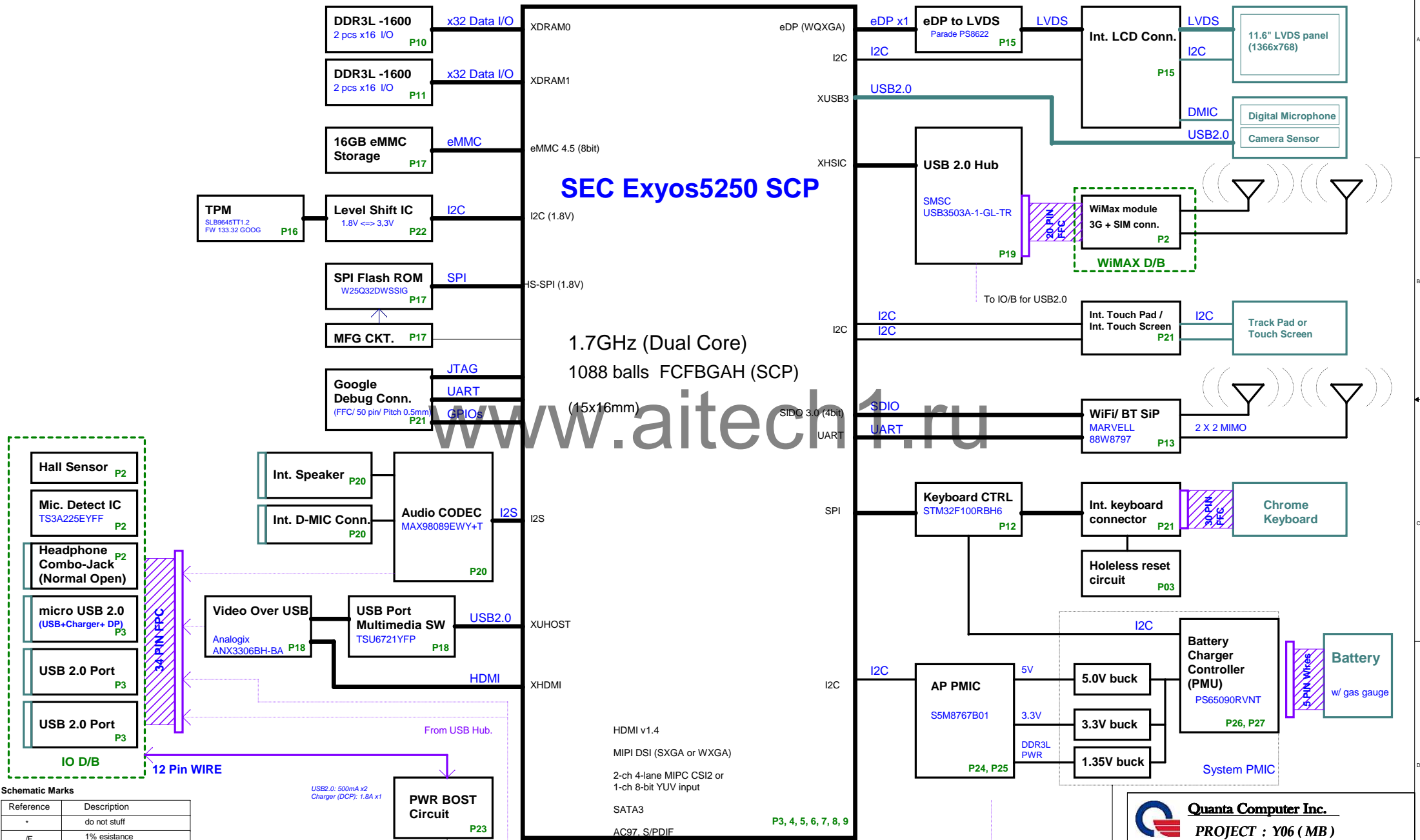



# Block Diagram (SEC EXYNOS5250 SCP+ DDR3L)



Schematic Marks	
Reference	Description
•	do not stuff
/F	1% esistance



**Quanta Computer Inc.**  
**PROJECT : Y06 ( MB )**

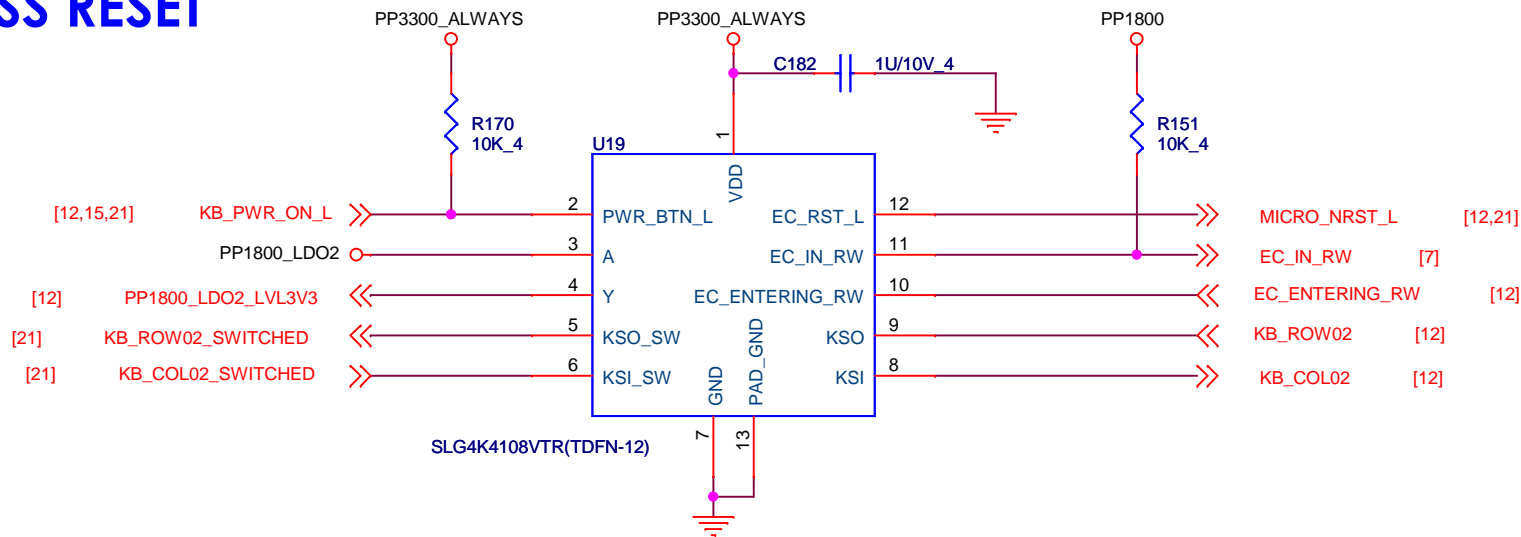
Size Custom	Document Number BLOCK DIAGRAM	Rev. A
Date: Wednesday, December 04, 2013	Sheet : 1	of 28



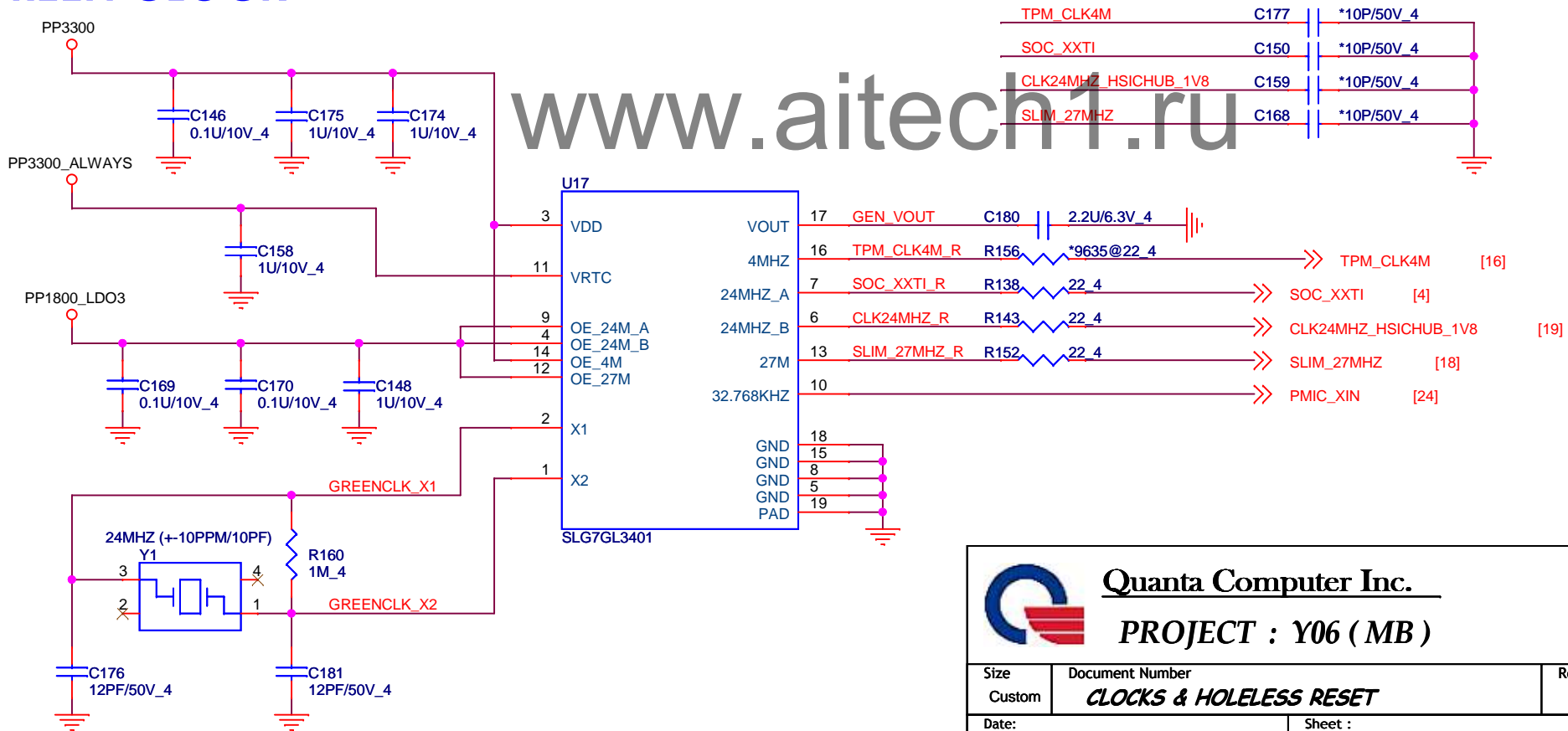




# HOLELESS RESET



# GREEN CLOCK



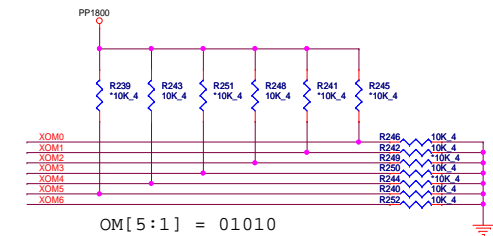
Quanta Computer Inc.

