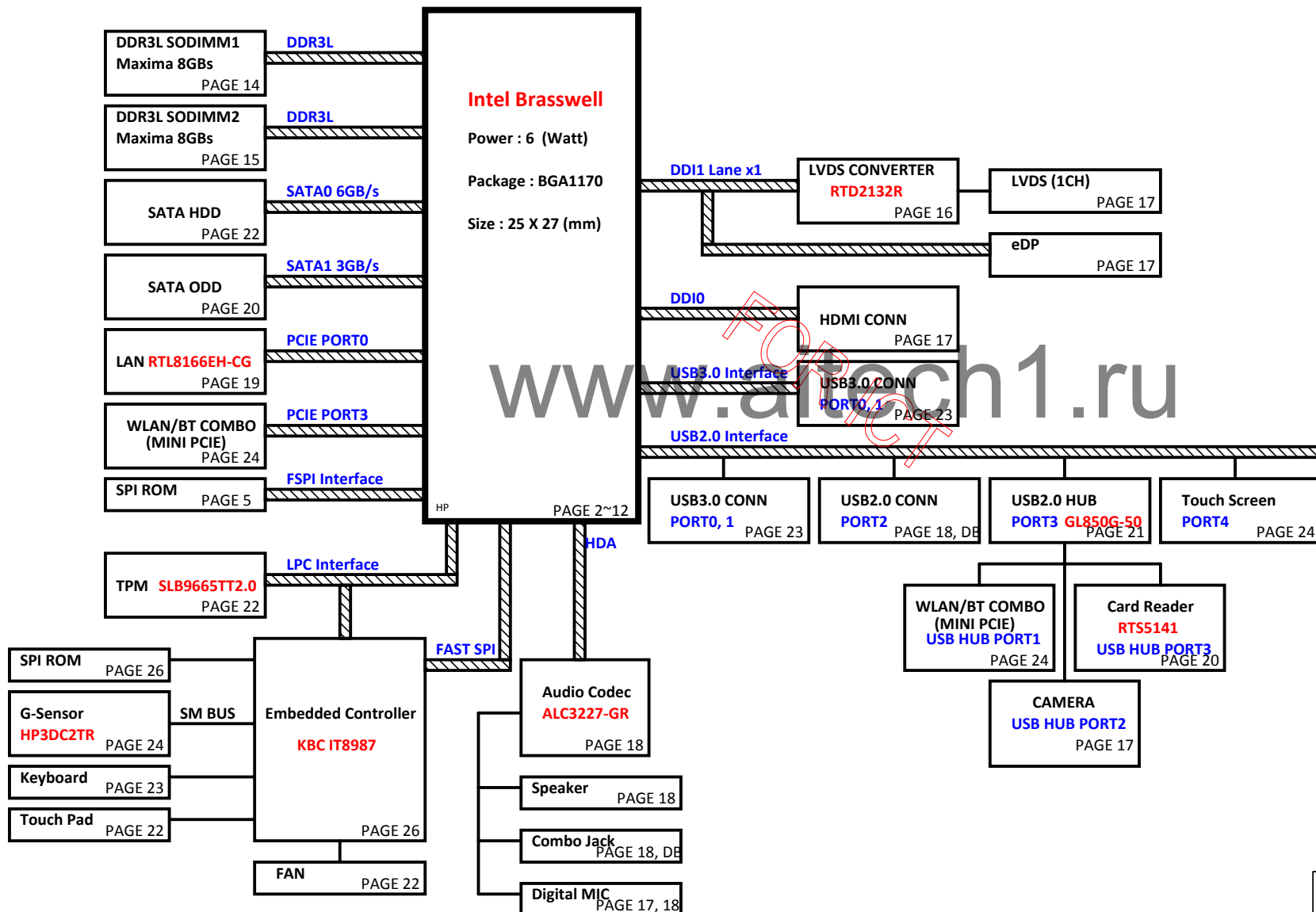


U8X UMA (14"/15.6")

Intel Braswell-M 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

Charger

PG.27

+3VS5/+5VS5

PG.28

DDR3L

PG.29

MOIC

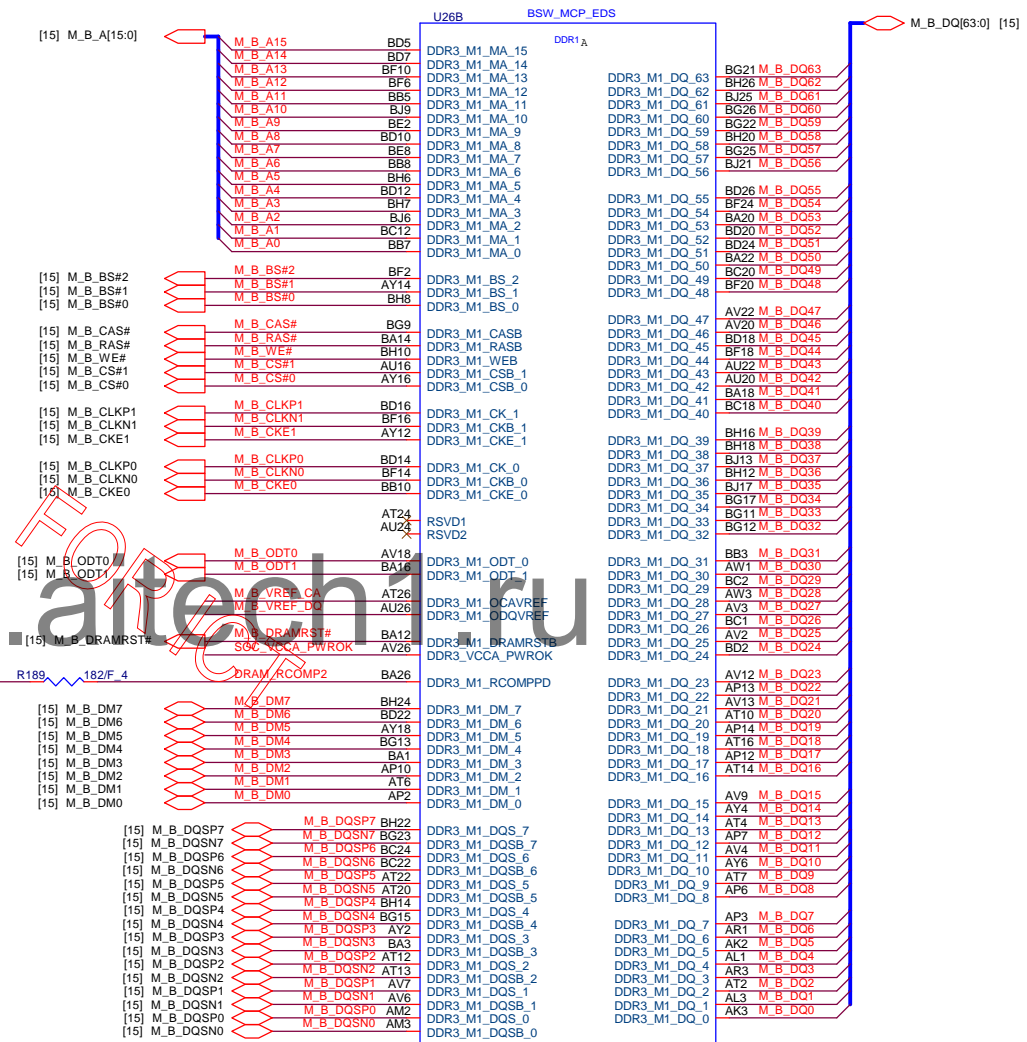
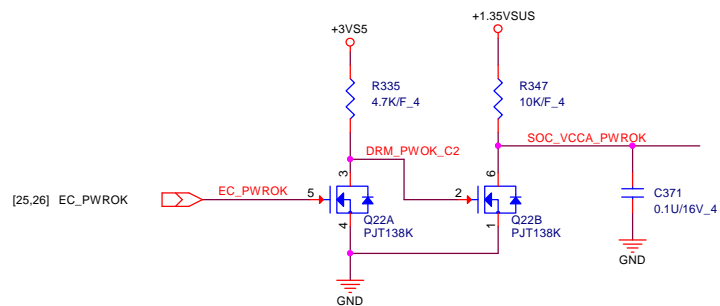
PG.30

