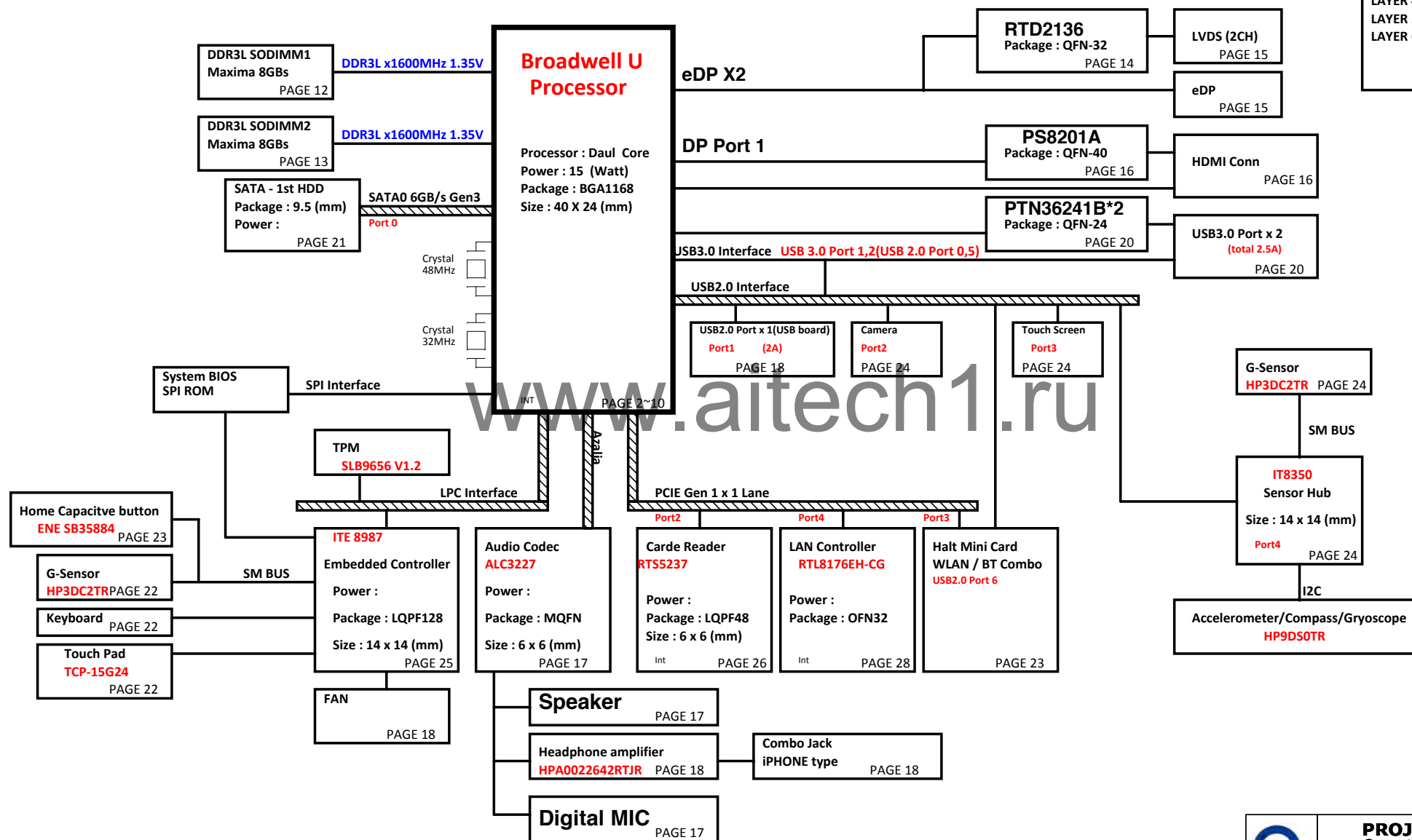


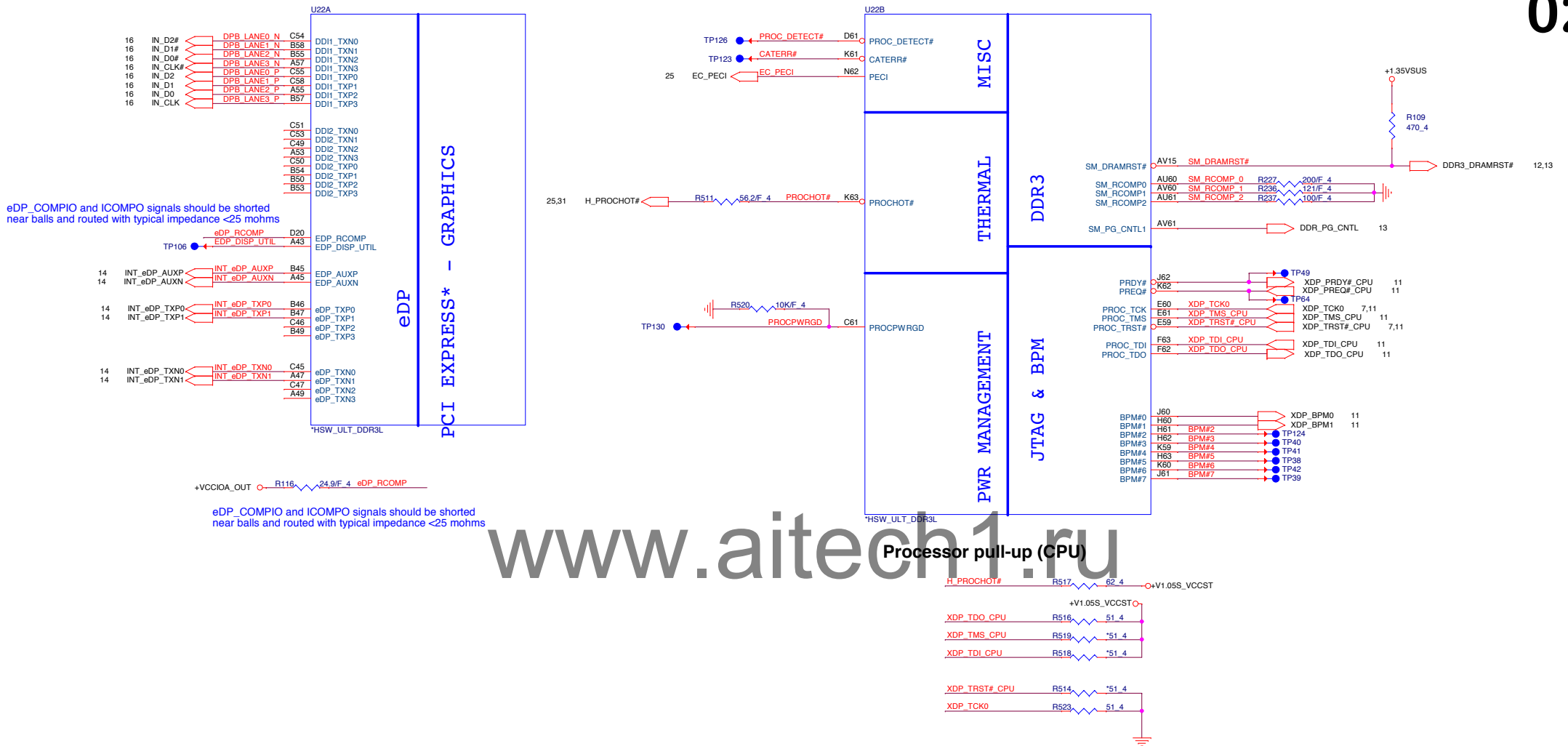
13"/15"

Y61 Intel Cresnet Bay ULT Platform Block Diagram

PCB 6L STACK UP

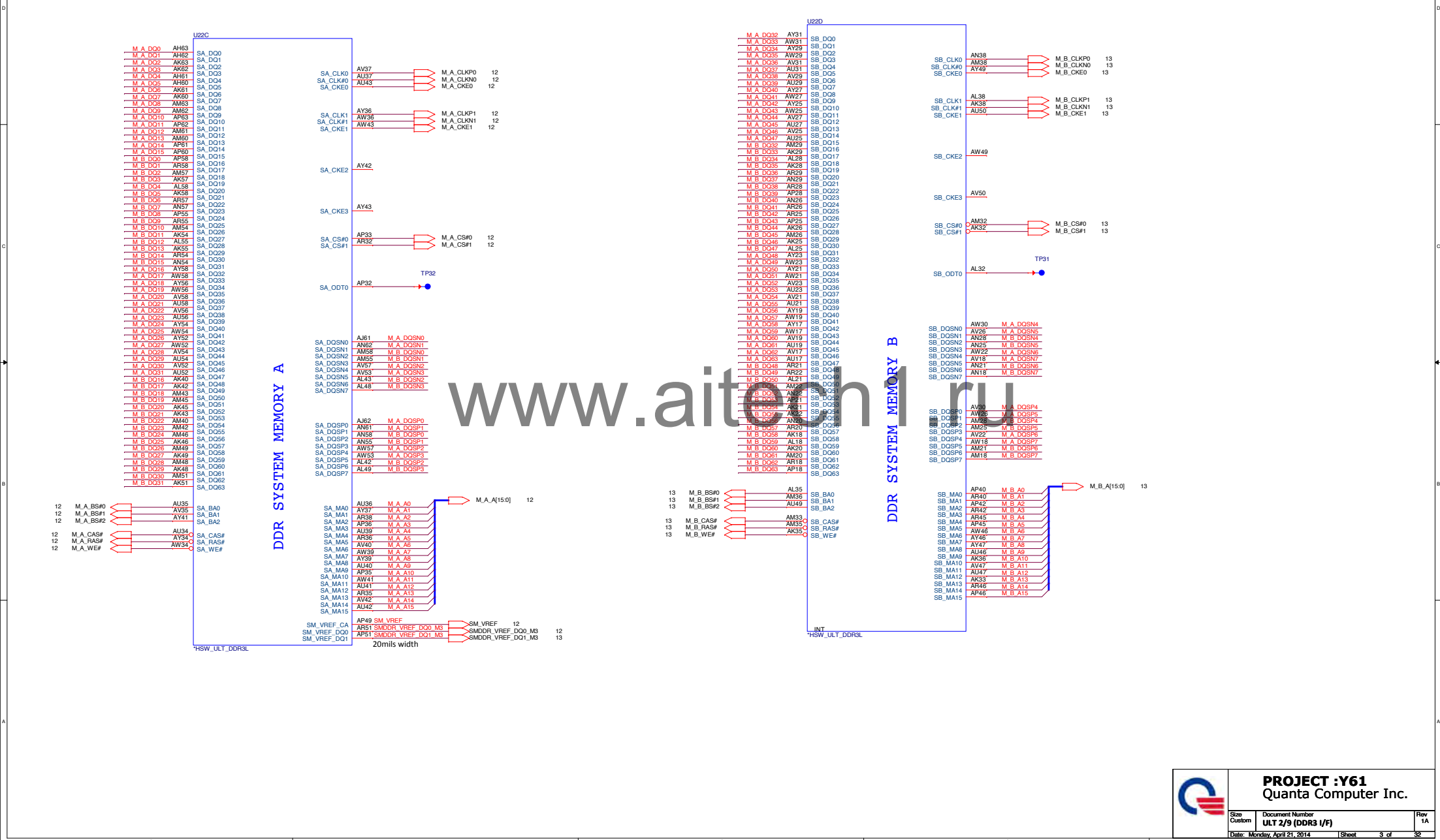
LAYER 1 : TOP
LAYER 2 : SGND
LAYER 3 : IN1(High)
LAYER 4 : IN2(Low)
LAYER 5 : SVCC
LAYER 6 : BOT