PROJECT : Y06 ( MB )

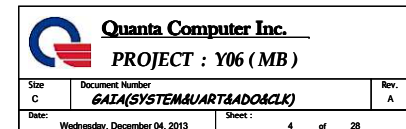
Size Custom	Document Number <b>CLOCKS &amp; HOLELESS RESET</b>	Rev. A
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## Booting Mode Option Selection



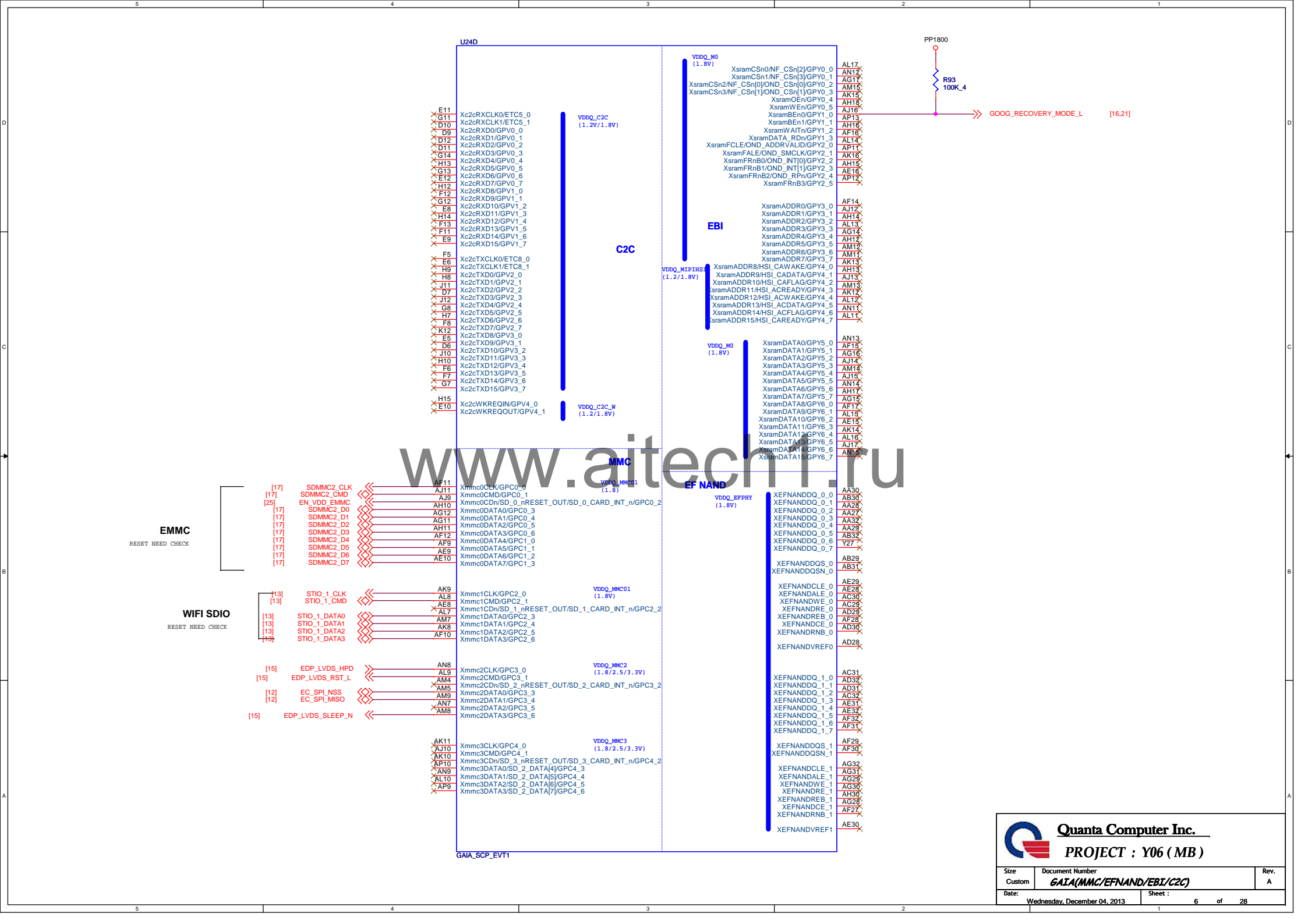
OM[5:1] = 10011 : EMMC0 -> SDIO CH2







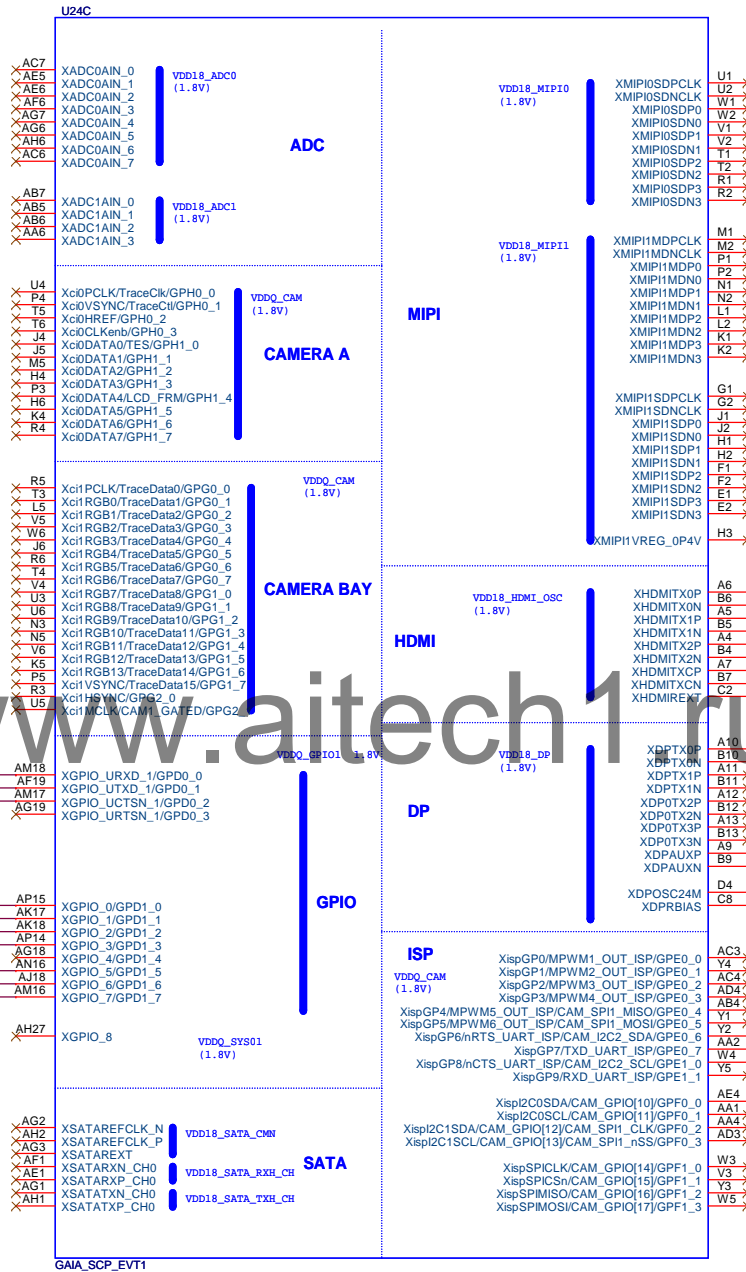
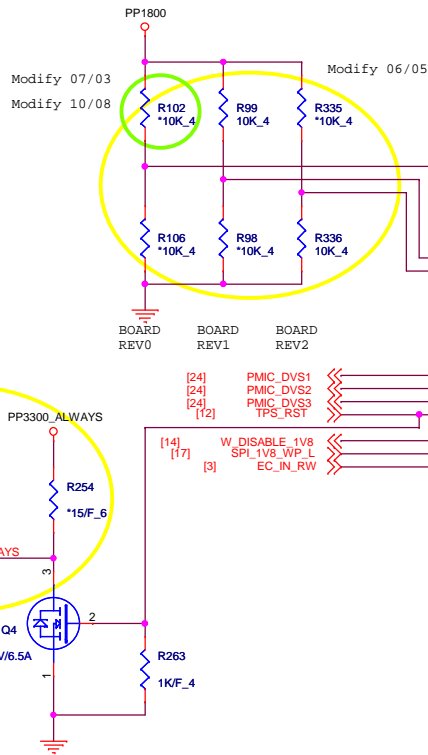






	(GPD0) BOARD_REV0	(GPD1) BOARD_REV1	(GPD2) BOARD_REV2	
Proto	0	0	X	(both Nanya & Elpida)
EVT + Nanya	1	0	X	
EVT + Micron	X	1	X	Rev: 07
DVT1 + Nanya	0	1	X	Rev: 08
DVT1 + Micron	1	1	X	Rev: 09
DVT2 + Nanya	X	X	0	Rev: 10
DVT2 + Micron	0	X	0	Rev: 11
P-PVT+ Nanya	1	X	0	Rev: 12
P-PVT+ Micron	X	0	0	Rev: 13
PVT + Nanya	0	0	0	Rev: 14
MP + Nanya	X	0	0	Rev: 15
MP + Micron	0	1	0	Rev: 16

Modify 08/01



GAIA\_SCP\_EVT1

<b>Quanta Computer Inc.</b> <b>PROJECT : Y06 (MB)</b>		Size	Document Number	Rev.
		Custom	<b>GAIA(ADC&amp;MEDIA&amp;SATA&amp;MIPI)</b>	A
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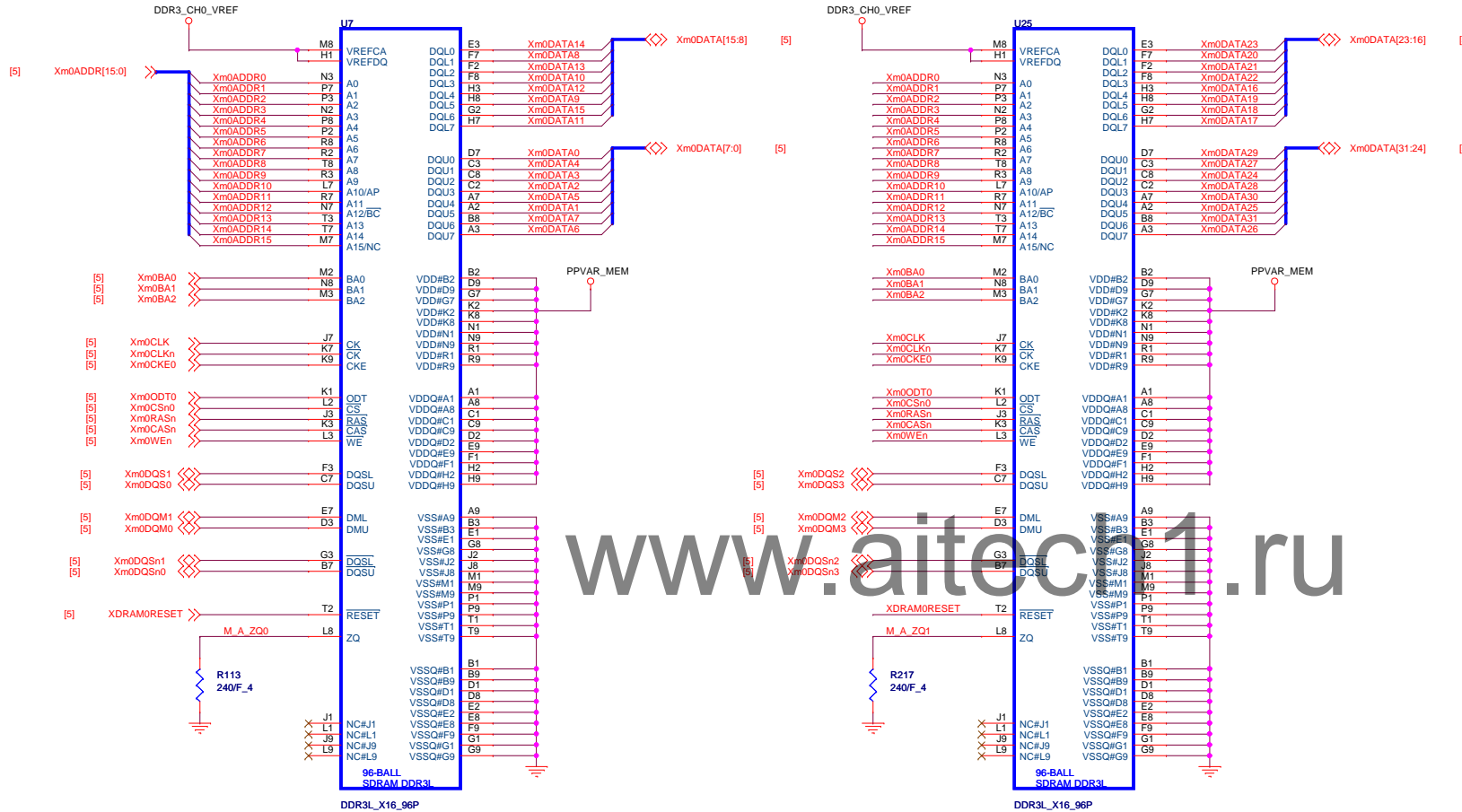




