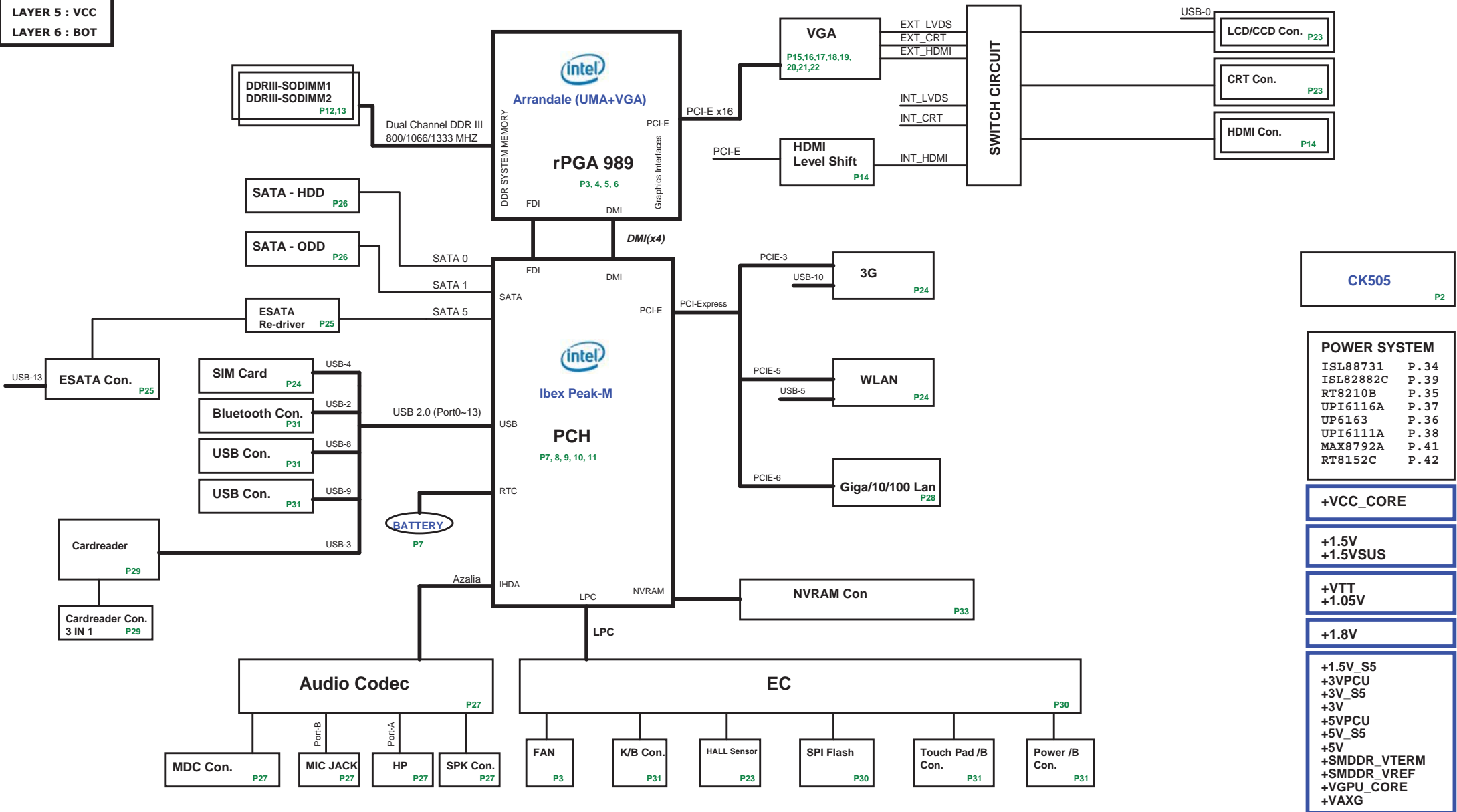


PCB STACK UP

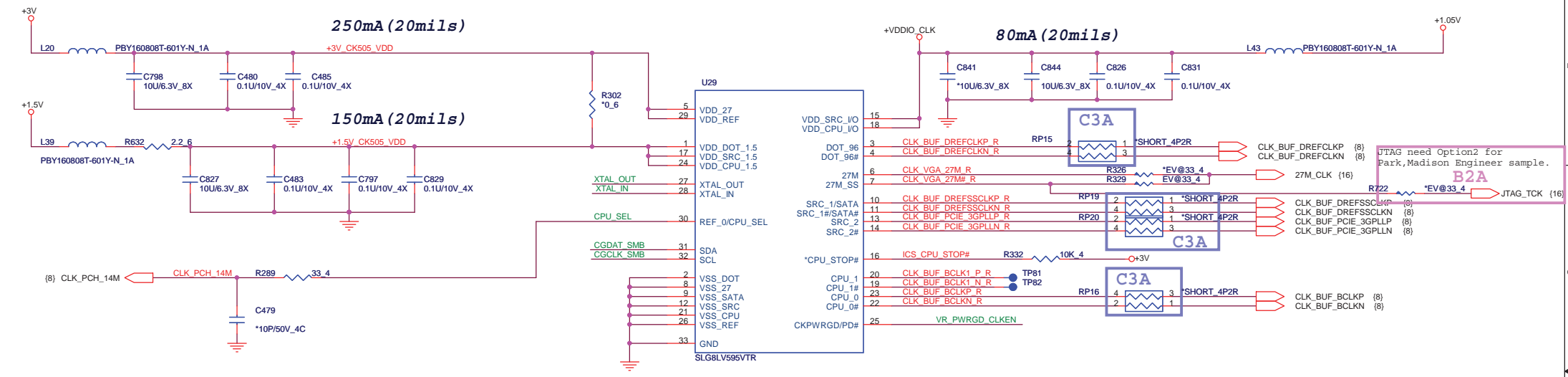
- LAYER 1 : TOP
- LAYER 2 : GND
- LAYER 3 : IN1
- LAYER 4 : IN2
- LAYER 5 : VCC
- LAYER 6 : BOT

BL6 Block Diagram

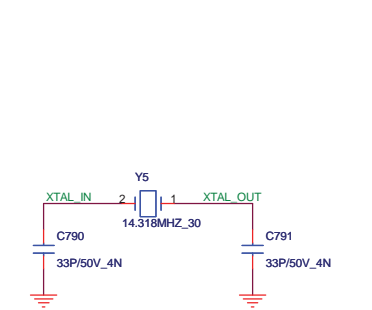


<http://laptop-motherboard-schematic.blogspot.com/>

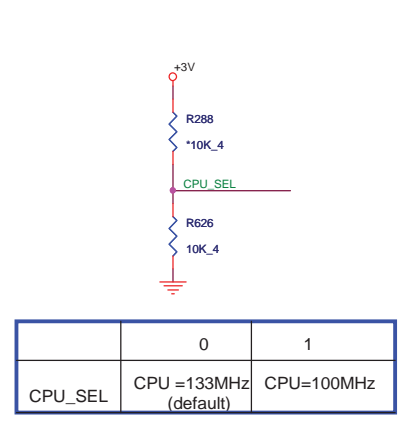
CLOCK Gen



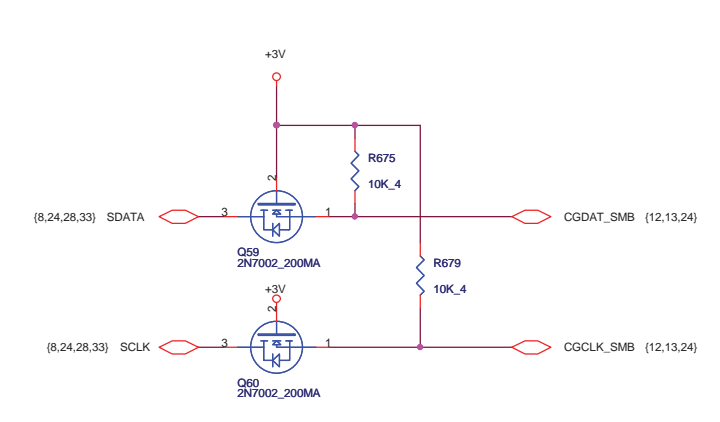
CLK CRYSTAL



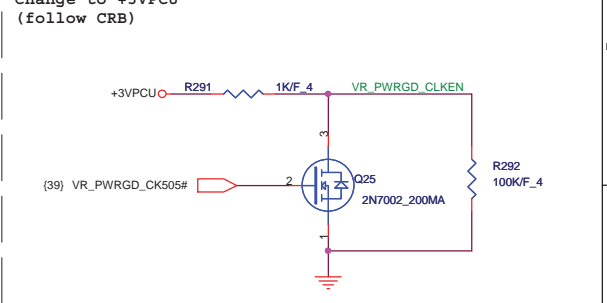
CLK CPU_SEL



CLK I2C

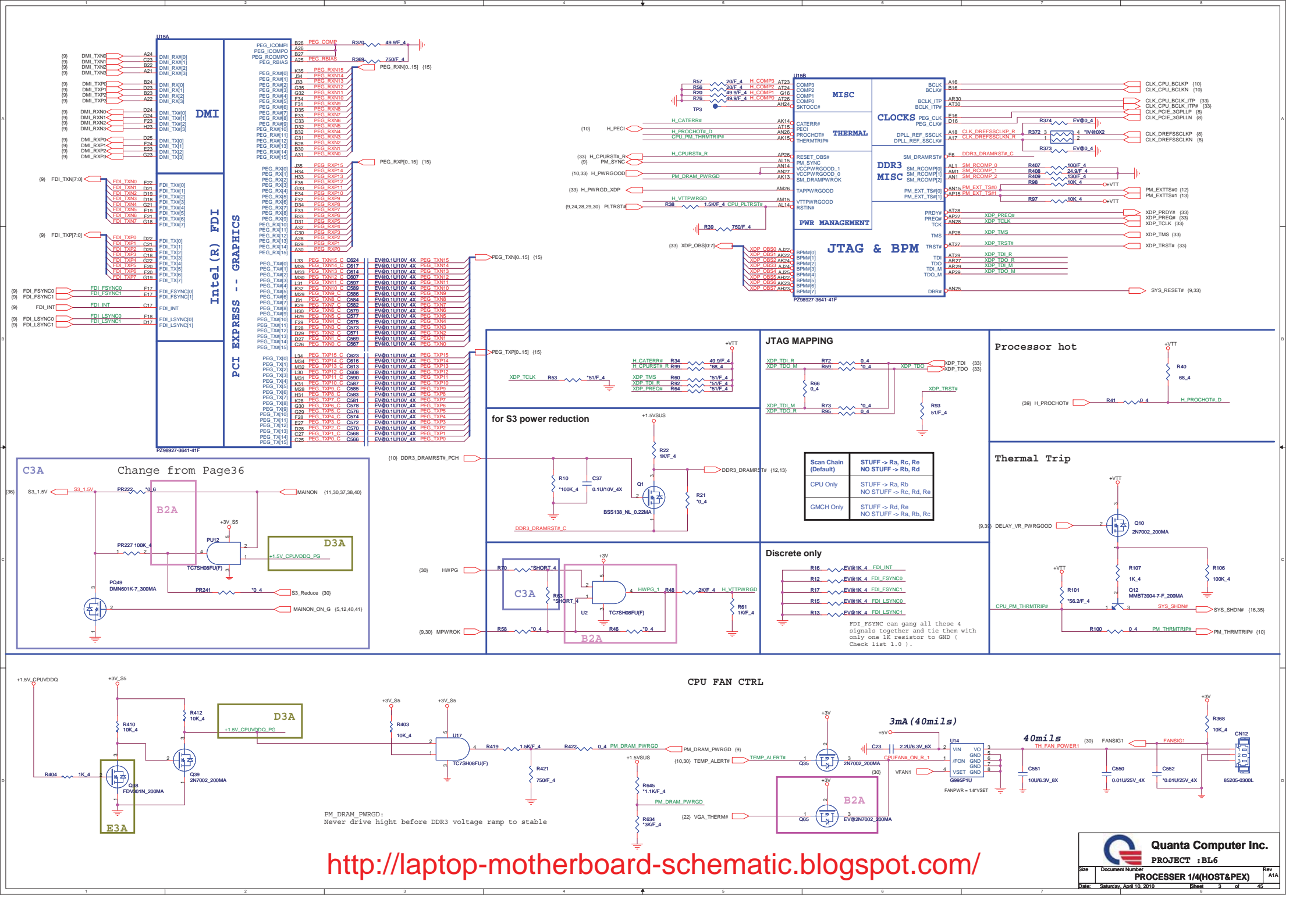


CLK POWERGOOD



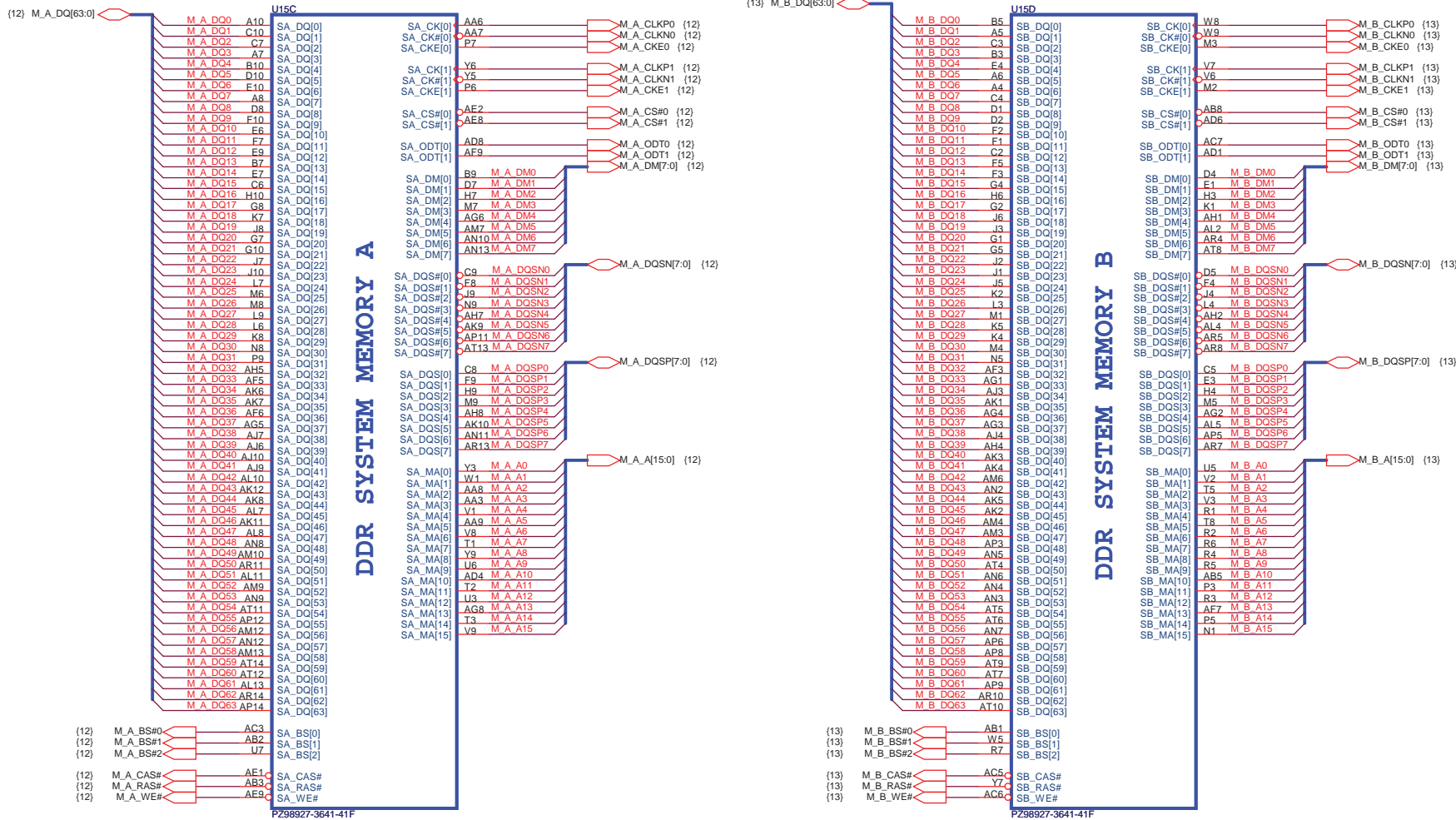
Quanta Computer Inc.
PROJECT : BL6

Size	Document Number	Rev
	CLOCK GENERATOR	A1A
Date:	Thursday, April 06, 2010	Sheet 2 of 45



<http://laptop-motherboard-schematic.blogspot.com/>

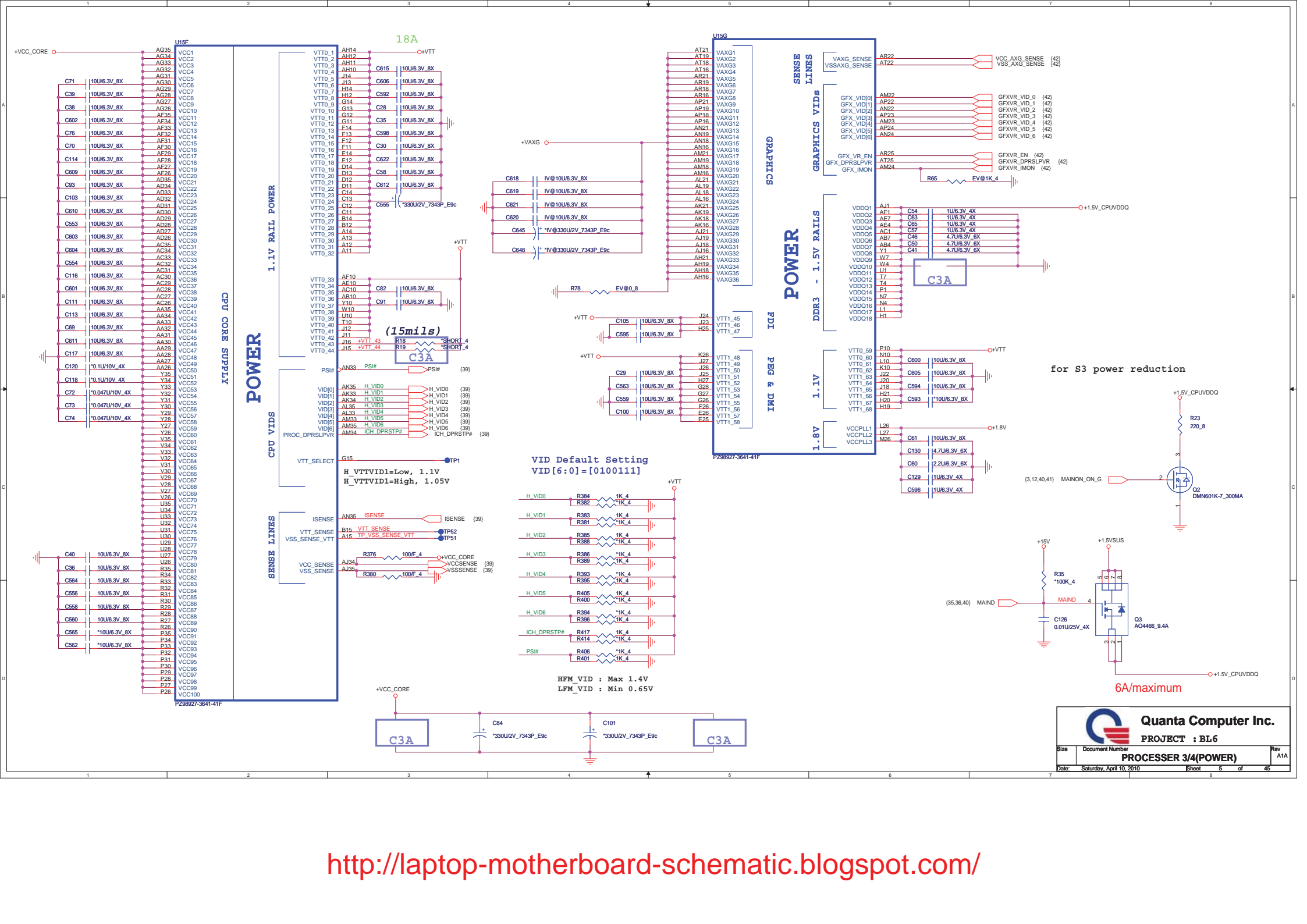
AUBURNDALE/CLARKSFIELD PROCESSOR (DDR3)



<http://laptop-motherboard-schematic.blogspot.com/>

Quanta Computer Inc.
PROJECT : BL6

Size	Document Number	Rev
	PROCESSOR 2/4(DDR)	A1A
Date:	Saturday, April 10, 2010	Sheet 4 of 45



POWER

CPU CORE SUPPLY

1.1V RAIL POWER

CPU CORE VIDS

SENSE LINES

GRAPHICS

POWER

FDI PEG & DMI

1.5V RAILS

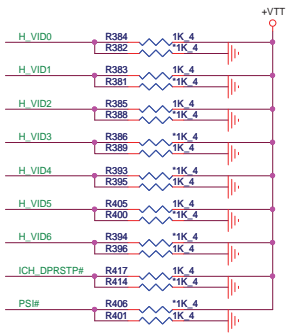
1.1V

1.8V

SENSE LINES

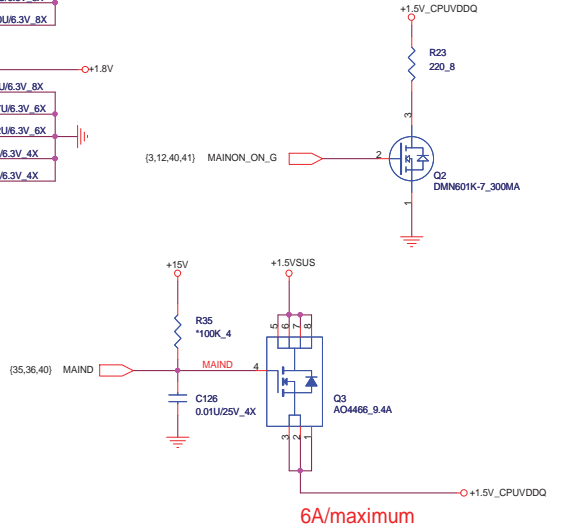
GRAPHICS VIDS

VID Default Setting
VID[6:0]=[0100111]



HFM_VID : Max 1.4V
LFM_VID : Min 0.65V

for S3 power reduction

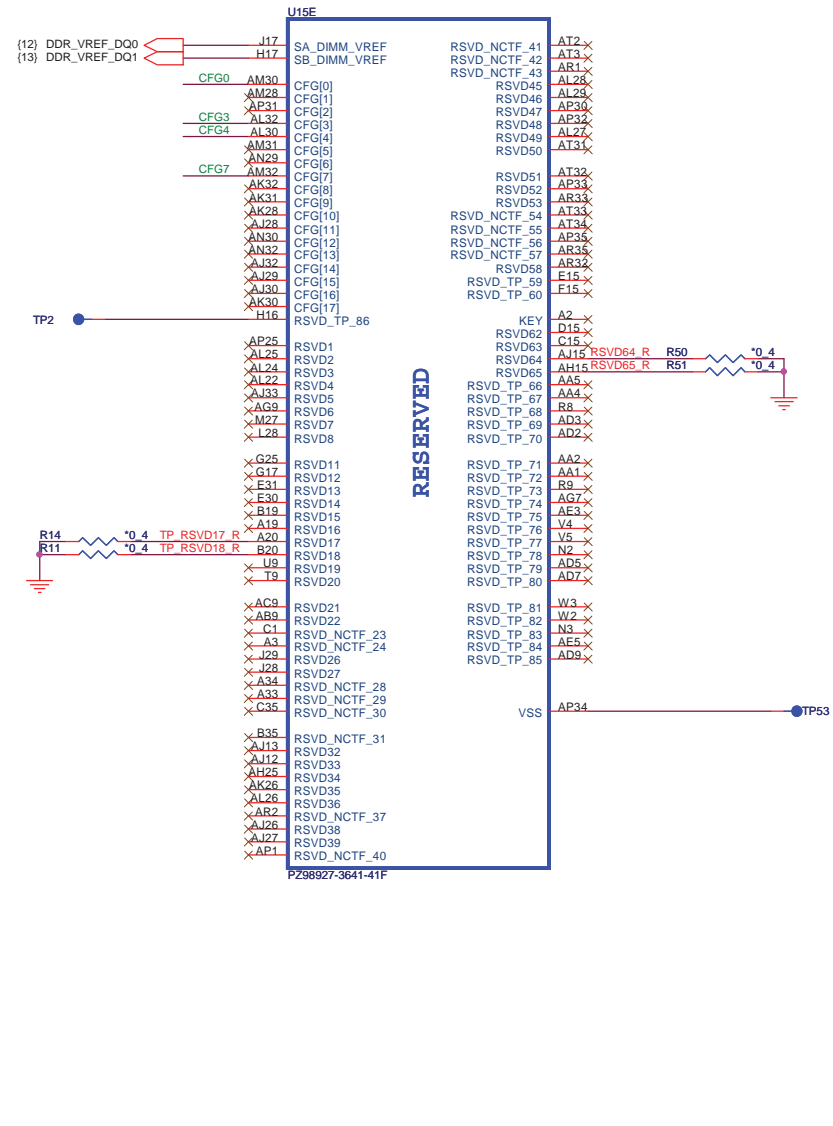
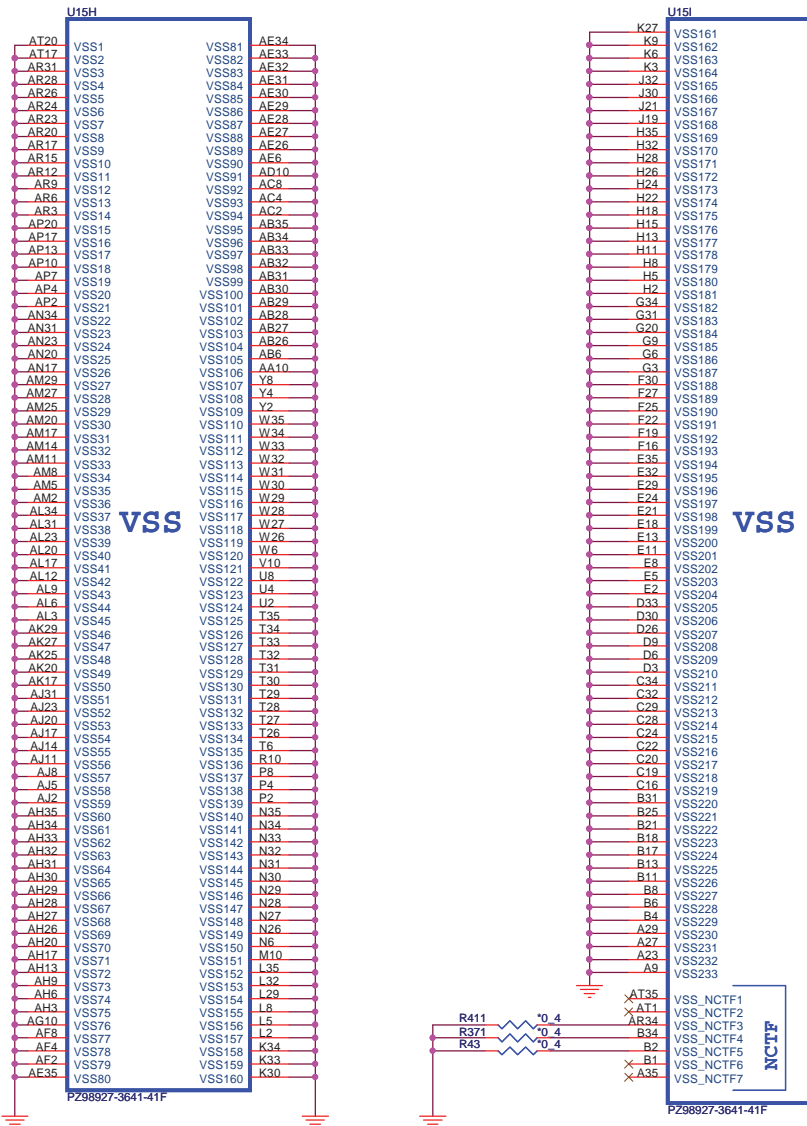


Quanta Computer Inc.
PROJECT : BL6

Size	Document Number	Rev
	PROCESSOR 3/4(POWER)	A1A
Date:	Saturday, April 10, 2010	Sheet 5 of 45

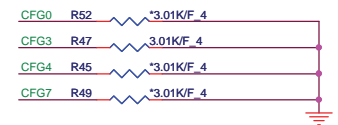
AUBURNDALE/CLARKSFIELD PROCESSOR (GND)

AUBURNDALE/CLARKSFIELD PROCESSOR(RESERVED, CFG)



Processor Strapping

	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



Quanta Computer Inc.
PROJECT : BL6

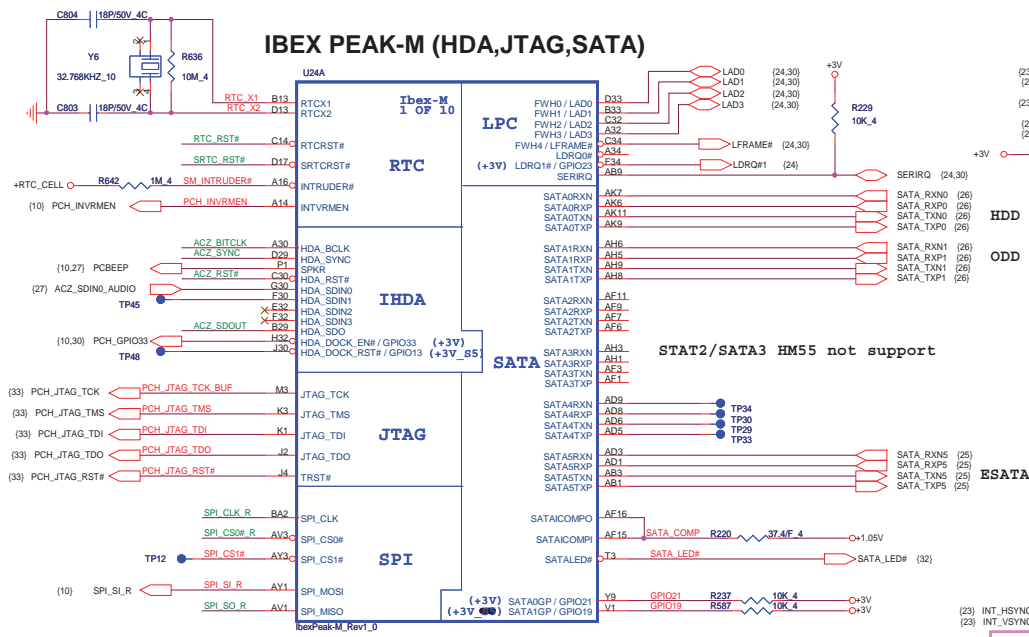
Size Document Number **PROCESSOR 4/4 (GND)** Rev 1A

Date: Saturday, April 10, 2010 Sheet 6 of 45

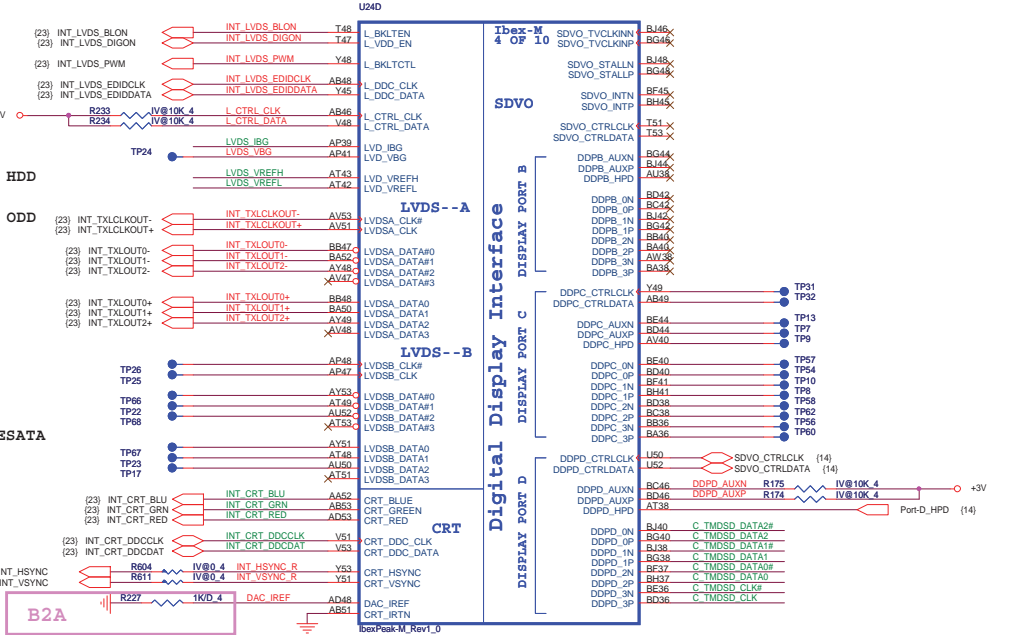
The Clarkfield processor's PCI Express interface may not meet PCI Express 2.0 jitter specifications. Intel recommends placing a 3.01K +/- 5% pull down resistor to VSS on CFG[7] pin for both rPGA and BGA components. This pull down resistor should be removed when this issue is fixed.