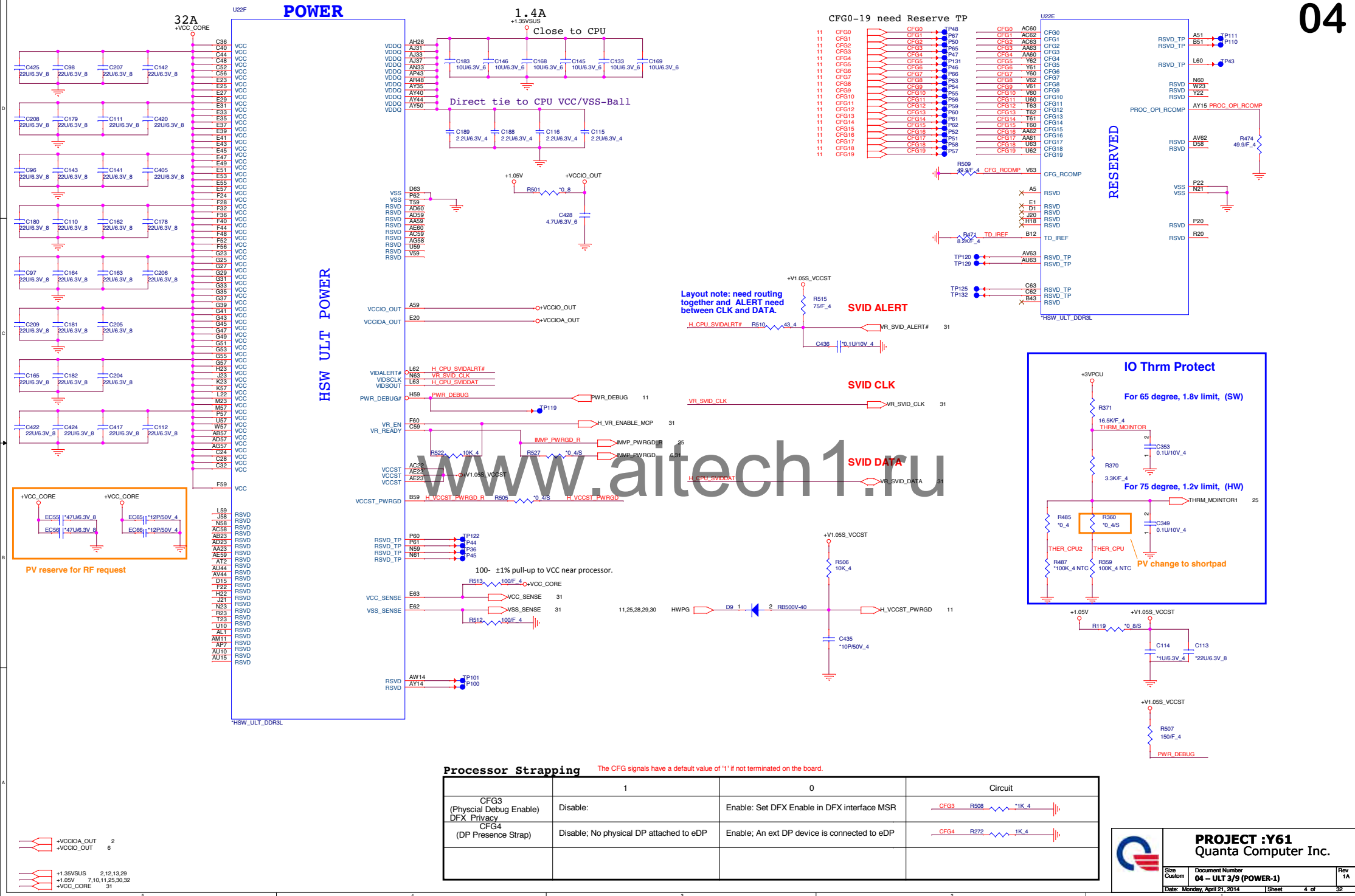




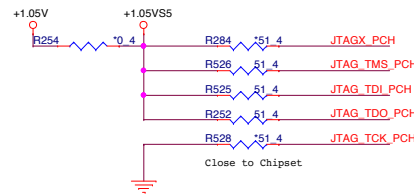
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Haswell ULT Processor (DDR3L)

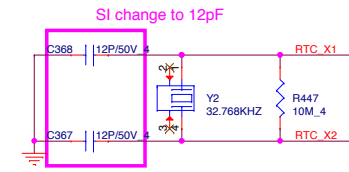




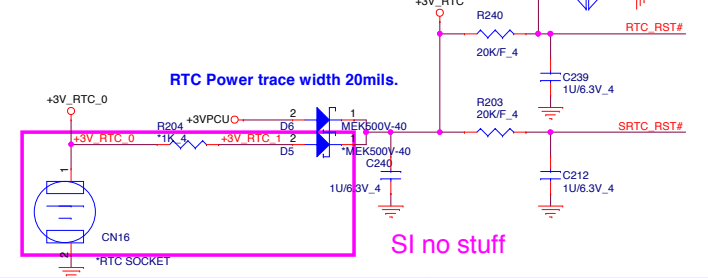
07



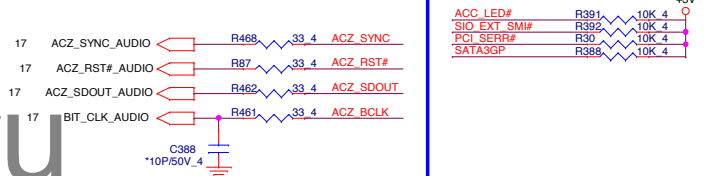
RTC Clock 32.768KHz



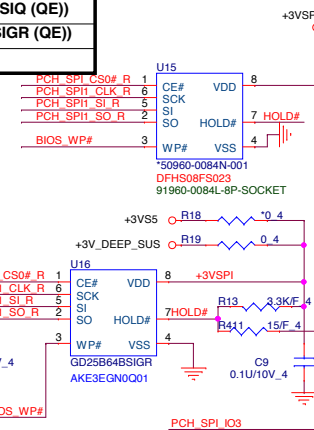
30mils J1 *SOLDERJUMPER-2



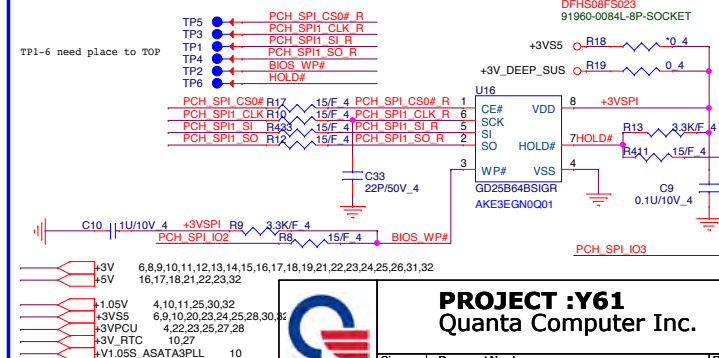
GPIO Pull UP



4M SPI ROM Socket



PCH SPI ROM(CLG)



PCH Strap Table

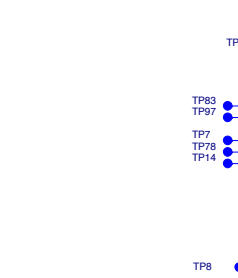
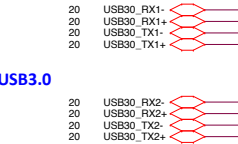
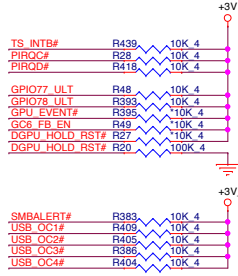
Pin Name	Strap description	Sampled	Configuration	Circuit						
SPKR	No reboot mode setting	PWROK	0 = Default (weak pull-down 20K) 1 = Setting to No-Reboot mode							
SDIO_D0 /GPIO66	Top-Block Swap	PWROK	0 = "top-block swap" mode 1 = Default (weak pull-up 20K)							
INTVRMEN	Integrated 1.05V VRM enable	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							

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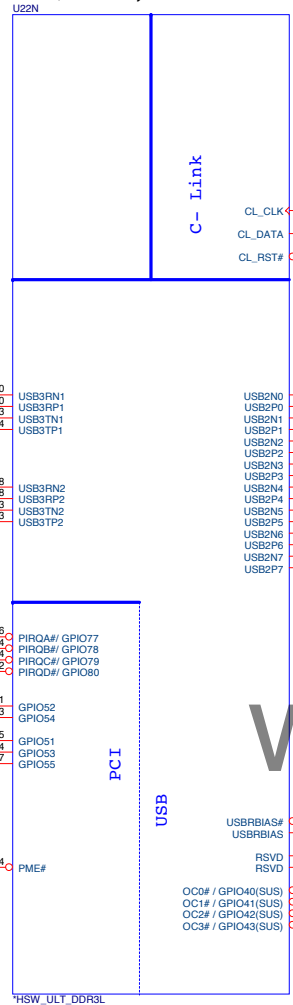
Size Custom	Document Number ULT 6/9(SATA/HDA)	Rev 1A
Date: Monday, April 21, 2014	Sheet 7 of	32

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

PCI/USBOC# Pull-up(CLG)



*HSW_ULT_DDR3L



Cardreader

WLAN

LAN

USB2.0(MB-1)

USB2.0(MB-2)

USB2.0 Small board

Sensor Hub

Camera

WLAN

TS

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USB2.0(MB-2)

USB2.0 Small board

Sensor Hub

Camera

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USB2.0(MB-2)

USB2.0 Small board

Sensor Hub

Camera

WLAN

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Cardreader

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USB2.0(MB-1)

USB2.0(MB-2)

USB2.0 Small board

Sensor Hub

Camera

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Cardreader

WLAN

LAN

USB2.0(MB-1)

USB2.0(MB-2)

USB2.0 Small board

Sensor Hub

Camera

WLAN

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Cardreader

WLAN

LAN

USB2.0(MB-1)

USB2.0(MB-2)

USB2.0 Small board

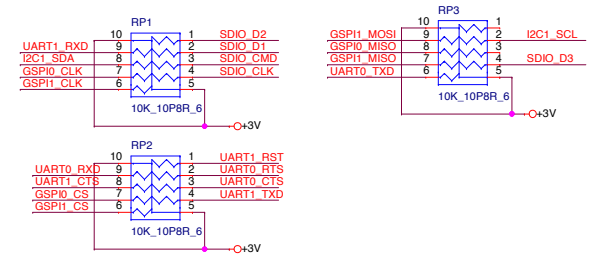
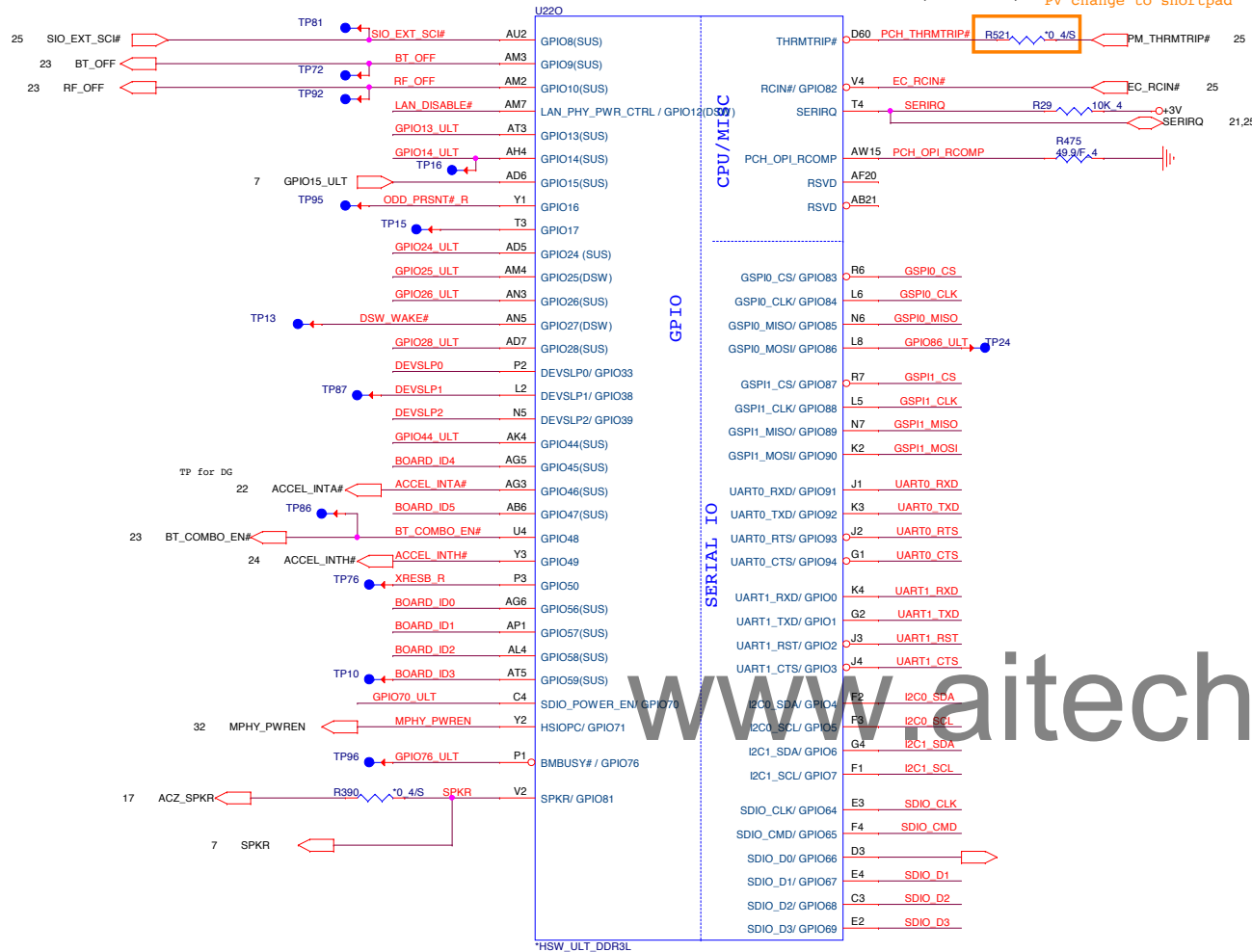
Sensor Hub

