

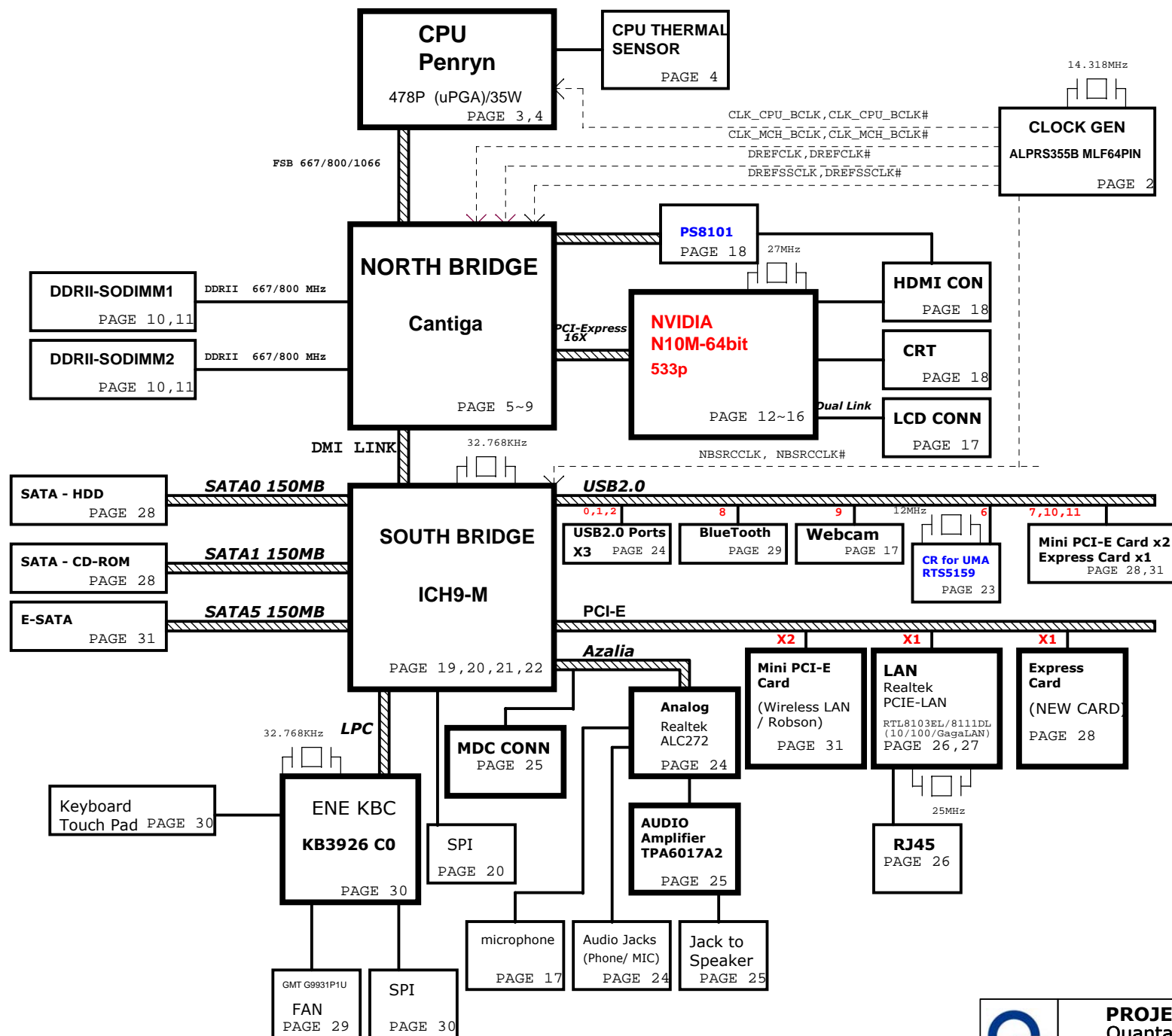
# Preso-II BLOCK DIAGRAM

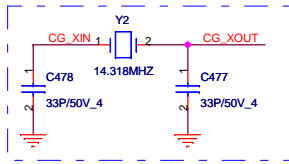
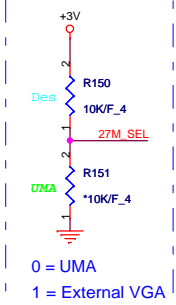
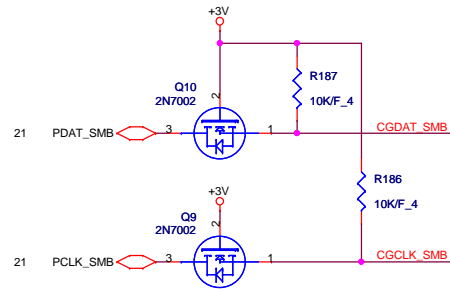
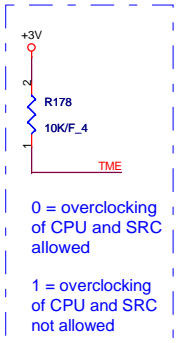
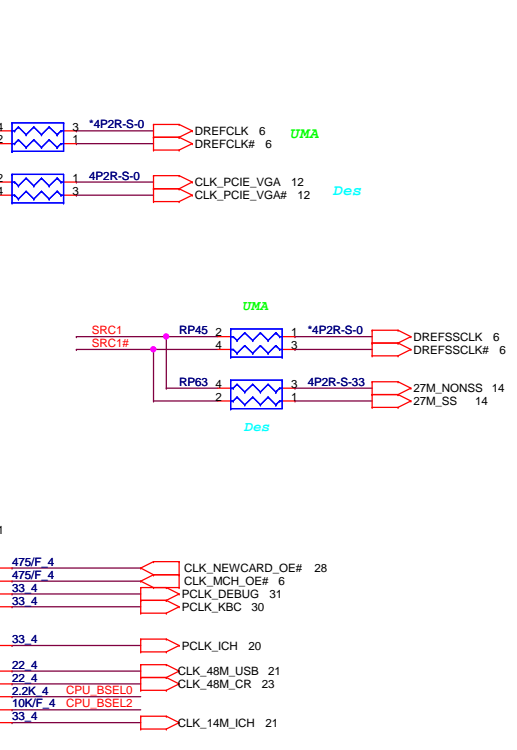
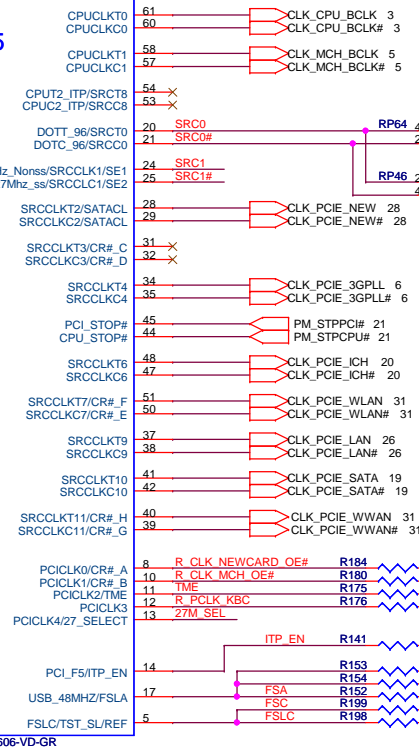
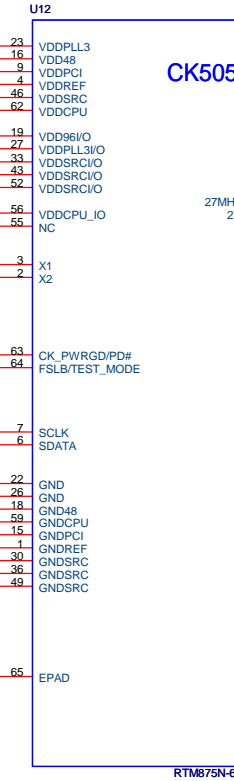
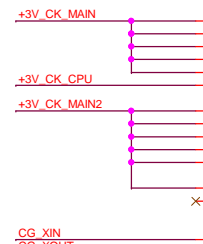
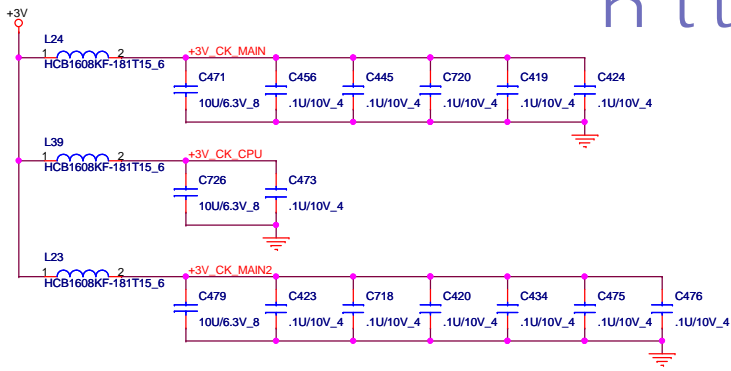
01

## PCB STACK UP

8L

LAYER 1 : TOP  
LAYER 2 : SGND  
LAYER 3 : IN1  
LAYER 4 : SGND1  
LAYER 5 : SVCC  
LAYER 6 : IN2  
LAYER 7 : SGND2  
LAYER 8 : BOT

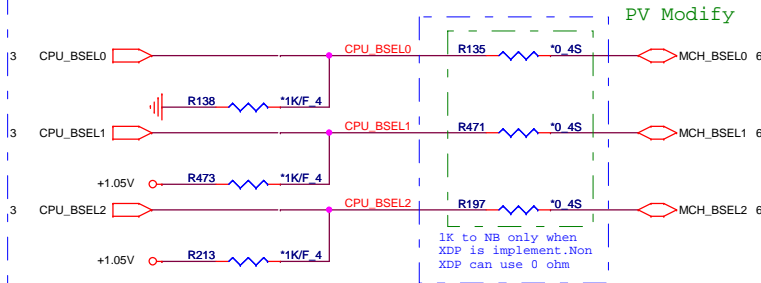
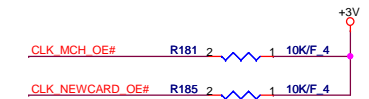




27M_SEL PIN13	PIN20	PIN21	PIN24	PIN25
0=UMA	DOT96T	DOT96C	SRCT1/LCDT_100	SRCT1/LCDT_100
1 = External VGA	SRCT0	SRCC0	27Mout-NSS	27Mout-SS

### CK505 QFN64

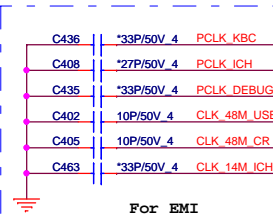
ICS ICS9LPRS355BKLF ALPRS355000  
Silego SLG8SP513VTR AL8SP513000  
Realtek RTM875N-606-VD-GR AL000875000



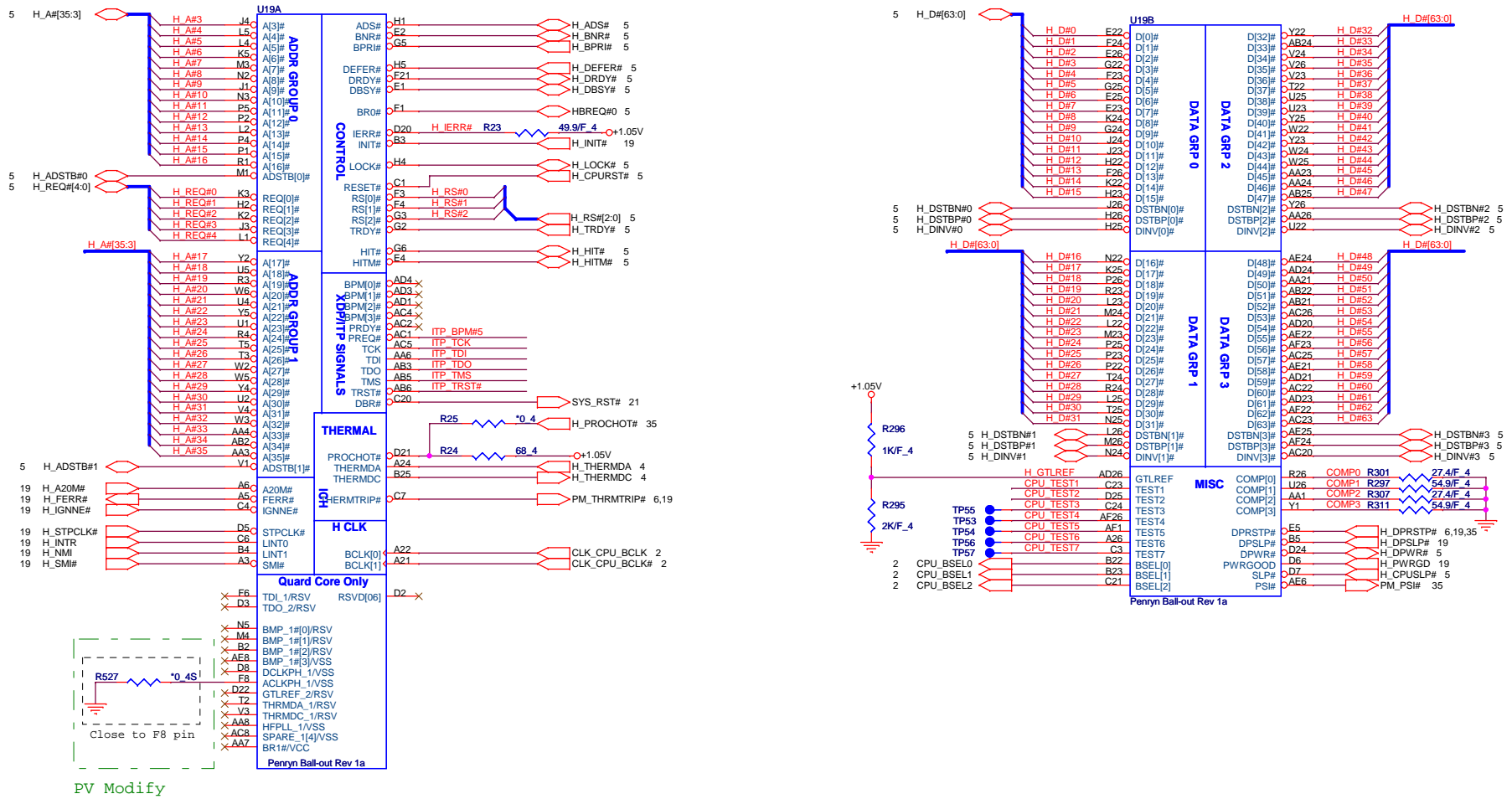
PV Modify

CPU Clock select

FSC	FSB	FSA	CPU	SRC	PCI
1	0	1	100	100	33
0	0	1	133	100	33
0	1	1	166	100	33
0	1	0	200	100	33
0	0	0	266	100	33
1	0	0	333	100	33
1	1	0	400	100	33
1	1	1	RSVD	100	33