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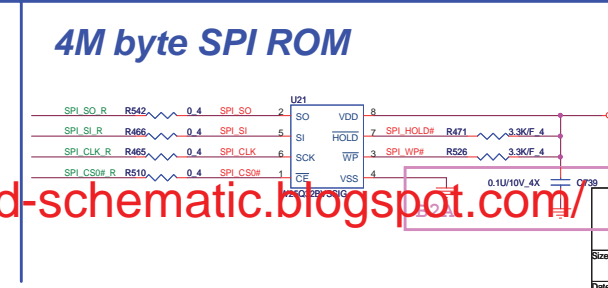
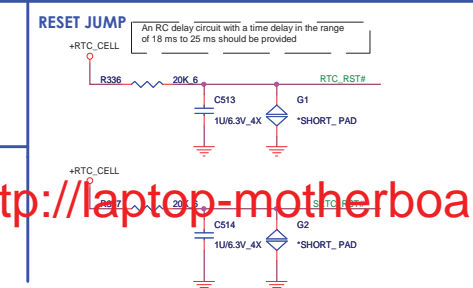
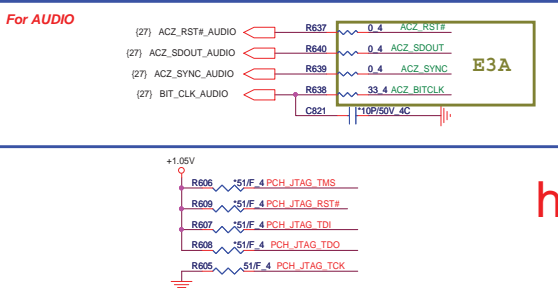
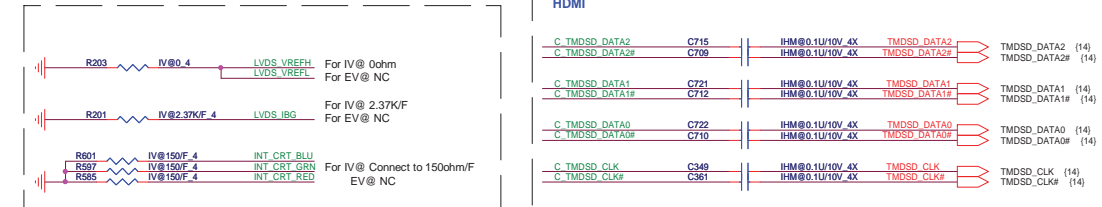
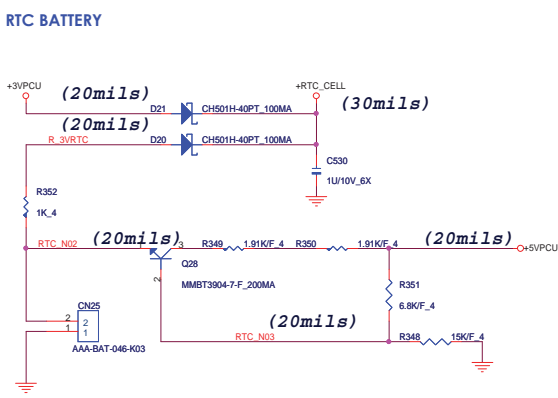
IBEX PEAK-M (HDA,JTAG,SATA)



IBEX PEAK-M (LVDS,DDI)



Port	Strap	How to enable Port?	How to disable Port?
LVDS	L_DDC_DATA	PU to 3.3V with 2.2k+/- 5%	NC
Port B	SDVO_CTRLRDATA	PU to 3.3V with 2.2k+/- 5%	NC
Port C	DDPC_CTRLRDATA	PU to 3.3V with 2.2k+/- 5%	NC
Port D	DDPD_CTRLRDATA	PU to 3.3V with 2.2k+/- 5%	NC
eDP	CFG[4]	PD to GND directly	NC



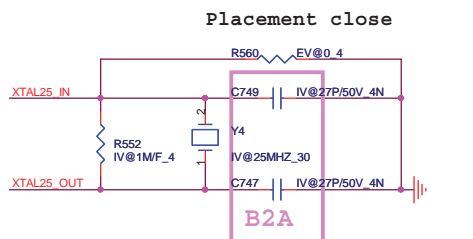
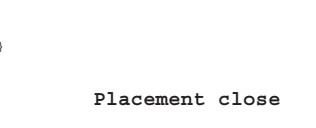
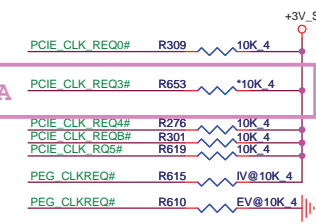
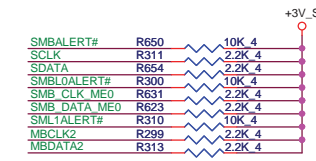
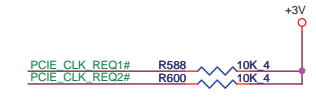
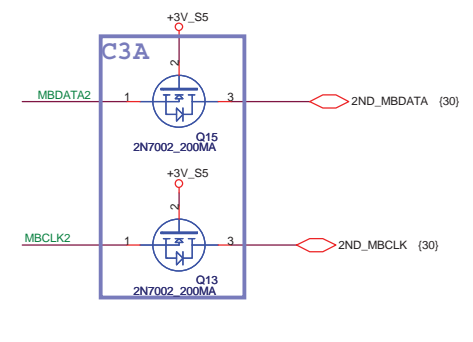
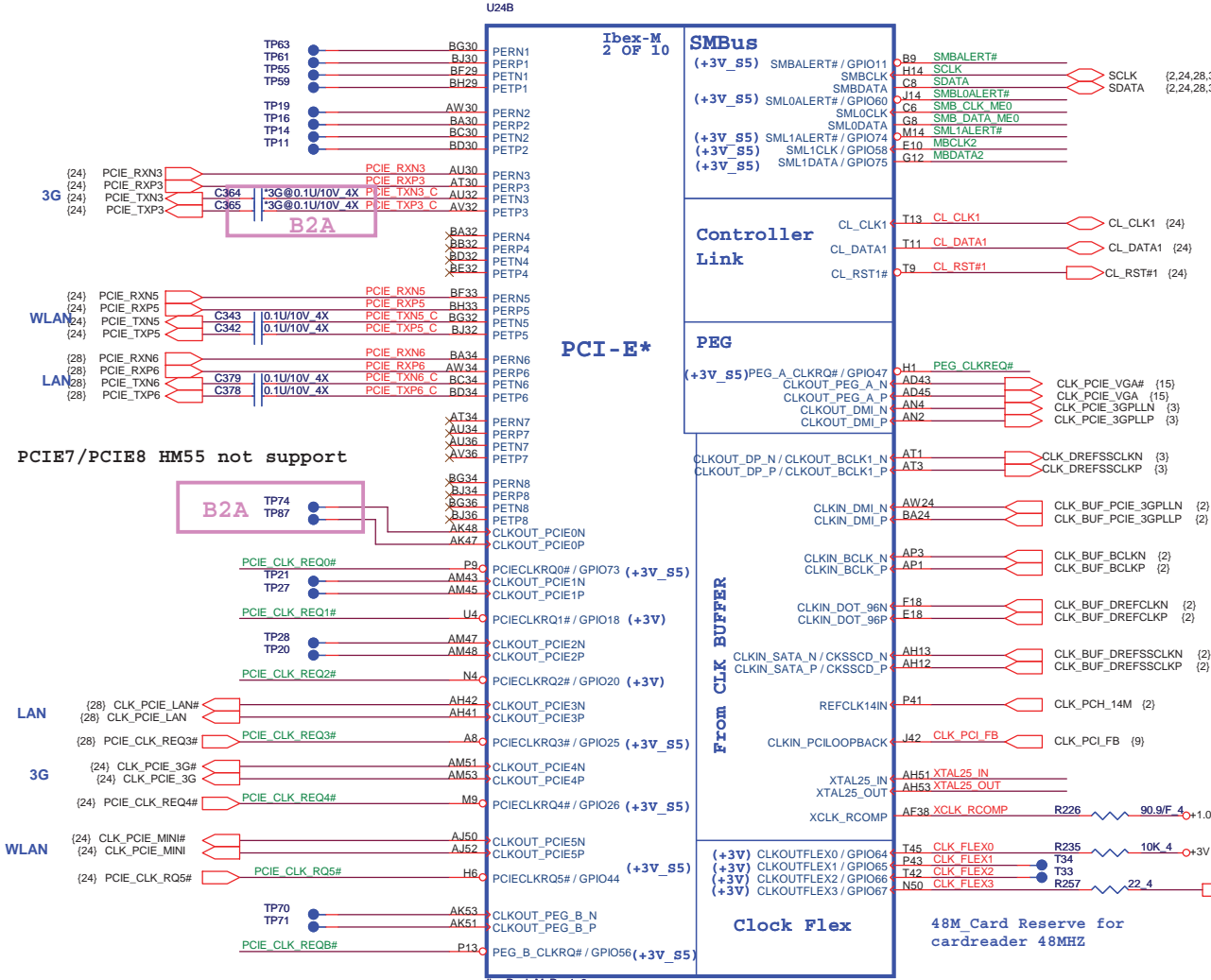
	PCH	2MB	4MB	8MB
PM55		●		
HM55			●	
HM57/PM57			●	●
QM57/QS57				●

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IBEX PEAK-M (GND)

AV7	VSS[159]	VSS[269]	H49
B11	VSS[160]	VSS[260]	H5
B15	VSS[161]	VSS[261]	J24
B19	VSS[162]	VSS[262]	K11
B23	VSS[163]	VSS[263]	K43
B31	VSS[164]	VSS[264]	K47
B35	VSS[165]	VSS[265]	K7
B39	VSS[166]	VSS[266]	L14
B43	VSS[167]	VSS[267]	L18
B47	VSS[168]	VSS[268]	L2
B7	VSS[169]	VSS[269]	L22
BG12	VSS[170]	VSS[270]	L32
BH12	VSS[171]	VSS[271]	L36
BH16	VSS[172]	VSS[272]	L40
BB20	VSS[173]	VSS[273]	L52
BB24	VSS[174]	VSS[274]	M12
BB30	VSS[175]	VSS[275]	M16
BB34	VSS[176]	VSS[276]	M20
BB38	VSS[177]	VSS[277]	M34
BB42	VSS[178]	VSS[278]	M38
BB49	VSS[179]	VSS[279]	M42
BB5	VSS[180]	VSS[280]	M46
BC10	VSS[181]	VSS[281]	M49
BC14	VSS[182]	VSS[282]	M5
BC18	VSS[183]	VSS[283]	M8
BC2	VSS[184]	VSS[284]	N24
BC22	VSS[185]	VSS[285]	P11
BC32	VSS[186]	VSS[286]	AD15
BC36	VSS[187]	VSS[287]	P22
BC40	VSS[188]	VSS[288]	P30
BC44	VSS[189]	VSS[289]	P32
BC52	VSS[190]	VSS[290]	P34
BH9	VSS[191]	VSS[291]	P42
BD48	VSS[192]	VSS[292]	P45
BD49	VSS[193]	VSS[293]	P47
BD5	VSS[194]	VSS[294]	R2
BE12	VSS[195]	VSS[295]	R52
BE16	VSS[196]	VSS[296]	T12
BE20	VSS[197]	VSS[297]	T41
BE24	VSS[198]	VSS[298]	T45
BE30	VSS[199]	VSS[299]	T49
BE34	VSS[200]	VSS[300]	T5
BE38	VSS[201]	VSS[301]	T8
BE42	VSS[202]	VSS[302]	U30
BE46	VSS[203]	VSS[303]	U31
BE48	VSS[204]	VSS[304]	U32
BE50	VSS[205]	VSS[305]	U34
BE6	VSS[206]	VSS[306]	U38
BE8	VSS[207]	VSS[307]	U42
BEF3	VSS[208]	VSS[308]	V11
BEF9	VSS[209]	VSS[309]	V16
BF51	VSS[210]	VSS[310]	V19
BF58	VSS[211]	VSS[311]	V22
BG4	VSS[212]	VSS[312]	V30
BG50	VSS[213]	VSS[313]	V31
BH11	VSS[214]	VSS[314]	V32
BH15	VSS[215]	VSS[315]	V34
BH19	VSS[216]	VSS[316]	V35
BH23	VSS[217]	VSS[317]	V38
BH31	VSS[218]	VSS[318]	V43
BH35	VSS[219]	VSS[319]	V46
BH39	VSS[220]	VSS[320]	V47
BH43	VSS[221]	VSS[321]	V49
BH47	VSS[222]	VSS[322]	V5
BH7	VSS[223]	VSS[323]	V7
C12	VSS[224]	VSS[324]	V8
C50	VSS[225]	VSS[325]	V23
D51	VSS[226]	VSS[326]	V28
E12	VSS[227]	VSS[327]	V52
E16	VSS[228]	VSS[328]	Y11
E20	VSS[229]	VSS[329]	Y12
E24	VSS[230]	VSS[330]	Y15
E30	VSS[231]	VSS[331]	Y19
E34	VSS[232]	VSS[332]	Y23
E38	VSS[233]	VSS[333]	Y28
E42	VSS[234]	VSS[334]	Y30
E46	VSS[235]	VSS[335]	Y31
E48	VSS[236]	VSS[336]	Y32
E6	VSS[237]	VSS[337]	Y38
E8	VSS[238]	VSS[338]	Y43
F49	VSS[239]	VSS[339]	Y46
F5	VSS[240]	VSS[340]	P49
G10	VSS[241]	VSS[341]	Y5
G14	VSS[242]	VSS[342]	Y6
G18	VSS[243]	VSS[343]	Y8
G2	VSS[244]	VSS[344]	P24
G22	VSS[245]	VSS[345]	T43
G32	VSS[246]	VSS[346]	AD51
G36	VSS[247]	VSS[347]	AT8
G40	VSS[248]	VSS[348]	AD47
G44	VSS[249]	VSS[349]	Y47
G52	VSS[250]	VSS[350]	AT12
AF39	VSS[251]	VSS[351]	AM6
H16	VSS[252]	VSS[352]	AT13
H20	VSS[253]	VSS[353]	AM5
H30	VSS[254]	VSS[354]	AK45
H34	VSS[255]	VSS[355]	AK39
H38	VSS[256]	VSS[356]	AV14
H42	VSS[257]	VSS[356]	
H42	VSS[258]	VSS[356]	

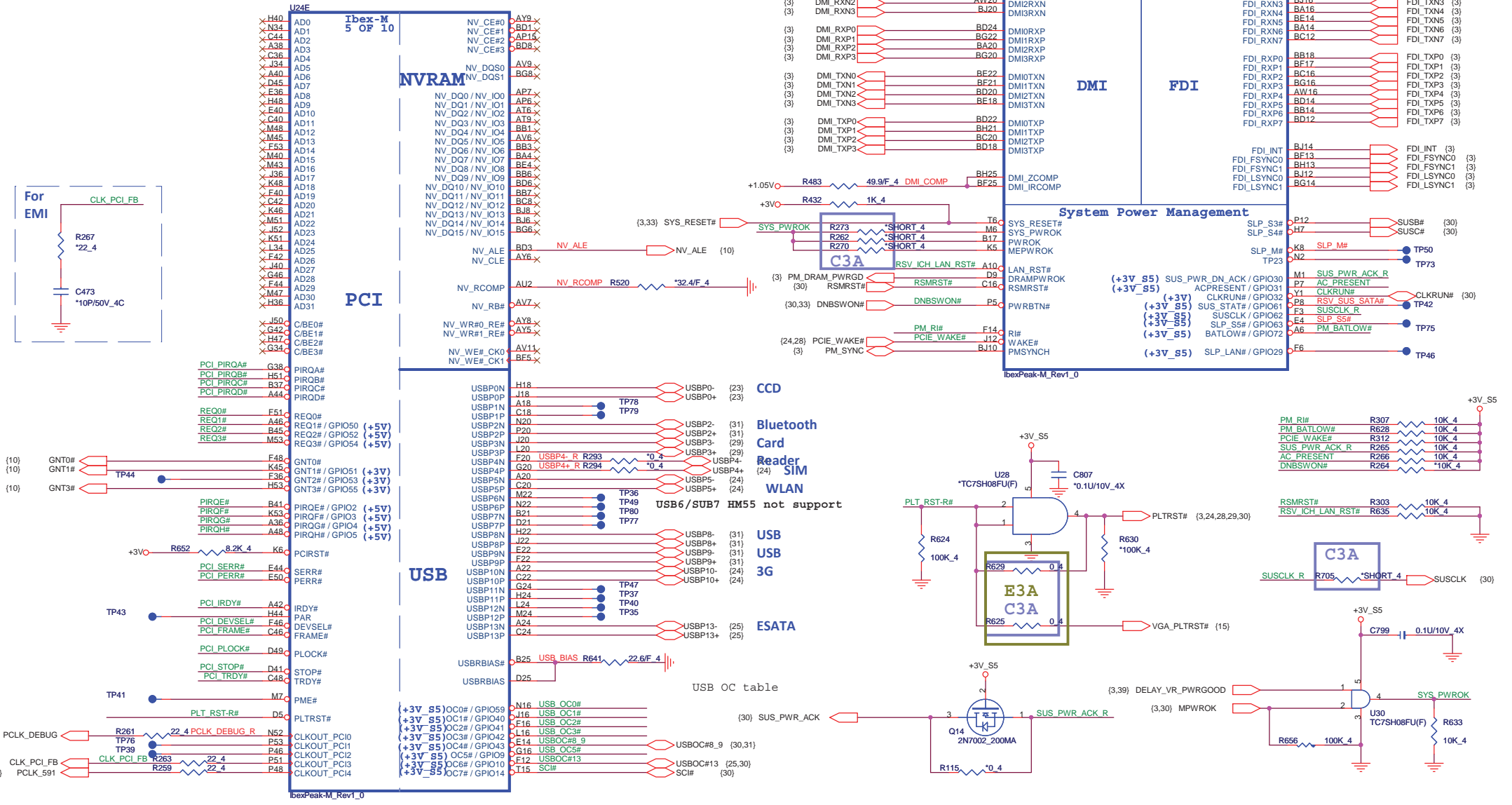
IBEX PEAK-M (PCI-E,SMBUS,CLK)



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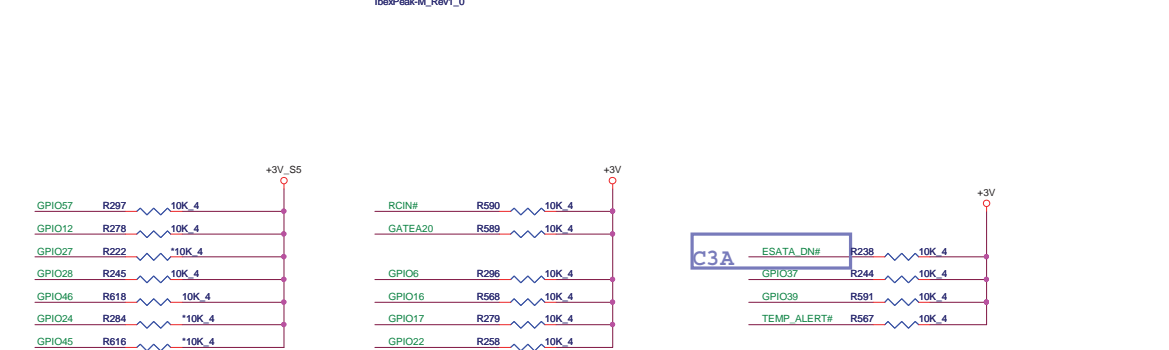
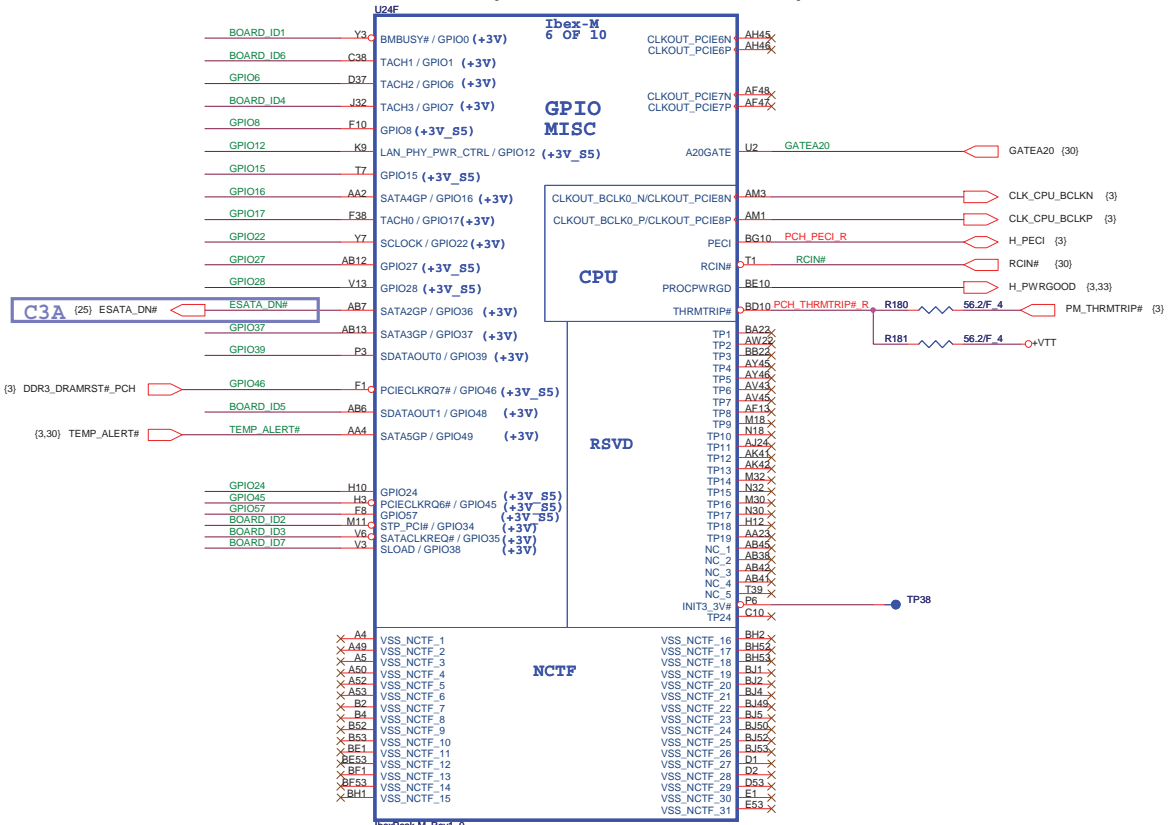
IBEX PEAK-M (DMI,FDI,GPIO)

IBEX PEAK-M (PCI,USB,NVRAM)



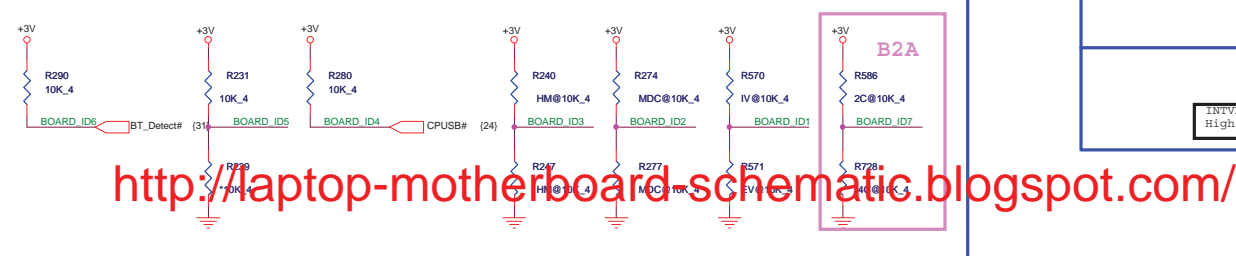
<http://laptop-motherboard.schematic.blogspot.com/>

IBEX PEAK-M (GPIO,VSS_NCTF,RSVD)

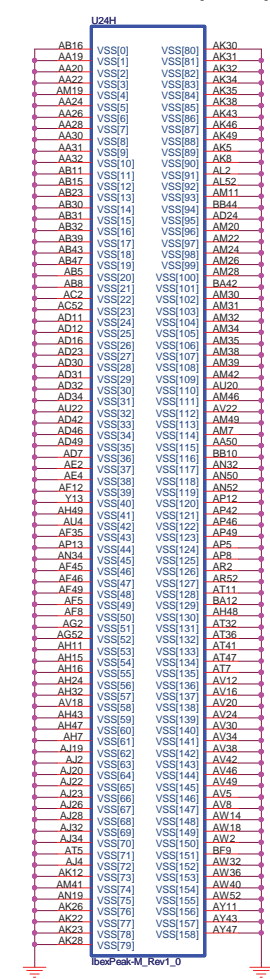


BOARD ID SETTING

Board ID	ID1	ID2	ID3	ID4	ID5	ID6	ID7
UMA SKU VGA SKU	H	L					
W/ MDC W/O MDC		H	L				
W/ HDMI W/O HDMI			H	L			
W/O 3G W/ 3G				H	L		
15" 14"					H	L	
W/O BT W/ BT						H	L
2 Core 4 Core							H



IBEX PEAK-M (GND)

