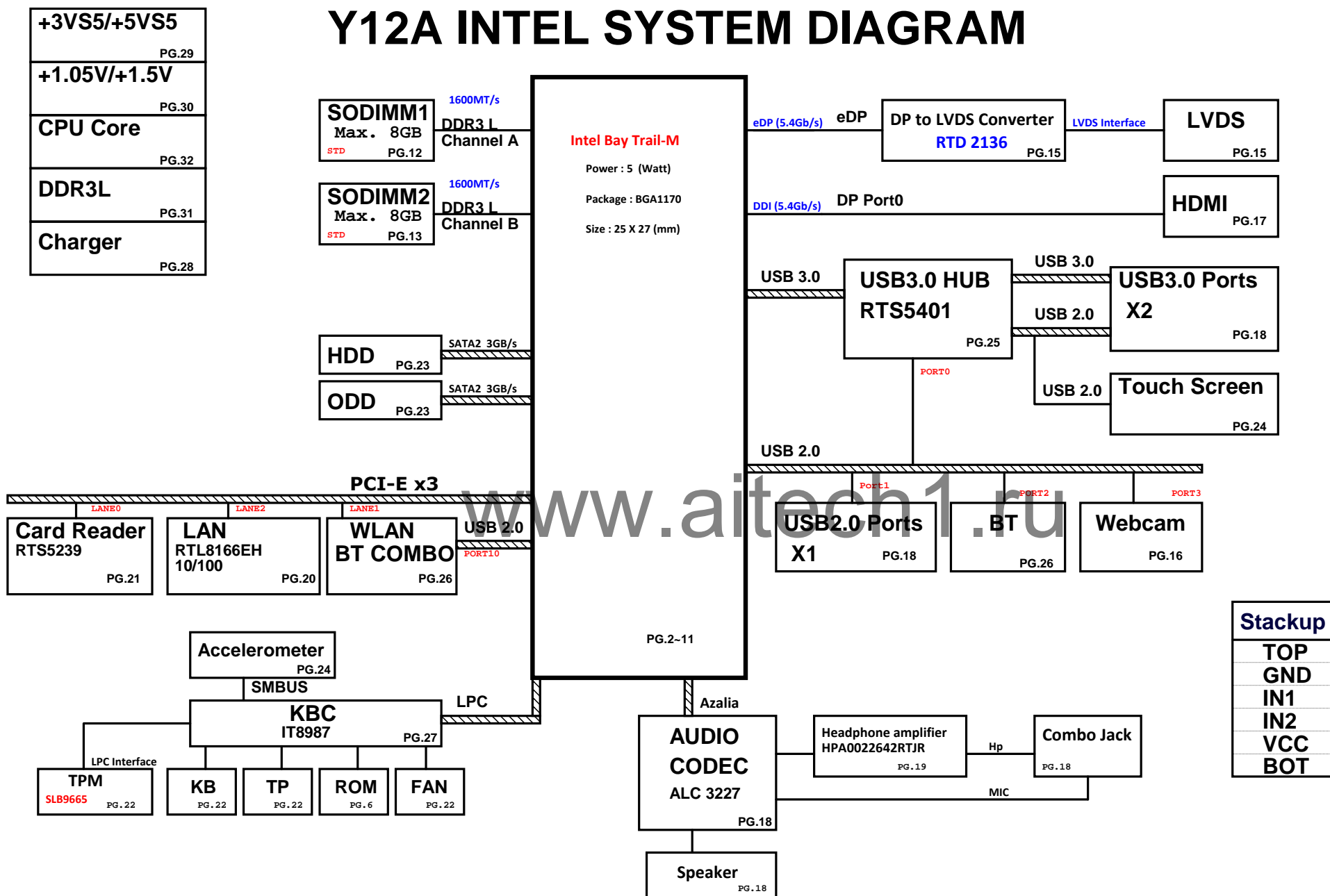
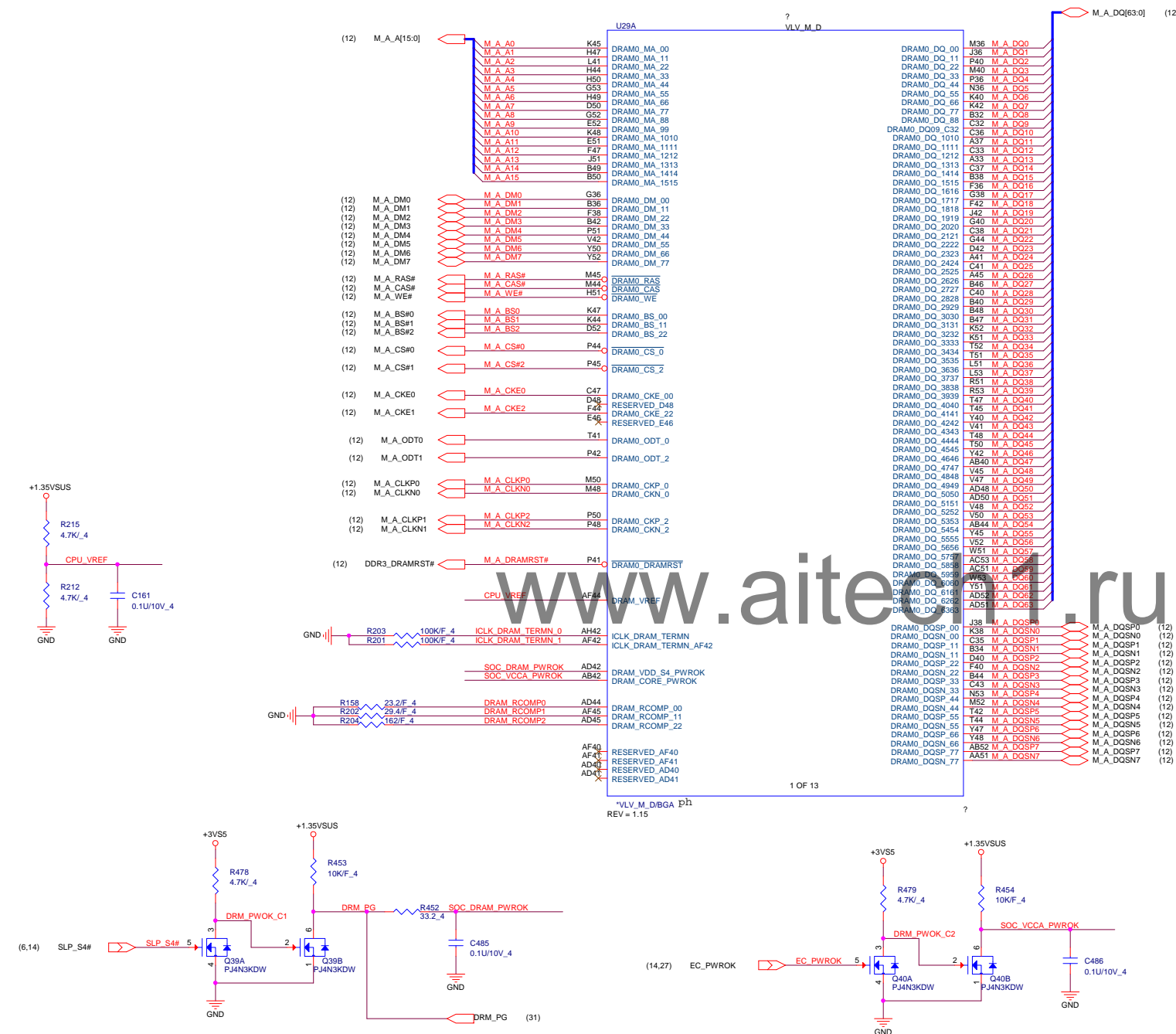


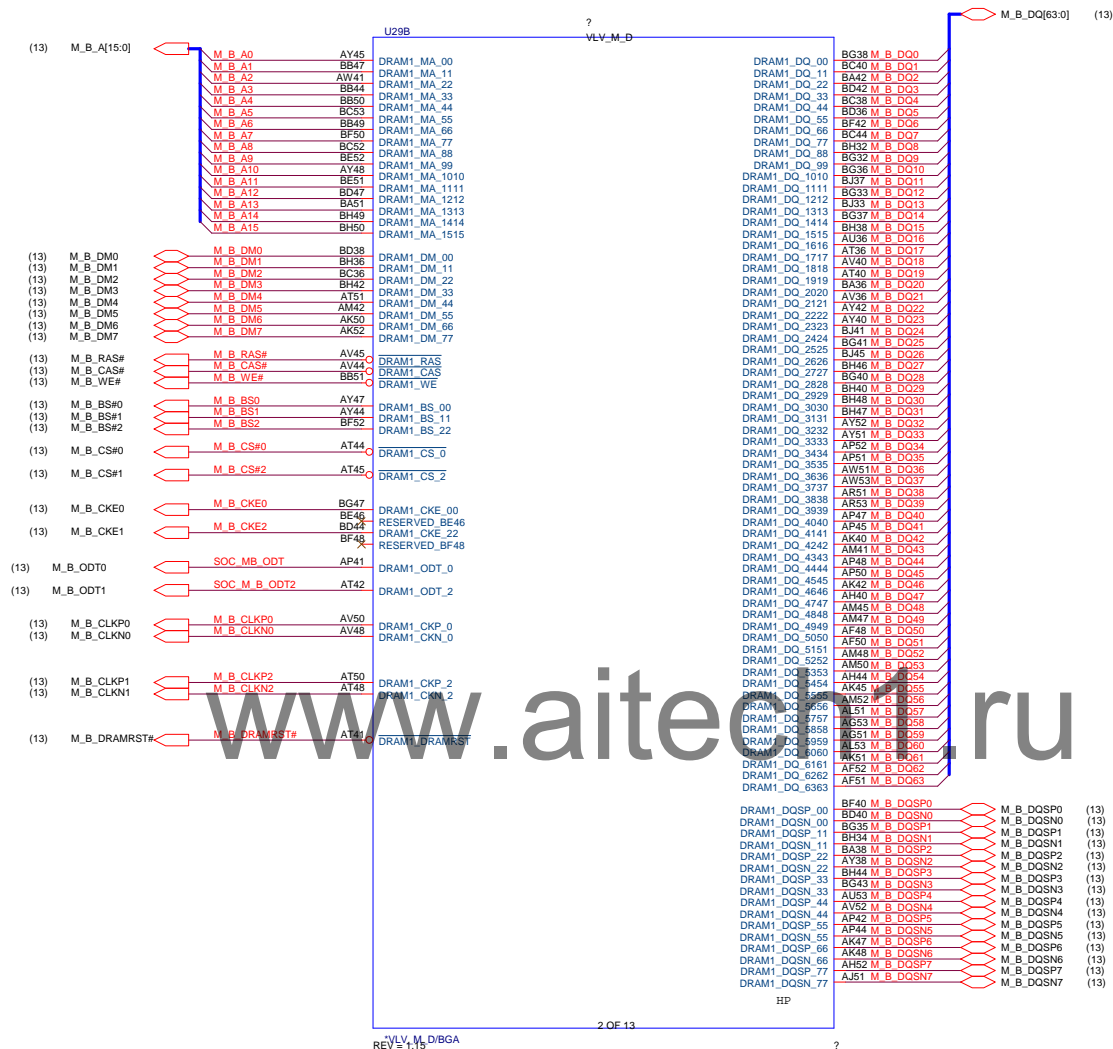
Y12A INTEL SYSTEM DIAGRAM



PROJECT : Y12A-BTM
Quanta Computer Inc.

