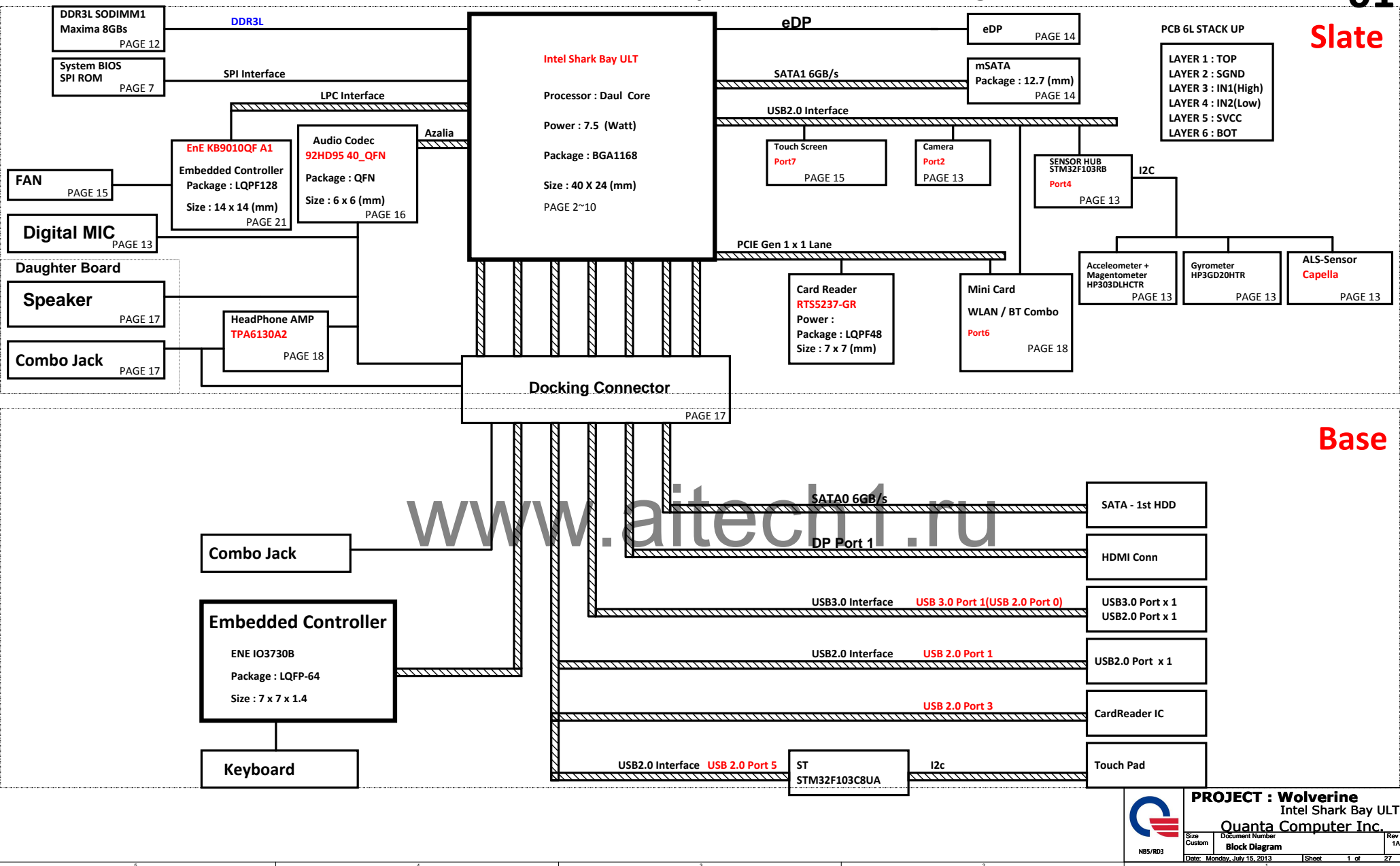


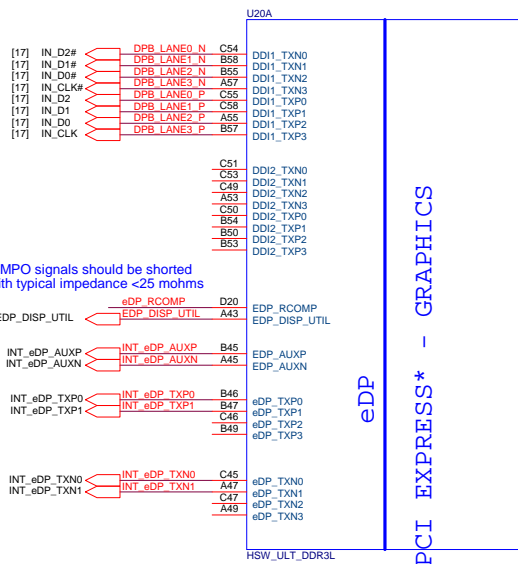
Wolverine DIS (13.3") Ultra Intel Shark Bay ULT Platform Block Diagram

01

Slate

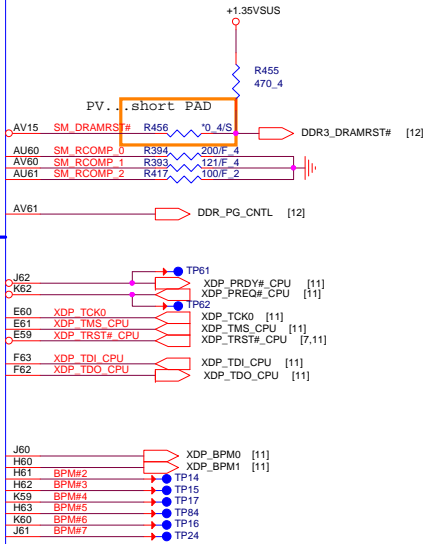
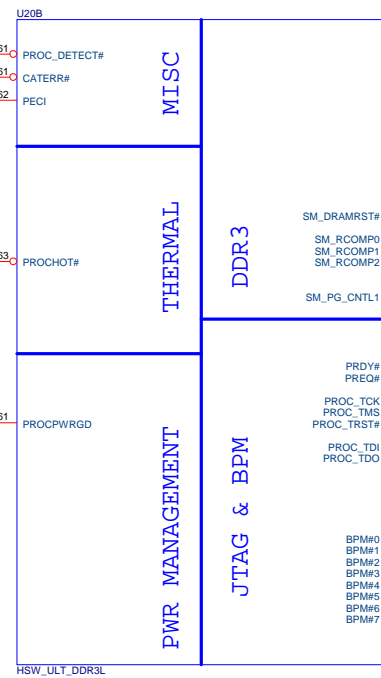
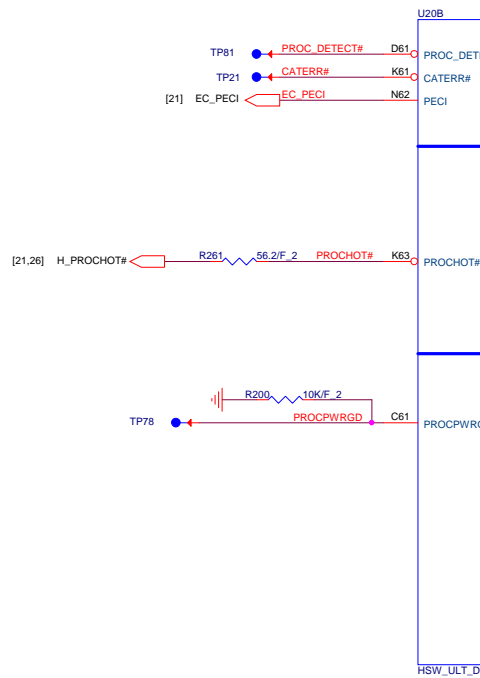
Base



