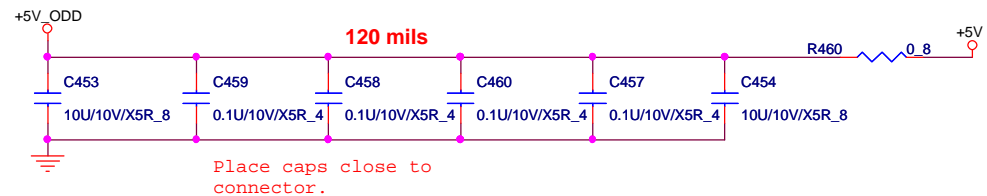
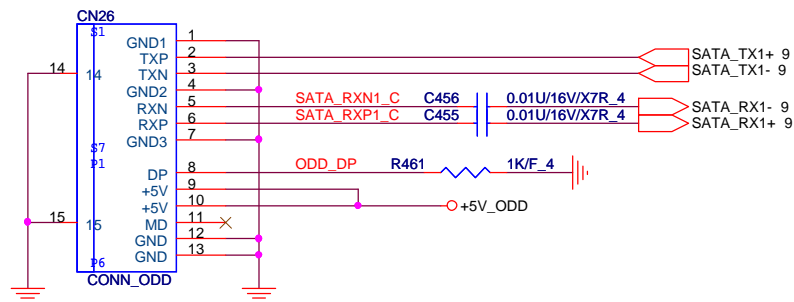
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8,12,17,18,19,30,31,35,37  
+5V  
+3V

22



## ODD Connector

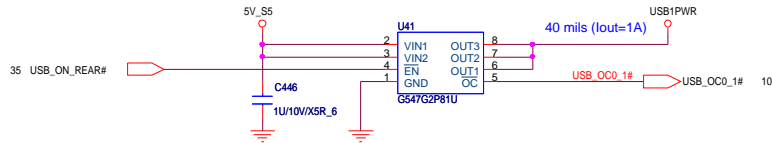


**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

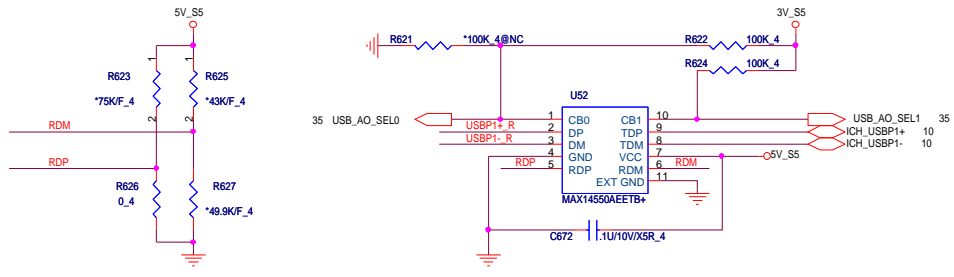
Size	Document Number	Rev
Custom	<b>SATA (HDD&amp;CD_ROM)</b>	
Date:	Tuesday, November 17, 2009	Sheet 22 of 46



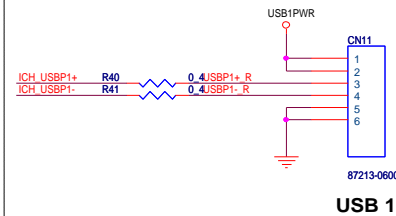
## USBX1



## Support Black-berry function

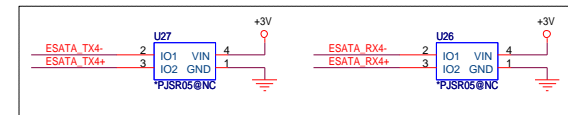
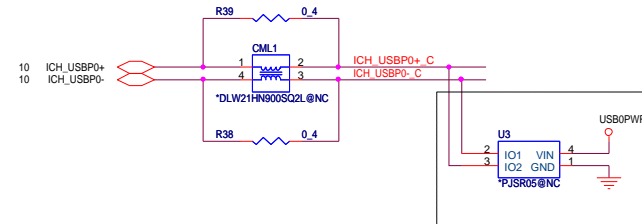
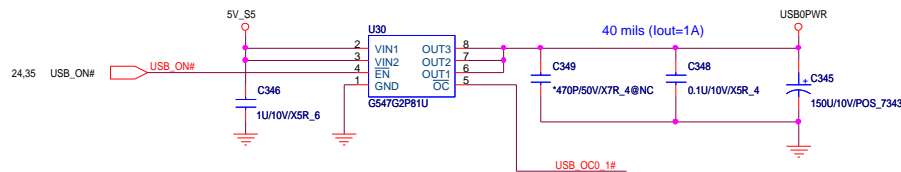


## USB X1---- Wire to board conn

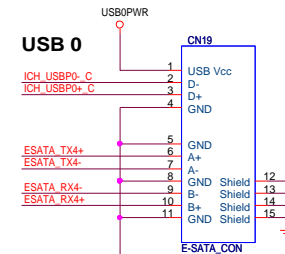
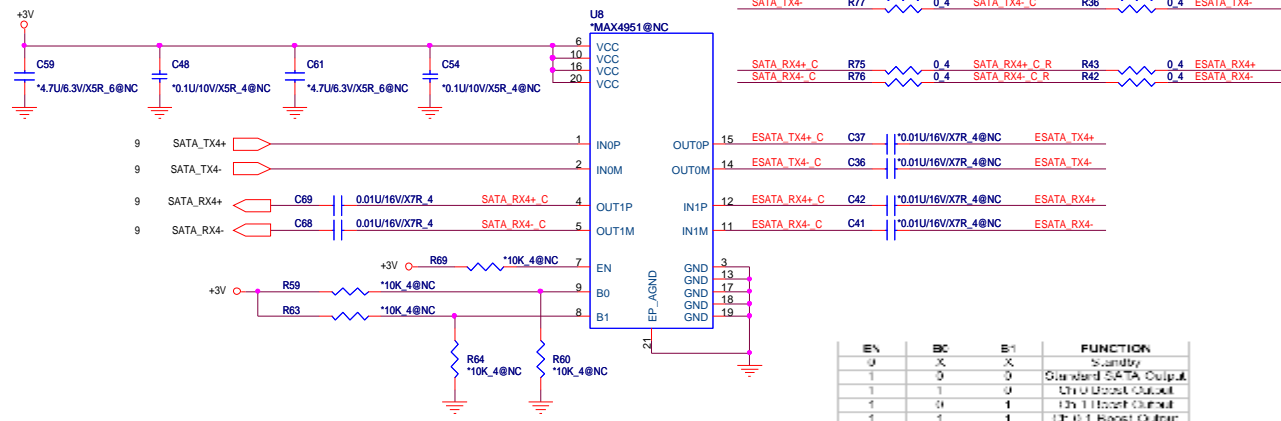


	w/ AOU3	w/o AOU3
R40	NO ASM	ASM
R41	NO ASM	ASM
U52	ASM	NO ASM
R622	ASM	NO ASM
R624	ASM	NO ASM
R626	ASM	NO ASM
C676	ASM	NO ASM

## USB + E-SATA



## E-SATA RE-DRIVER

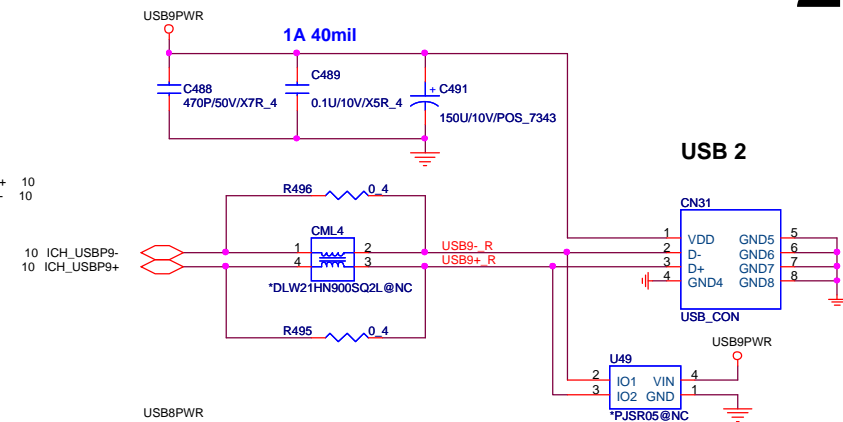


EN	BC	B1	FUNCTION
0	X	X	Standby
1	0	0	Standard SATA Output
1	1	0	On-Chip SATA Output
1	0	1	On-Chip SATA Output
1	1	1	On-Chip SATA Output



**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

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Custom	USB X1/USB+ESATA	
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Pin connection diagram for the 2WM610C1C-DS-7F module. The module is a blue square with pins 1-6 on the left and 4-6 on the right. Pin 1 is VCC, Pin 2 is RST, Pin 3 is CLK, Pin 4 is GND, Pin 5 is VPP, and Pin 6 is DATA. External connections are shown with red arrows: UIM\_PWR to VCC (pin 1), UIM\_RESET to RST (pin 2), UIM\_CLK to CLK (pin 3), UIM\_VPP to VPP (pin 5), and UIM\_DATA to DATA (pin 6). The module is labeled CN29 and 2WM610C1C-DS-7F.

