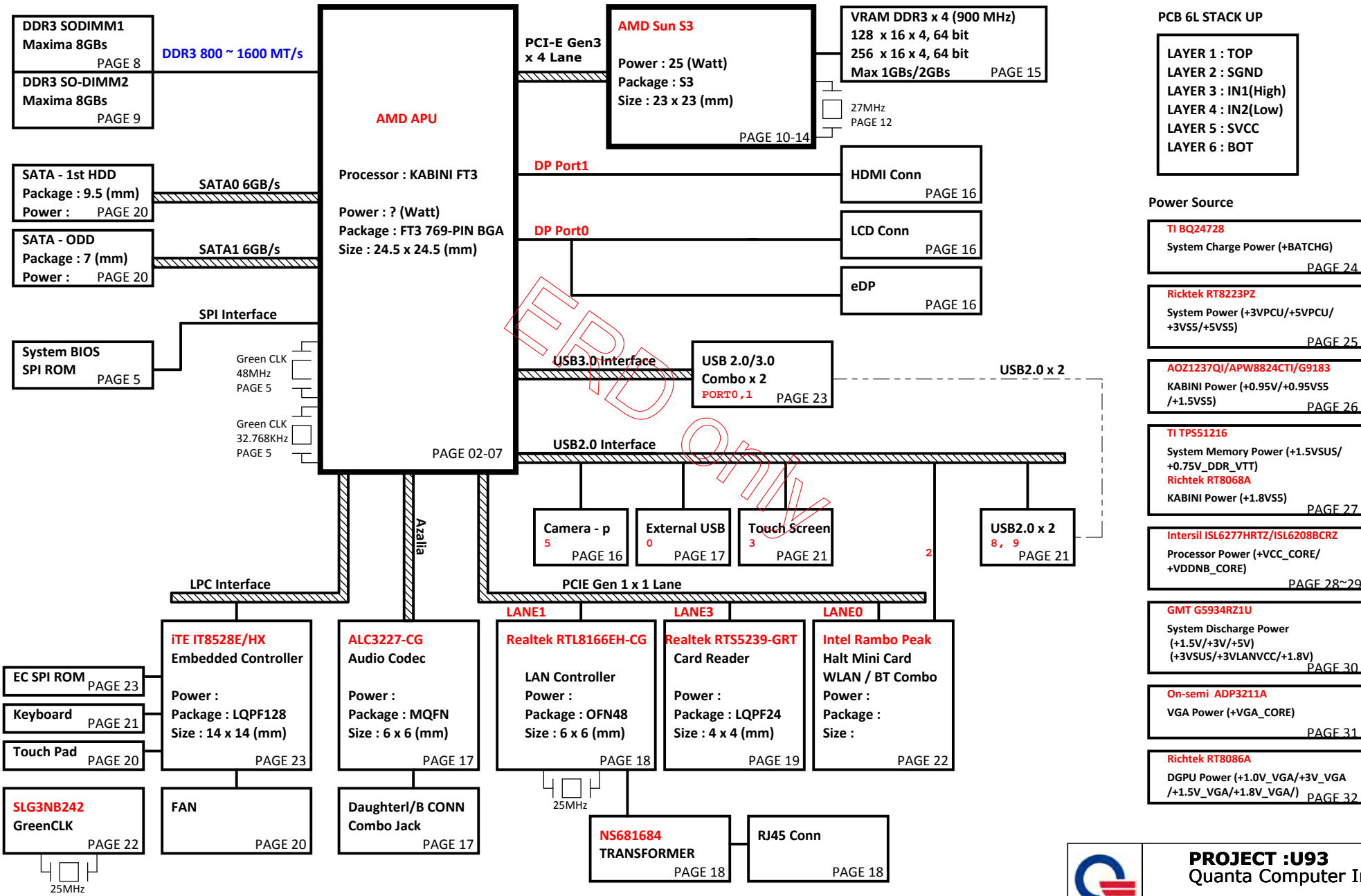
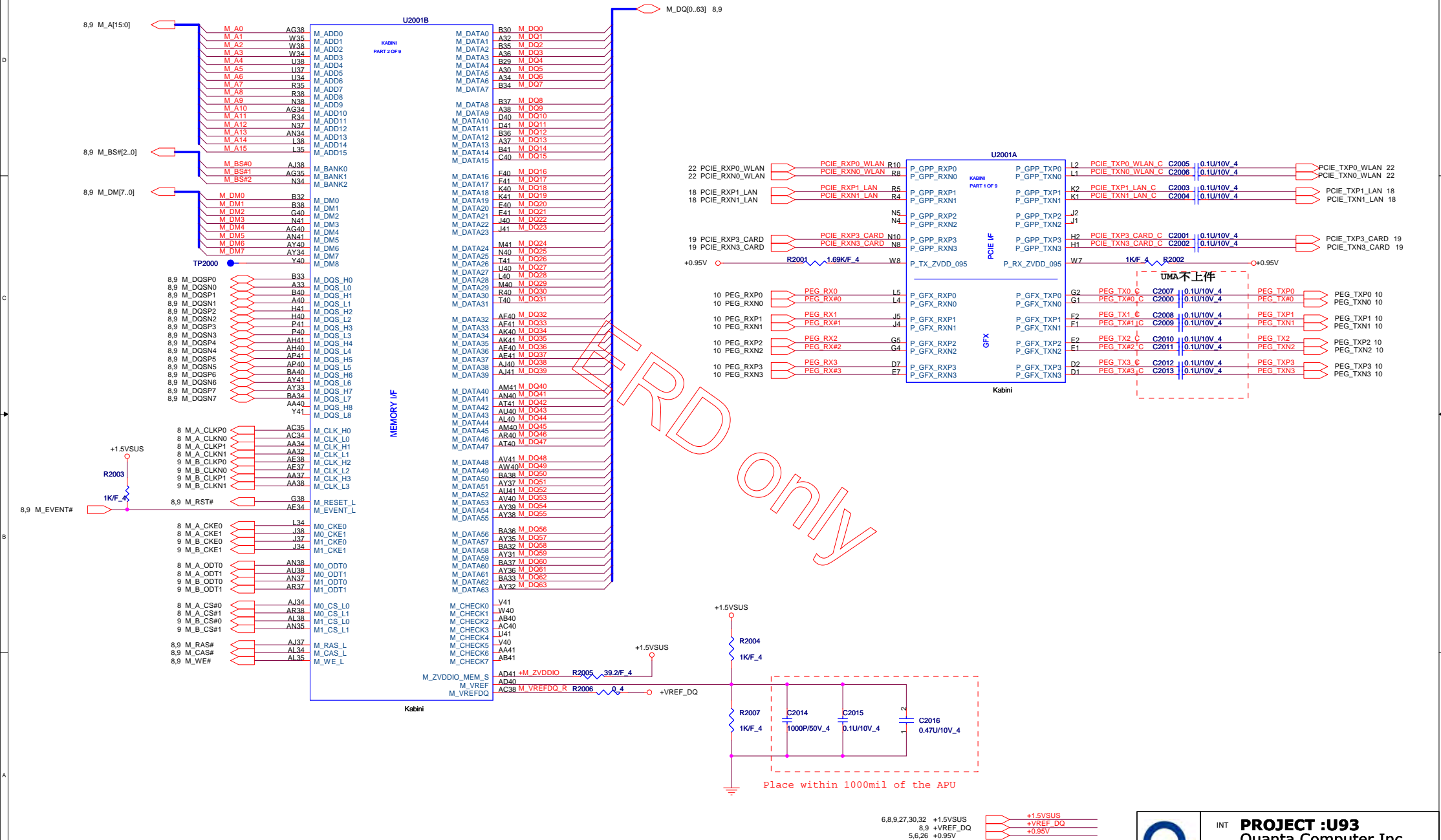


Lean G_AMD KABINI DIS/UMA (14"/15.6")


Ultra/Slim

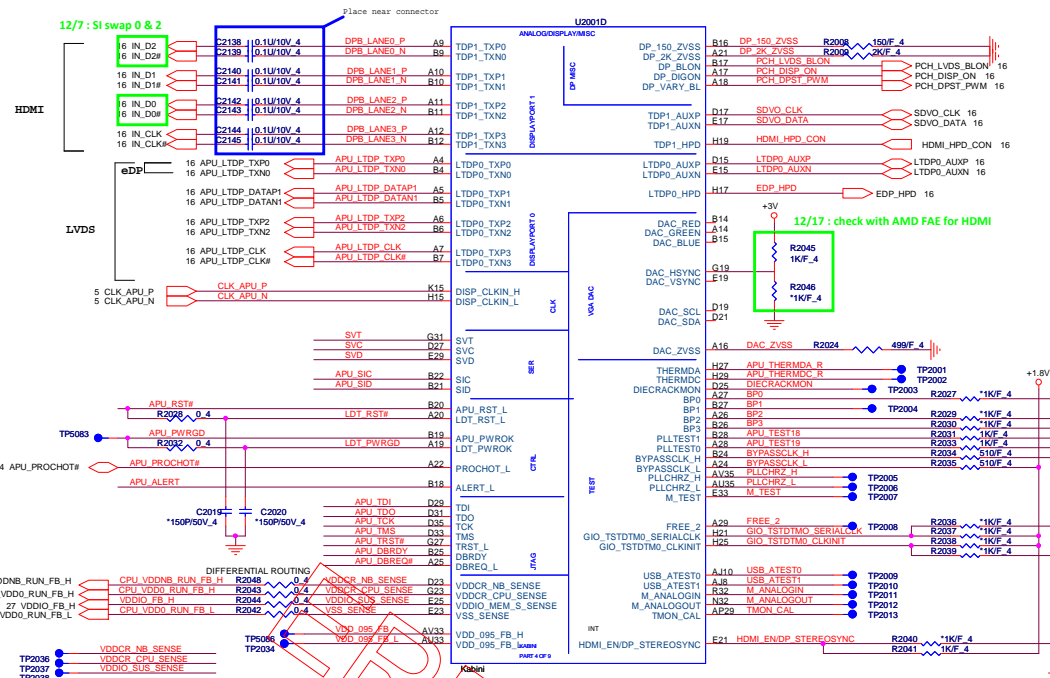
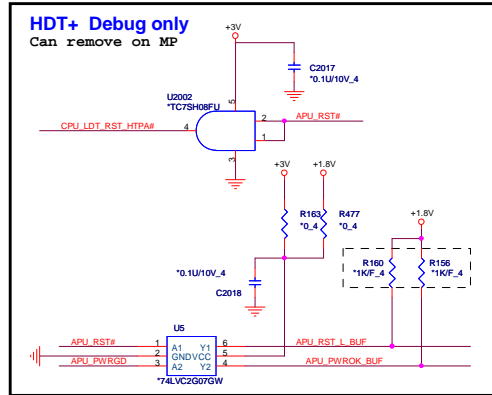
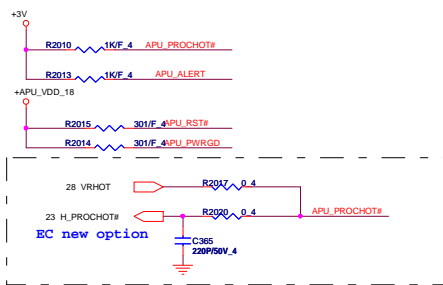
01





6,8,9,27,30,32 +1.5VSUS
8,9 +VREF_DQ
5,6,26 +0.95V

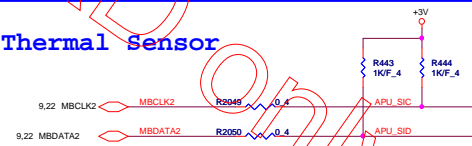
| | | | |
|---|--|--|-----------|
|  | PROJECT :U93 Quanta Computer Inc. | | |
| | Size | Document Number MEM/PCIE (1/6) | Rev 1A |
| Date: | Wednesday, April 03, 2013 | Sheet | 2 of 32 |



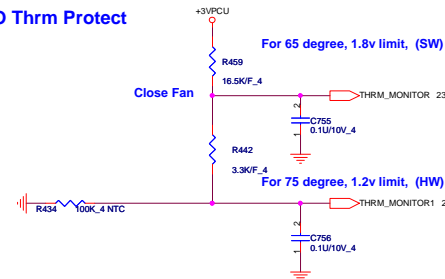
HDT+ Connector for Debug only



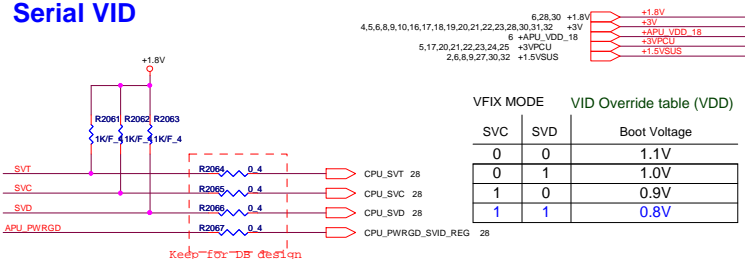
Thermal Sensor

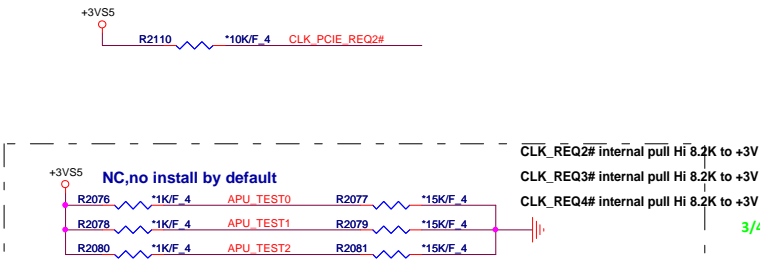
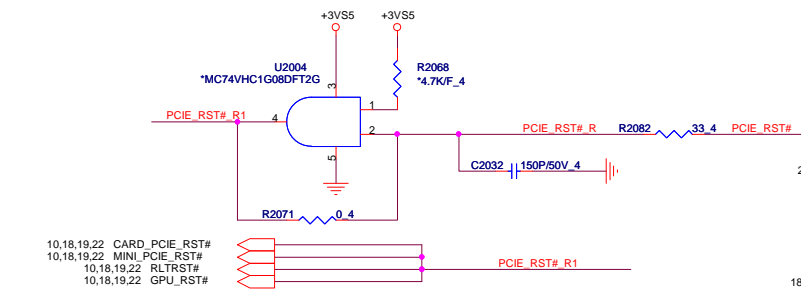