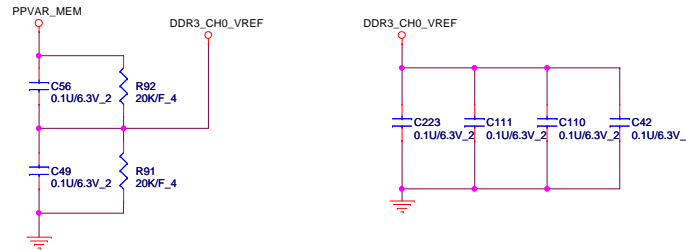
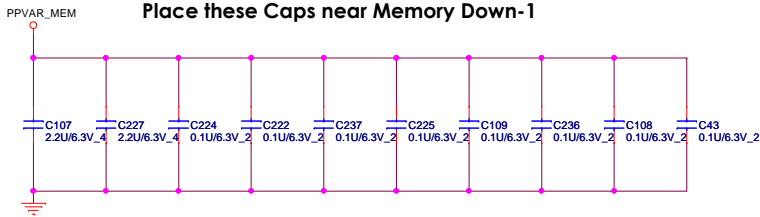


# DDR3L Port0

Nanya SDRAM(96P) NT5CC256M16BP-DI : AKD5JGGTF01  
Micron SDRAM(96P) MT41K256M16HA-125:E : AKD5JGSTL11



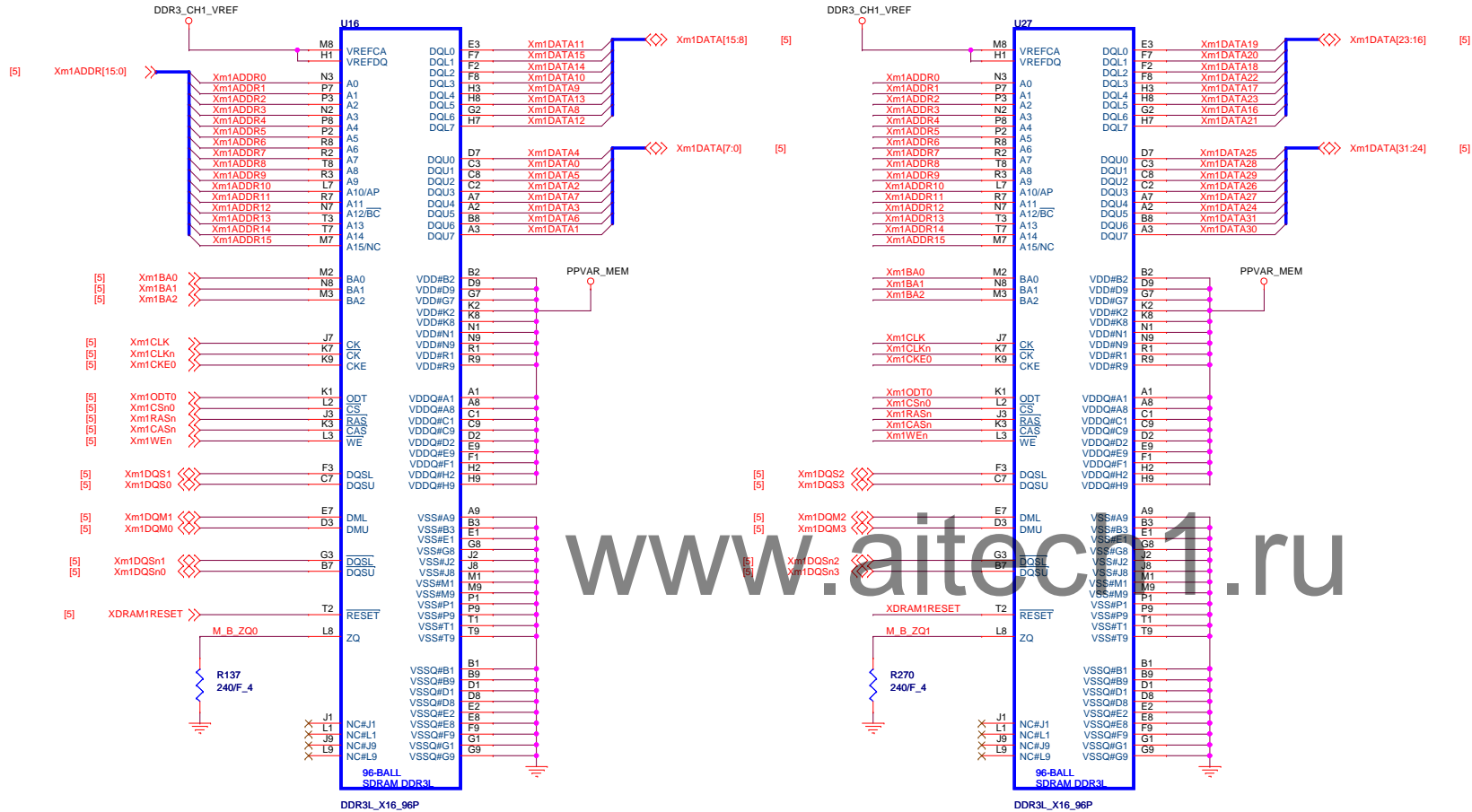
Place these Caps near Memory Down-1



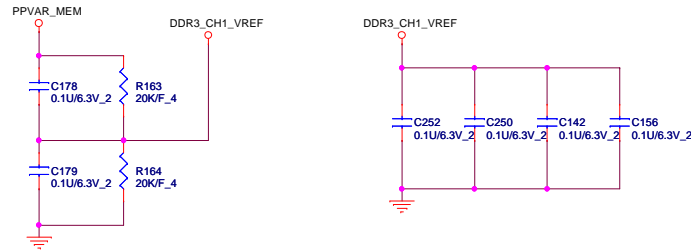
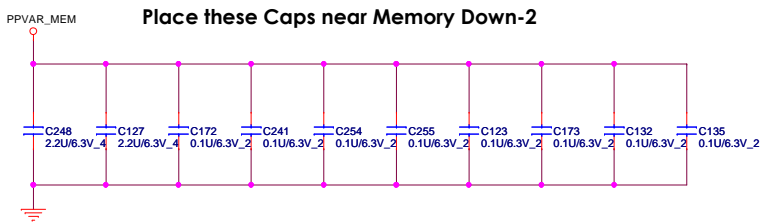