Document Number
 BLOCK DIAGRAM
 Date: Monday, December 30, 2013
 Sheet 1 of 34
 Rev 1A

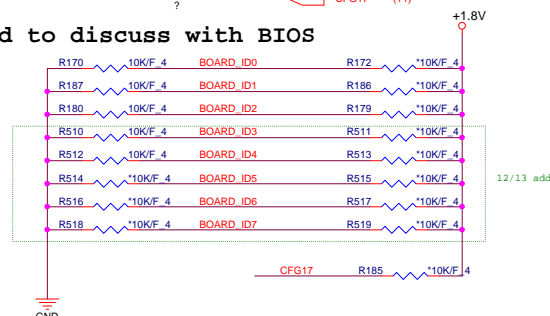


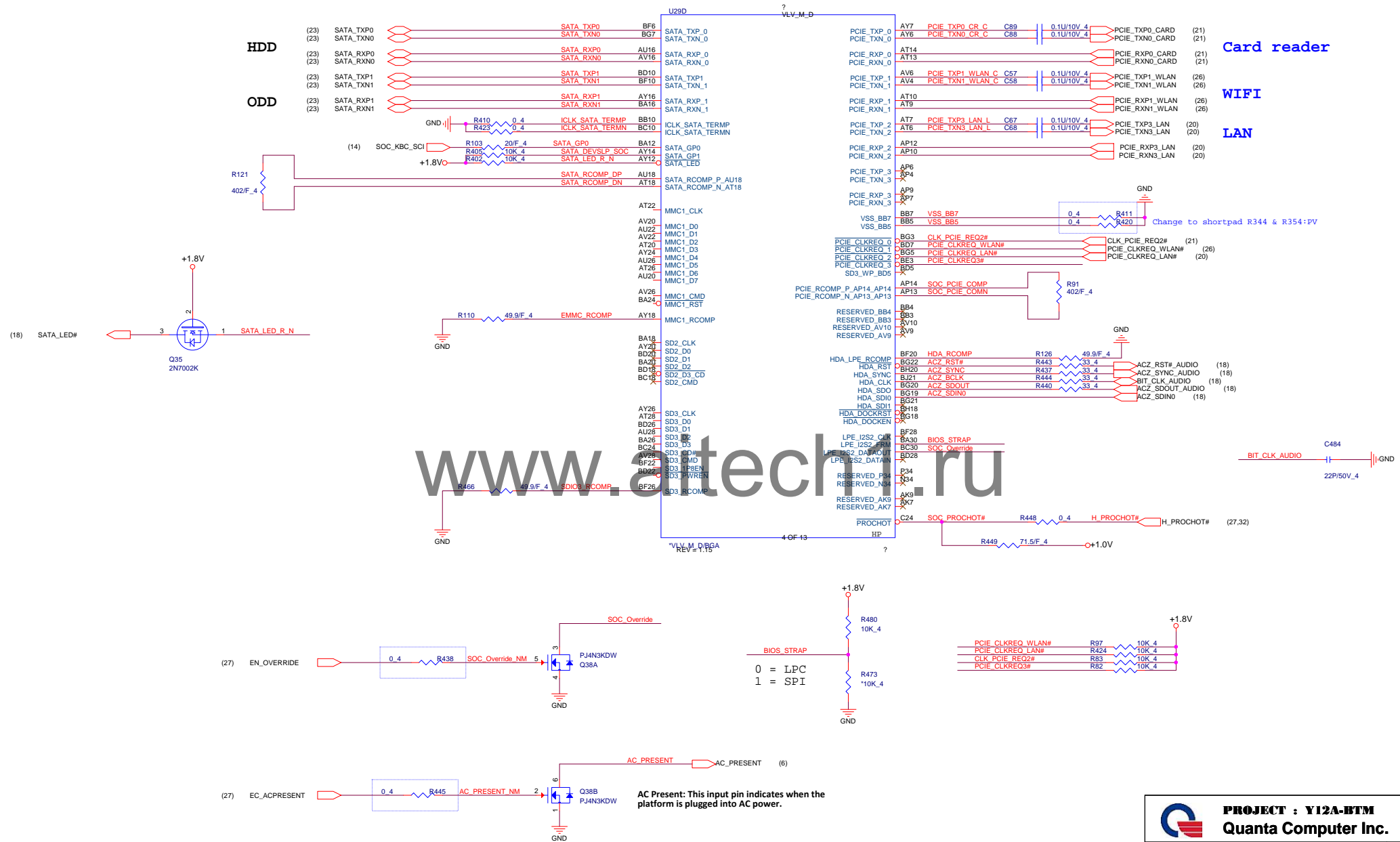


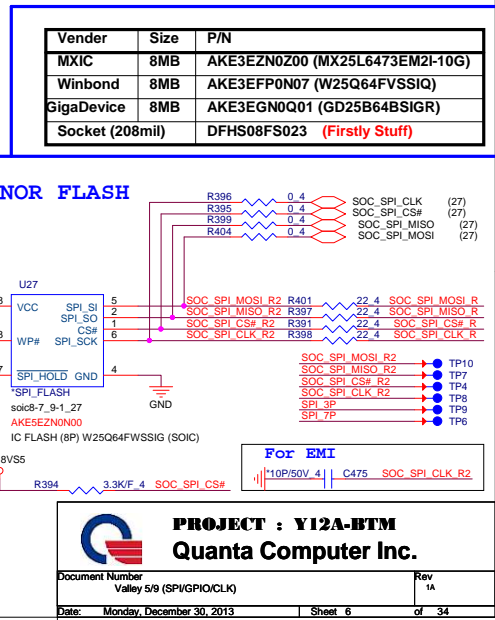


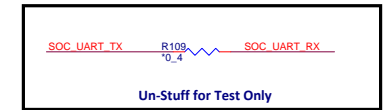
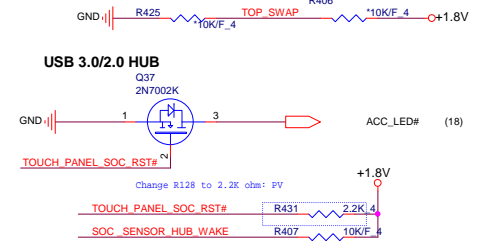
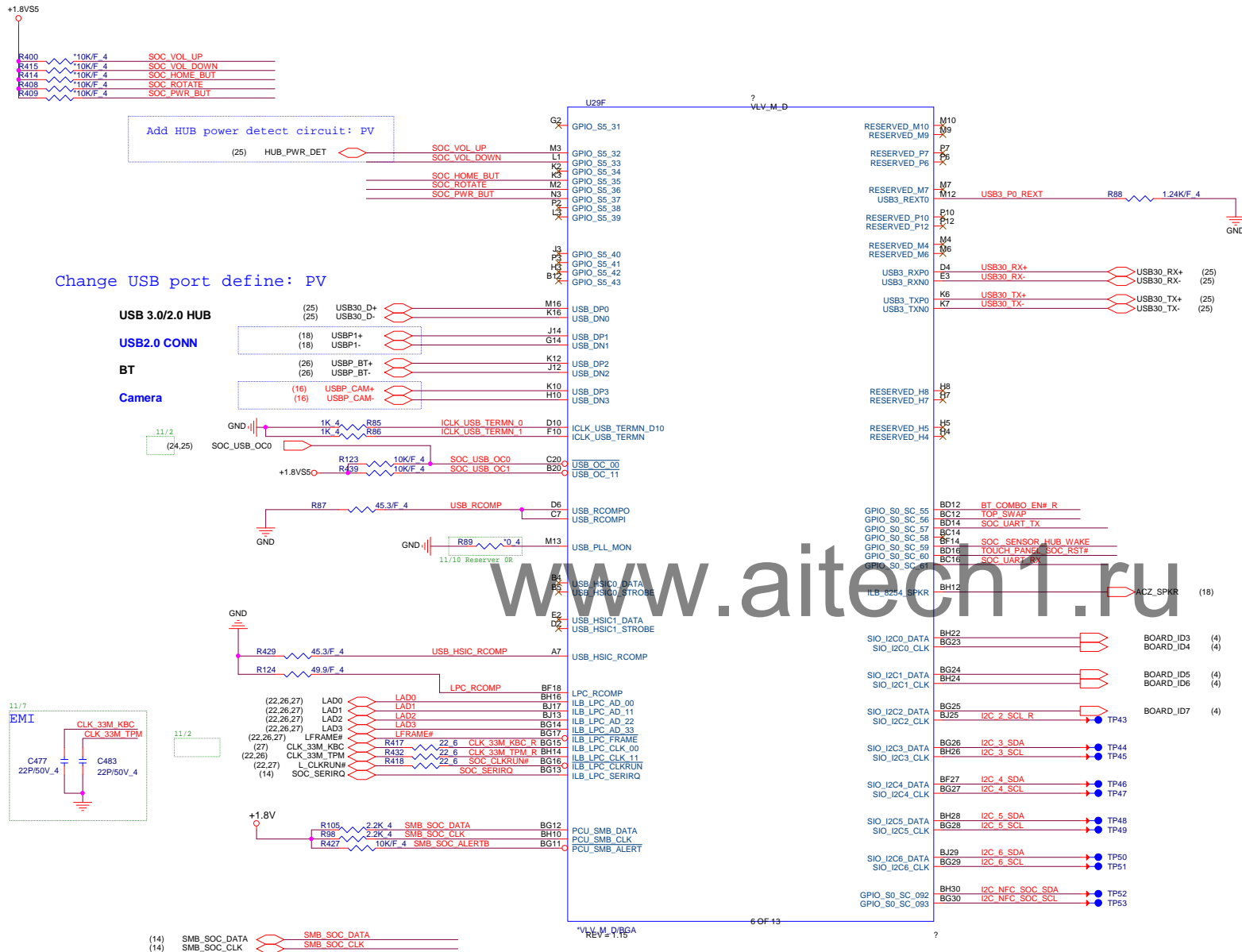
	Reserve (Default = 000)			Pavilion/Envy 00 = Pavilion 01 = Envy 10 = Pavilion Special Edition 11 = TBD		14" = 00 15" = 01 17" = 10		UMA = 0 S.G = 1
Model	BOARD_ID7	BOARD_ID6	BOARD_ID5	BOARD_ID4	BOARD_ID3	BOARD_ID2	BOARD_ID1	BOARD_ID0
Pavillian 14"	0	0	0	0	0	0	0	0
Pavillian 15.6"	0	0	0	0	0	0	1	0
Pavillian 17"	0	0	0	0	0	1	0	0

