


INDEX

Page#	Description
1	Block Diagram
2	Front Page
3-4	Penryn (CPU)
5-14	MCP79 (NB+SB+CKG)
15-16	DDRIII SO-DIMM(204P)
17-25	VGA (NB9M)
26	LCD CONN
27	CRT CONN
28	DeMux SW (SN75DP122)
29	HDMI & DP CONN
30	USB & eSATA & TV
31	HDD & ODD (SATA)
32	MINI-CARD (WLAN)
33	MINI-CARD (WPAN,WWAN)
34	Express Card
35	FAN & Thermal
36	SIO (ITE8512)
37	Flash ROM/ RTC/ CIR
38	KB/ CCD/ User Interface
39	LED
40-41	Card Reader & 1394
42-43	Audio CODEC(92HD73C)/ AMP/ Jack/ Subwoofer
45-46	LAN PHY (B5071)/ RJ45/ Transformer
47	System Reset Circuit
48	CHARGER (MAX8731)
49	CPU Core (ISL6266)
50	MCP79 CORE/ 1.05V (MAX17007)
51	DDR 1.5V/ 1.1V (TPS51116)
52	SYS 5V/ 3V(MAX17020)
53	NB9 Core (MAX8632)
54	GRAM_1.8V (TPS51117)
55	DCIN,Batt
56	RUN POWER SW
57	Debug Port (Mini PCI)
58	PAD & SCREW

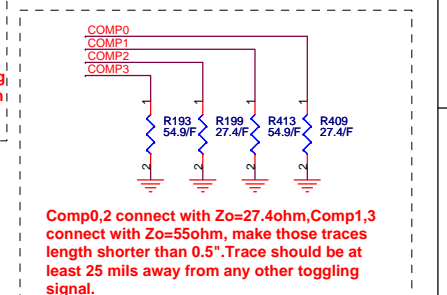
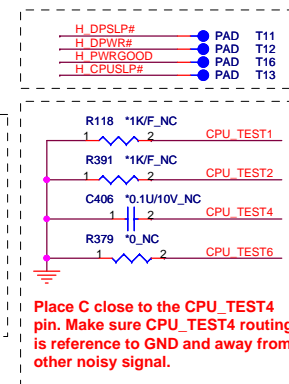
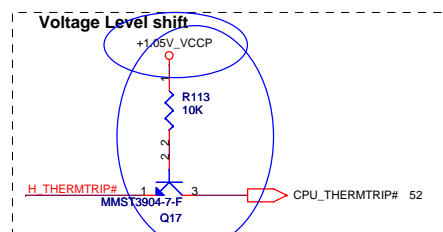
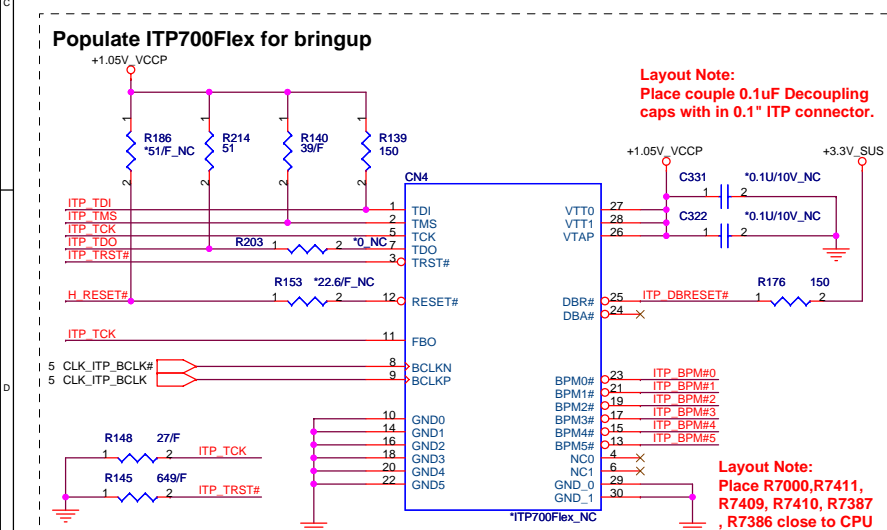
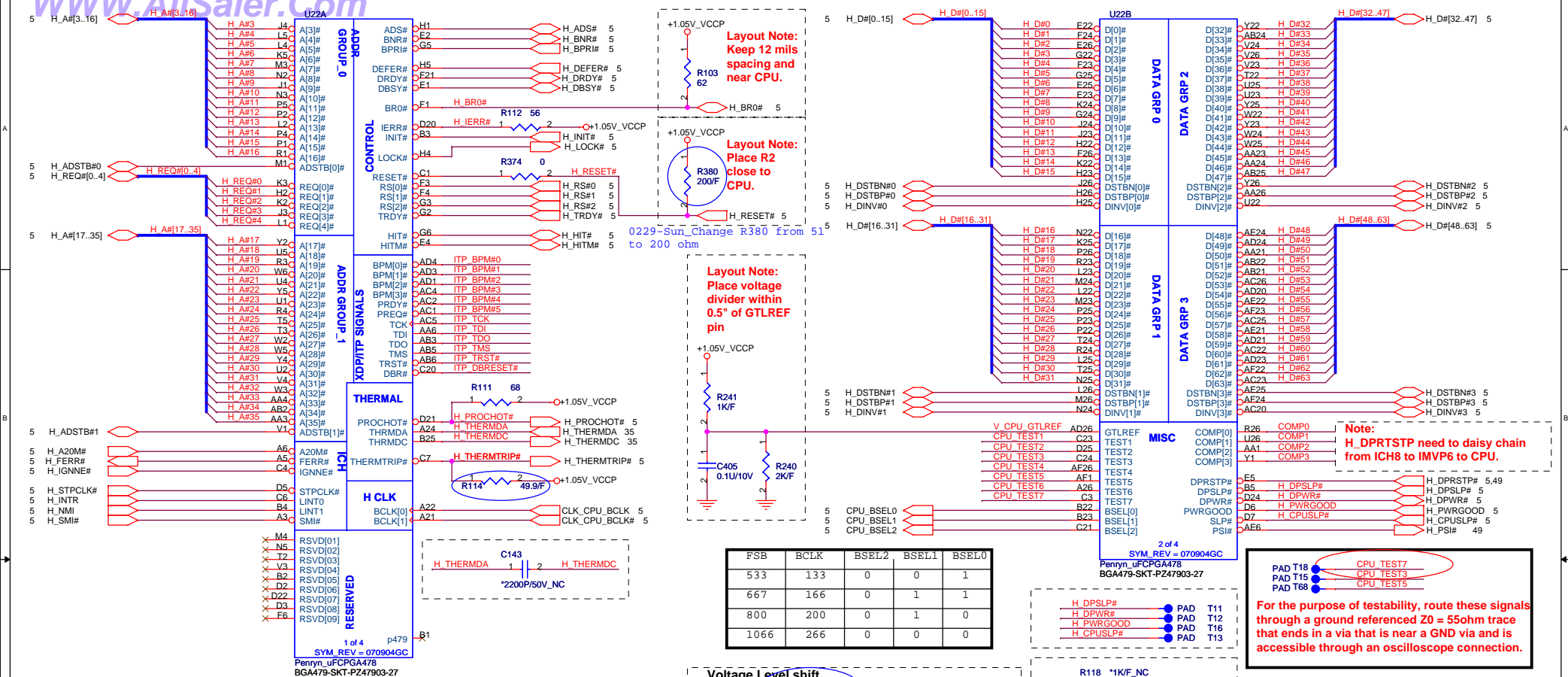
Power States

Power Rail	Control Signal	S0	S3	S4	S5	G3
+PWR_SRC	N/A	V	V	V	V	
+0.75V_DDR_VTT	RUN_ON	V				
+1.05V_VCCP	CPUVDD_EN	V				
+1.1V_GFX	+3.3V_NB9X	V				
+1.1V_GFX_PCIE	MXM_PWR_EN	V				
+1.1V_RMGT	SLP_RMGT#	V	V			
+1.1V_RUN	RUN_ON	V				
+1.1V_SUS	+3.3V_SUS	V	V			
+1.5V_RUN	RUN_ON	V				
+1.5V_DDR	SIO_SLP_S5#	V	V			
+1.8V_FBVDDQ	NB9_CORE_PWRGD	V				
+1.8V_RUN	RUN_ON	V				
+15V_ALW	+5V_ALW	V	V			
+3.3V_ALW	+5V_ALW2	V	V	V	V	
+3.3V_NB9X	MXM_PWR_EN	V				
+3.3V_RMGT	SLP_RMGT#	V	V			
+3.3V_RUN	RUN_ON	V				
+3.3V_SUS	SUS_ON	V	V			
+5V_ALW	5V_ALW_ON	V	V			
+5V_ALW2	+PWR_SRC	V	V	V	V	
+5V_HDD	HDDC_EN	V				
+5V_MOD	MODC_EN	V				
+5V_RUN	RUN_ON	V				
+GFX_PWR_SRC	RUN_ON	V				
+LCDVCC	EN_LCDVCC	V				
+MCP_CORE	RUN_ON	V				
+NB9_CORE	+3.3V_NB9X	V				
+RTC_CELL	N/A	V	V	V	V	V
+VCC_CORE	1.05V_VCCP_PWRGD	V				
+USB_RIGHT_PWR	USB_SIDE_EN#	V	V			
+USB_LEFT_PWR	USB_BACK_EN#	V	V			

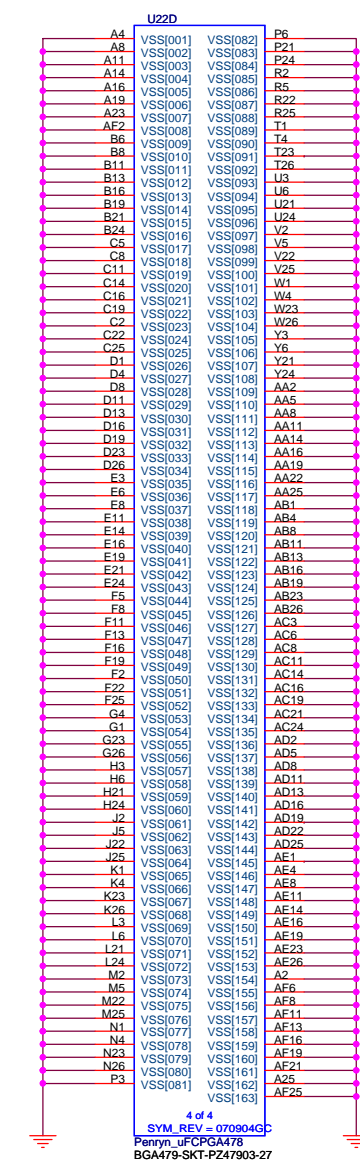
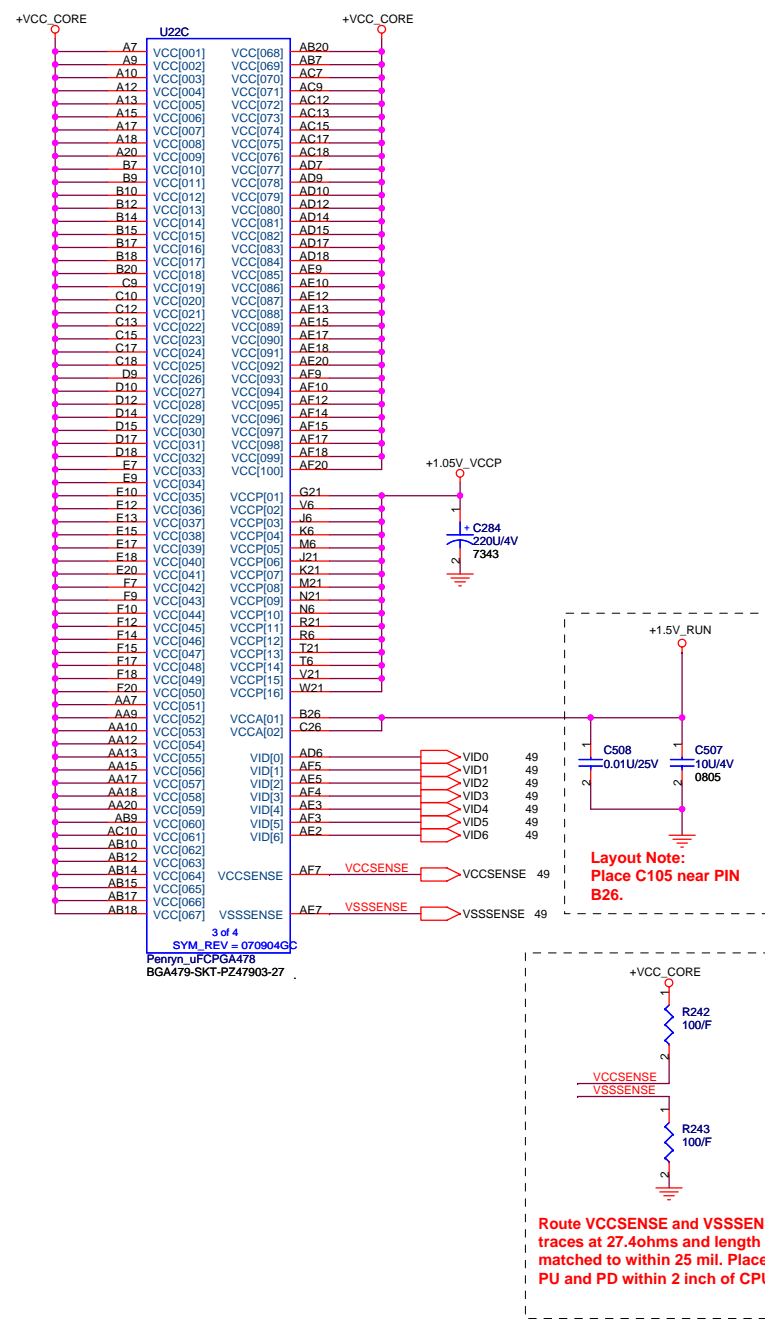
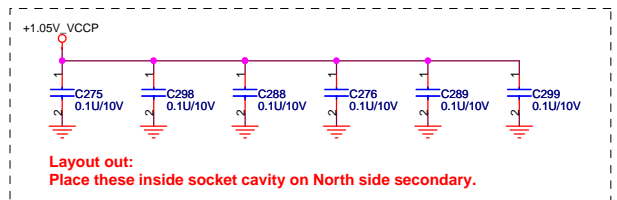
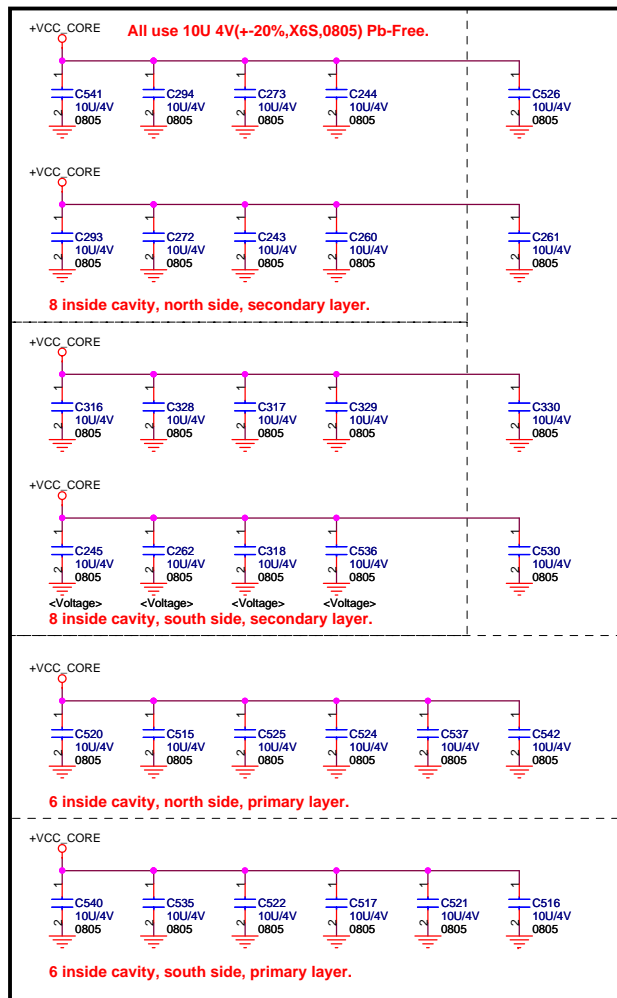


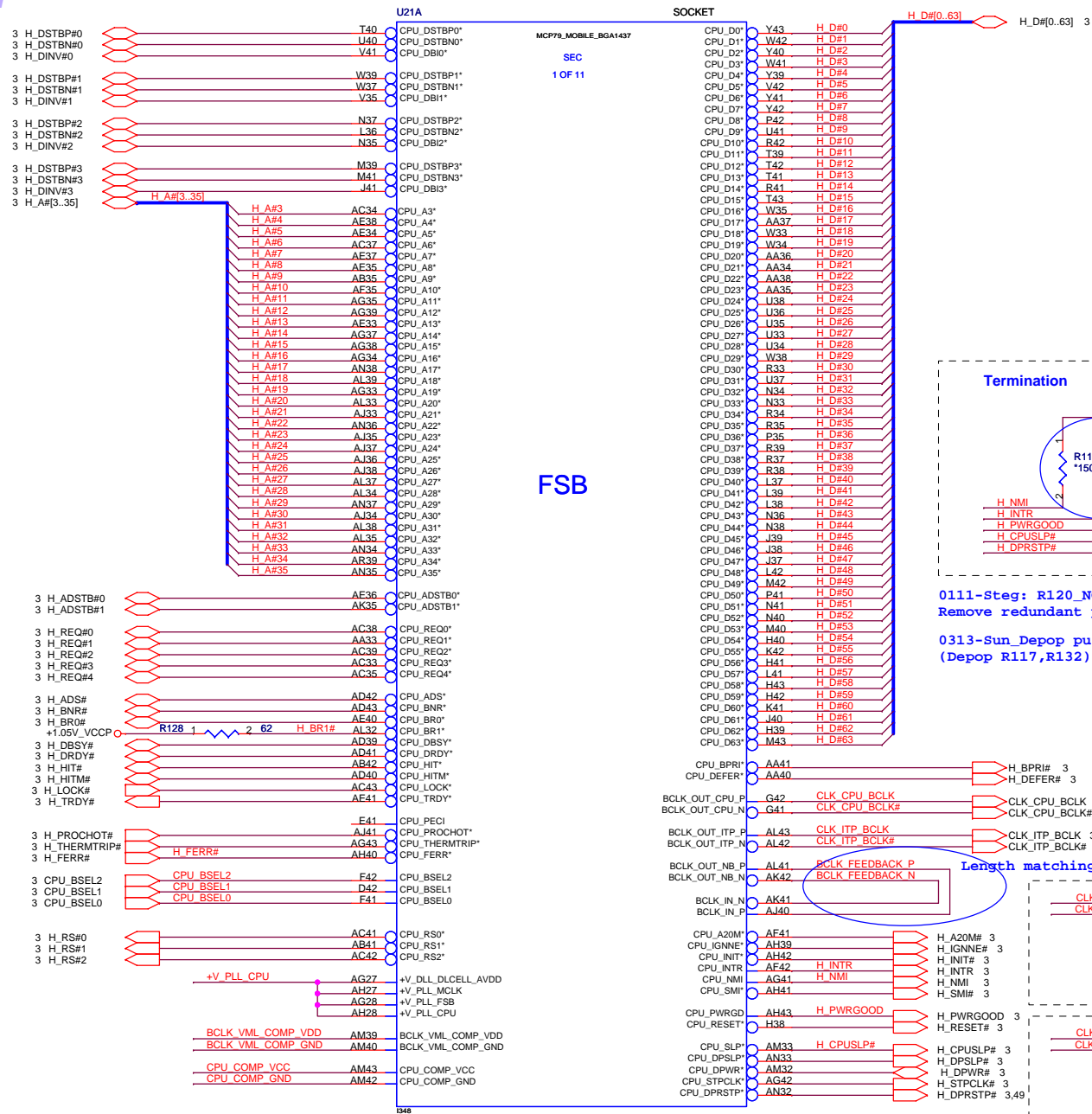
**QUANTA
COMPUTER**

Title Index & Power Status		
Size	Document Number IM3 (XPS-Jolie)	Rev 1A
Date:	Thursday, March 20, 2008	Sheet 2 of 59

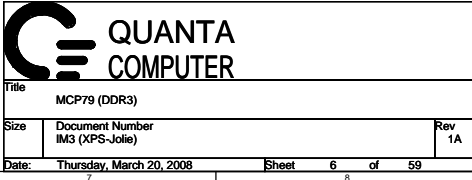


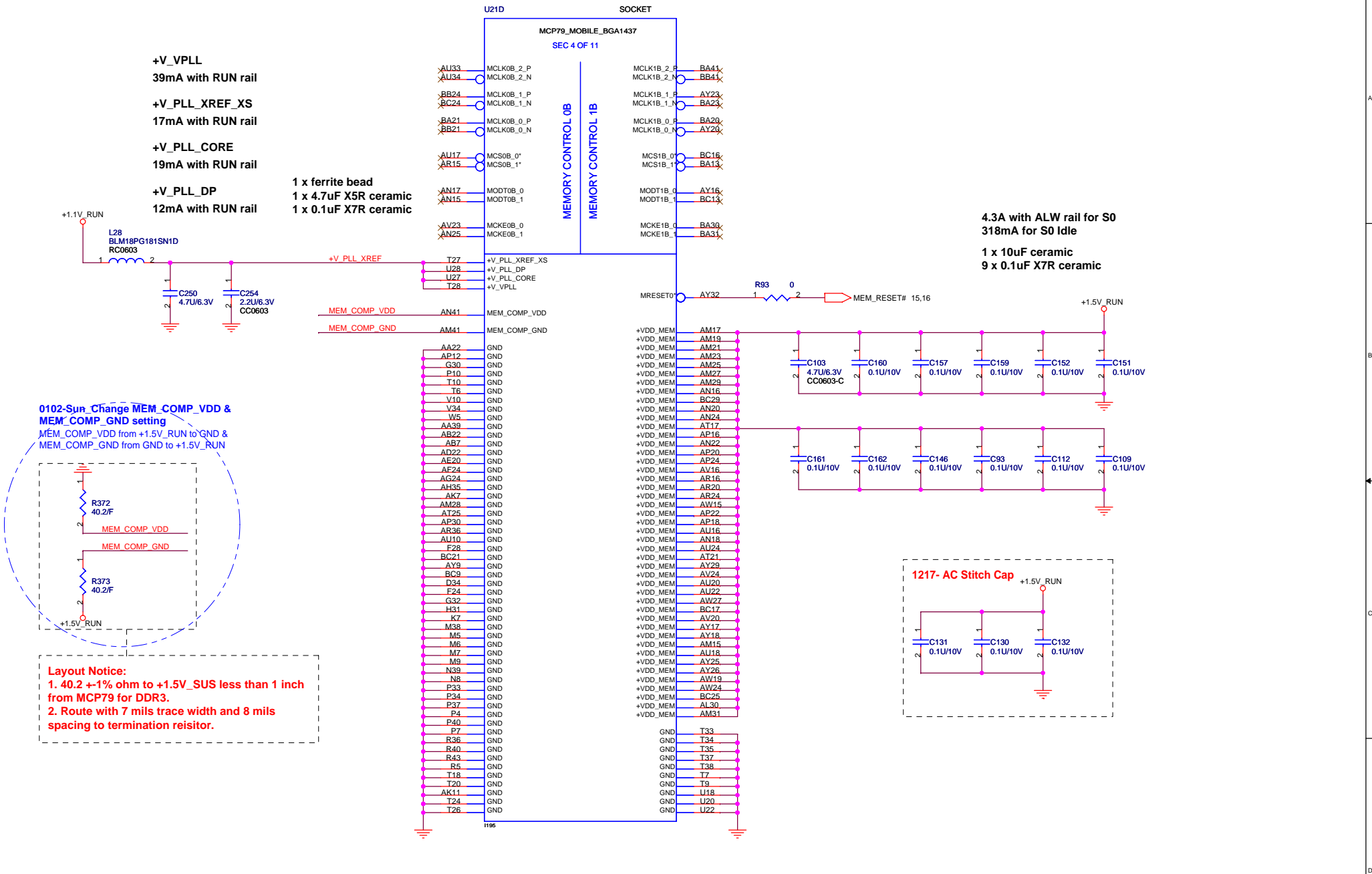
ITP disable guidelines			
Signal	Resistor Value	Connect To	Resistor Placement
TDI	150 ohm +/- 5%	VTT	Within 2.0" of the ITP
TMS	39 ohm +/- 5%	VTT	Within 2.0" of the ITP
TRST#	680 ohm +/- 5%	GND	Within 2.0" of the ITP
TCK	27 ohm +/- 5%	GND	Within 2.0" of the ITP
TDO	Open	VTT	Within 2.0" of the ITP
ITP_EN	R268 Depop	+3VRUN	Close to CK410M Pin8





Title				MCP79 (HOST)			
Size		Document Number				Rev	
		IM3 (XPS-Jolie)				1B	
Date:		Thursday, March 20, 2008		Sheet		5 of 59	





17 PCIE_MRX_GTX_P[0..15]
17 PCIE_MRX_GTX_N[0..15]

PCIE Layout Notice:
MCP79 BGA Breakout (<27ps):
Route at 50 ohm impedance and 1.5x dielectric height spacing.
After Breakout:
Route at 50 Signal end and 90 ohm differential.
Inter-pair spacing 4x (Microstrip) dielectric height spacing 3x (Stripline) dielectric height spacing.