Camera

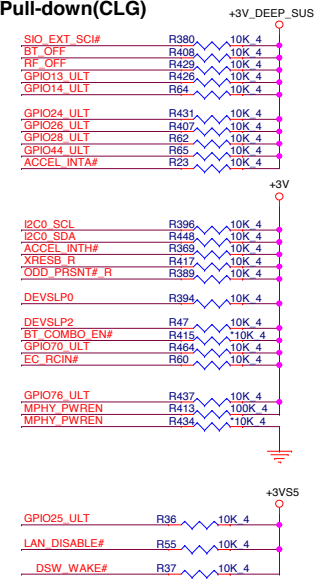
WLAN

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

PV change to shortpad



GPIO Pull-up/Pull-down(CLG)

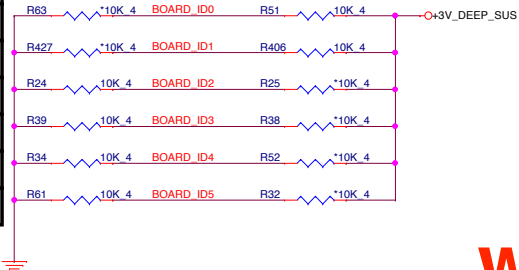


Close to EC



09

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

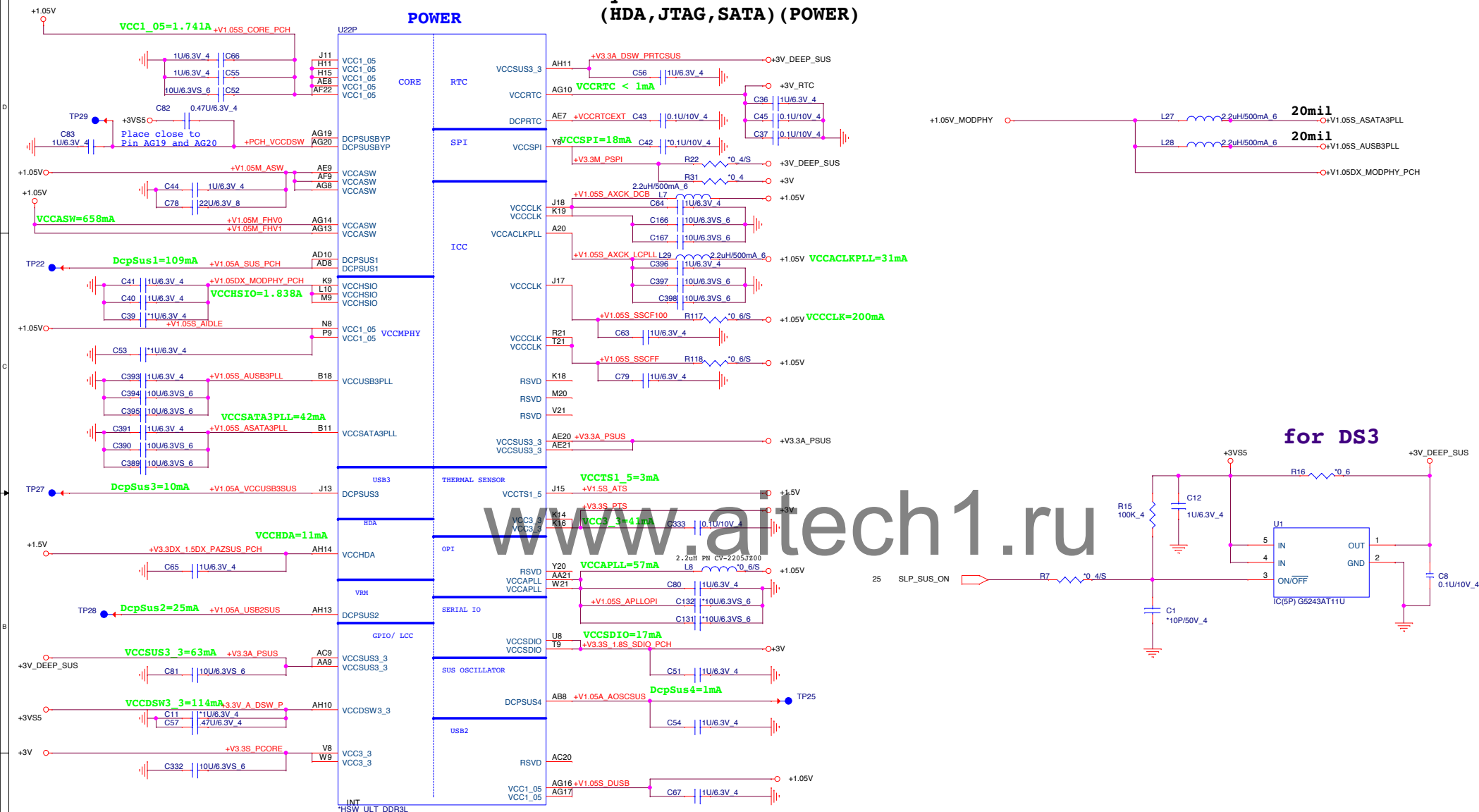


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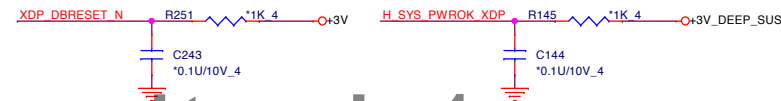
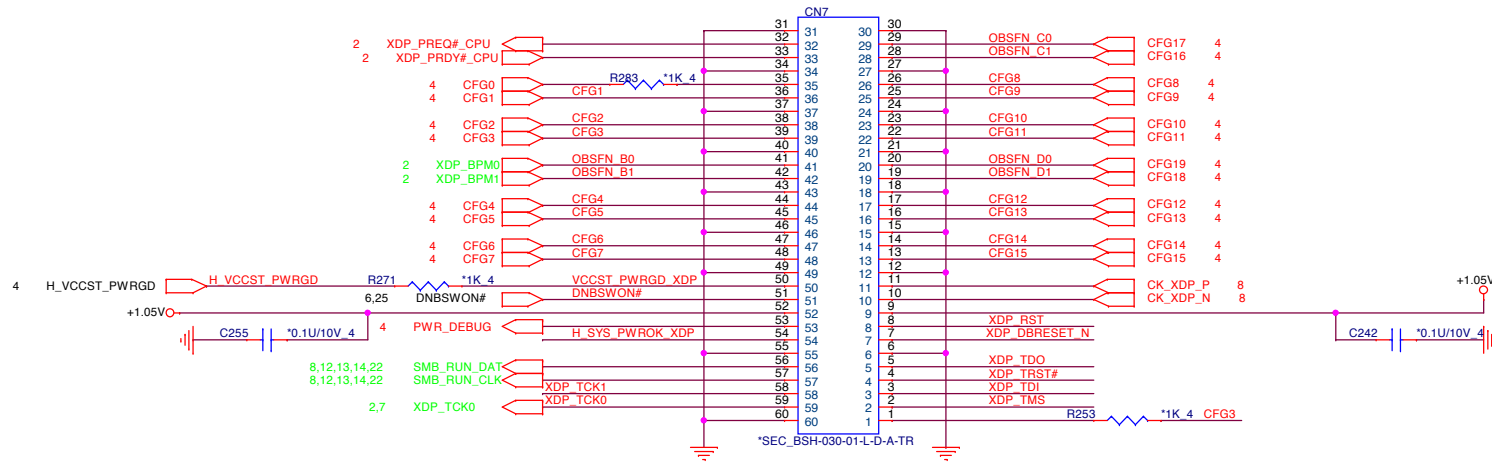
PROJECT :Y61
Quanta Computer Inc.

Size Custom	Document Number ULT 8/9 (GPIO/MISC)	Rev 1A
Date: Monday, April 21, 2014	Sheet	9 of 32

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

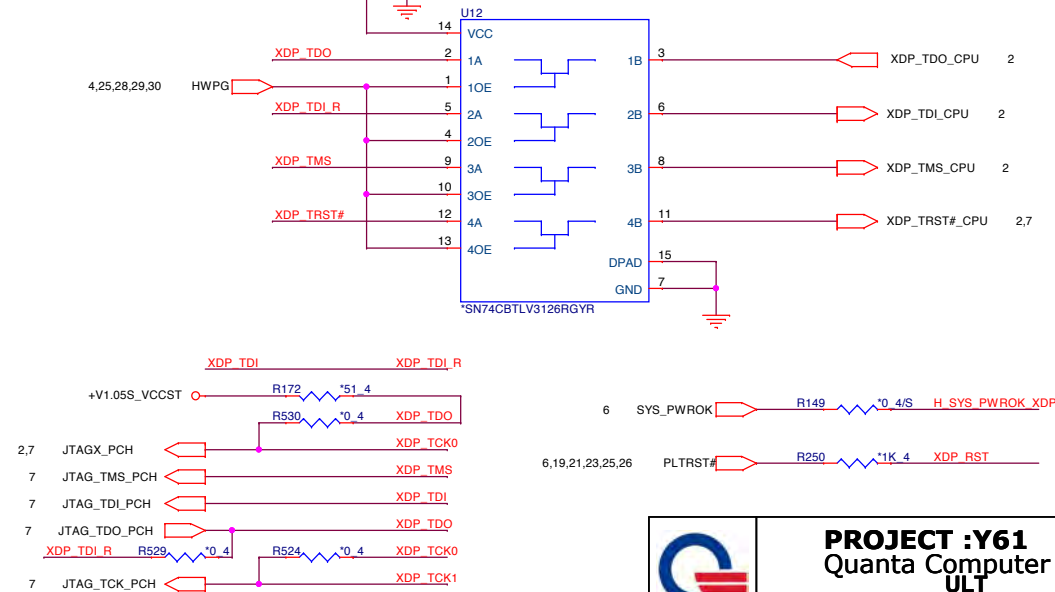
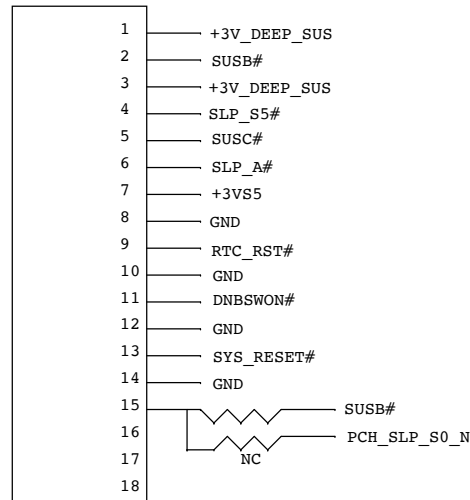


6,7,8,9,11,12,13,14,15,16,17,18,19,21,22,23,24,25,26,31,32	+3V	
16,17,18,21,22,23,32	+5V	7 +V1.05S_AUSB3PLL 8 +V1.05S_ASATA3PLL 8 +V1.05S_AXCK_LCPLL
4,7,11,25,30,32	+1.05V	7.27 +3V_RTC
6,7,9,20,23,24,25,28,30,32	+3VS5	2,4,12,13,29 +1.35VSUS
13,18,20,28,29,30,31,32	+5VS5	

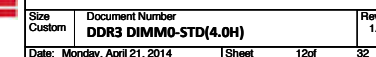
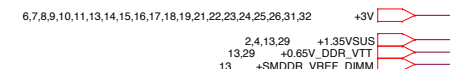