Need to discuss with BIOS









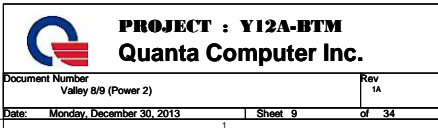
12/13

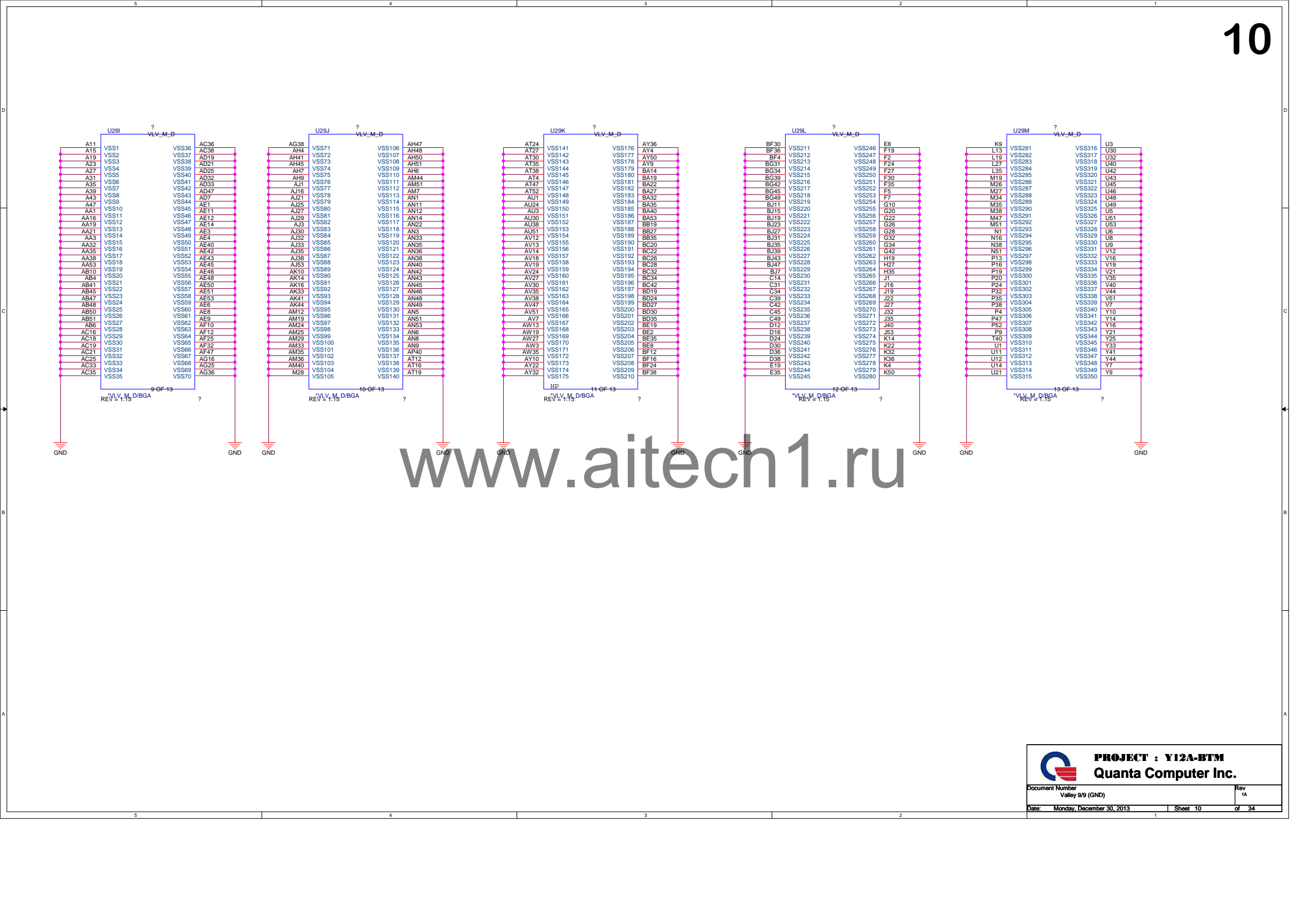


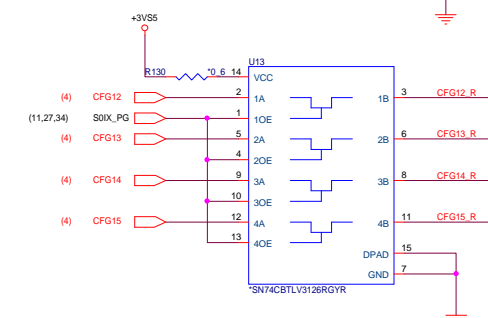
PROJECT : Y12A-BTM
Quanta Computer Inc.

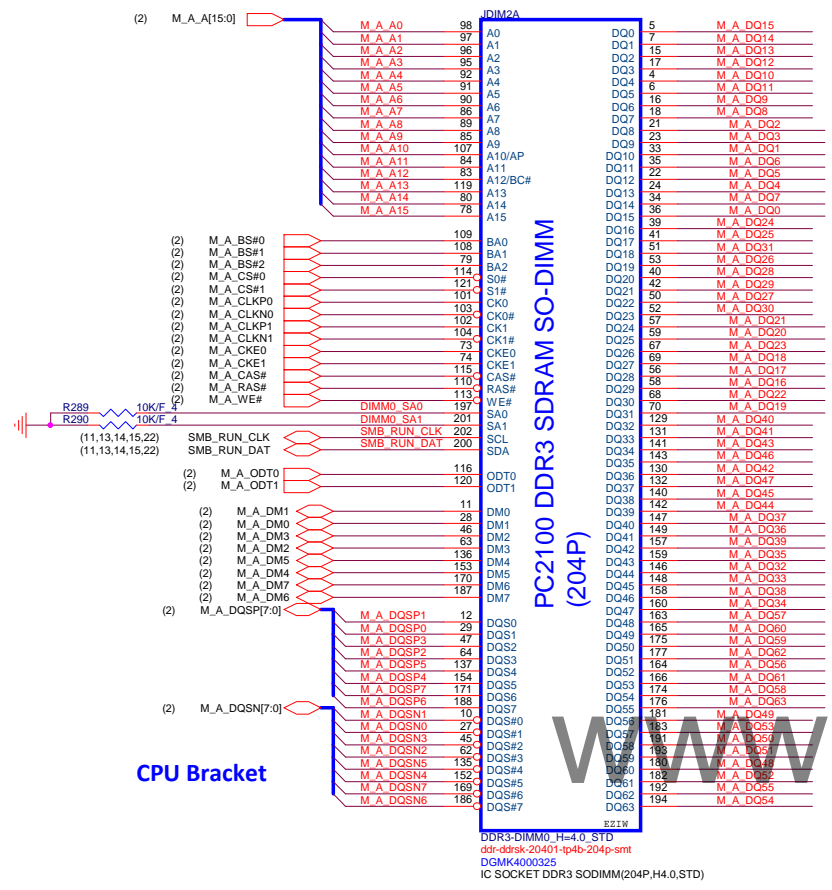
Document Number
Valley 6/9 (USB/LPC12C)
Rev 1A

Date: Monday, December 30, 2013 Sheet 7 of 34

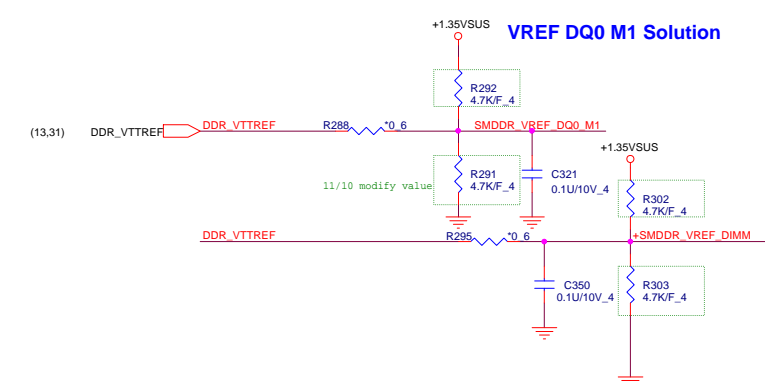
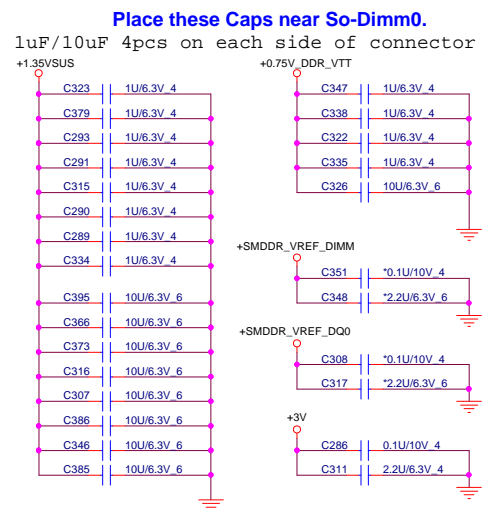
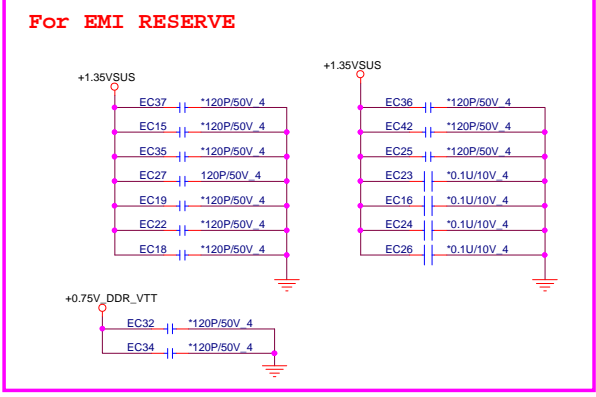
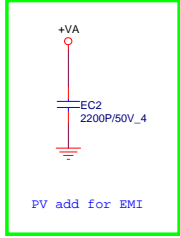
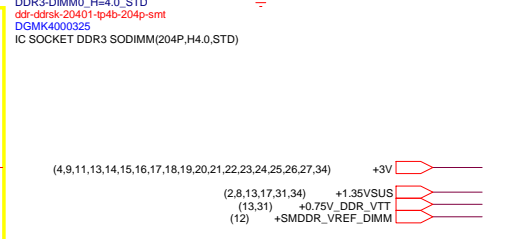
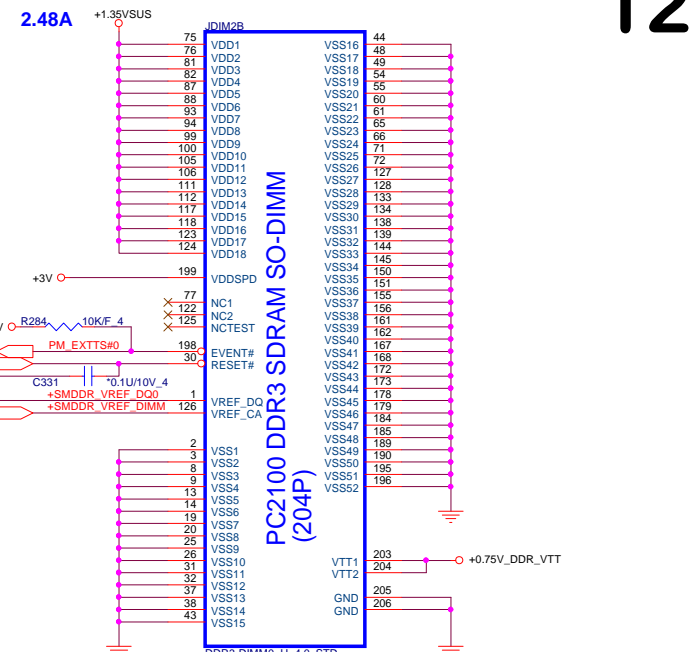
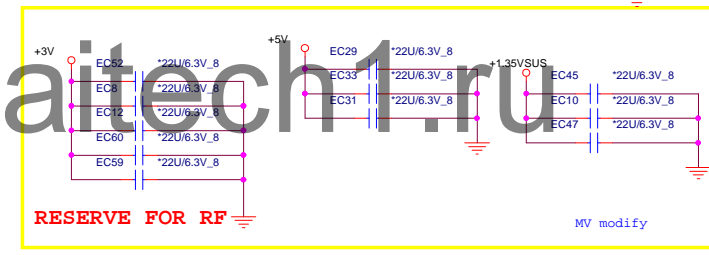