# DDR3L Port1

Nanya SDRAM(96P) NT5CC256M16BP-DI : AKD5JGGTF01  
Micron SDRAM(96P) MT41K256M16HA-125:E : AKD5JGSTL11



Place these Caps near Memory Down-2

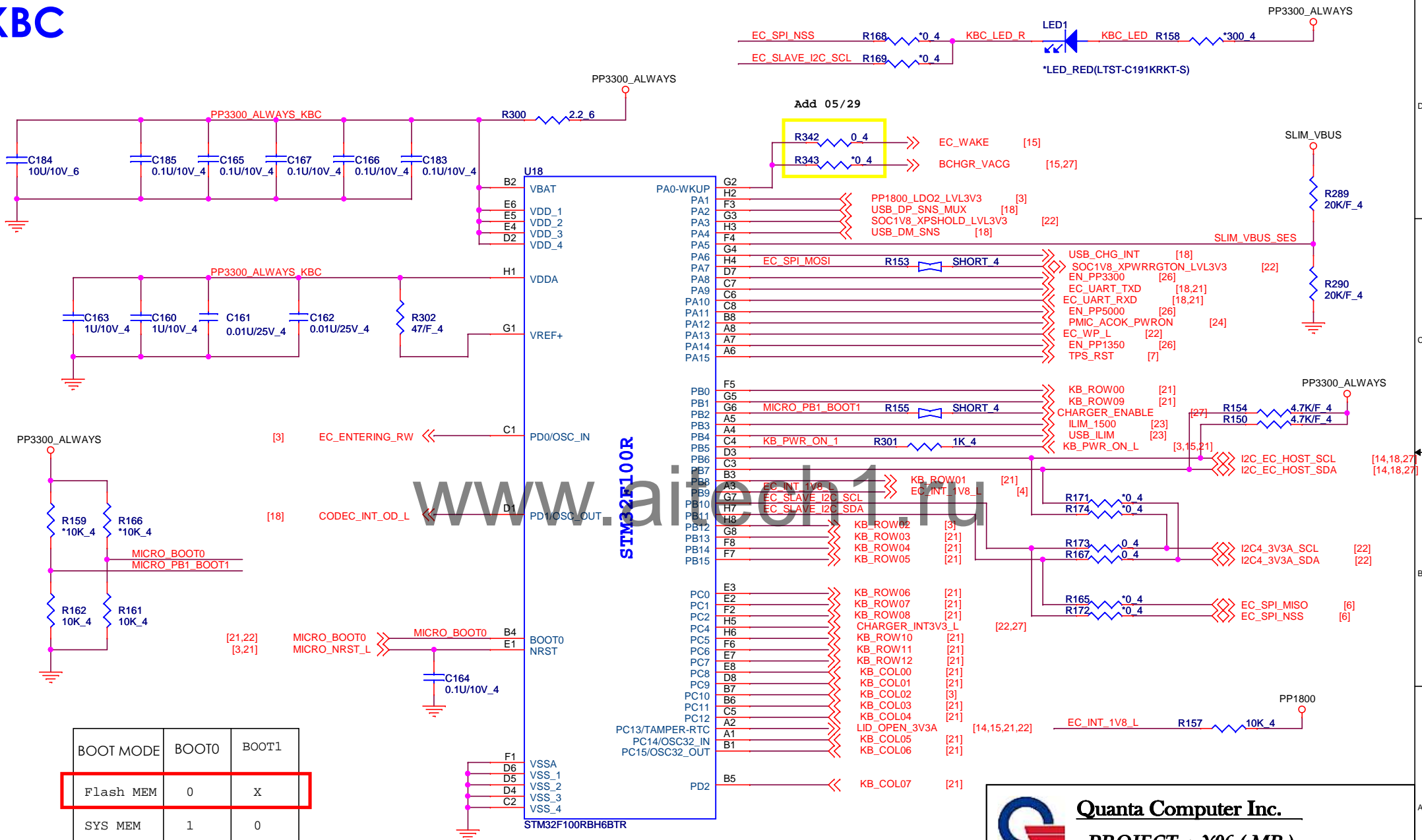


**Quanta Computer Inc.**  
**PROJECT : Y06 ( MB )**


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**KBC**



BOOT MODE	BOOT0	BOOT1
Flash MEM	0	X
SYS MEM	1	0
SRAM	1	1

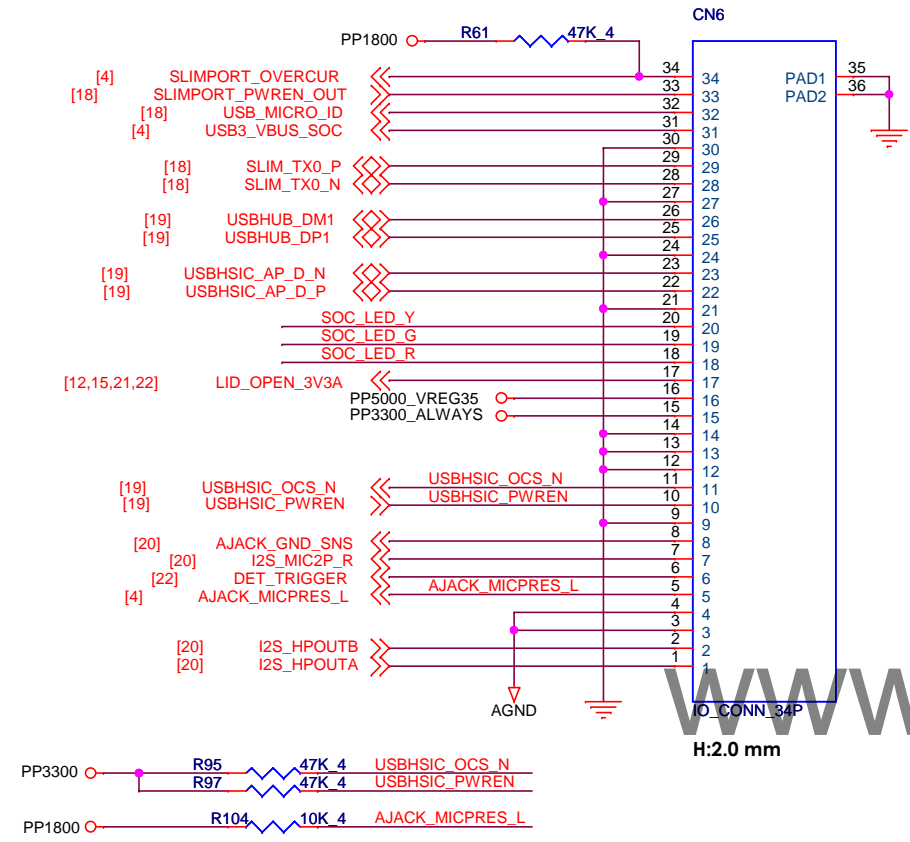
 <u><b>Quanta Computer Inc.</b></u> <b>PROJECT : Y06 ( MB )</b>		
Size Custom	Document Number <b>Keyboard/Power Controller</b>	Rev. A
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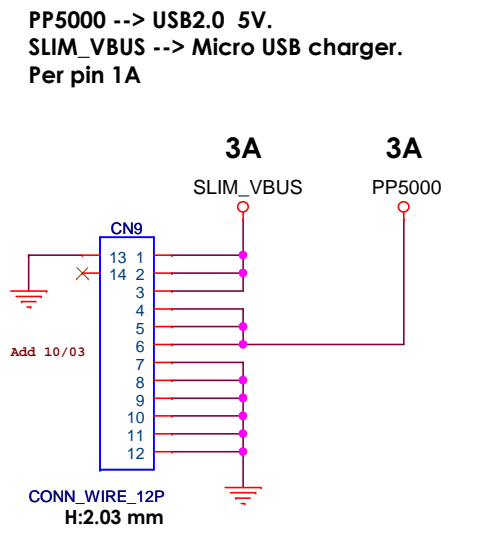




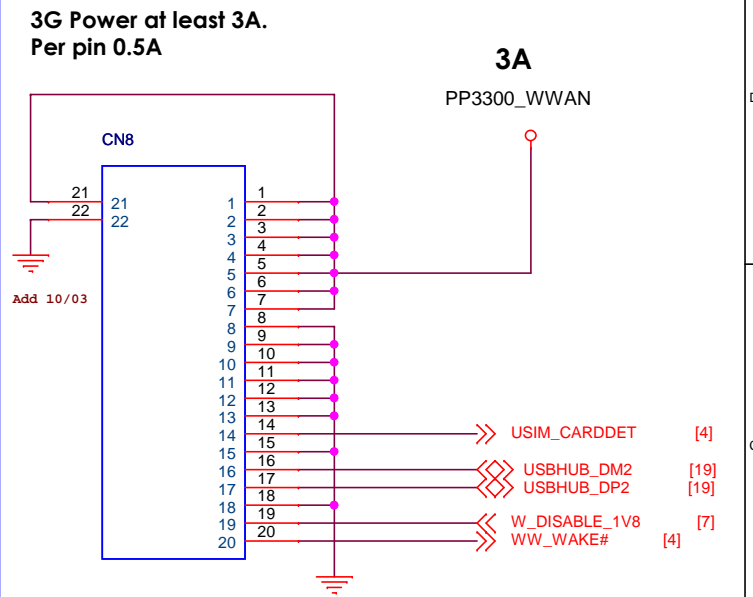
# IO/B FPC Connector



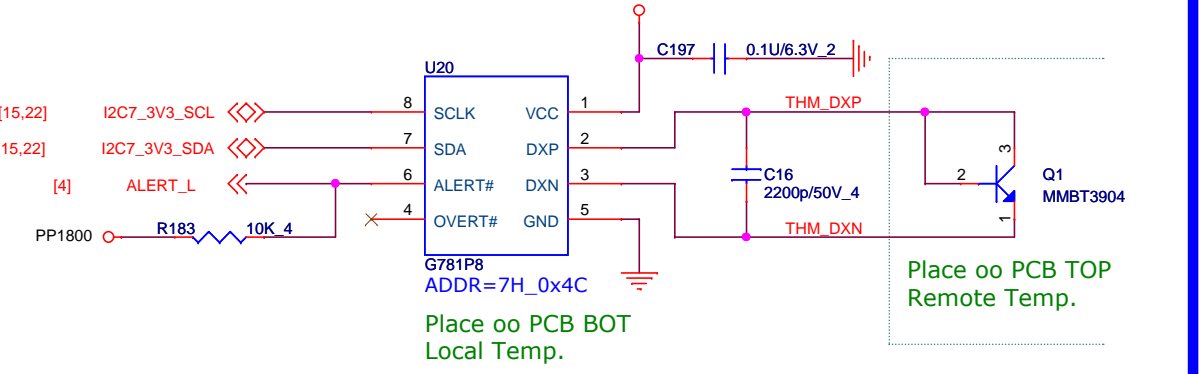
# IO/B PWR Wire Conn.



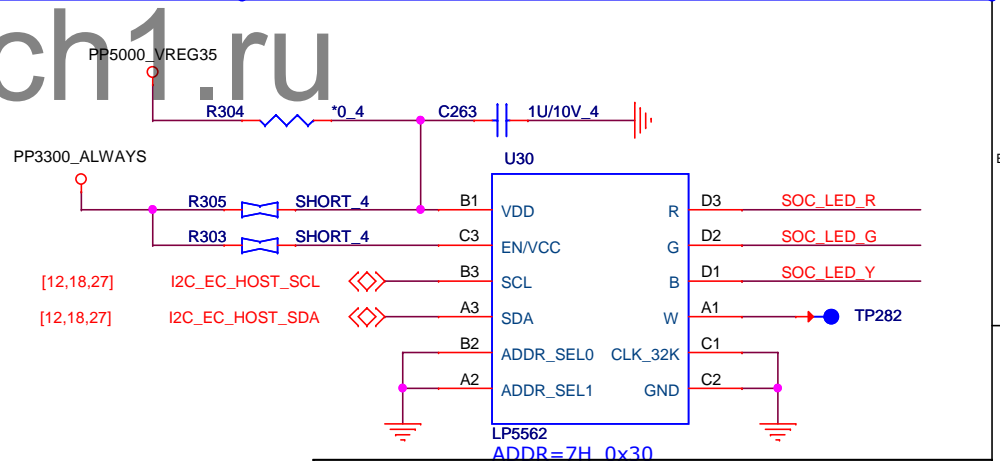
# WWAN/B FFC Conn.



# Thermal Sensor



# LED driver



**Quanta Computer Inc.**

**PROJECT : Y06 ( MB )**

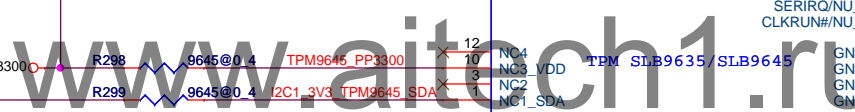
Size Custom	Document Number <b>IO Conn/Thermal/LED drive</b>	Rev. A
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5	4	3	2	1
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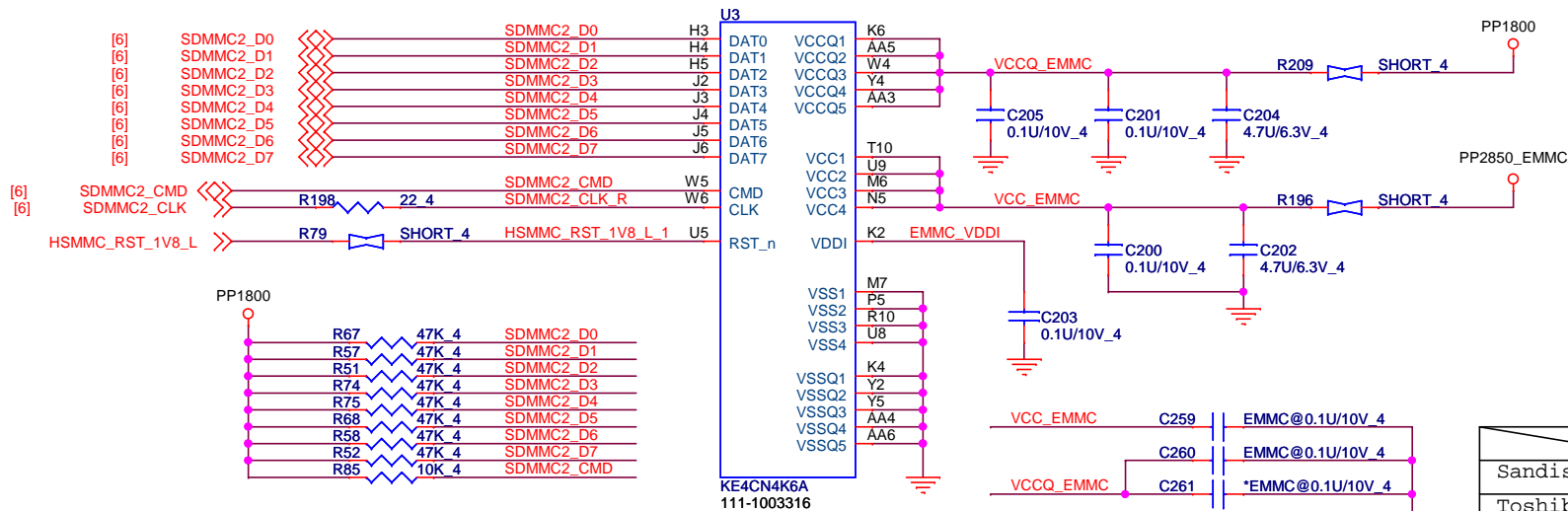


