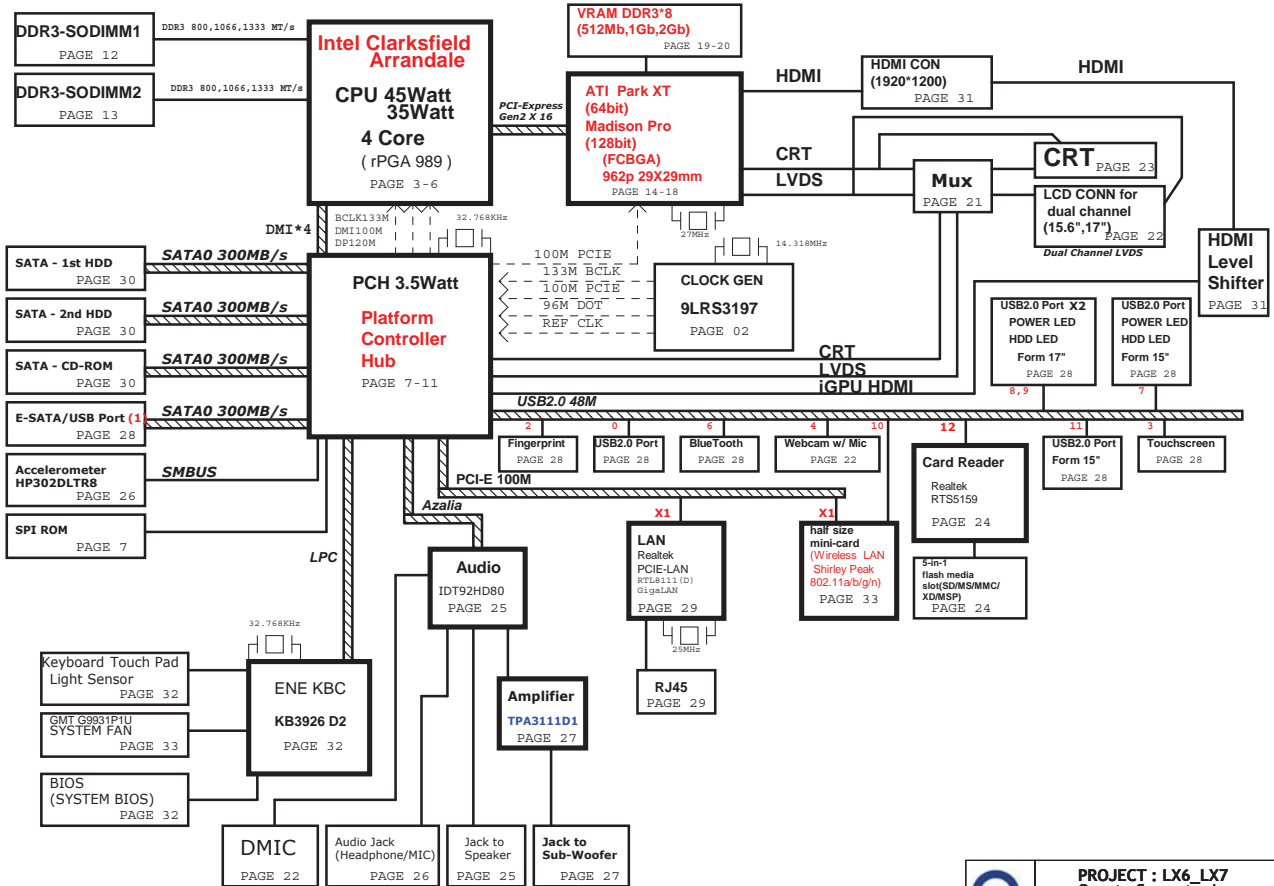


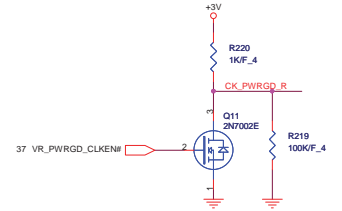
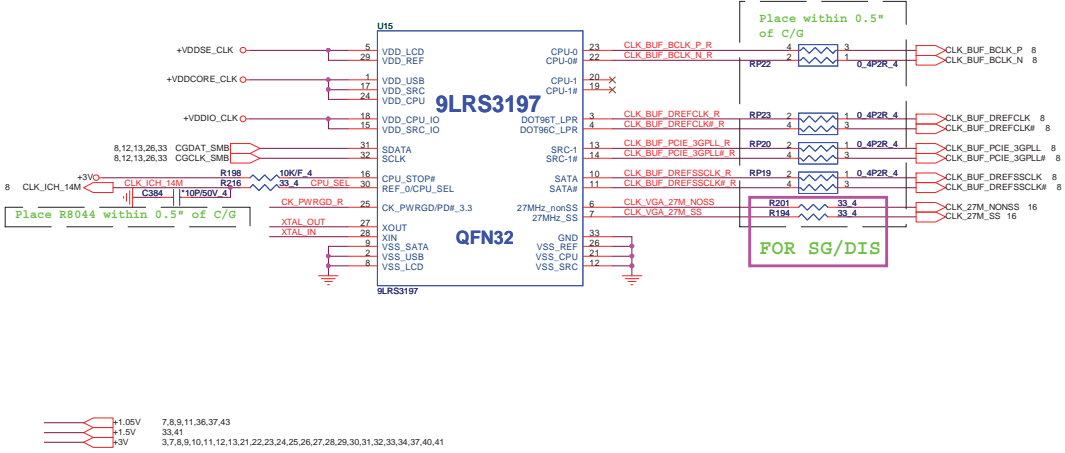
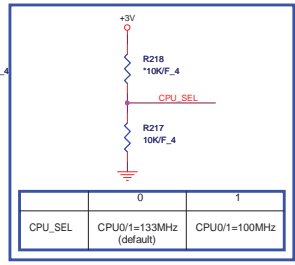
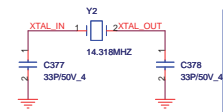
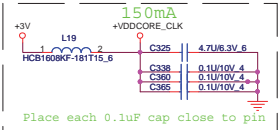
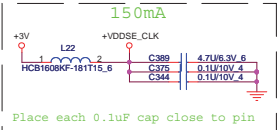
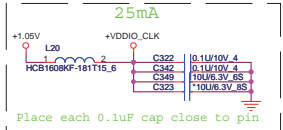
# LX6/7 (Liverpool) BLOCK DIAGRAM

PCB STACK UP  
6L Dis.

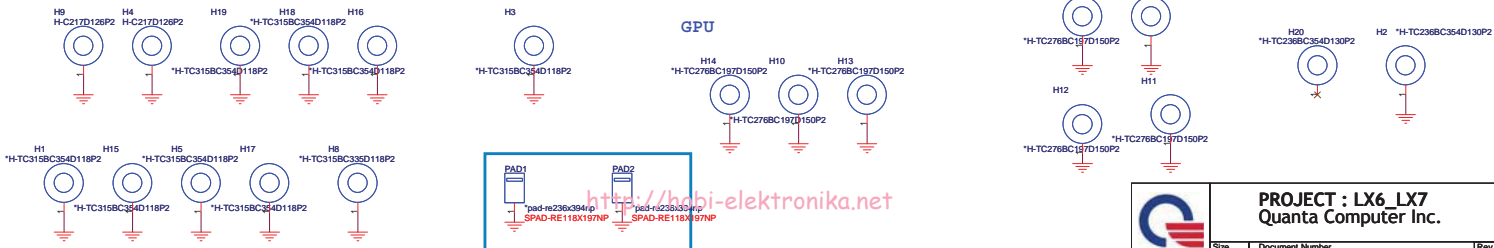
LAYER 1 : TOP  
LAYER 2 : SGND  
LAYER 3 : IN1(High)  
LAYER 4 : IN2(Low)  
LAYER 5 : SVCC  
LAYER 6 : BOT



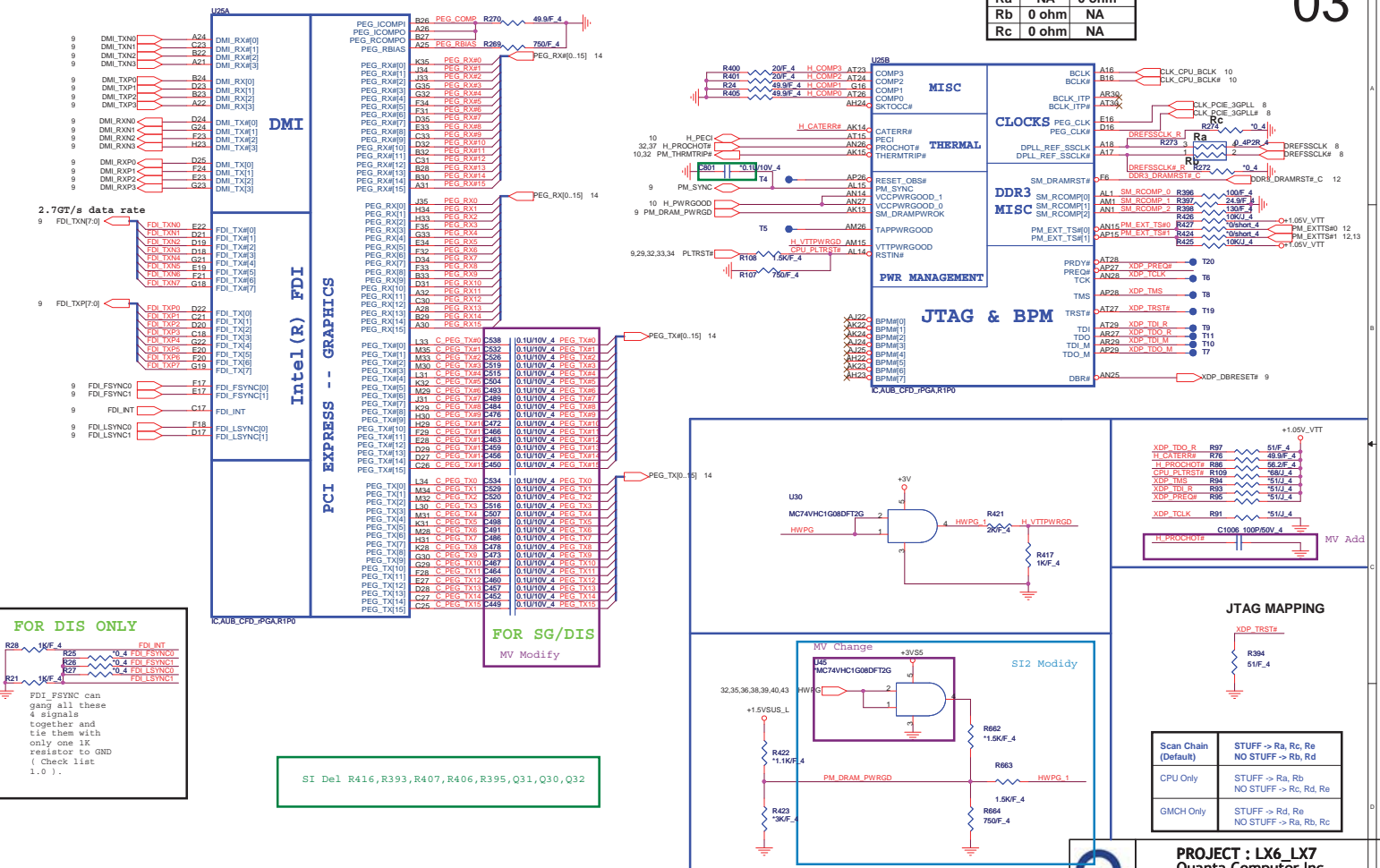
- DDR III SMD DR VTERM and GPU+1.5V/+1.0V(RT8207G) PAGE 40
- BATTERY SELECTOR PAGE 42
- SYSTEM CHARGER(P2806) PAGE 41
- SYSTEM POWER RT8206B PAGE 35
- +1.05V\_VTT and GPU +1.8V/+3V(VT358) PAGE 38
- VCCP +1.05V/+1.8V(RT8204) PAGE 36
- VGACORE/VDDC(RT8208/RT9018A) PAGE 39
- CPU CORE (ADP3212) PAGE 37



HOLE



DIS	NA	0 ohm
Rb	0 ohm	NA
Rc	0 ohm	NA



**FOR DIS ONLY**

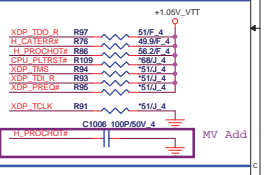
R28 JK\_F 4  
R26 JK\_F 4  
R27 JK\_F 4  
R21 JK\_F 4

FDI\_FSYNC can gang all these 4 signals together and tie them with only one 1K resistor to GND (check list 1.0).

**FOR SG/DIS**

MV Modify

SI Del R416, R393, R407, R406, R395, Q31, Q30, Q32

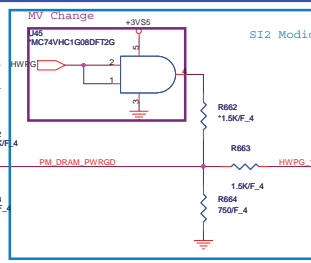


**JTAG MAPPING**

XDP TRST#	R34	51F_4
XDP TDO_R	R67	51F_4
TDI_CHERST#	R16	485F_4
H_PROCHOT#	R68	662F_4
XDP TMS	R34	51F_4
XDP TDI_R	R68	662F_4
XDP PREDEF	R68	662F_4
XDP TCLK	R91	75U_4

Scan Chain (Default)	STUFF -> Ra, Rc, Rd NO STUFF -> Ra, Rb, Rd
CPU Only	STUFF -> Ra, Rd NO STUFF -> Rc, Rb, Re
GMCH Only	STUFF -> Rd, Re NO STUFF -> Ra, Rb, Rc

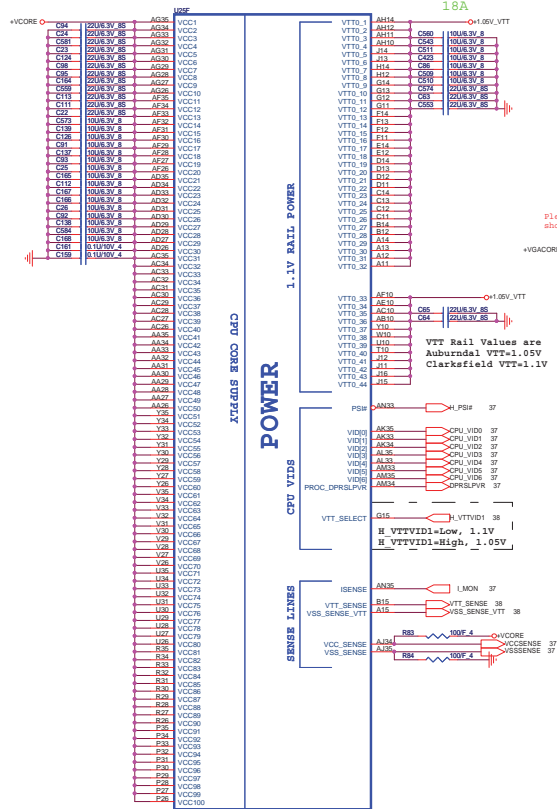


- +3V 2.7,8,9,10,11,12,13,21,22,23,24,25,26,27,28,29,30,31,32,33,34,37,40,41
- +1.05V\_VTT 5,10,11,32,37,38,43
- +1.5VUS\_L 5,41
- +3VSS 8,9,10,11,41

**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

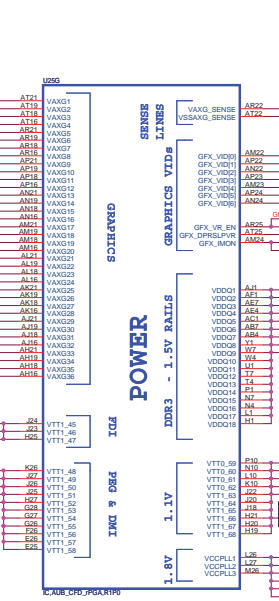
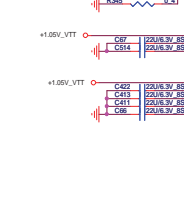
Size: NBS  
Document Number: PROCESSOR 14/(HOST&PEX)  
Date: Tuesday, February 02, 2010 Sheet 3 of 44



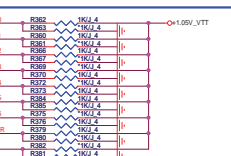
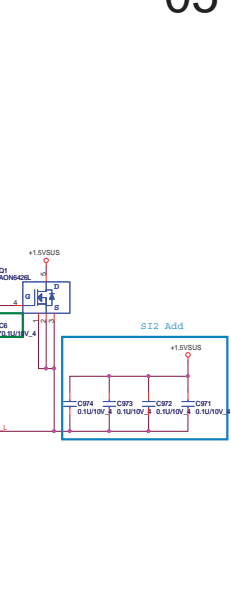
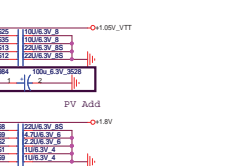
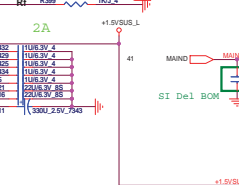
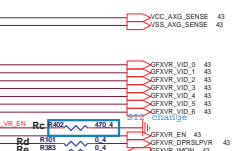


Please note that +VCC\_GFX\_CORE should be 1.05V in Auburndale

	DIS	SG/UMA
Ra	0 ohm	NA
Rb	NA	STUFF



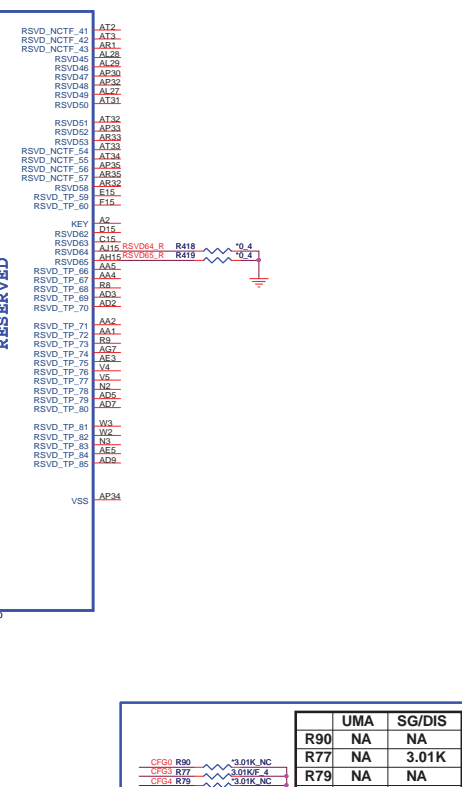
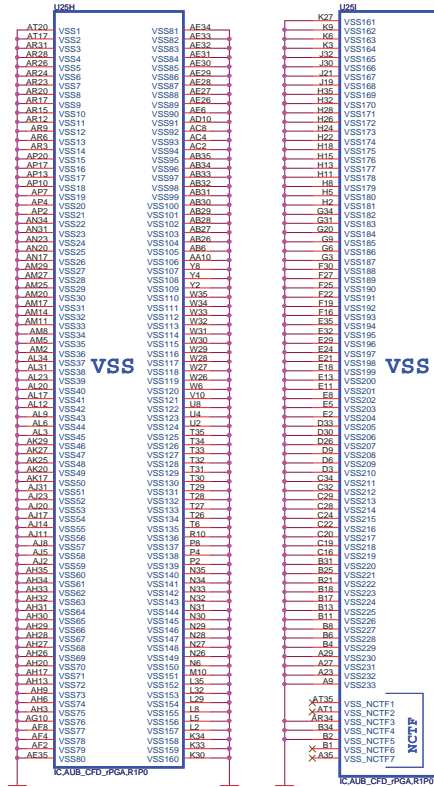
	DIS	SG/UMA
Rc	NA	470
Rd	NA	0 ohm
Re	NA	0 ohm
Rf	NA	NA



HFM\_VID : Max 1.4V  
LPM\_VID : Min 0.65V

AUBURDALE/CLARKSFIELD PROCESSOR (GND)

AUBURDALE/CLARKSFIELD PROCESSOR (RESERVED, CFG)



The Clarkfield processor's PCI Express interface may not meet PCI Express 2.0 jitter specifications. Intel recommends placing a 3.01K +/- 5% pull down resistor to VSS on CFG7[1] pin for both rPGA and BGA components. This pull down resistor should be removed when this issue is fixed.

