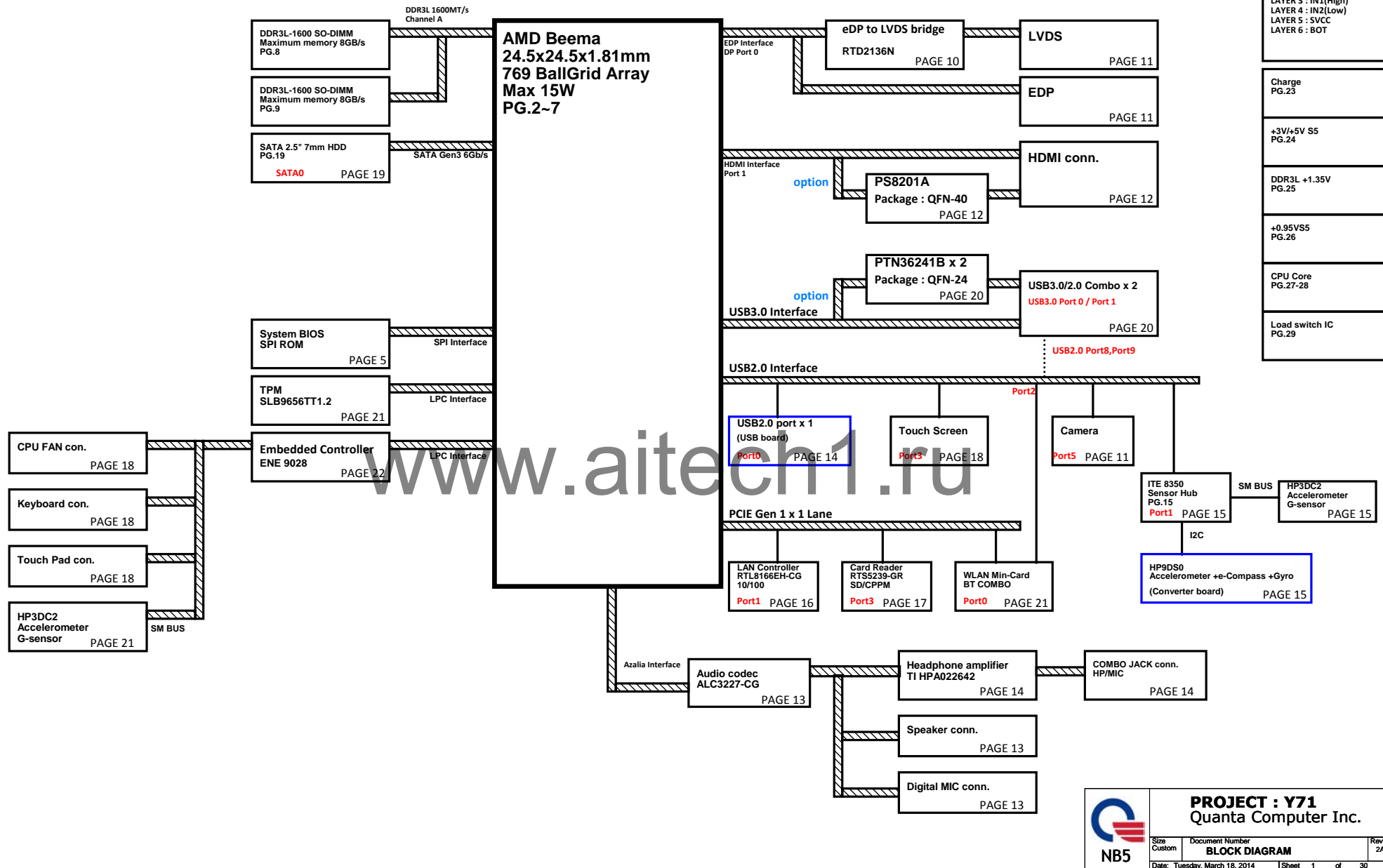


Y72 (HP Napa) AMD Beema Platform Block Diagram

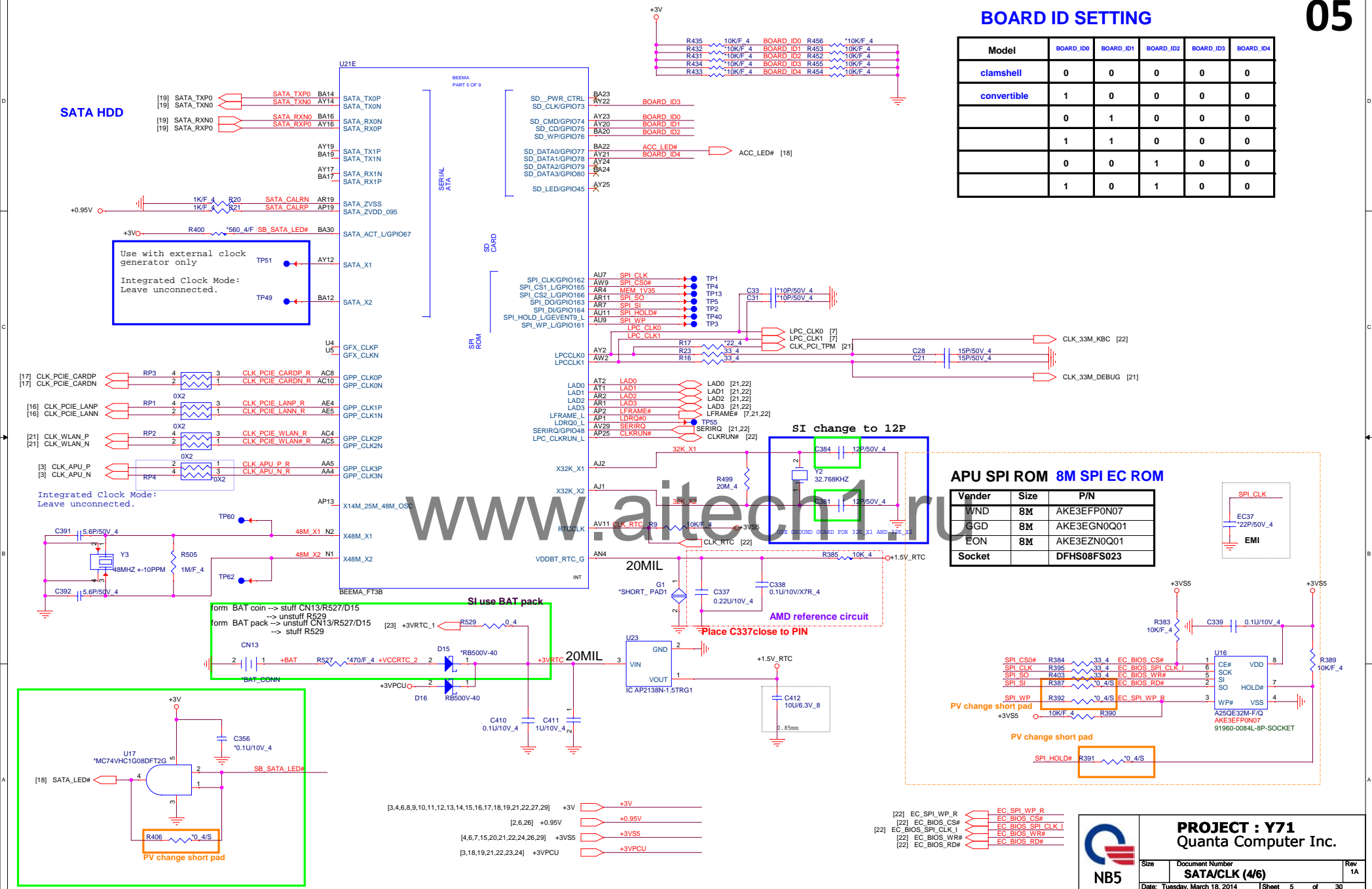
01

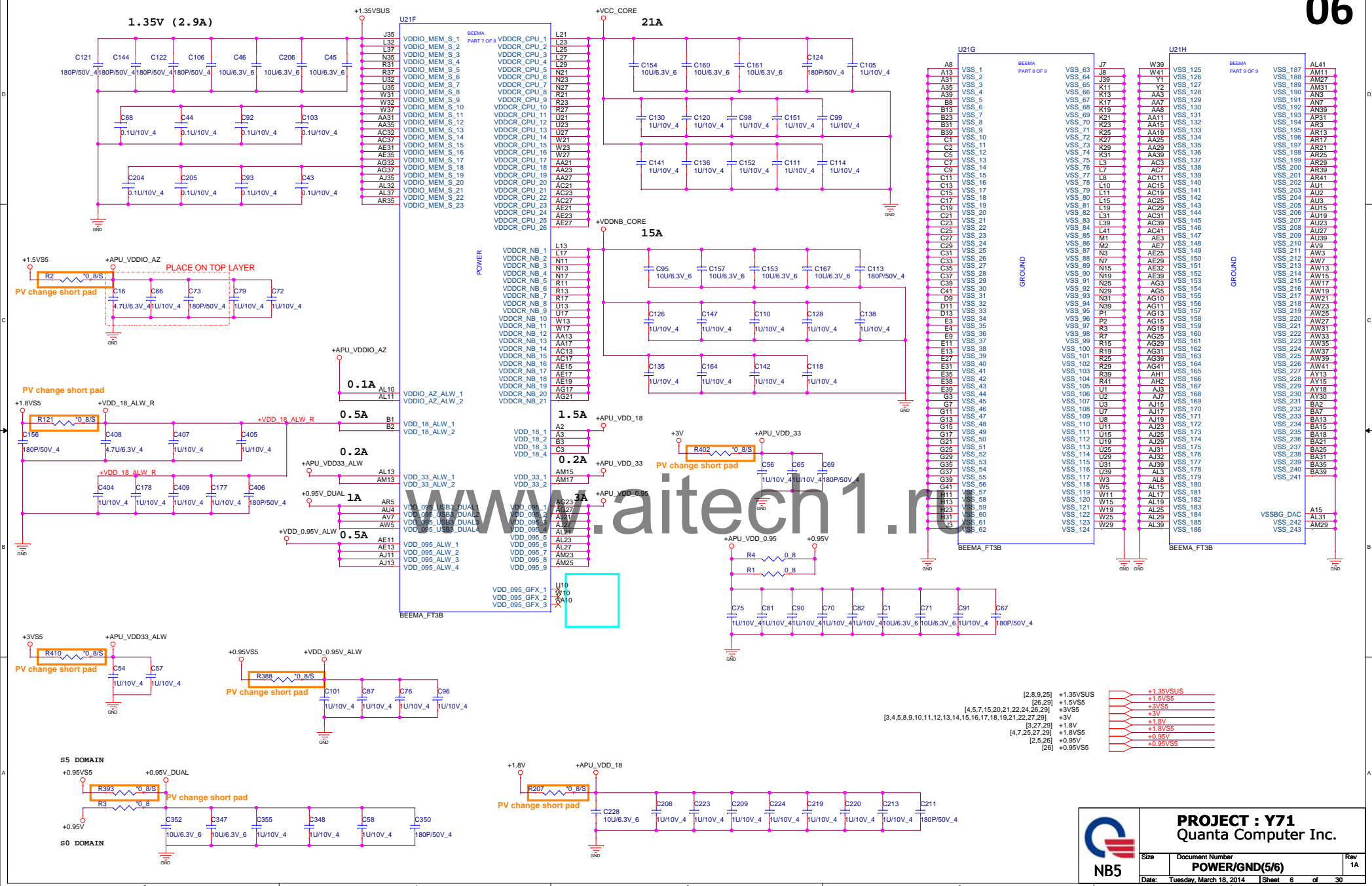






Model	BOARD_ID0	BOARD_ID1	BOARD_ID2	BOARD_ID3	BOARD_ID4
clamshell	0	0	0	0	0
convertible	1	0	0	0	0
	0	1	0	0	0
	1	1	0	0	0
	0	0	1	0	0
	1	0	1	0	0