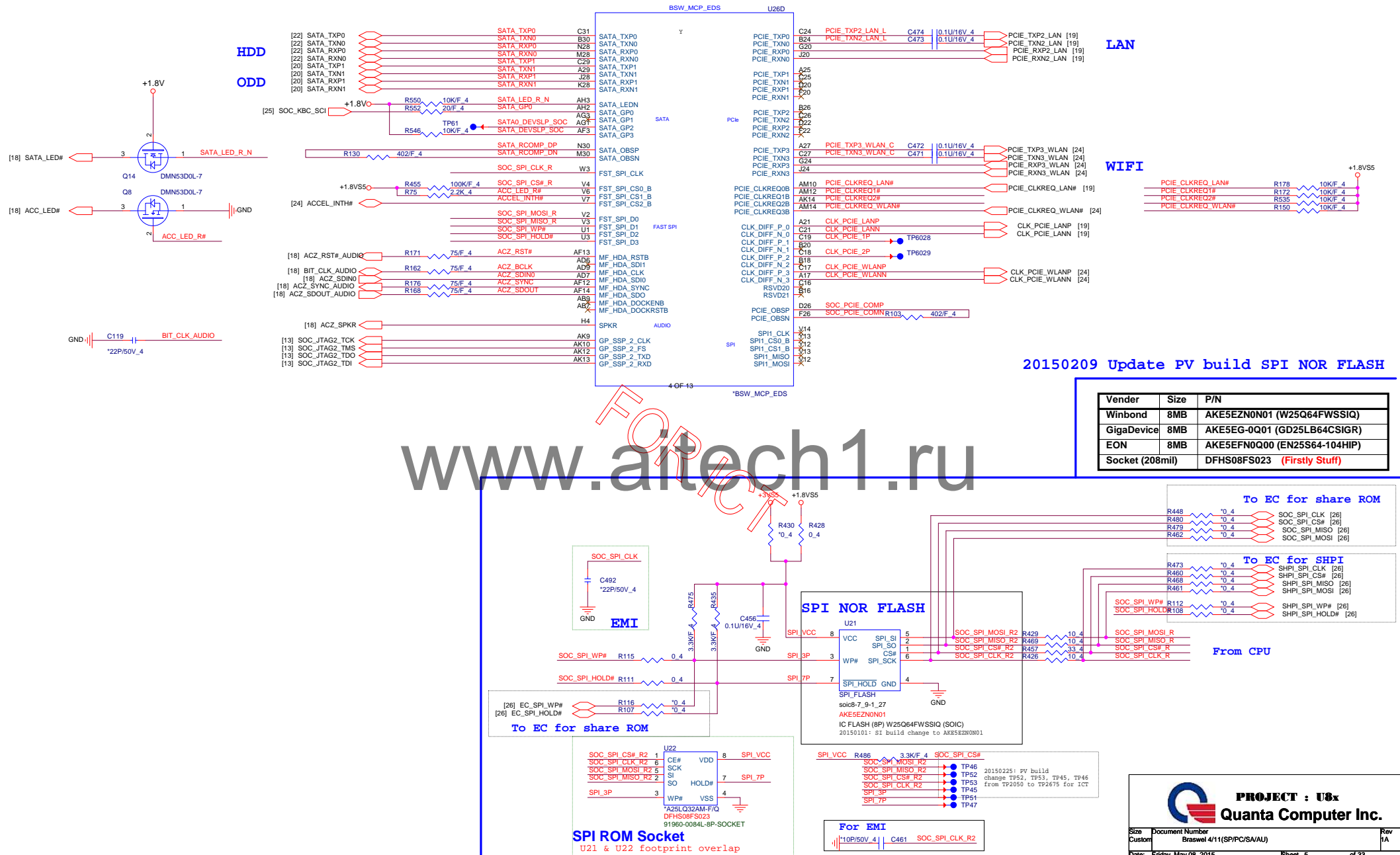
VGG & VCC CORE

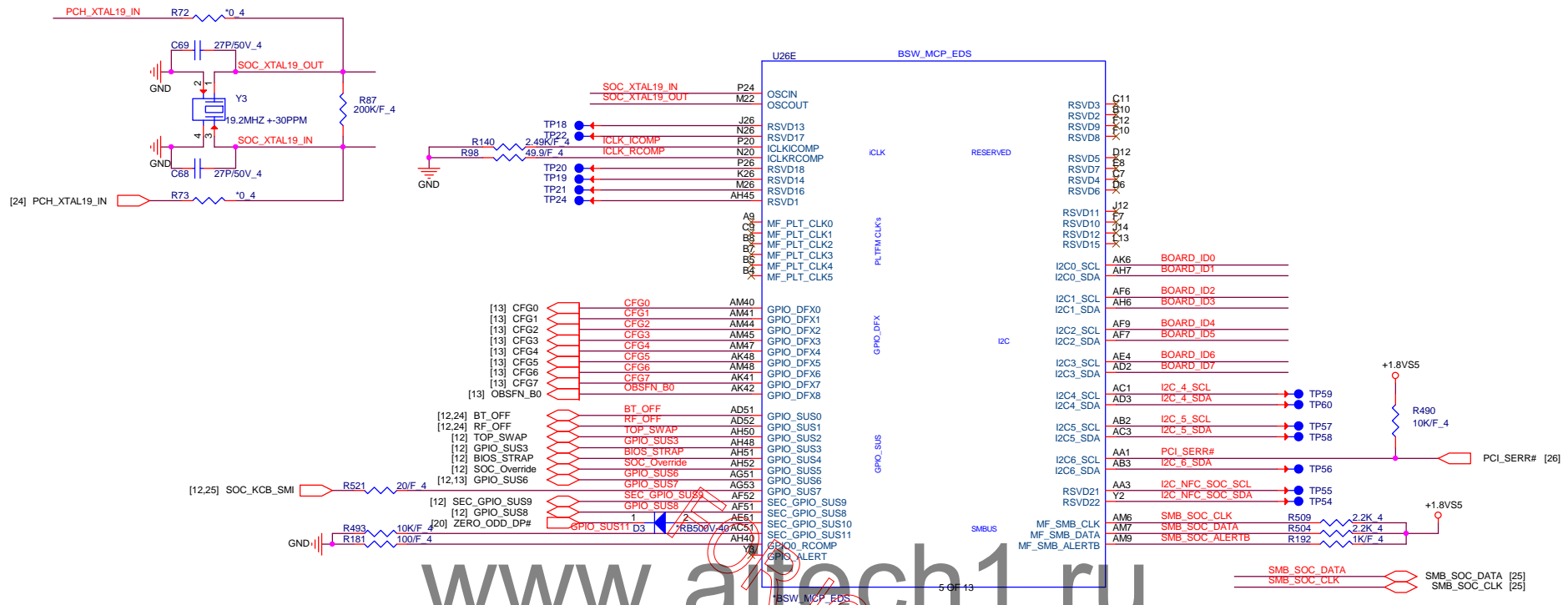
PG.31, 32

SYS Power

PG.33

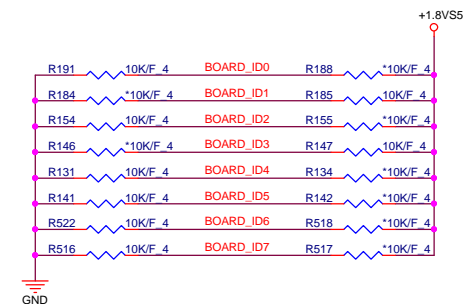






BOARD ID SETTING

Reserve (Default = 00)		CPU (for BOM) 00: N3700 01: N3050 10: N3150		0: W/FAN 1: FANLESS		00: 14" 01: 15" 10: 17"		0: UMA 1: DIS	
BOARD_ID7	BOARD_ID6	BOARD_ID5	BOARD_ID4	BOARD_ID3	BOARD_ID2	BOARD_ID1	BOARD_ID0		
0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	1	1	1	1
0	0	1	0		1	0			

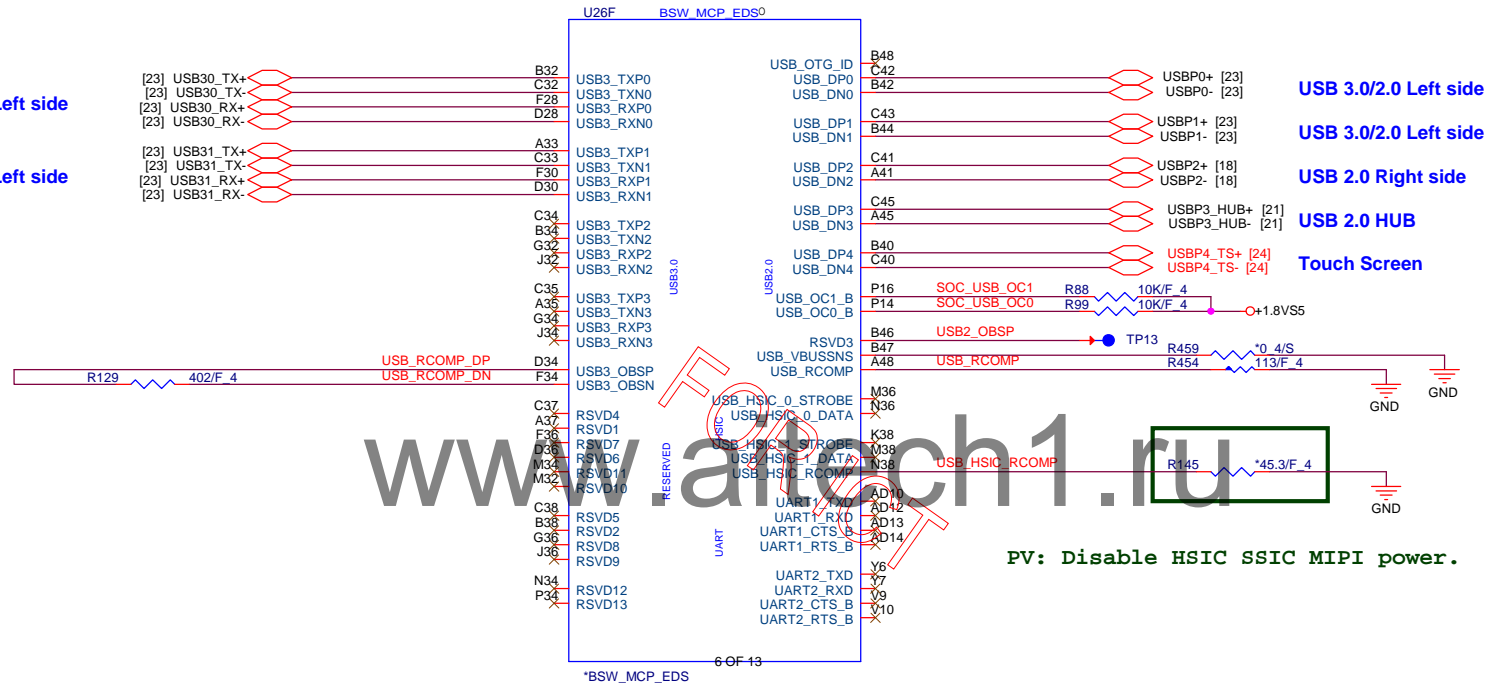


PROJECT : U3x
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Braswel 5/11(I2C/GPIO/CLK)	1A
Date:	Friday, May 08, 2015	Sheet 6 of 33

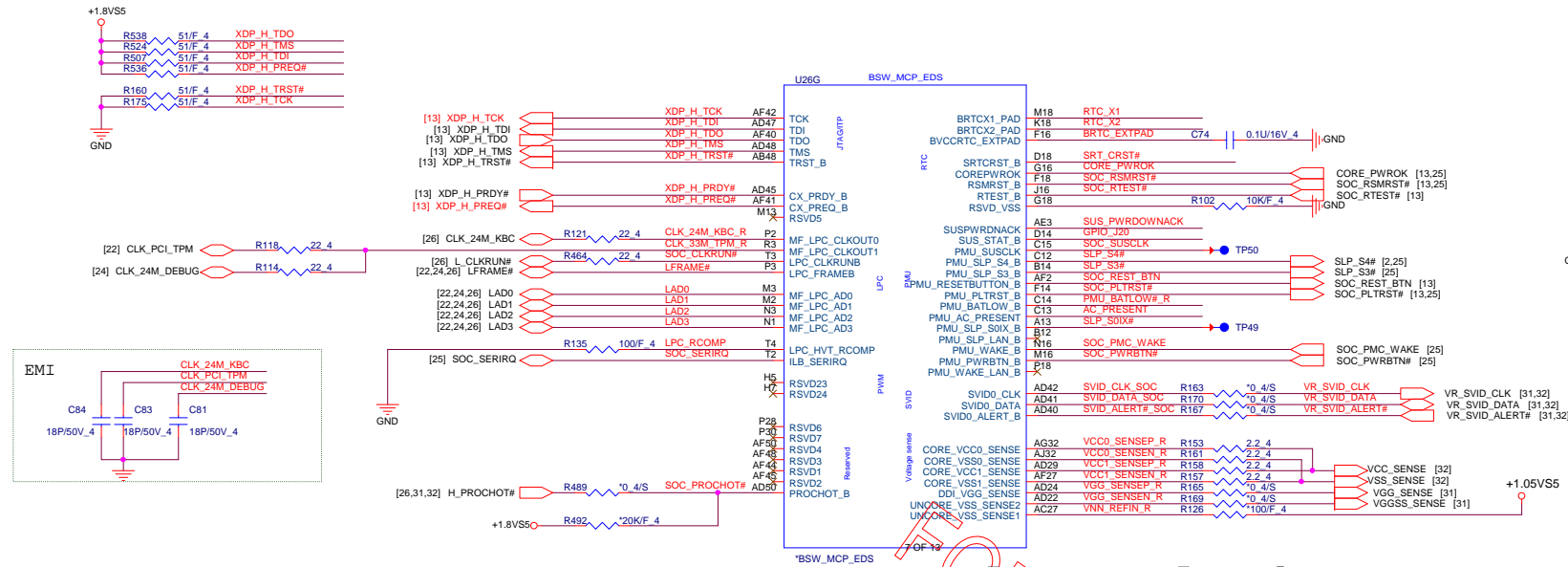
USB 3.0/2.0 Left side

USB 3.0/2.0 Left side

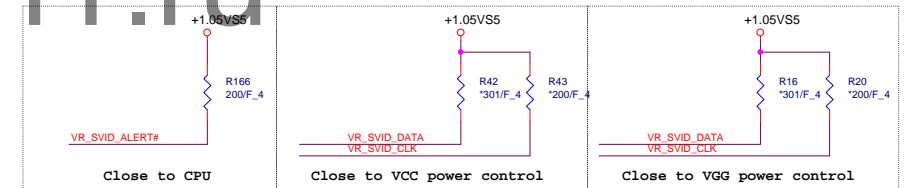
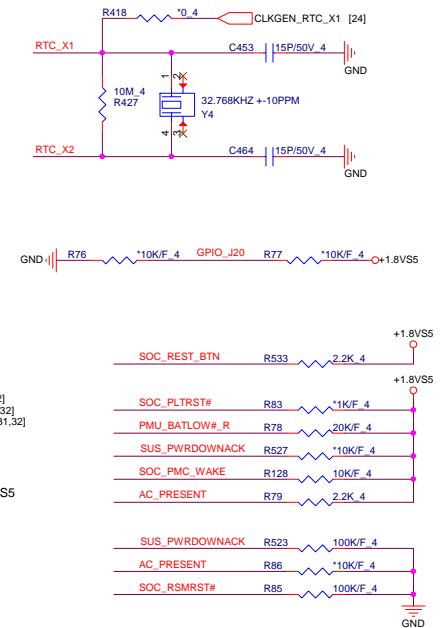


PROJECT : U8x
Quanta Computer Inc.

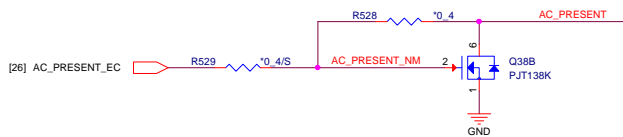
Size B	Document Number Braswel 6/11 (USB/URAT)	Rev 1A
Date: Tuesday, May 26, 2015	Sheet 7	of 33



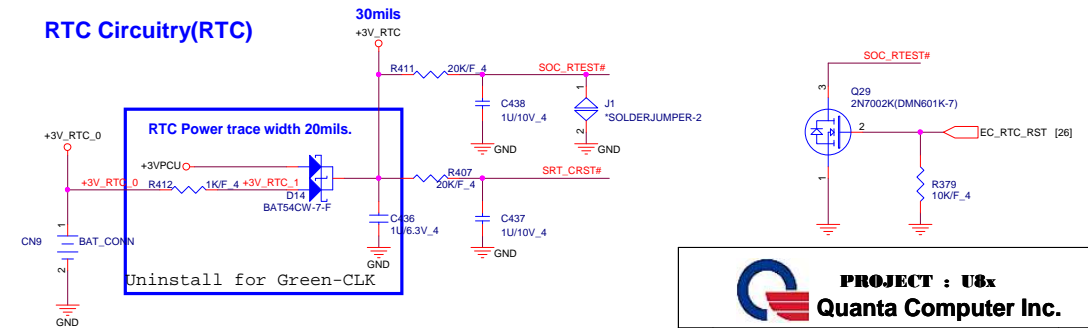
RTC Clock 32.768KHz



AC Present: This input pin indicates when the platform is plugged into AC power.