IO Thrm Protect

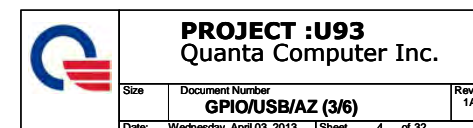
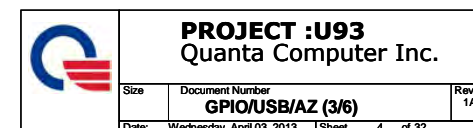
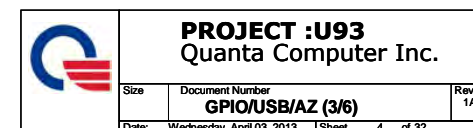
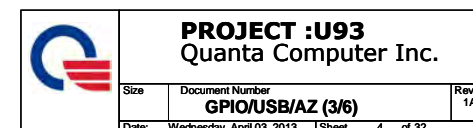
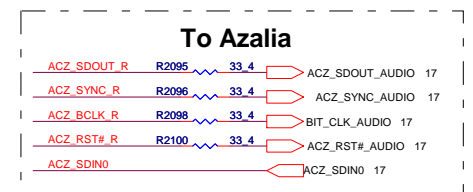
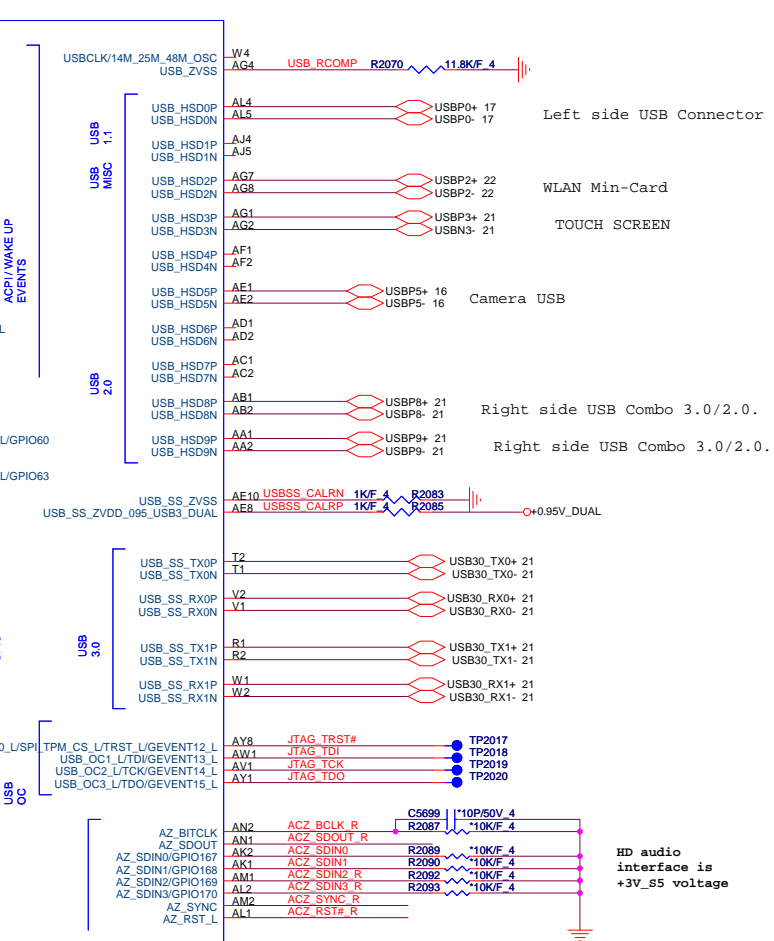
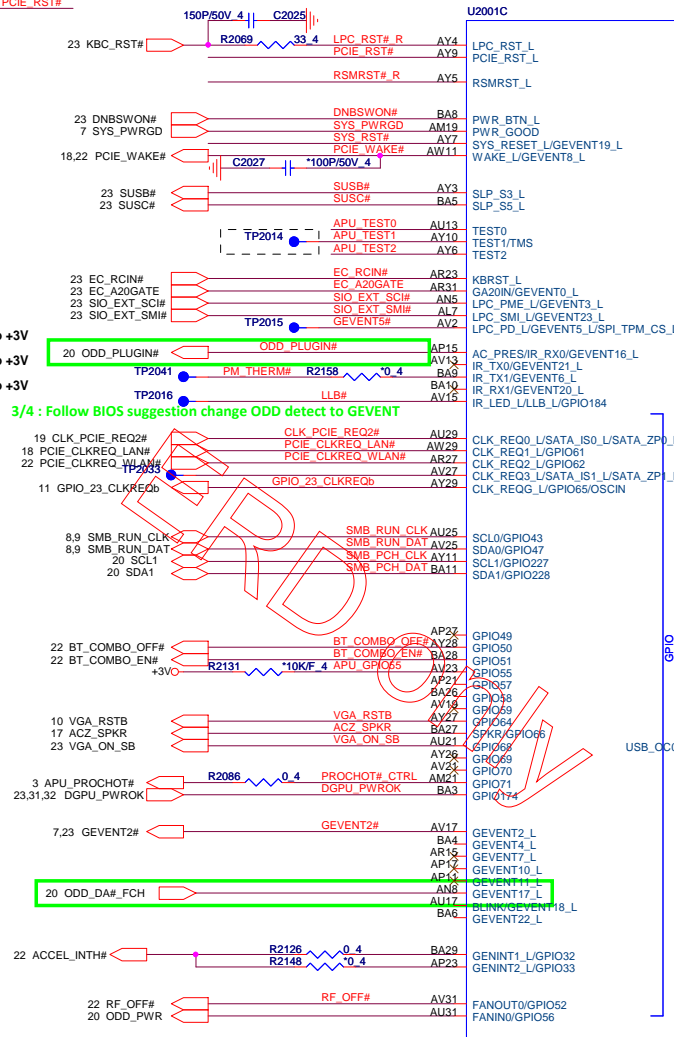
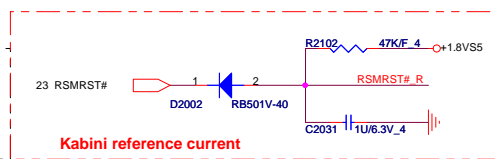
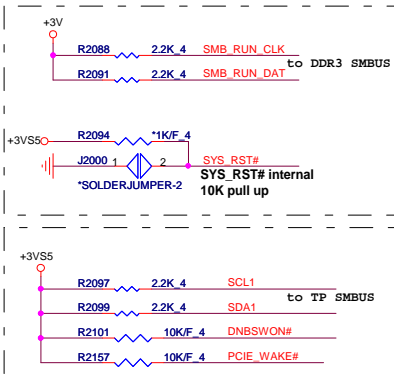


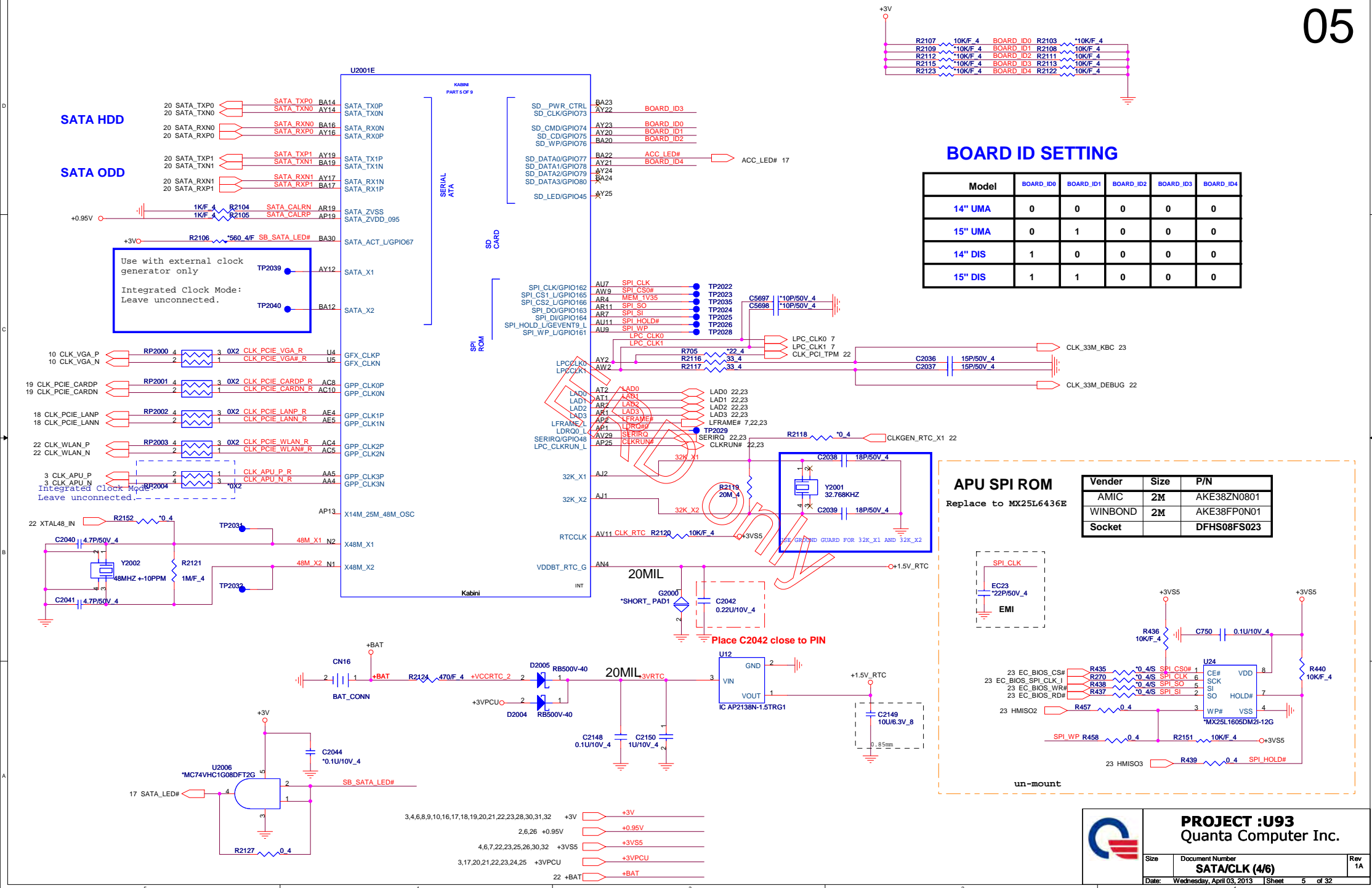
Serial VID

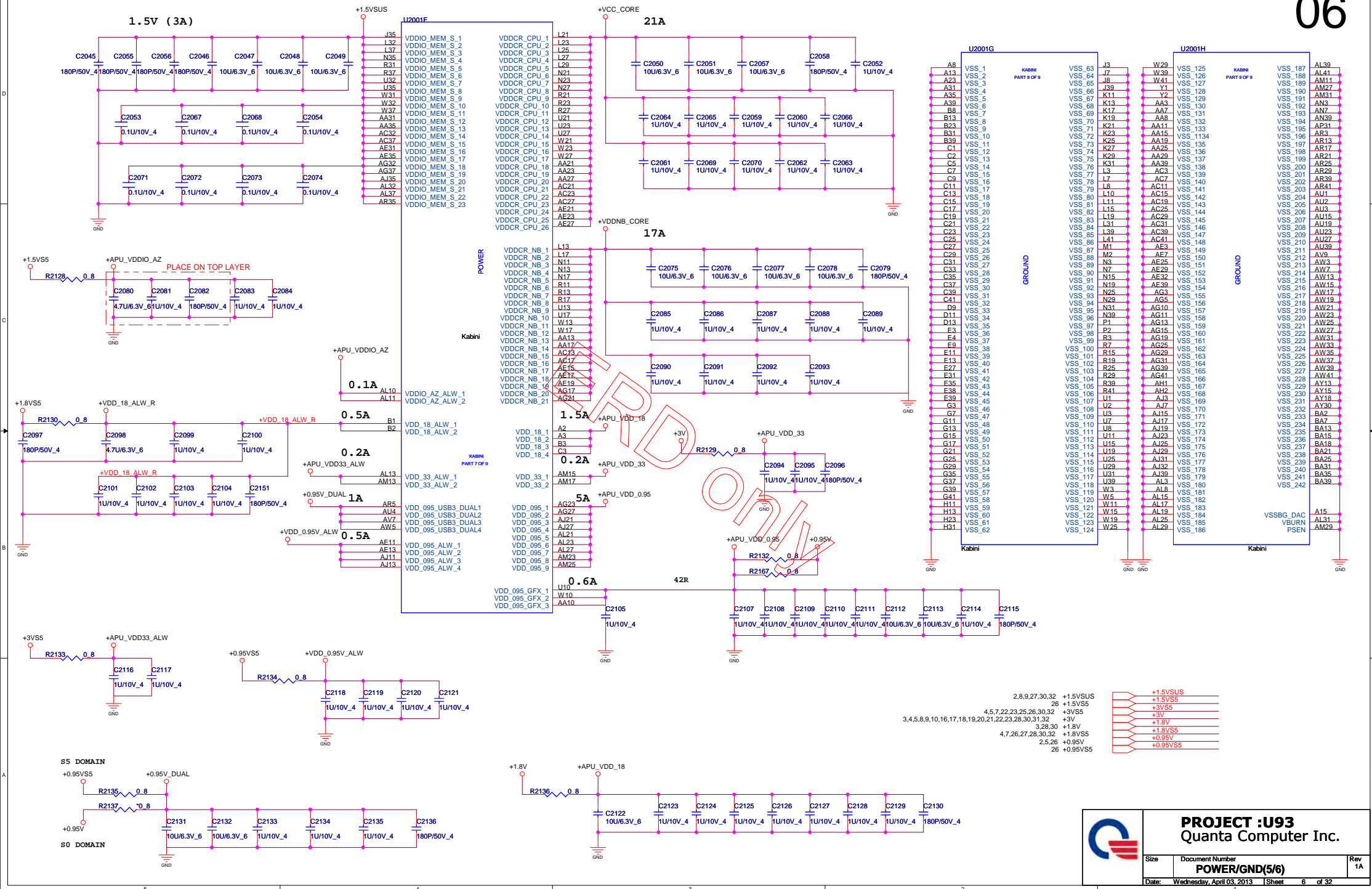




| TEST2 | TEST1 | TEST0 | Description |
|-------|-------|-------|---|
| 0 | 0 | 0 | FCH TAP accessible from APU when TAPEN is asserted FCH JTAG pins are overloaded for multiple functions, in this configuration the FCH JTAG are used as non-JTAG pins |
| 0 | 0 | 1 | Reserved |
| 0 | 1 | X | Reserved |
| 1 | TMS | 0 | FCH JTAG multi-function pins are configured as JTAG pins, in this configuration the FCH TAP can be accessed from FCH JTAG pins |
| 1 | TMS | 1 | Use on ATE only Yuba JTAG enabled |



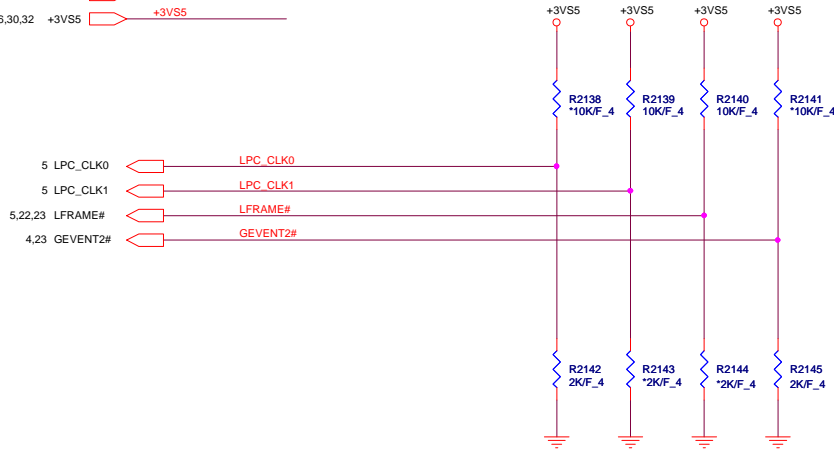




RAPS PINS

OVERLAP COMMON PADS WHERE
POSSIBLE FOR DUAL-OP RESISTORS.