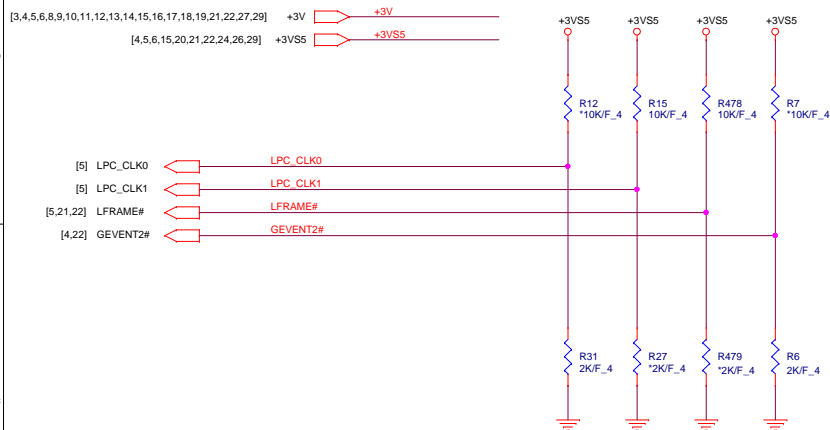




STRAPS PINS

OVERLAP COMMON PADS WHERE
POSSIBLE FOR DUAL-OP RESISTORS.

DEBUG STRAPS

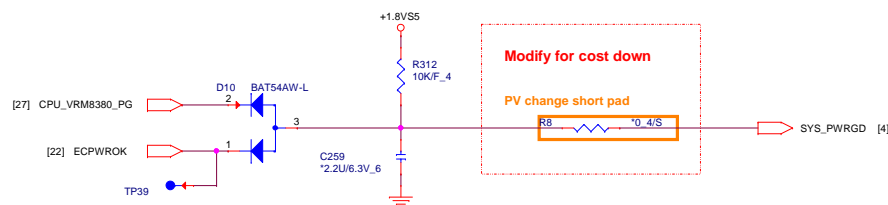


REQUIRED STRAPS

					LPC_CLK0	LPC_CLK1	LFRAME#	GEVENT2#
PULL HIGH					BOOT FAIL TIMER ENABLED	CLKGEN ENABLED DEFAULT	SPI ROM DEFAULT	1.8V SPI ROM
PULL LOW					BOOT FAIL TIMER DISABLED DEFAULT	CLKGEN DISABLED	LPC ROM	3.3V SPI ROM DEFAULT

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SYS_PWRGD



Modify for cost down

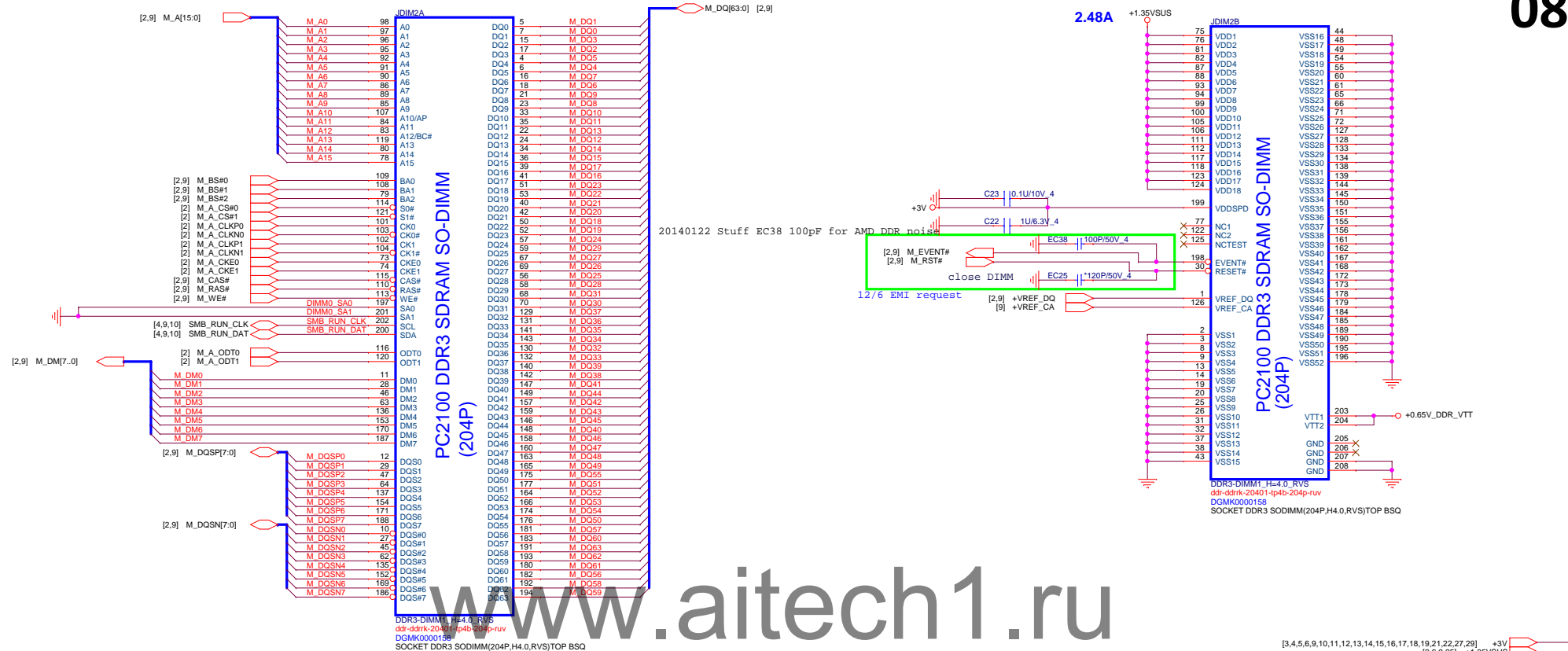
PV change short pad



PROJECT : Y71
Quanta Computer Inc.

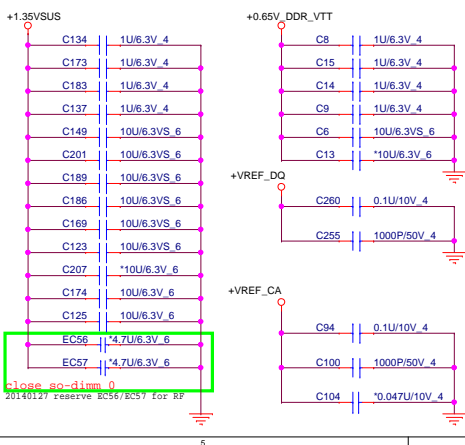
Size Document Number
STRAP (6/6)
Date: Tuesday, March 18, 2014 Sheet 7 of 30

Rev
1A



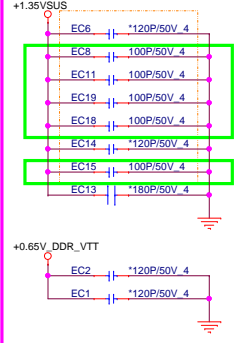
www.aitech1.ru

Place these Caps near So-Dimm0.

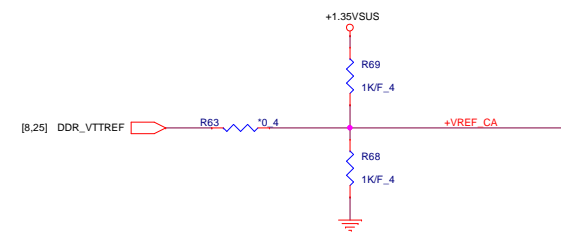
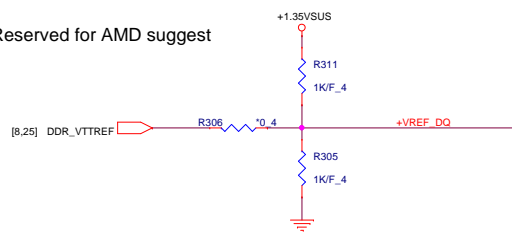