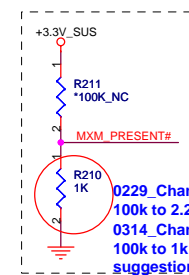
PCIE MRX GTX P0 E7
PCIE MRX GTX N0 E7
PCIE MRX GTX P1 D7
PCIE MRX GTX N1 D7
PCIE MRX GTX P2 E6
PCIE MRX GTX N2 E6
PCIE MRX GTX P3 E5
PCIE MRX GTX N3 E5
PCIE MRX GTX P4 E4
PCIE MRX GTX N4 E4
PCIE MRX GTX P5 E3
PCIE MRX GTX N5 E3
PCIE MRX GTX P6 C3
PCIE MRX GTX N6 C3
PCIE MRX GTX P7 D3
PCIE MRX GTX N7 D3
PCIE MRX GTX P8 C5
PCIE MRX GTX N8 C5
PCIE MRX GTX P9 L11
PCIE MRX GTX N9 L11
PCIE MRX GTX P10 L9
PCIE MRX GTX N10 L9
PCIE MRX GTX P11 L7
PCIE MRX GTX N11 L7
PCIE MRX GTX P12 L6
PCIE MRX GTX N12 L6
PCIE MRX GTX P13 N9
PCIE MRX GTX N13 N9
PCIE MRX GTX P14 P9
PCIE MRX GTX N14 P9
PCIE MRX GTX P15 N5
PCIE MRX GTX N15 N5

PCIE

SOCKET

PCIE MTX GRX C P0 C347 1 2 0.1U/10V
PCIE MTX GRX N0 C340 1 2 0.1U/10V
PCIE MTX GRX C P1 C373 1 2 0.1U/10V
PCIE MTX GRX N1 C384 1 2 0.1U/10V
PCIE MTX GRX C P2 C556 1 2 0.1U/10V
PCIE MTX GRX N2 C565 1 2 0.1U/10V
PCIE MTX GRX C P3 C552 1 2 0.1U/10V
PCIE MTX GRX N3 C548 1 2 0.1U/10V
PCIE MTX GRX C P4 C358 1 2 0.1U/10V
PCIE MTX GRX N4 C367 1 2 0.1U/10V
PCIE MTX GRX C P5 C333 1 2 0.1U/10V
PCIE MTX GRX N5 C323 1 2 0.1U/10V
PCIE MTX GRX C P6 C547 1 2 0.1U/10V
PCIE MTX GRX N6 C544 1 2 0.1U/10V
PCIE MTX GRX C P7 C543 1 2 0.1U/10V
PCIE MTX GRX N7 C539 1 2 0.1U/10V
PCIE MTX GRX C P8 C311 1 2 0.1U/10V
PCIE MTX GRX N8 C319 1 2 0.1U/10V
PCIE MTX GRX C P9 C534 1 2 0.1U/10V
PCIE MTX GRX N9 C538 1 2 0.1U/10V
PCIE MTX GRX C P10 C297 1 2 0.1U/10V
PCIE MTX GRX N10 C307 1 2 0.1U/10V
PCIE MTX GRX C P11 C291 1 2 0.1U/10V
PCIE MTX GRX N11 C280 1 2 0.1U/10V
PCIE MTX GRX C P12 C532 1 2 0.1U/10V
PCIE MTX GRX N12 C529 1 2 0.1U/10V
PCIE MTX GRX C P13 C523 1 2 0.1U/10V
PCIE MTX GRX N13 C527 1 2 0.1U/10V
PCIE MTX GRX C P14 C263 1 2 0.1U/10V
PCIE MTX GRX N14 C267 1 2 0.1U/10V
PCIE MTX GRX C P15 C519 1 2 0.1U/10V
PCIE MTX GRX N15 C518 1 2 0.1U/10V

PCIE_MTX_GRX_P[0..15] 17
PCIE_MTX_GRX_N[0..15] 17



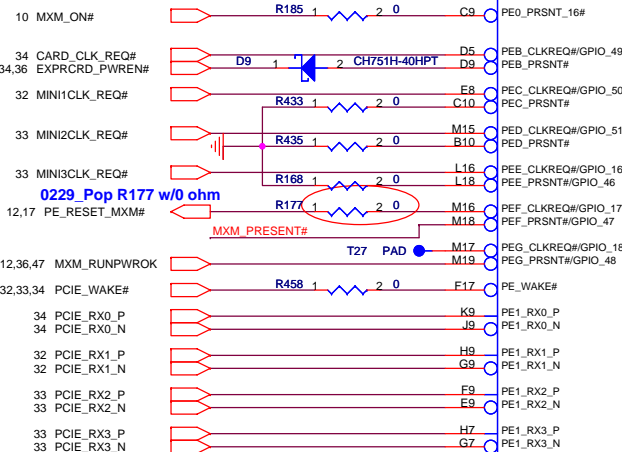
0229_Change R210 from 100k to 2.2k ohm
0314_Change R210 from 100k to 1k ohm base on NV suggestion

Express Card

WLAN

UWB/BT

WWAN



Express Card

WLAN

UWB/BT

WWAN

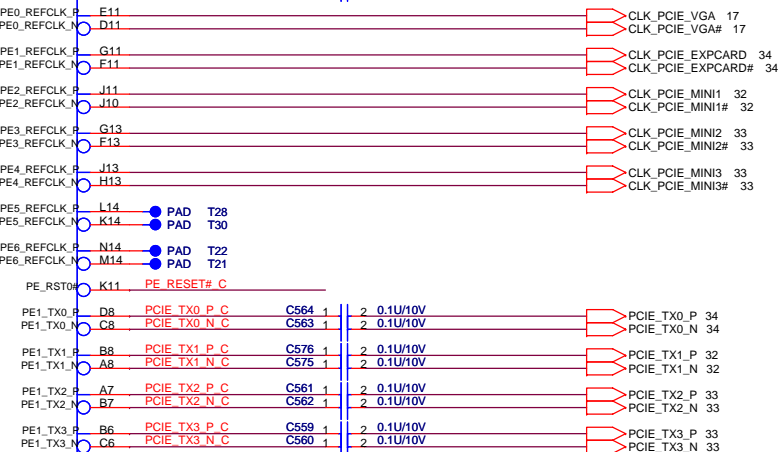
482mA with RUN rail

1 x 4.7uF X5R ceramic
2 x 0.1uF X7R ceramic

0312-Sun_Change footprint to normal short type "short40x18"

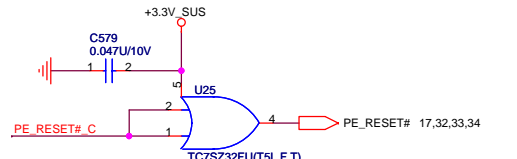
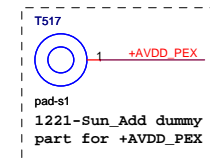
82mA with RUN rail

1 x ferrite bead
1 x 4.7uF X5R ceramic
1 x 0.1uF X7R ceramic

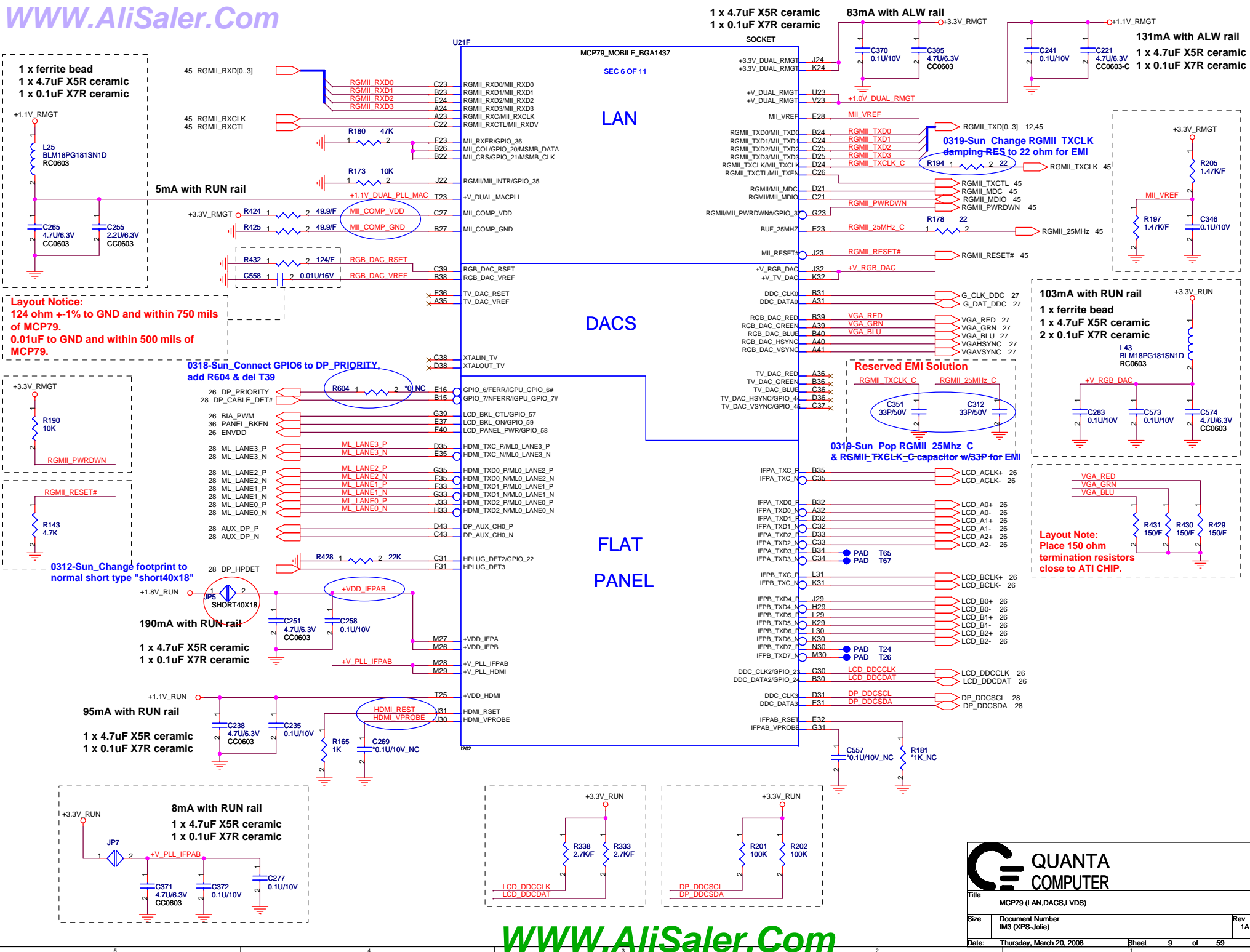


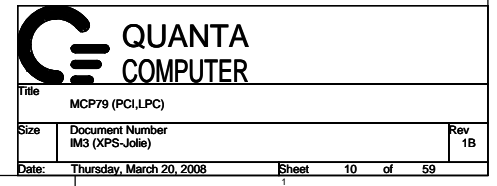
1304mA with RUN rail

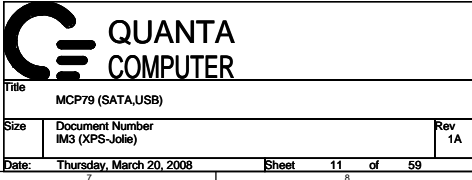
1x ferrite bead
1x 10uF
1 x 4.7uF X5R ceramic
2 x 1uF X5R ceramic
2 x 0.1uF X7R ceramic

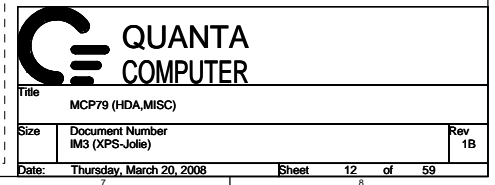


Title			MCP79 (PCIE)
Size	Document Number	IM3 (XPS-Jolie)	Rev 1A
Date:	Friday, March 21, 2008	Sheet	8 of 59



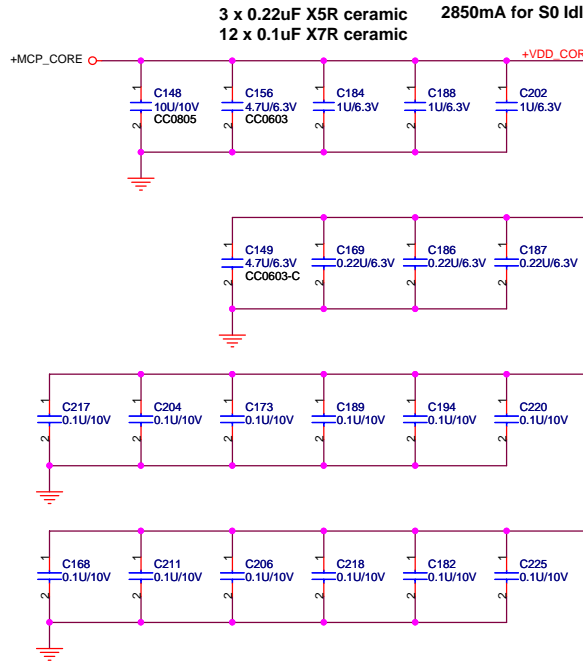






1 x 10uF ceramic
2 x 4.7uF X5R ceramic
3 x 1uF X5R ceramic
3 x 0.22uF X5R ceramic
12 x 0.1uF X7R ceramic

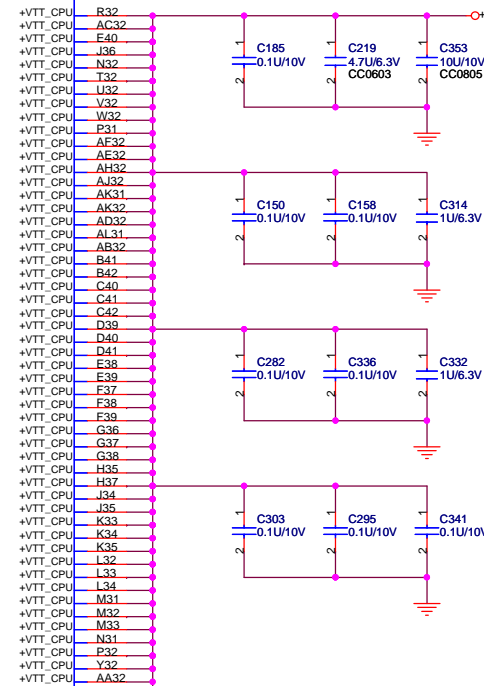
17.756A with RUN rail for S0
2850mA for S0 Idle



POWER

+VTT_CPU
1139mA for ALW rail
+VTT_CPUCLK
43mA for ALW rail

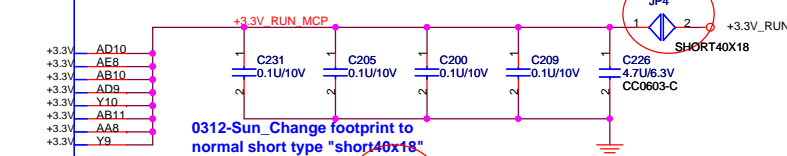
1 x 10uF ceramic
1 x 4.7uF X5R ceramic
2 x 0.1uF X7R ceramic



0312-Sun_Change footprint to normal short type "short40x18"

+3.3V_RUN_MCP
450mA with RUN rail

1 x 4.7uF X5R ceramic
4 x 0.1uF X7R ceramic



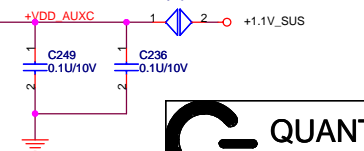
0312-Sun_Change footprint to normal short type "short40x18"

+3.3V_DUAL
16mA with ALW rail
+3.3V_DUAL_USB
450mA with ALW rail

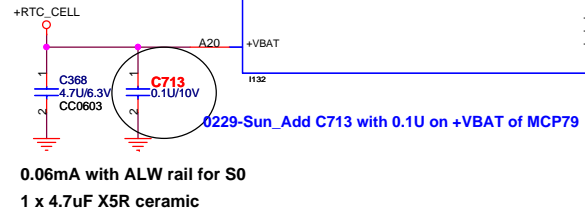
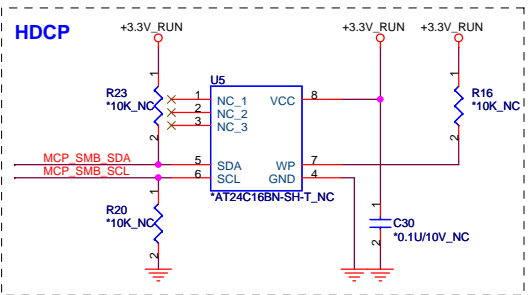
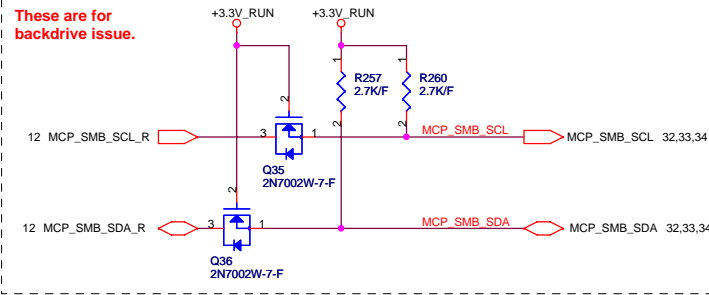
1 x 4.7uF X5R ceramic
1 x 0.1uF X7R ceramic
1 x 4.7uF X5R ceramic
1 x 0.1uF X7R ceramic

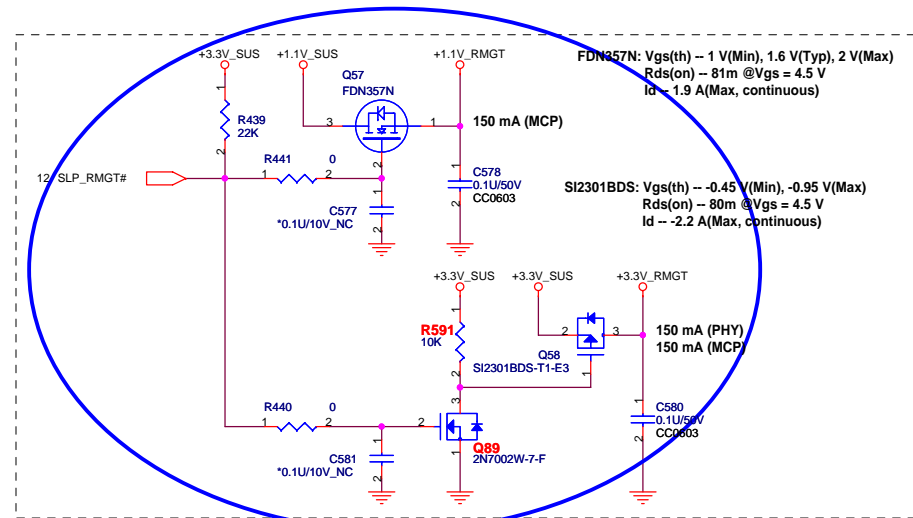
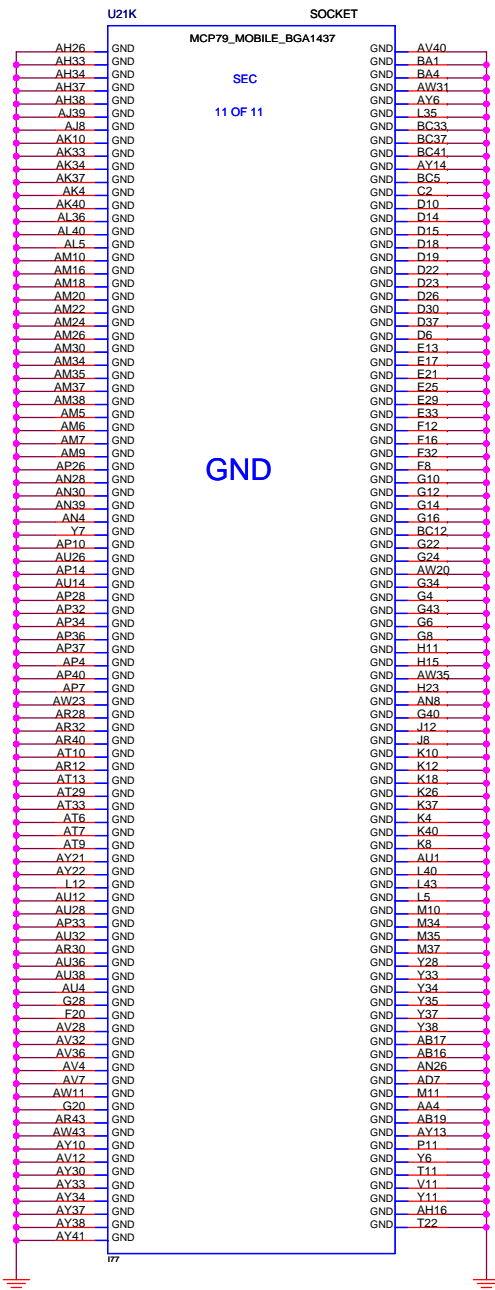
+VDD_AUXC
105mA with ALW rail

2 x 0.1uF X7R ceramic



Title			MCP79 (POWER)
Size	Document Number	Rev	
	IM3 (XPS-Jolie)	1A	
Date:	Thursday, March 20, 2008	Sheet	13 of 59





0229-Sun_1.1V_RMGT & +3.3V_RMGT MOSFET Vgs aren't enough issue, modify circuit reference NV CRB

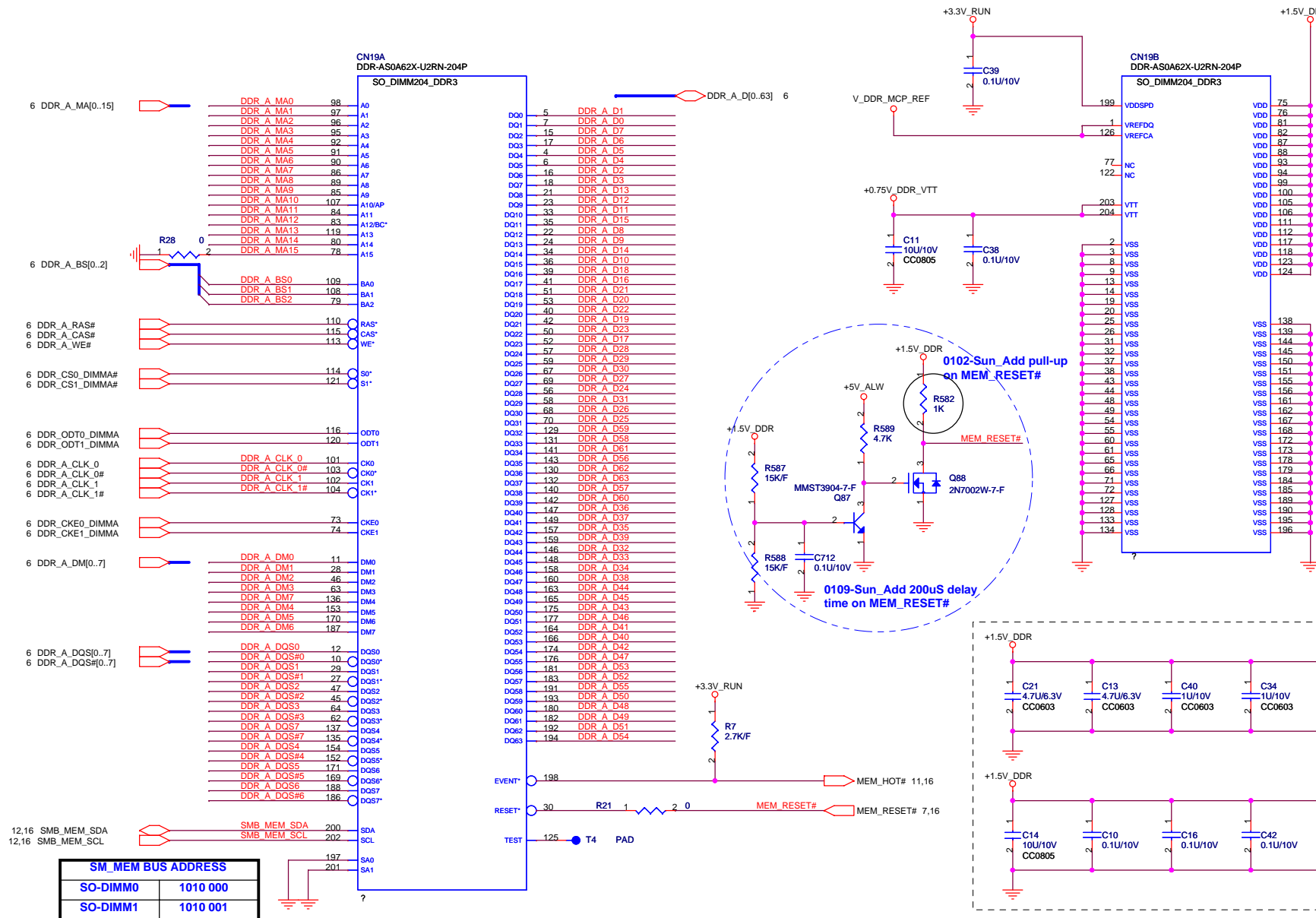
(Del JP11,JP12

Change Q57 from SI2304BDS-T1-E3 to FDN357N, Q58 from SI2304BDS-T1-E3 to SI2301BDS-T1-E3

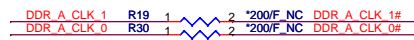
Add Q? with 2N7002,R? with 10K)



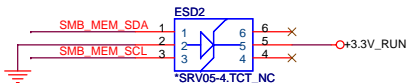
Title		
MCP79 (GND)		
Size	Document Number	Rev
	IM3 (XPS-Jolie)	1B
Date:	Thursday, March 20, 2008	Sheet 14 of 59