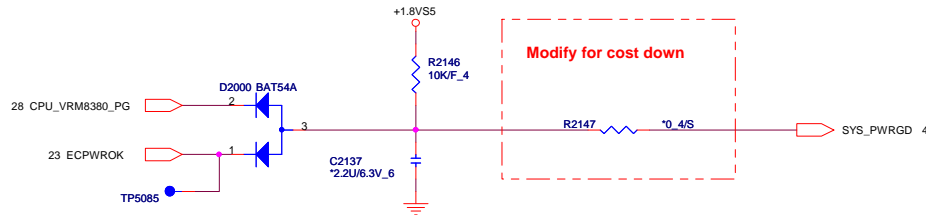
DEBUG STRAPS



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 |

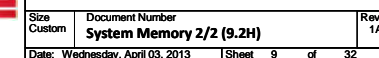
SYS_PWRGD

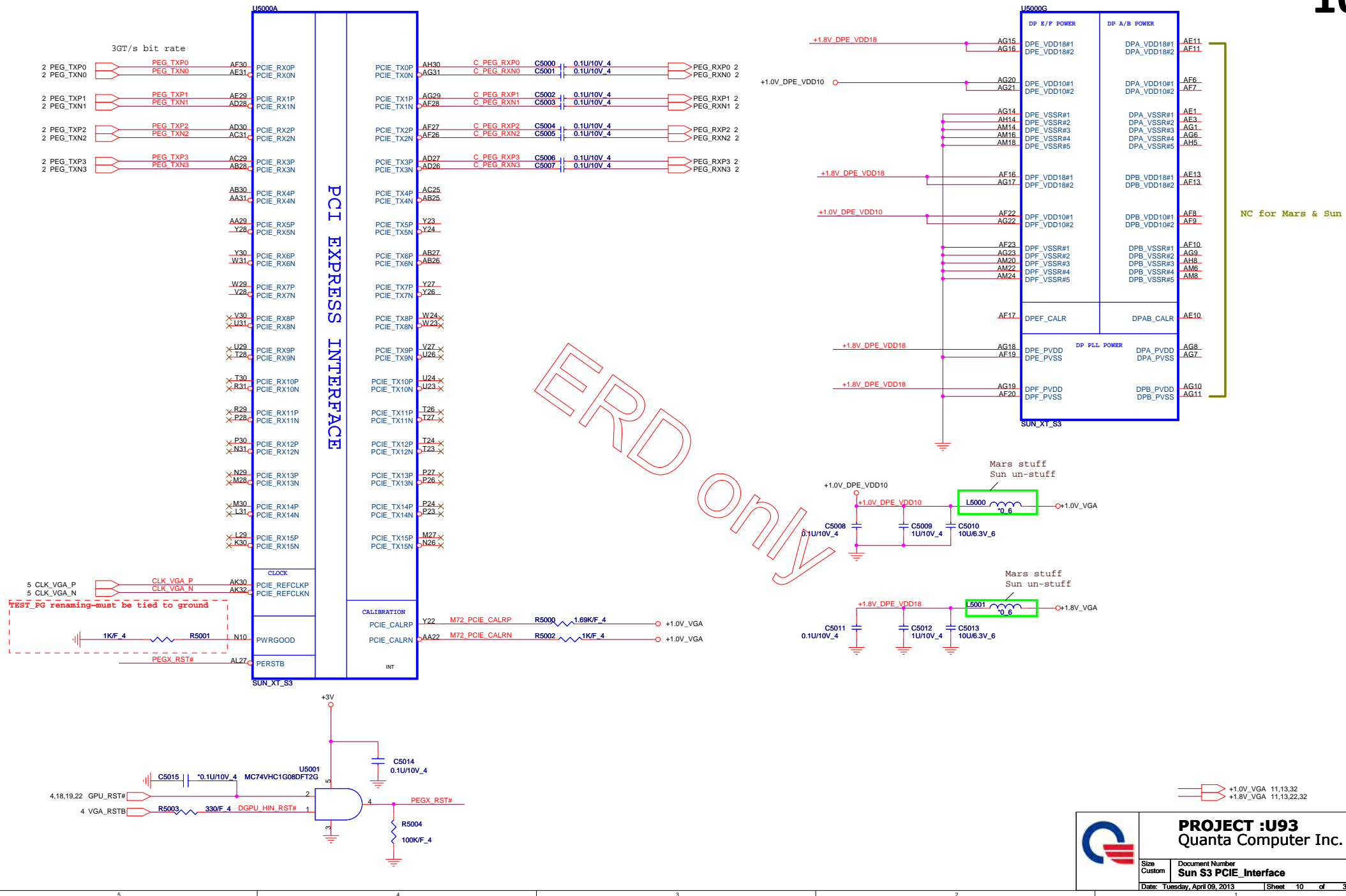


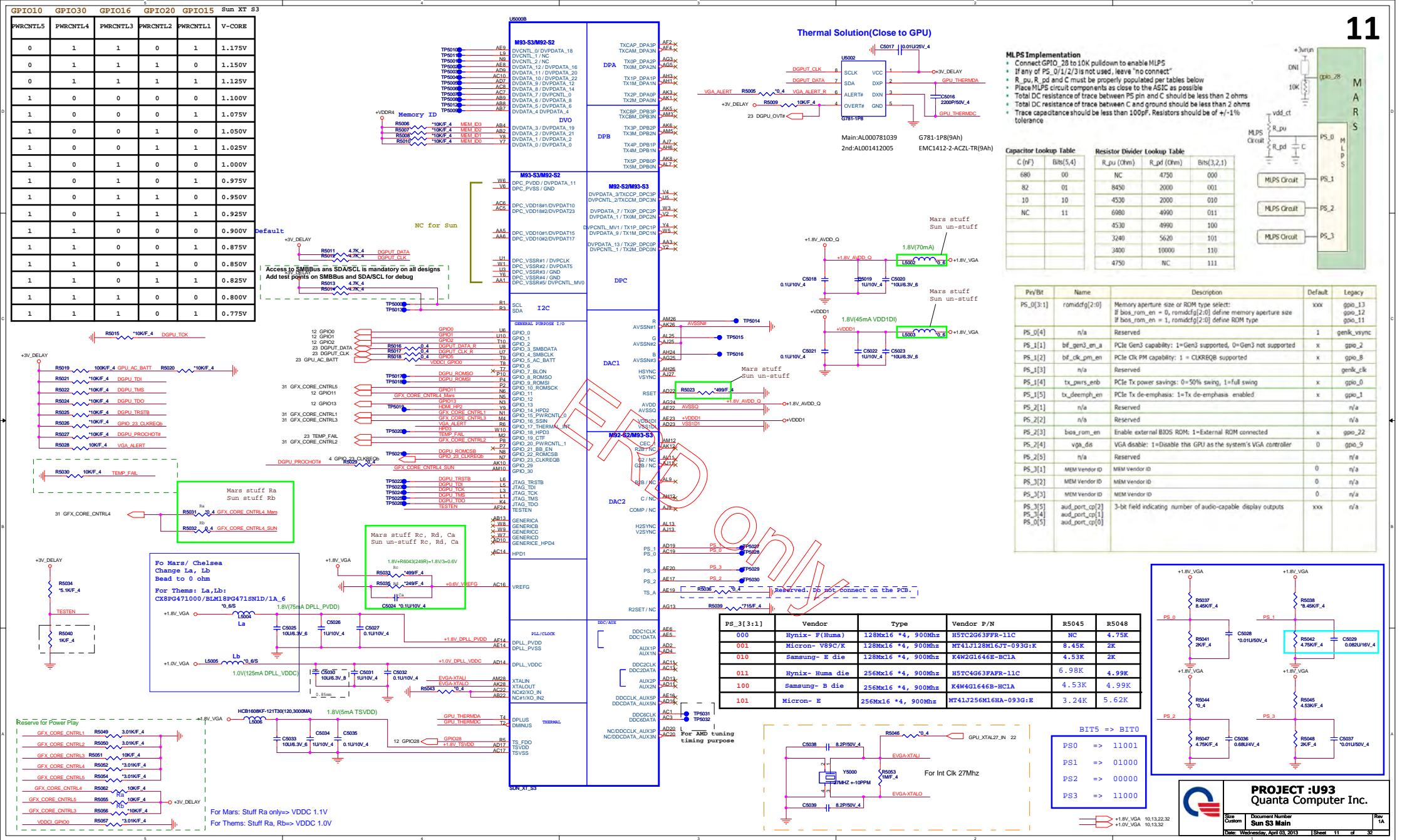
PROJECT :U93
Quanta Computer Inc.

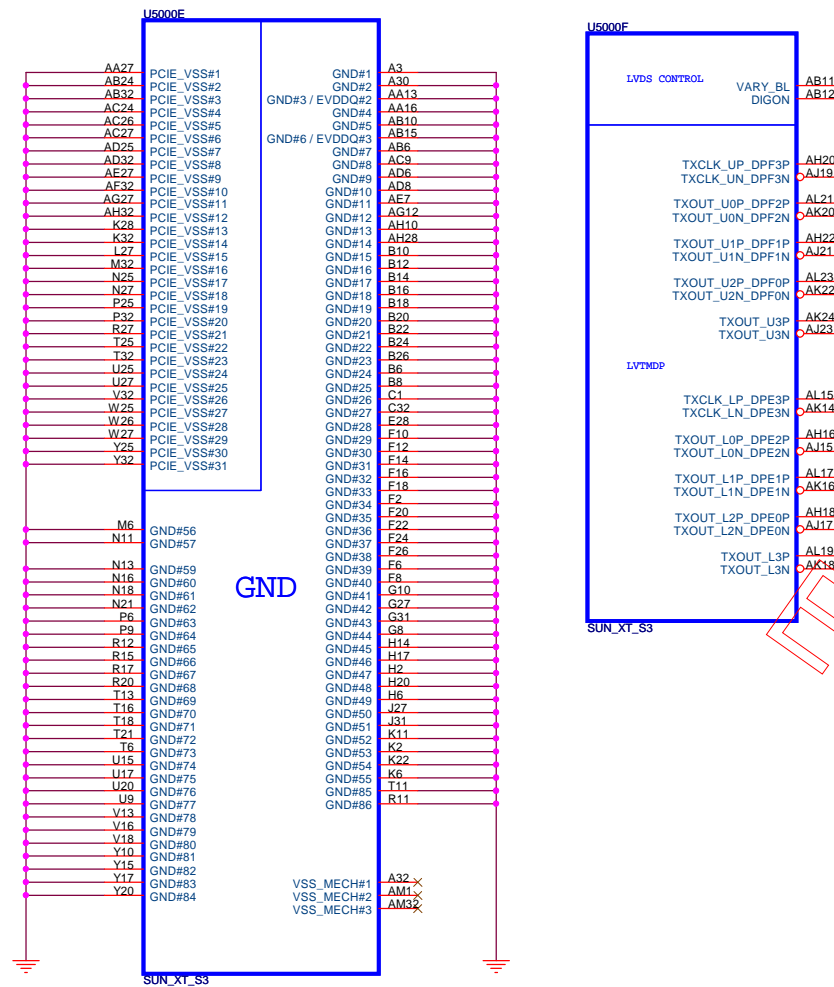
| | | |
|-------|---------------------------|---------------|
| Size | Document Number | Rev |
| | STRAP (6/6) | 1A |
| Date: | Wednesday, April 03, 2013 | Sheet 7 of 32 |











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

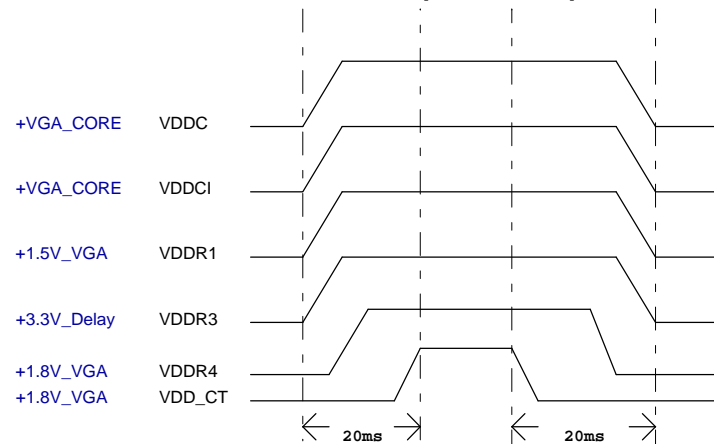
| STRAPS | PIN | DESCRIPTION OF DEFAULT SETTINGS | RECOMMENDED SETTINGS |
|----------------------|----------------|--|----------------------|
| TX_PWRS_ENB | GPIO0 | PCIE FULL TX OUTPUT SWING | 0 |
| TX_DEEMPH_EN | GPIO1 | PCIE TRANSMITTER DE-EMPHASIS ENABLED | X |
| RSVD | GPIO2 | RESERVED | 0 |
| RSVD | GPIO8 | RESERVED | 0 |
| BIF_VGA_DIS | GPIO9 | VGA ENABLED | 0 |
| RSVD | GPIO21 | RESERVED | 0 |
| BIOS_ROM_EN | GPIO_22_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 |
| AUDI[1] | HSYNC | SEE DATABOOK FOR DETAIL | 0 |
| AUDI[0] | VSNC | 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

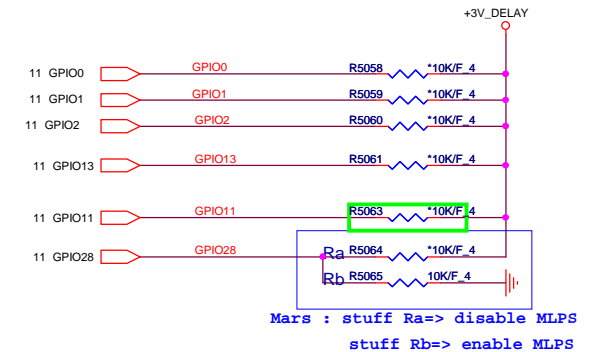
Power Up/Down Sequence



Memory Aperture size(Seymour)

| GPIO9 | | GPIO13 | GPIO12 | GPIO11 |
|---------|------|-----------|-----------|-----------|
| BIOSROM | | ROMIDCFG2 | ROMIDCFG1 | 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 |