20140122 Stuff EC8,EC11,EC19,EC18,EC15 100pF for AMD DDR noise

For EMI RESERVE

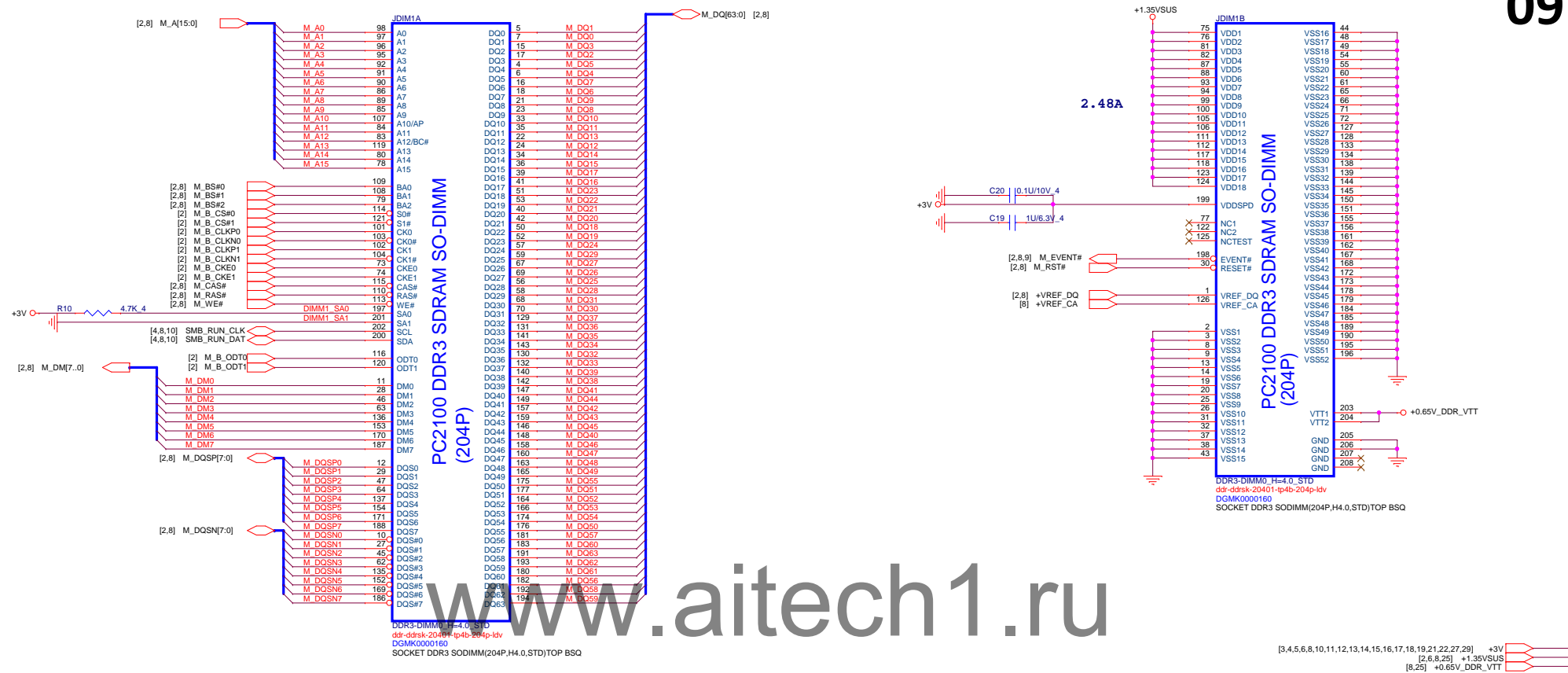


Reserved for AMD suggest

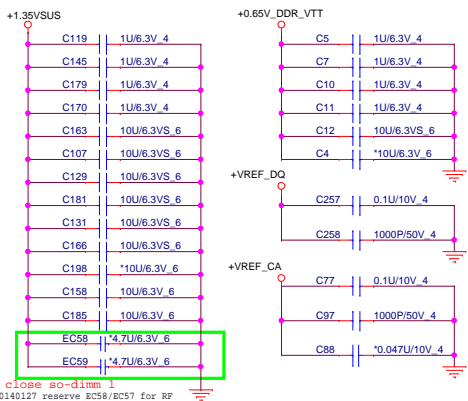


PROJECT : Y71
Quanta Computer Inc.

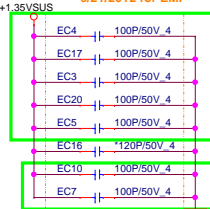
Size Custom	Document Number System Memory 1/2 (4.0H)	Rev 1A
Date: Tuesday, March 18, 2014		Sheet 8 of 30



Place these Caps near So-Dimm1.

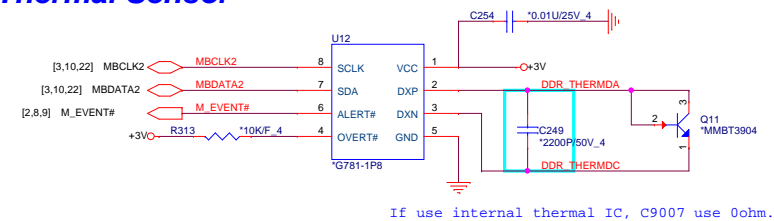


For EMI RESERVE



20140122 Stuff EC4, EC17, EC3, EC20, EC5, EC10, EC7 100pF for AMD DDR noise

Local Thermal Sensor



If use internal thermal IC, C9007 use 0ohm.

Main:AL000781039 G781-1P8(9Ah)
2nd:AL001412005 EMC1412-2-ACZL-TR(9Ah)

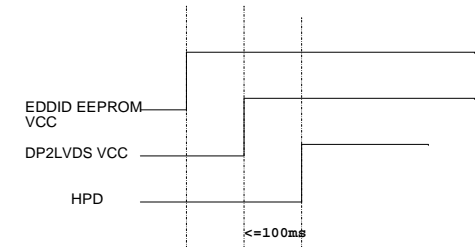
Main:AL001412003 EMC1412-1-ACZL-TR(98h)
2nd:AL000431014 TMP431ADGKR(98h)



PROJECT : Y71
Quanta Computer Inc.

Size	Document Number	Rev
Custom	System Memory 2/2 (4.0H)	1A
Date: Tuesday, March 18, 2014	Sheet 9 of 30	

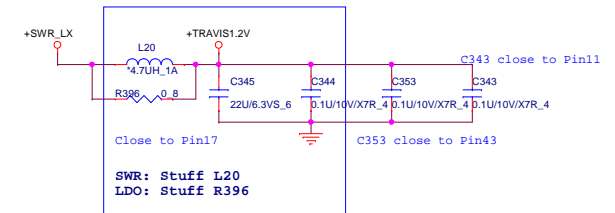
RTD2136S Power Up Sequence



[3,11] EDP_HPDI EDP_HPDI R415 1K/F 4 EDP_HPDI 2136

R423 100K/F_4

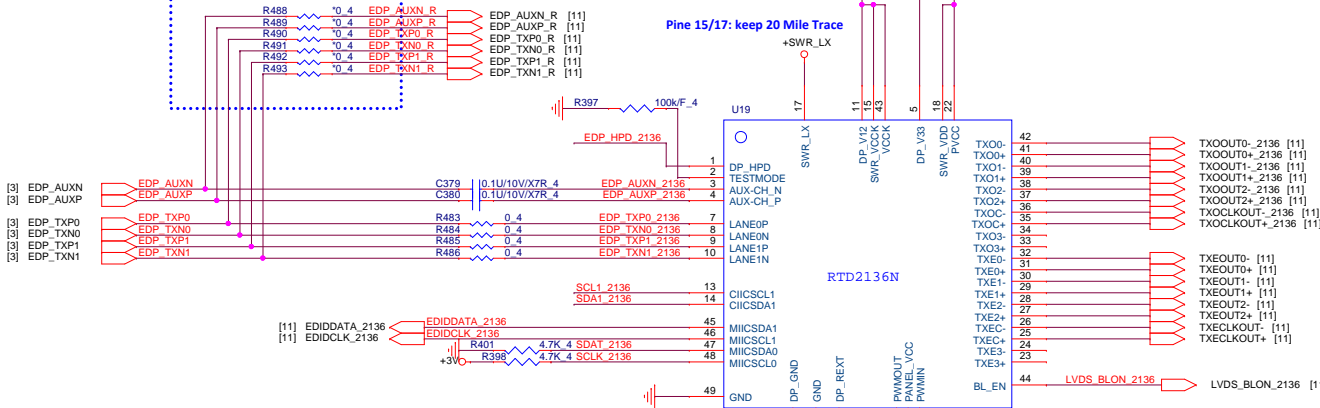
L20: need use CV-4709MN00 for Vendor suggestion
2nd CV-4709MN03



[3,4,5,6,8,9,11,12,13,14,15,16,17,18,19,21,22,27,29] +3V
[12,13,19,21,29] +1.5V

NB5	PROJECT : Y71 Quanta Computer Inc.		
	Size	Document Number	Rev
	Custom	LVDS converter RTD2136	1A
	Date: Tuesday, March 18, 2014	Sheet 10 of 30	

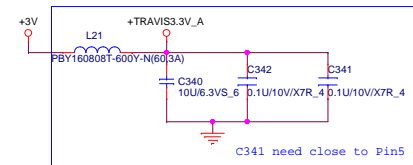
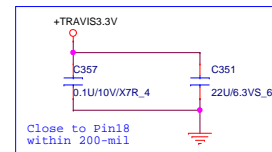
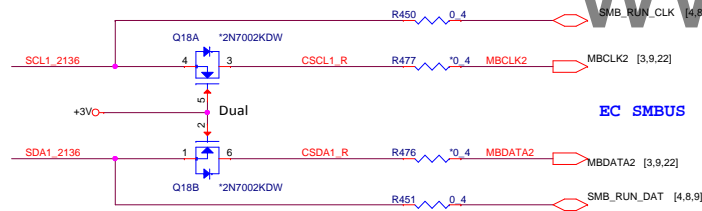
Reserve for co layout EDP CON, EDP only please stuff