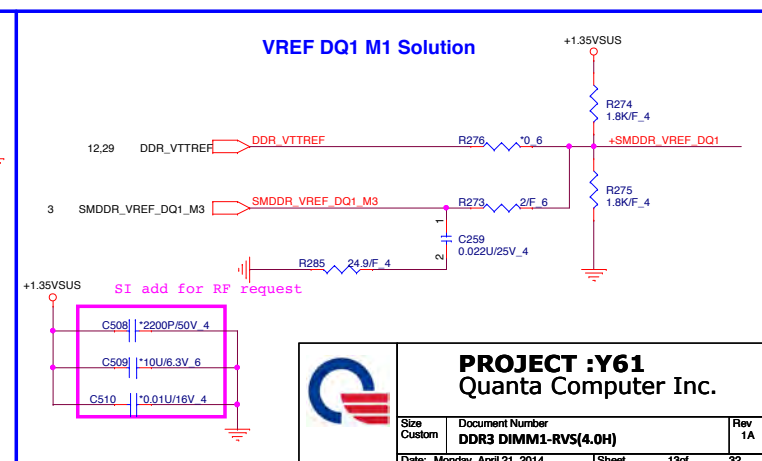
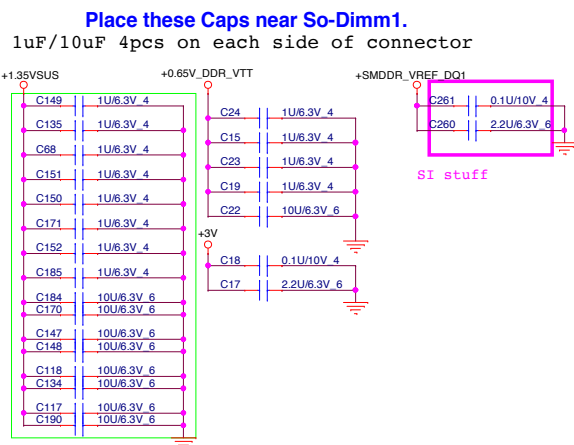
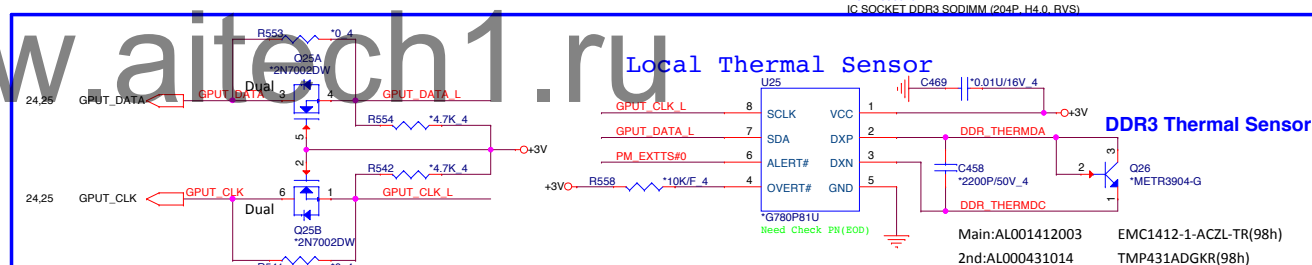
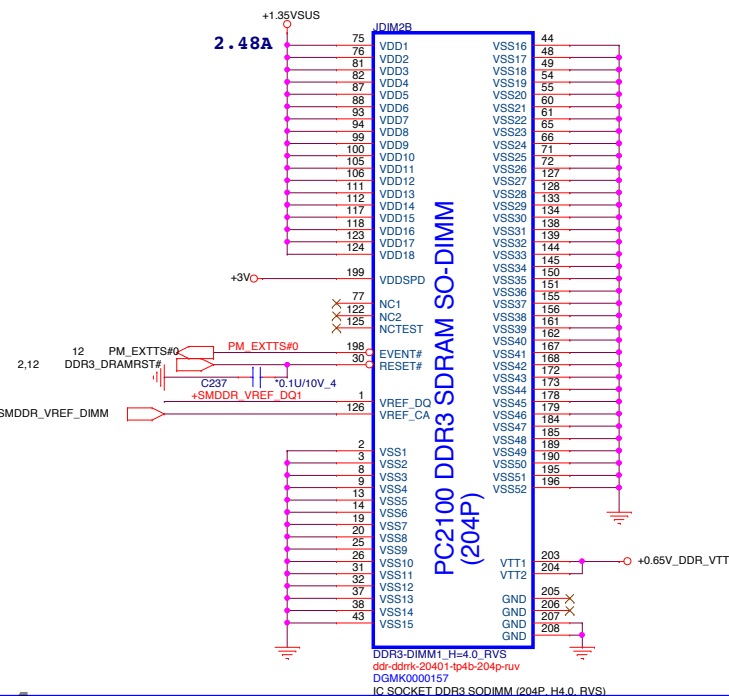
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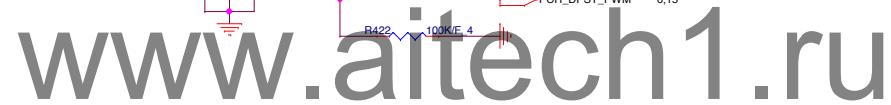
APS



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Quanta Computer Inc.
ULT





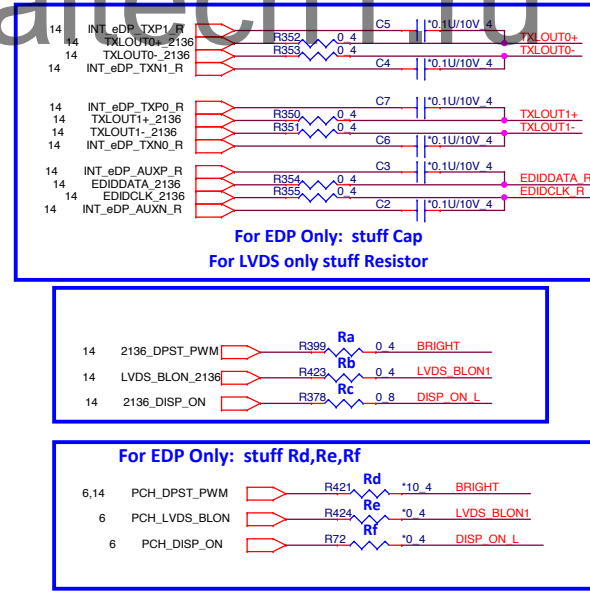
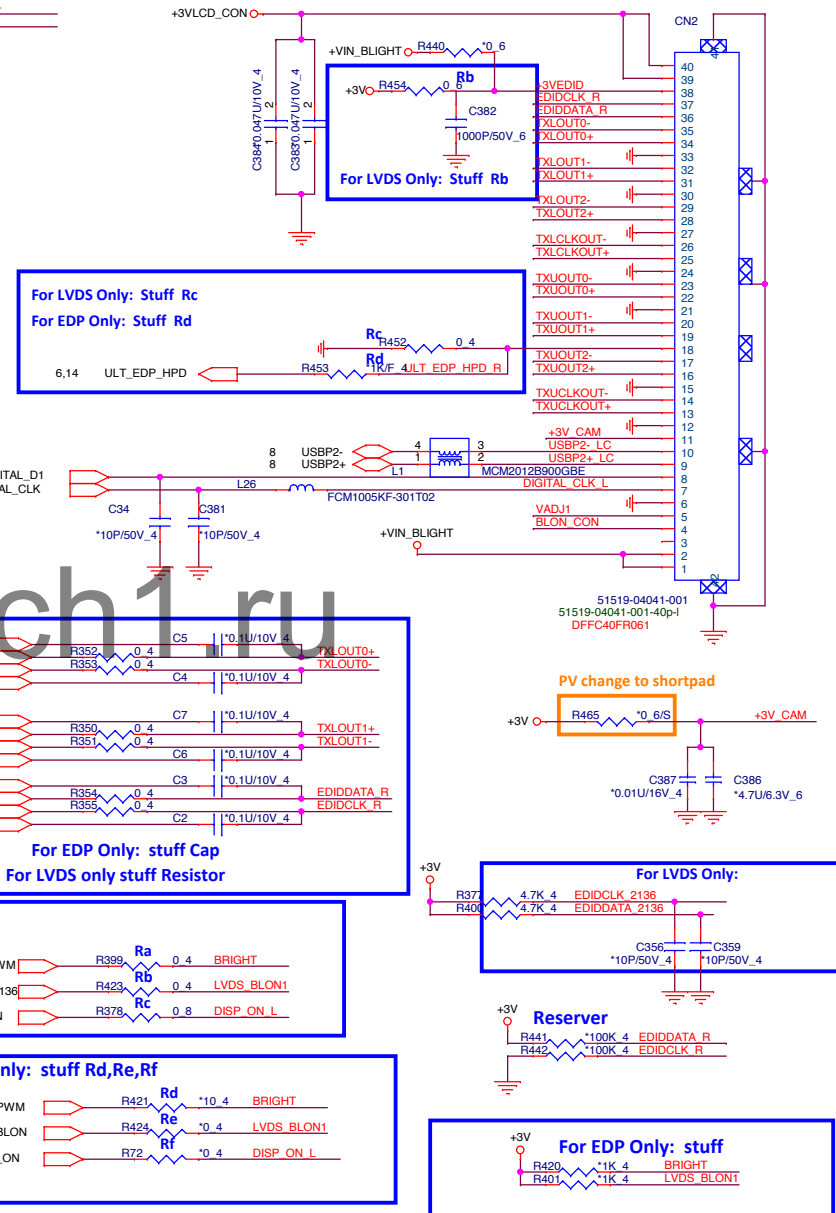
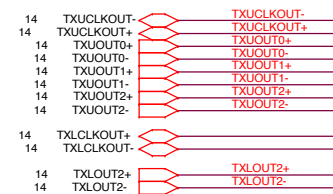
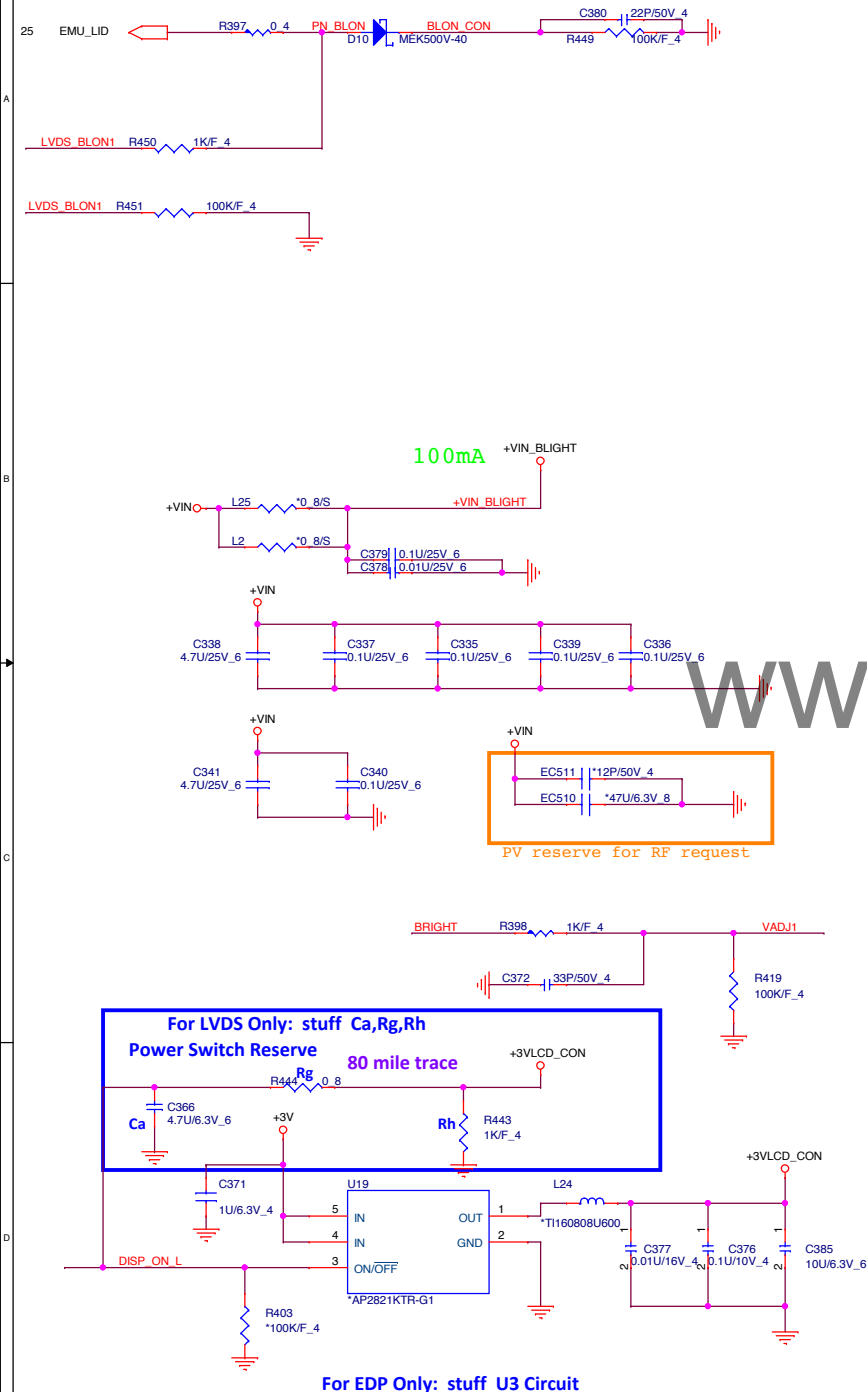