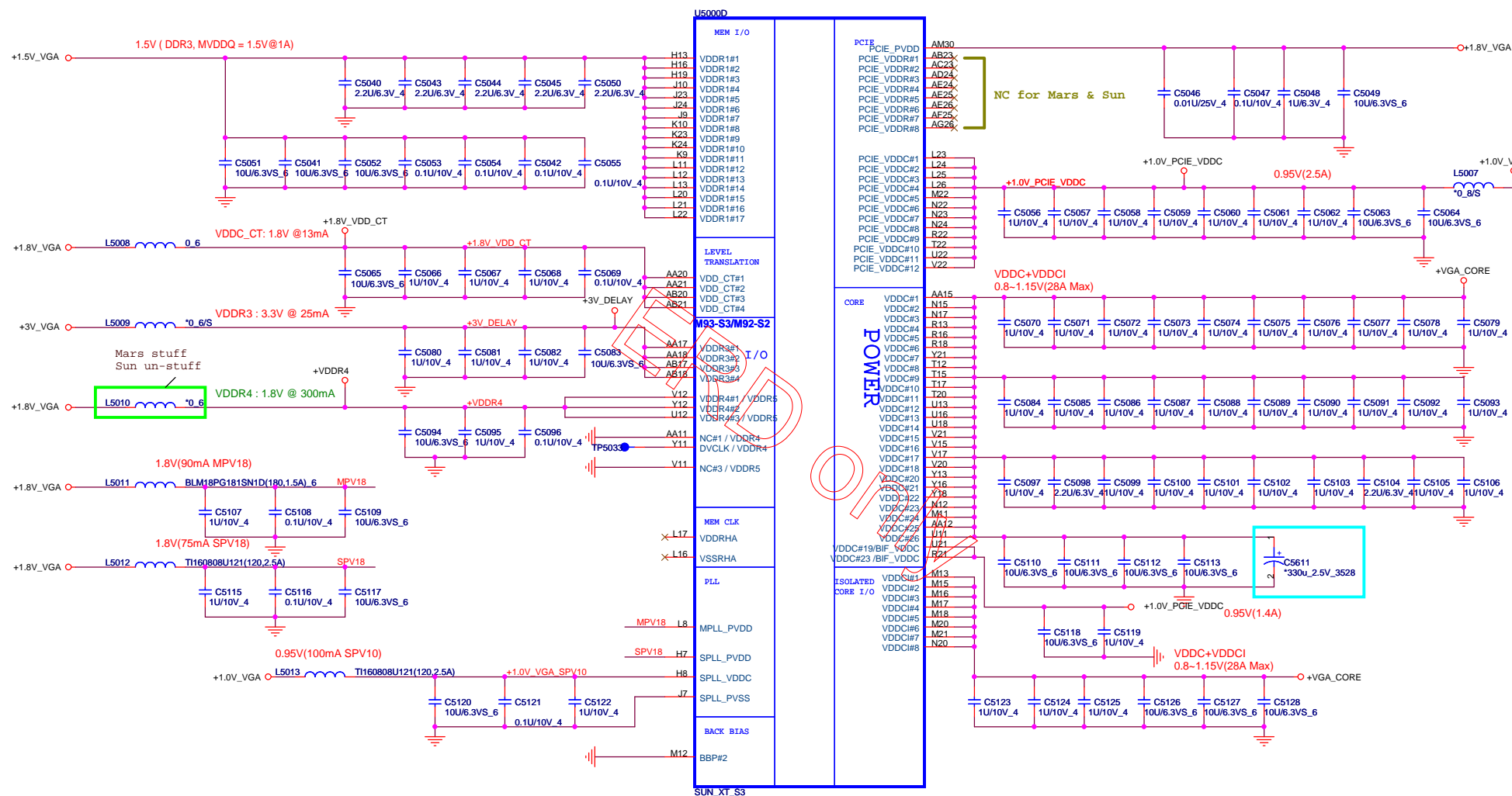
It is a shared pin strap with CONFIG[2:0] if BIOS_ROM_EN is set to 0.

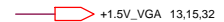
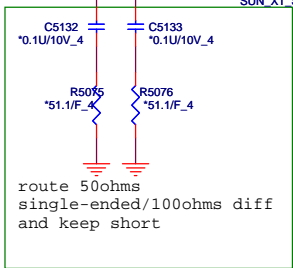
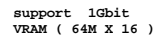


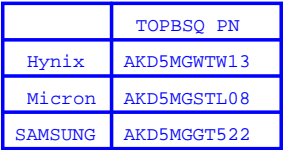
PROJECT :U93
Quanta Computer Inc.

| | | |
|---------------------------------|---------------------------|--------|
| Size Custom | Document Number | Rev 1A |
| | Sun S3 GND / LVDS/ Straps | |
| Date: Wednesday, April 03, 2013 | Sheet 12 of 32 | |

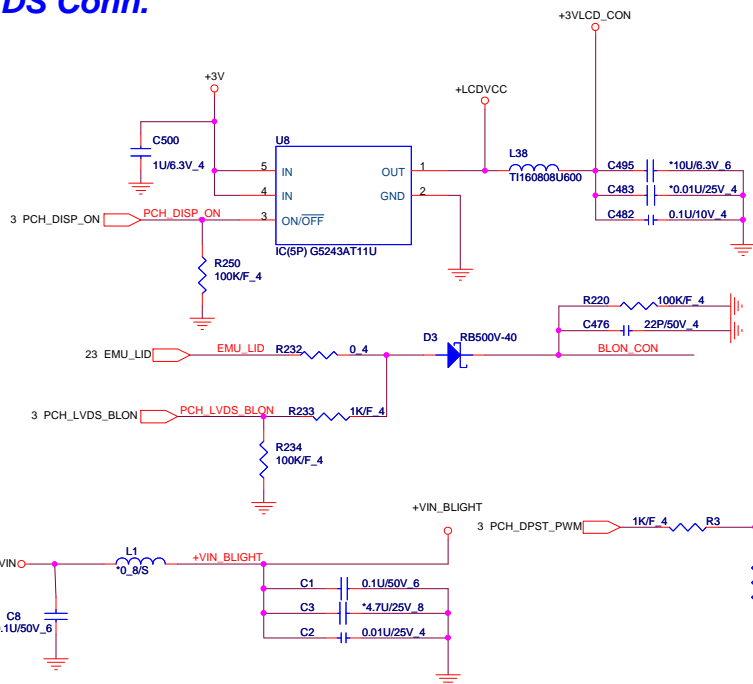
+3V_DELAY 11,13



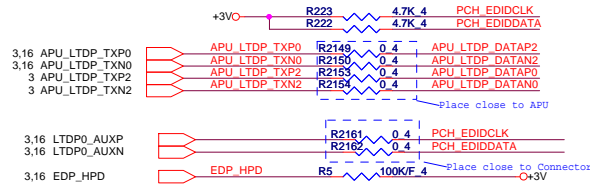




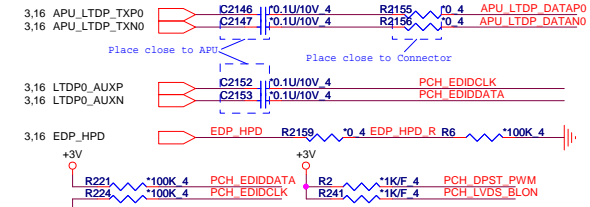
LVDS Conn.



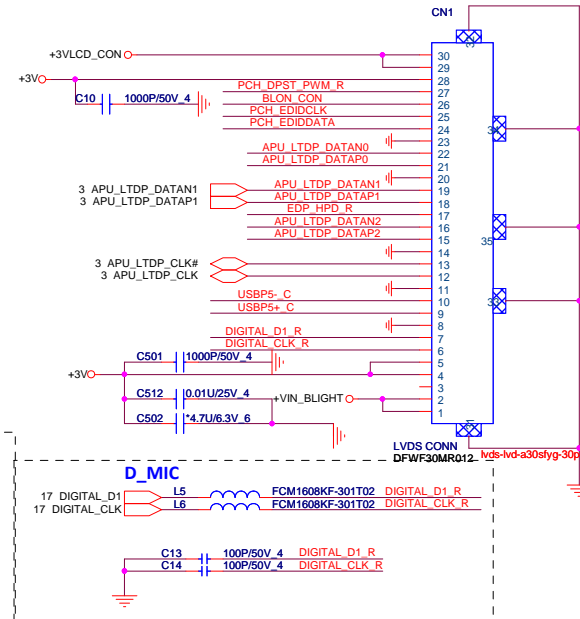
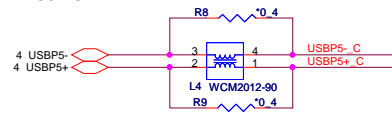
For LVDS only : stuff



For EDP Only: stuff

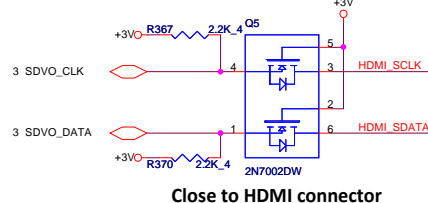


USB CAMERA



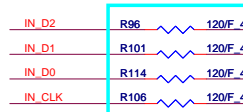
HDMI Conn.

HDMI SMBus Isolation

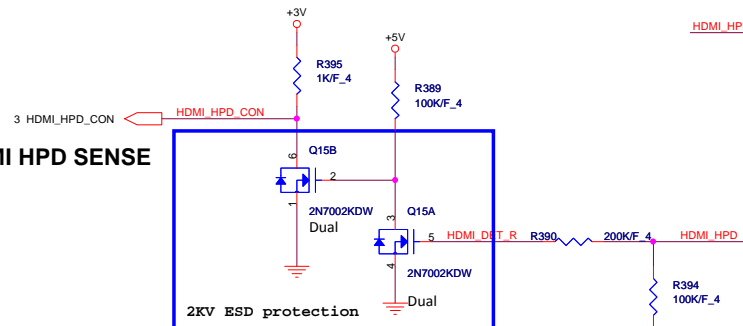


Close to HDMI connector

EMI Solution

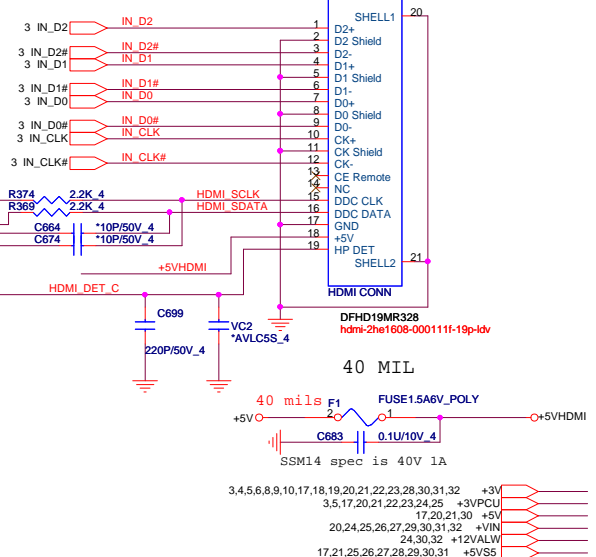


HDMI HPD SENSE

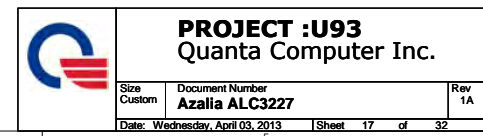


2KV ESD protection

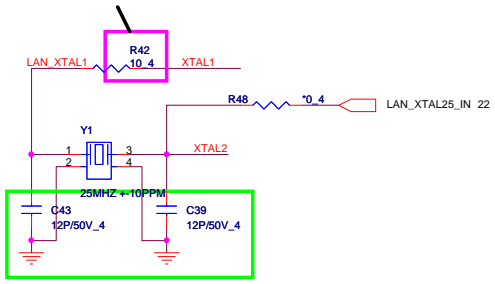
SPS Type



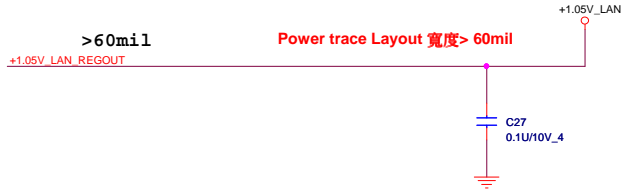
| | | |
|-------------------------------|----------------------|-----|
| | | |
| PROJECT :U93 | | |
| Quanta Computer Inc. | | |
| Size | Document Number | Rev |
| Custom | LCD Connector (LVDS) | 1A |
| Date: Tuesday, April 09, 2013 | Sheet 16 of 32 | |



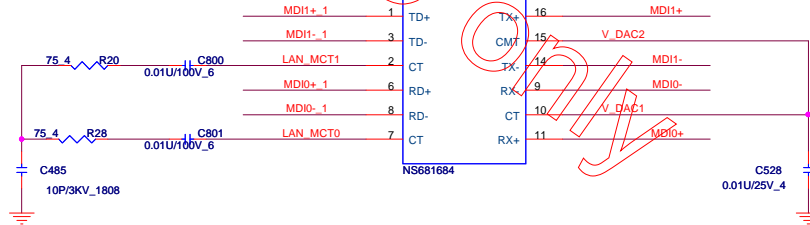
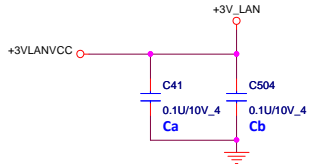
For EMI 0 ~ 22 ohm