	1	0
CFG4 (Display Port Presence)	Disabled; No Physical Display Port attached to Embedded Display Port	Enabled; An external Display port device is connected to the Embedded Display port
CFG0 (PCI-Epress Configuration Select)	Single PEG	Bifurcation enabled
CFG3 (PCI-Epress Status Lane Reversal)	Normal Operation	Lane Numbers Reversed 15 -> 0, 14 -> 1

	UMA	SG/DIS
R70	NA	NA
R77	NA	3.01K
R79	NA	NA
R87	NA	NA

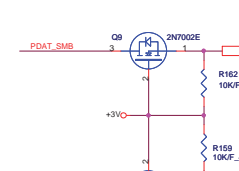
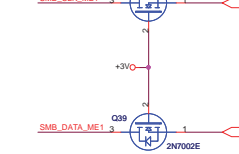
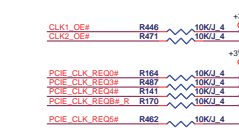
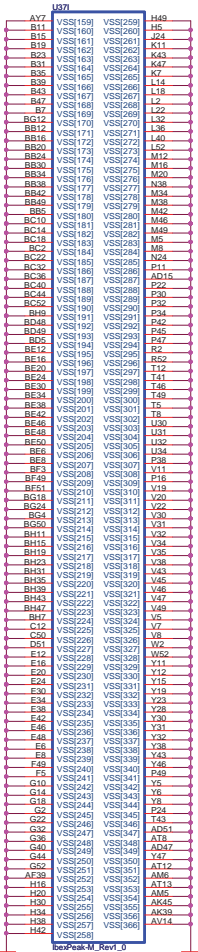
CFG[1:0] - PCI\_Epress Configuration Select  
 \* 1x 1 x 16 PEG  
 \* 1x 2 x 8 PEG

**PROJECT : LX6\_LX7 Quanta Computer Inc.**

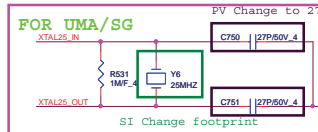
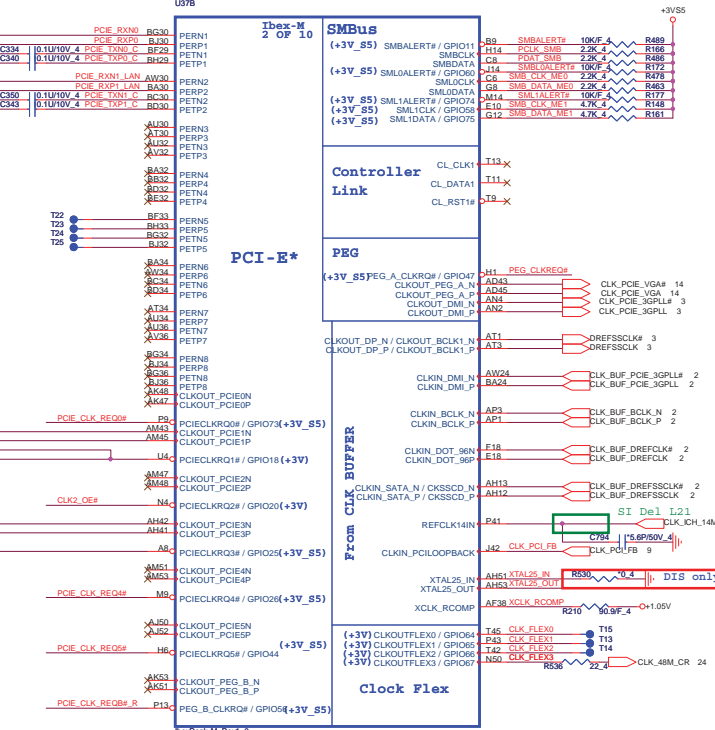
**NBS** (Logo)

Rev 1A  
 Document Number: **PROCESSOR 4/4 (GND)**  
 Date: Tuesday, February 02, 2010 Sheet 8 of 44





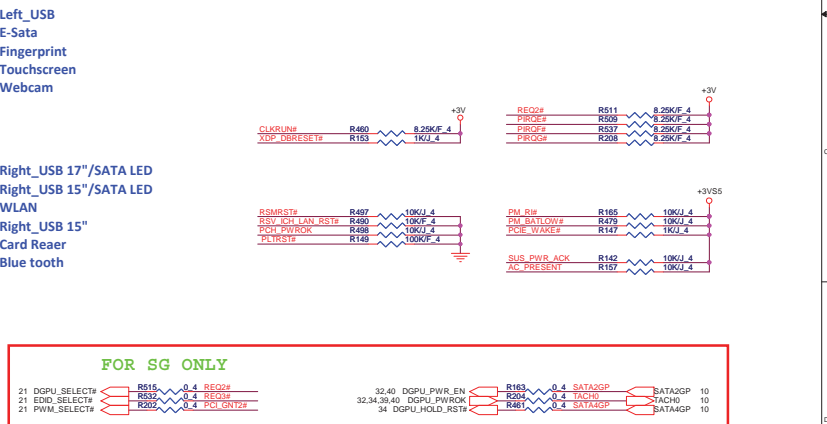
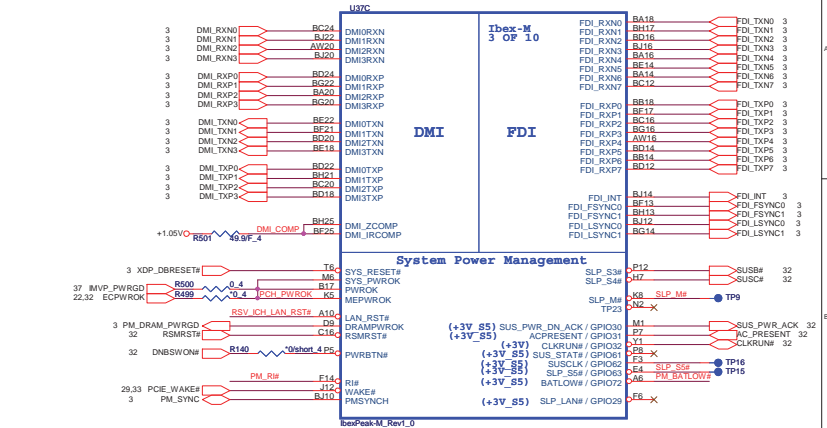
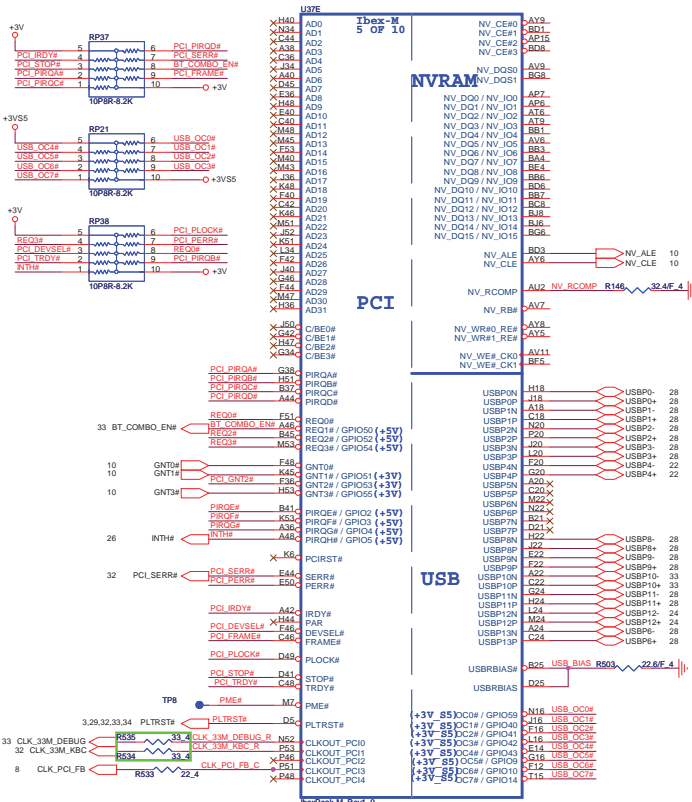
### IBEX PEAK-M (PCI-E, SMBUS, CLK)





IBEX PEAK-M (DMI,FDI,GPIO)

IBEX PEAK-M (PCI,USB,NVDRAM)



**FOR SG ONLY**

21 DOPU_SELECT#	R515	0.4	REF0#	R165	0.4	SATA0GP	BAT0GP	10
21 EIO_SELECT#	R516	0.4	REF0#	R204	0.4	TACH0	BAT0GP	10
21 PWM_SELECT#	R505	0.4	PCI_GATE#	R466	0.4	SATA0GP	BAT0GP	10

33.240 DGPU\_PWR\_EN  
32.334,34.7 DGPU\_PWR\_EN  
34 DGPU\_HOLD\_RST#

**IBEX PEAK-M Rev1.0**

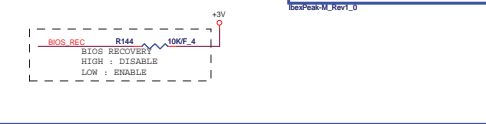
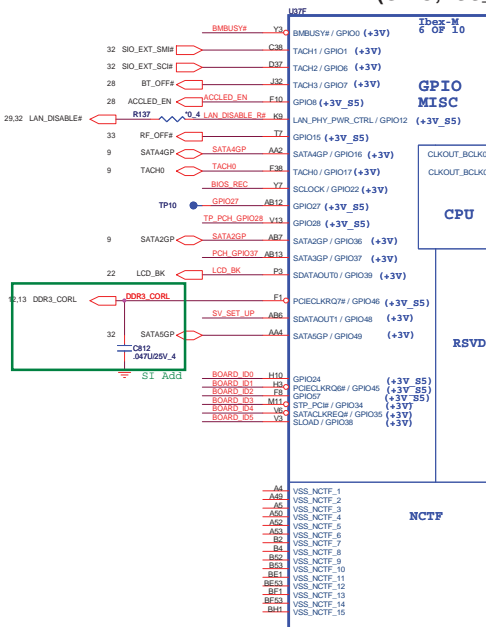
**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

**NBS**

Site Custom    Document Number **PCH 3/5 (PCI,ONFI,USB,DMI)**    Rev 1A

Date: Tuesday, February 02, 2010    Sheet 9 of 44

# IBEX PEAK-M (GPIO,VSS\_NCTF,RSVD)



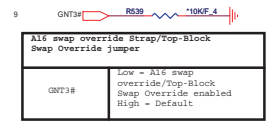
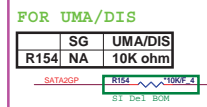
## BOARD ID SETTING

Board ID	ID5	ID4	ID3	ID2	ID1	ID0
TBD	R05 (0)	R04 (0)	R03 (0)	R02 (0)	R01 (0)	R00 (1)
TBD	R05 (0)	R04 (0)	R03 (0)	R02 (0)	R01 (1)	R00 (0)
TBD	R05 (0)	R04 (0)	R03 (0)	R02 (0)	R01 (1)	R00 (1)
TBD	R05 (0)	R04 (0)	R03 (0)	R02 (1)	R01 (0)	R00 (0)
TBD	R05 (0)	R04 (0)	R03 (0)	R02 (1)	R01 (1)	R00 (0)
TBD	R05 (0)	R04 (0)	R03 (0)	R02 (1)	R01 (1)	R00 (1)
TBD	R05 (0)	R04 (0)	R03 (0)	R02 (1)	R01 (1)	R00 (0)
TBD	R05 (0)	R04 (0)	R03 (0)	R02 (1)	R01 (1)	R00 (1)

	Board ID	ID0	ID1	ID2	ID3	ID4	ID5
	LX6	0	1				
	LX7	1	0				
	Discrete			0	0		
	UMA				0	1	
	SG					1	0
	LX7_No Subwoofer						

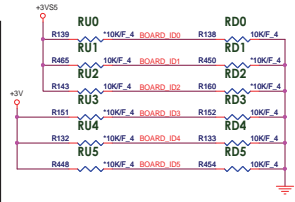
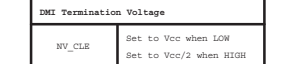
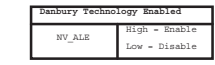
<http://hobi-elektro.ru>

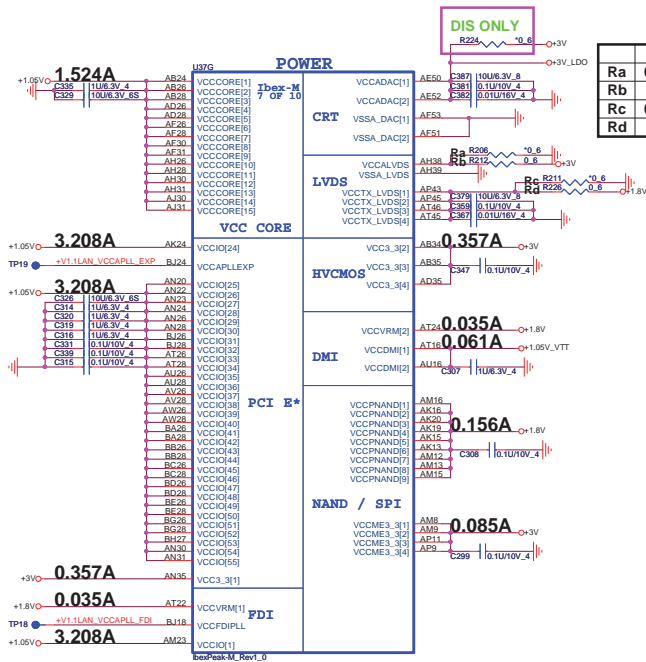
# IBEX PEAK-M (GND)



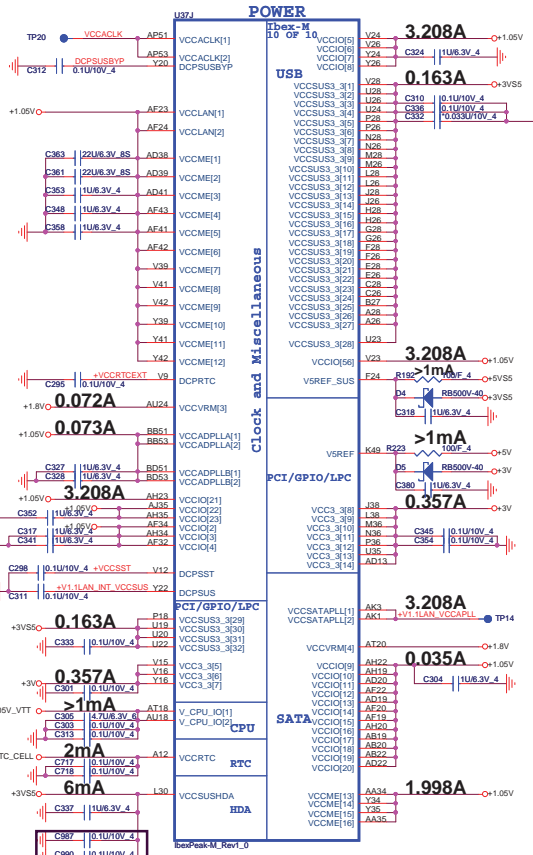
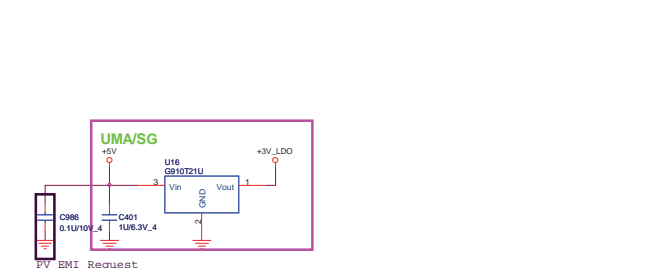
Boot BIOS Strap

PCI_GNT#0	GNT#1	Boot BIOS Location
0	0	LPC
0	1	Reserved (MANT)
1	0	PCI
1	1	SPI





	DIS	SG/UMA
Ra	0 ohm	NA
Rb	NA	0 ohm
Rc	0 ohm	NA
Rd	NA	0 ohm



Clock and Miscellaneous

PCI/GPIO/LPC

CPU

SATA

RTC

HDA

**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

Rev A

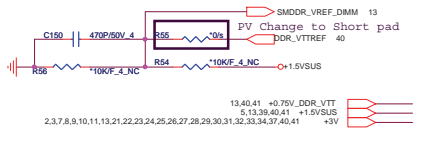
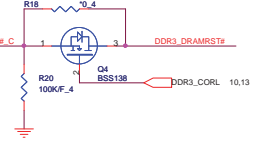
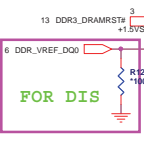
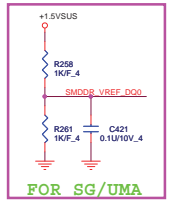
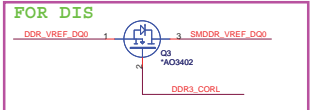
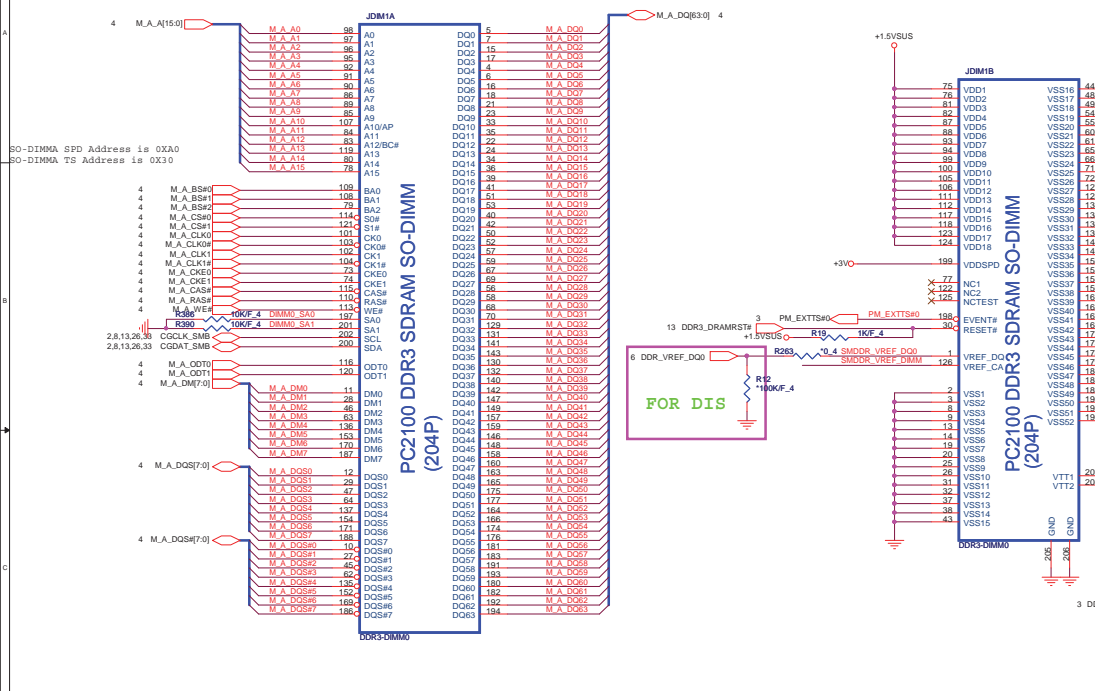
Doc Number: **PCH 5/5 (POWER)**

Sheet 11 of 44

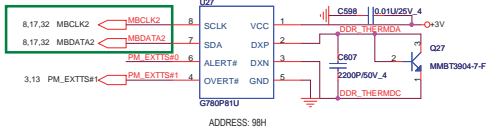
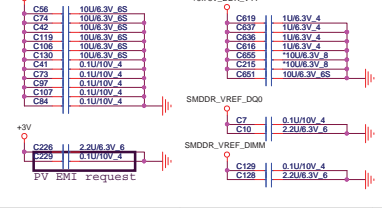
Date: Tuesday, February 02, 2010

NBS





Place these Caps near So-Dimm0.  
Some Capacitors replace 100F 0805 by 4.7uF 0603  
It can cost down 30%



Place these U27 near So-Dimm0(JDM1A).