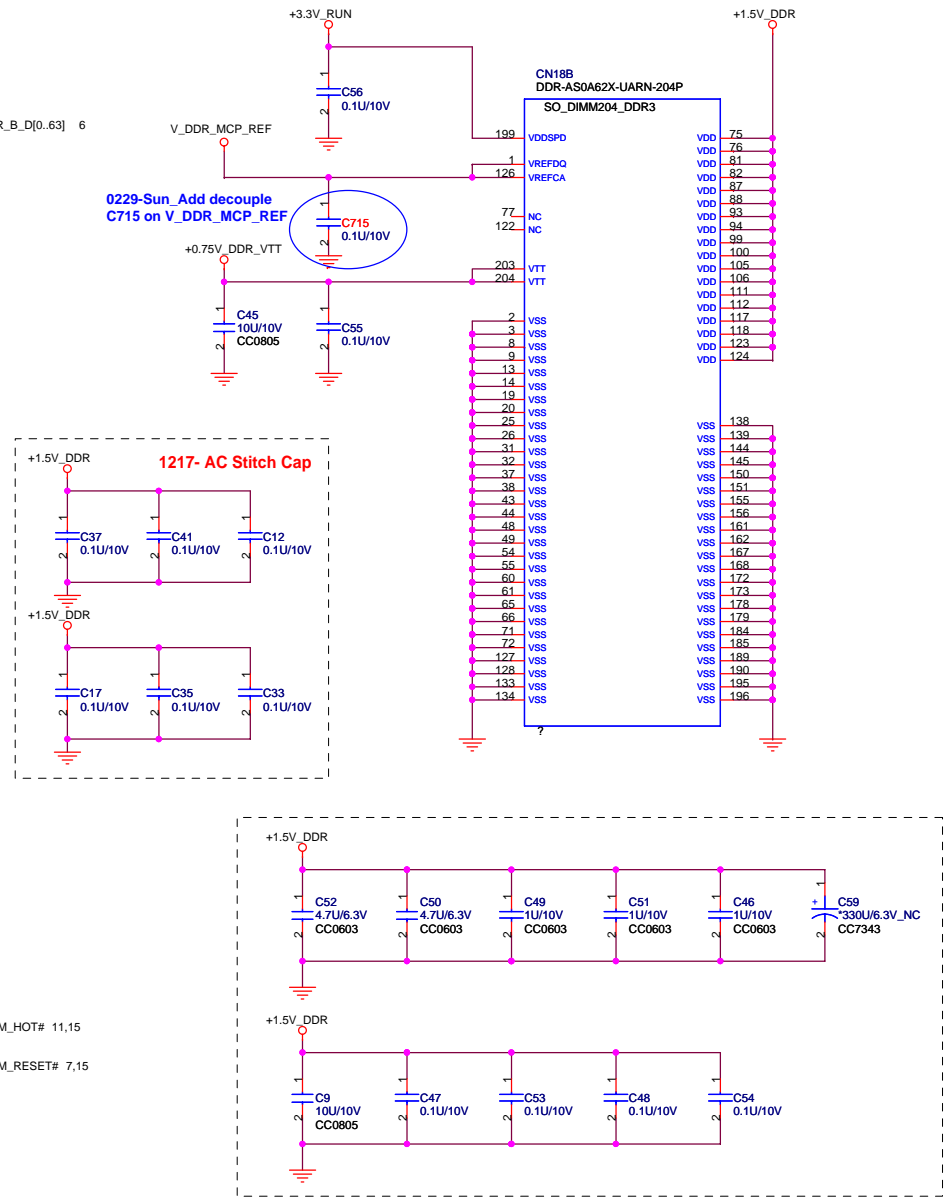
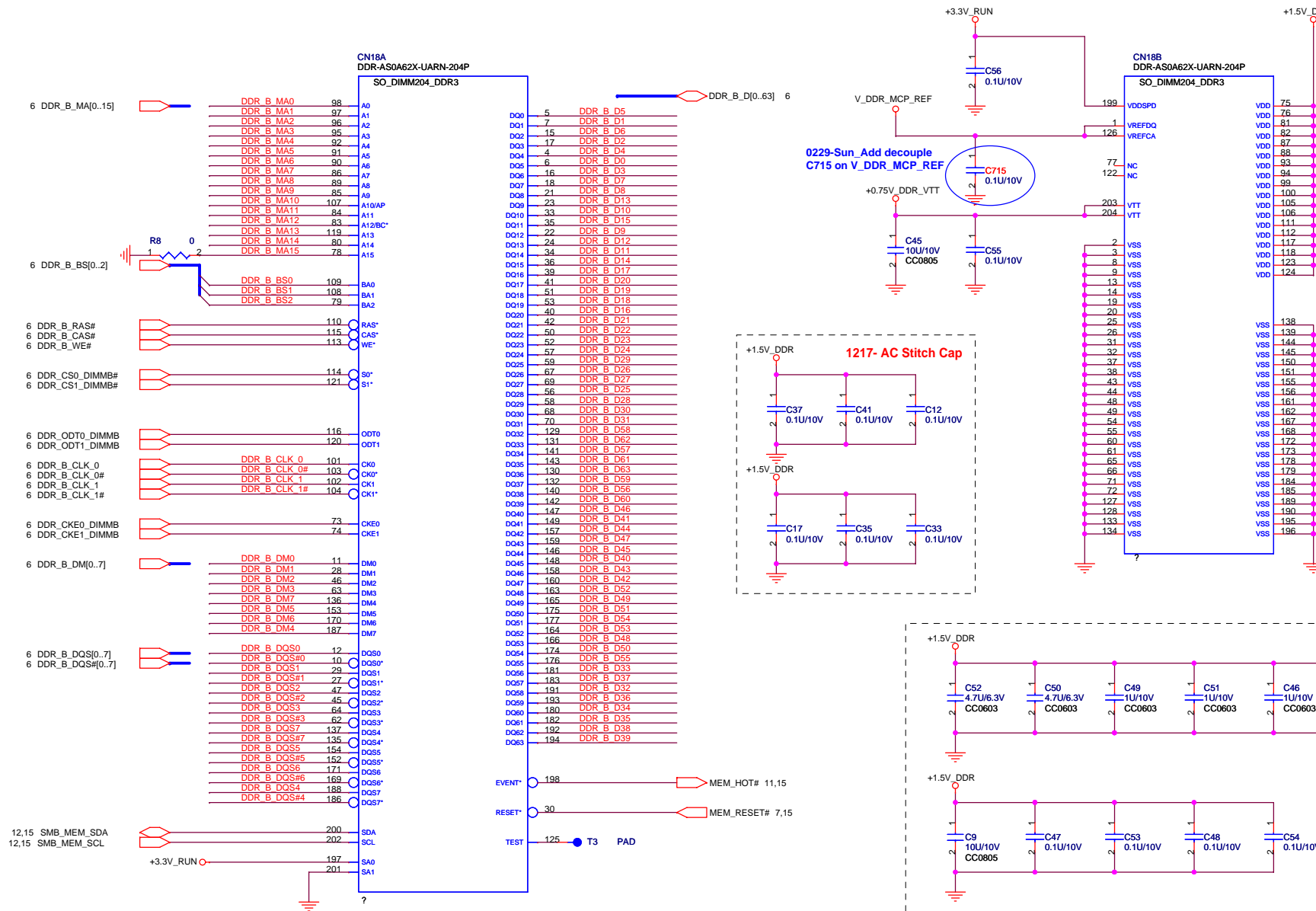
For EMI Reserved



Place ESD Protection diodes.



Title			DDR3 SO-DIMM (204P)
Size	Document Number	Rev	
	IM3 (XPS-Jolie)	1B	
Date:	Thursday, March 20, 2008	Sheet	15 of 59

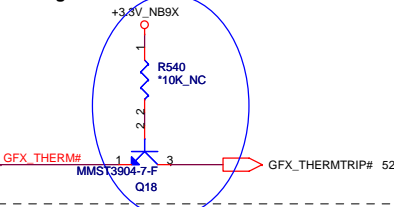
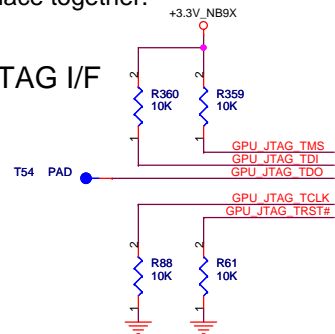
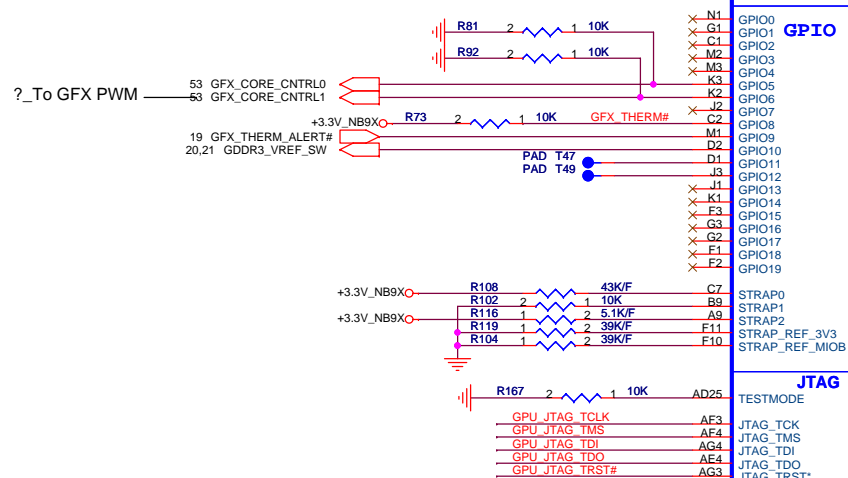


QUANTA COMPUTER

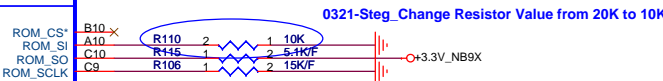
Title: DDR3 SO-DIMM (204P)

Size: Document Number IM3 (XPS-Jolie) Rev 1A

Date: Thursday, March 20, 2008 Sheet 16 of 59



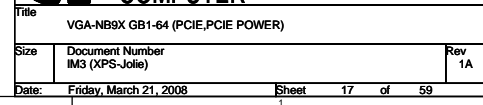
0311-Sun_Reserve GFX_THERM# to shutdown power.
(Add Q18, R540)

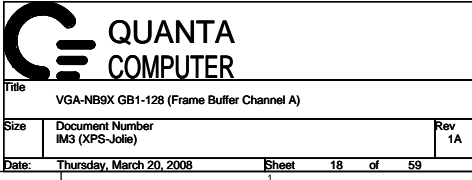


VRAM Strap:ROM_SI

ID	ROM_SI	Memory part
01	Pull down 20K	Samsung
02	Pull down 10K	Infineon
03		
04		

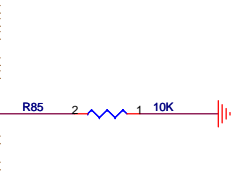
GPIO	I/O	ACTIVE	USAGE	Used
0	IN	N/A	NVGEN HOTPLUG DETECT	
1	IN	N/A	DVI/HDMI LINKC HOTPLUG DETECT	
2	OUT	HIGH	PANEL BACKLIGHT PWM	
3	OUT	HIGH	PANEL POWER ENABLE	
4	OUT	HIGH	PANEL BACKLIGHT ENABLE	
5	OUT	HIGH	NV_VDD ALT_V0	
6	OUT	HIGH	NV_VDD ALT_V1	
7	OUT	HIGH	FB_VDD VDD0	
8	IN	LOW	OVERTEMP ALERT	
9	OUT	LOW	THERMAL ALERT	
10	OUT	HIGH	DYNAMIC VIB FREF GDDR3 (not used for DDR2)	
11	OUT	HIGH	SLI SYNC0 (not used for GB1-64)	
12	IN	N/A	AC DETECT	
13	OUT	LOW	POWER SUPPLY CONTROL0	
14	OUT	HIGH	POWER SUPPLY CONTROL1	
15	IN	N/A	HPD_E	
16	IN	N/A	DVI_E	No
17	IN	N/A	HDMI_E	No
18	IN	N/A	DVI_F (not used)	No
19	IN	N/A	HDMI_F (not used)	No





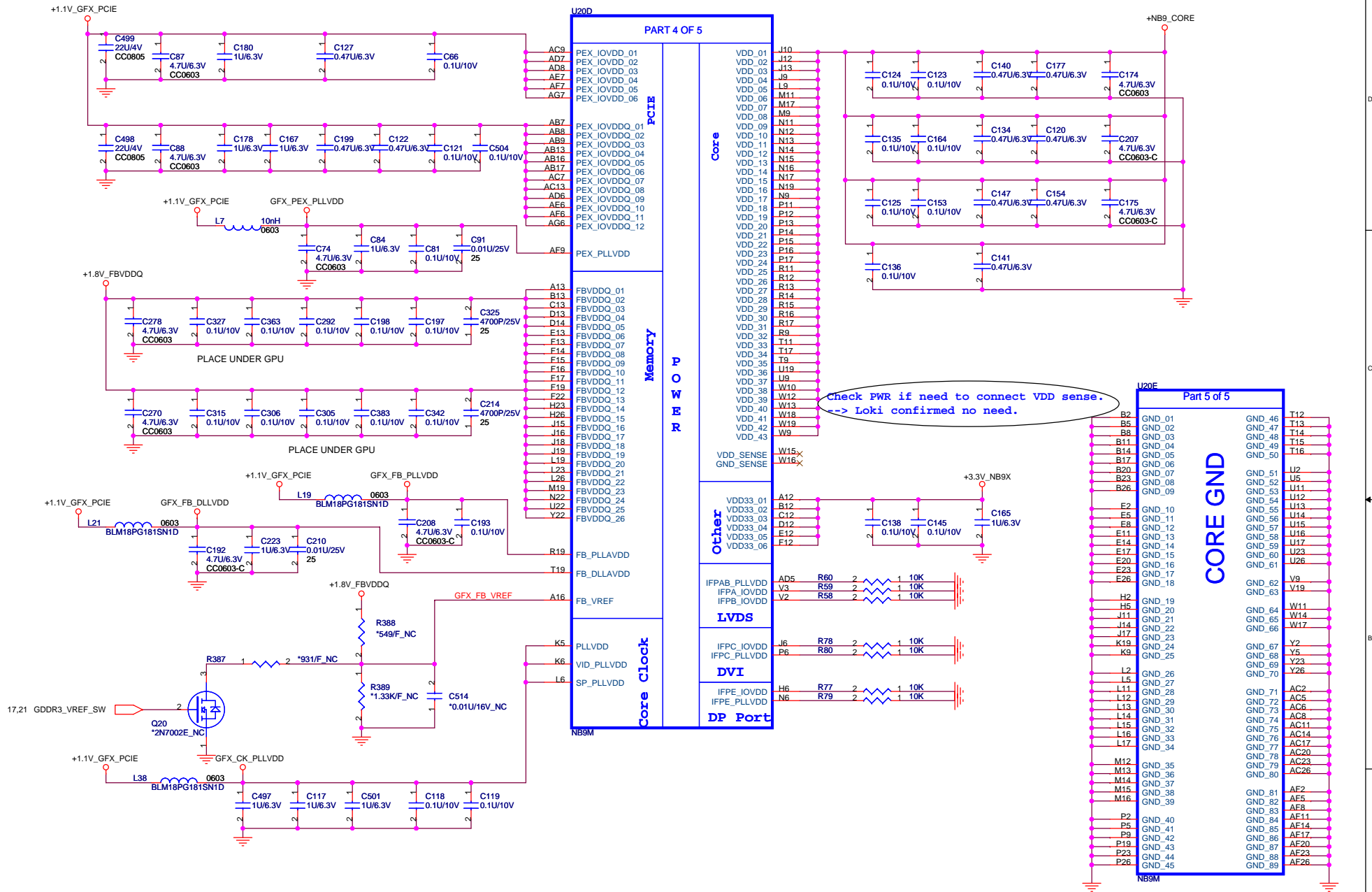
GPU Driver Calibration			
Memory/PKG	FBVDDQ	FBCAL_PU_GND	FBCAL_PD_VDDQ
DDR2	1.8V	30.1	30.1
GDDR3	1.8V	30.9	44.2
GDDR3 DVS	1.8V/1.5V	30.9	44.2

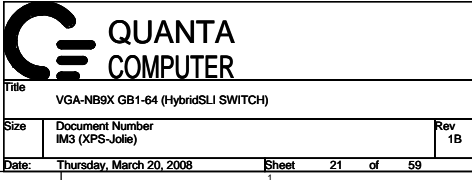
Note: Use only 1% resistors for driver calibration




SPREAD SPECTRUM

0309-Sun_Consider to change to R-pack ?

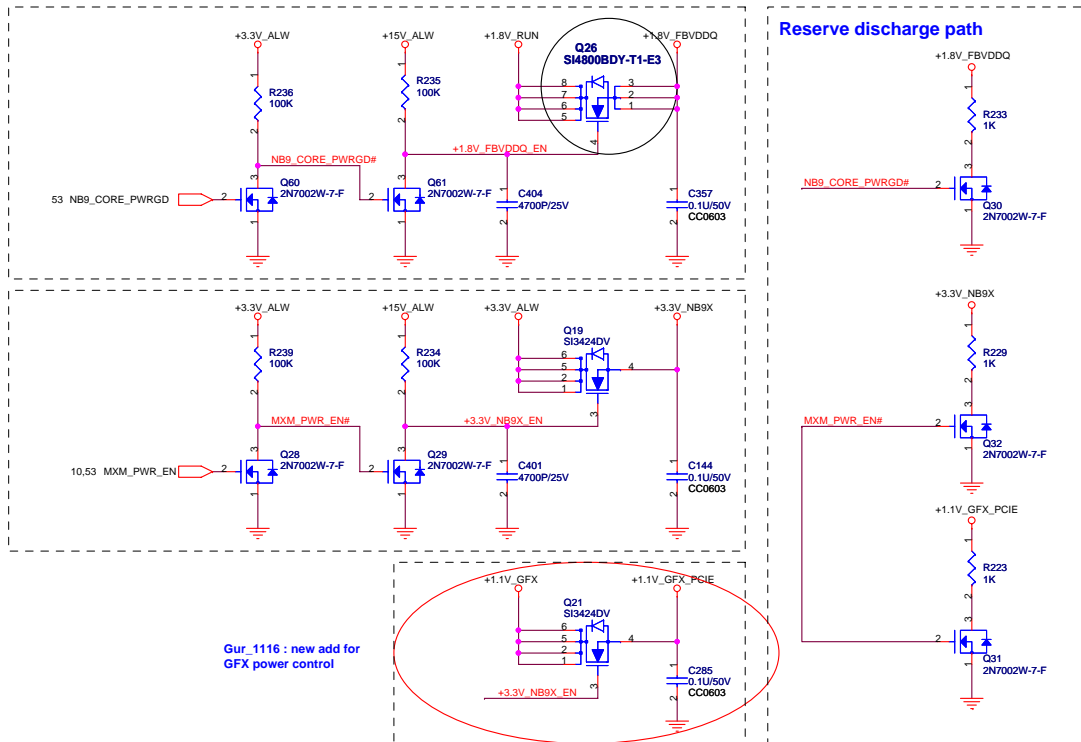





BLANK PAGE FOR PAGE
NUMBER SAME AS DISCRETE

 QUANTA COMPUTER		
Title		
Size	Document Number IM3 (XPS-Jolie)	Rev 1A
Date:	Thursday, March 20, 2008	Sheet 22 of 59


1225-Sun_Chenge Q26 from
SI4812BDY to SI4800BDY-T1-E3.



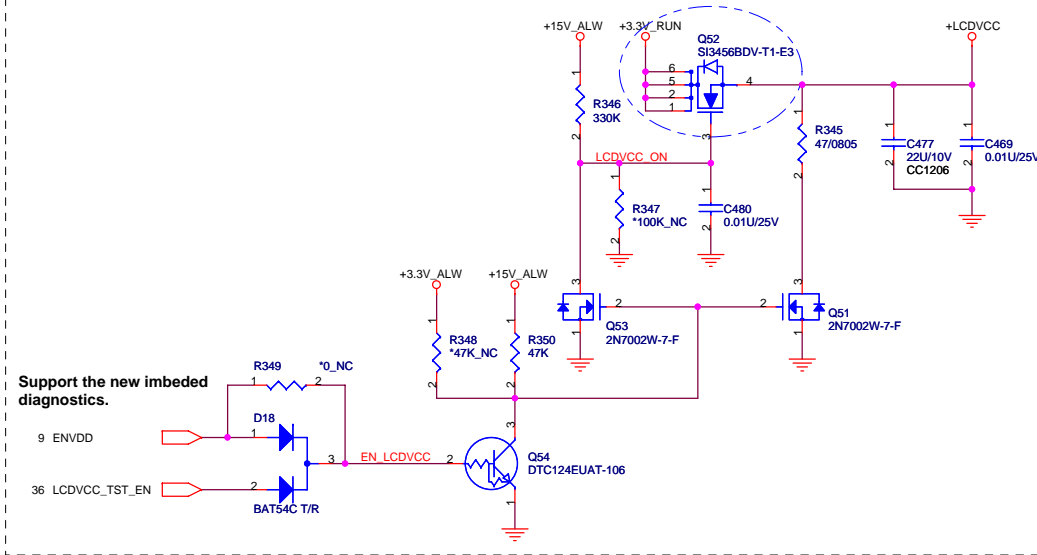
BLANK PAGE FOR PAGE
NUMBER SAME AS DISCRETE

 QUANTA COMPUTER		
Title		
Size	Document Number IM3 (XPS-Jolie)	Rev 1A
Date:	Thursday, March 20, 2008	Sheet 24 of 59

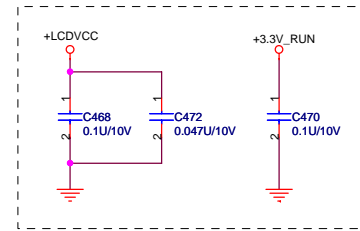
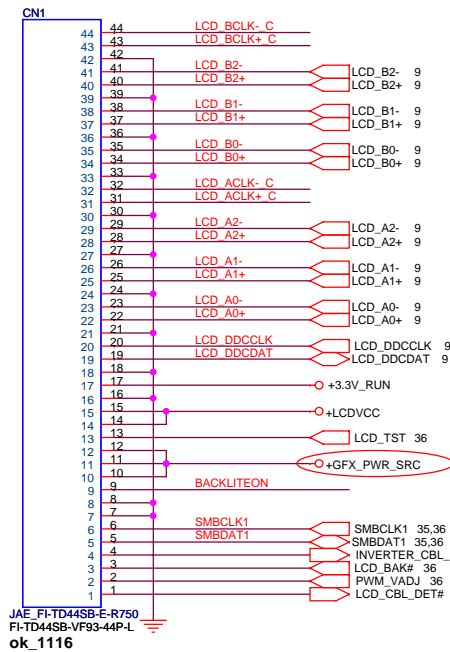
BLANK PAGE FOR PAGE
NUMBER SAME AS DISCRETE

 QUANTA COMPUTER		
Title		
Size	Document Number IM3 (XPS-Jolie)	Rev 1A
Date:	Thursday, March 20, 2008	Sheet 25 of 59

0112-Stanley: Change BOM for EOL issue (SI3456BDV).



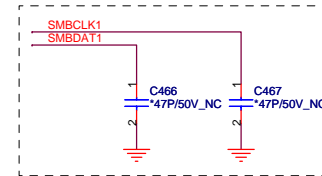
GND,VCC要用最粗的电子线



WXGA 1280*800=>70 MHz
WXGA+ 1440*900=>108 MHz
WSXGA+ 1680*1050=>120MHz
WUXGA 1920*1200=>166 MHz

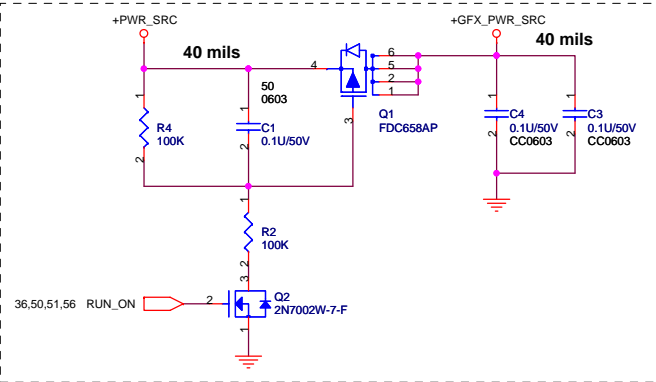
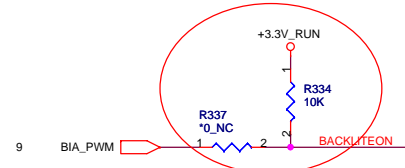
Address : A9H --Contrast
AAH --Backlight

MBRAI specification of antenna gain is
10dBi@474MHz, -7dBi@698MHz,
-5dBi@858MHz.



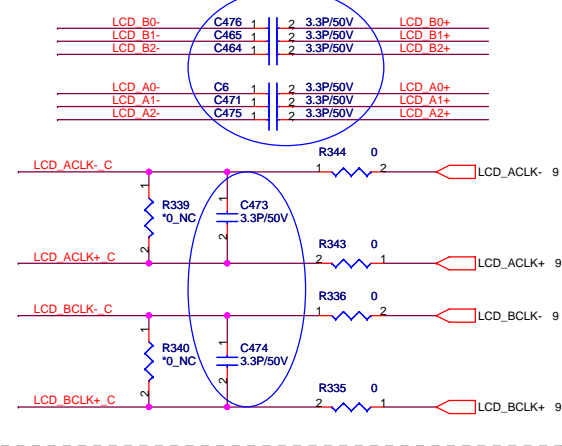
Populate R65 for DPST implementation only.