IC body need add 3x3 via to GND

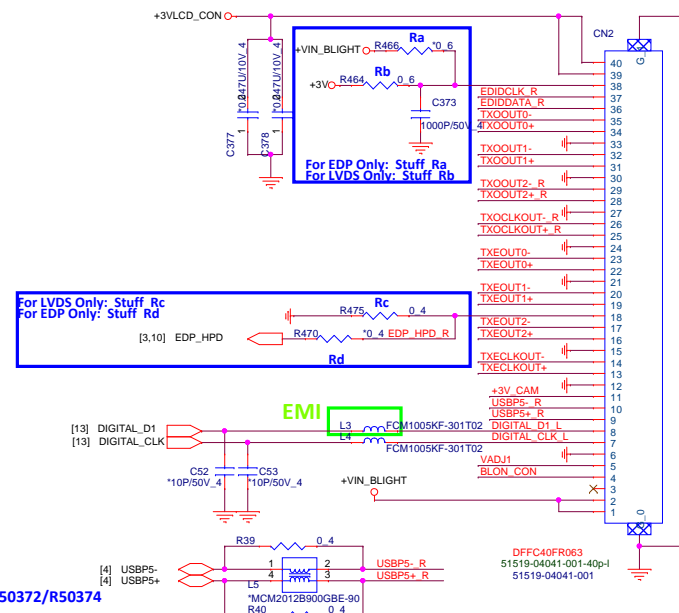
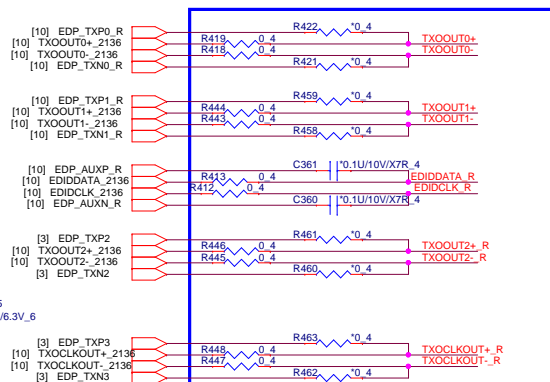
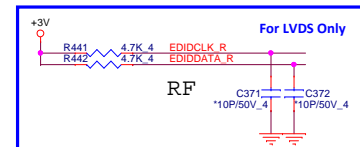
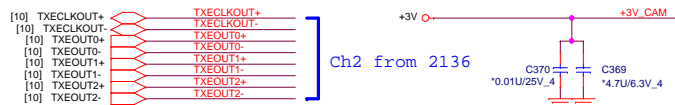
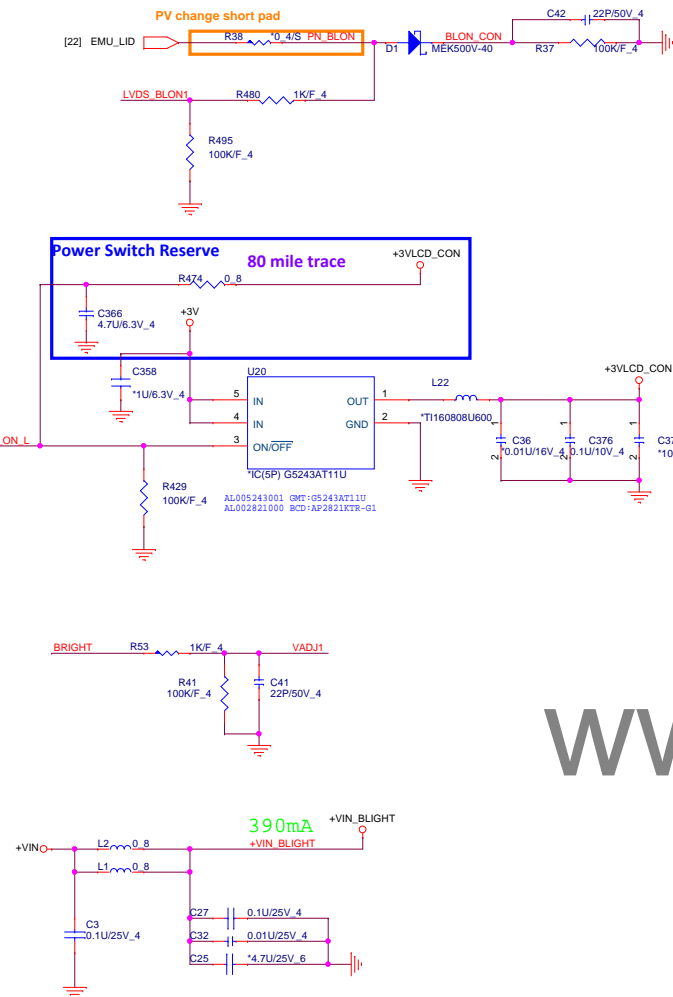
		MODE_CFG0(PIN47)	
		0	1
MODE_CFG1(PIN48)	0	X	EP MODE
	1	ROM ONLY MODE	EEPROM MODE

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LVDS conn.

11



For EDP Only: stuff
R37/R45/R72/R73/C30121/R50368/R50370/R50372/R50374

For LVDS only: stuff
R17/R18/R11/R120/R33/R34/R50367/R50369/R50372/R50374

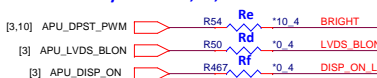
For EDP Only: stuff

For EDP Only: stuff

For LVDS Only: stuff Ra,Rb,Rc

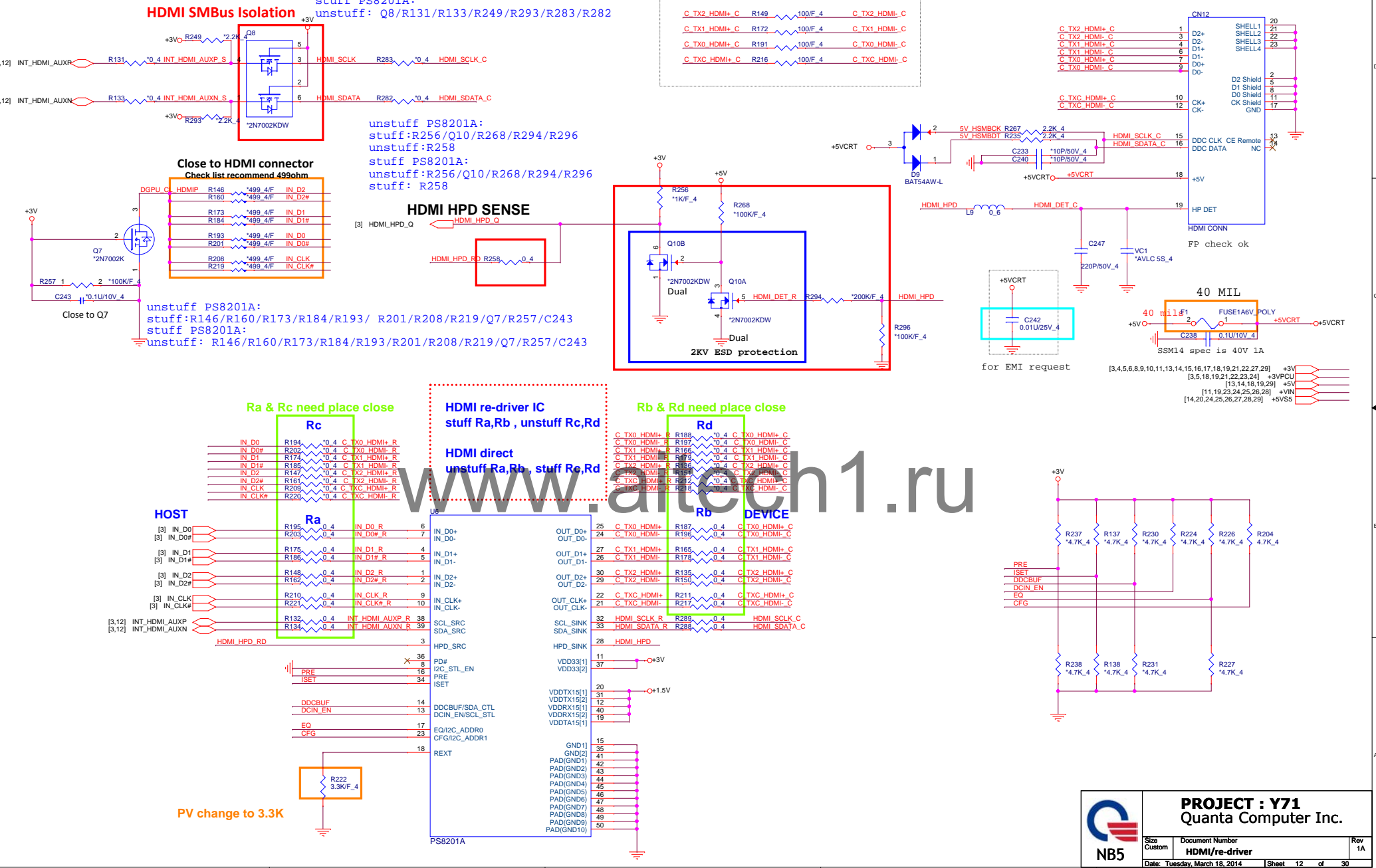


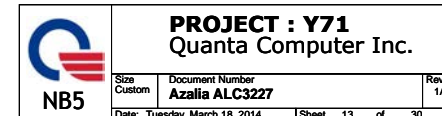
For EDP Only: stuff Rd,Re,Rf



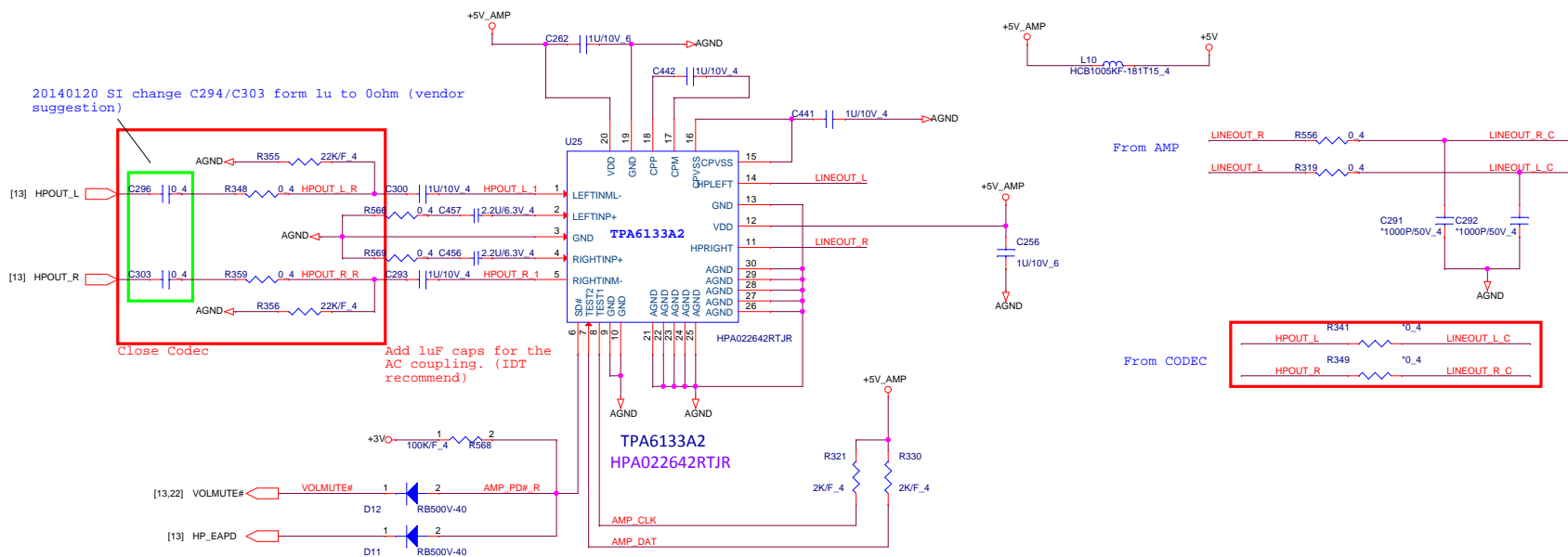
PROJECT : Y71
Quanta Computer Inc.

