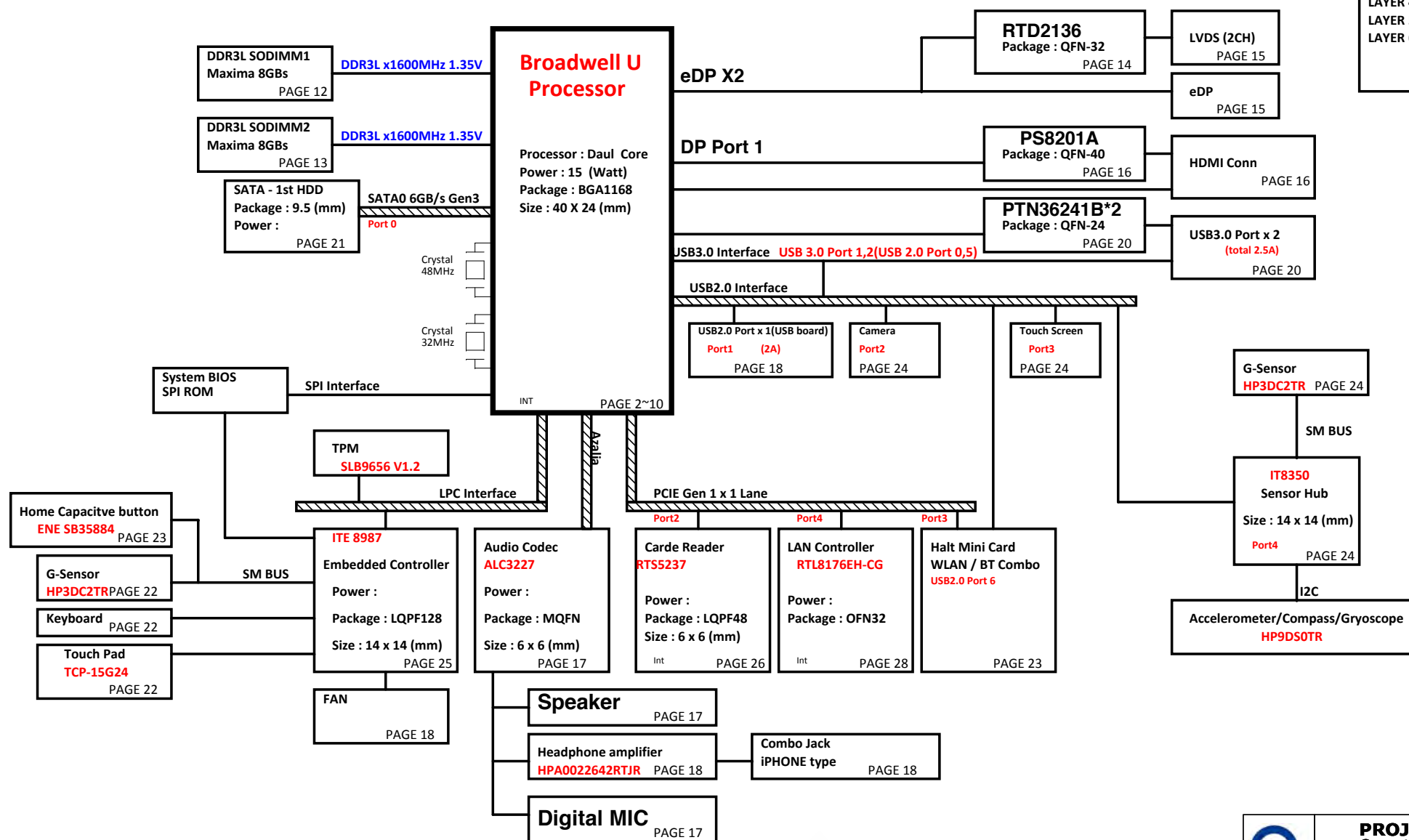


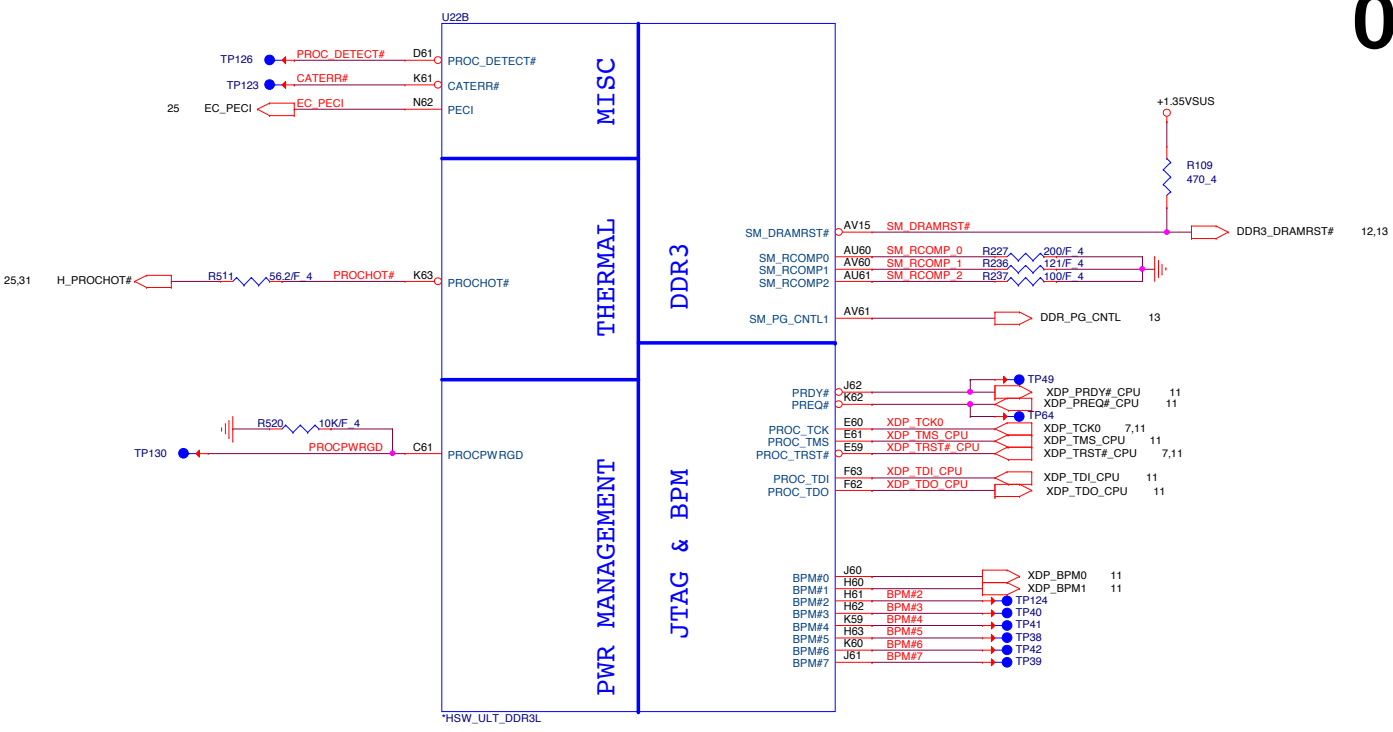
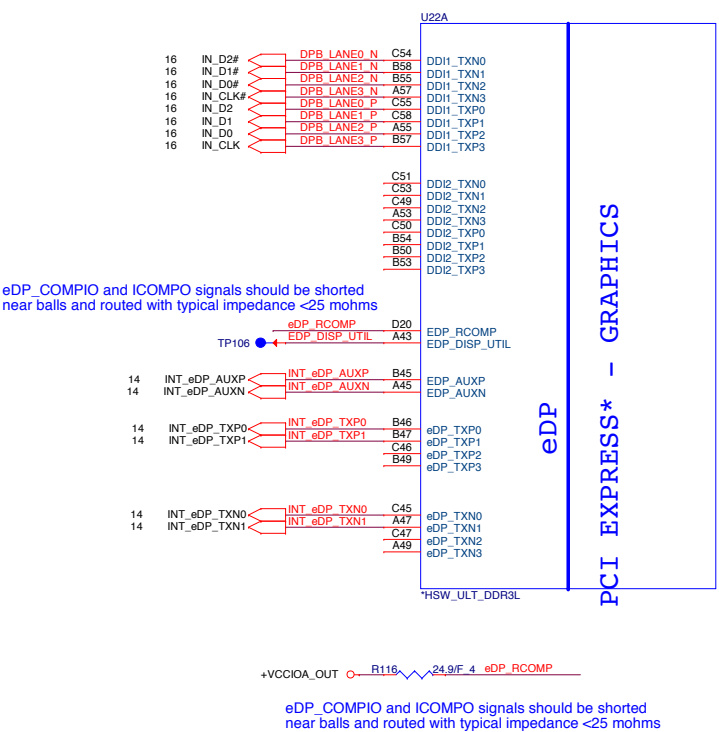
# 13"/15"

## Y61 Intel Crescent Bay ULT Platform Block Diagram

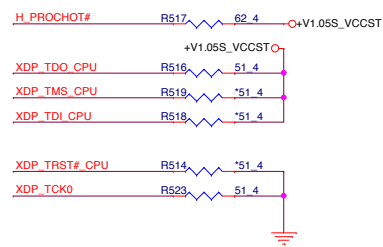
PCB 6L STACK UP

LAYER 1 : TOP  
LAYER 2 : SGND  
LAYER 3 : IN1(High)  
LAYER 4 : IN2(Low)  
LAYER 5 : SVCC  
LAYER 6 : BOT

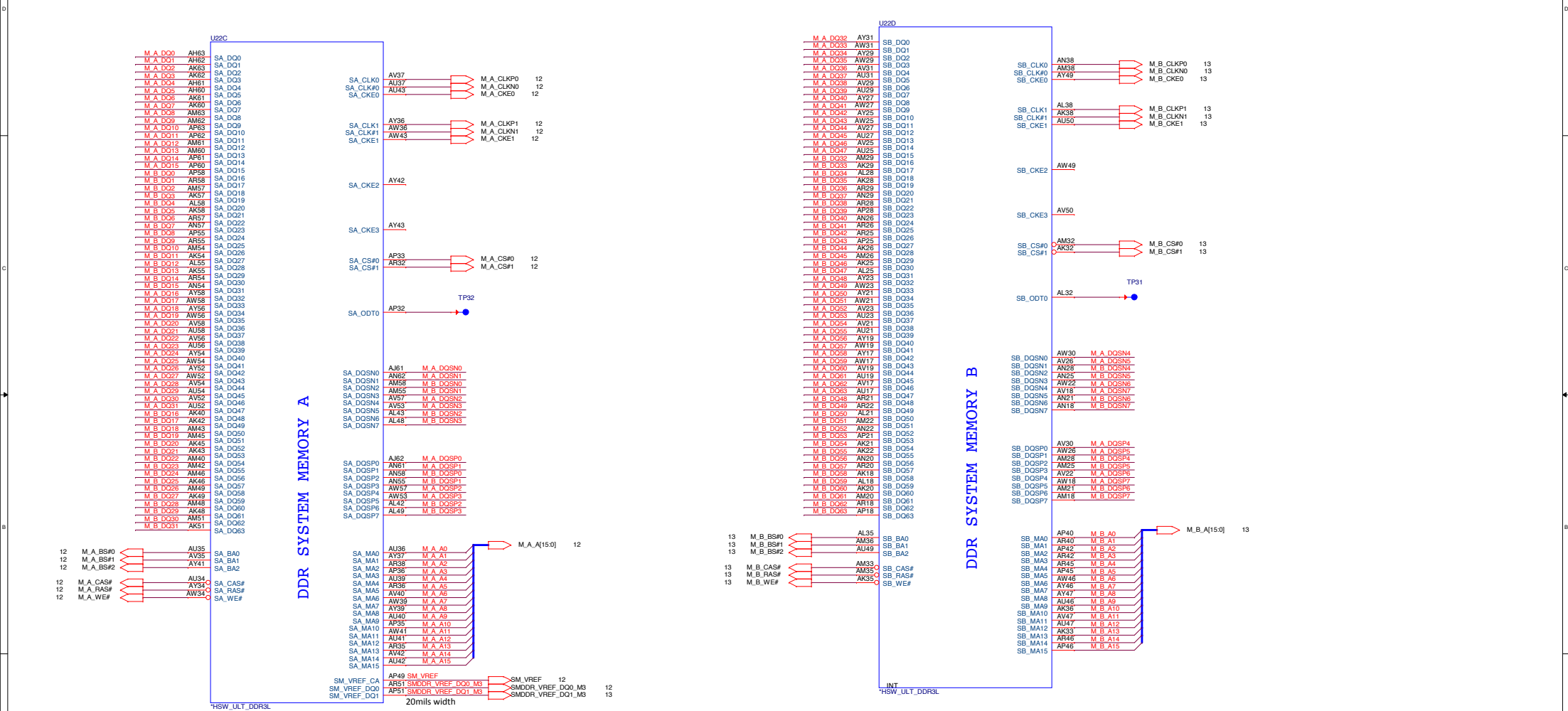


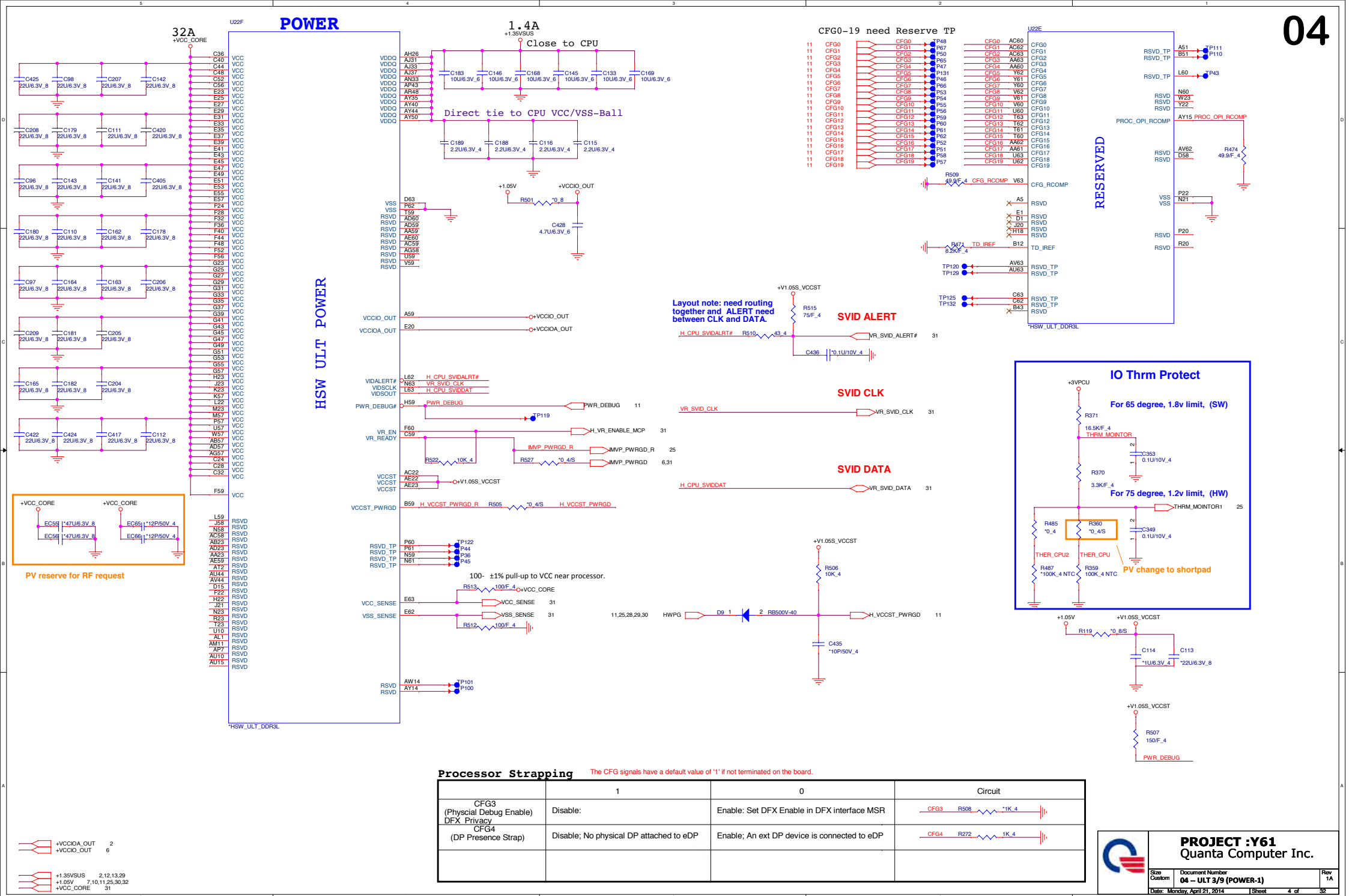


Processor pull-up (CPU)