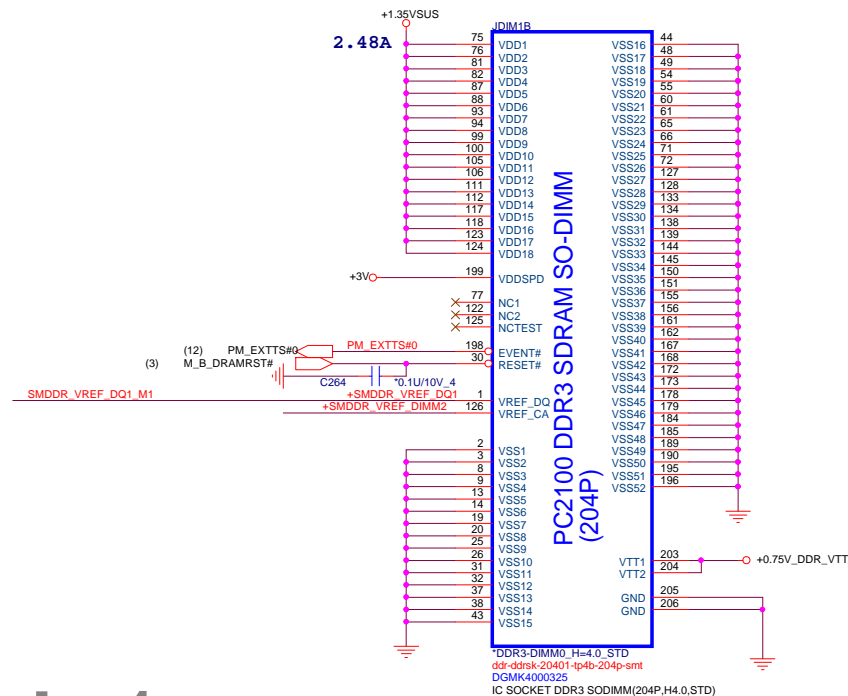
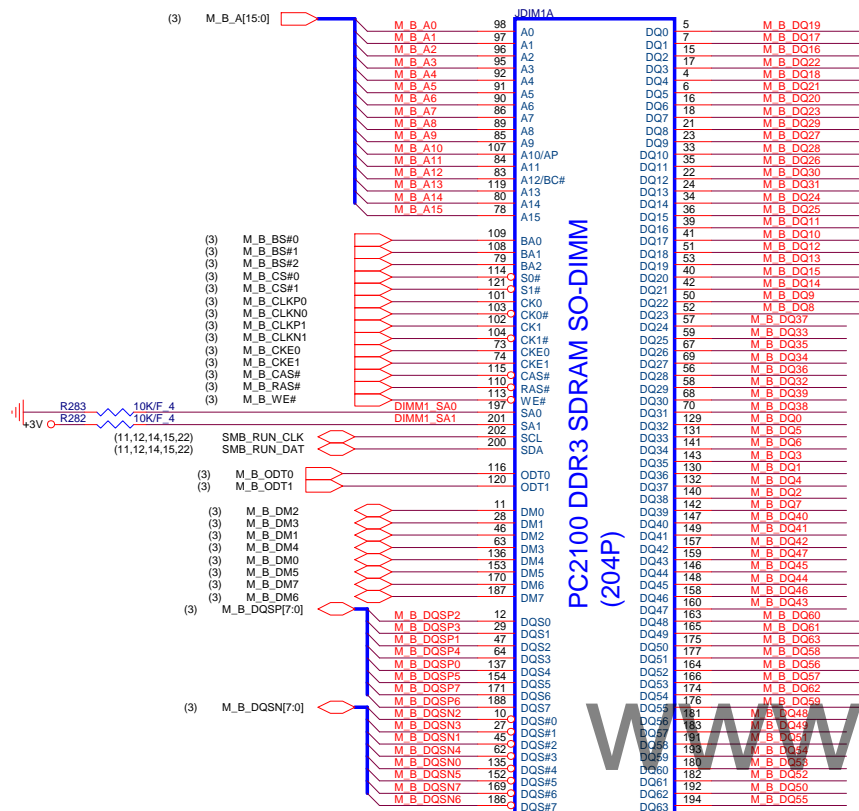




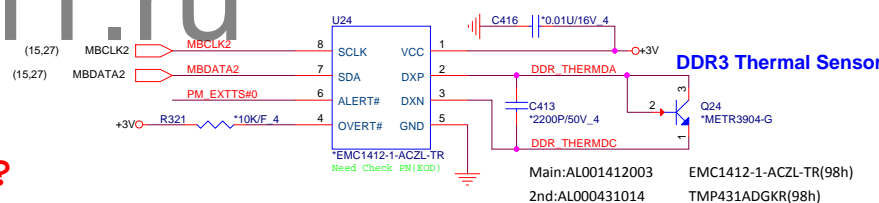
M_A_DQ[63:0] (2)



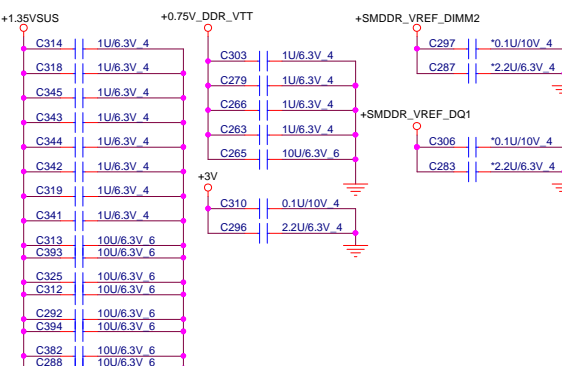
M_B_DQ[63:0] (3)



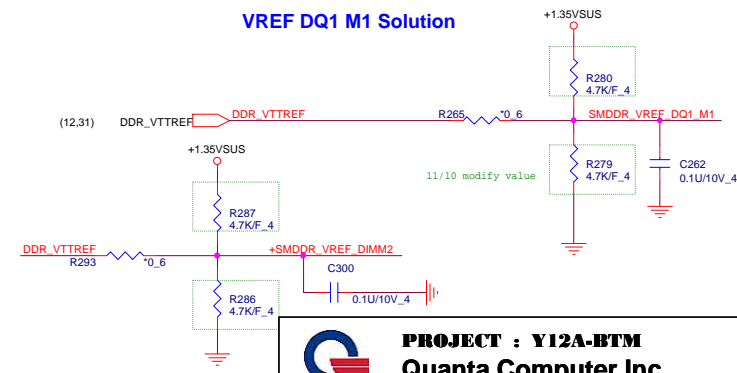
Local Thermal Sensor



Place these Caps near So-Dimm1.
1uF/10uF 4pcs on each side of connector

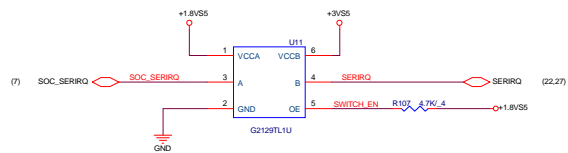


VREF DQ1 M1 Solution

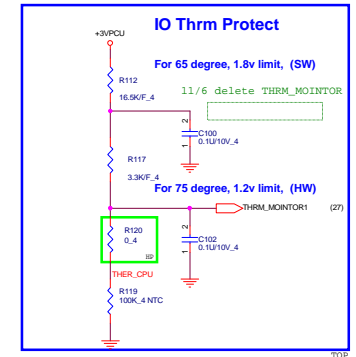
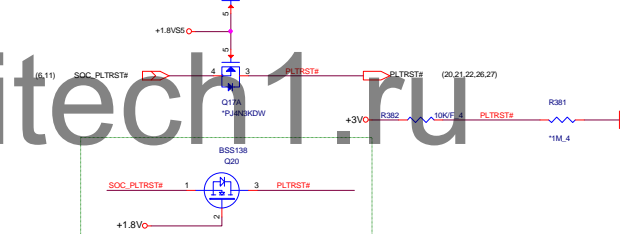
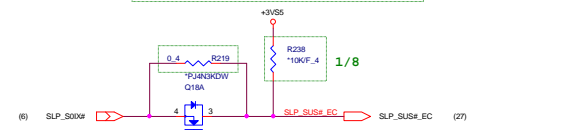
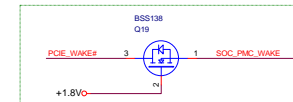
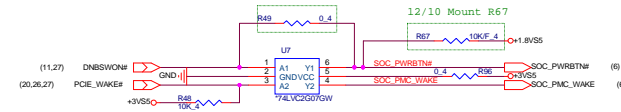
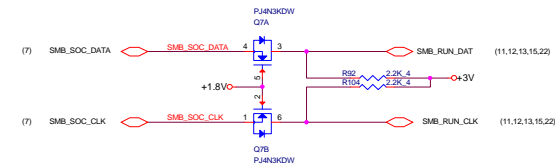
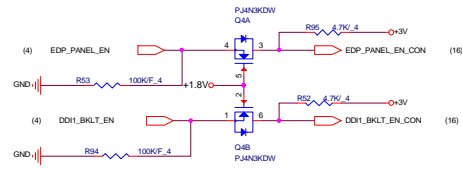


PROJECT : Y12A-BTM
Quanta Computer Inc.

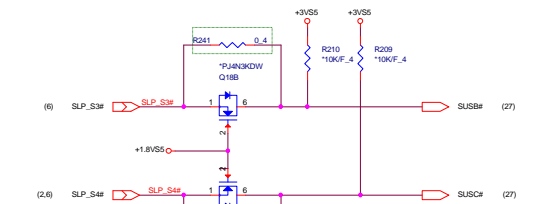
Document Number
DDR3 DIMM1-STD(4.0H)
Rev 1A
Date: Tuesday, December 31, 2013 Sheet 13 of 34



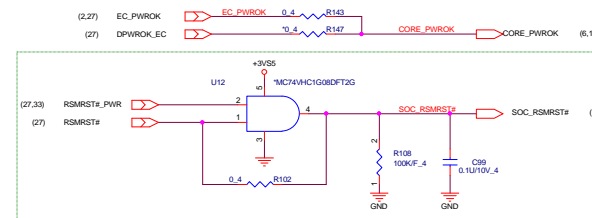
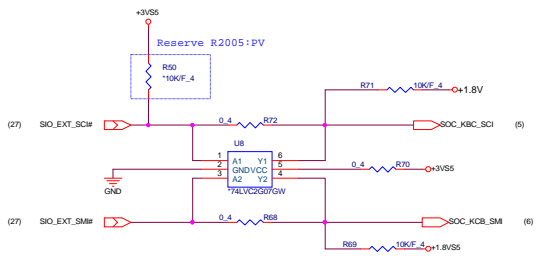
11/4 Delete duplicate TP lever shift



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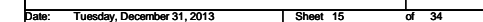
12/11 Mount R240

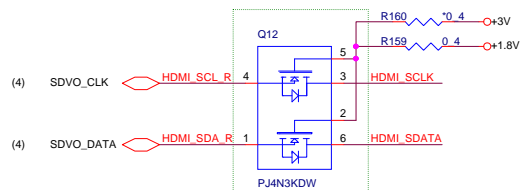


11/5 Add AND gate



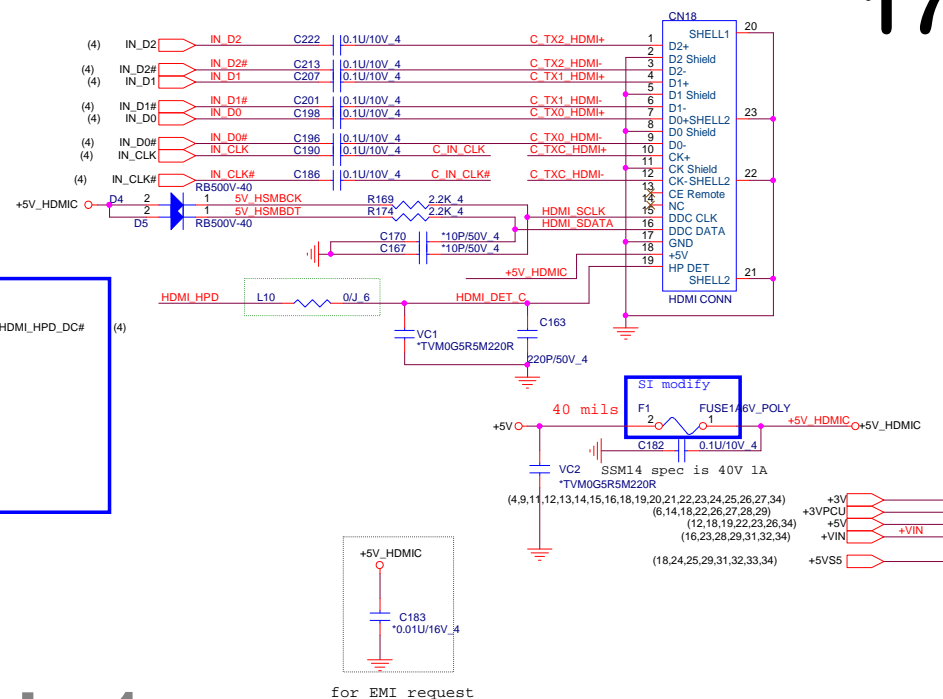
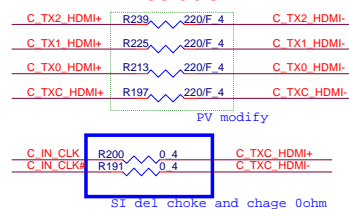
www.aitech1.ru