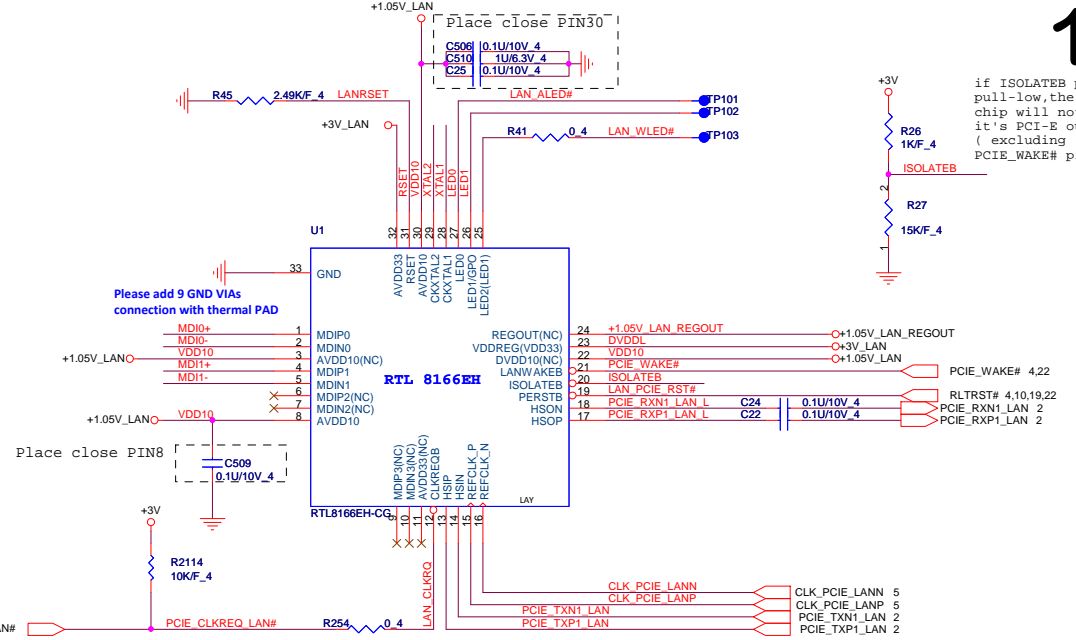
SI change to 12p



Place close PIN23 and PIN32

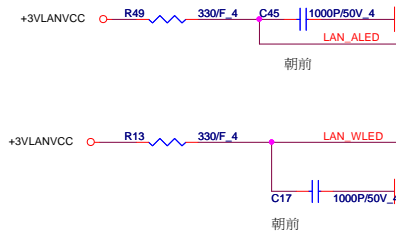
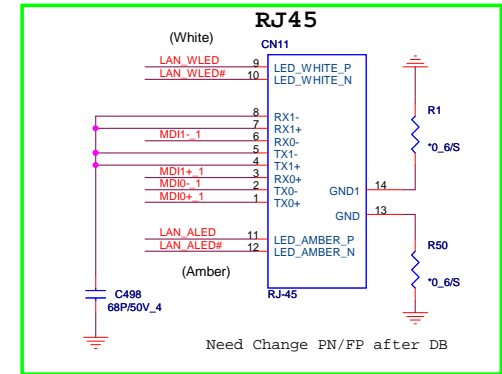


3,4,5,6,8,9,10,16,17,19,20,21,22,23,28,30,31,32 +3V
22,30 +3VLANVCC



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

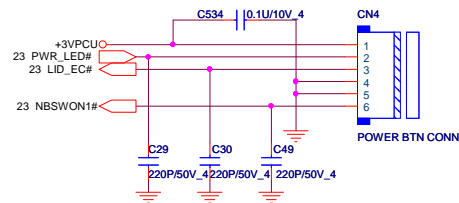
LAN conn



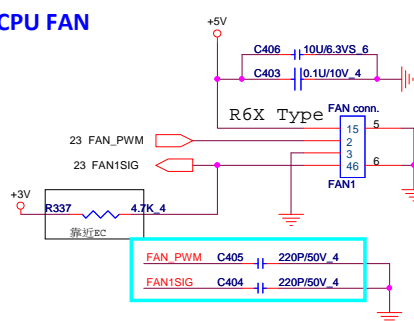
| | | |
|--|---|-----------|
| | | |
| PROJECT :U93 Quanta Computer Inc. | | |
| Size Custom | Document Number RTL 8166EH/RJ45 | Rev 1A |
| Date: Wednesday, April 03, 2013 Sheet 18 of 32 | | |

Power Button Connector

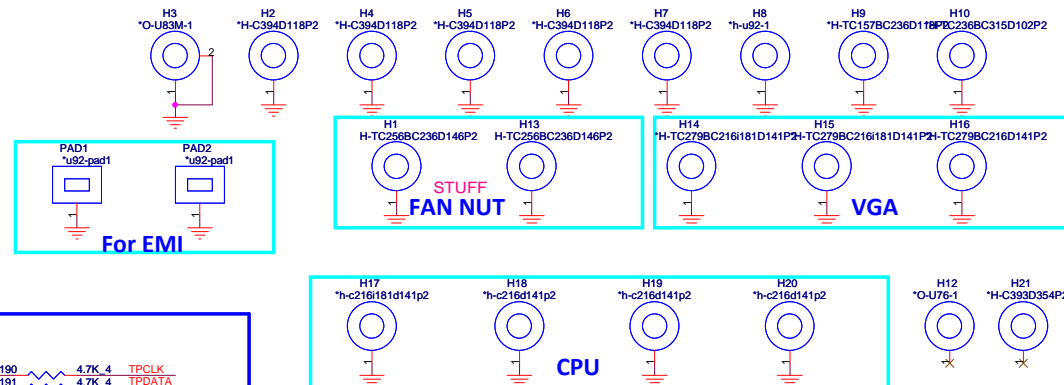
Pin1 : +3VPCU(LIDSWITCH PWR)
Pin2 : POWER LED
Pin3 : LIDSWITCH
Pin4 : GND
Pin5 : GND
Pin6 : POWERON#



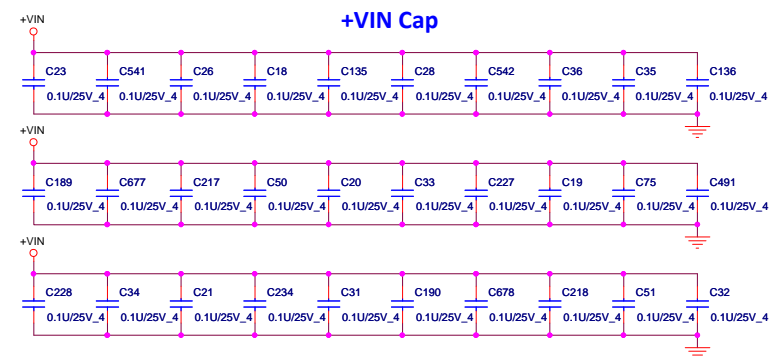
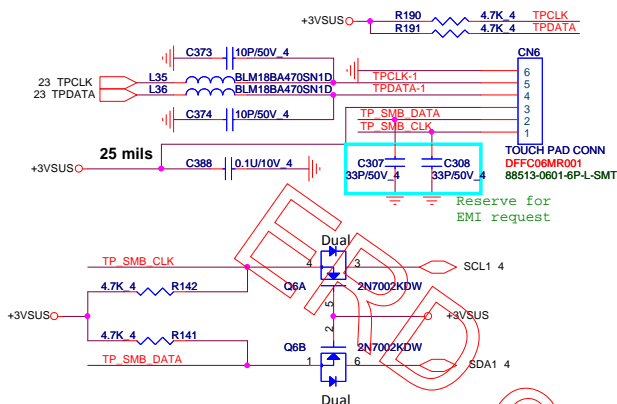
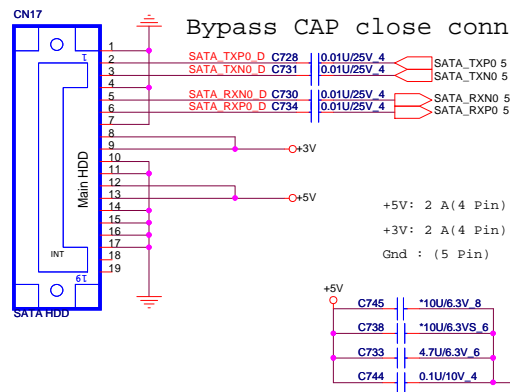
CPU FAN



Hole

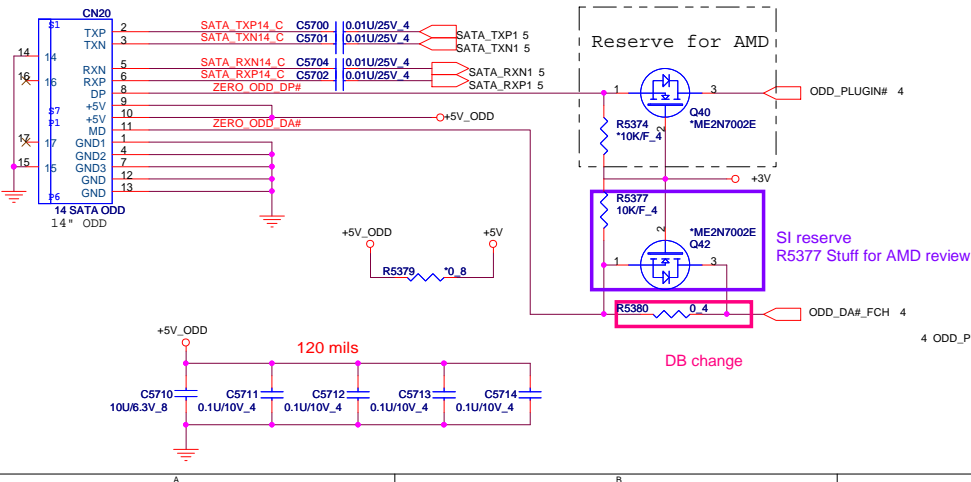


SATA HDD Connector(Cable type)



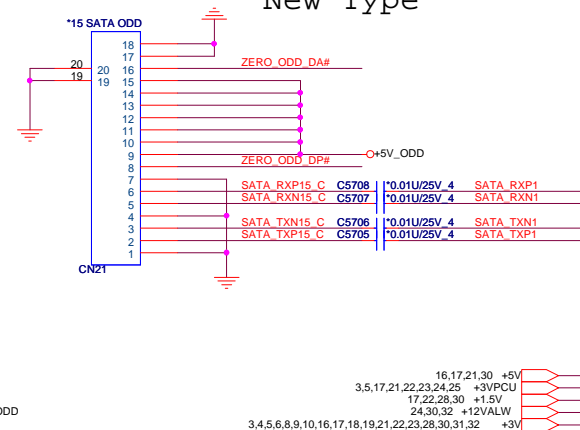
SATA ODD CONNECTOR

14" SATA ODD Bypass CAP close conn



15" SATA ODD

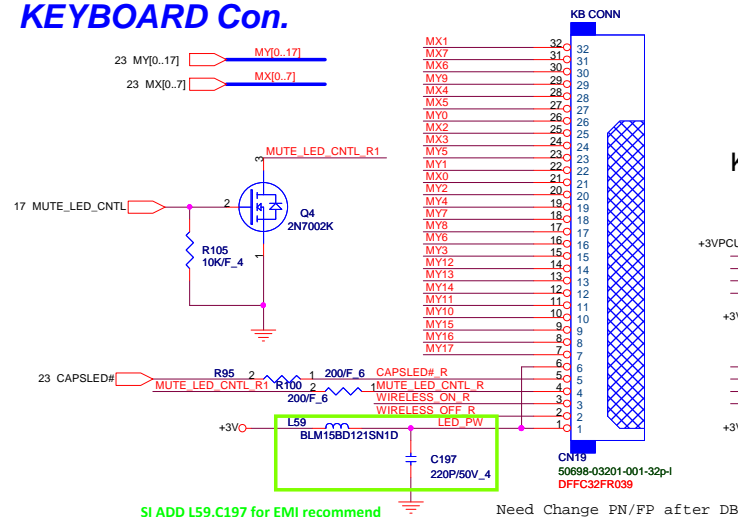
New Type



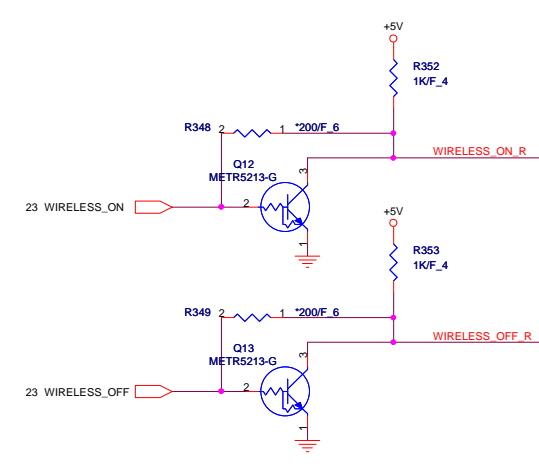
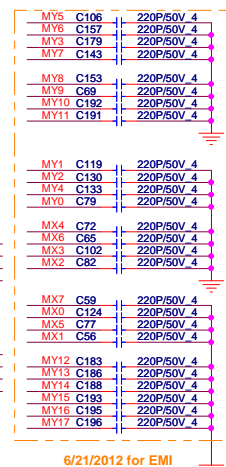
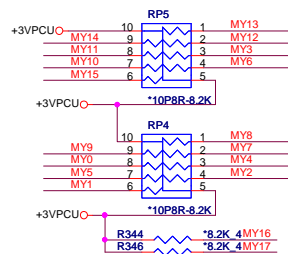
| | | | |
|---------------------------------|-----------------|-------------------------|----|
| | | PROJECT :U93 | |
| | | Quanta Computer Inc. | |
| Size | Document Number | SATA HDD/ODD/MSATA CONN | |
| Custom | | | |
| Date: Wednesday, April 03, 2013 | Sheet | 20 of | 32 |

KEYBOARD Con.