## Haswell ULT Processor (DDR3L)

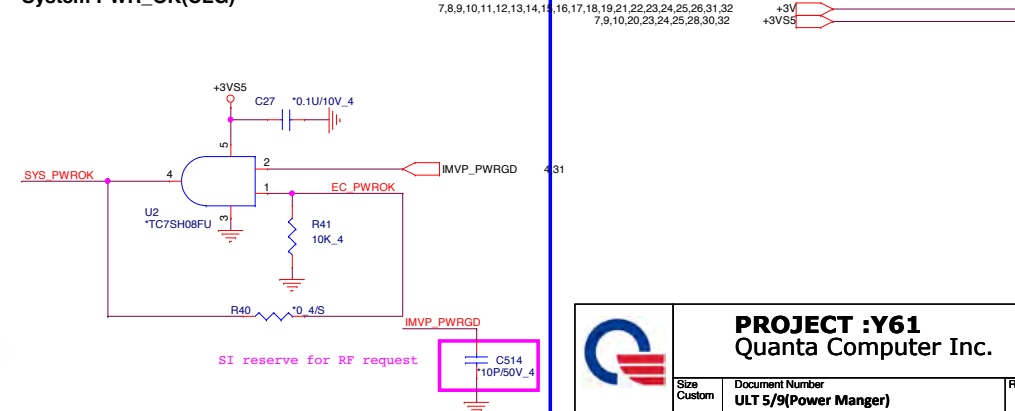
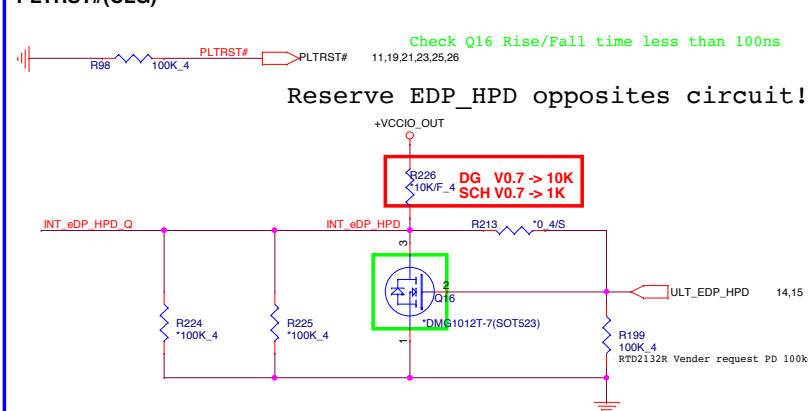
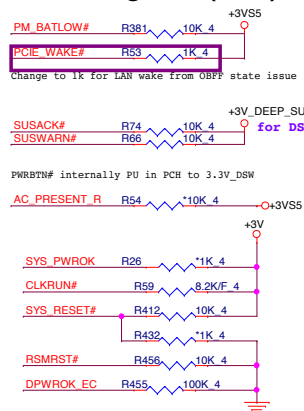




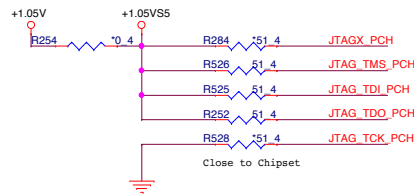




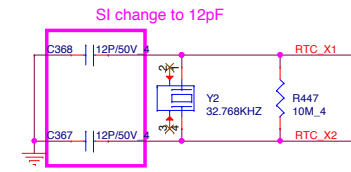
### System PWR\_OK(CLG)



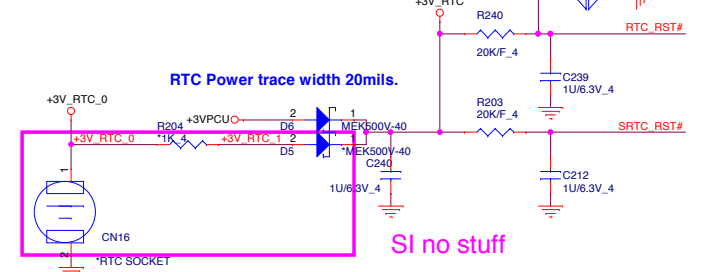
07



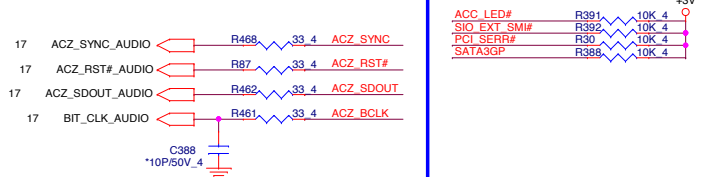
## RTC Clock 32.768KHz



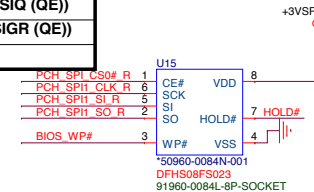
30mils J1 \*SOLDERJUMPER-2



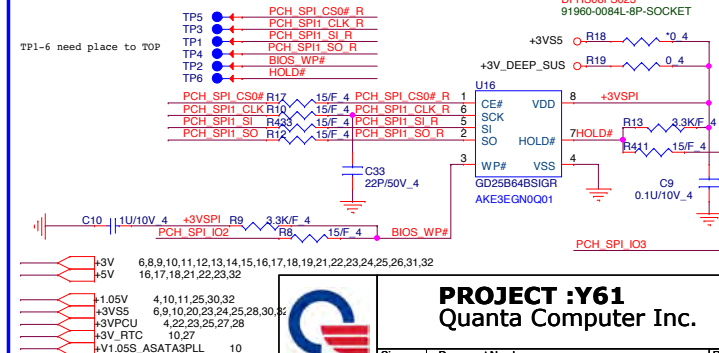
## GPIO Pull UP



### 4M SPI ROM Socket



TP1-6 need place to TOP



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Quanta Computer Inc.

Size Custom	Document Number <b>ULT 6/9(SATA/HDA)</b>	Rev 1A
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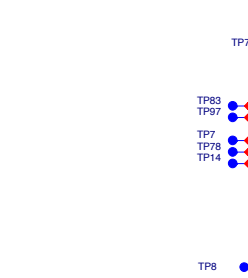
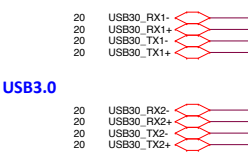
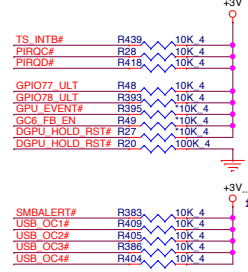
### PCH Strap Table

Pin Name	Strap description	Sampled	Configuration	Circuit						
SPKR	No reboot mode setting	PWROK	0 = Default (weak pull-down 20K) 1 = Setting to No-Reboot mode							
SDIO_D0 /GPIO66	Top-Block Swap	PWROK	0 = "top-block swap" mode 1 = Default (weak pull-up 20K)							
INTVRMEN	Integrated 1.05V VRM enable	ALWAYS	Should be always pull-up							
HDA_SDO /I2S0_TXD	Flash Descriptor Security Only for Interposer	PWROK	0 = Default (weak pull-down 20K) 1 = Can be Overriden							
GSPI0_MOSI /GPIO86	Boot BIOS Selection	PWROK	<table border="1"><thead><tr><th>GNT0#</th><th>Boot Location</th></tr></thead><tbody><tr><td>1</td><td>LPC</td></tr><tr><td>0</td><td>SPI(Default)</td></tr></tbody></table>	GNT0#	Boot Location	1	LPC	0	SPI(Default)	
GNT0#	Boot Location									
1	LPC									
0	SPI(Default)									
GPIO15	TLS Confidentiality	PWROK	0 = ME Crypto Transport Layer Security cipher suite with no confidentiality(Default) 1 = Intel ME Crypto TLS cipher suite with confidentiality							
DSWVRMEN	Deep Sx Well On-Die Voltage Regulator Enable	ALWAYS	Should be always pull-up							

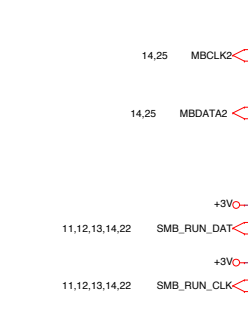


# Lynx Point-LP Platform Controller Hub (HDA, JTAG, SATA)

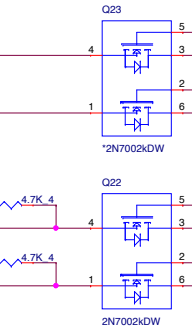
## PCI/USBOC# Pull-up(CLG)



## SMBus/Pull-up(CLG)



## CLK\_REQ/Strap Pin(CLG)



## K501UB



## CLK\_REQ/Strap Pin(CLG)



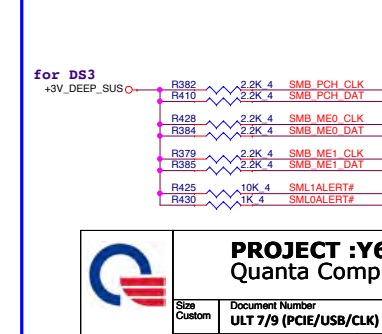
## CLK\_REQ/Strap Pin(CLG)



## CLK\_REQ/Strap Pin(CLG)



## SMBus/Pull-up(CLG)



**PROJECT :Y61**  
**Quanta Computer Inc.**

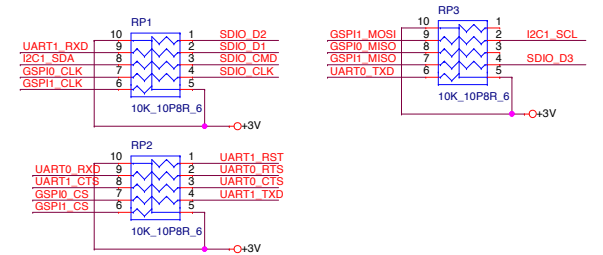
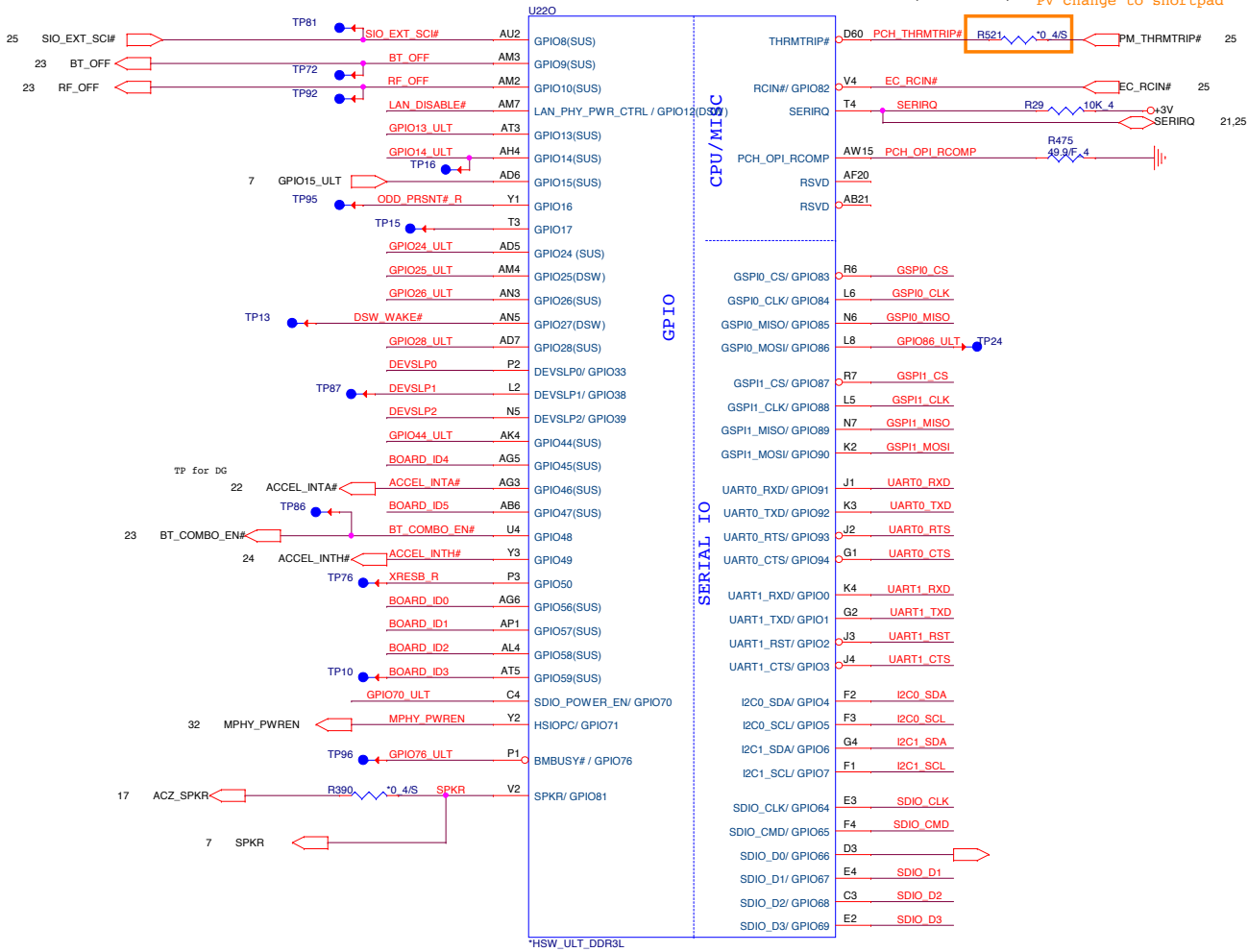
Size	Document Number	Rev
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6,7,9,10,11,12,13,14,15,16,17,18,19,21,22,23,24,25,26,31,32  
+3V  
+3V\_DEEP\_SUS