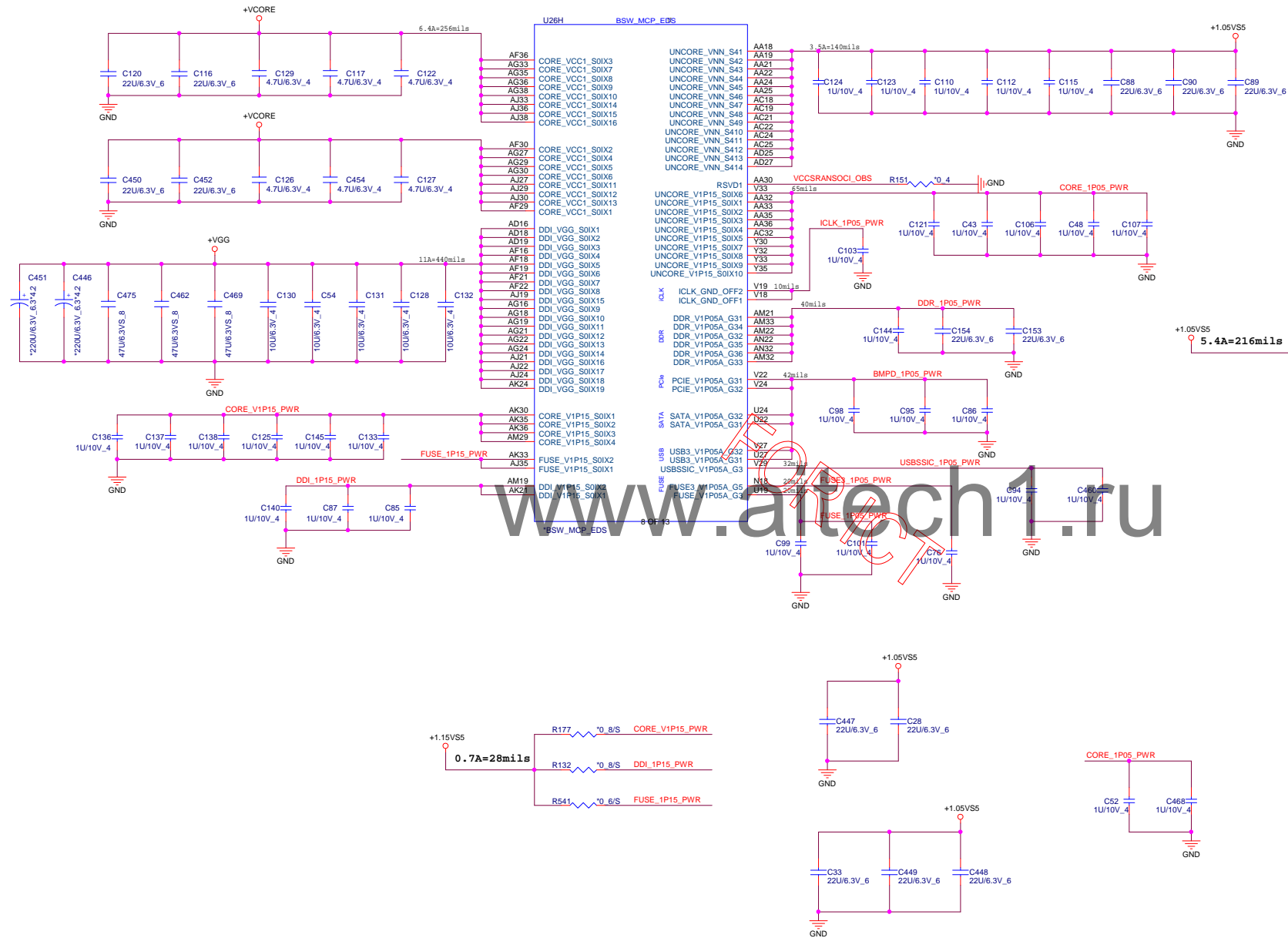


RTC Circuitry(RTC)

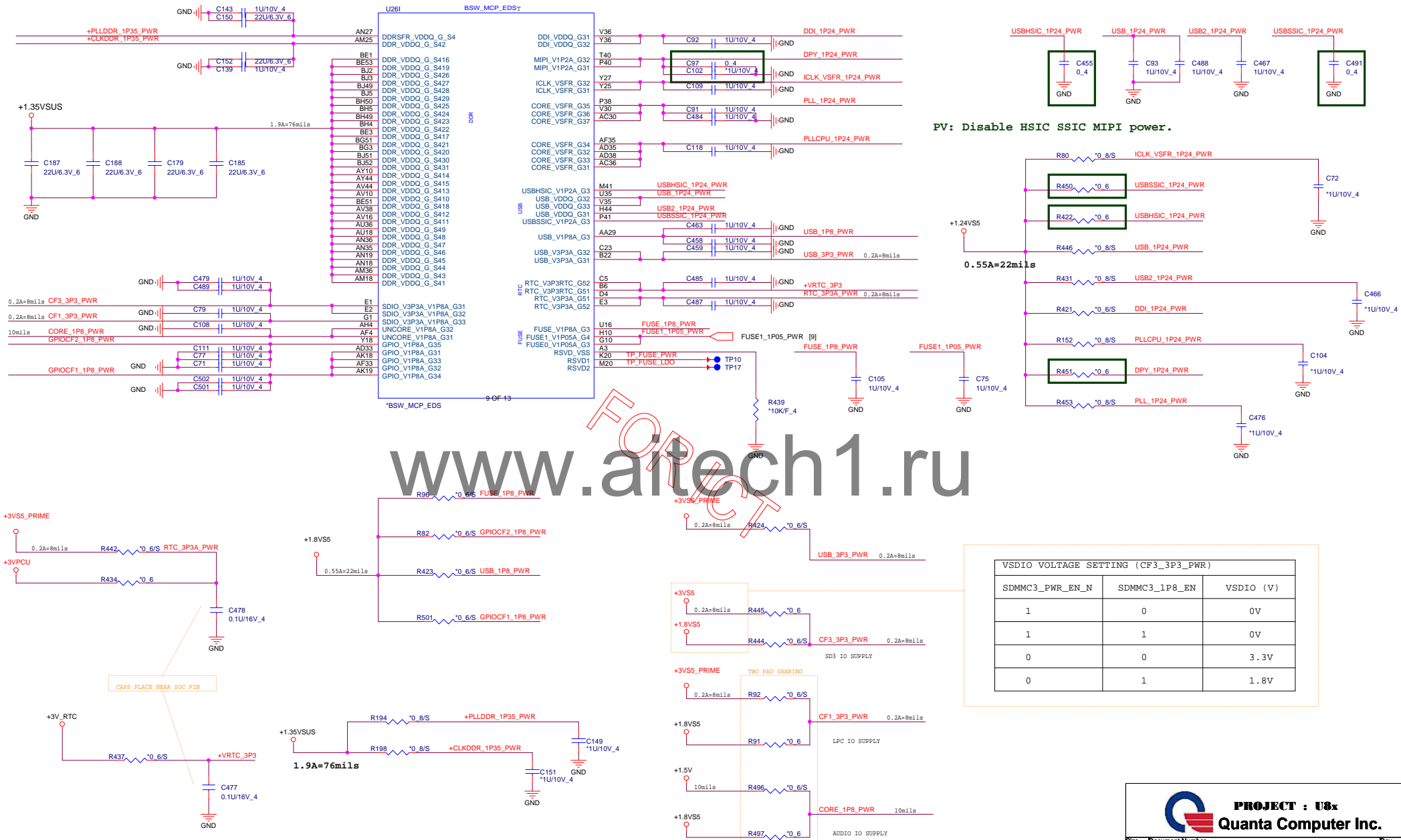


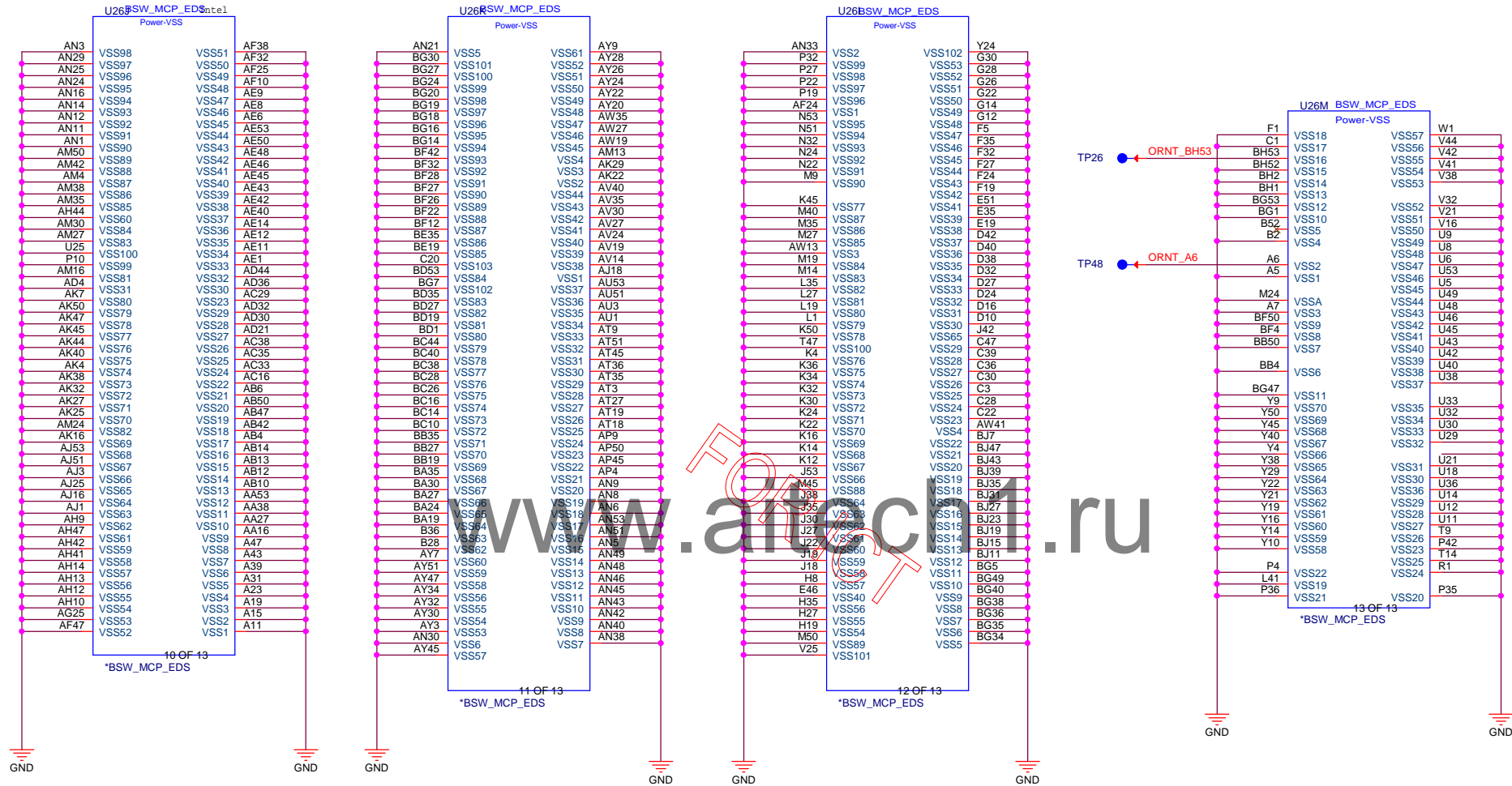
PROJECT : U8x
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Braswel 7/11(RTC/LPC/PMU)	1A
Date:	Friday, May 29, 2015	Sheet 8 of 33



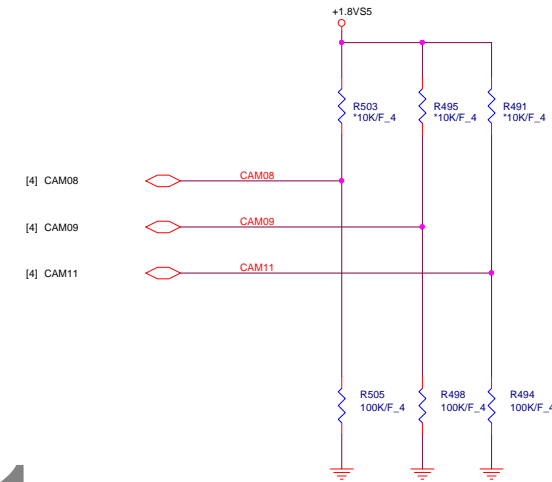
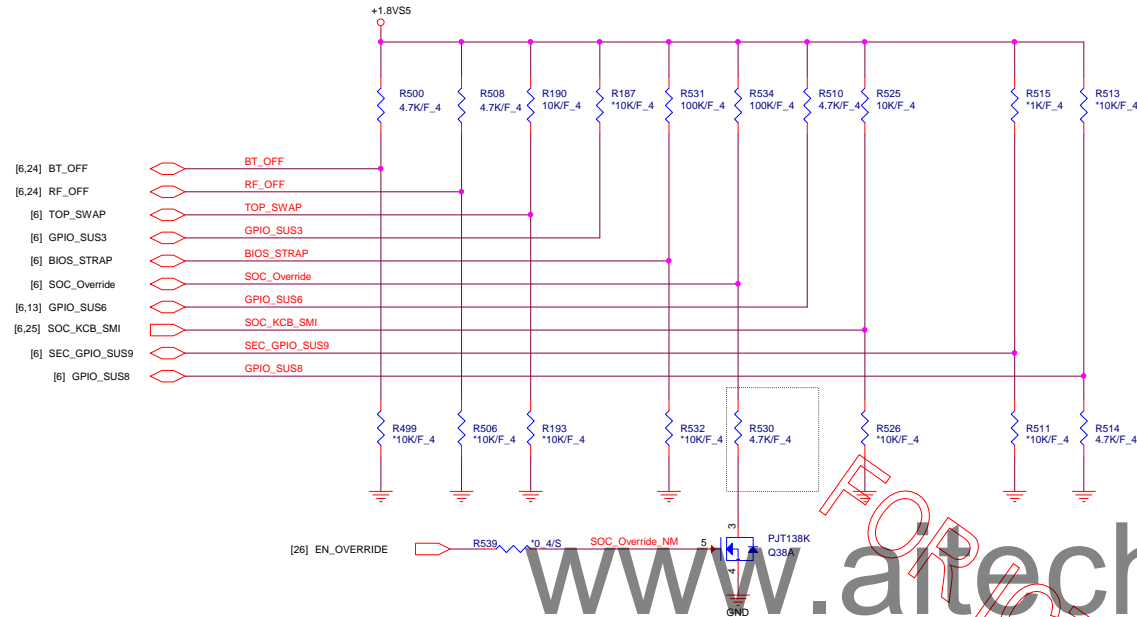
PLACE THE CAPS UNDER THE PKG SHADOW





PROJECT : U8x
Quanta Computer Inc.