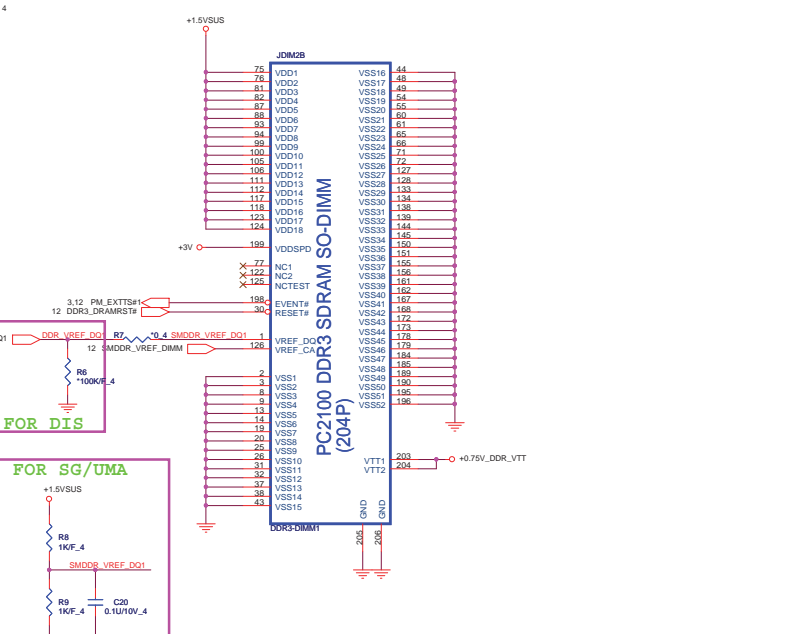
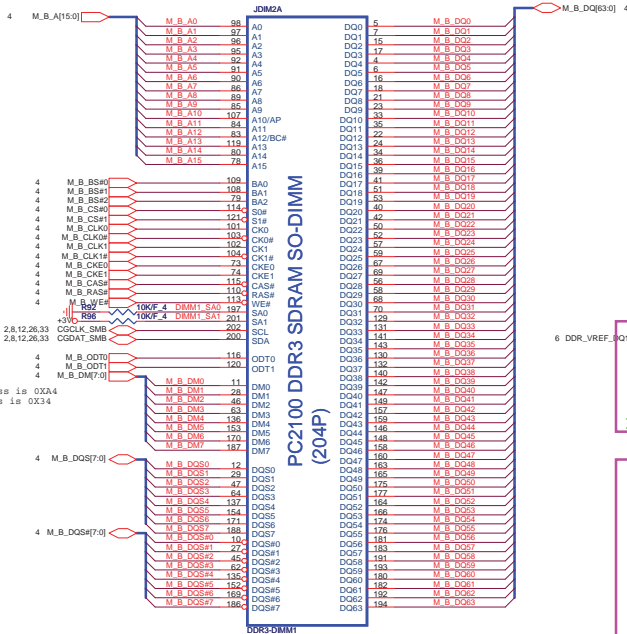
<http://hobi-elektronika.net>

**PROJECT : LX6\_LX7 Quanta Computer Inc.**

Rev 1A

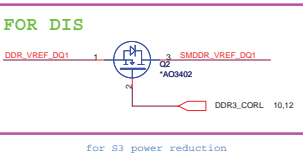
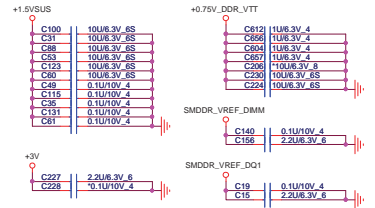
Doc Number: DDR3 DIMM-0

Date: Tuesday, February 02, 2010 Sheet 12 of 44

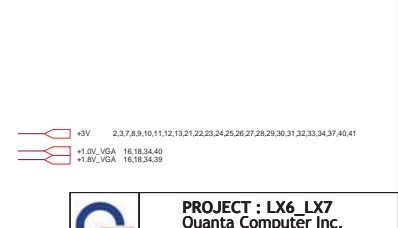
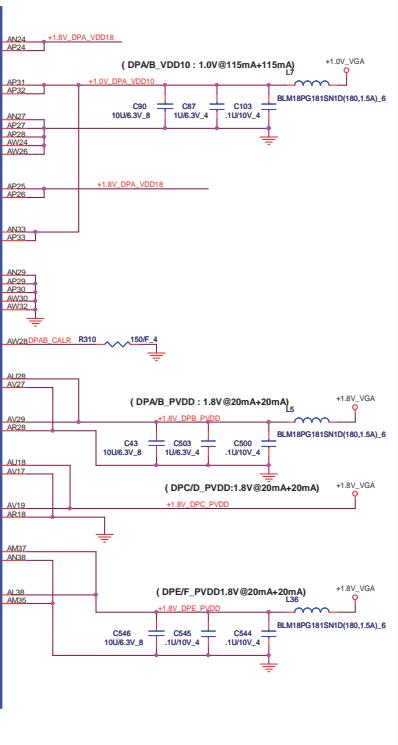
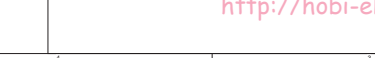
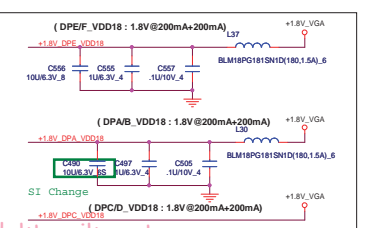
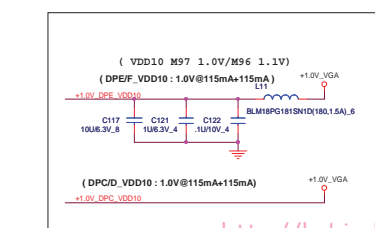
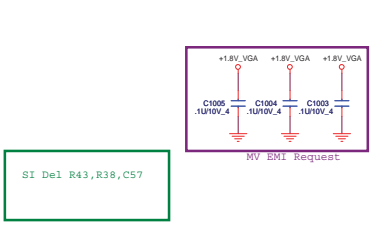
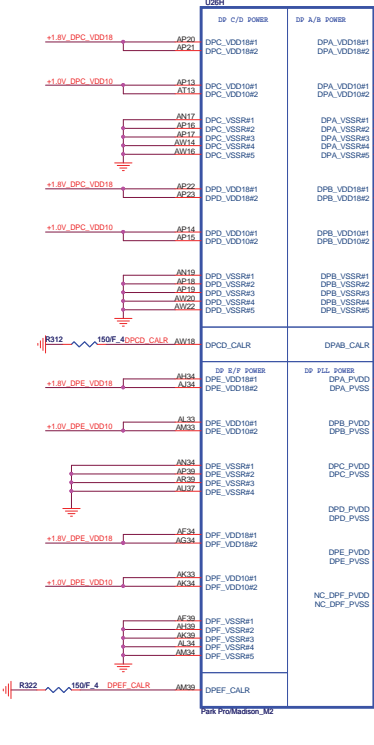
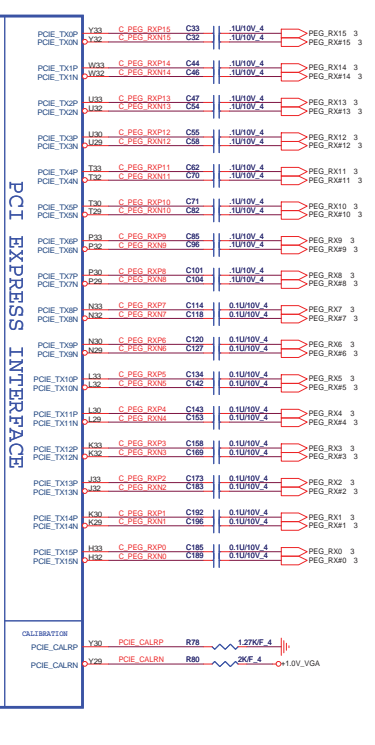
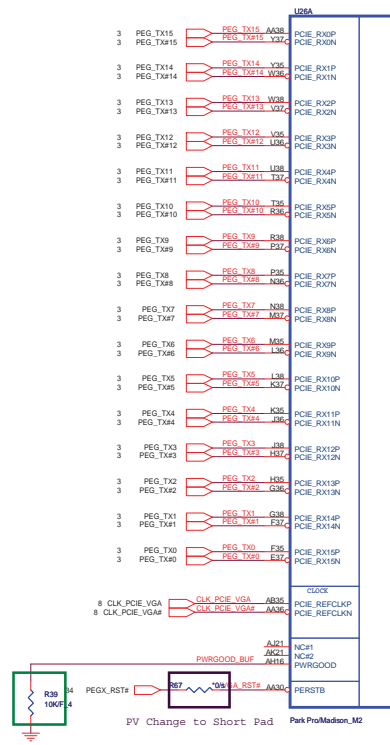


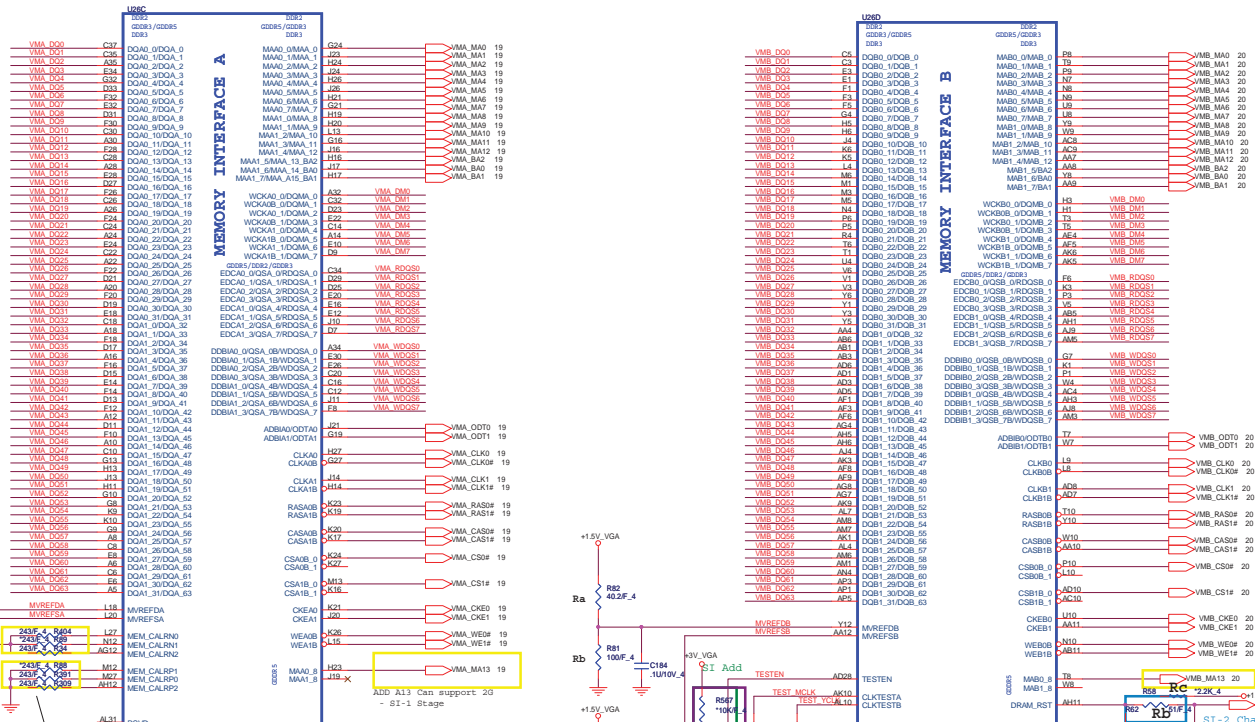
SO-DIMMS SPD Address is 02A4  
SO-DIMMS R9 Address is 03X4

Place these Caps near So-Dimm1.  
Some Projects replace 10UF 0805 by 4.7UF 0603  
It can cost down 30%



12.40.41 +0.75V\_DDR\_VTT 5.12.39.40.41 +1.5V\_SUS  
2.37.8.9.10.11.12.21.22.23.24.25.26.27.28.29.30.31.32.33.34.37.40.41 +3V





Park ProfMation\_M2

Designator	For PARK	For Madison
MEM_CALRNP0	stuff	stuff
MEM_CALRNP1	stuff	stuff
MEM_CALRNP2	stuff	stuff

Park/Madison\_M2

Designator	For Park/Madison_M2
MEM_CALRNP0	stuff
MEM_CALRNP1	stuff
MEM_CALRNP2	stuff

### DDR3/GDDR3 Memory Stuff Option

	GDDR5	GDDR3	DDR3
+1.5V_VGA	1.5V	1.8V/1.5V	1.5V
Ra	10.2R	40.2R	40.2R
Rb	100R	100R	100R

Designator	For Mannheim
Ra	10K
Rb	51R
Rc	DNI
Ca	68pF

**PROJECT : LX6 LX7**  
**Quanta Computer Inc.**

Rev 1A

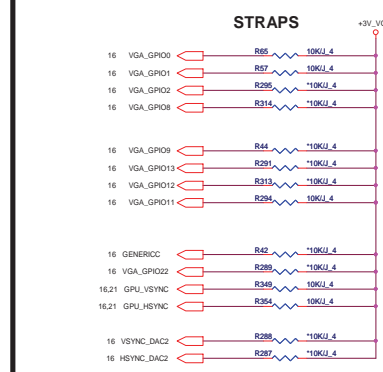
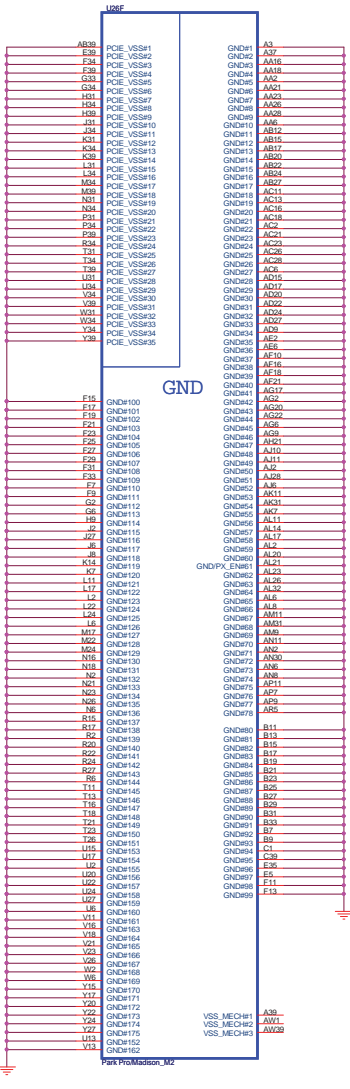
Doc Number: **ATT M97-M2 (MEM UF) 2/5**

Date: Tuesday, February 02, 2010 Sheet 15 of 44

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**Memory Aperture size fix 256M**

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

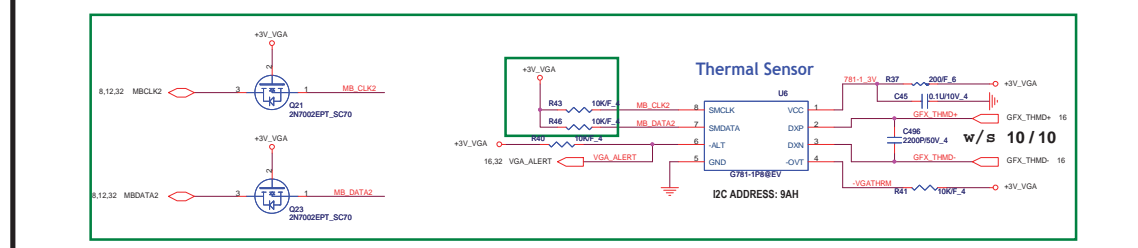
**CONFIGURATION STRAPS**  
ALLOW FOR PULLUP PADS FOR THESE STRAPS AND IF THESE GPIOs ARE USED, THEY MUST NOT CONFLICT DURING RESET

STRAPS	PIN	DESCRIPTION OF DEFAULT SETTINGS	RECOMMENDED SETTINGS
TX_PWRS_ENB	GPIO0	<b>Transmitter Power Savings Enable</b> 0: 50% Tx output swing for mobile mode 1: 100% Tx output swing (Default setting for Desktop)	1
TX_DEEMPH_EN	GPIO1	<b>PCI Express Transmitter De-emphasis Enable</b> 0: Tx de-emphasis disabled for mobile mode 1: Tx de-emphasis enabled (Default setting for Desktop)	1
BIF_GEN2_EN_A	GPIO2	0 = Advertises the PCI-E device as 2.5 GT/s capable at power-on. 1 = Advertises the PCI-E device as 3.0 GT/s capable at power-on. 2 = 3.0 GT/s capability will be controlled by software.	0
RSVD BIF_VGA_DIS	GPIO8	VGA ENABLED	0
RSVD	GPIO9		0
BIOS_ROM_EN	GPIO22_ROMEN	ENABLE EXTERNAL BIOS ROM	0
ROMIDCFG2(0)	GPIO13-11	SERIAL ROM TYPE OR MEMORY APERTURE SIZE SELECT	0 0 1
VIP_DEVICE_STRAP_ENA	V2SYN	IGNORE VIP DEVICE STRAPS	0
RSVD AUD1	GENERIC HSYN	AUD1(1) AUD1(0) 0: No audio function 1: 0 Audio for DisplayPort and HDMI if dongle is detected 1: 0 Audio for DisplayPort only 1: 1 Audio for both DisplayPort and HDMI	0 0 11

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

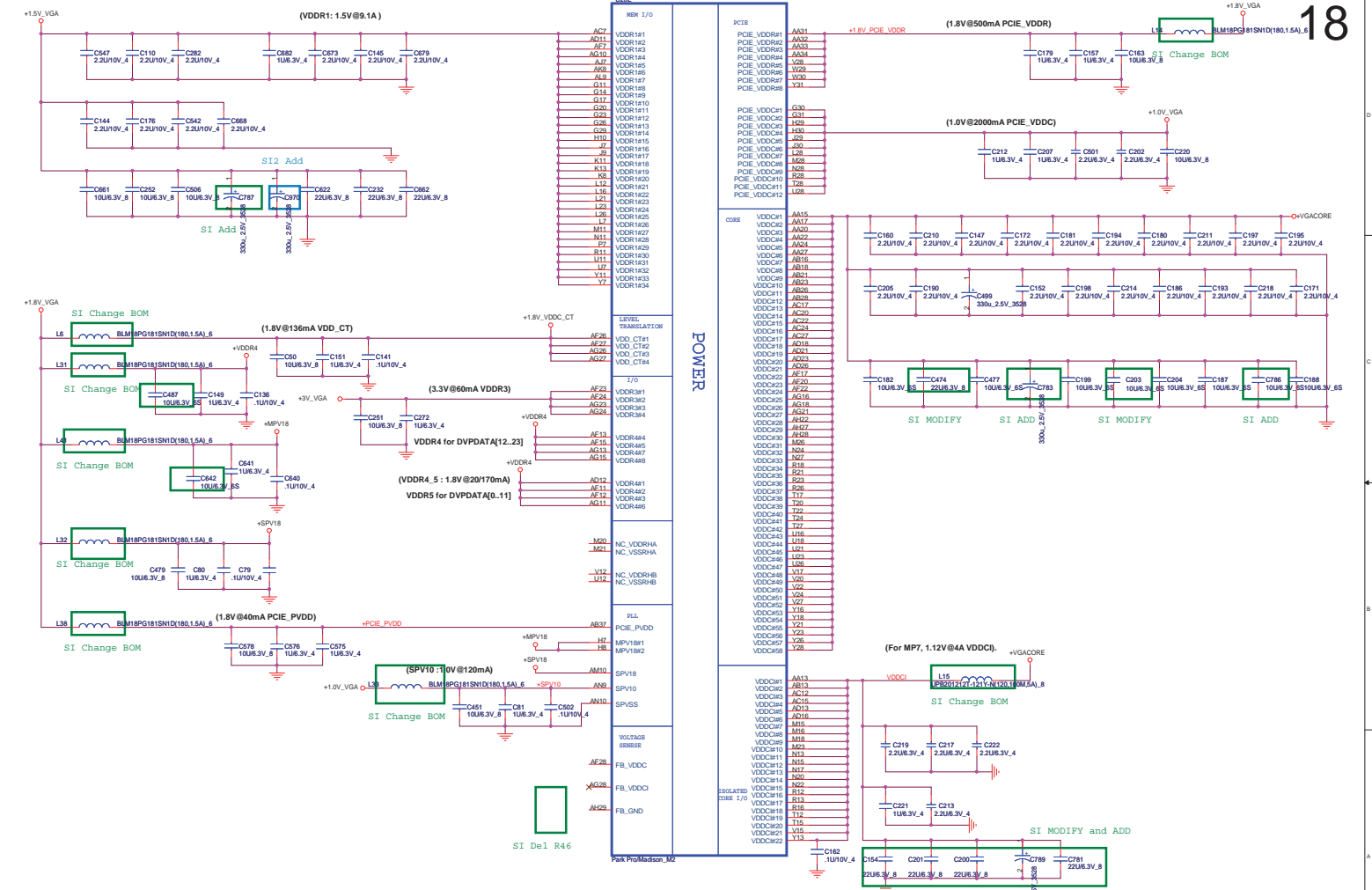
HSYN	GENERIC
PULLUP PADS ARE NOT REQUIRED FOR THESE STRAPS BUT IF THESE GPIOs ARE USED, THEY MUST NOT CONFLICT DURING RESET	
GPIO21_BB_EN	

It is a shared pin strap with CONFIG[2:0] if BIOS\_ROM\_EN is set to 0.



**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

NB5  
Date: Tuesday, February 02, 2010  
Sheet 17 of 44



POWER

AC7	VDDR111
AD17	VDDR112
AE7	VDDR113
AG10	VDDR114
AH1	VDDR115
AK8	VDDR116
AL2	VDDR117
G11	VDDR118
GL1	VDDR119
G17	VDDR120
G20	VDDR121
G21	VDDR122
G22	VDDR123
G29	VDDR124
H10	VDDR125
H11	VDDR126
H12	VDDR127
H13	VDDR128
H14	VDDR129
H15	VDDR130
K11	VDDR131
K13	VDDR132
K9	VDDR133
L12	VDDR134
L21	VDDR135
L22	VDDR136
L26	VDDR137
L27	VDDR138
M11	VDDR139
M12	VDDR140
N11	VDDR141
N12	VDDR142
N13	VDDR143
R11	VDDR144
U11	VDDR145
U7	VDDR146
V11	VDDR147
Y7	VDDR148
AE26	VDD_C11
AE27	VDD_C12
AE28	VDD_C13
AE29	VDD_C14
AE21	T10
AE22	VDDR41
AE23	VDDR42
AE24	VDDR43
AE25	VDDR44
AE26	VDDR45
AE27	VDDR46
AE28	VDDR47
AE29	VDDR48
AD12	VDDR41
AE11	VDDR42
AE12	VDDR43
AE13	VDDR44
AE14	VDDR45
AE15	VDDR46
AE16	VDDR47
AE17	VDDR48
MD0	NC_VDDRHA
MD1	NC_VSSRHA
MD2	NC_VDDRHB
MD3	NC_VSSRHB
Y12	NC_VDDRHB
Y13	NC_VSSRHB
AB37	PCI_PVDD
H7	MPV181
HL	MPV182
ANR	SPV18
ANL	SPV10
AN10	SPVSS
VG2AGE	SEBSSE
AE2L	FB_VDDC
XG2B	FB_VDDCI
AM2L	FB_GND