	w/ WWAN	w/o WWAN
CN29	ASM	NO ASM
U46	ASM	NO ASM
C480-C481	ASM	NO ASM
C483-C485	ASM	NO ASM

UIM\_RESET

UIM\_CLK

C481 33P/50V/COG\_4

C480 33P/50V/COG\_4

U46 CM1293A-04SO

UIM\_VPP

UIM\_PWR

UIM\_DATA

C484 33P/50V/COG\_4

C485 1U/10V/X5R\_6

C483 33P/50V/COG\_4

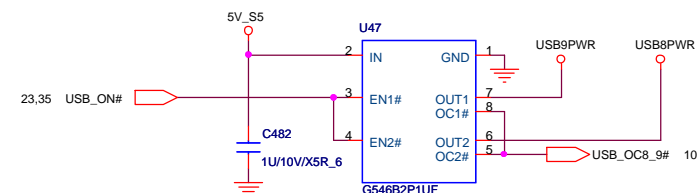
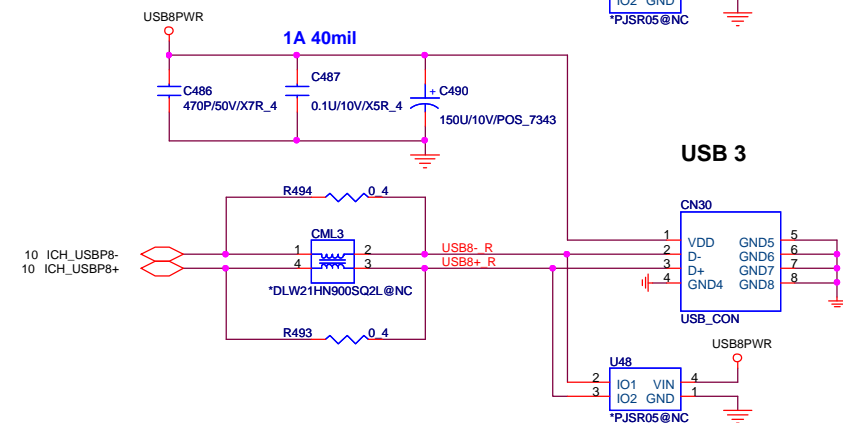
35 BATLED\_GREEN R392 221/F 4 GREEN LED2 2 C2 A 3 3VPCU Battery

35 BATLED\_AMBER R398 221/F 4 AMBER LED2 4 3VPCU

RIGHT-ANGLE-LED

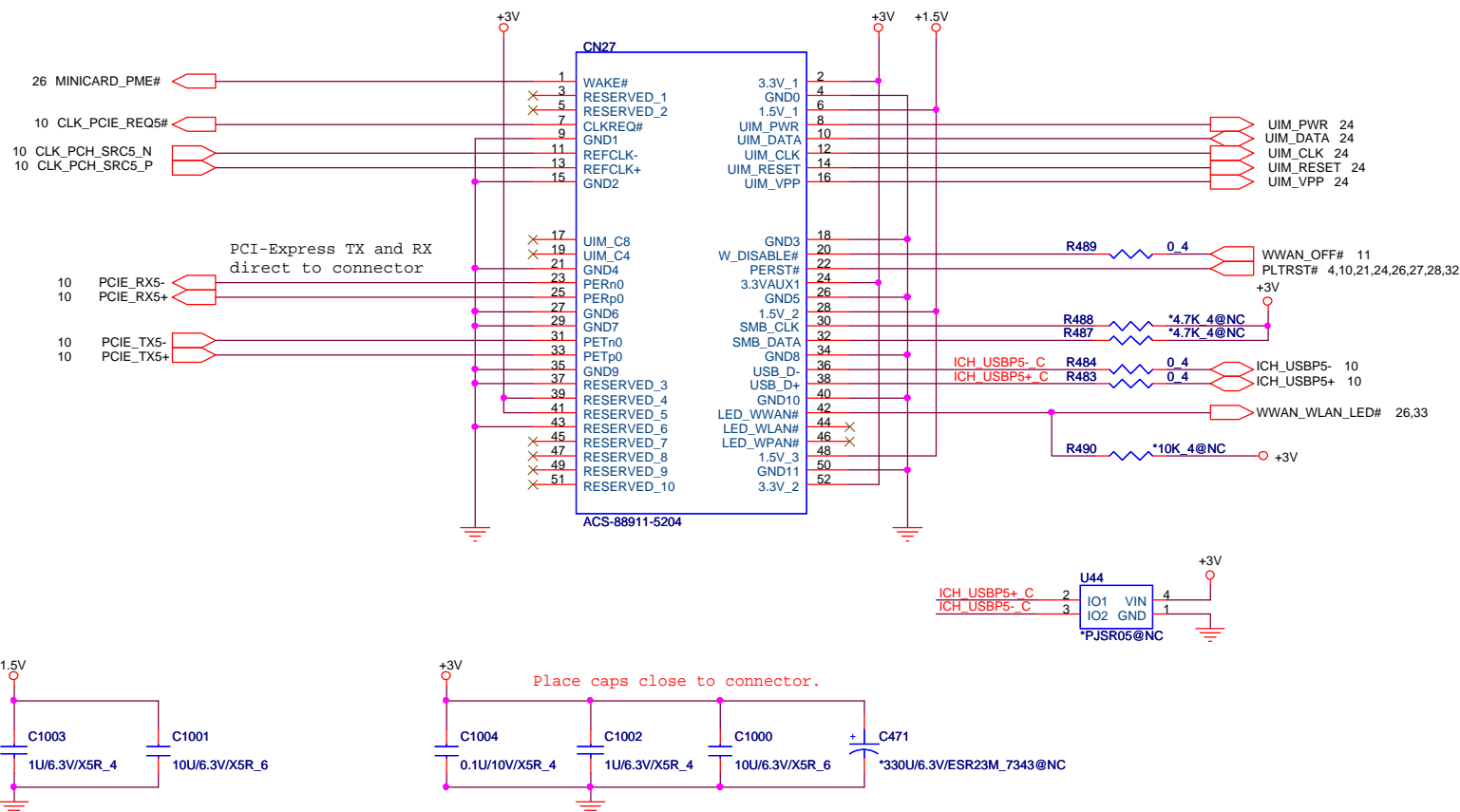
35 SUSPEND\_LED# R368 221/F 4 LED1 1 3 3VSUS Suspend

SUSPEND\_LED\_GREEN



# MiniCard WWAN connector

25



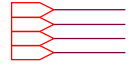
	w/ WWAN	w/o WWAN
CN27	ASM	NO ASM
R489	ASM	NO ASM
R484	ASM	NO ASM
R483	ASM	NO ASM
C1000~C1004	ASM	NO ASM

**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

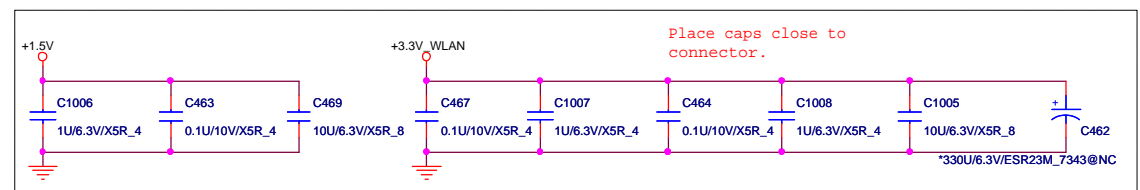
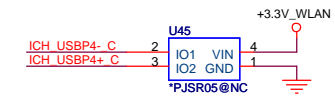
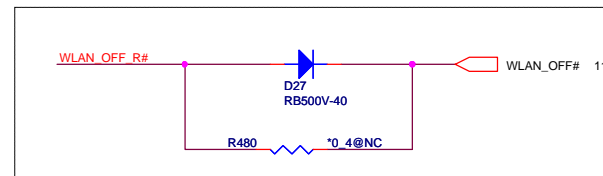
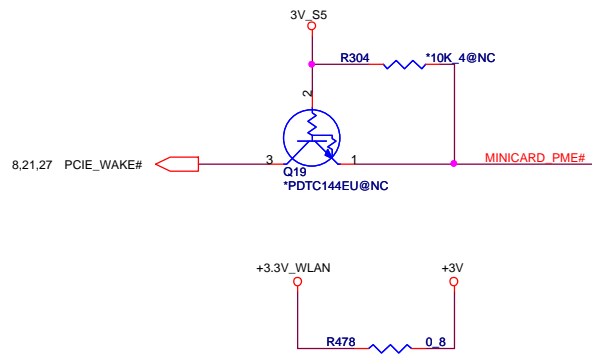
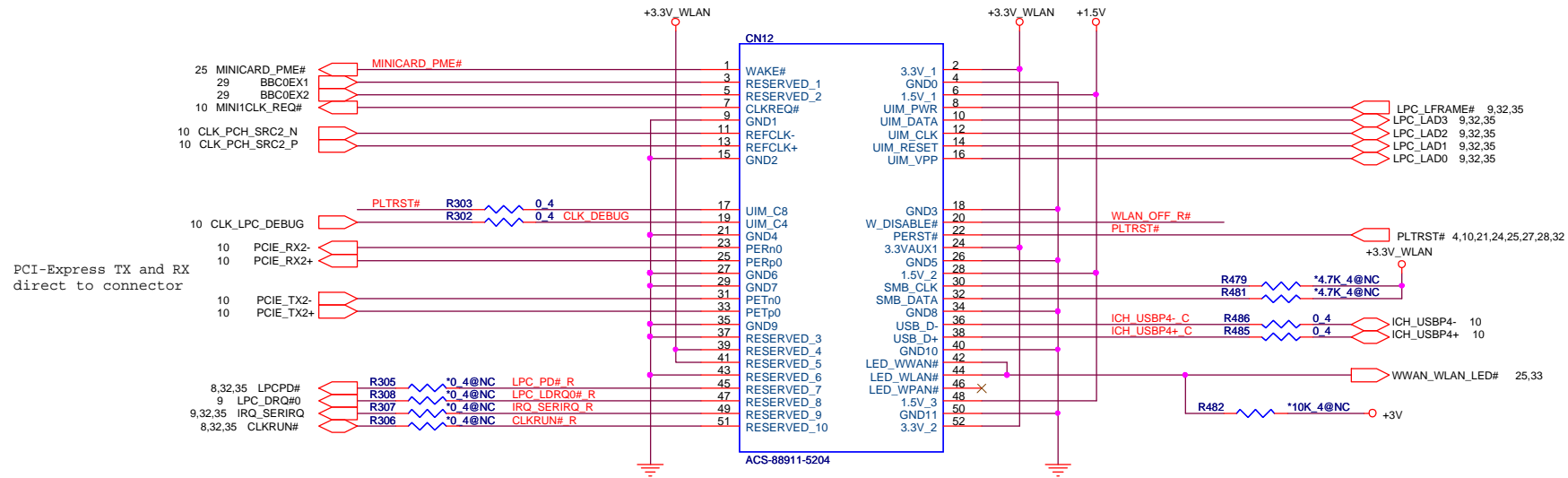
Size Custom	Document Number	Rev
<b>MINI-Card (UWB, WWAN)</b>		
Date: Tuesday, November 17, 2009	Sheet 25 of 46	

