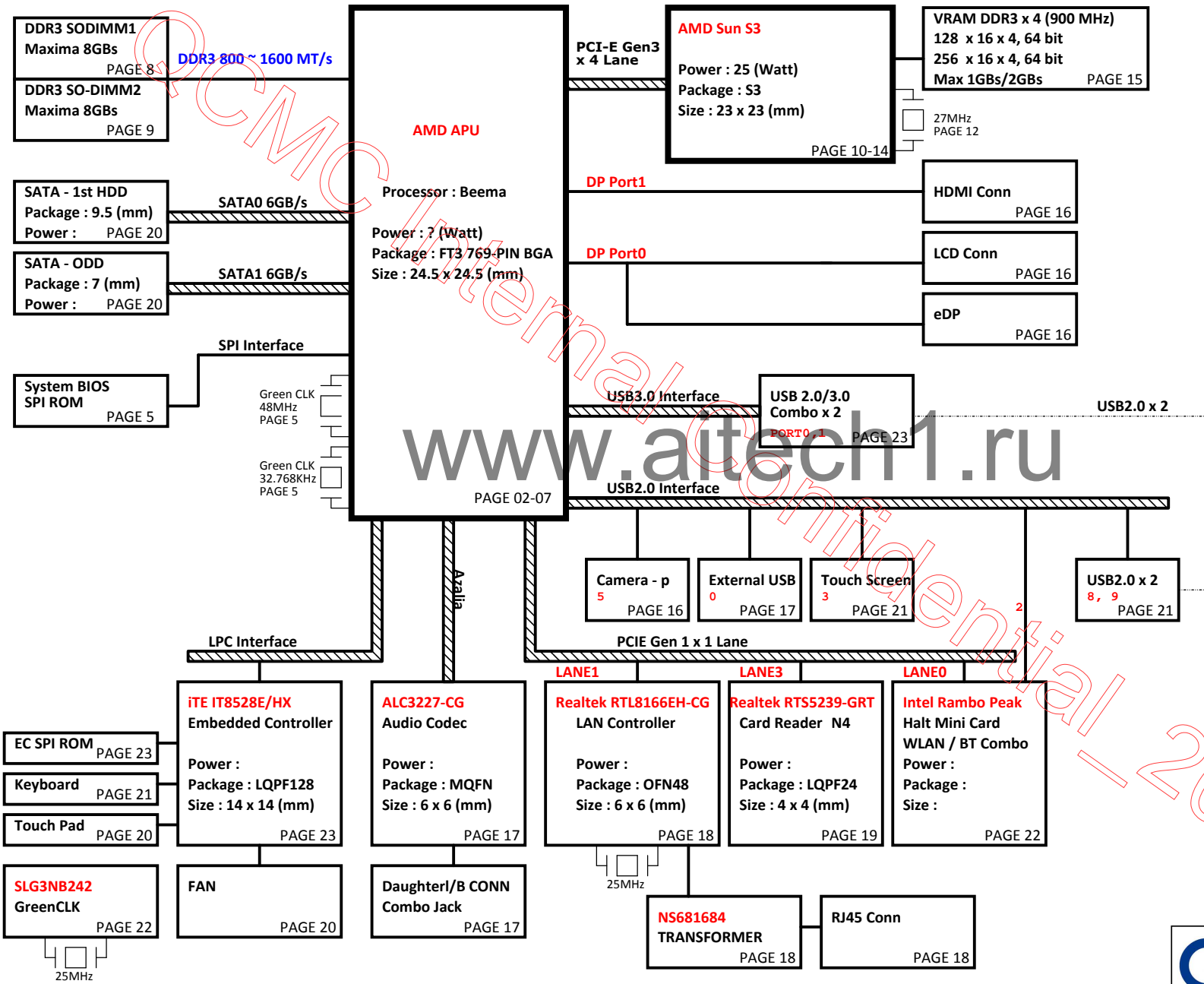


Lean G_AMD Beema DIS/UMA (14"/15.6")

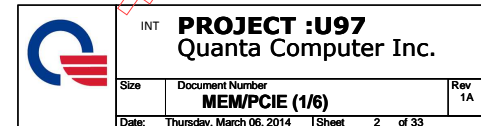
Ultra/Slim⁰¹

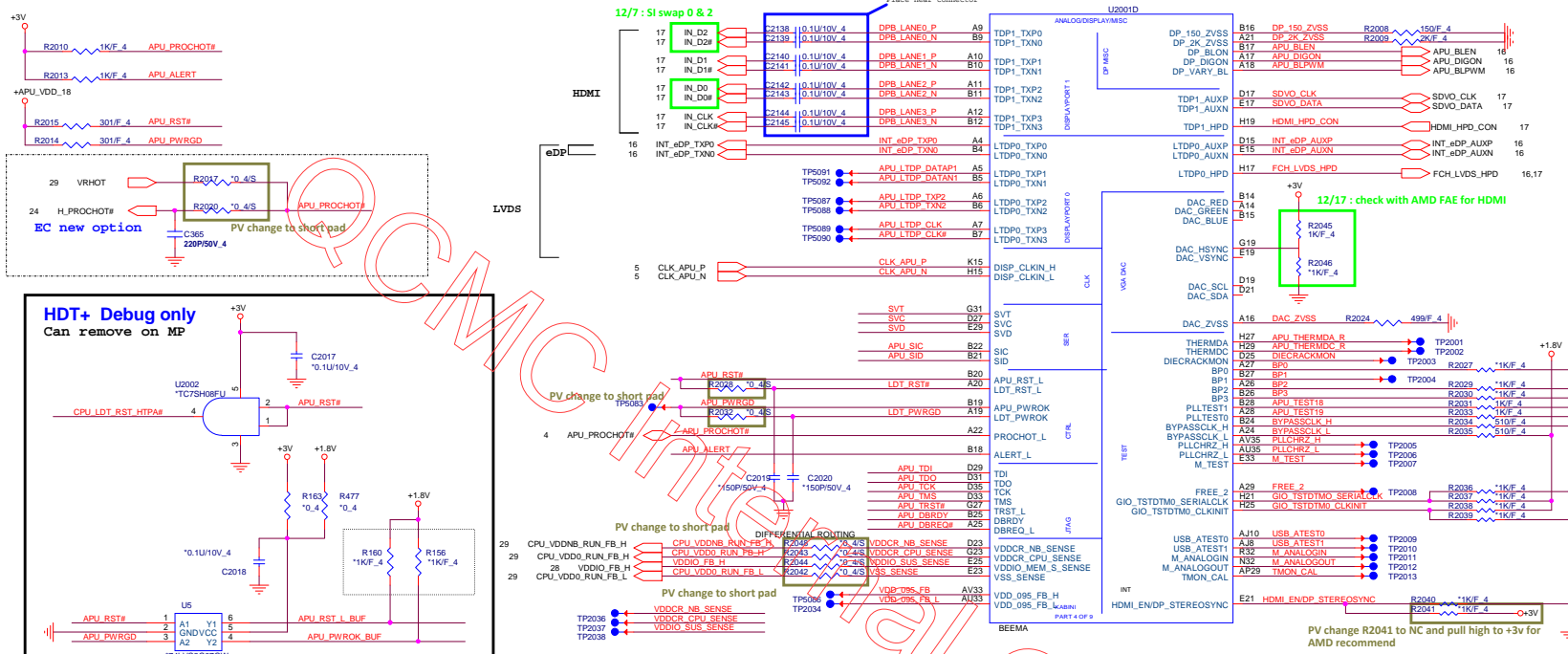


PCB 6L STACK UP

LAYER 1 : TOP
LAYER 2 : SGND
LAYER 3 : IN1(High)
LAYER 4 : IN2(Low)
LAYER 5 : SVCC
LAYER 6 : BOT

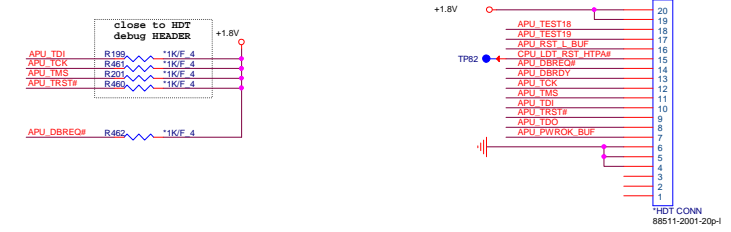
- Power Source**
- TI BQ24728**
System Charge Power (+BATCHG)
PAGE 24
 - Rictek RT8223PZ**
System Power (+3VPCU/+5VPCU/
+3VSS/+5VSS)
PAGE 25
 - AOZ1237Q/APW8824CTI/G9183**
KABINI Power (+0.95V/+0.95VSS
/+1.5VSS)
PAGE 26
 - TI TPS51216**
System Memory Power (+1.5VSSUS/
+0.75V_DDR_VTT)
Rictek RT8068A
KABINI Power (+1.8VSS)
PAGE 27
 - Intersil ISL6277HRTZ/ISL6208BCRZ**
Processor Power (+VCC_CORE/
+VDDNB_CORE)
PAGE 28~29
 - GMT G5934R21U**
System Discharge Power
(+1.5V/+3V/+5V)
(+3VSSUS/+3VLANVCC/+1.8V)
PAGE 30
 - On-semi ADP3211A**
VGA Power (+VGA_CORE)
PAGE 31
 - Rictek RT8086A**
DGPU Power (+1.0V_VGA/+3V_VGA
/+1.5V_VGA/+1.8V_VGA/)
PAGE 32



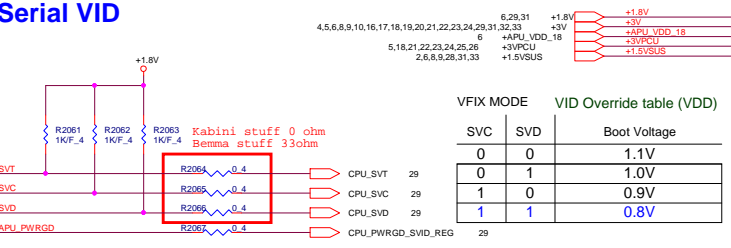


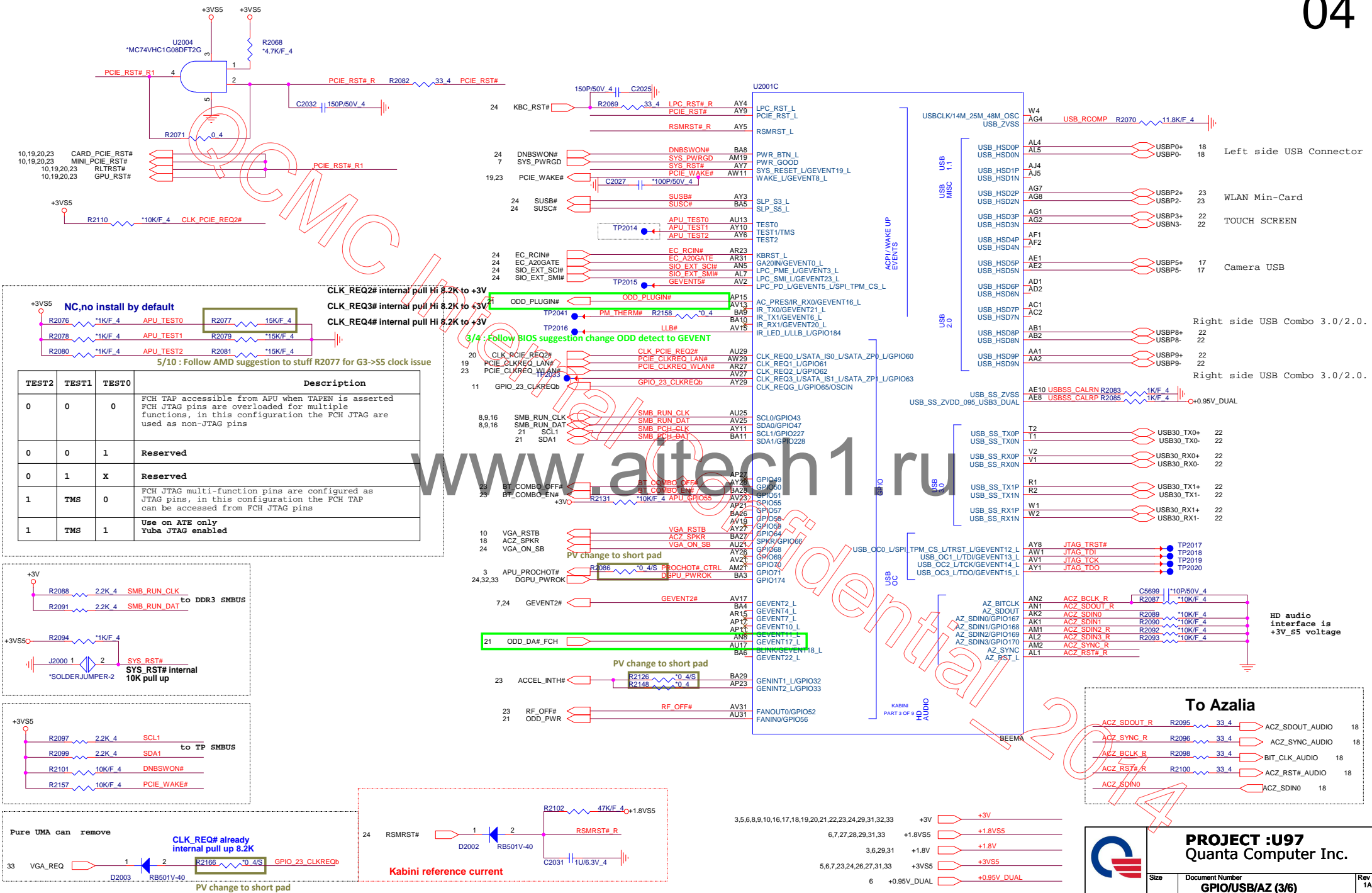
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HDT+ Connector for Debug only