### PROJECT : Preso-II Quanta Computer Inc.



PV Modify



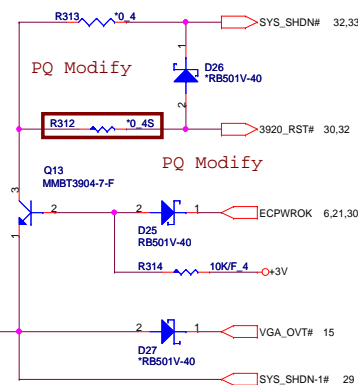
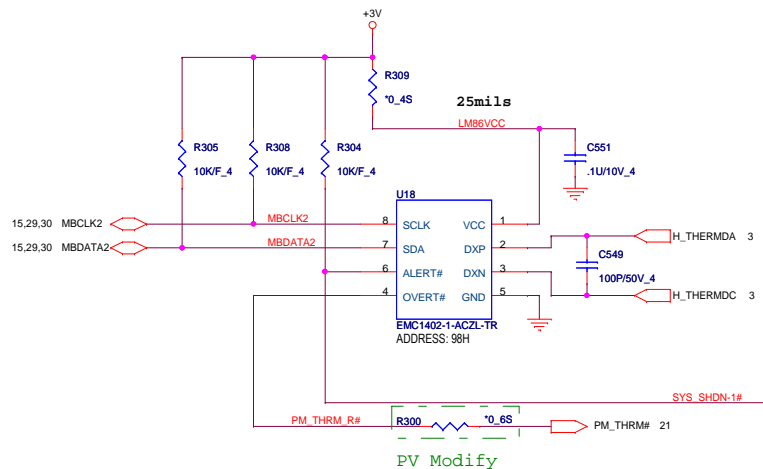
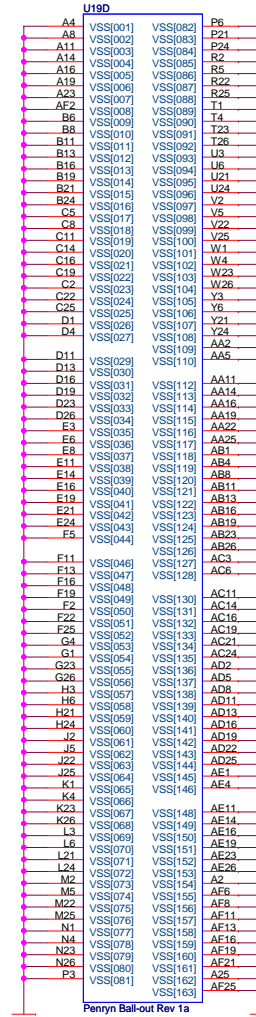
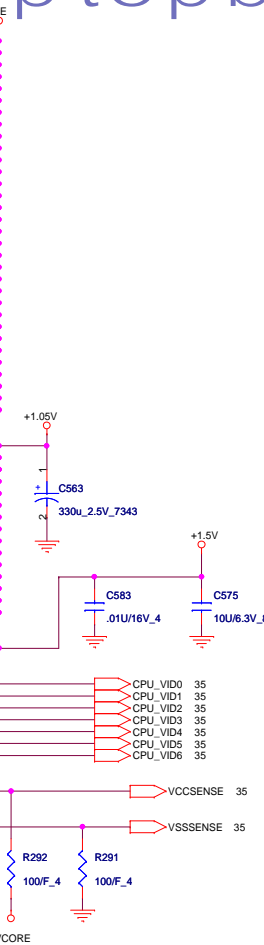
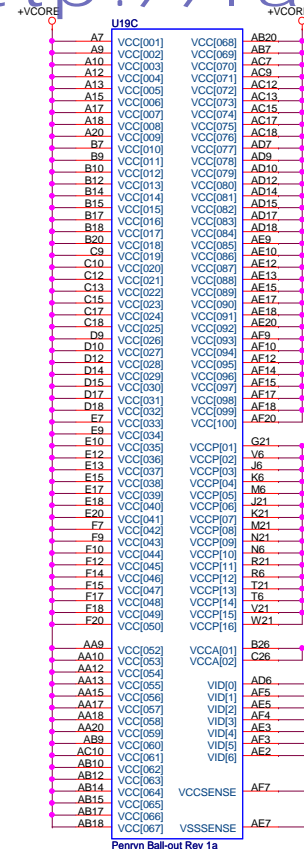
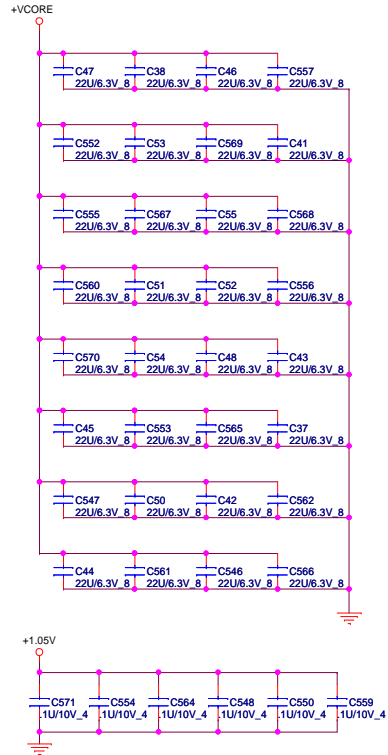
**PROJECT : Preso-II**  
Quanta Computer Inc.

2,6,9,10,11,12,14,15,17,18,19,20,21,22,24,25,26,28,29,30,31,35,36,38  
2,3,5,6,8,9,19,22,23,34,35  
9,19,20,22,24,25,28,31,34,38  
35

+3V  
+1.05V  
+1.5V  
+VCORE

http://laptopblue.vn

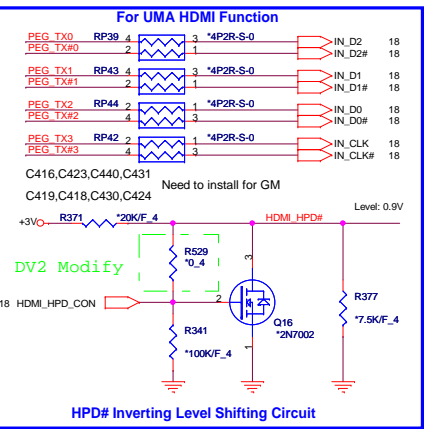
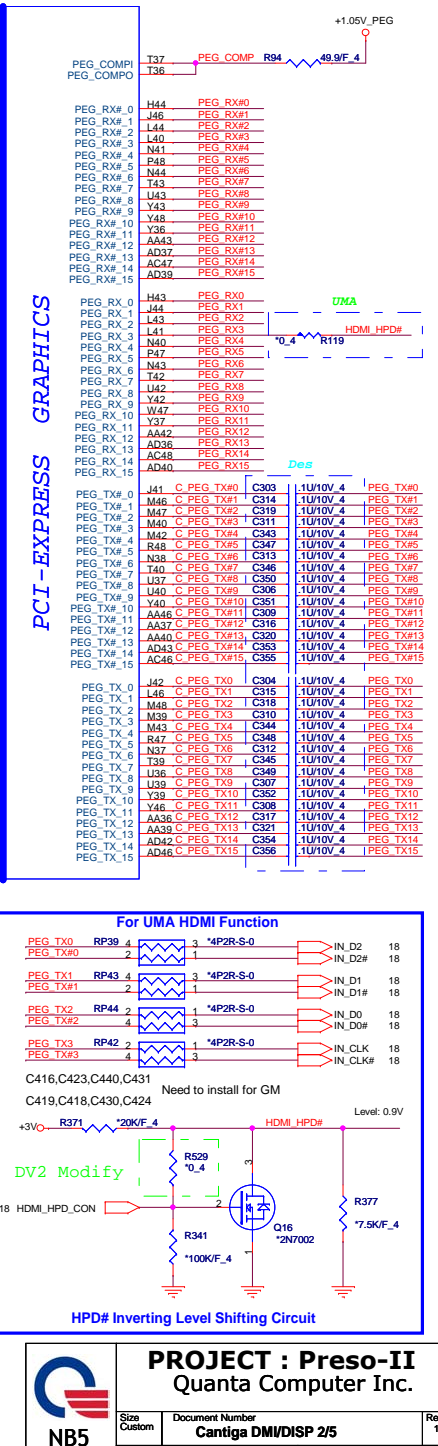
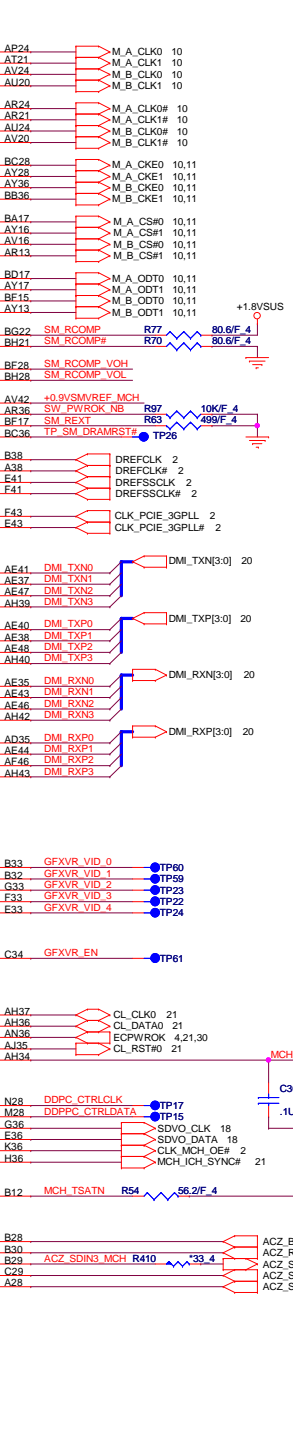
04

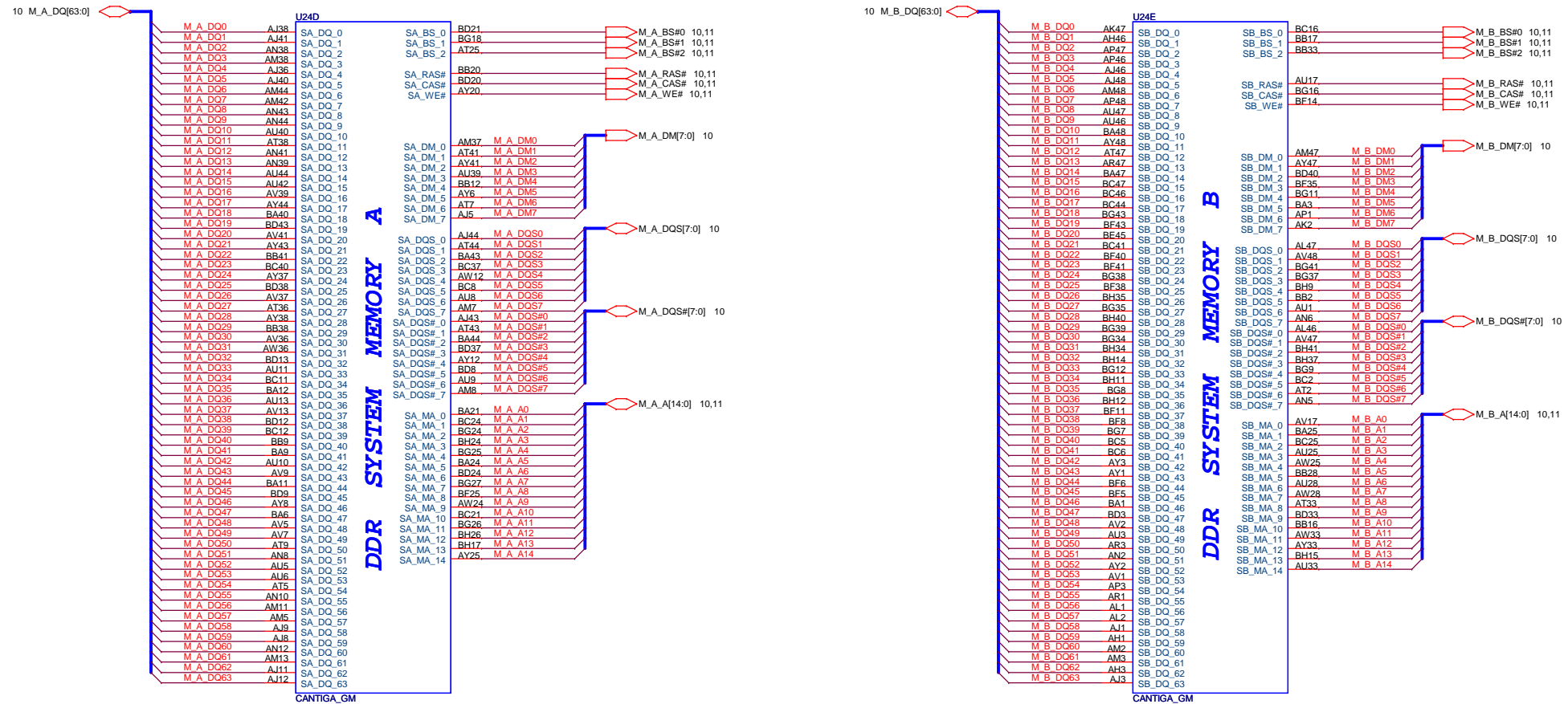






MCH_CFG_13	MCH_CFG_12	Configuration
0	0	Reserved
1	0	XOR Mode enabled
0	1	All-Z Mode enabled
1	1	Normal operation (Default)