SLB9635 : AL009635K10  
SLB9645 : AR00C1D2000

 <div> <u><b>Quanta Computer Inc.</b></u>  <b>PROJECT : Y06 ( MB )</b> </div>		
Size Custom	Document Number <b>TPM</b>	Rev. A
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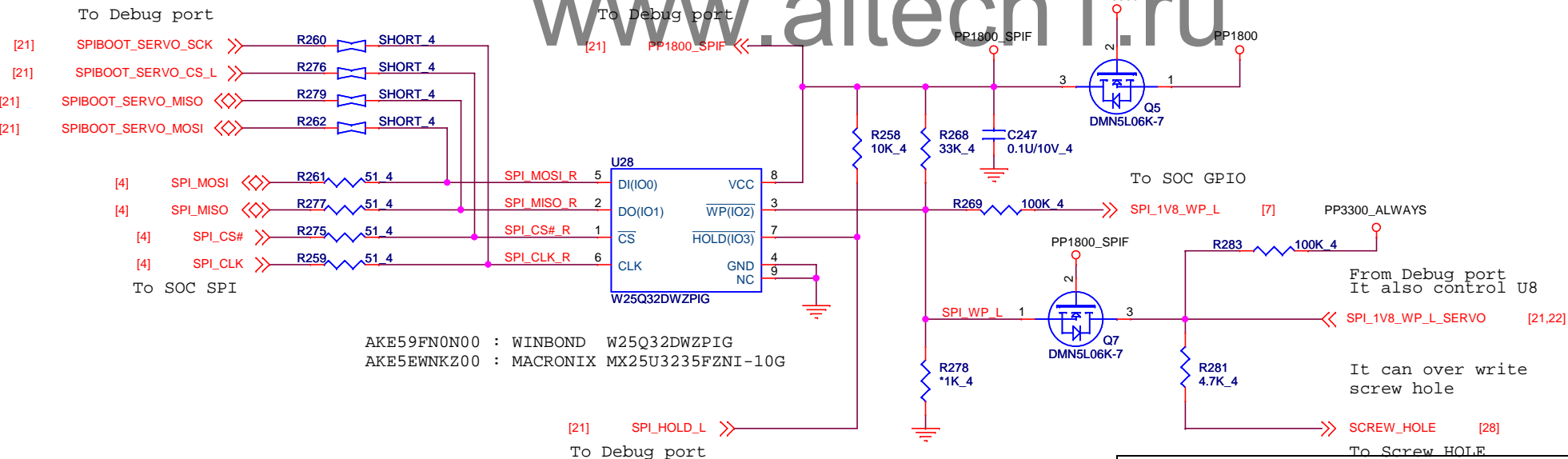


# EMMC (SDMMC2)




AKE3RFPTP05 : Kingston(16G) 169 pin KE4CN4K6A (12x16mm)  
 AKE3RFPT104 : SandisK (16G) 153 pin SDIN7DU2-16G-T (11.5x13mm)  
 AKE3RYPT001 : Toshiba (16G) 153 pin THGBM5G7A2JBAIR (11.5x13mm)

# SPI FLASH



AKE59FN0N00 : WINBOND W25Q32DWZPIG  
 AKE5EWNKZ00 : MACRONIX MX25U3235FZNI-10G



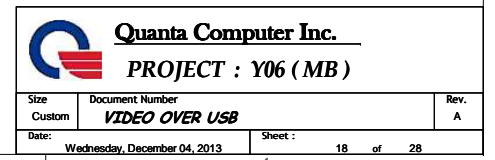
**Quanta Computer Inc.**

**PROJECT : Y06 ( MB )**

Size Custom	Document Number <b>eMMC / SPI FLASH</b>	Rev. A
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**MUX**



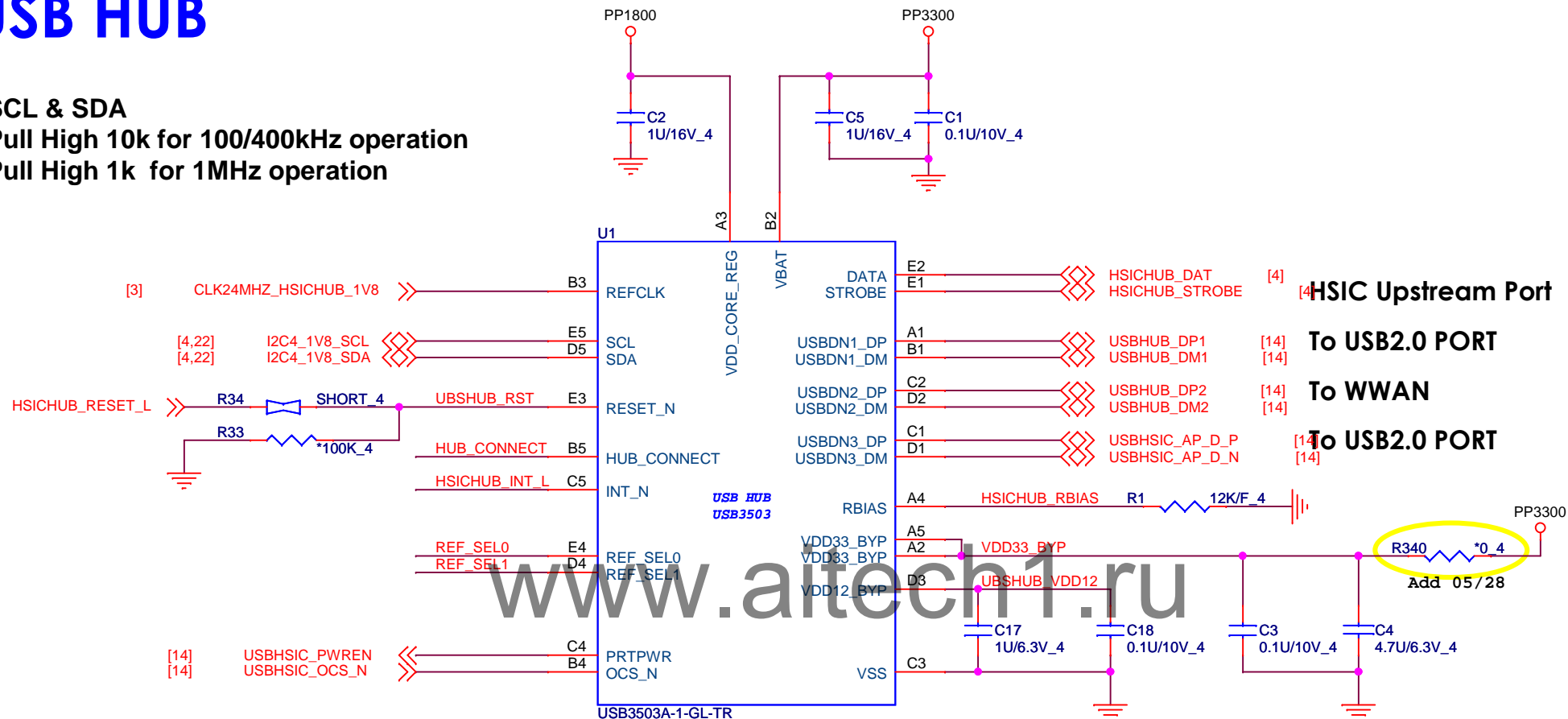


# USB HUB

## SCL & SDA

Pull High 10k for 100/400kHz operation

Pull High 1k for 1MHz operation

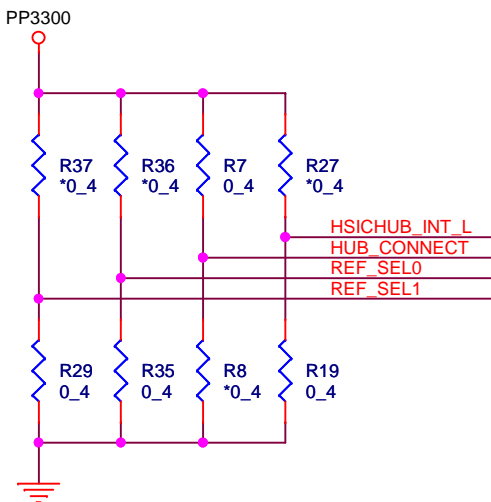


INT\_N Pull GND. (Pull high will use Primary Clock.)

Secondary Reference Clock Frequencies

REF_SEL[1:0]	Frequency (MHz)
'00'	24.0
'01'	27.0
'10'	25.0
'11'	50.0

Select REF\_SEL[1:0] = 00 = 24MHz.



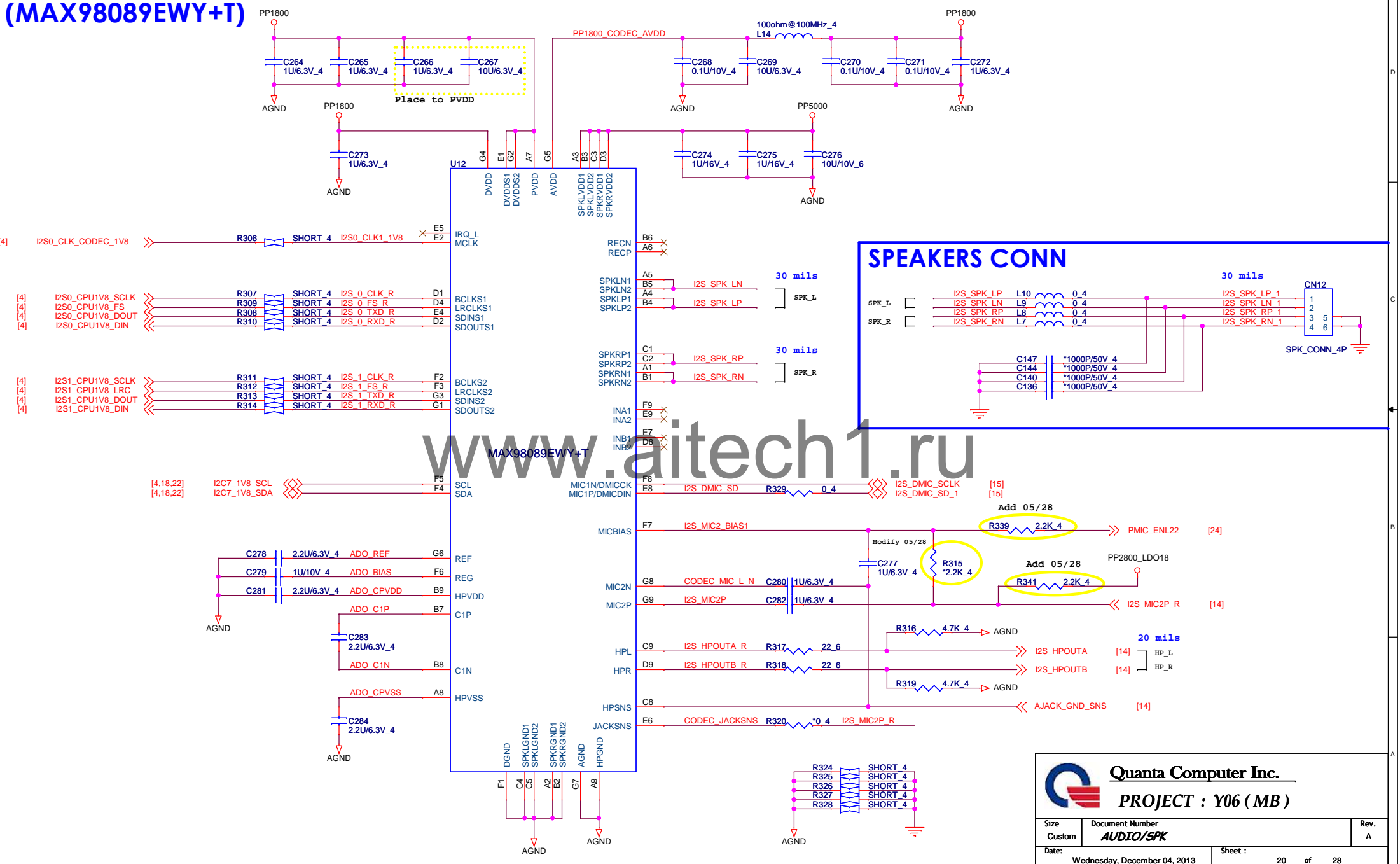
Quanta Computer Inc.