Populate R341 for platform without DPST support. No Stuff for Discrete DSPT support due to back up plan.

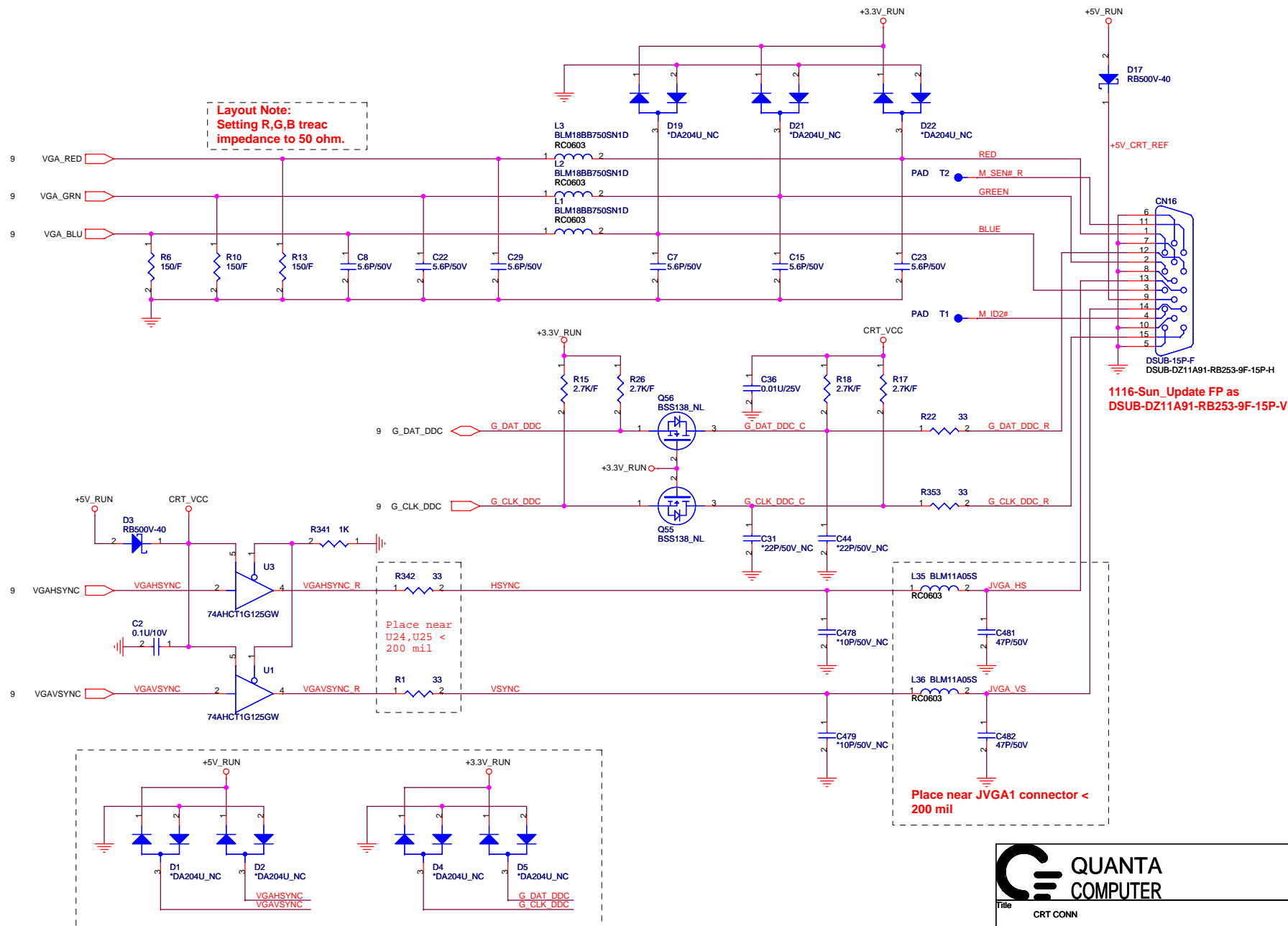


0319-Sun_Pop 3.3P on LVDS bus for COMM team demand

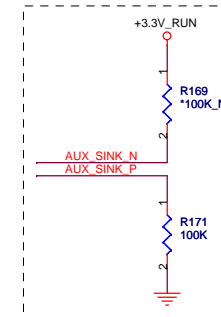
Shunt capacitors on LVDS for improving WWAN.



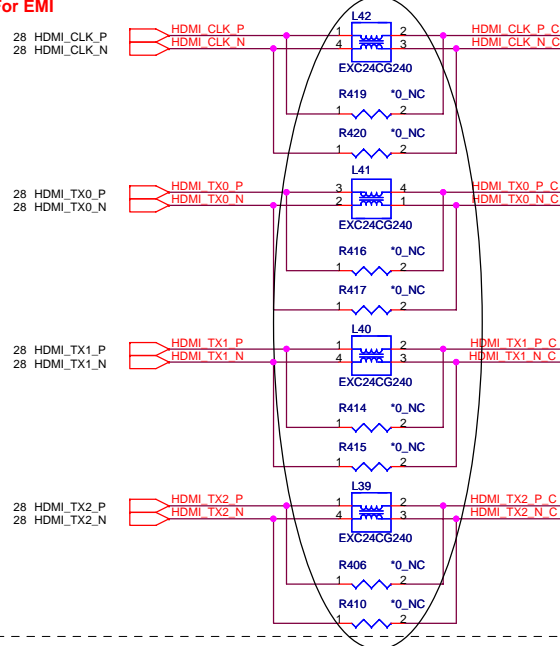
Title		
LCD CONN		
Size	Document Number	Rev
	IM3 (XPS-Jolie)	1B
Date:	Thursday, March 20, 2008	Sheet 26 of 59



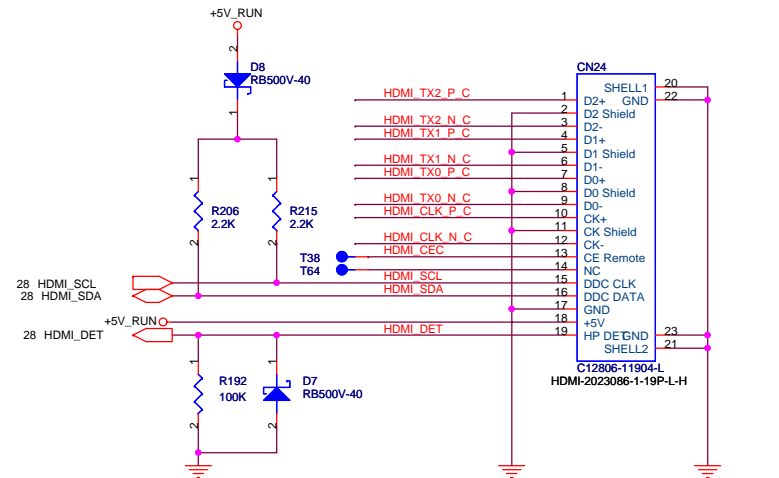
Title CRT CONN		
Size	Document Number IM3 (XPS-Jolie)	Rev 1A
Date:	Thursday, March 20, 2008	Sheet 27 of 59



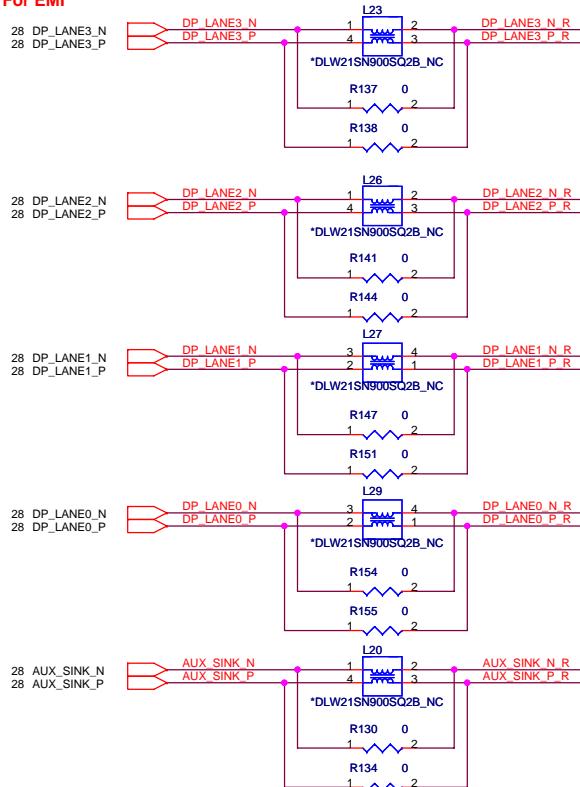
Reserve For EMI



HDMI CONNECTOR

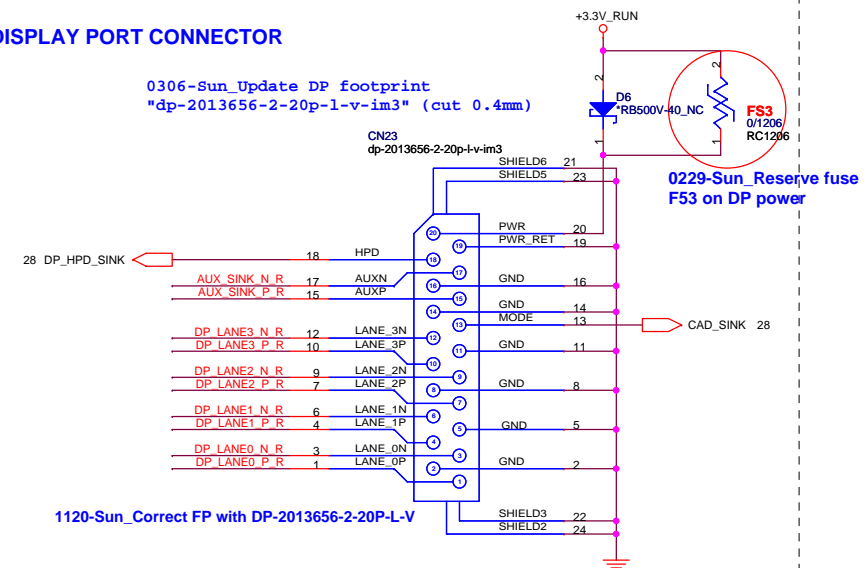


Reserve For EMI

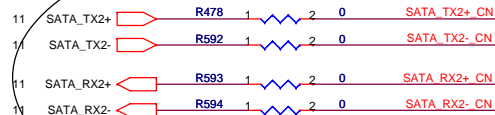
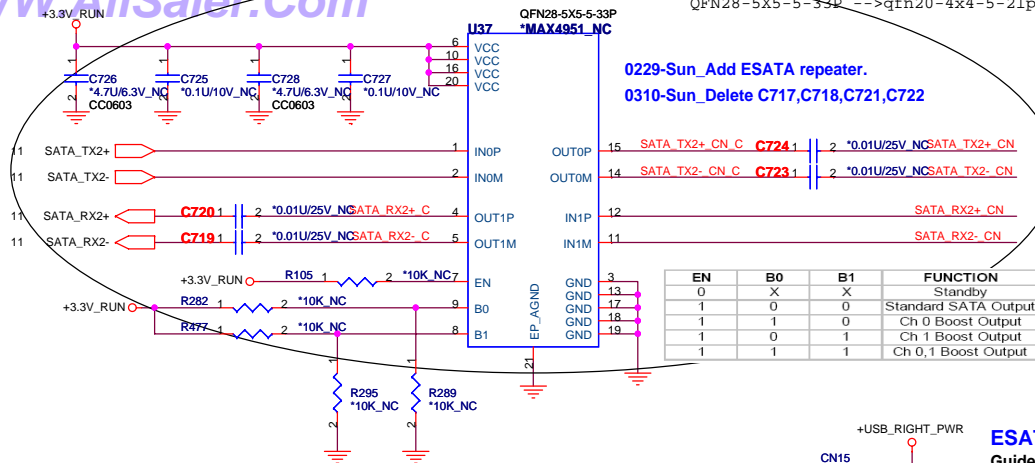


DISPLAY PORT CONNECTOR

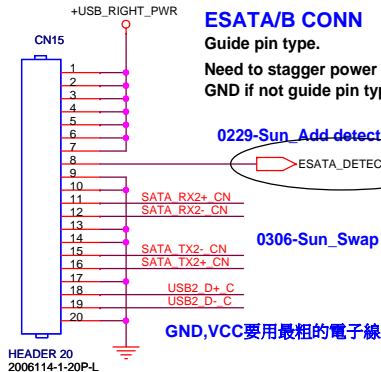
0306-Sun_Update DP footprint
"dp-2013656-2-20p-l-v-im3" (cut 0.4mm)



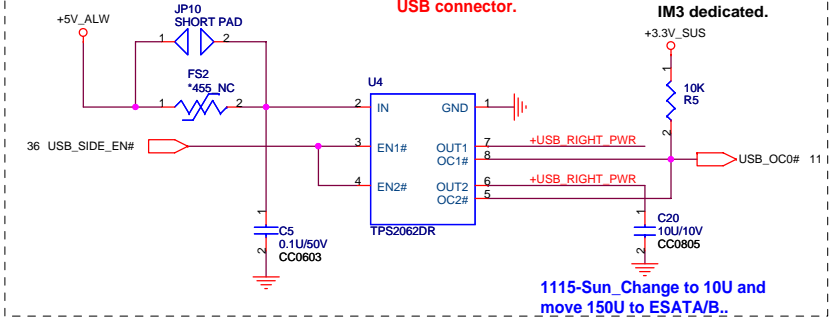
Title			HDMI & DP CONN
Size	Document Number	Rev	
	IM3 (XPS-Jolie)	1A	
Date:	Thursday, March 20, 2008	Sheet	29 of 59



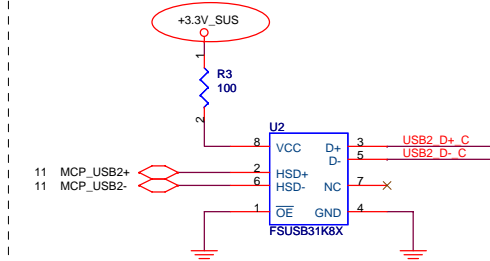
0306-Sun_Add ESATA jump RES.



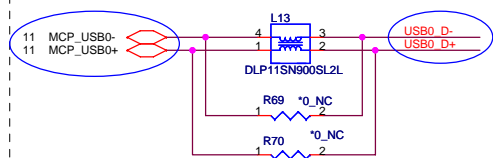
USB POWER SW



USB BUS SW

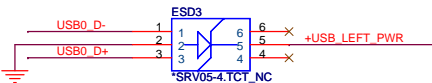


0318-Sun_change left USB port from port1 to port0

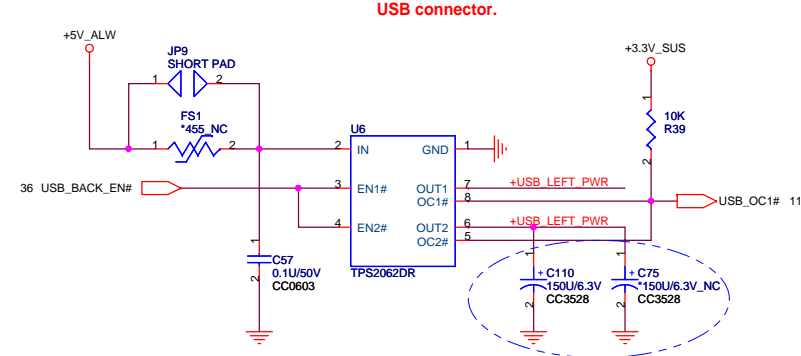


Platforms should put in PADS for the USB chokes if they have the room. Chokes should be NOPOP.

Place ESD diodes as close as USB connector.

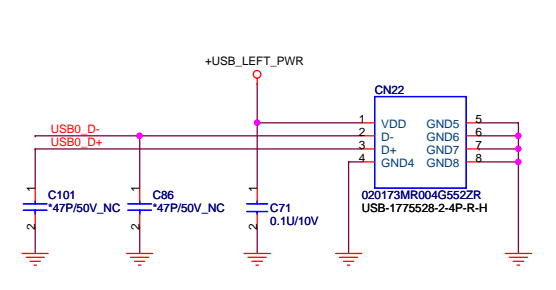


USB POWER SW



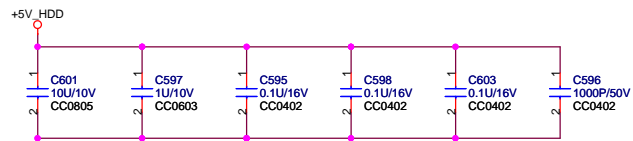
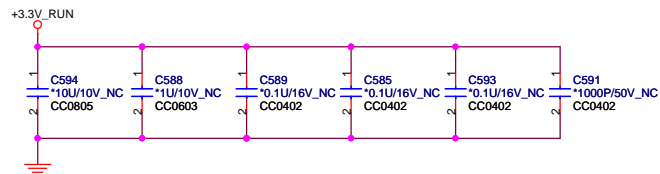
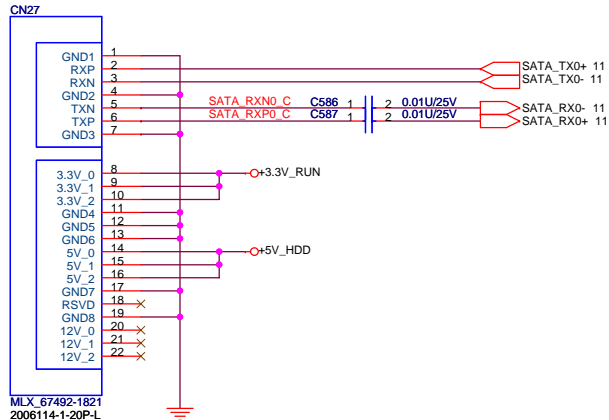
0111-Stanley: Change BOM from to 6.3V_3528.

USB CONN

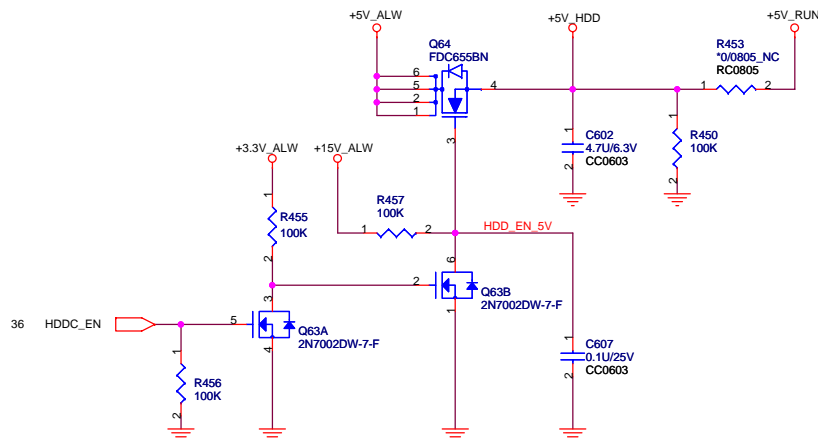


Title			USB, eSATA
Size	Document Number	Rev	
	IM3 (XPS-Jolie)	1B	
Date:	Thursday, March 20, 2008	Sheet	30 of 59

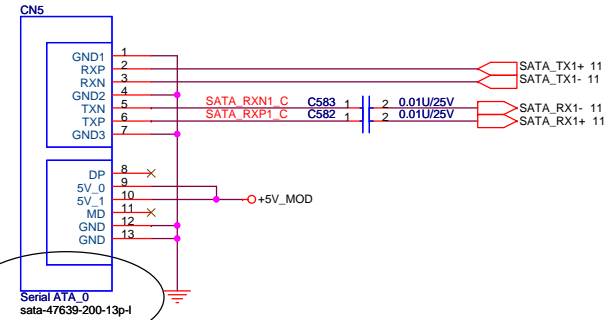
SATA HDD Connector



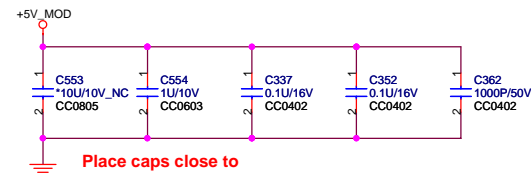
Place caps close to connector.



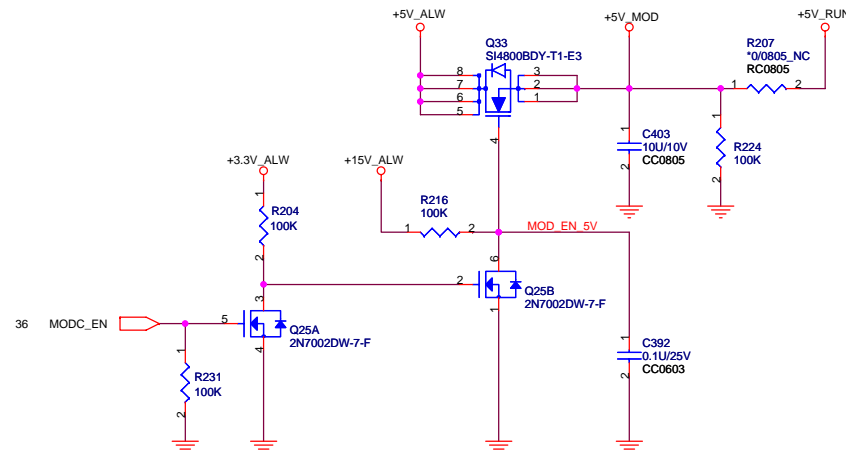
SATA ODD Connector



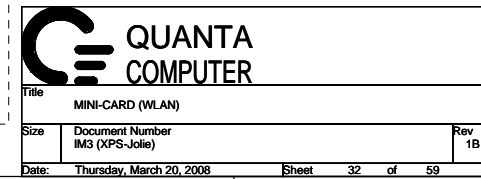
0306-Sun_Change to new footprint_sata-47639-200-13p-l

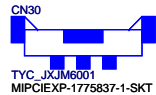


Place caps close to connector.

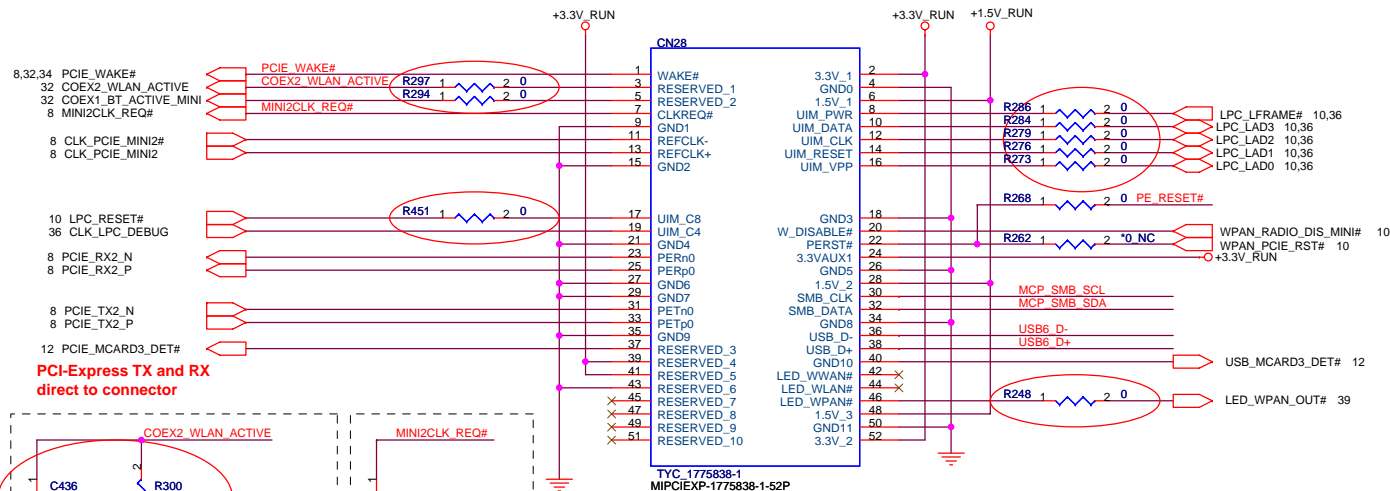


Title			SATA (HDD&CD ROM)
Size	Document Number	Rev	
	IM3 (XPS-Jolie)	1A	
Date:	Friday, March 21, 2008	Sheet	31 of 59

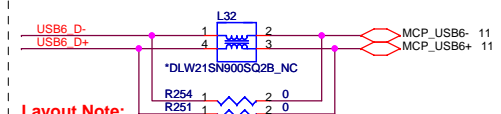




MiniCard Robson, BT. UWB Connector



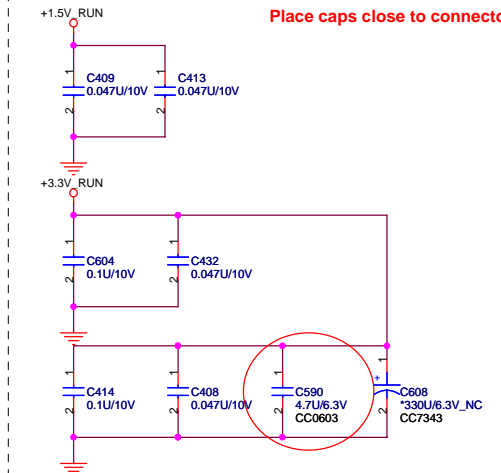
Reserve For EMI



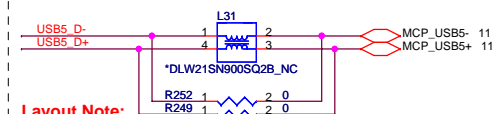
Layout Note:

R240 and R244 close to choke as possible to minimize stubs.