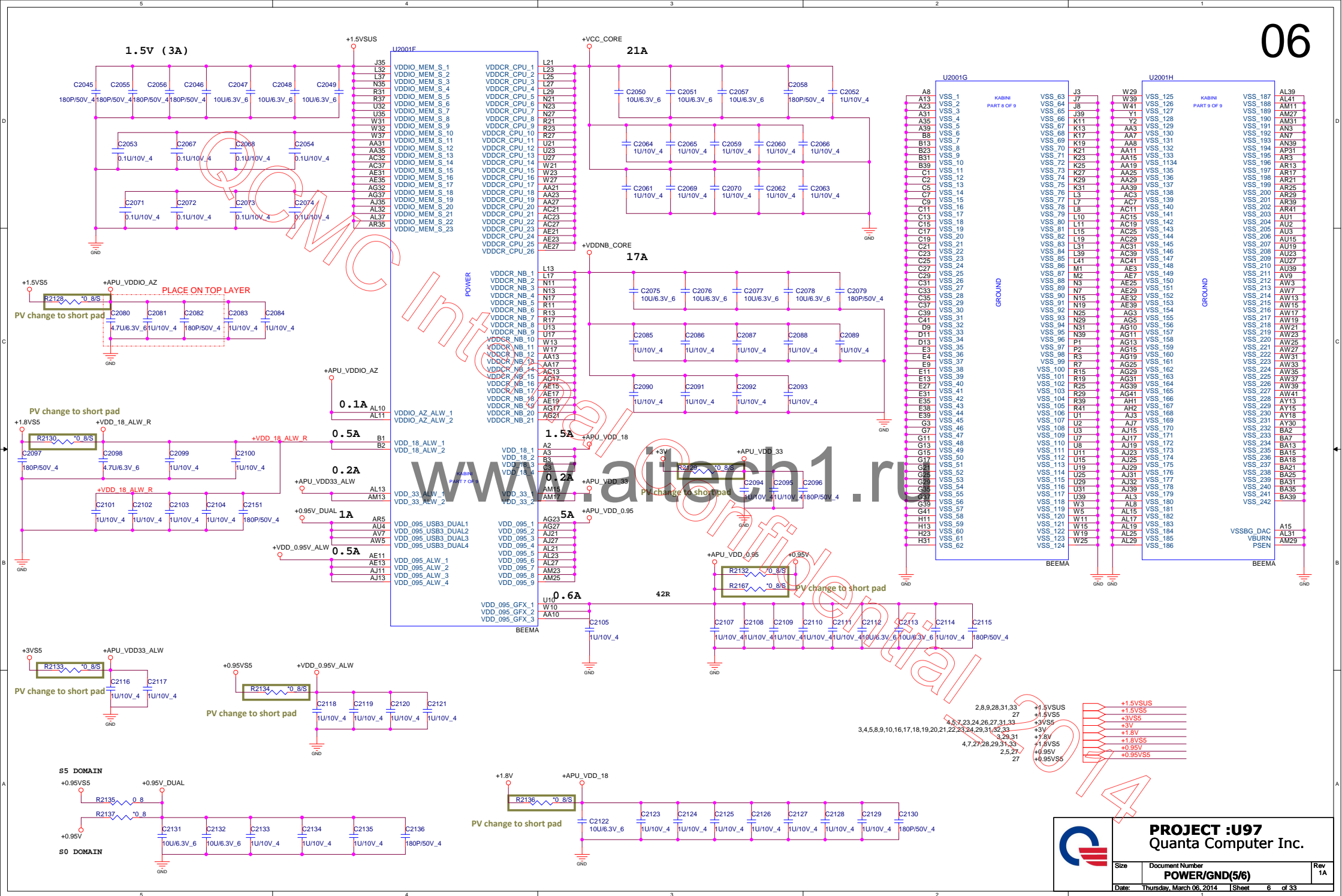


Serial VID





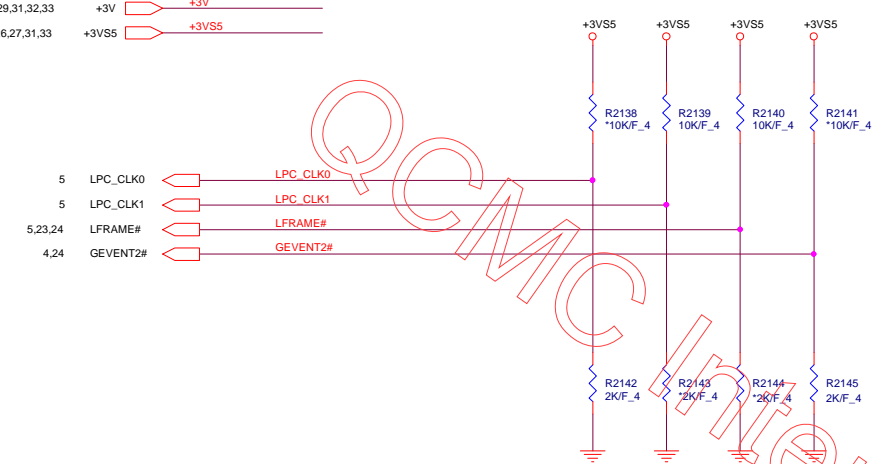




STRAPS PINS

OVERLAP COMMON PADS WHERE POSSIBLE FOR DUAL-OP RESISTORS.

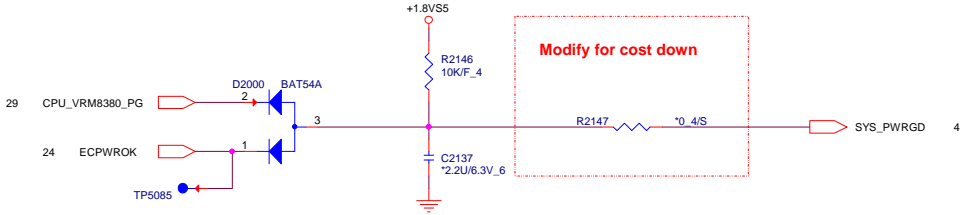
DEBUG STRAPS

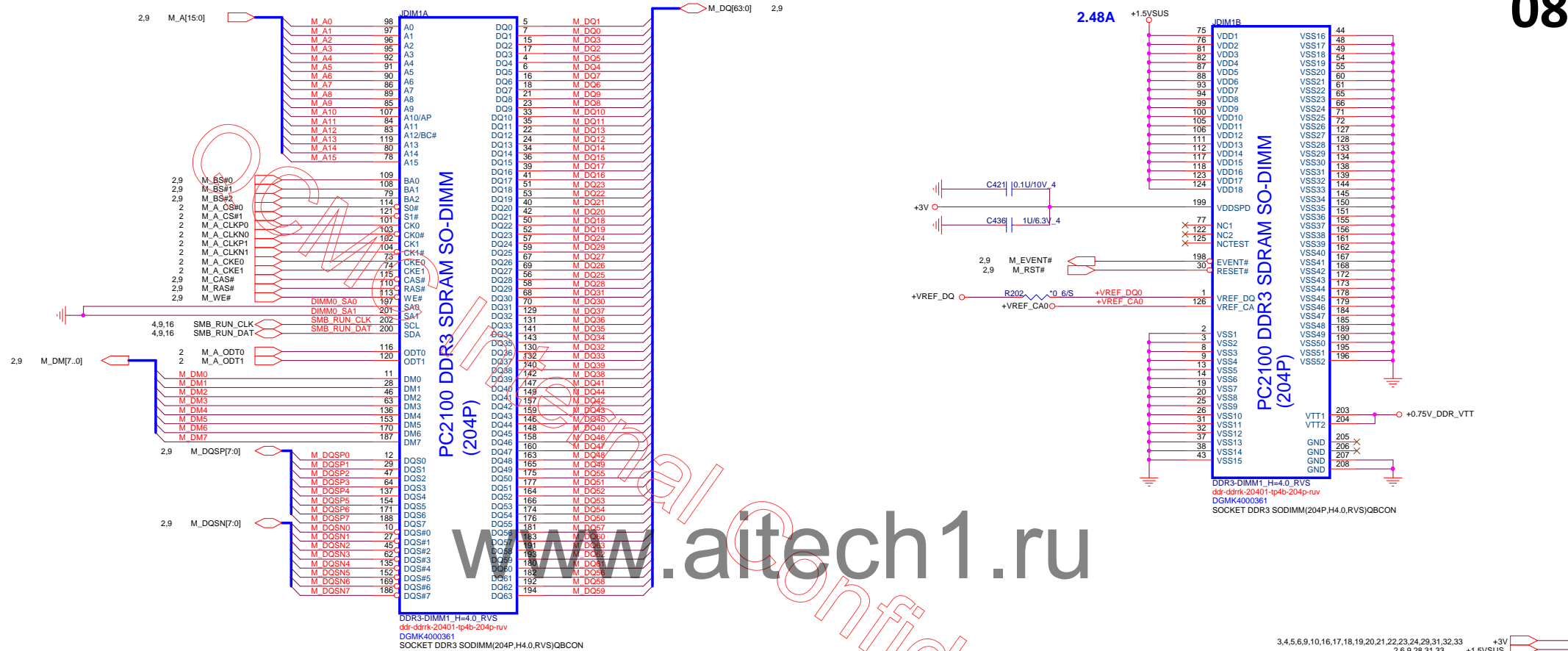


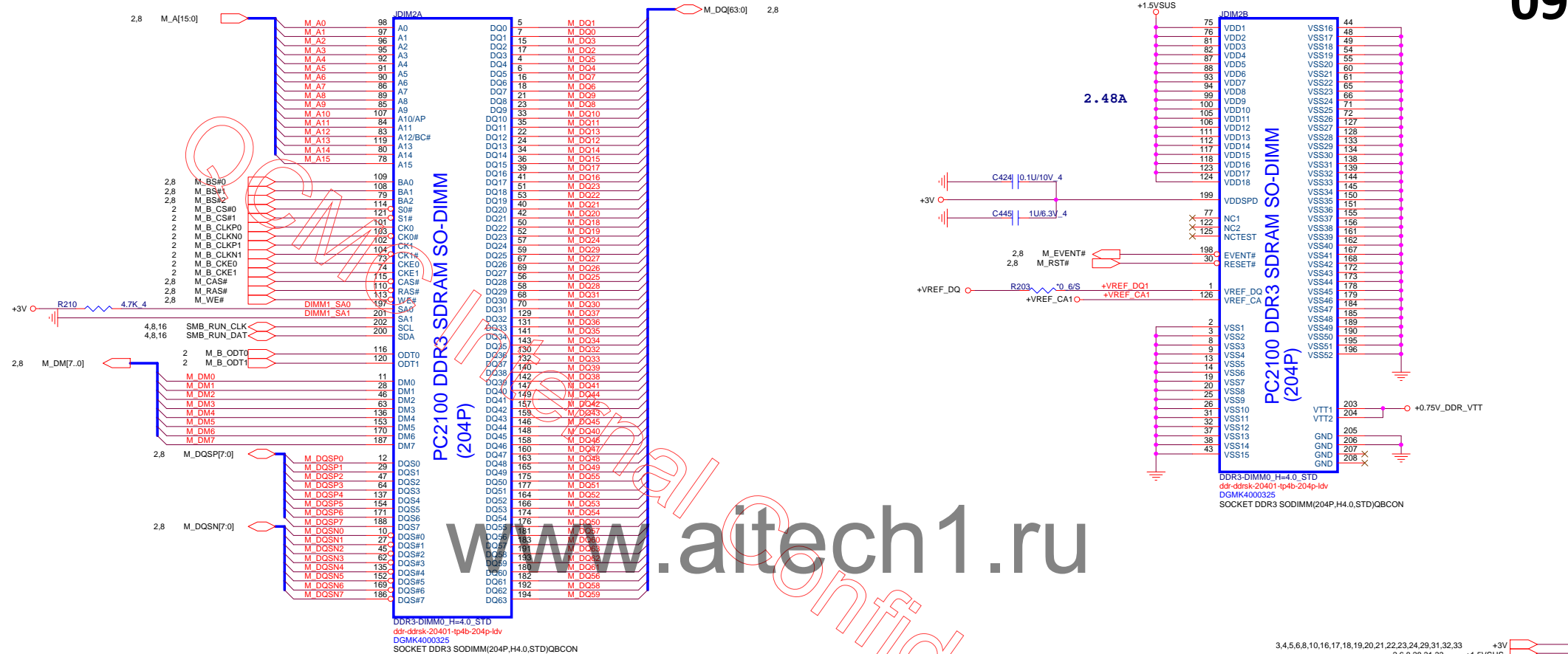
REQUIRED STRAPS

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

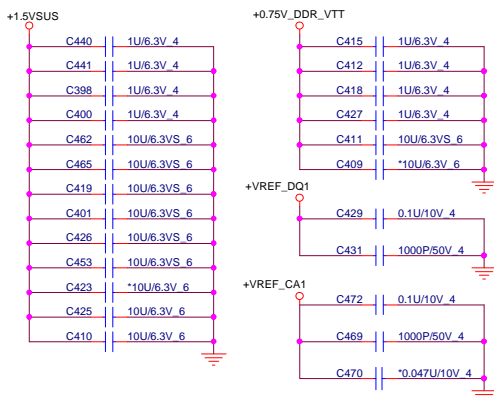
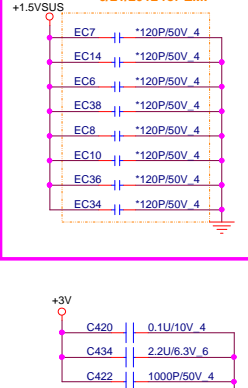
SYS_PWRGD





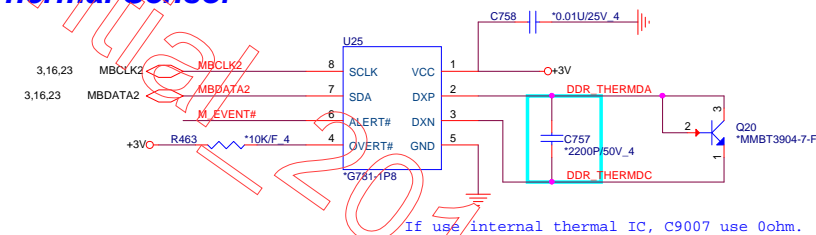


Place these Caps near So-Dimm1.