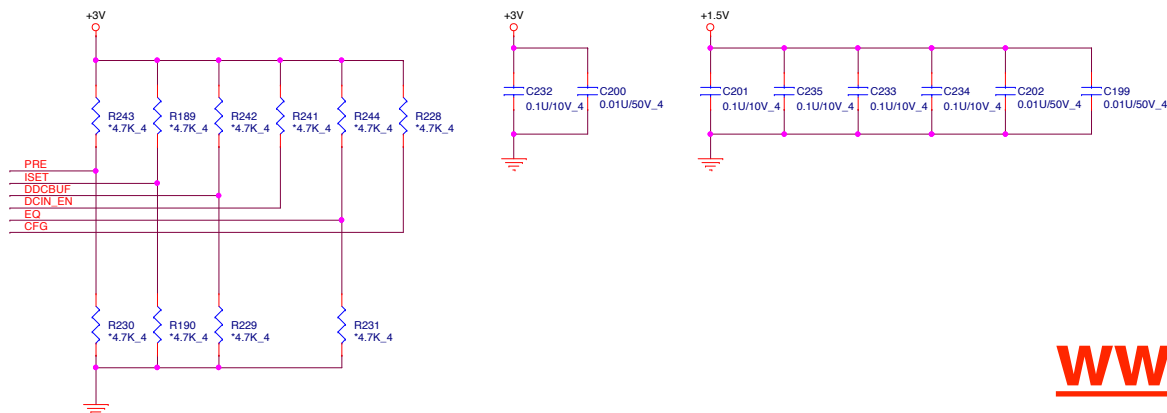
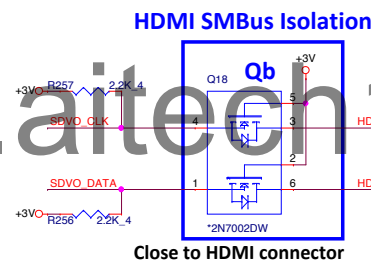
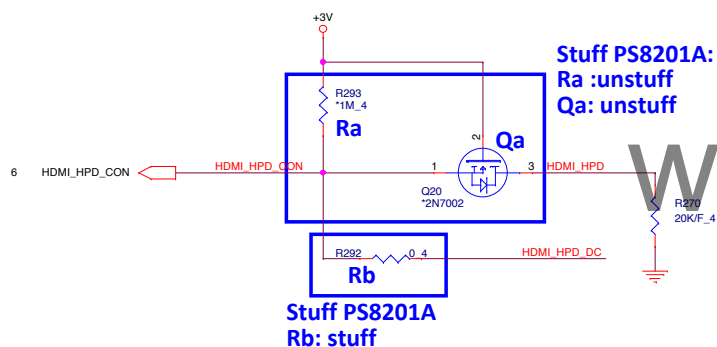
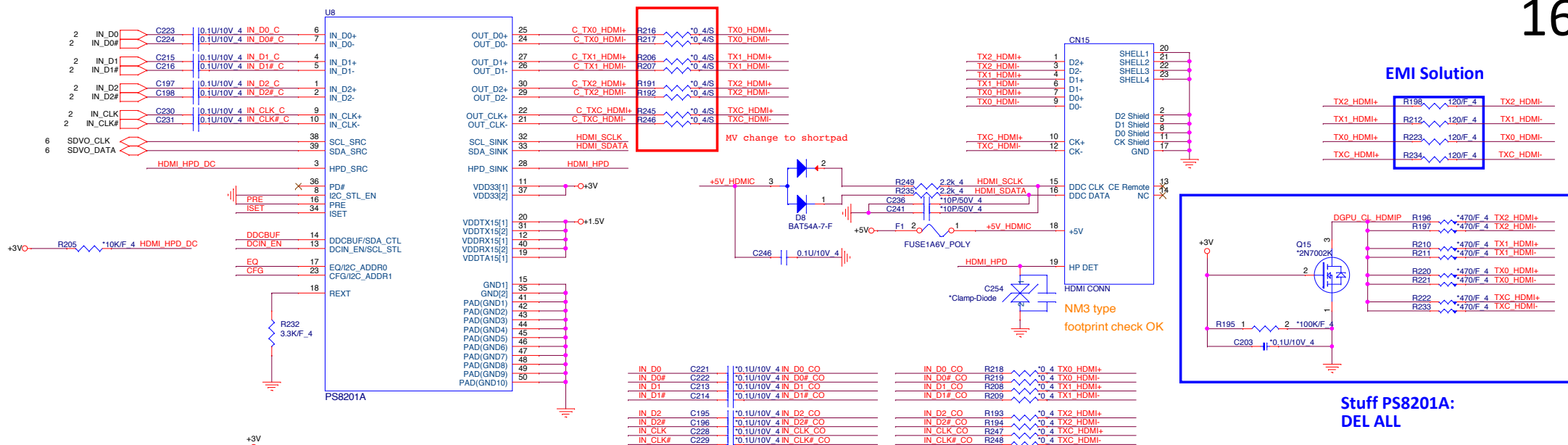
Size Custom	Document Number RTD2136	Rev 1A
Date: Monday, April 21, 2014		Sheet 14 of 32

LID Switch

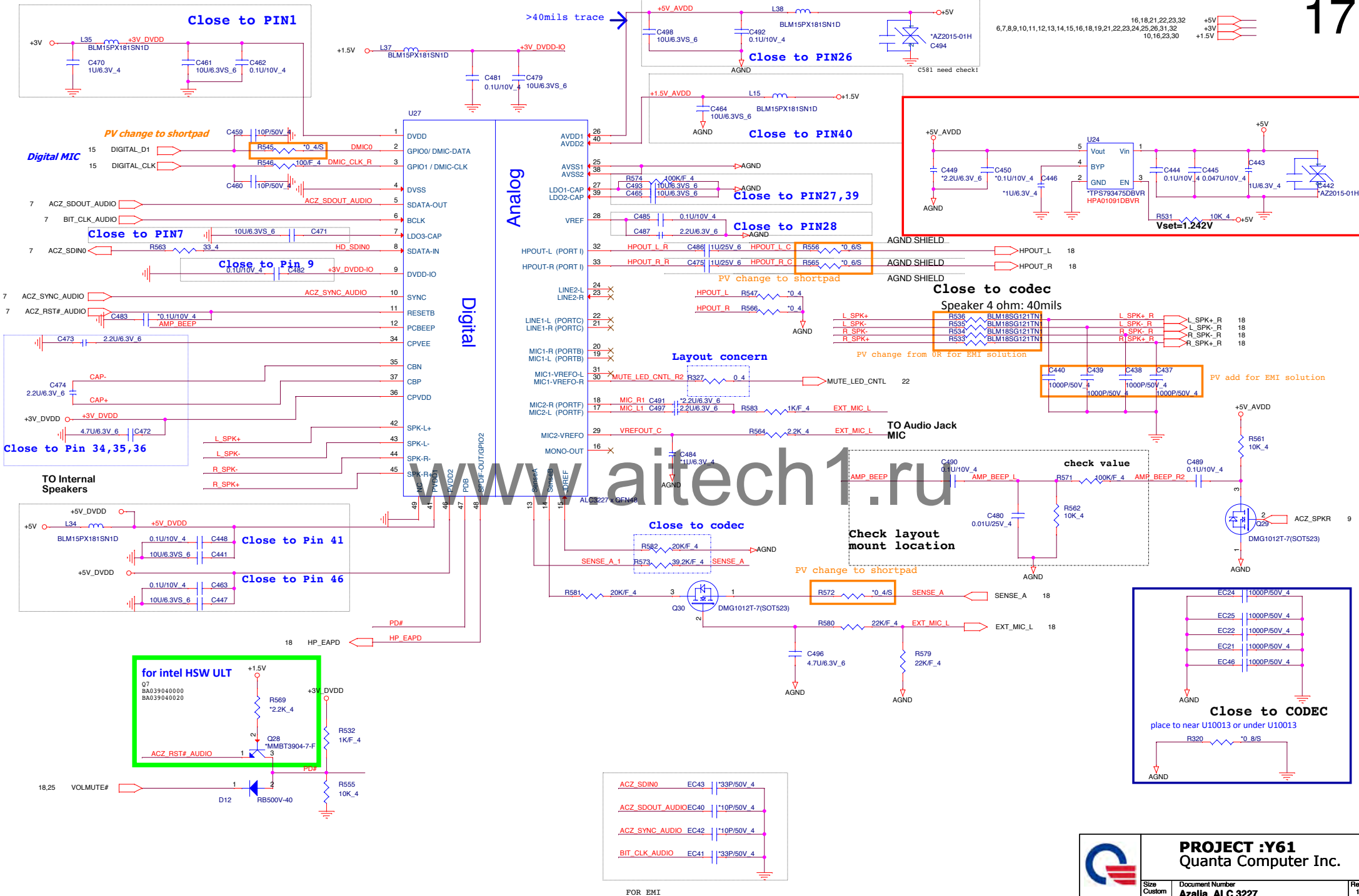
LVDS Conn.

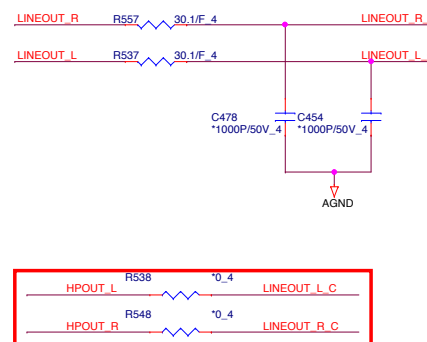
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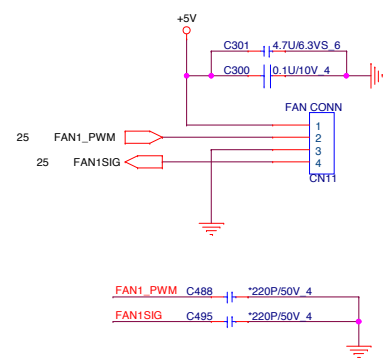
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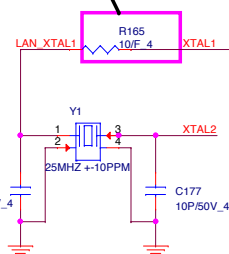
FAN



6,7,8,9,10,11,12,13,14,15,16,17,19,21,22,23,24,25,26,31,32	+3V	
16,17,21,22,23,32	+5V	
13,20,28,29,30,31,32	+5VSS	

	<h1>PROJECT :Y61</h1> <h2>Quanta Computer Inc.</h2>		
	Size Custom	Document Number	Rev 1A
	Audio/AMP HPA022642RTJR		
Date: Monday, April 21, 2014		Sheet 18 of 32	

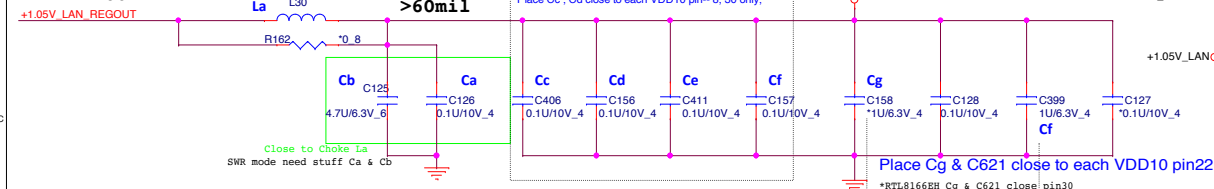
For EMI 0 ~ 22 ohm



Trace<30 mil
Width > 60 mil
 >60mil

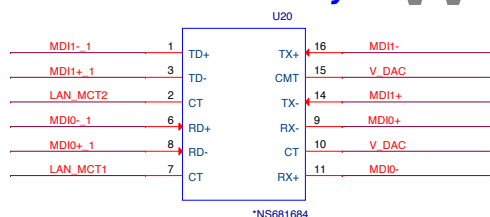
Power trace Layout 寬度> 60mil

>60mil



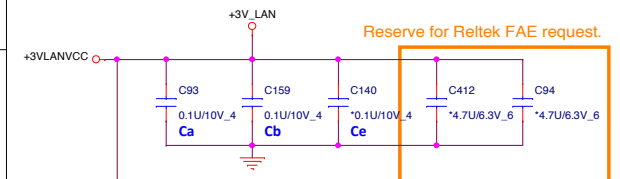
- * Place Cg close to each VDD10 pin-- 22 (reserve)