Close to HDMI connector
12/9 change P/N

EMI Solution

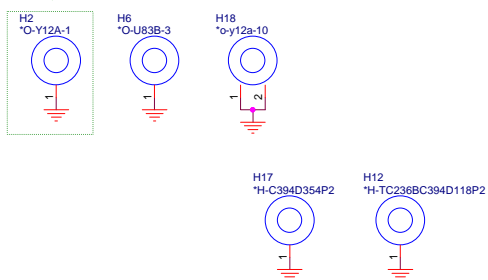


for EMI request

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Hole

11/6

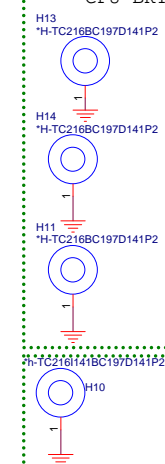


12/11

11/7

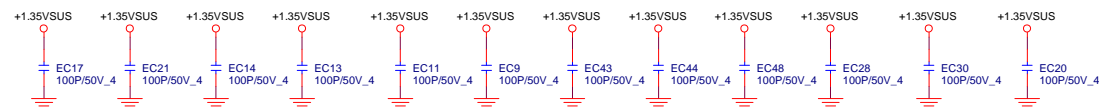
11/5 Change CPU Bracket

.....
CPII BKT



12/11

12/11

EMI

PROJECT : Y12A-BTM
Quanta Computer Inc.

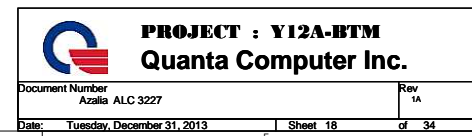
Document Number
HDM

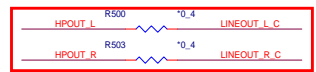
Rev	
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Date: Tuesday, December 31, 2013

Sheet 17

of 34



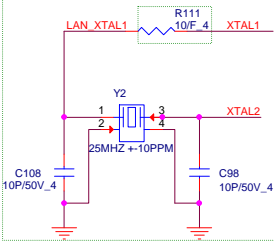


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For EMI 0 ~ 22 ohm

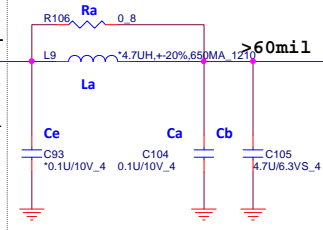
10/31 add crystal

Change Y1 PN to BG625000121: PV



Power trace Layout 宽度> 60mil

>60mil
Trace<30 mil
Width > 60 mil

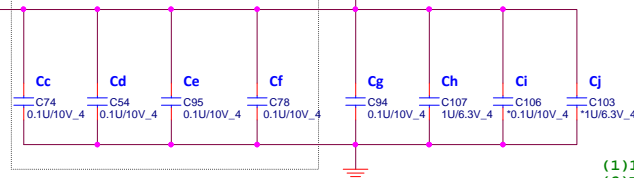


For GbE
Stuff La, Ca, Cb

For 10/100
NA: La, Ca, Cb
STUFF: Ra, Ce

For GbE
* Place Cc, Cd, Ce, Cf
close to each VDD10 pin-- 3, 22, 8, 30

For 10/100 NA Ce, Cf
* Place Ce, Cf
close to each VDD10 pin-- 8, 30 only,

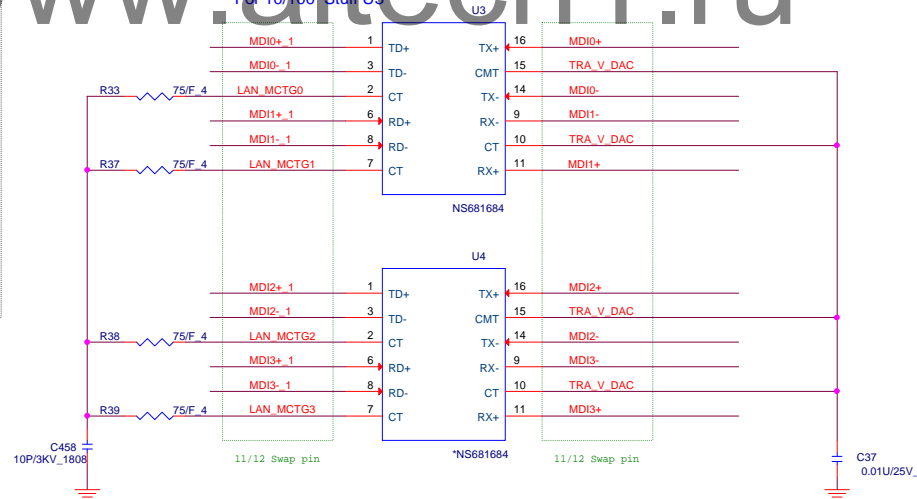


For GbE
* Place Cg and Gh close to each VDD10 pin-- 22

For 10/100
* Place Ci and Cj close to each VDD10 pin-- 30

11/10 Modify name

For GbE Stuff U3, U4
For 10/100 Stuff U3



11/12 Swap pin

11/12 Swap pin

12/27 unmount R101 11/10 Vendor suggest

Please add 9 GND VIAs
connection with thermal PAD

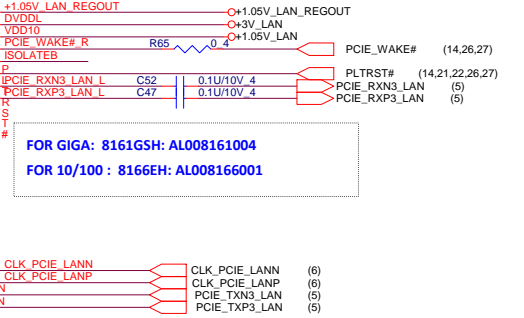
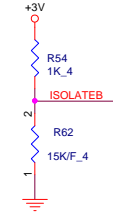
(5)

(1)10/31 only support 10/100
(2)Reserver 10/100/1000

For GbE
* Place Ra
For 10/100
* Place Rb

FOR GIGA: 8161GSH: AL008161004
FOR 10/100: 8166EH: AL008166001

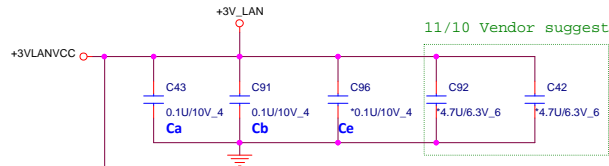
if ISOLATEB pin
pull-low, the LAN
chip will not drive
it's PCI-E outputs
(excluding
PCI-E_WAKE# pin)



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For 10/100
* Stuff Cb and Ce only, close to each VDD33 pin-- 23, 32

For GIGA
* Stuff Ca and Cb only, close to each VDD33 pin-- 11, 32



11/10 Vendor suggest

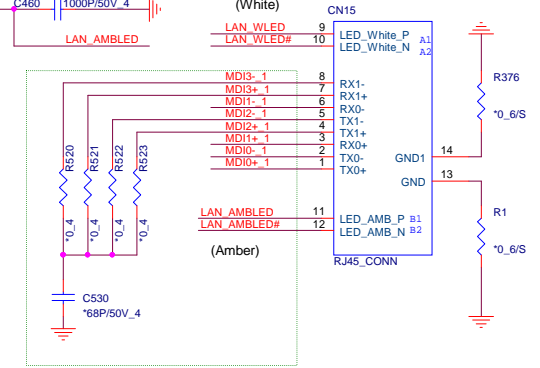
* Place Cc and Cd close to each VDD33 pin-- 23

For GIGA
Stuff Cc, Cd

For 10/100
NA: Cc, Cd

Remove For Not Using SWR mode

RJ45



(1)10/31 Delete 10/100
(2)Change RJ45 P/N for U83B
(3)11/7 Reserver 10/100/1000
(4)12/17 EMI reserve TX2+/- & TX3+/- R and C.
(5)Change LAN CONN P/N & footprint

For GiGA

BOT:GST5009B LF,DB0206LAN00

FCE :NS892407 ,DB0LL1LAN00

For 10/100

BOT: TST1284R LF DB0EL5LAN00

FCE :NS892408 ,DB0EF7LAN01

(4,9,11,12,13,14,15,16,17,18,19,21,22,23,24,25,26,27,34)

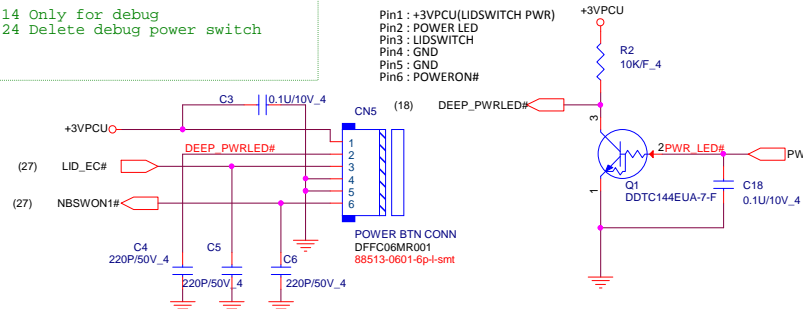
(34)

+3V

+3V_LANVCC

Power Button Connector

11/14 Only for debug
12/24 Delete debug power switch



Lid Switch FOR 15"

11/2 delete LID switch

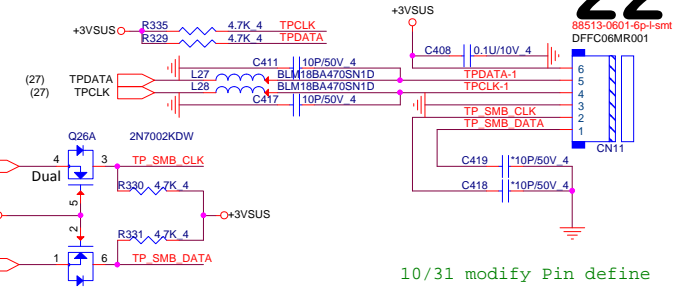
(27)

Touch Pad Connector

12/26 Change L27, L28 footprint

(11,12,13,14,15)

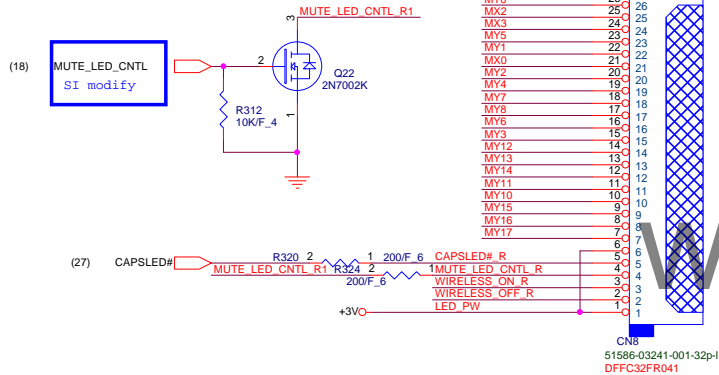
(11,12,13,14,15)



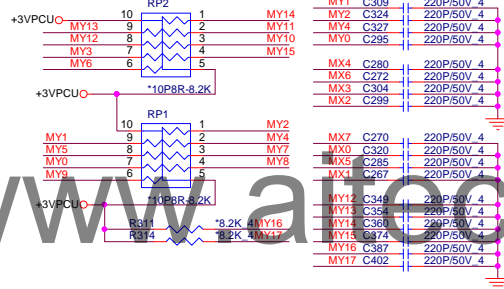
10/31 modify Pin define

KEYBOARD Con.