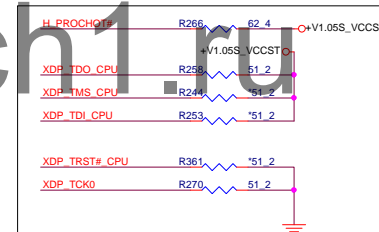


+VCCIOA_OUT R181 24.9/F 2 eDP_RCOMP

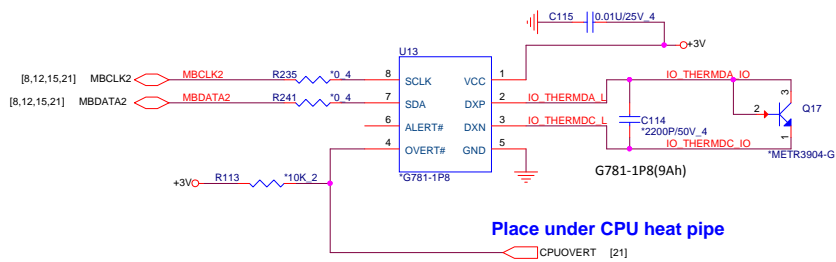
eDP_COMPIO and ICOMPO signals should be shorted near balls and routed with typical impedance <25 mohms



Processor pull-up (CPU)



Local Thermal Sensor



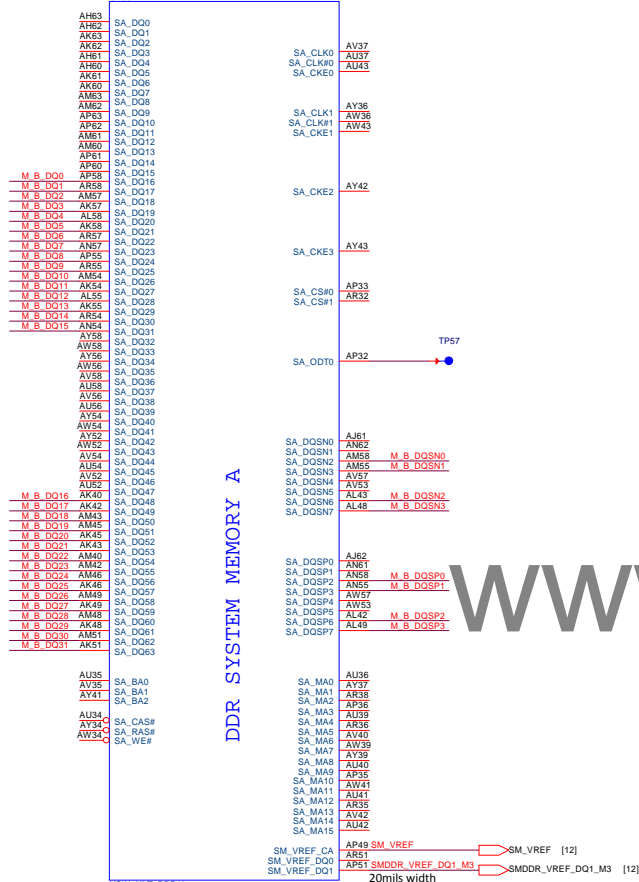
Place under CPU heat pipe

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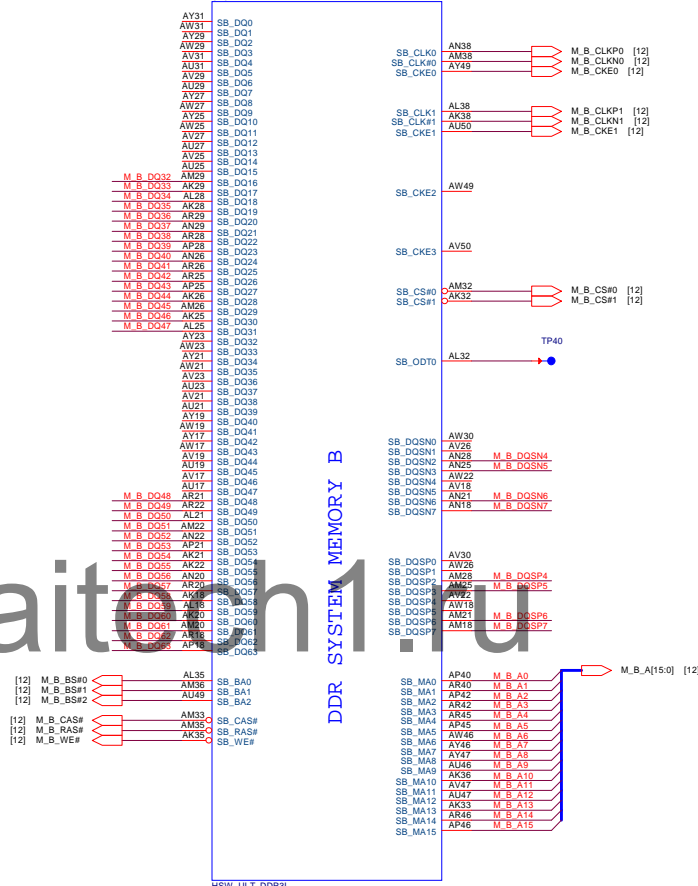
Haswell ULT Processor (DDR3L)

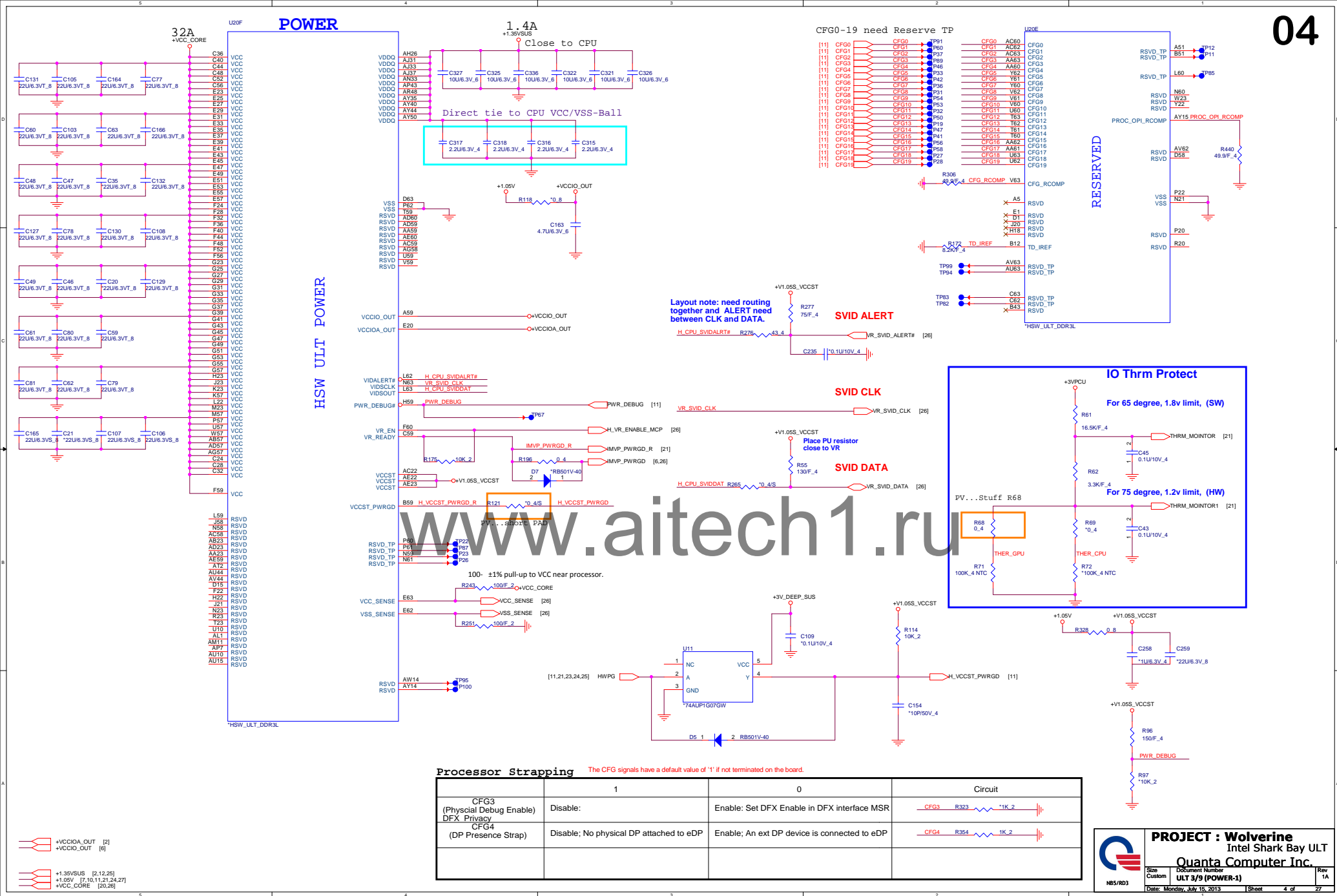
[12] M_B_DQ[63:0]
[12] M_B_DQS[7:0]
[12] M_B_DQS[7:0]