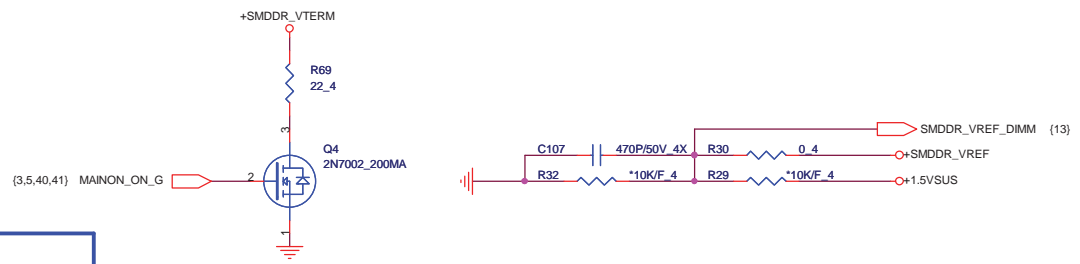
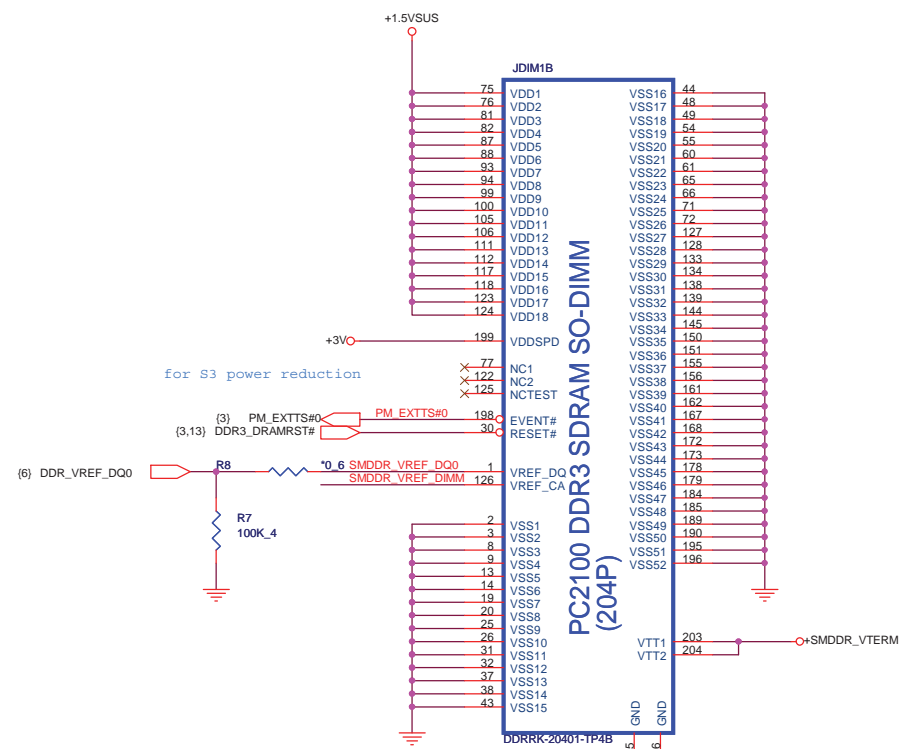
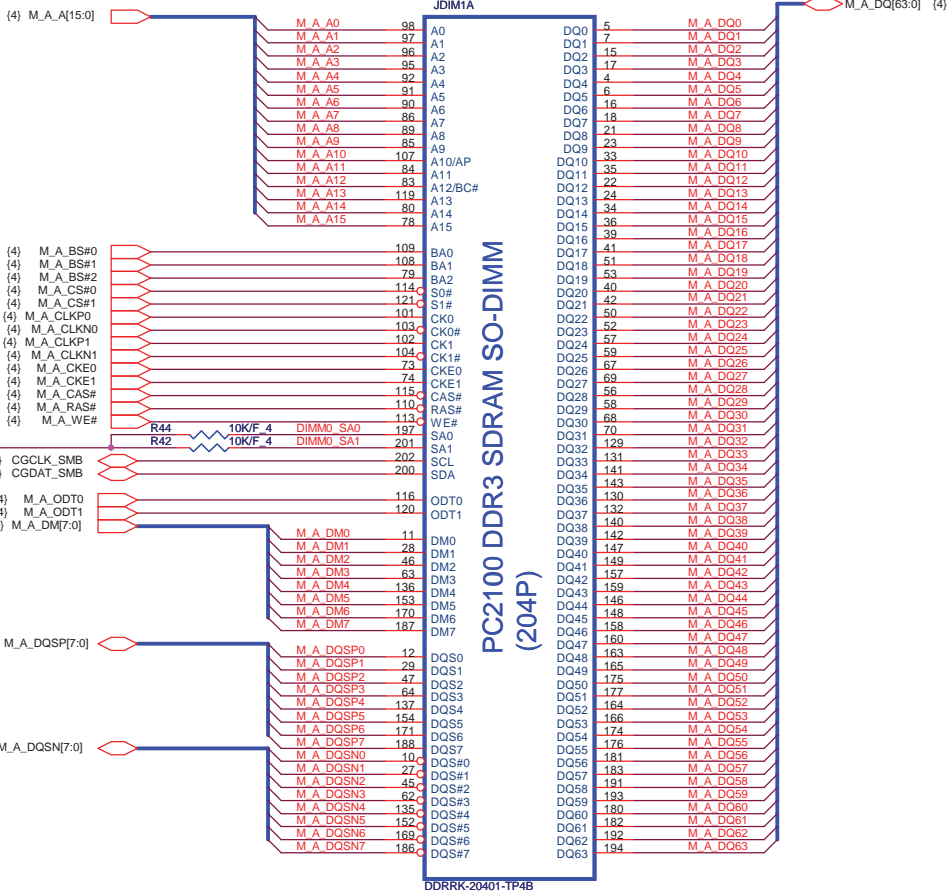


PCH Strap Pin Configuration Table

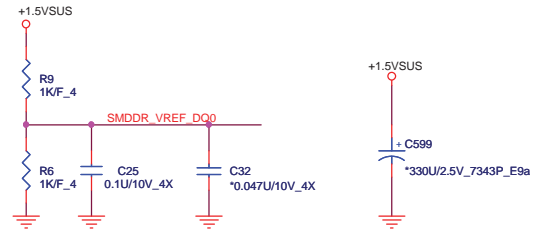
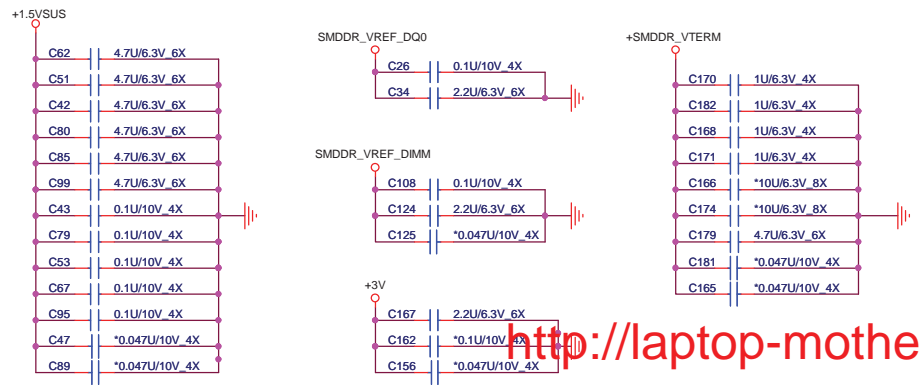
SPKR	(7,27) PCBEEP	R592	10K_4	+3V	Reboot option at power-up 0 = Default Mode (Internal weak Pull-down) 1 = No Reboot Mode with TCO Disabled															
GNT3#/ GPIO55	(9) GNT3#	R622	10K_4		Top-Block Swap Override 0 = Top Block Swap Mode 1 = Default Mode (Internal pull-up)															
HDA_DOCK_EN #GPIO33	(7,30) PCH_GPIO33	R282	1K_4	JP1 2	Flash Descriptor Security Override 0 = Flash Descriptor Security will be overridden 1 = Security measure defined in the Flash Descriptor will be enabled.															
GNT0#, GNT1#	(9) GNT0# (9) GNT1#	R272 R621	10K_4 10K_4		Boot BIOS Strap															
<table border="1"> <thead> <tr> <th>PCI_GNT0#</th> <th>GNT#1</th> <th>Boot BIOS Location</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>LPC</td> </tr> <tr> <td>0</td> <td>1</td> <td>PCI</td> </tr> <tr> <td>1</td> <td>0</td> <td>Reserved (NAND)</td> </tr> <tr> <td>1</td> <td>1</td> <td>SPI</td> </tr> </tbody> </table>						PCI_GNT0#	GNT#1	Boot BIOS Location	0	0	LPC	0	1	PCI	1	0	Reserved (NAND)	1	1	SPI
PCI_GNT0#	GNT#1	Boot BIOS Location																		
0	0	LPC																		
0	1	PCI																		
1	0	Reserved (NAND)																		
1	1	SPI																		
SPI_MOSI	(7) SPI_SL_R	R504	10K_4	+3V	TPM Functionality Disable 1 = Enabled 0 = Disable															
NV_ALE	(9) NV_ALE	R496	10K_4	+1.8V	IntelR Anti-Theft Technology HDD Data Protection (Intel AT-d) Enable 1 = Enabled 0 = Disabled (Default)															
GPIO8	GPIO8	R298	10K_4	+3V_S5	Reserved This signal has a weak internal pull up. NOTE: This signal should not be pulled low															
GPIO15	GPIO15	R248	1K_4	+3V_S5	Reserved 0 = Intel ME Crypto Transport Layer Security (TLS) cipher suite with no confidentiality 1 = Intel ME Crypto Transport Layer Security (TLS) cipher suite with confidentiality															
GPIO27	GPIO27	R232	10K_4		Reserved This signal has a weak internal pull-up.															
On-Die PLL Voltage Regulator					0 = Disables the VccV/VM. Need to use on-board filter circuits for analog rails. 1 = Enables the internal VccV/VM to have a clean supply for analog rails. No need to use on-board filter circuit. This signal has a weak internal pull-up.															
	+RTC_CELL	R644	330K_6	PCH_INVRMEN	INTVRMEN - Integrated SUS 1.1V VRM Enable High - Enable Internal VRs															

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H=4



Place these Caps near So-Dimm0.



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PROJECT : BL6

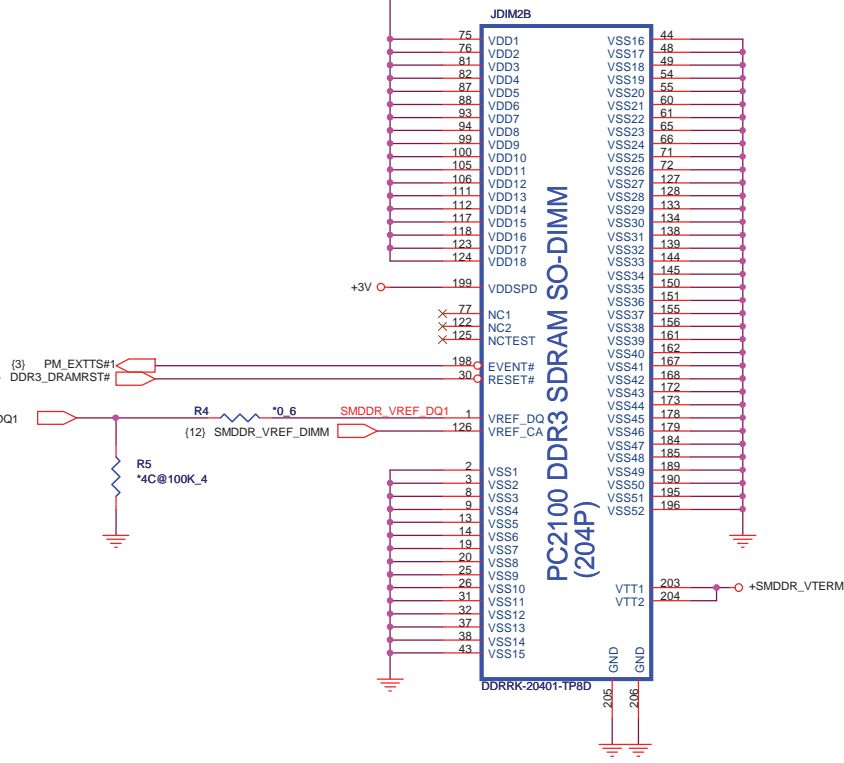
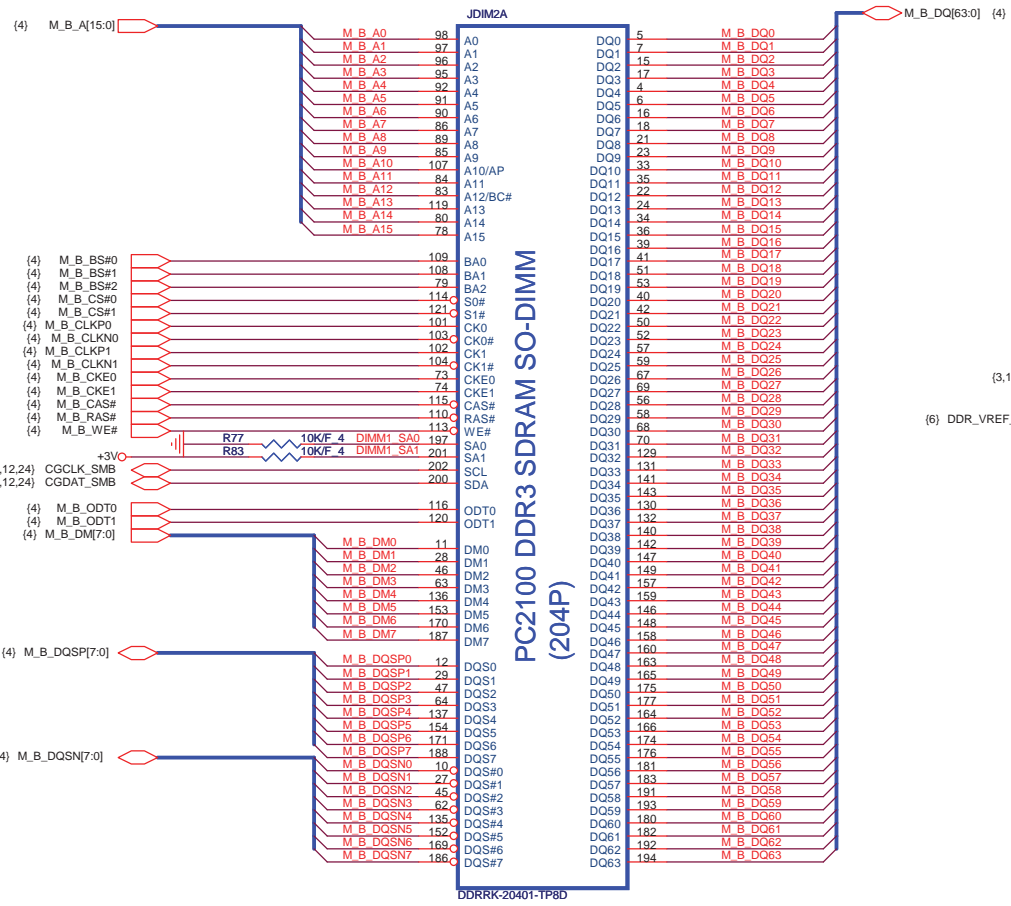
Size Document Number
DDR3 DIMM-0 Rev A1A

Date: Thursday, April 08, 2010 Sheet 12 of 45

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H=8

H=8



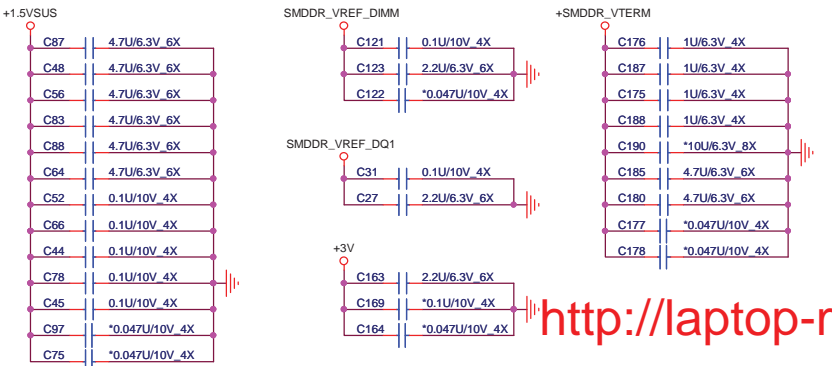
PC2100 DDR3 SDRAM SO-DIMM (204P)

PC2100 DDR3 SDRAM SO-DIMM (204P)

DDRRK-20401-1P8D

DDRRK-20401-1P8D

Place these Caps near So-Dimm1.



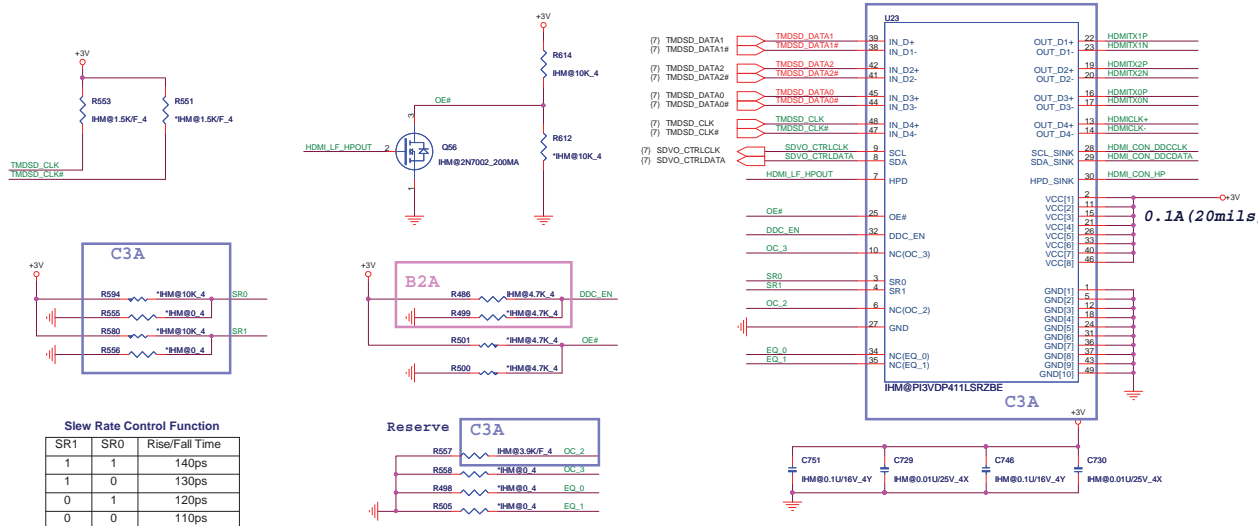
<http://laptop-motherboard-schematic.blogspot.com/>

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PROJECT : BL6

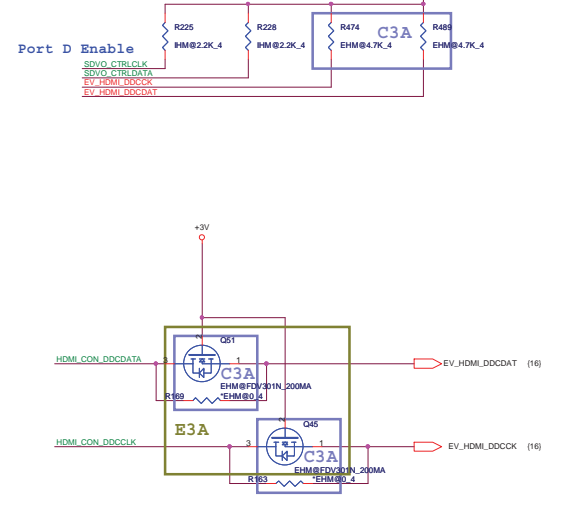
Size Document Number Rev A1A
DDR3 DIMM-1

