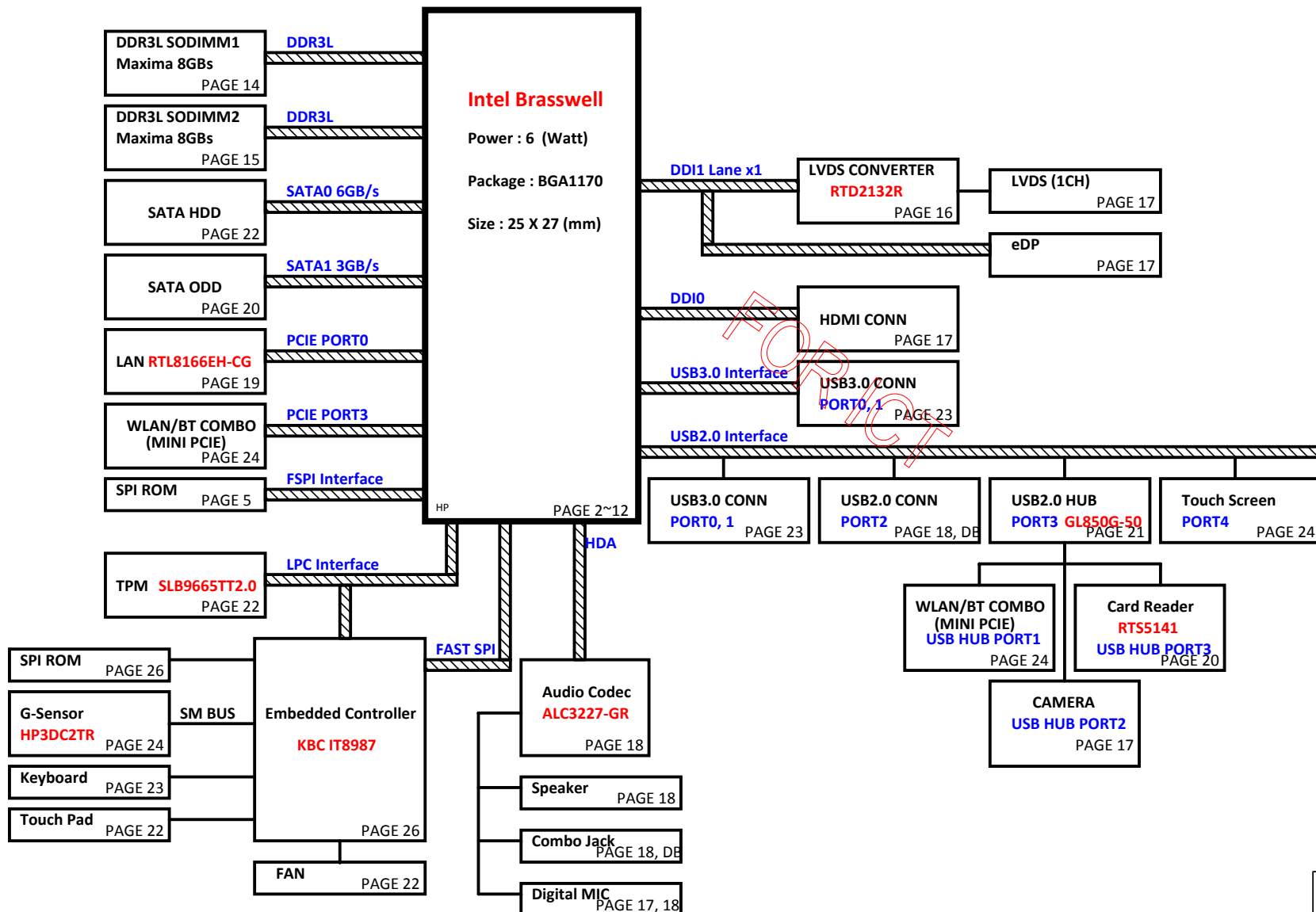


# U8X UMA (14"/15.6")

## 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

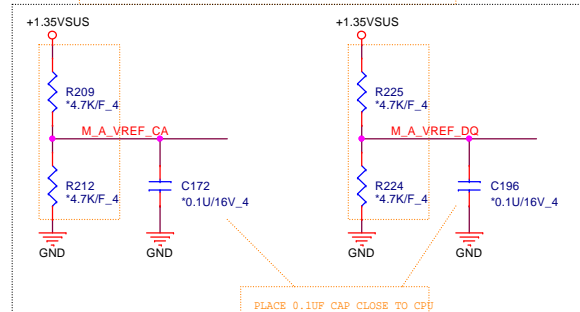
### SYS Power

PG.33

10/8 Del M\_A\_MONIP and M\_A\_MONIN let it NC follow intel recommendation.

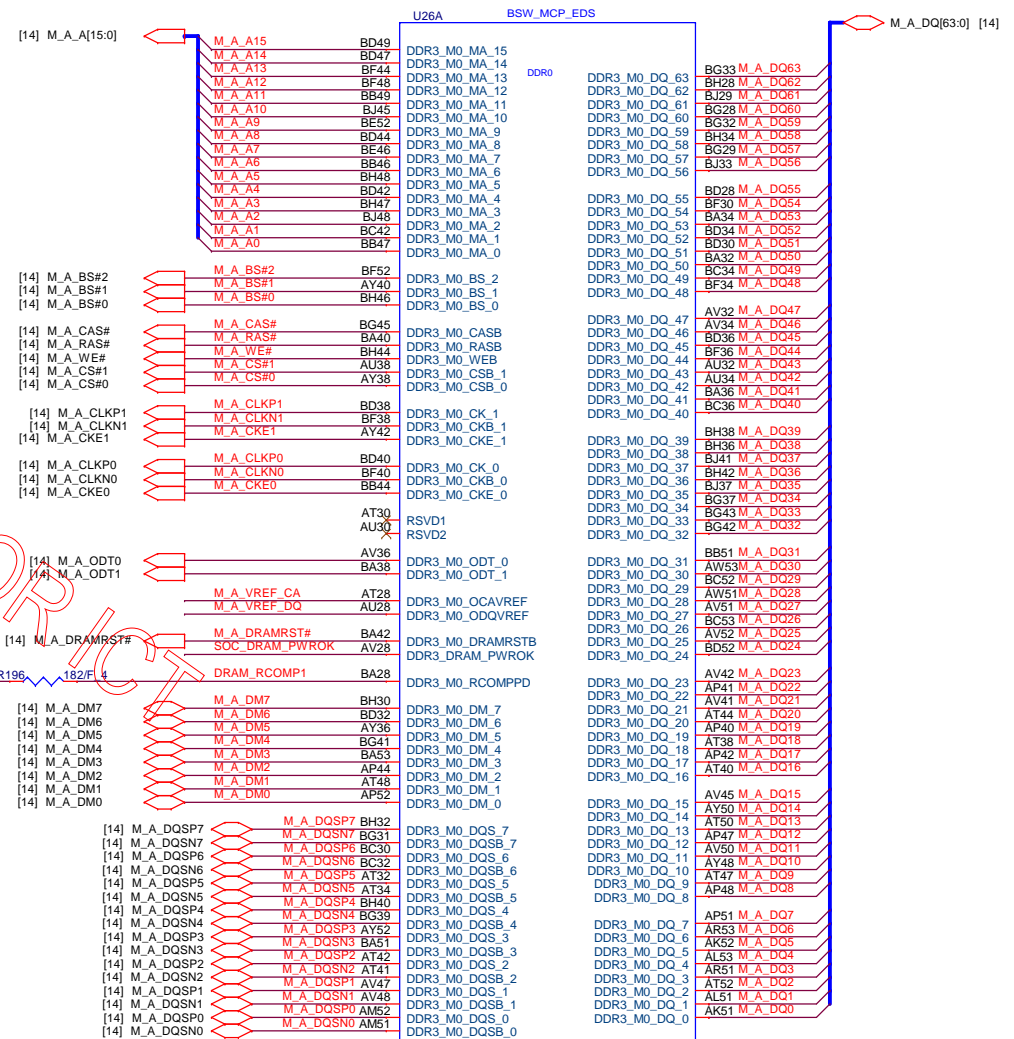
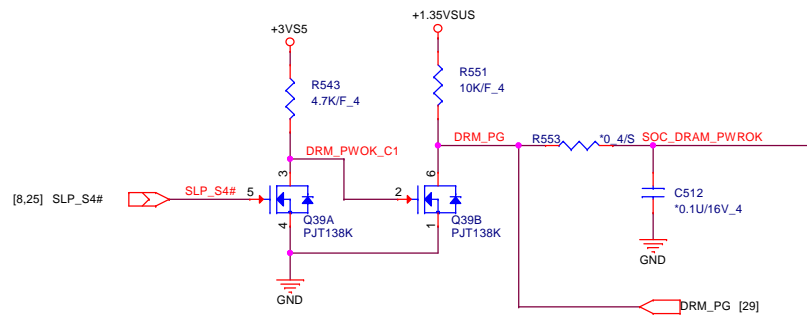
ROUTE ALL VREF POWER SIGNALS AS THICK TRACES

PLACE TWO 4.7K RESISTORS CLOSE TO CPU PINS ON M\_VREF  
ROUTE THE VREF POWER SIGNALS WITH THICK TRACES



PLACE 0.1uF CAP CLOSE TO CPU

02/09 No Stuff Vref circuitry from SOC pages.  
VOLTAGE DIVIDER FOR VREF IS FOR DDR3L DIMMS ONLY. SOC DOES NOT DRIVE VREF.  
Follow TO BRASWELL SOC EDS AND PDG FOR MORE DETAILS ABOUT DDR VREF