Size B	Document Number Braswell 10/11 (GND)	Rev 1A
Date: Friday, May 08, 2015	Sheet 11	of 33



REQUIRED STRAPS

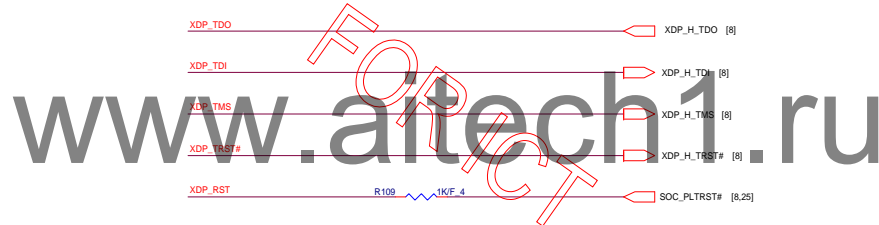
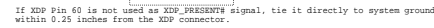
	GPIO_SUS0	GPIO_SUS1	TOP_SWAP	GPIO_SUS3	BIOS_STRAP	SOC_Override	GPIO_SUS6	SOC_KCB_SMI	GPIO_SUS8
PULL HIGH	DDI0 detected DEFAULT	DDI1 detected DEFAULT	Normal Operation DEFAULT	Reserve 10 KΩ PU DEFAULT	SPI DEFAULT	Normal Operation DEFAULT 20150209 PV change	10 KΩ PU to 1.8V DEFAULT	Reserve 10 KΩ PU DEFAULT	Supply is 1.35V DEFAULT
PULL LOW	DDI0 not detected	DDI1 not detected	Change Boot Loader address		LPC	Override			Supply is 1.25V DEFAULT

	CAM08	CAM09	CAM11
PULL HIGH	ICLK Xtal OSC Bypass	CCU SUS RO Bypass	RTC OSC Bypass
PULL LOW	ICLK Xtal OSC No Bypass DEFAULT	CCU SUS RO No Bypass DEFAULT	RTC OSC No Bypass DEFAULT

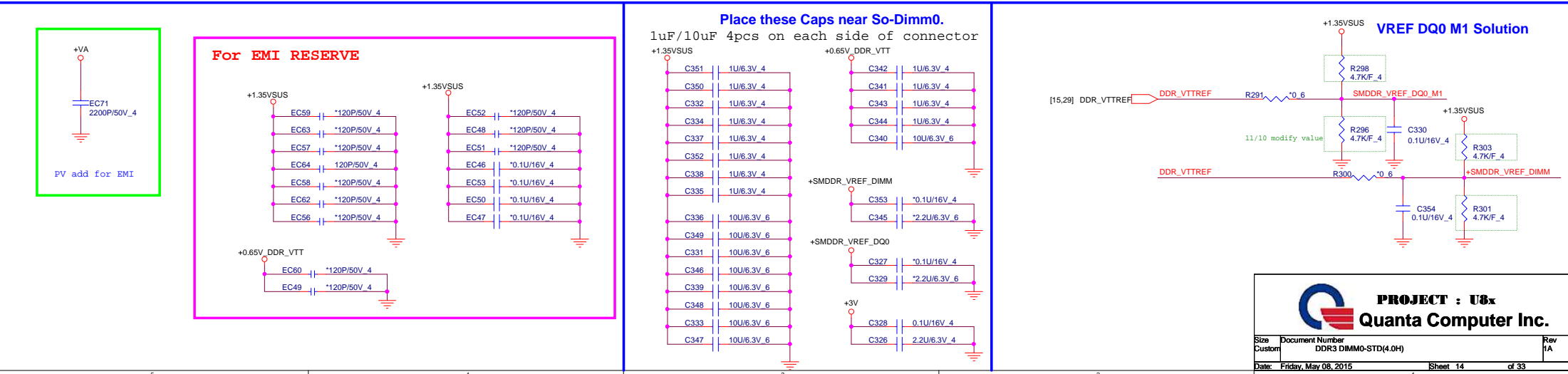
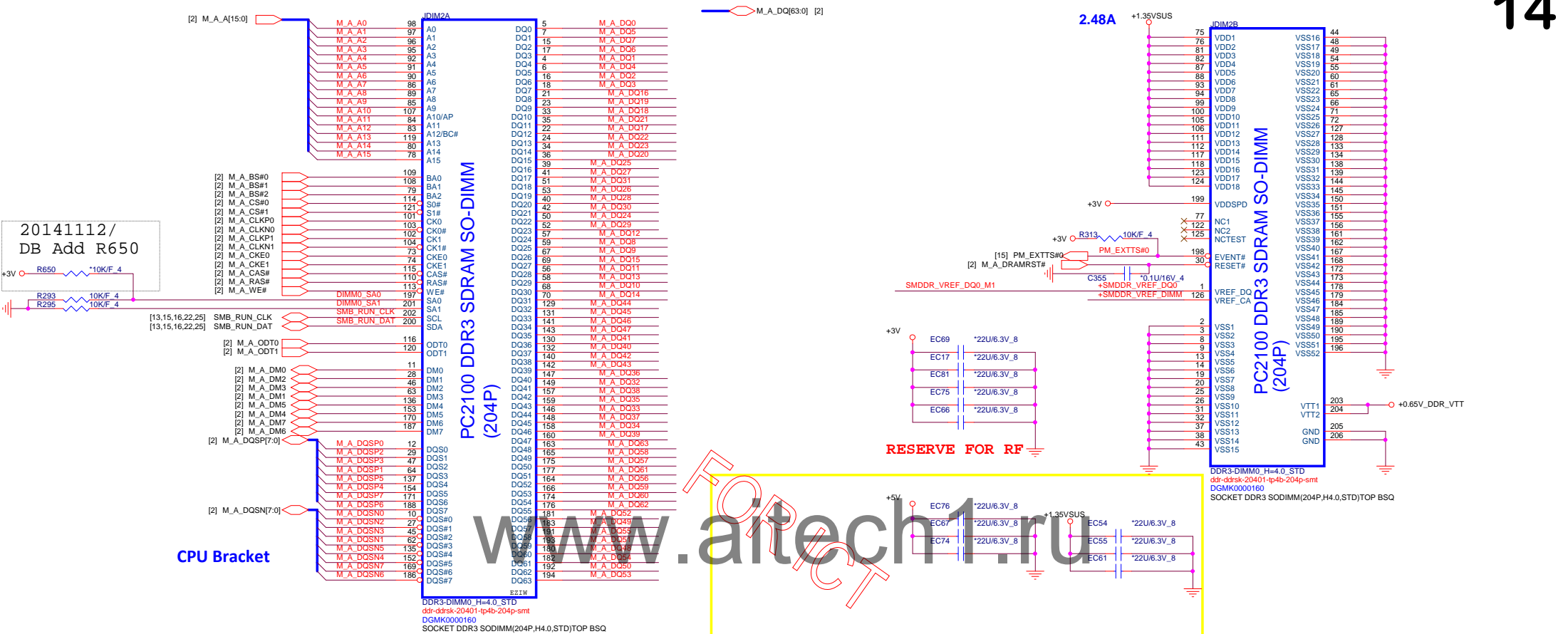


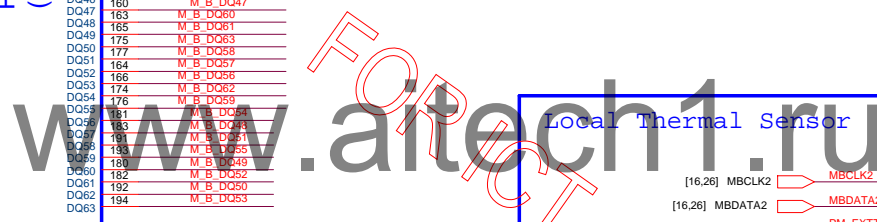
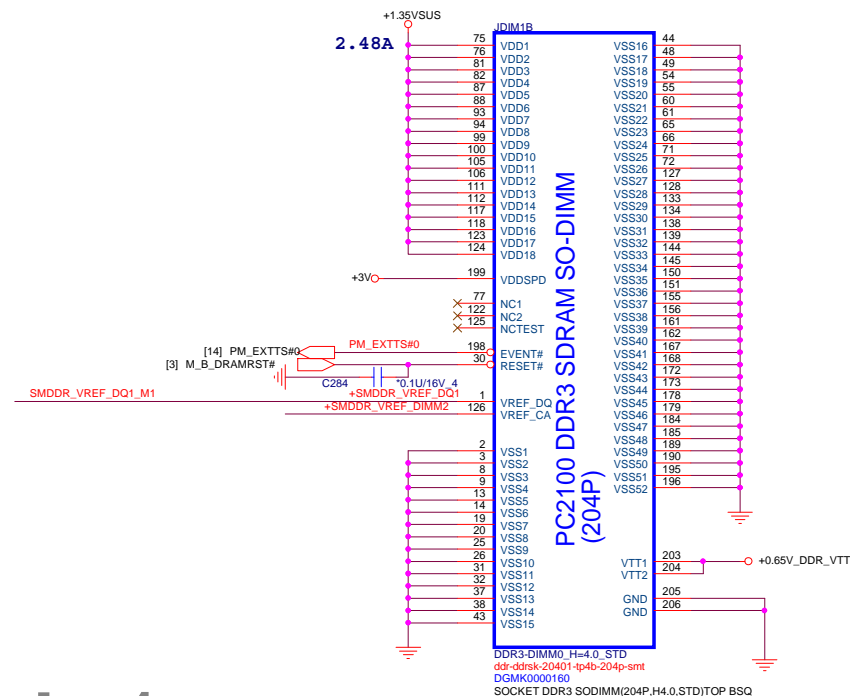
PROJECT : UBx
Quanta Computer Inc.

Size: Custom
Document Number: Braswell 11/11 (Strap)
Date: Friday, May 08, 2015
Rev: 1A
Sheet 12 of 33

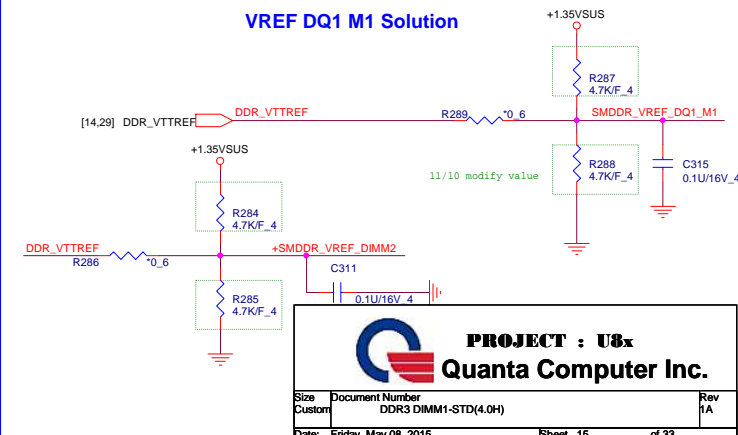


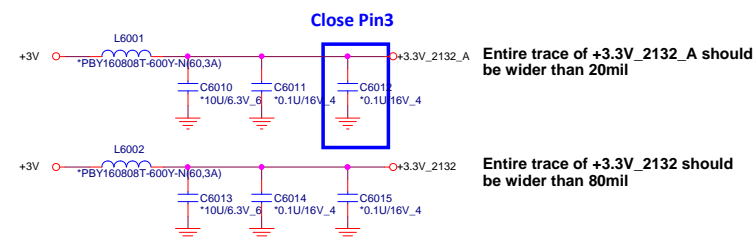
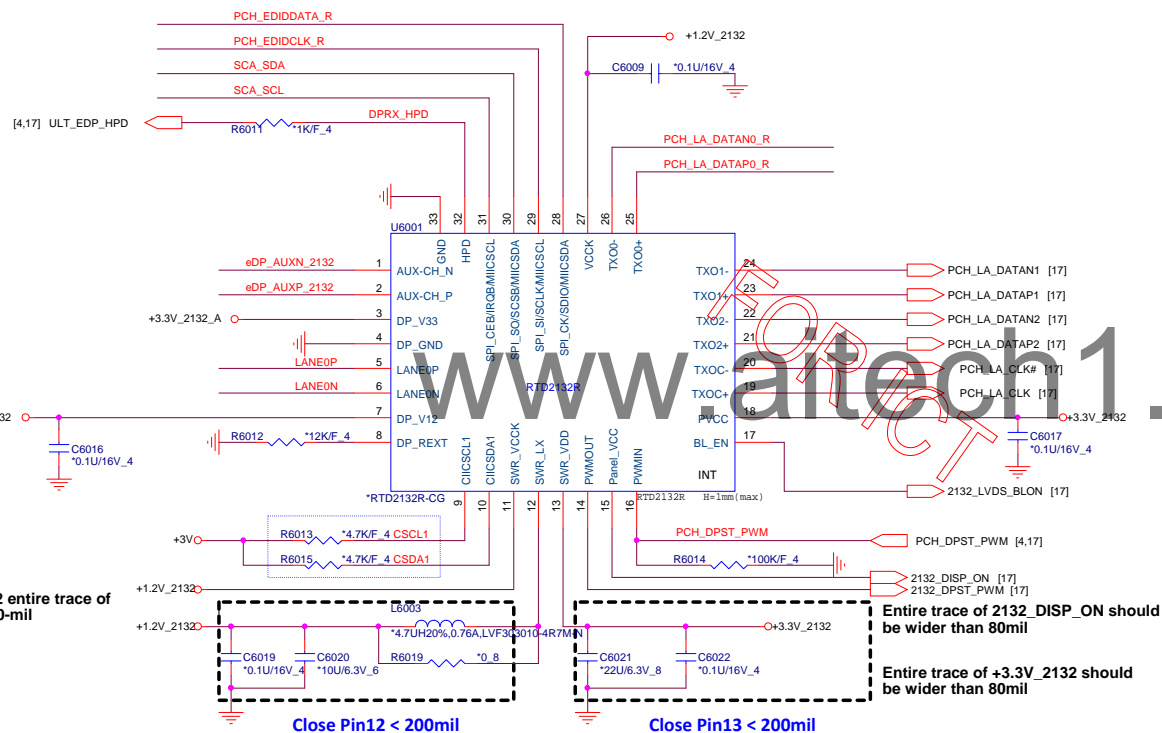
PROJECT : U8x
Quanta Computer Inc.