Size	Document Number	Rev
Custom	LCD CONN/Camera/D-MIC	1A
Date: Tuesday, March 18, 2014	Sheet 11 of 30	

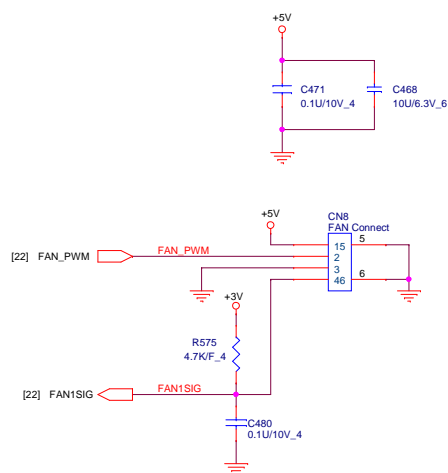




20140120 SI change C294/C303 form 1u to 0ohm (vendor suggestion)



CPU FAN



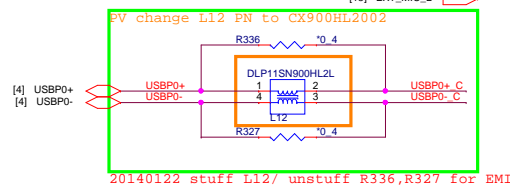
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Close CN5

need check PN& FP

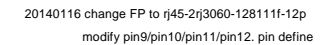
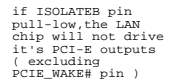
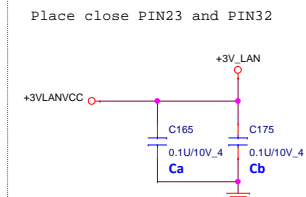
SPK
USB2.0

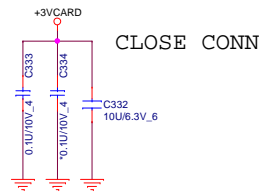
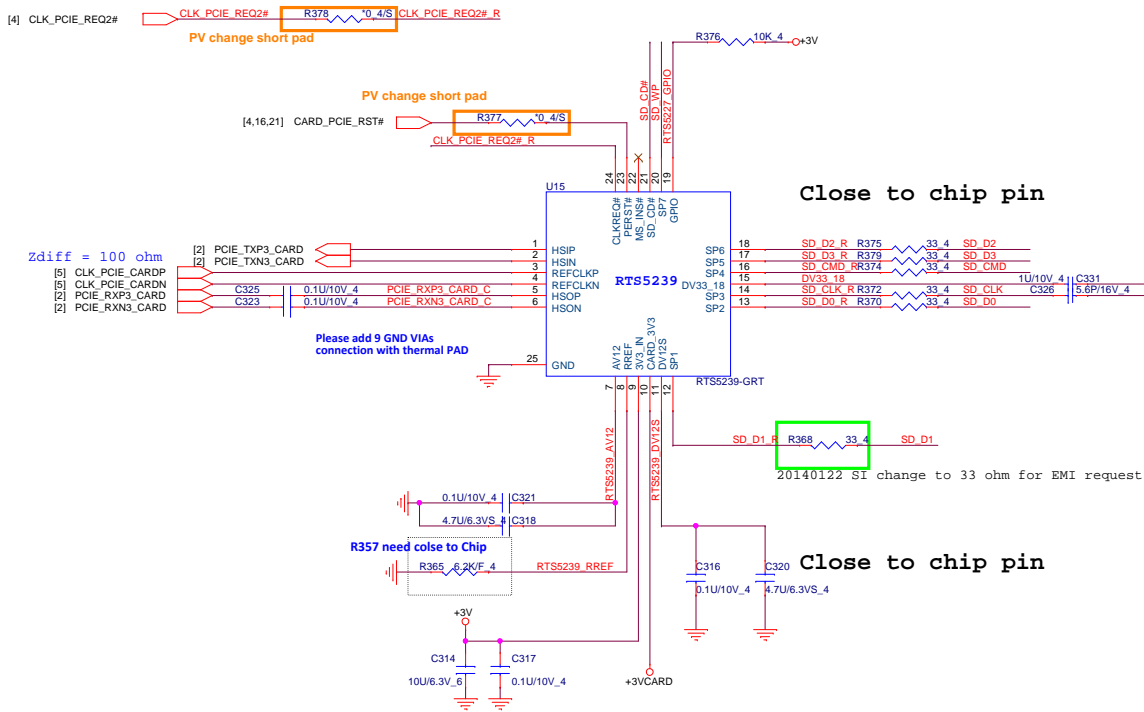
AUDIO COMBO JACK



[20,24,25,26,27,28,29] +5VS5
[3,4,5,6,8,9,10,11,12,13,15,16,17,18,19,21,22,27,29] +3V
[12,13,18,19,29] +5V
[3,5,18,19,21,22,23,24] +3VPCU

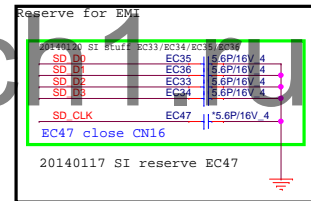
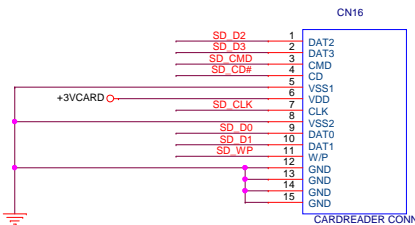
NB5	PROJECT : Y71 Quanta Computer Inc.	
	Size Custom	Document Number HPA022642/Audio/USB2/FAN
	Date: Tuesday, March 18, 2014	Sheet 14 of 30





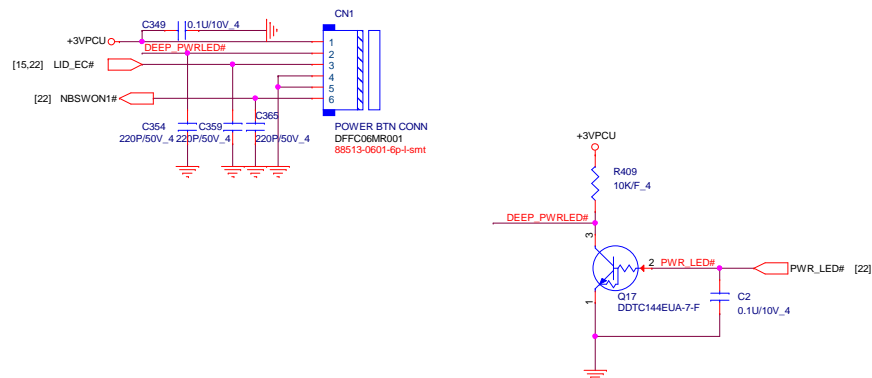
www.aitec.com

CARD READER

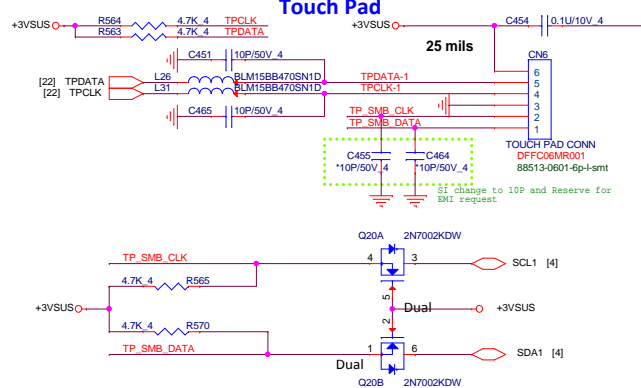


pin define ok / FP ok

Power Botton Connector

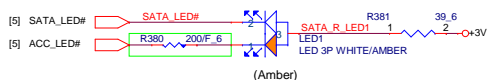


Touch Pad

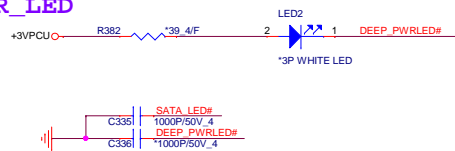


LED

SATA LED

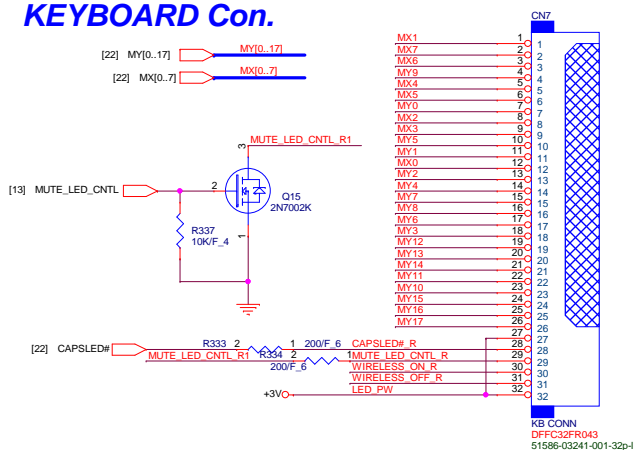


PWR LED



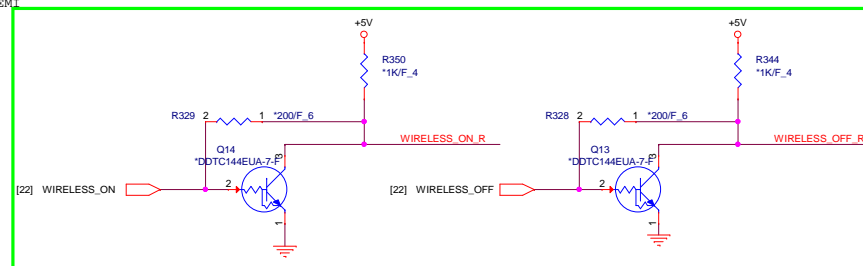
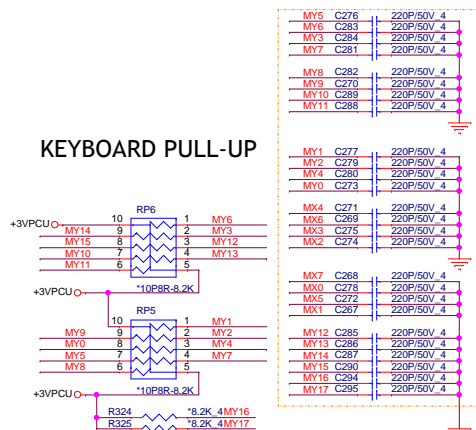
PWR LED Clamshell only

KEYBOARD Con.