14,16,34,40	+1.0V_VGA
39	+VGAORE
15,19,20,34,39	+1.5V_VGA
14,16,34,39	+1.8V_VGA
15,16,17,31,34,39	+3V_VGA

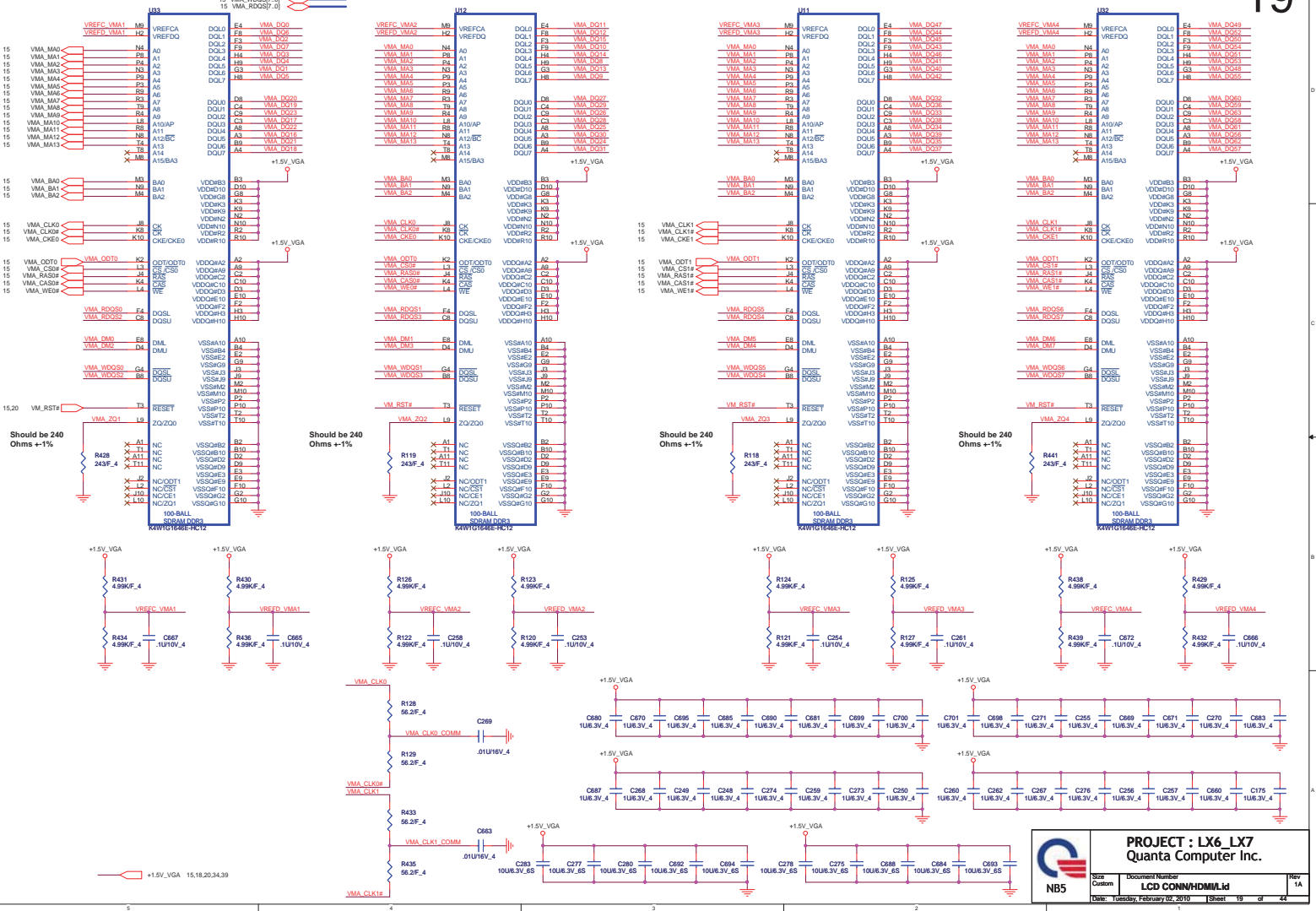
**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

NB5

Doc Number: **ATI M97-M2 (POWER) 5/5**

Date: Tuesday, February 02, 2010 | Sheet 18 of 44

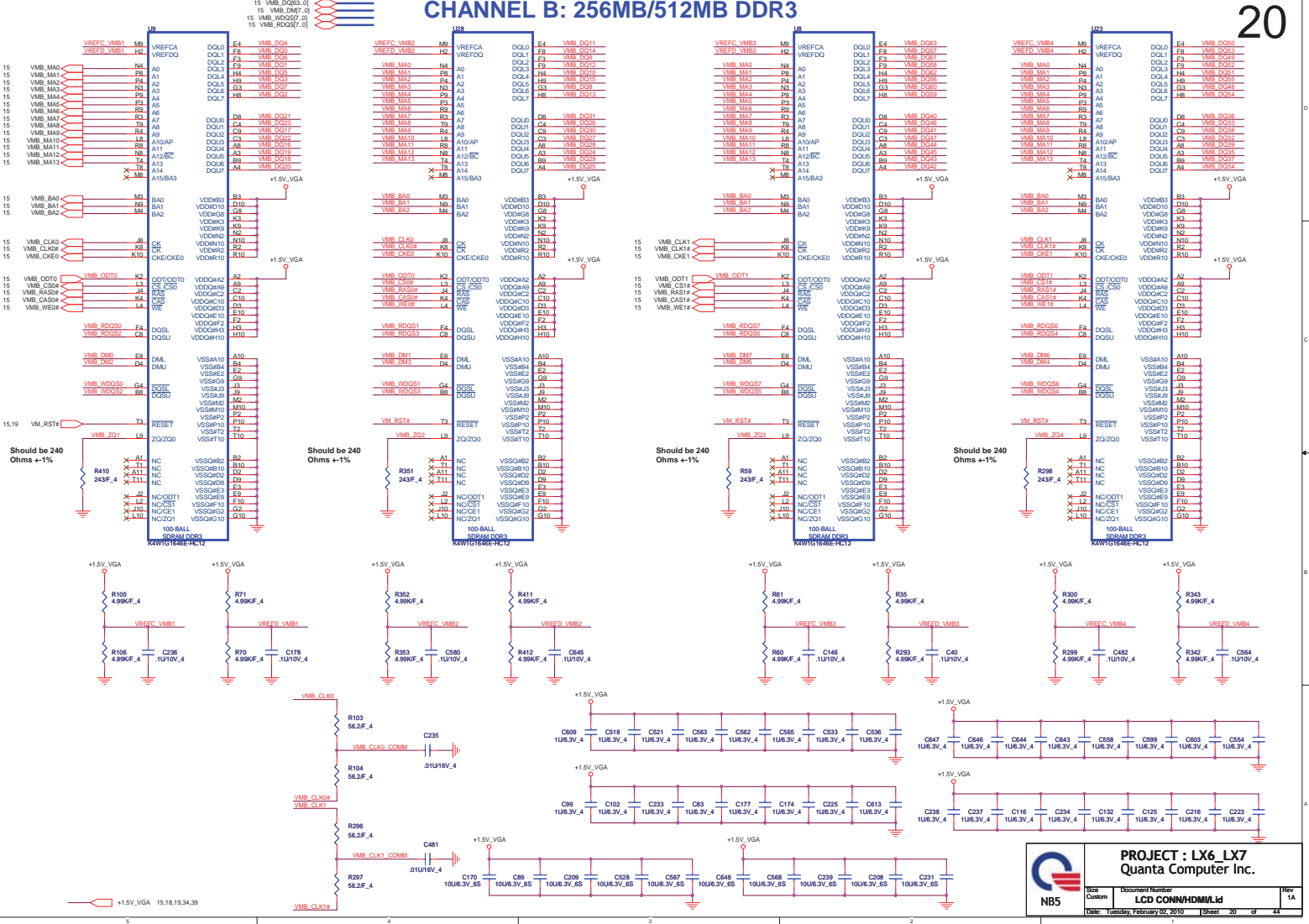
CHANNEL A: 256MB/512MB DDR3

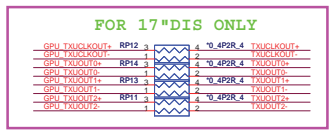
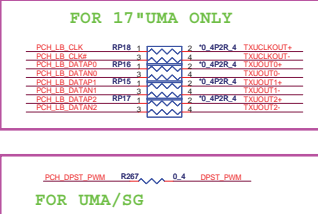
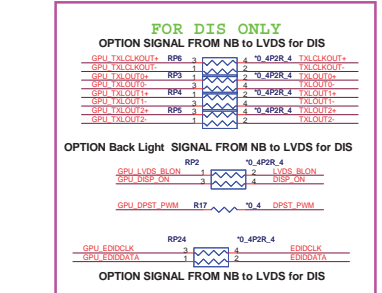
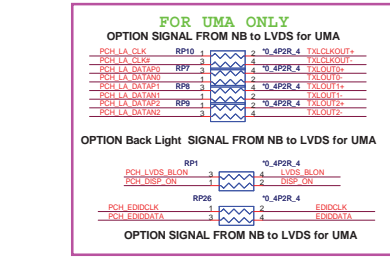
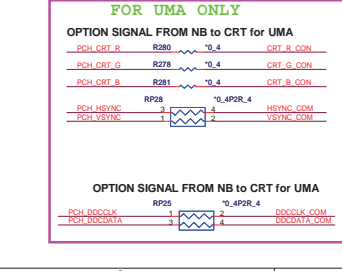
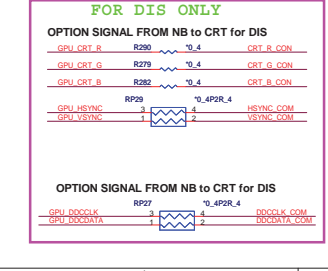
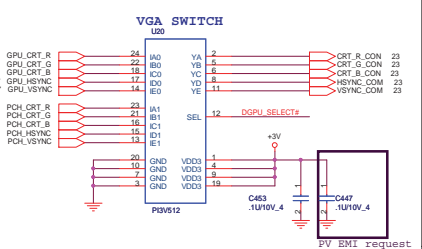
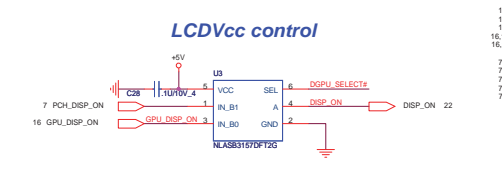
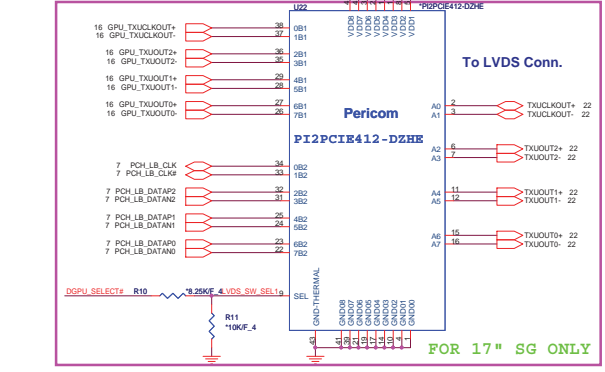
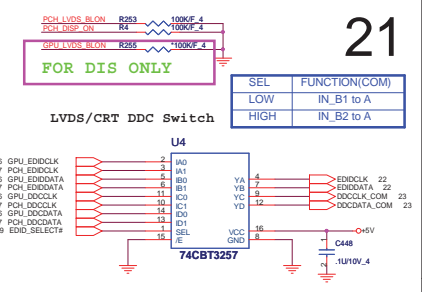
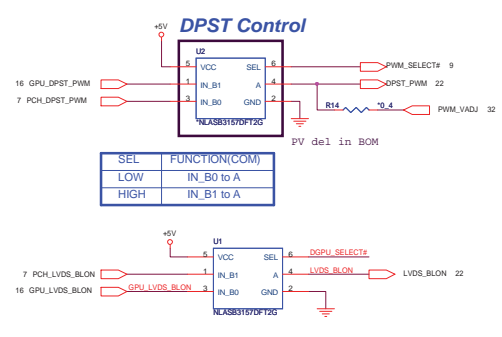
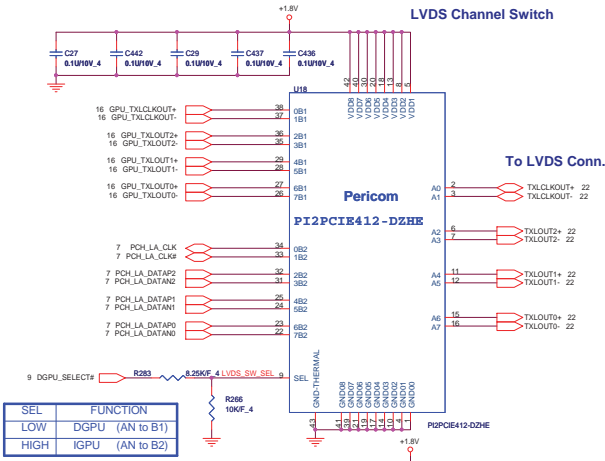


**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

Sig Custom    Document Number  
**LCD CONN/HDMI/Lid**    Rev 1A

Date: Tuesday, February 02, 2010    Sheet 19 of 44



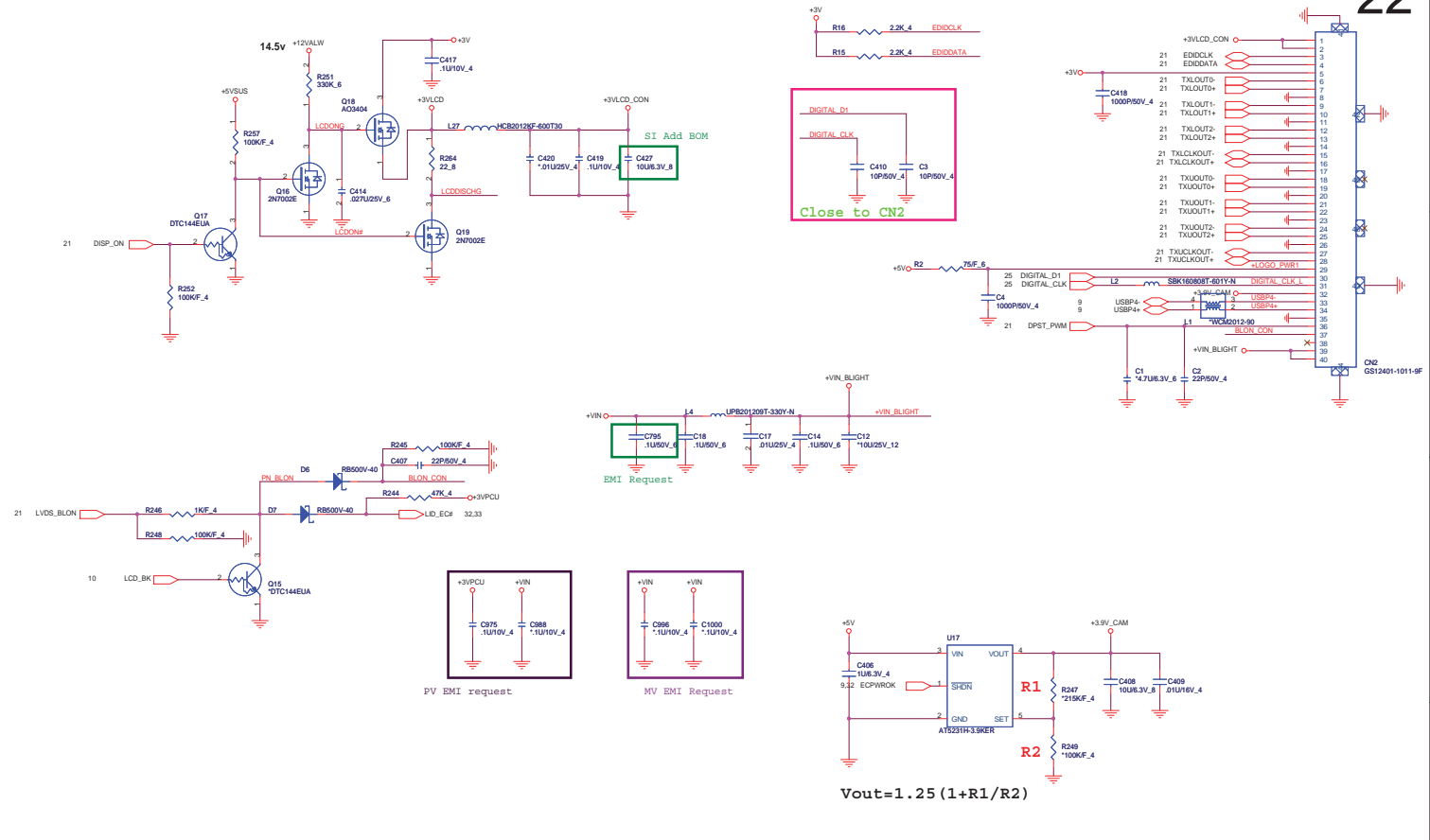


**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

**NB5**

System Document Number **SWITCHABLE** Rev 1A

Date: Tuesday, February 02, 2010 Sheet 21 of 44

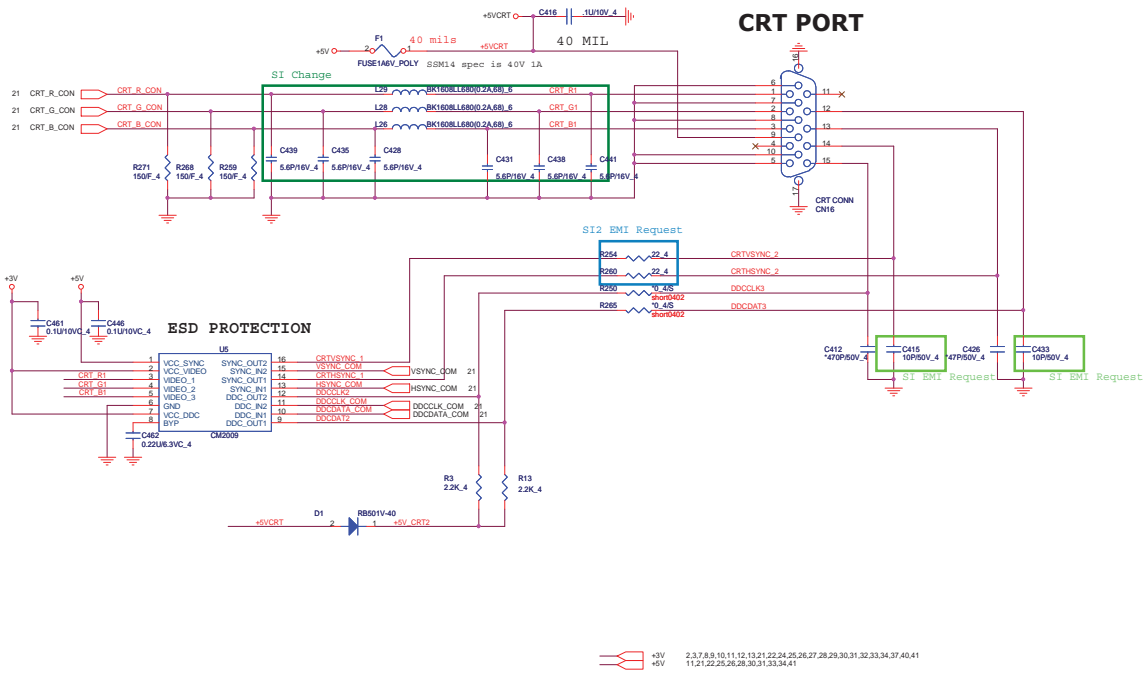


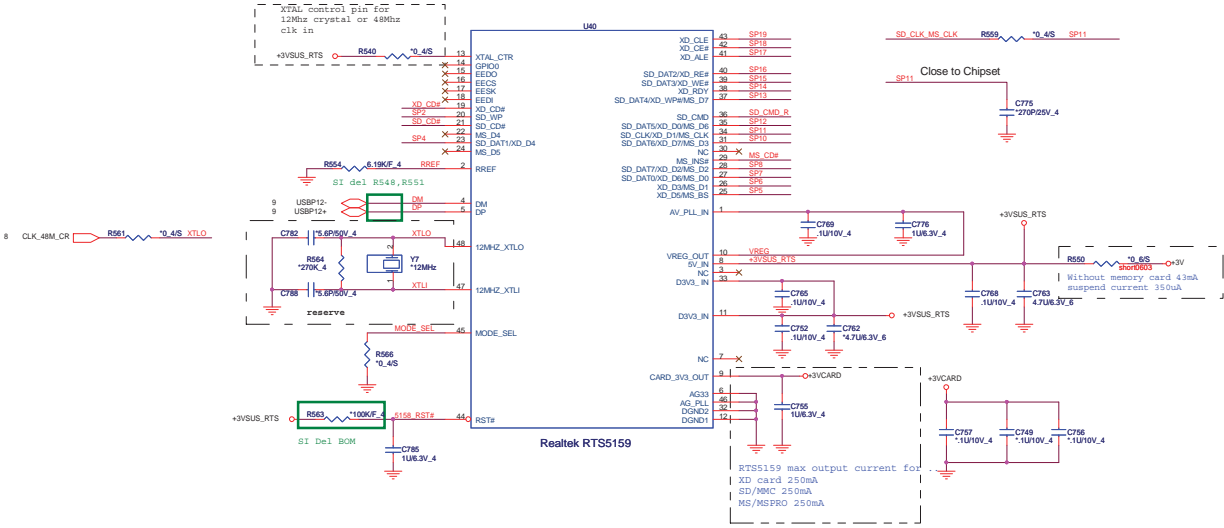
$$V_{out} = 1.25 (1 + R1/R2)$$

- 2,3,7,8,9,10,11,12,13,21,23,24,25,26,27,28,29,30,31,32,33,34,37,40,41 +3V
- 11,21,23,25,26,28,30,31,33,34,41 +5V
- 27,29,36,37,39,40,41,42,43 +VIN
- 7,28,32,33,34,35,36,39,41,42,43 +3VPCU
- 30,34,39,41 +12V

**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

Size: NB5	Document Number: LCD_CONN/LID function	Rev: 1A
Date: Tuesday, February 02, 2010	Sheet: 22	of: 44