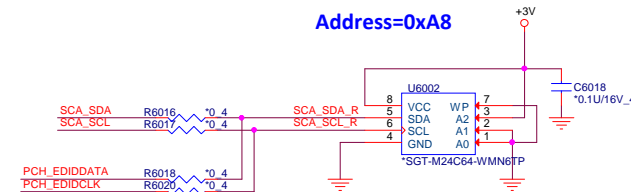


VREF DQ1 M1 Solution

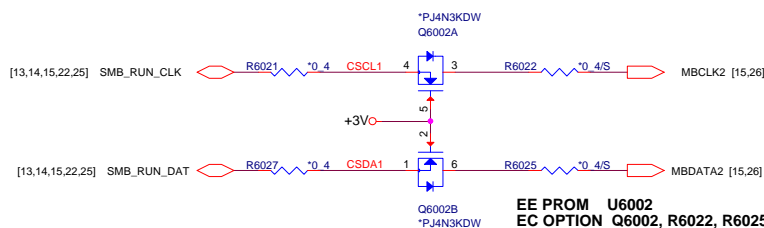




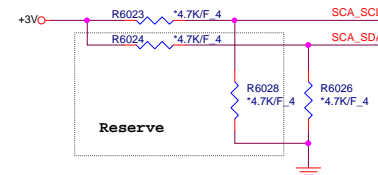
```
SCA_SCL pull high => EEPROM mode
SCA_SDA pull low  => EEPROM Free mode
```




RTD2132S => R6016, R6017
RTD2132R => R6018, R6020

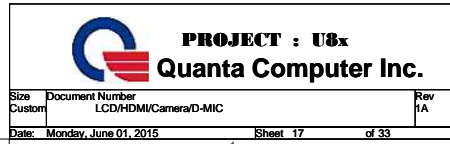


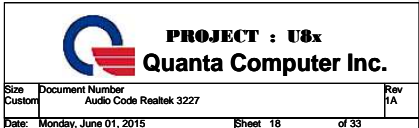
EE PROM U6002
EC OPTION Q6002, R6022, R6025 (Default)



		MODE_CFG0(PIN30)	
		0	1
MODE_CFG1(PIN31)	0	X	EP MODE
	1	ROM ONLY MODE	EEPROM MODE

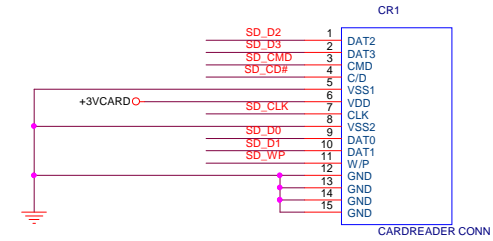
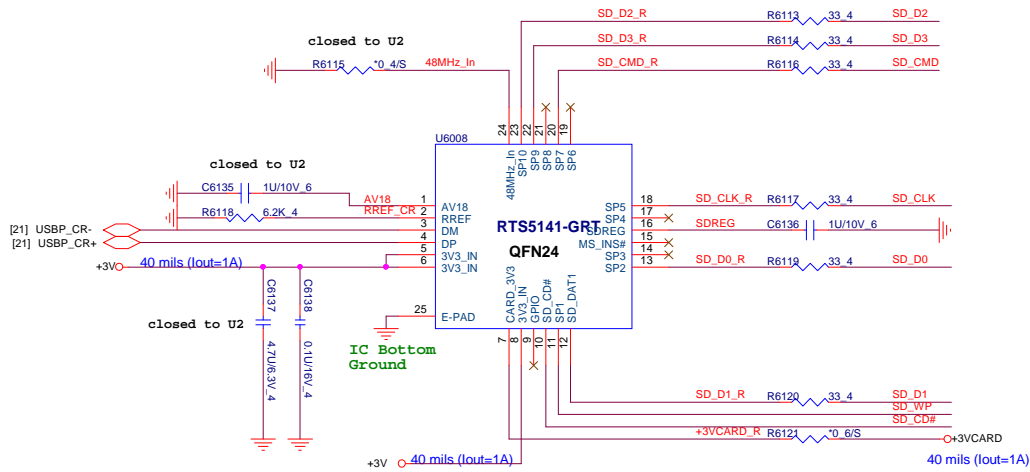
 <div style="display: inline-block; vertical-align: middle;"> <p>PROJECT : USx</p> <p>Quanta Computer Inc.</p> </div>		
Size Custom	Document Number LVDS converter RTD2132R	Rev 1/A
Date: Friday, May 08, 2015	Sheet 16	of 33



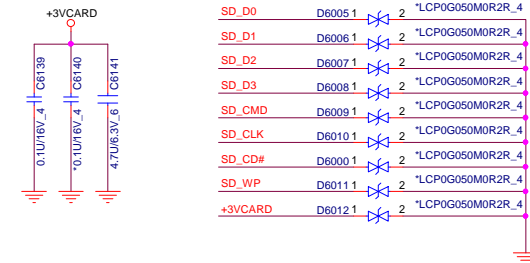


RTS5141 USB2.0 CARD READER Controller

20



CLOSE CONN



Reserve for EMI

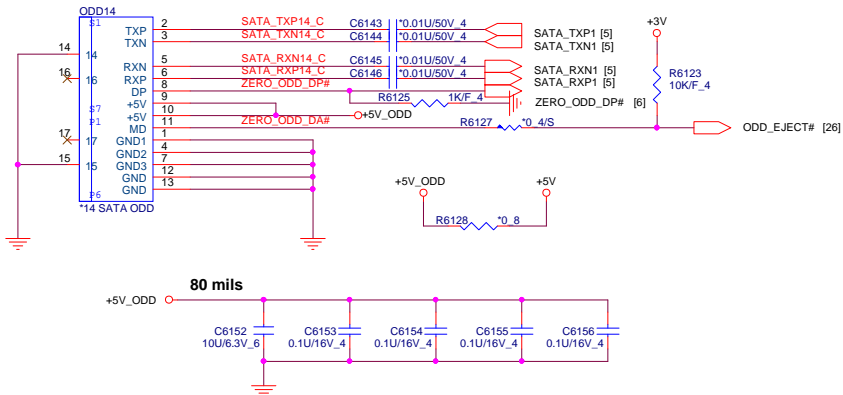
SD_D0	EC6010	5.6P/16V_4
SD_D1	EC6011	5.6P/16V_4
SD_D2	EC6012	5.6P/16V_4
SD_D3	EC6013	5.6P/16V_4
SD_CMD	EC6014	5.6P/16V_4
SD_CLK	EC6015	5.6P/16V_4

Close to chip

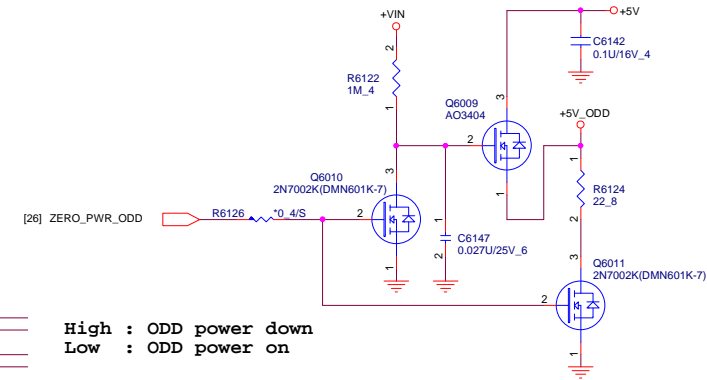
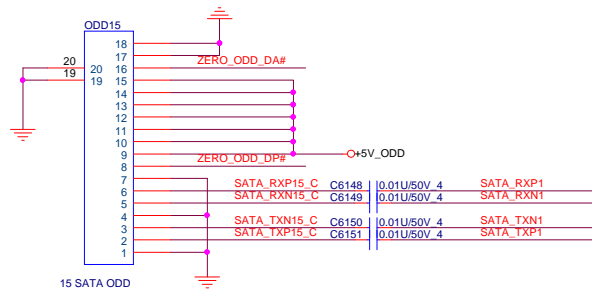
SATA ODD CONNECTOR