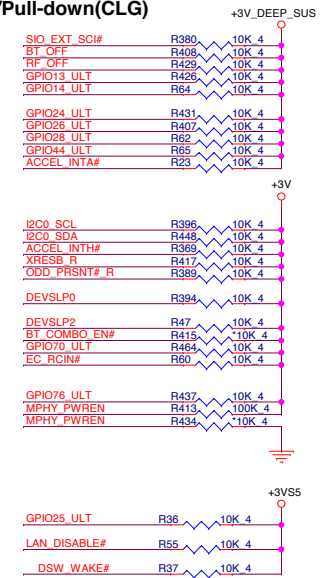


# Lynx Point-LP Platform Controller Hub (HDA,JTAG,SATA) Haswell (GPIO)

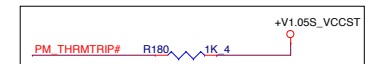
PV change to shortpad



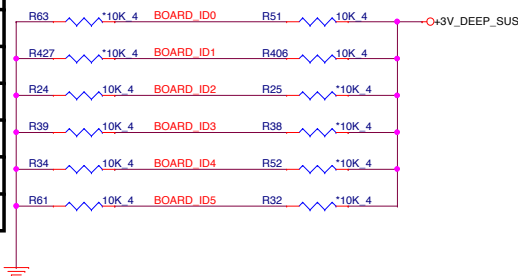
## GPIO Pull-up/Pull-down(CLG)



## Close to EC



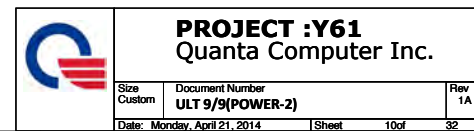
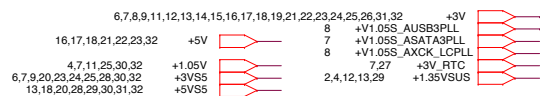
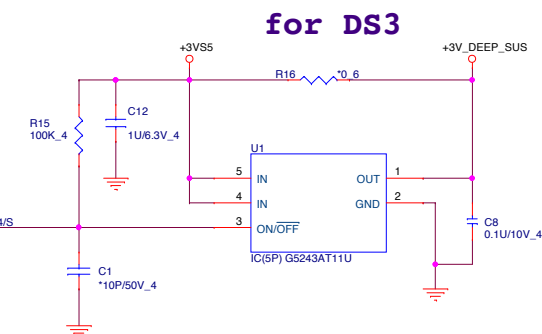
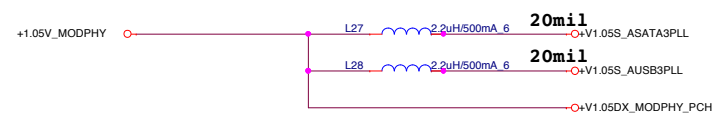
Model	BOARD_ID5	BOARD_ID4	BOARD_ID3	BOARD_ID2	BOARD_ID1	BOARD_ID0
13" clamshell wo/TS	0	0	0	0	0	1
13" convertible w/TS	0	0	0	0	1	0
15" convertible w/TS+ Giga NIC	0	0	0	0	1	1
13" clamshell w/TS (Reserve)	0	0	0	0	0	0
13" convertible wo/TS (Reserve)	0	0	0	0	0	0
15" convertible w/TS (Reserve)	0	0	0	0	0	0

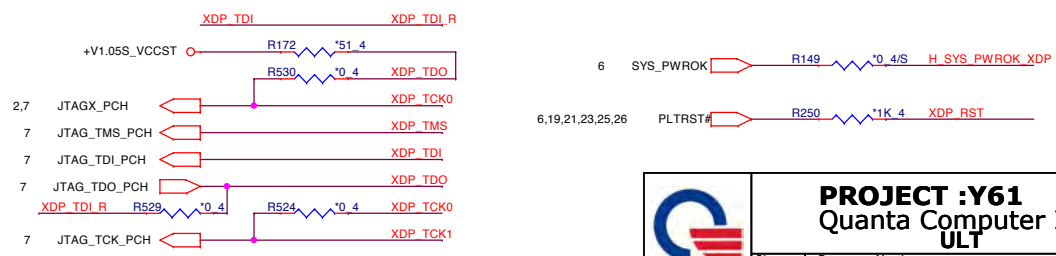
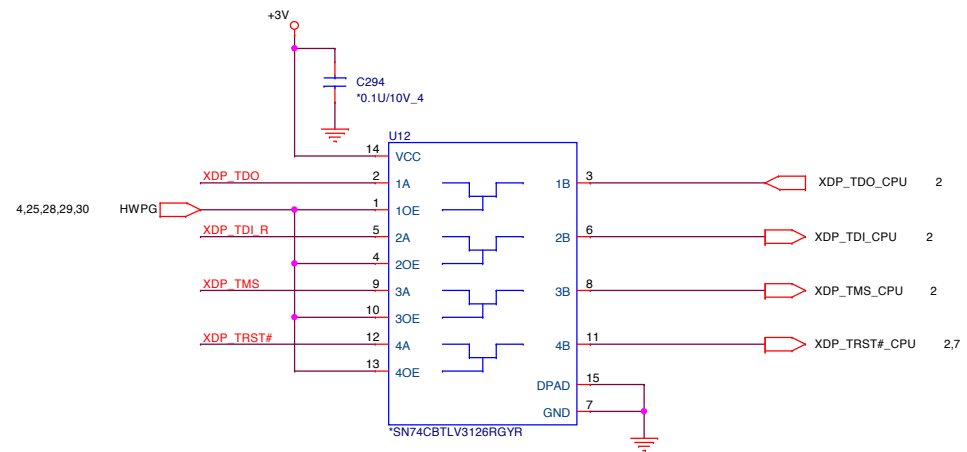
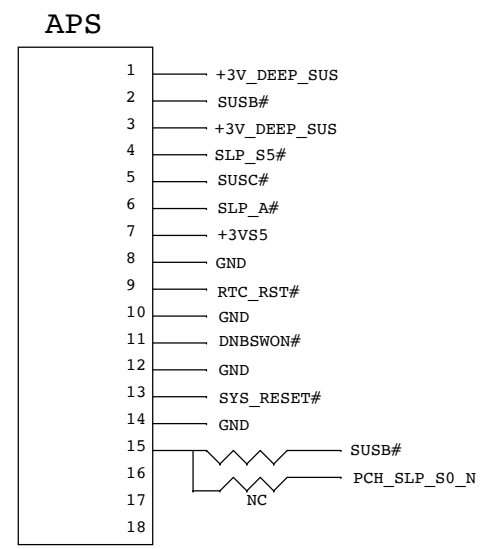
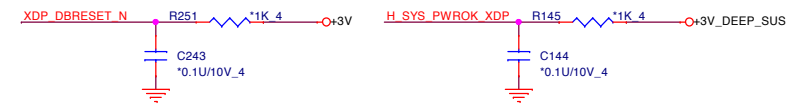
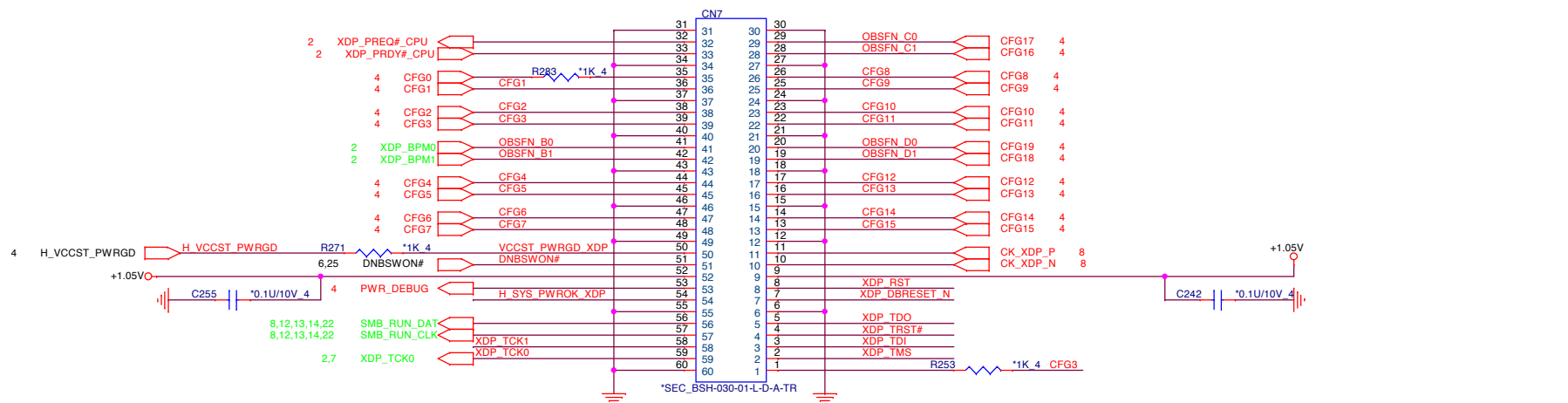


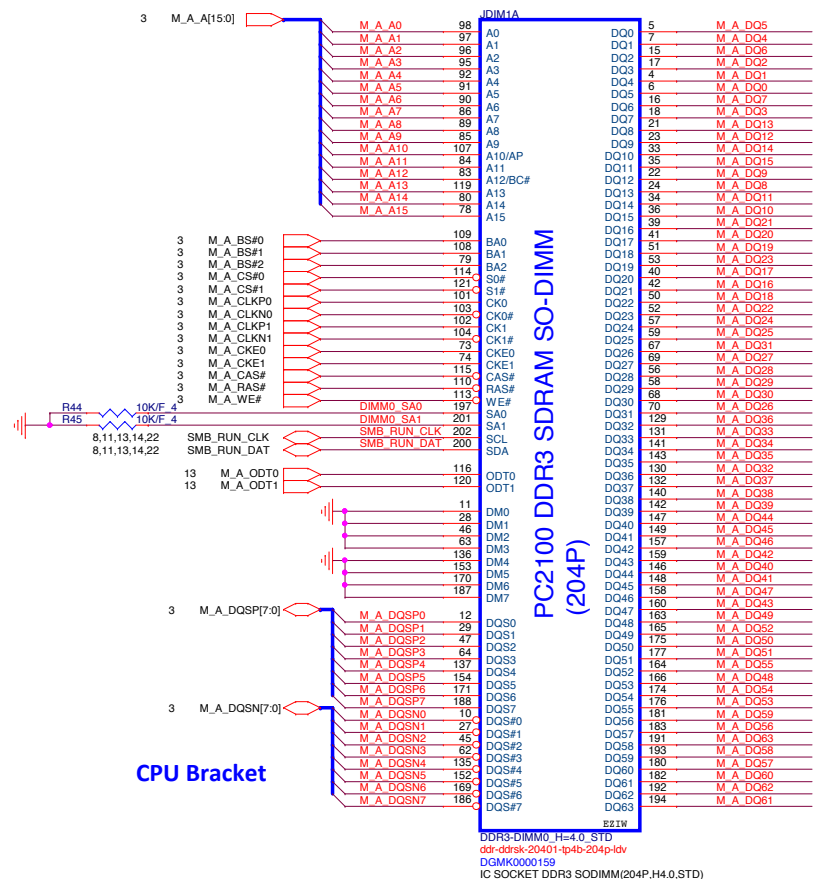
6,7,8,10,11,12,13,14,15,16,17,18,19,21,22,23,24,25,26,31,32  
6,7,10,20,23,24,25,28,30,32

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**Quanta Computer Inc.**

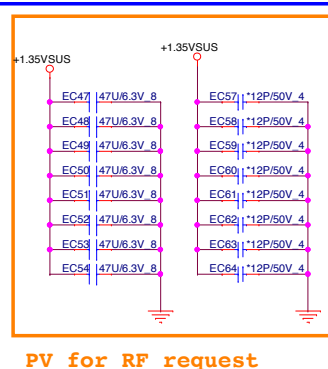
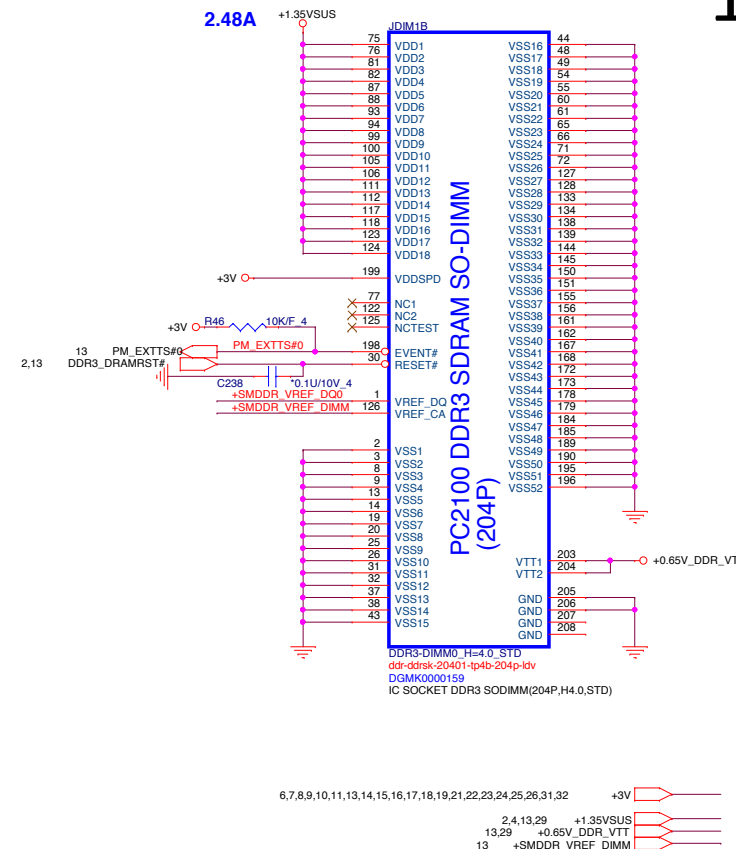
Size Custom	Document Number <b>ULT 8/9 (GPIO/MISC)</b>	Rev <b>1A</b>
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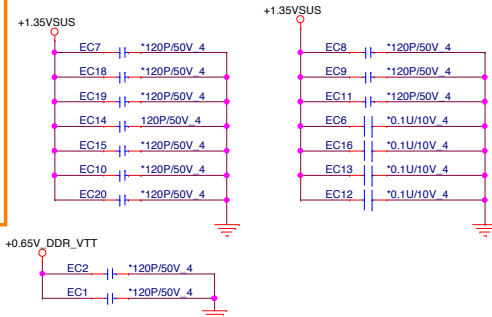
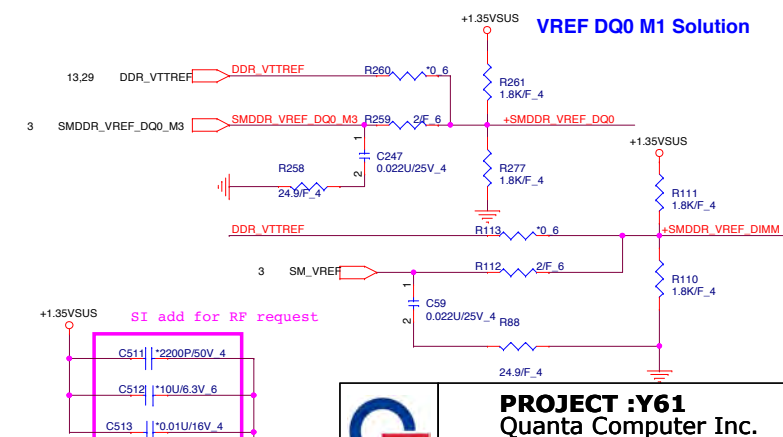
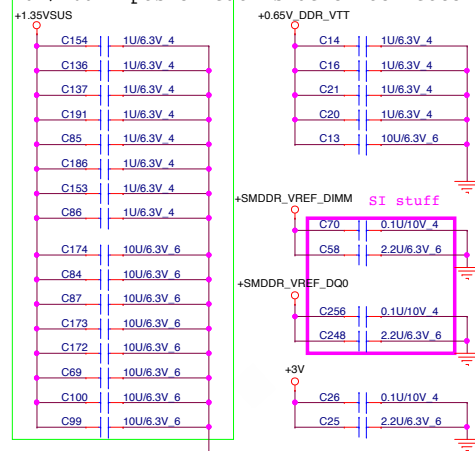