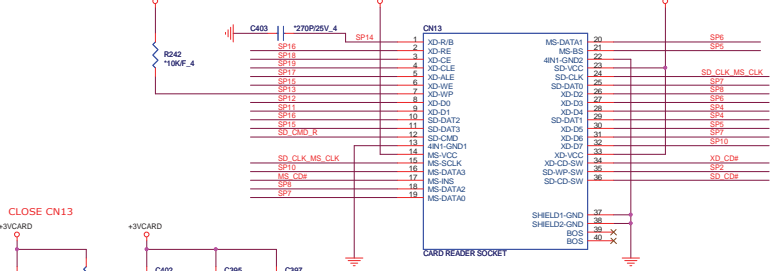




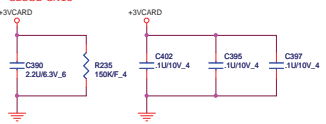
**Note:**

SP0	SD/MMC	MS	XD
SP1			XD_CMD
SP2			XD_WP
SP3			XD_CSB
SP4			XD_DAT1
SP5			XD_D0
SP6			XD_D1
SP7			XD_D2
SP8			XD_D3
SP9			XD_D4
SP10			XD_D5
SP11			XD_D6
SP12			XD_D7
SP13			XD_D8
SP14			XD_D9
SP15			XD_D10
SP16			XD_D11
SP17			XD_D12
SP18			XD_D13
SP19			XD_D14
SP20			XD_D15
SP21			XD_D16
SP22			XD_D17
SP23			XD_D18
SP24			XD_D19
SP25			XD_D20
SP26			XD_D21
SP27			XD_D22
SP28			XD_D23
SP29			XD_D24
SP30			XD_D25
SP31			XD_D26
SP32			XD_D27
SP33			XD_D28
SP34			XD_D29
SP35			XD_D30
SP36			XD_D31
SP37			XD_D32
SP38			XD_D33
SP39			XD_D34
SP40			XD_D35
SP41			XD_D36
SP42			XD_D37
SP43			XD_D38
SP44			XD_D39
SP45			XD_D40
SP46			XD_D41
SP47			XD_D42
SP48			XD_D43
SP49			XD_D44
SP50			XD_D45
SP51			XD_D46
SP52			XD_D47
SP53			XD_D48
SP54			XD_D49
SP55			XD_D50
SP56			XD_D51
SP57			XD_D52
SP58			XD_D53
SP59			XD_D54
SP60			XD_D55
SP61			XD_D56
SP62			XD_D57
SP63			XD_D58
SP64			XD_D59
SP65			XD_D60
SP66			XD_D61
SP67			XD_D62
SP68			XD_D63
SP69			XD_D64
SP70			XD_D65
SP71			XD_D66
SP72			XD_D67
SP73			XD_D68
SP74			XD_D69
SP75			XD_D70
SP76			XD_D71
SP77			XD_D72
SP78			XD_D73
SP79			XD_D74
SP80			XD_D75
SP81			XD_D76
SP82			XD_D77
SP83			XD_D78
SP84			XD_D79
SP85			XD_D80
SP86			XD_D81
SP87			XD_D82
SP88			XD_D83
SP89			XD_D84
SP90			XD_D85
SP91			XD_D86
SP92			XD_D87
SP93			XD_D88
SP94			XD_D89
SP95			XD_D90
SP96			XD_D91
SP97			XD_D92
SP98			XD_D93
SP99			XD_D94
SP100			XD_D95

**XD, MMC/SD, MS/MSP  
5 IN1 CARD READER**



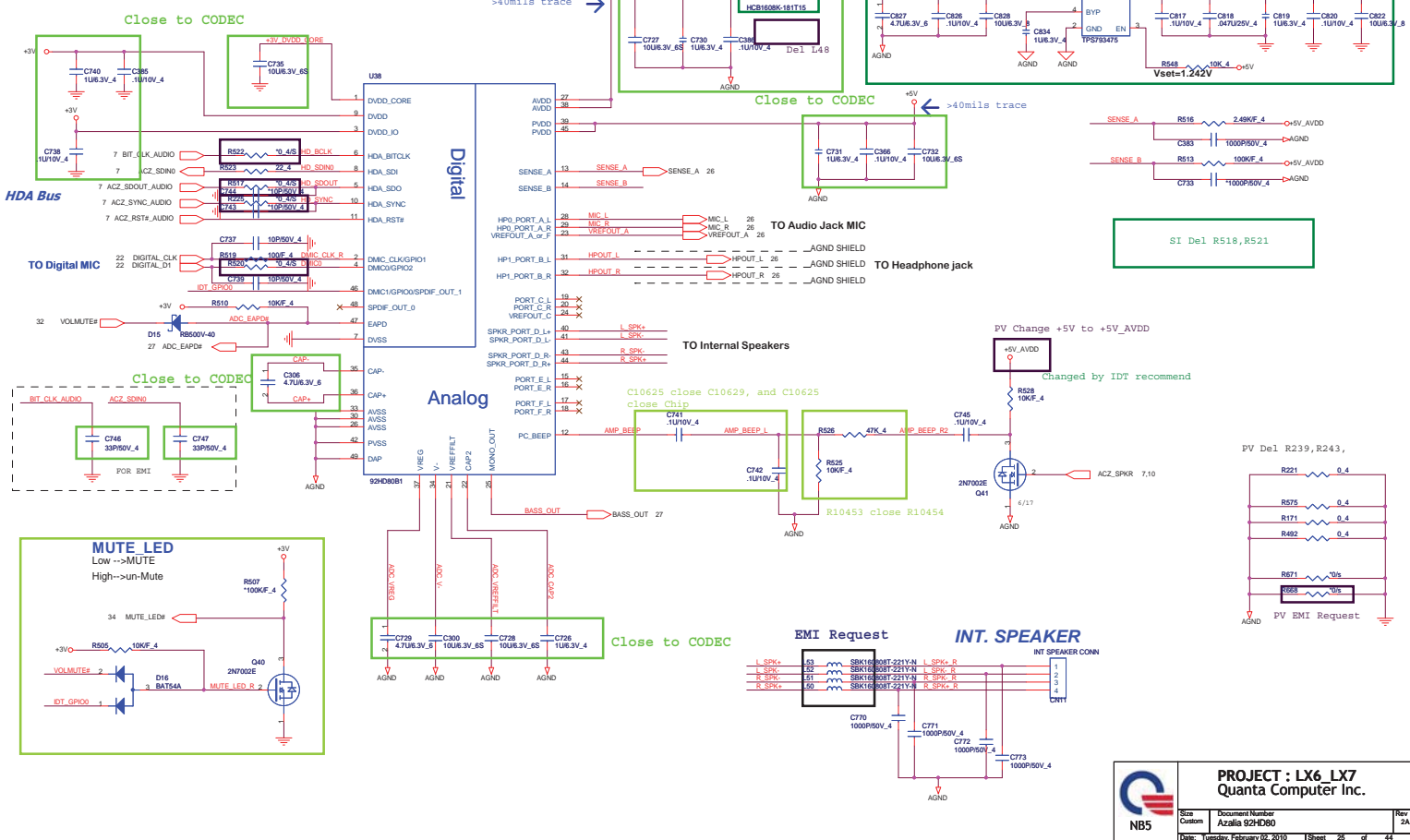
**5 IN1 CARD-READER (PUSH-PUSH)**  
Support SD/SD PRO/MMC/MS/MS PRO/XD Cards



	PROJECT : LX6_LX7 Quanta Computer Inc.	Rev 1A
	Document Number RTSS159 & CR SOCKET	Date: Tuesday, February 02, 2010   Sheet 24 of 44



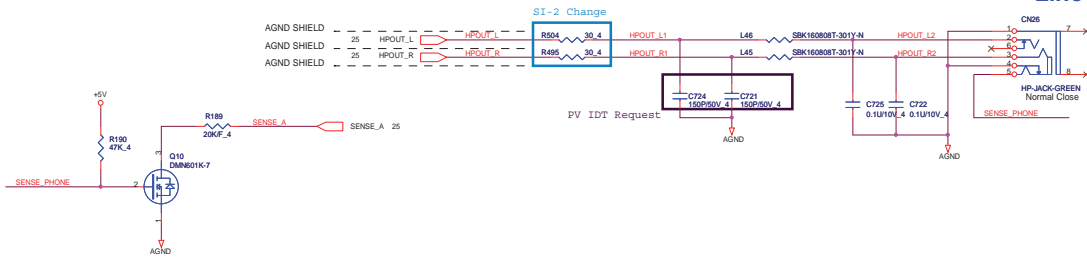
2,3,7,8,9,10,11,12,13,21,22,23,24,26,27,28,29,30,31,32,33,34,37,40,41  
27 +4.75VAVDD  
11,21,22,23,26,28,30,31,33,34,41 +5V



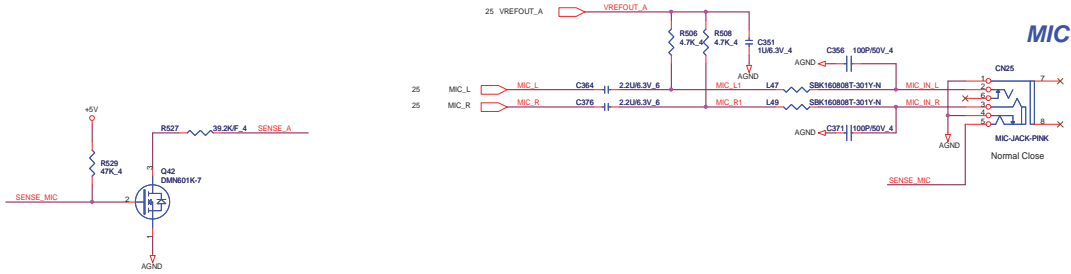
	<b>PROJECT : LX6_LX7</b> <b>Quanta Computer Inc.</b>		
	Size: Custom Document Number: A7444-024-0260	Rev: 2A	Date: Tuesday, February 03, 2010   Sheet 25 of 44

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Line out

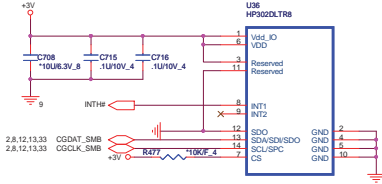


MIC



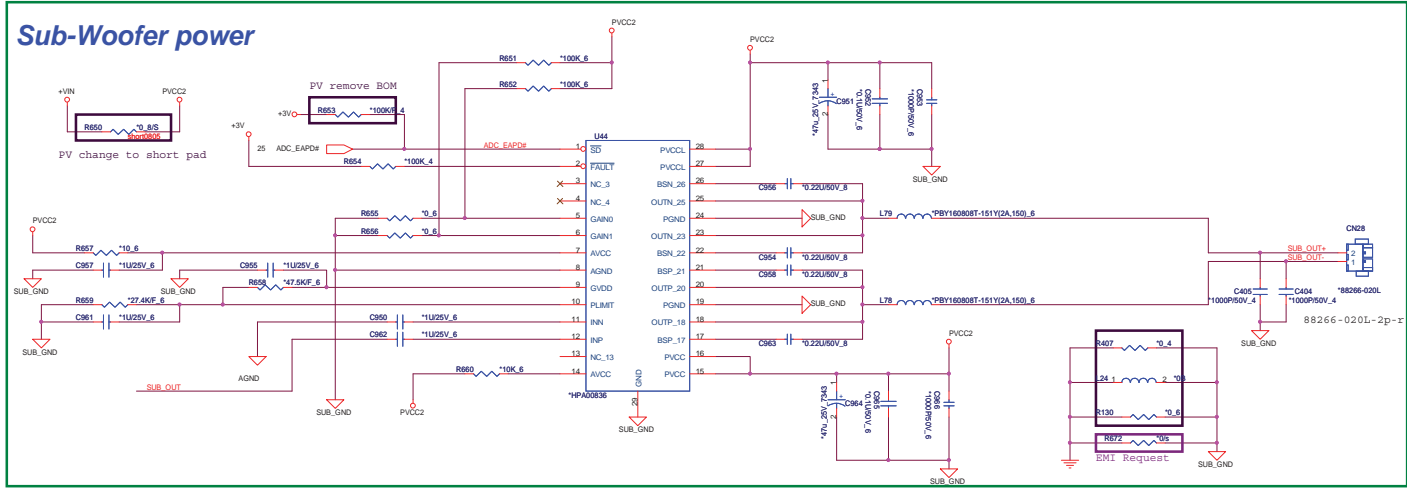
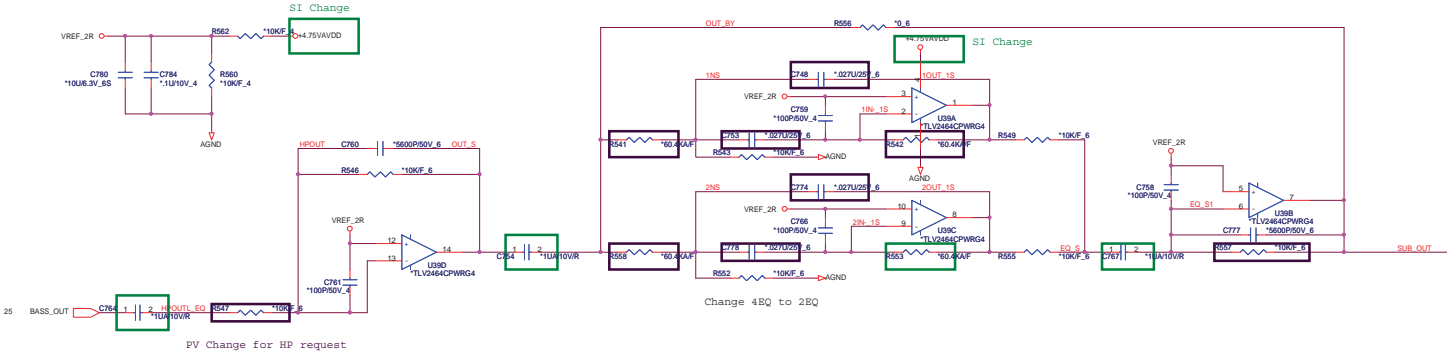
Accelerometer Sensor

SGT-LI8302DLTR interrupt pin default is low / active HI, B108 need to programming 22h to change status from active HI to low



Pin 12: Low 38hex  
Pin 12: unconnected/floating 3Ahex

	<b>PROJECT : LX6_LX7</b> Quanta Computer Inc.	
	SCS Custom	Document Number Audio Jack/Accelerometer
Date: Tuesday, February 02, 2010 15:52		of 44



GAIN1	GAIN0	dB
0	0	1.2
0	1	1.8
1	0	23.6
1	1	36

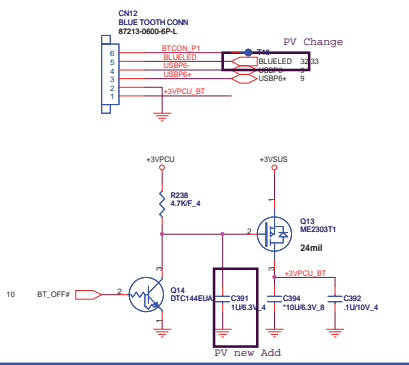
PV De1 R574, R241, R240

+3V 2,3,7,8,9,10,11,12,13,21,22,23,24,25,26,28,29,30,31,32,33,34,37,40,41  
 +4.75VAVDD 25 22,35,36,37,39,40,41,42,43  
 +VIN

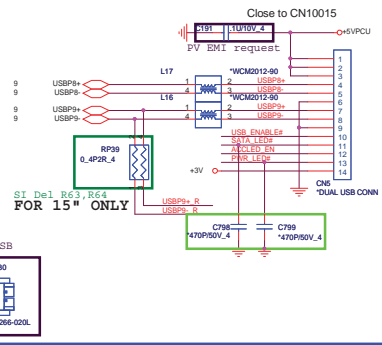
**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

Size	Document Number	Rev
Custom	SUBWOOFER (EQ & AMP)	1A
Date: Tuesday, February 03, 2010	Sheet 27 of 44	

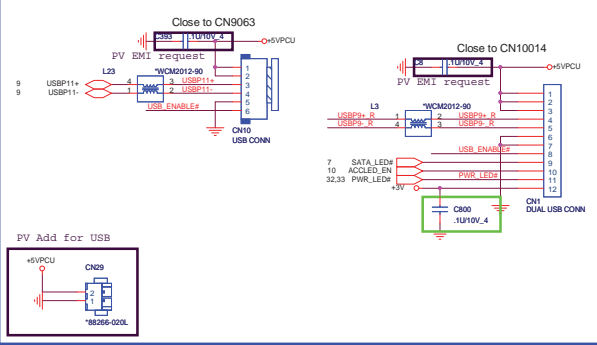
### BLUETOOTH



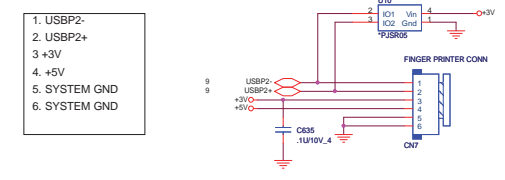
### RIGHT SIDE USB2 for 17"



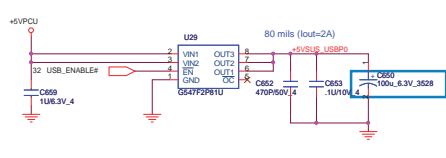
### RIGHT SIDE USB for 15"



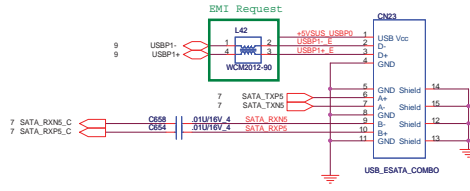
### USB fingerprint CON



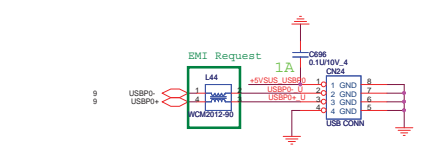
### E-SATA



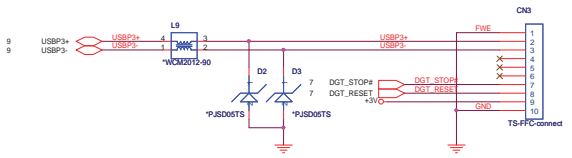
### USB & ESATA



### LEFT USB PORT



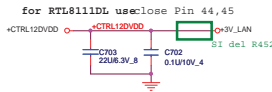
### Touch screen for 15"



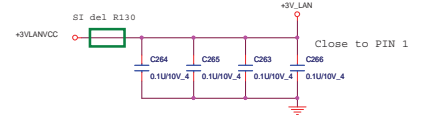
**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

Size	Document Number	Rev
Custom	BT/W/O/F/T/Touchscreen	1A
Date: Tuesday, February 03, 2010	Sheet: 28	of 44

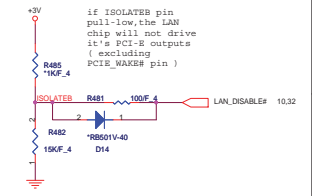
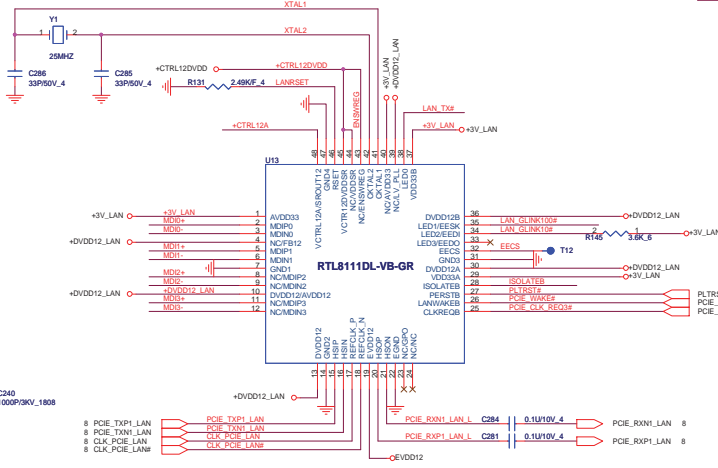
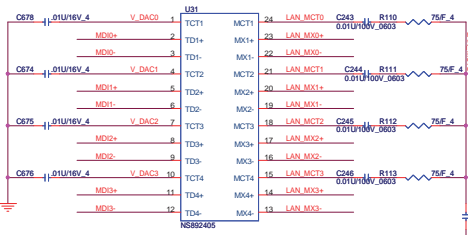
T : Stuffed for RTL8111DL(10/100/1000)



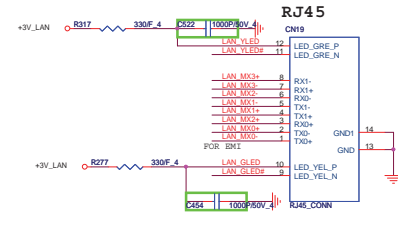
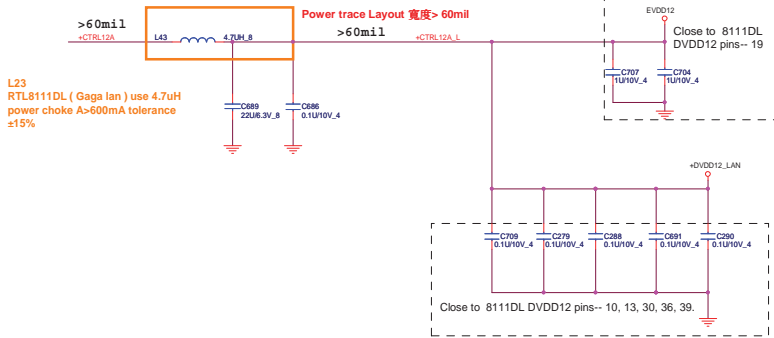
Remove R3571, R3573  
 R3571 and R3573 are used in  
 RTL8111DL, remove R3573 if  
 switching regulator is enable  
 , Remove R3571 external power  
 is used.