10/100 only

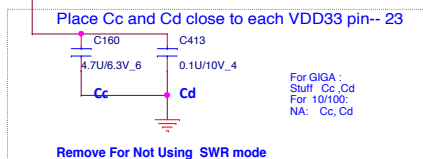


*NS681684

BOT: TST1284R LF DB0EL5LAN00



close to each VDD33 pin-- 11, 32



For GIGA :
 Stuff Cc, C
 For 10/100
 NA: Cc, C

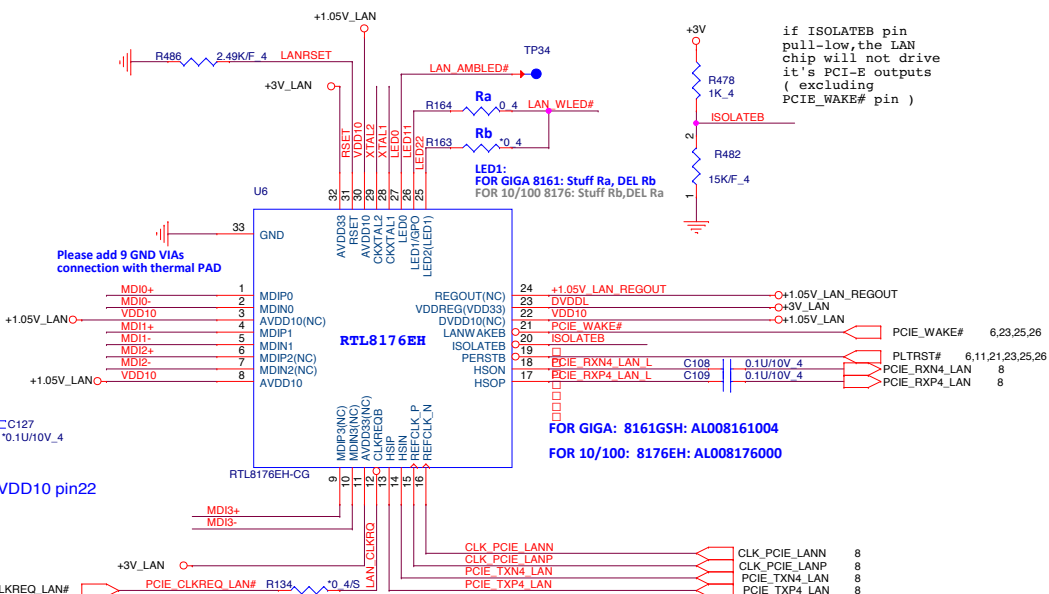
Remove For Not Using SWR mode

6,7,8,9,10,11,12,13,14,15,16,17,18,21,22,23,24,25,26,31,32

+3V

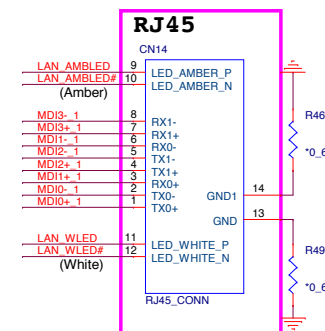
+3VLAVCC

Please add 9 GND VIAs
connection with thermal PAD

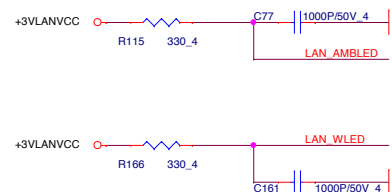


FOR GIGA: 8161GSH: AL008161004
FOR 10/100: 8176EH: AL008176000

LAN conn



SI change footprint to
rj45-2rj3060-128111f-12p

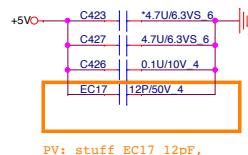
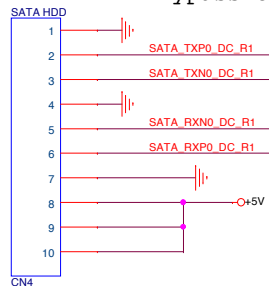


PROJECT :Y61
Quanta Computer Inc.

Size Custom	Document Number RTL 8161/RJ45
Date: Monday, April 21, 2014	Sheet 19 of 32

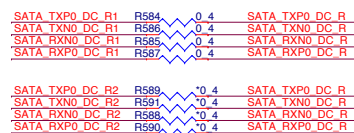
SATA HDD Connector(Cable type)

Bypass CAP close conn



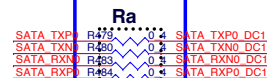
PV: stuff EC17 12pF,

SI add for co-lay use

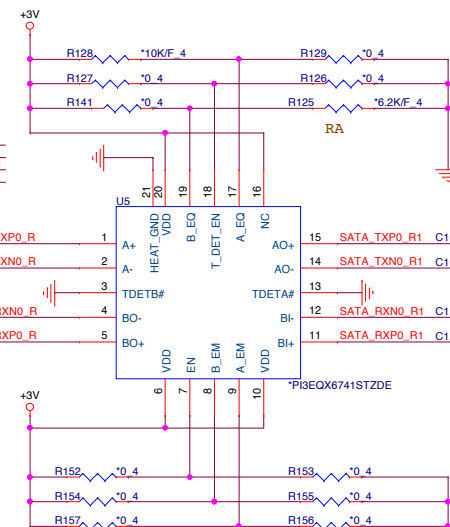
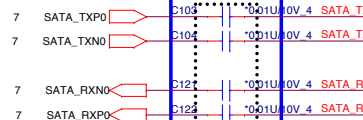


SATA Re-driver

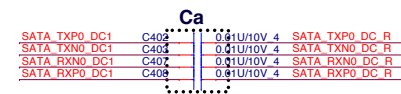
Ra & Rb need place close



HOST



DEVICE



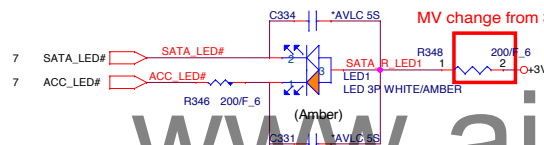
Ca

Cb

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

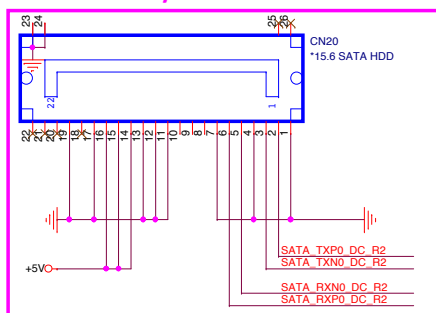
SATA LED

MV change from 39ohm to 200ohm for ID



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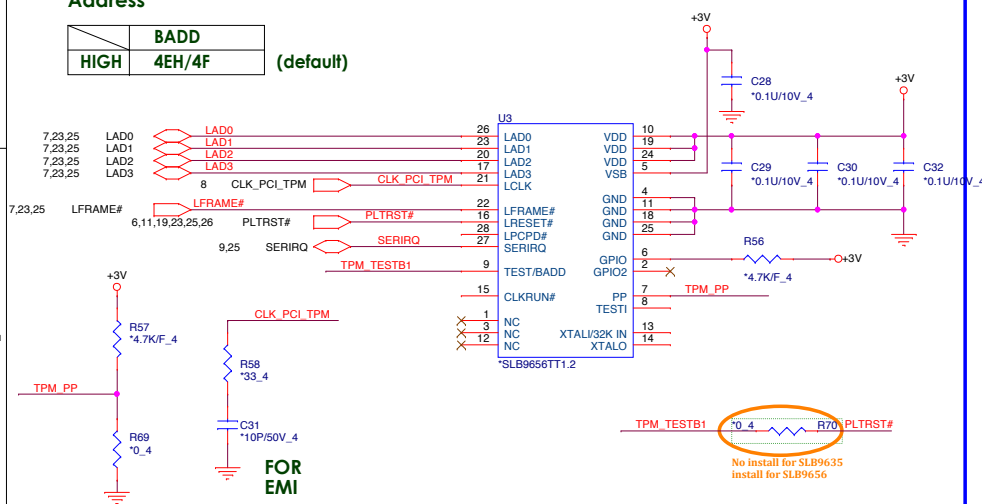
SI-co-lay SATA HDD Connector



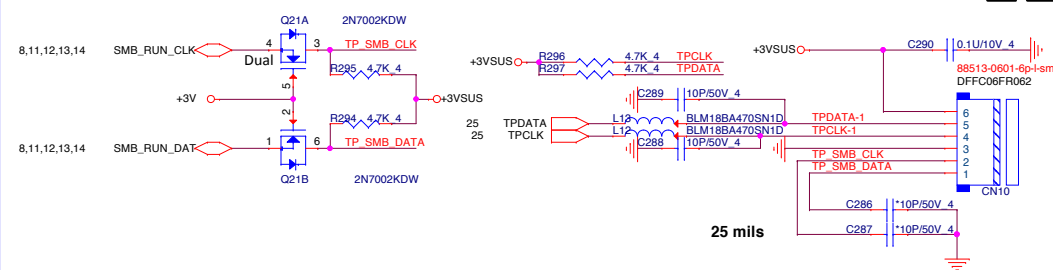
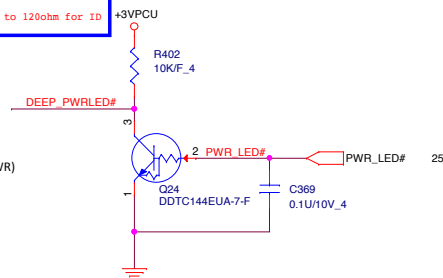
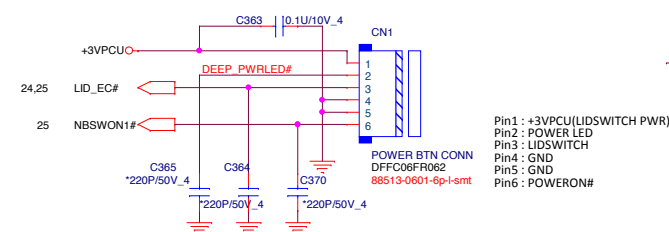
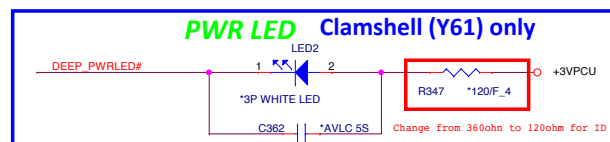
TPM (1.2)

Address

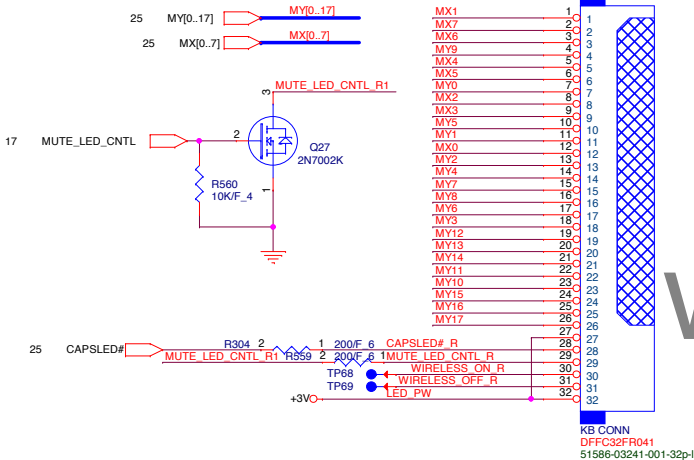
Address	BADD
HIGH	4EH/4F (default)

No install for SLB9635
install for SLB9656

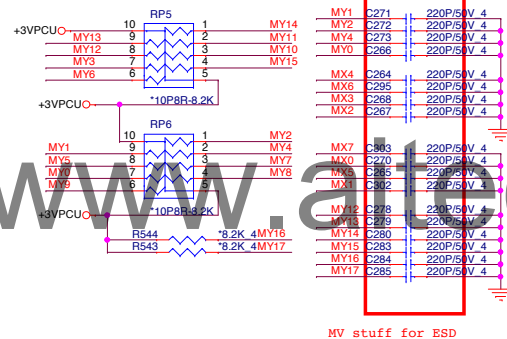
Touch Pad Connector



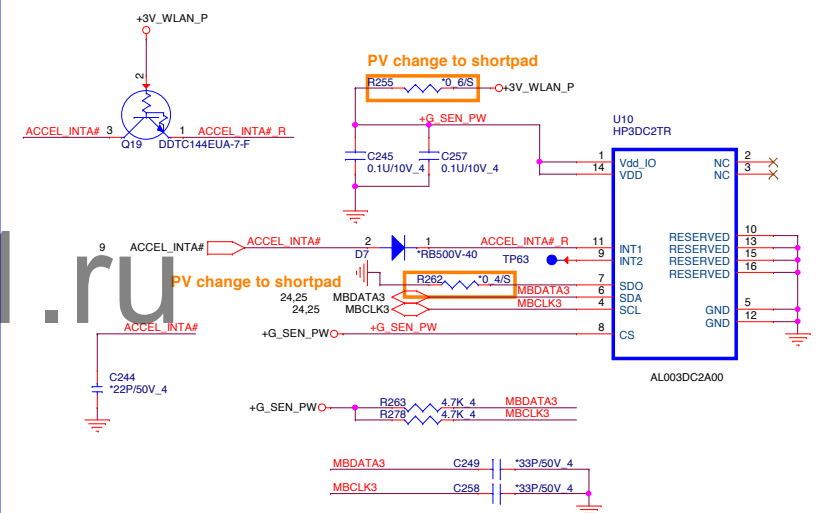
KEYBOARD Con.