\*BSW\_MCP\_EDS

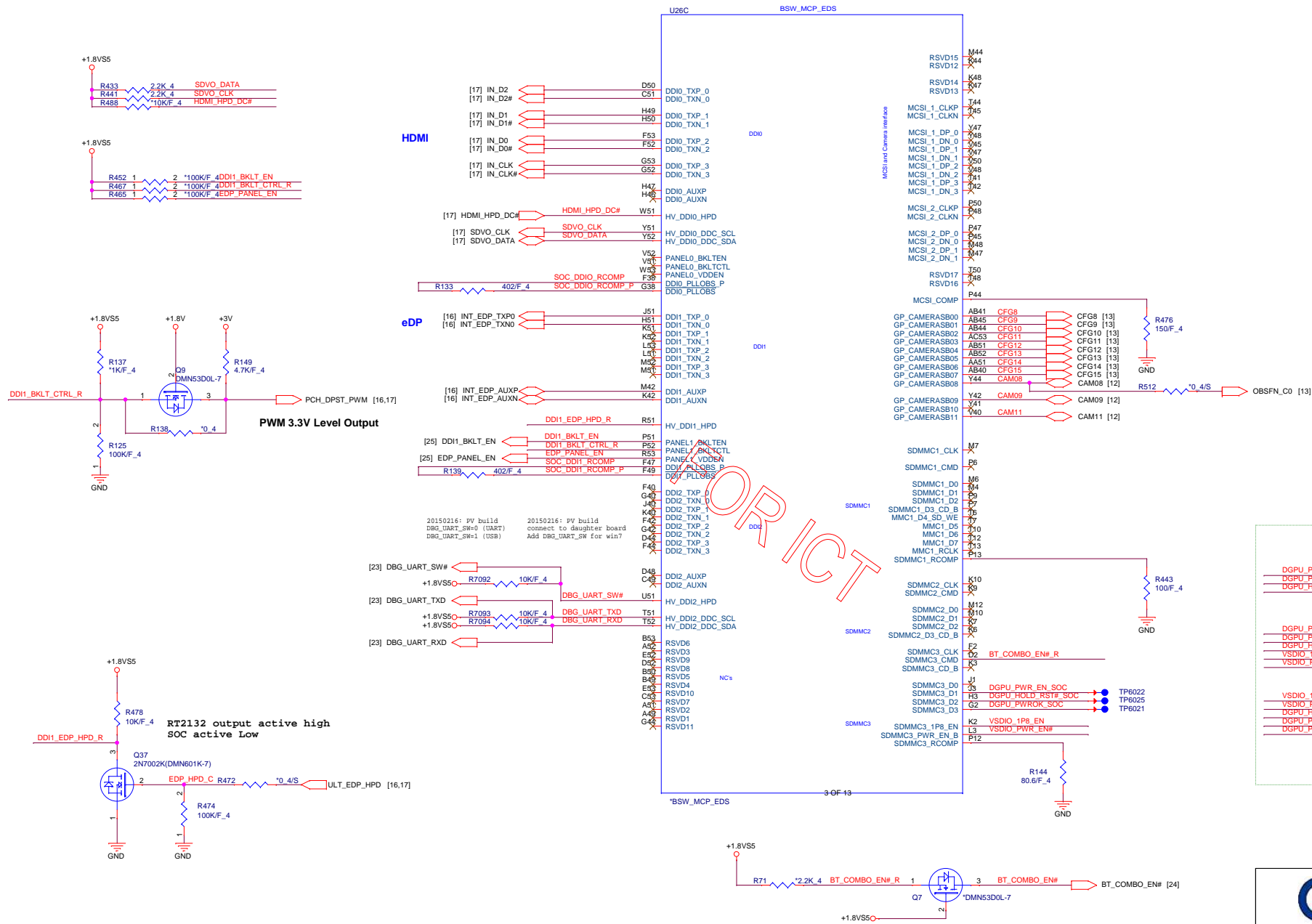
1 OF 13

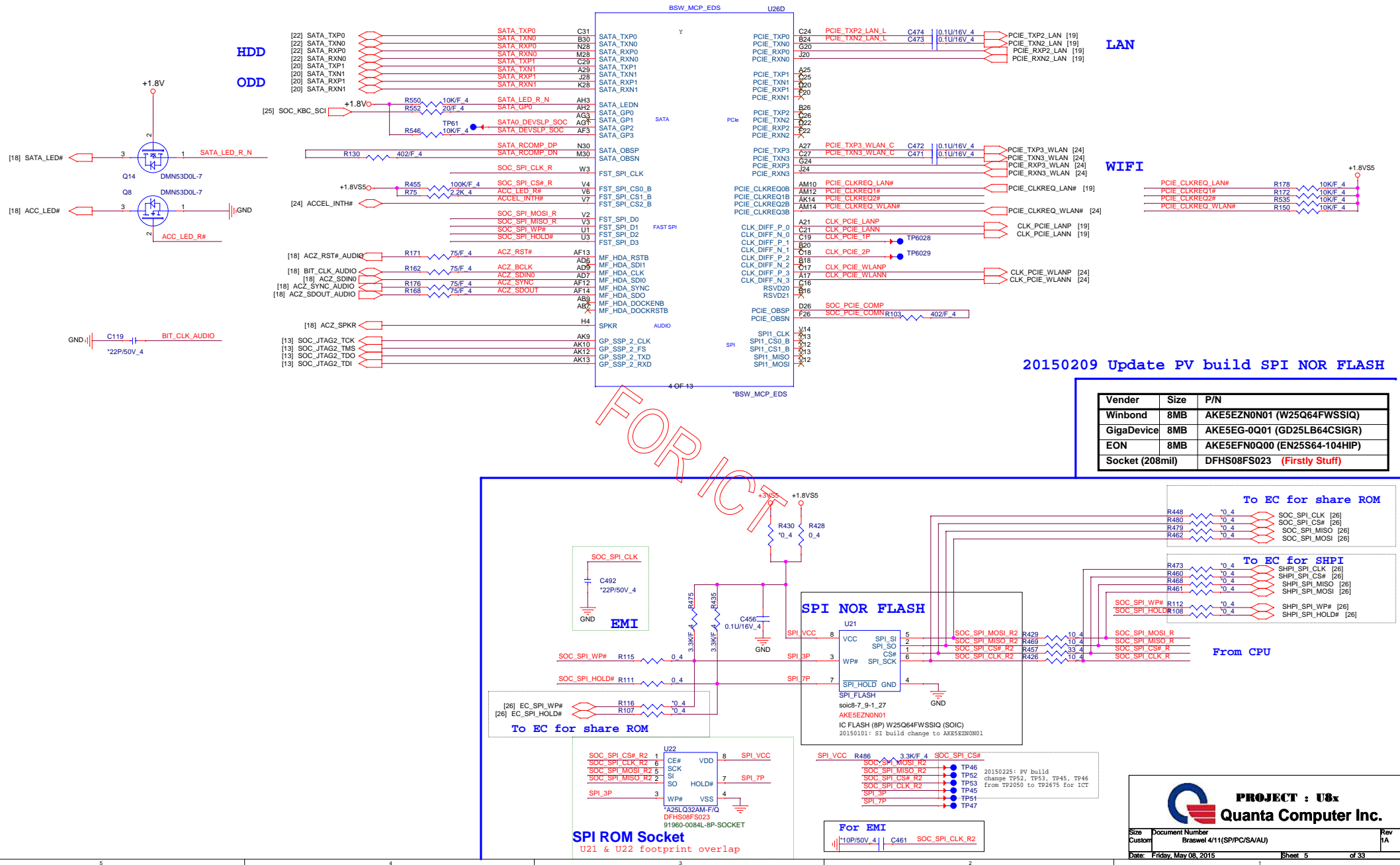


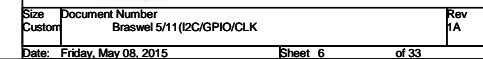
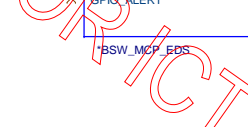
**PROJECT : U3x**  
**Quanta Computer Inc.**

Size	Document Number	Rev
Custom	Braswell 1/11 (DDR4)	A
Date:	Friday, May 08, 2015	Sheet 2 of 33



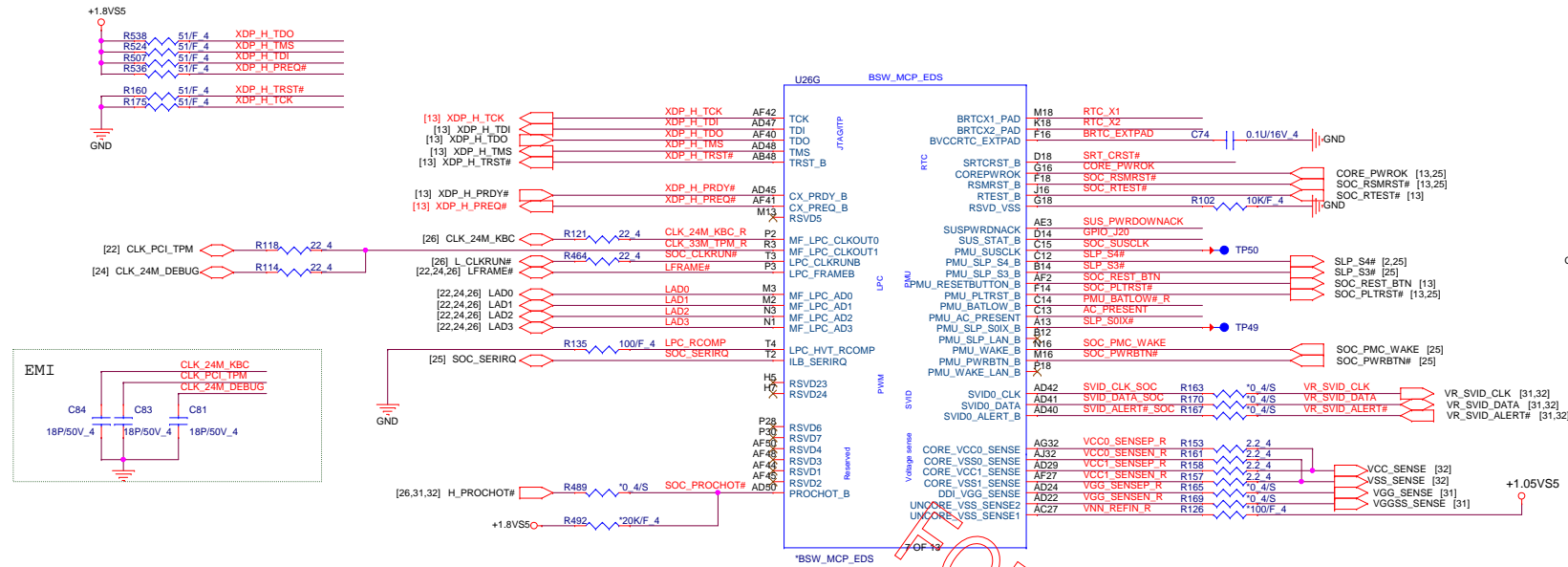




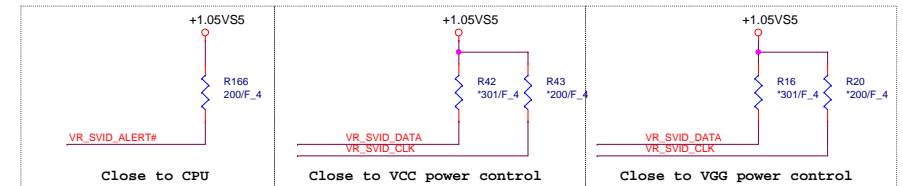
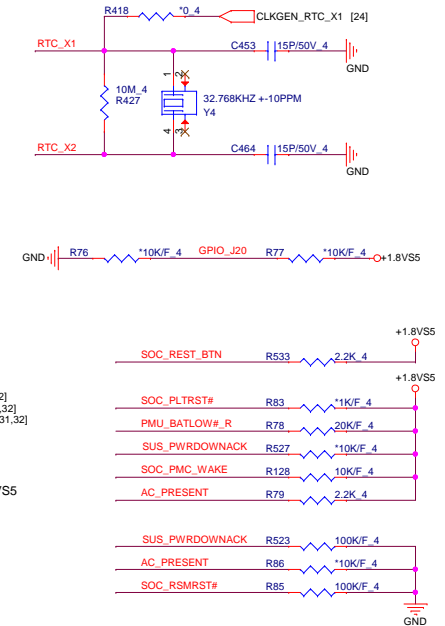