PROJECT : Y06 ( MB )

Size Custom	Document Number <b>USB HUB</b>	Rev. A
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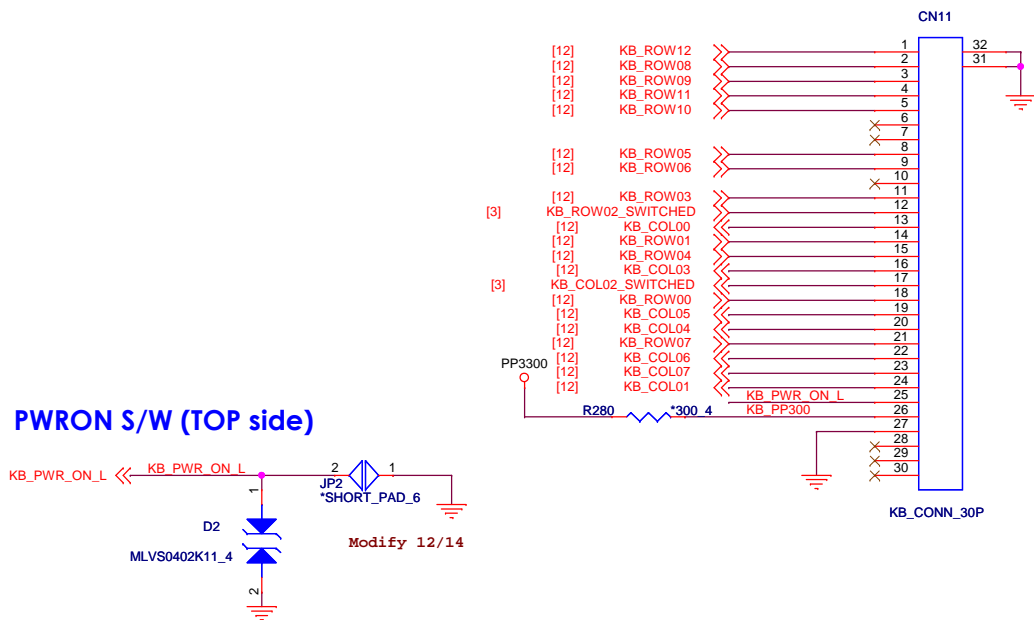


# Audio Codec (MAX98089EWY+T)

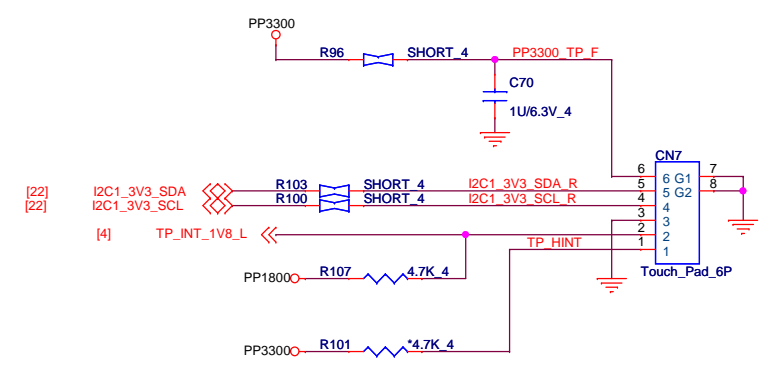




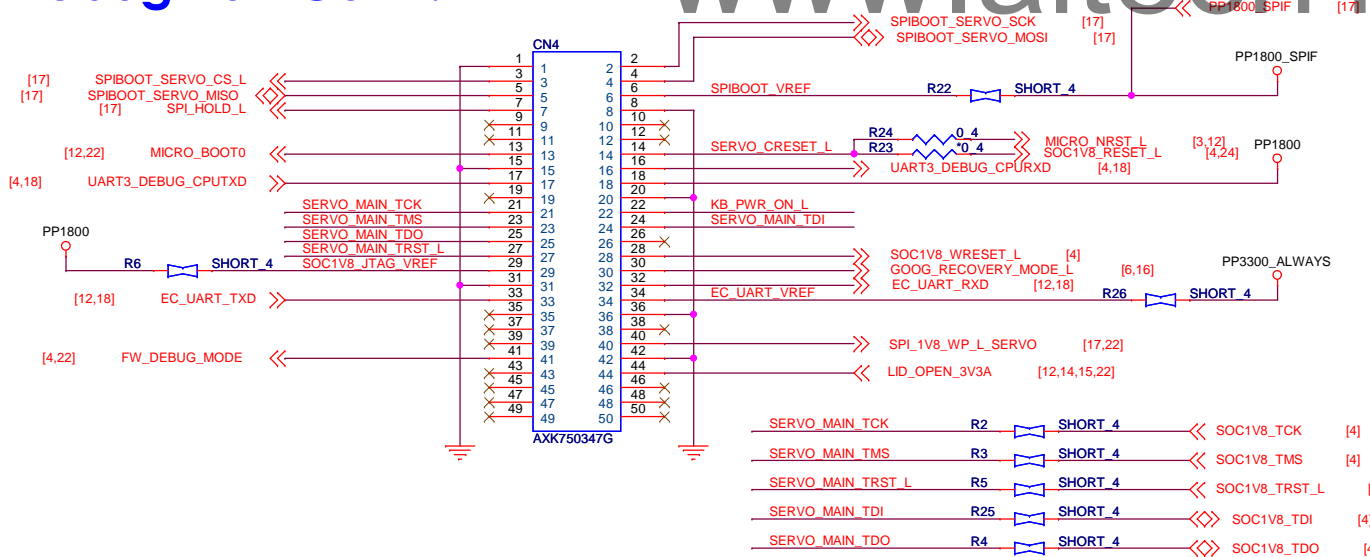
# Keyboard Conn.



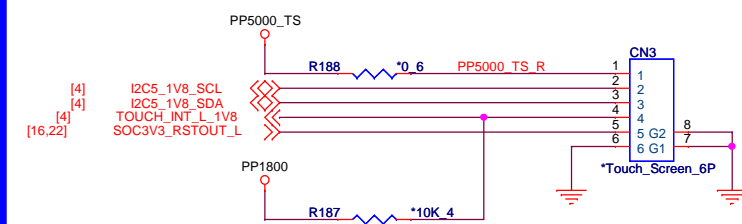
# Touch Pad Conn.




# Debug Port Conn.



# Touch Screen Conn. (Reserve)



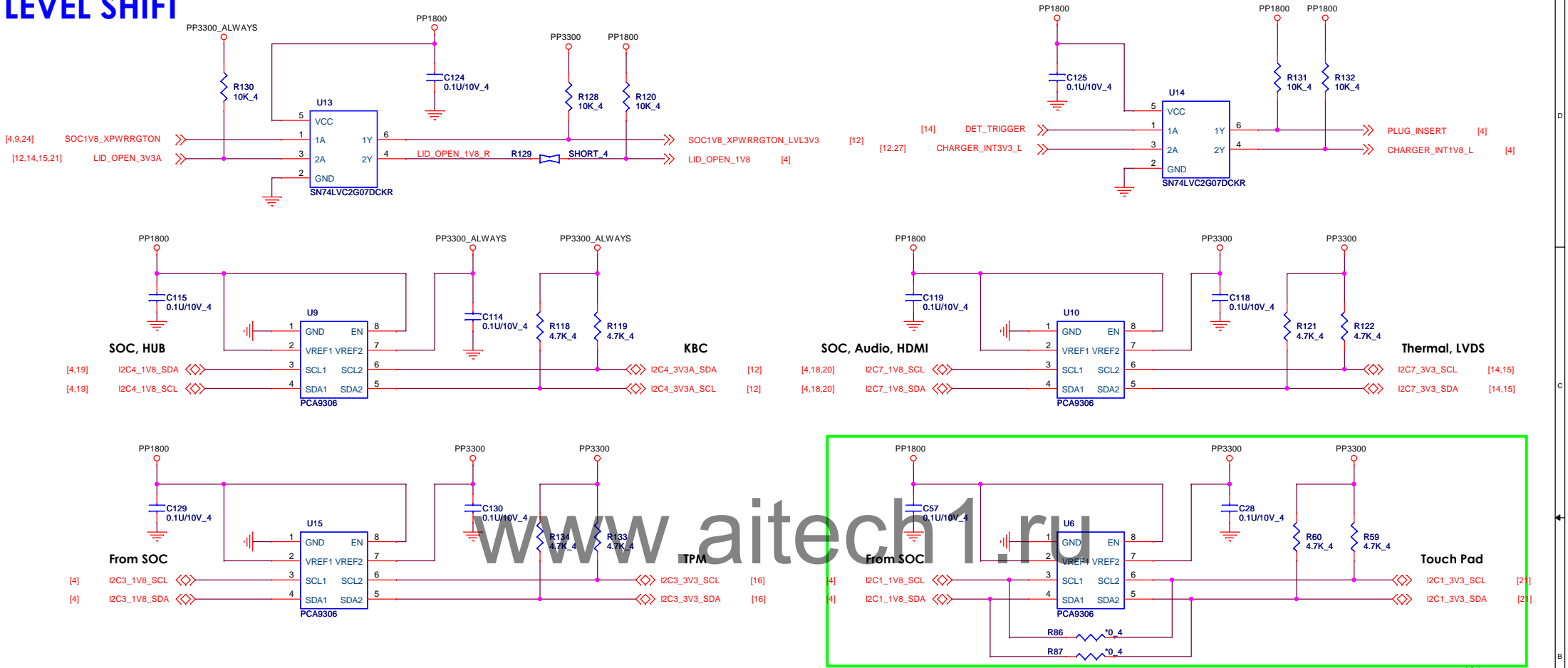
**Quanta Computer Inc.**

PROJECT : Y06 ( MB )

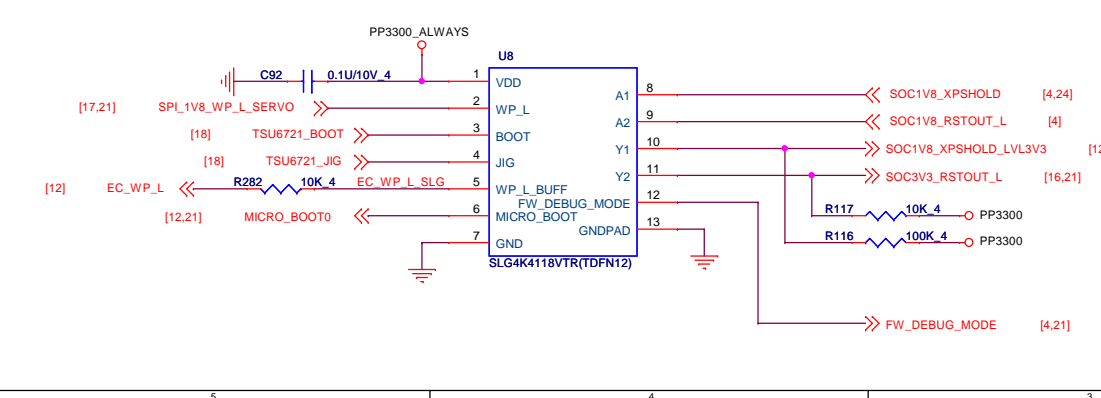
Size B	Document Number KB/Debug/TP/JTAG/TS	Rev. A
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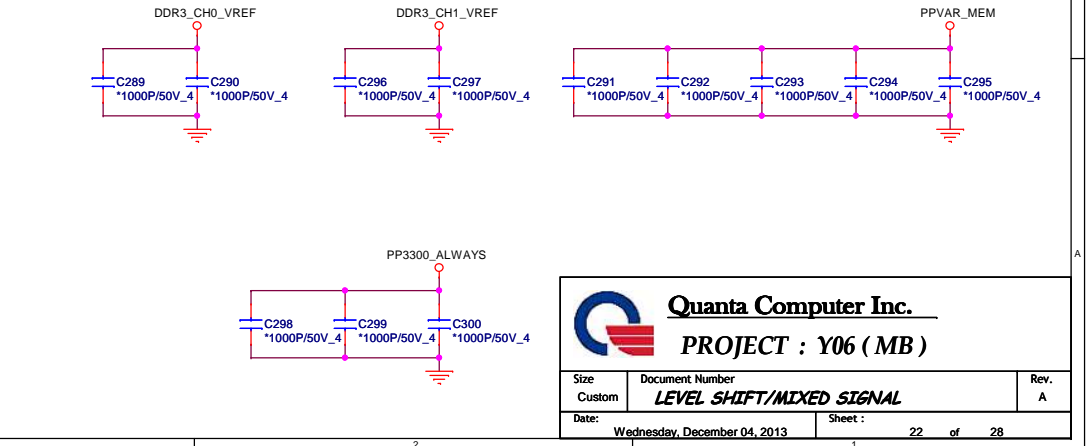
# LEVEL SHIFT