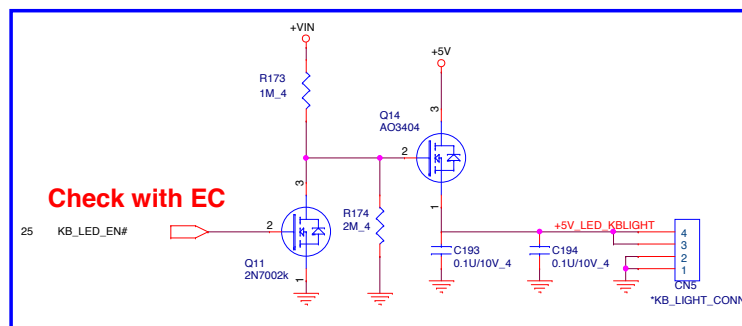
KEYBOARD PULL-UP



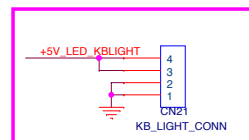
Accelerometer Sensor

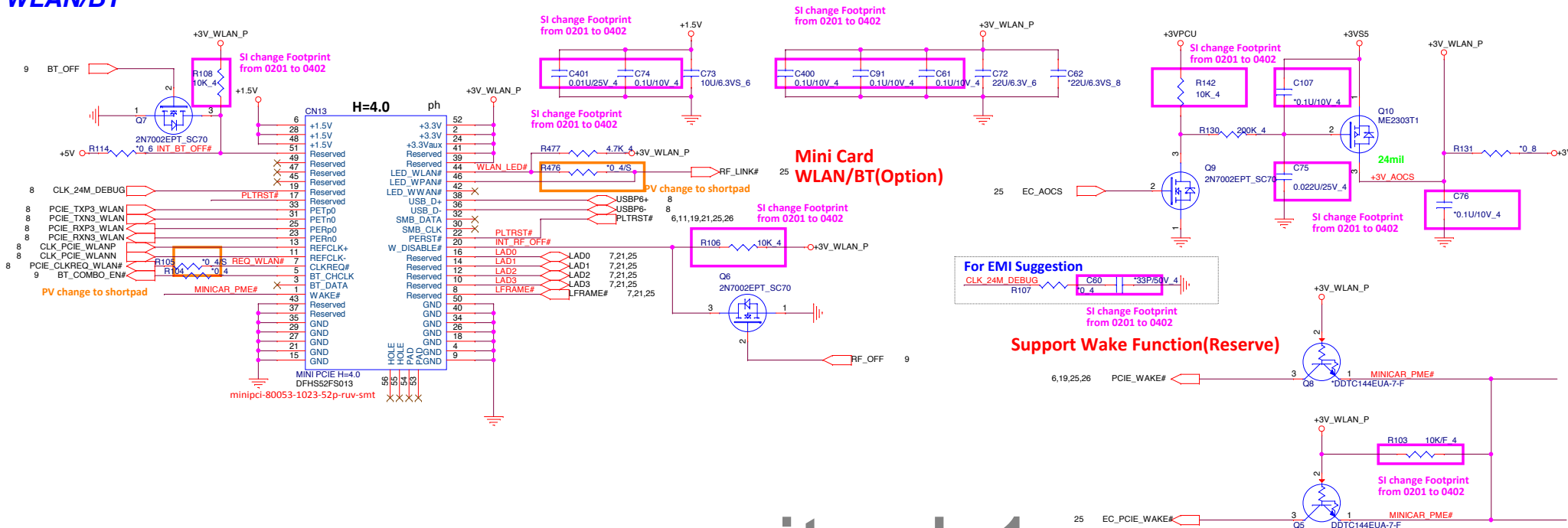


15" KB backlight only



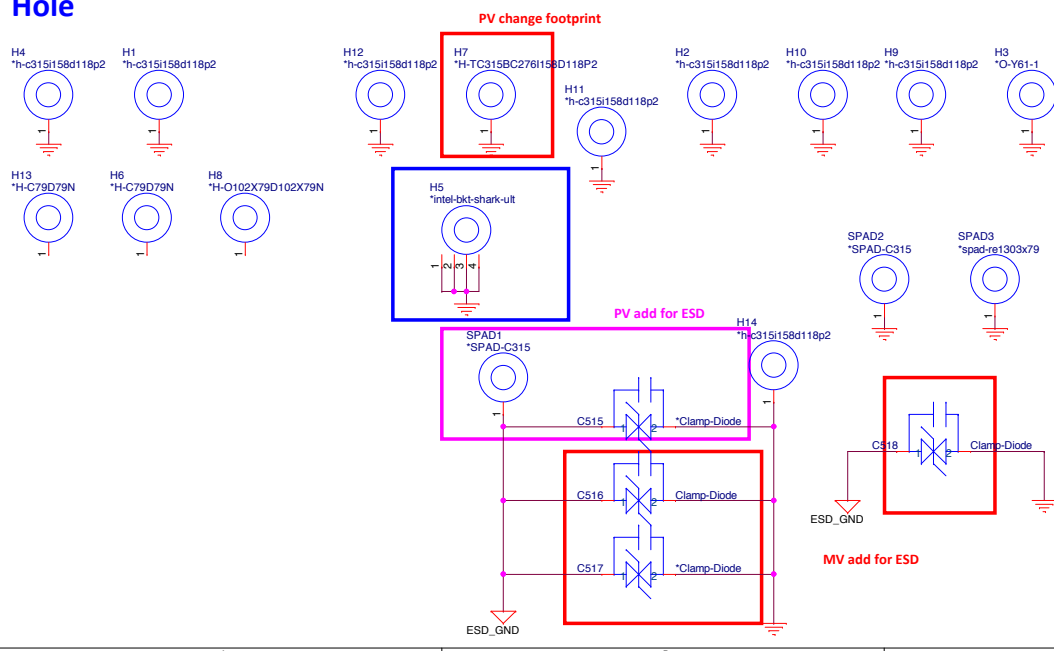
Co-lay





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Hole



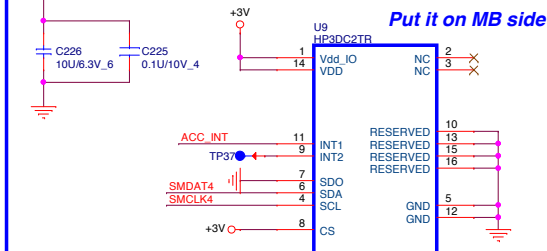
6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22,24,25,26,31,32
16,17,18,21,22,32
4,7,22,25,27,28

27 +PRWSRC
+3V
+5V
+3VPCU

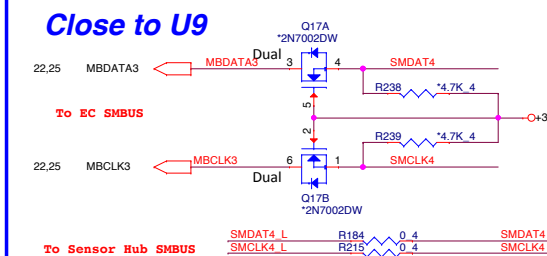


PROJECT :Y61
Quanta Computer Inc.

Size Custom	Document Number WLAN/G-Sensor/G-CLK/TS	Rev 1A
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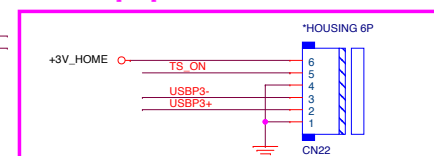
Put it on MB side



Close to U9

To Sensor Hub SMBUS

SI co-lay 6 pin TS COM



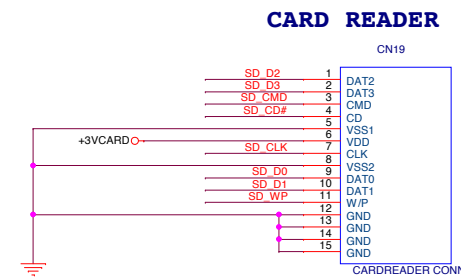
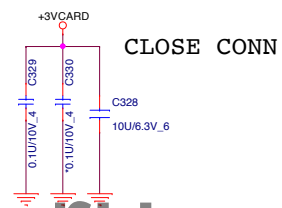
PROJECT :Y61
Quanta Computer Inc.

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

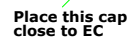
- 32.768kHz clock lines:
 - a. If possible, please avoid using any through-hole.
 - b. Please make the trace length short, and the trace width wide enough.
 - c. The spacing to the closest neighbor should be wide enough.



SI reserve for EMI



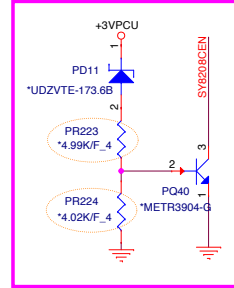
NEW Type



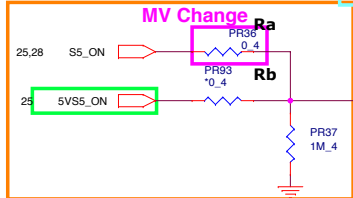
+3VS5 6,7,9,10,20,23,24,25,30,32
+5VS5 13,18,20,29,30,31,32