(27) MY[0..17] MY[0..17]
(27) MX[0..7] MX[0..7]



KEYBOARD PULL-UP

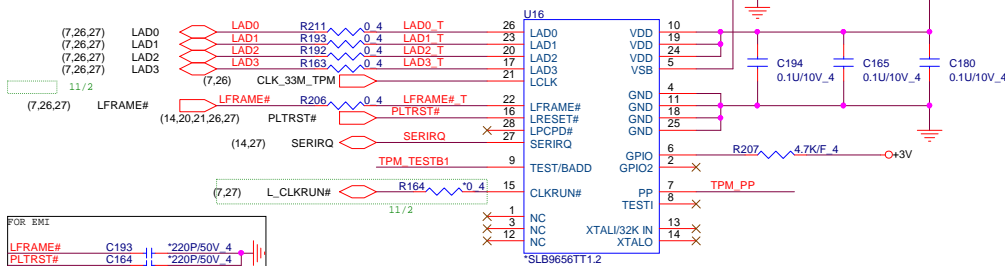


11/7 Delete backlight KB

TPM (1.2)

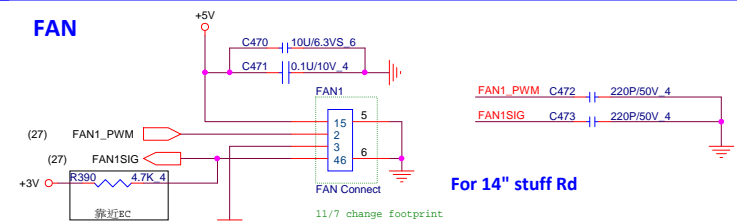
Address

	BADD
HIGH	4EH/4F (default)



FOR EMI

FAN



For 14" stuff Rd

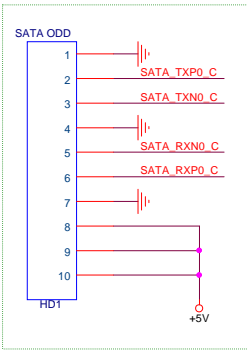


PROJECT : Y12A-BTM
Quanta Computer Inc.

Document Number	TPM/TP/FAN/LED	Rev	1A
Date	Monday, December 30, 2013	Sheet	22 of 34

SATA HDD Connector(Cable type) 14", 15", 17"

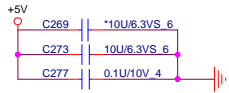
+5V: 2 A(4 Pin)
Gnd : (5 Pin)
+3V: 2 A(4 Pin)



SATA_TXP0_C C302	0.01U/16V_4	SATA_TXP0	(5)
SATA_TXN0_C C298	0.01U/16V_4	SATA_TXN0	(5)
SATA_RXN0_C C294	0.01U/16V_4	SATA_RXN0	(5)
SATA_RXP0_C C282	0.01U/16V_4	SATA_RXP0	(5)

11/12 delete 14" and 15" SATA CONN

11/1 Modify pin define and footprint
11/11 Swap pin
12/25 change footprint

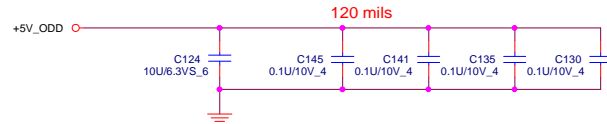
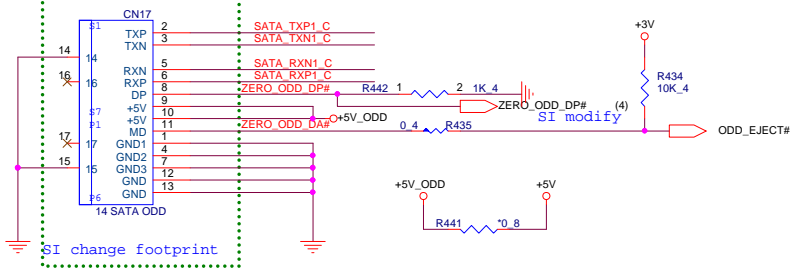


SATA ODD CONNECTOR

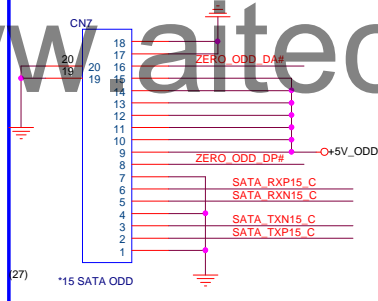
14" SATA ODD

12/24 update footprint

Bypass CAP close conn



15" & 17" SATA ODD New Type



11/6 update footprint

11/1 Colayout 15" & 17" ODD

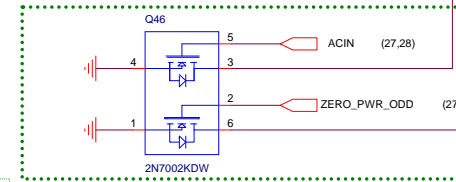
For 15" & 17": stuff Ra

11/11 Swap pin

SATA_TXP15_C C494	0.01U/25V_4	SATA_TXP1	(5)
SATA_TXN15_C C491	0.01U/25V_4	SATA_TXN1	(5)
SATA_RXN15_C C489	0.01U/25V_4	SATA_RXN1	(5)
SATA_RXP15_C C487	0.01U/25V_4	SATA_RXP1	(5)

For 14": stuff Rb

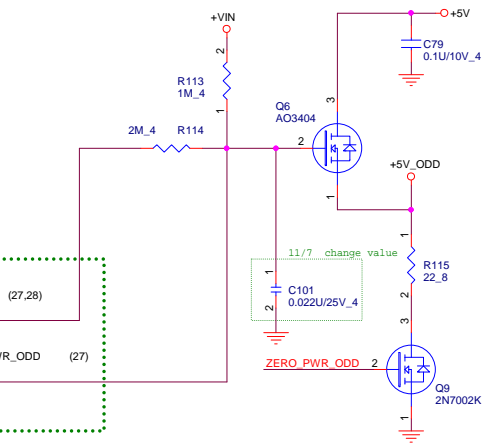
SATA_TXP1_C C495	0.01U/25V_4	SATA_TXP1	
SATA_TXN1_C C492	0.01U/25V_4	SATA_TXN1	
SATA_RXN1_C C490	0.01U/25V_4	SATA_RXN1	
SATA_RXP1_C C488	0.01U/25V_4	SATA_RXP1	