M\_A\_DQ[63:0] 3

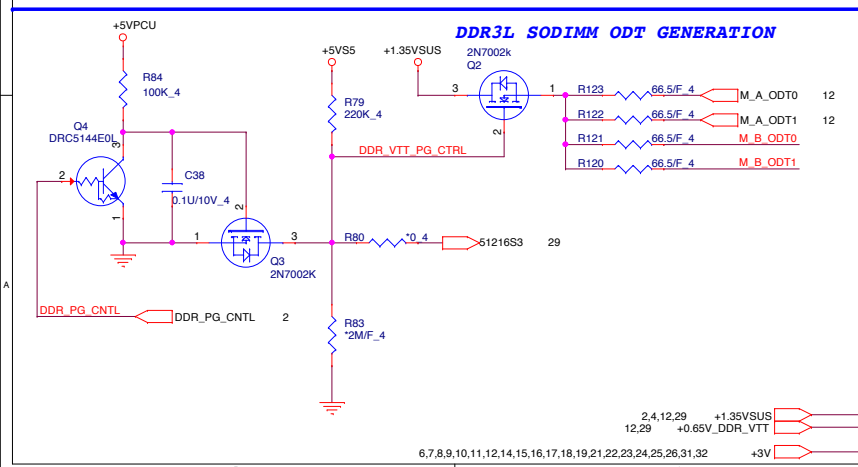
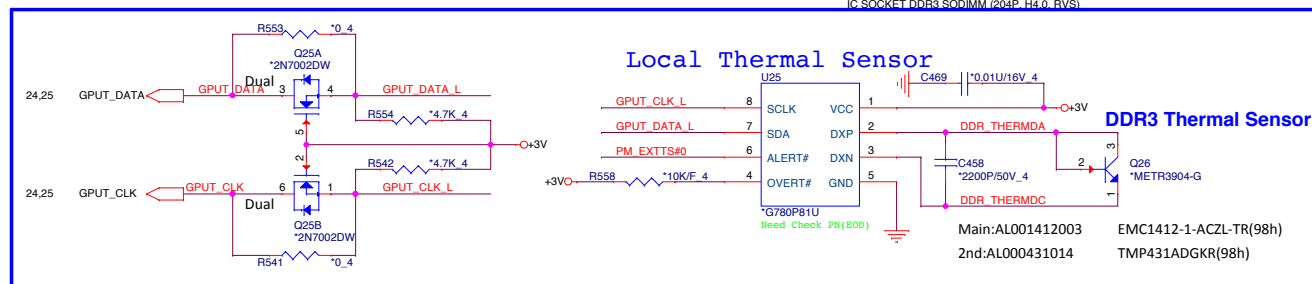
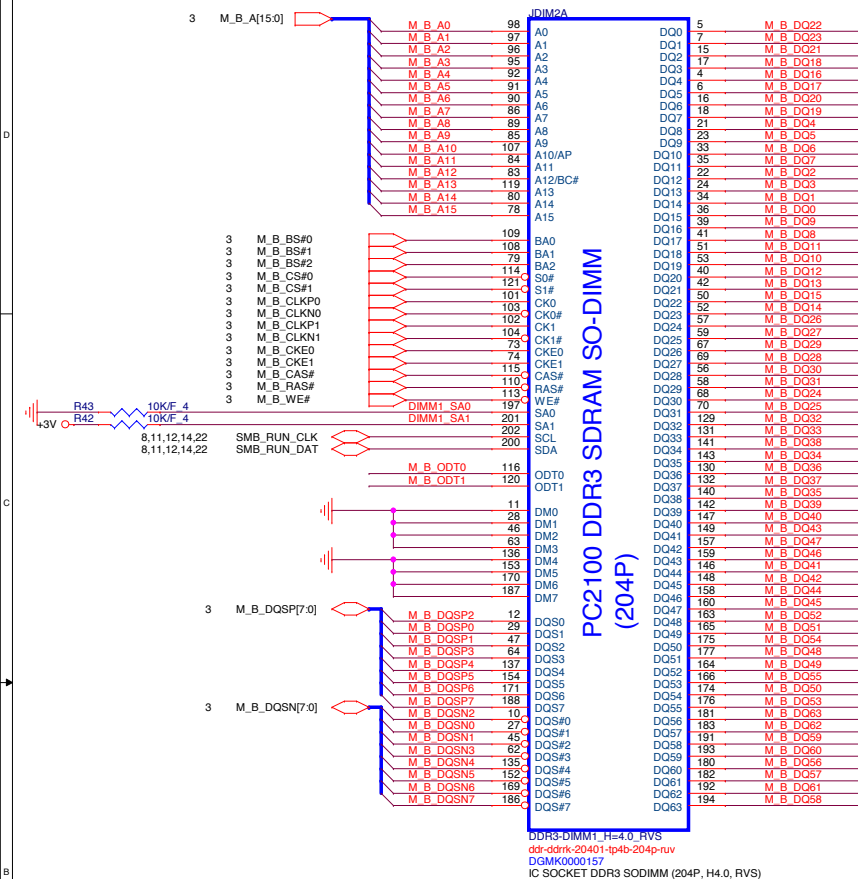


## For EMI RESERVE

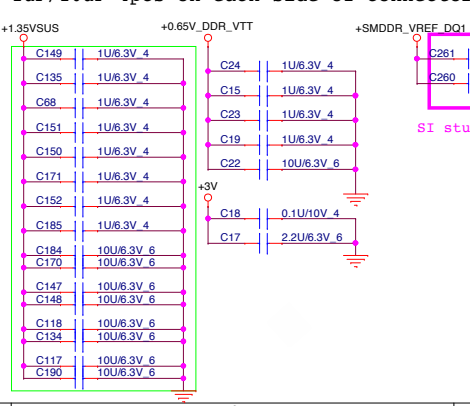
Place these Caps near So-Dimm0.  
1uF/10uF 4pcs on each side of connector

**PROJECT :Y61**  
**Quanta Computer Inc.**

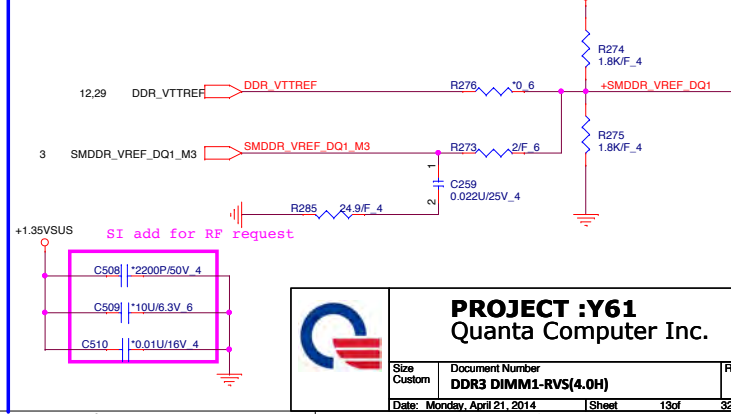
Size	Document Number	Rev
Custom	DDR3 DIMM0-STD(4.0H)	1A
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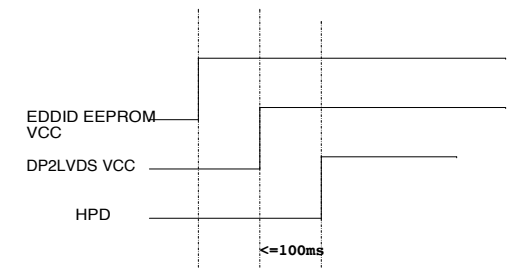
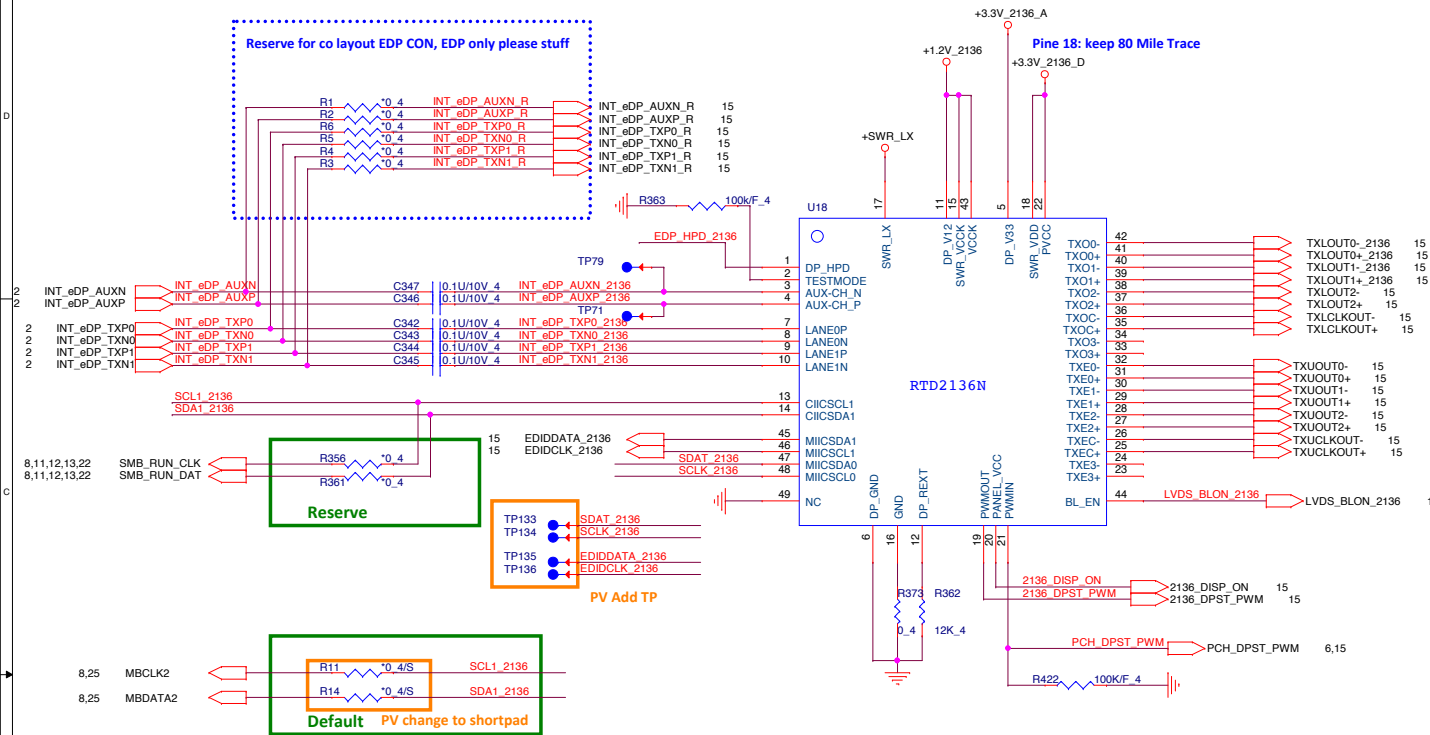