AL08111DB00 RTL8111DL-GR

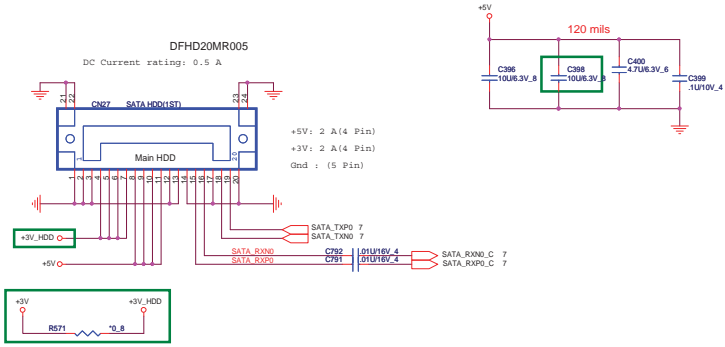


NS892402: GIGABIT

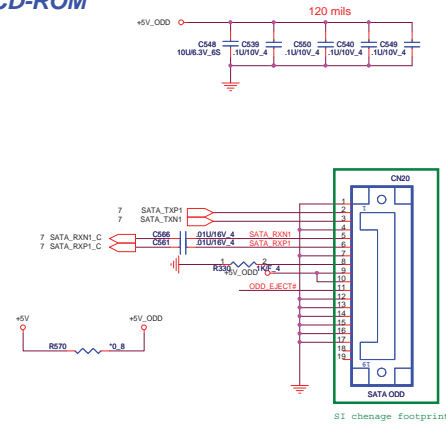


			<b>PROJECT : LX6_LX7</b> Quanta Computer Inc.		
Size	Document Number				
Custom	8103ERJL45				Rev 1A
Date:	Tuesday, February 03, 2010	Sheet	28	of	44

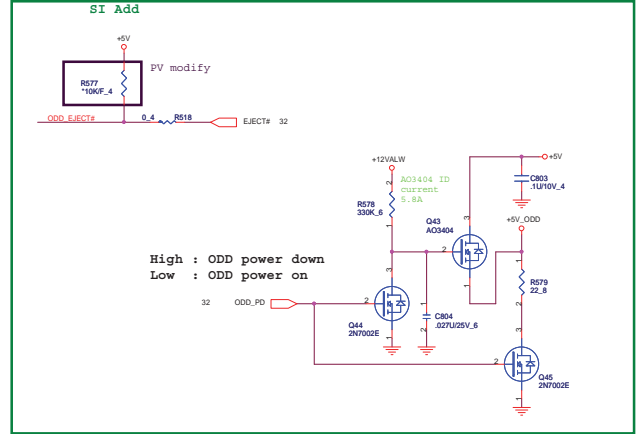
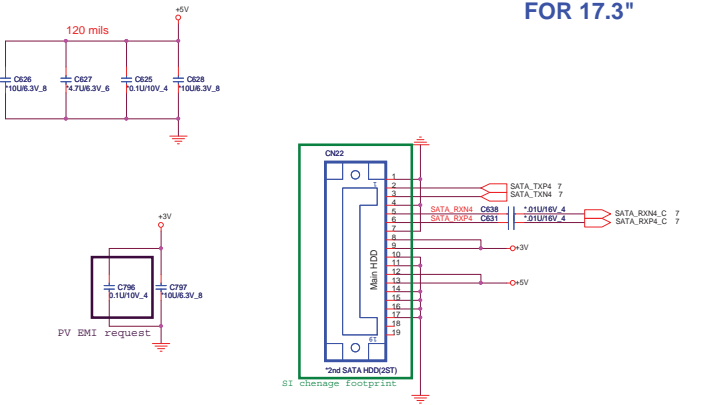
SATA HDD CONNECTOR



SATA CD-ROM



SATA\_2 CONNECTOR FOR 17.3"

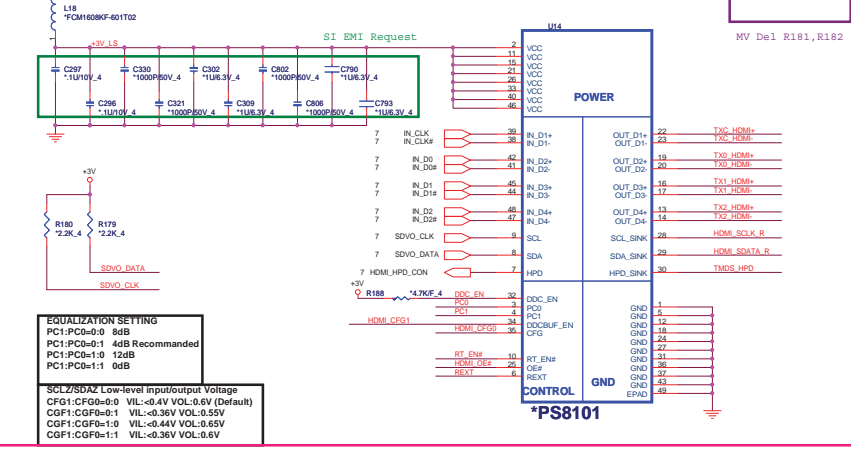


- ⎓ +3V 2,3,7,8,9,10,11,12,13,21,22,23,24,25,26,27,28,29,31,32,33,34,37,40,41
- ⎓ +5V 11,21,22,23,25,26,28,31,33,34,41
- ⎓ +12VALLW 22,34,39,41

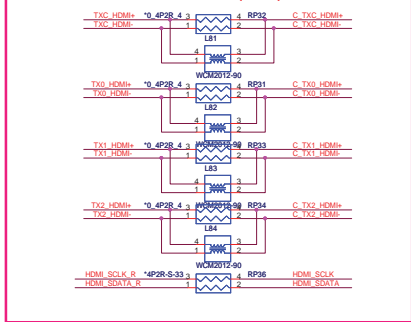
		PROJECT : LX6_LX7		Rev 1A	
		Quanta Computer Inc.			
Size Custom	Document Number ODD/HDD/ANT				
Date: Tuesday, February 03, 2010		Sheet	30	of	44

For UMA HDMI function

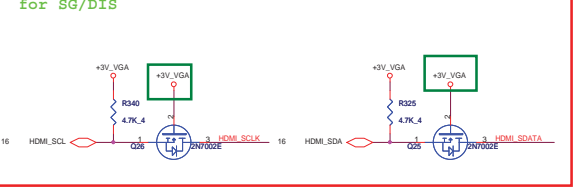
for UMA



for UMA Close to HDMI(CN21) Connector



for SG/DIS Close to HDMI(CN21) Connector

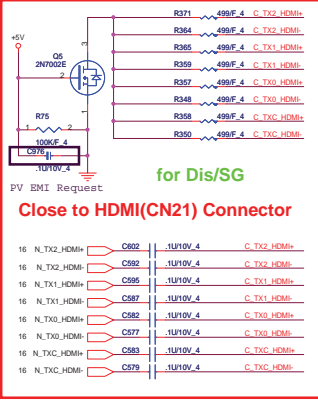


Signals		PDT	CHR	PIM
PC1	Ra	NC	4.7K	NC
HDMI_CFG0	Rb	NC	NC	NC
HDMI_CFG1	Rc	4.7K	NC	NC
REXT	Rd	499	1.2K	4.7K
PC1	Re	NC	NC	4.7K
HDMI_OE#	Rf	NC	4.7K	NC
PC0	Rg	4.7K	4.7K	4.7K

Vendor:PDT P/N:AL008101000  
Vendor:CHR P/N:AL007318002  
Vendor:PIM P/N:ALP411LS004

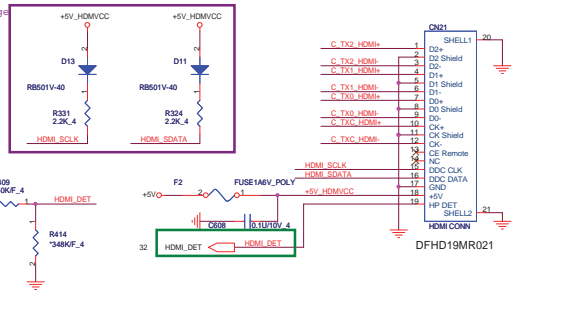
**U14 for UMA**

- R185 C885 .1uF 10V 4
- R186 C997 .1uF 10V 4
- R187 C1001 .1uF 10V 4



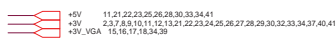
SI Del Q29,R378,R413,R415

MV Del R670,R669



PV Del R374,R368,R378 BOM

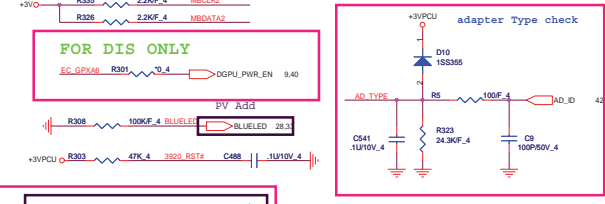
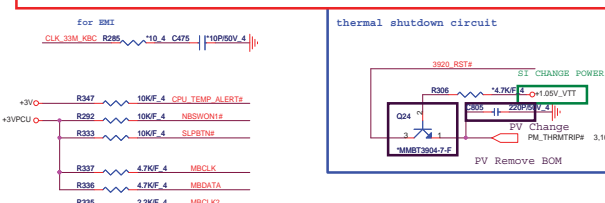
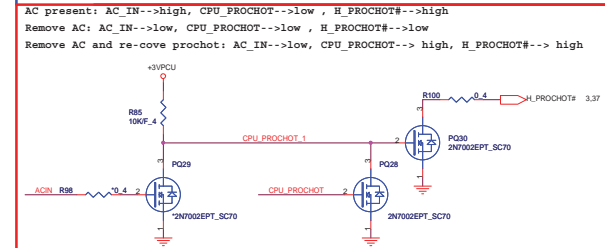
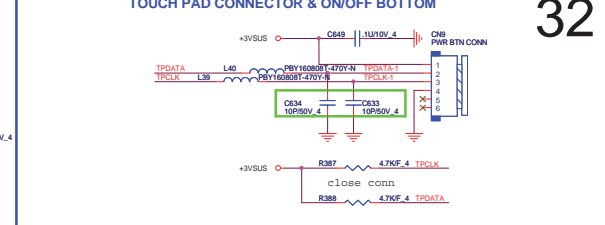
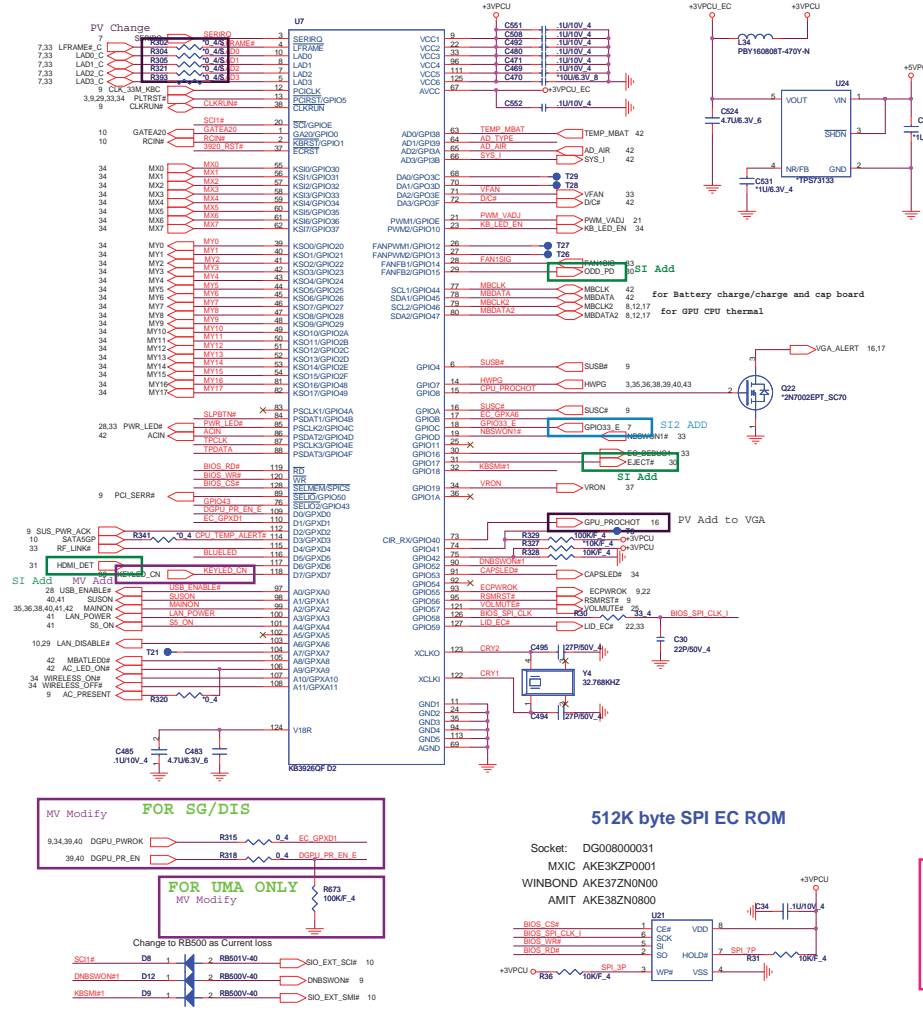
for UMA/DIS/SG



**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

**NB5**

Doc: LX6\_LX7  
Rev: 1A  
Date: Tuesday, February 02, 2010 | Sheet 31 of 44



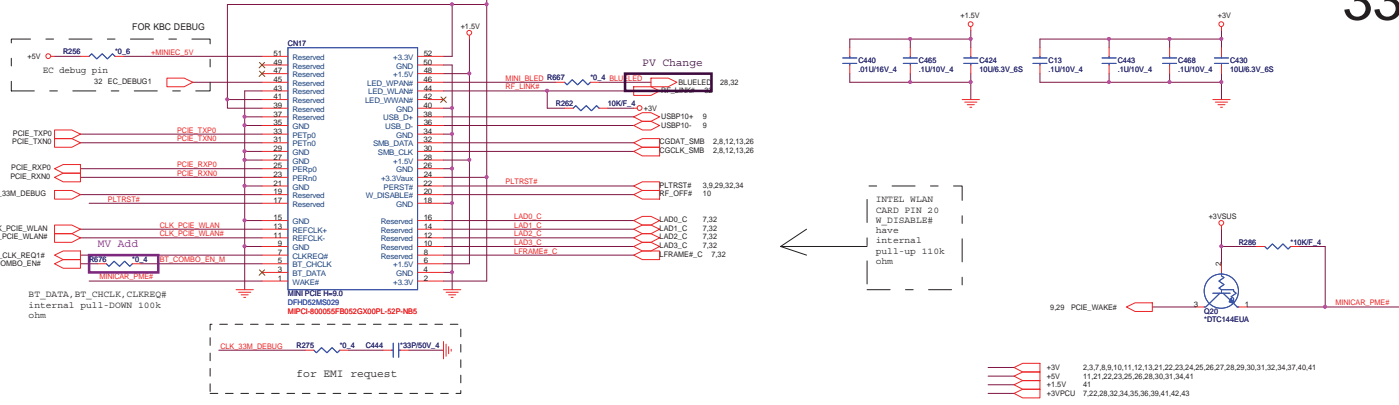
**PROJECT : LX6\_LX7**  
**Quanta Computer Inc.**

Docu: **KB3926/ROM/TP**

Rev: 1A

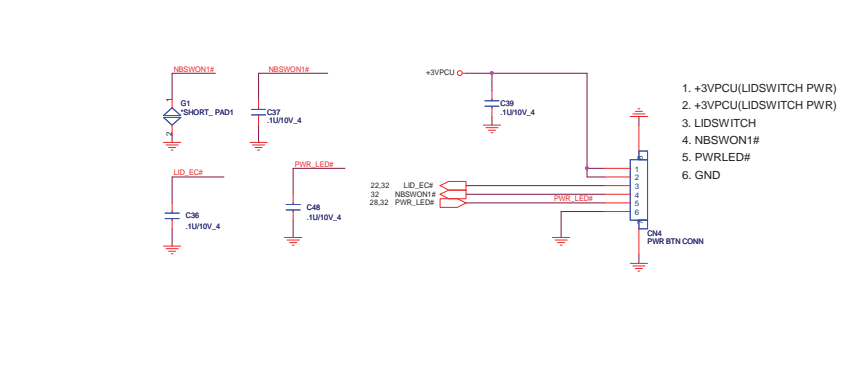
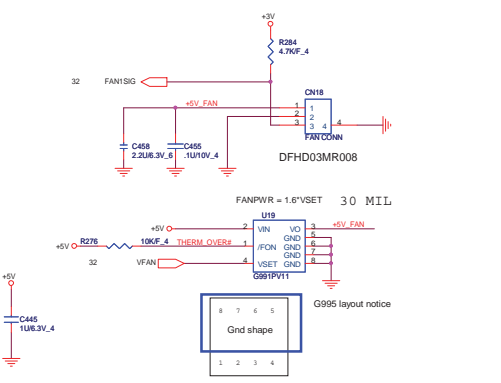
Date: Monday, February 03, 2010 18:00:33 of 44





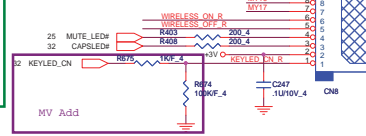
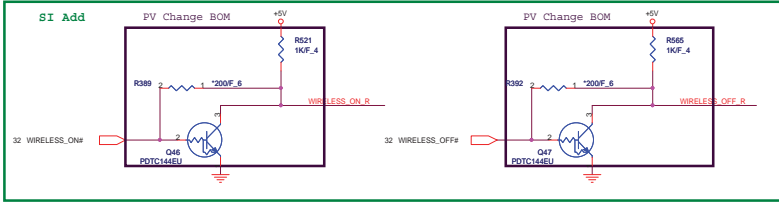
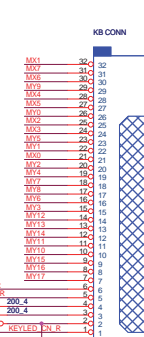
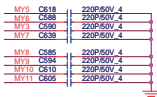
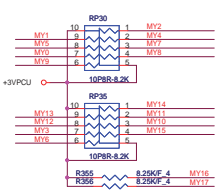
CPU FAN

POWER BOTTON CONNECT



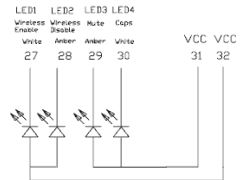
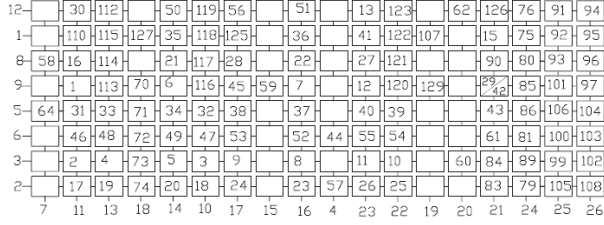
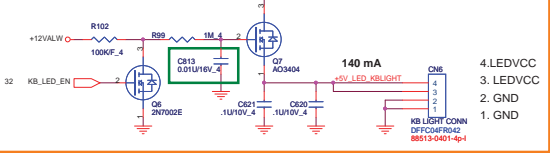
	PROJECT : LX6_LX7 Quanta Computer Inc.		
	Size: Custom	Document Number: MINI PCI-E CONN/FAN	Rev: 1A
	Date: Tuesday, February 03, 2010	Sheet: 33	of: 44

KEYBOARD PULL-UP



clear ABS 758 resin for key cap.  
7 LEDs for 15.4" (total LED current 140mA)  
11 LEDs for 17" (Total LED current 220mA)

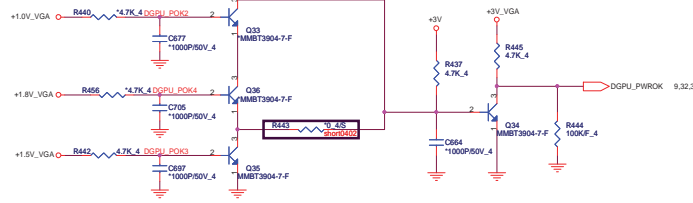
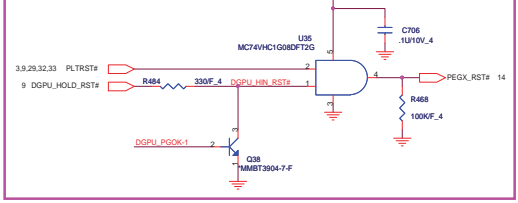
KB backlight for 15"



FOR DIS ONLY



FOR SG ONLY



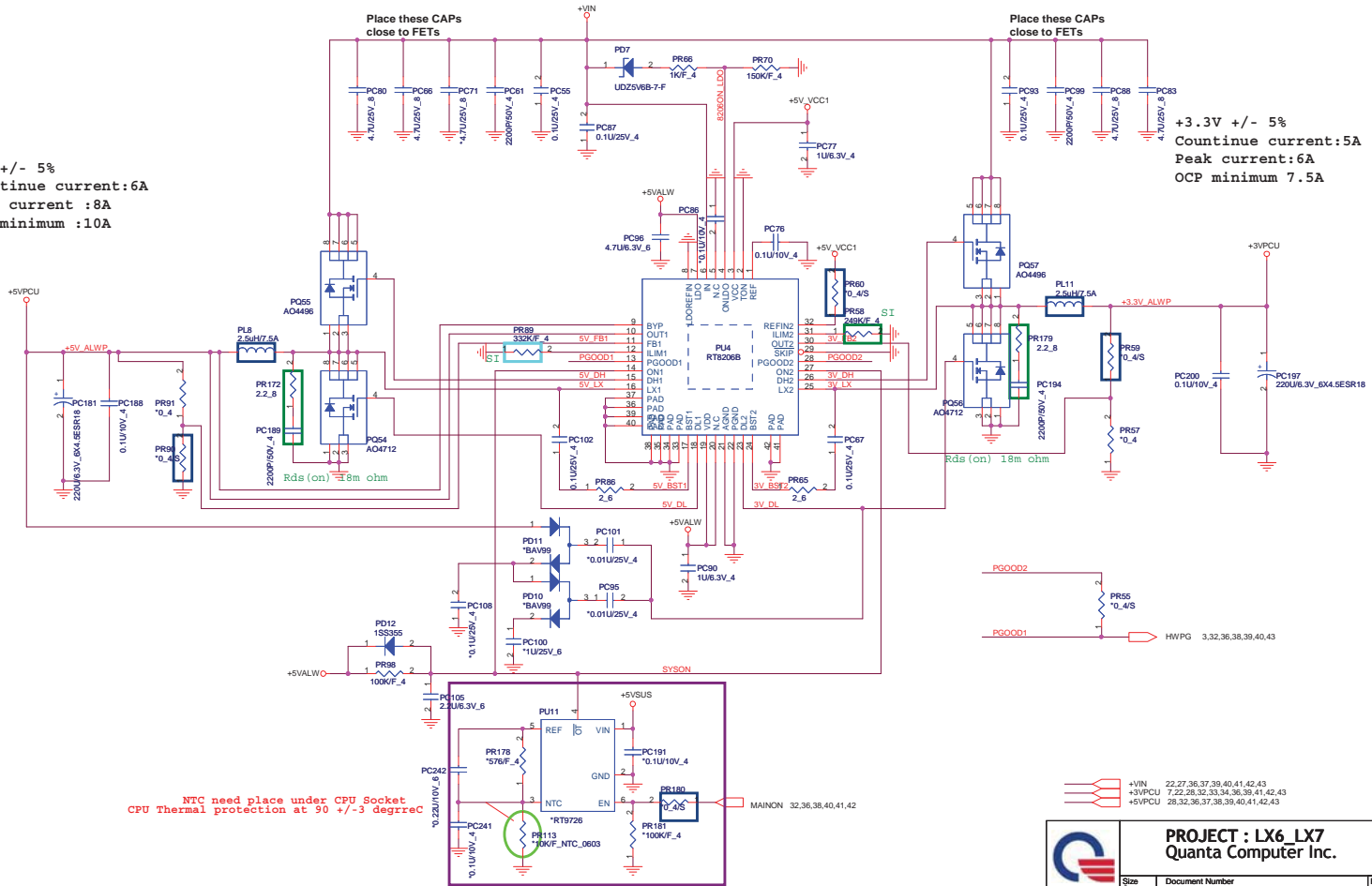
- +3V 2,3,7,8,9,10,11,12,13,21,22,23,24,25,26,27,28,29,30,31,32,33,37,40,41
- +5V 11,21,22,23,25,26,28,30,31,33,41
- +3VPCU 7,22,28,32,33,35,36,39,41,42,43
- +3V\_VGA 15,16,17,18,31,39
- +12VALW 22,30,39,41
- +1.0V\_VGA 14,16,18,40
- +1.5V\_VGA 15,18,19,20,39
- +1.8V\_VGA 14,16,18,39

PROJECT : LX6\_LX7  
Quanta Computer Inc.