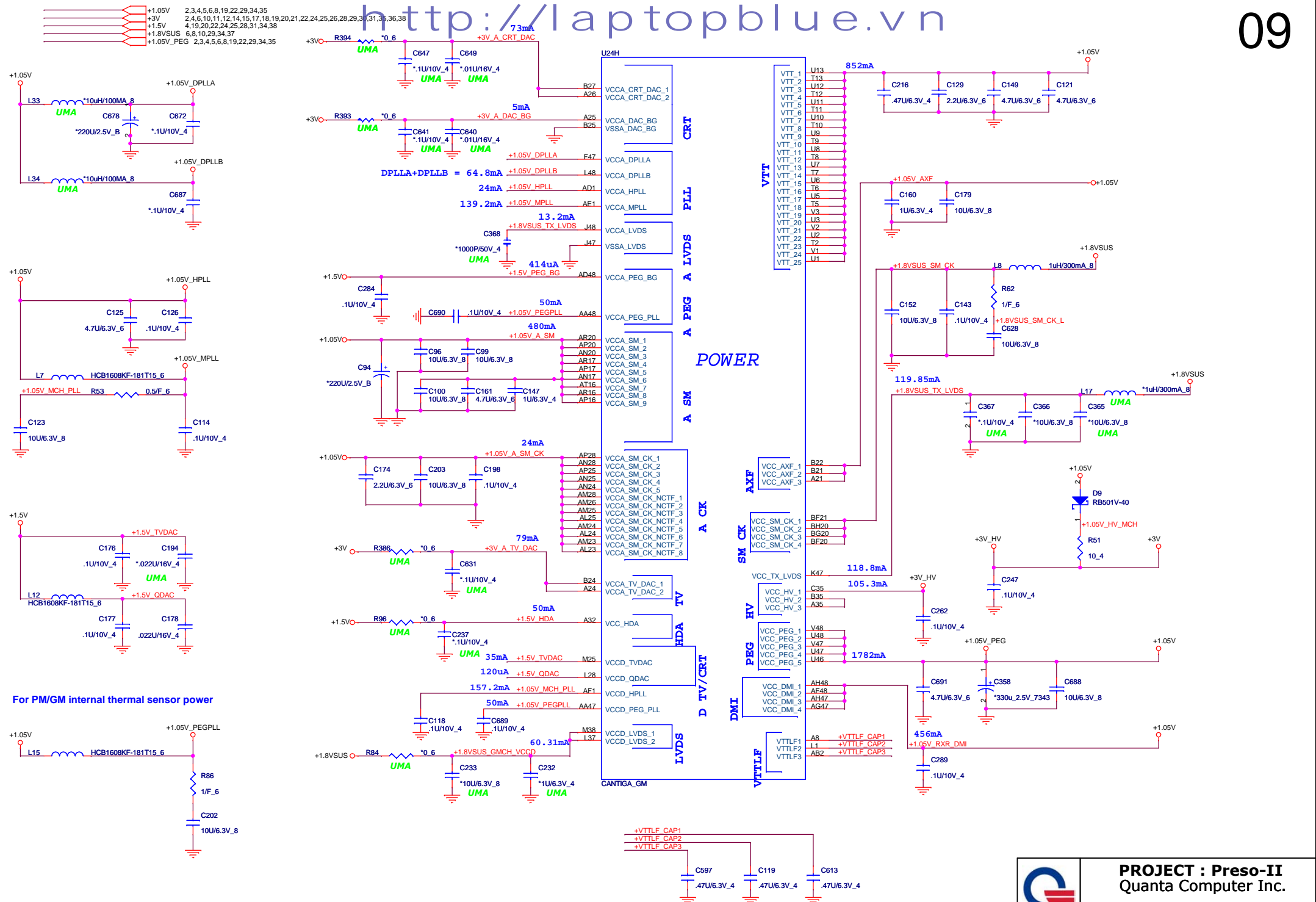
**PROJECT : Preso-II**  
Quanta Computer Inc.

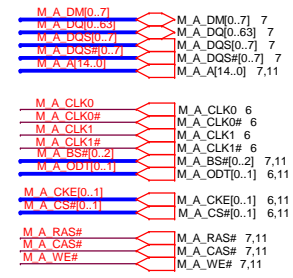
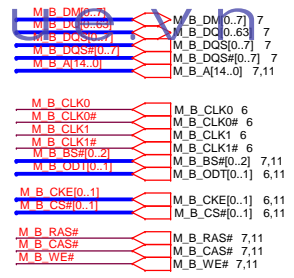
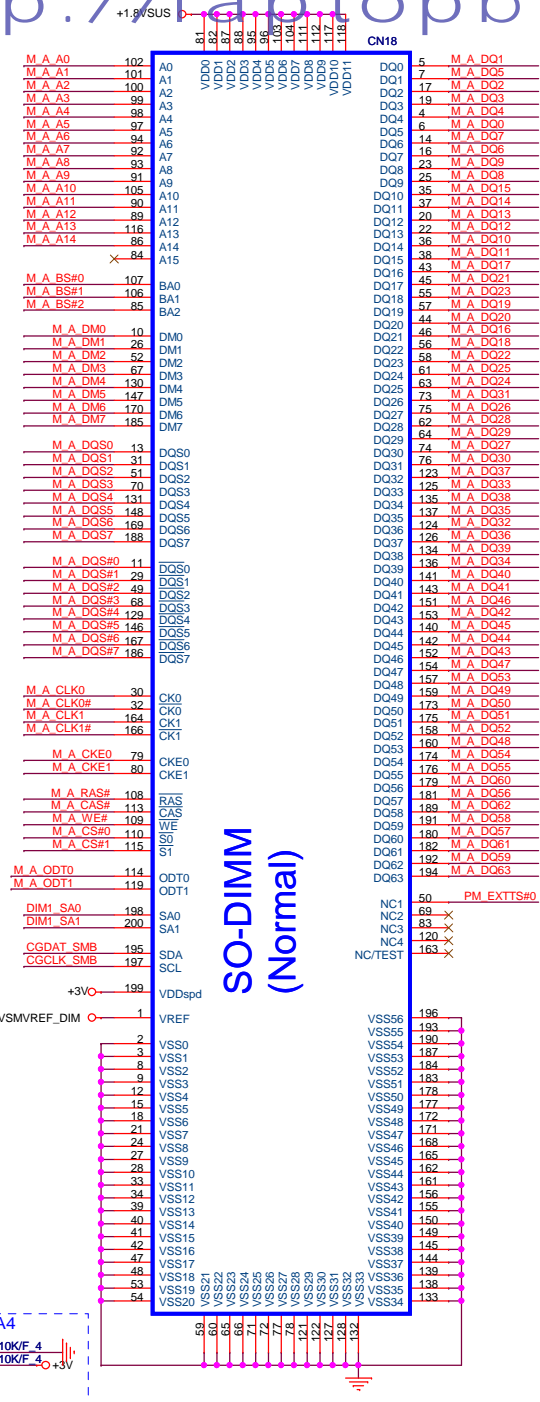
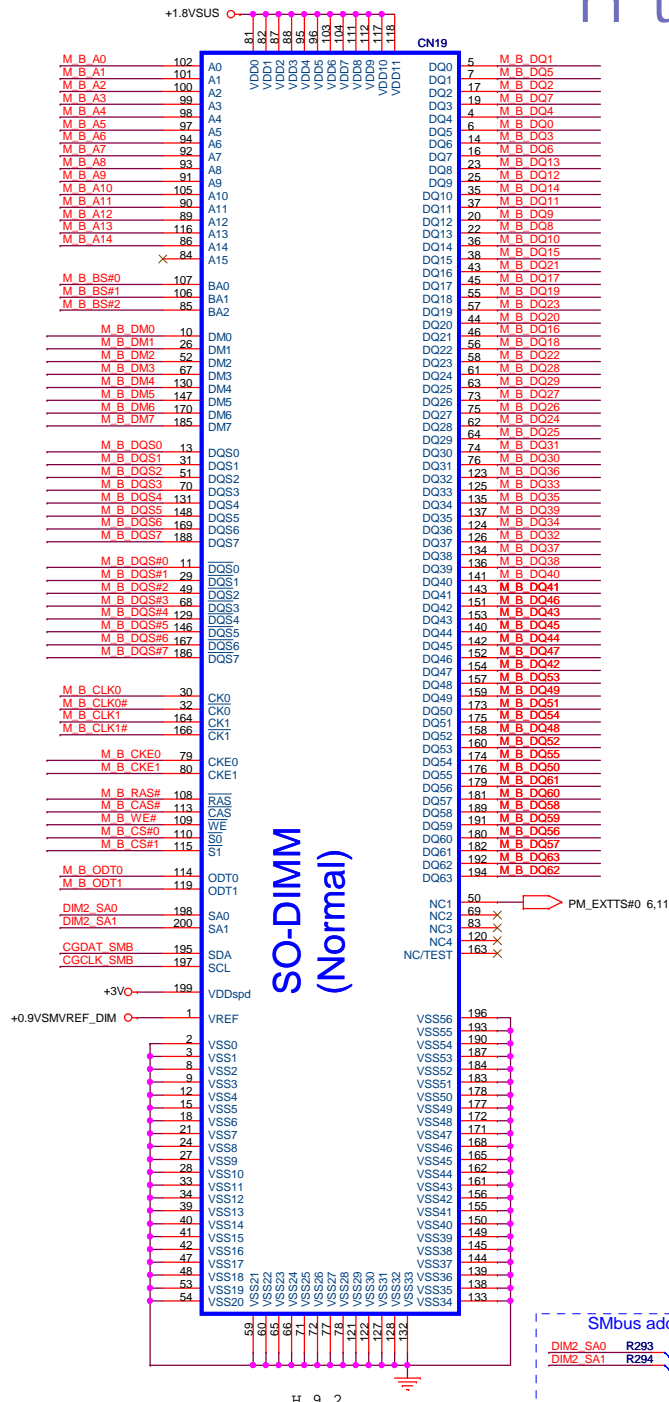
Size Custom	Document Number	Rev 1A
	Cantiga DDR2 3/5	
Date: Tuesday, May 05, 2009	Sheet 7 of 39	



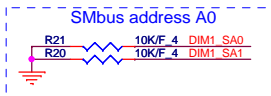
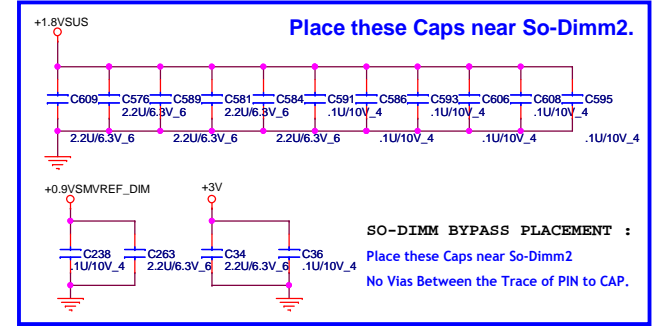
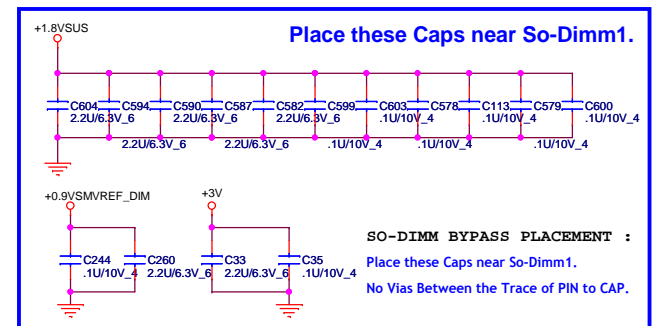
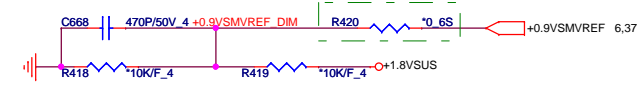
Size Custom	Document Number <b>Cantiga Vcc 4/5</b>	Rev 1A
Date: Tuesday, May 05, 2009		Sheet 8 of 39







PV Modify

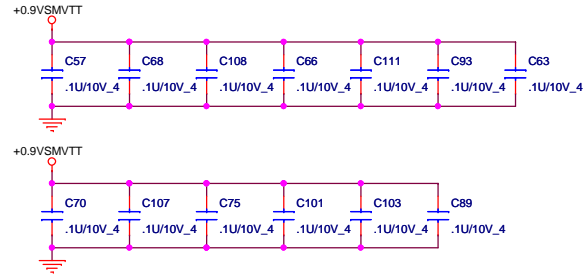


# http://laptopblue.vn

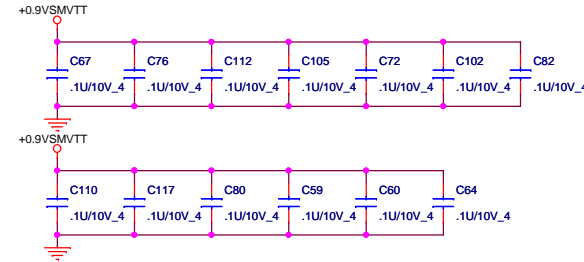
## DDRII DUAL CHANNEL A,B.