**Place these Caps near So-Dimm1.**  
1uF/10uF 4pcs on each side of connector

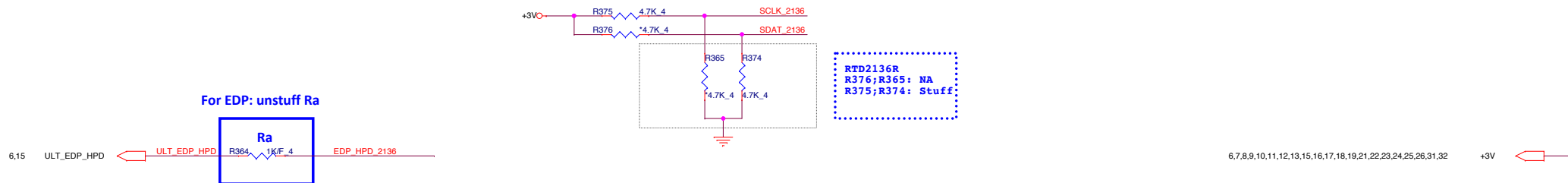


**VREF DQ1 M1 Solution**

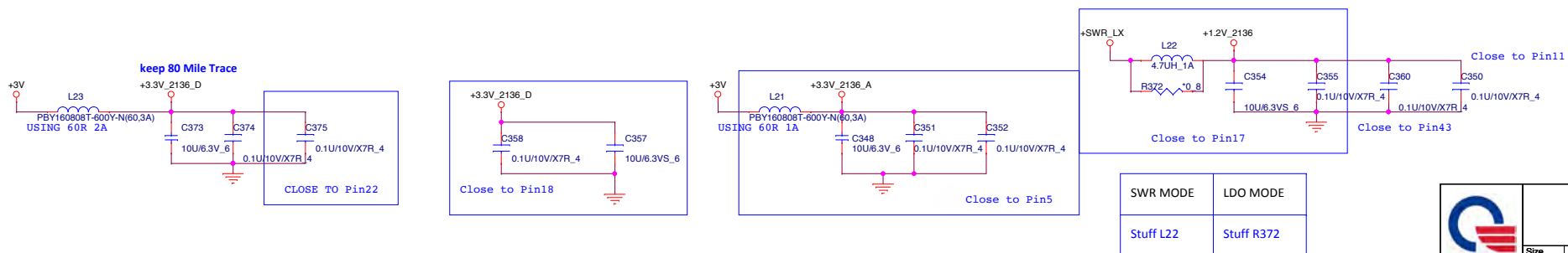




## PV remove EEPROM



L10: need use CV-4709MN00 for Vendor suggestion



SWR MODE	LDO MODE
Stuff L22	Stuff R372



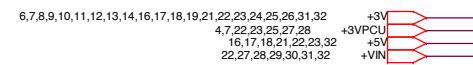
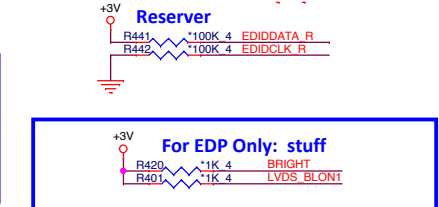
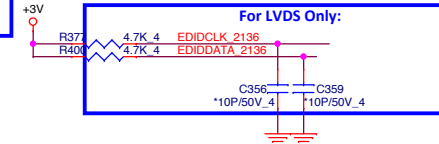
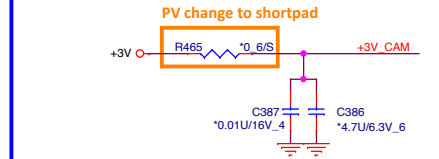
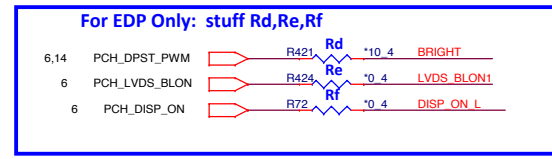
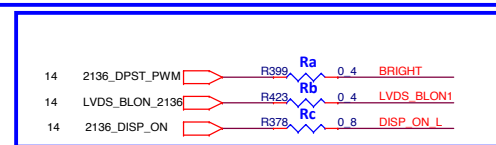
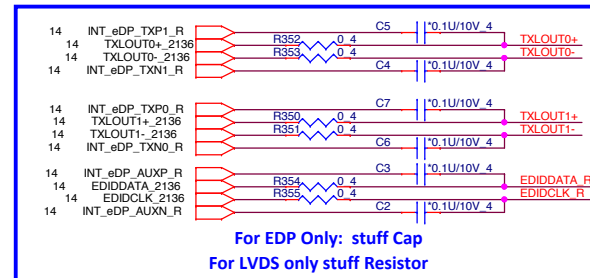
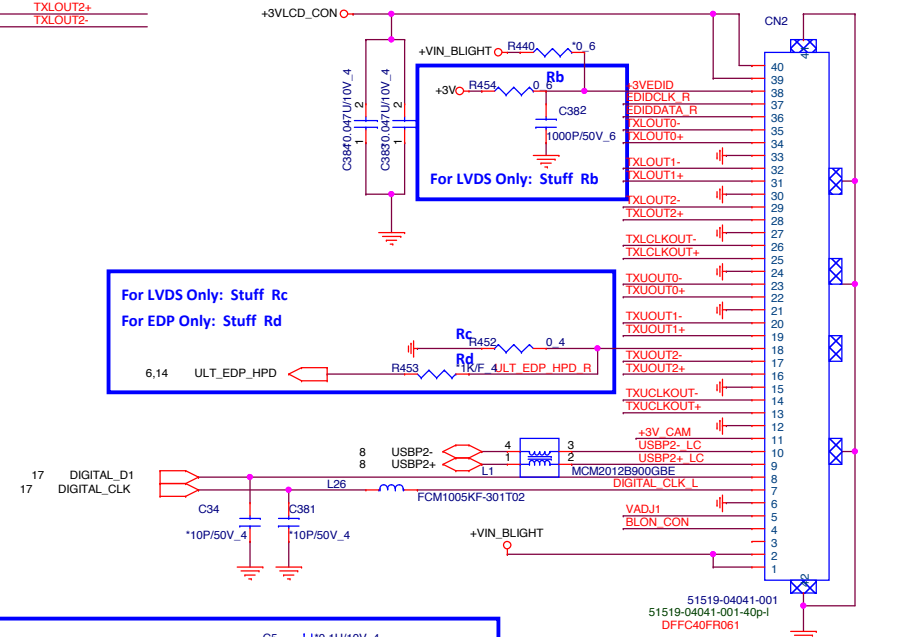
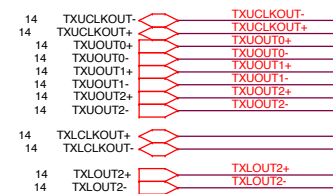
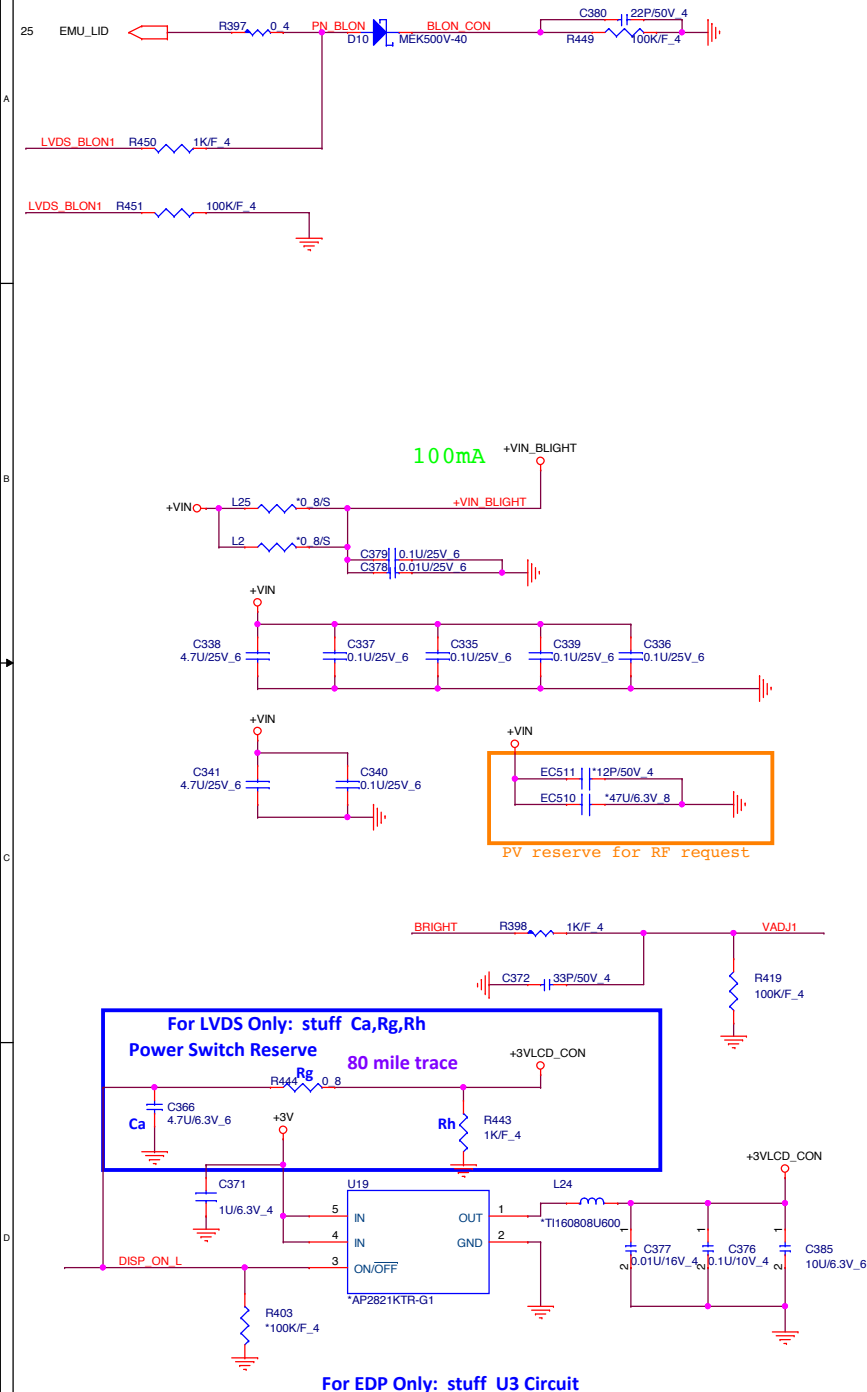
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Quanta Computer Inc.

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## LID Switch

**LVDS Conn.**

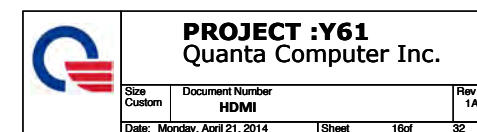
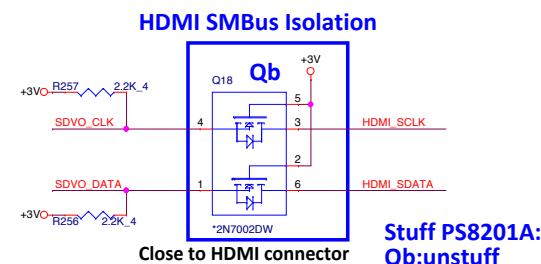
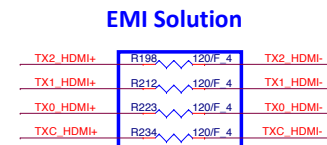
15

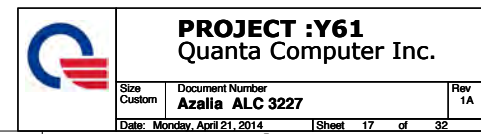


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Quanta Computer Inc.

Size Custom	Document Number <b>LCD CONN/LID/CAM</b>	Rev 1A
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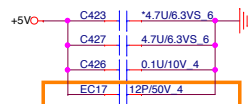
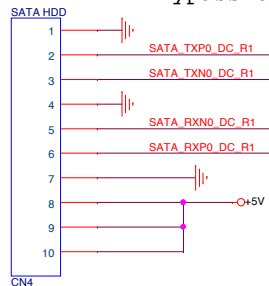






## SATA HDD Connector(Cable type)

Bypass CAP close conn



PV: stuff EC17 12pF,

SI add for co-lay use

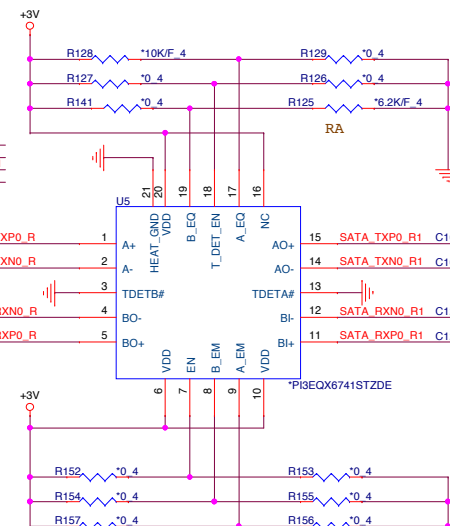
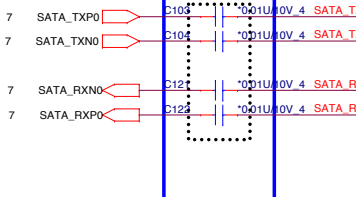
SATA_TXP0_DC_R1	R584	0.4	SATA_TXP0_DC_R
SATA_TXN0_DC_R1	R586	0.4	SATA_TXN0_DC_R
SATA_RXN0_DC_R1	R585	0.4	SATA_RXN0_DC_R
SATA_RXP0_DC_R1	R587	0.4	SATA_RXP0_DC_R

SATA_TXP0_DC_R2	R589	0.4	SATA_TXP0_DC_R
SATA_TXN0_DC_R2	R591	0.4	SATA_TXN0_DC_R
SATA_RXN0_DC_R2	R588	0.4	SATA_RXN0_DC_R
SATA_RXP0_DC_R2	R590	0.4	SATA_RXP0_DC_R

## SATA Re-driver

Ra &amp; Rb need place close

HOST



DEVICE

SATA_TXP0_DC1	C402	0.1U/10V 4	SATA_TXP0_DC_R
SATA_TXN0_DC1	C403	0.1U/10V 4	SATA_TXN0_DC_R
SATA_RXN0_DC1	C407	0.1U/10V 4	SATA_RXN0_DC_R
SATA_RXP0_DC1	C408	0.1U/10V 4	SATA_RXP0_DC_R

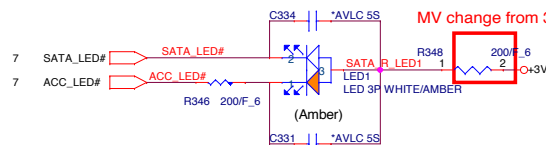
Ca

Cb

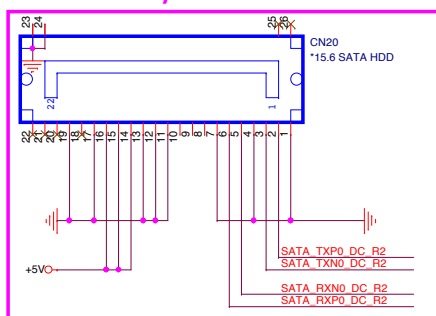
SATA re-driver IC  
stuff Rb,Cb , unstuff Ra,Caunstuff SATA re-driver IC  
stuff Ra,Ca , unstuff Rb,Cb

## SATA LED

MV change from 39ohm to 200ohm for ID



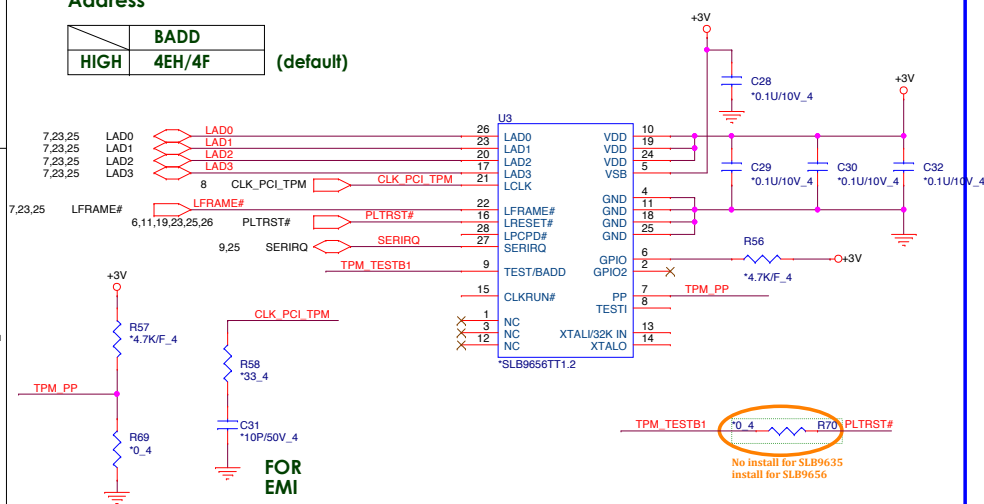
## SI-co-lay SATA HDD Connector



## TPM (1.2)

Address

Address	BADD
HIGH	4EH/4F (default)