21

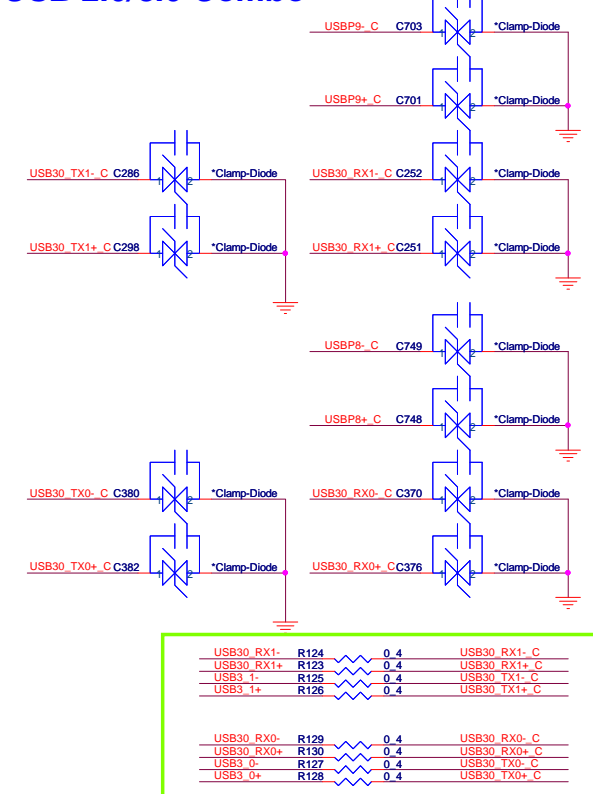


KEYBOARD PULL-UP



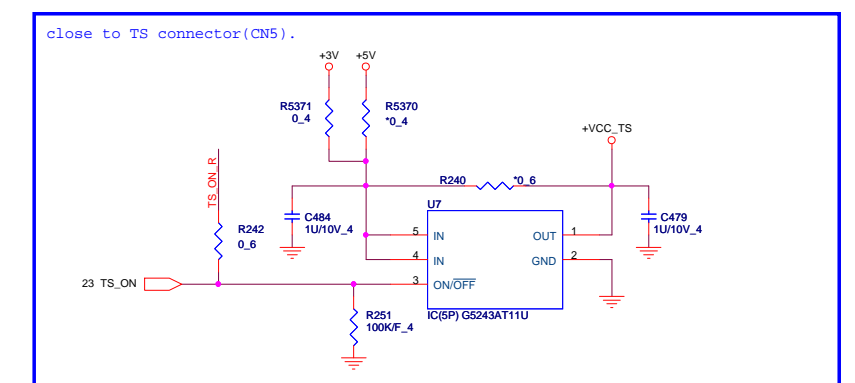
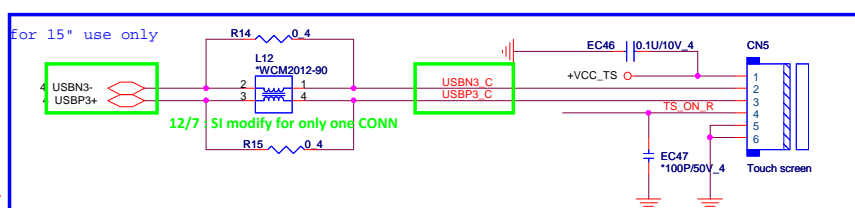
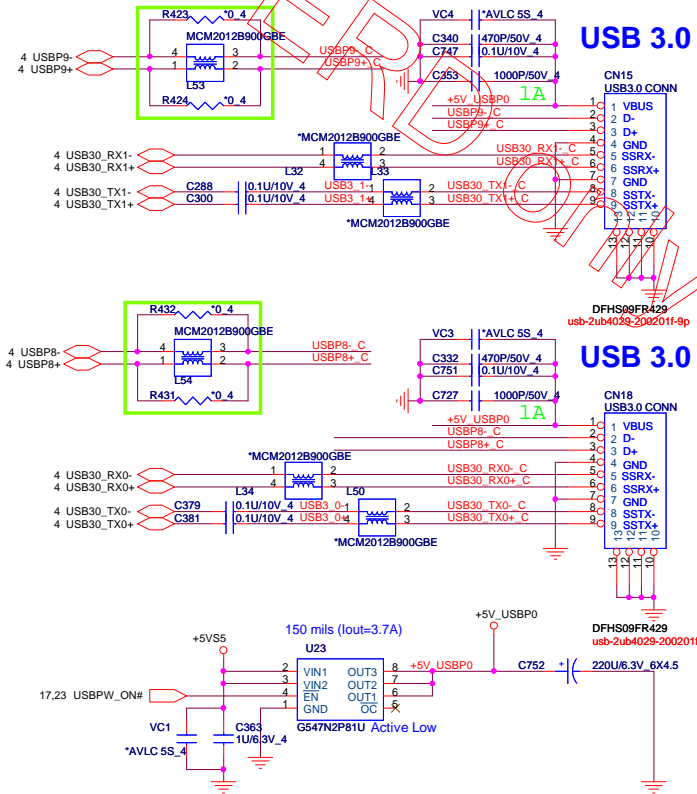
NM9 Type

USB 2.0/3.0 Combo

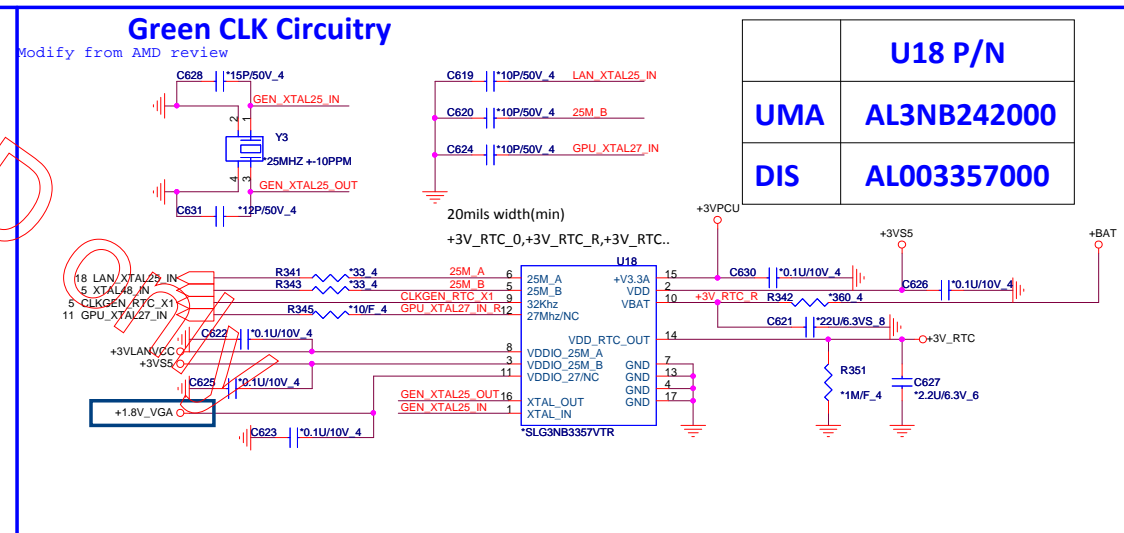
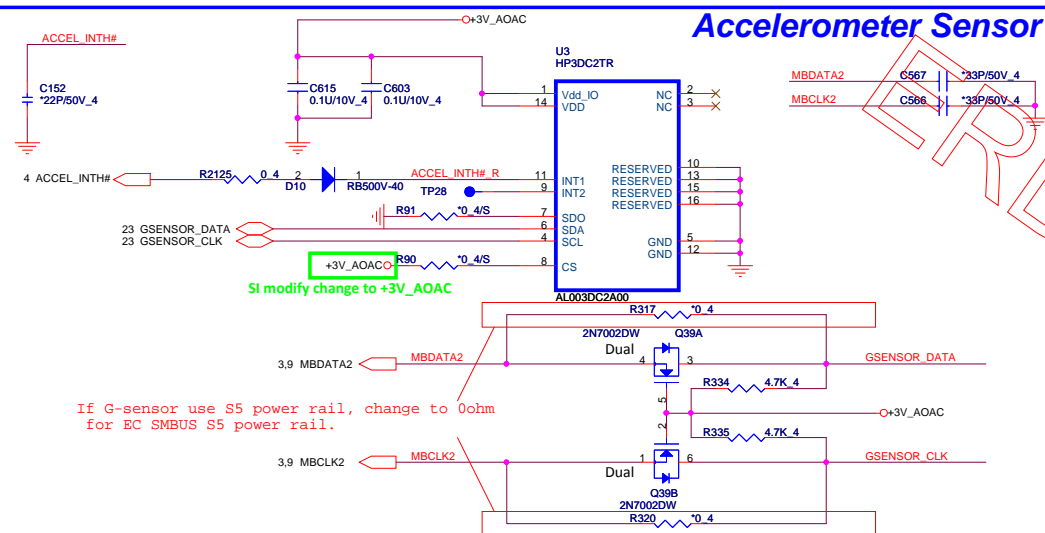
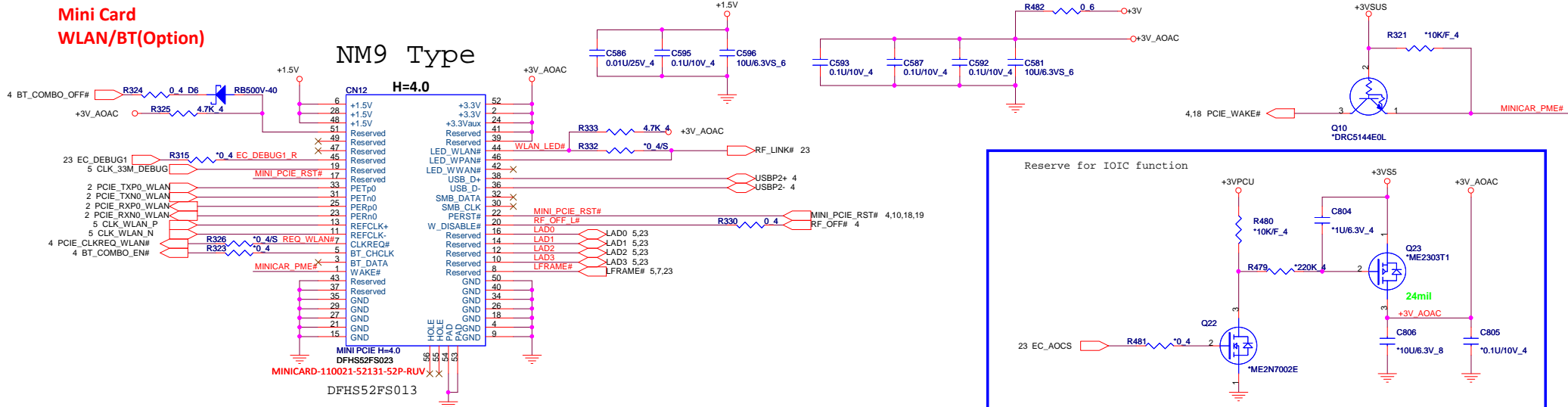


SPS Type

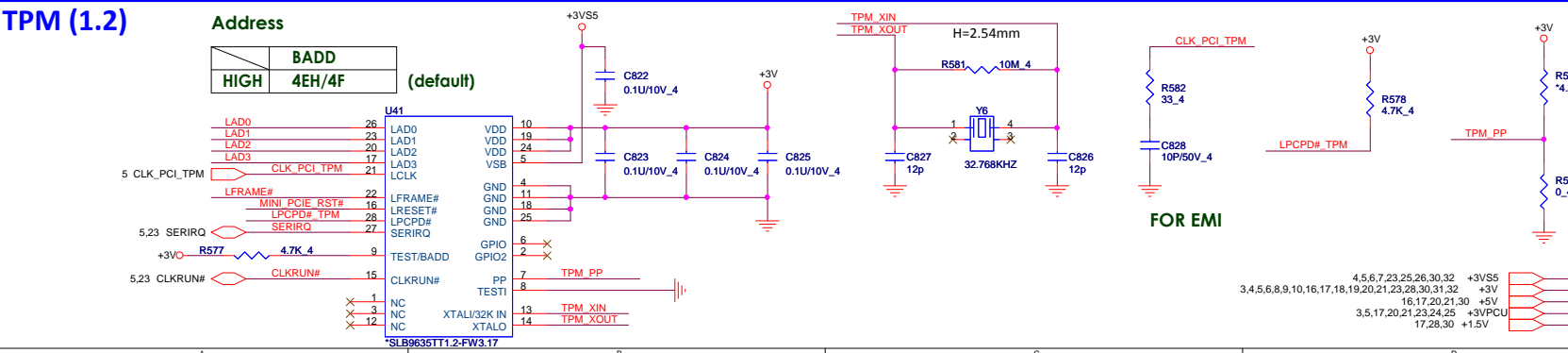
USB 3.0




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

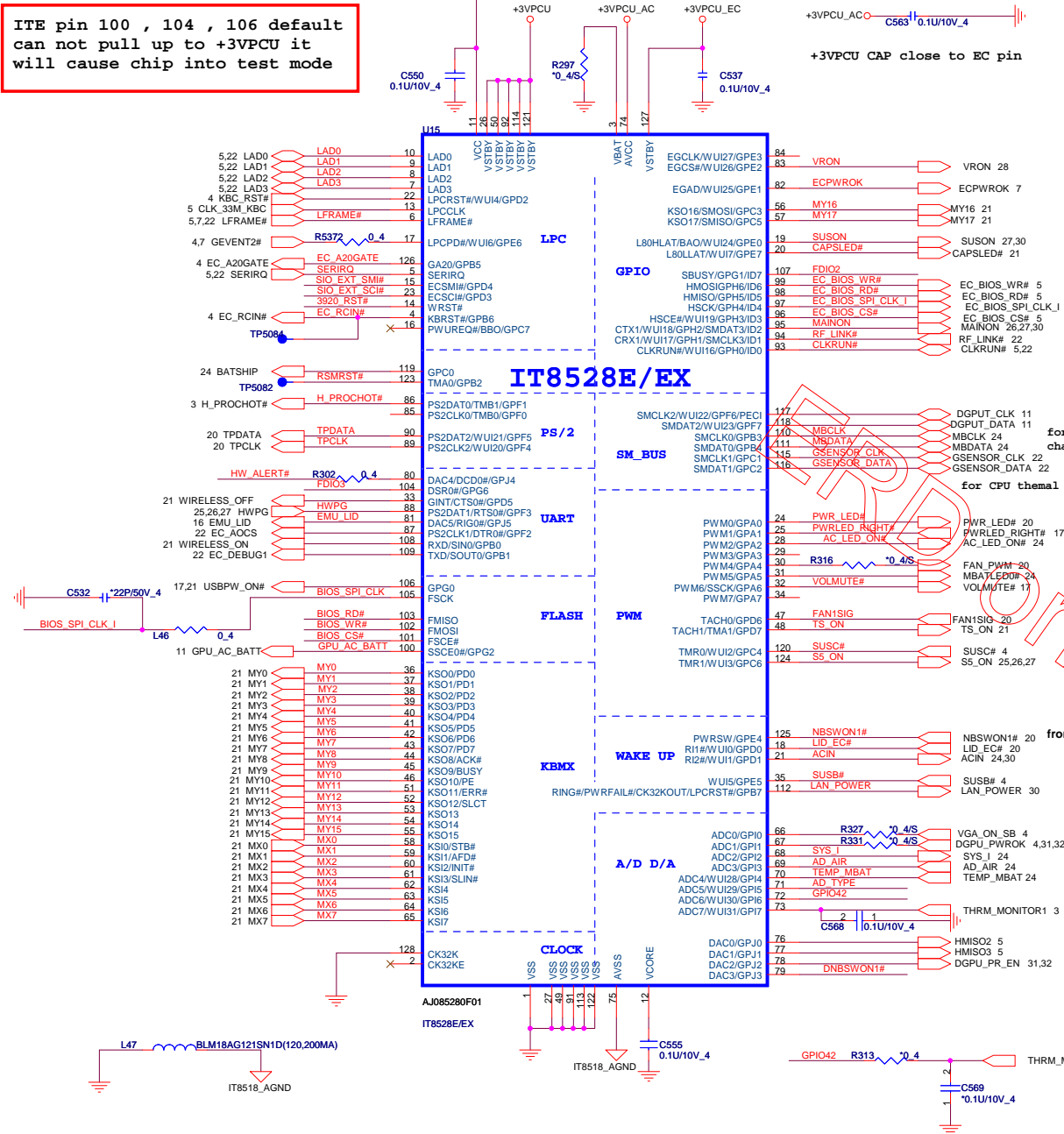


TPM (1.2)