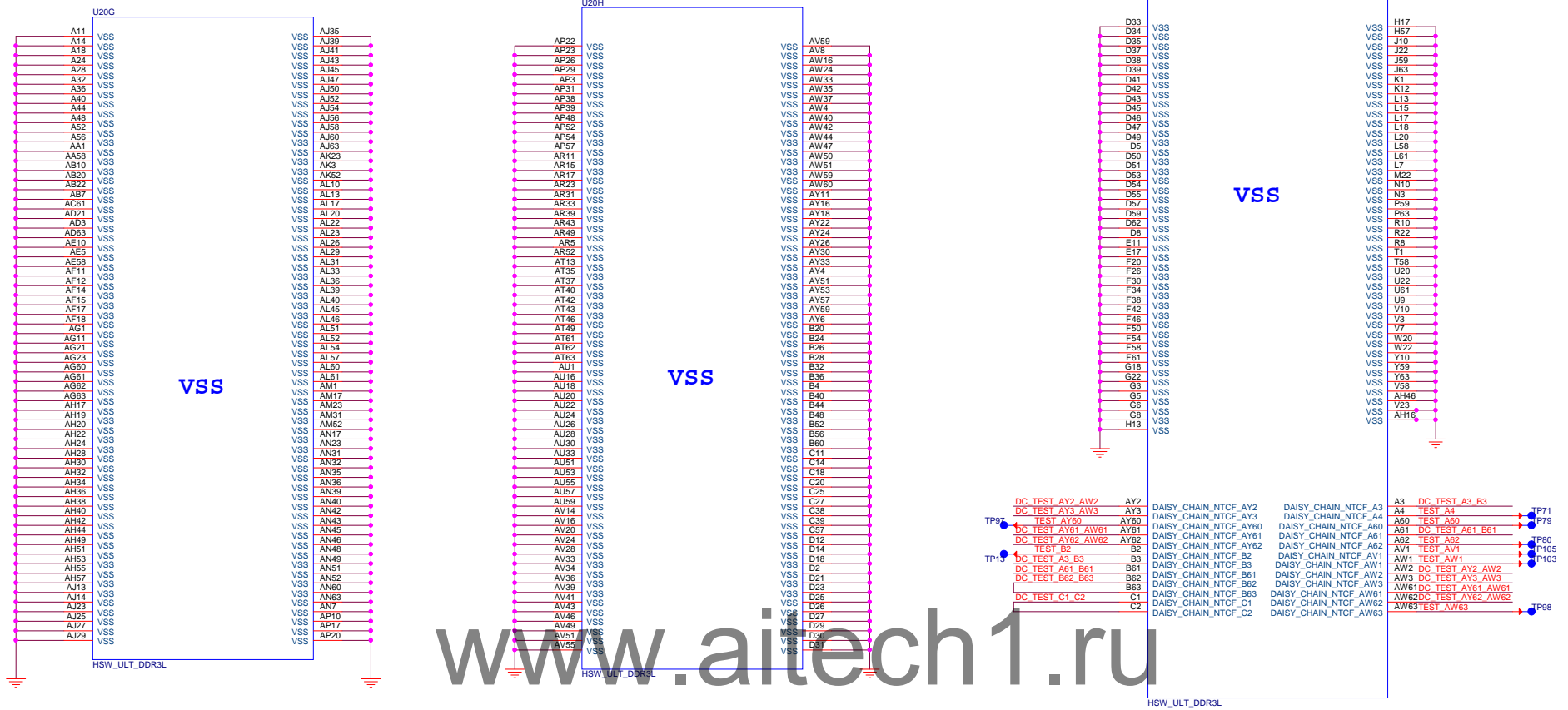
U20C

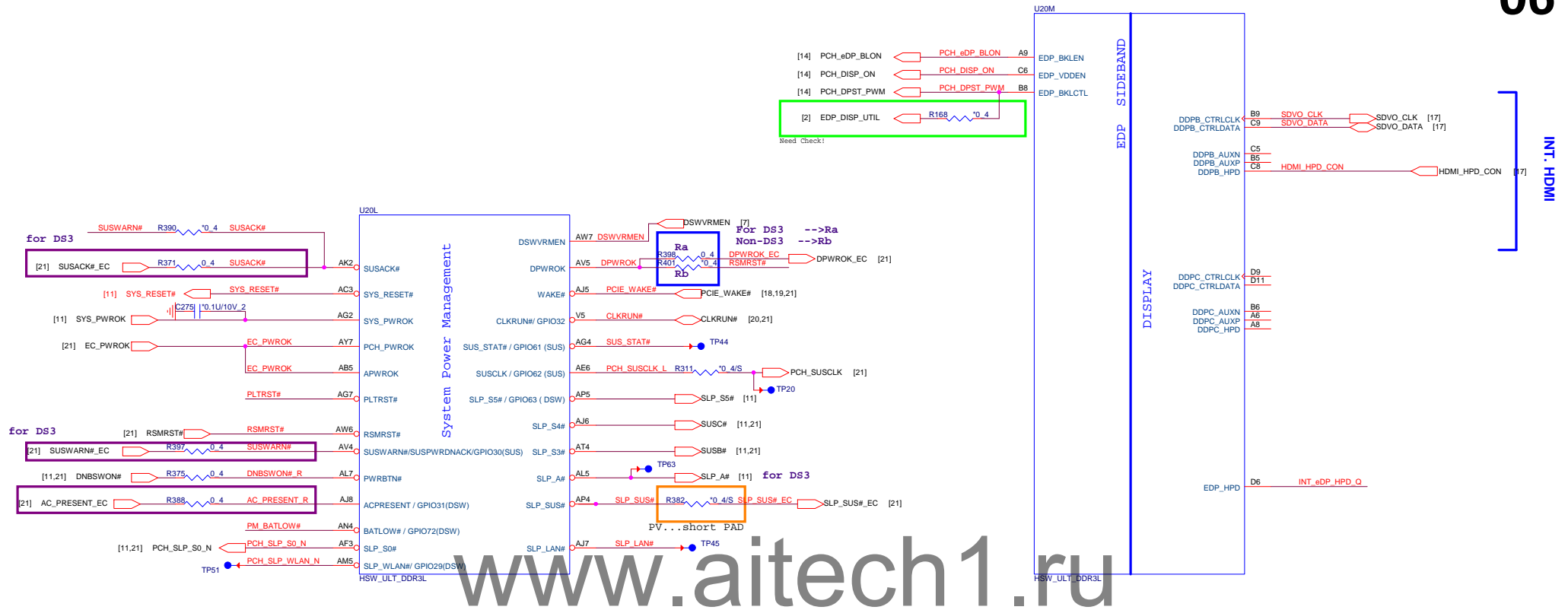


U20D



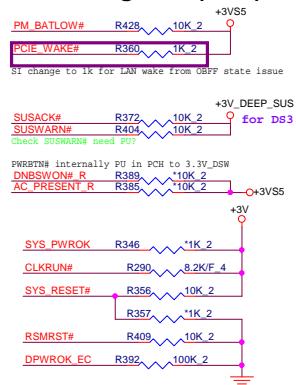




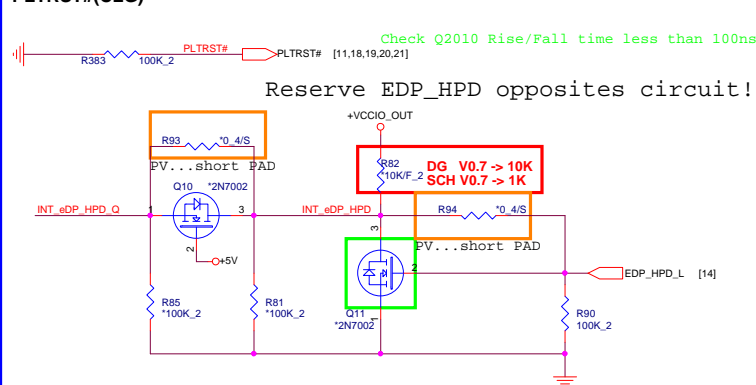


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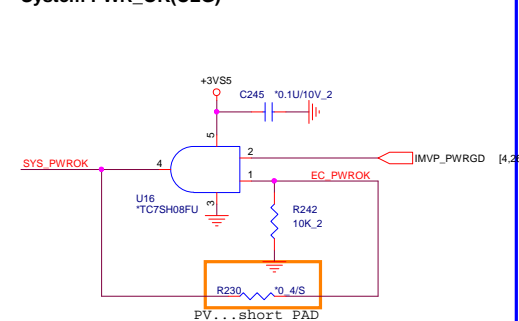
PCH Pull-high/low(CLG)



PLTRST#(CLG)



System PWR_OK(CLG)



[2,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,26,27] +3V

[9,10,11,18,19,20,23,24,27] +3VSS

[14,15,16,17,18,27] +5V



PROJECT : Wolverine
Intel Shark Bay ULT
Quanta Computer Inc.