For EMI RESERVE
6/21/2012 for EMI

Local Thermal Sensor

DDR3 Thermal Sensor

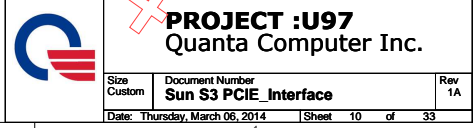


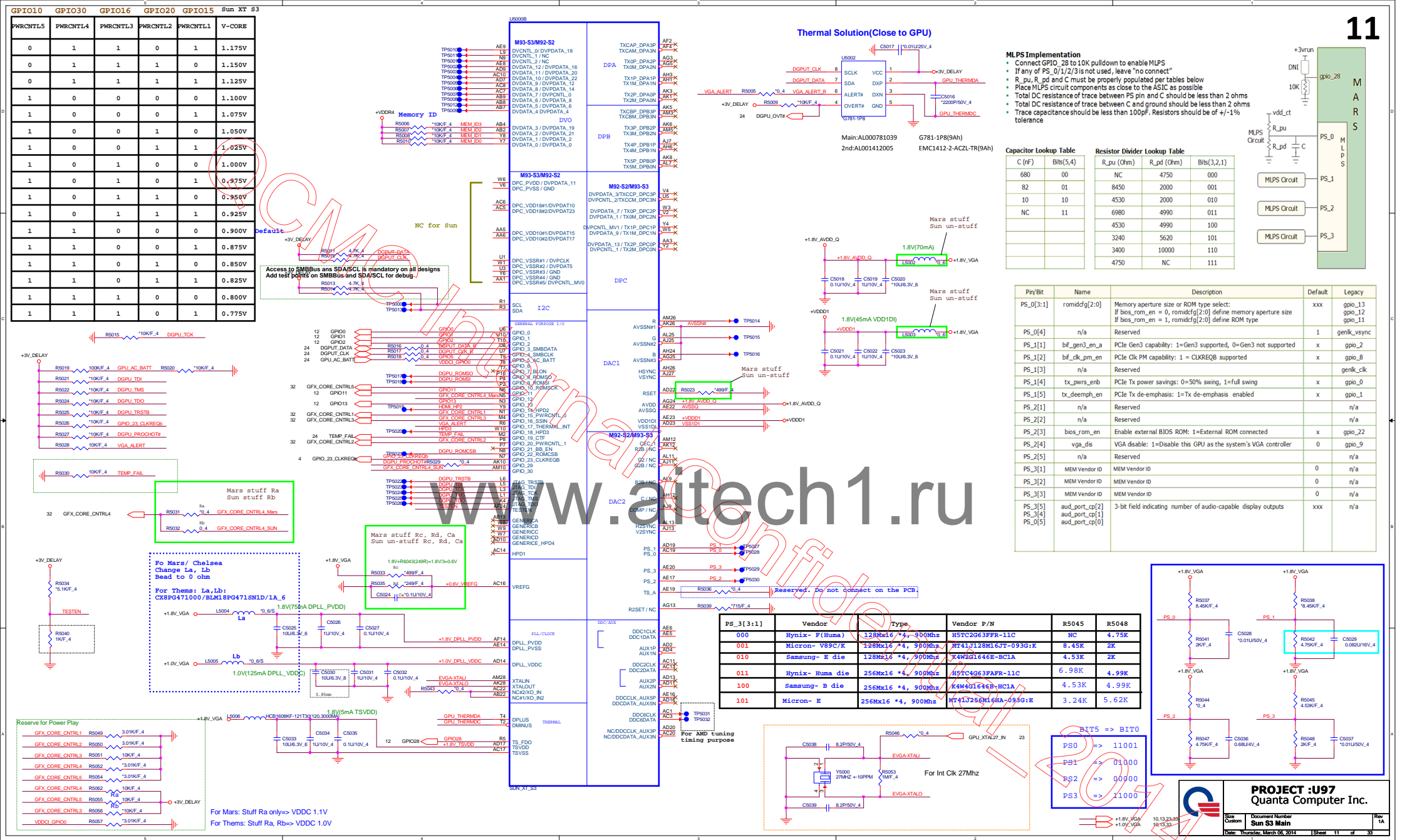
If use internal thermal IC, C9007 use 0ohm.

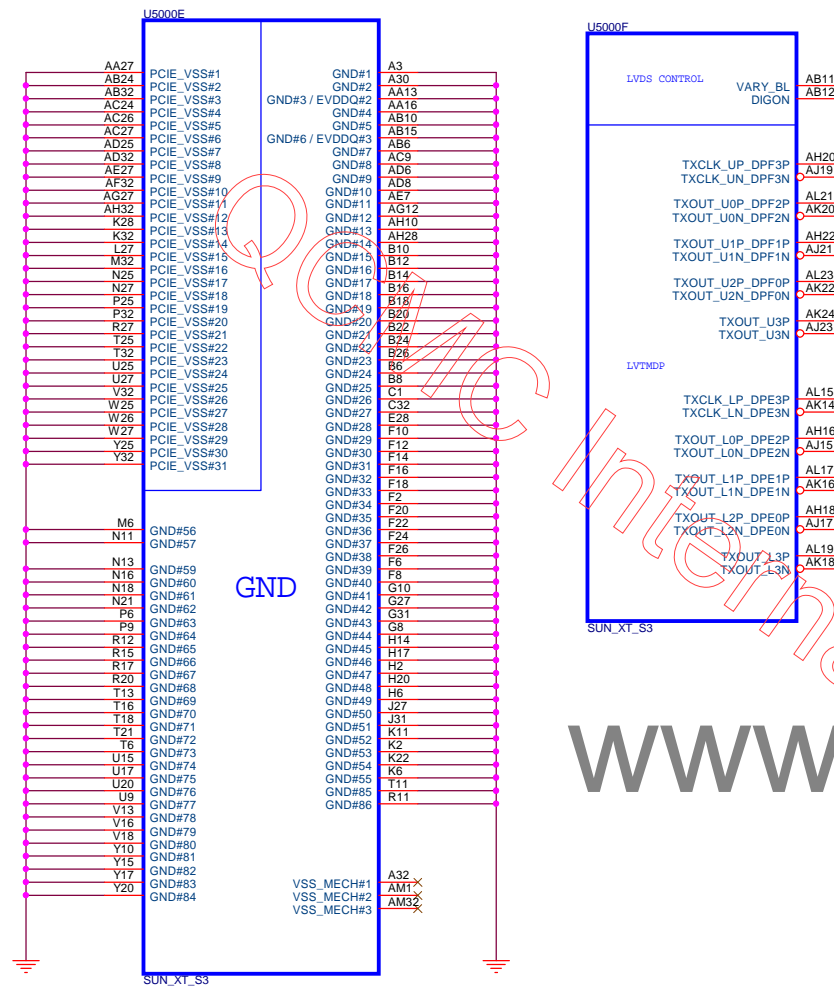
Main:AL000781039 G781-1P8(9Ah)
2nd:AL001412005 EMC1412-2-ACZL-TR(9Ah)

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

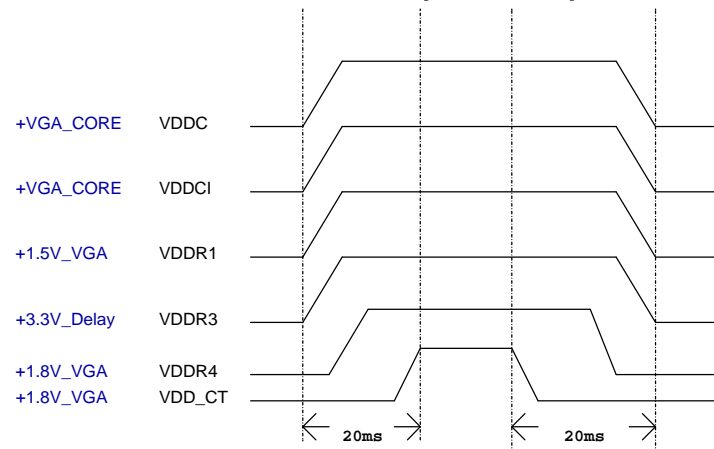
PROJECT :U97 Quanta Computer Inc.		
Size Custom	Document Number System Memory 2/2 (9.2H)	Rev 1A
Date: Thursday, March 06, 2014	Sheet 9	of 33







Power Up/Down Sequence



Memory Aperture size(Seymour)

GPIO9 BIOSROM		GPIO13 ROMIDCFG2	GPIO12 ROMIDCFG1	GPIO11 ROMIDCFG0
0	128M	0	0	0
0	256M	0	0	1
0	64M	0	1	0
0	32M	0	1	1
0	512M	1	0	0
0	1G	1	0	1
0	2G	1	1	0
0	4G	1	1	1

It is a shared pin strap with CONFIG[2:0] if BIOS_ROM_EN is set to 0.

CONFIGURATION STRAPS-- SEE EACH DATABOOK FOR STRAP DETAILS

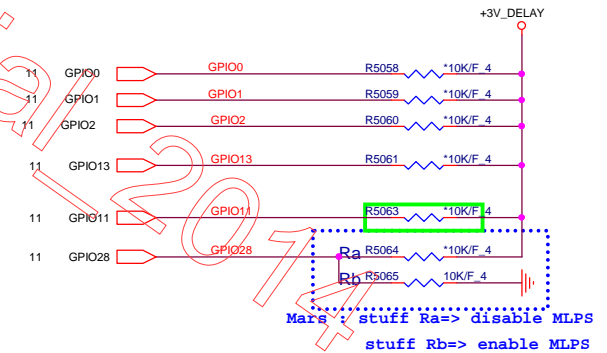
ALLOW FOR PULLUP PADS FOR THESE STRAPS AND IF THESE GPIOs ARE USED, THEY MUST NOT CONFLICT DURING RESET

STRAPS	PIN	DESCRIPTION OF DEFAULT SETTINGS	
TX_PWRS_ENB	GPIO0	PCIE FULL TX OUTPUT SWING	0
TX_DEEMPH_EN	GPIO1	PCIE TRANSMITTER DE-EMPHASIS ENABLED	X
RSVD	GPIO2	RESERVED	0
RSVD	GPIO8	RESERVED	0
BIF_VGA_DIS	GPIO9	VGA ENABLED	0
RSVD	GPIO21	RESERVED	0
BIOS_ROM_EN	GPIO22_ROMCSB	ENABLE EXTERNAL BIOS ROM	0
ROMIDCFG(2:0)	GPIO[13:11]	SERIAL ROM TYPE OR MEMORY APERTURE SIZE SELECT	0 0 1
VIP_DEVICE_STRAP_ENA	V2SYNC	IGNORE VIP DEVICE STRAPS (Removed on Seymour/Whistler)	0
RSVD	H2SYNC	RESERVED	0
AUD[1]	HSYNC	SEE DATABOOK FOR DETAIL	0
AUD[0]	VSYS	SEE DATABOOK FOR DETAIL	0
RSVD	GENERICC	RESERVED	0

NOTE1: AMD RESERVED CONFIGURATION STRAPS

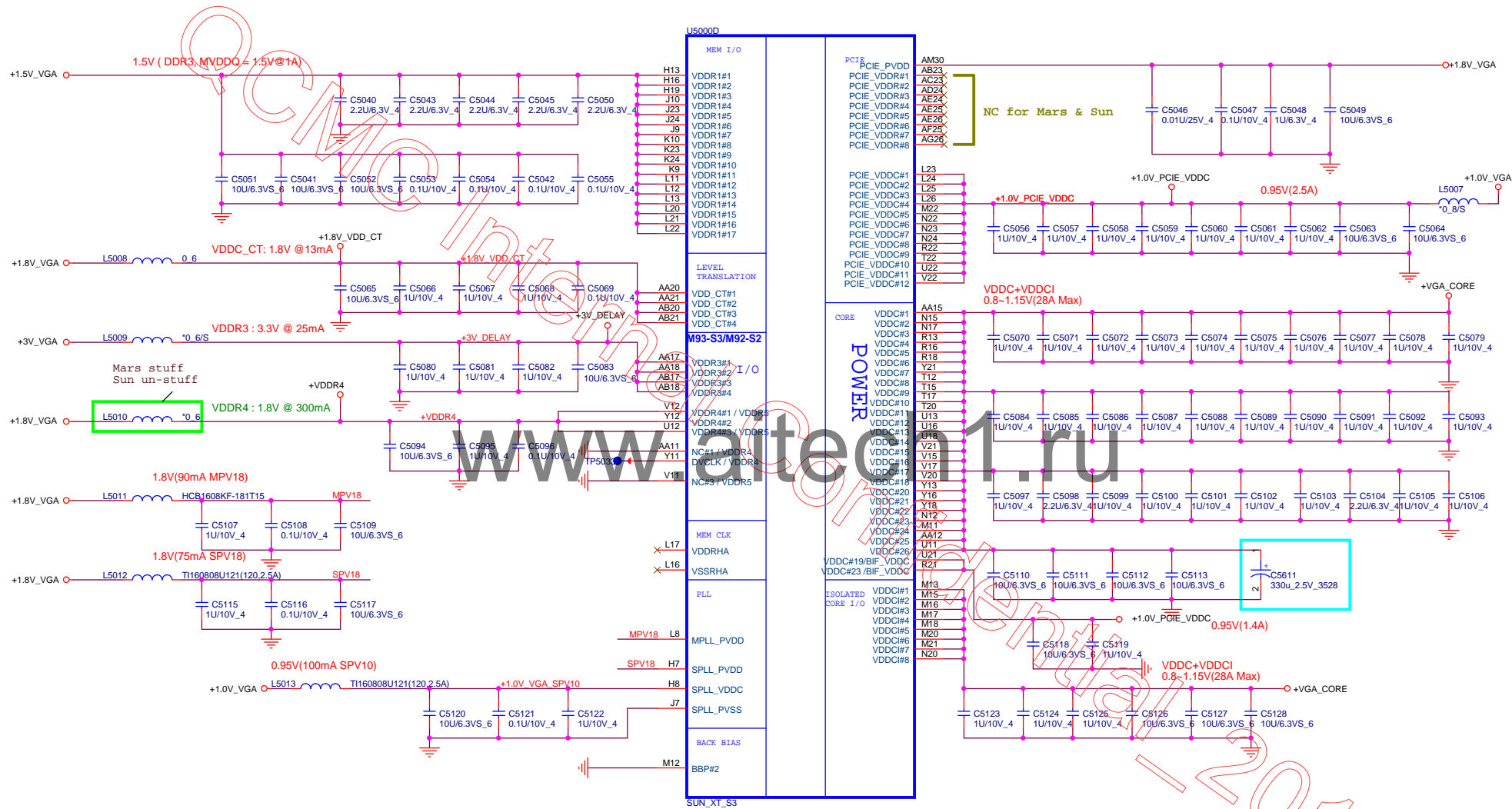
ALLOW FOR PULLUP PADS FOR THESE STRAPS BUT DO NOT INSTALL RESISTOR. IF THESE GPIOs ARE USED, THEY MUST KEEP "LOW" AND NOT CONFLICT DURING RESET.