# MiniCard WLAN/WiMAX connector

3,4,8,9,10,11,12,14,15,16,17,18,19,21,22,23,24,25,27,28,29,31,32,33,34,35,37,39,40,41,42  
+3V  
3,25,27,39 +1.5V  
9,16,21,24,33,34,35,37,38,41,43 3VPCU  
16,37,38,39,40,41,42,43 VIN



# 26

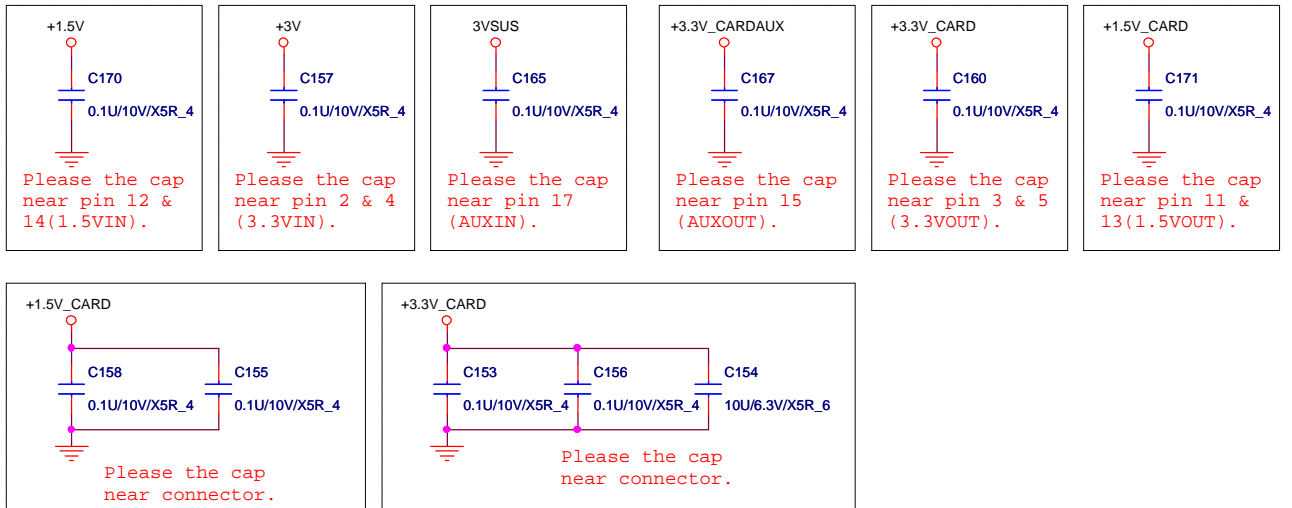
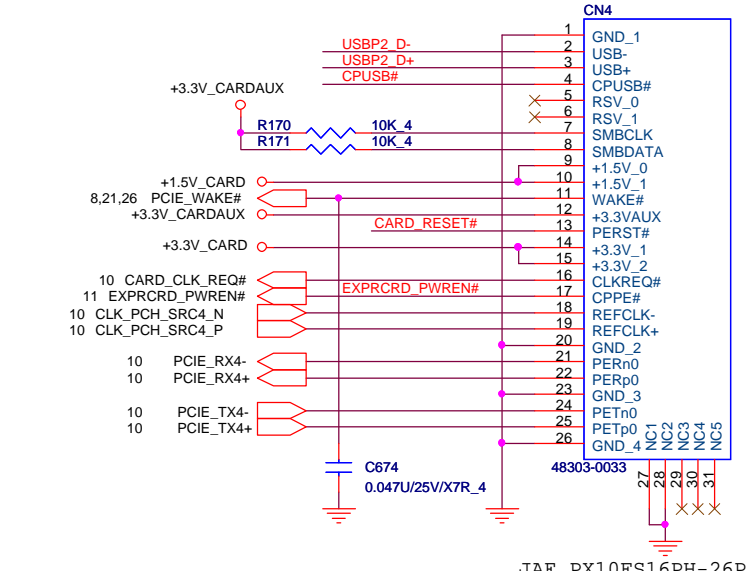
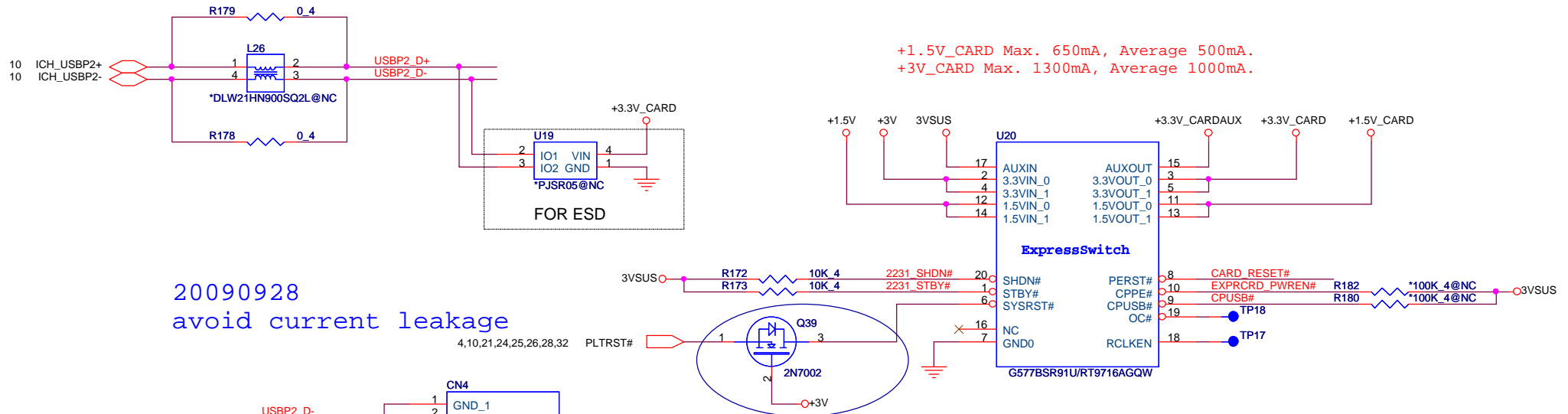



		<b>LD-Note Calpella UMA</b> <b>Quanta Computer Inc.</b>	
		<b>MINI-Card (WLAN)</b>	
Size	Document Number	Date:	Rev
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# Express Card

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

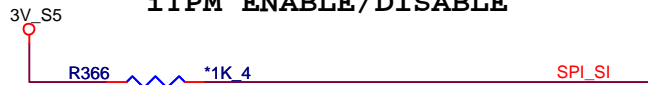




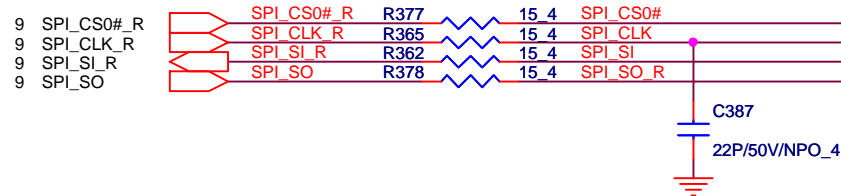
**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

Size	Document Number	Rev
Custom	Express Card	
Date:	Tuesday, November 17, 2009	Sheet 27 of 46