20140122 Stuff keyboard capacitors for EMI

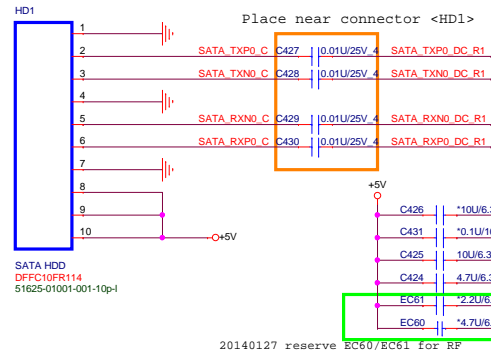
KEYBOARD PULL-UP



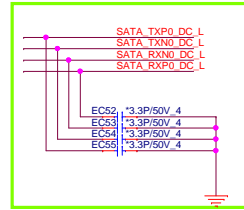
SATA HDD CONNECTOR FFC TYPE

SATA Re-driver

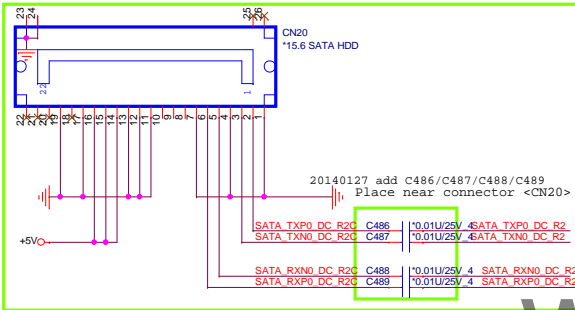
19



20140123 add for EMI



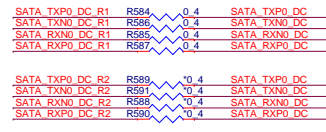
SI-co-lay SATA HDD Connector



SI add for co-lay use

To FFC conn

To direct conn



SATA re-driver IC
stuff Rb,Rc , unstuff Ra,Rd

SATA direct
unstuff Ra,Rc , stuff Ra,Rd

HOST

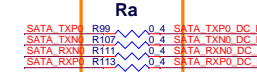
[5] SATA_TXP0

[5] SATA_TXN0

[5] SATA_RXN0

[5] SATA_RXP0

Ra & Rb need place close



Ra & Rb need place close



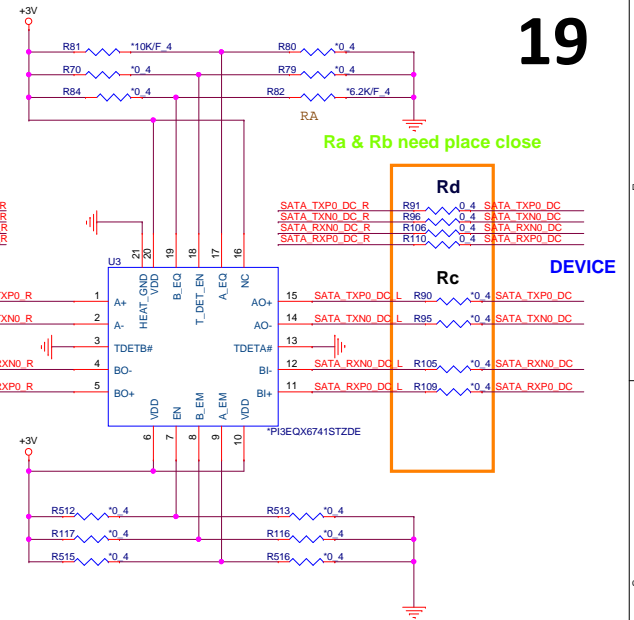
DEVICE

[15] SATA_TXP0_DC

[14] SATA_TXN0_DC

[12] SATA_RXN0_DC

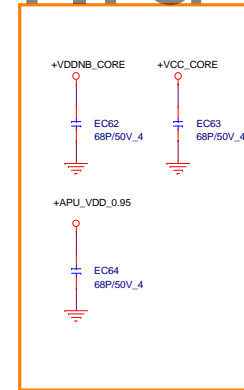
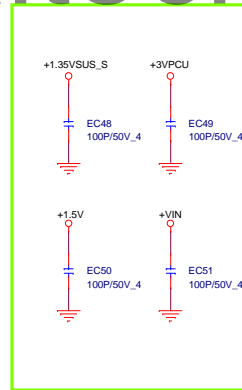
[11] SATA_RXP0_DC



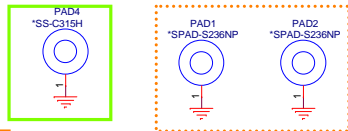
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20140123 SI add for EMI

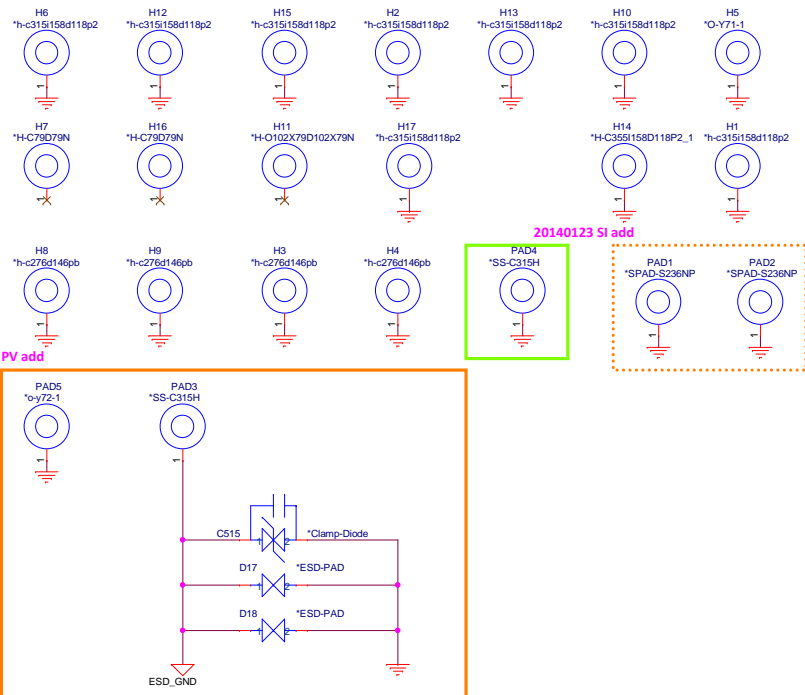
PV add for EMI



20140123 SI add



HOLE

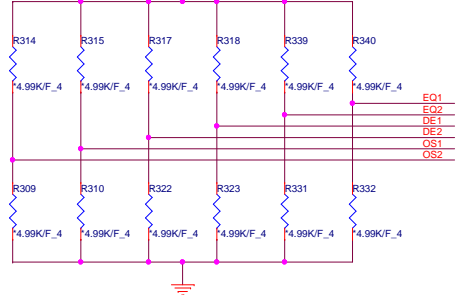
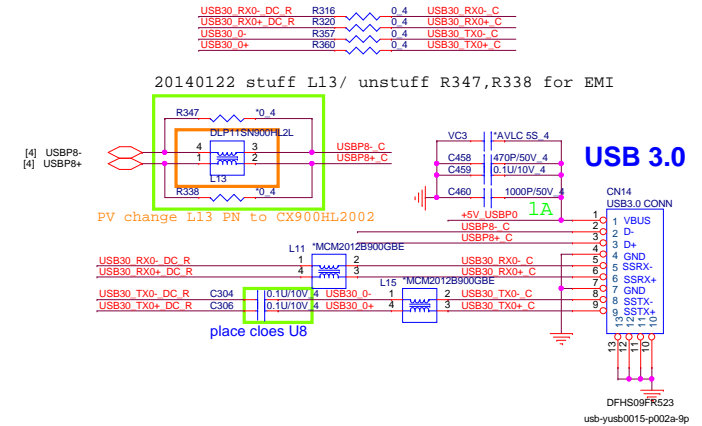
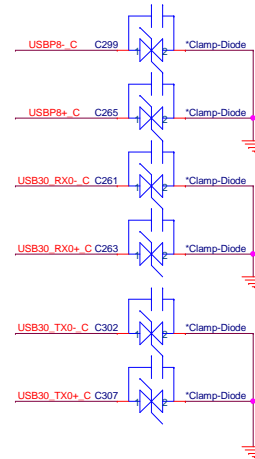
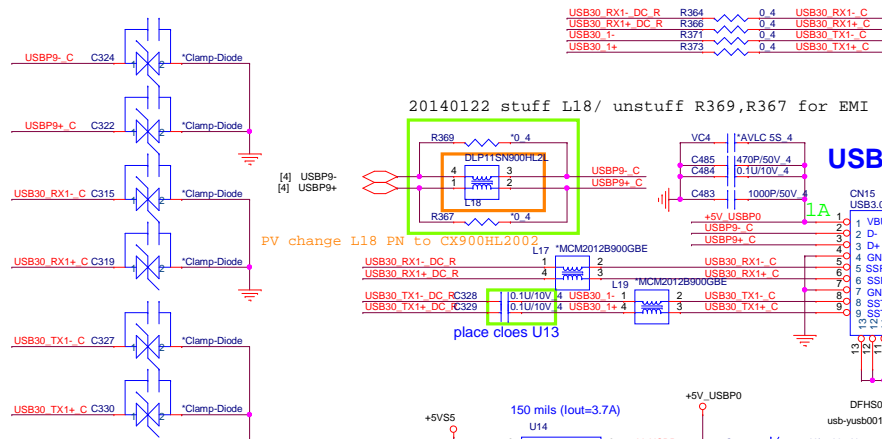


[3,4,5,6,8,9,10,11,12,13,14,15,16,17,18,21,22,27,29]

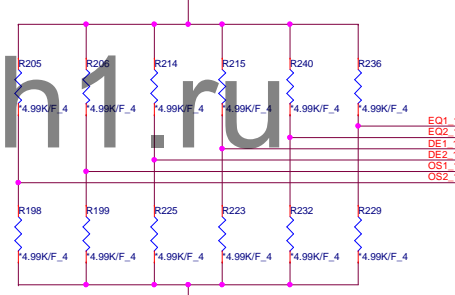
[12,13,14,18,29]