12/24 change to dual MOS

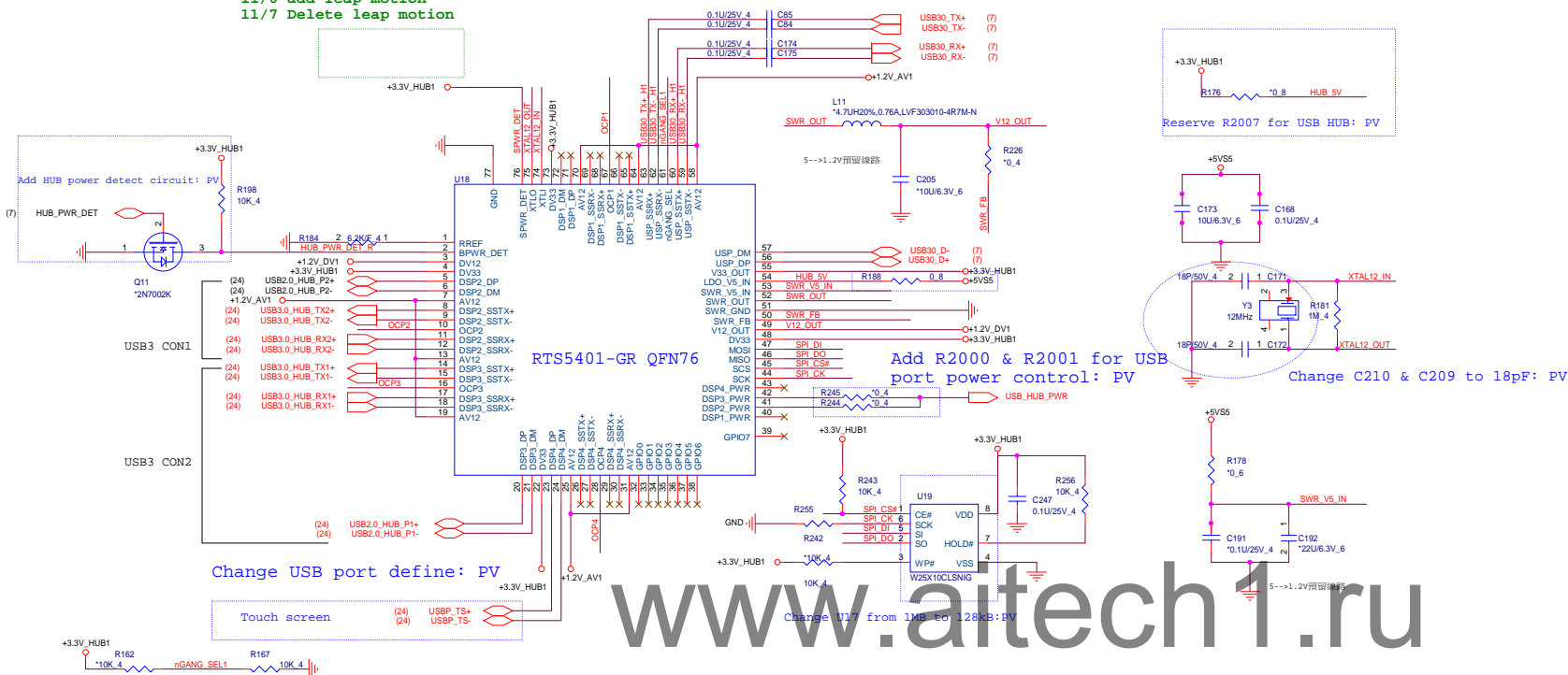
For BMI

ACIN C223	*220P/50V_4	
ZERO_PWR_ODD C214	*220P/50V_4	

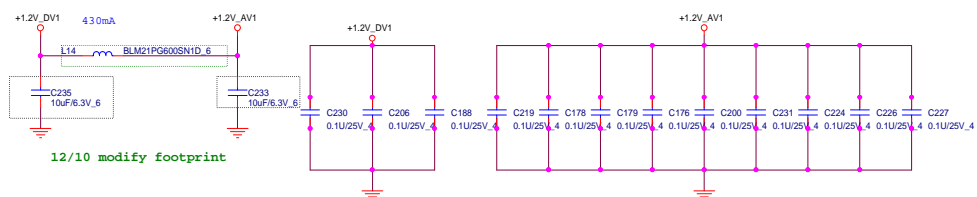


(2,9,11,14,18,24,25,26,27,29,30,32,33,34) +3VS5

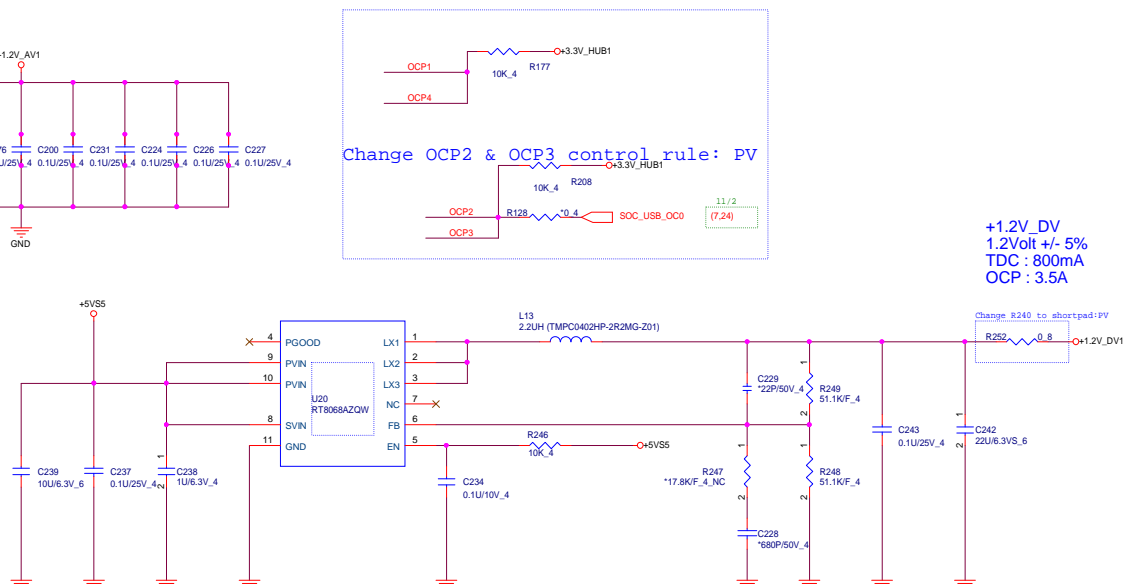
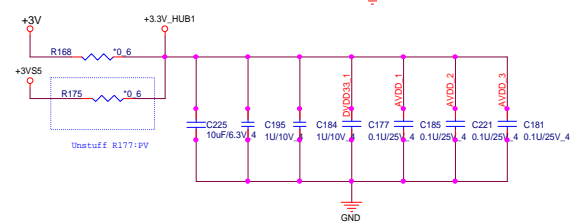

```
11/6 add leap motion
11/7 Delete leap motion
```



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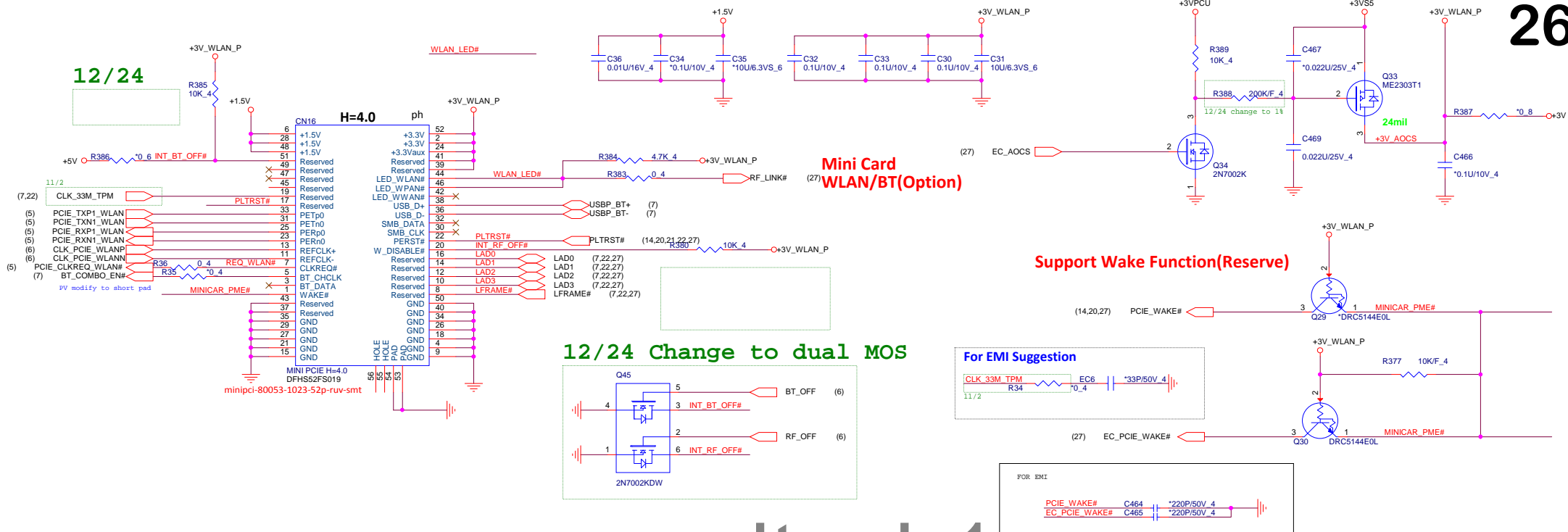


12/10 modify footprint



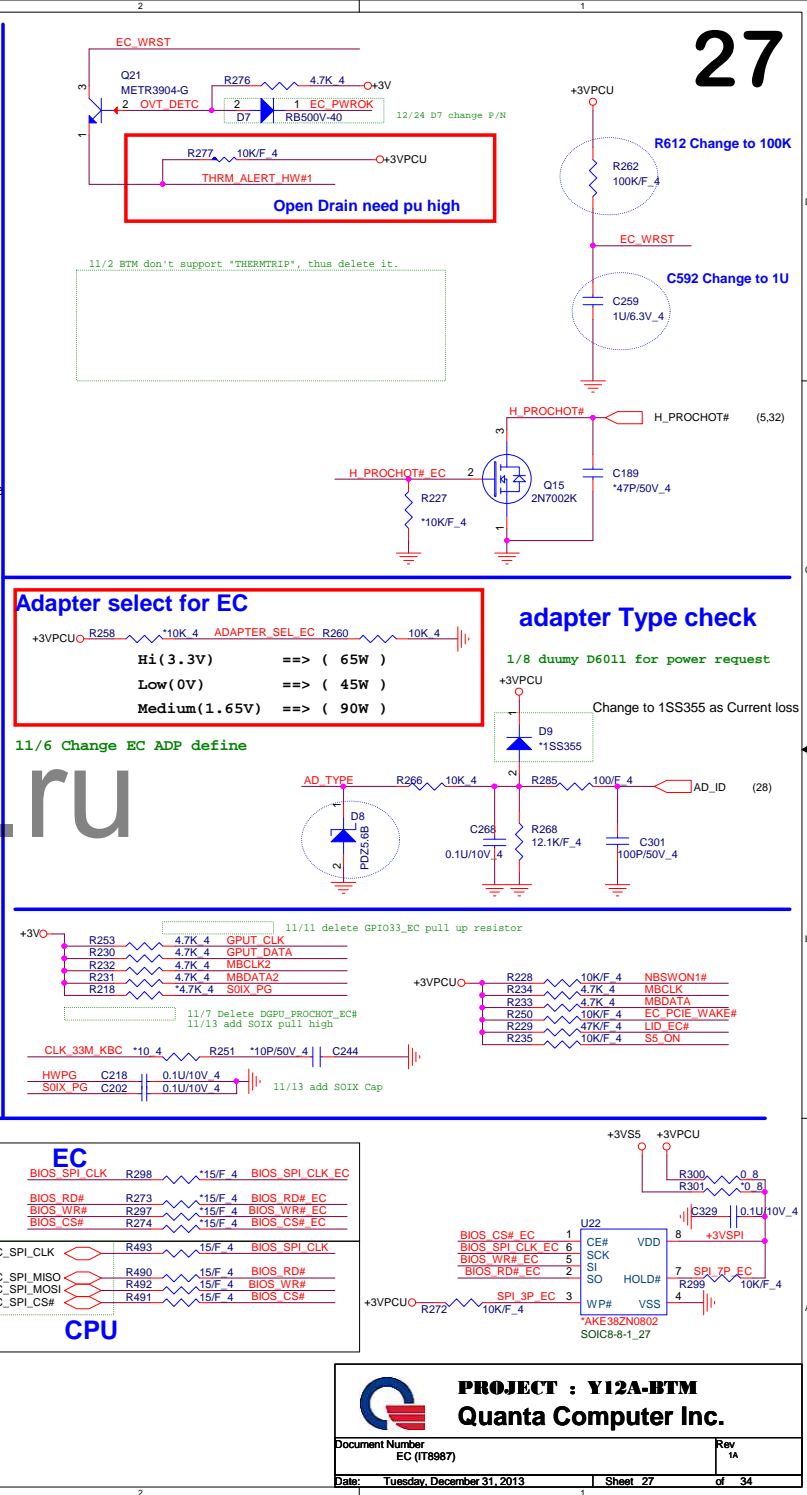
+1.2V_DV
1.2Volt +/- 5%
TDC : 800mA
OCP : 3.5A

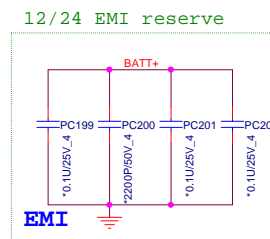
12/24

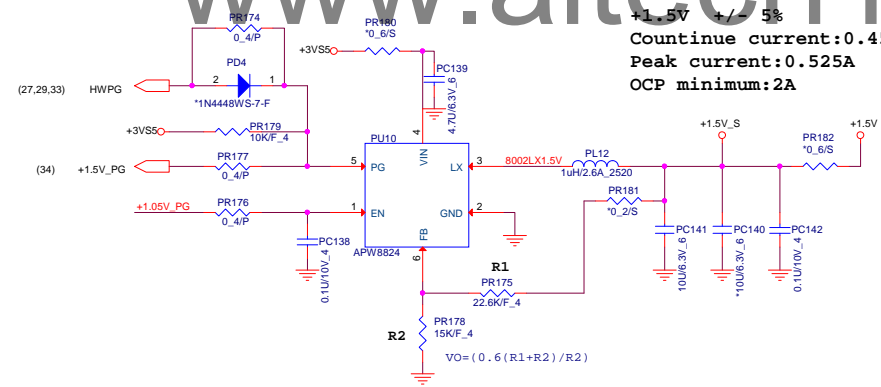
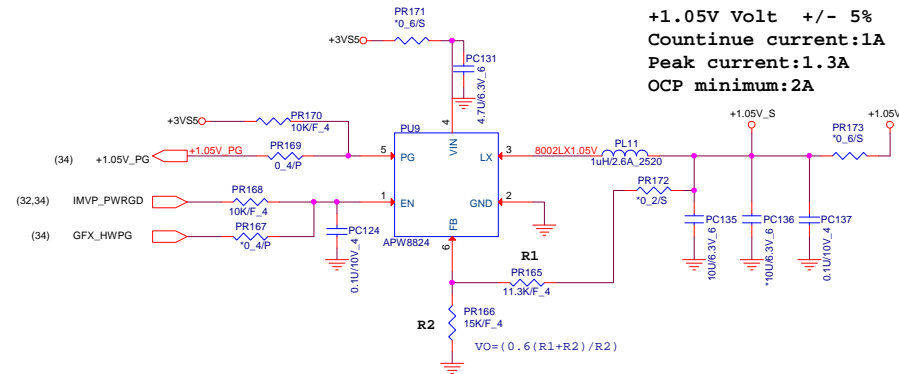