Size Custom	Document Number ULT 5/9(Power Manger)	Rev 1A
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U20J



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							
GPIO_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							

30mils



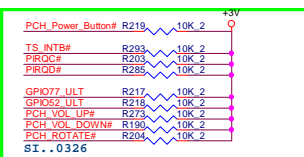
GPIO Pull UP



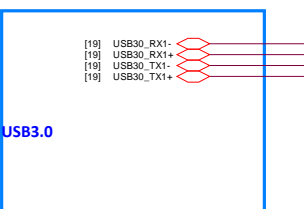
■ PCH SPI ROM(CLG)



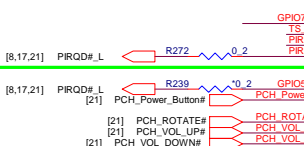
PCI/USB OC# Pull-up (CLG)



Change Pull-High Net name
R219,R273,R190,R204 for
Button Array



20111130 Modify USB3.0 for HM70

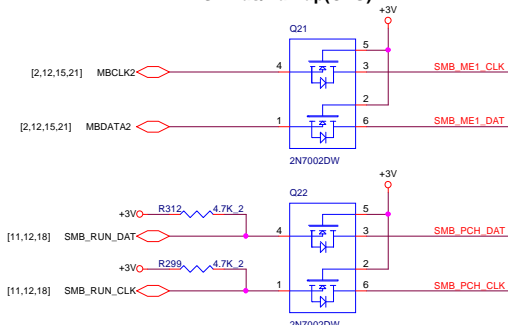


SI..0326

```
Add Button array for Power
Button, Rotate, VOL UP, VOL DOWN
```



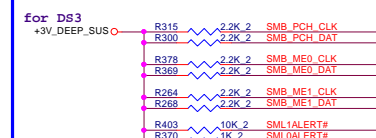
SMBus/Pull-up(CLG)



CLK_REQ/Strap Pin(CLG)



SMBus/Pull-up(CLG)



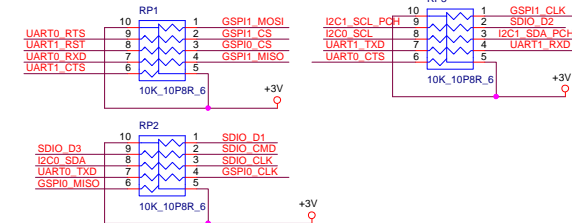
PROJECT : Wolverine
Intel Shark Bay ULT
Quanta Computer Inc.

Size Custom	Document Number ULT 7/9 (PCIE/USB/CLK)
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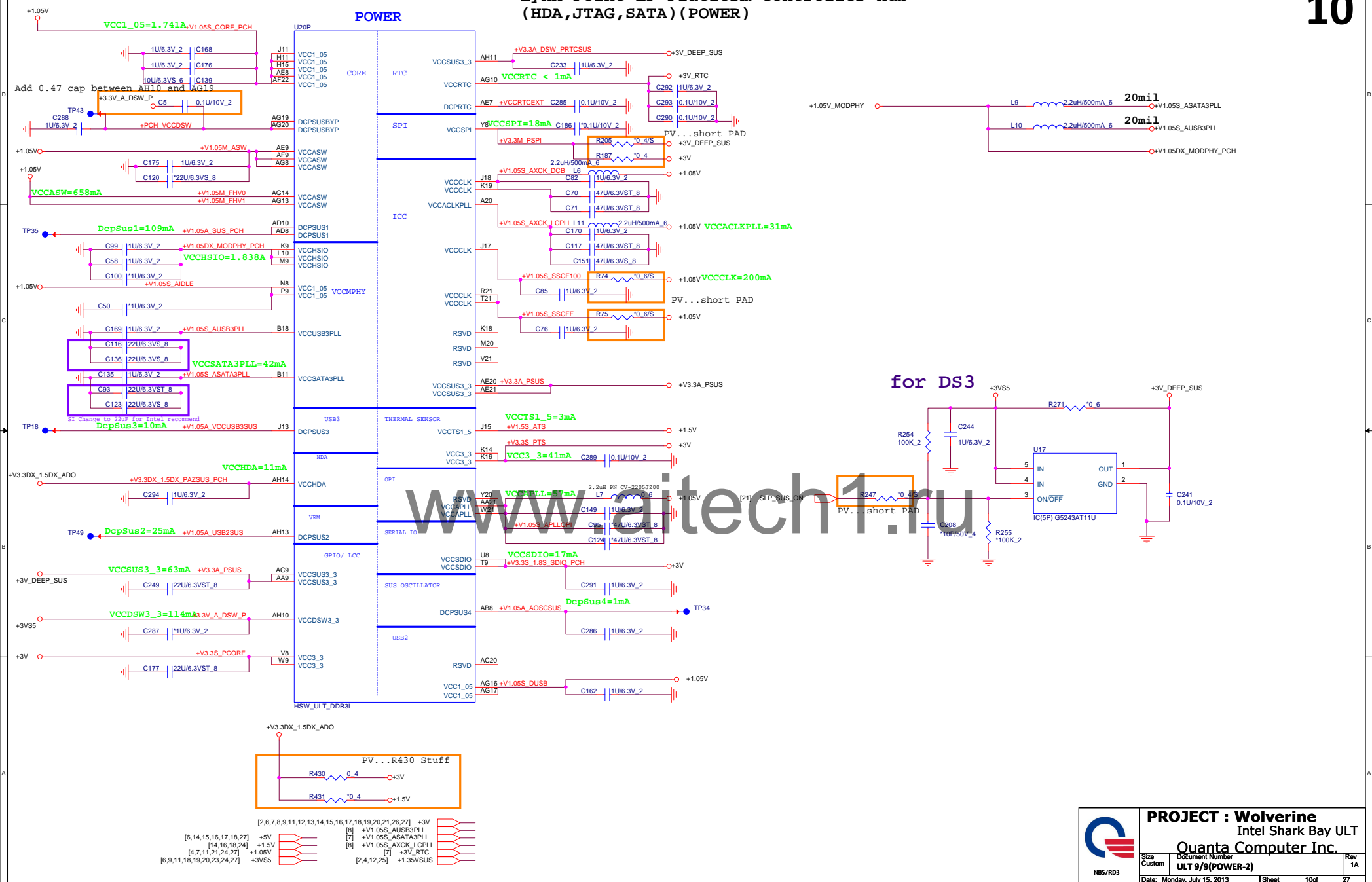
09

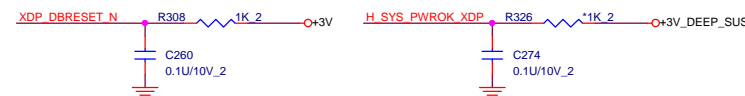


The diagram shows a 5V regulator circuit for DS3. It features a 10K resistor (R353) connected to BOARD_ID0, a 10K resistor (R352) connected to *10K_2, and a 3V3_DEEP_SUS output. The circuit is divided into two sections, Rb and Ra.