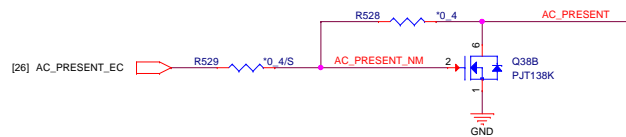




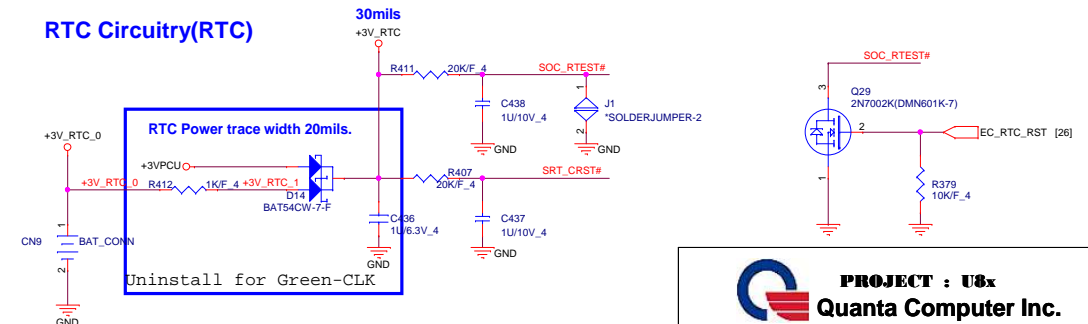
## RTC Clock 32.768KHz



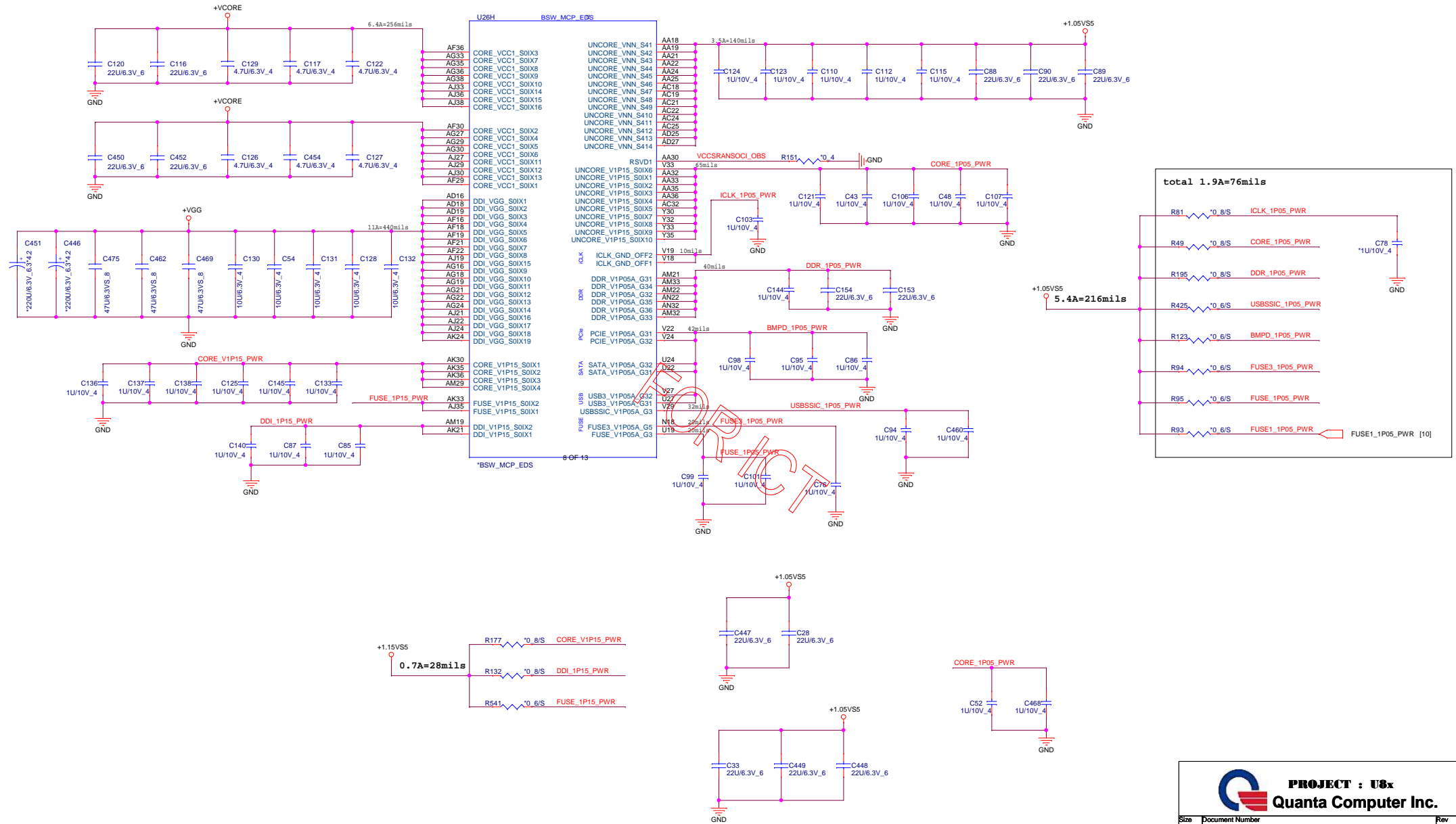
AC Present: This input pin indicates when the platform is plugged into AC power.



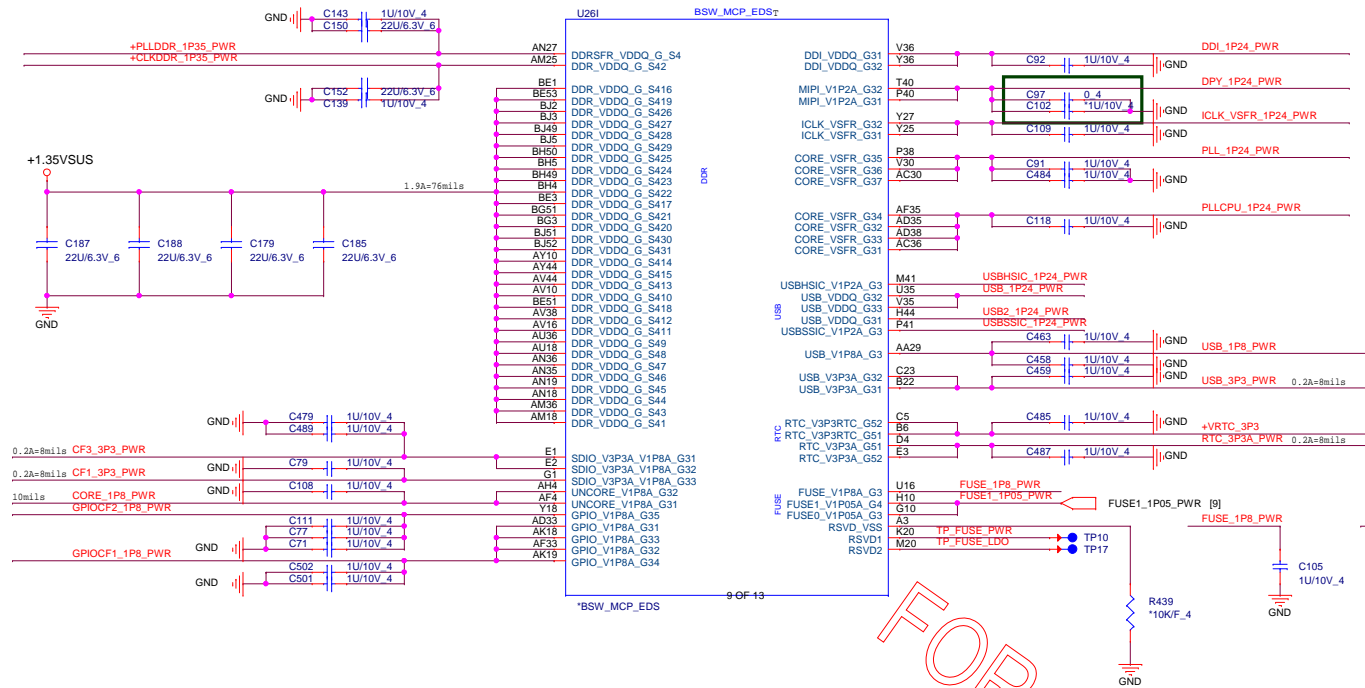
## RTC Circuitry(RTC)