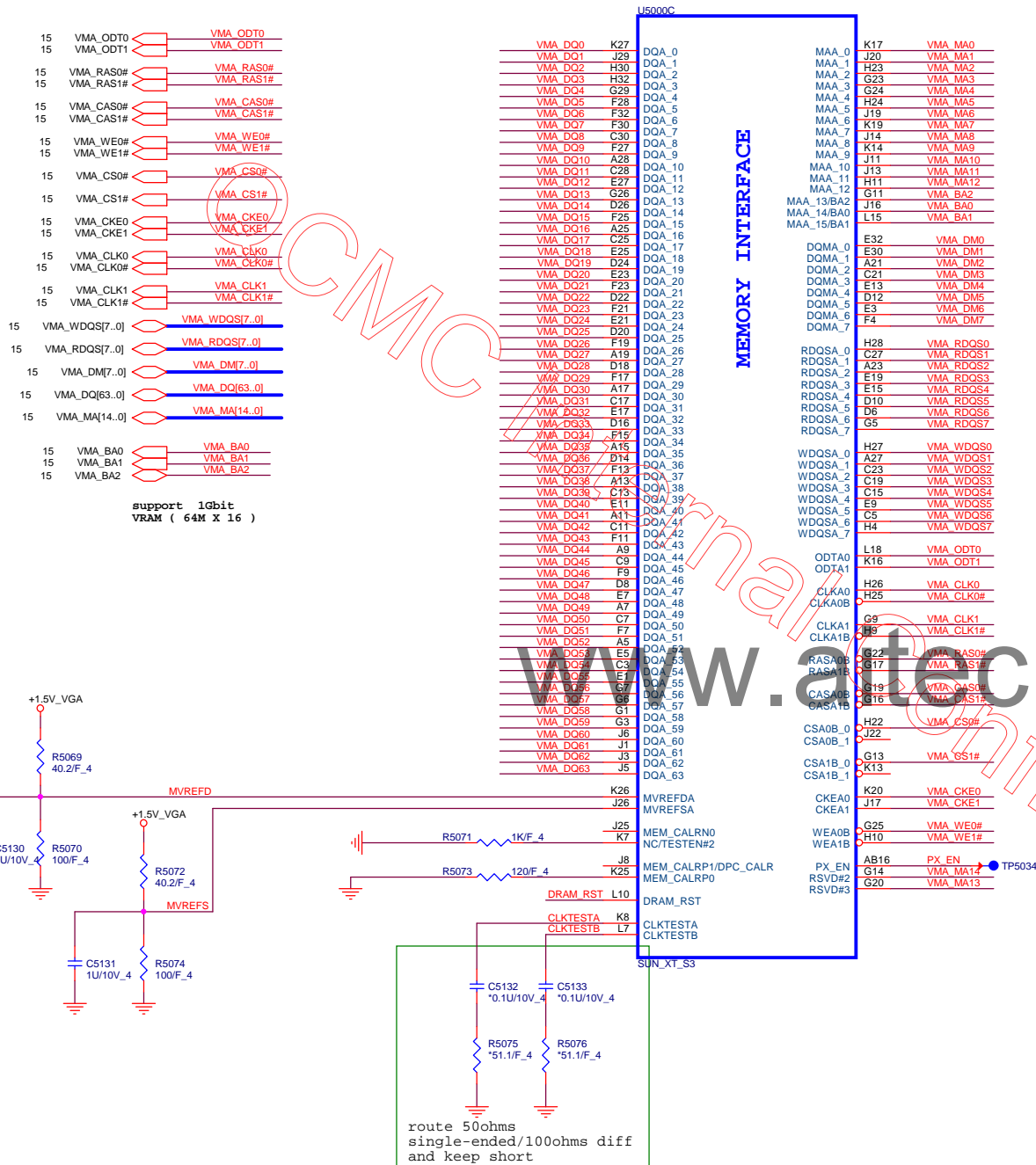
GPIO21 H2SYNC GENERICC GPIO8 GPIO2



PROJECT :U97
Quanta Computer Inc.

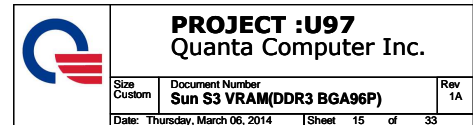
Size Custom	Document Number	Rev 1A
	Sun S3 GND / LVDS/ Straps	
Date: Thursday, March 06, 2014	Sheet 12 of 33	

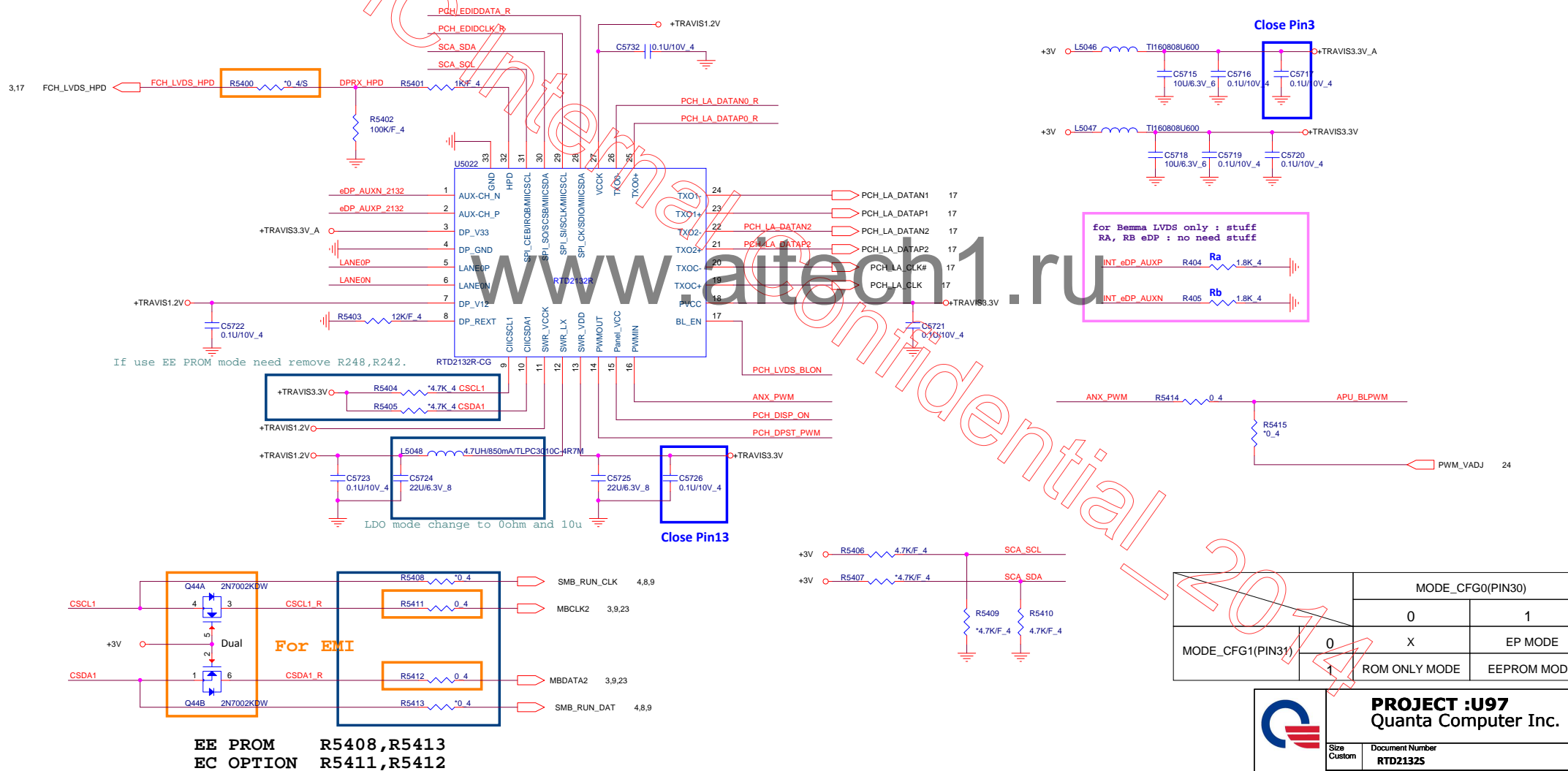


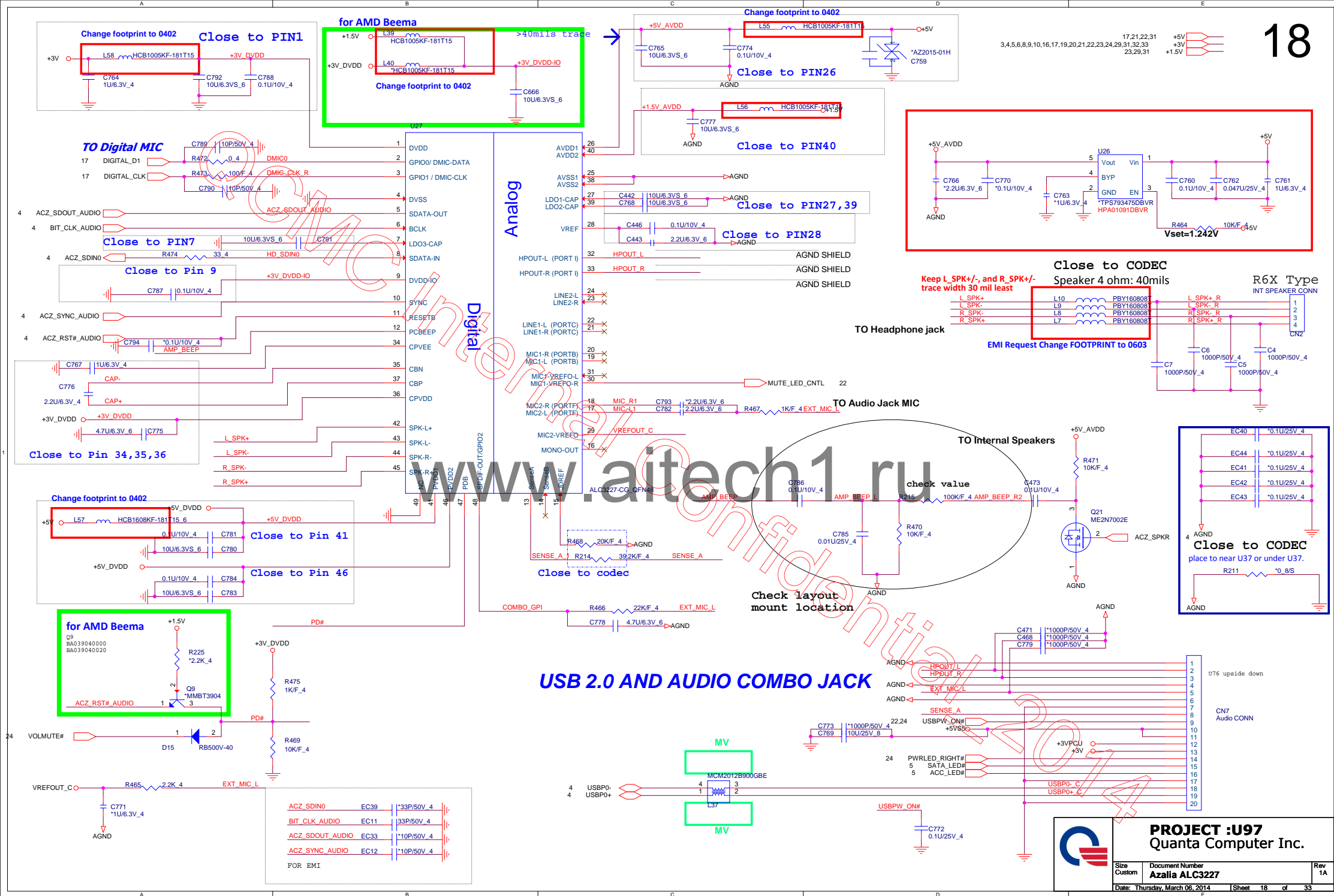


PROJECT :U97
Quanta Computer Inc.