Date: Thursday, April 08, 2010 Sheet 13 of 45

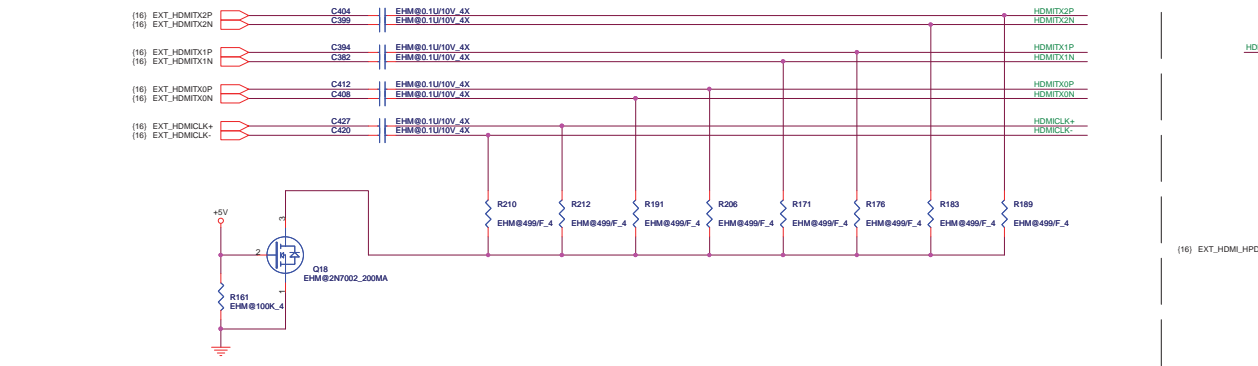
HDMI Level Shift



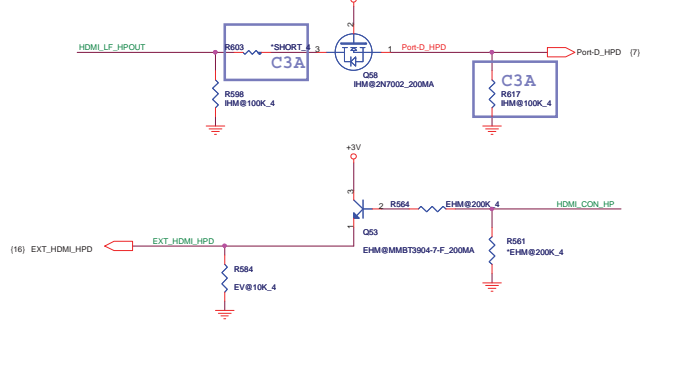
HDMI DDC



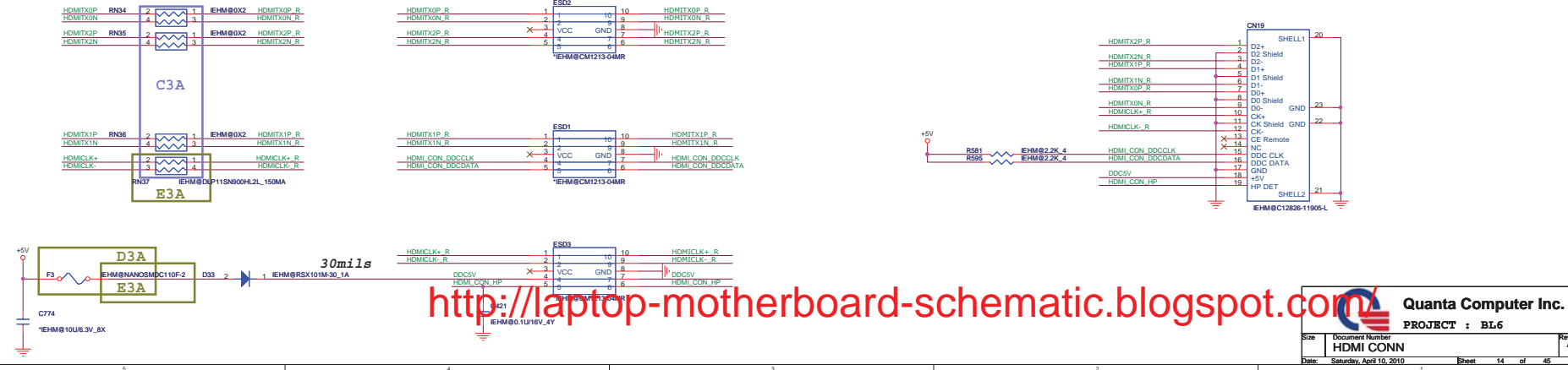
Discrete HDMI



HDMI HPD



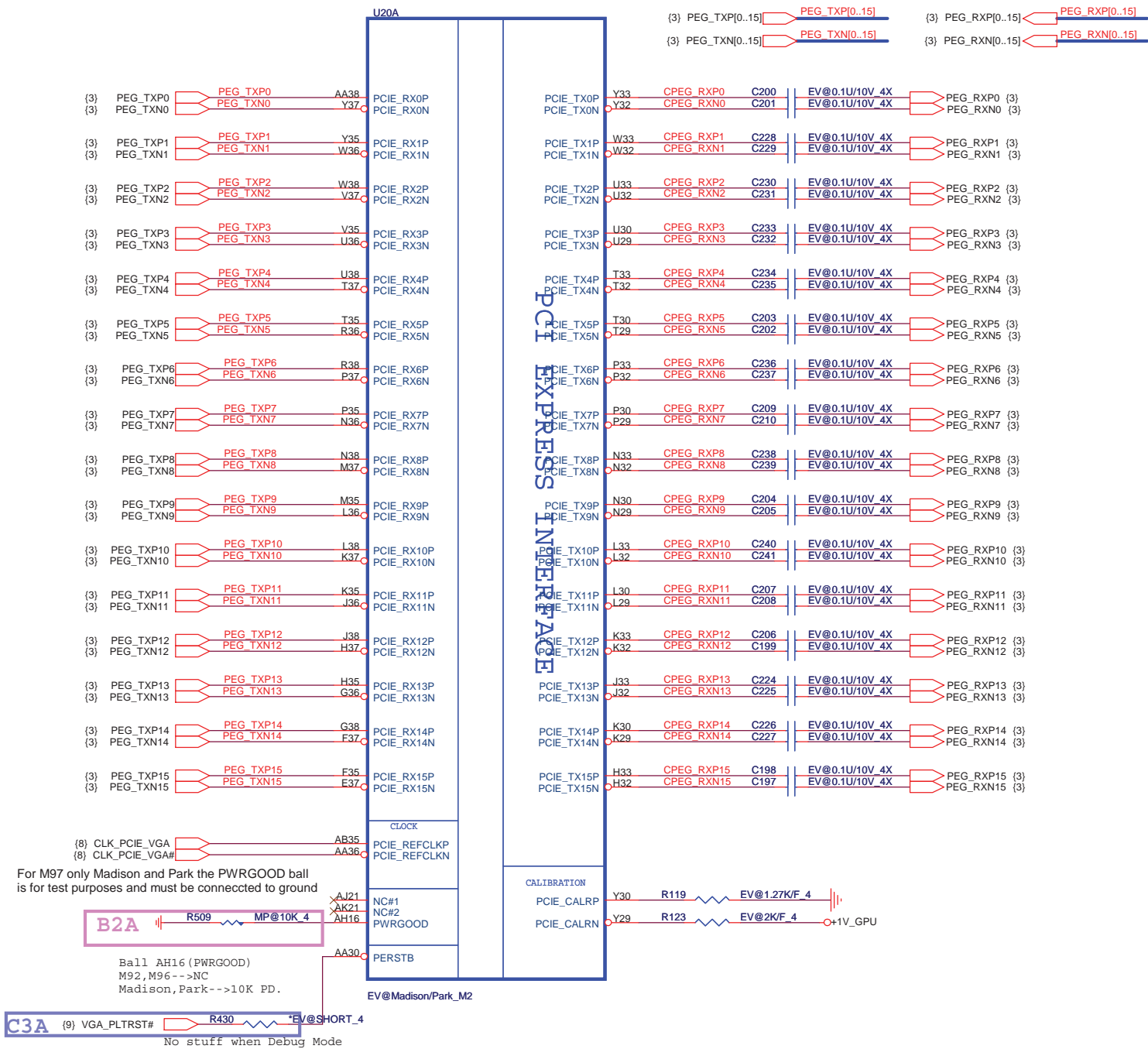
Close to HDMI CONN



<http://laptop-motherboard-schematic.blogspot.com/>

Quanta Computer Inc.
PROJECT : BL6

Size: Documents Number: HDMI CONN
Date: Saturday, April 10, 2010 Sheet 14 of 45



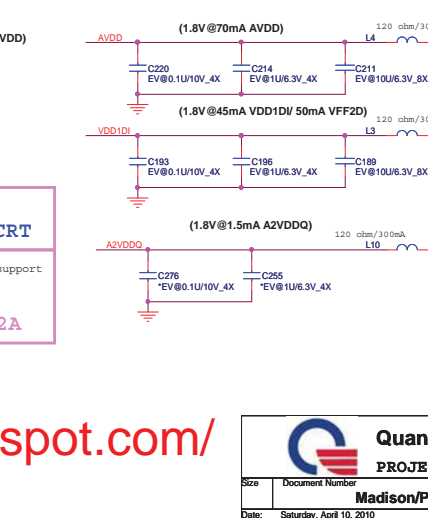
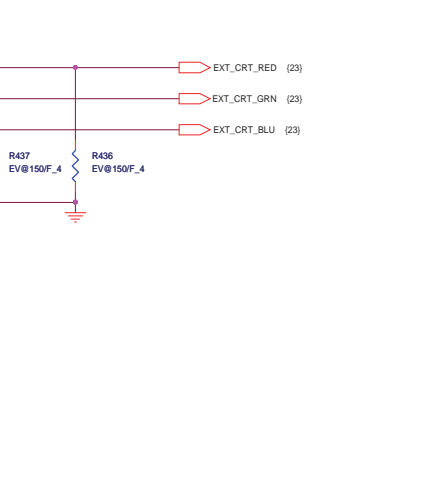
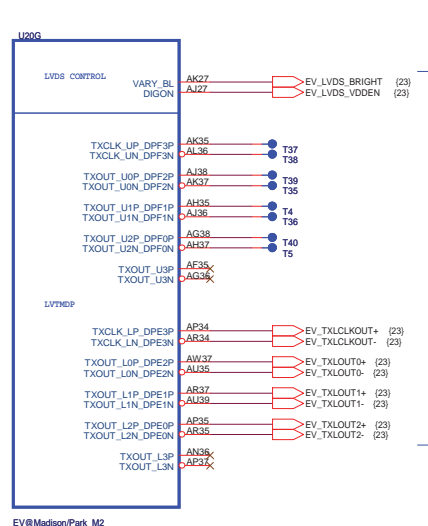
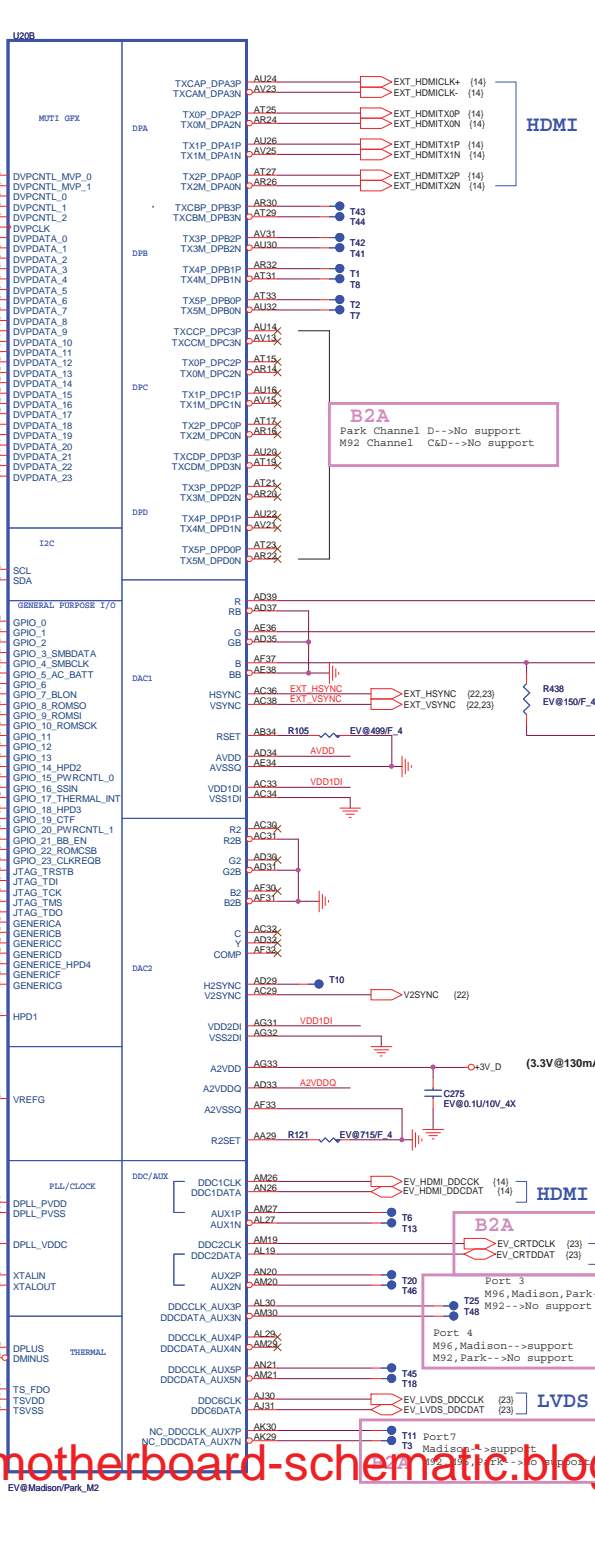
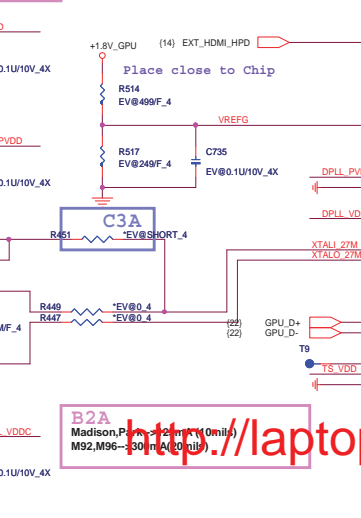
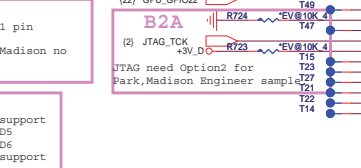
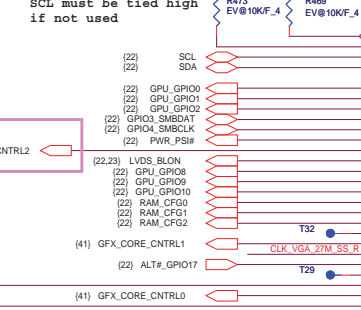
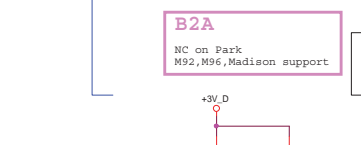
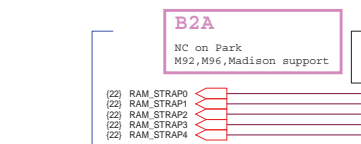
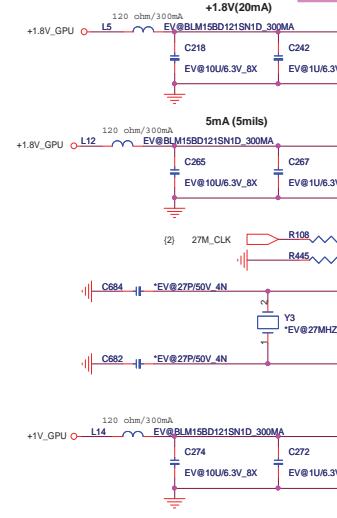
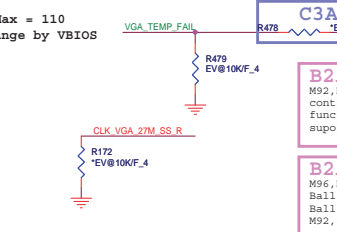
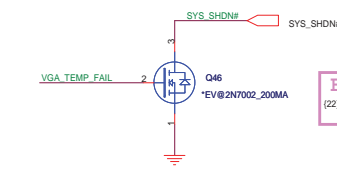
Quanta Computer Inc.
PROJECT : BL6

Size	Document Number	Rev
	Madison/Park-HOST I/F	A1A
Date:	Saturday, April 10, 2010	Sheet 15 of 45

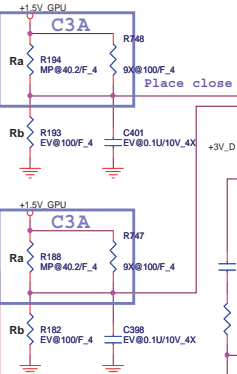
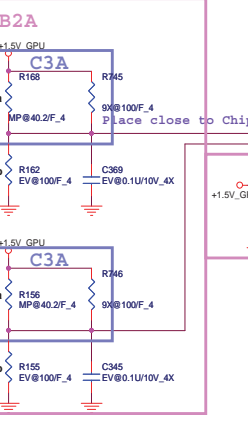
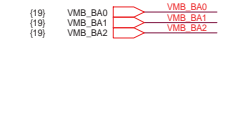
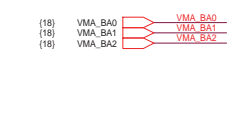
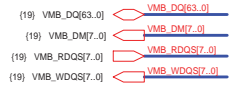


JTAG SIGNAL STUFF OPTION FOR OPTION2

SIGNALS	NORMAL MODE	JTAG MODE (DEBUG)
TESTEN	"1" (PU)	"1" (PU)
GPIO24_TRSTB	"0" (PD)	"1" (PU)
GPIO26_TCK	CLK	"1" (PU)
GPIO27_TMS	"1" (PU)	"1" (PU)



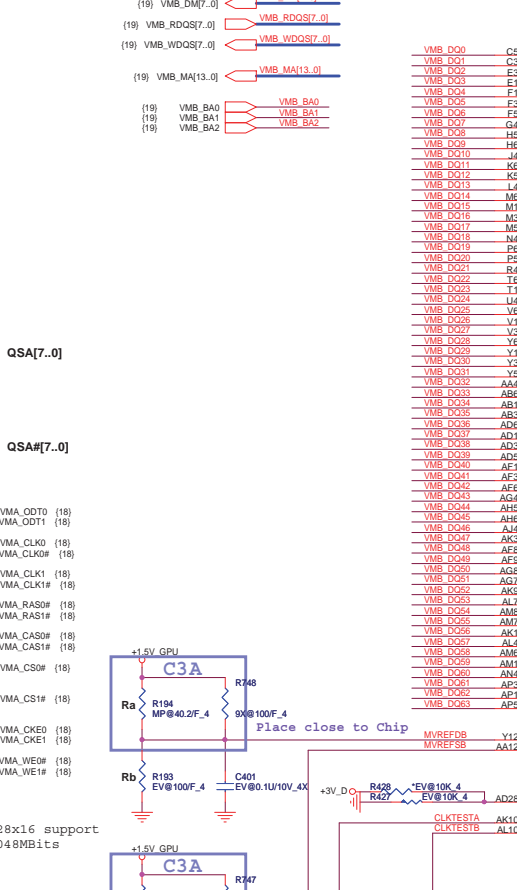
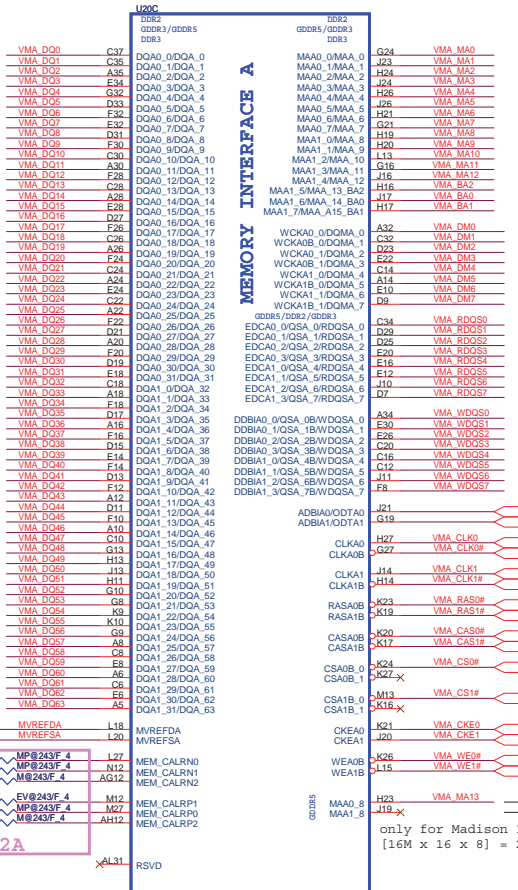
<http://laptop-motherboard-schematic.blogspot.com/>



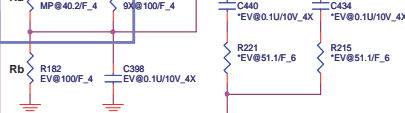
DDR3/GDDR3 Memory Stuff Option		
Madison/Park	GDDR3	DDR3
MVDDQ	1.8V/1.5	1.5V
Ra	40.2R	40.2R
Rb	100R	100R

M96/M92		
GDDR3	DDR3	
MVDDQ	1.8V/1.5	1.5V
Ra	40.2R	100R
Rb	100R	100R

C3A



Ball Name	Madison	Park	M96	M92
MVREFDA	V	V	V	V
MVREFSA	V	V	V	V
MVREFDB	V	V	V	V
MVREFSB	V	V	V	V
MEM_CALRNO	V	V		
MEM_CALRN1	V	V		
MEM_CALRN2	V	V		
MEM_CALRP0	V	V		
MEM_CALRP1	V	V	V	V
MEM_CALRP2	V	V		



TESTEN	Description
0	Internal Debug use only
1	JTAG signals enable

B2A
Ball1 H23,T8
M92, M96-M2 ->RSVD. Can
not support 128M*16
MEM#

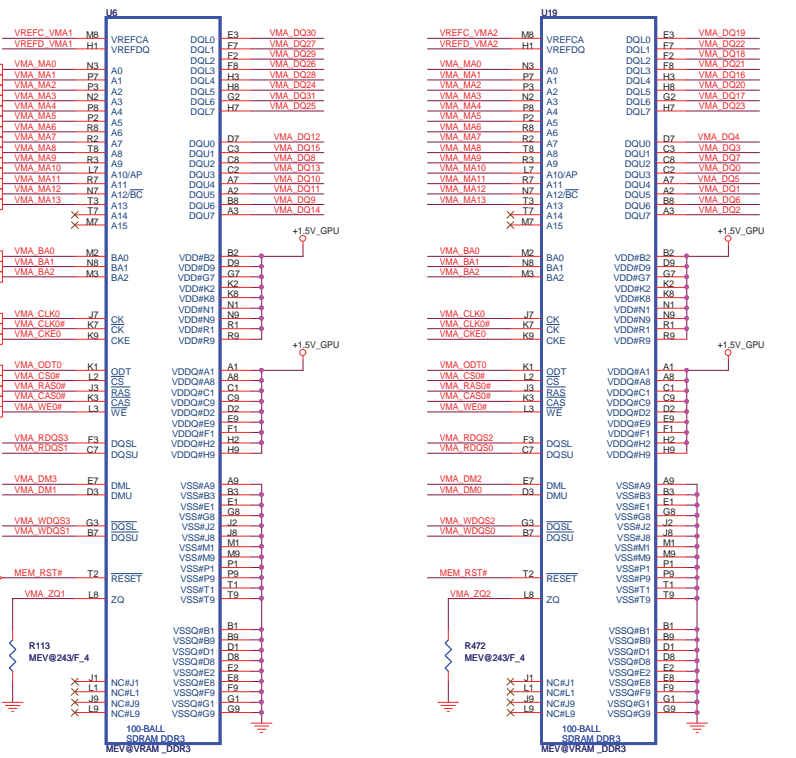
for Park/Madison 128x16 support
[16M x 16 x 8] = 2048Mbits
MEM_RST# (18,19)

<http://laptop-motherboard-schematic.blogspot.com/>

CHANNEL A: 512MB DDR3 (64M*16*4pcs)

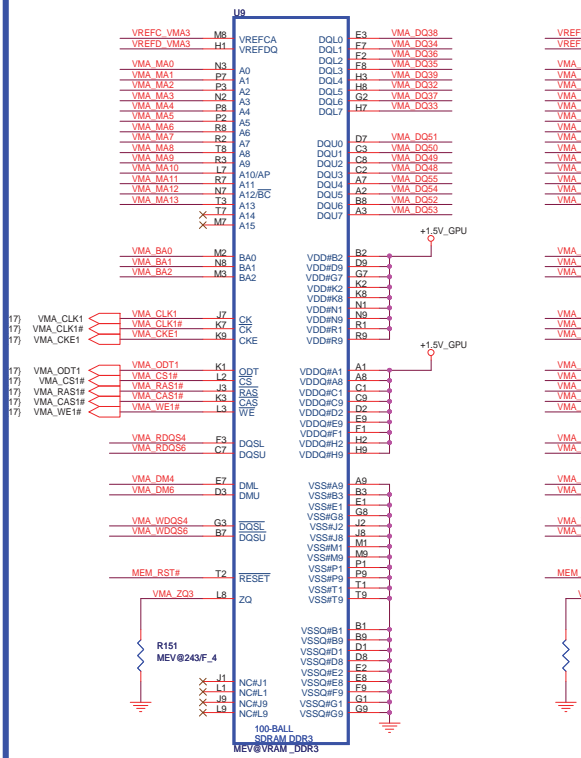
- (17) VMA_DQ[63..0] → VMA_DQ[63..0]
- (17) VMA_DM[7..0] → VMA_DM[7..0]
- (17) VMA_RDQS[7..0] → VMA_RDQS[7..0]
- (17) VMA_WDQS[7..0] → VMA_WDQS[7..0]
- (17) VMA_MA[13..0] → VMA_MA[13..0]

QSA[7..0]
QSA#[7..0]



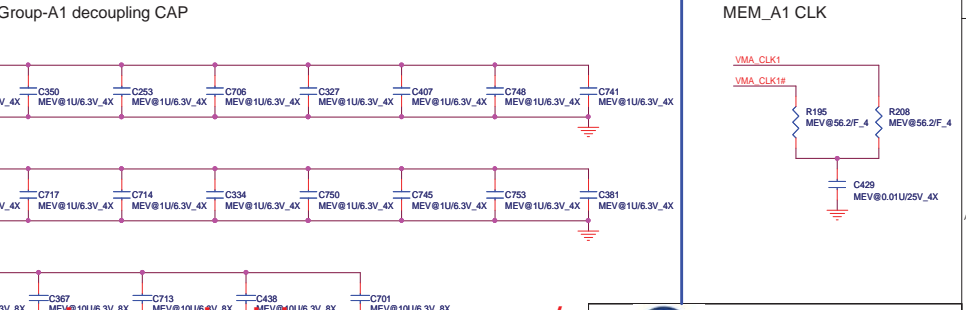
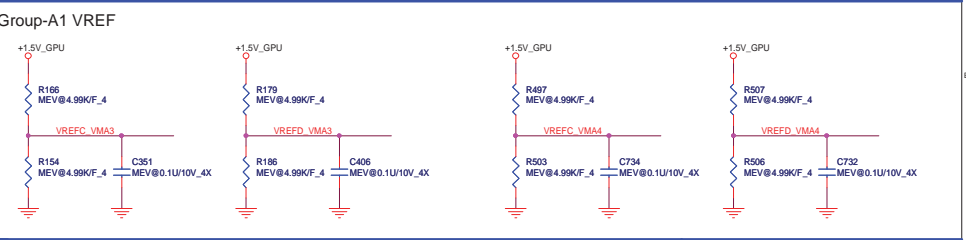
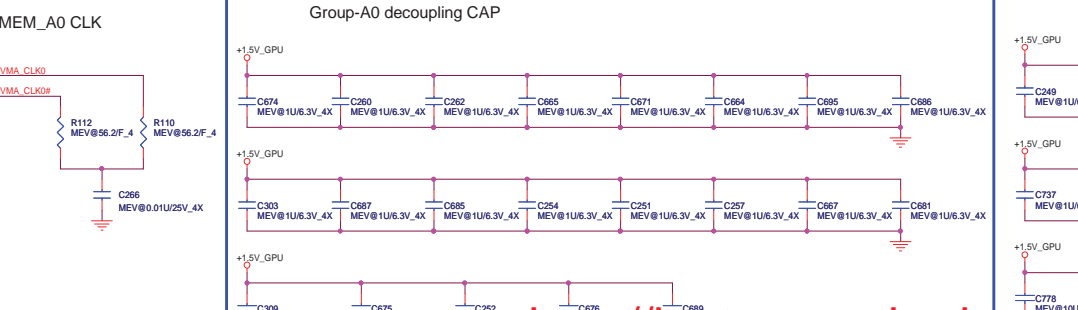
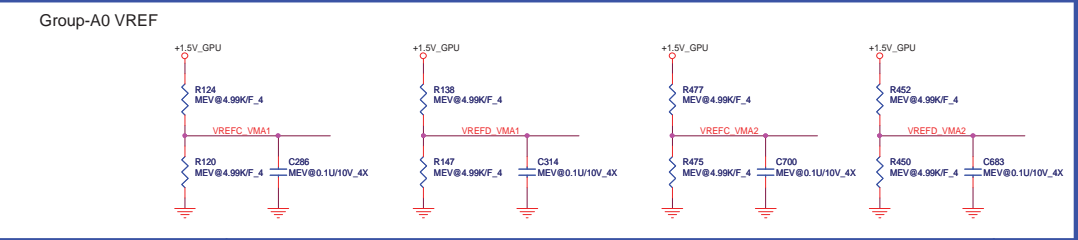
TOP Left

BOT Left

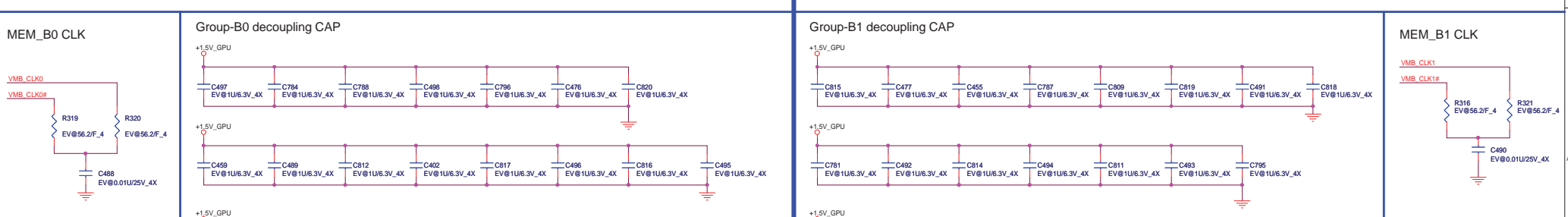
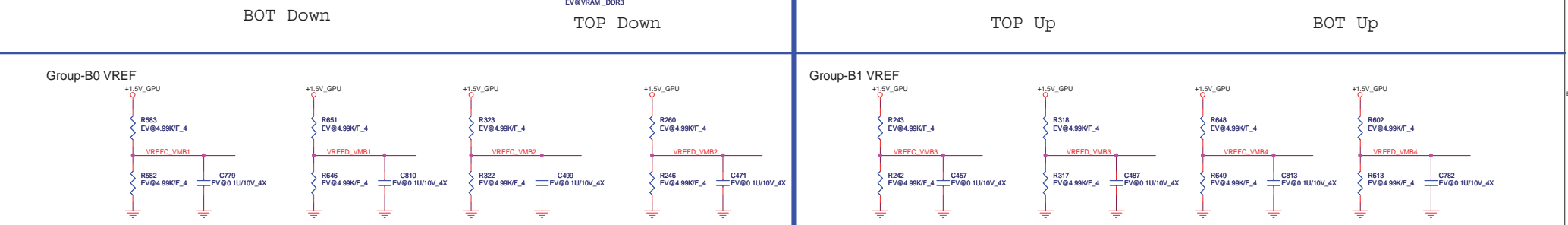
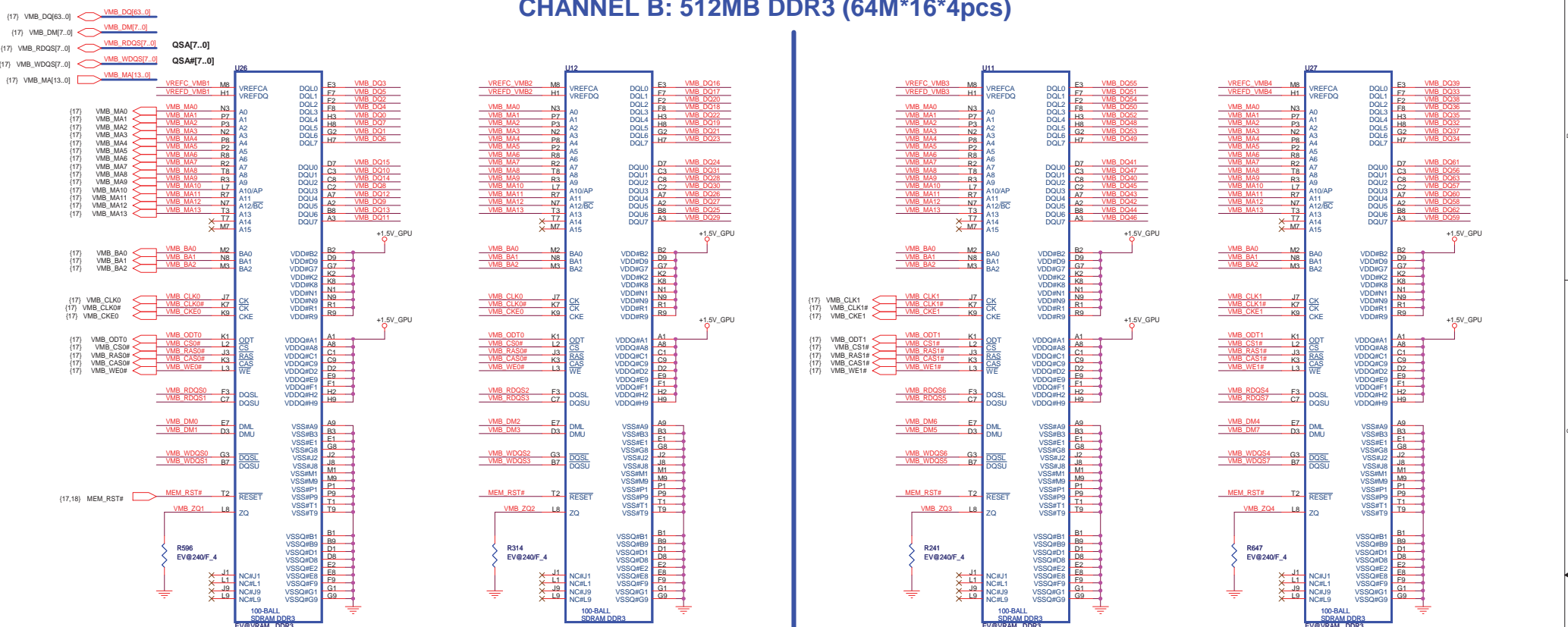


BOT Right

TOP Right



CHANNEL B: 512MB DDR3 (64M*16*4pcs)



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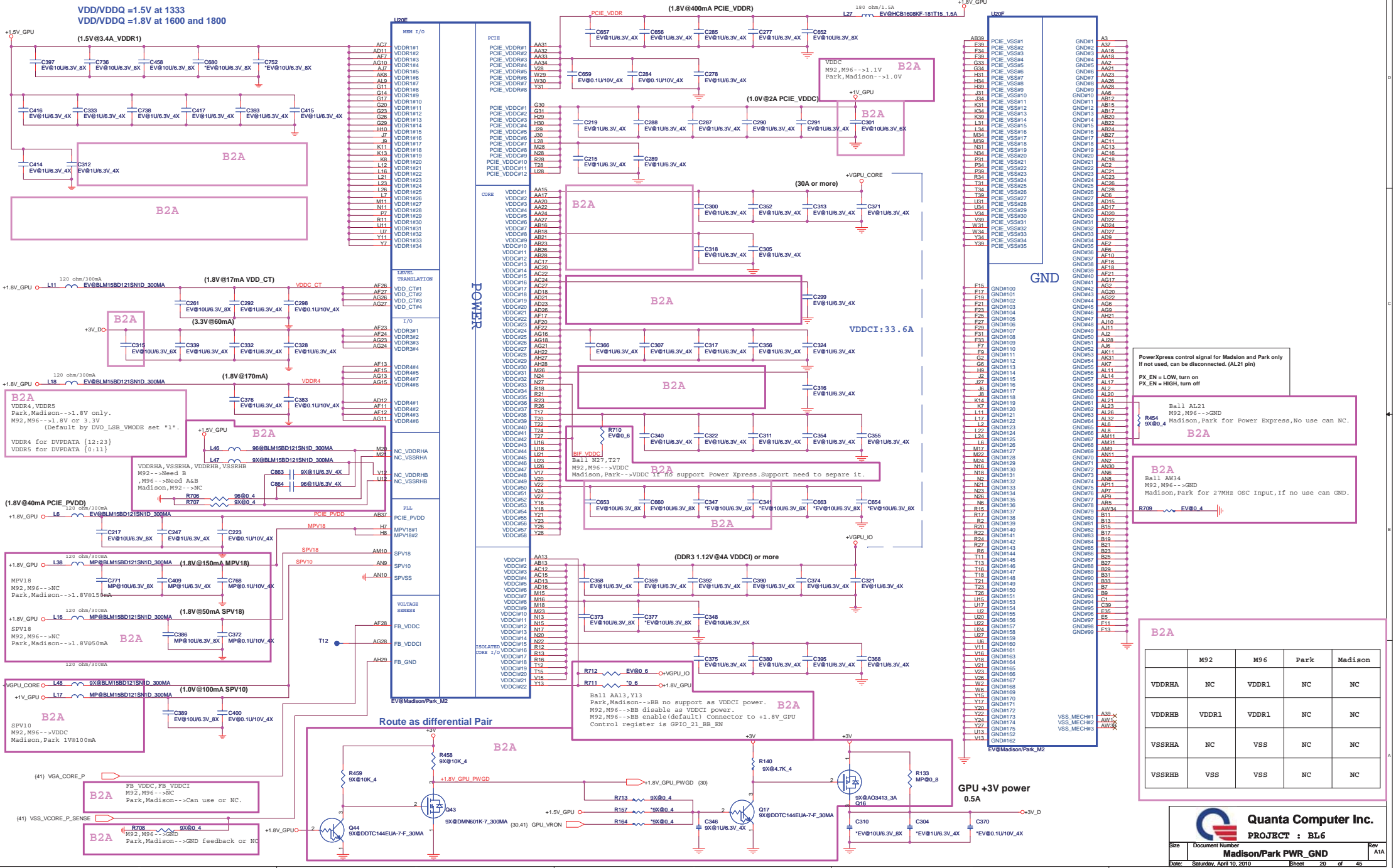
Quanta Computer Inc.