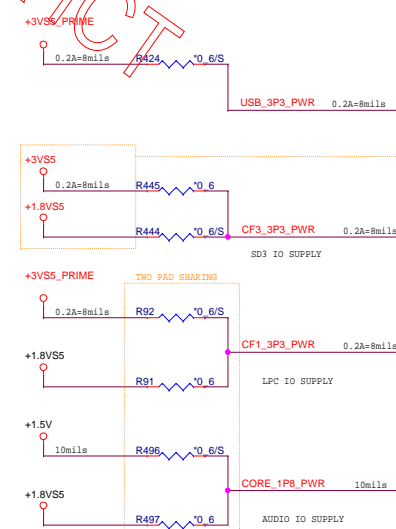
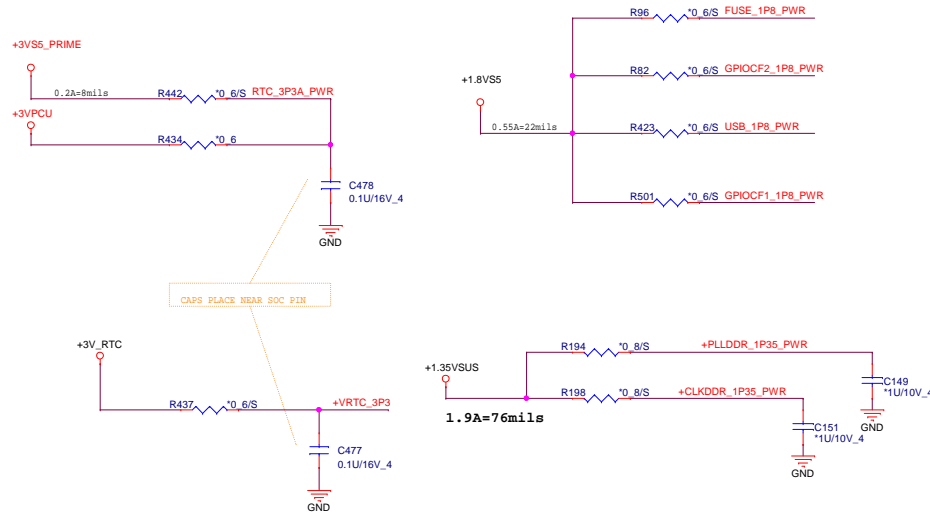
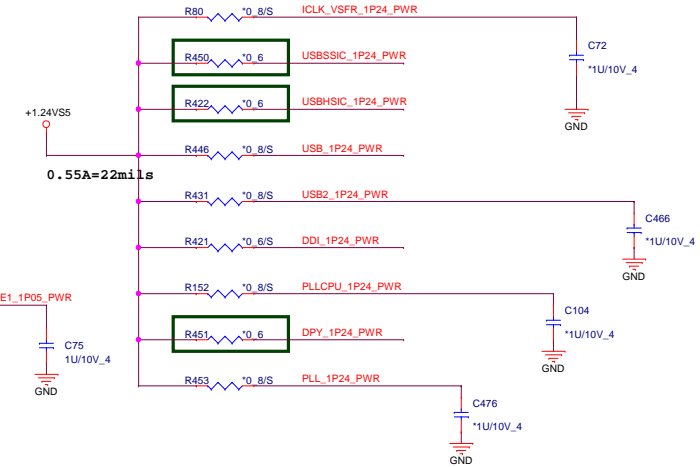




PLACE THE CAPS UNDER THE PKG SHADOW



PV: Disable HSIC SSIC MIPI power.

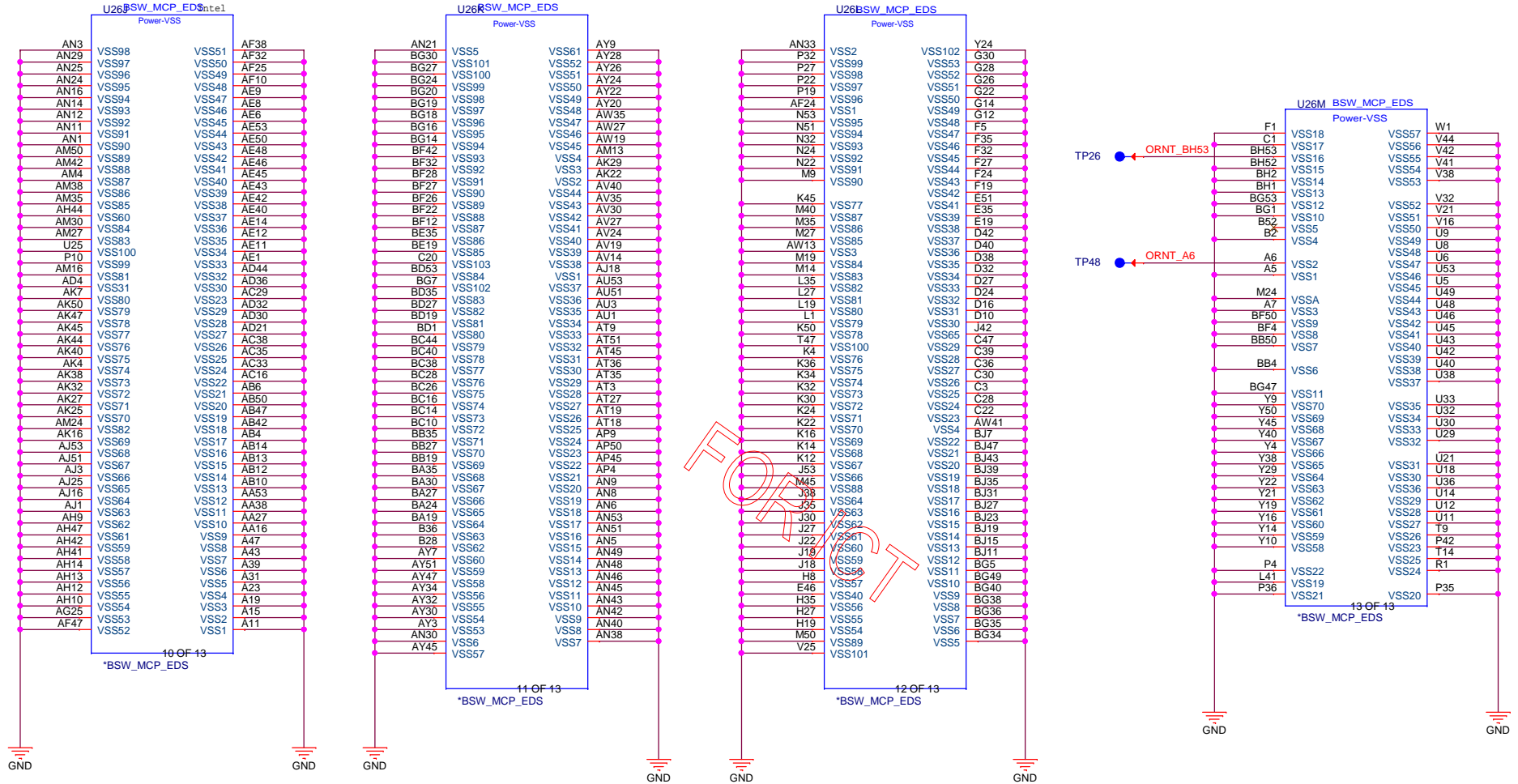


VSDIO VOLTAGE SETTING (CF3_3P3_PWR)		
SDMMC3_PWR_EN_N	SDMMC3_1P8_EN	VSDIO (V)
1	0	0V
1	1	0V
0	0	3.3V
0	1	1.8V



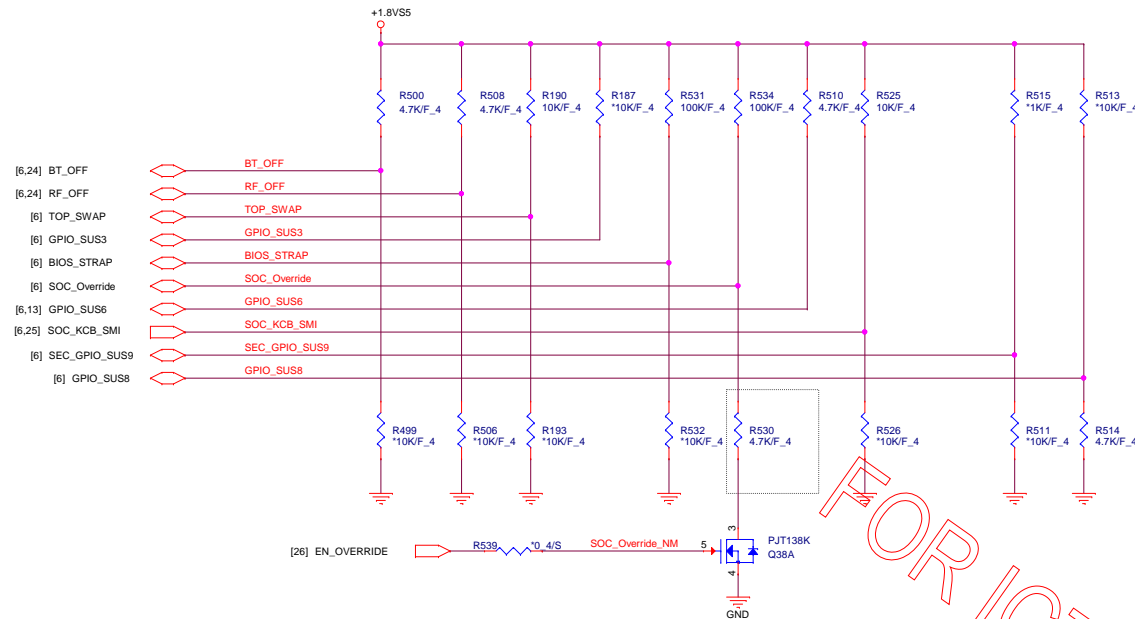
**PROJECT : U8x**  
**Quanta Computer Inc.**

Size Custom Document Number Braswell 9/11 (Power 2) Rev 1A  
 Date: Tuesday, May 26, 2015 Sheet 10 of 33



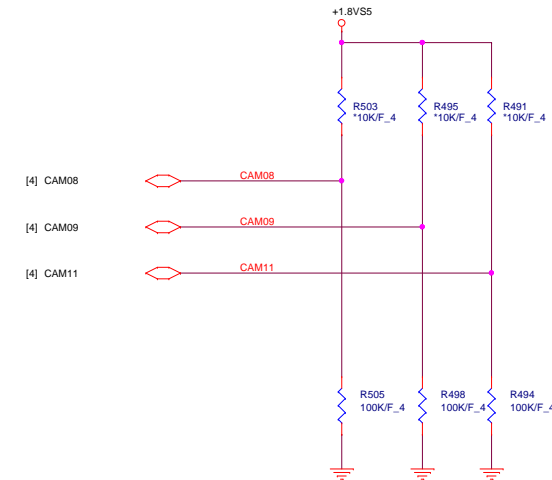
**PROJECT : U8x**  
**Quanta Computer Inc.**

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

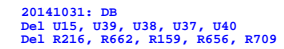
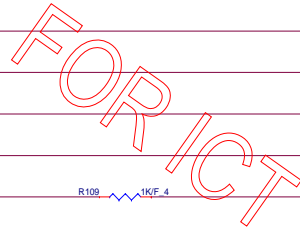
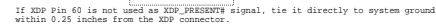