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

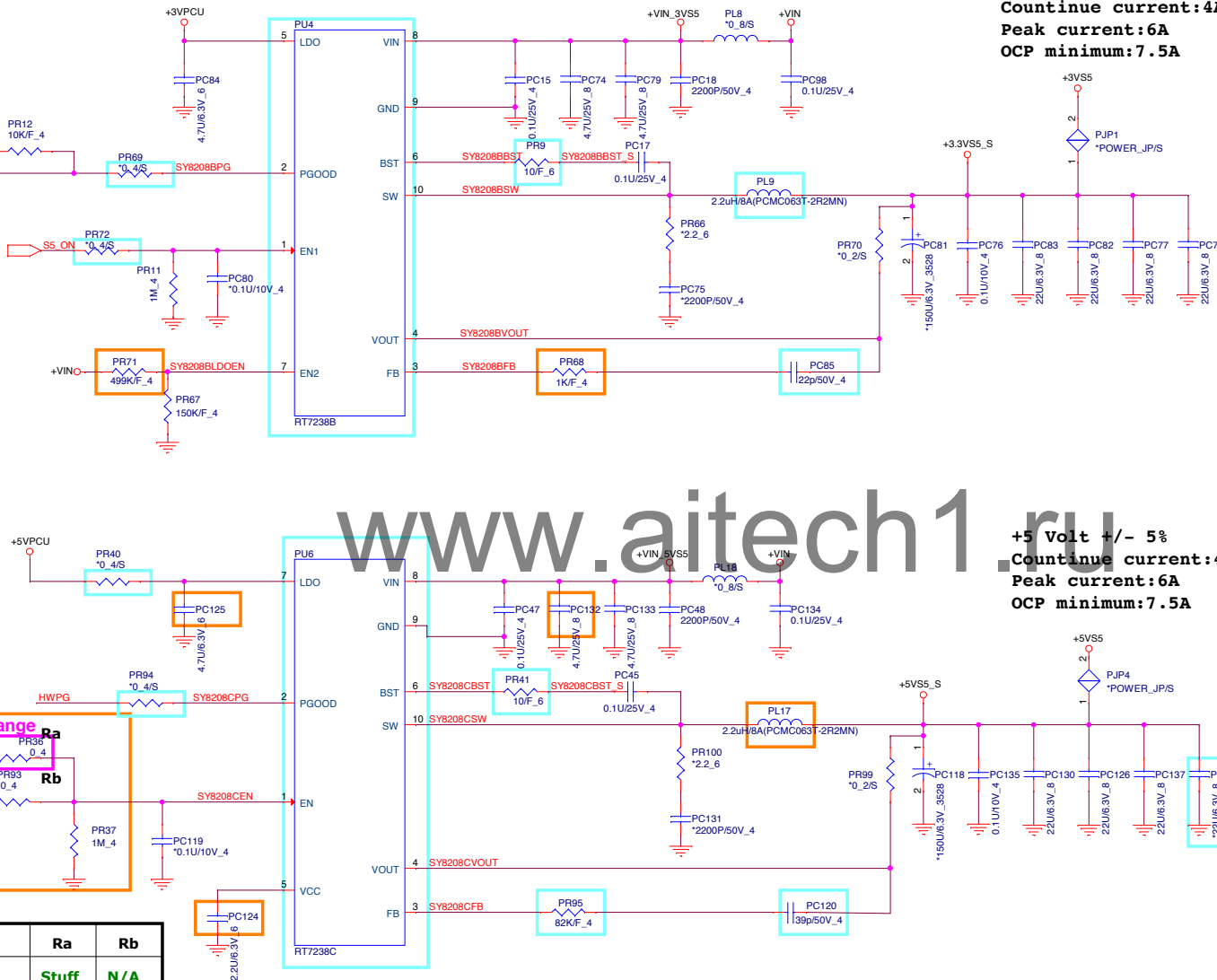
MV Change



MV Change



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

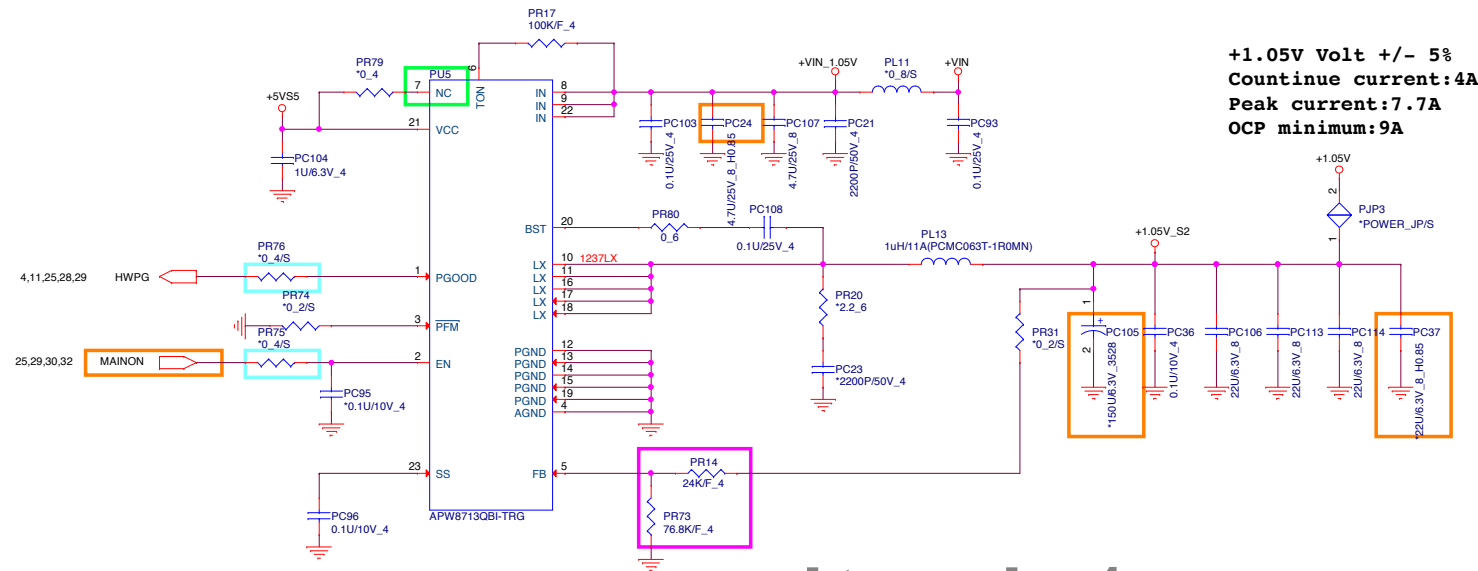


+5 Volt +/- 5%
Countinue current:4A
Peak current:6A
OCp minimum:7.5A

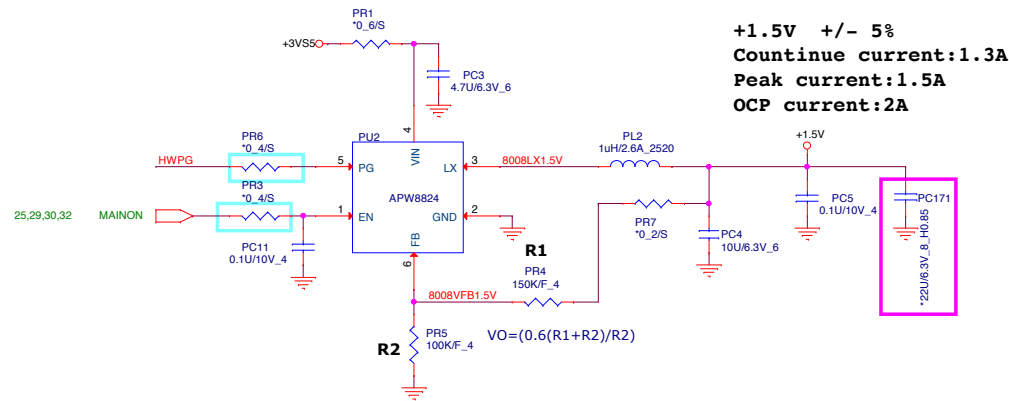


PROJECT :NAPA
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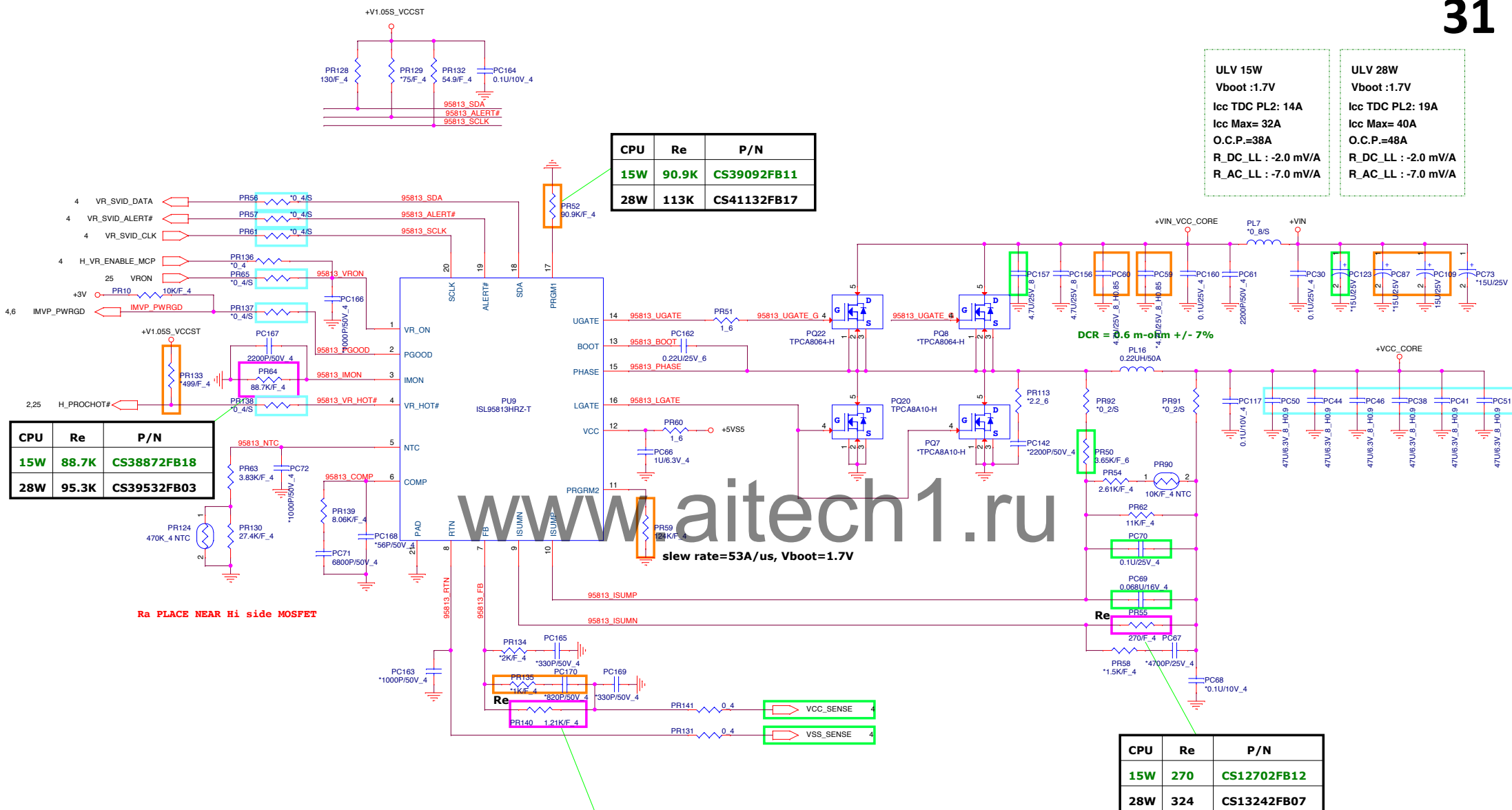
Size Custom Document Number 3/5VS5 (SY8208B/SY8208C) Rev 1A
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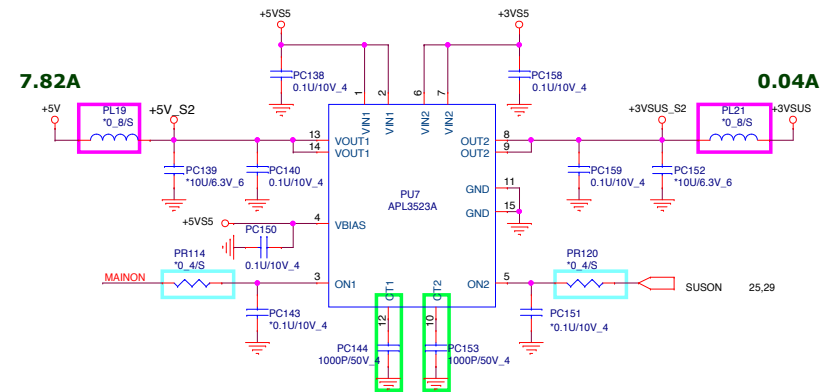
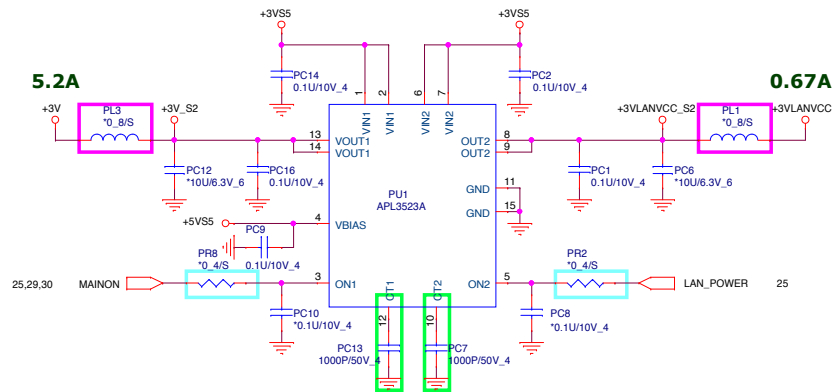


+VIN 15,22,27,28,29,31,32
+3VSS 6,7,9,10,20,23,24,25,28,32
+5VSS 13,18,20,28,29,31,32
+5VPCU 13,27,28

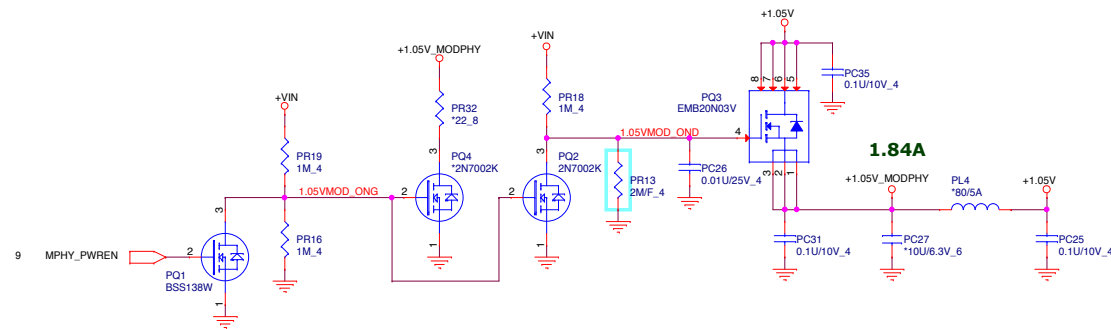


PROJECT :NAPA
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6,7,8,9,10,11,12,13,14,15,16,17,18,19,21,22,23,24,25,26,31	+3V
16,17,18,21,22,23	+5V
15,22,27,28,29,30,31	+VIN
6,7,8,10,20,23,24,25,28,30	+3VSS
13,18,20,28,29,30,31	+5VSS
19	+3VLANVCC



PROJECT :NAPA
Quanta Computer Inc.

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