PROJECT : BL6

Size: Document Number
VRAM_B: DDR3-64M*16*4PCS Rev: A1A

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For Madison and Park VDDCI and VDDC can share one common regulator



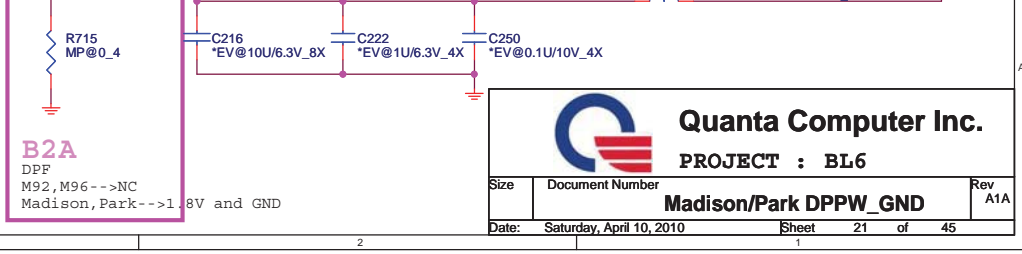
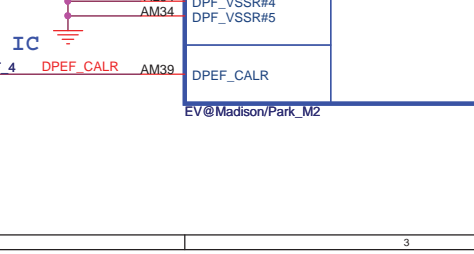
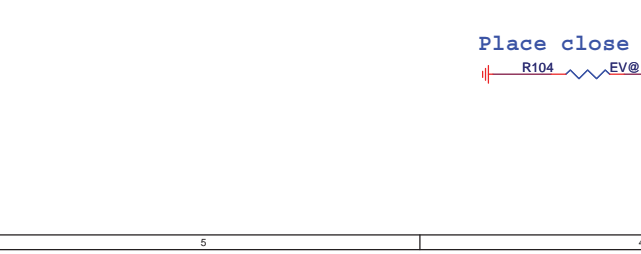
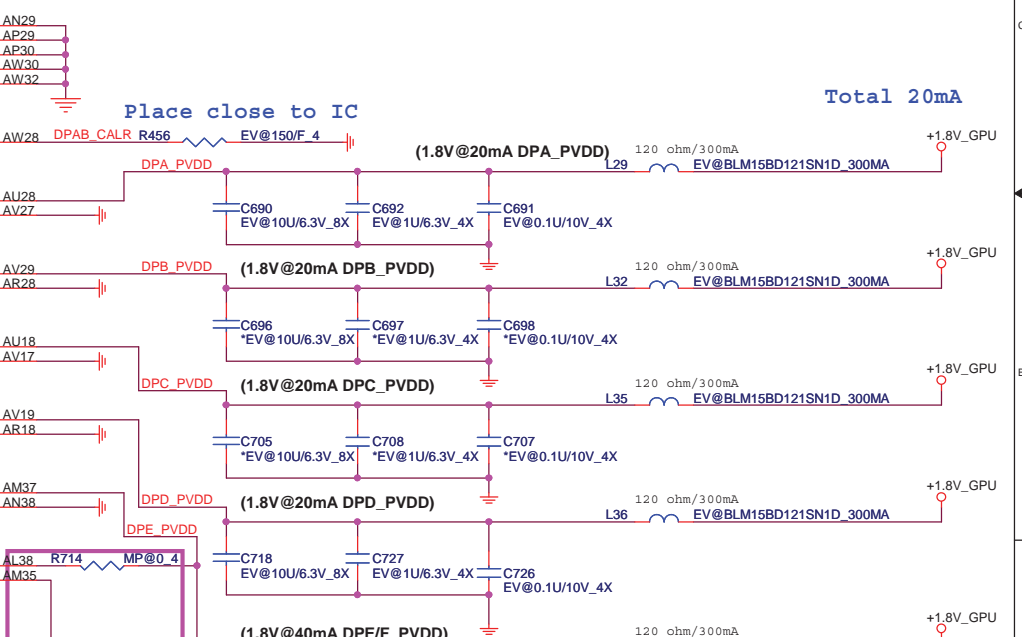
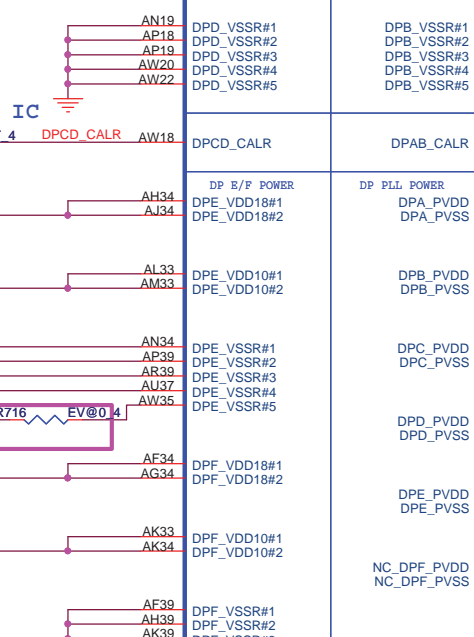
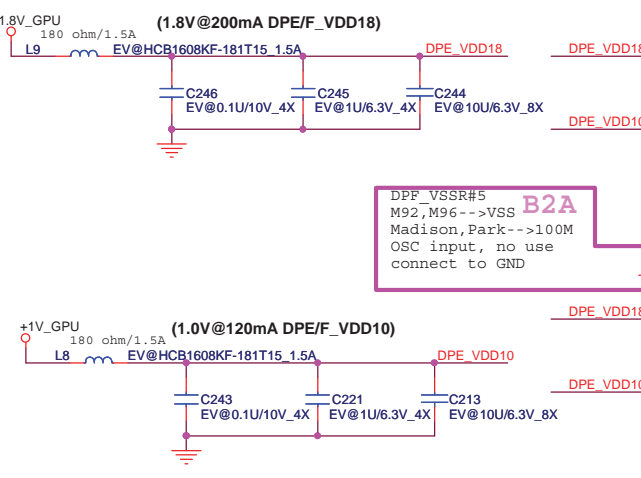
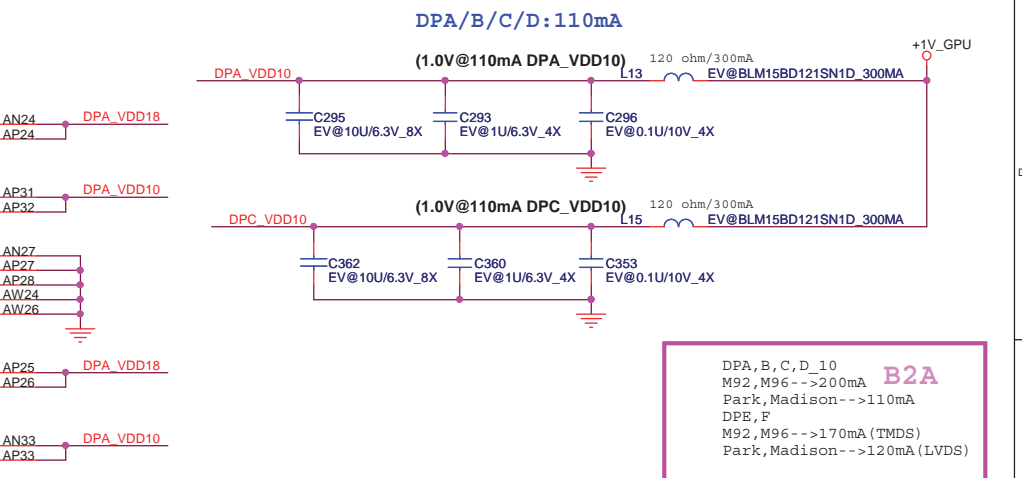
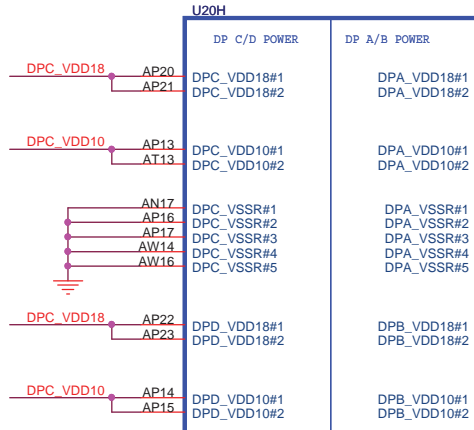
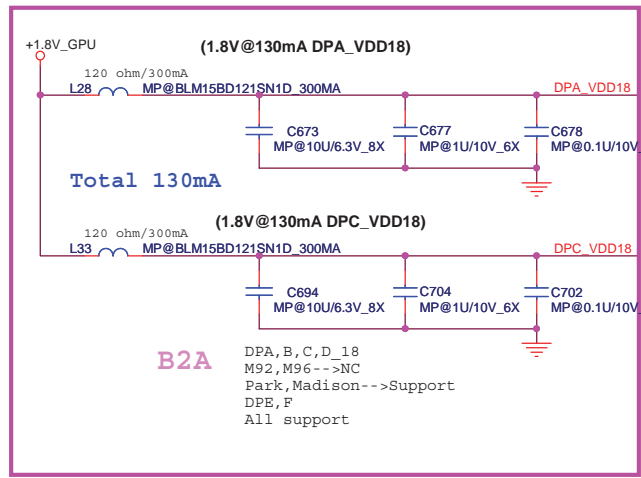
PowerXpress control signal for Madison and Park only
If not used, can be disconnected. (AL21 pin)
PX_EN = LOW, turn on
PX_EN = HIGH, turn off

Ball A121
M92, M96 -->GND
R454 9X@0.4

Ball A134
M92, M96 -->GND
Madison, Park for 27MHz OSC Input, if no use can GND.
R709 EV@0.4

	M92	M96	Park	Madison
VDDRH	NC	VDDR1	NC	NC
VDDRB	VDDR1	VDDR1	NC	NC
VSSRH	NC	VSS	NC	NC
VSSRB	VSS	VSS	NC	NC

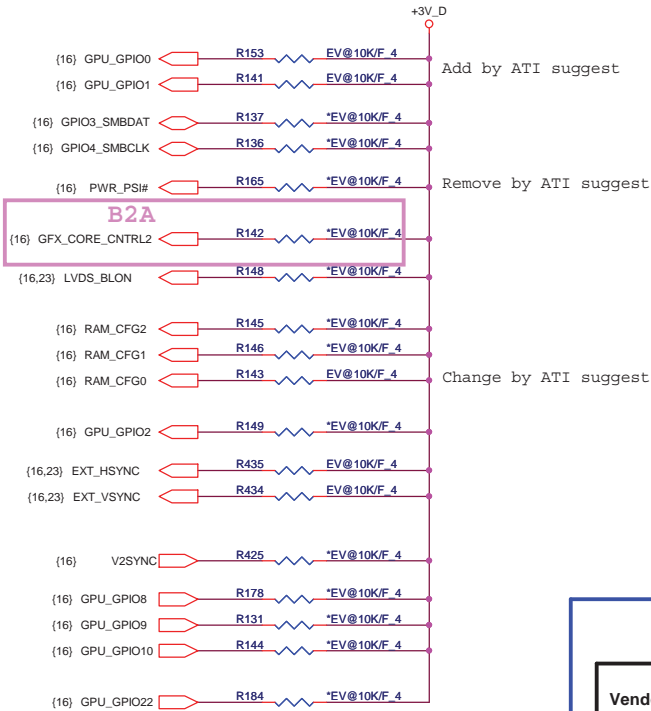
Quanta Computer Inc.
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Size Document Number
Madison/Park PWR_GND
Rev A1A
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Quanta Computer Inc.
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	Madison/Park DPPW_GND	A1A
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PIN STRAPS



Memory Aperture size	
RAM_CFG[2:0]	Size
000	128MB
001	256MB
010	64MB
011	32MB

ROM Table		
EXT_HSYNC	EXT_VSYNC	Discription
0	0	No Audio
0	1	Any one by detect
1	0	DP only
1	1	Both DP & HDMI

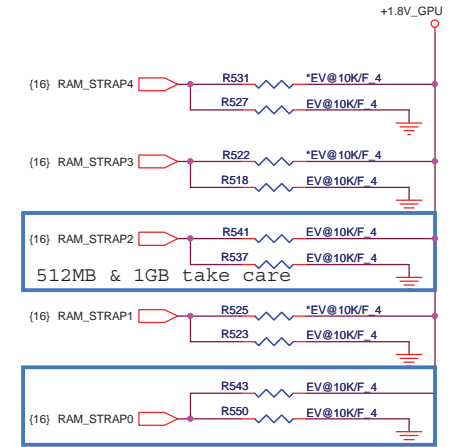
CONFIGURATION STRAPS

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

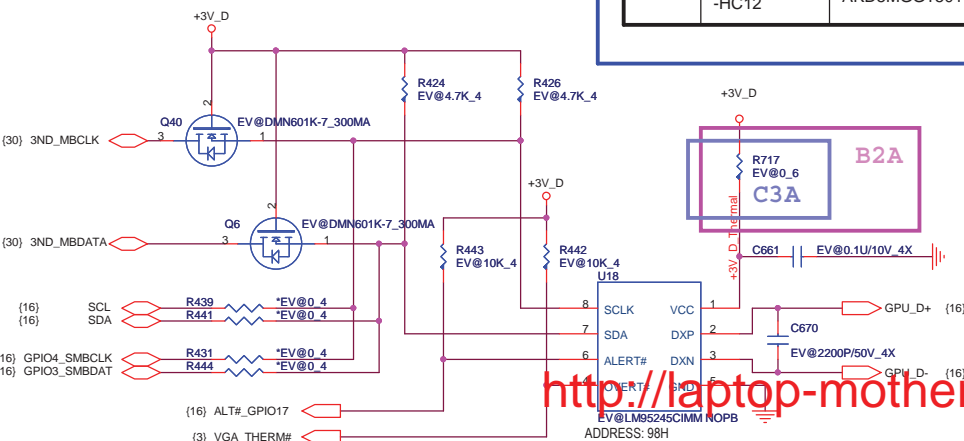
STRAPS	PIN	DESCRIPTION OF DEFAULT SETTINGS	DEFAULT	REMARK
TX_PWRS_ENB	GPIO0	0 = 50% TX OUTPUT SWING 1 = FULL TX OUTPUT SWING	0	
TX_DEEMPH_EN	GPIO1	PCIe TRANSMITTER DE-EMPHASIS ENABLED 0 = TX DE-EMPHASIS DISABLED 1 = TX DE-EMPHASIS ENABLED	0	
BIOS_ROM_EN	GPIO_22_ROMCSB	ENABLE EXTERNAL BIOS ROM (Only for GDDR5) 0 = DISABLE 1 = ENABLE	0	
ROMIDCFG(2:0)	GPIO[13:11]	SERIAL ROM TYPE OR MEMORY APERTURE SIZE SELECT NUMONYX M25P10A : 101	000	See ROM table
BIF_GEN2_EN_A	GPIO2	0 = PCIe DEVICE AS 2.5GT/S CAPABLE 1 = PCIe DEVICE AS 5GT/S CAPABLE	0	
GPIO_8_ROMSO H2SYNC GPIO_21_BB_EN	GPIO8 H2SYNC GPIO21	Reserved Only	0	
AUD[1] AUD[0]	HSYNC VSYNC	AUD[1:0] 00: NO AUDIO FUNCTION. 01: AUDIO FOR DISPLAYPORT AND HDMI IF ADAPTER IS DETECTED. 10: AUDIO FOR DISPLAYPORT ONLY. 11: AUDIO FOR BOTH DISPLAYPORT AND HDMI.	11	See Audio table
GPIO_9_ROMSI	GPIO9	0 = VGA controller capacity enable	0	
VIP_DEVICE_STRAP_ENA VIP: Video Capture Port Interface	V2SYNC	0 = DRIVER would ignore the value sample on VHAD_0 during RESET.	0	

DDR3 Memory TYPE

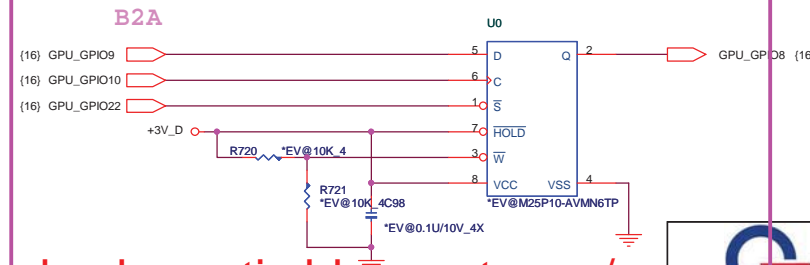
Vendor	Vendor P/N	STN B/S P/N	Size	RAM_STRAP3 DVPDATA_3	RAM_STRAP2 DVPDATA_2	RAM_STRAP1 DVPDATA_1	RAM_STRAP0 DVPDATA_0	RAM_STRAP4	
								15"	14"
Hynix	H5TQ1G63BFR-12C	AKD5LZGTW00 (64M*16)	512MB	0	1	0	0	0	1
			1GB	0	0	0	0	0	1
			2GB	0	0	1	0	0	1
Samsung	K4W1G1646E-HC12	AKD5LGGT502 (64M*16)	512MB	0	1	0	1	0	1
			1GB	0	0	0	1	0	1
			2GB	0	0	1	1	0	1



Thermal Sensor



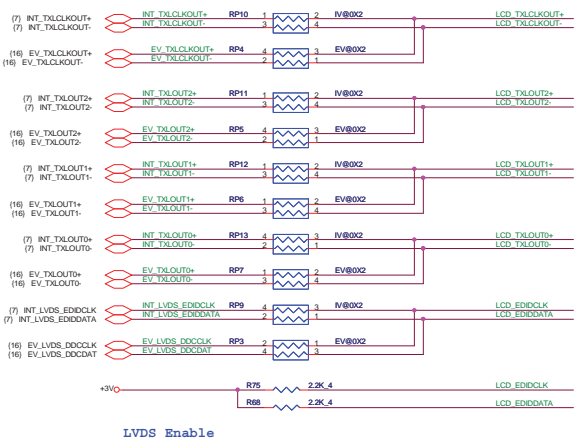
EEPROM



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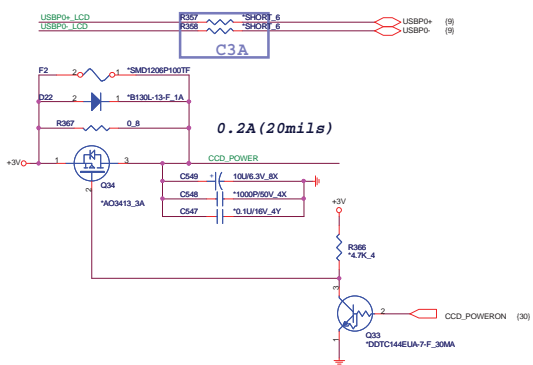
Quanta Computer Inc.
 PROJECT : BL6
Memory strip/Thermal/HDCP
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LVDS Signals



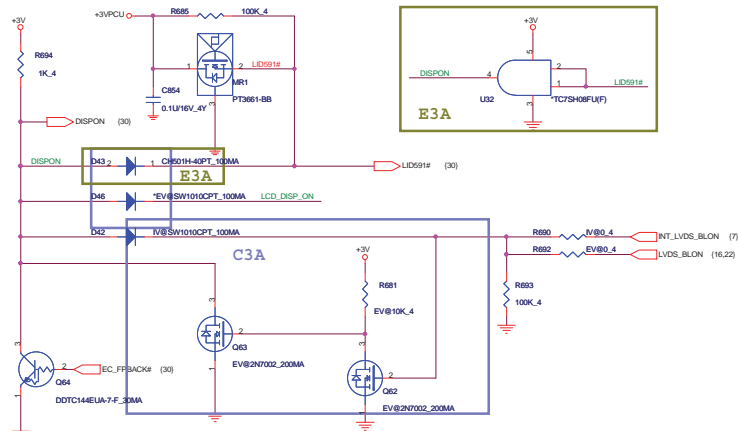
LVDS Enable

CCD

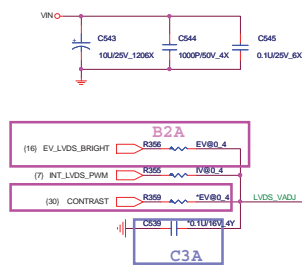


0.2A (20mils)

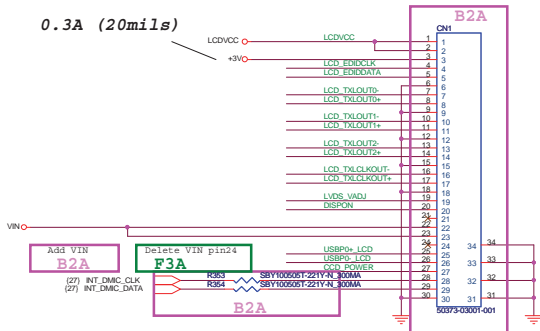
HALL SENSOR & BACK LIGHT SWITCH



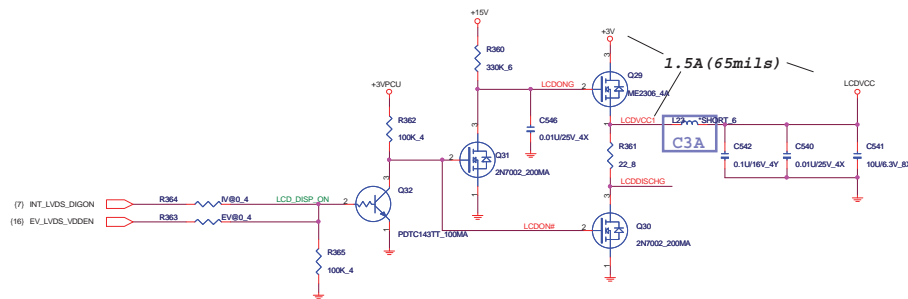
LCD Panel Module



0.3A (20mils)

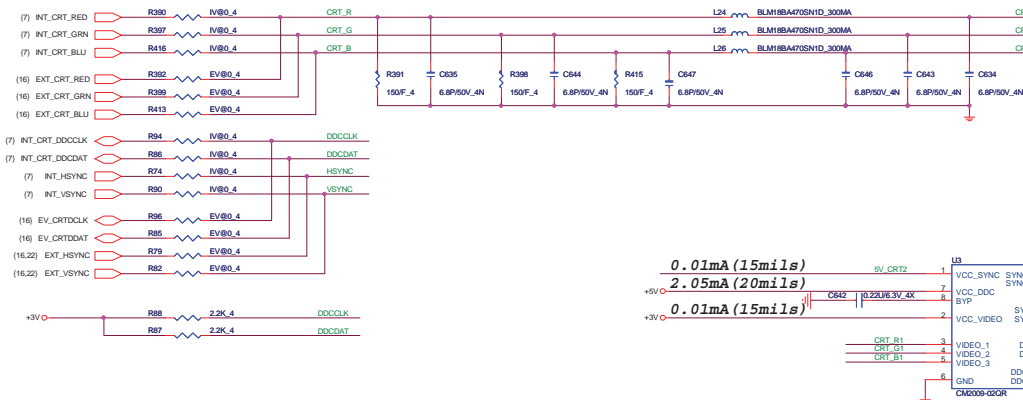


LCD POWER SWITCH



1.5A (65mils)

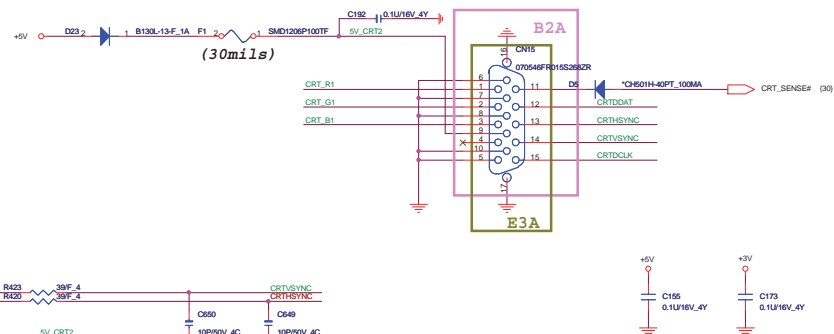
CRT



0.01mA (15mils)

2.05mA (20mils)

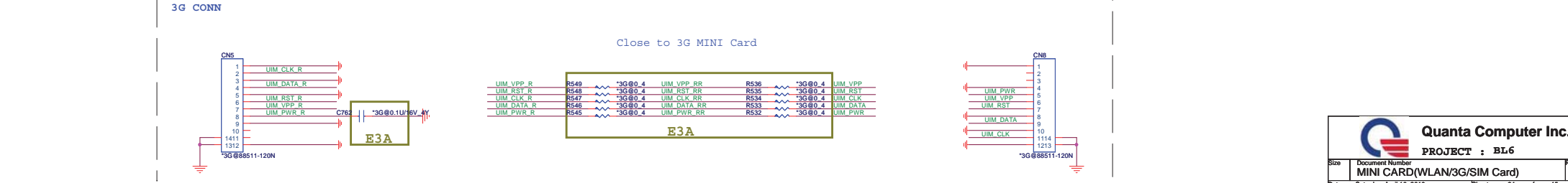
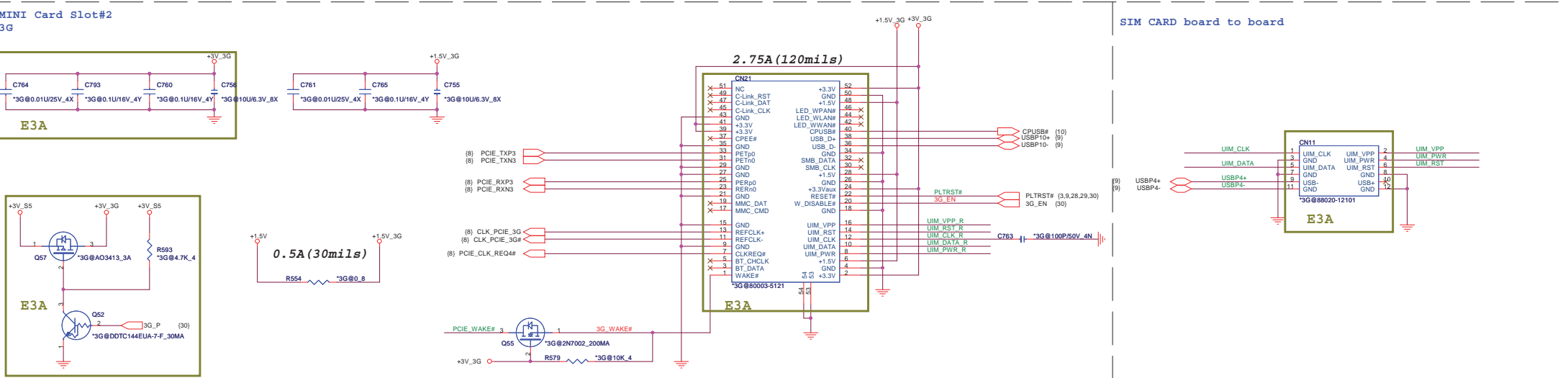
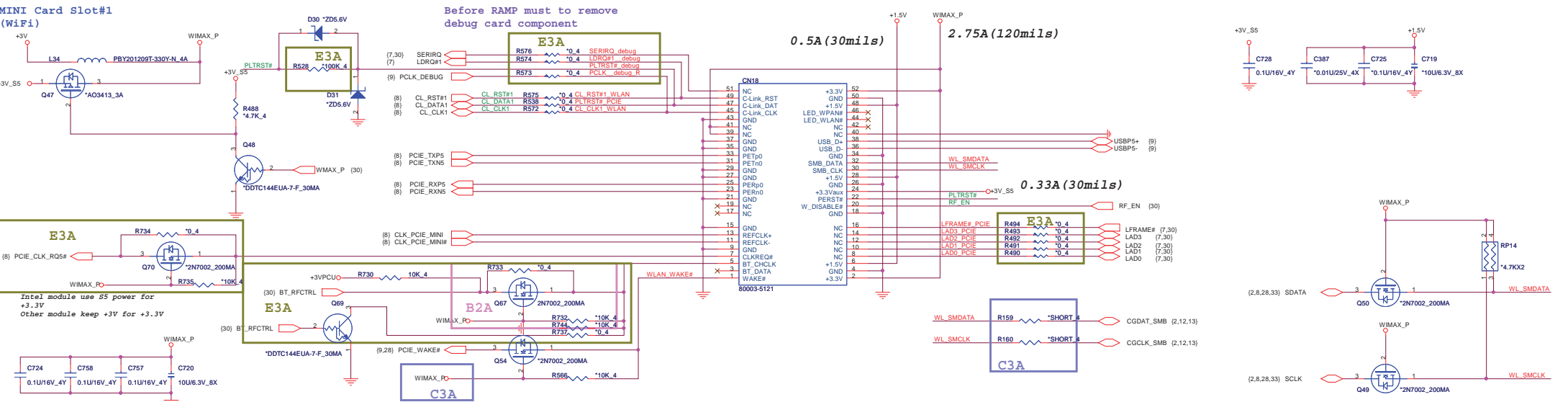
0.01mA (15mils)