11

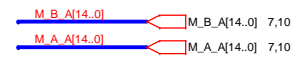
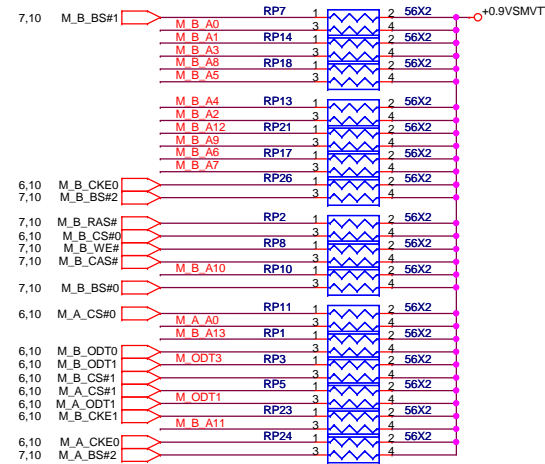
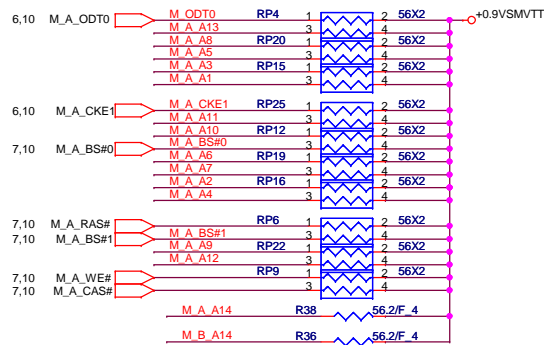
### DDRII A CHANNEL



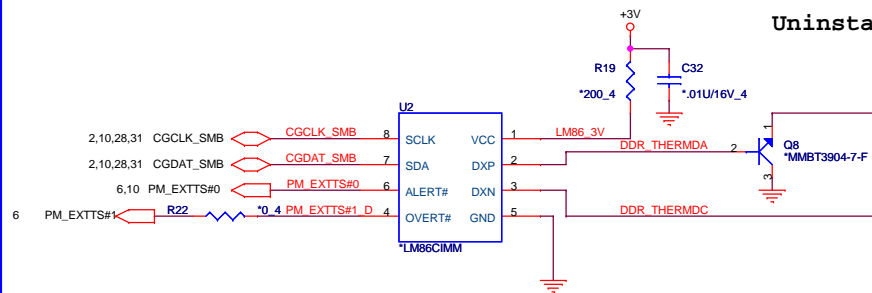
### DDRII B CHANNEL



Layout note: Place one cap close to every 2 pullup resistors terminated to SMDDR\_VTERM

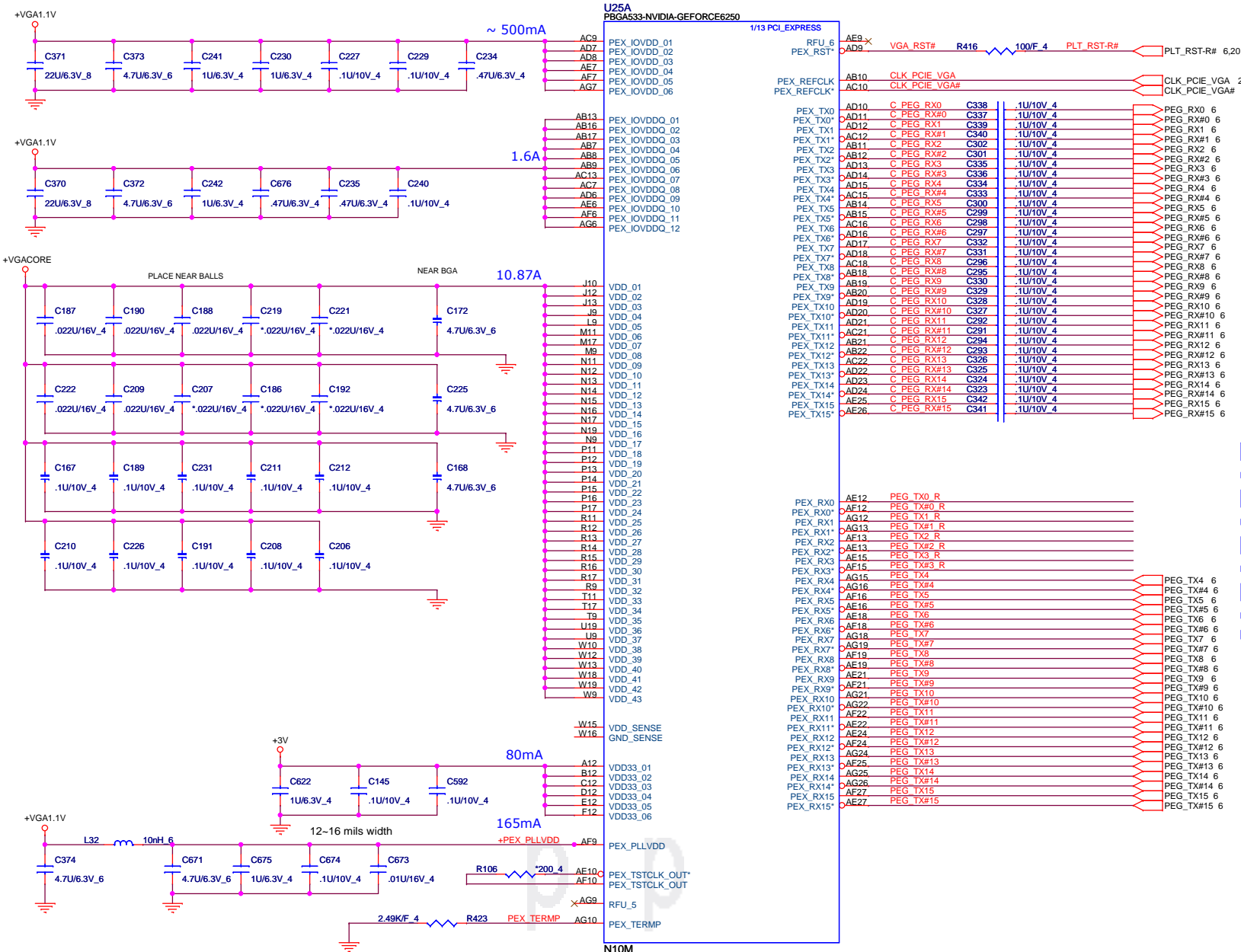


Uninstall

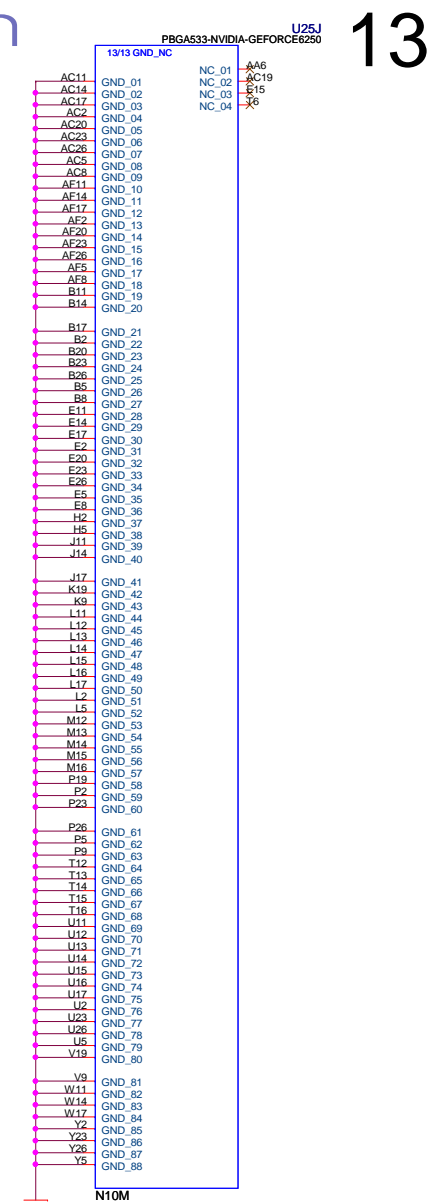


**PROJECT : Preso-II**  
Quanta Computer Inc.

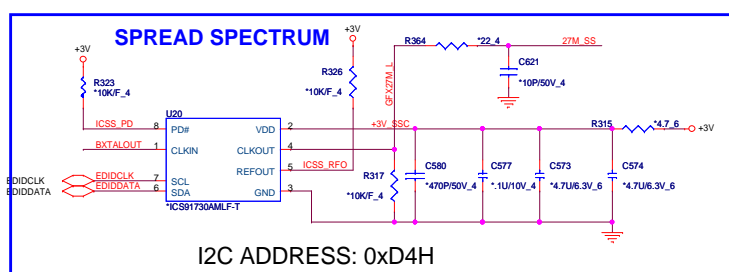
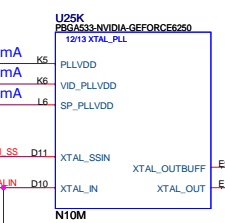
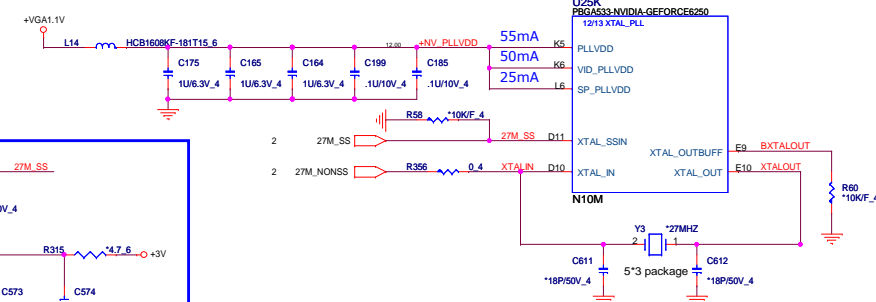
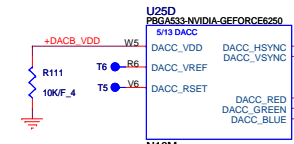
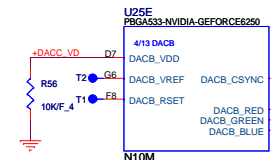
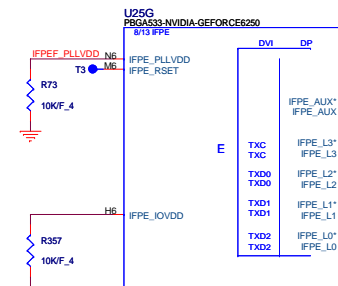
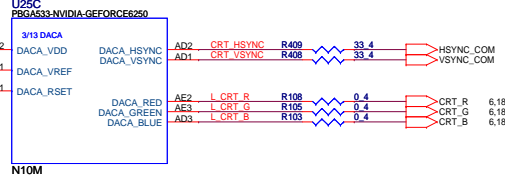
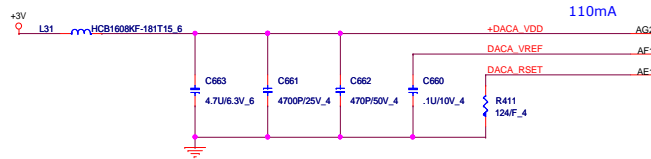
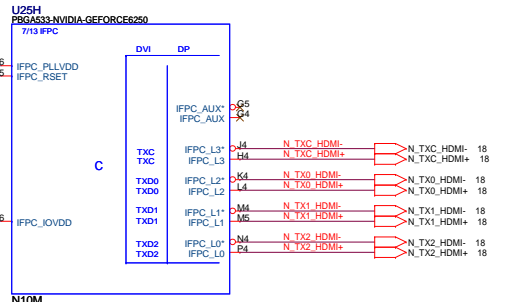
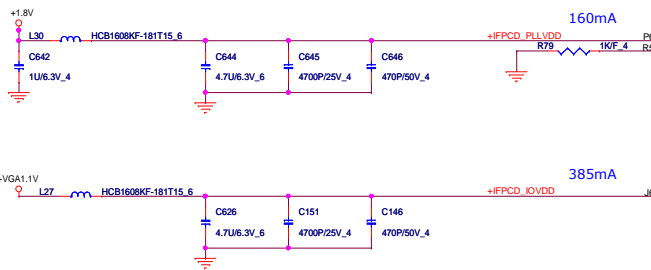
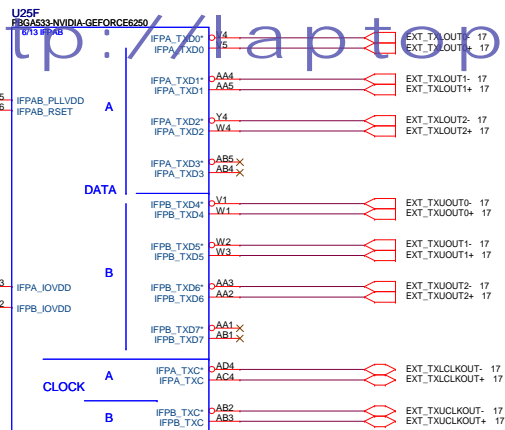
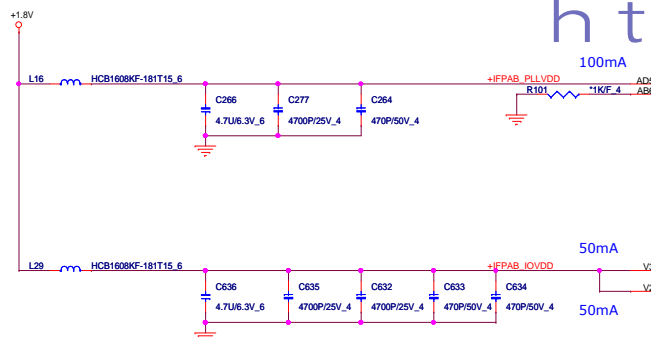
Size	Document Number	Rev
Custom	DDR2 termination	1A
Date: Tuesday, May 05, 2009	Sheet 11 of 39	



**PROJECT : Preso-II**  
**Quanta Computer Inc.**



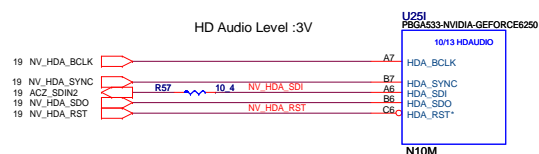
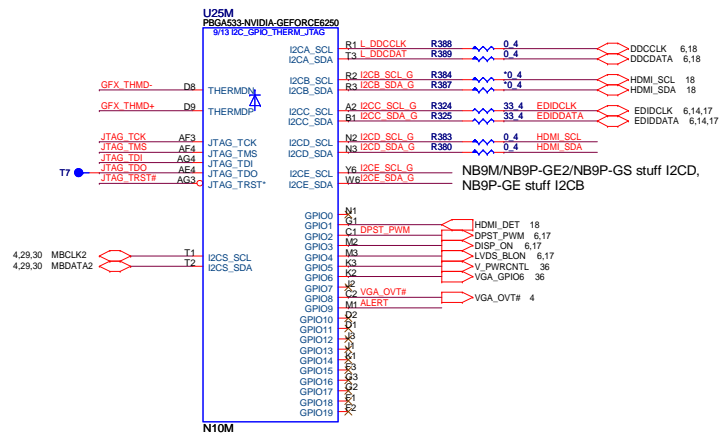
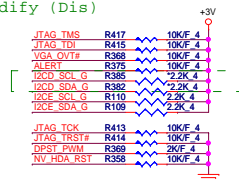
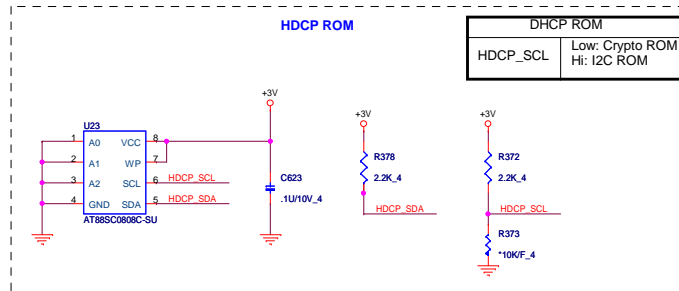