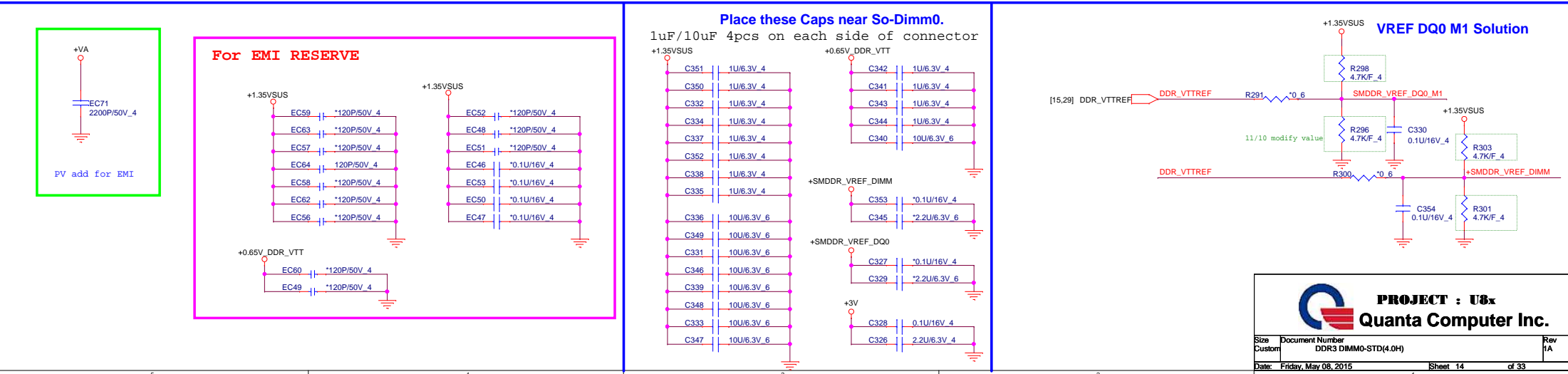
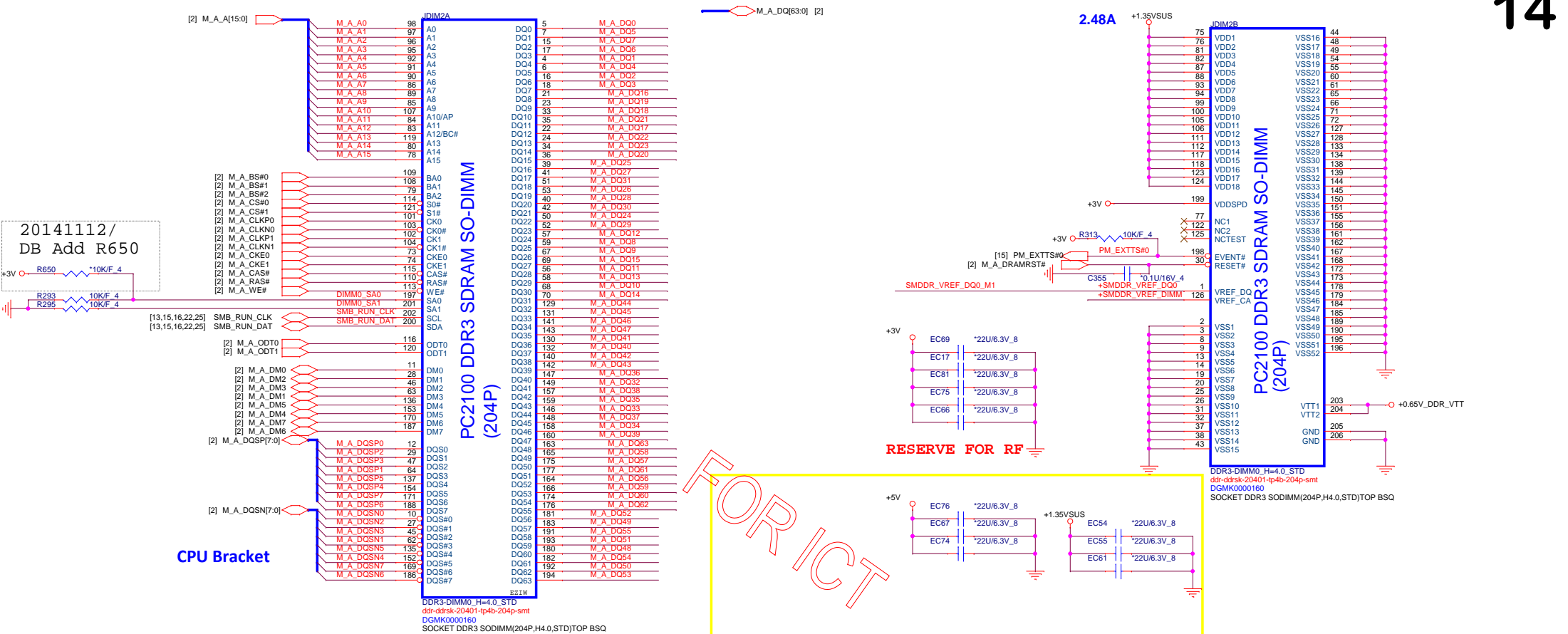
	CAM08	CAM09	CAM11
PULL HIGH	ICLK Xtal OSC Bypass	CCU SUS RO Bypass	RTC OSC Bypass
PULL LOW	ICLK Xtal OSC No Bypass DEFAULT	CCU SUS RO No Bypass DEFAULT	RTC OSC No Bypass DEFAULT

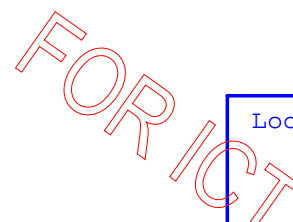


**PROJECT : UBx**  
**Quanta Computer Inc.**

Size Custom Document Number Braswell 11/11 (Strap) Rev 1A  
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## Local Thermal Sensor



1uF/10uF 4pcs on each side of connector

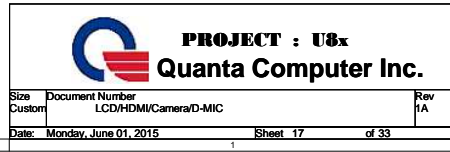


**PROJECT : U8x**  
**Quanta Computer Inc.**

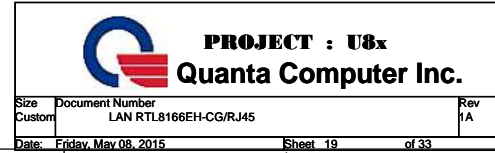
Size Custom	Document Number DDR3 DIMM1-STD(4.0H)	Rev 1A
Date: Friday, May 08, 2015	Sheet 15	of 33