Quanta Computer Inc.
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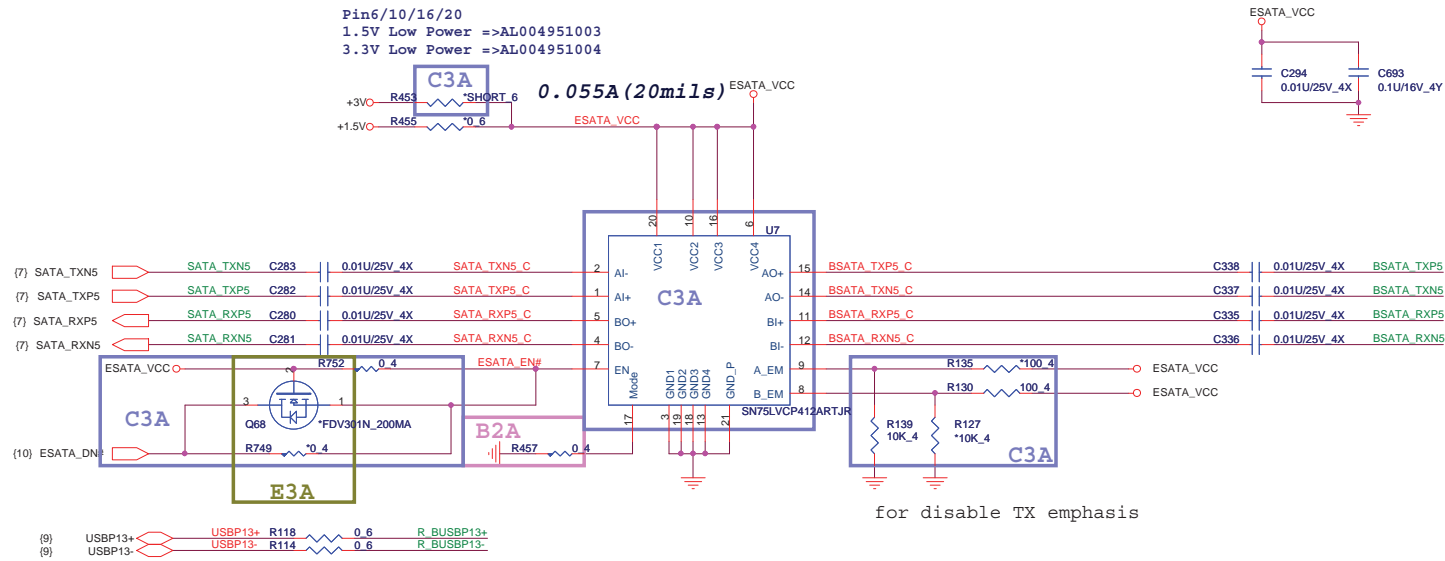


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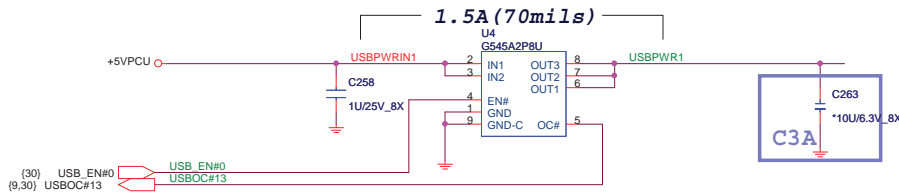
Size	Document Number	Rev
	MINI CARD(WLAN/3G/SIM Card)	A1A
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ESATA Re-driver IC

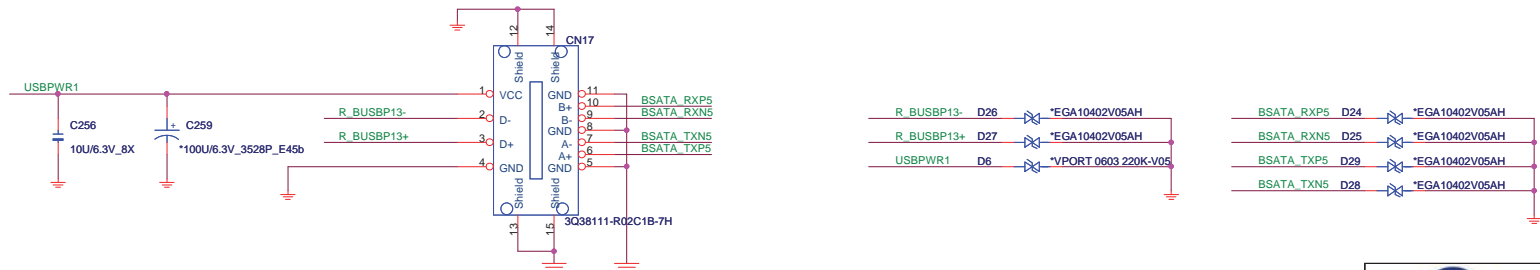
Pin6/10/16/20
 1.5V Low Power =>AL004951003
 3.3V Low Power =>AL004951004



for disable TX emphasis



ESATA CONN

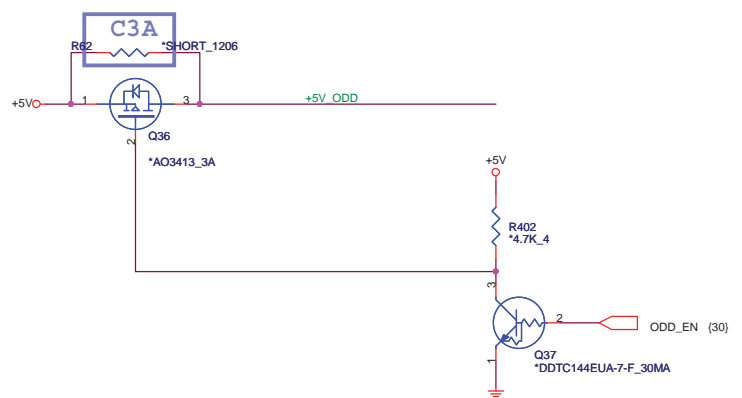
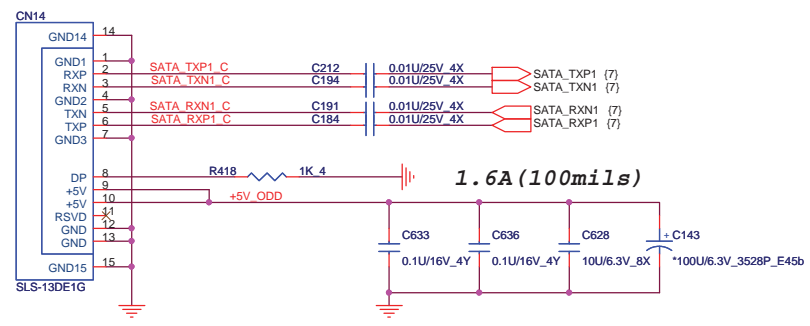


<http://laptop-motherboard-schematic.blogspot.com/>

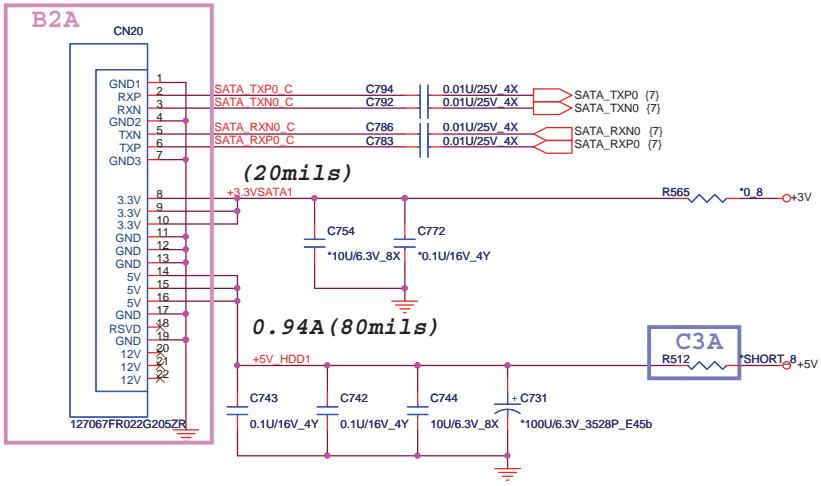
Quanta Computer Inc.
 PROJECT : BL6

Size	Document Number	Rev
	TP/SW/ESATA/USB+Audio/LED	A1A
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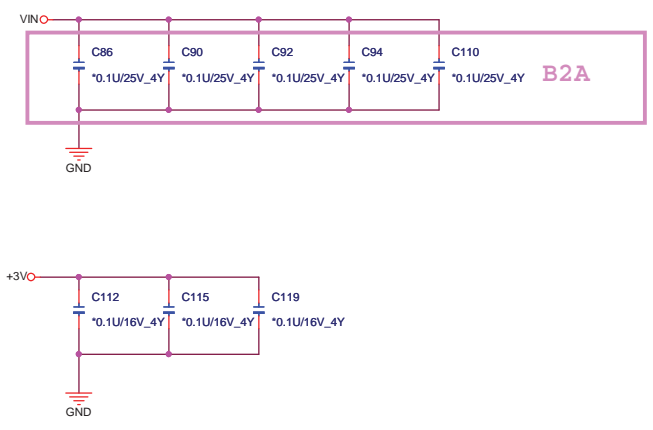
SATA ODD



SATA HDD

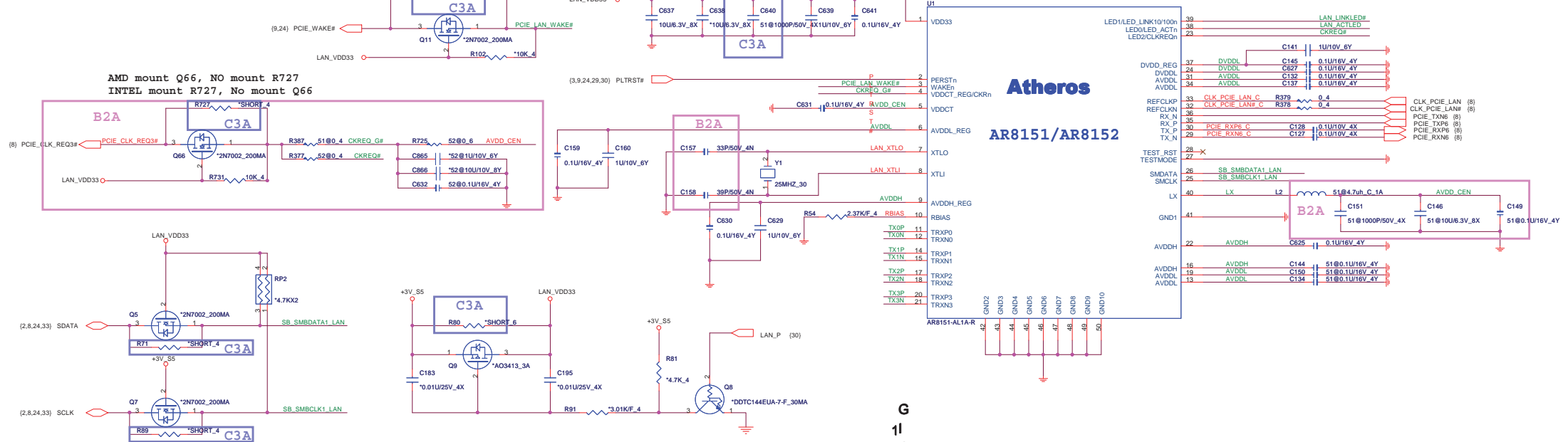


EMI

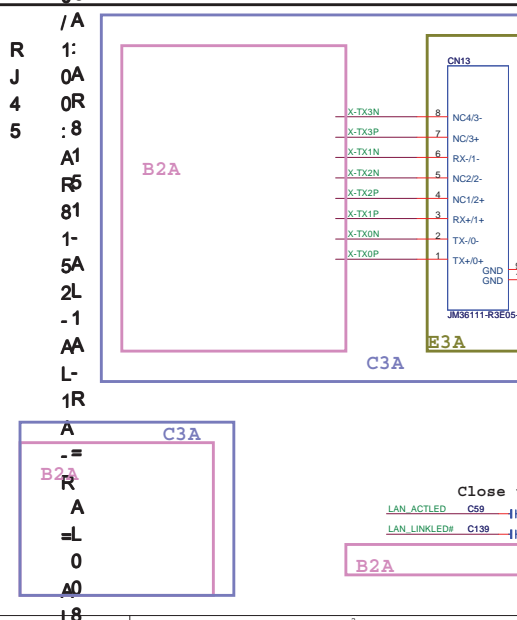
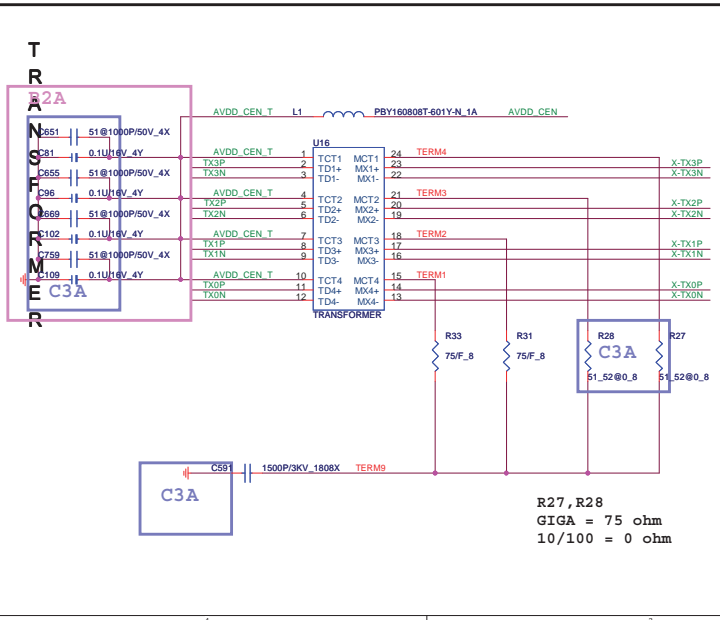
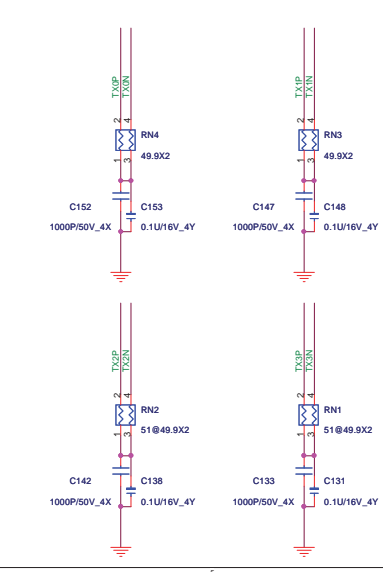


<http://laptop-motherboard-schematic.blogspot.com/>

Atheros Lan



PLACE NEAR LAN IC SIDE



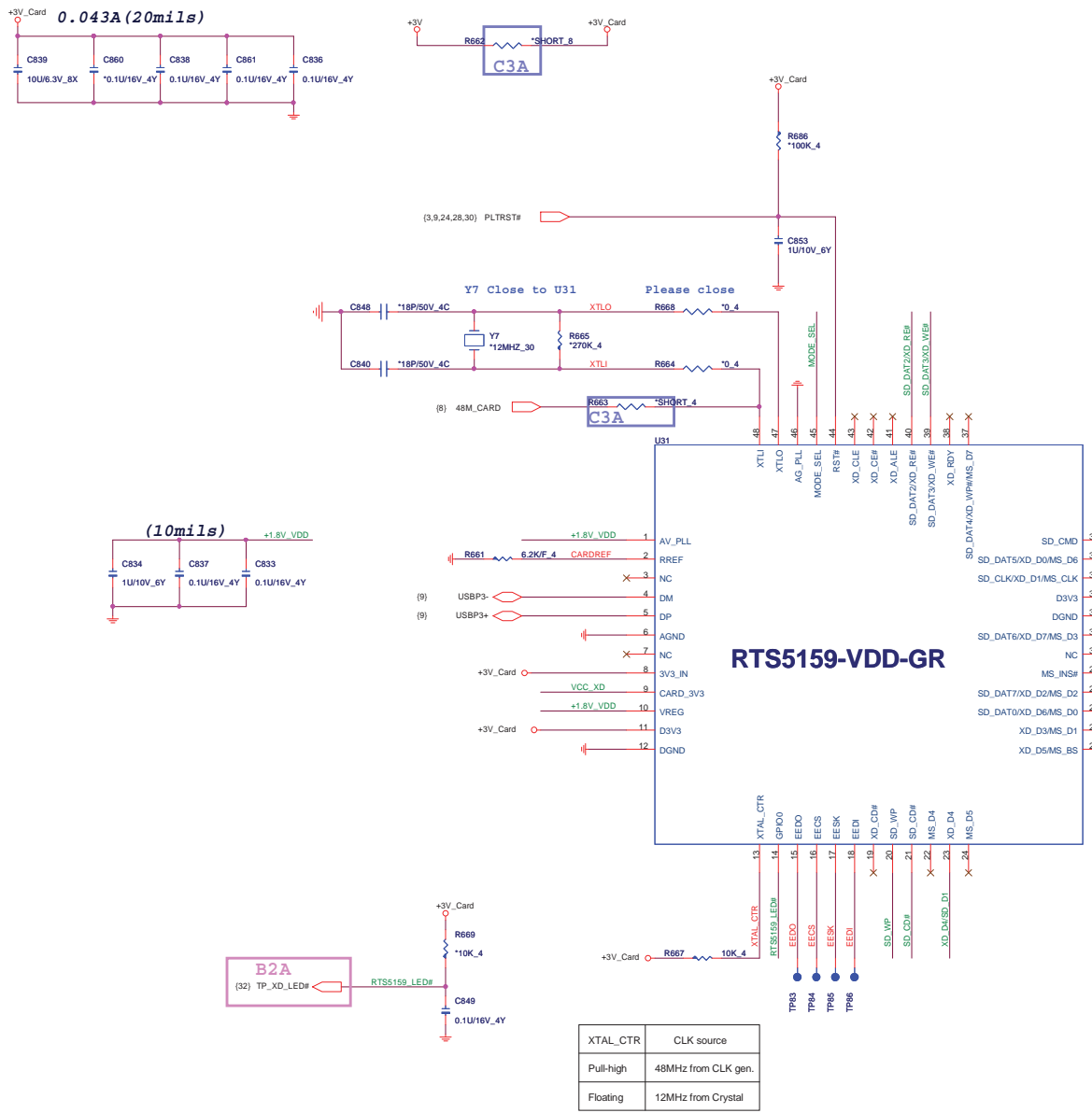
LED0 = LAN_ACTLED	1	Over-clocking enable (default = 1)
	0	Over-clocking disable
LED1 = LAN_LINKED#	1	SWR switch-mode regulator select Giga LAN pull high (default = 1)
	0	I2O linear regulator select 10/100M LAN pull Low
CKREQ# or CKREQ_G#	1	Normal function
	0	ATE test mode

Quanta Computer Inc.
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Atheros Lan
Date: Saturday, April 10, 2010
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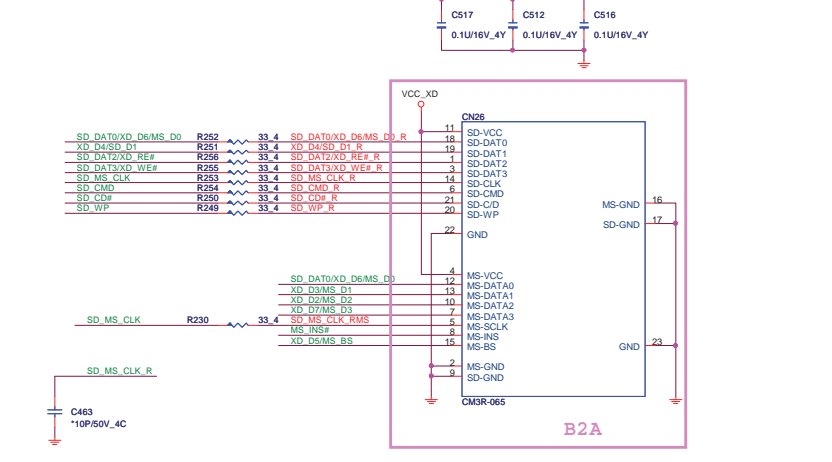
http://laptop-motherboard-schematic.blogspot.com/

5 IN 1 CARD READER



XTAL_CTR	CLK source
Pull-high	48MHz from CLK gen.
Floating	12MHz from Crystal

3 IN 1 CARD READER

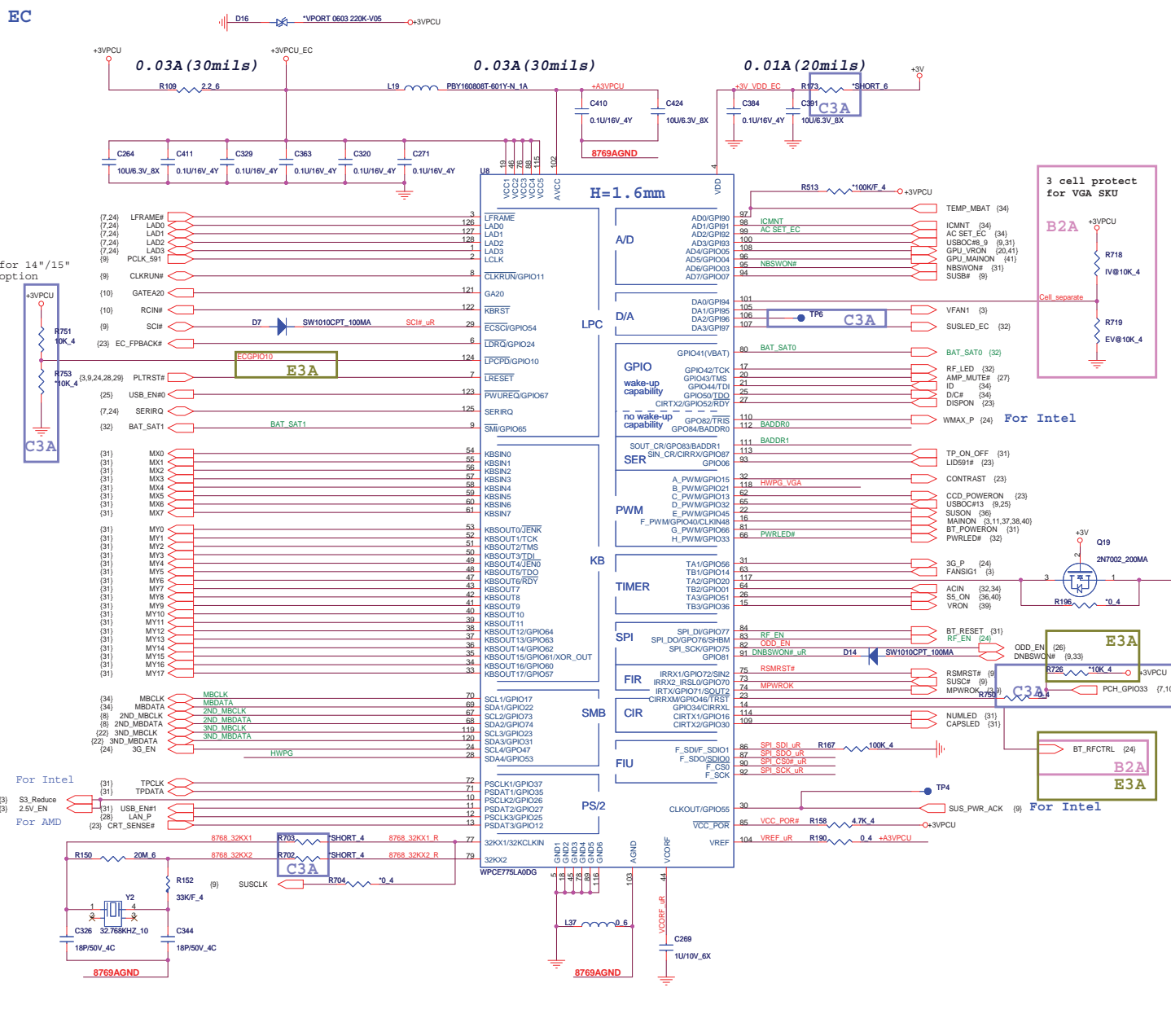


B2A
(Please refer to Realtek Application Notes for more detail description)

MODE_SEL	R678	C851	Power mode
RTS 5159	0-ohm	NC	USB Auto De-link mode:

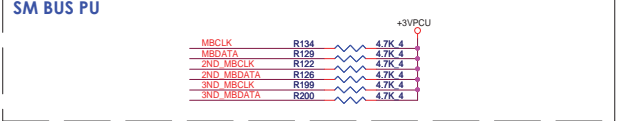
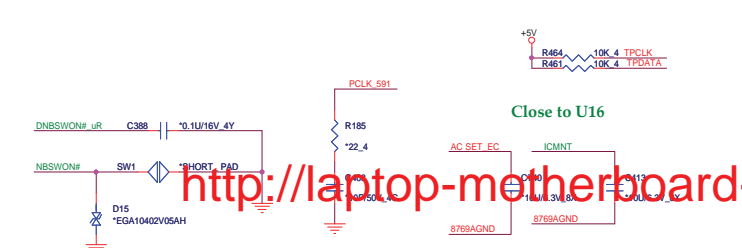
Quanta Computer Inc.
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Size	Document Number	Rev
	RTS5159 (Card Reader)	A1A
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SMBUS Table

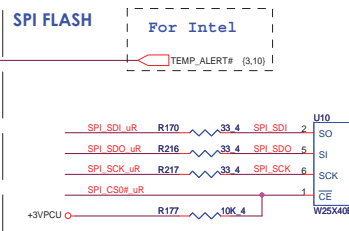
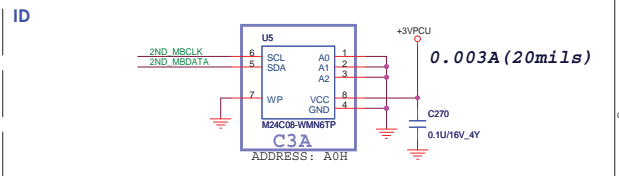
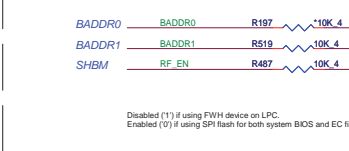
SMBUS	Devices	Address
1	Battery	
2	PCH SML1	
	AMD SMBus	98H
	EC EEPROM	A0H
	VGA Board Thermal Sensor	98H
3		



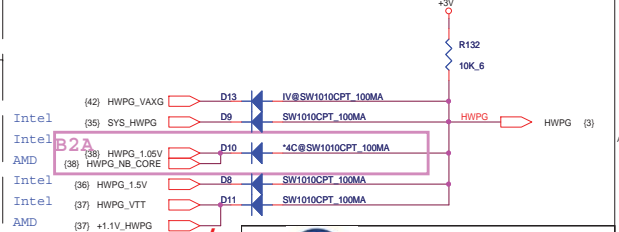
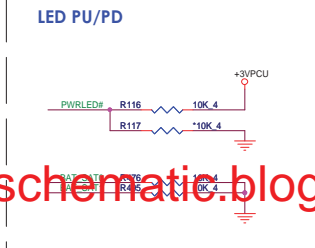
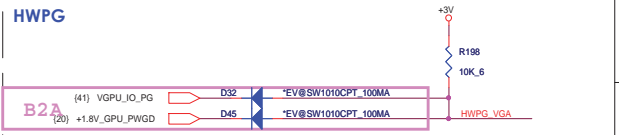
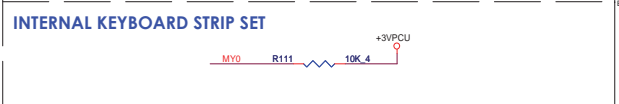
I/O Base Address

I/O Address		
BADDR1-0	Index	Data
0 0		XOR TREE TEST MODE
0 1		CORE DEFINED
1 0	2Eh	2Fh
1 1	164Eh	164Fh