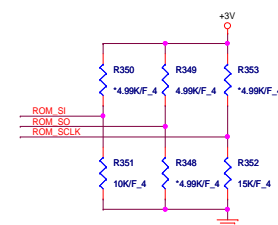
I2C ADDRESS: 0xD4H

STUFF PDs on XTALSSIN and XTALOUTBUFF when EXT\_SS is NOT USED

Install it when not connected to Spread spectrum device



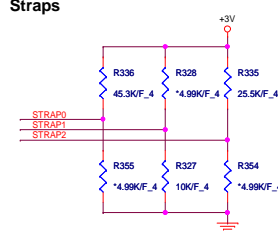
## PCI\_DEVID[4] / SUBVENDOR



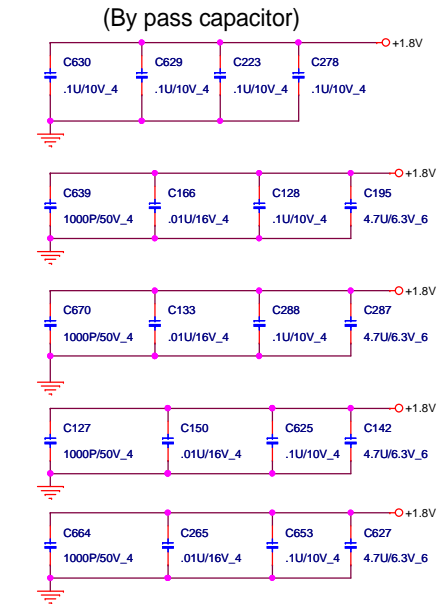
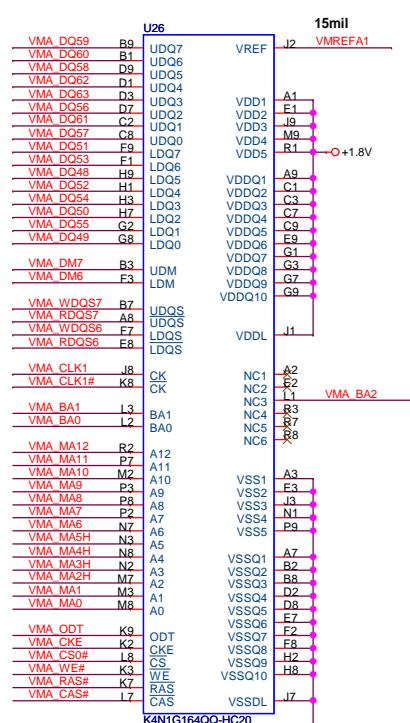
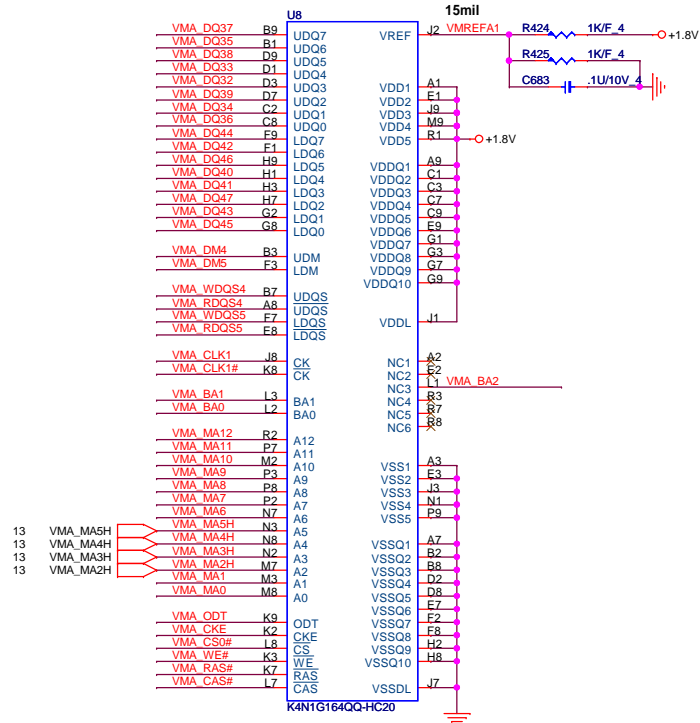
VRAM ID	
ROM_SI	PD 5K: Hynix PD 10K: Samsung PD 15K: Qimonda

### Logical Strap Bit Mapping

GPIO	I/O	ACTIVE	USAGE
0	IN	N/A	PRIMARY DVI HOTPLUG
1	IN	N/A	SECONDARY DVI HOTPLUG
2	OUT	HIGH	PANEL BACKLIGHT PWM
3	OUT	HIGH	PANEL POWER ENABLE
4	OUT	HIGH	PANEL BACKLIGHT ENABLE
5	OUT	N/A	NVDD VID0
6	OUT	N/A	NVDD VID1
7	OUT	N/A	FBVDD VID0
8	IN	LOW	THERMAL ALERT
9	OUT	LOW	FAN PWM
10	OUT	N/A	FBVREF SELECT
11	OUT	N/A	SLI SYNC0
12	IN	N/A	AC DETECT
13	OUT	LOW	PS CONTROL OR HDMI_CEC
14	OUT	HIGH	PS CONTROL



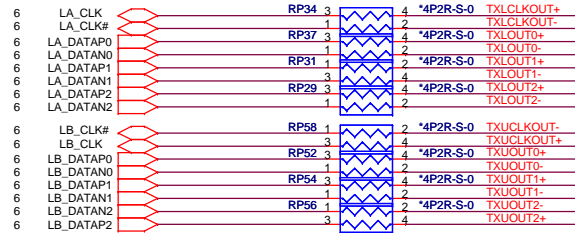
	PU	PD
5K	1000	0000
10K	1001	0001
15K	1010	0010
20K	1011	0011
25K	1100	0100
30K	1101	0101
35K	1110	0110
45K	1111	0111



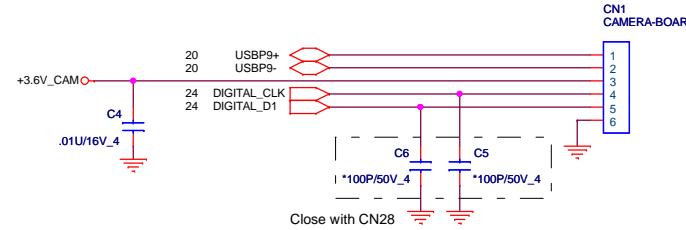
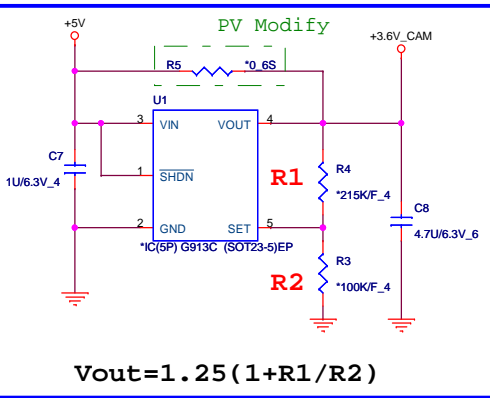
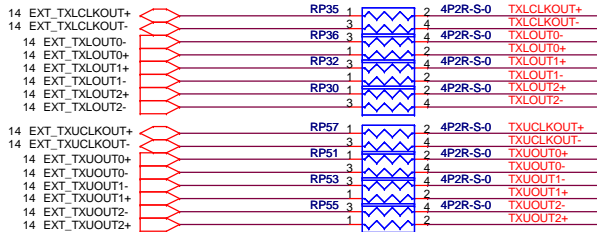
Size Custom	Document Number <b>N10M VRAM-1(GDDR2) 5/5</b>	Rev 1A
Date: Tuesday, May 05, 2009		Sheet 16 of 39

1. If LCD connector near GPU, then place these series Resistors near GPU  
2. If LCD connector near N/B, then place these series Resistors near N/B

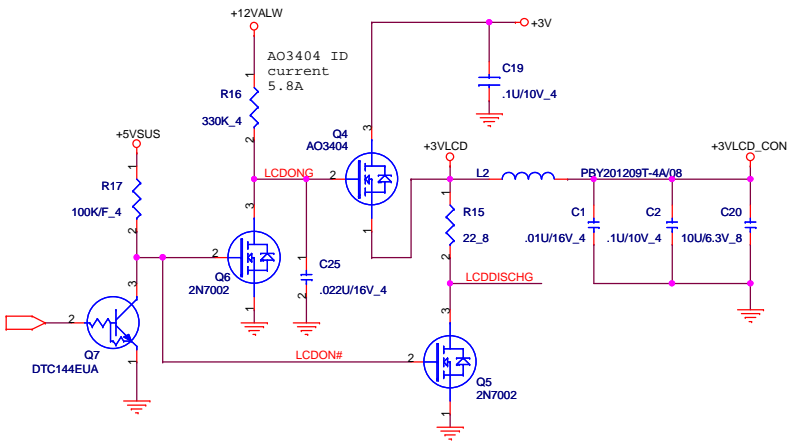
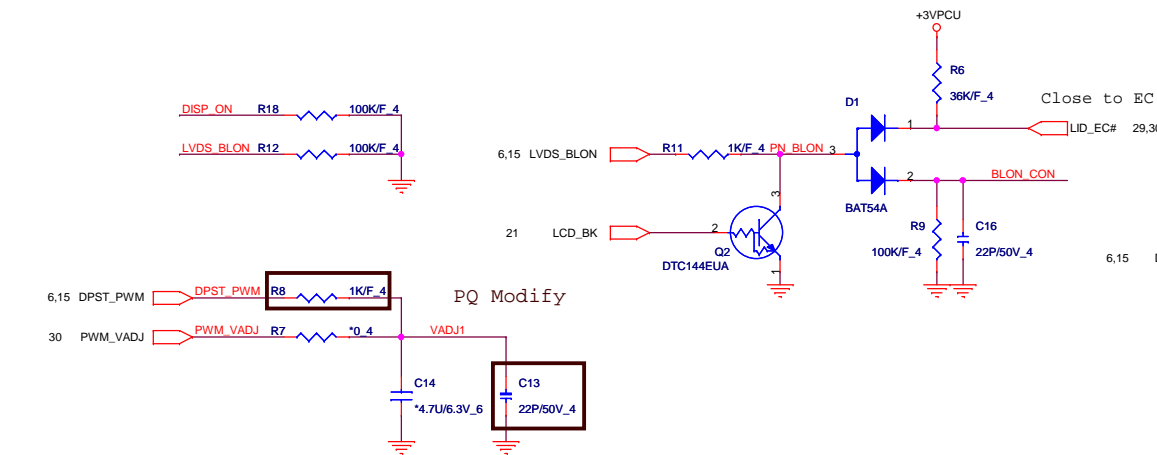
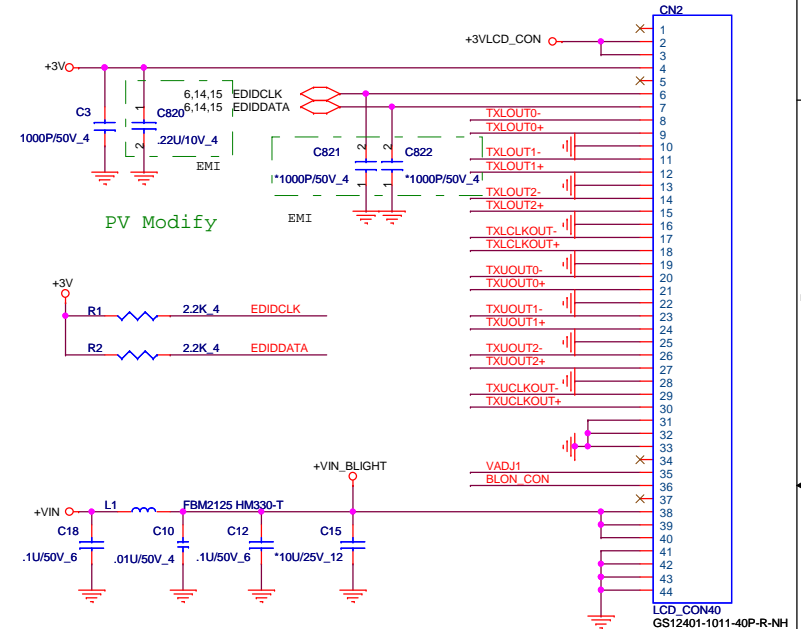
OPTION SIGNAL FROM NB FOR UMA VGA