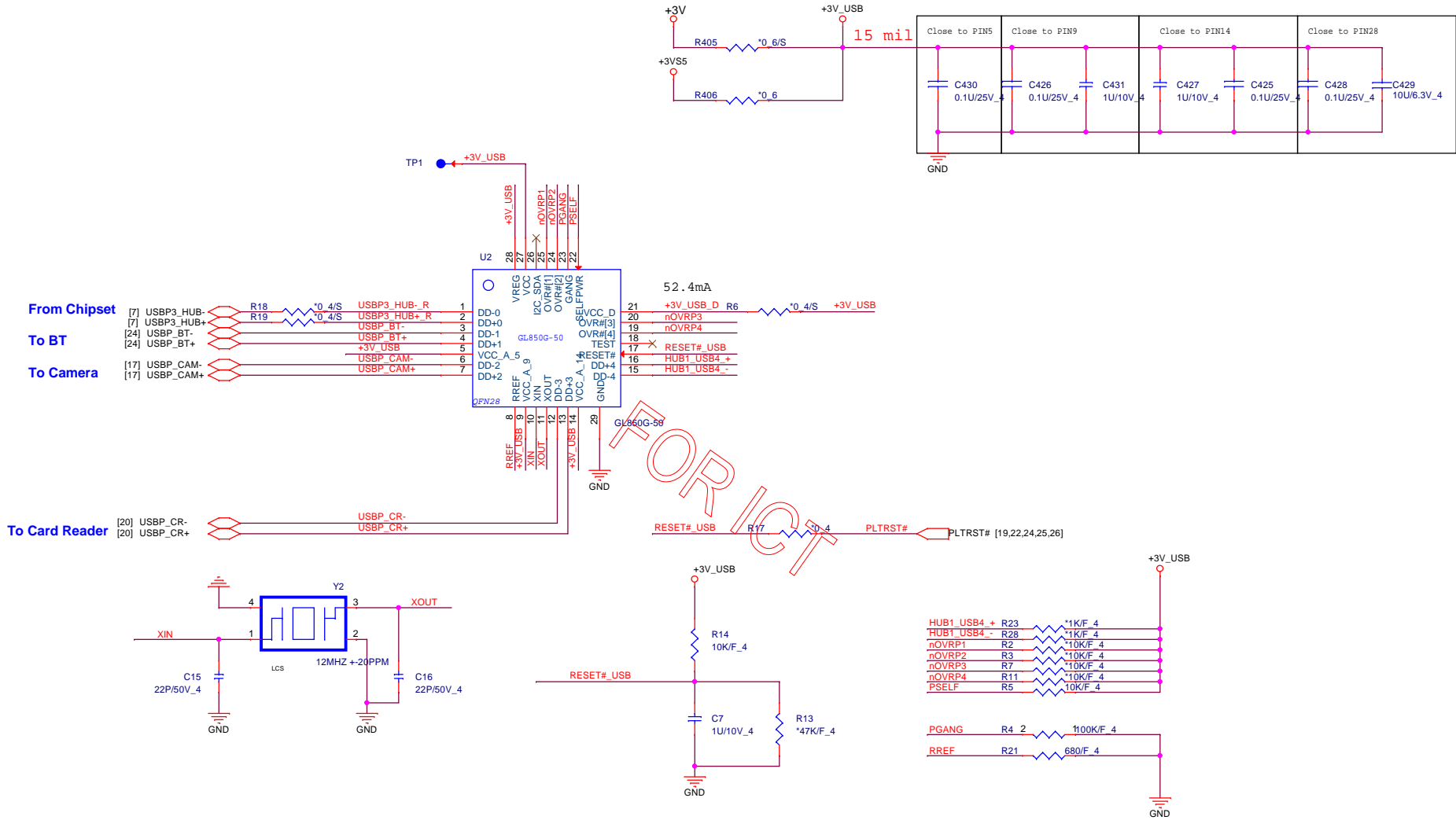




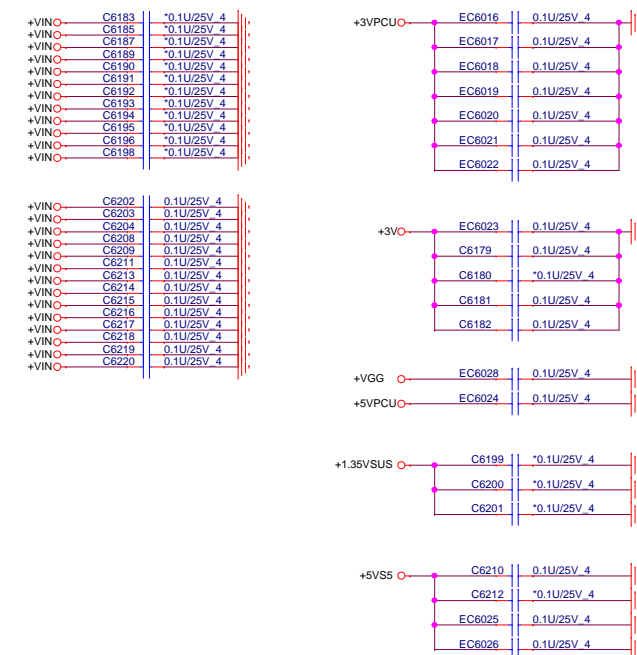




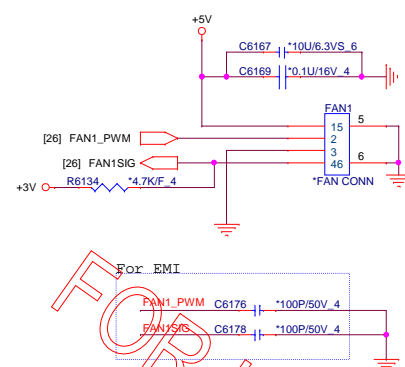




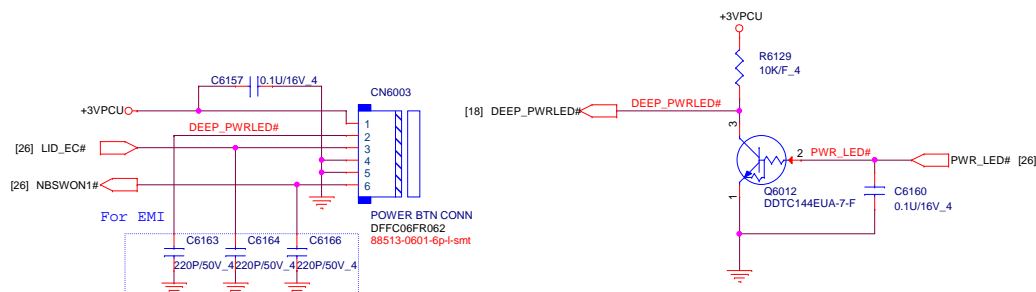
## EMI Caps



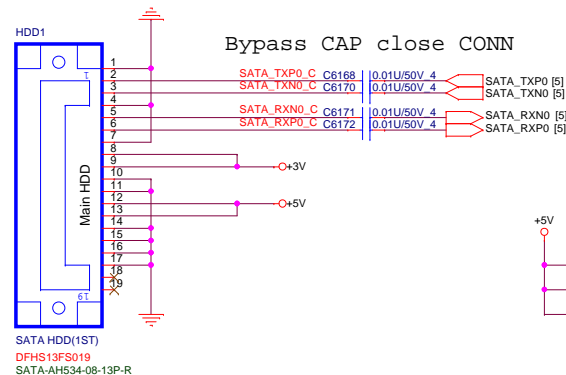
**FAN**



## Power Botton Connector

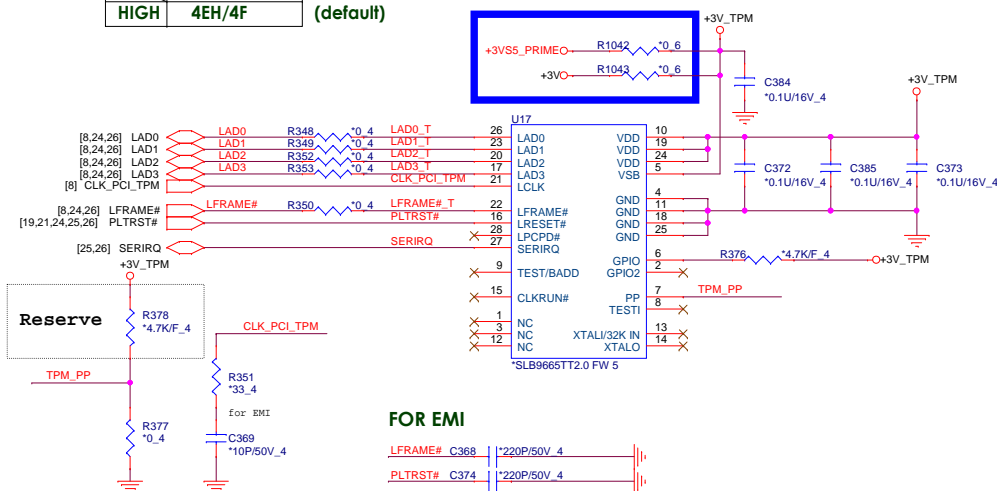


### SATA HDD Connector(Cable type)



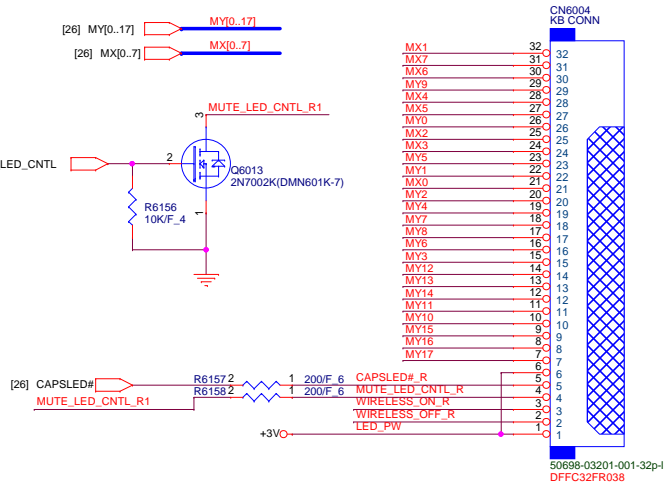
## TPM (2.0)

Address	BADD	
HIGH	4EH/4F	(default)

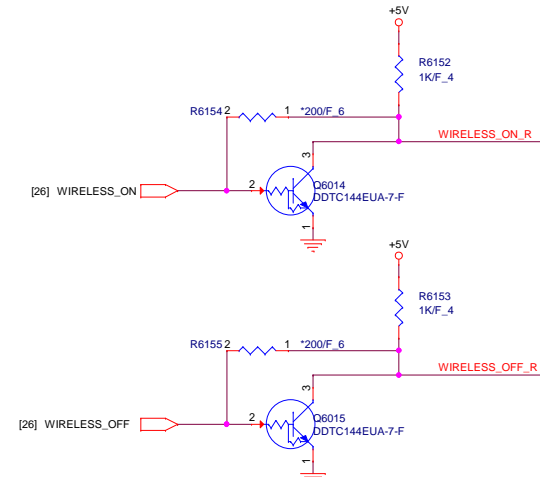
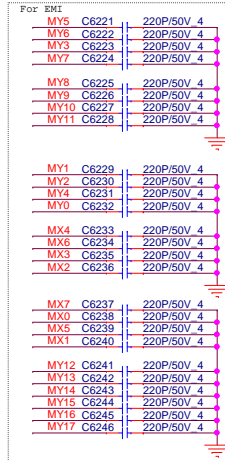
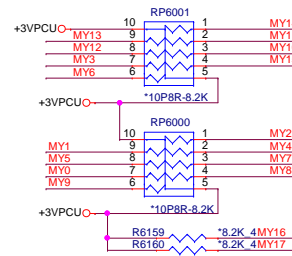