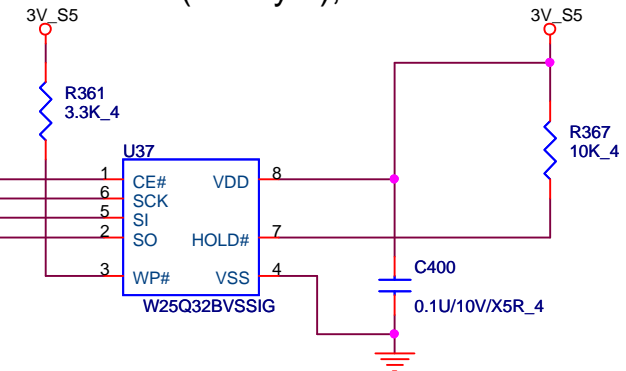
## iTPM ENABLE/DISABLE



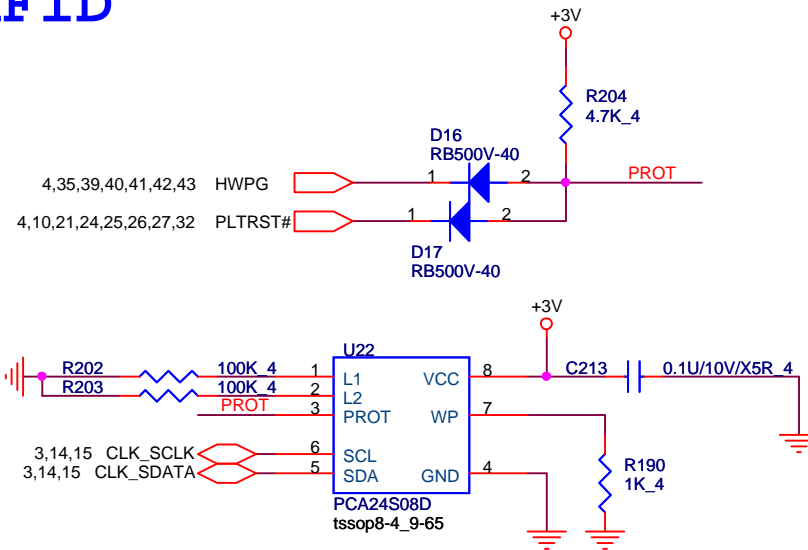
iTPM Function	R366
Enable	1K
Disable	NC



For PCH  
32Mbit (4M Byte), SPI



## RFID



**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

Size	Document Number	Rev
Custom	<b>iTPM &amp; RFID EEPROM</b>	

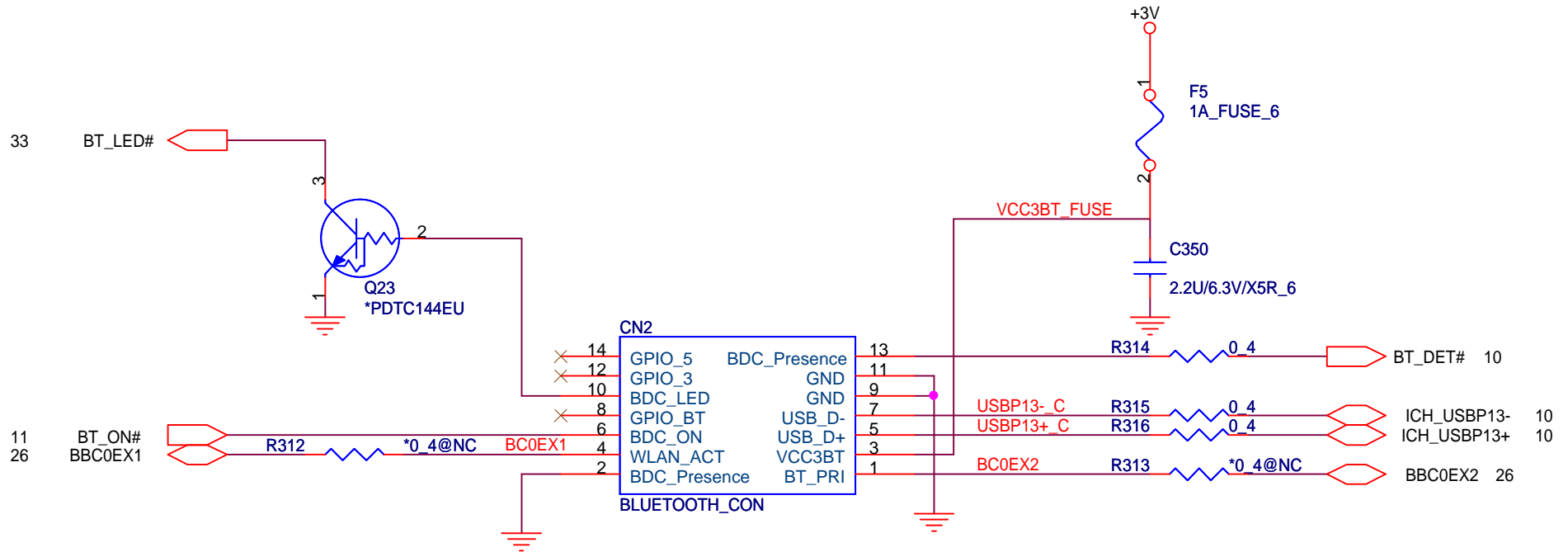
Date: Tuesday, November 17, 2009 Sheet 28 of 46

# 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



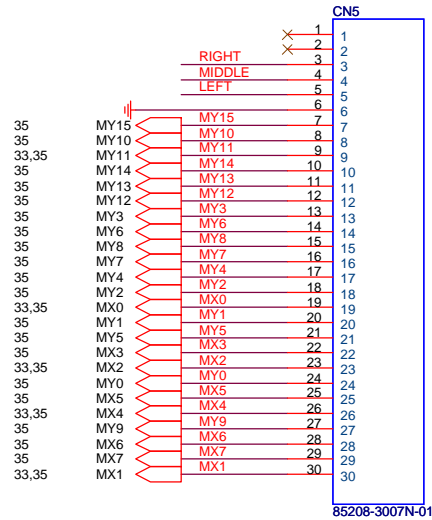
**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

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

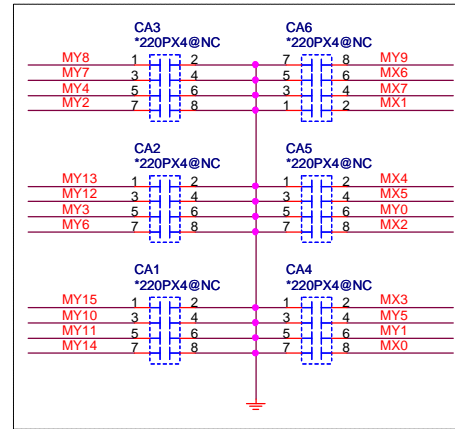


## KEYBOARD

### KEYBOARD connector



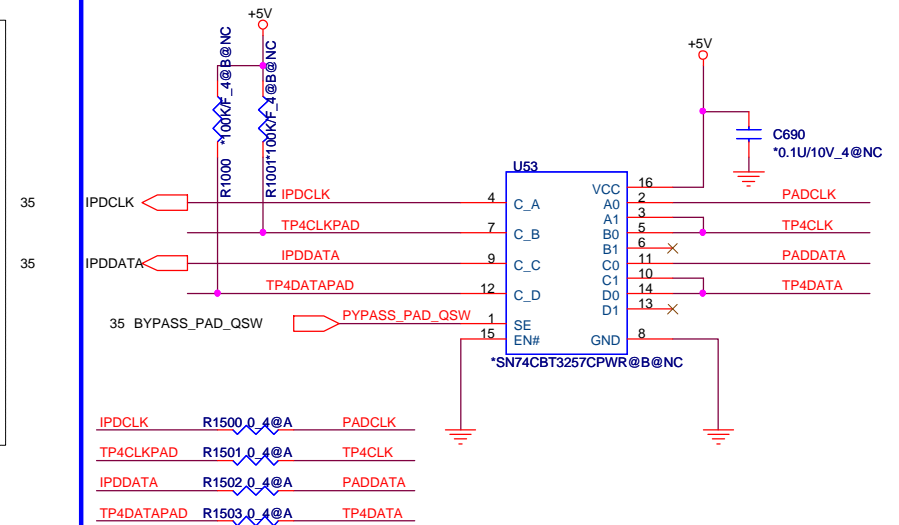
8,12,17,18,19,22,31,35,37 +5V  
9,16,21,24,33,34,35,37,38,41,43 3VPCU