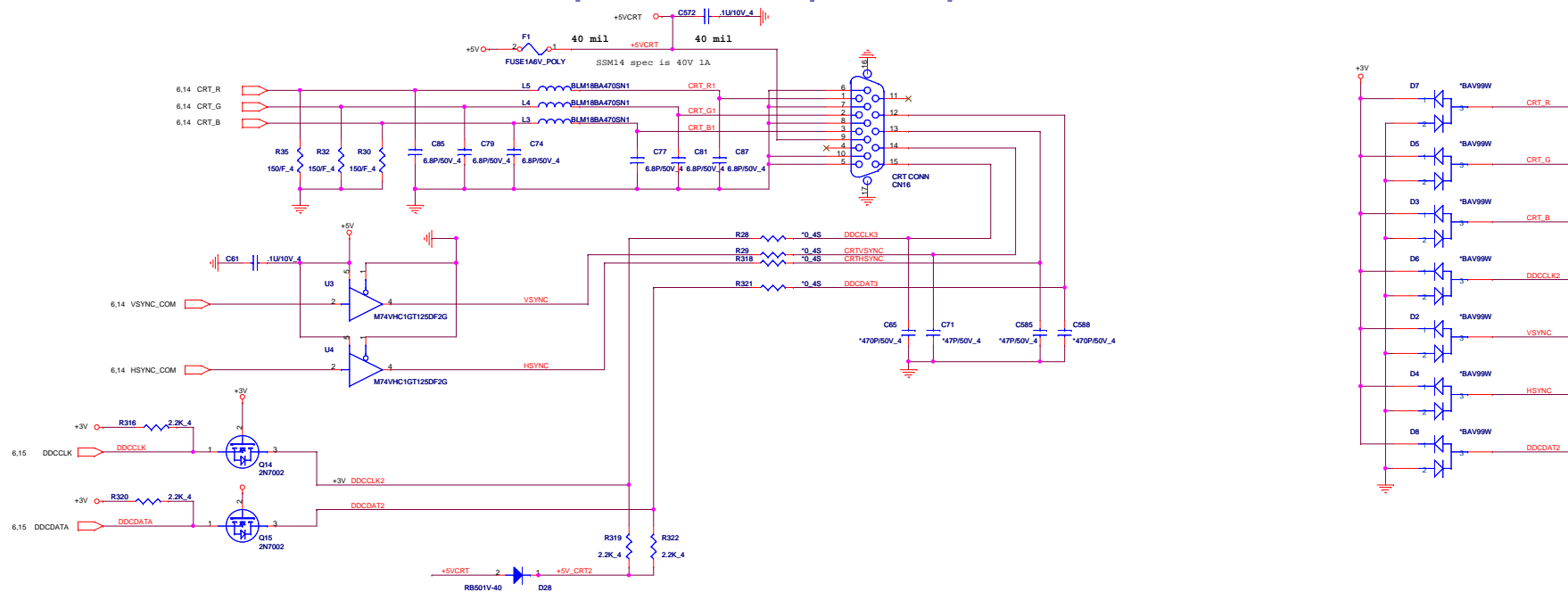


OPTION SIGNAL FROM Nvidia to VGA

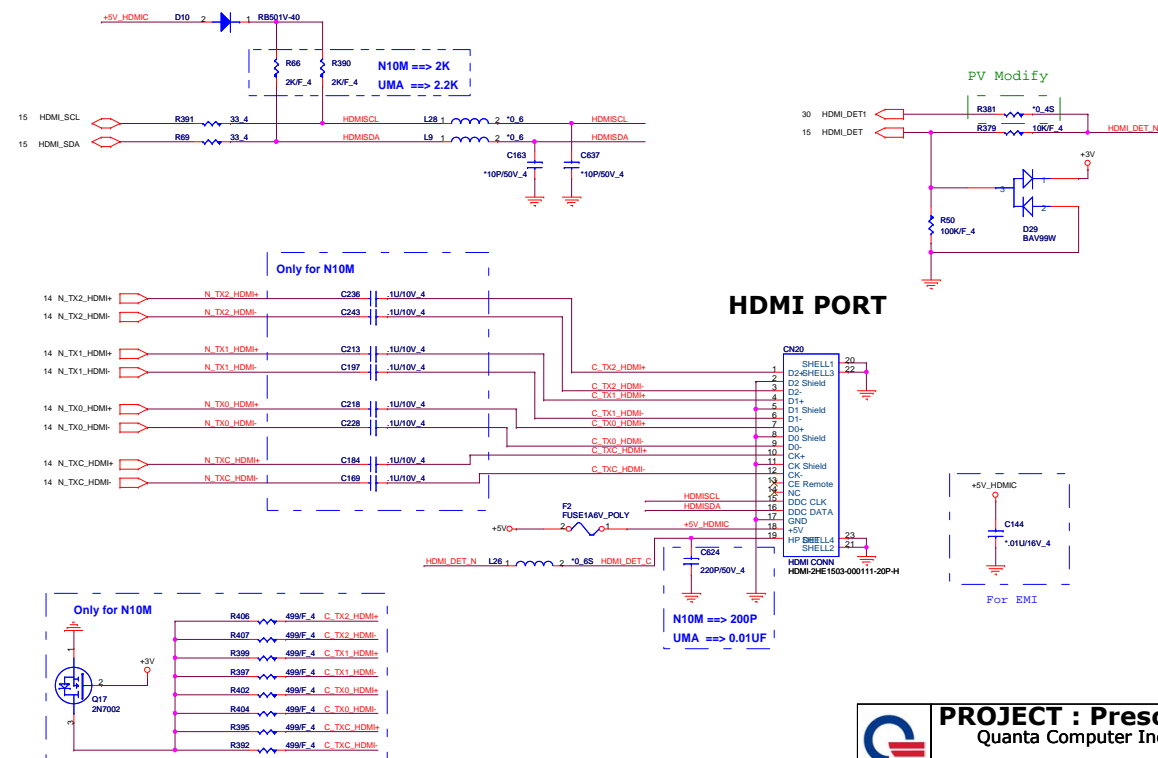
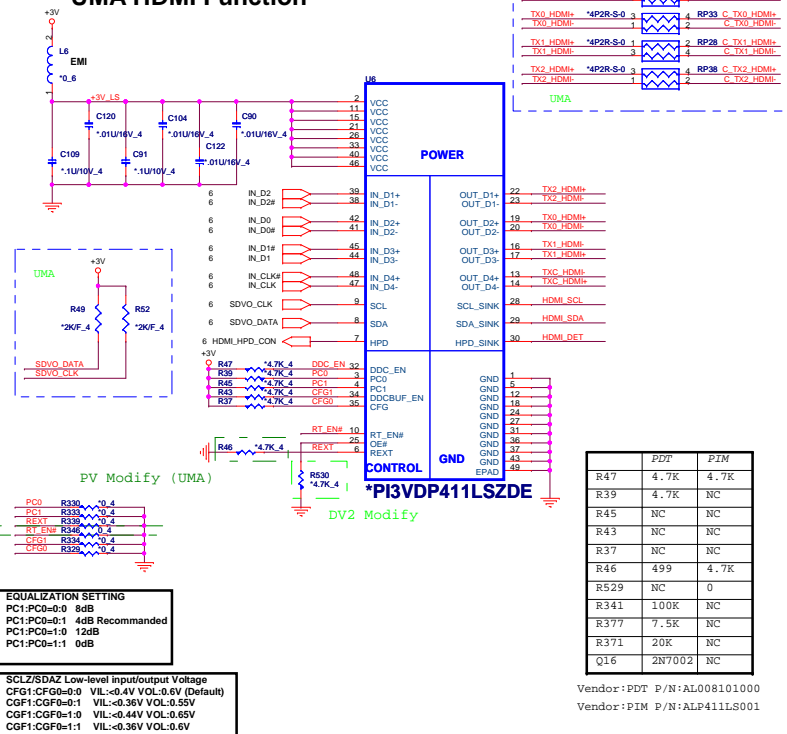


LCD / USB CAMERA / DIGITAL MIC CONNECTOR

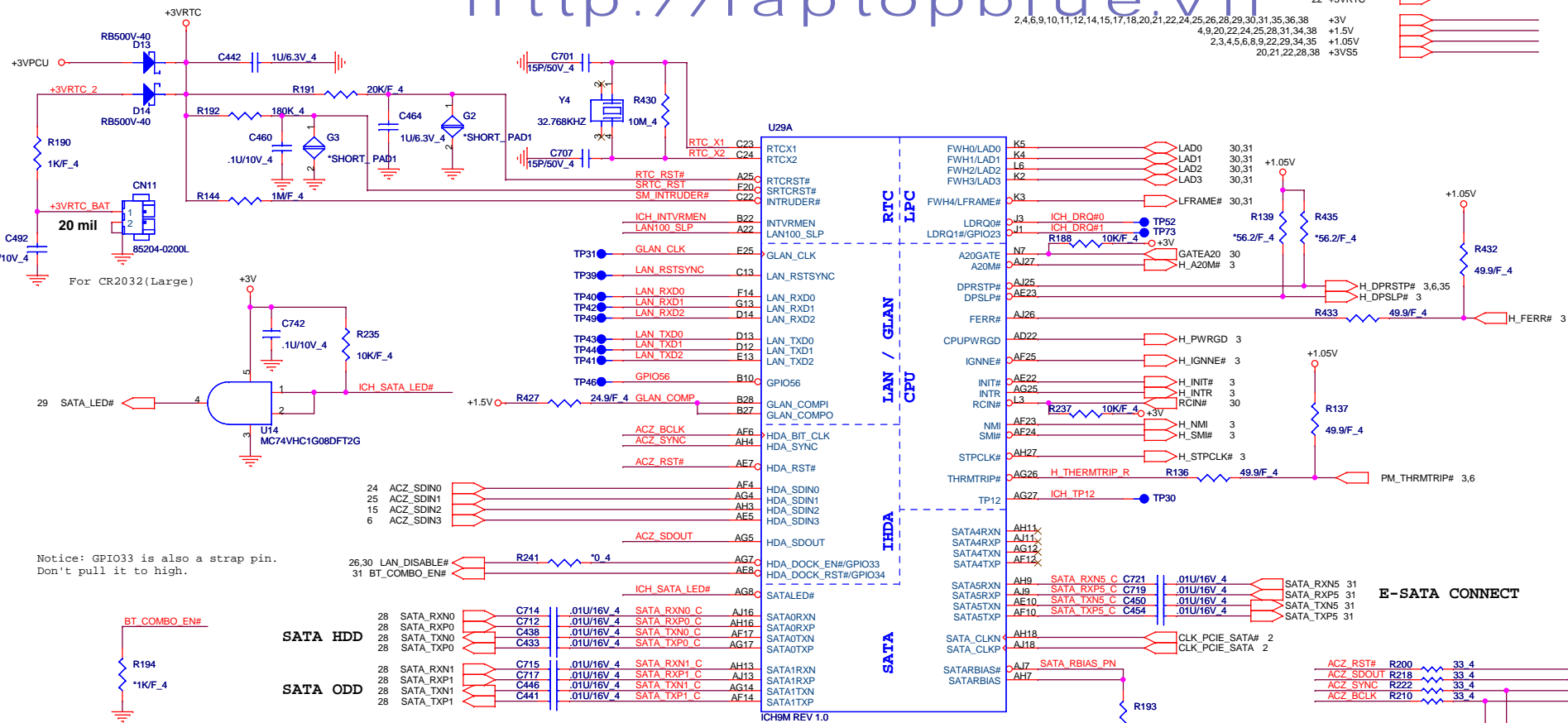




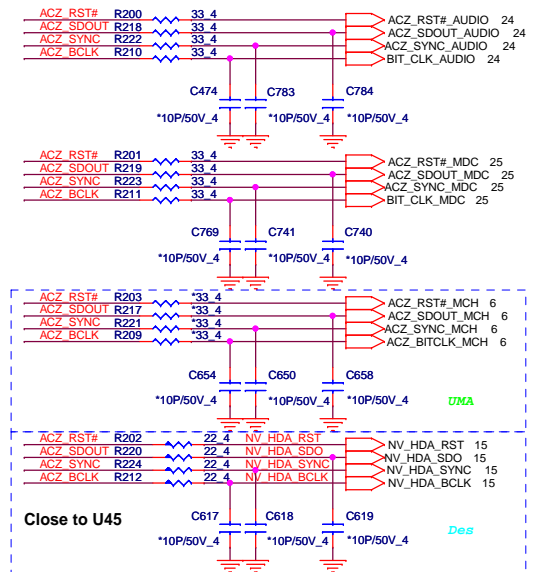
## UMA HDMI Function







## E-SATA CONNECT



## SB Strap

<b>ICH9-M Internal VR Enable strap</b> (Internal VR for Vccsus1_05, VccSus1_5 and VccCL1_5)	<b>ICH9-M LAN100_SLP Strap</b> (Internal VR for VccLAN1_05 and VccCL1_05)
INTVRMEN Low = Internal VR disable High = Internal VR enable(Default)	LAN100_SLP Low = Internal VR disable High = Internal VR enable(Default)

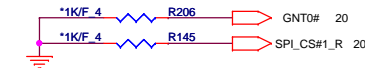
## XOR Chain Entrance Strap

ICH_TP3	HDA_SDOOUT	Description
0	0	RSVD
0	1	Enter XOR Chain
1	0	Normal operation(Default)
1	1	Set PCIE port config bit 1

## ICH9 Boot BIOS select

STRAP	PCI_GNT0#	SPL_CS#1
SPI	0	1
PCI	1	0
LPC	1	1

(default)



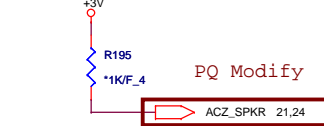
## A16 swap override strap

PCI_GNT#3	Low = A16 swap override enabled Hi = Default
-----------	---



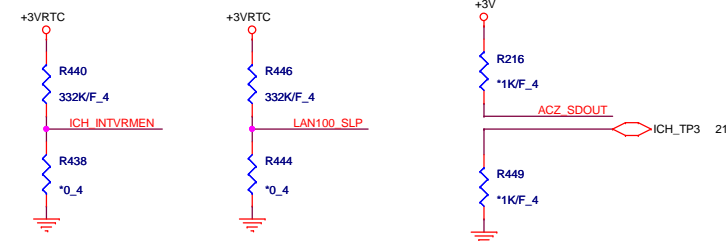
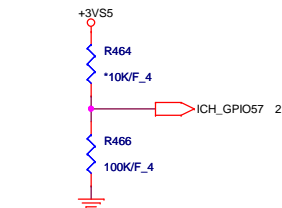
## No Reboot Strap

ACZ_SPKR	Low: Default Hi: No reboot
----------	-------------------------------



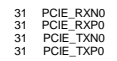
## TPM physical presence

ICH_GPIO57	Low: Default
------------	--------------

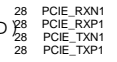


**PROJECT : Preso-II**  
Quanta Computer Inc.

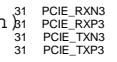
MINI CARD PCI-E(WLAN)