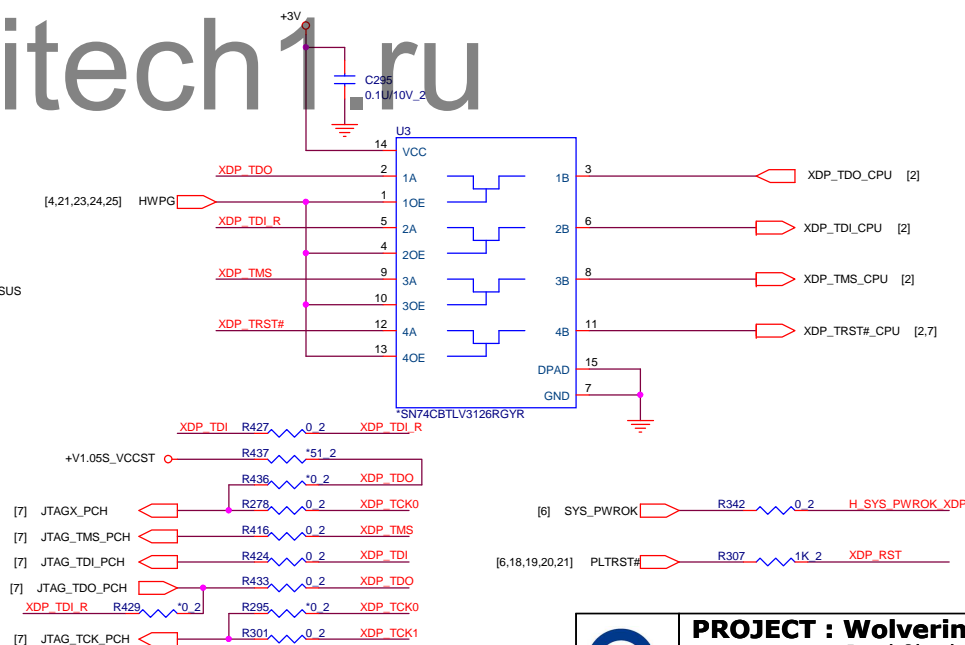
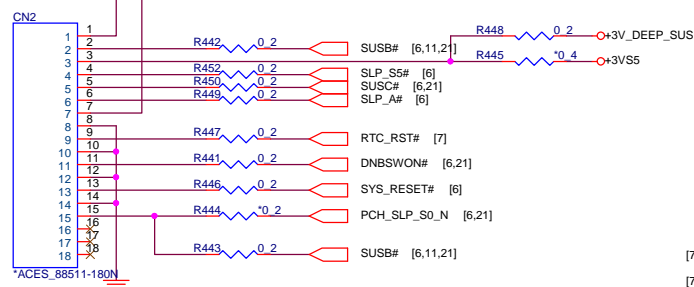
 NBS/RD3	PROJECT : Wolverine Intel Shark Bay ULT Quanta Computer Inc.		
	Size Custom	Document Number ULT 8/9 (GPIO/MISC)	Rev 1A
	Date: Mondav. July 15, 2013	Sheet 9 of	27

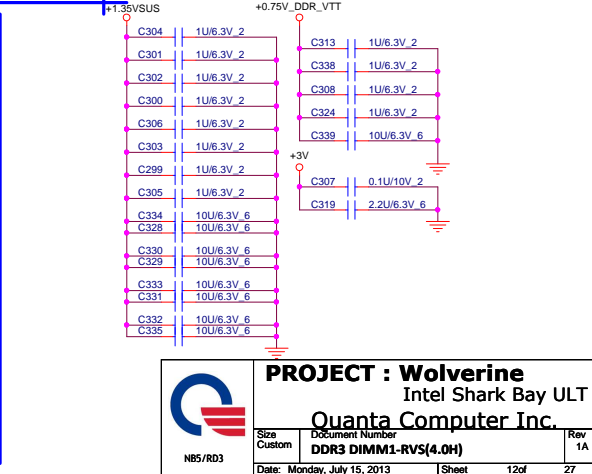
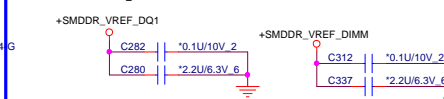
Lynx Point-LP Platform Controller Hub
(HDA,JTAG,SATA)(POWER)





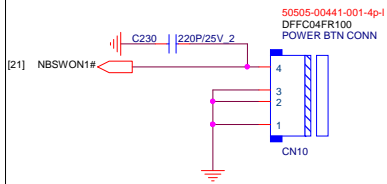
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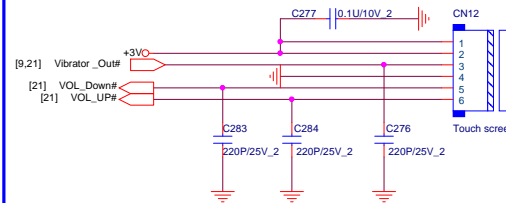