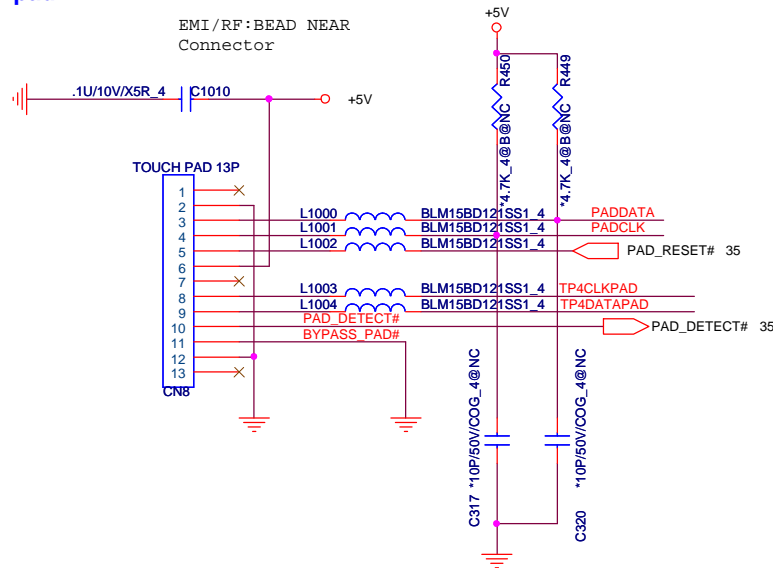
For EMI request

### Touch pad/Track point Switch

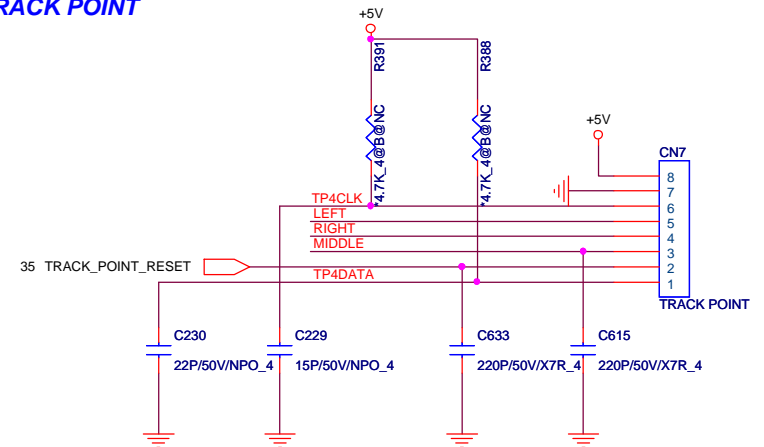
30



### Touch pad



### TRACK POINT



**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

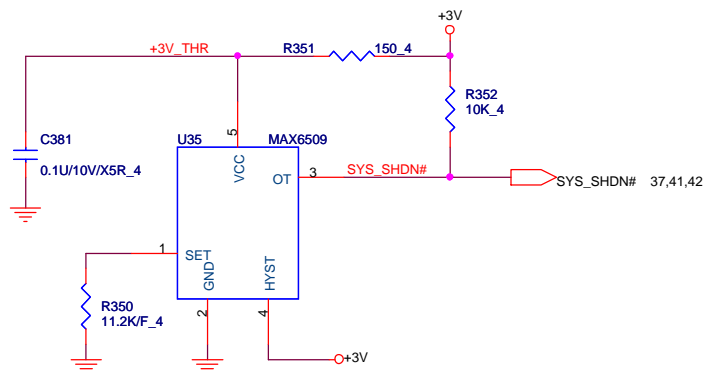
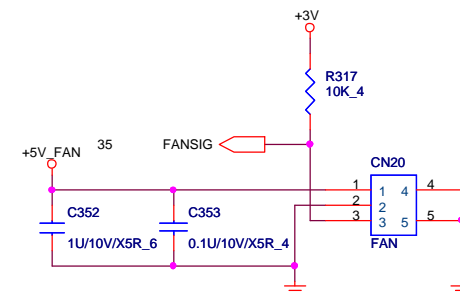
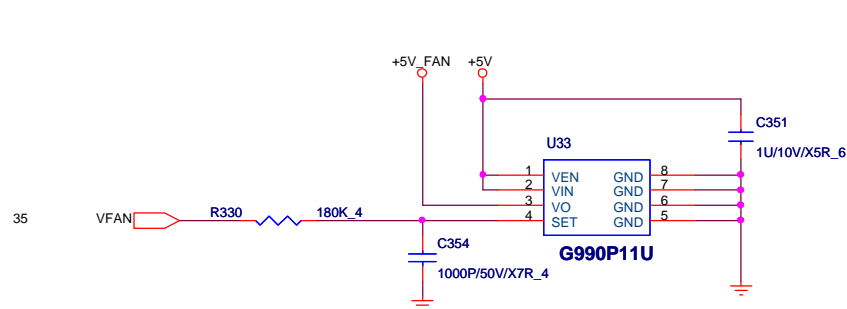
Size	Document Number	Rev
Custom	K/B, T/P	
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# FAN CONTROL

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

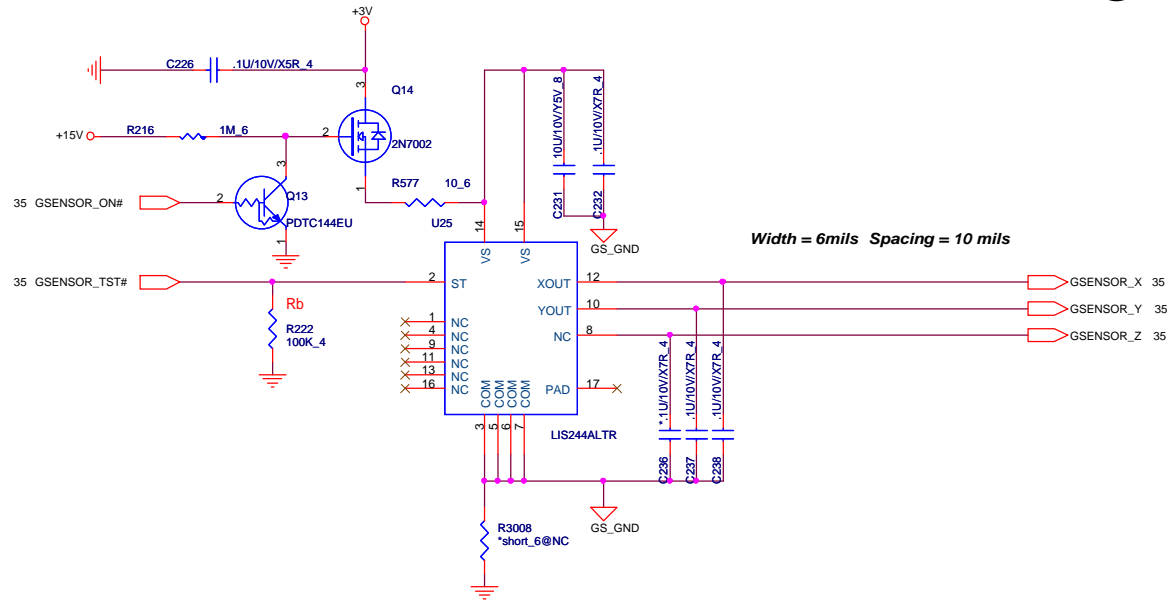
31



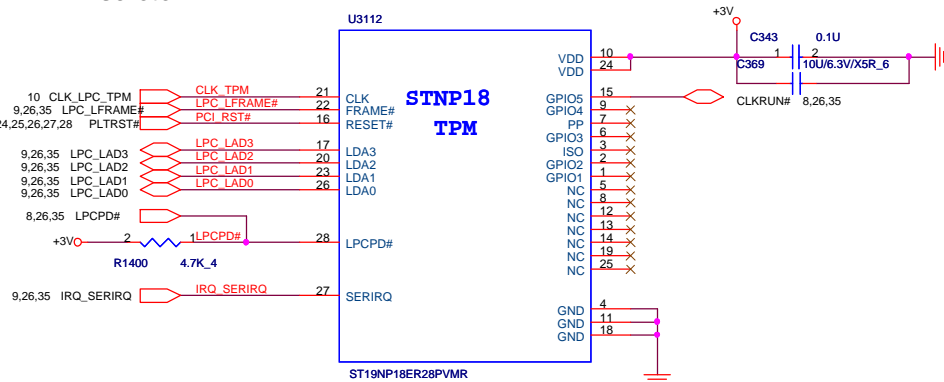
 <b>LD-Note Calpella UMA</b> <b>Quanta Computer Inc.</b>		Rev
Size Custom	Document Number	Date: Tuesday, November 17, 2009
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# G-SENSOR (2-Axial)

32



## Discrete TPM



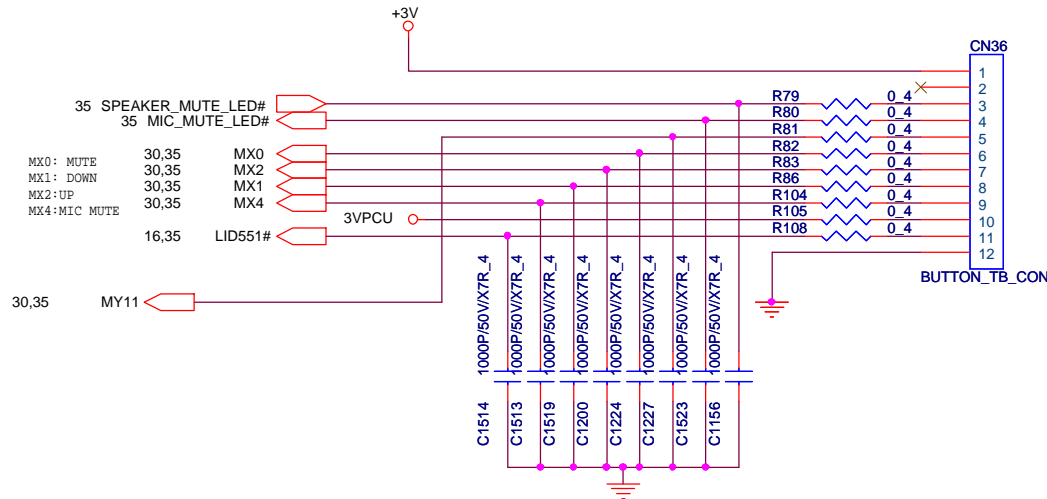
**G-Note Montevina**  
**Quanta Computer Inc.**

Size Document Number  
Custom G-SENSOR/Discrete TPM  
Date: Tuesday, November 17, 2009 Sheet 32 of 46  
Rev <RevCode>