## Logics and Level Shifters (Green Pak II)



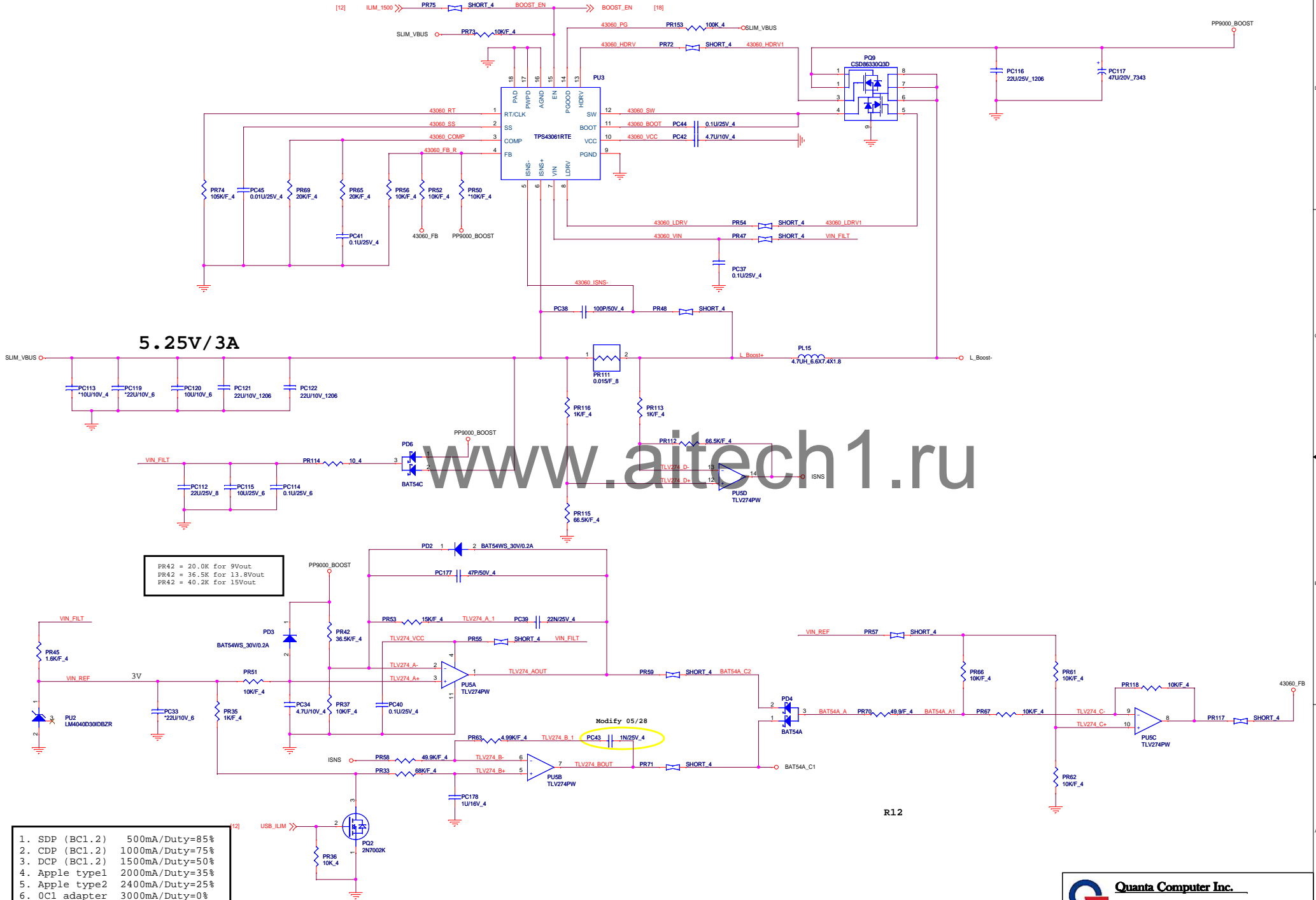
## EMI



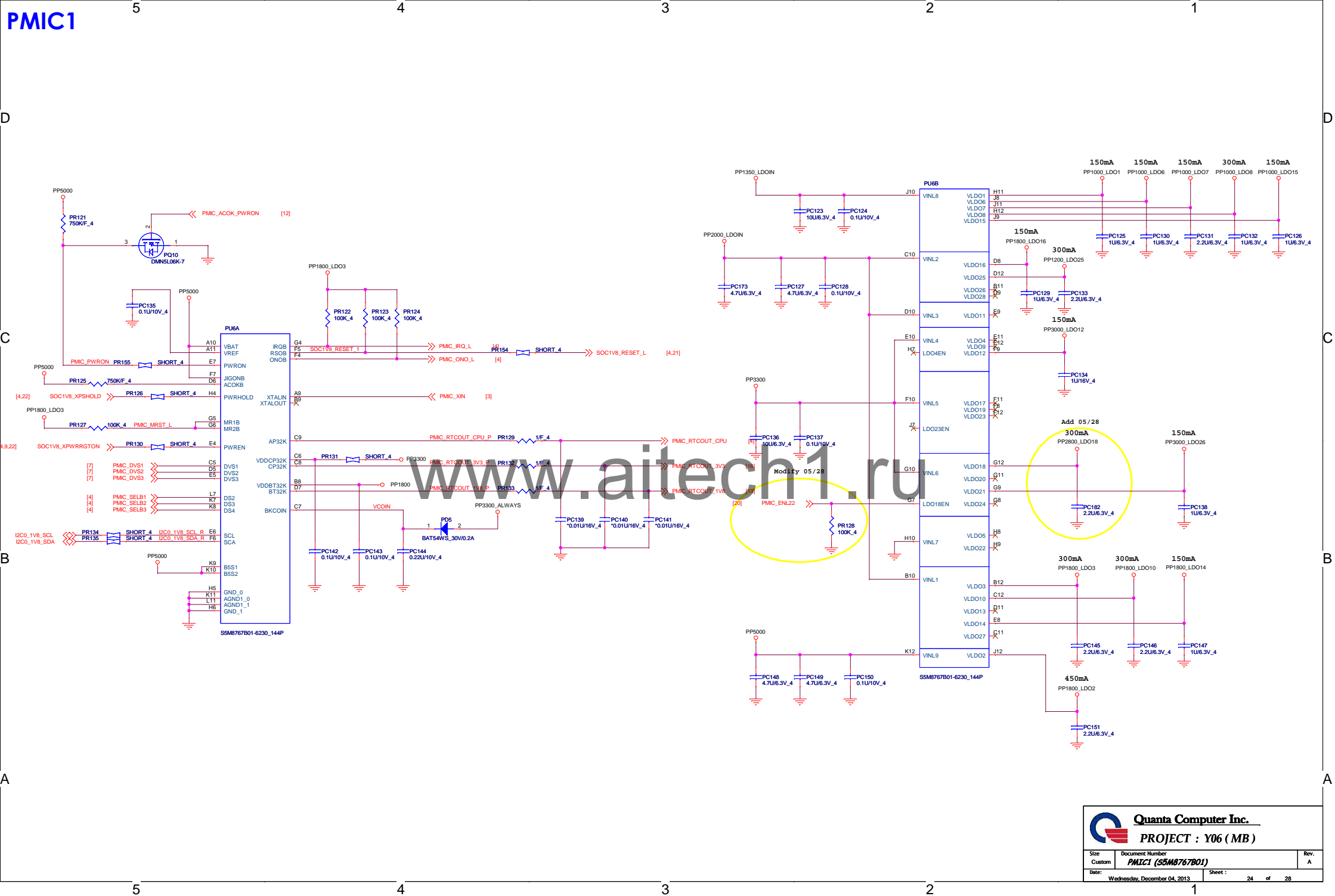


# USB BOOST

13.8V for 3S1P

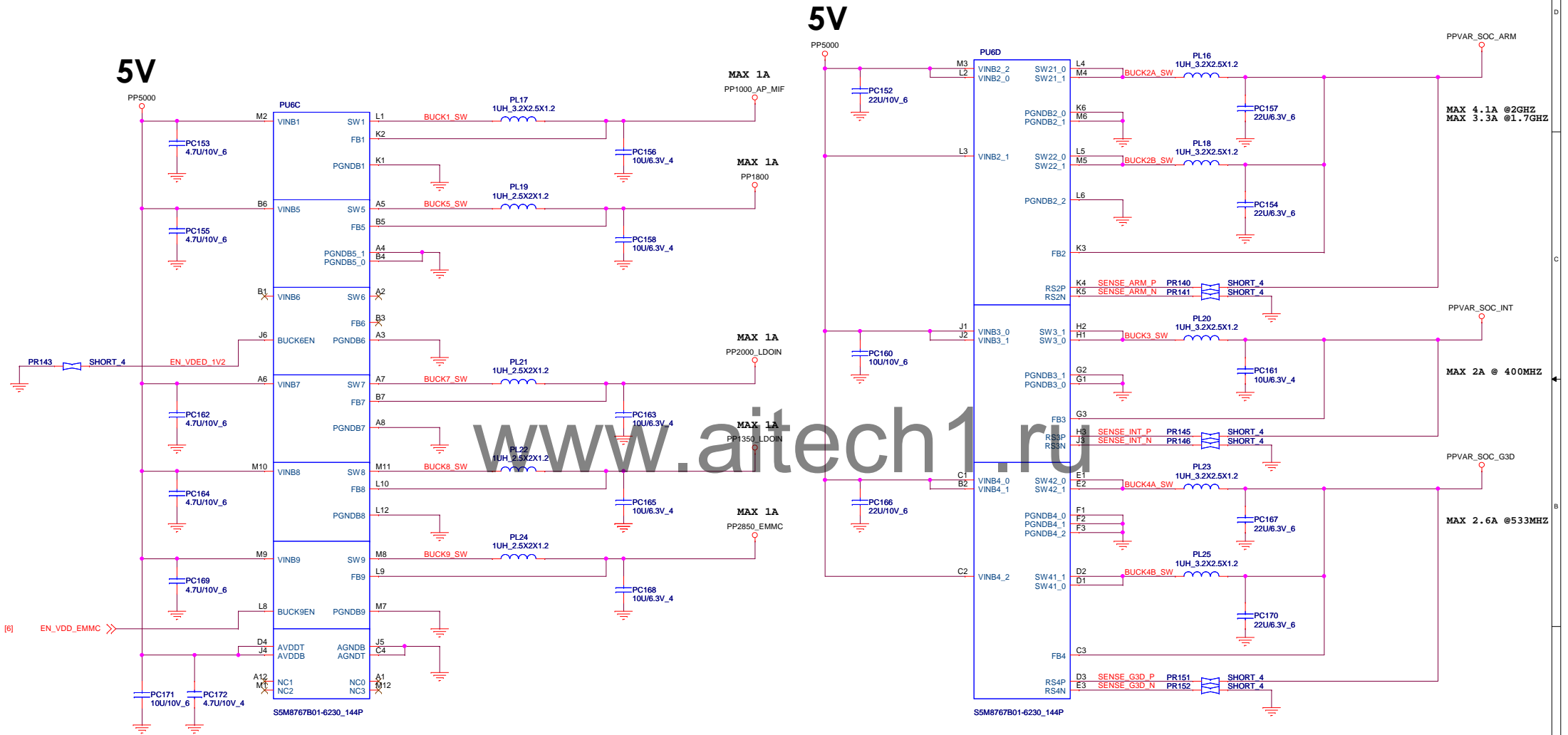









PMIC2





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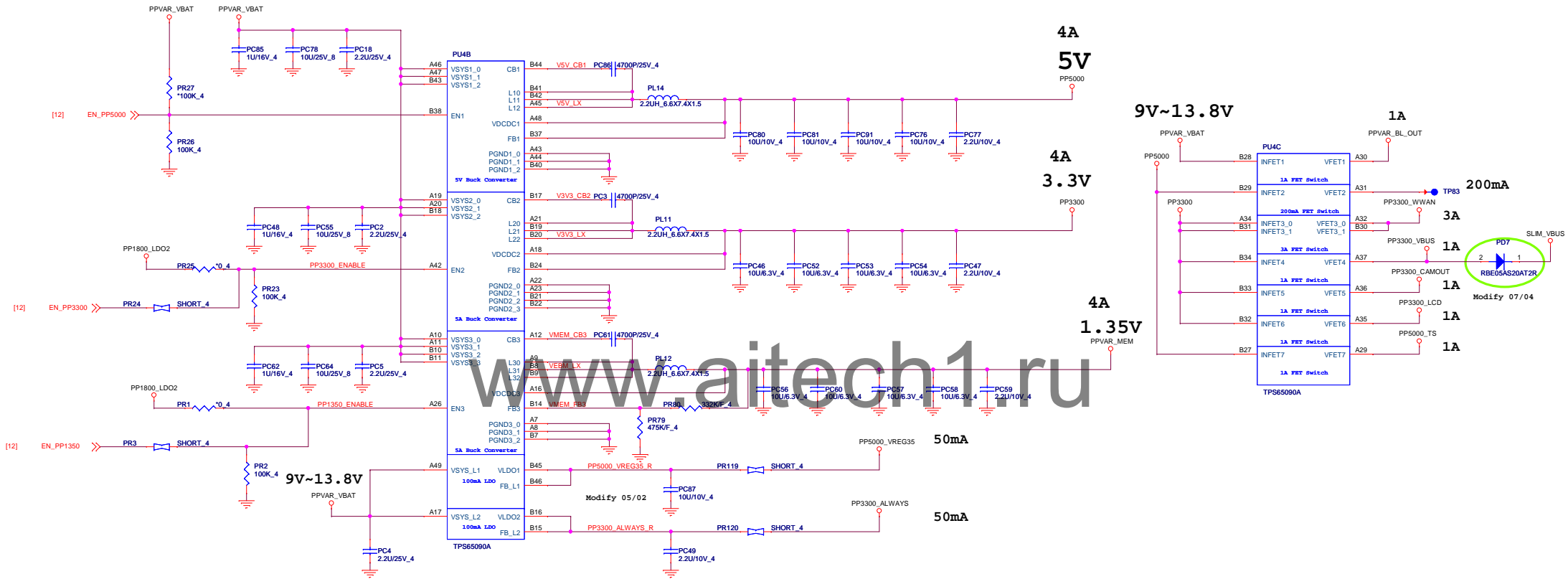
PROJECT : Y06 (MB)

Size Custom	Document Number <b>PMIC2 (S5M8767B01)</b>	Rev. A
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## PMU 3V/5V/MEM

9V~13.8V

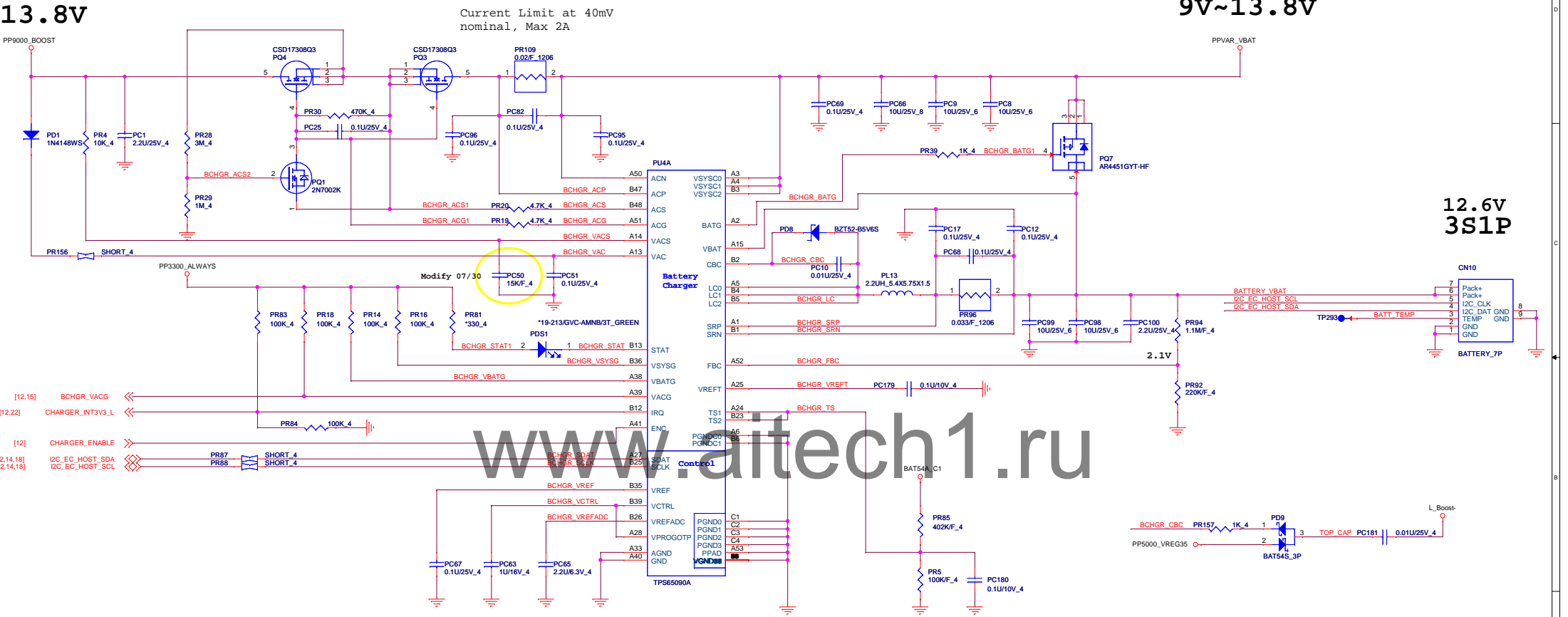




PMU Battery Charger

13.8V

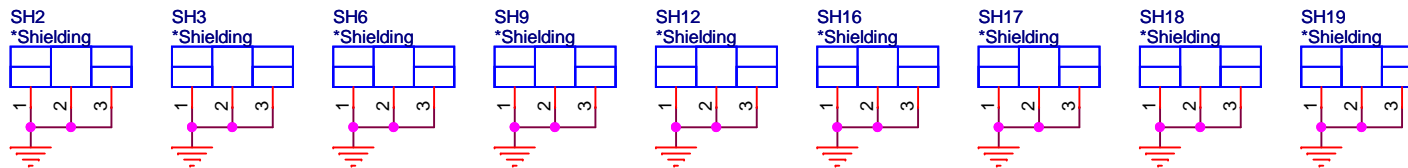