Place caps close to connector.



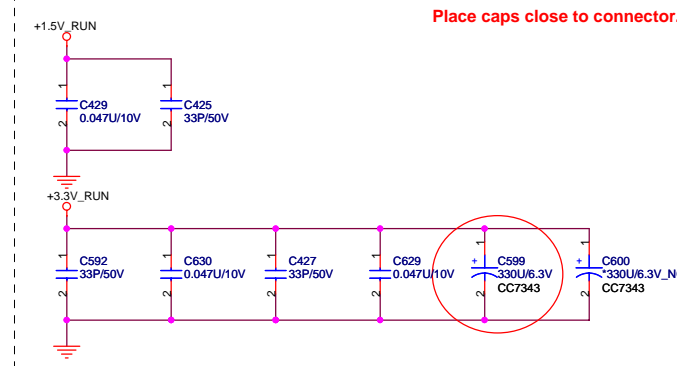
Reserve For EMI



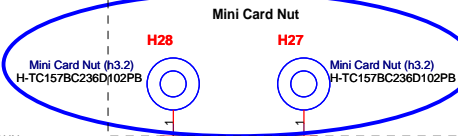
Layout Note:

R240 and R244 close to choke as possible to minimize stubs.

Place caps close to connector.



MiniCard WWAN Connector



0318-Sun_Correct Nut footprint as "H-TC157BC236D102PB"

0229-Sun_Change Mini Card WWAN Latch to Nut (Del CN31, add H27,H28)

0317-Sun_Reserve damping RES on SIM clock & DATA (Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

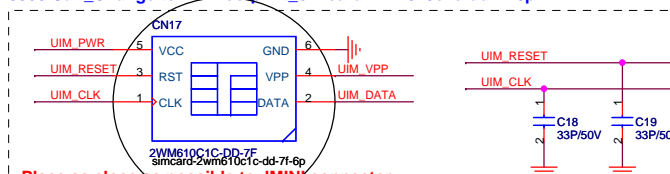
(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

(Place close to CN29)

0306-Sun_Change to new footprint_simcard-2wm610c1c-dd-7f-6p



Place as close as possible to JMINI connector



MINI-CARD (WWAN,WPAN)

Document Number

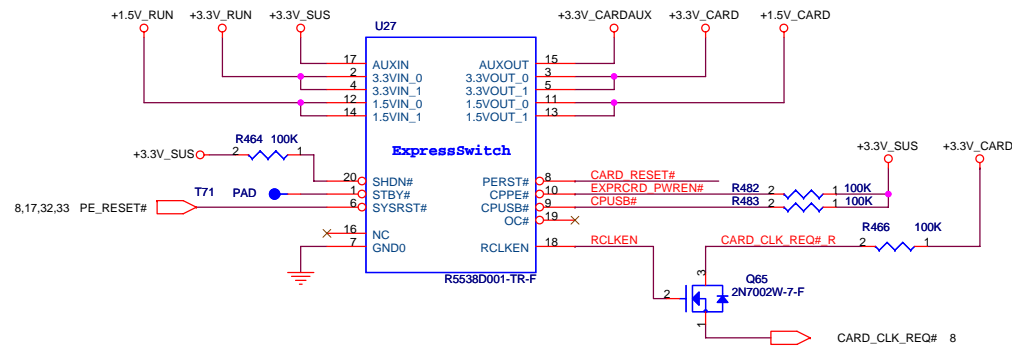
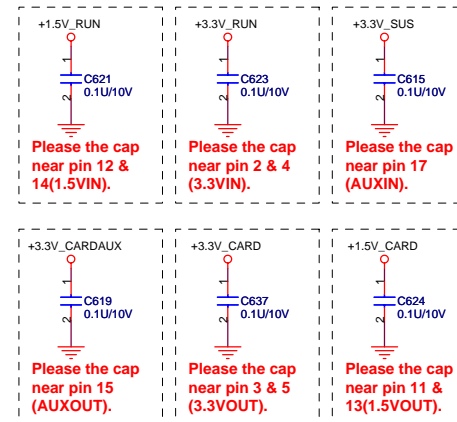
IM3 (XPS-Jolie)

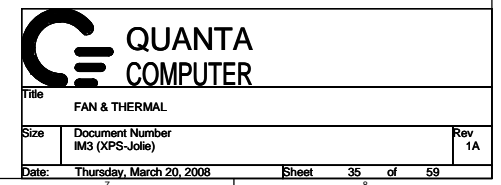
Date: Friday, March 21, 2008

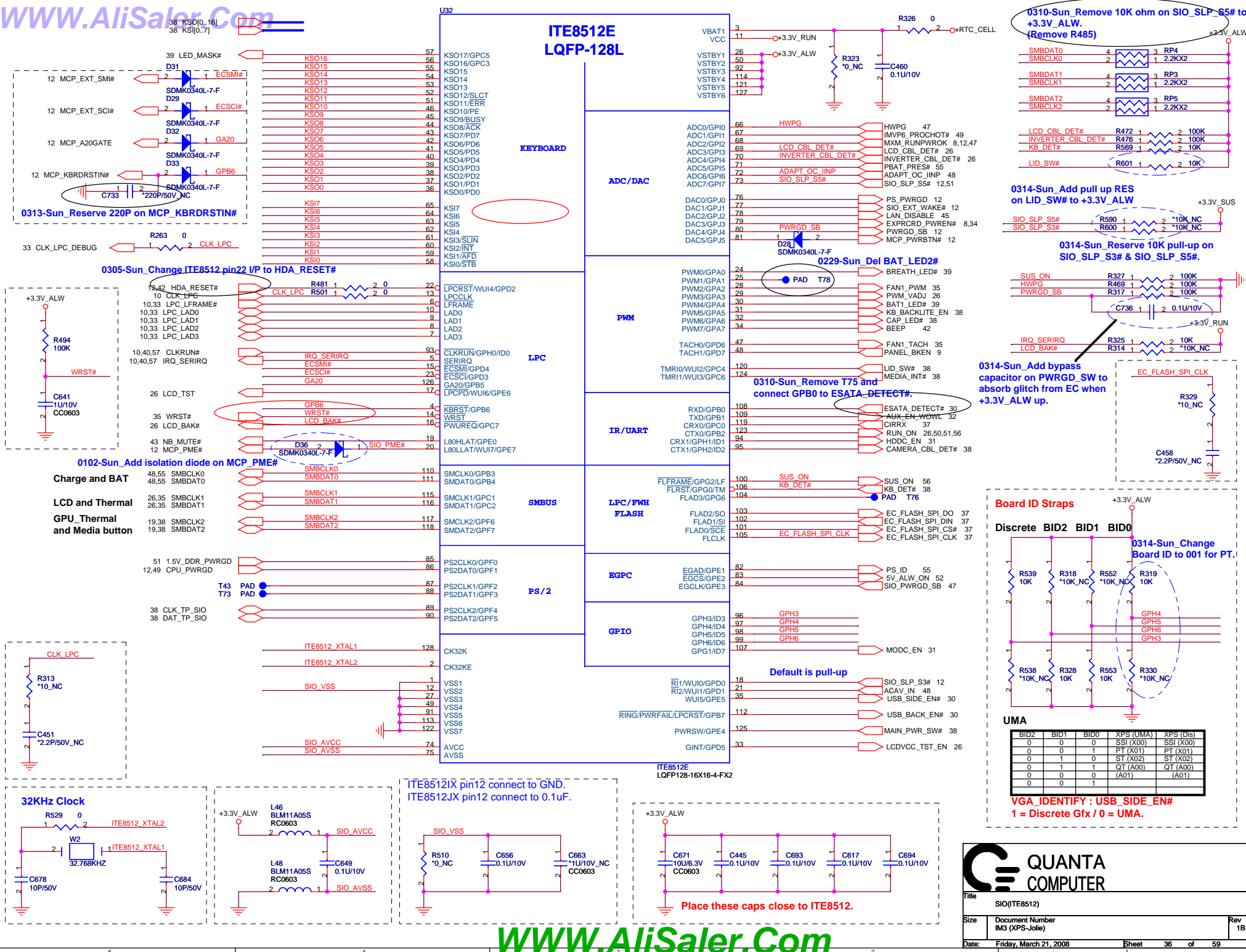
Sheet 33 of 59

Rev 1A

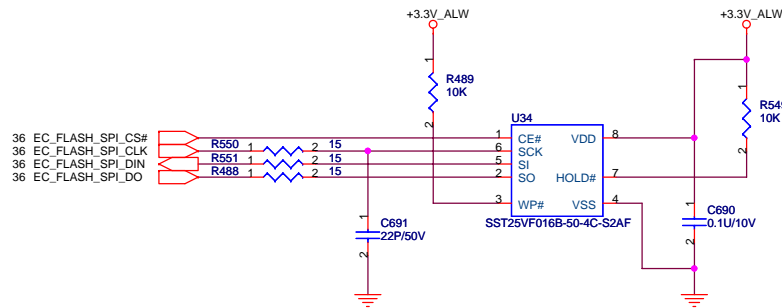
+1.5V_CARD Max. 650mA, Average 500mA.
+3V_CARD Max. 1300mA, Average 1000mA.

[illegible]

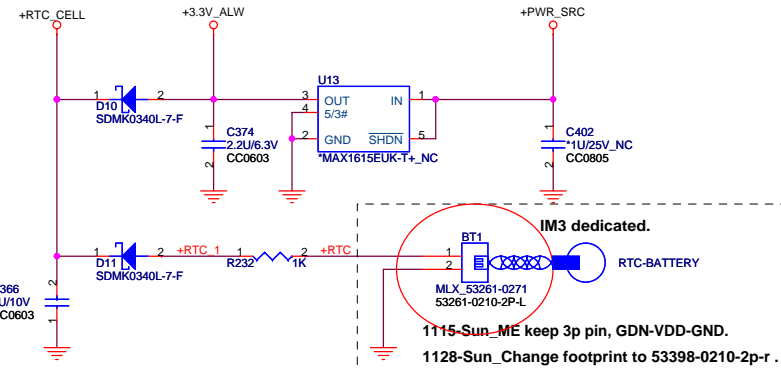




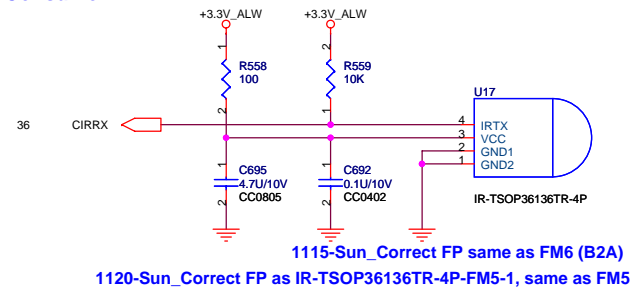
16Mbit (2M Byte), SPI



RTC BATTERY



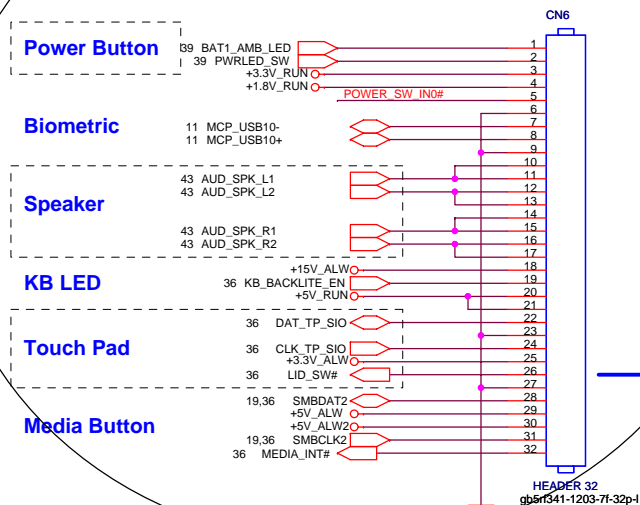
Consumer IR



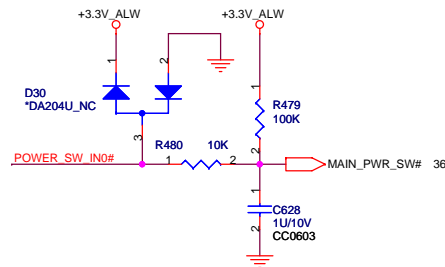
0306-Sun_Change CN6 to 34pin "gb5rf341-1203-7f-34p-I"
0314-Sun_Change CN6 to 32pin "gb5rf341-1203-7f-32p-I"

BREATH_PWRLED_BOT:

Solid = System On, Normal Activity; "Breathing" = System in Standby; Off = System Off (or in Hibernation)



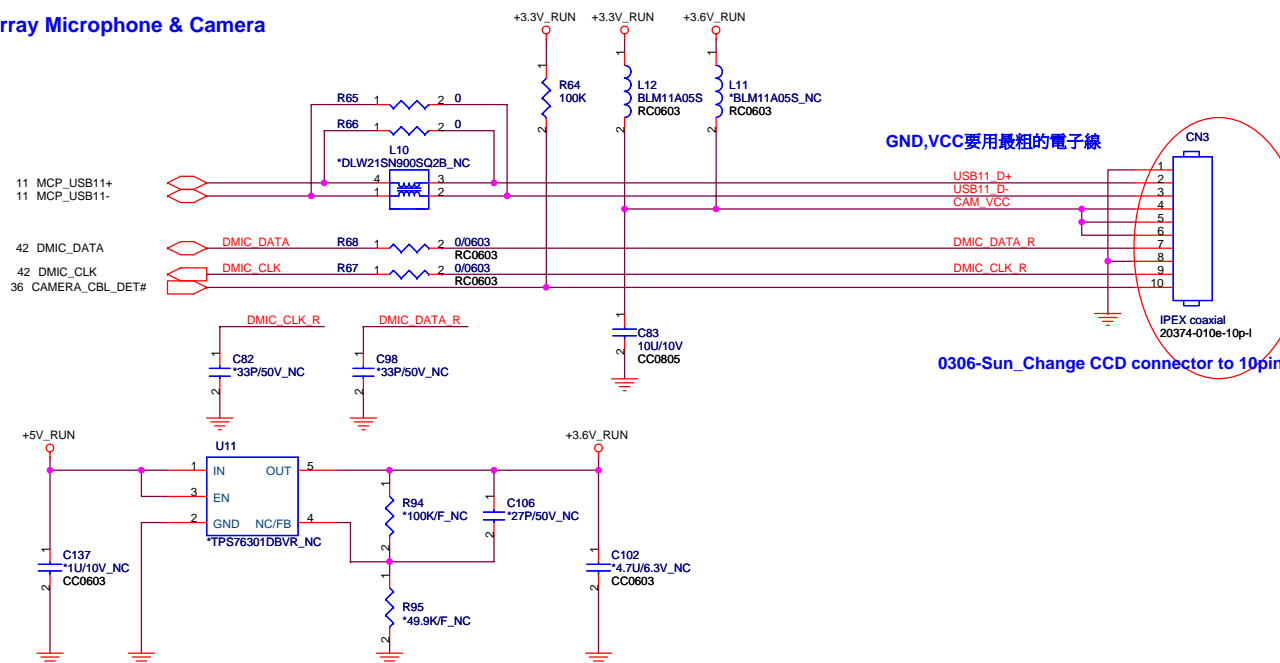
Power Button



0311-Touch Pad:

1. Connect +3.3V_ALW to TP connector on D/B.
2. Inform TP vendor to change design.

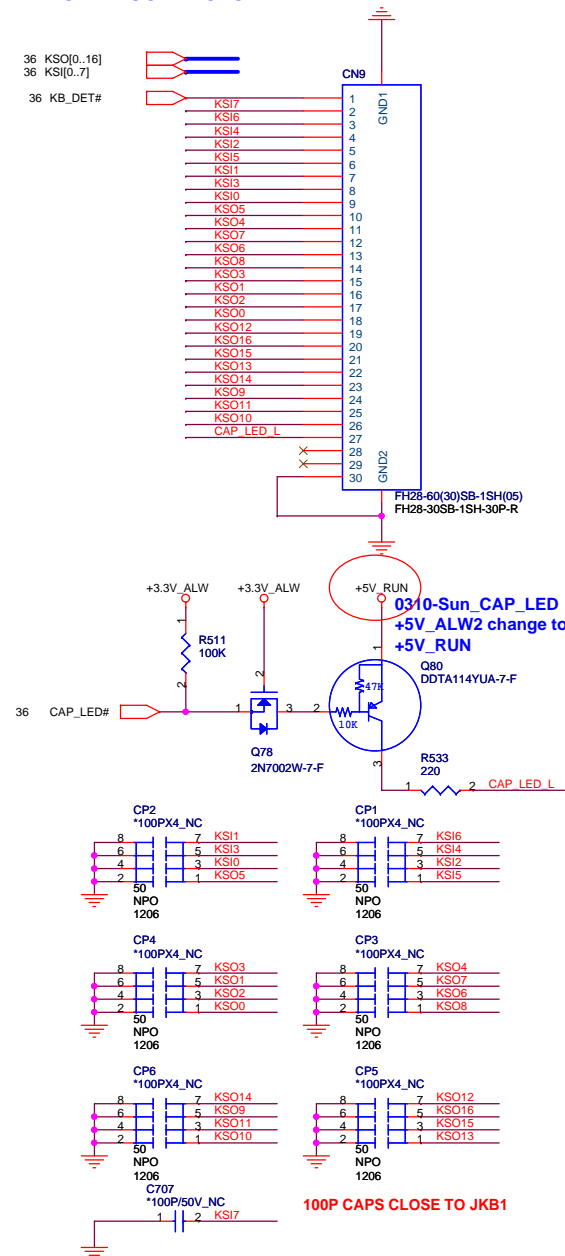
Array Microphone & Camera



GND,VCC要用最粗的电子线

0306-Sun_Change CCD connector to 10pin

KEYBOARD CONNECTOR



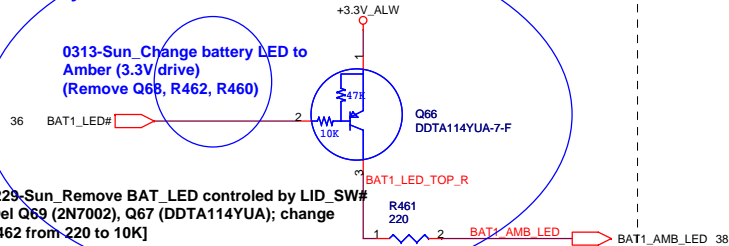
100P CAPS CLOSE TO JKB1



Title			USER INTERFACE/CIR
Size	Document Number	Rev	
	IM3 (XPS-Jolie)	1A	
Date:	Thursday, March 20, 2008	Sheet	38 of 59

Battery status

0313-Sun_Change battery LED to Amber (3.3V/drive)
(Remove Q66, R462, R460)

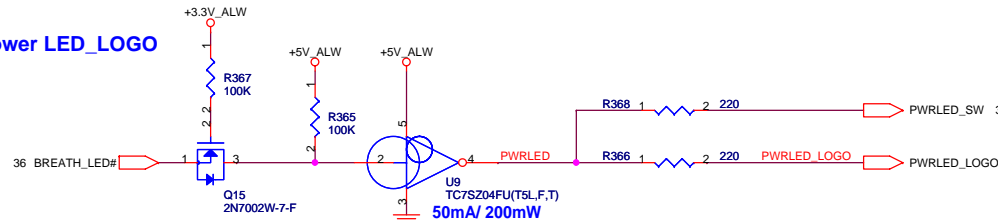


0229-Sun_Remove BAT_LED controlled by LID_SW#
[Del Q69 (2N7002), Q67 (DDTA114YUA); change R462 from 220 to 10K]

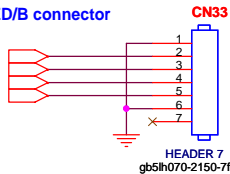
0229-Sun_Del BAT_LED2
[Del R295,Q48,Q43 (2N7002) and Q46,Q47 (DDTA114YUA)]

0229-Sun_Change PWRLED_SW control same as PWRLED_LOGO
[Del U10 (TC7SZ04F), Q16 (2N7002)]

Power LED_LOGO

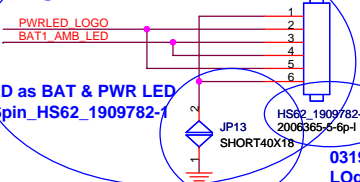


0306-Sun_Add status LED/B connector



0229-Sun_Remove LED control by LID_SW#
(Del R478,R477,Q75)

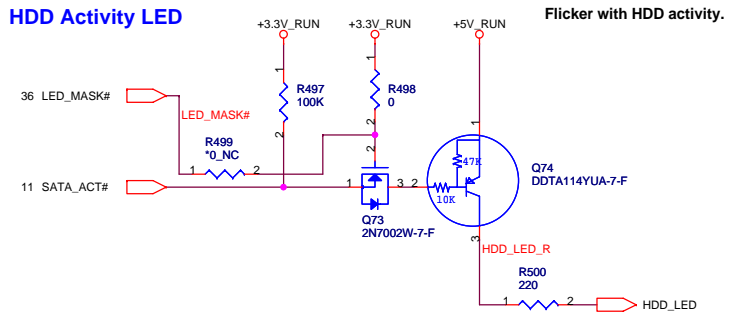
Logo LED/B connector



0306-Sun_Change Logo LED as BAT & PWR LED
and change connector to 6pin_HS62_1909782-1

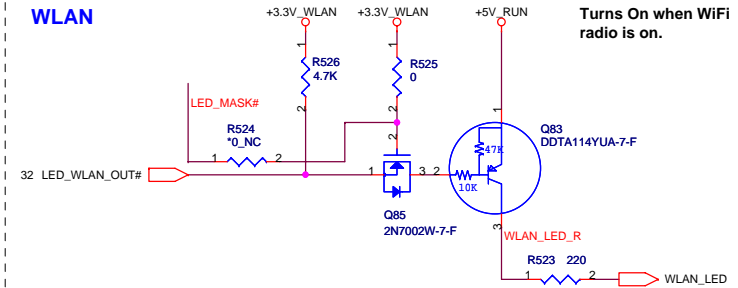
0314-Sun_Add short pad on GND of
Logo LED/B connector for EMI request.

HDD Activity LED



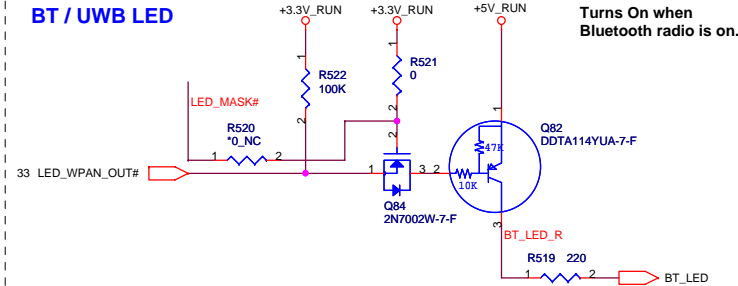
Flicker with HDD activity.

WLAN



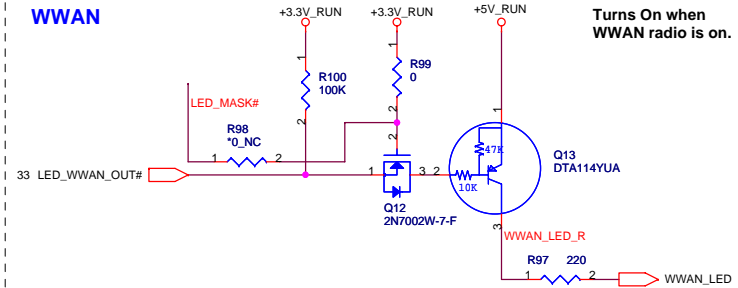
Turns On when WiFi
radio is on.

BT / UWB LED



Turns On when
Bluetooth radio is on.

WWAN

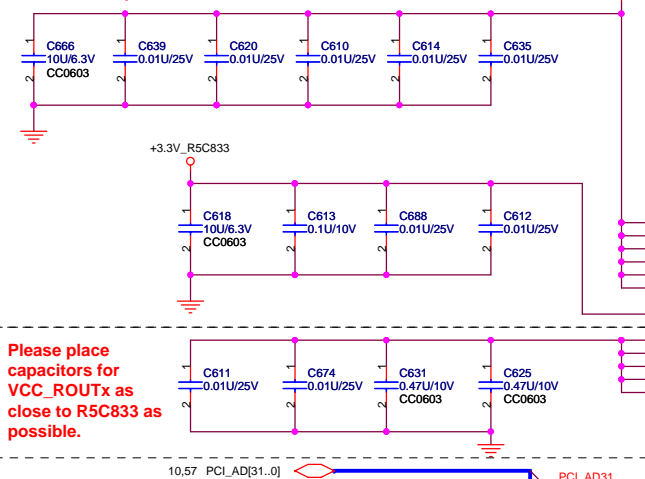


Turns On when
WWAN radio is on.

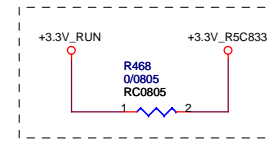


Title LED		
Size	Document Number IM3 (XPS-Jolie)	Rev 1A
Date:	Thursday, March 20, 2008	Sheet 39 of 59

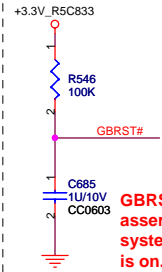
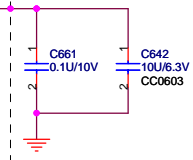
Place the power caps close to the relation pins.