Size Custom	Document Number Sun S3 MEM_Interface	Rev 1A
Date: Thursday, March 06, 2014	Sheet 14 of 33	



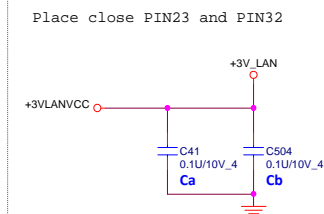




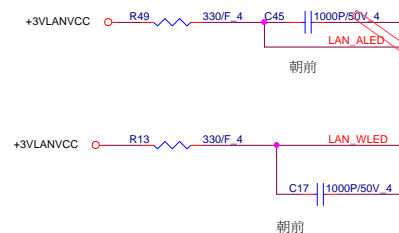
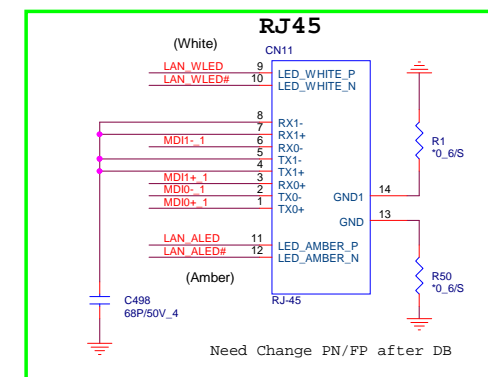


>60mil

Power trace Layout 寬度> 60mil



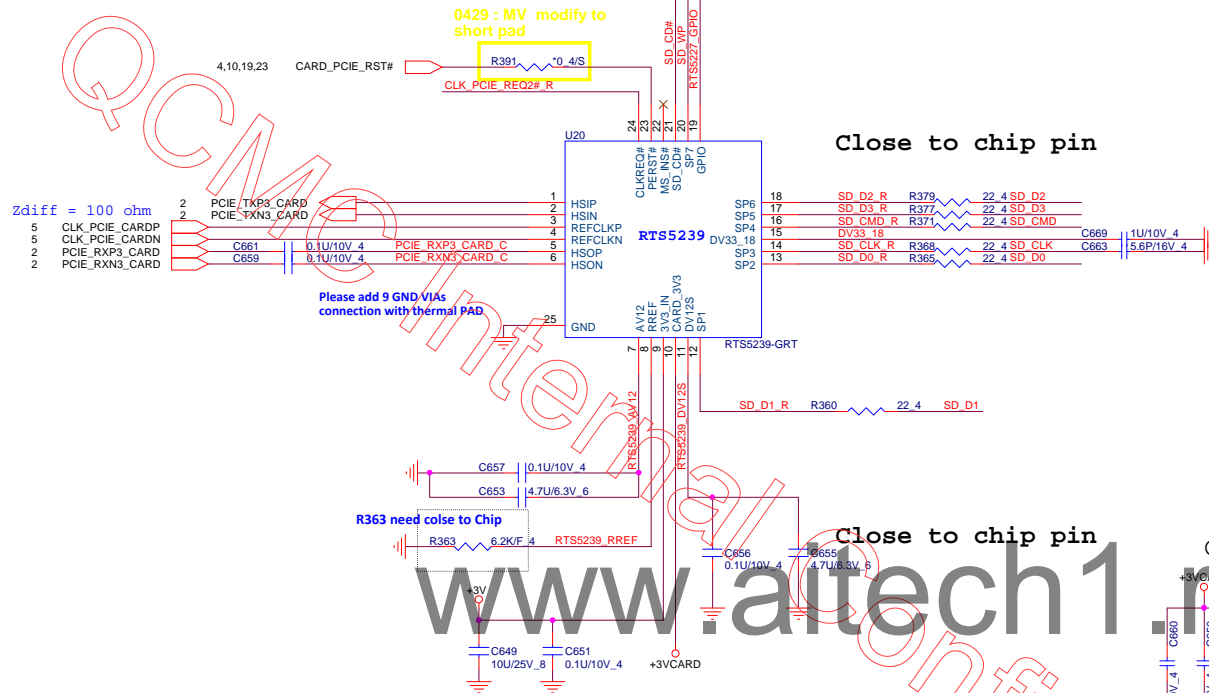
LAN conn



3,4,5,6,8,9,10,16,17,18,20,21,22,23,24,29,31,32,33
23,31

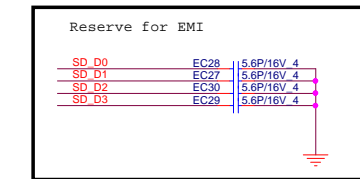
+3V
+3VLAVCC

4 CLK_PCIE_REQ2# R392 *0.4/S CLK_PCIE_REQ2# R

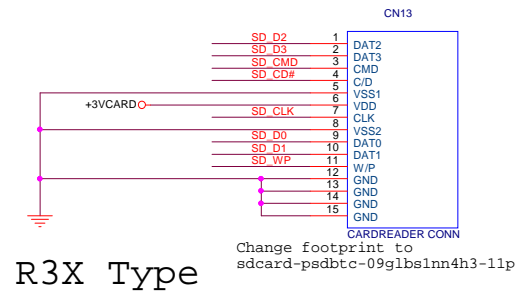


SP1	SD_D1	MS_D1
SP2	SD_D0	MS_D0
SP3	SD_CLK	MS_D0
SP4	SD_CMD	MS_D2
SP5	SD_D3	MS_D3
SP6	SD_D2	MS_CLK
SP7	SD_WP	MS_BS

Share Pin



SD / MMC CARD READER



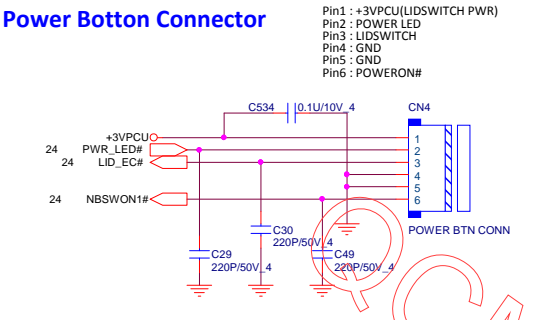
R3X Type



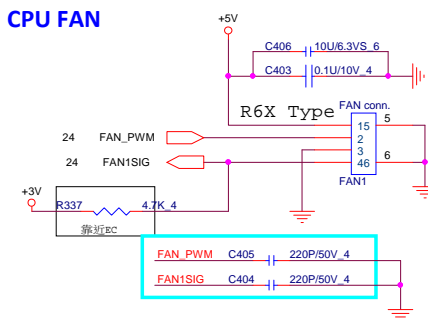
PROJECT :U97
Quanta Computer Inc.

Size Custom	Document Number RTS5239 & CR SOCKET	Rev 1A
Date: Thursday, March 06, 2014	Sheet 20 of 33	

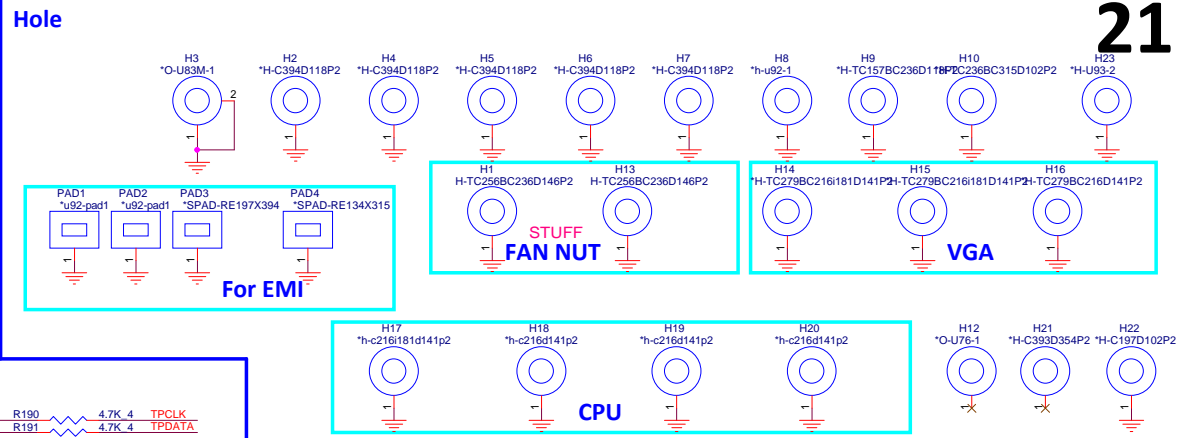
Power Botton Connector



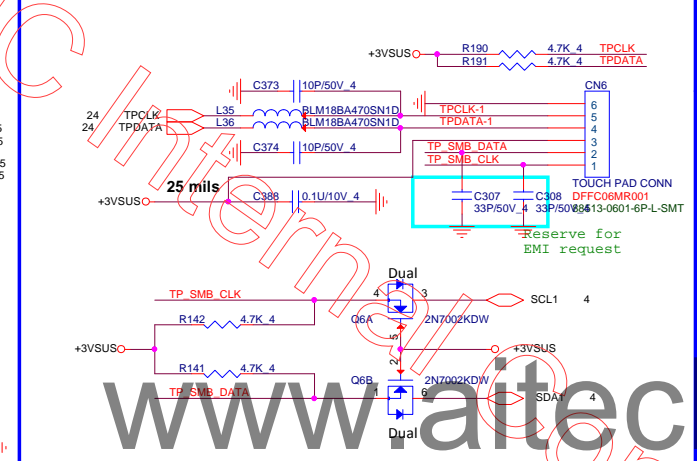
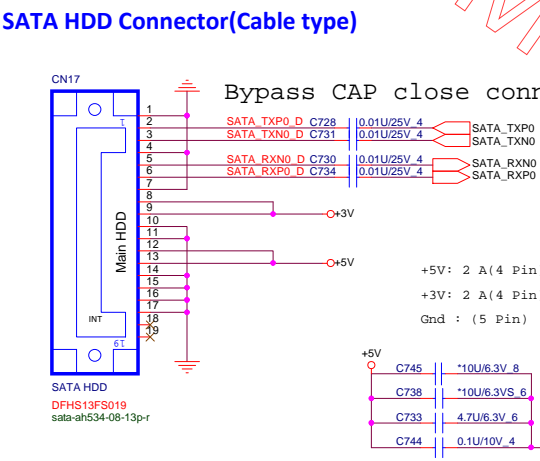
CPU FAN



Hole

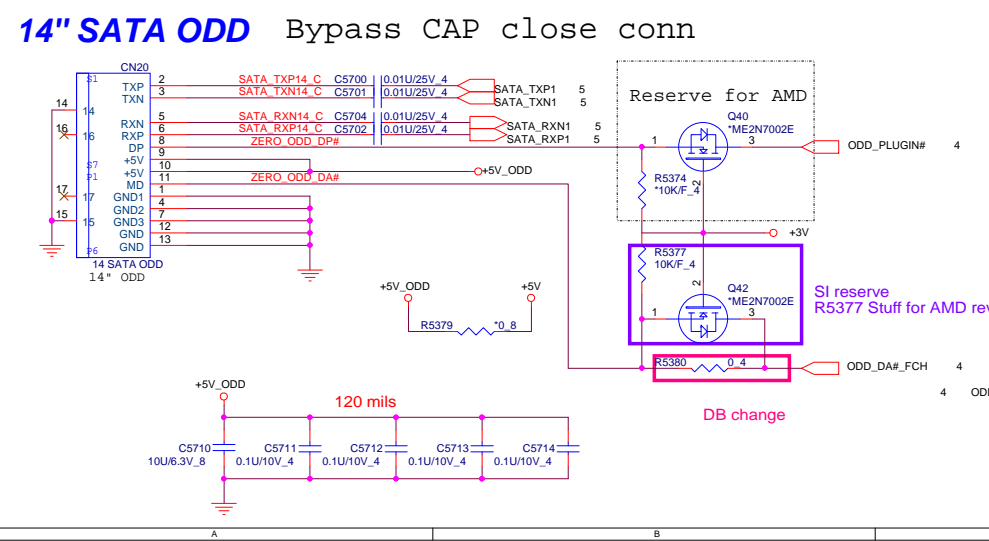


SATA HDD Connector(Cable type)



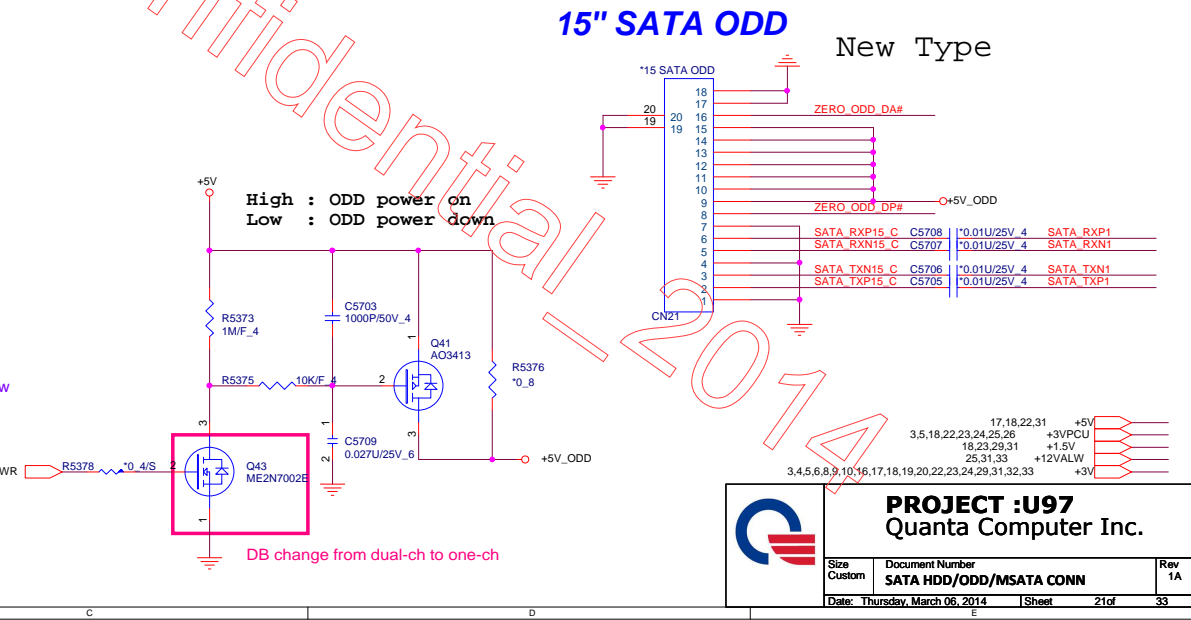
**SATA ODD
CONNECTOR**

14" SATA ODD Bypass CAP close conn



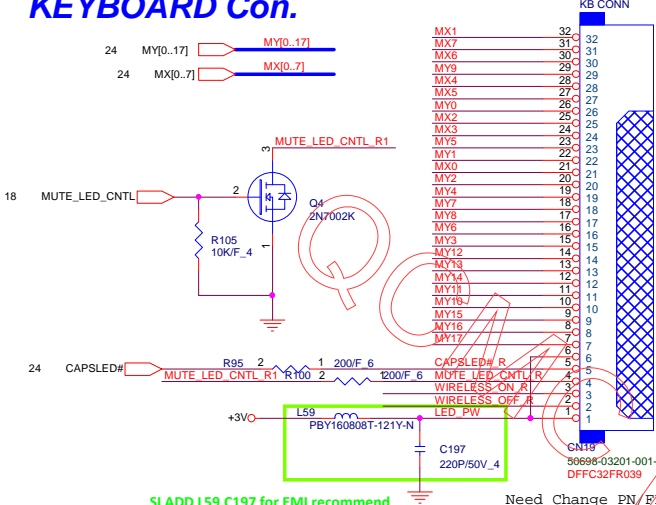
15" SATA ODD

New Type



KEYBOARD Con.