# KEYBOARD Con.

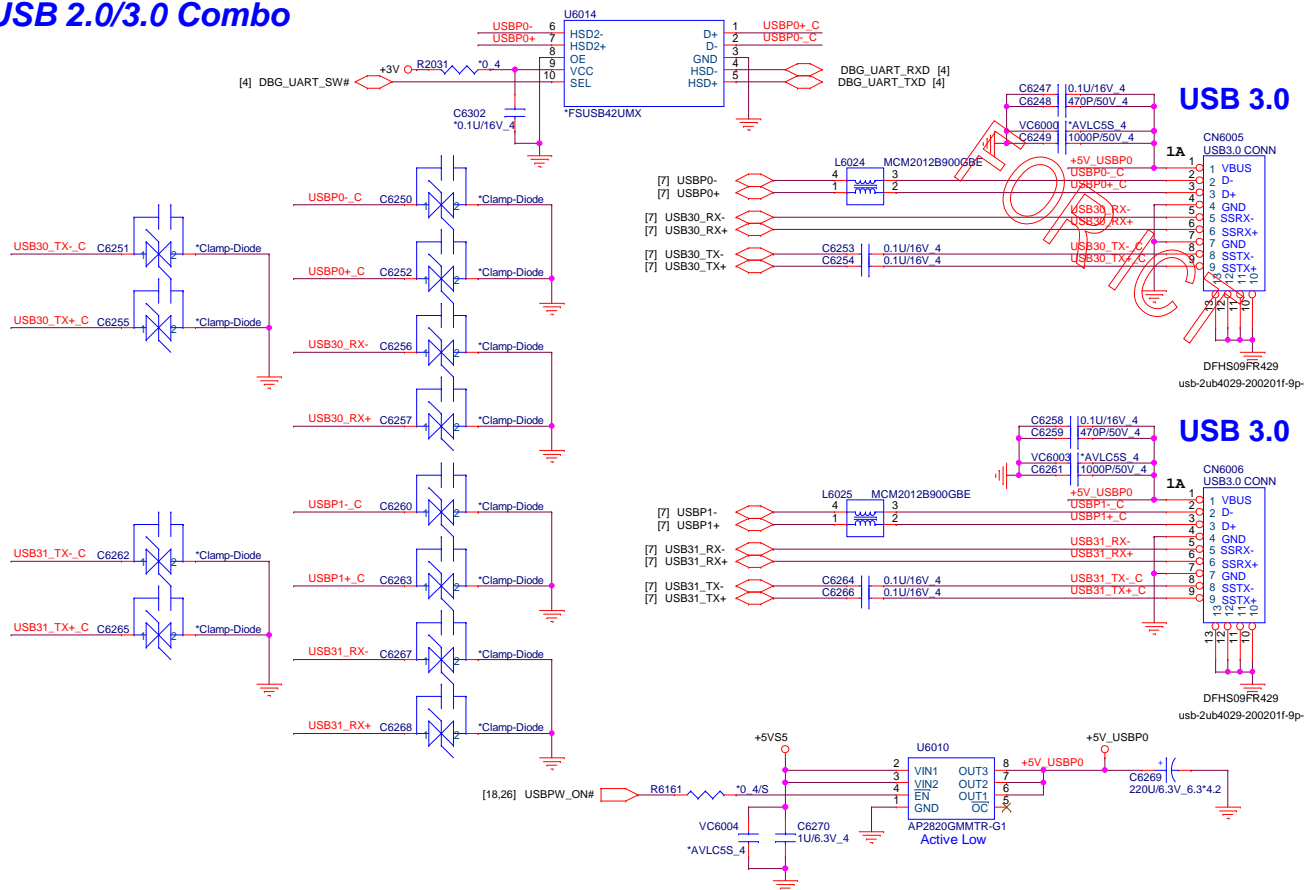


## KEYBOARD PULL-UP

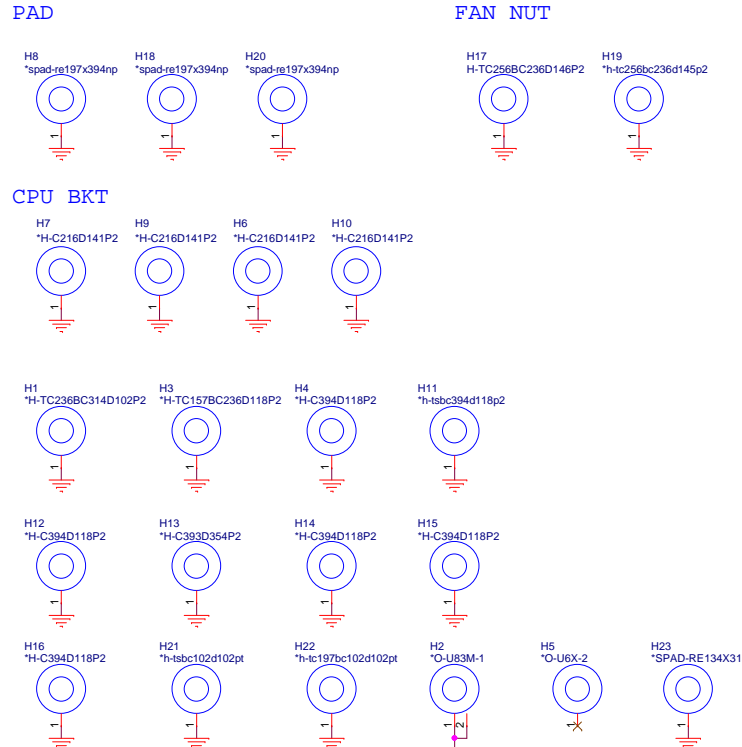


23

# USB 2.0/3.0 Combo

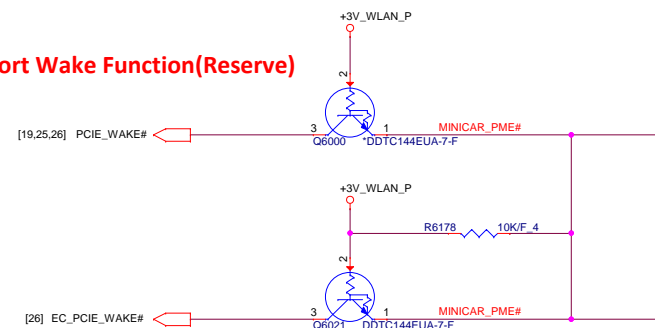


# Hole



**PROJECT : U8x**  
**Quanta Computer Inc.**

Size	Document Number	Rev
Custom	USB3.0/KB/HOLE	A
Date:	Monday, June 01, 2015	Sheet 23 of 33

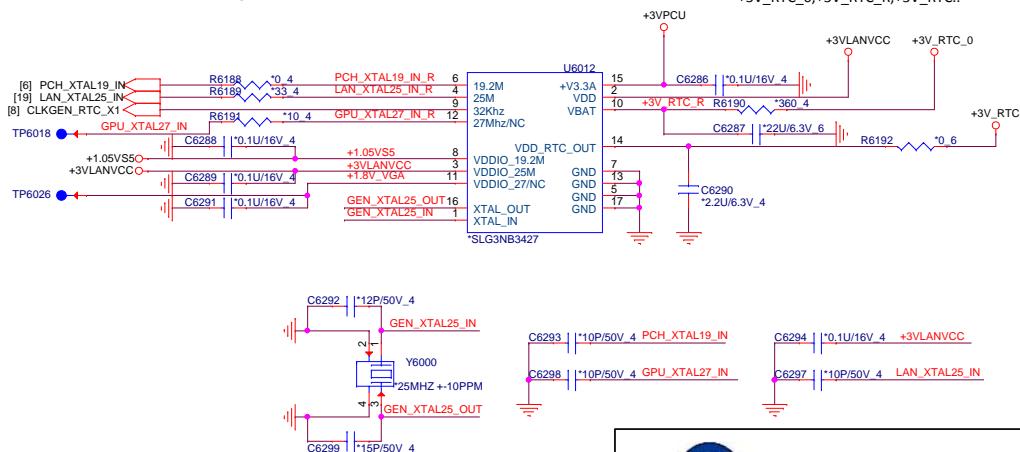


Clock Out 4 ports:

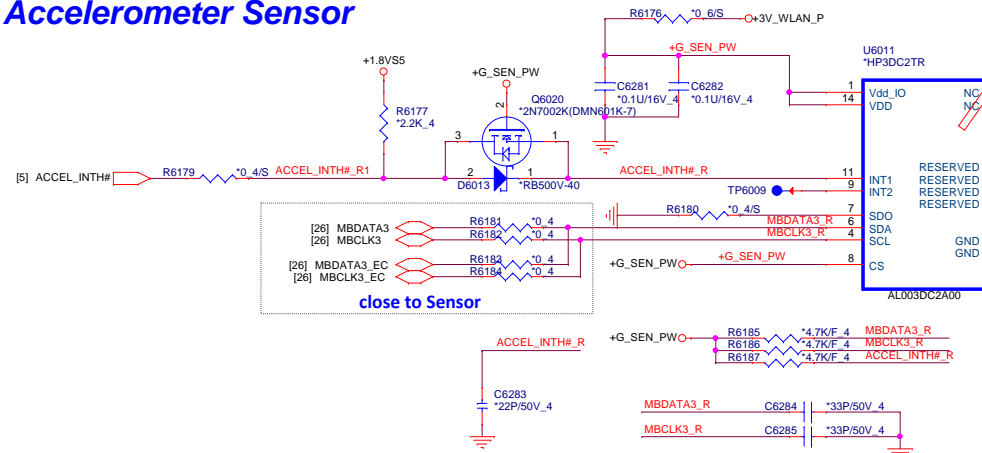
```
DIS : AL003427000 3427 For 32.768K + 25M + 19.2M + 27M
UMA : AL003426002 3426 For 32.768K + 25M + 19.2M
```

20mils width(min)

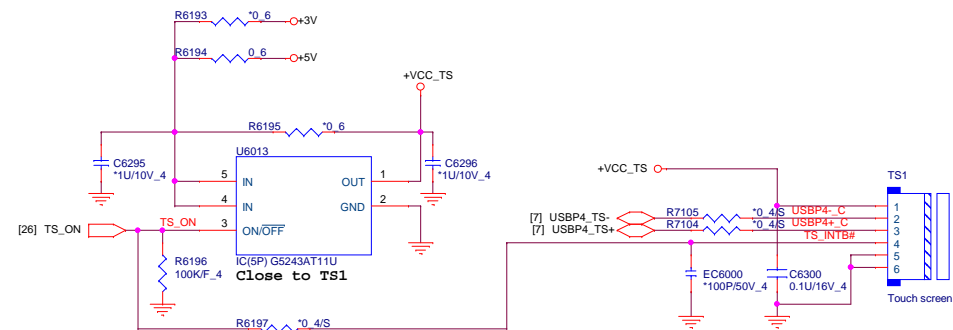
+3V RTC 0,+3V RTC R,+3V RTC..

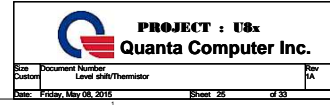


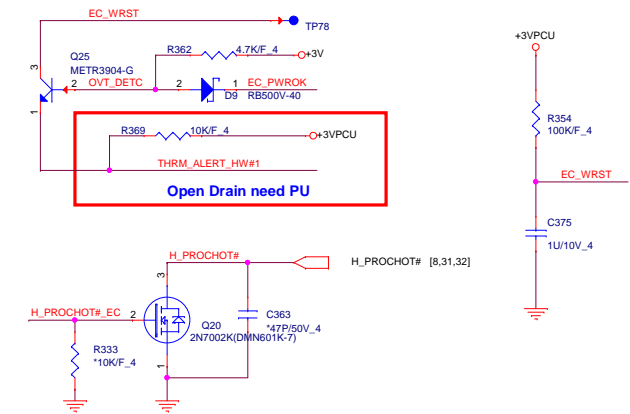
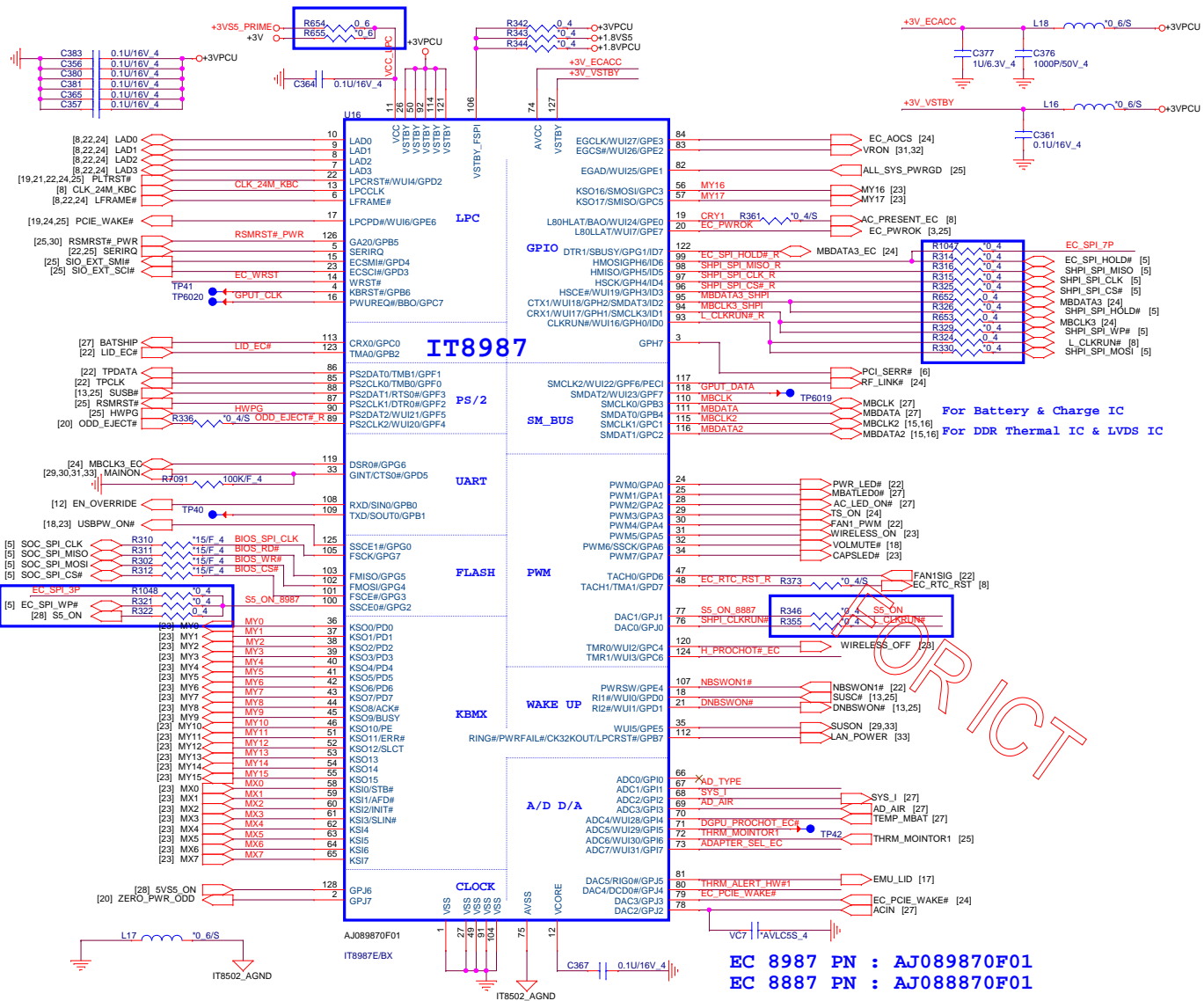
## Accelerometer Sensor