USB 3.0 re-driver

10/31 delet USB3.0 re-driver IC





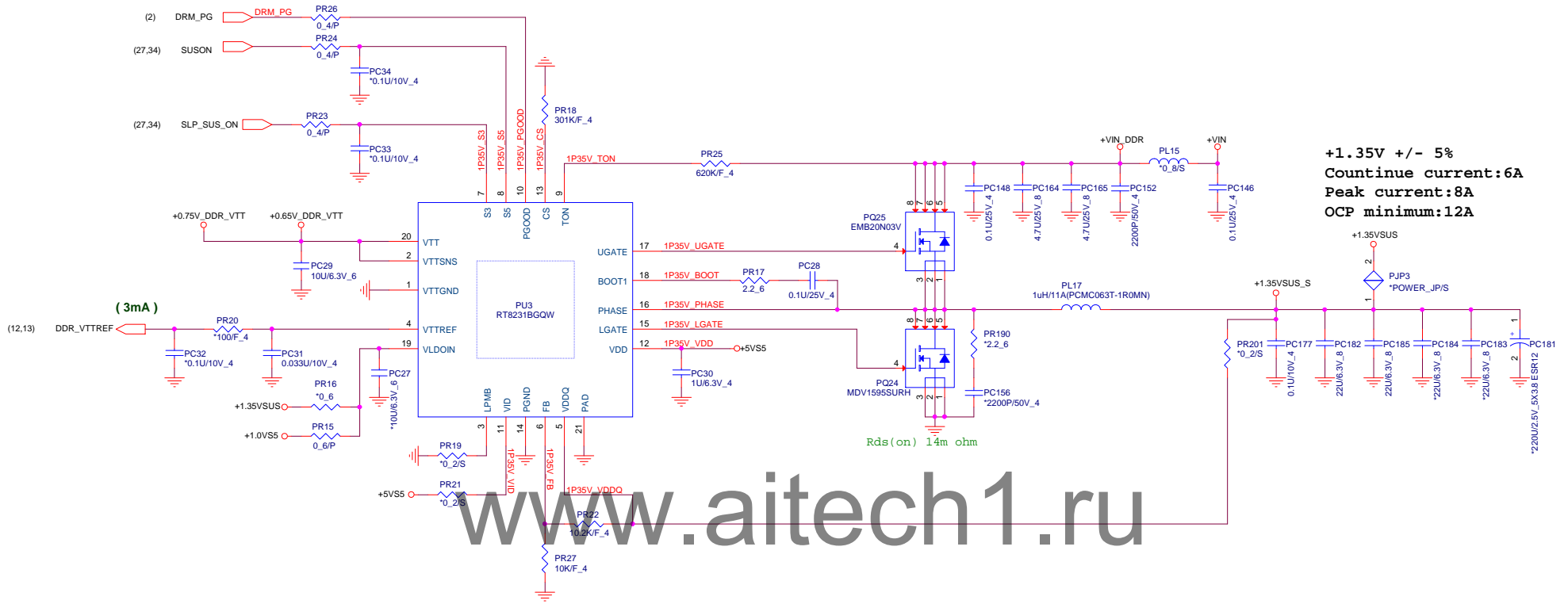


PROJECT : Y12A-BTM
Quanta Computer Inc.

Document Number
+1.05V/+1.5V (SY8002)

Rev
1A

Date: Monday, December 30, 2013 Sheet 30 of 34



+1.35V +/- 5%
Countinue current:6A
Peak current:8A
OCP minimum:12A

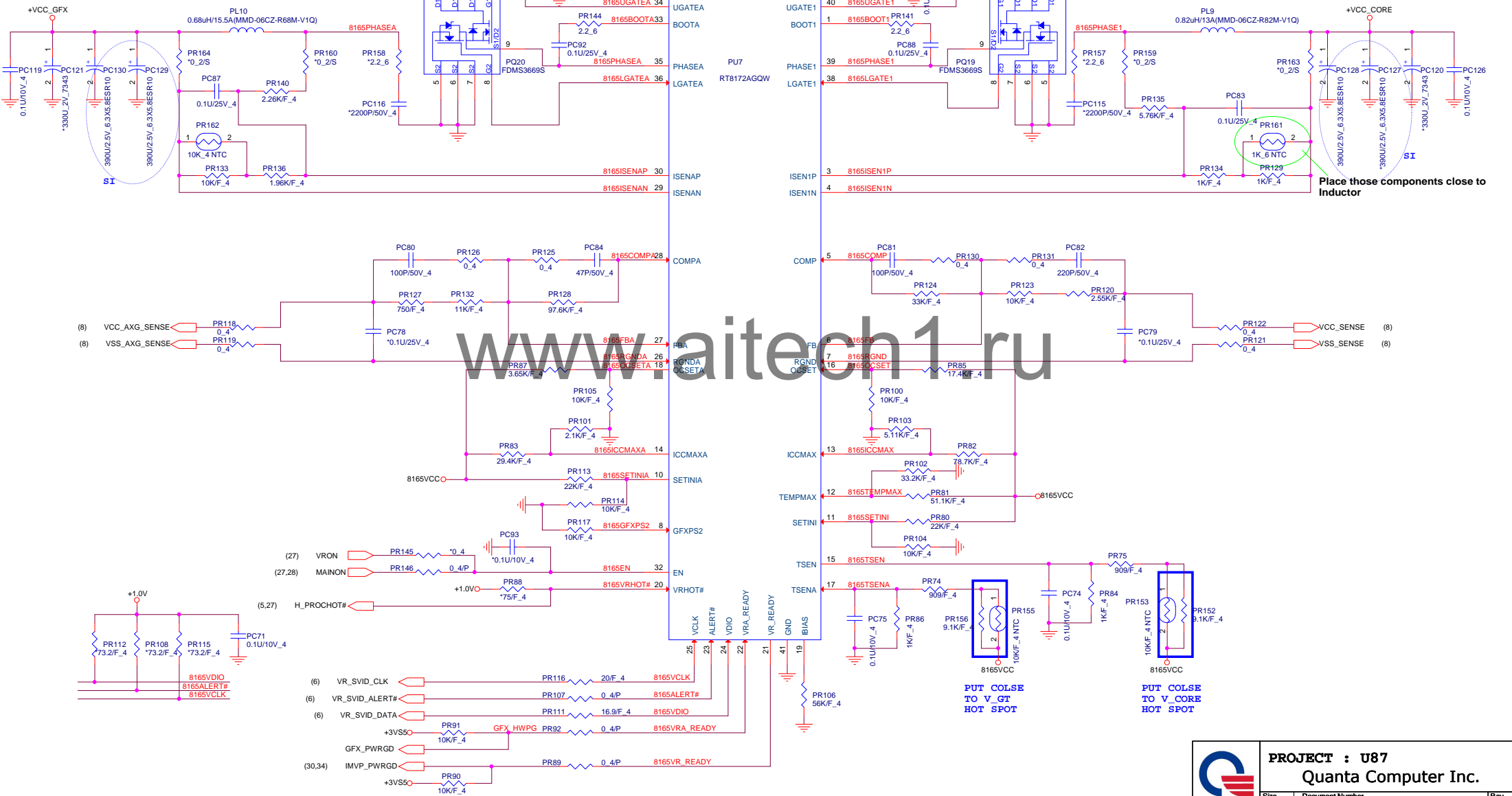
Rds(on) 14m ohm


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+1.35VSUS (2,8,12,13,17,34)

+GFXCORE Volt +/- 5%
Countinue current:6A
Peak current:14A
OCP minimum:16.5A

+CPUVORE Volt +/- 5%
Countinue current:6A
Peak current:12A
OCP minimum:14A

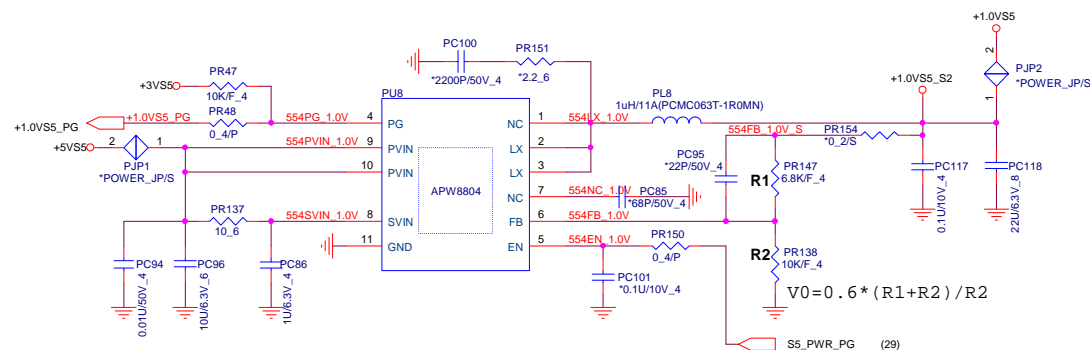




PROJECT : U87
Quanta Computer Inc.

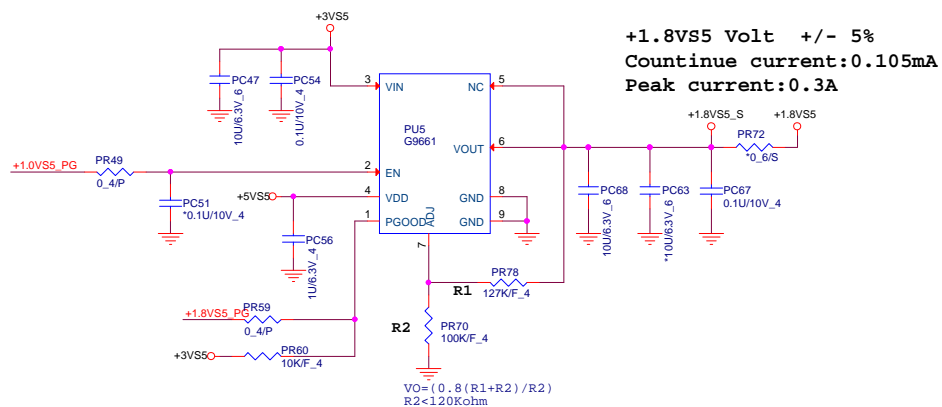
Size	Document Number	Rev
Custom	Vcore(RT8172A)	1A
Date: Monday, December 30, 2013		Sheet 32 of 34

+1.0VS5 Volt +/- 5%
 Countinue current:2A
 Peak current:3A
 OCP minimum:4.5A

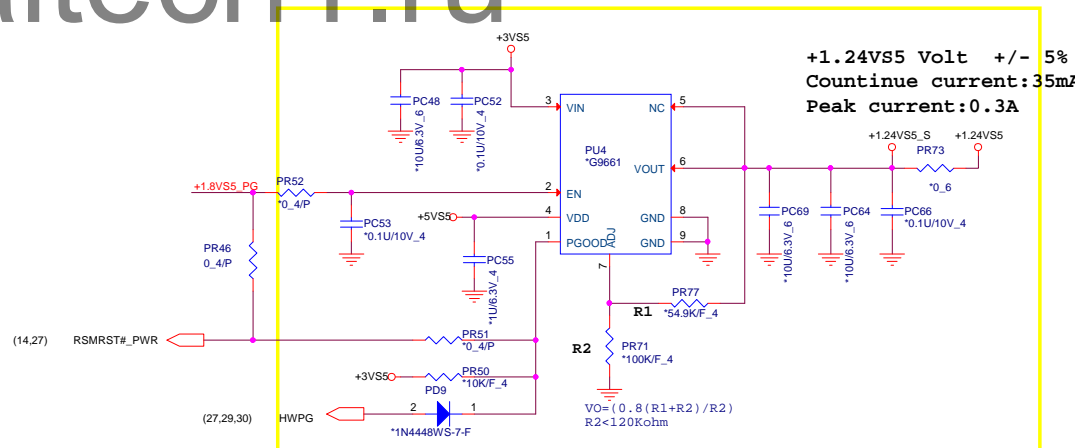


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+1.8VS5 Volt +/- 5%
 Countinue current:0.105mA
 Peak current:0.3A



+1.24VS5 Volt +/- 5%
 Countinue current:35mA
 Peak current:0.3A



PROJECT : Y12A-BTM
Quanta Computer Inc.

Document Number
 1.0VS5/1.8VS5/1.24VS5

Rev
 1A

Date: Monday, December 30, 2013

Sheet 33

of 34