9V~13.8V



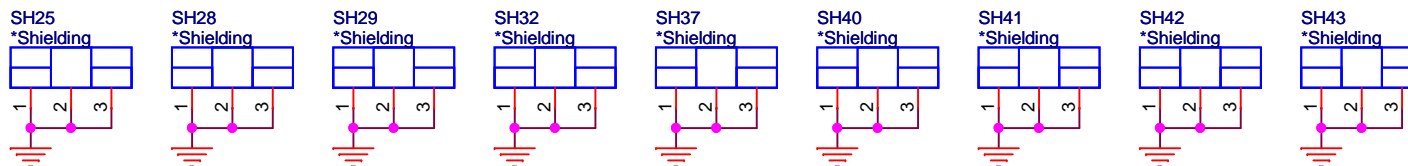


# Shielding set

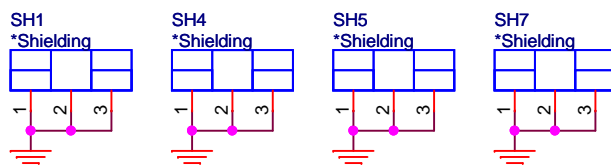
CPU  
(TOP)



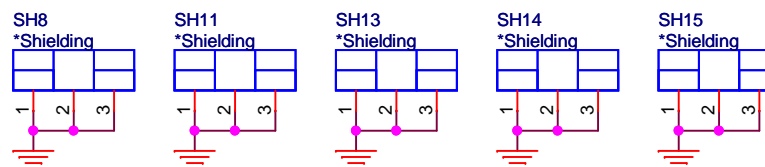
CPU  
(BOT)



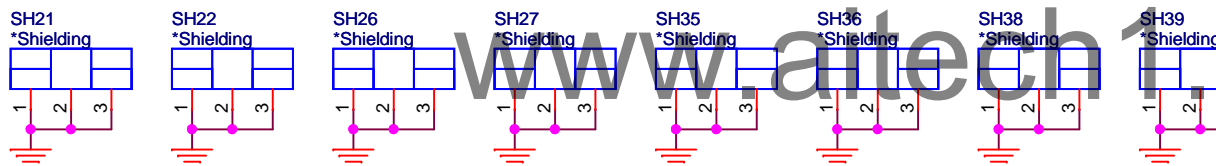
eMMC  
(TOP)



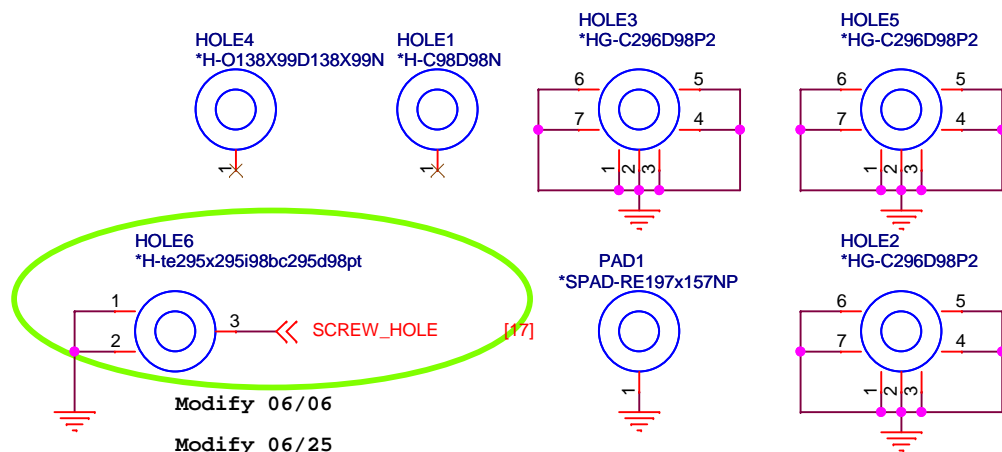
PMIC  
(TOP)



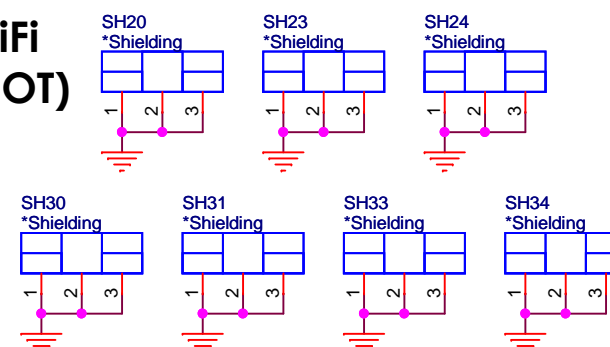
PMU  
(BOT)



## Screw Hole



WiFi  
(BOT)



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PROJECT : Y06 ( MB )

Size

Custom

Document Number

SCREW & SHIELD

Rev.

A

Date:

Wednesday, December 04, 2013

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