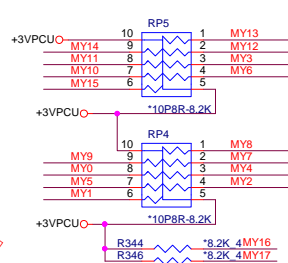
22



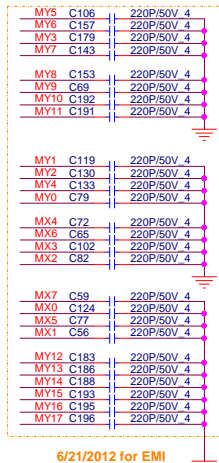
SI ADD L59,C197 for EMI recommend

Need Change PN/FP after DB

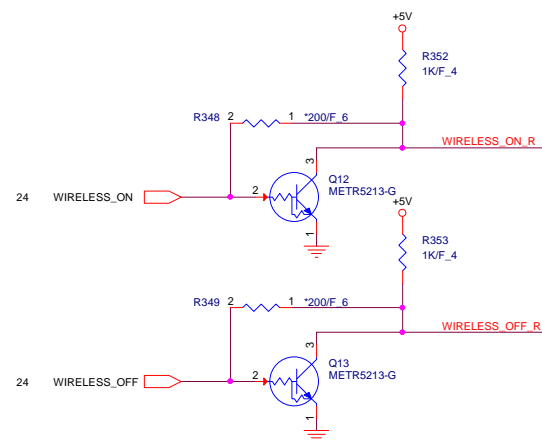
KEYBOARD PULL-UP



6/21/2012 for EMI



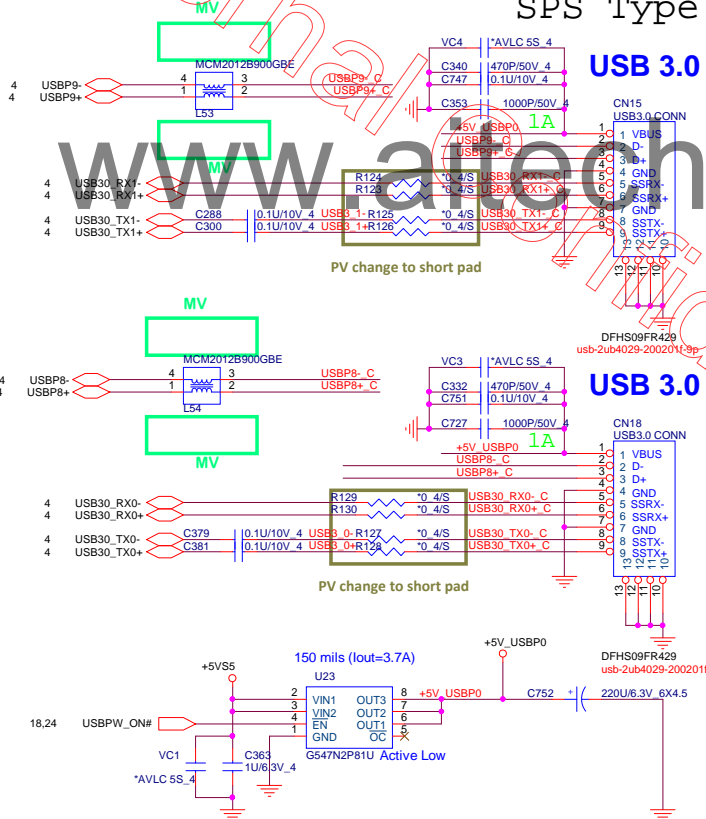
6/21/2012 for EMI



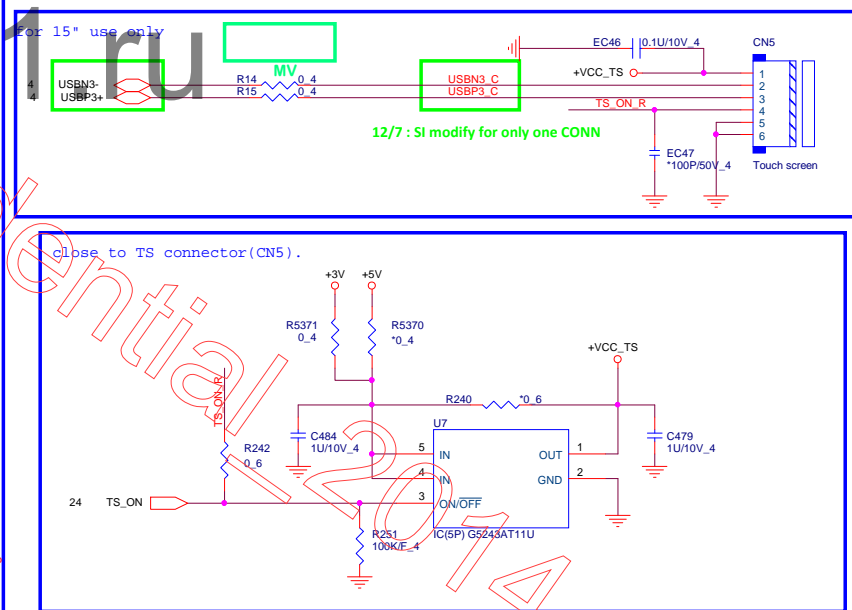
NM9 Type

SPS Type

USB 3.0



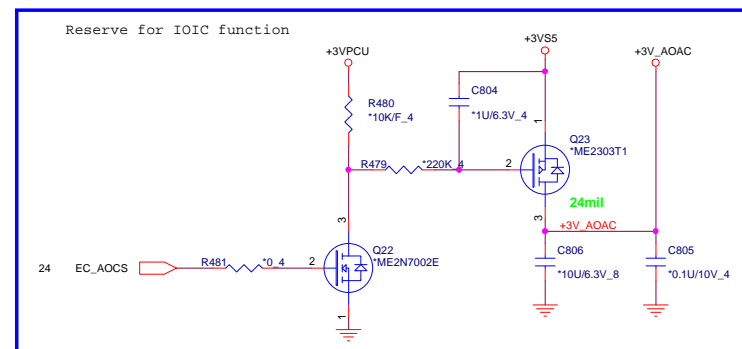
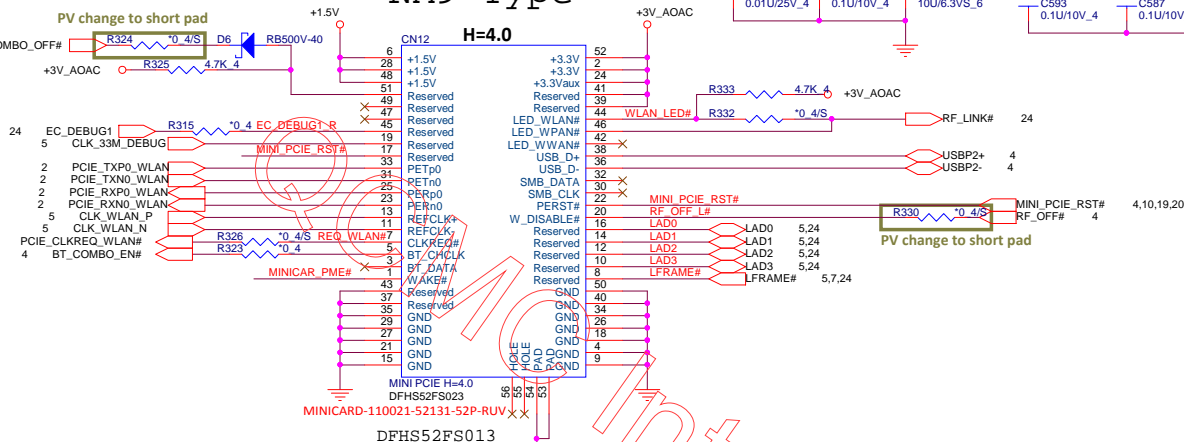
USB 3.0



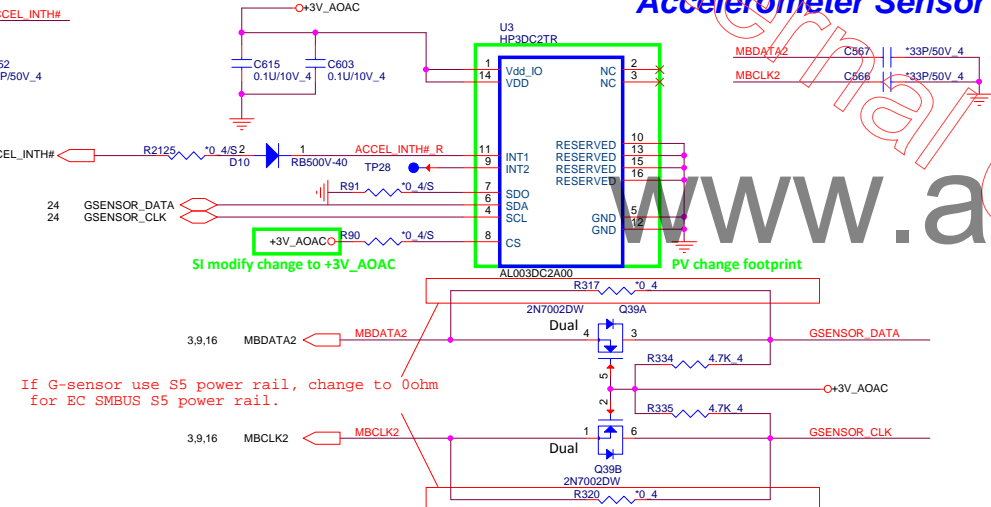
PROJECT :U97
Quanta Computer Inc.