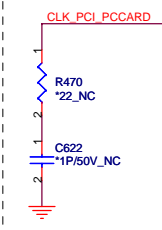
Please place capacitors for VCC_ROUTx as close to R5C833 as possible.



Place the power caps close to the relation pins.



GBRST# should be asserted only when system power supply is on.

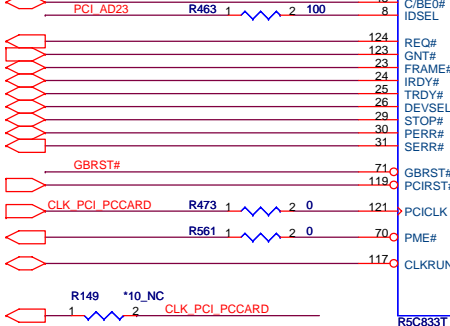


10,57 PCI_PAR
10,57 PCI_C_BE3#
10,57 PCI_C_BE2#
10,57 PCI_C_BE1#
10,57 PCI_C_BE0#

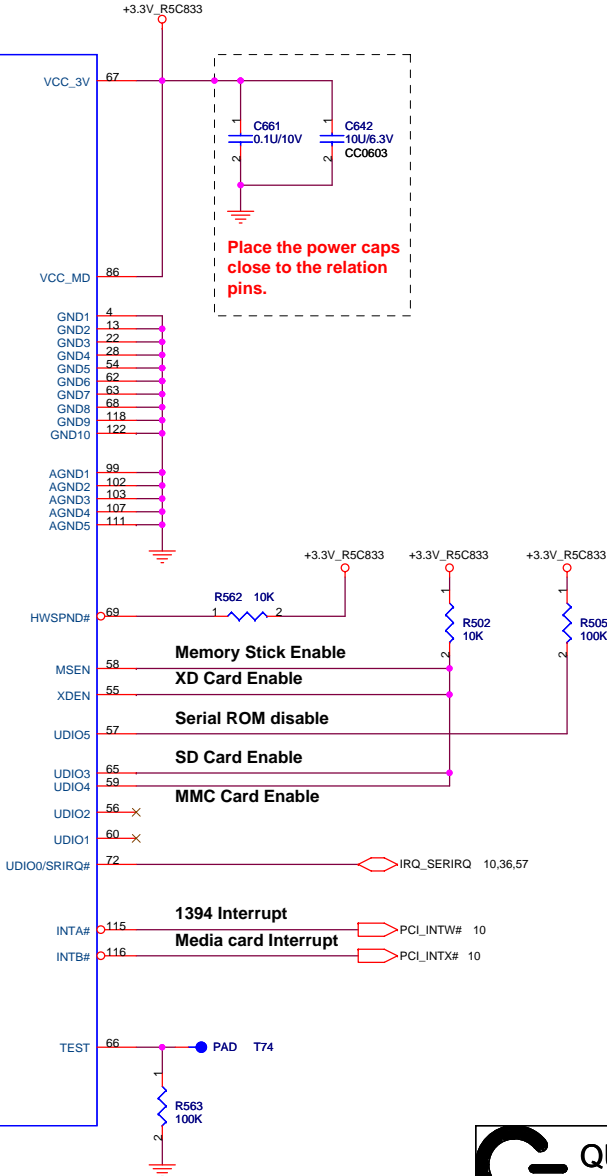
10 PCI_REQ0#
10 PCI_GNT0#
10,57 PCI_FRAME#
10,57 PCI_IRDY#
10,57 PCI_TRDY#
10,57 PCI_DEVSEL#
10,57 PCI_STOP#
10,57 PCI_PERR#
10,57 PCI_SERR#


10,57 PCI_RST#
10 CLK_PCI_PCCARD
10,57 PCI_PME#
10,36,57 CLKRUN#

57 CLK_PCI_DEBUG



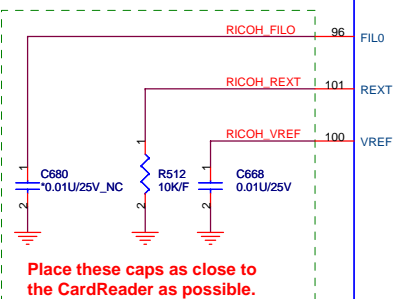
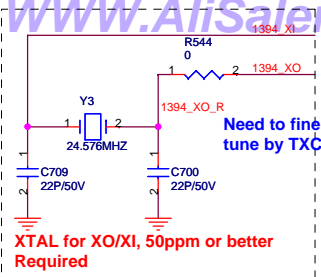
PCI / OTHER





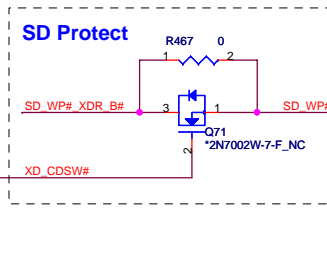
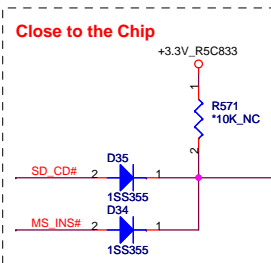
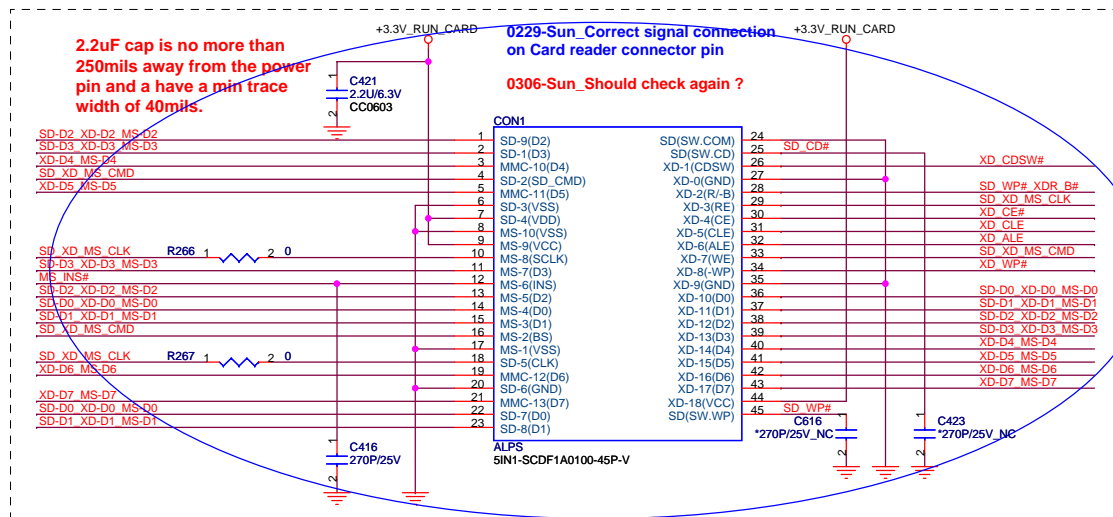
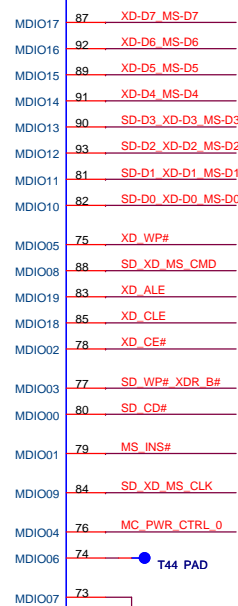
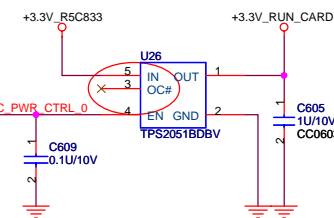
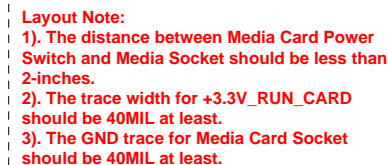
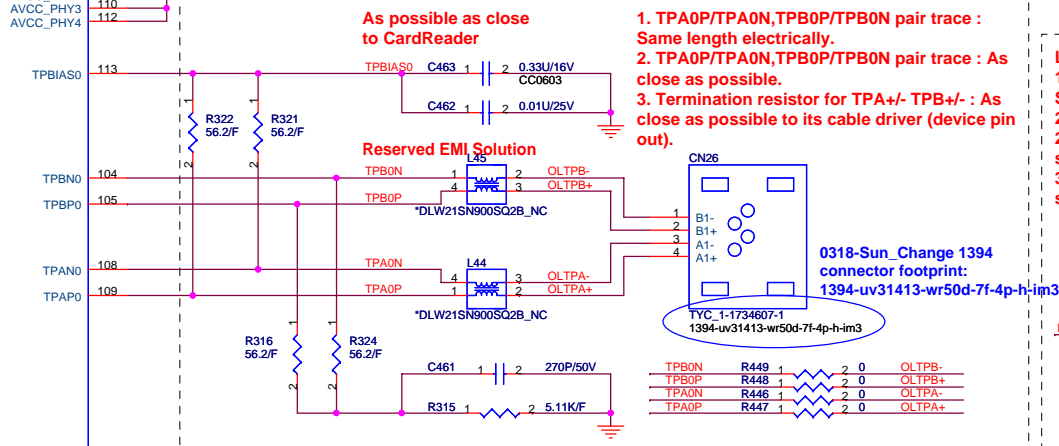
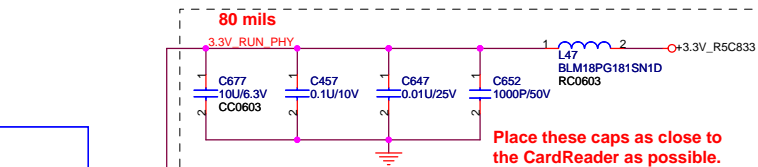
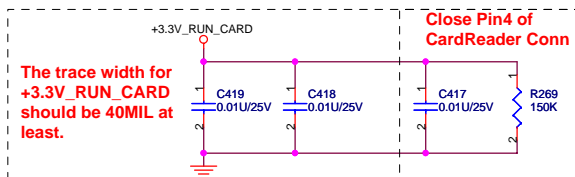
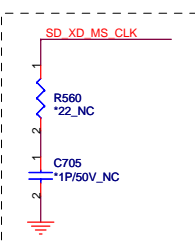
**QUANTA
COMPUTER**

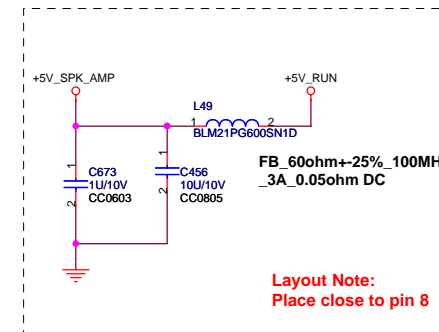
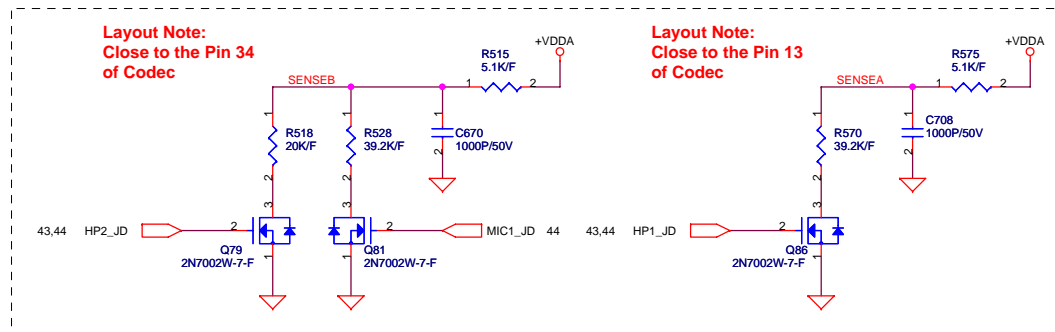
Title CARDREADER FOR 8 IN 1 CONTROLLER		
Size	Document Number IM3 (XPS-Jolie)	Rev 1A
Date:	Thursday, March 20, 2008	Sheet 40 of 59



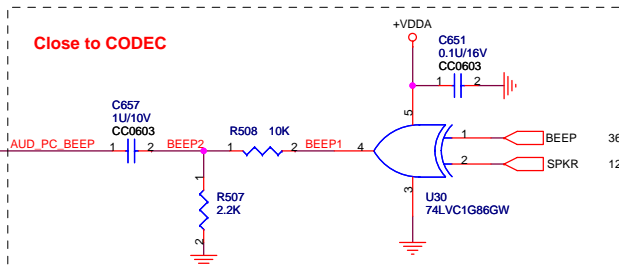
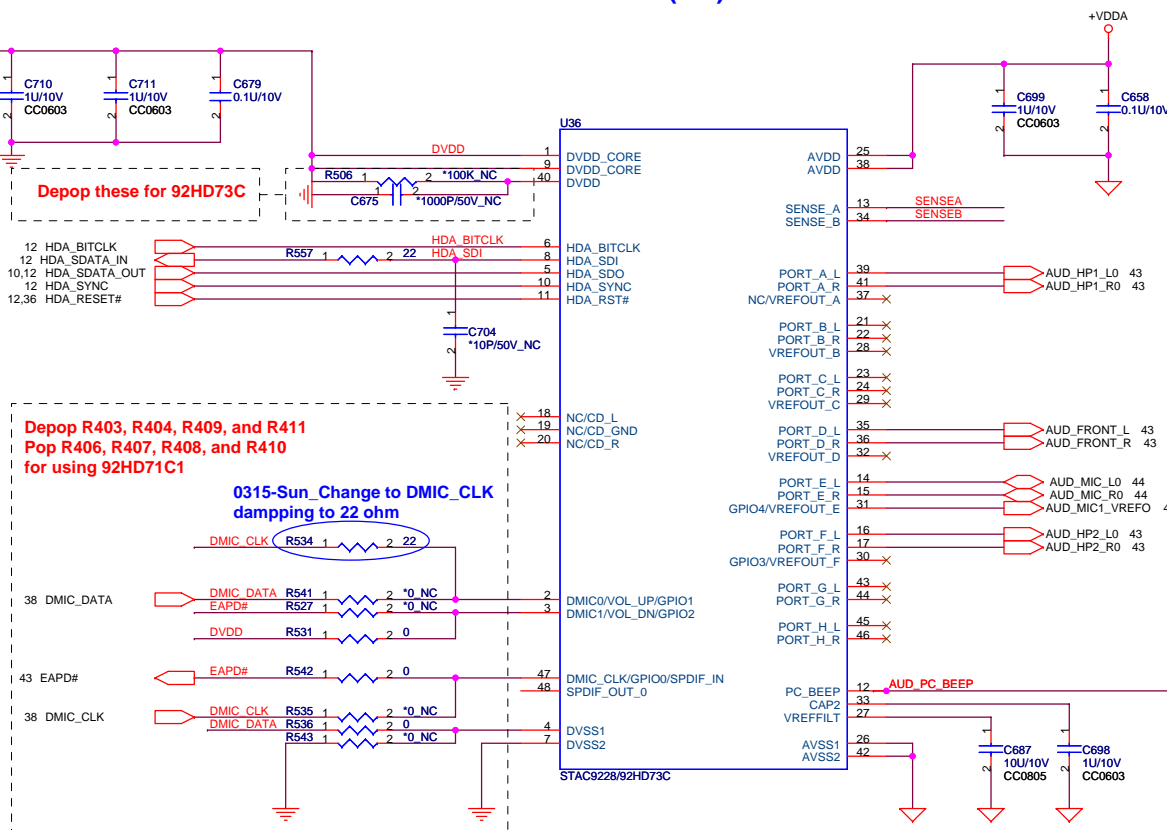
Card Reader interface signal mapping

PIN	SD	MNC	MS	XD
MD1000	SD_CD#	MNC_CD#		XD_CD0#
MD1001			MS_CD#	XD_CD1#
MD1002	SD_WP#			XD_R#
MD1004	SD_PWR0	MNC_PWR	MS_PWR	XD_PWR
MD1005	SD_LED#	MNC_LED#	MS_LED#	XD_LED#
MD1007	MRST#			
MD1008	SD_CLK	MNC_CLK	MS_CLK	XD_WE#
MD1009	SD_CLR#	MNC_CLR#	MS_CLR#	XD_RE#
MD1010	SD_D0	MNC_D0	MS_D0	XD_D0
MD1011	SD_D1	MNC_D1	MS_D1	XD_D1
MD1012	SD_D2	MNC_D2	MS_D2	XD_D2
MD1013	SD_D3	MNC_D3	MS_D3	XD_D3
MD1014		MNC_D4		XD_D4
MD1015		MNC_D5		XD_D5
MD1016		MNC_D6		XD_D6
MD1017		MNC_D7		XD_D7
MD1018			MS_CLR#	XD_CLR#
MD1019				XD_#LR



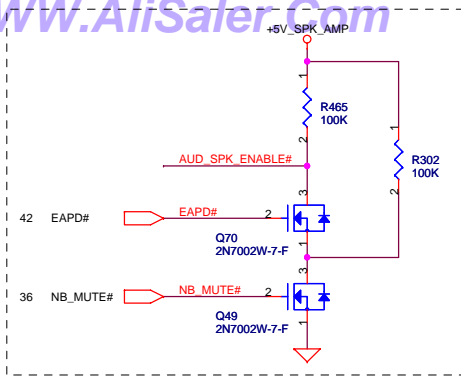


AZALIA (HD) CODEC

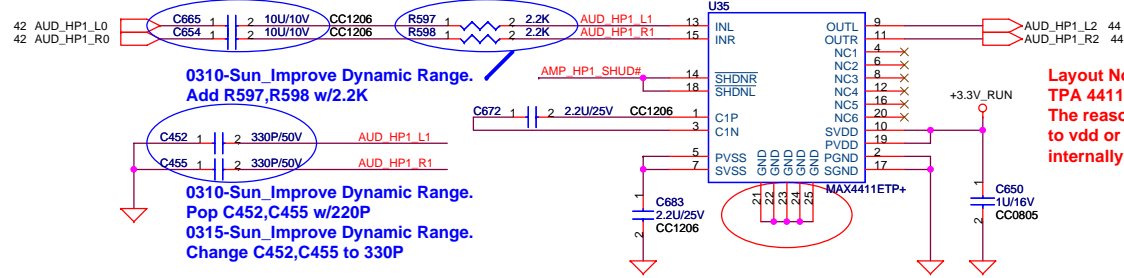


Title			Azalia CODEC
Size	Document Number	Rev	
	IM3 (XPS-Jolie)	1A	
Date:	Friday, March 21, 2008	Sheet	42 of 59

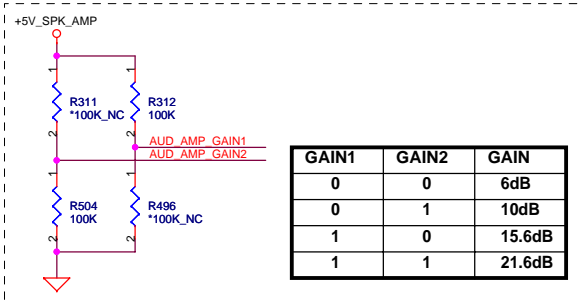
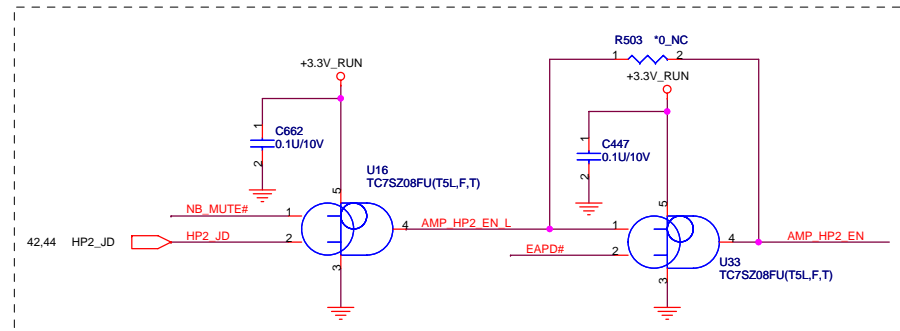
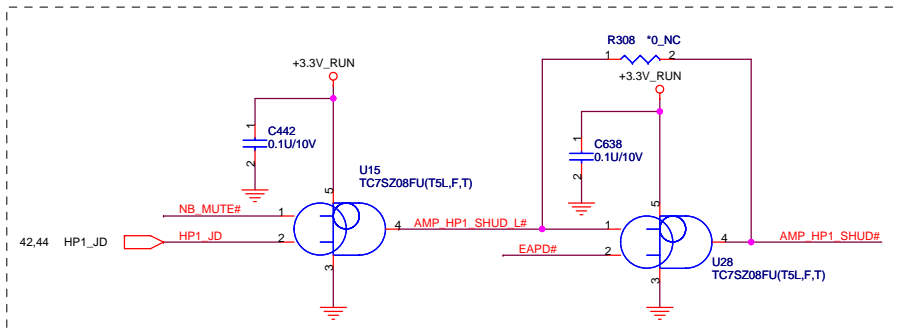
INTERNAL SPEAKER AMP



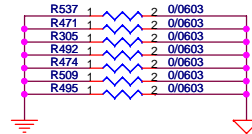
0315-Sun_Improve Dynamic Range.
0320-StegChange AC coupling to 10U/10V



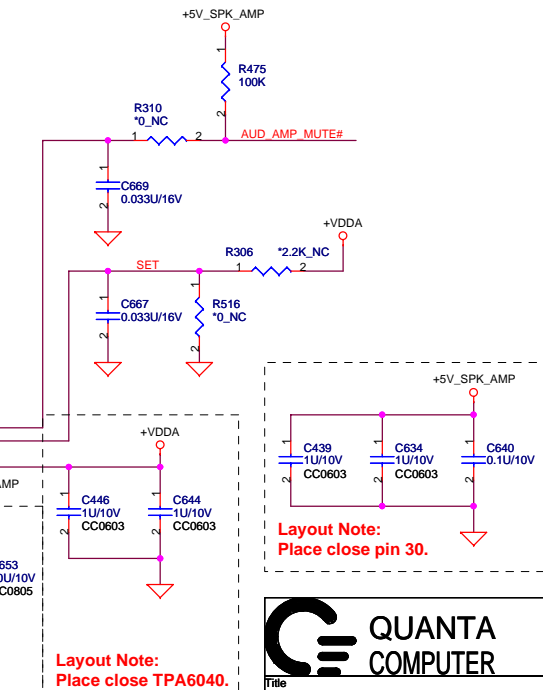
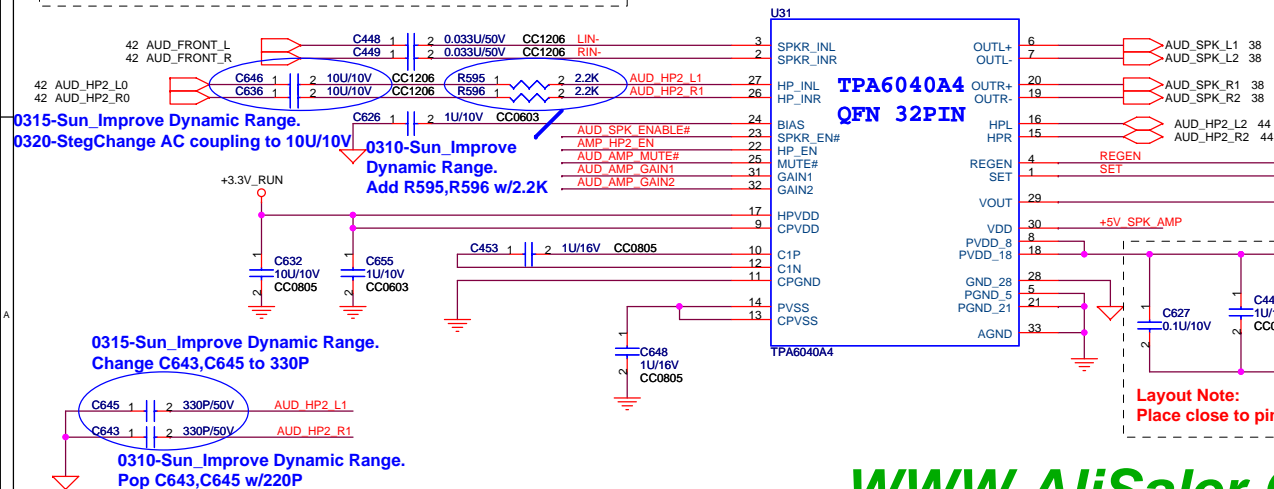
Layout Note:
TPA 4411 : cannot connect EP to GND.
The reason that we can't solder the pad to vdd or ground is because it is internally connected to VSS.



GAIN1	GAIN2	GAIN
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB



Layout Note:
MAX9789A/TPA6040A : need to connect EP (exposed paddle) to GND.
TPA 4411 : cannot connect EP to GND.
MAX 4411: can connect EP to GND.