14" SATA ODD

Bypass CAP close conn



15" SATA ODD

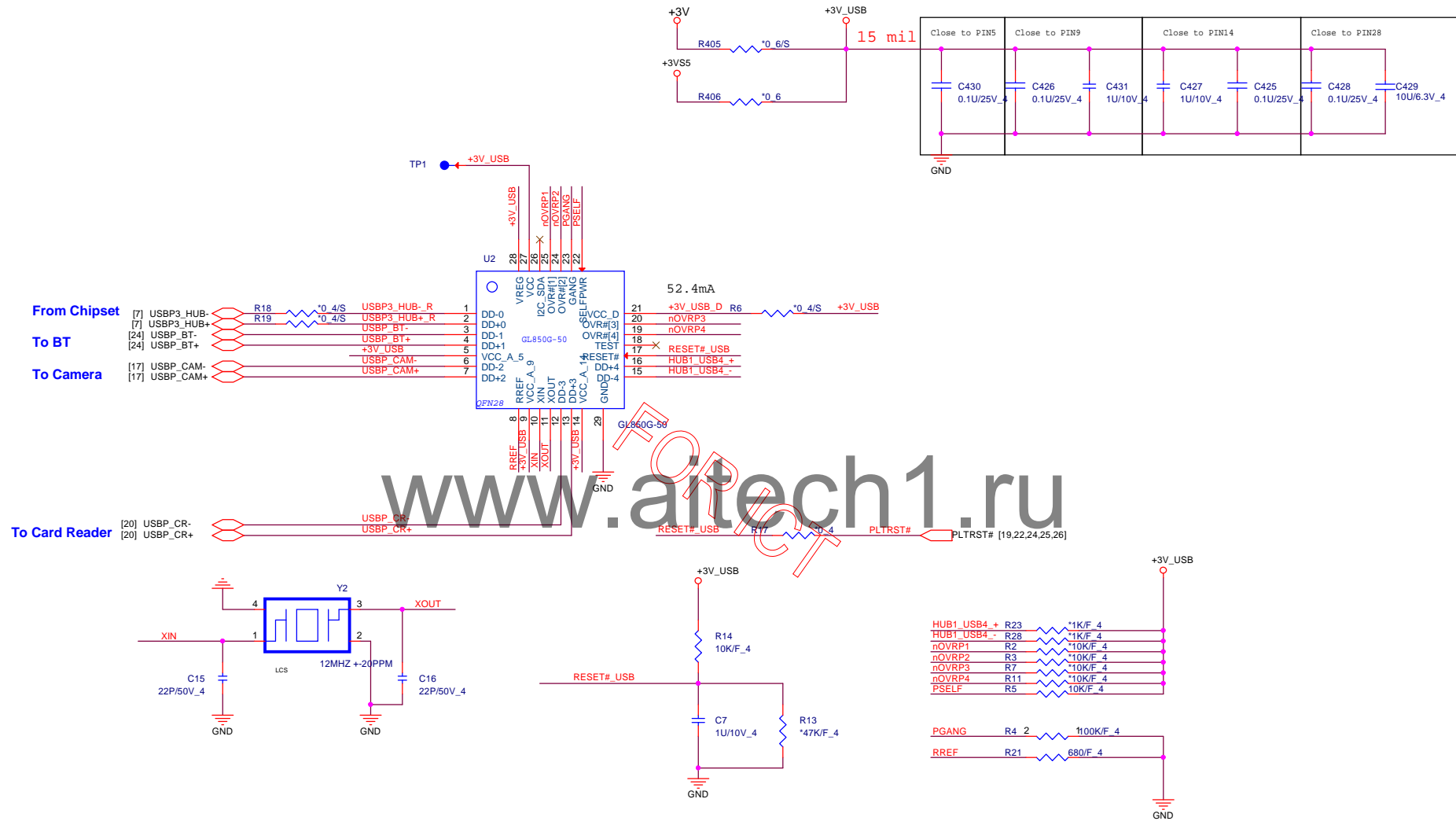


High : ODD power down
Low : ODD power on

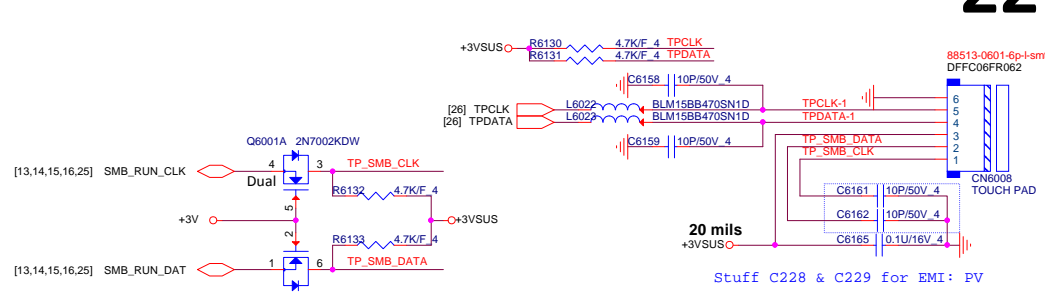


PROJECT : U3x
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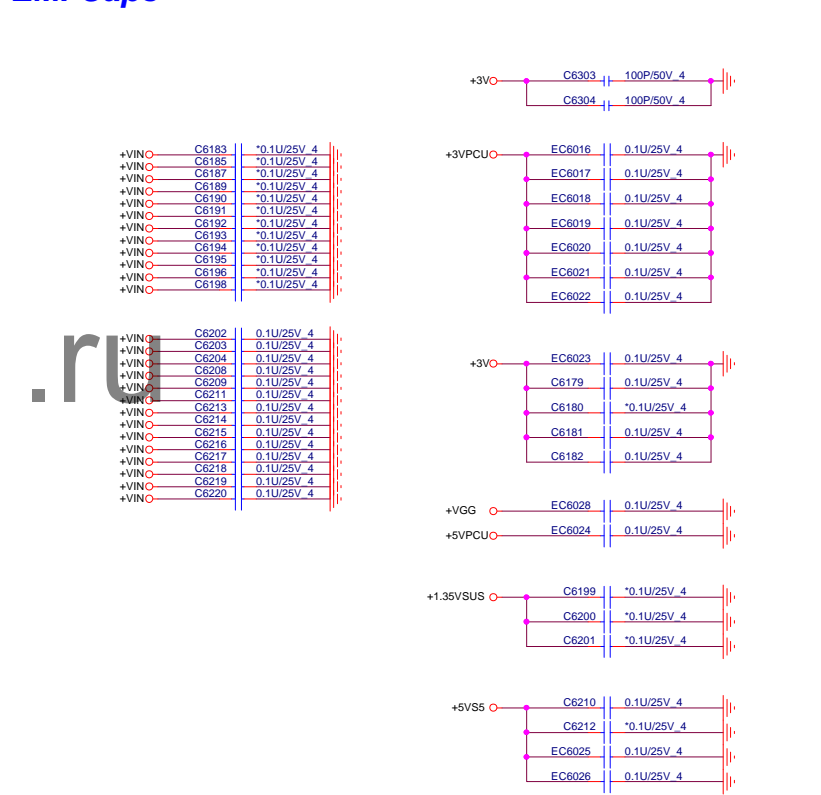
Size	Document Number	Rev
Custom	CR RTS5141/SOCKET/ODD	1A
Date:	Friday, May 29, 2015	Sheet 20 of 33



SATA HDD Connector(Cable type)

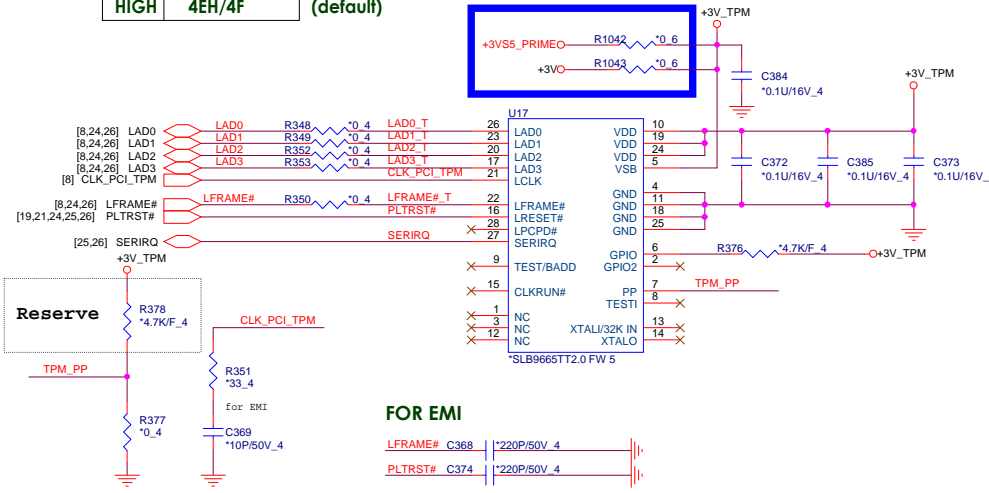


EMI Caps



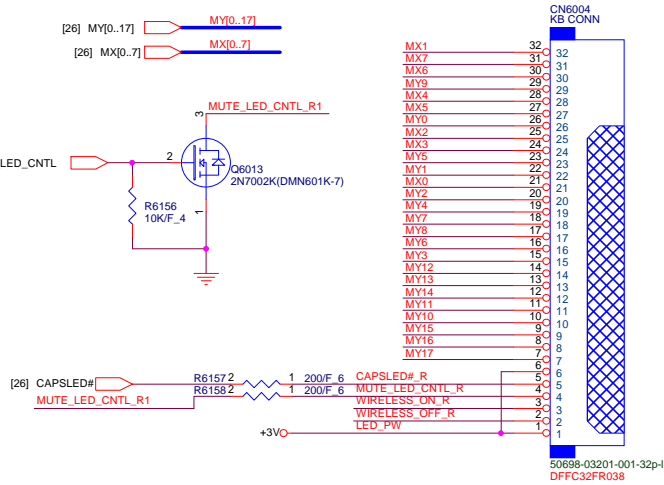
Address

(default)

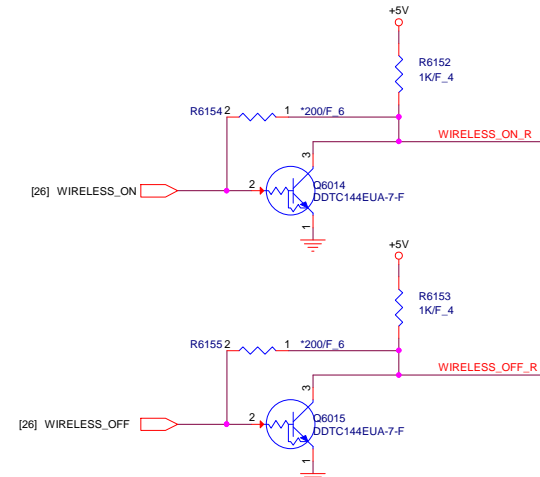
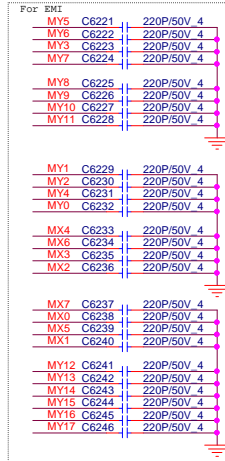
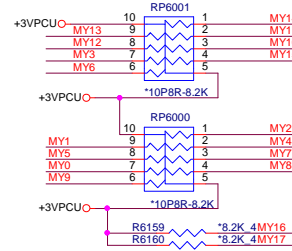


LFRAME#	C368	*220P/50V_4
PLTRST#	C374	*220P/50V_4

KEYBOARD Con.