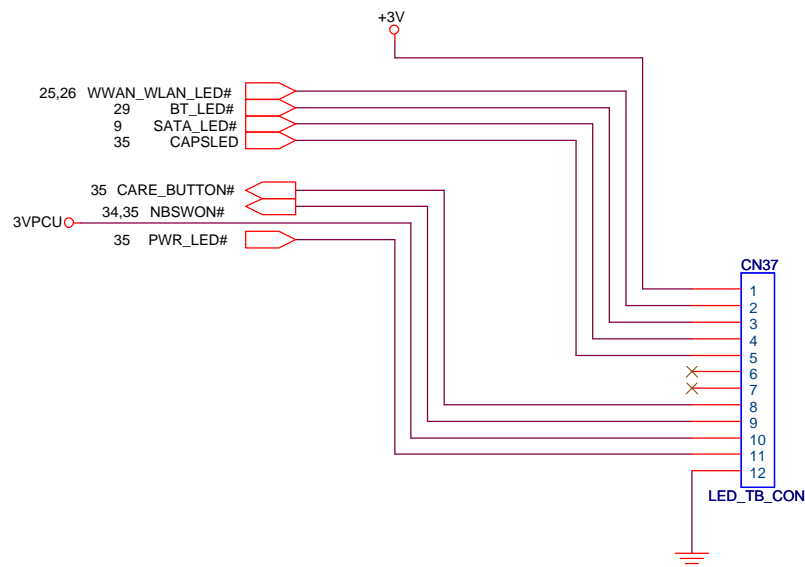
# Daughter Boards for LEDs & Ports

33

## FFC TO KBD LEFT SIDE CONNECTOR

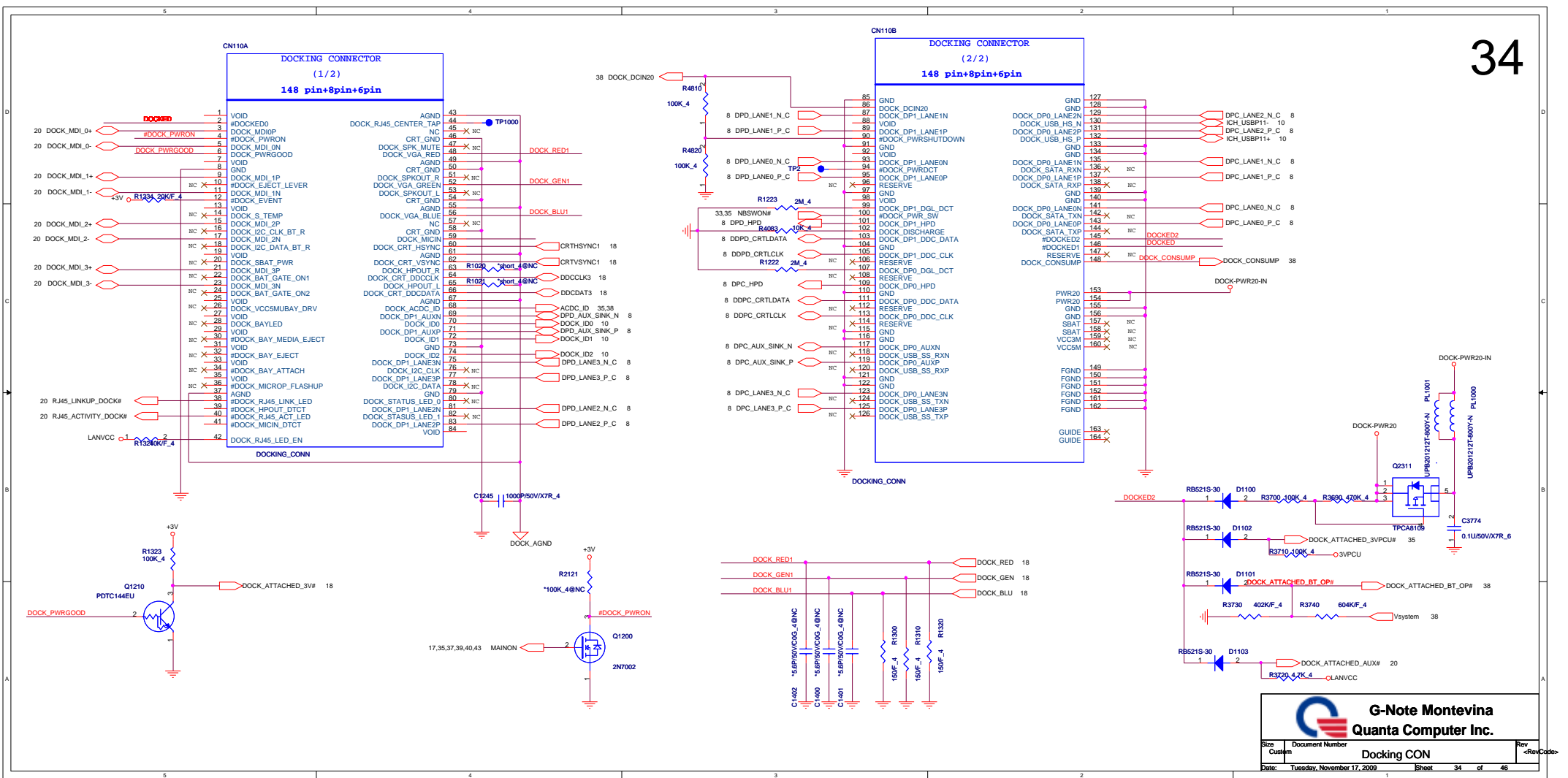


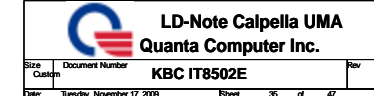
## FFC TO LED RIGHT SIDE CONNECTOR

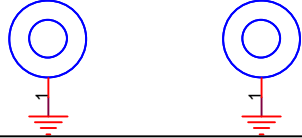
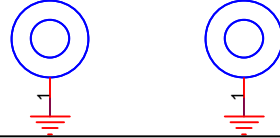
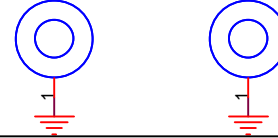
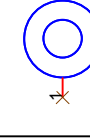
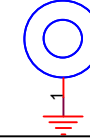
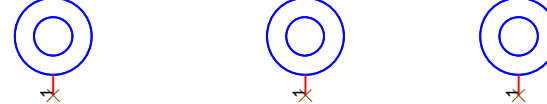
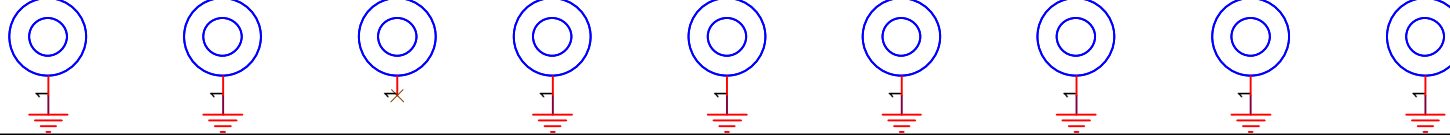
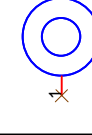
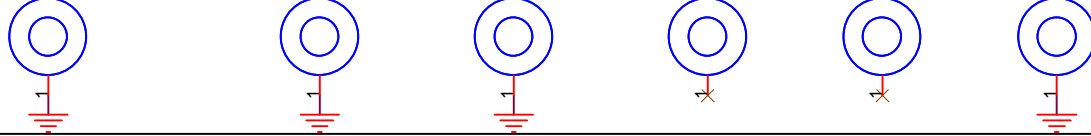
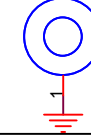
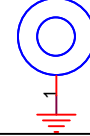
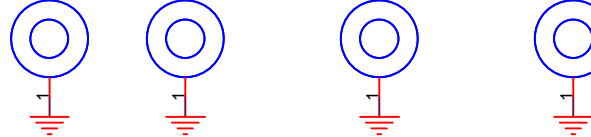
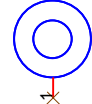
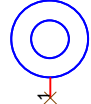
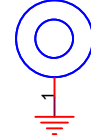
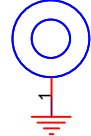


**G-Note Montevina**  
**Quanta Computer Inc.**

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Daughter Boards		
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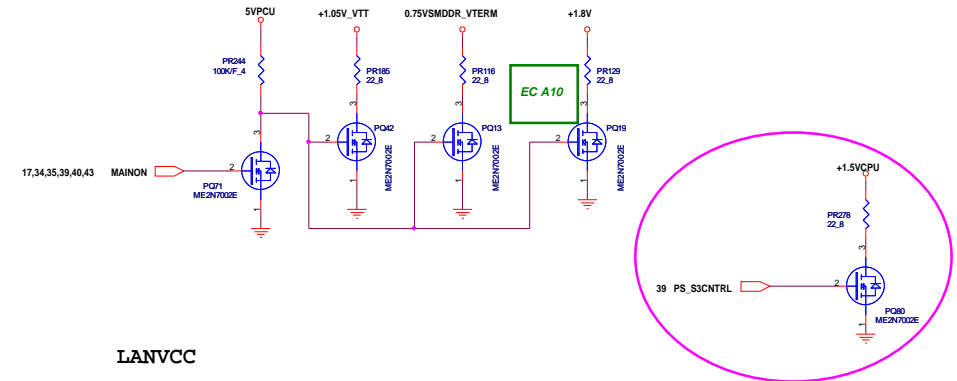
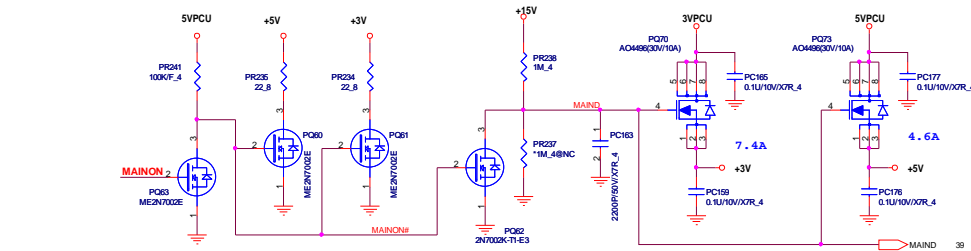




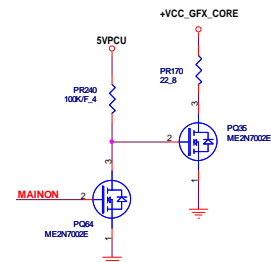
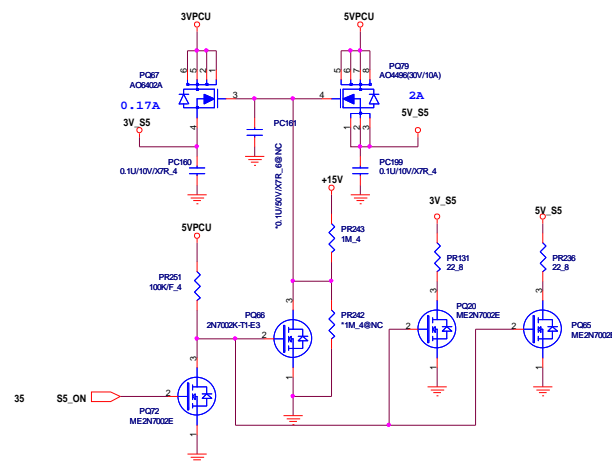
**MiniCard WLAN**HOLE13 H-TC197BC142D102P2  
HOLE14 H-TC197BC142D102P2**MiniCard WWAN**HOLE35 H-TC236BC102D64P2  
HOLE36 H-TC236BC102D64P2**Hole for PCH support**HOLE34 H-BC197D118PB  
HOLE33 H-BC197D118PB**Drink Hole**HOLE8  
\*O-GC8-2**Bluetooth nut**HOLE3  
H-TC197D118PT**Hole for CPU support**HOLE29 \*H-C142D142N@NC  
HOLE31 \*H-C142D142N@NC  
HOLE30 \*H-C142D142N@NC  
HOLE32 \*H-C142D142N@NC**VGA nut**HOLE27 \*H-C276D87P2  
HOLE28 O-GC8-1  
HOLE26 H-TC236BC216D87P2**Boundary Hole**HOLE7 \*H-C276D87P2  
HOLE4 \*H-C276D91P2  
HOLE5 \*H-C86D86N@NC  
HOLE15 \*H-TC236BC216D87P2H-C209D209N  
HOLE10 \*H-C276D91P2@NC  
HOLE9 \*H-BC276D91P2  
HOLE17 \*H-C276D91P2@NC  
HOLE2 \*H-C276D91P2@NC**Break Hole**HOLE11  
\*o-gc4@NC**Boundary Hole**HOLE6 \*H-TSHAPEBC276D91P2-1@NC  
HOLE16 \*H-C276D91P2@NC  
HOLE25 \*H-C276D91P2@NC  
HOLE23 \*H-C79D79N  
HOLE21 \*H-BC276D87PB  
HOLE24 \*H-C157D91P2@NC**K/B Control/B Nut**HOLE18  
\*H-TC189D122PT**Boundary Hole (ODD)**HOLE12  
\*H-C276D91P2@NC**PAD**GP2 \*SPAD-SPE1NP  
GP3 \*SPAD-RE197X217NP  
GP1 \*RE236X494NP  
GP4 \*RE270X220NPHOLE19  
O-GC2A-1HOLE20  
O-GC2A-2HOLE22  
\*H-TC181D93PTHOLE37  
\*H-TC189BC158D122P2**LD-Note Calpella UMA**  
**Quanta Computer Inc.**