+3V

+5V

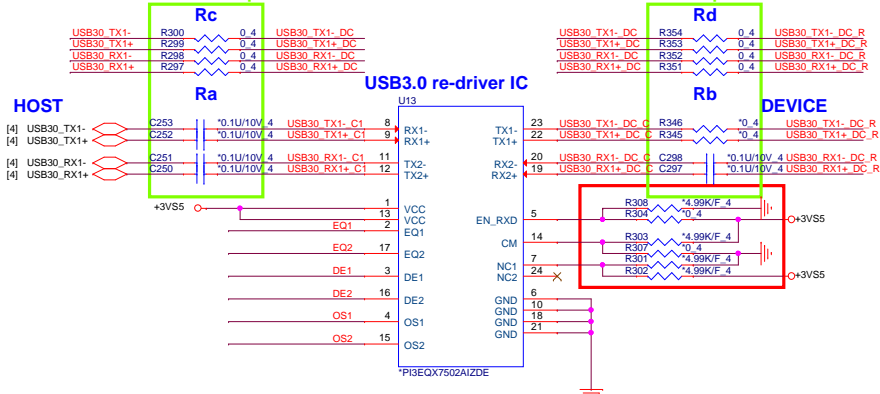


OSx		Transition Bit Amplitude	
NC(default)		1000	
0		870	
1		1085	
OSx		Equalization dB	
NC(default)		0	
0		7	
1		15	
DEX	OSx=NC	OSx=0	OSx=1
NC	-3.5dB	-2.2dB	-4.4dB
0	-5.0dB	-5.2dB	-6.0dB
1	-8.5dB	-8.9dB	-7.6dB
EN_RXD		DEVICE FUNCTION	
1(default)		Normal operating mode	
0		Sleep mode	
CM		DEVICE FUNCTION	
0(default)		Normal operating mode	
1		Compliance mode	



Ra & Rc need place close

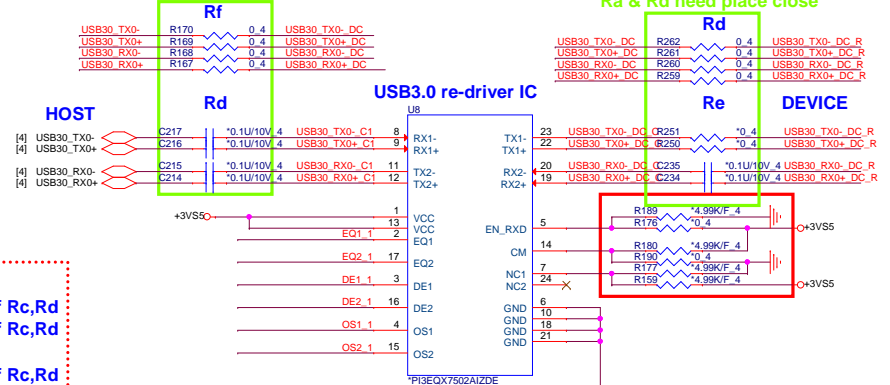
Ra & Rd need place close



USB3.0 re-driver IC
stuff Ra,Rb , unstuff Rc,Rd
USB3.0 direct
unstuff Ra,Rb , stuff Rc,Rd
unstuff Rd,Re , stuff Rf,Rd

Rd & Rf need place close

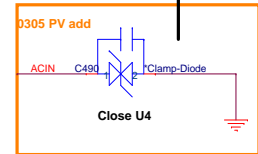
Ra & Rd need place close



[4,5,6,7,15,21,22,24,26,29] +3V55
[14,24,25,26,27,28,29] +5V55
[3,5,18,19,21,22,23,24] +3VPCU

[3,4,5,6,8,9,10,11,12,13,14,15,16,17,18,19,21,27,29] +3V
[3,5,18,19,21,23,24] +3VPCU

That will help to isolate some of over shoot voltage from AC thru charger IC to EC.



For Home button IC update fw
For G-sensor x 2

PV add for press some key to let system dump BSOD file

0120 SI add for Auto load code

0304 PV add

0.95 SS_ON

0120 SI add for Auto load code

0.95 SS_ON

THRM_MONITOR1

C168

0.1u/10V_4

[24,25,26] S5_ON

[3] THRM_MONITOR1

HW_ALERT# R118

5VS5_ON

[23] MBATLED0#

[23] AC_LED_ON#

[18] WIRELESS_ON

[18] WIRELESS_OFF

Power Button Reset

EC_MRDLY_RST

U2

MRDLY VCC

GND RESET#

EC_CD_RST

MR#

*G677L308A31U

C39

*0.1u/25V_4

C38

*0.047u/10V_4

C40

*0.047uF_4

C41

*0.047uF_4

C42

*0.047uF_4

C43

*0.047uF_4

C44

*0.047uF_4

C45

*0.047uF_4

C46

*0.047uF_4

C47

*0.047uF_4

C48

*0.047uF_4

C49

*0.047uF_4

C50

*0.047uF_4

C51

*0.047uF_4

C52

*0.047uF_4

C53

*0.047uF_4

C54

*0.047uF_4

C55

*0.047uF_4

C56

*0.047uF_4

C57

*0.047uF_4

C58

*0.047uF_4

C59

*0.047uF_4

C60

*0.047uF_4

C61

*0.047uF_4

C62

*0.047uF_4

C63

*0.047uF_4

C64

*0.047uF_4

C65

*0.047uF_4

C66

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C67

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C68

*0.047uF_4

C69

*0.047uF_4

C70

*0.047uF_4

C71

*0.047uF_4

C72

*0.047uF_4

C73

*0.047uF_4

C74

*0.047uF_4

C75

*0.047uF_4

C76

*0.047uF_4

C77

*0.047uF_4

C78

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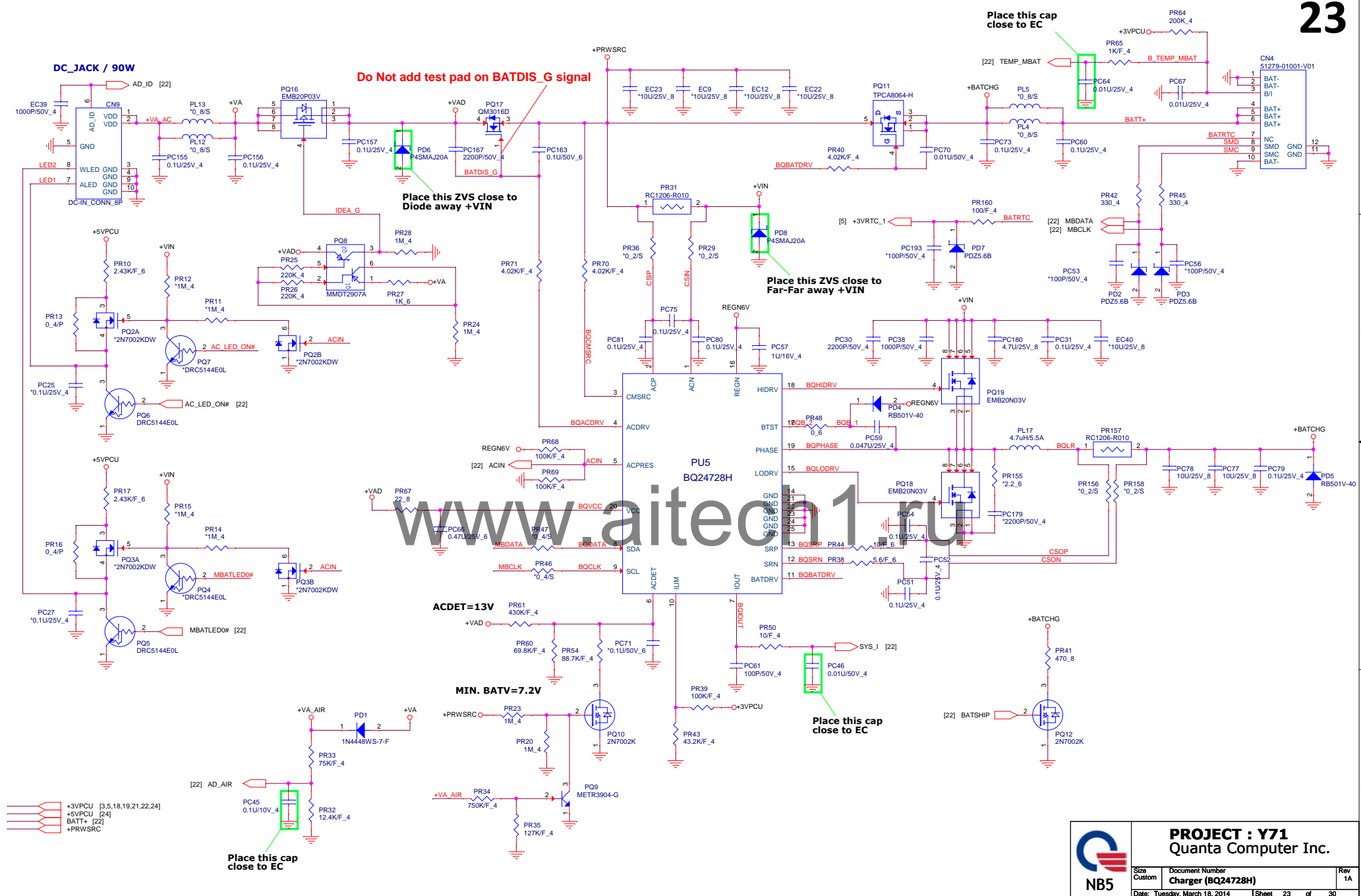
C161

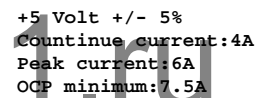
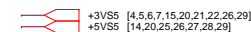
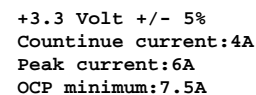
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C162

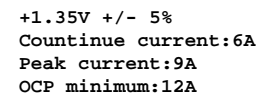
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C163