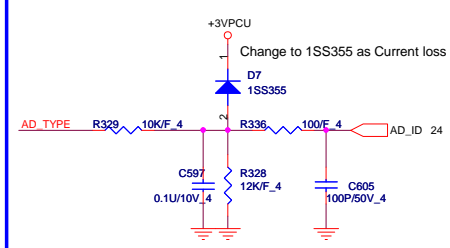


| | | | |
|---|---|---|-----------|
|  | PROJECT :U93 Quanta Computer Inc. | | |
| | Size Custom | Document Number MINI-PCIE/LED | Rev 1A |
| Date: Wednesday, April 03, 2013 | | Sheet 22of | 32 |

ITE pin 100 , 104 , 106 default
can not pull up to +3VPCU it
will cause chip into test mode

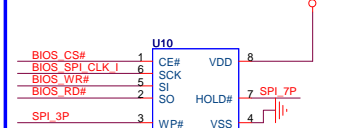


Smart adapter Type check

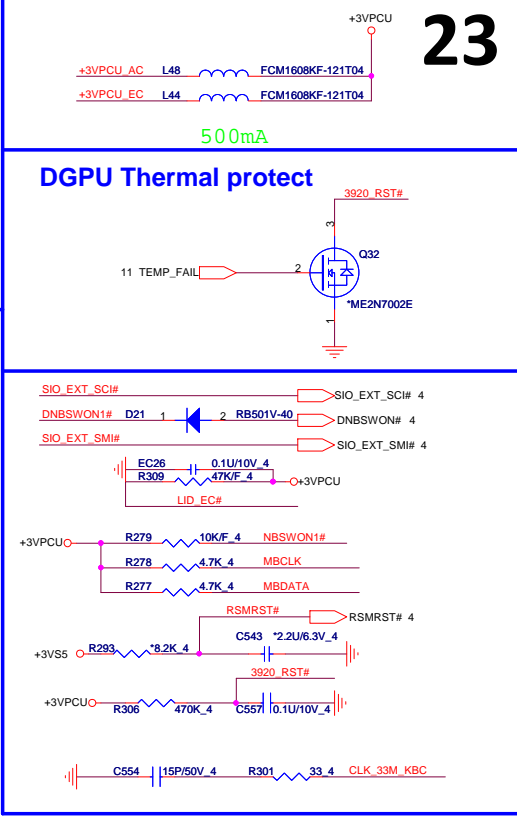


| Vender | Size | P/N |
|--------|------|-------------|
| AIT | 4M | AKE39ZN0800 |
| GGD | 4M | AKE39GN0Q01 |
| WND | 4M | AKE39FN0N01 |
| Socket | | DFHS08FS023 |

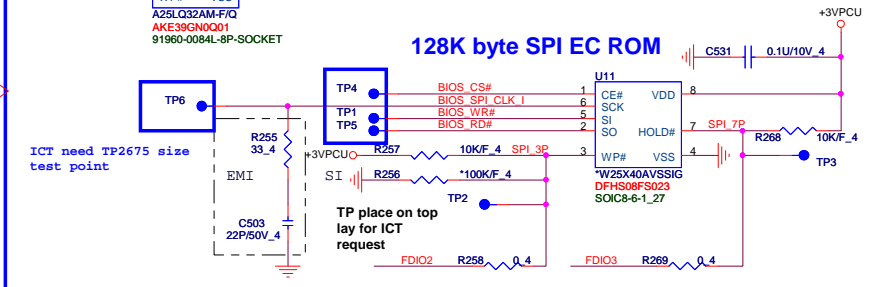
4M SPI EC ROM



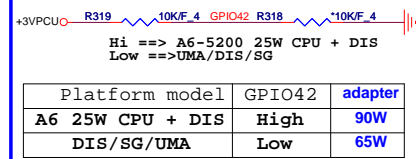
DGPU Thermal protect




128K byte SPI EC ROM

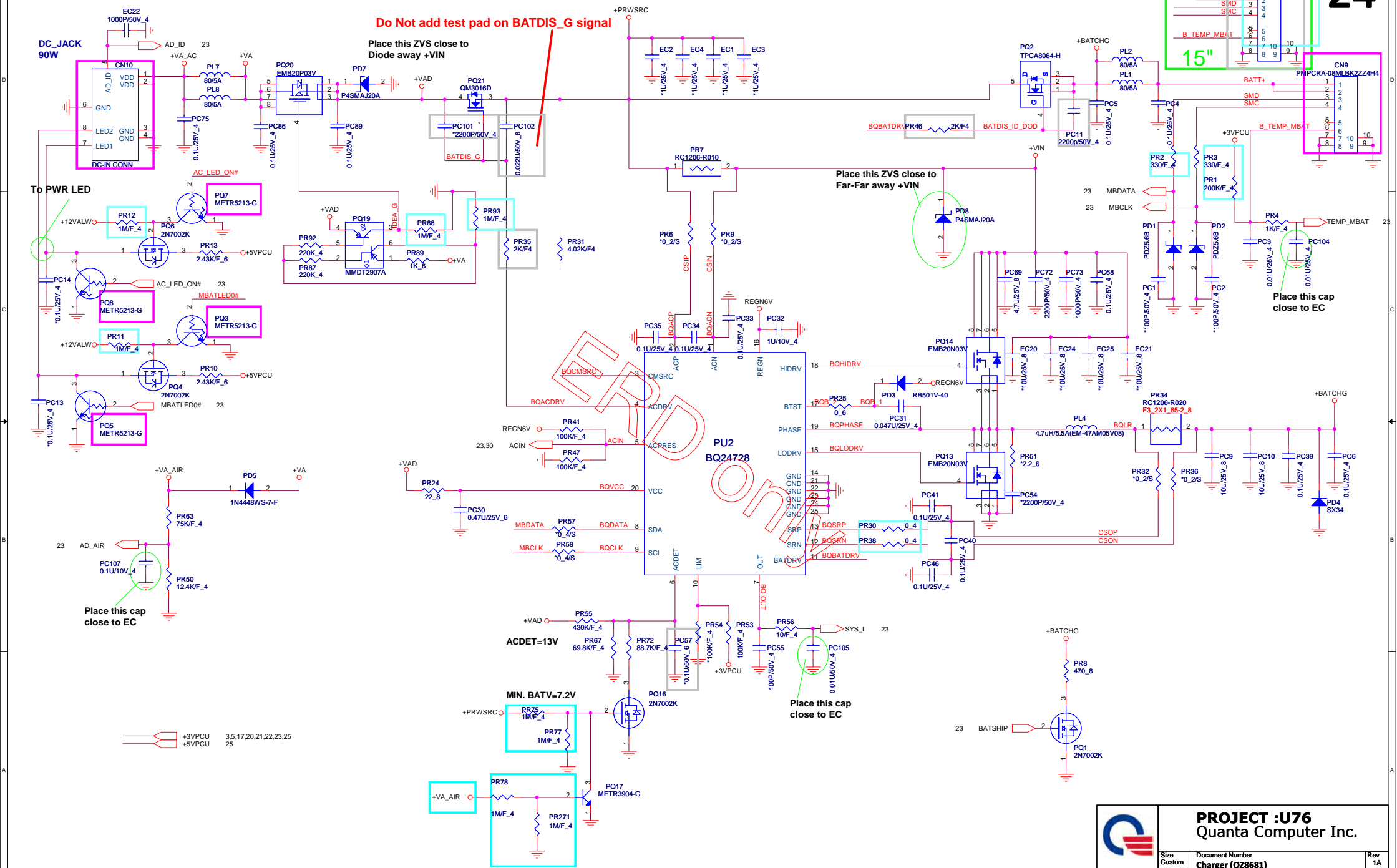


Adapter select

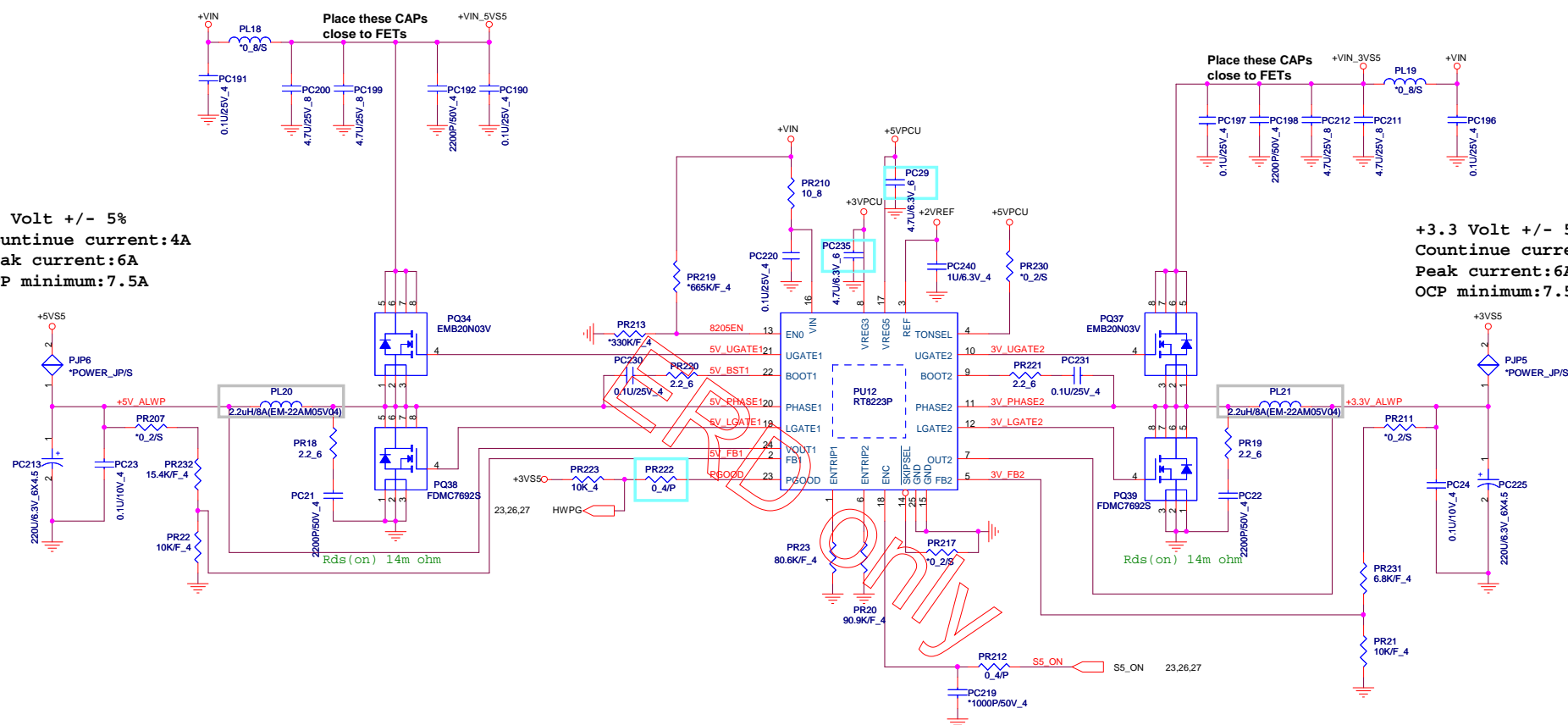


| | | | |
|---|--|--|-----------|
|  | PROJECT :U93 Quanta Computer Inc. | | |
| | Size Custom | Document Number EC (IT8528E)/ROM | Rev 1A |
| | Date: Wednesday, April 03, 2013 | Sheet 23 of 32 | |

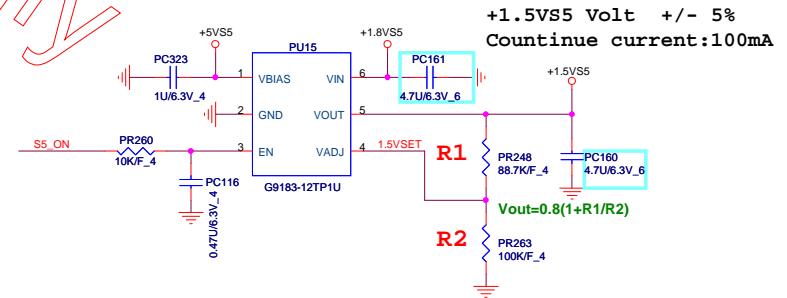
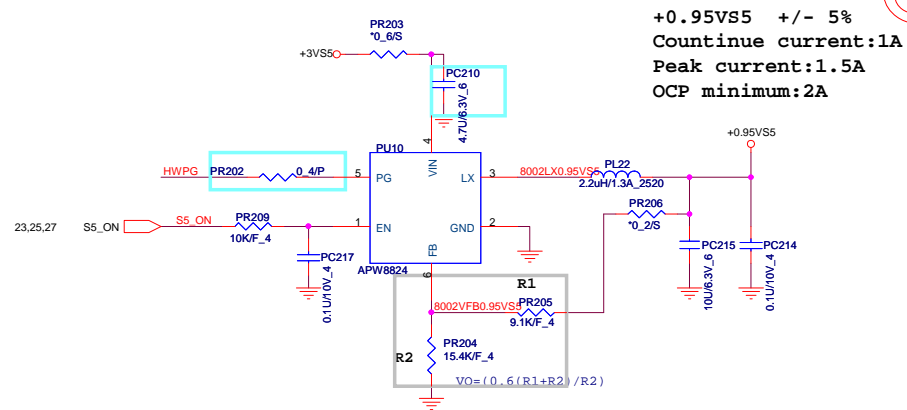
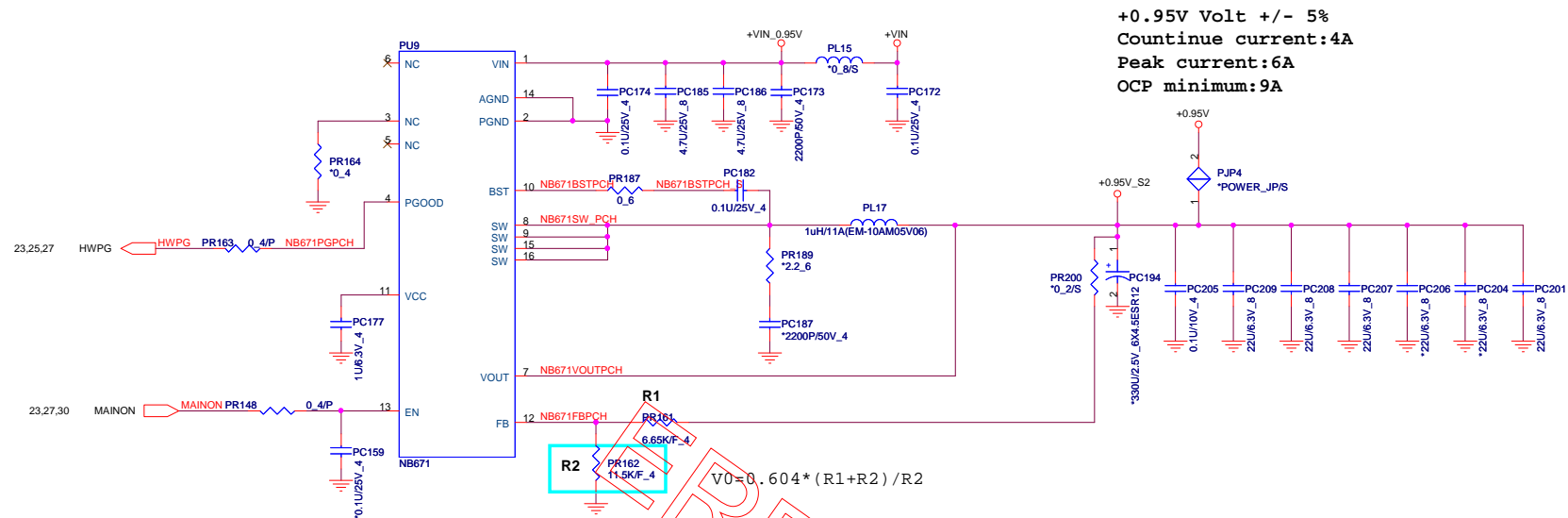
ADD VGA_TEMP_FAIL function is active Hi