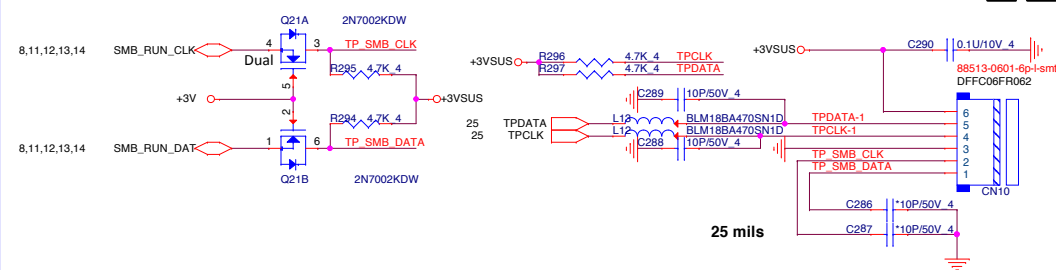
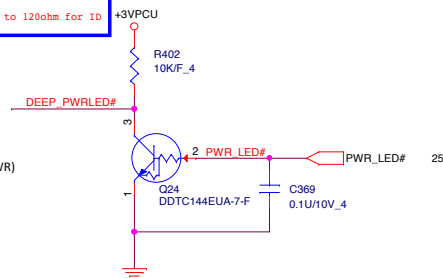
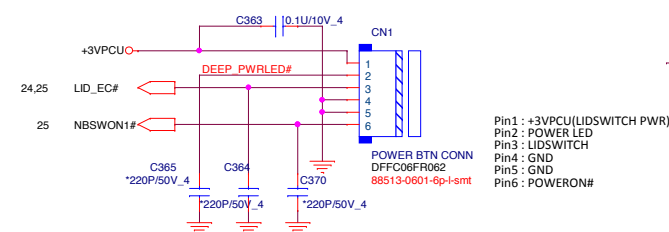
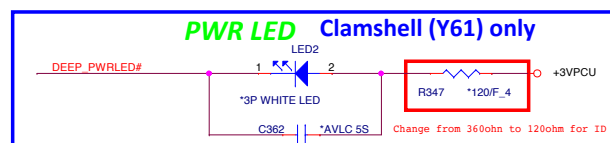


6,7,8,9,10,11,12,13,14,15,16,17,18,19,22,23,24,25,26,31,32  
16,17,18,22,23,32  
4,7,22,23,25,27,28  
27

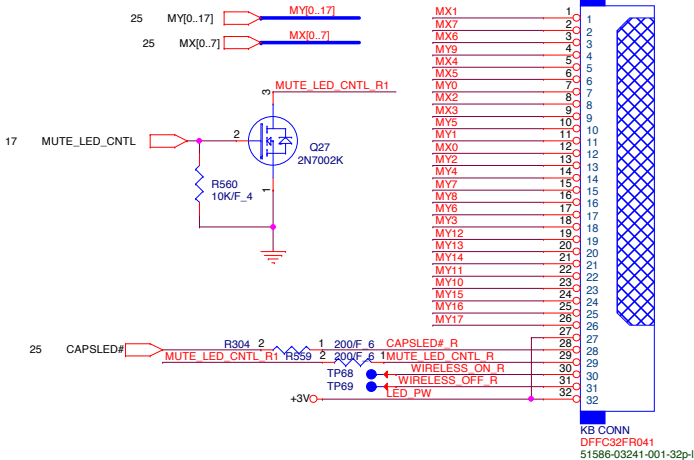
+3V  
+5V  
+3VPCU  
BATT+

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		Size Custom	Rev 1A
Document Number		HDD/mSATA/FAN/LED	
Date: Monday, April 21, 2014		Sheet 21 of 32	

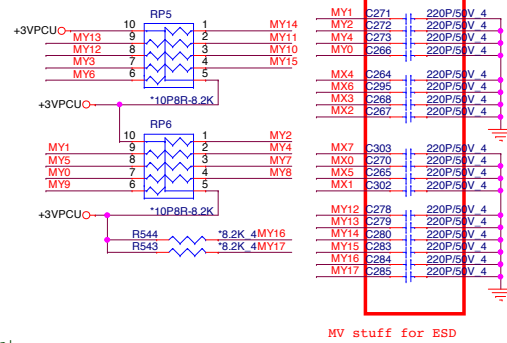
## Touch Pad Connector



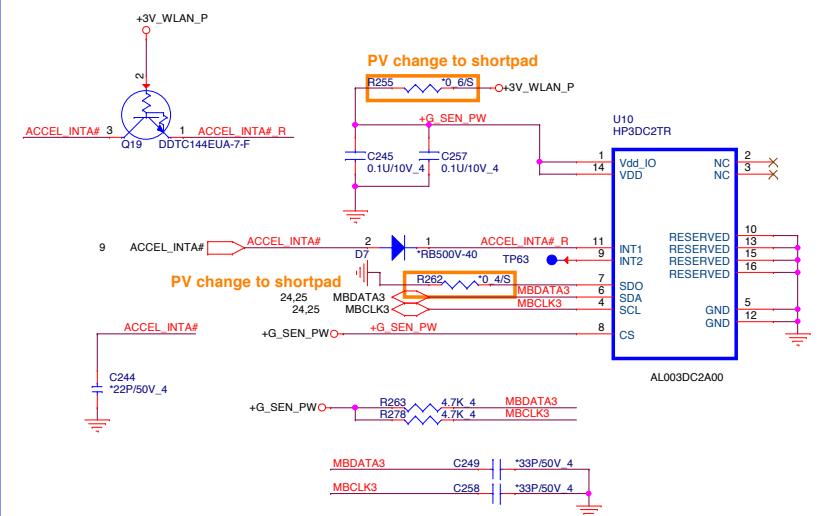
## KEYBOARD Con.



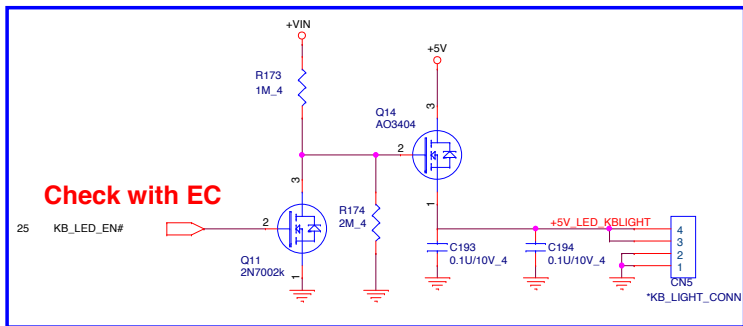
## KEYBOARD PULL-UP



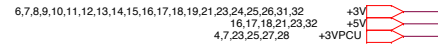
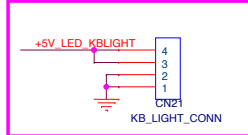
## Accelerometer Sensor



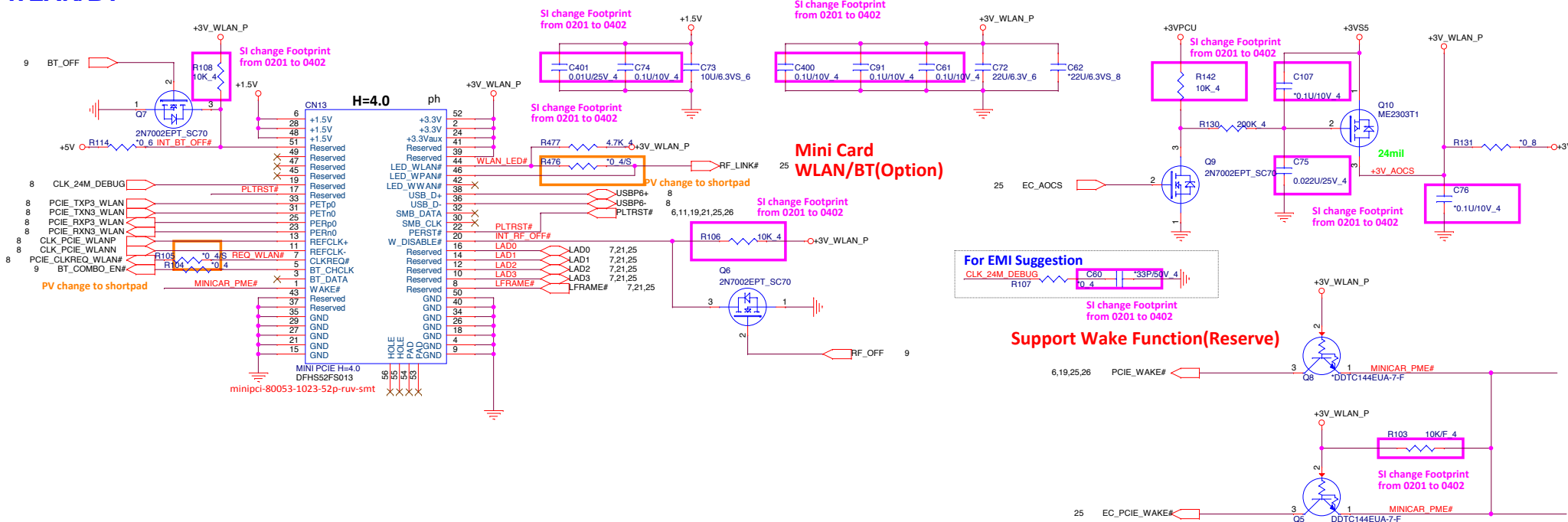
**15" KB backlight only**



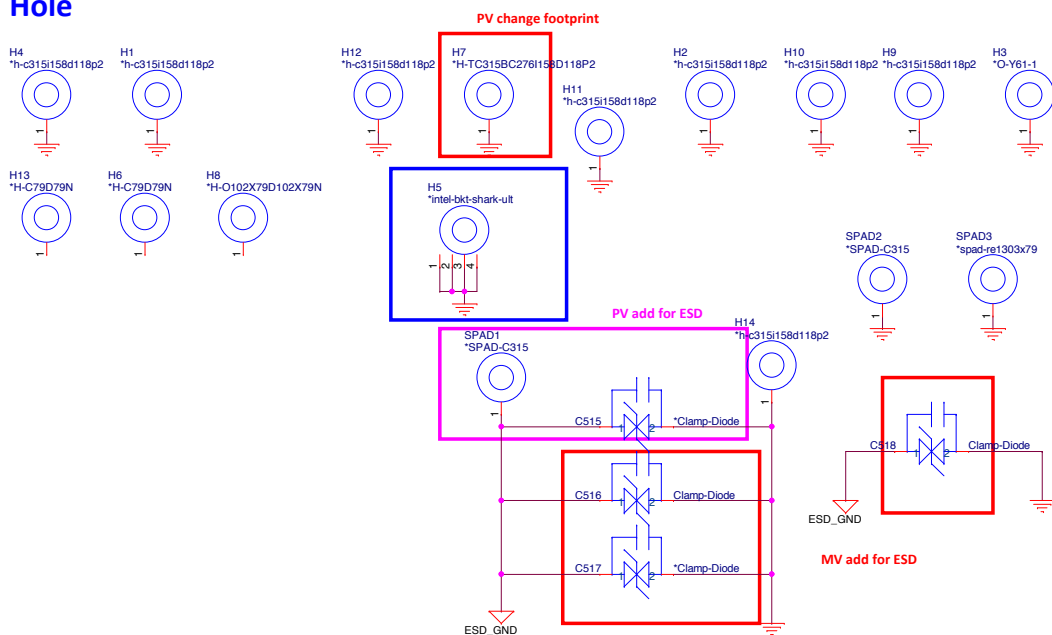
## Co-lay







## Hole



27 +PRWSRC  
6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22,24,25,26,31,32 +3V  
16,17,18,21,22,32 +5V  
4,7,22,25,27,28 +3VPCU

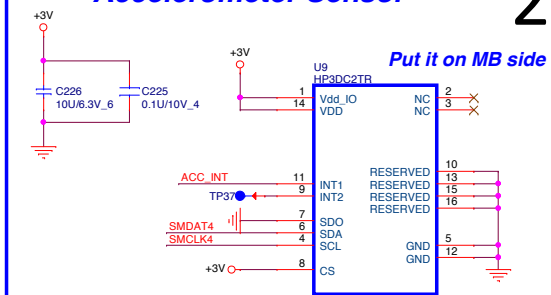


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Quanta Computer Inc.

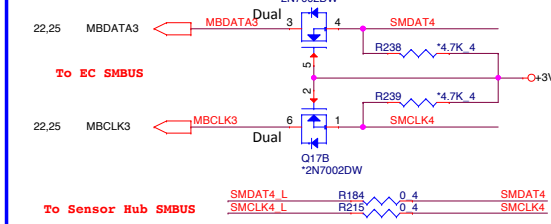
Size Custom	Document Number <b>WLAN/G-Sensor/G-CLK/TS</b>	Rev 1A
Date: Monday, April 21, 2014	Sheet 23 of	32

# Accelerometer Sensor

Put it on MB side



## Close to U9



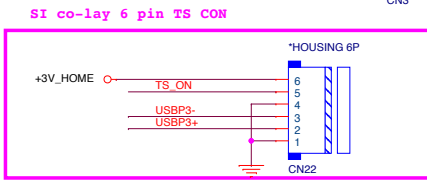
To APU 9 ACCEL\_INTH# R488 0.4 ACC\_INT

Reserved SMBus channel 0 for debugging & updating FW  
Reserved  
SMBus channel 4 for connecting the Sensor (G-sensor)

Reserved TX/RX for debugging  
if no use ADC function, please pull down to GND  
SMINTx for sensor interrupt

GPG2 can't floating  
GPG2 Pull High Enable mirror function.  
GPG2 Pull Low Disable mirror function.

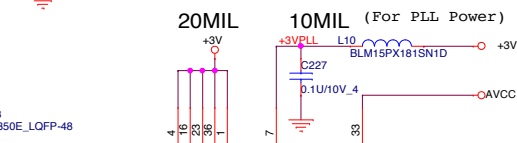
3 IN 1-Sensor  
connector to HOME IC



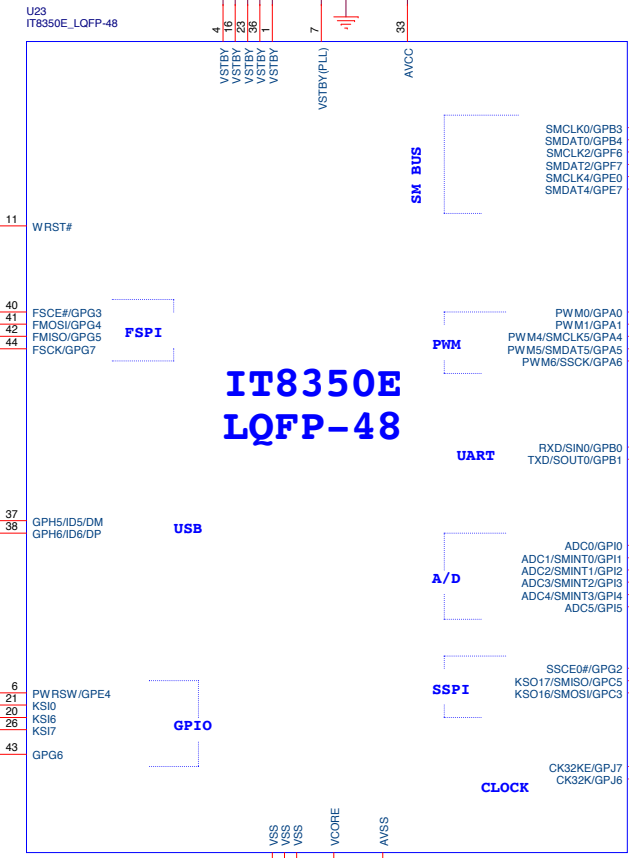
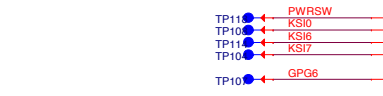
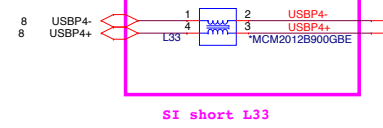
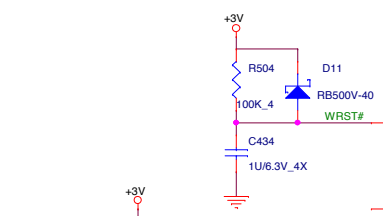
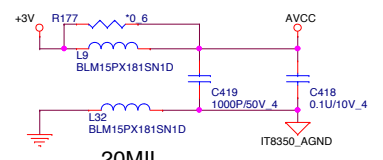
**PROJECT :Y61**  
Quanta Computer Inc.