Control Buttons

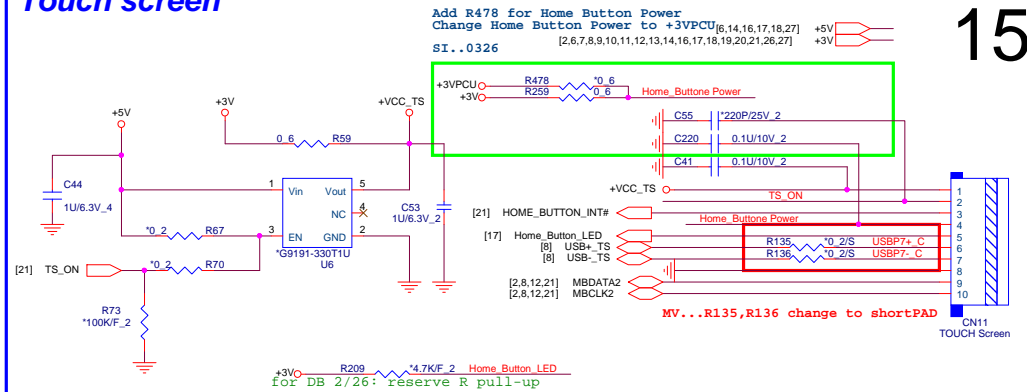
Power button



VOL BTN CONN

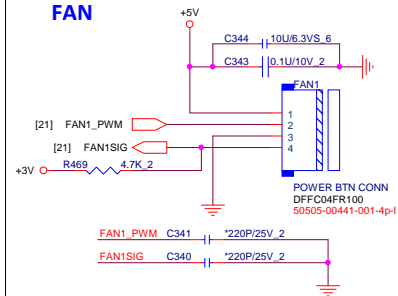


Touch screen

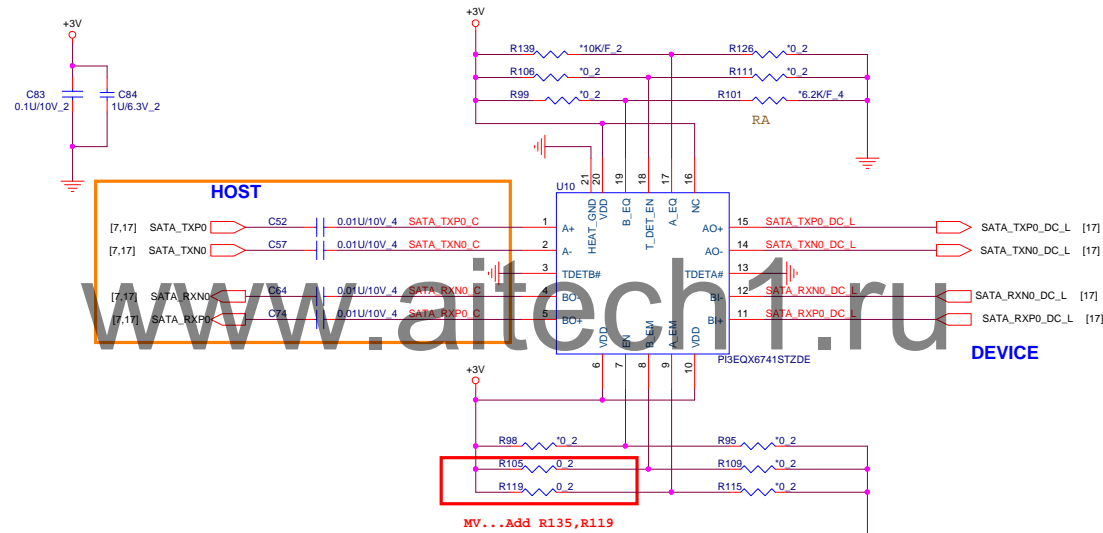


15

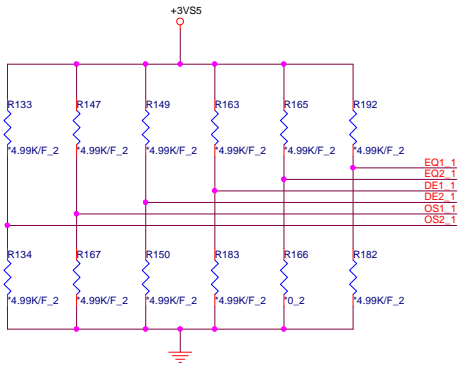
FAN



SATA Re-driver



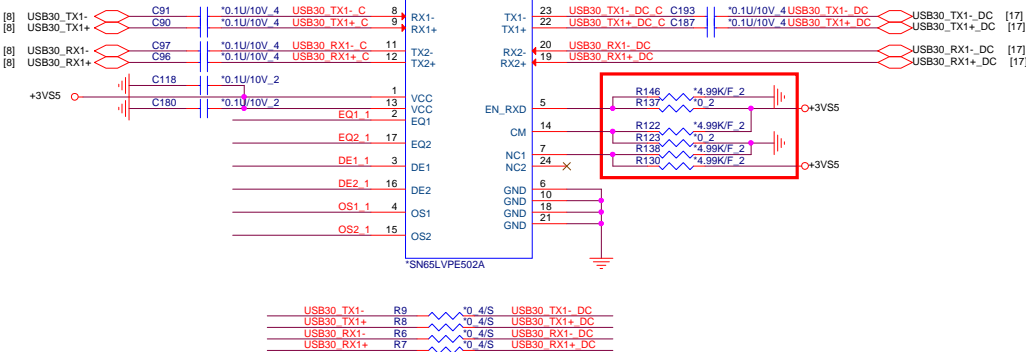
OSx		Transition Bit Amplitude	
NC(default)		1000	
0		870	
1		1085	
EQx		Equalization dB	
NC(default)		0	
0		7	
1		15	
DEx		OSx=NC	
NC		OSx=0	
0		OSx=1	
1		OSx=2	
EN_RXD		DEVICE FUNCTION	
1(default)		Normal operating mode	
0		Sleep mode	
CM		DEVICE FUNCTION	
0(default)		Normal operating mode	
1		Compliance mode	



HOST

USB3.0 re-driver IC

DEVICE

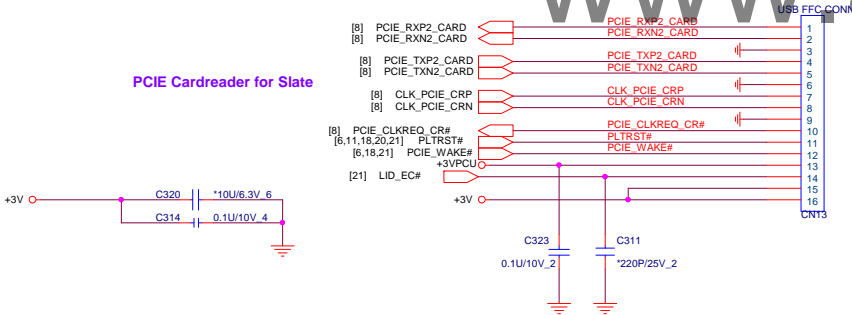



SI 3/1: add R470~R473 test PASS

CardReader

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PCIe Cardreader for Slate



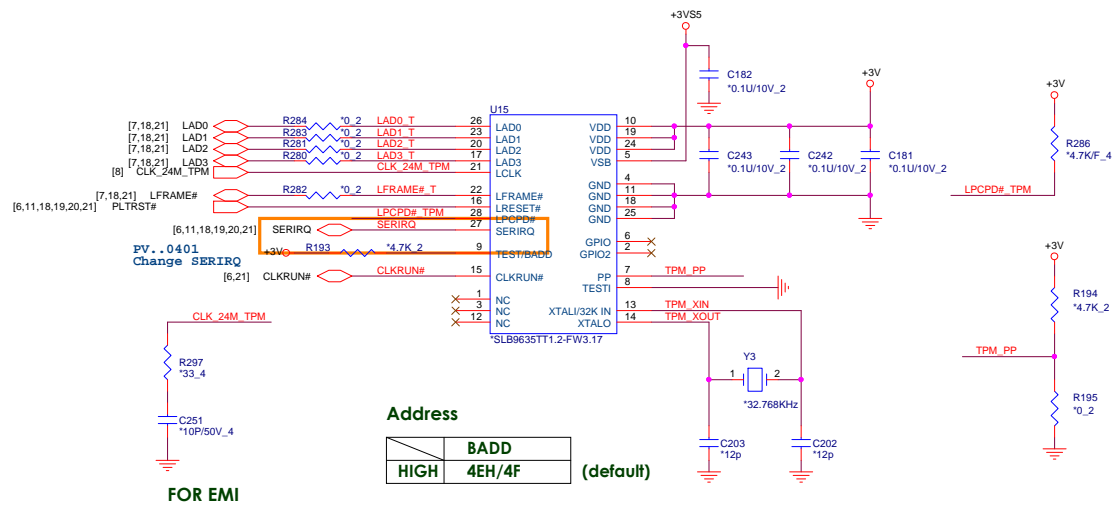


PROJECT : Wolverine
Intel Shark Bay ULT

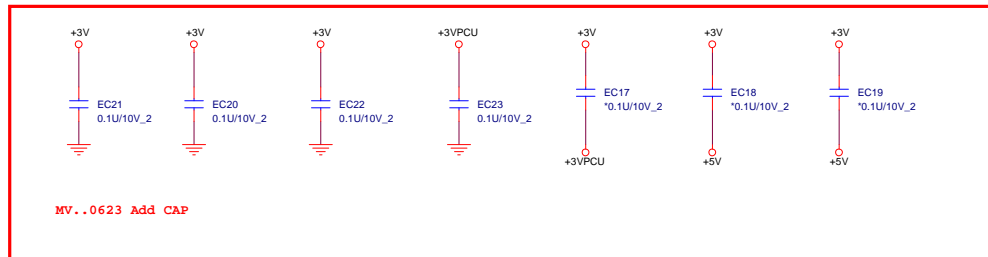
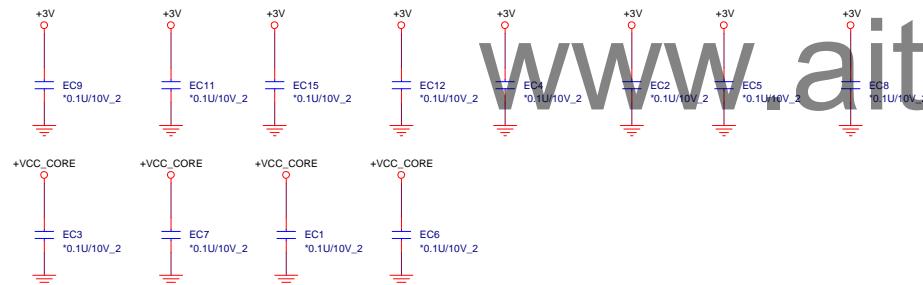
Quanta Computer Inc.