**Mini Card
WLAN/BT(Optional)**

NM9 Type

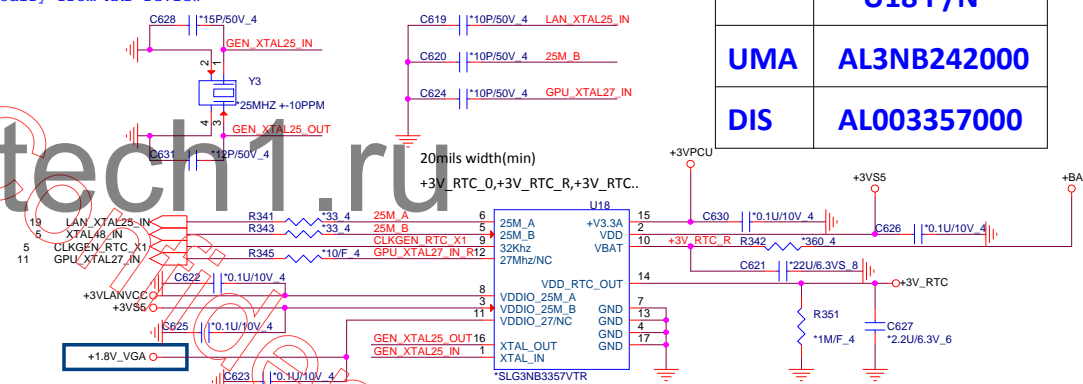


Accelerometer Sensor



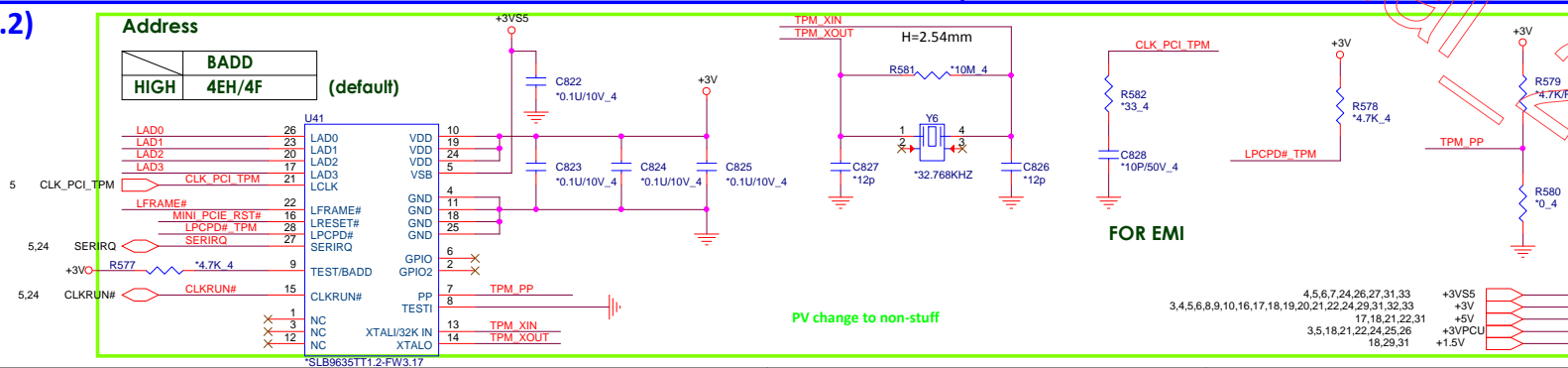
Green CLK Circuitry

Modify from AMD review



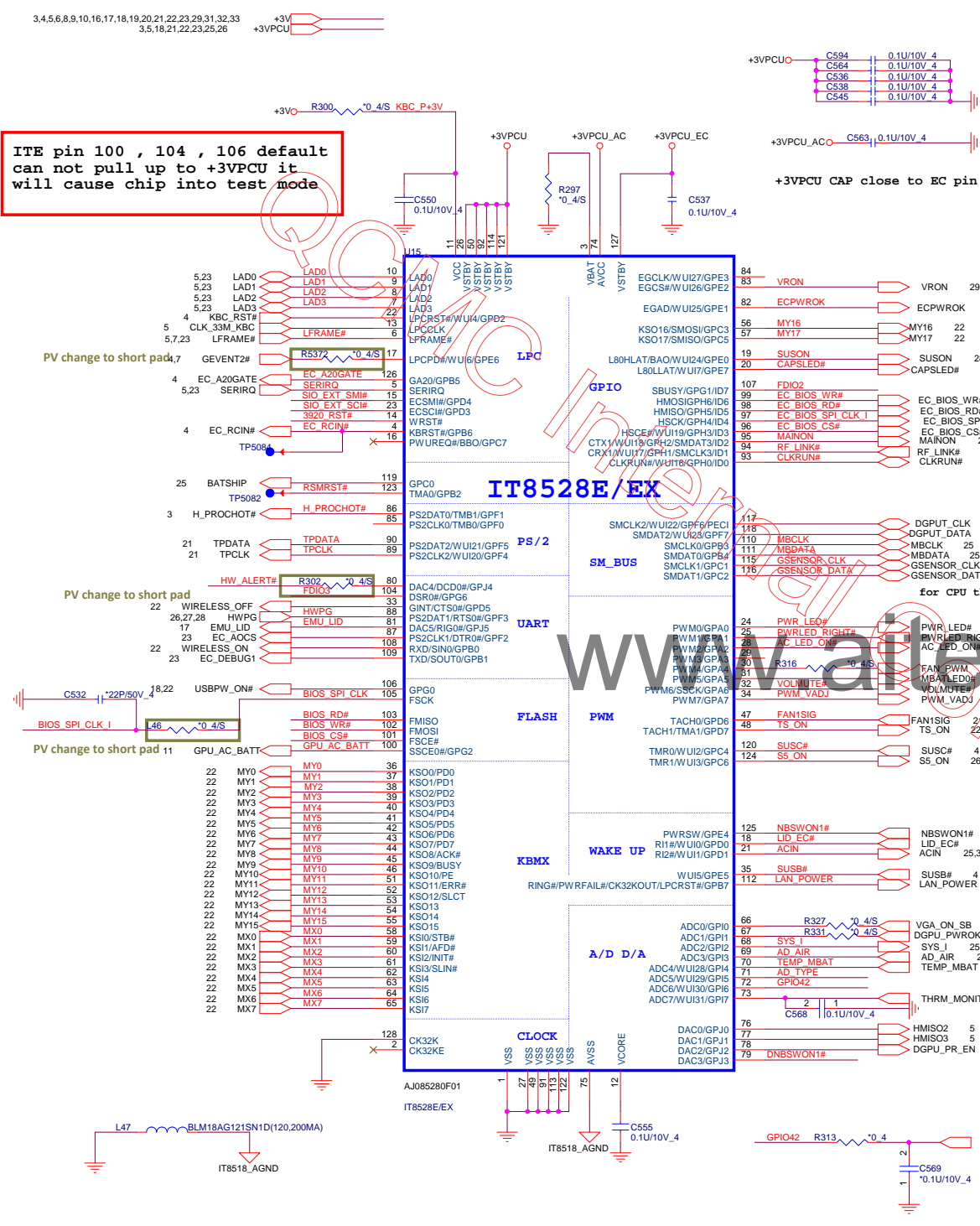
	U18 P/N
UMA	AL3NB242000
DIS	AL003357000

TPM (1.2)

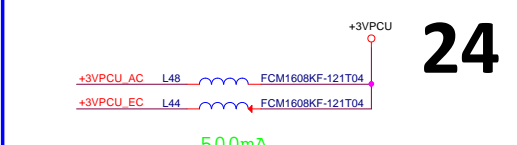
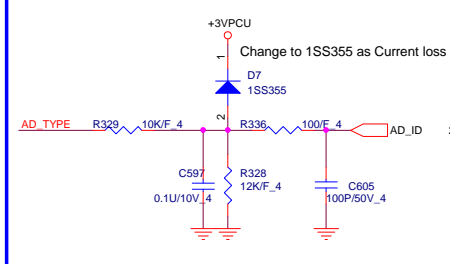


PROJECT :U97
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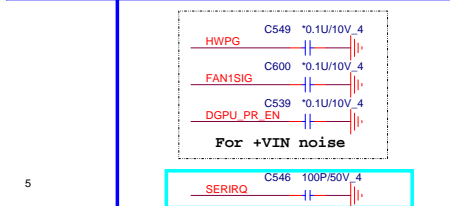
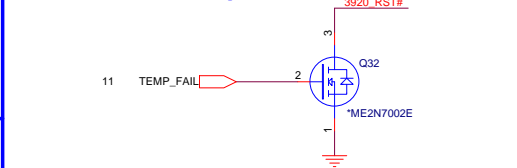
Size Custom	Document Number MINI-PCIE/LED	Rev 1A
Date: Thursday, March 06, 2014	Sheet 23 of	33



Smart adapter Type check

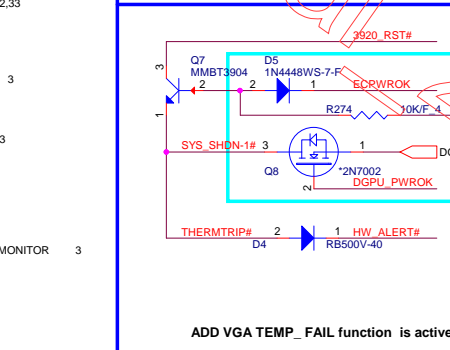
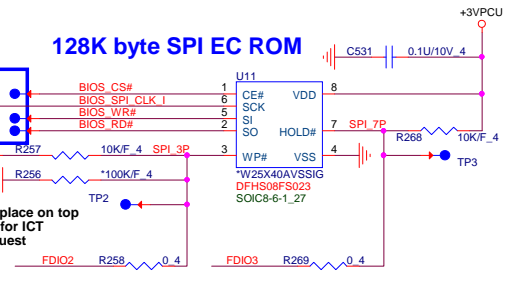
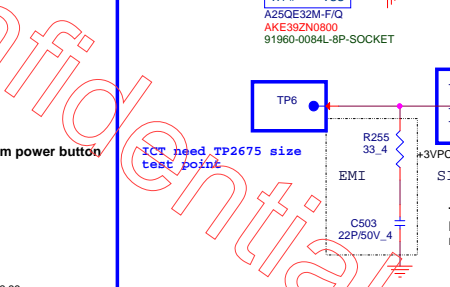
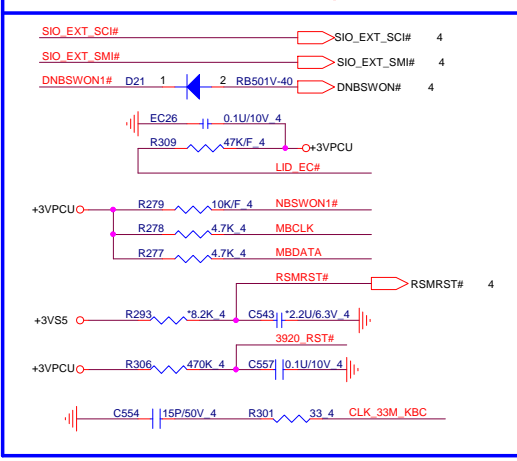
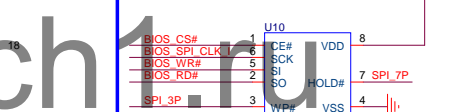


DGPU Thermal protect



Vender	Size	P/N
AIT	4M	AKE39ZN0800
EON	4M	AKE39ZN0Q03
WND	4M	AKE39FN0N01
Socket		DFHS08FS023

4M SPI EC ROM



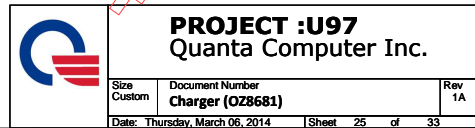
Adapter select			
Hi ==> A6-5200 25W CPU + DIS			
Low ==> UMA/DIS/SG			
Platform model	GPI042	adapter	
A6 25W CPU + DIS	High	90W	
DIS/SG/UMA	Low	65W	

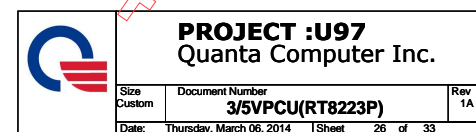
PROJECT :U97
Quanta Computer Inc.

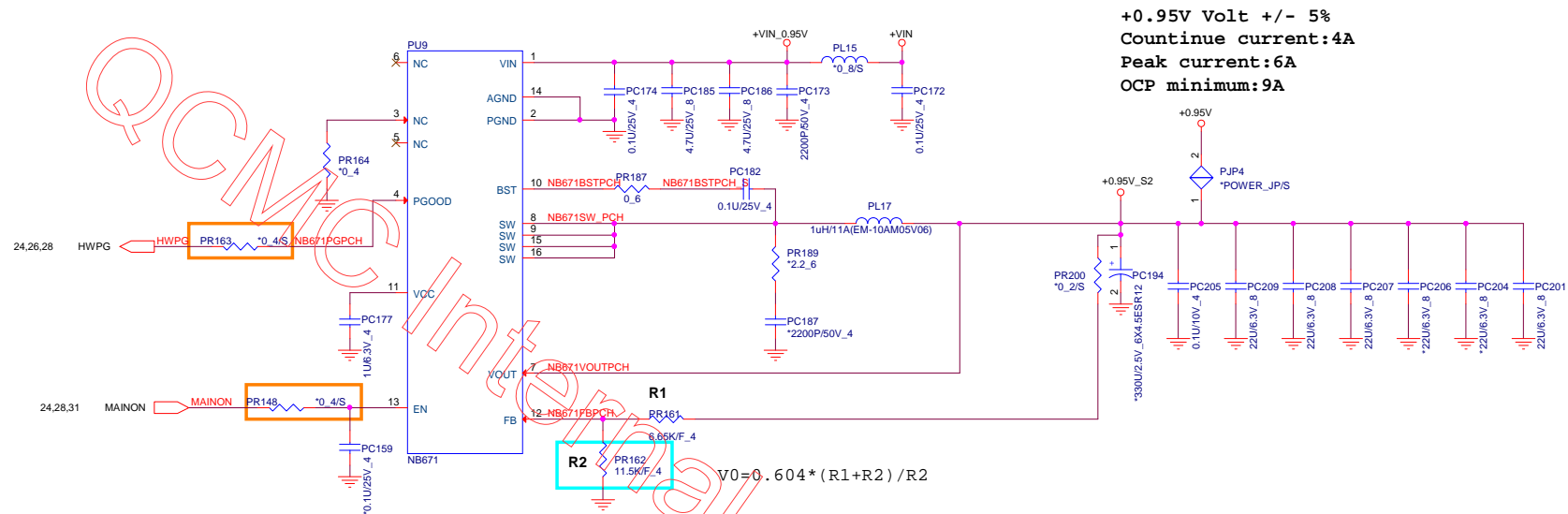
Size	Document Number	Rev
Custom	EC (IT8528E)/ROM	1A

Date: Thursday, March 06, 2014 | Sheet 24 of 33

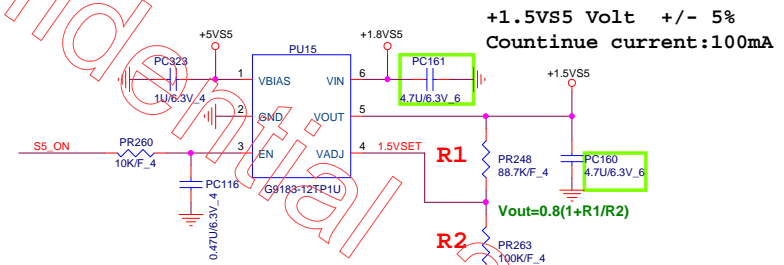
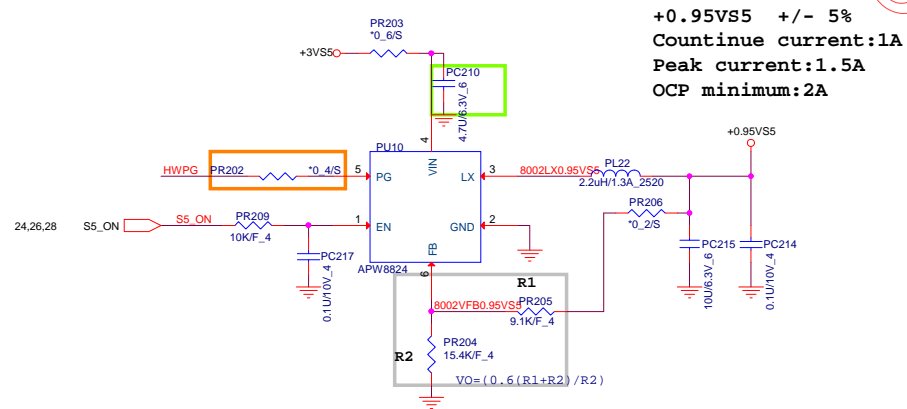
ADD VGA TEMP_FAIL function is active Hi