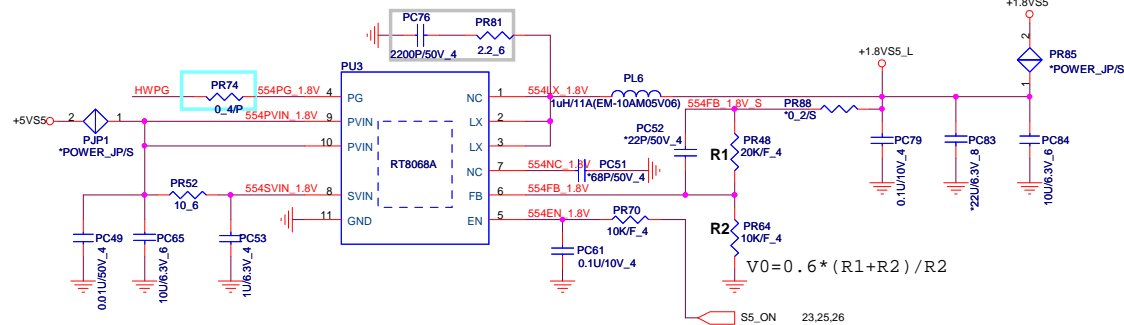
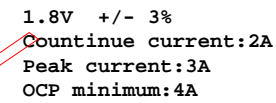


+3.3 Volt +/- 5%
Continue current:4A
Peak current:6A
OCP minimum:7.5A

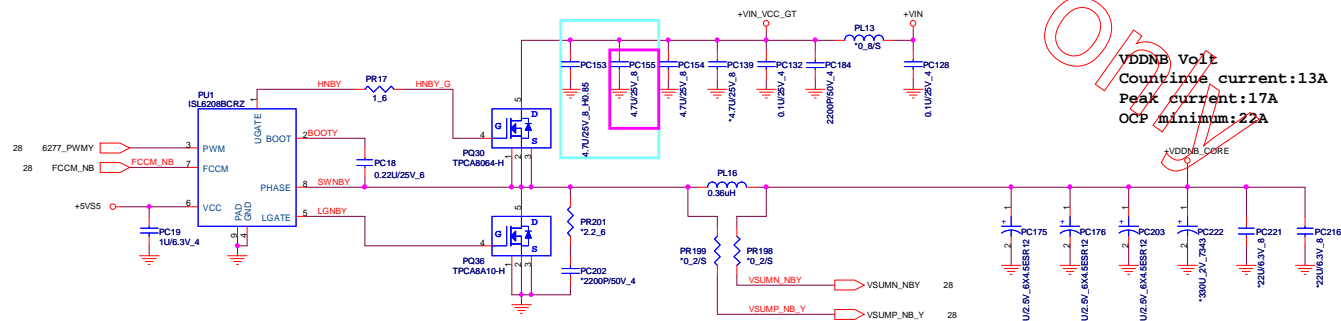
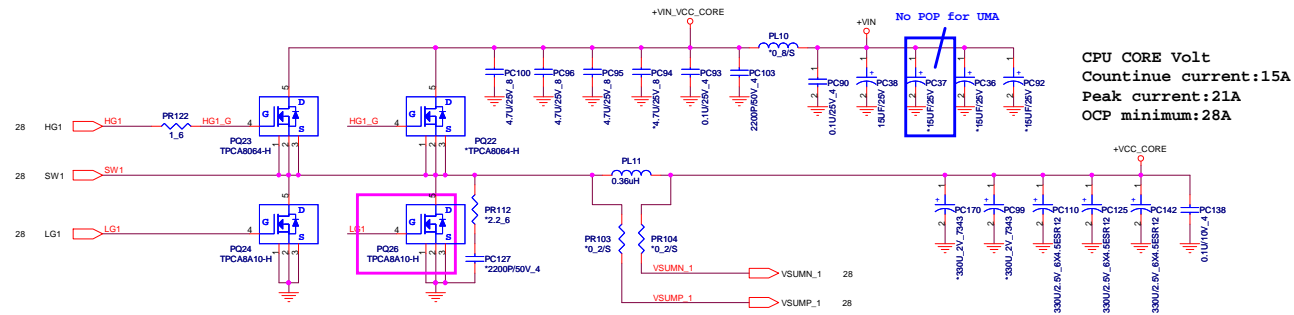


| | | |
|---------------------------------|--|-----------|
| Size Custom | Document Number 3/5VPCU(RT8223P) | Rev 1A |
| Date: Wednesday, April 03, 2013 | Sheet 25 of 32 | |



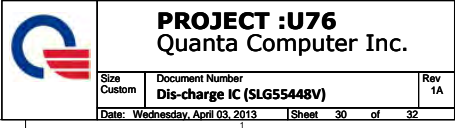




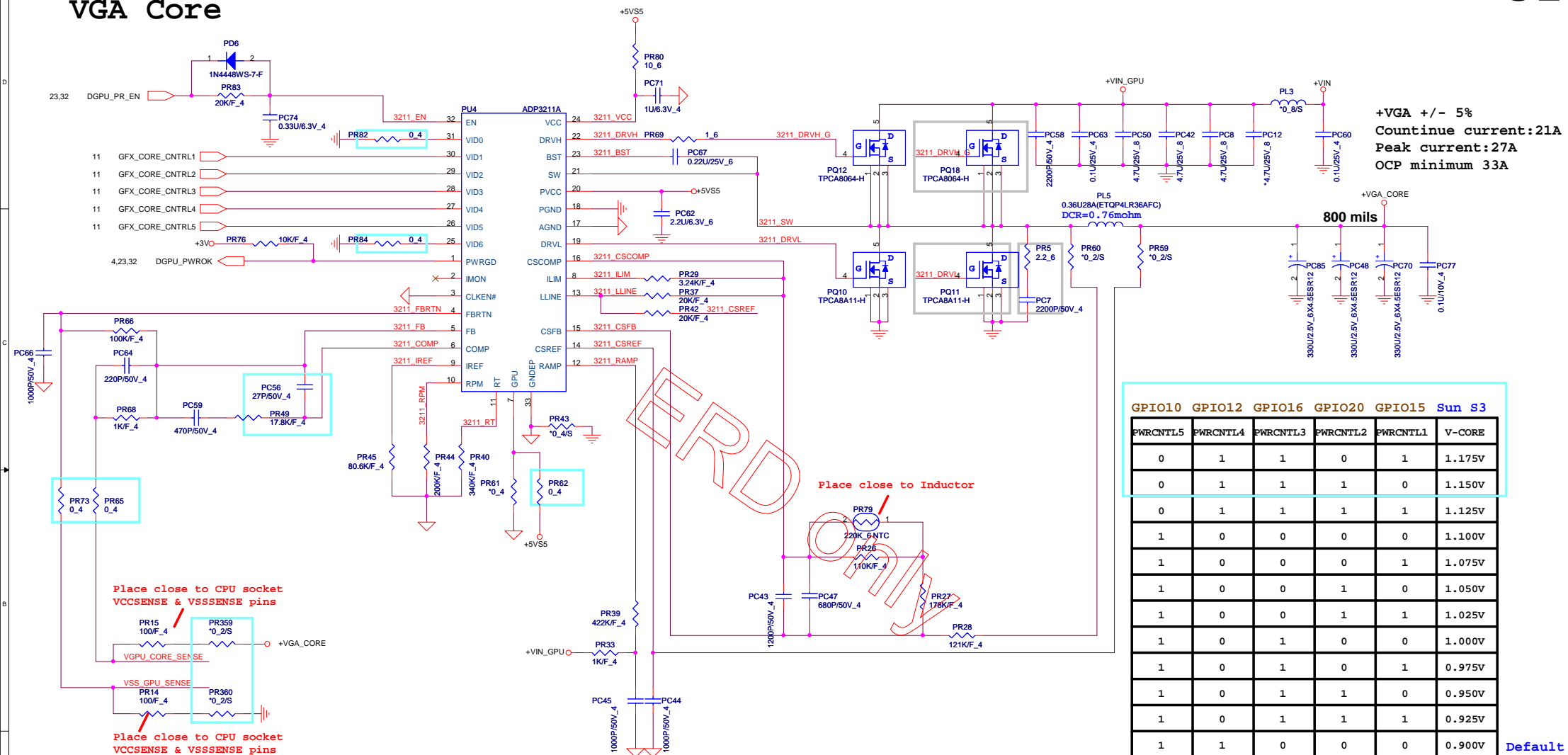


PROJECT :U76
Quanta Computer Inc.

| | | |
|--|----------------------------|-----------|
| Site Custom | Document Number ISL6208 | Rev 1A |
| Date: Wednesday, April 03, 2013 Sheet 29 of 32 | | |

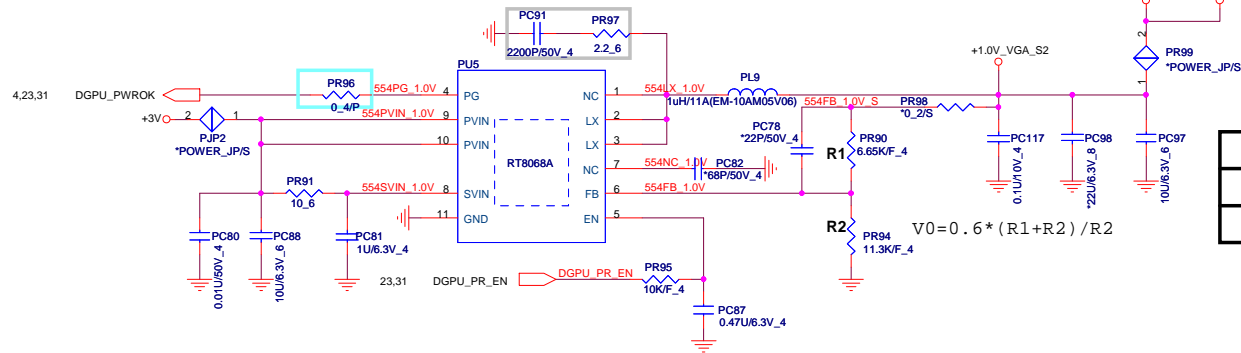


VGA Core

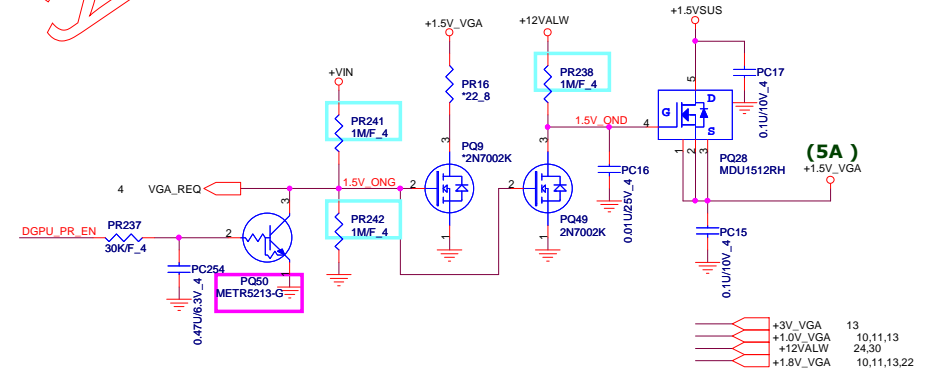
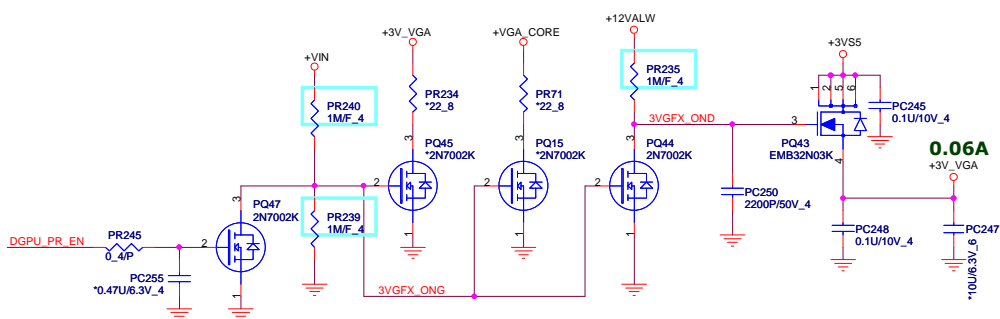
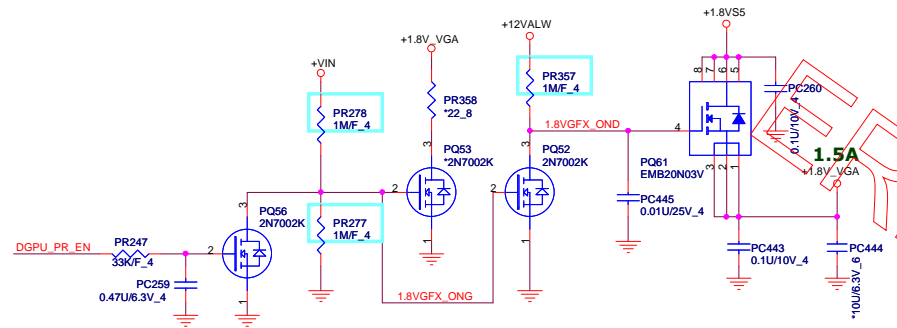


Default


+0.95V +/- 3%
 Countinue current:2A
 Peak current:3A
 OCP minimum:4A



| R2 Value | P/N | 1.0V_VGA |
|----------|-------------|----------|
| 10K | CS31002FB26 | 1.0V |
| 11.3K | CS31132FB07 | 0.95V |



+3V_VGA 13
 +1.0V_VGA 10,11,13
 +12V_VGA 24,30
 +1.8V_VGA 10,11,13,22

| | | |
|---|--------------------------------------|-----------|
|  PROJECT :U76 Quanta Computer Inc. | | |
| Size Custom | Document Number +VGA POWER | Rev 1A |
| Date: Wednesday, April 03, 2013 | Sheet 32 | of 32 |