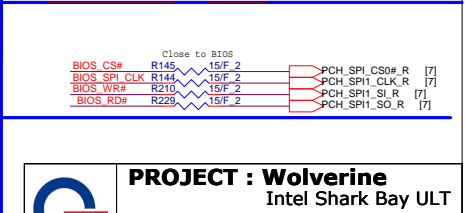
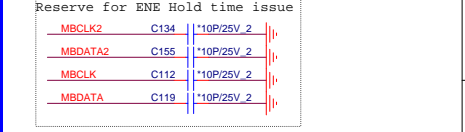
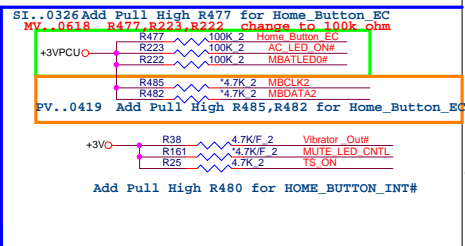
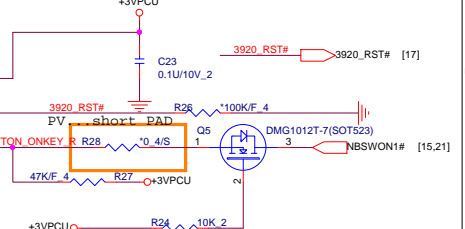
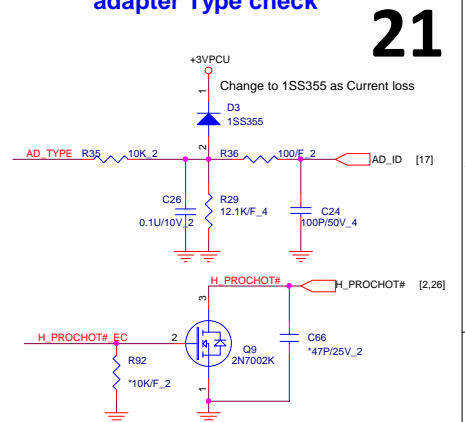
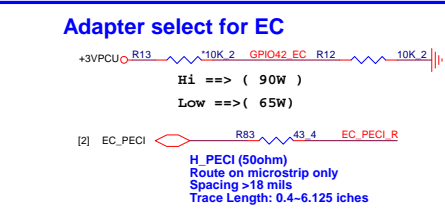
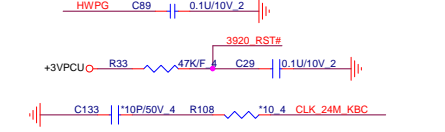
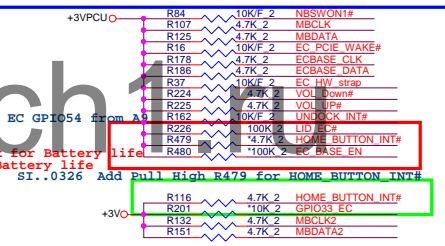
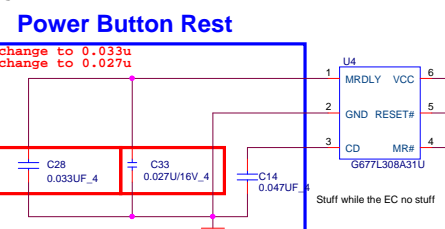
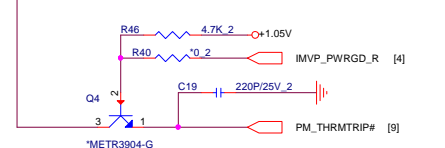
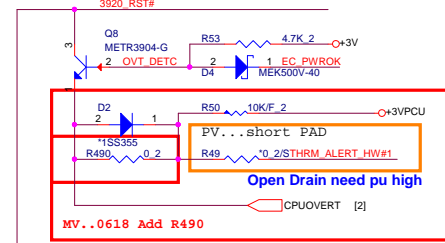
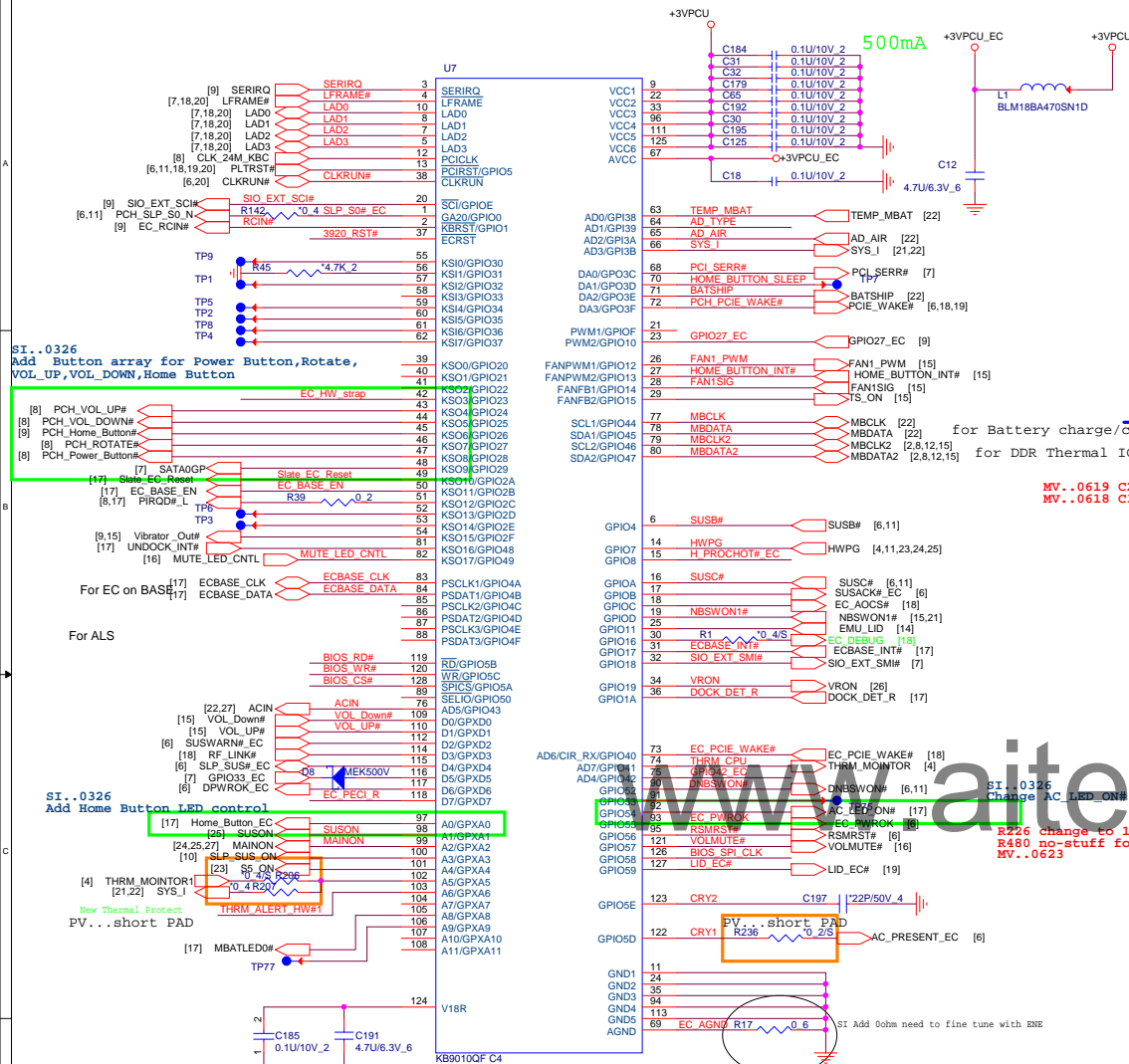
Size	Document Number	Rev
Custom	USB 3.0 SATA re-driver	1A
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TPM