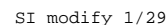




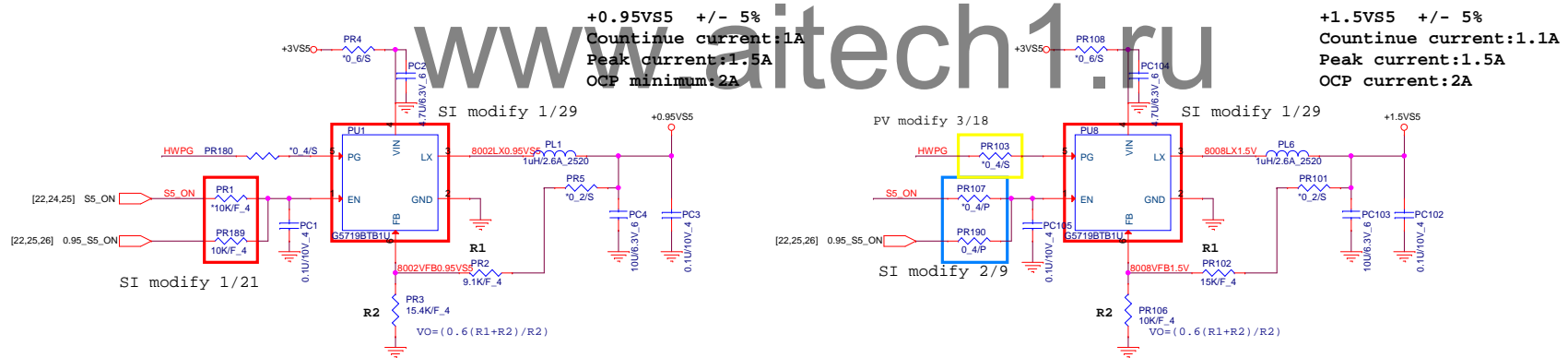
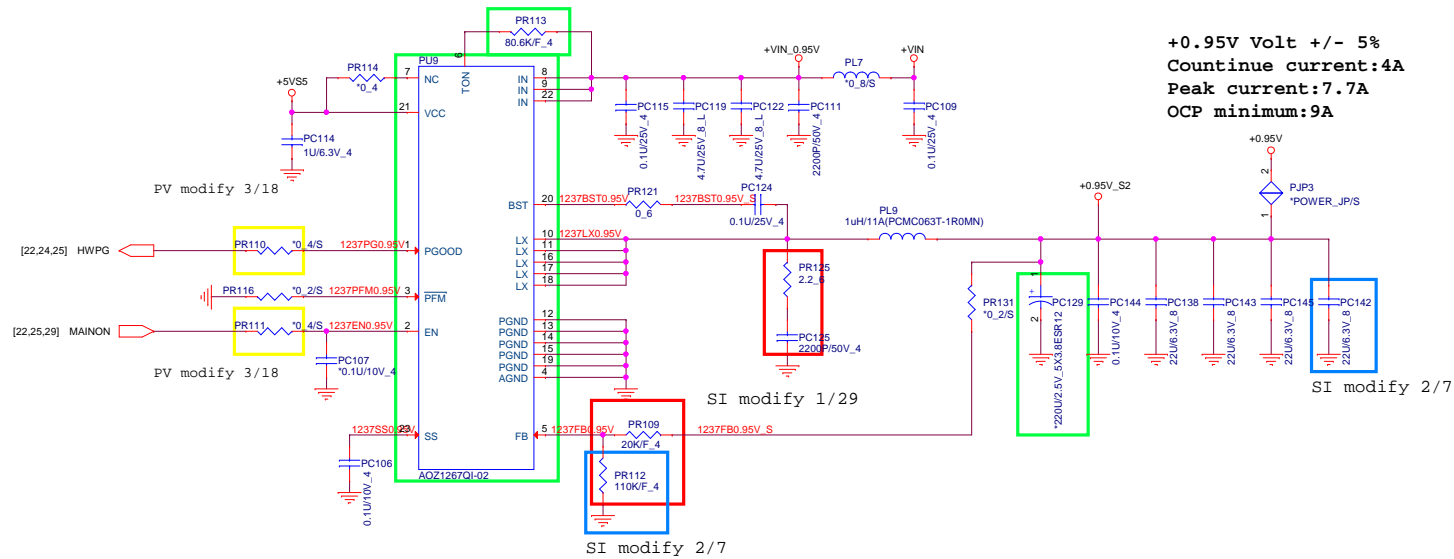
USB Charge support	Ra	Rb
Vine (No support)	Stuff	NA
Envy (Support)	NA	Stuff

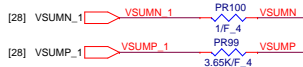


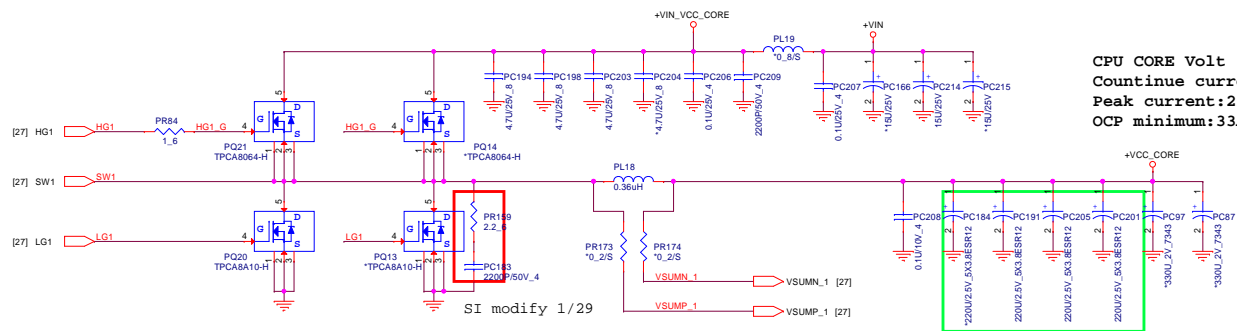
1.8VS5 +/- 3%
Continue current:2A
Peak current:3A
OCP minimum:4A


$$V_0 = 0.6 * (R_1 + R_2) / R_2$$

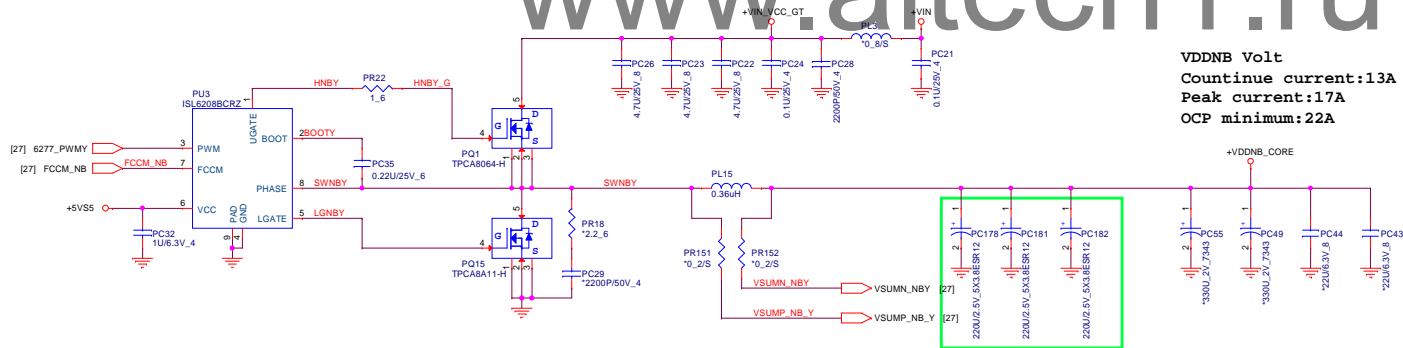
SI modify 2/9

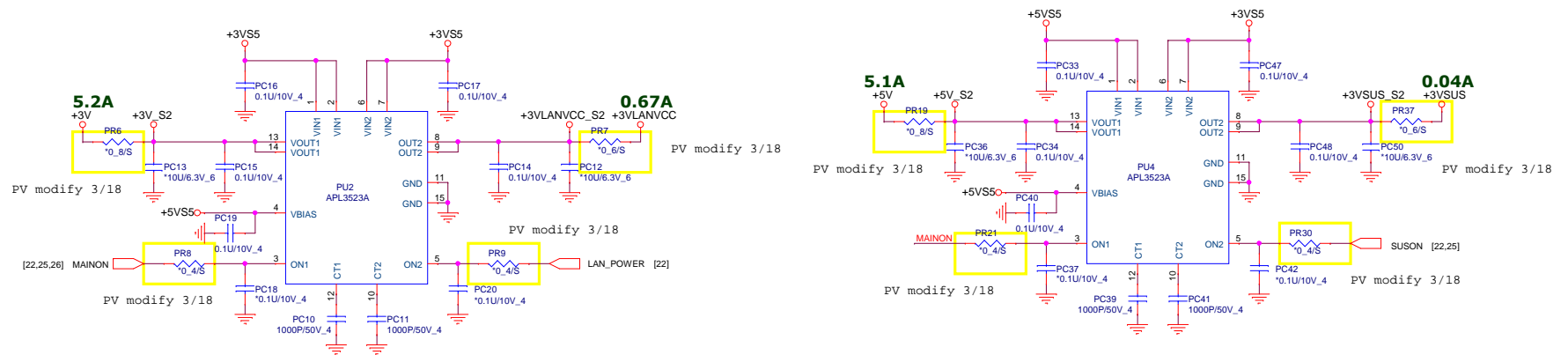




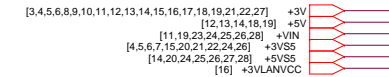
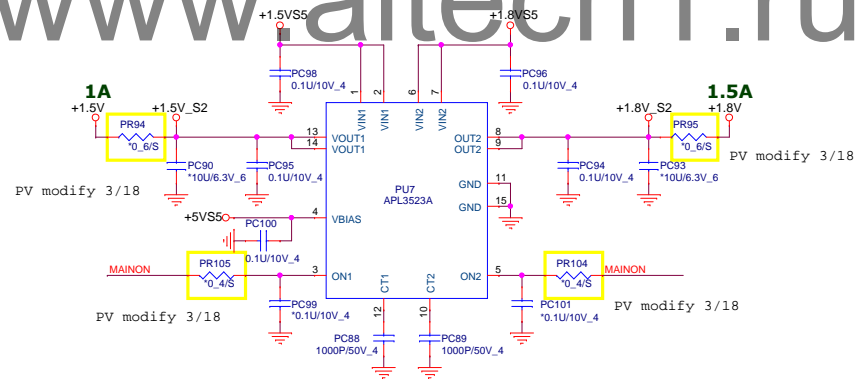


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APU Beema

Touchpad

DDR Thermal

RTD2136
DDR Thermal IC

EC KB9028QF

DDR Thermal IC

Battery
Charger

Home Key FW update

G sensor

Touch Pad