Size Custom	Document Number <b>ITE8350/HP9DS0/HP3DC2</b>	Rev 1A
Date: Monday, April 21, 2014	Sheet 24	of 32

Note: Place all capacitors close to IT8350.

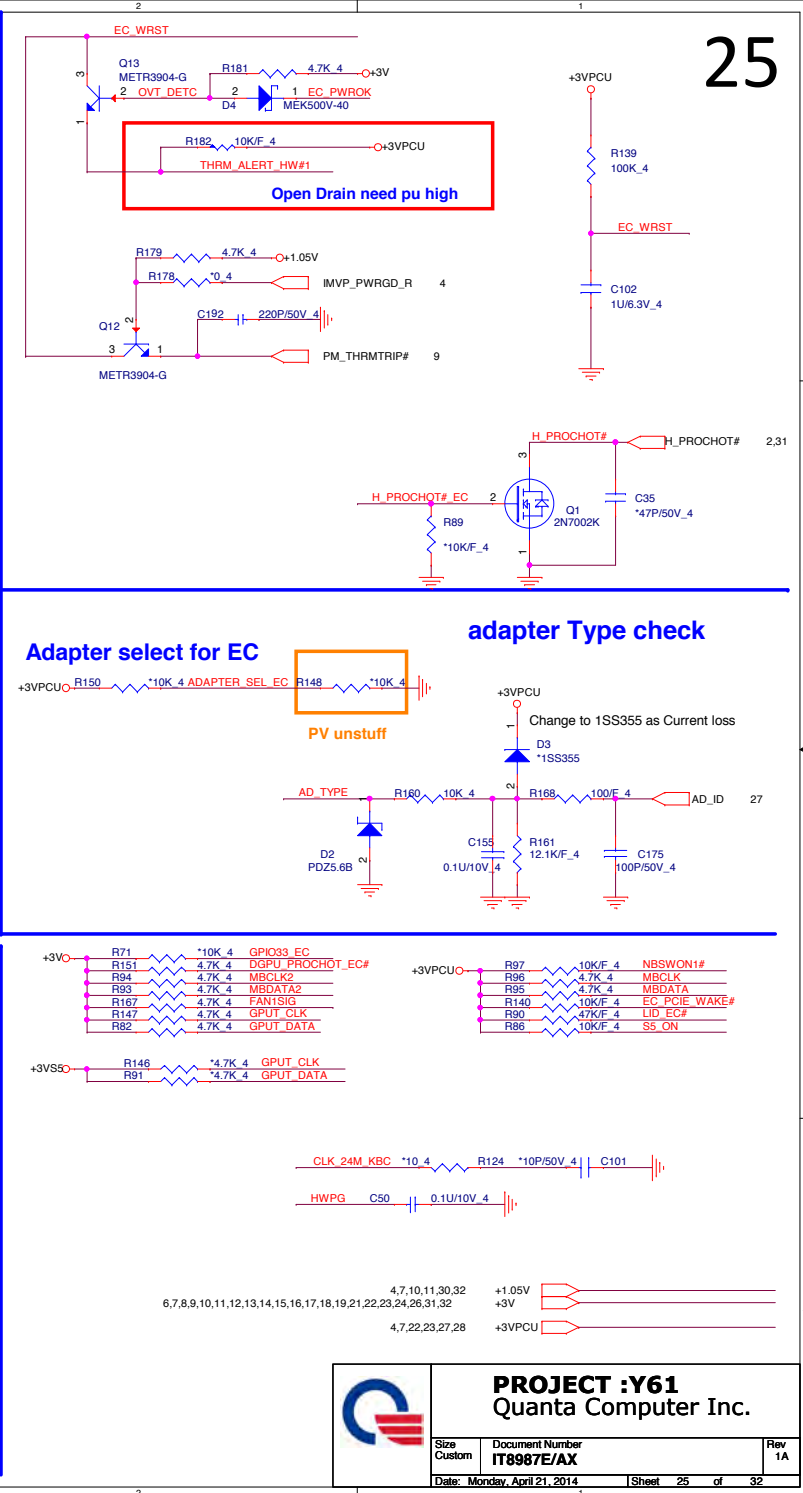
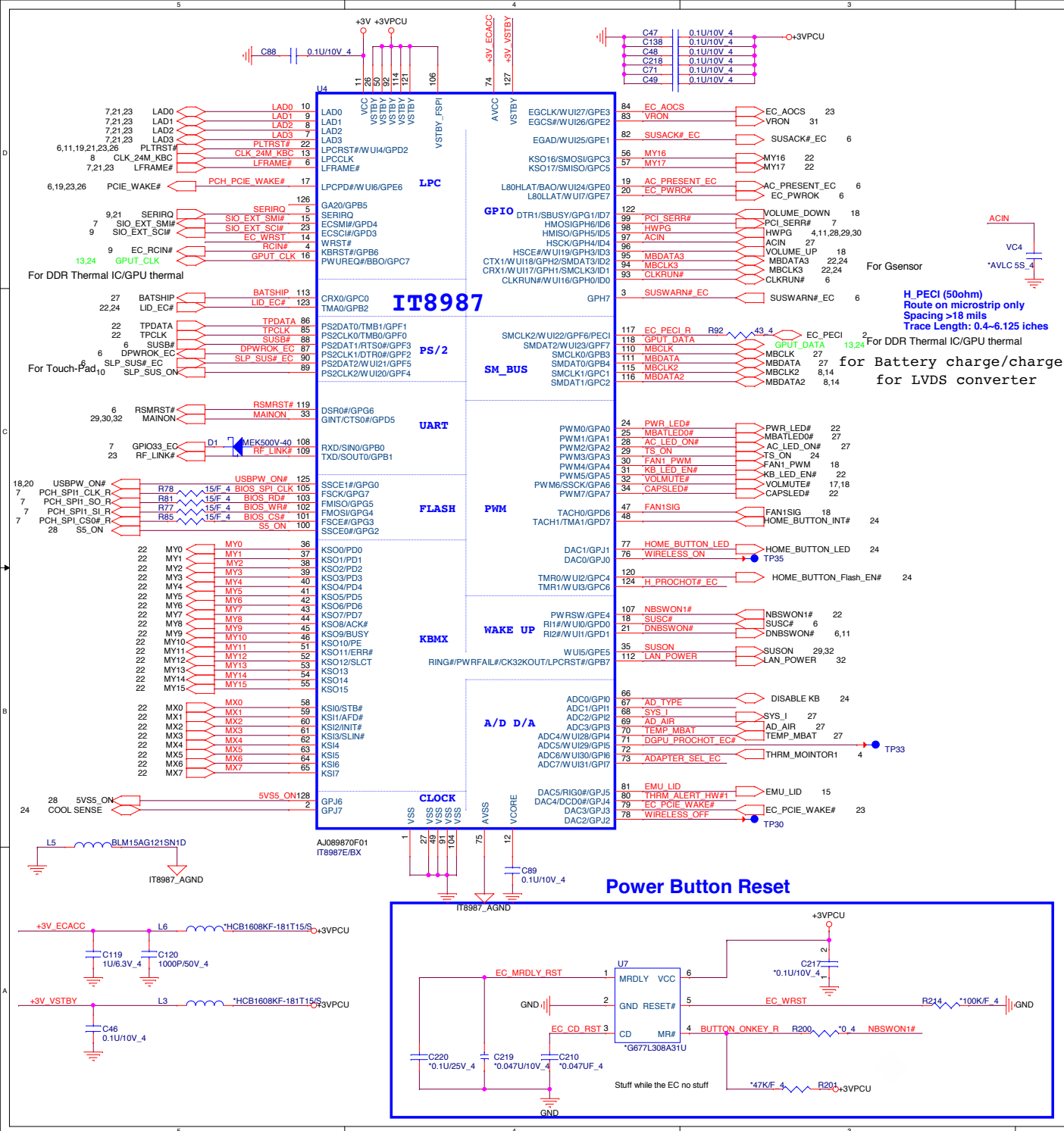


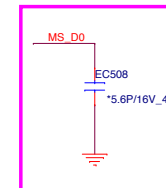
## IT8350E LQFP-48



32.768kHz clock lines:  
a. If possible, please avoid using any through-hole.  
b. Please make the trace length short, and the trace width wide enough.  
c. The spacing to the closest neighbor should be wide enough.

SI short L4



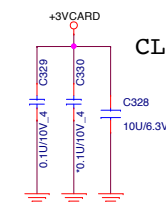


SD / MMC

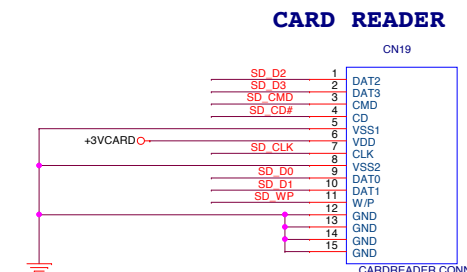
SI reserve for EMI



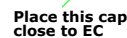
close to chip pin



CLOSE CONN

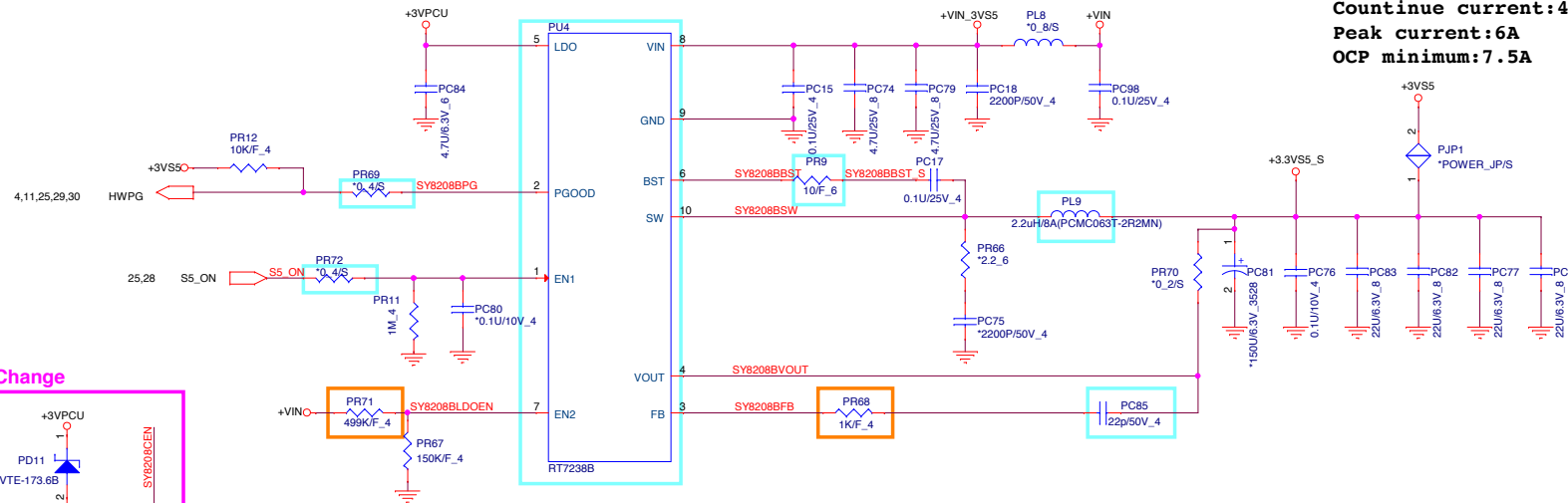


NEW Type

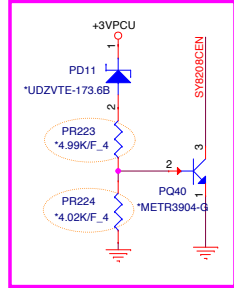


+3VS5 6,7,9,10,20,23,24,25,30,32  
+5VS5 13,18,20,29,30,31,32

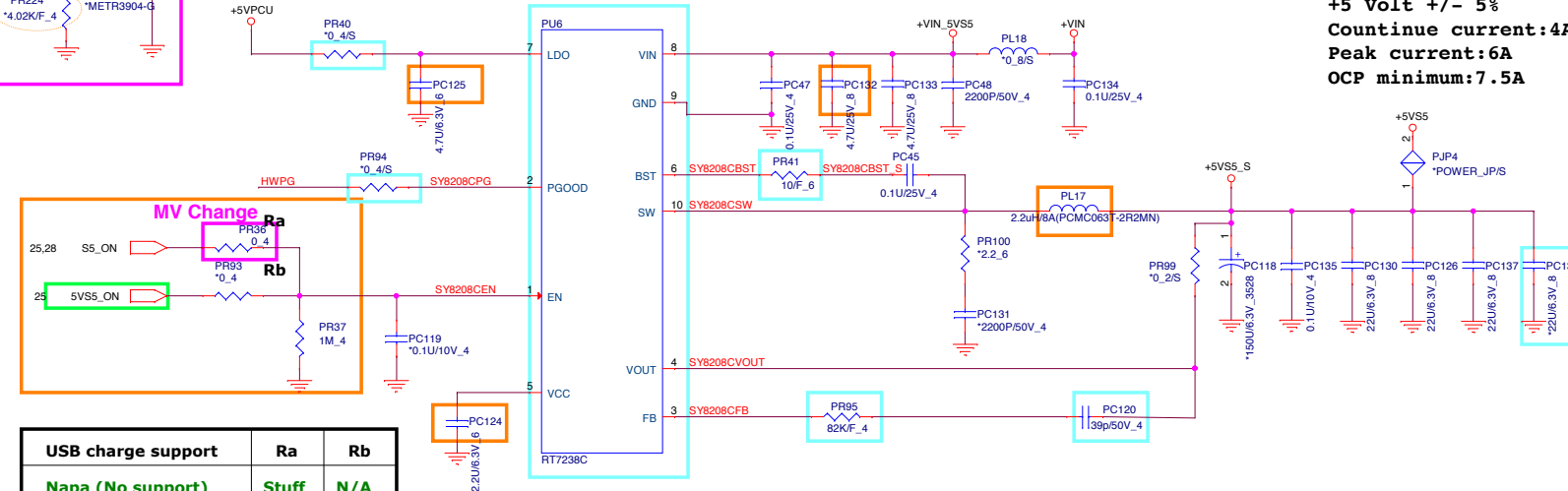
**+3.3 Volt +/- 5%**  
**Countinue current:4A**  
**Peak current:6A**  
**OCp minimum:7.5A**