EMI



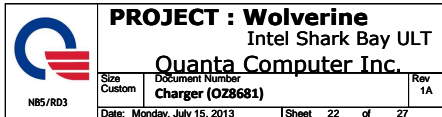


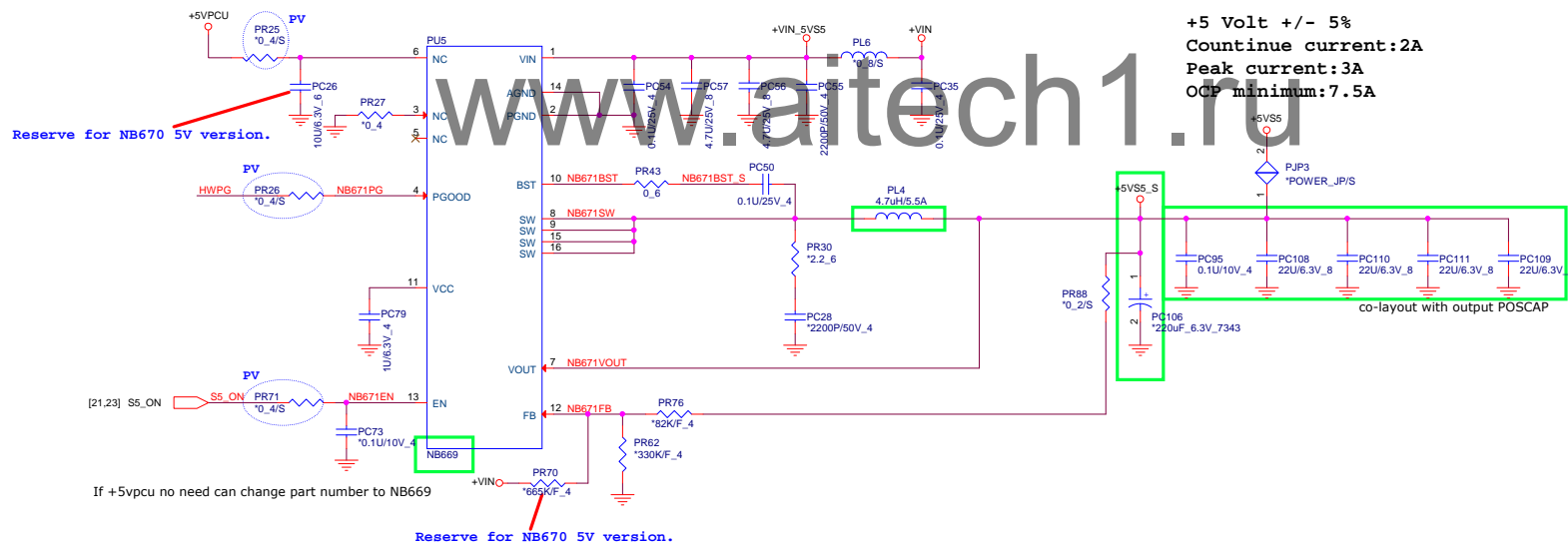
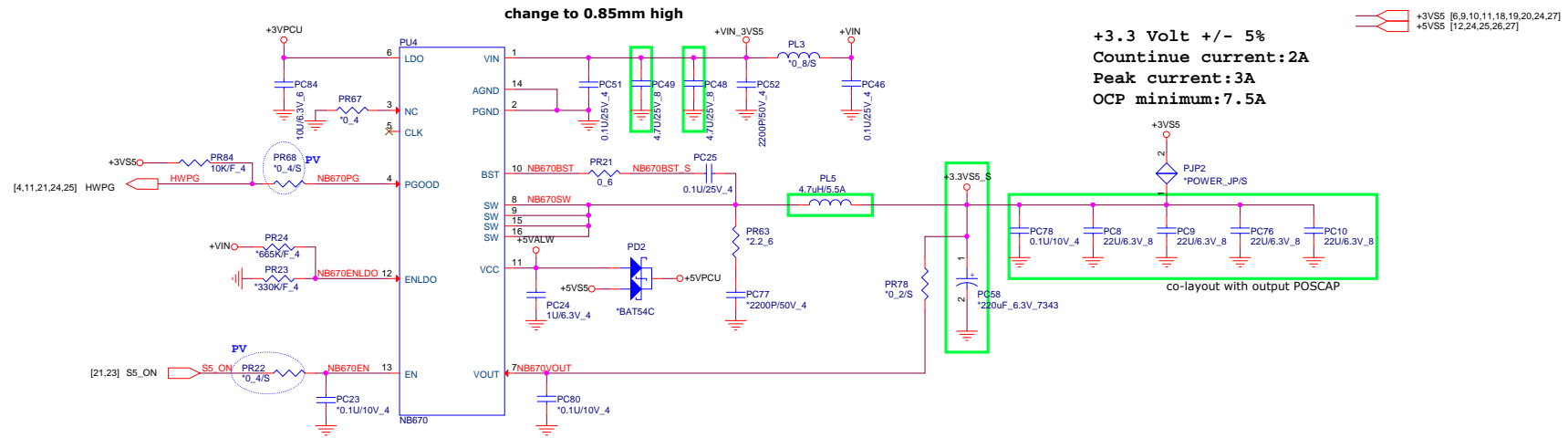
PROJECT : Wolverine Intel Shark Bay ULT

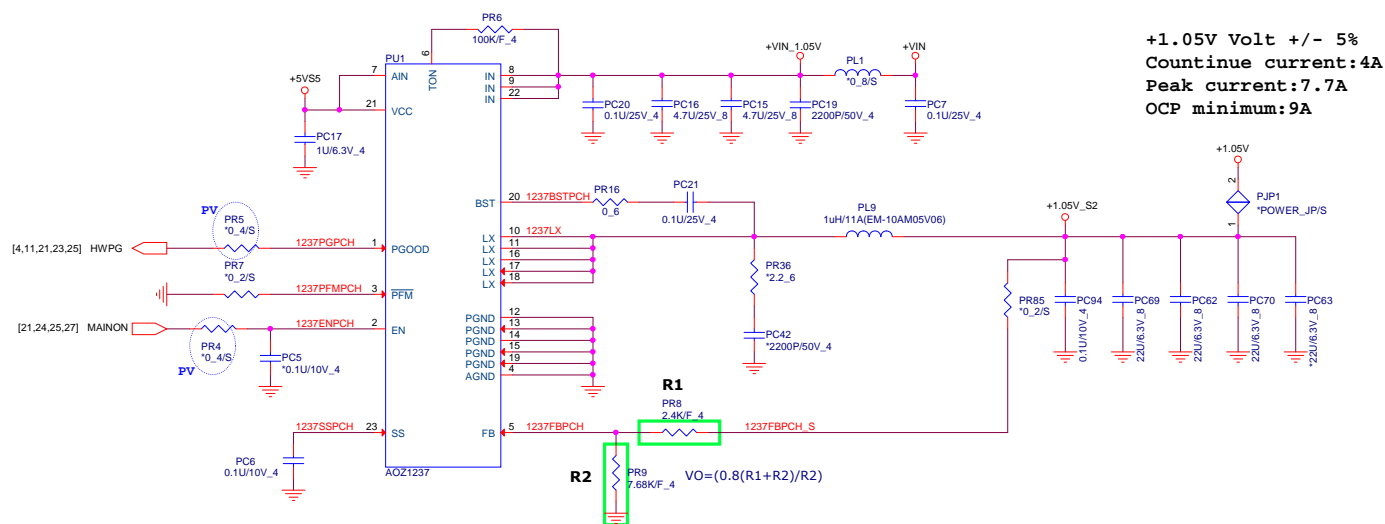
Quantia Computer Inc.

Size Custom Document Number EC (KB9010QF C4) Rev 1A

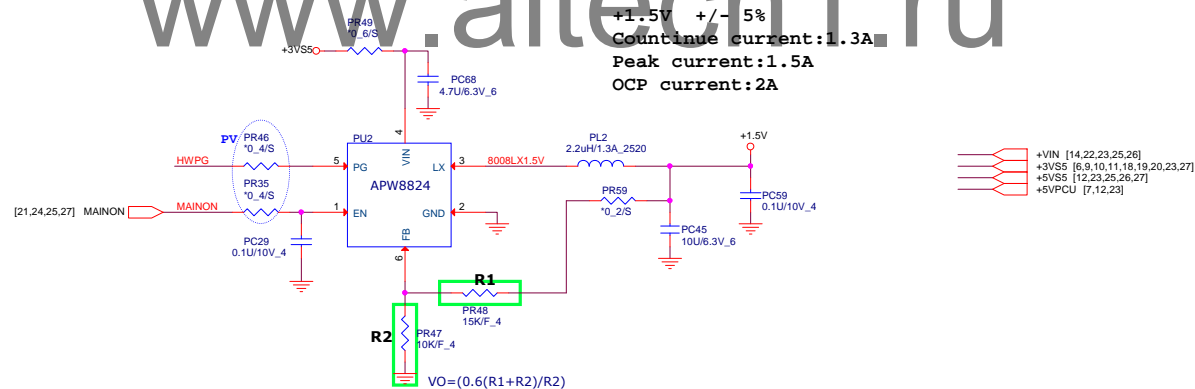
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PROJECT : Wolverine
 Intel Shark Bay ULT
Quanta Computer Inc.

Size Custom	Document Number +1.1VS5 (RT8228)/2.5V	Rev 1A
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