## Touch screen



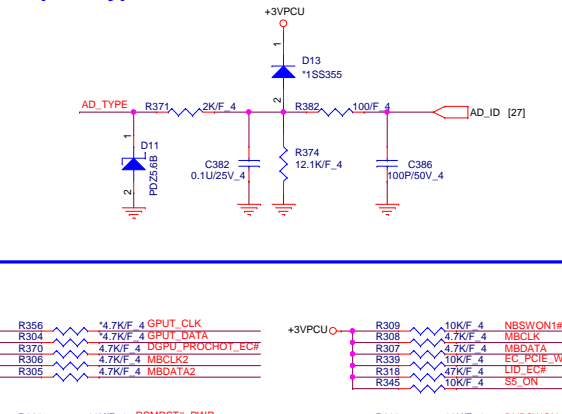




### Adapter select for EC

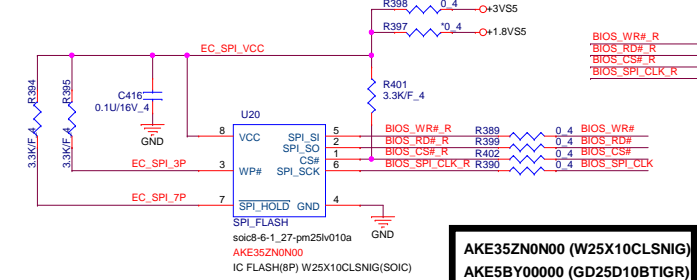
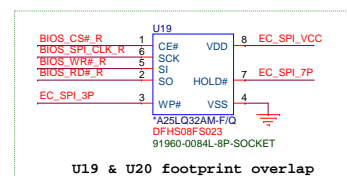
DIS HIGH ==> (65W) Stuff R365  
 UMA LOW ==> (45W) Stuff R364

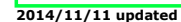
### Adapter Type check



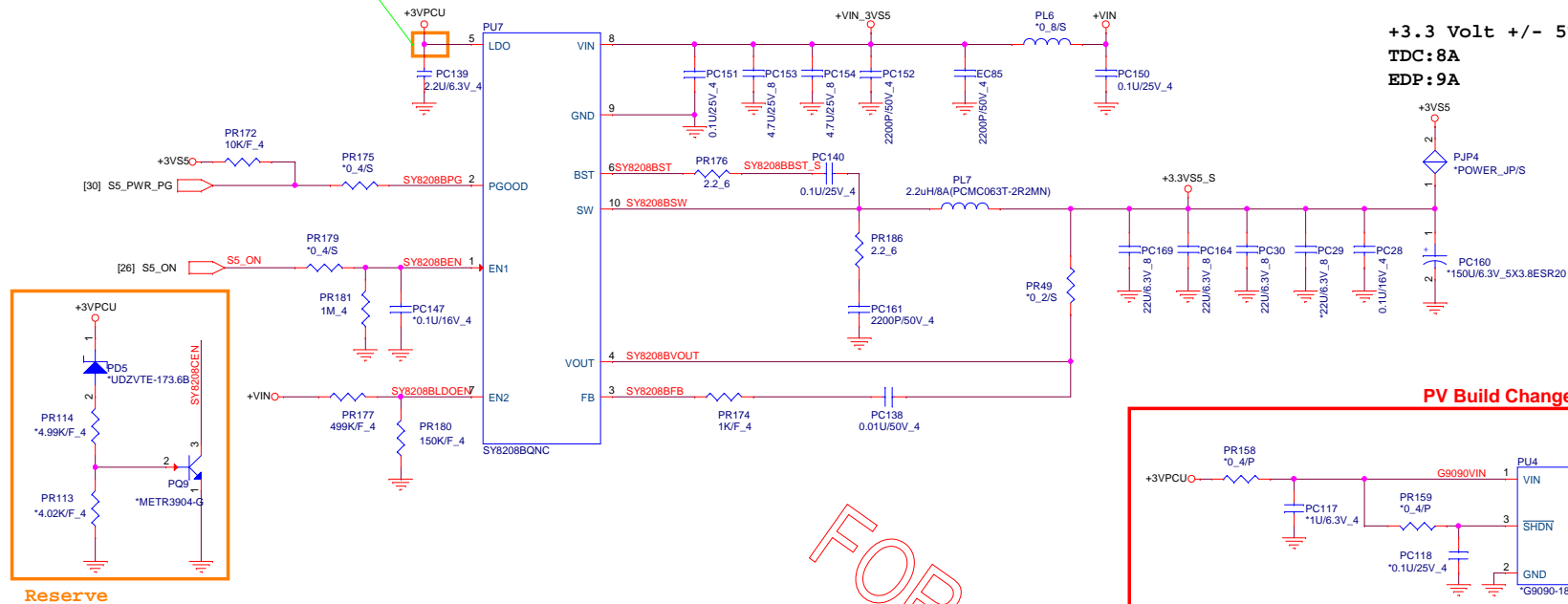
### ROM for EC and close to EC

### ROM Socket



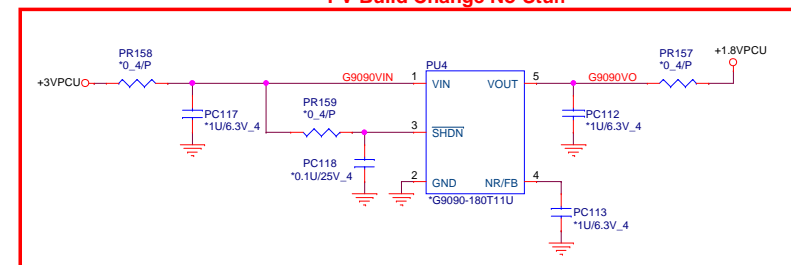


Do Not add test pad on VCC &amp; LDO pin

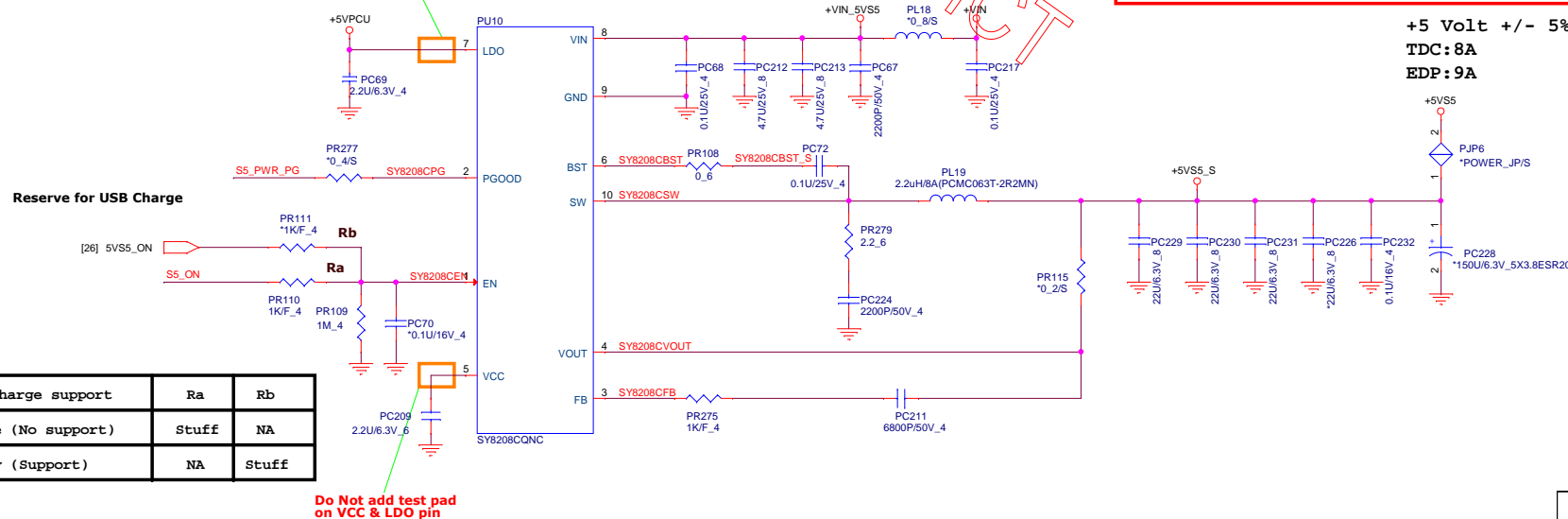


**+1.8VPCU Volt +/- 5%**  
**Countinue current:0.01A**  
**Peak current:0.02A**

PV Build Change No-Stuff



Do Not add test pad on VCC &amp; LDO pin



USB Charge support	Ra	Rb
Vine (No support)	Stuff	NA
Envy (Support)	NA	Stuff



**PROJECT : U3x**  
**Quanta Computer Inc.**

Size: Custom Document Number: 3/VS5 (RT7238B/RT7238C) Rev: 1A

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