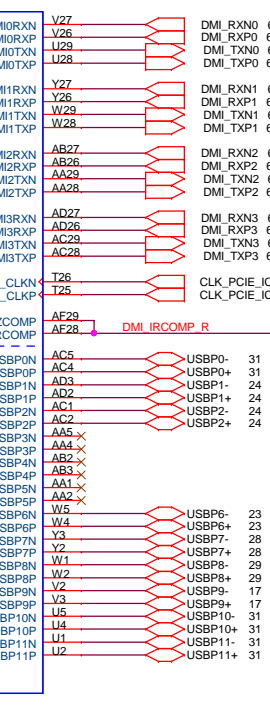
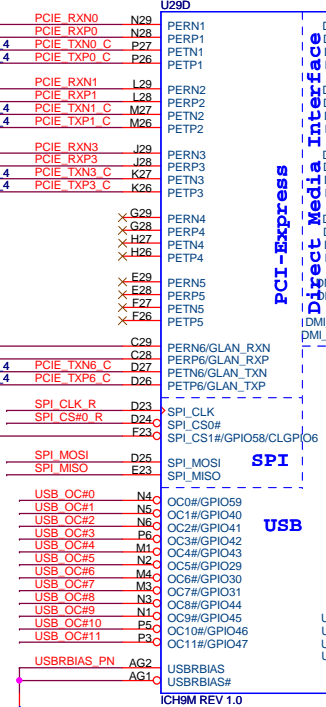
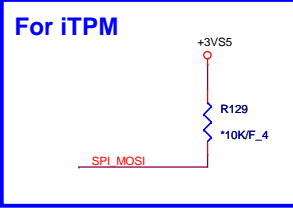
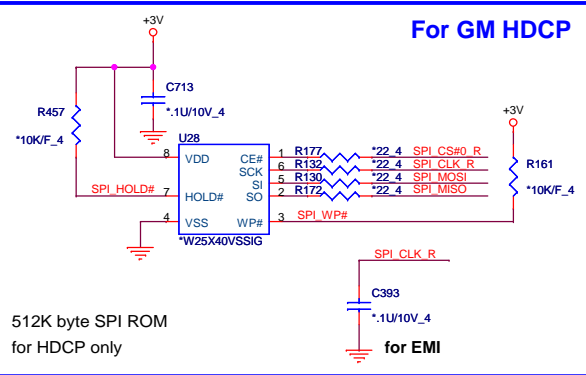
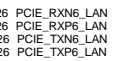
EXPRESS CARD (NEW CARD)



MINI CARD PCI-E(Robson)



PCI-E-LAN



E-SATA and USB Connector

USB Connector

USB Connector

Card Reader

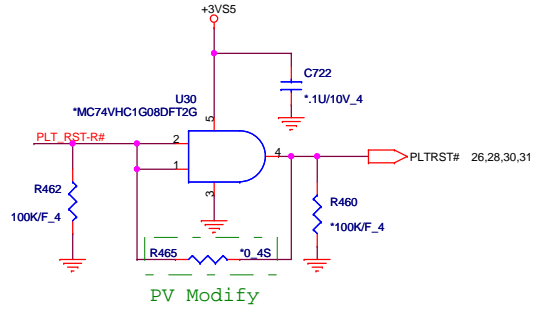
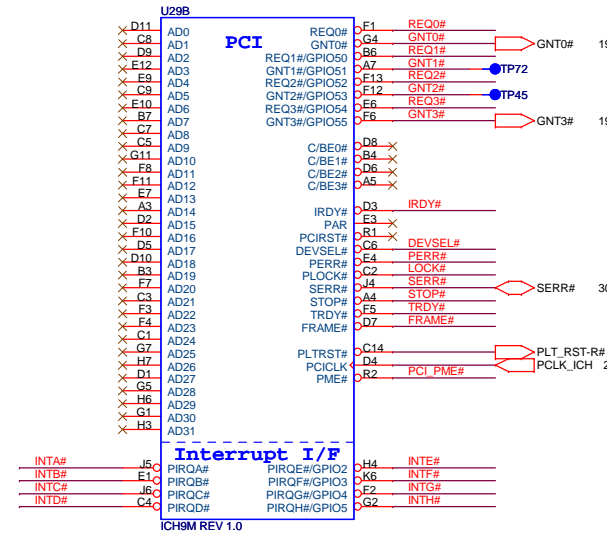
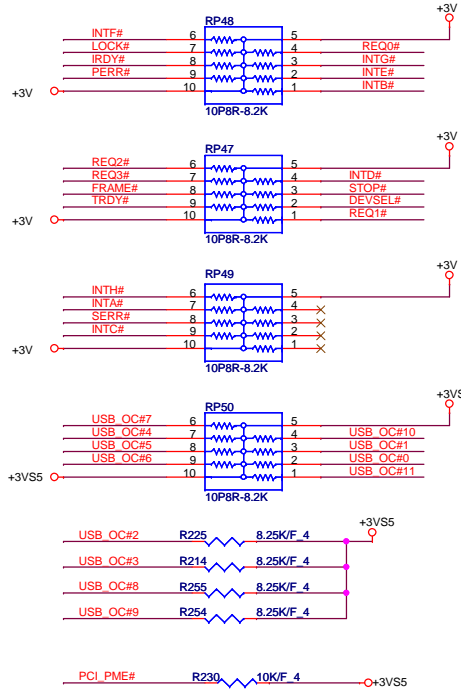
NEW CARD

BLUETOOTH

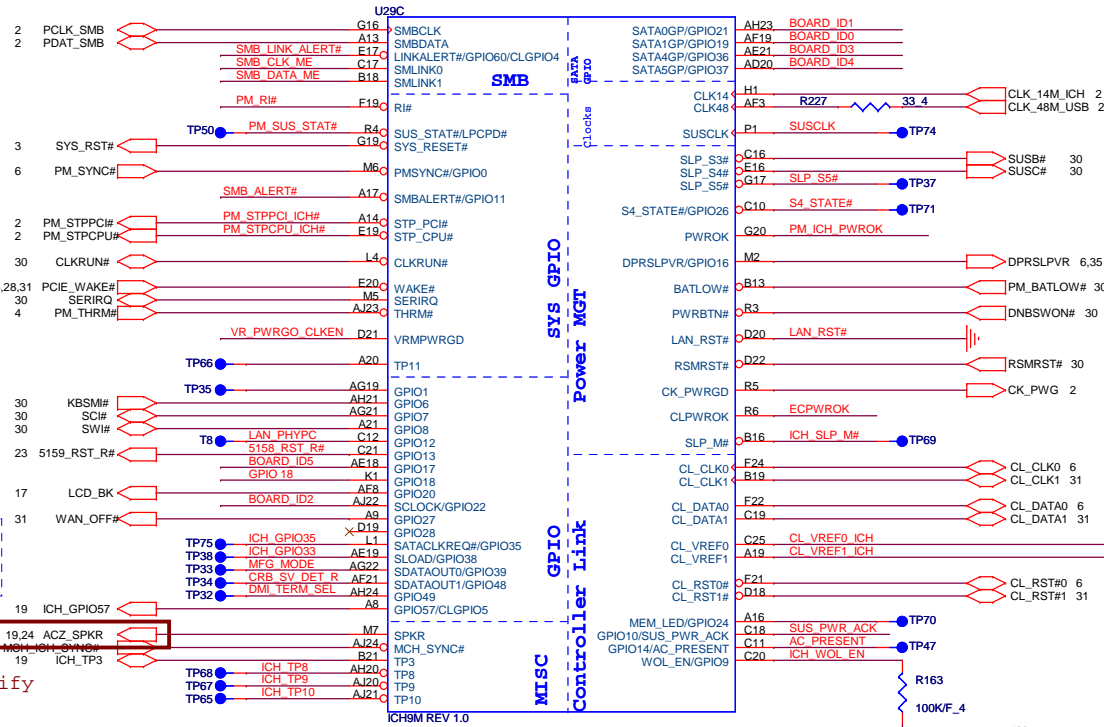
Carama USB

Wireless Mini-Card

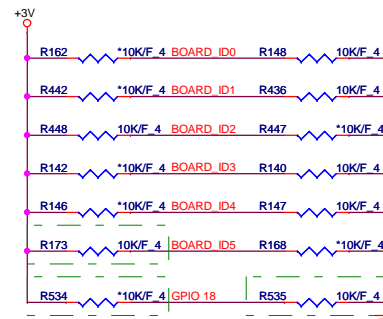
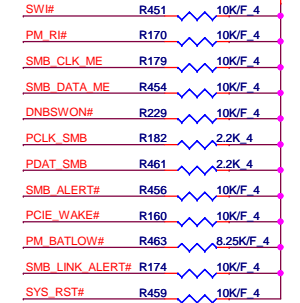
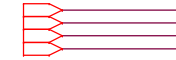
Robson Mini-Card



PROJECT : Preso-II  
Quanta Computer Inc.



4, 9, 19, 20, 22, 24, 25, 28, 31, 34, 38 +1.5V  
2, 4, 6, 9, 10, 11, 12, 14, 15, 17, 18, 19, 20, 22, 24, 25, 26, 28, 29, 30, 31, 35, 36, 38 +3V  
19, 20, 22, 28, 38 +3VS5  
23, 29, 31, 34, 35, 36, 38 +3VSUS