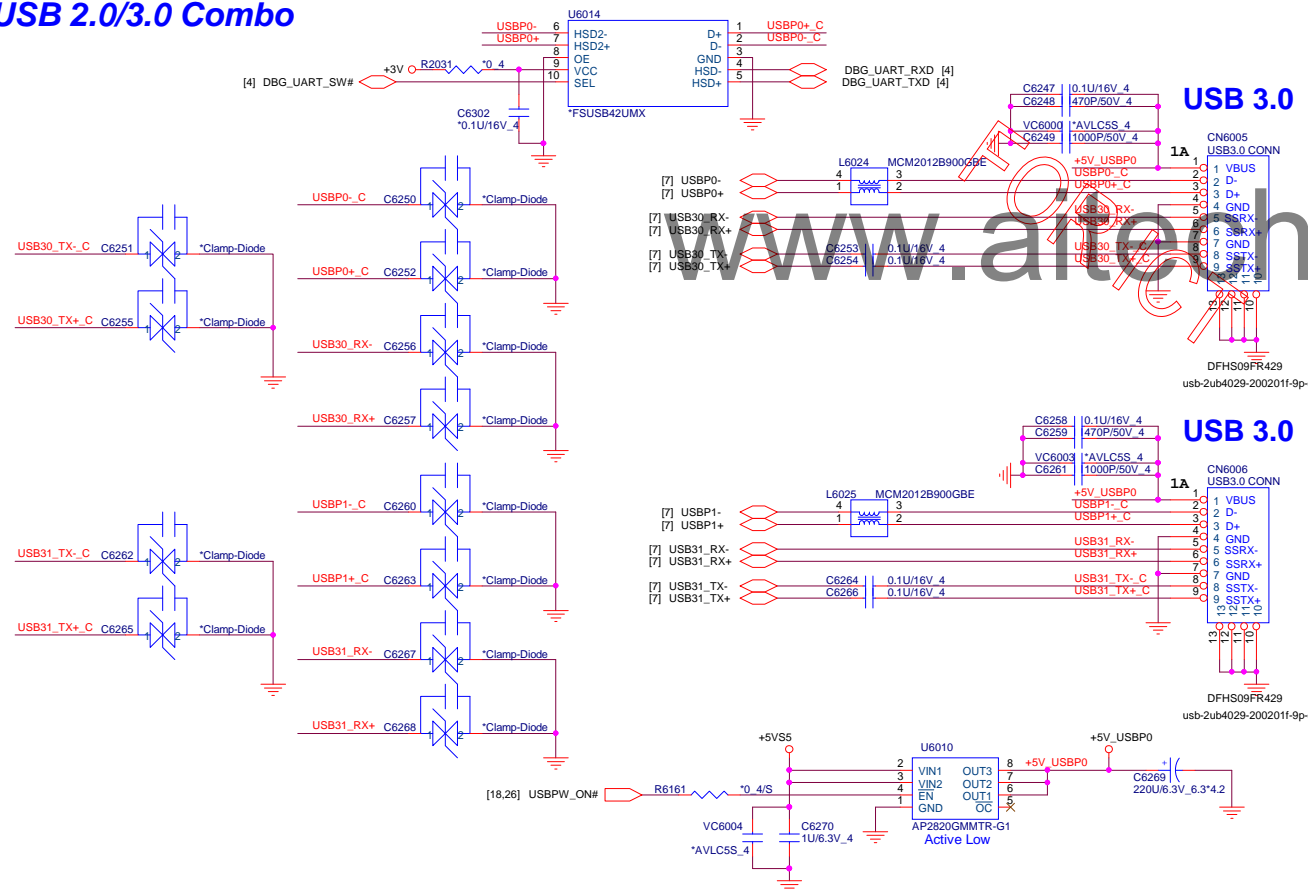


KEYBOARD PULL-UP

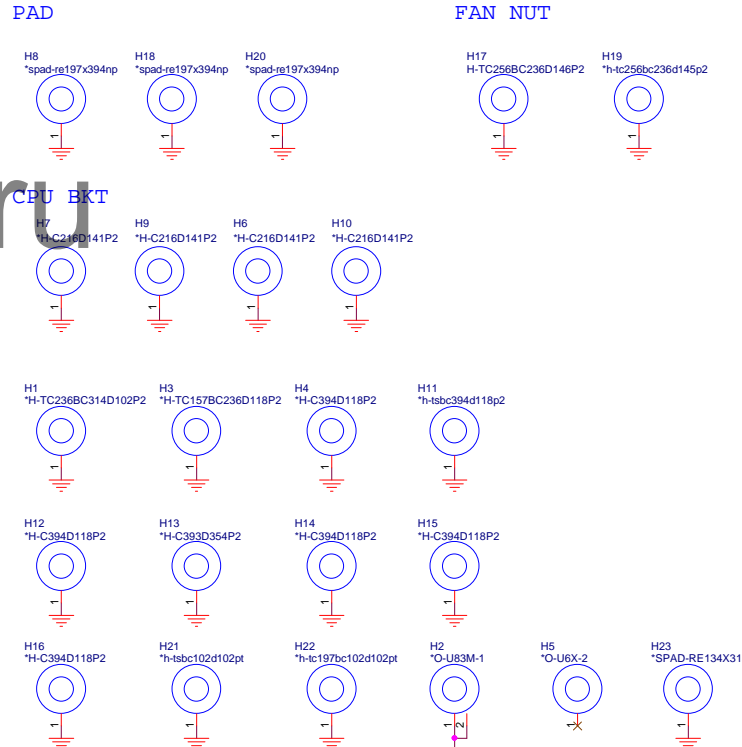


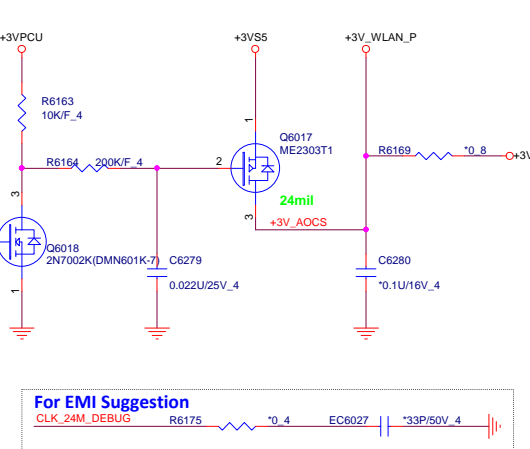
23

USB 2.0/3.0 Combo



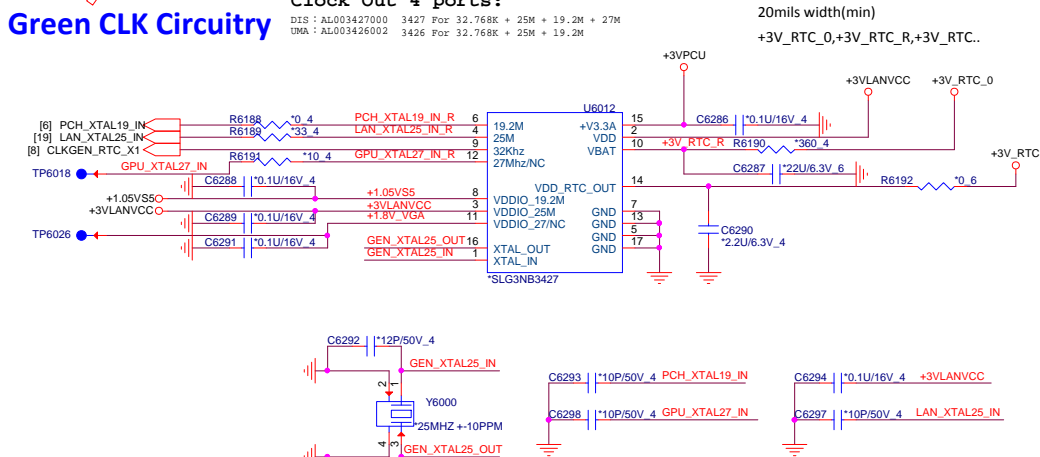
Hole





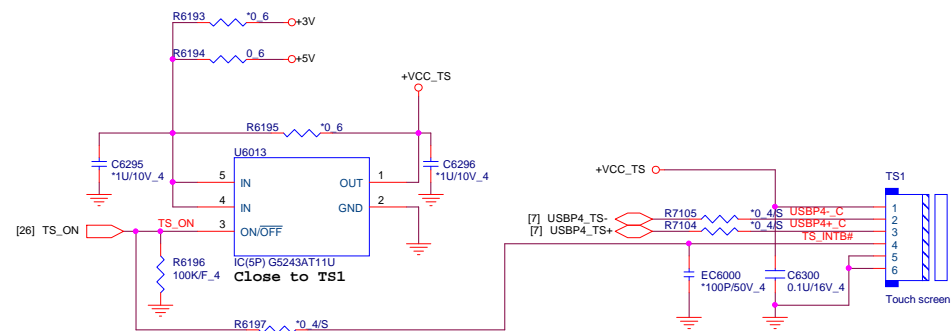
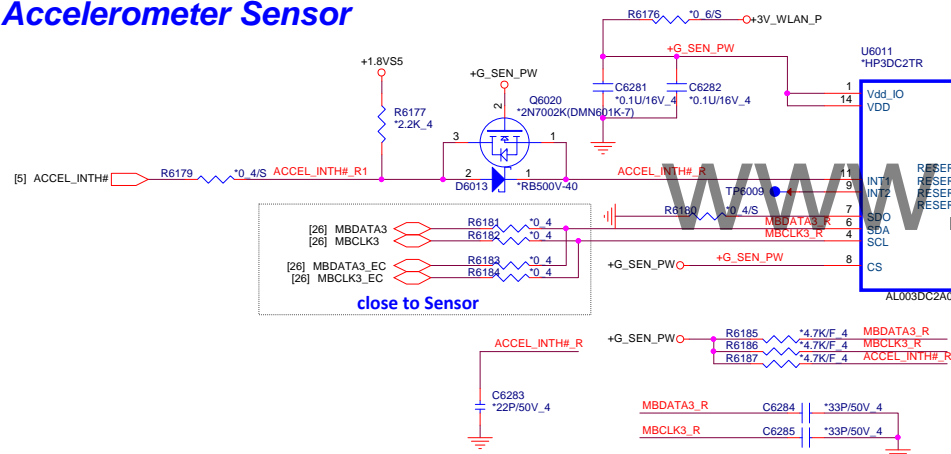
```
DIS : AL003427000 3427 For 32.768K + 25M + 19.2M + 27M
UMA : AL003426002 3426 For 32.768K + 25M + 19.2M
```

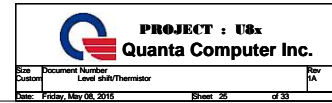
+3V RTC 0,+3V RTC R,+3V RTC..

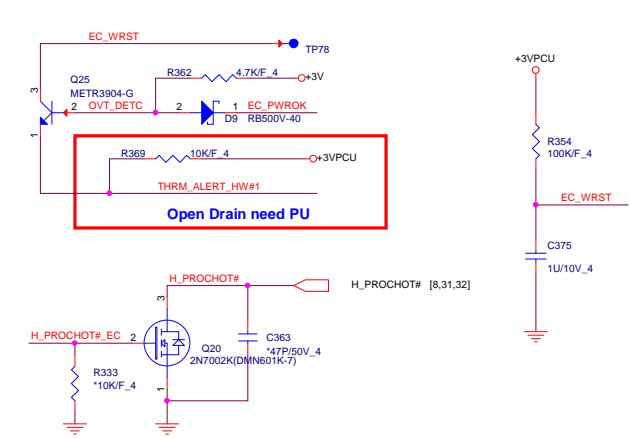
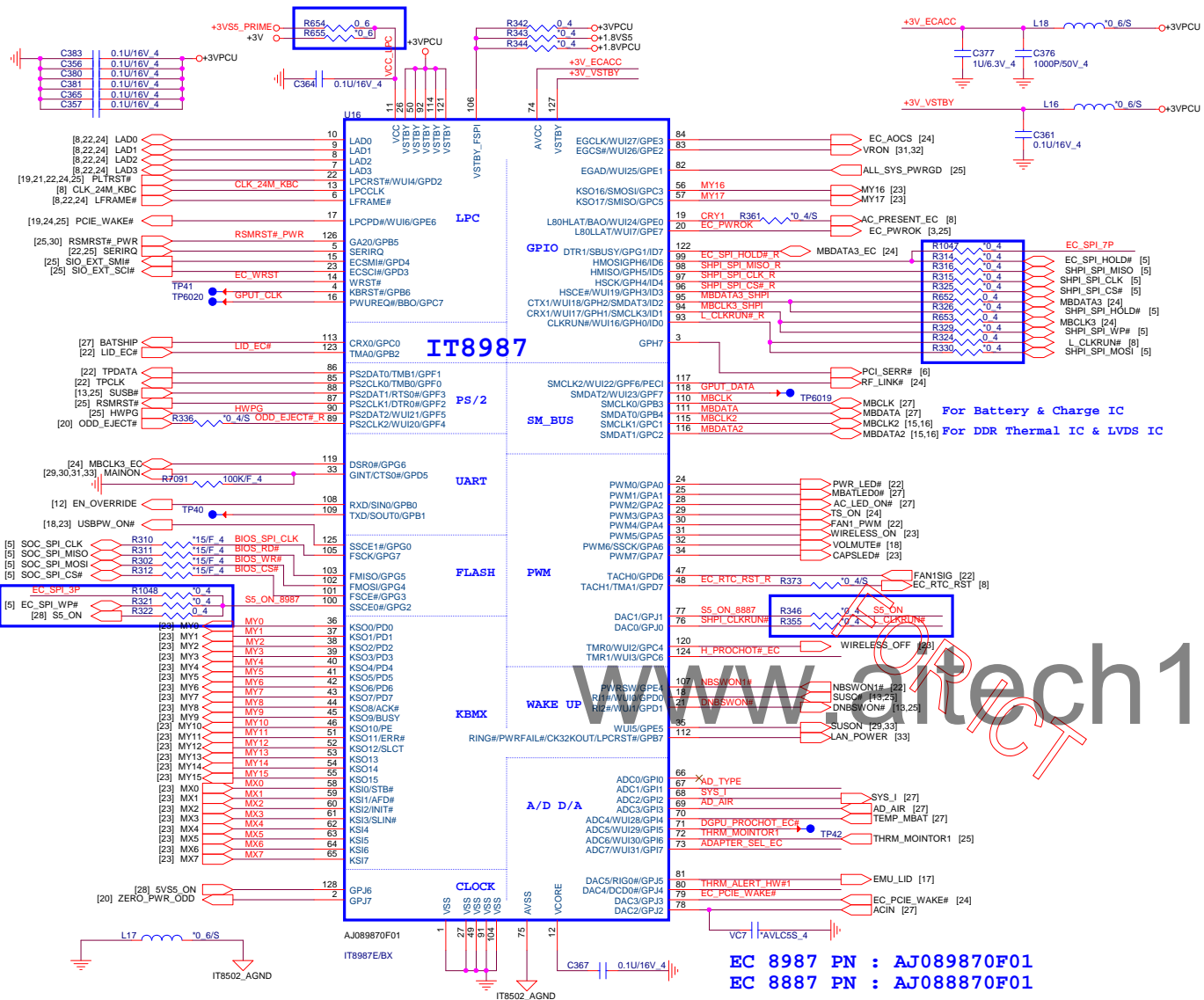


tech1.ru [26] EC_PCIE_WAKE

Touch screen



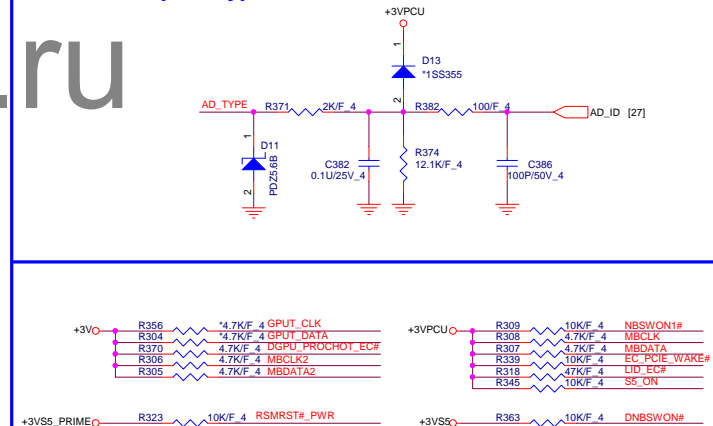




Adapter select for EC

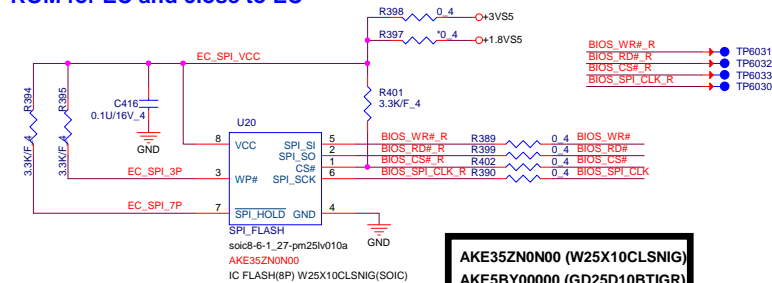
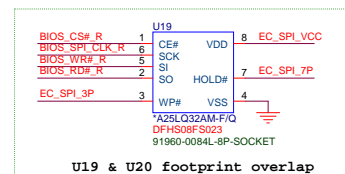
DIS HIGH ==> (65W) Stuff R365
UMA LOW ==> (45W) Stuff R364

Adapter Type check

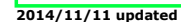


ROM for EC and close to EC

ROM Socket



AKE35ZN0N00 (W25X10CLSNG)
AKE5BY00000 (GD25D10BTGR)