Size: Custom	Document Number: KB	Rev: 1A
Date/Version: February 02, 2010	Sheet: 34	of: 44

+5V +/- 5%  
 Countinue current:6A  
 Peak current :8A  
 OCP minimum :10A

+3.3V +/- 5%  
 Countinue current:5A  
 Peak current:6A  
 OCP minimum 7.5A

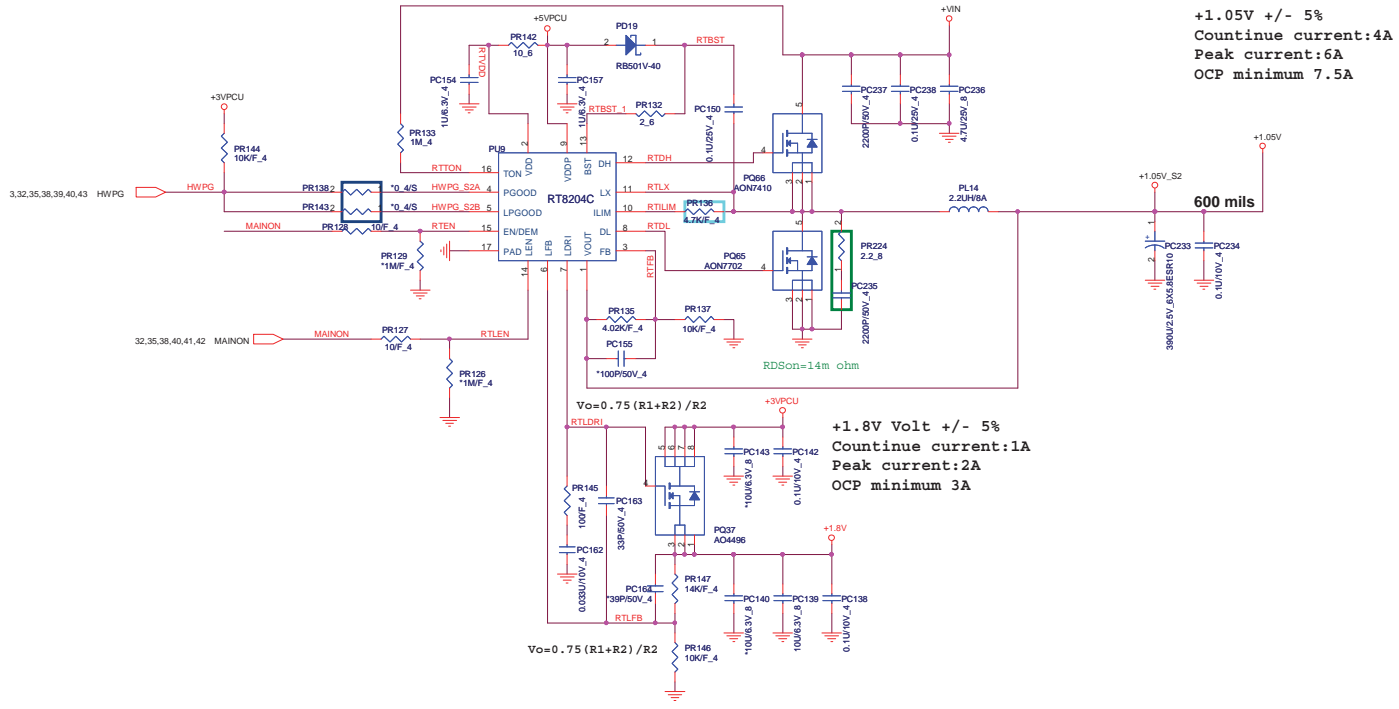


NTC need place under CPU Socket  
 CPU Thermal protection at 90 +/-3 degreeC

- +VIN 22,27,36,37,38,40,41,42,43
- +3VPCU 7,22,28,32,33,34,36,38,41,42,43
- +5VPCU 28,32,36,37,38,39,40,41,42,43

	<b>PROJECT : LX6_LX7</b> Quanta Computer Inc.		Rev 1A
	Size Custom	Document Number +5V/+3V (RT8206B)	

MV Change



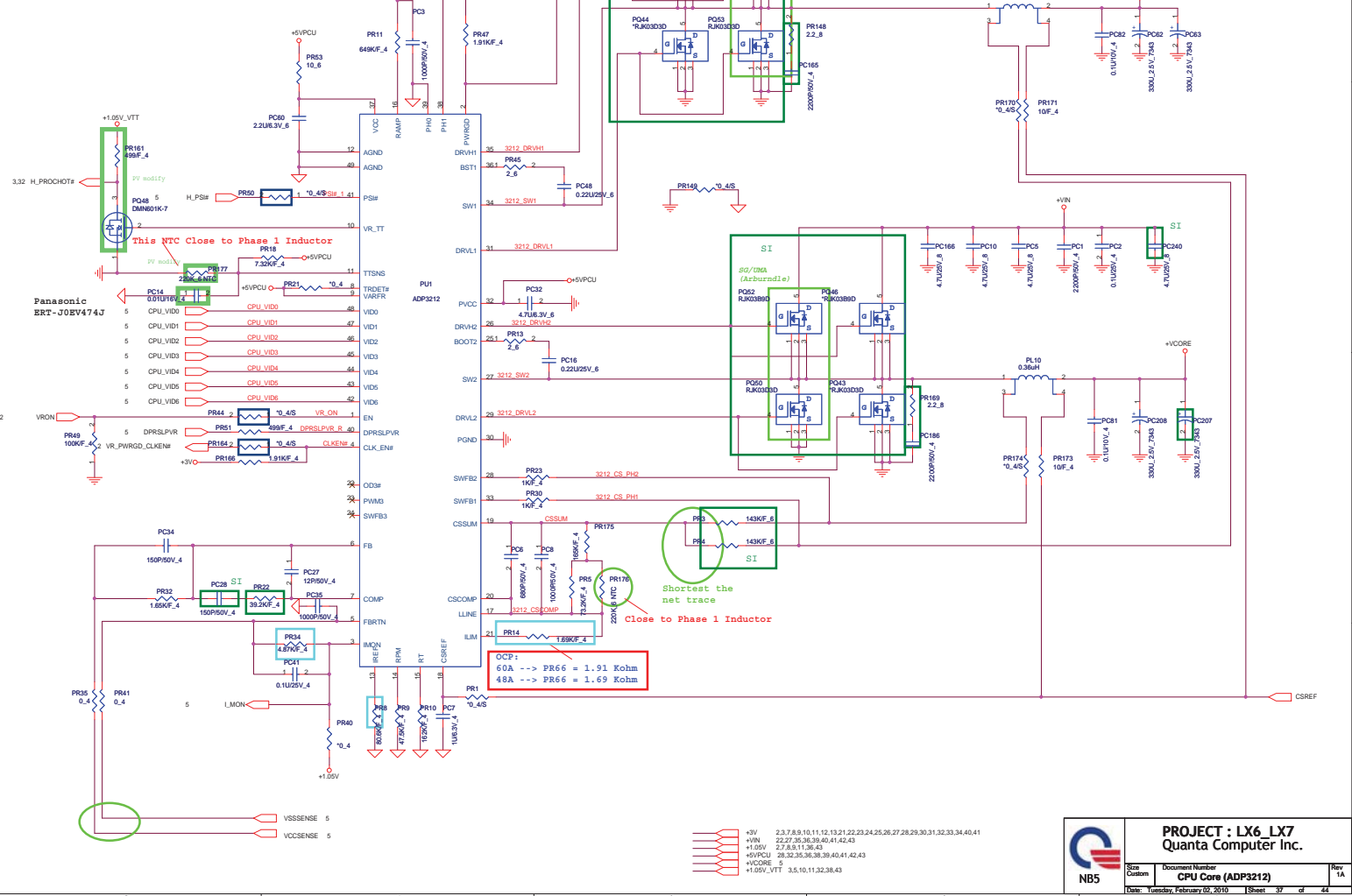
+1.05V +/- 5%  
 Countinue current:4A  
 Peak current:6A  
 OCP minimum 7.5A

+1.8V Volt +/- 5%  
 Countinue current:1A  
 Peak current:2A  
 OCP minimum 3A

- +1.8V 5,10,11,21,41
- +VIN 22,27,35,37,39,40,41,42,43
- +1.05V 2,7,8,9,11,37,43
- +3VPCU 7,22,28,32,33,34,35,39,41,42,43
- +5VPCU 28,32,35,37,39,39,40,41,42,43

	<b>PROJECT : LX6_LX7</b> Quanta Computer Inc.		Rev 1A
	Size Custom	Document Number +1.05V/+1.8V (RT8204C)	

	DIS (Clarksfield)	SG/UMA (Arburndle)
不上件		PQ45 PQ46 PQ43 PQ44
PR14	1.91k (OCP-63A) (CS21912FB13)	1.69k (OCP-55A) (CS21692FB01)
PR34	4.7k (CS24702FB10)	4.87k (CS24872FB07)

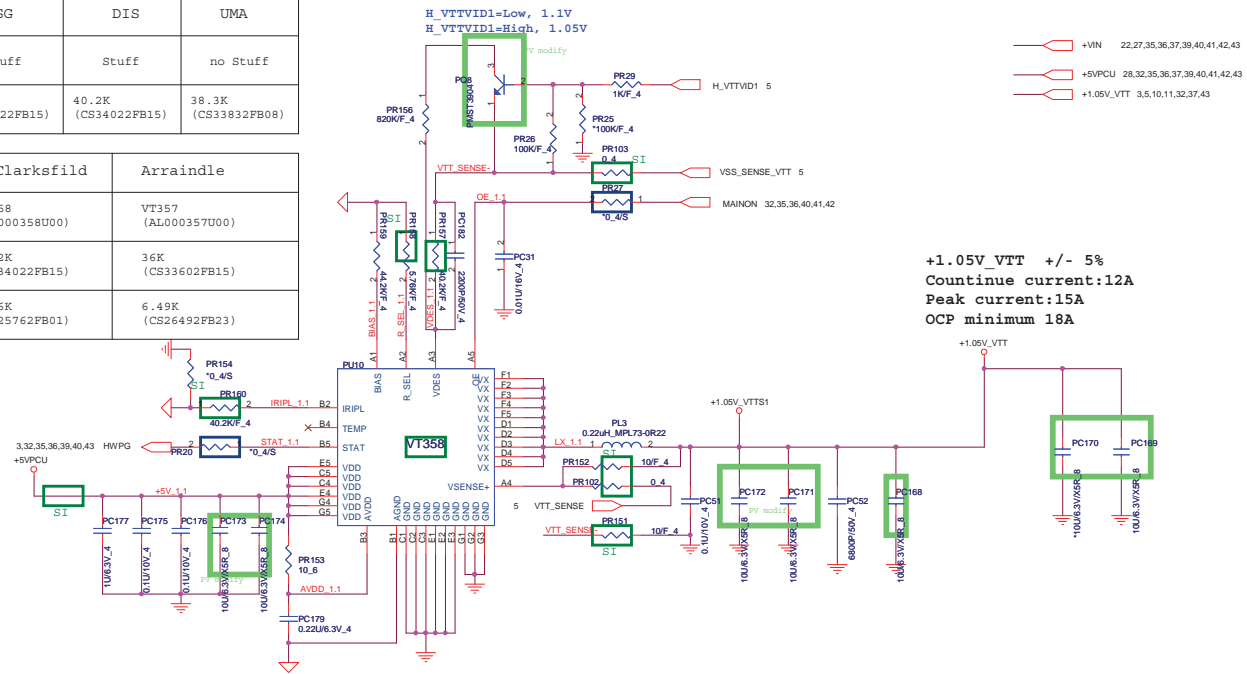


+VCORE  
 Countinue current:24A  
 Peak current:40A  
 OCP minimum 48A

	PROJECT : LX6_LX7 Quanta Computer Inc.	Rev 1A
	Date: Tuesday, February 02, 2010 18:00 Sheet 37 of 44	

	SG	DIS	UMA
PR156 PR26 PR29 PQ8	Stuff	Stuff	no Stuff
PR157	40.2K (CS34022FB15)	40.2K (CS34022FB15)	38.3K (CS33832FB08)

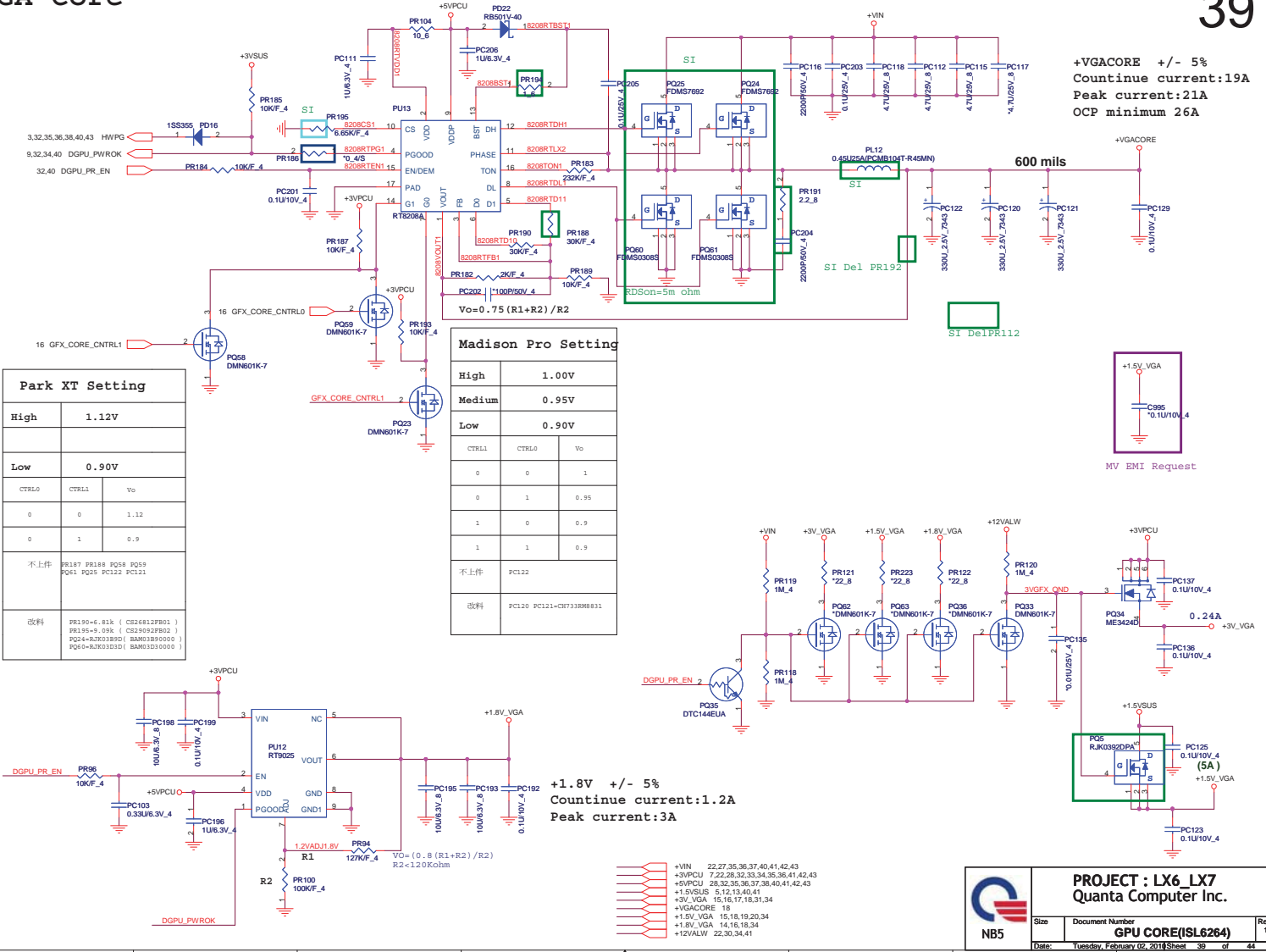
	Clarksfield	Arraindle
PU10	VT358 (AL000358U00)	VT357 (AL000357U00)
PR160	40.2K (CS34022FB15)	36K (CS33602FB15)
PR158	5.76K (CS25762FB01)	6.49K (CS26492FB23)



+1.05V\_VTT +/- 5%  
 Countinue current:12A  
 Peak current:15A  
 OCP minimum 18A

	<b>PROJECT : LX6_LX7</b> Quanta Computer Inc.		Rev 1A
	Size Custom	Document Number +1.05V_VTT (VT358)	

+VGACORE +/- 5%  
 Countinue current:19A  
 Peak current:21A  
 OCP minimum 26A

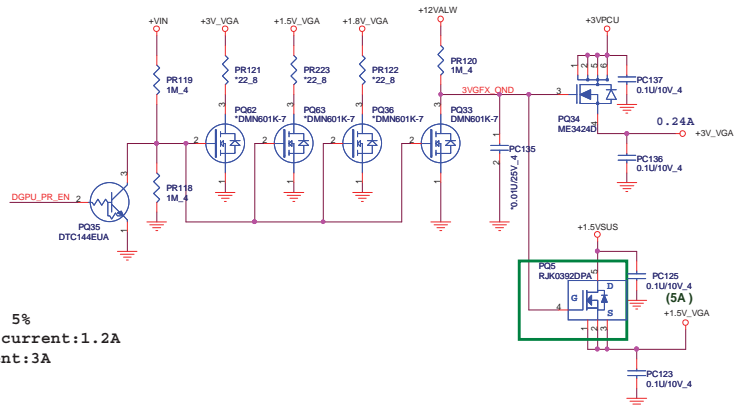
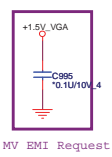


**Park XT Setting**

High	1.12V	
Low	0.90V	
CTRL1	CTRL1	Vo
0	0	1.12
0	1	0.9
不上件	PR187 PR188 PQ58 PQ59 PQ61 PQ63 PC122 PC121	
改料	PR190=6.81k ( CS26812F801 ) PR195=9.09k ( CS29092F802 ) PQ64=RTK03D3D ( BAW03D30000 ) PQ60=RTK03D3D ( BAW03D30000 )	

**Madison Pro Setting**

High	1.00V	
Medium	0.95V	
Low	0.90V	
CTRL1	CTRL0	Vo
0	0	1
0	1	0.95
1	0	0.9
1	1	0.9
不上件	PC122	
改料	PC120 PC121=CH733R8831	



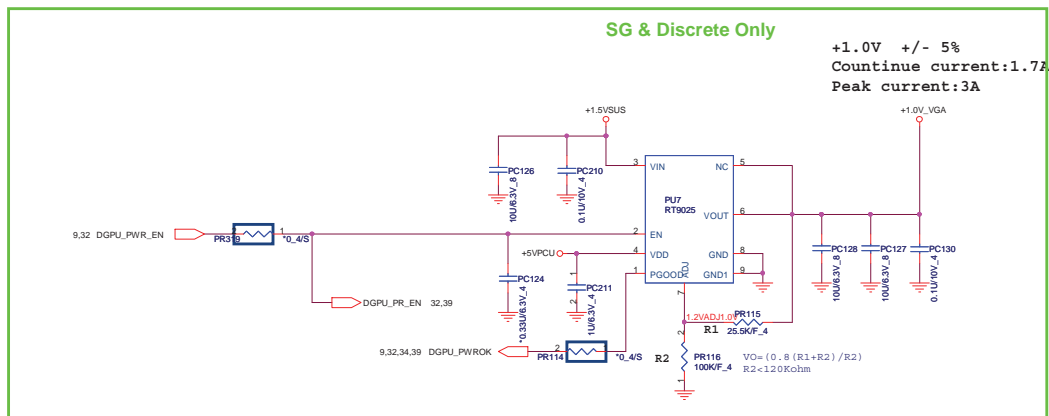
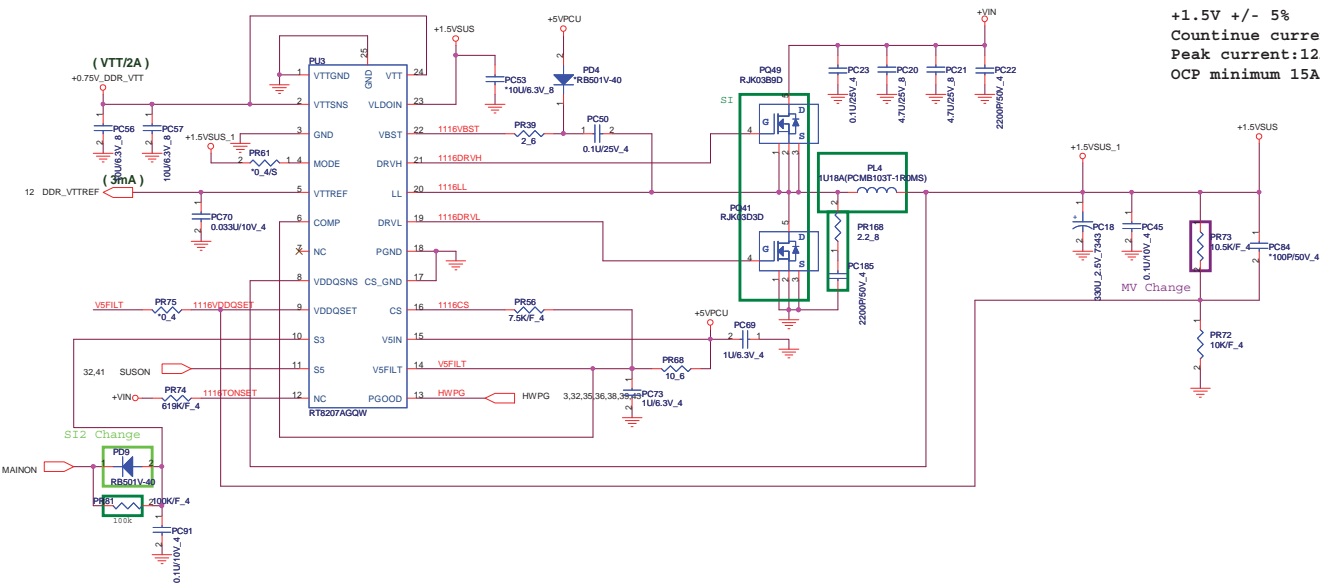
+1.8V +/- 5%  
 Countinue current:1.2A  
 Peak current:3A

- +VIN 22,27,35,36,37,40,41,42,43
- +3VPCU 7,22,28,32,33,34,35,36,41,42,43
- +5VPCU 29,32,35,36,37,38,40,41,42,43
- +1.5VSUS 5,12,13,40,41
- +3V\_VGA 15,16,17,18,31,34
- +VGACORE 18
- +1.5V\_VGA 15,18,19,20,34
- +1.9V\_VGA 14,16,18,34
- +12VALW 22,30,34,41

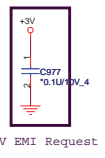
**PROJECT : LX6\_LX7**  
 Quanta Computer Inc.