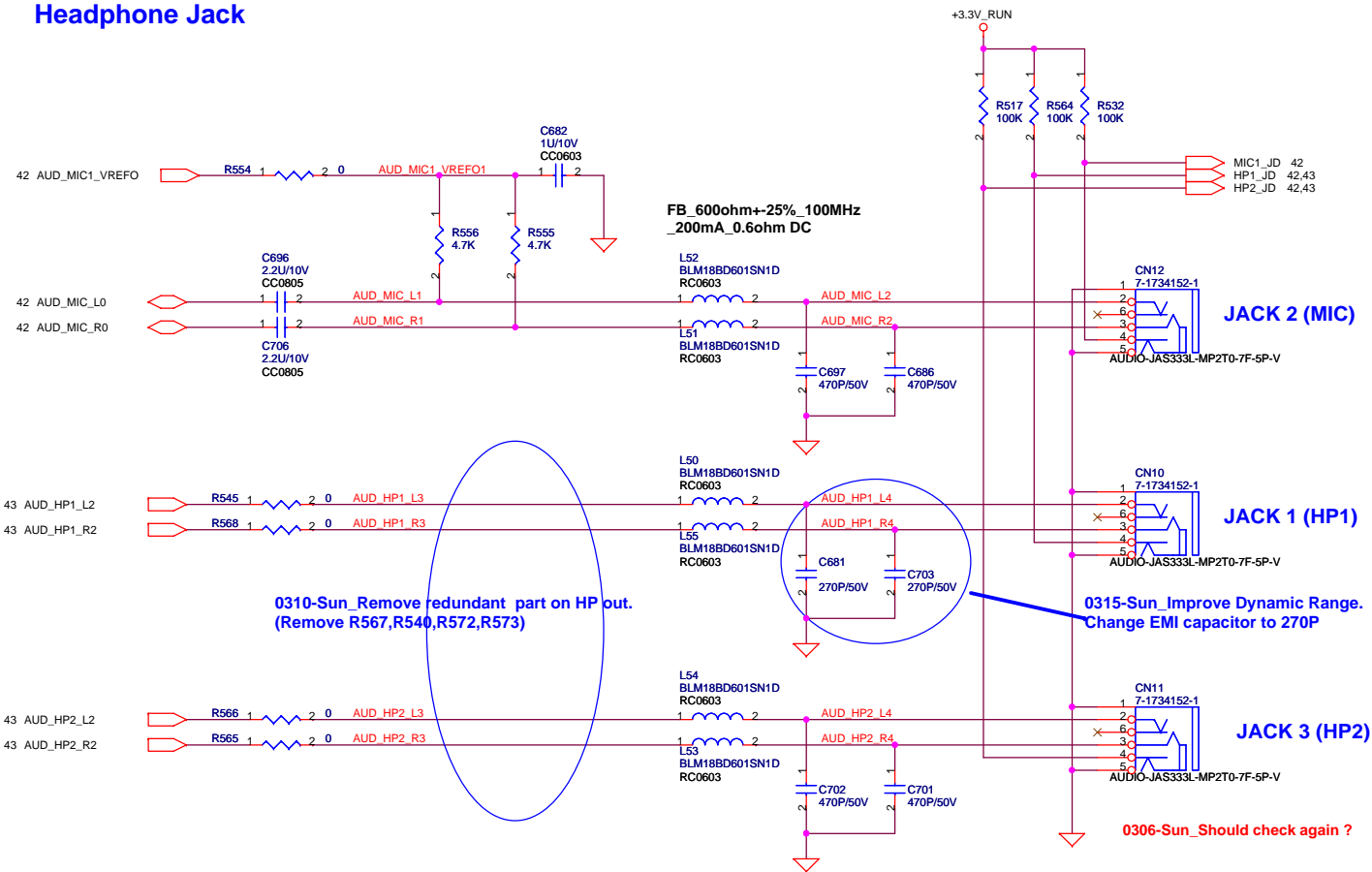


Layout Note:
Place close pin 30.



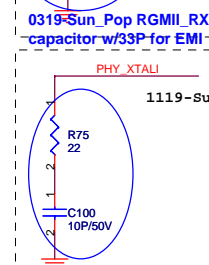
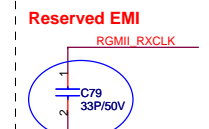
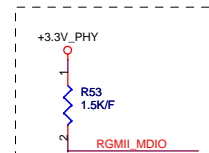
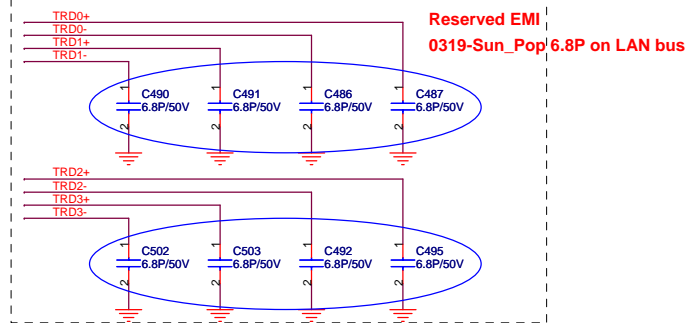
Title			
AUDIO AMP			
Size	Document Number		Rev
	IM3 (XPS-Jolie)		1A
Date:	Friday, March 21, 2008	Sheet	43 of 59

Headphone Jack



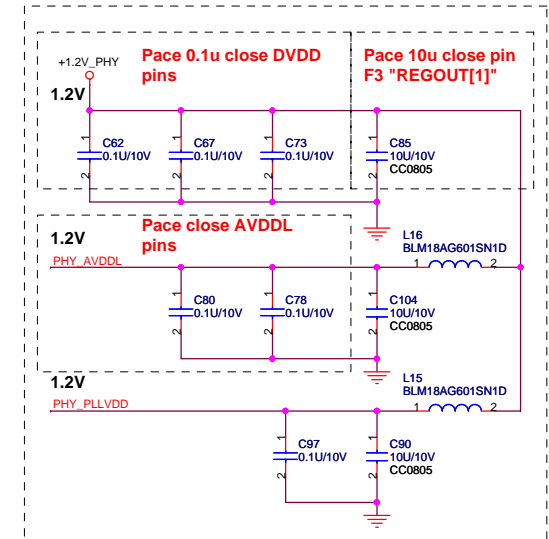
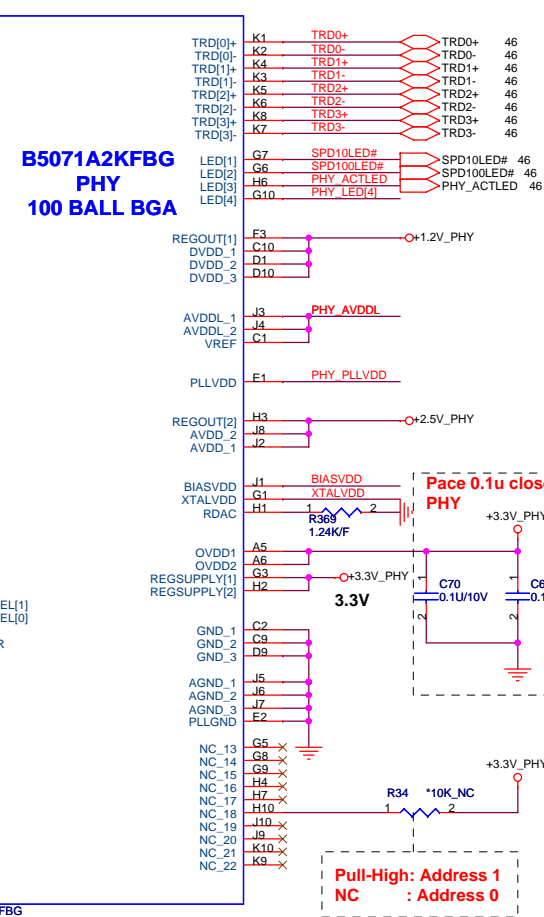
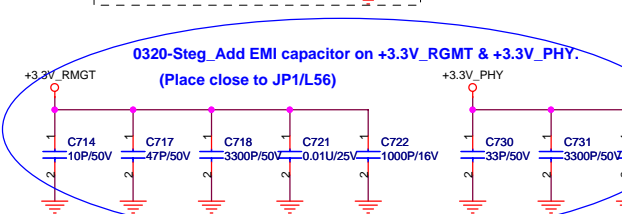
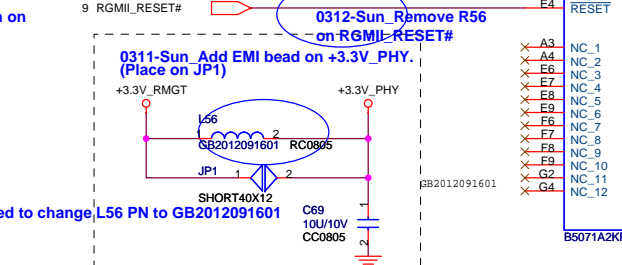
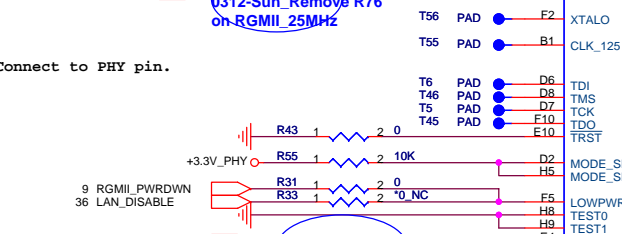
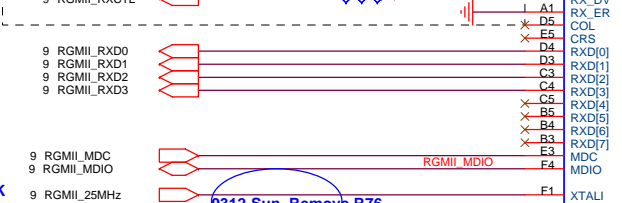
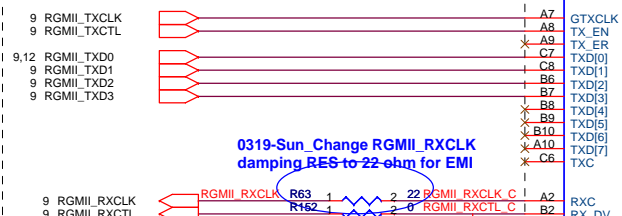
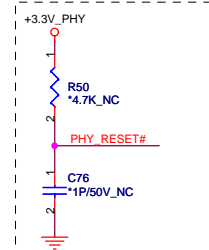
Layout Note:

1. Use 50 ohm impedance for all trace.
2. Trace length matched to a tolerance of 9.8mm in order to keep the skew between signals less than 0.07ns.
3. The receive and transmit signals kept away from each other and other analog and clock signals to reduce crosstalk.

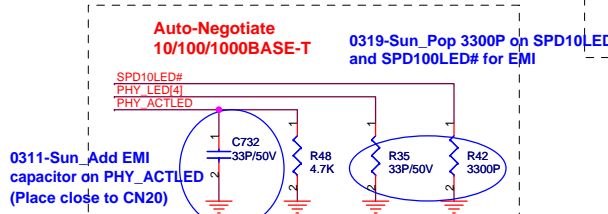
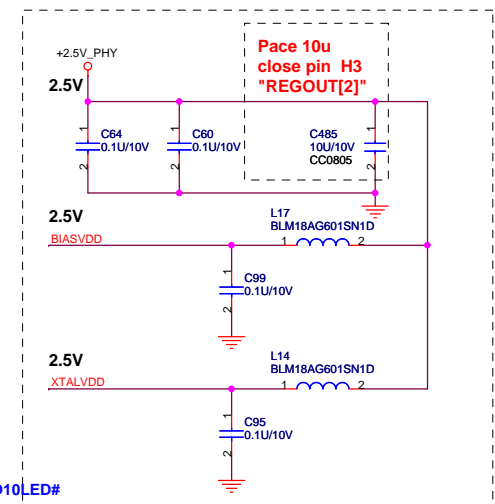


0319-Sun_Pop AC termination on PHY_XTALI for EMI

0312-Sun_Remove R74 on PHY_XTALI.



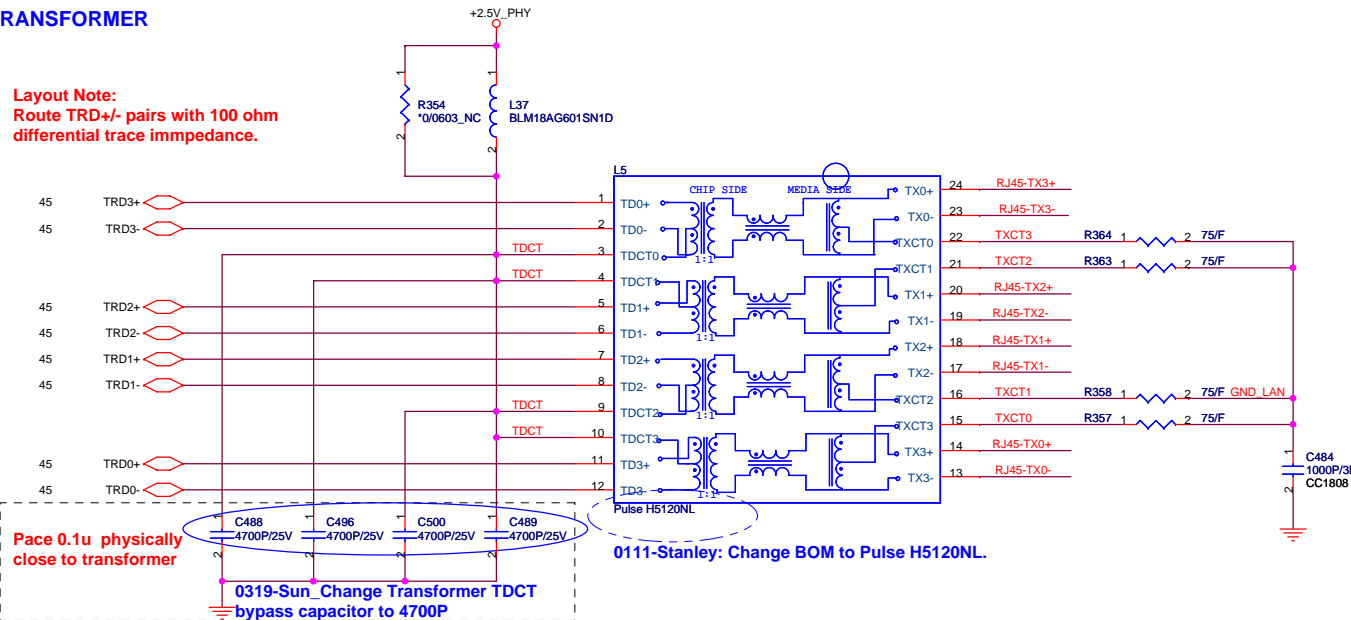
Layout Note:
Locate the RDAC resistor as close to the RDAC pin as possible and keep the trace between the pin and resistor and short and wide as possible.



Title LAN Broadcom PHY B5071		
Size	Document Number IM3 (XPS-Jolie)	Rev 1A
Date:	Thursday, March 20, 2008	Sheet 45 of 59

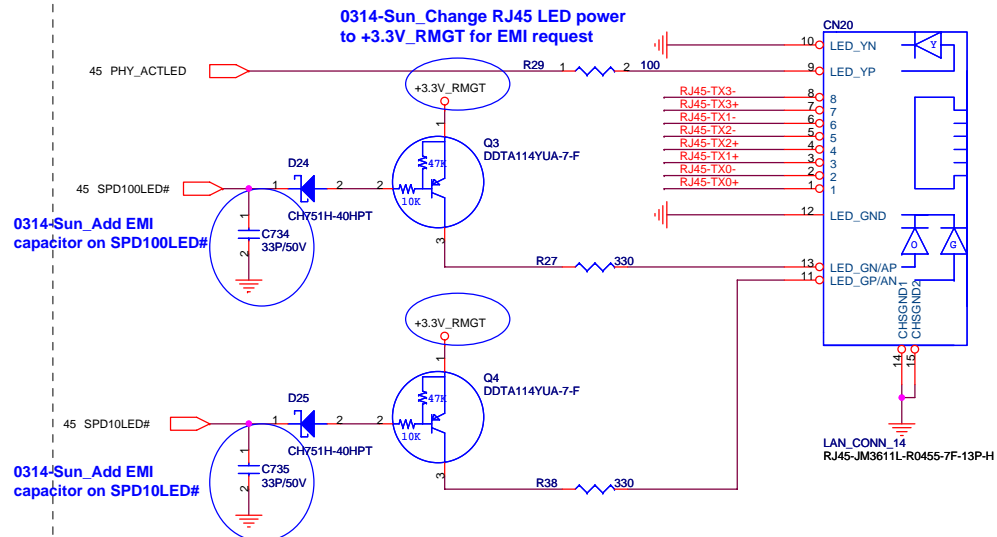
TRANSFORMER

Layout Note:
Route TRD+/- pairs with 100 ohm differential trace impedance.

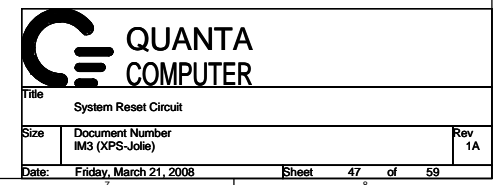


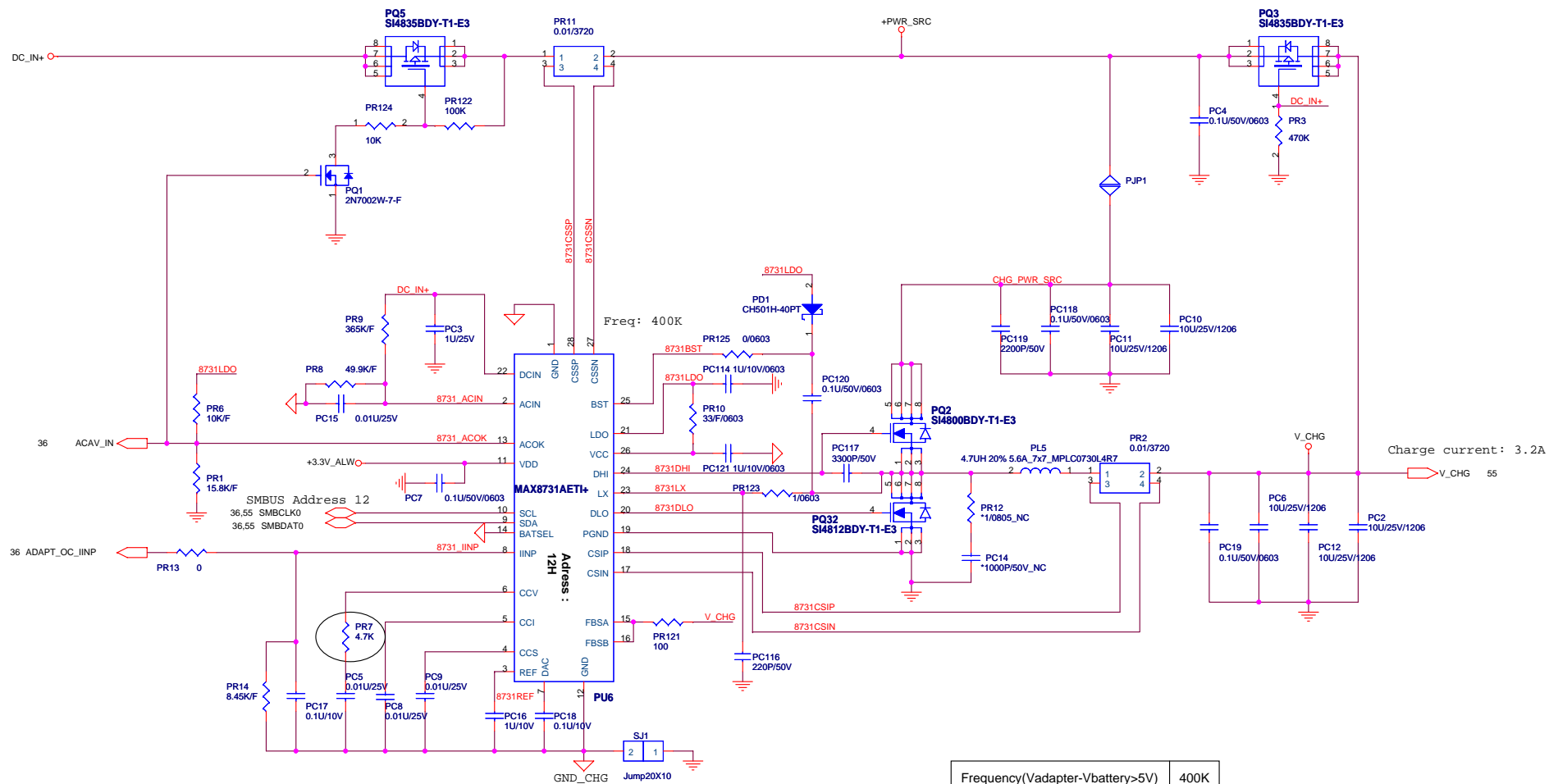
RJ-45 Connector

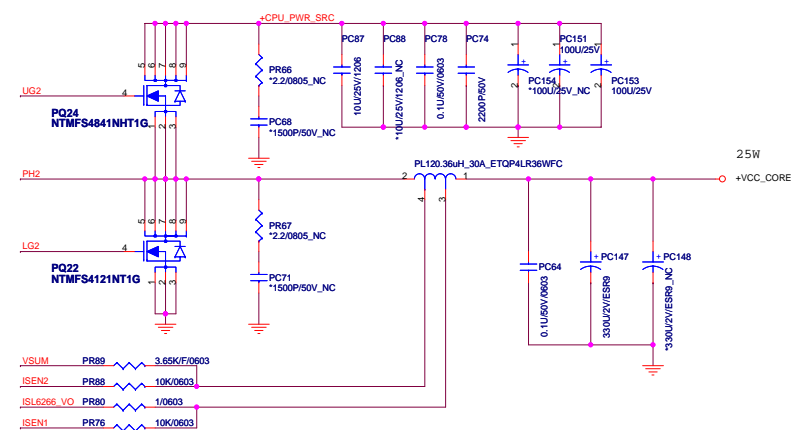
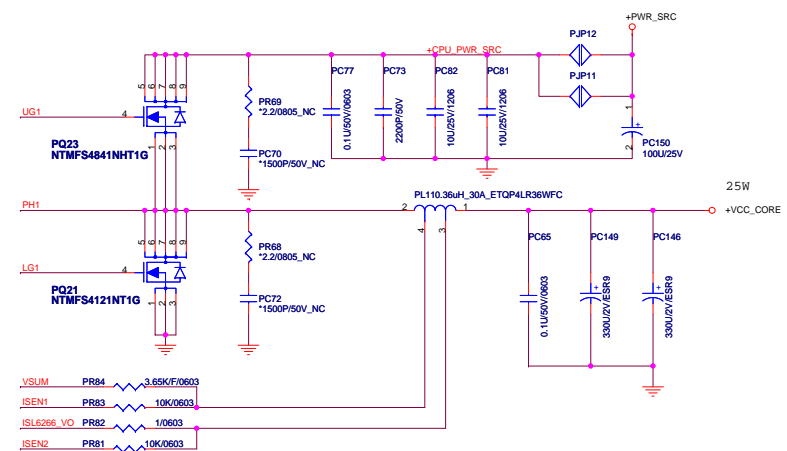
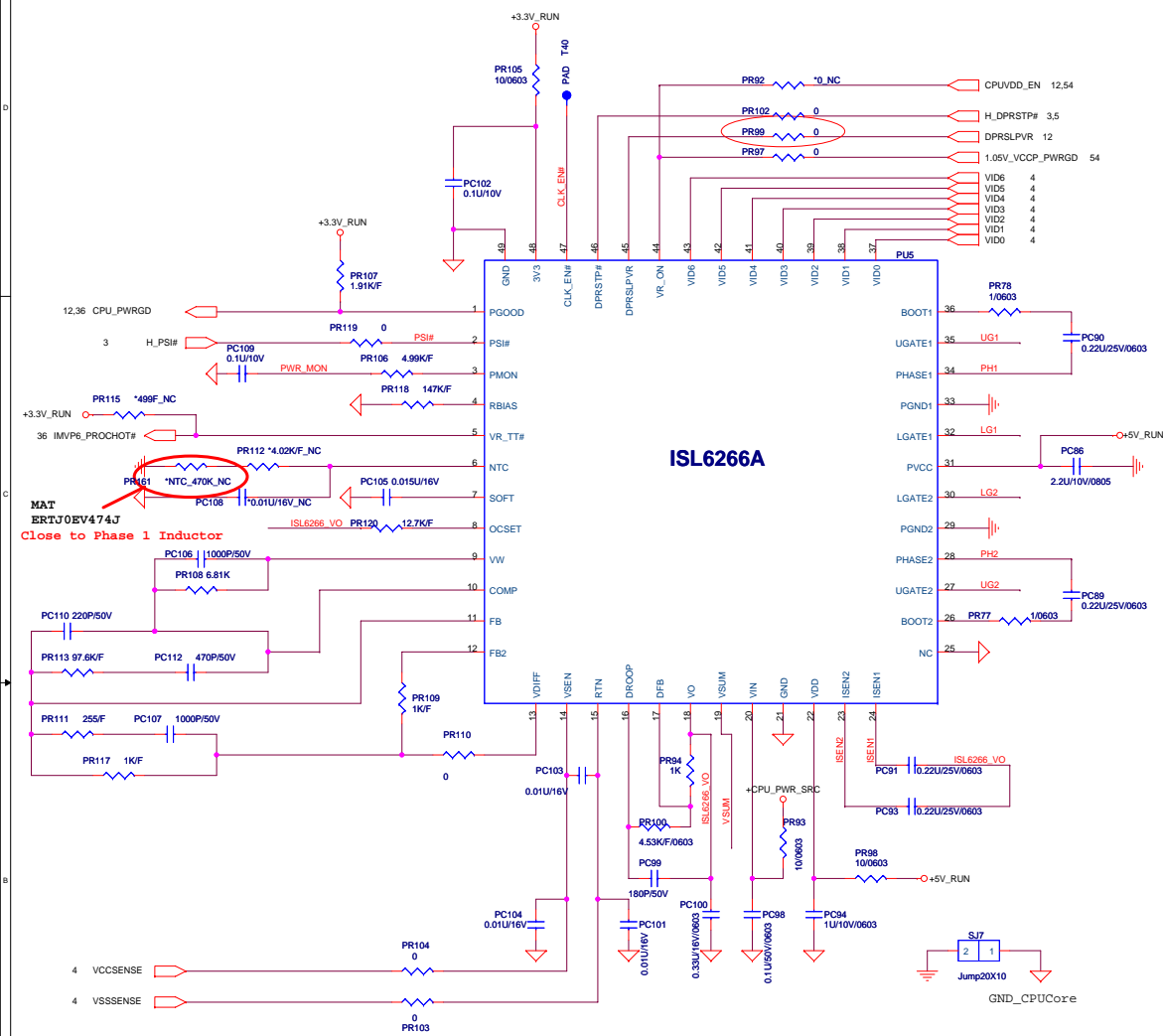
0314-Sun_Change RJ45 LED power to +3.3V_RMGT for EMI request