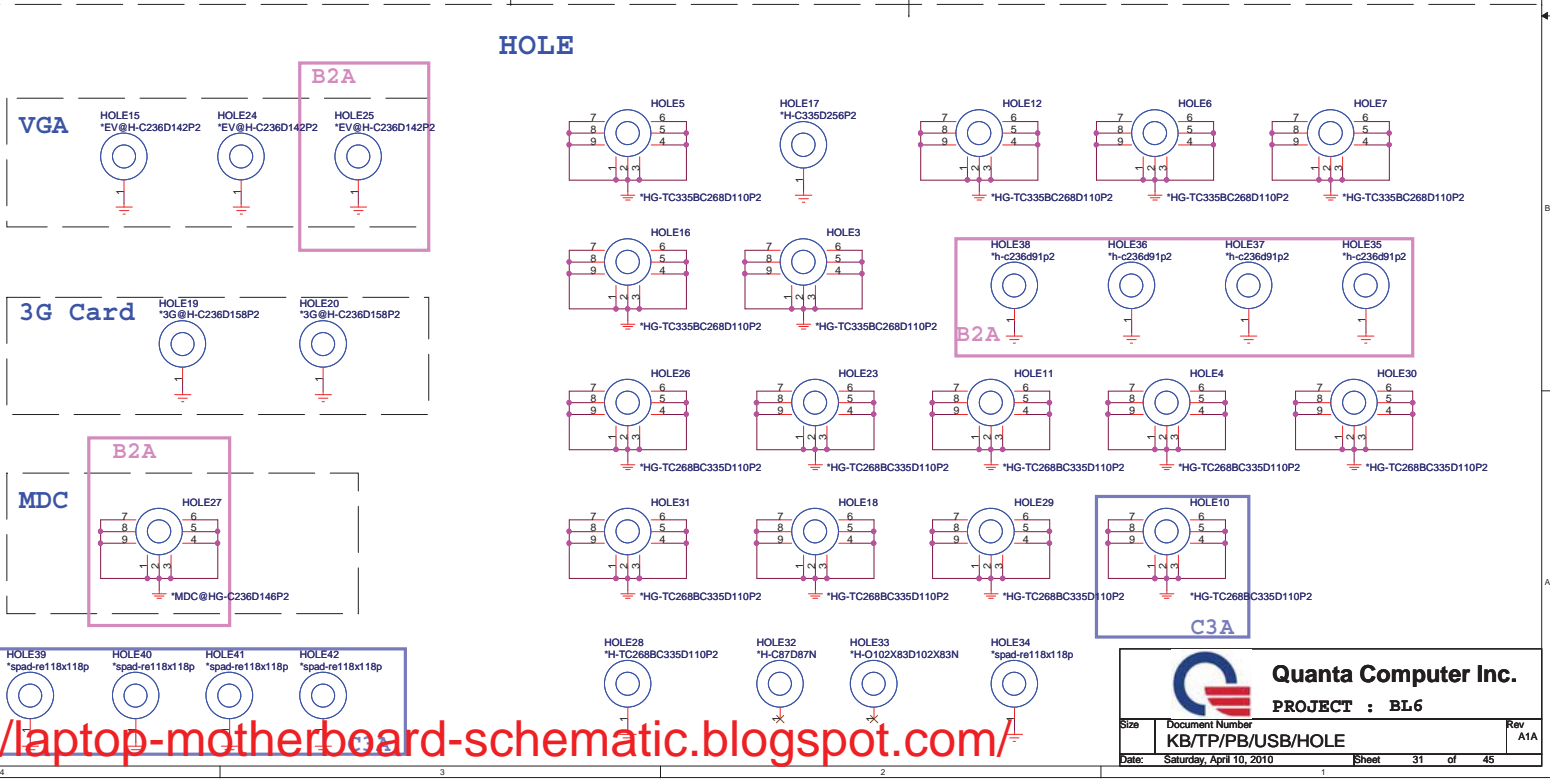
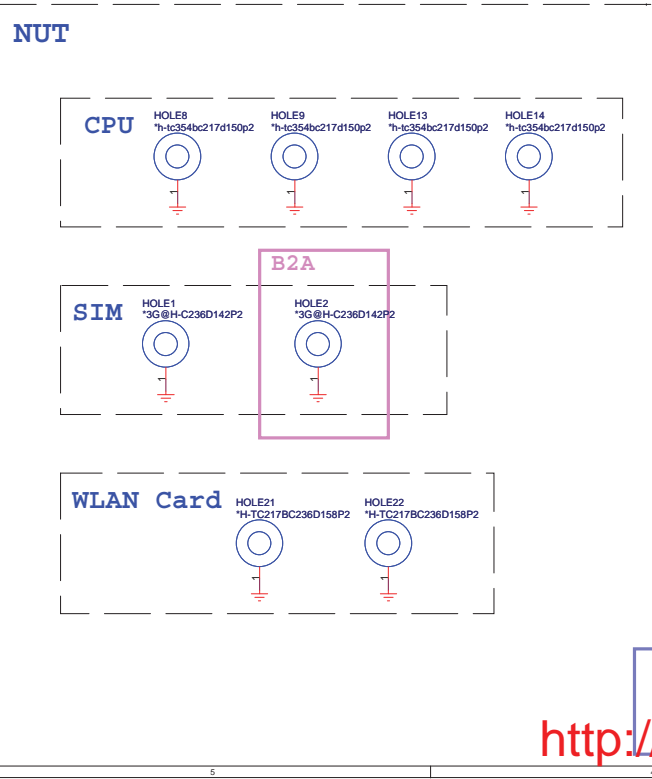
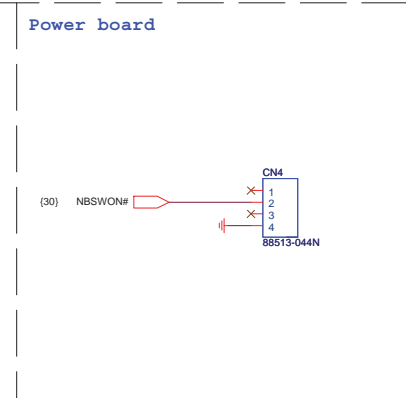
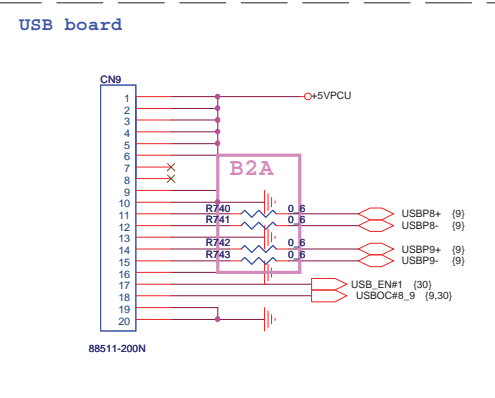
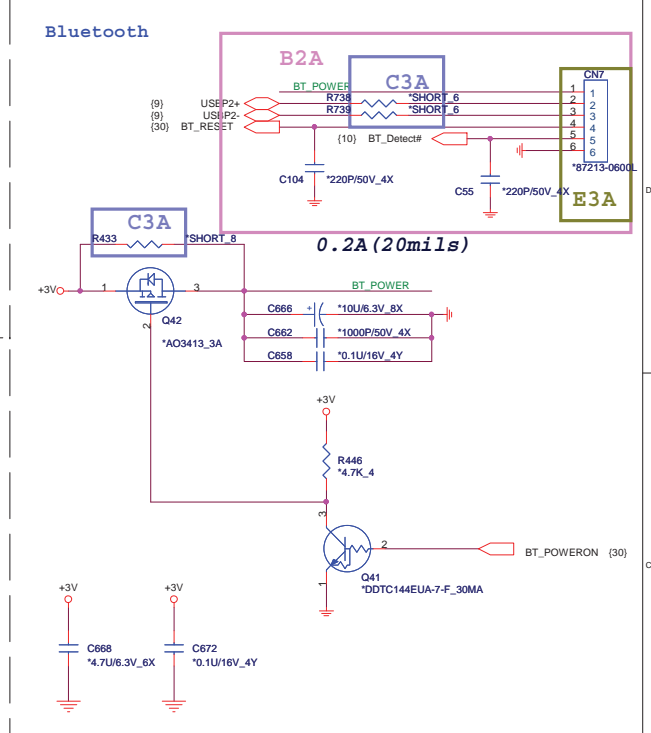
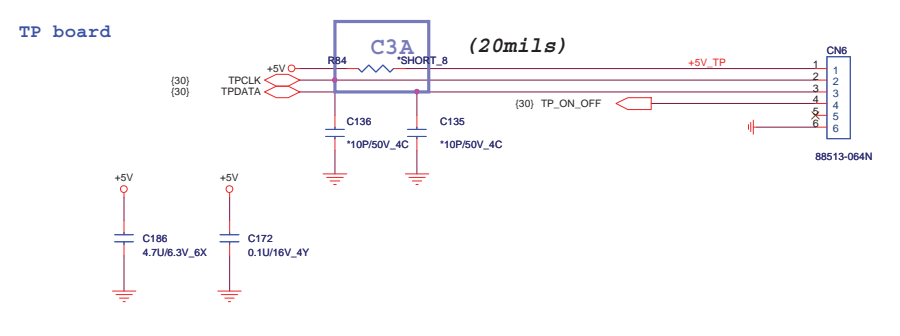
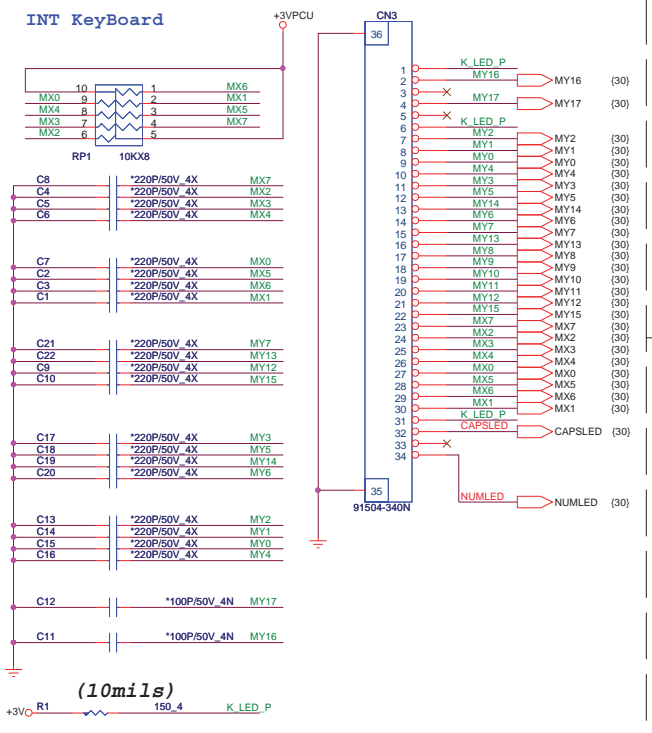
SHBM=0: Enable shared memory with host BIOS



Intel	512KB	W25X40BVSSIG
AMD	2MB	W25Q16BVSSIG



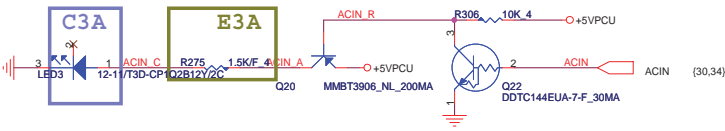
<http://laptop-motherboard-schematic.blogspot.com/>



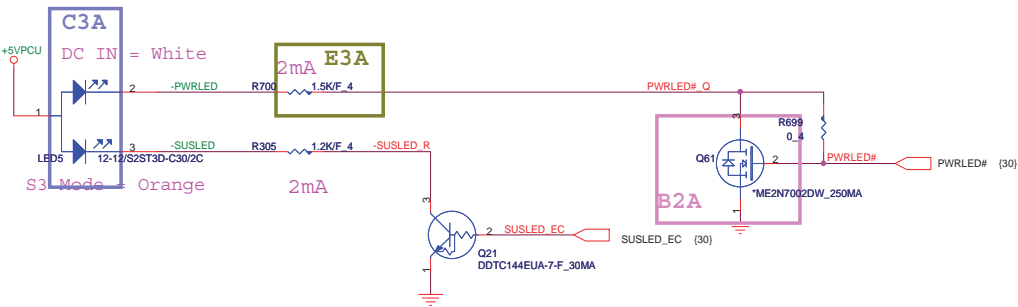
<http://laptop-motherboard-schematic.blogspot.com/>

LED

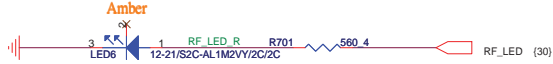
AC-IN



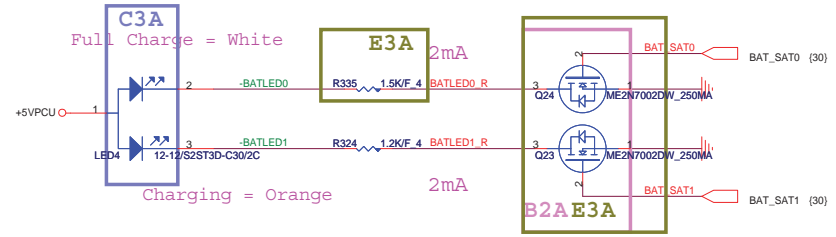
POWER



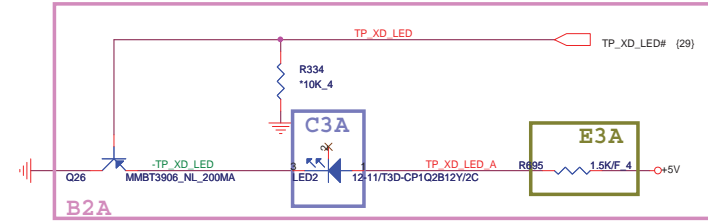
RF LED



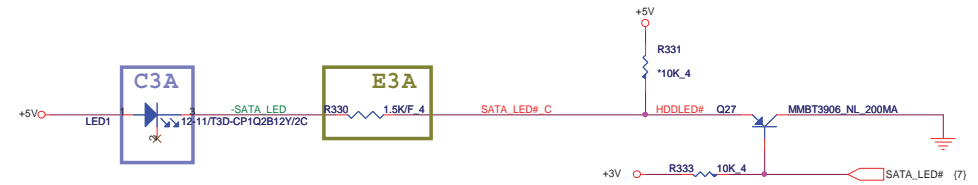
BATTERY



CARDREADER

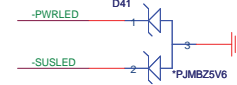


HDD/ODD

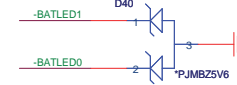


ESD Protect

FOR POWER LED



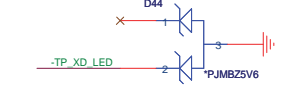
FOR BATTERY LED



FOR HDD/RF LED

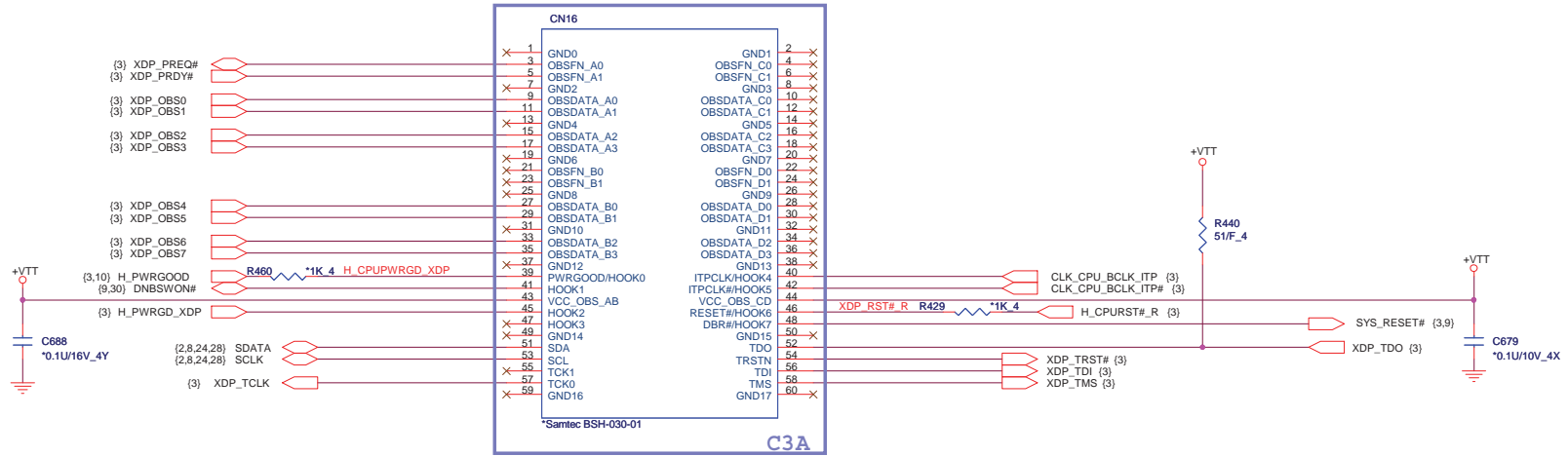


FOR CARDREADER LED



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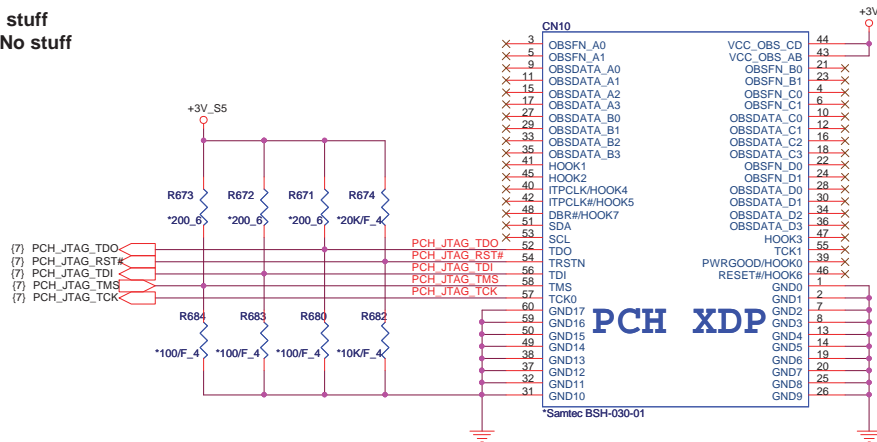
CPU XDP




Feature Set	SKU Name (S)				
	Q57	H57	H55	P55	P57
BraidWood	Y	Y	N	N	Y

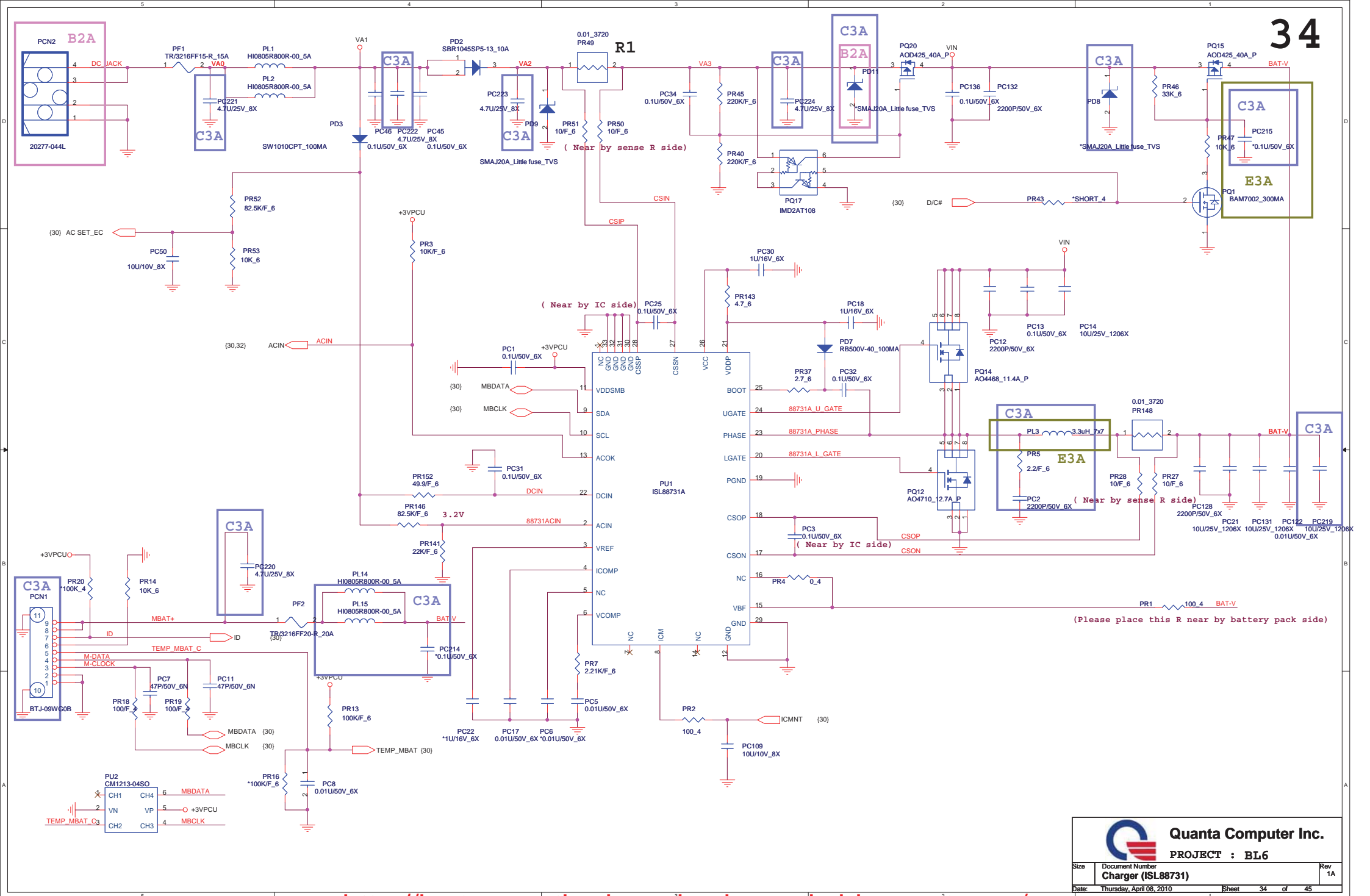
PCH XDP

Note: For ES1/ES2 version all stuff
Production version all No stuff



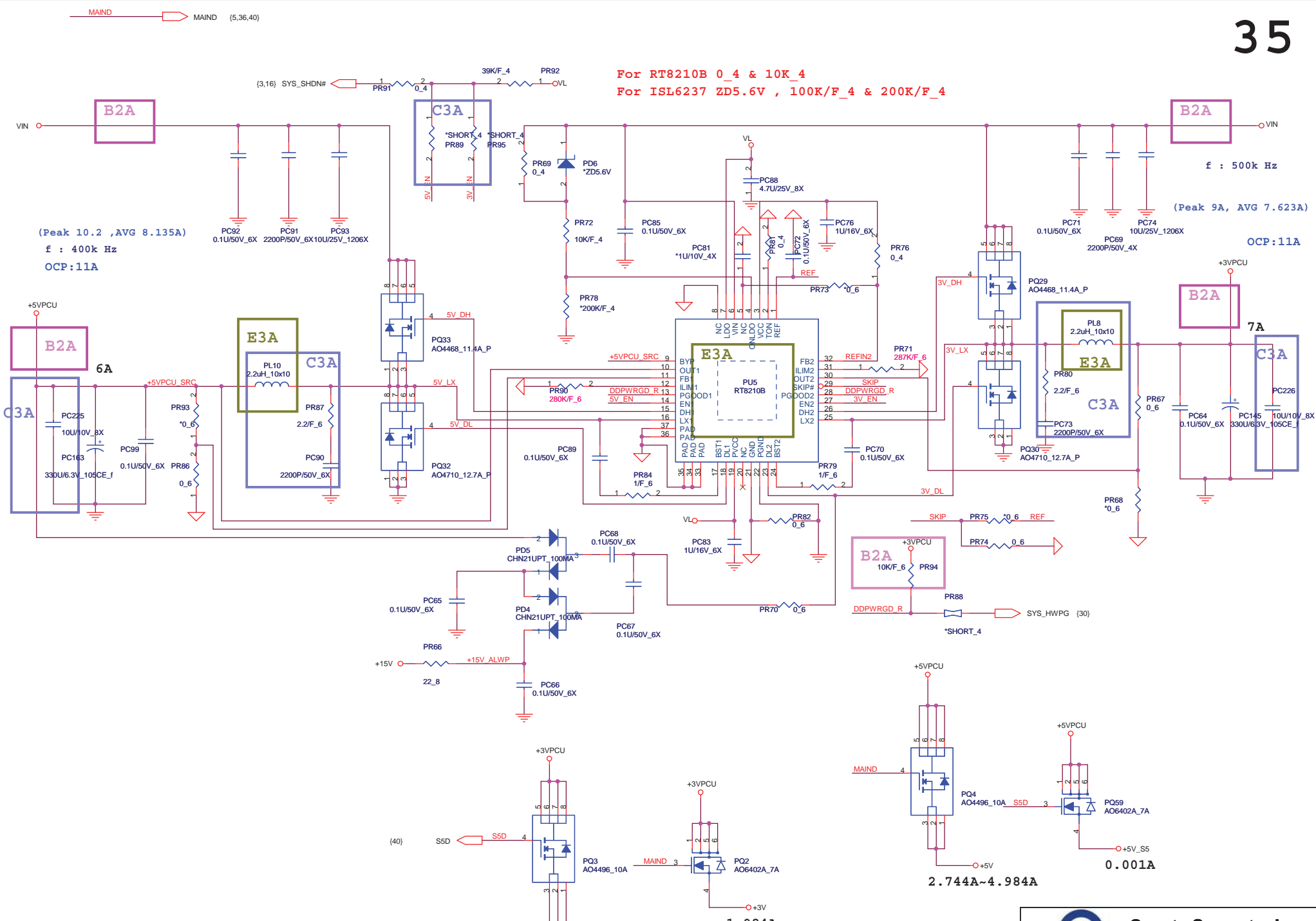
<http://laptop-motherboard-schematic.blogspot.com/>


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NVRAM Connector
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Quanta Computer Inc.
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Size	Document Number	Rev
	Charger (ISL88731)	1A
Date	Thursday, April 08, 2010	Sheet 34 of 45

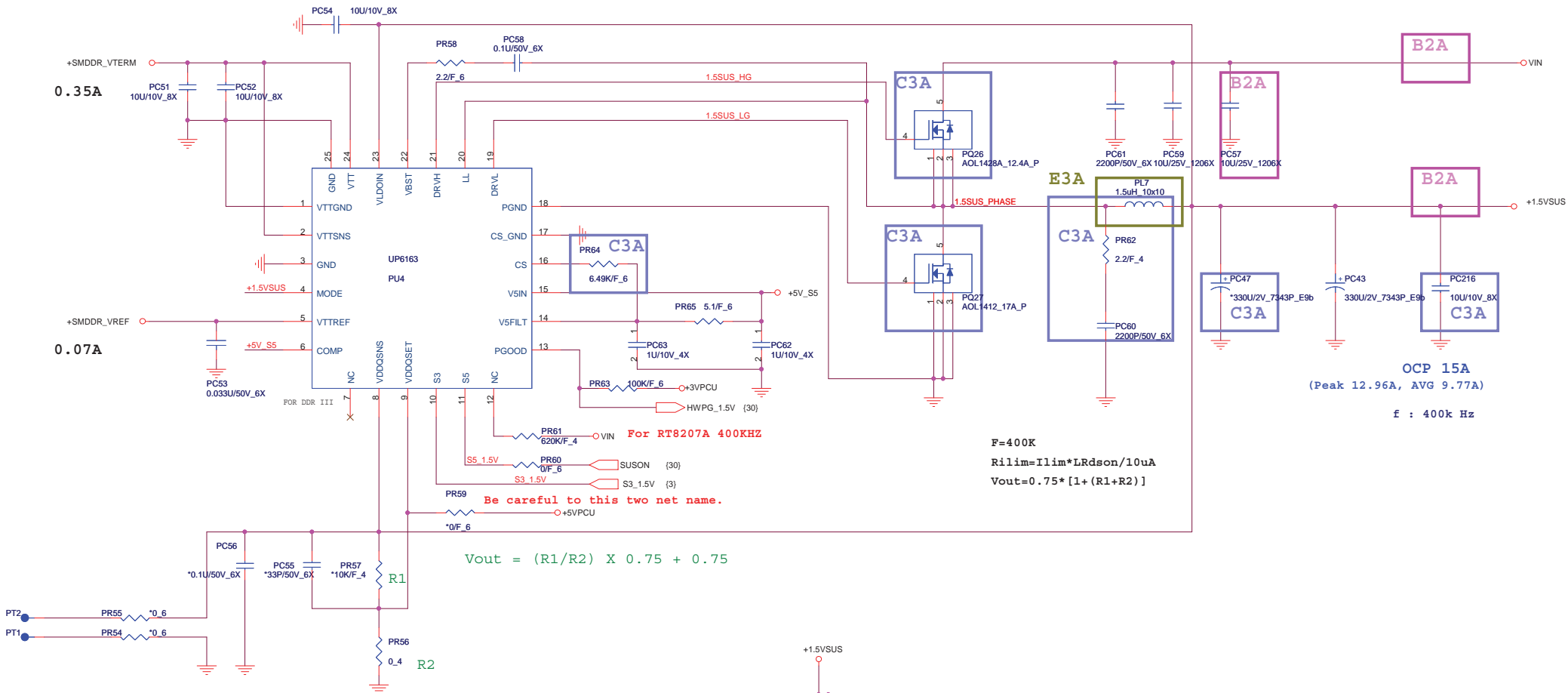


For RT8210B 0_4 & 10K_4
 For ISL6237 ZD5.6V , 100K/F_4 & 200K/F_4

<http://laptop-motherboard-schematic.blogspot.com/>

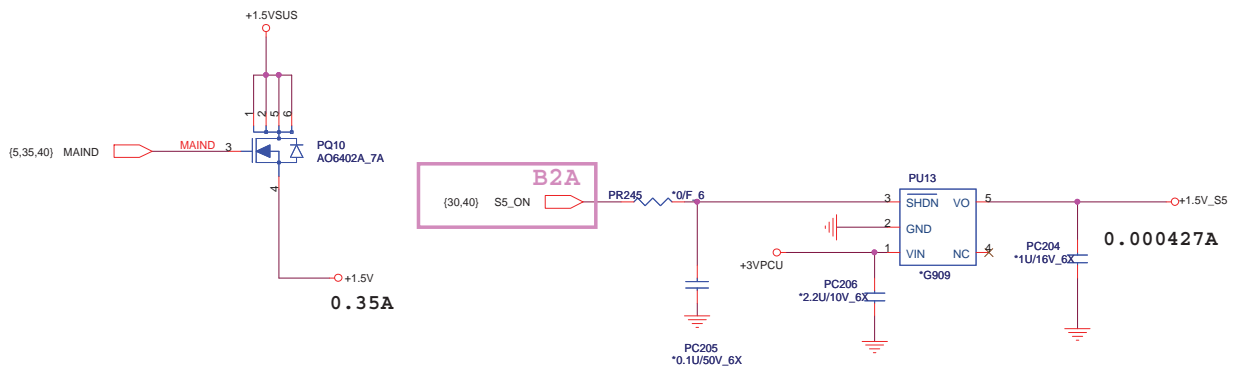
Quanta Computer Inc.
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Size	Document Number	Rev
	System 5V/3V (ISL6237)	1A
Date:	Wednesday, April 07, 2010	Sheet 35 of 45