Size	Document Number	Rev
	<b>GPU CORE(ISL6264)</b>	1A
Date:	Tuesday, February 02, 2011	Sheet 39 of 44

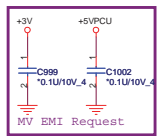
+1.5V +/- 5%  
 Countinue current:6A  
 Peak current:12A  
 OCP minimum 15A



+1.0V +/- 5%  
 Countinue current:1.7A  
 Peak current:3A



PV EMI Request

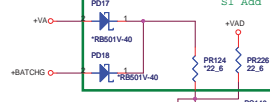


MV EMI Request

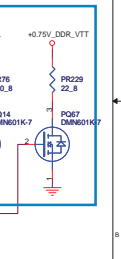
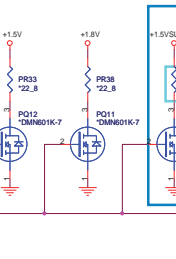
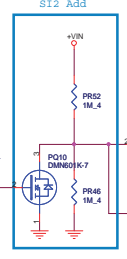
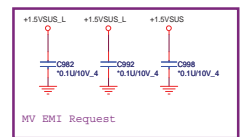
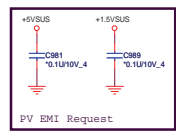
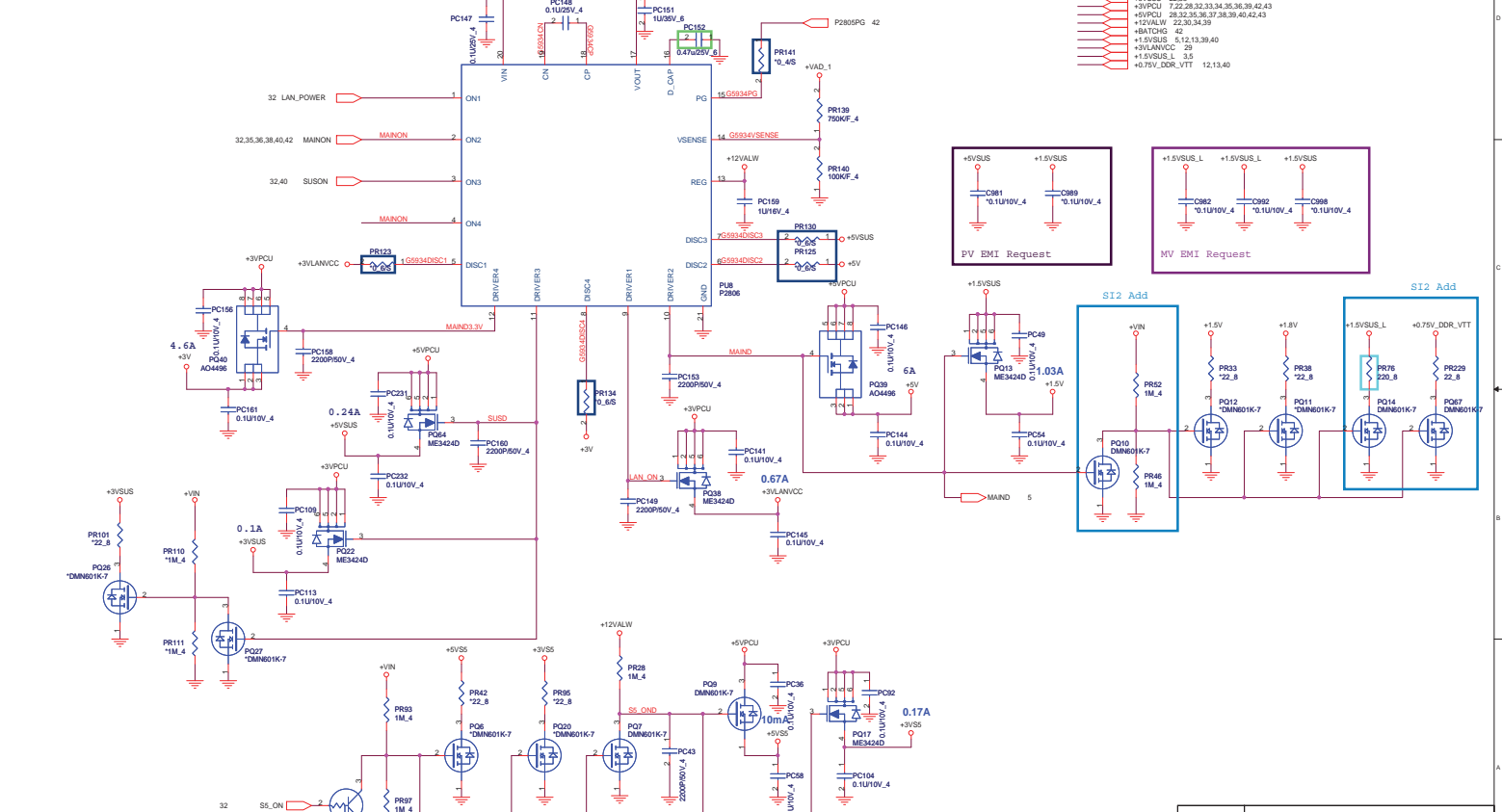
- +3V 2,3,7,8,9,10,11,12,13,21,22,23,24,25,26,27,28,29,30,31,32,33,34,37,41
- +VIN 22,27,35,36,37,39,41,42,43
- +5VPCU 28,32,35,36,37,38,39,41,42,43
- +1.5VSUS 5,12,13,39,41
- +1.0V\_VGA 14,16,18,34
- +0.75V\_DDR\_VTT 12,13,41

	<b>PROJECT : LX6_LX7</b> Quanta Computer Inc.		Rev 1A
	Size Custom	Document Number <b>DDR3 (RT8207)</b>	



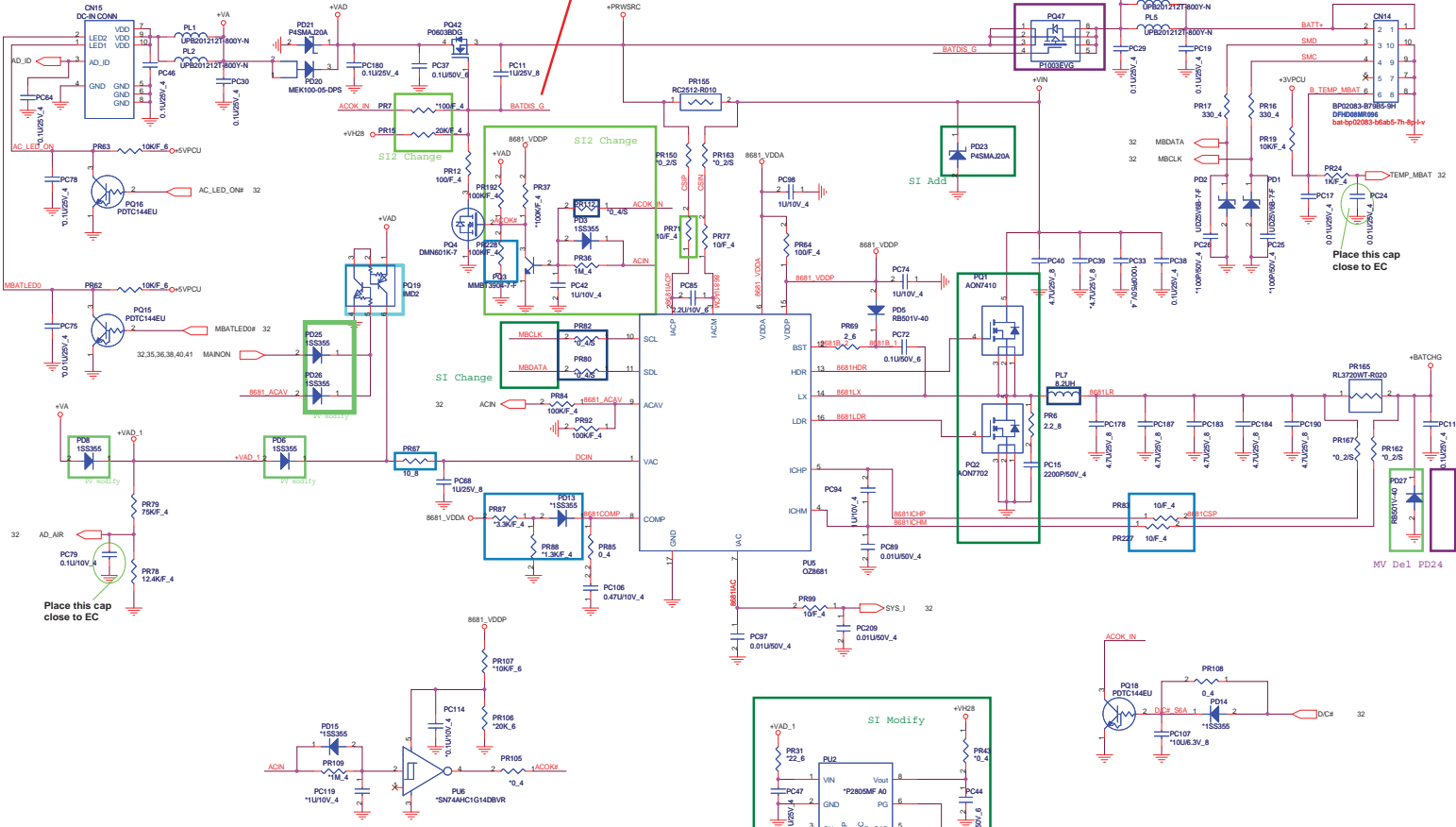


+VA	42
+V	11,21,22,23,25,26,28,30,31,33,34
+VIN	22,27,35,36,37,39,40,42,43
+1.5V	33
+1.8V	5,10,11,21,36
+VSS	3,8,9,10,11
+VSS1	11
+VSS2	42
+VAD	42
+VSSUS	28,32,33,39
+VSSUS1	22,35
+VPCU	7,22,28,32,33,34,35,36,39,42,43
+VPCU1	28,32,35,36,37,38,39,40,42,43
+VPCU2	22,30,34,39
+VLANVCC	29
+1.5V/SUS_L	5,12,13,39,40
+VLANVCC	29
+1.5V/SUS_L	3,5
+0.75V_DDR_VTT	12,13,40



NB5	PROJECT : LX6_LX7 Quanta Computer Inc.		
	Docu Custom	Docu Number Dis-charge IC (P2806)	Rev 1A
Date: Tuesday, February 12, 2010		Sheet: 41 of 44	

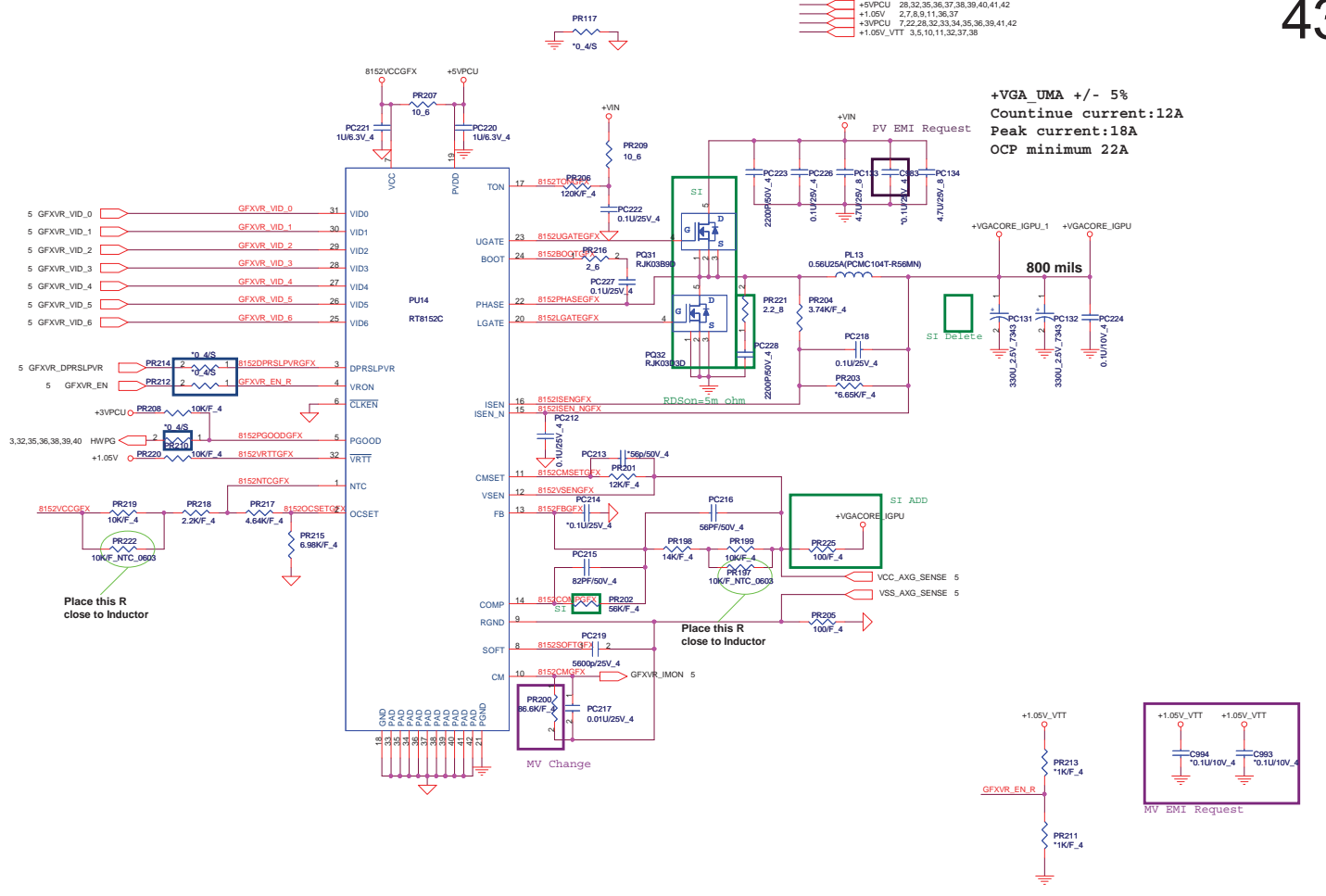
Do Not add test pad on BATDIS\_G signal



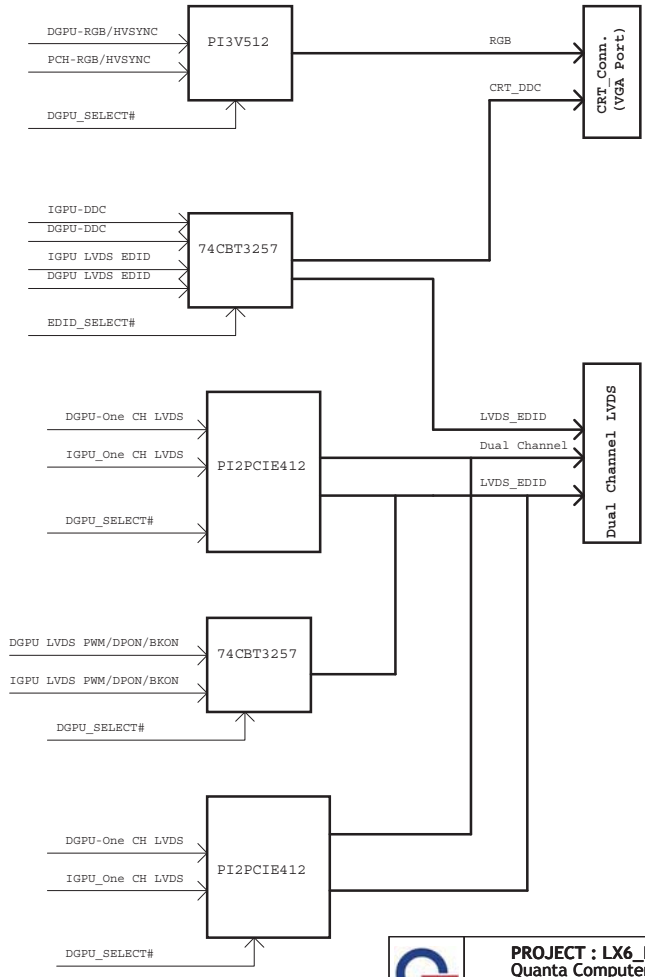
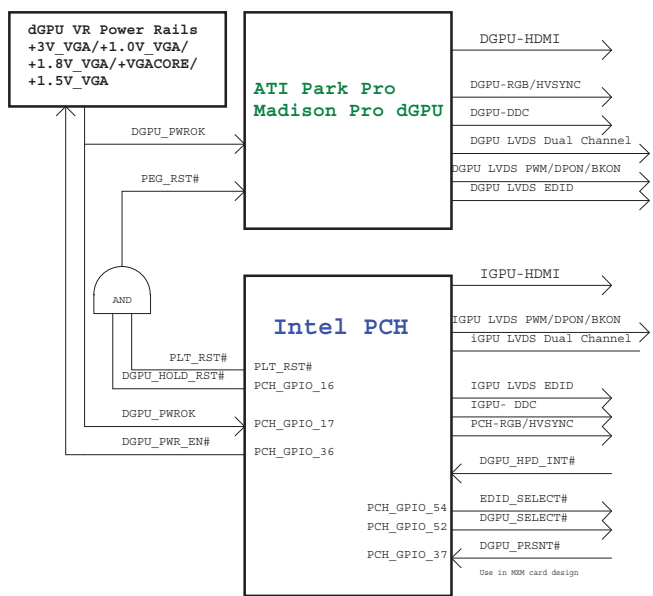
- +VA 41
- +VH28 41
- +VAD\_1 41
- +3VPCU 7,22,28,32,33,34,35,36,39,41,43
- +4VPCU 28,32,35,36,37,38,39,40,41,43
- +BATCHG 41

	<b>PROJECT : LX6_LX7</b>		Rev 1A
	Quanta Computer Inc.		
	Document Number	Charger (BQ24704)	
Date: Tuesday, February 05, 2010	Sheet	42 of 44	

+VGACORE_IGPU	5
+VIN	2,27,35,36,37,39,40,41,42
+5VPCU	28,32,35,36,37,38,39,40,41,42
+1.05V	2,7,8,9,11,36,37
+3VPCU	7,22,28,32,33,34,35,36,39,41,42
+1.05V_VTT	5,5,10,11,32,37,38



	<b>PROJECT : LX6_LX7</b>		Date: Tuesday, February 02, 2010	Sheet 43 of 44
	Quanta Computer Inc.			
	Size Custom	Document Number <b>UMA GPU CORE (RT8152C)</b>		



Switchable GPIOs	Descriptions
PCH_GPIO52	DGPU_SELECT#
PCH_GPIO16	DGPU_HOLD_RST#
PCH_GPIO36	DGPU_PWR_EN#
PCH_GPIO17	DGPU_PWR_OK
PCH_GPIO54	EDID_ELECT#
PCH_GPIO37	DGPU_PRSENT#

	PROJECT : LX6_LX7		Date: Tuesday, February 02, 2010 1 Sheet 44 of 44
	Size Custom	Document Number Switch Blockdiagram	