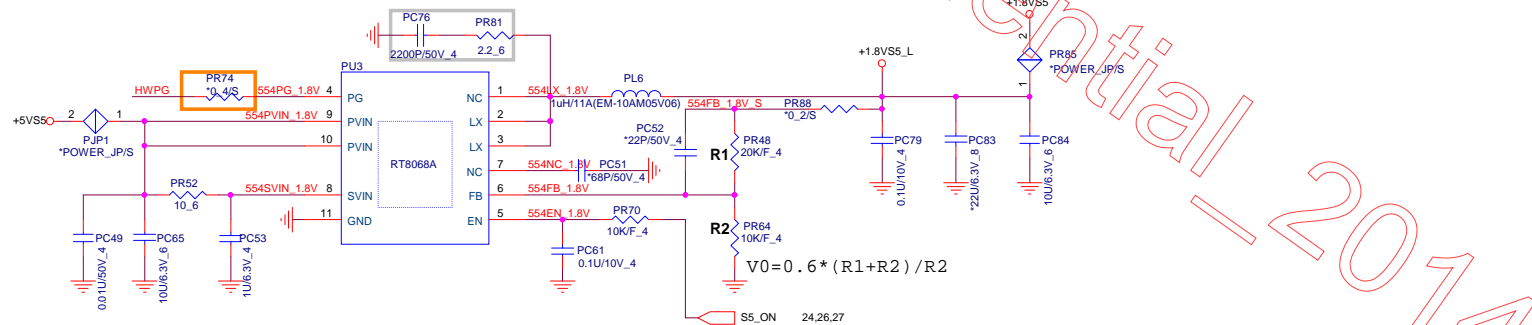
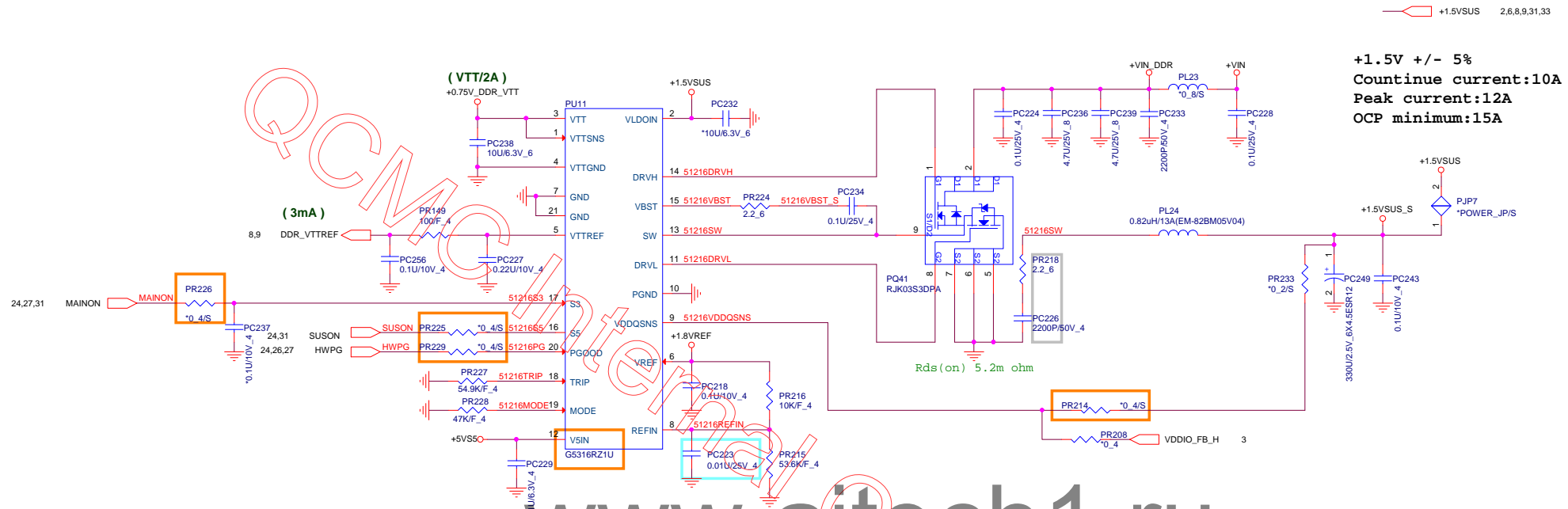


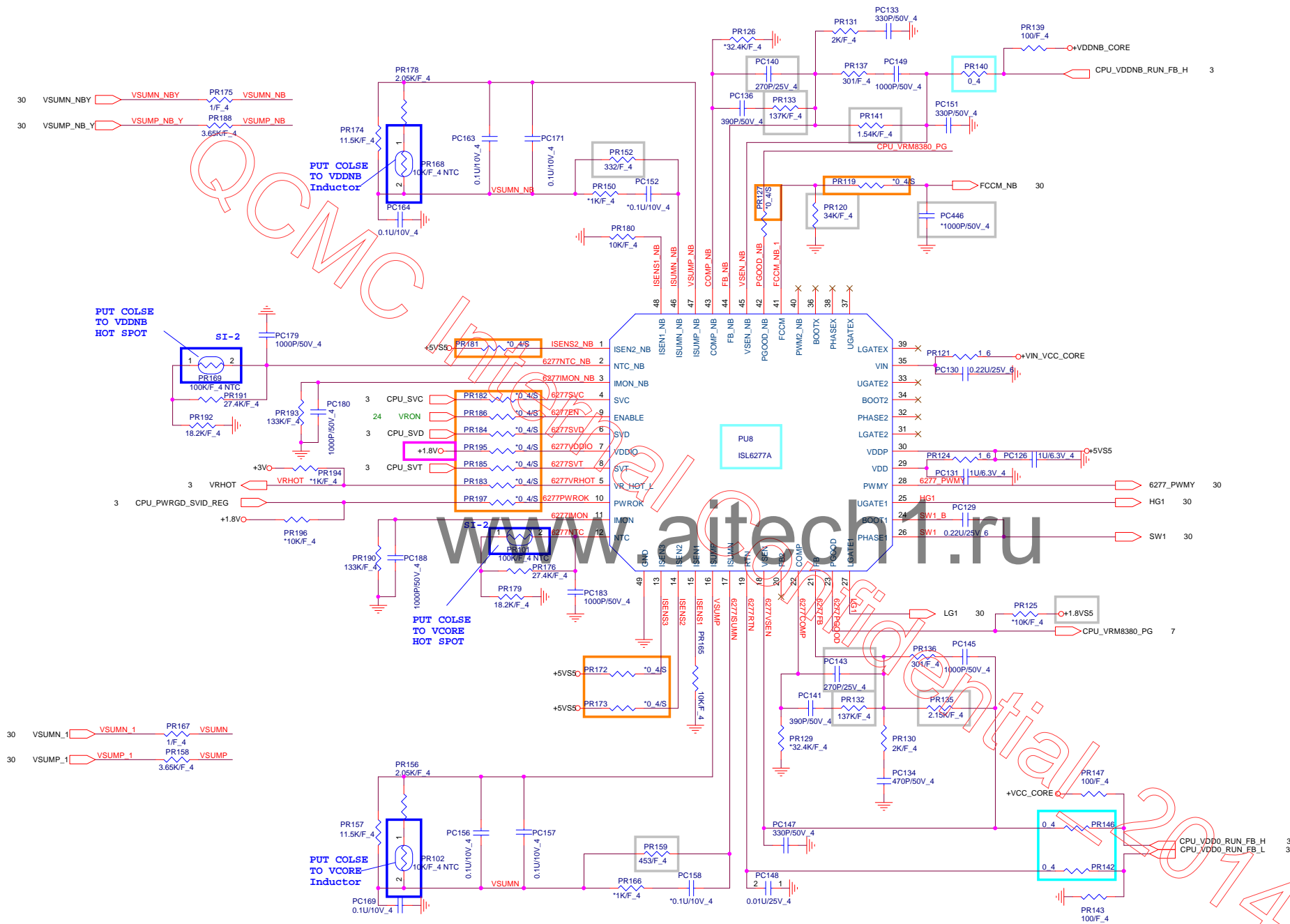
www.aitech1.ru

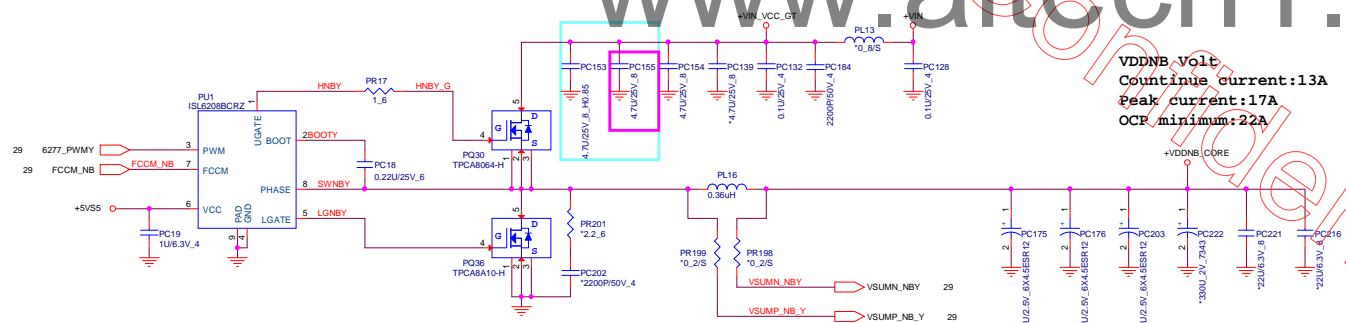
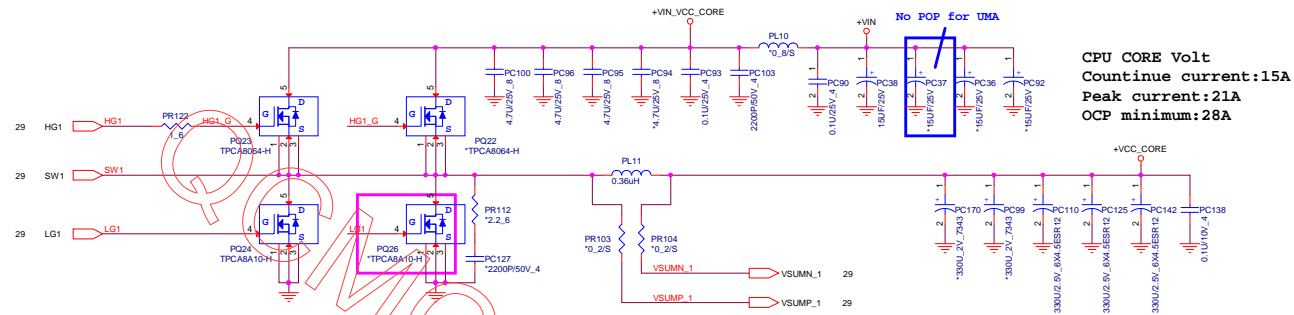


PROJECT :U97
Quanta Computer Inc.

Size	Document Number	Rev
Custom	+1.2V (RT8228)	1A
Date: Thursday, March 06, 2014	Sheet 27 of 33	



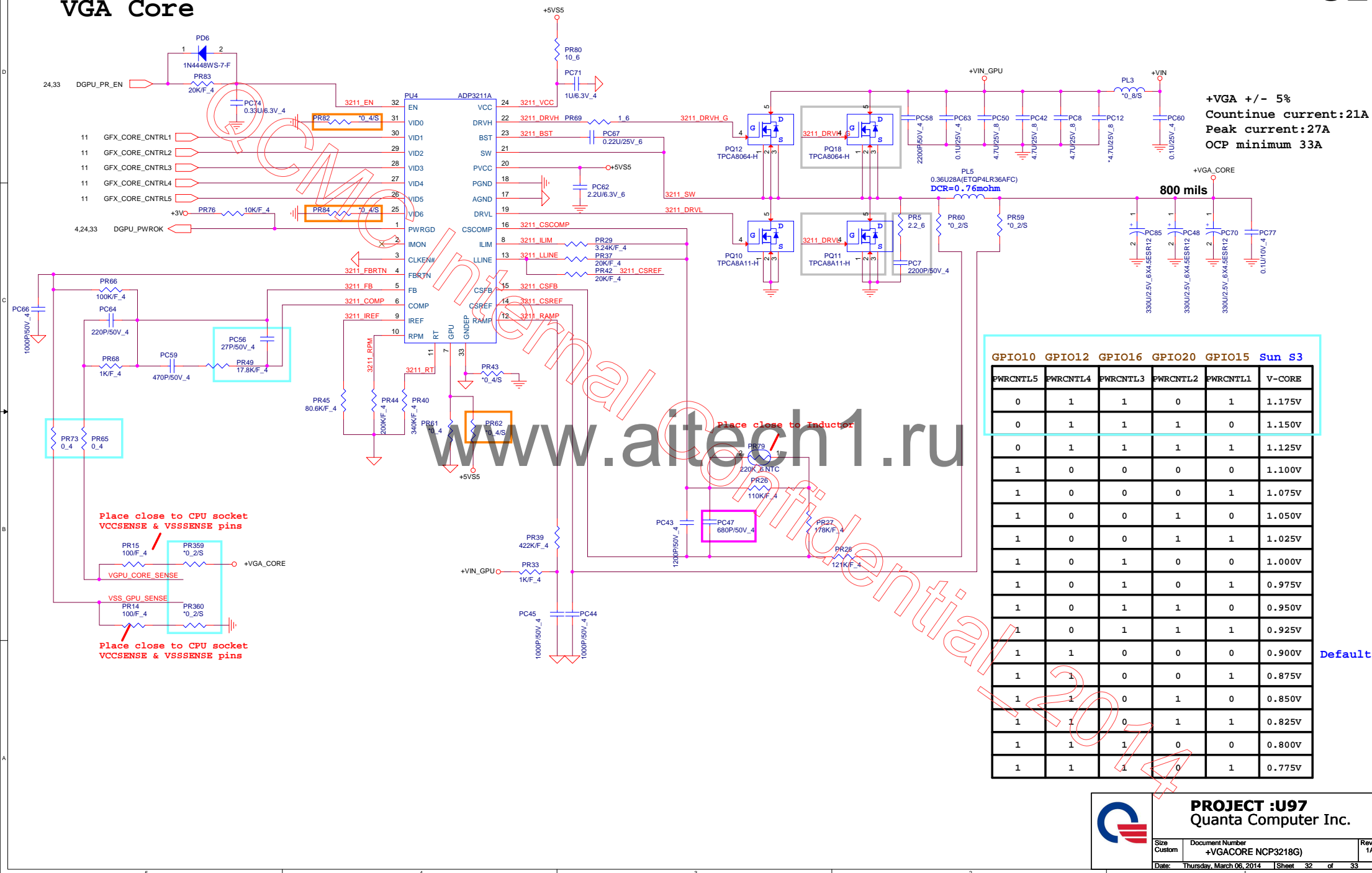




PROJECT :U97
Quanta Computer Inc.

Site	Document Number	Rev
Custom	ISL6208	1A
Date: Thursday, March 06, 2014 Sheet 30 of 33		

VGA Core



GPIO10	GPIO12	GPIO16	GPIO20	GPIO15	Sun CORE
PWRCNTL5	PWRCNTL4	PWRCNTL3	PWRCNTL2	PWRCNTL1	V-CORE
0	1	1	0	1	1.175V
0	1	1	1	0	1.150V
0	1	1	1	1	1.125V
1	0	0	0	0	1.100V
1	0	0	0	1	1.075V
1	0	0	1	0	1.050V
1	0	0	1	1	1.025V
1	0	1	0	0	1.000V
1	0	1	0	1	0.975V
1	0	1	1	0	0.950V
1	0	1	1	1	0.925V
1	1	0	0	0	0.900V
1	1	0	0	1	0.875V
1	1	0	1	0	0.850V
1	1	0	1	1	0.825V
1	1	1	0	0	0.800V
1	1	1	0	1	0.775V