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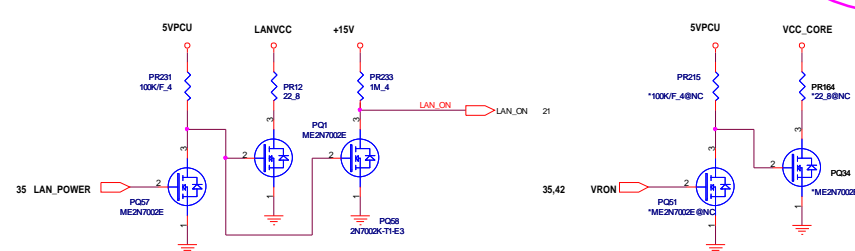




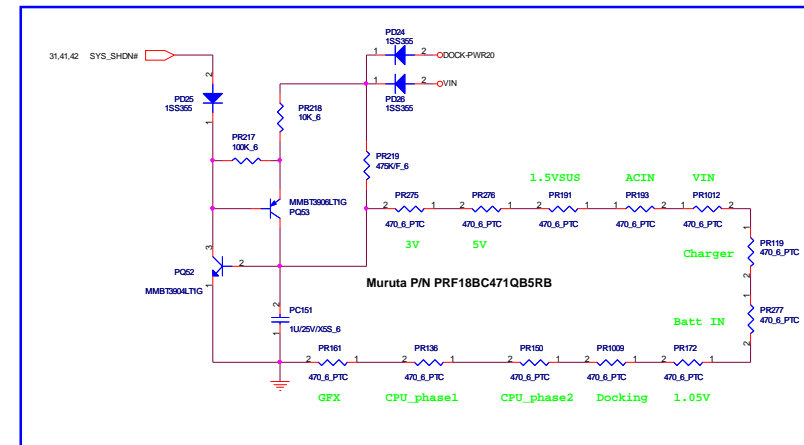
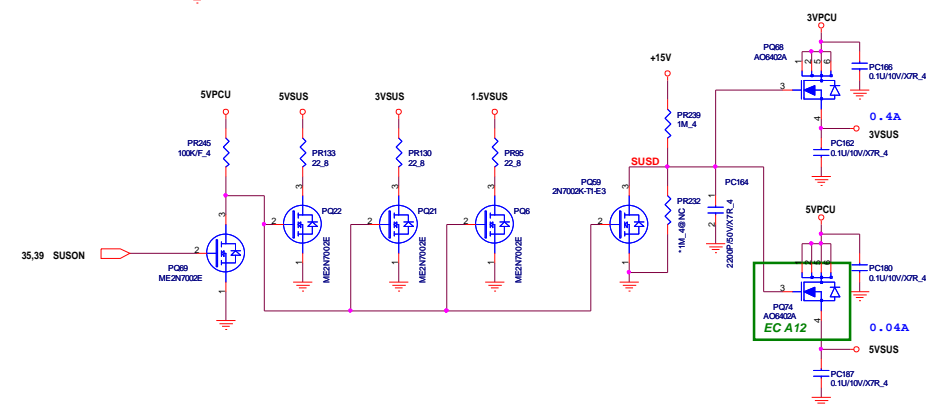
## 3V\_S5, 5V\_S5