C3A

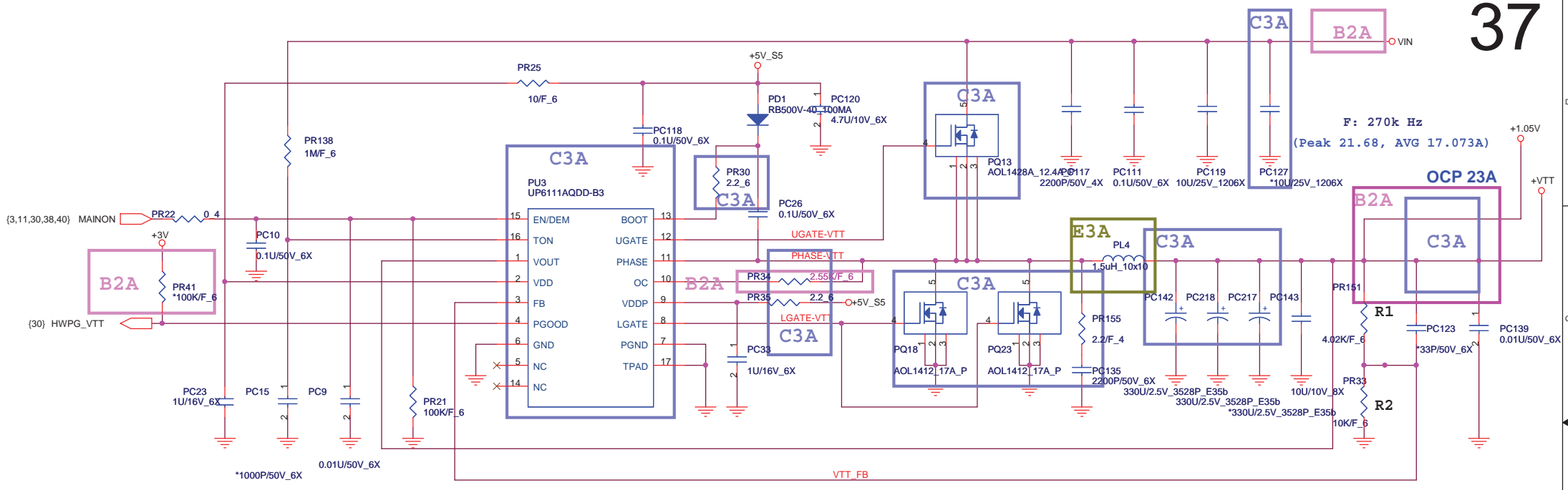
Change to Page3



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Quanta Computer Inc.
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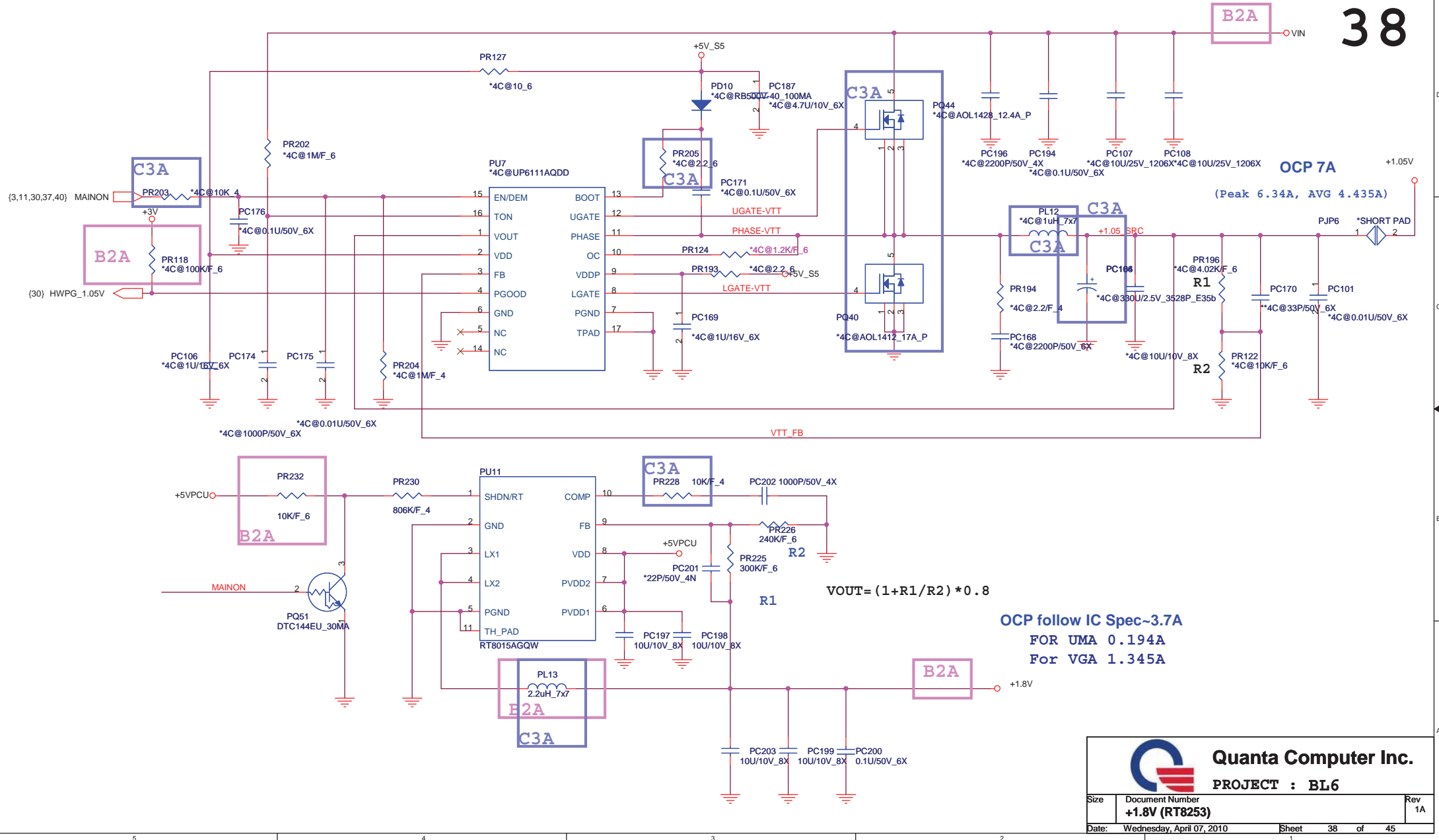
Size	Document Number	Rev
	DDR 1.5V(UP6163)	1A
Date:	Wednesday, April 07, 2010	Sheet 36 of 45



$V_{OUT} = (1 + R1/R2) * 0.75$

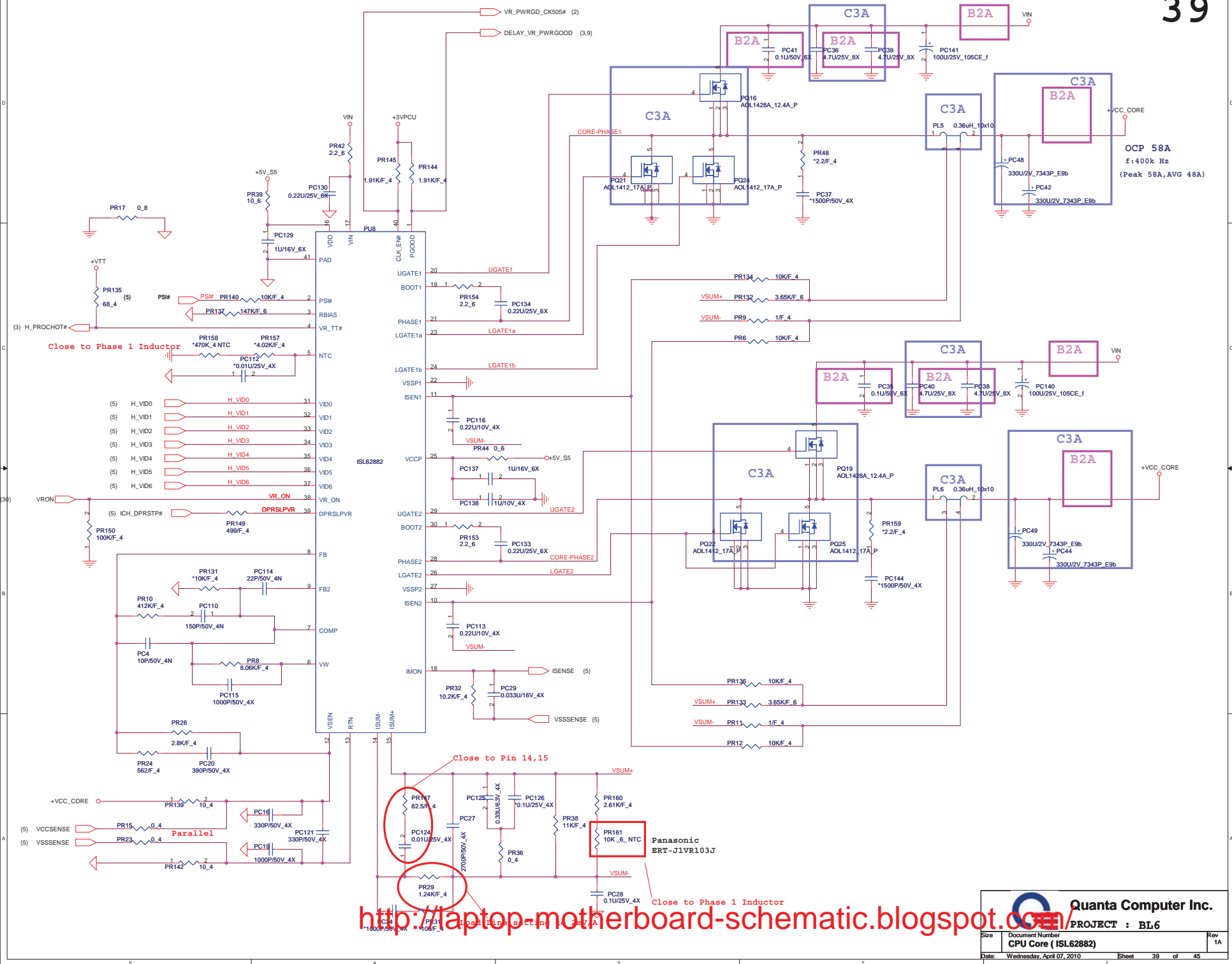
Quanta Computer Inc.
PROJECT : BL6

Size	Document Number	Rev
	+VTT (UP6111A)	1A
Date:	Wednesday, April 07, 2010	Sheet 37 of 45

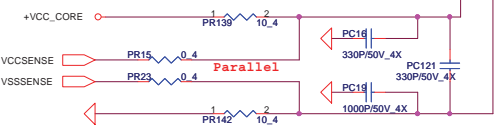


Quanta Computer Inc.
PROJECT : BL6

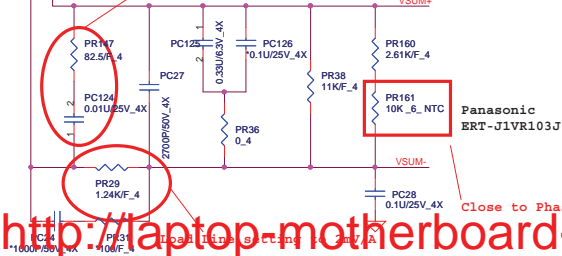
Size	Document Number	Rev
	+1.8V (RT8253)	1A
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Close to Phase 1 Inductor



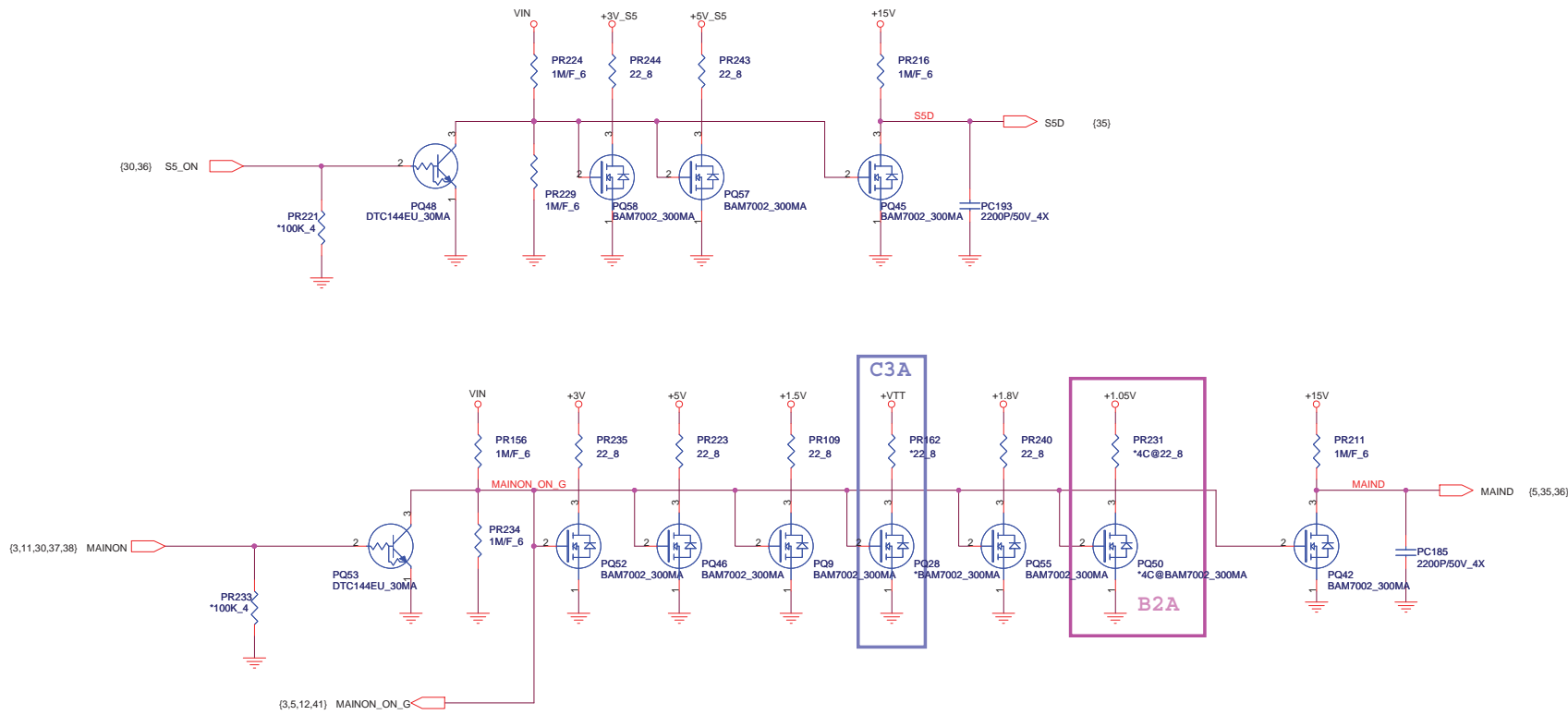
Close to Pin 14,15



Close to Phase 1 Inductor

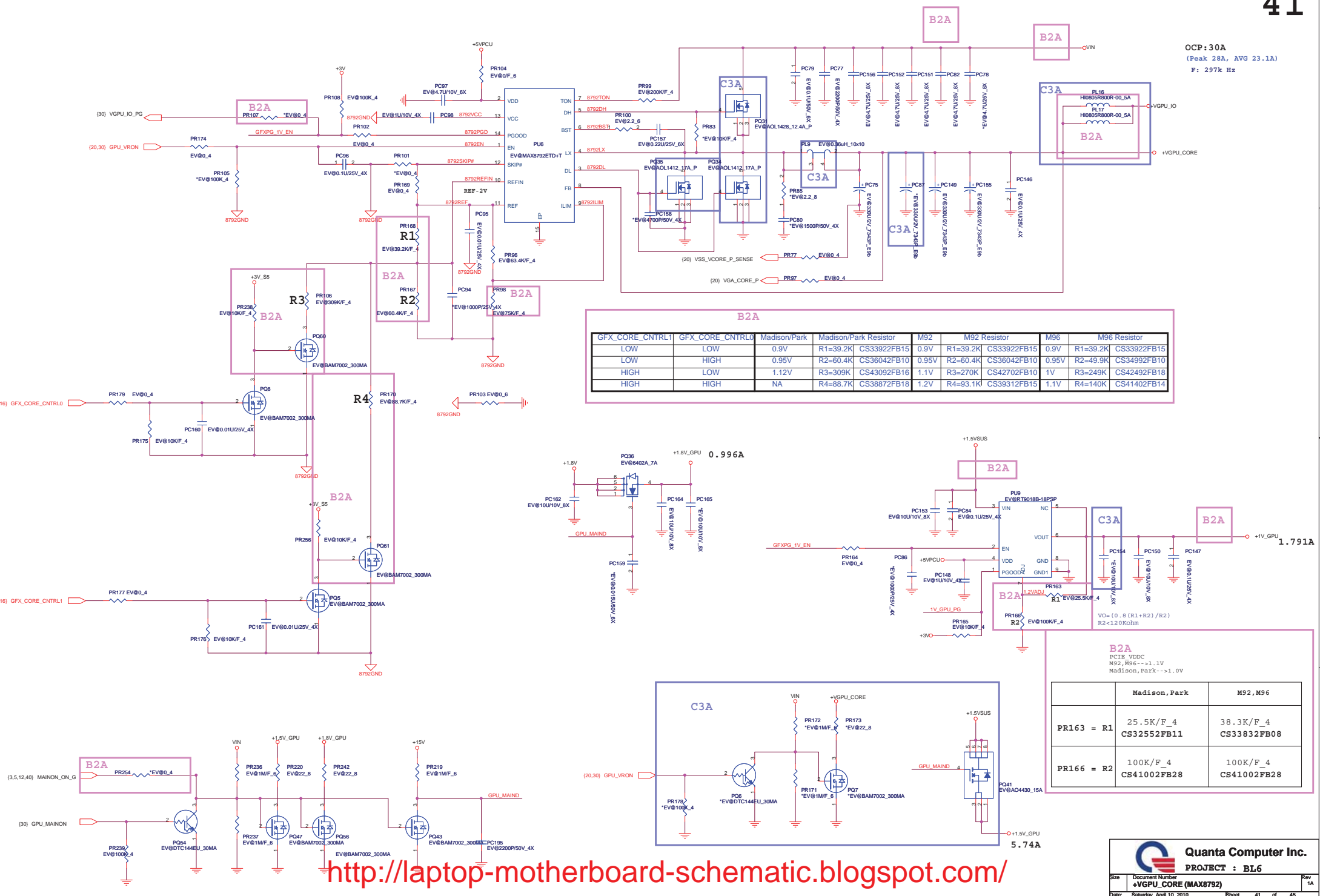
<http://laptop-motherboard-schematic.blogspot.com/>

		Quanta Computer Inc. PROJECT : BL6	
		Document Number CPU Core (ISL62882)	Rev 1A
Date: Wednesday, April 07, 2010	Sheet 39 of 45		



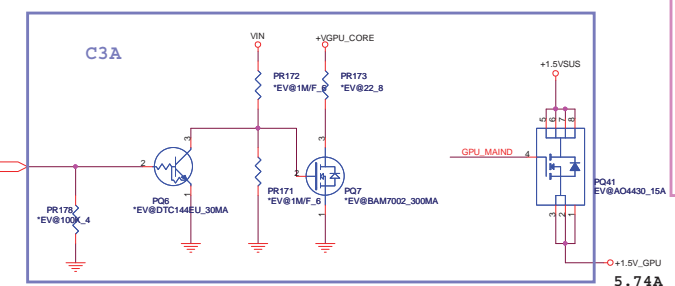
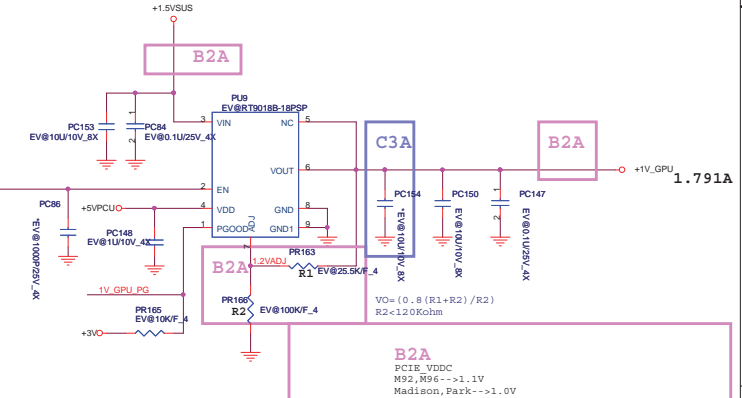
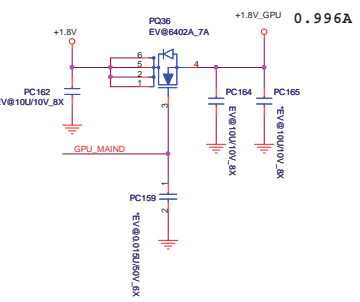
<http://laptop-motherboard-schematic.blogspot.com/>

OCP: 30A
 (Peak 28A, AVG 23.1A)
 F: 297K Hz



B2A

GFX_CORE_CNTRL1	GFX_CORE_CNTRL0	Madison/Park	Madison/Park Resistor	M92	M92 Resistor	M96	M96 Resistor
LOW	LOW	0.9V	R1=39.2K	0.9V	R1=39.2K	0.9V	R1=39.2K
LOW	HIGH	0.95V	R2=60.4K	0.95V	R2=60.4K	0.95V	R2=49.9K
HIGH	LOW	1.12V	R3=309K	1.1V	R3=270K	1V	R3=249K
HIGH	HIGH	NA	R4=88.7K	1.2V	R4=93.1K	1.1V	R4=140K

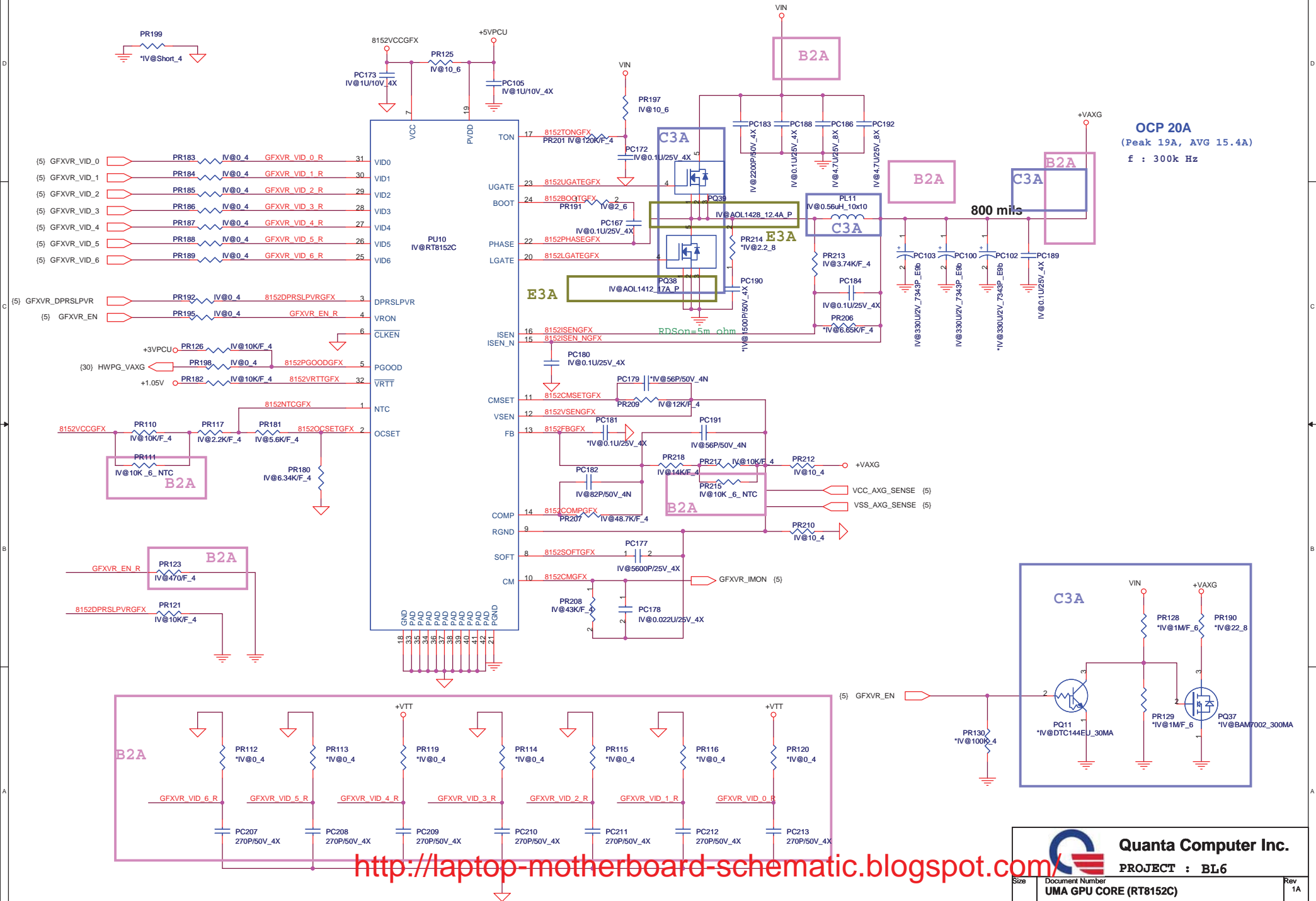


B2A

PCIe_VDDC
 M92, R66 --> 1.1V
 Madison, Park --> 1.0V

	Madison, Park	M92, M96
PR163 = R1	25.5K/F_4 CS32552FB11	38.3K/F_4 CS33832PB08
PR166 = R2	100K/F_4 CS41002FB28	100K/F_4 CS41002FB28

<http://laptop-motherboard-schematic.blogspot.com/>

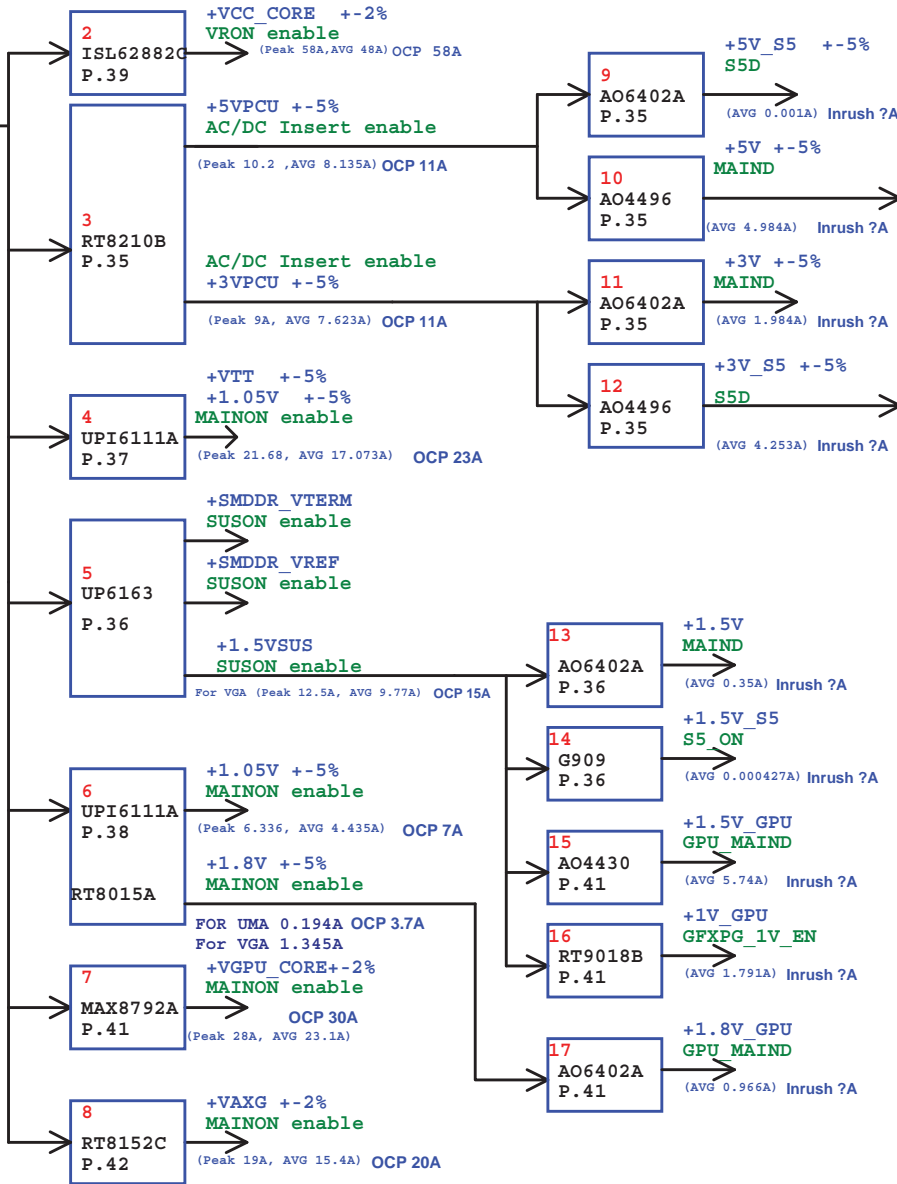
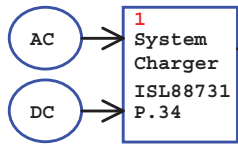


<http://laptop-motherboard-schematic.blogspot.com/>

Quanta Computer Inc.
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	UMA GPU CORE (RT8152C)	1A
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Power Tree Table



Power Distribution List

Power	Distribution

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