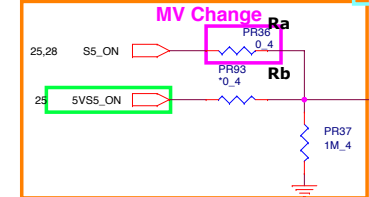
MV Change



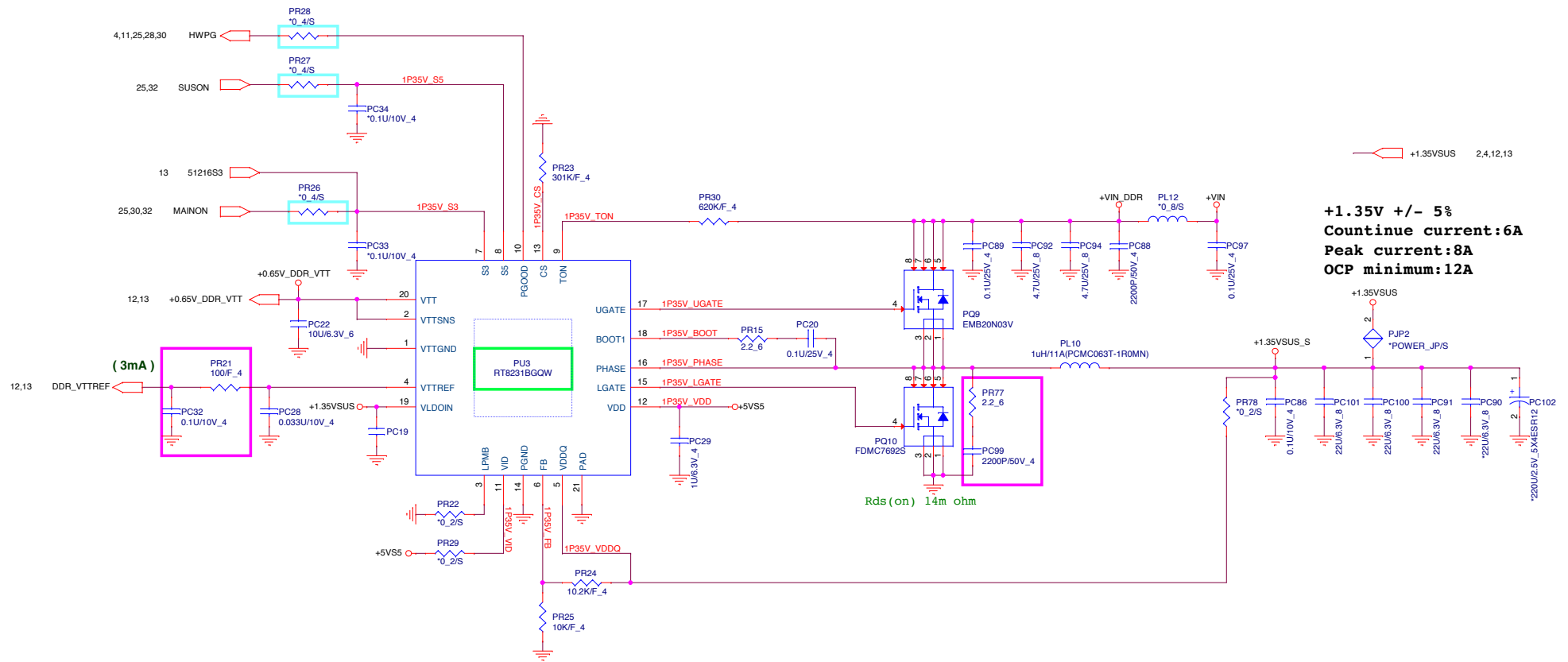
**+5 Volt +/- 5%**  
**Countinue current:4A**  
**Peak current:6A**  
**OCp minimum:7.5A**



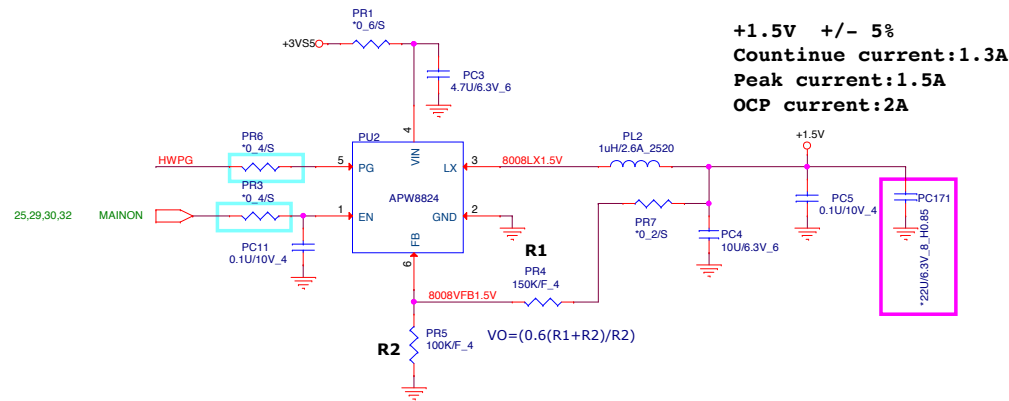
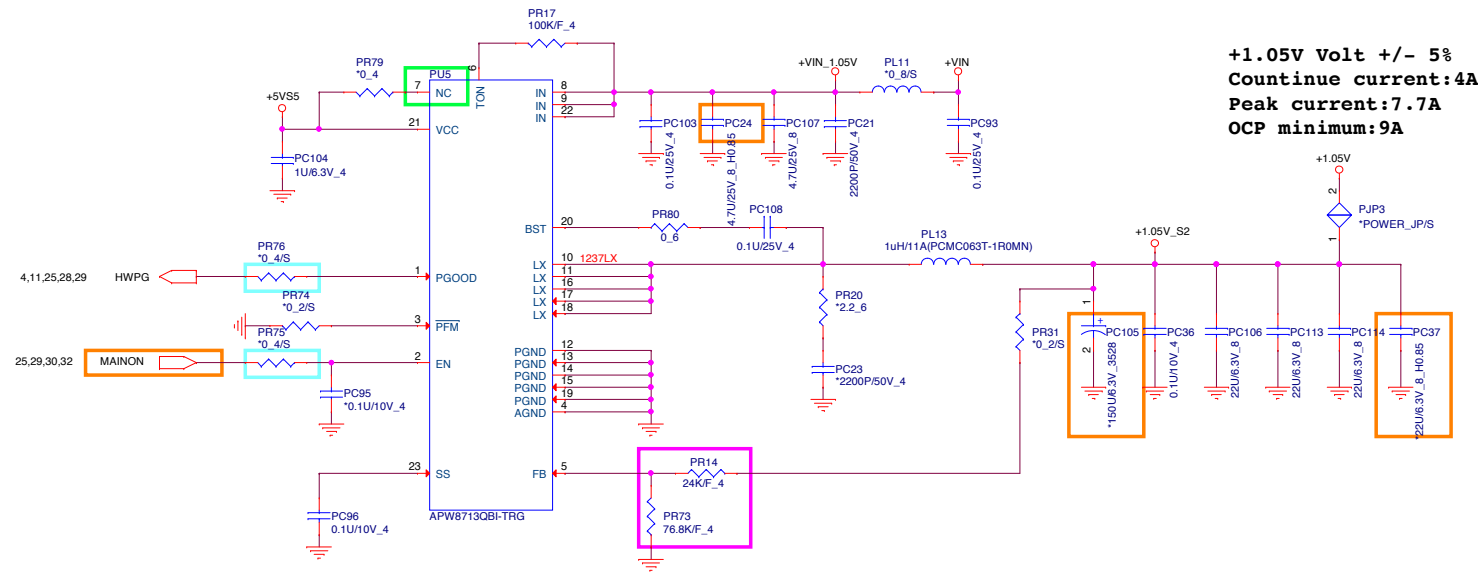
MV Change



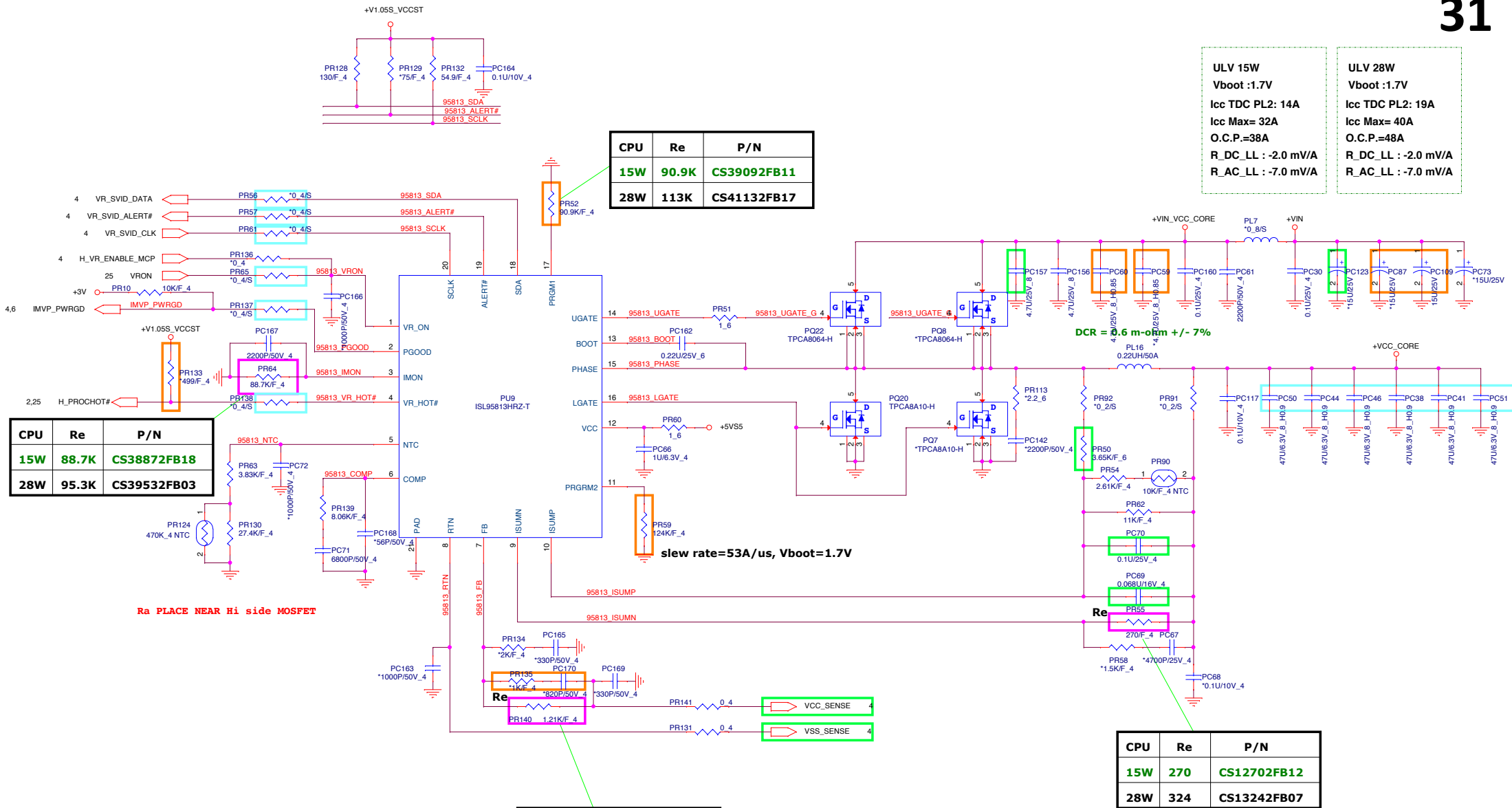
USB charge support	Ra	Rb
Napa (No support)	Stuff	N/A
Whisky (Support)	N/A	Stuff





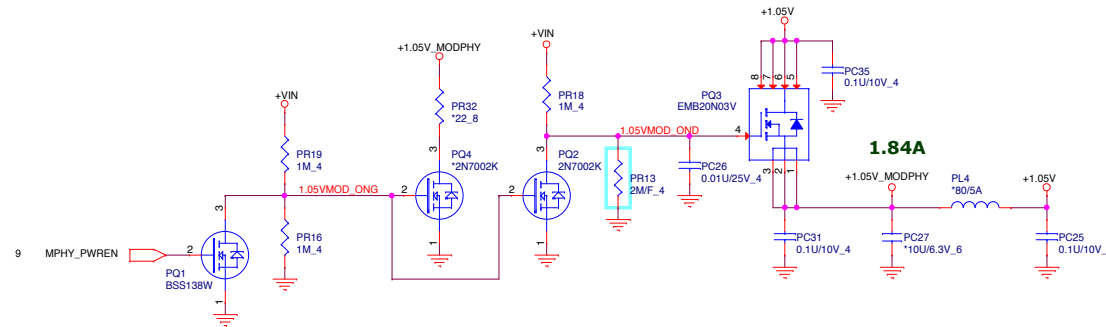
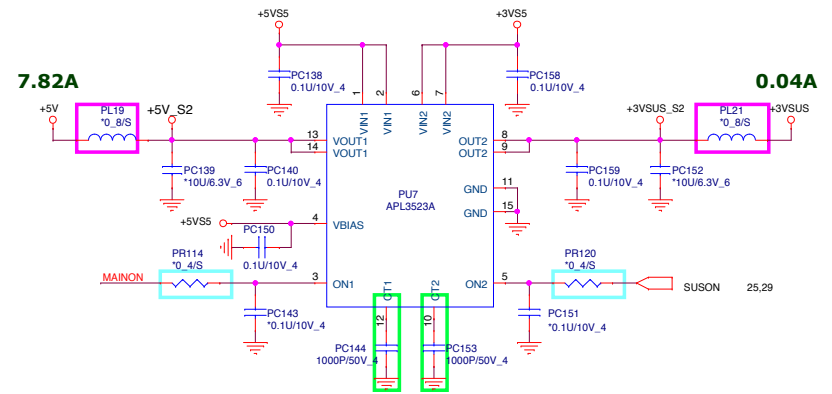
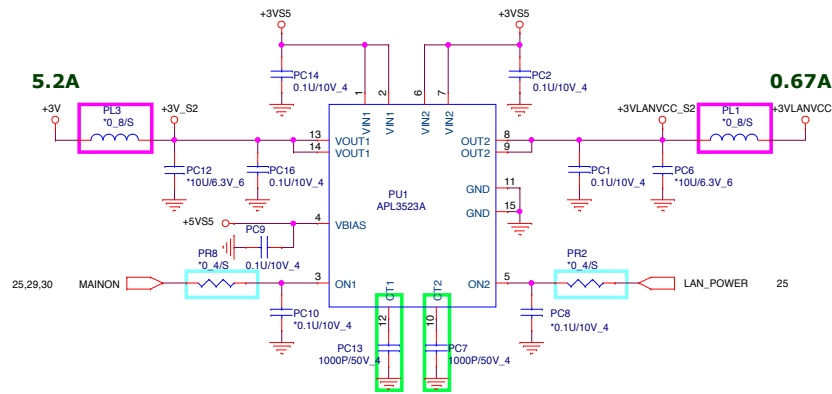


+VIN 15,22,27,28,29,31,32  
 +3VSS 6,7,9,10,20,23,24,25,28,32  
 +5VSS 13,18,20,28,29,31,32  
 +5VPCU 13,27,28



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6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22,23,24,25,26,31	+3V
16,17,18,21,22,23	+5V
15,22,27,28,29,30,31	+VIN
6,7,8,10,20,23,24,25,28,30	+3VSS
13,18,20,28,29,30,31	+5VSS
19	+3VLAVCC