## LANVCC

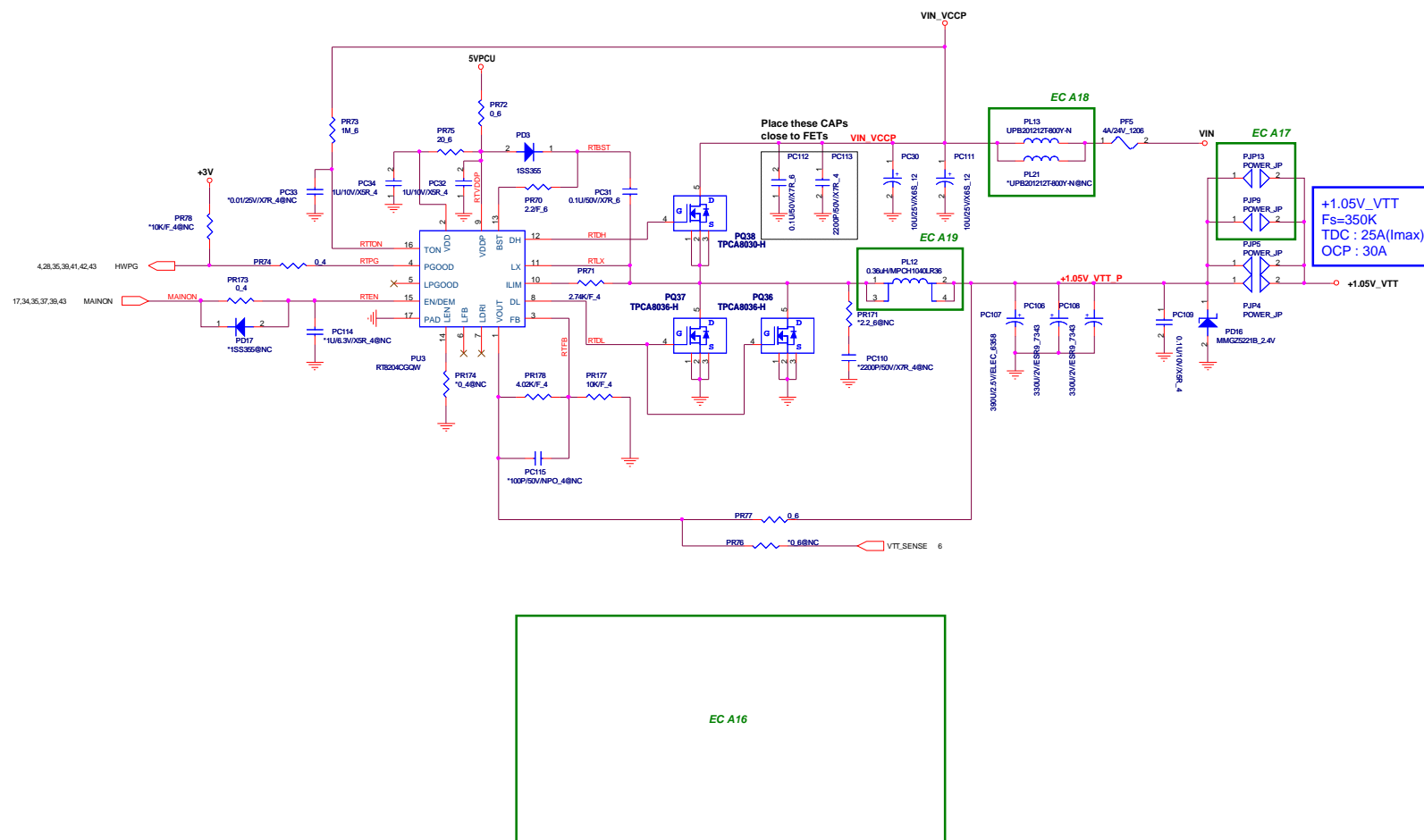


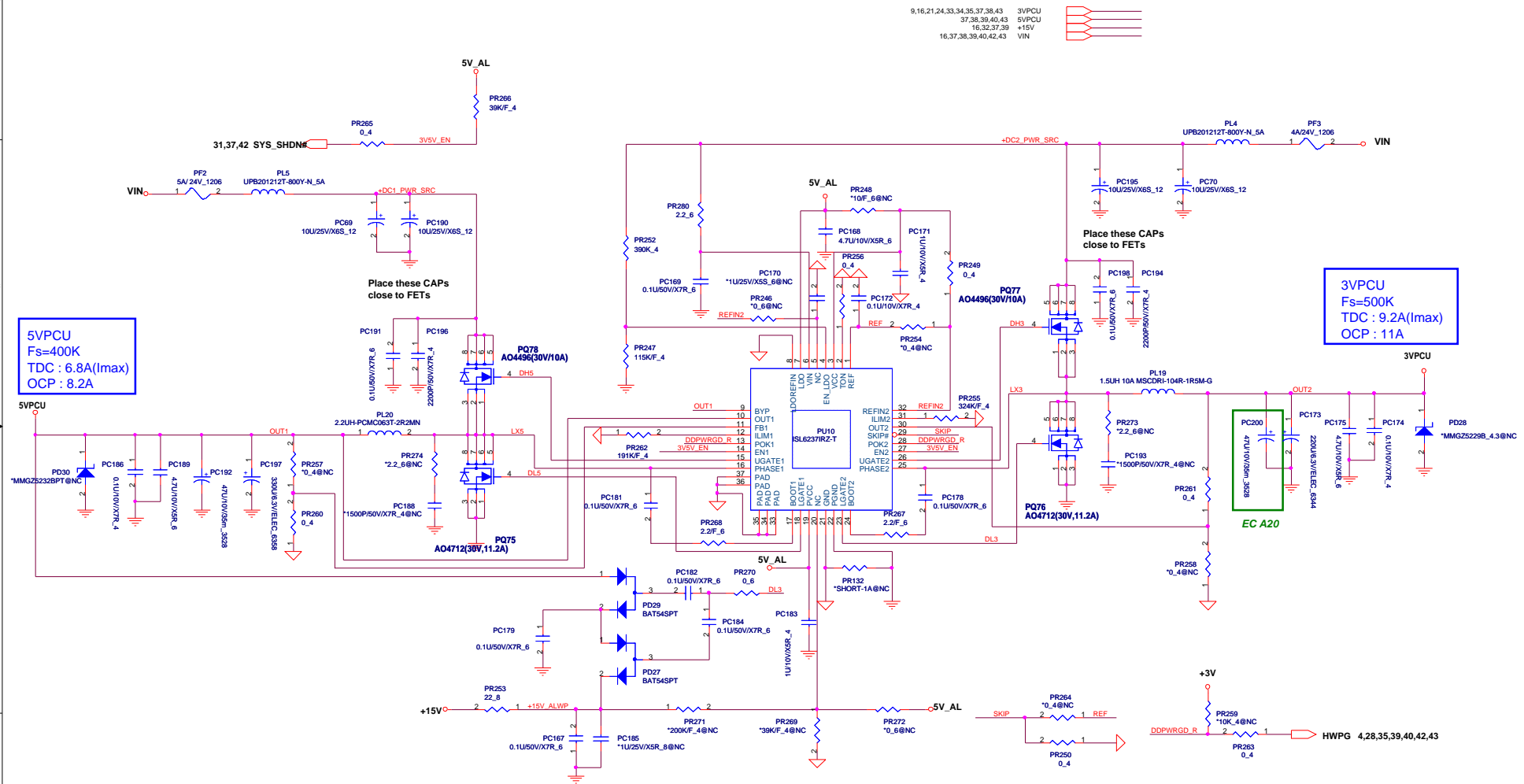
## 3VSUS, 5VSUS

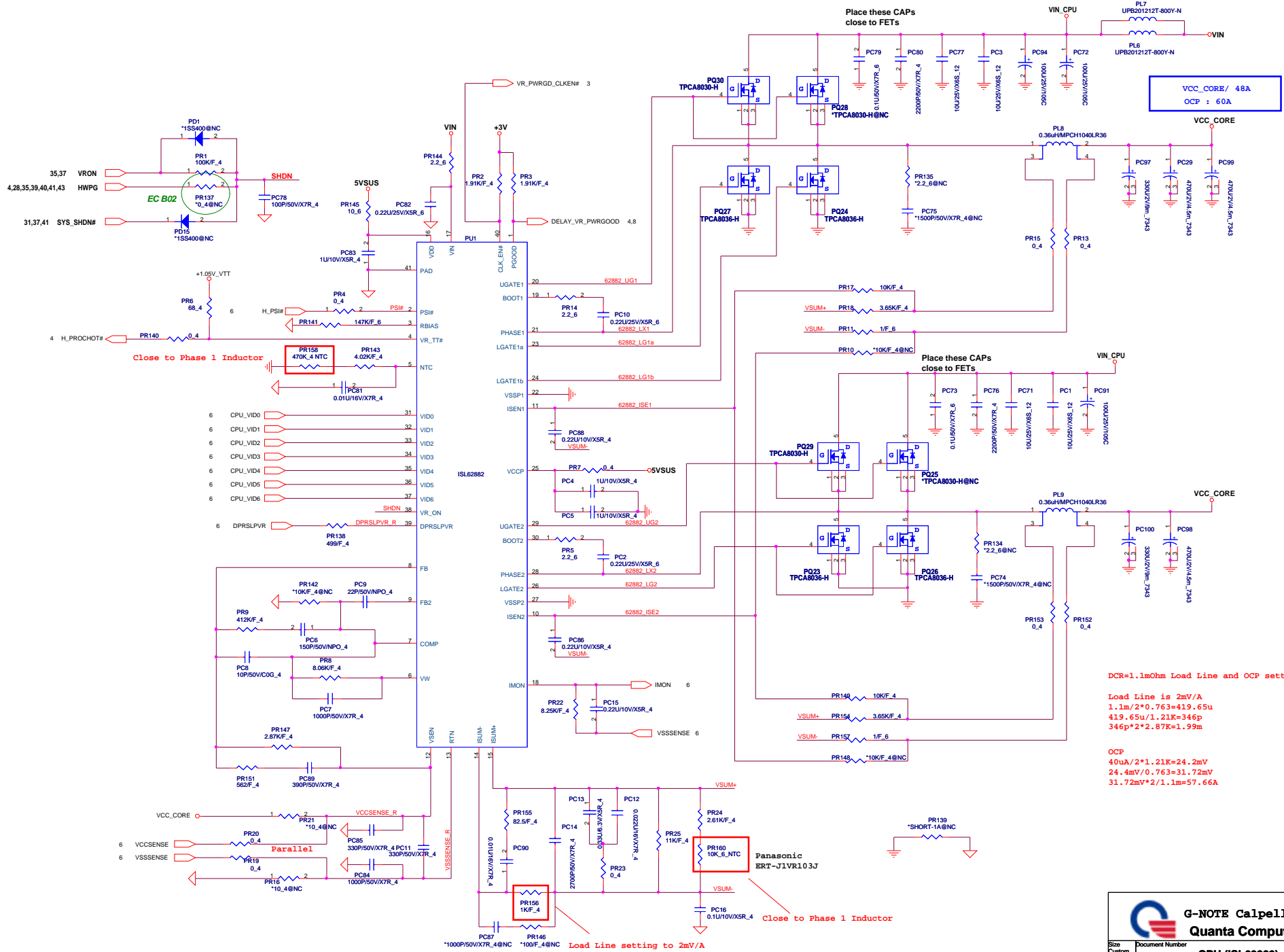


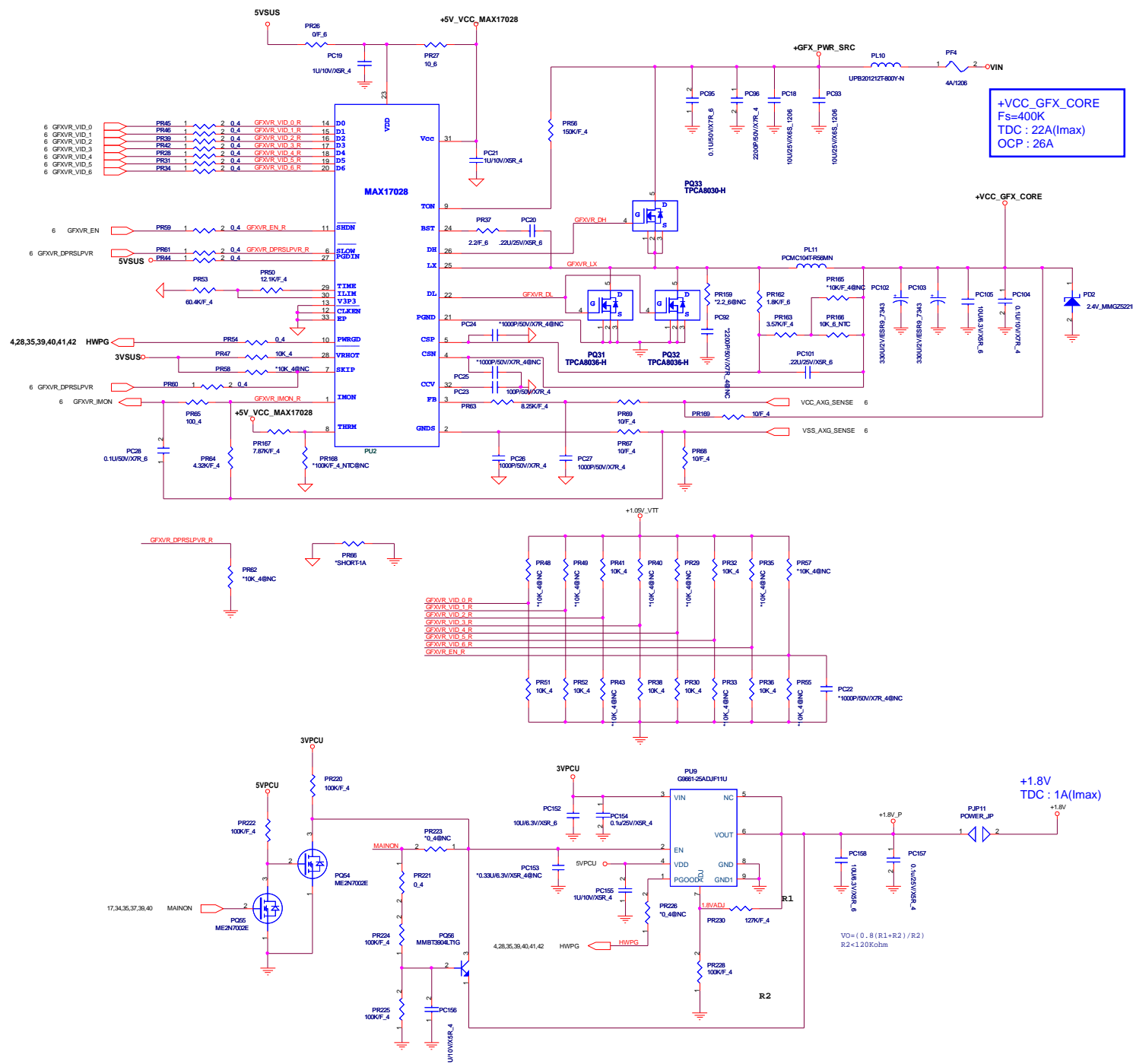












## Revision History

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