D



1

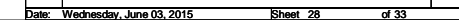
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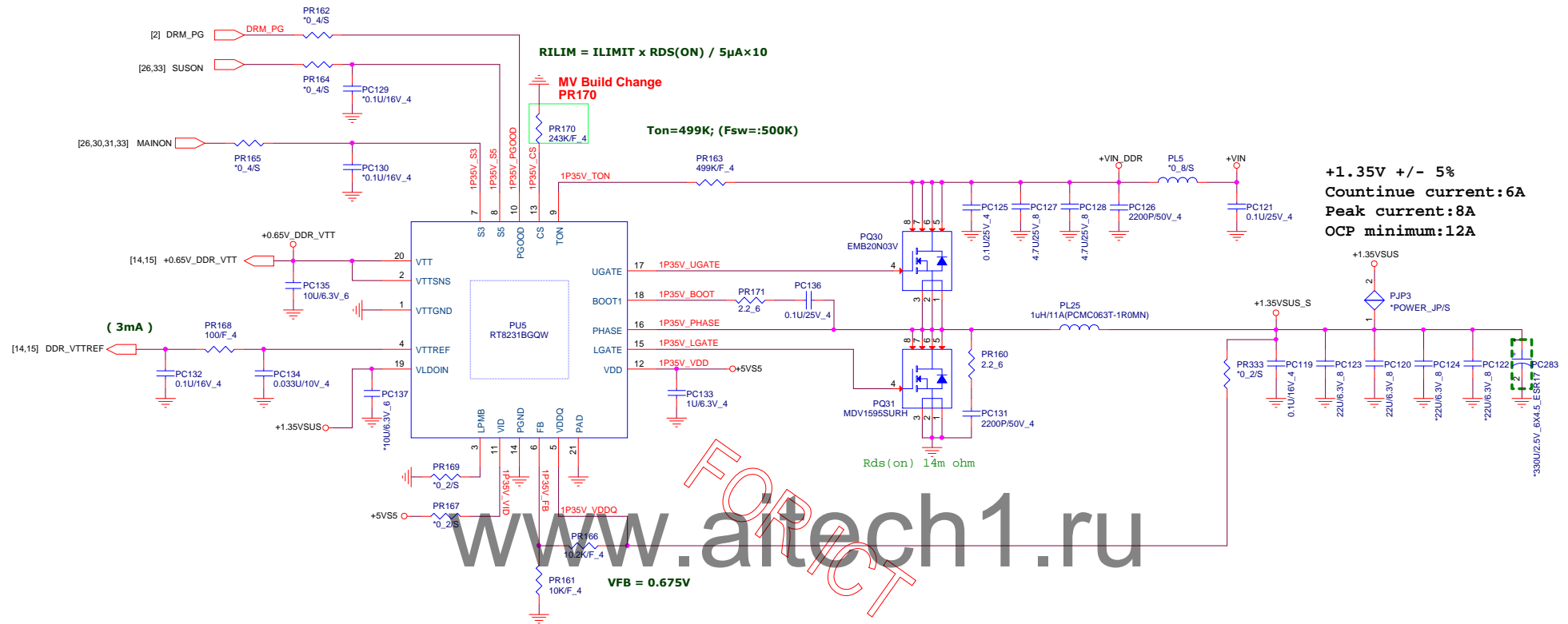


B

A

1

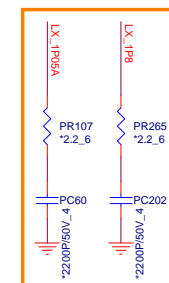
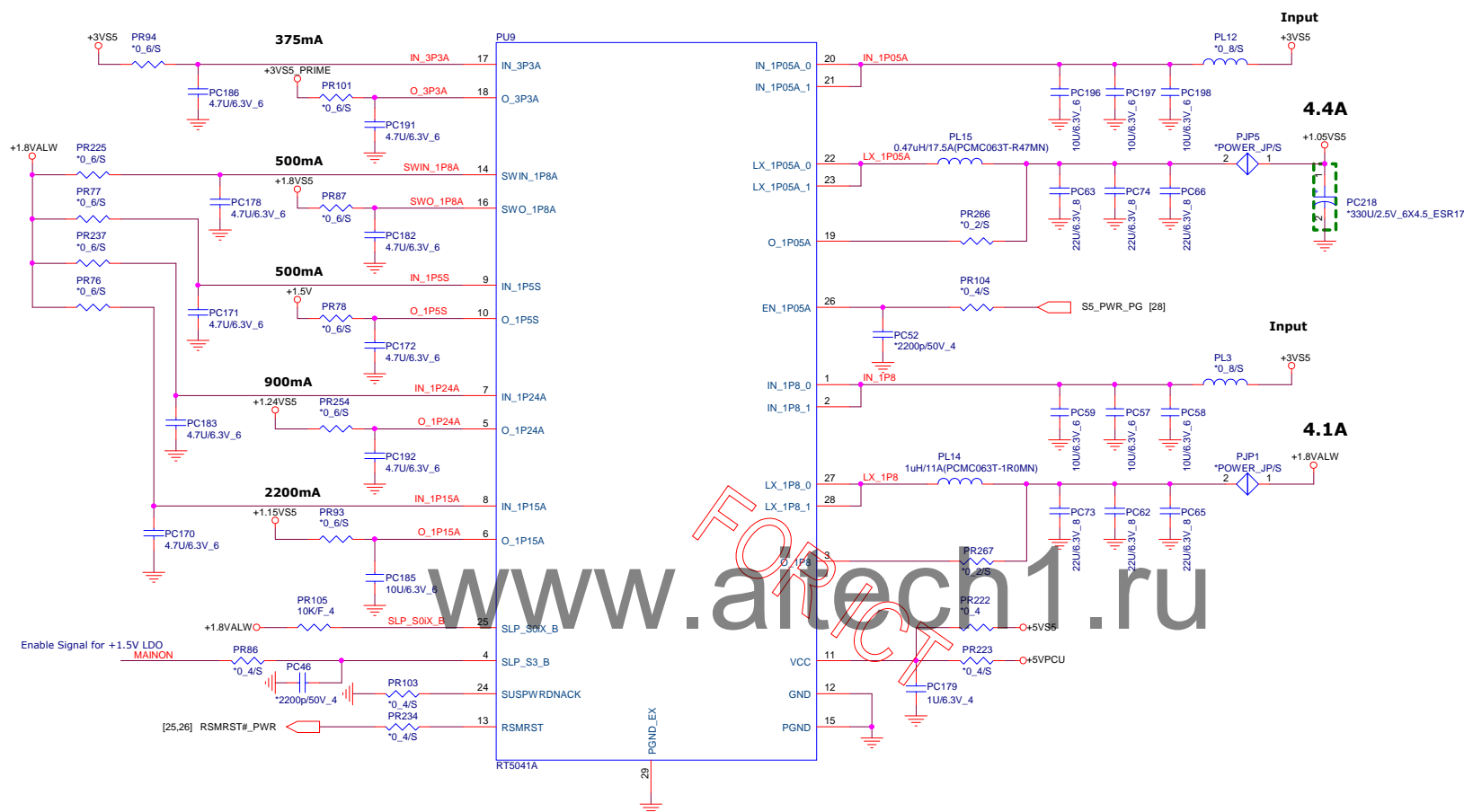




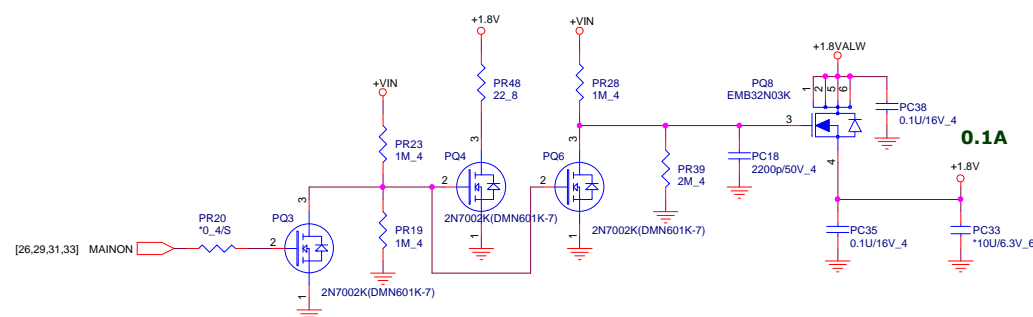
PROJECT : U8x
Quanta Computer Inc.

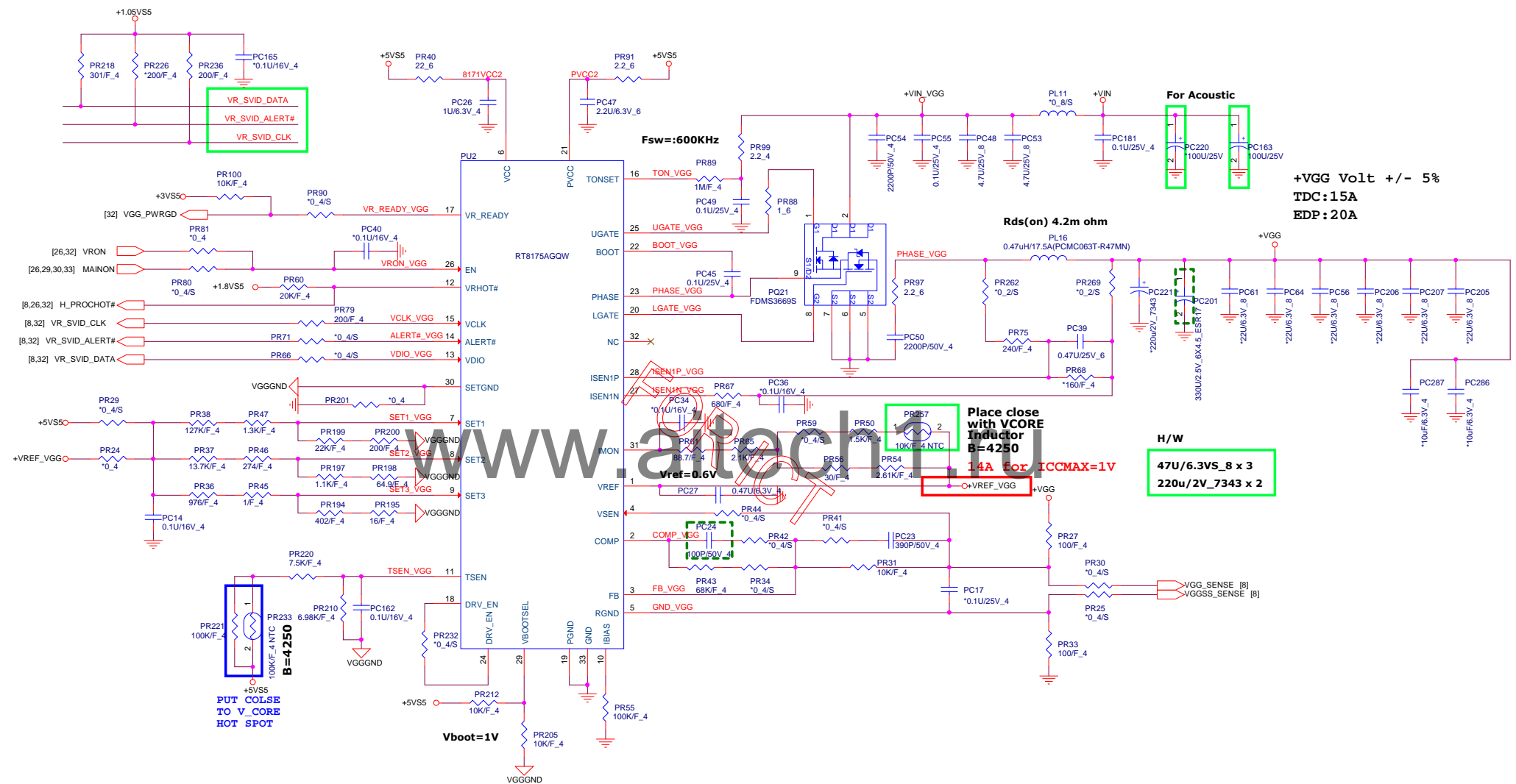
Size	Document Number	Rev
Custom	DDR3 (RT8231B)	1A

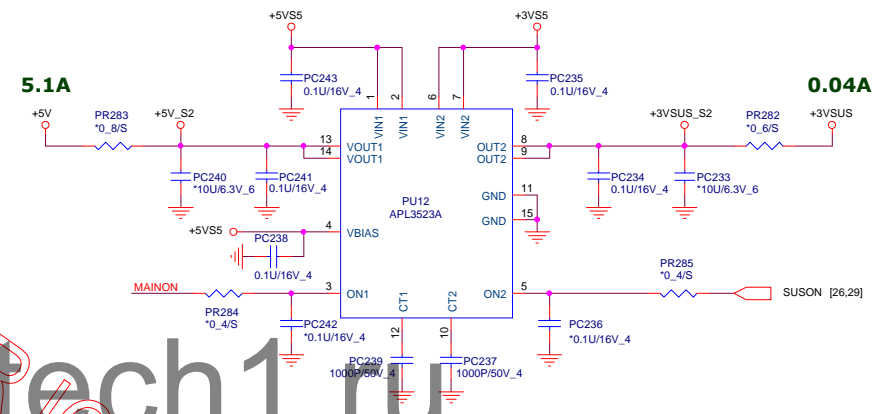
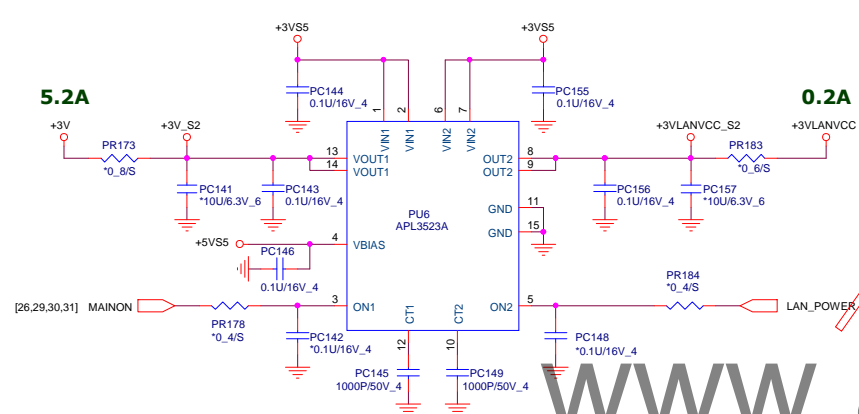
Date: Wednesday, June 03, 2015 Sheet 29 of 33



Snubber







PROJECT : U8x
Quanta Computer Inc.

Size	Document Number	Rev
Custom	Load switch IC (APL3523A)	1A

Date: Wednesday, June 03, 2015 Sheet 33 of 33