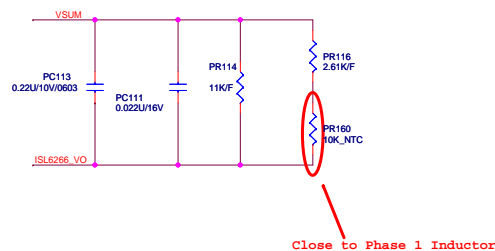
Title		
LAN SWITCH		
Size	Document Number	Rev
	IM3 (XPS-Jolie)	1B
Date:	Friday, March 21, 2008	Sheet 46 of 59

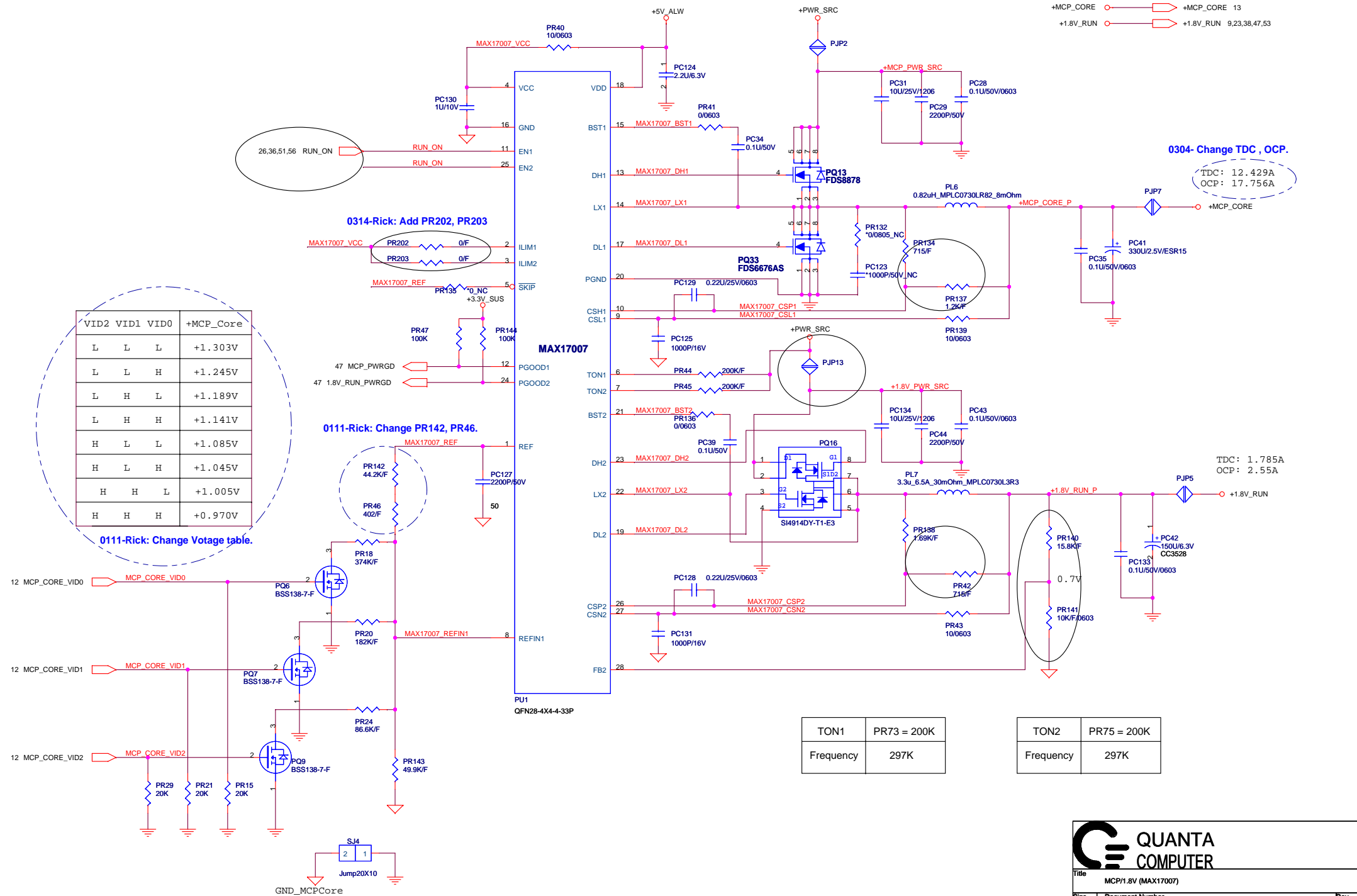




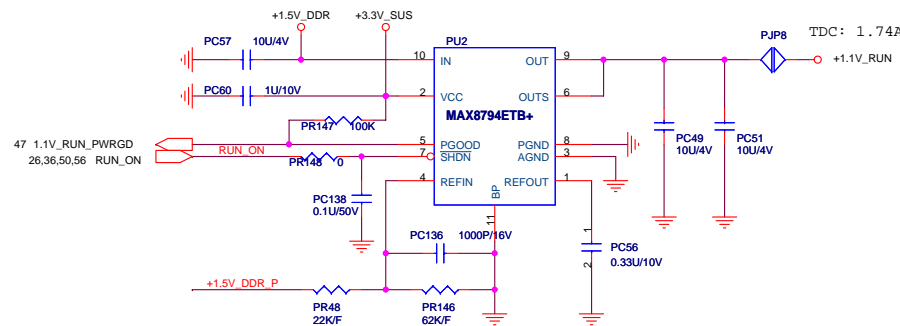
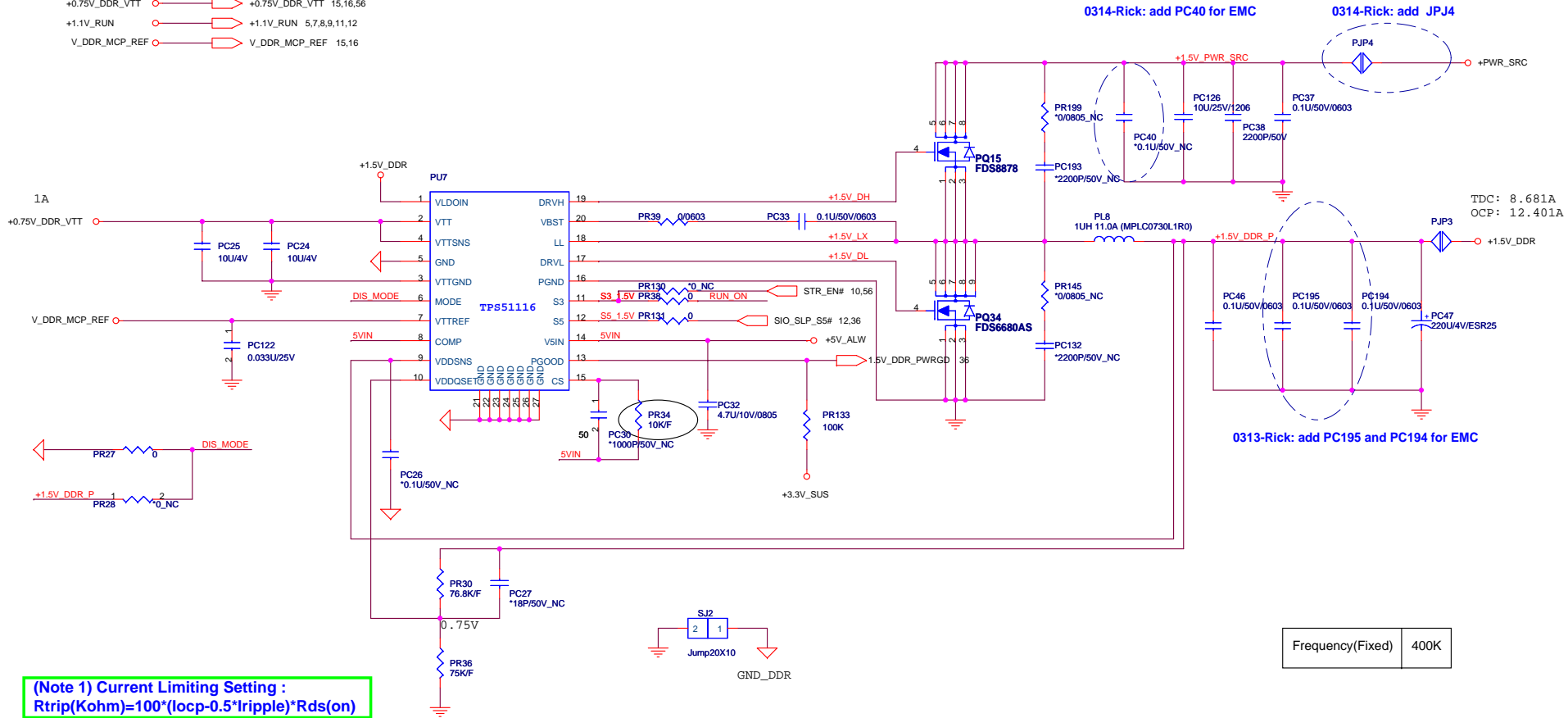


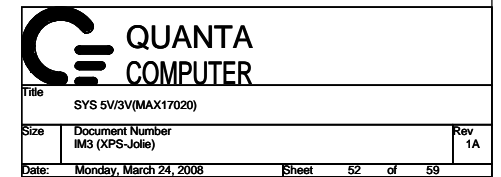
VW	PR37
Frequency	270KHZ@0A / 310KHZ@44A

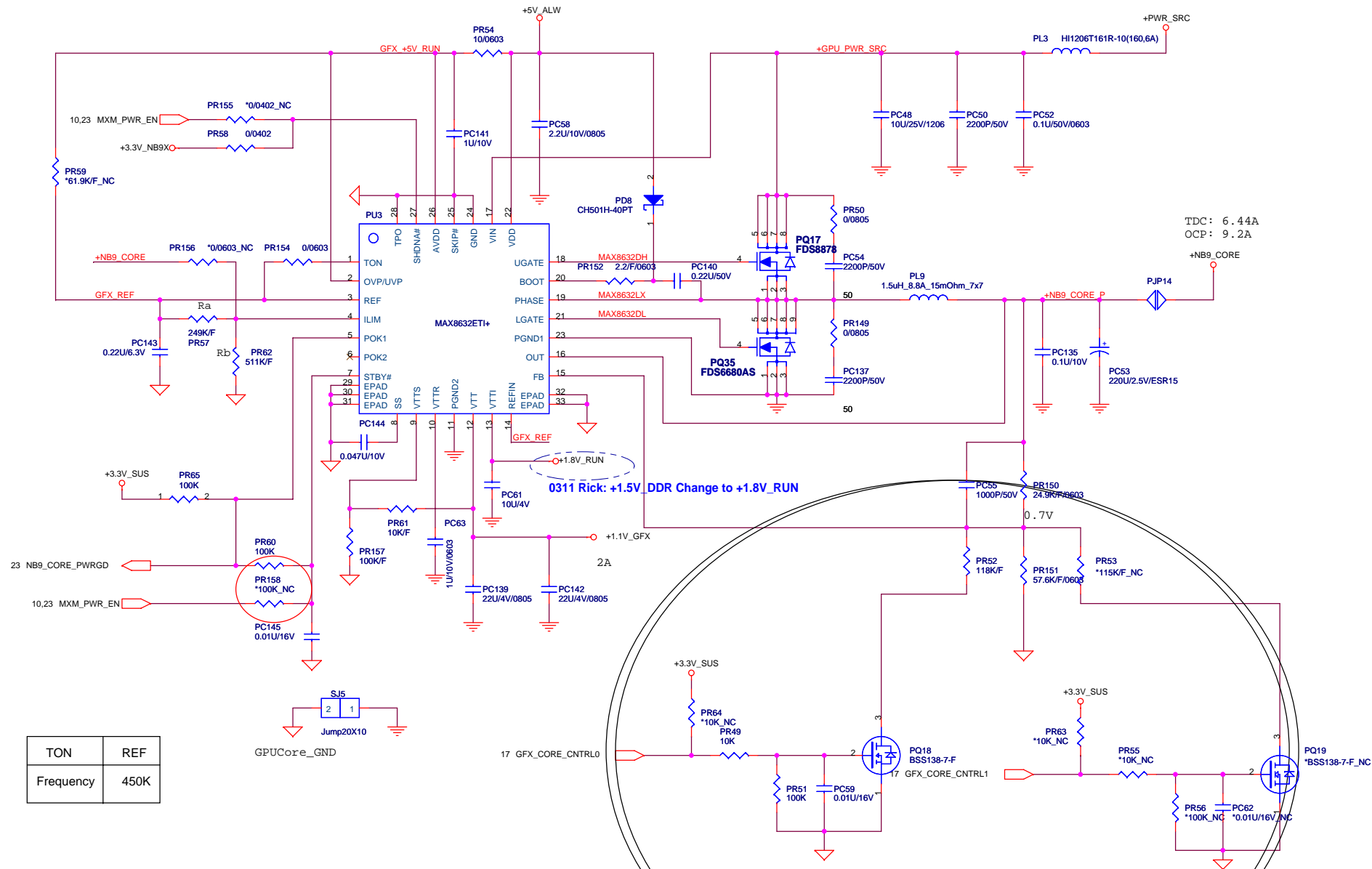


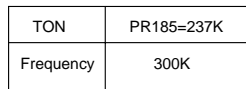


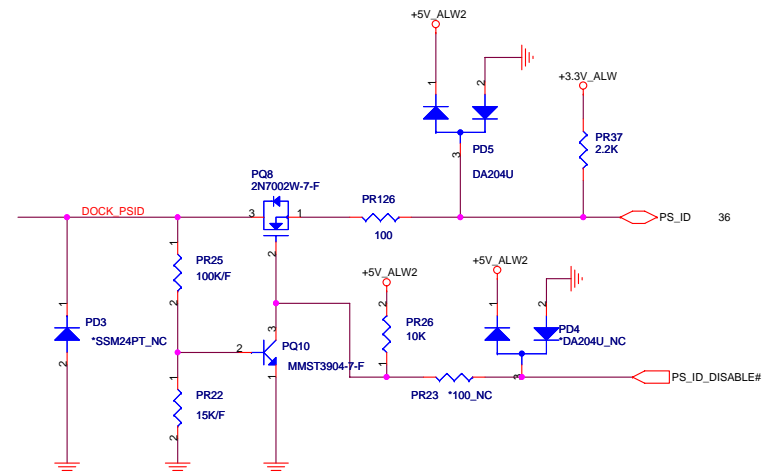
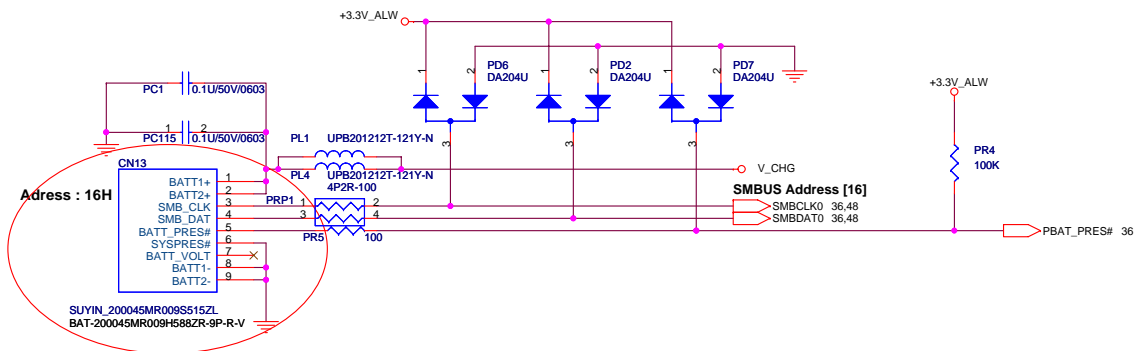
+1.5V_DDR ○ → +1.5V_DDR 15,16,47,56
 +0.75V_DDR_VTT ○ → +0.75V_DDR_VTT 15,16,56
 +1.1V_RUN ○ → +1.1V_RUN 5,7,8,9,11,12
 V_DDR_MCP_REF ○ → V_DDR_MCP_REF 15,16



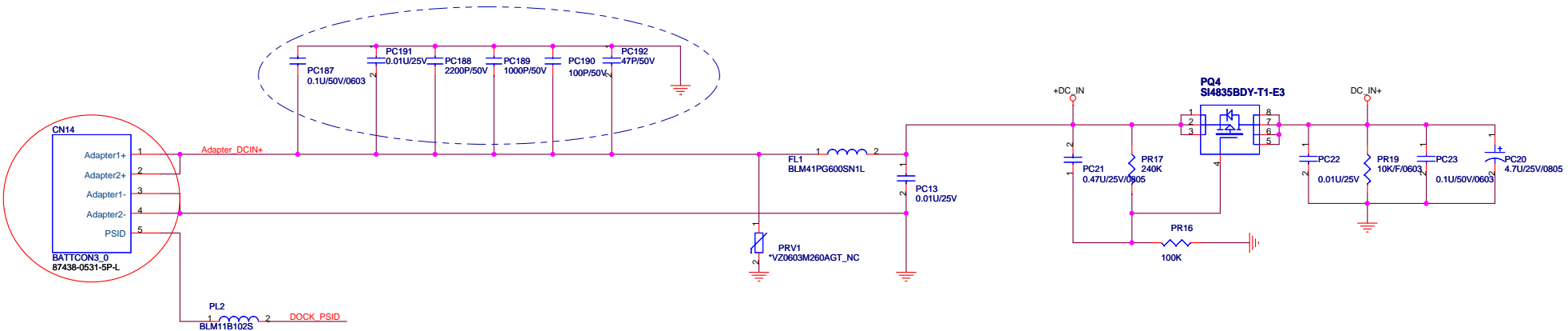


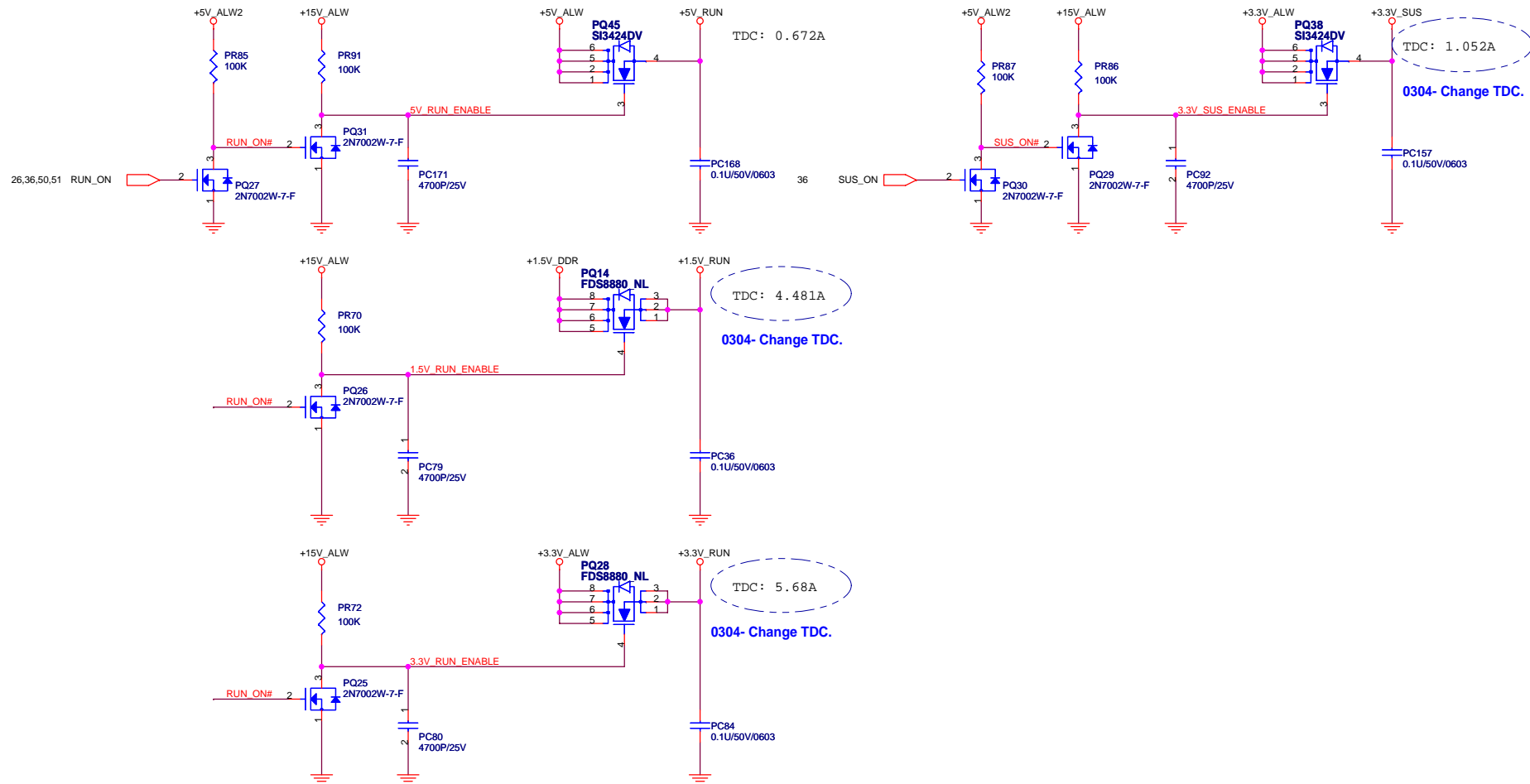




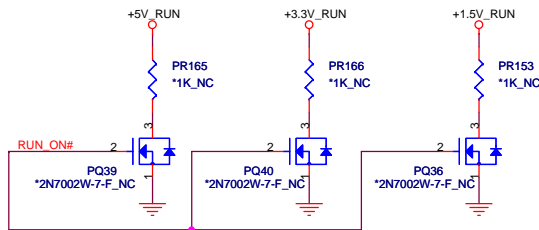


0311-Rick: Add PC187-PC192 for EMC

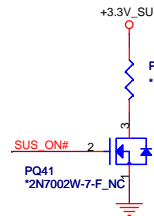




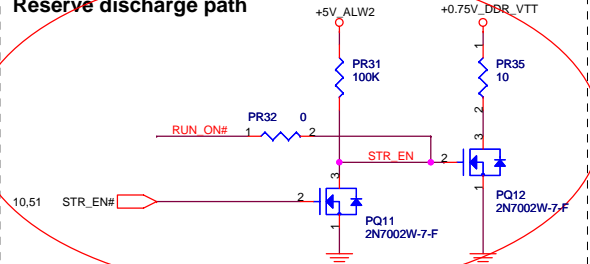
Reserve discharge path



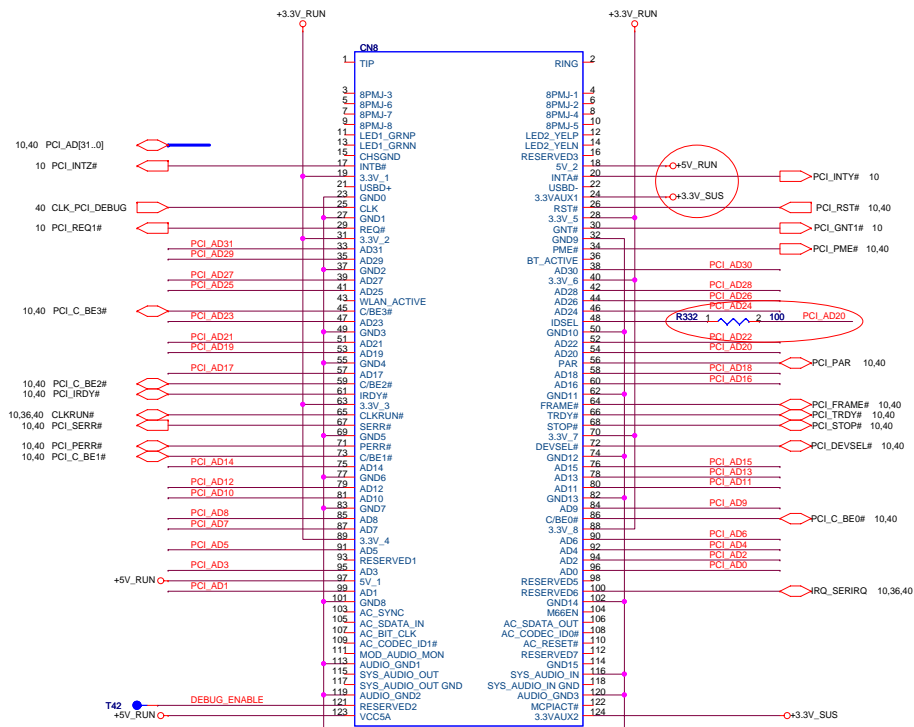
Reserve discharge path



Reserve discharge path



Title			RUN POWER SW
Size	Document Number	Rev	
	IM3 (XPS-Jolie)	1A	
Date:	Thursday, March 20, 2008	Sheet	56 of 59



1115-Sun_Add Mini PCI CONN for BIOS debug