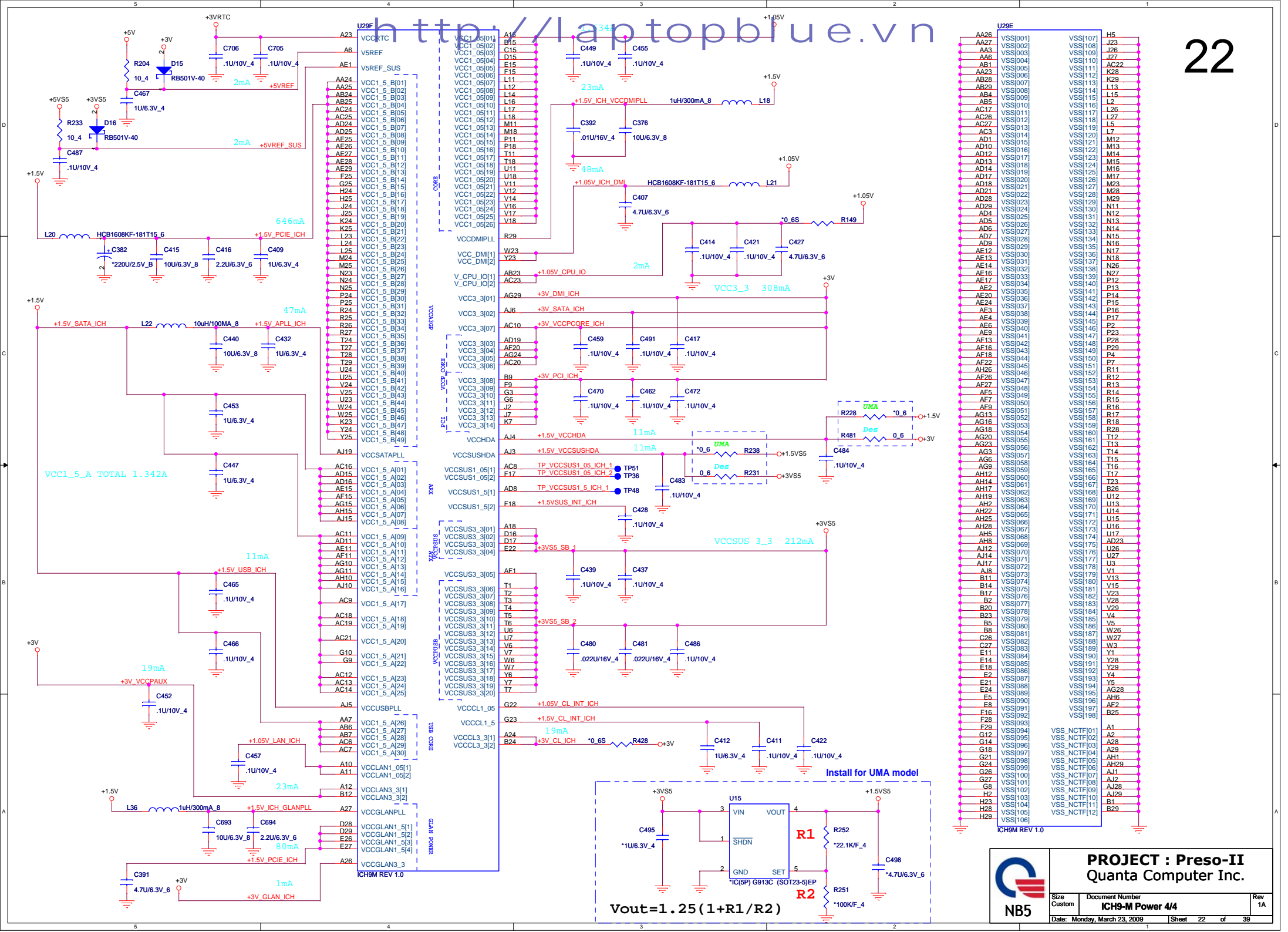


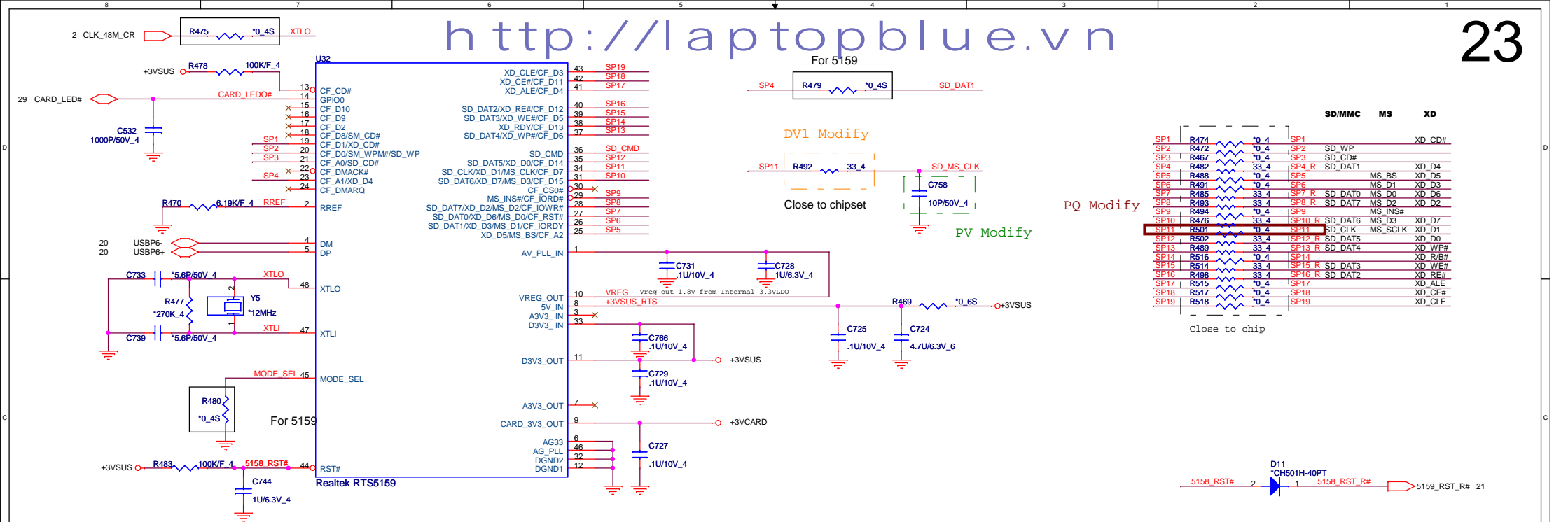
**Board ID**

Model	BOARD_ID 2	BOARD_ID 3	BOARD_ID 5
GM45	0	0	1
GL40	0	0	1
N10M	1	0	1

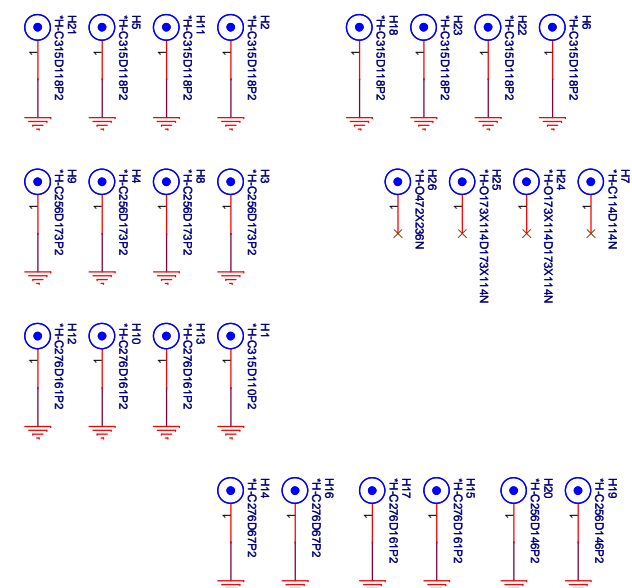
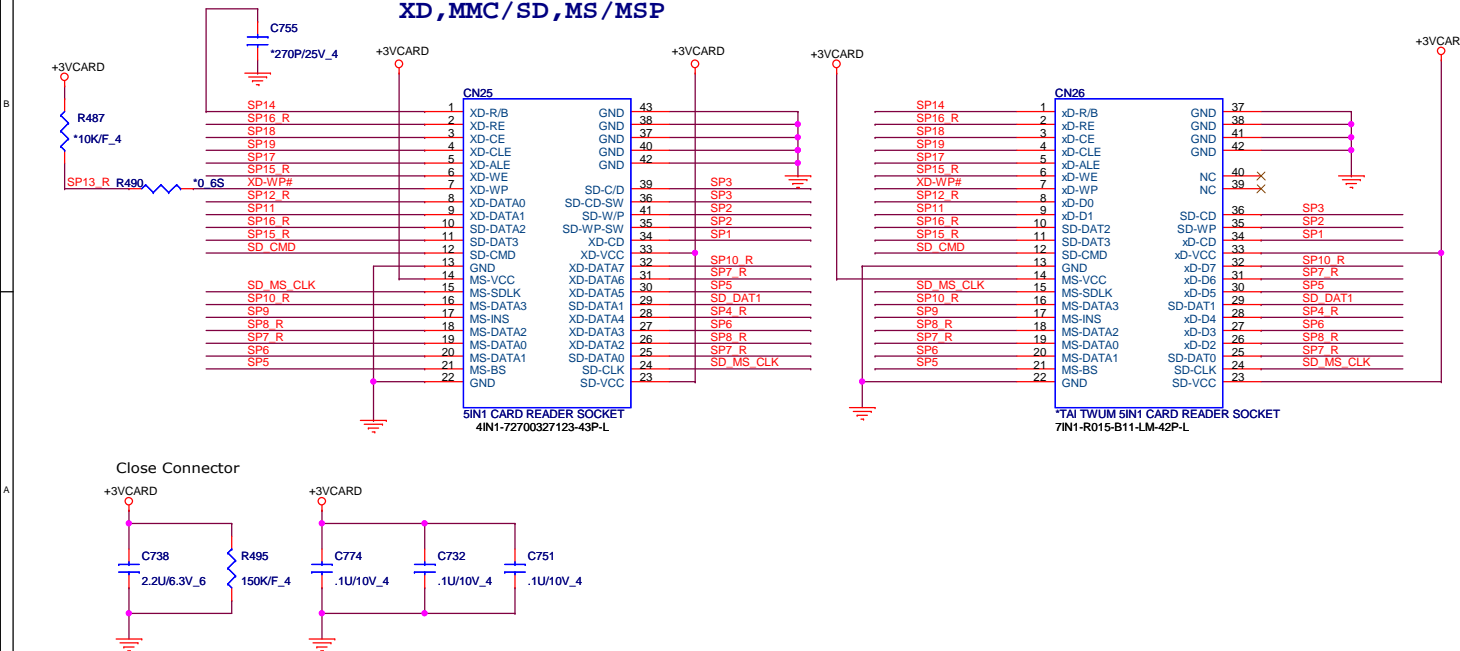


**PROJECT : Preso-II**  
Quanta Computer Inc.

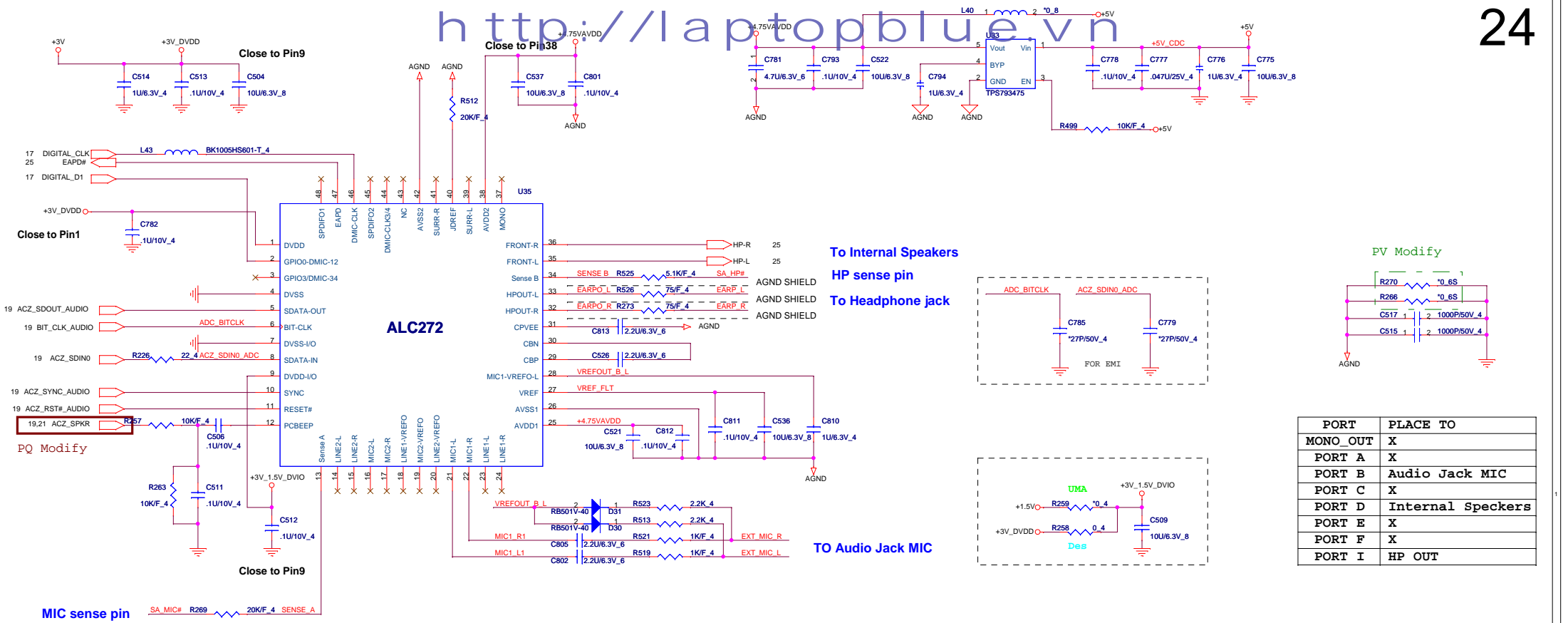




## 5 IN1 CARD READER XD, MMC/SD, MS/MSP

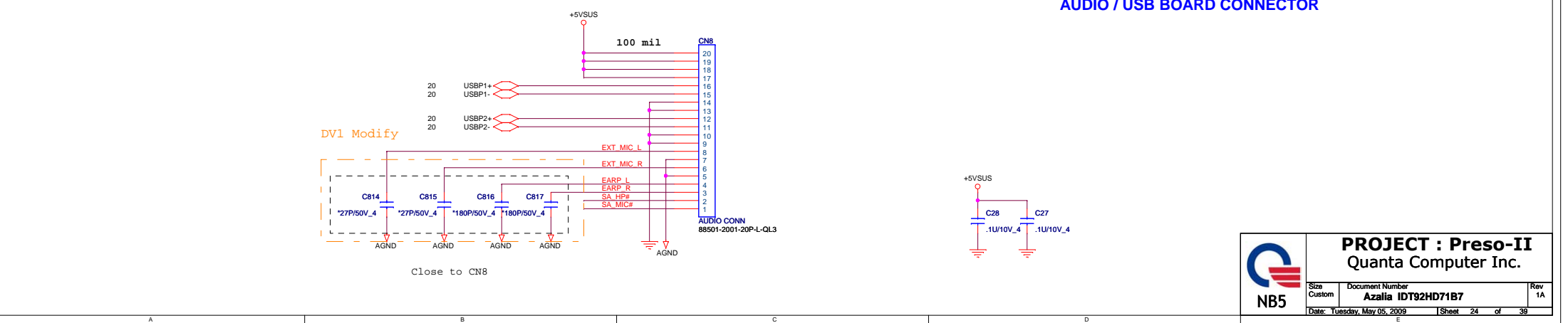






PORT	PLACE TO
MONO_OUT	X
PORT A	X
PORT B	Audio Jack MIC
PORT C	X
PORT D	Internal Speakers
PORT E	X
PORT F	X
PORT I	HP OUT

### AUDIO / USB BOARD CONNECTOR

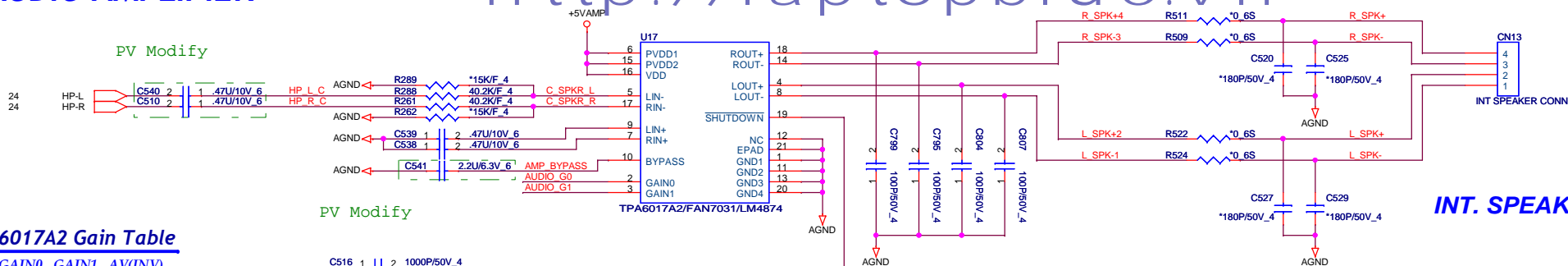


**PROJECT : Preso-II**  
Quanta Computer Inc.

Size Custom	Document Number <b>Azalia IDT92HD71B7</b>	Rev 1A
Date: Tuesday, May 05, 2009		Sheet 24 of 39

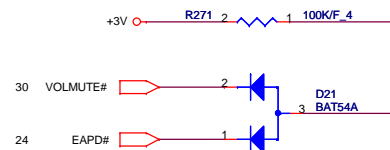
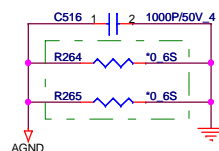
# http://laptopblue.vn

## PV Modify

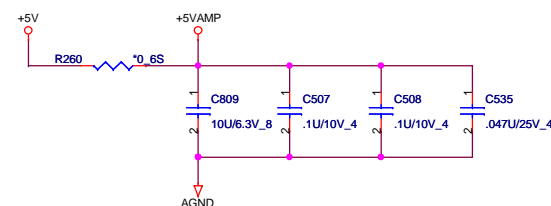
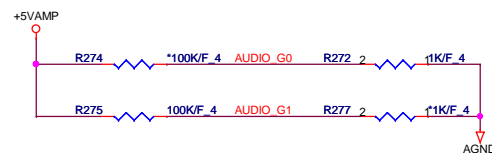


<i>GAIN0</i>	<i>GAIN1</i>	<i>AV(INV)</i>
--------------	--------------	----------------

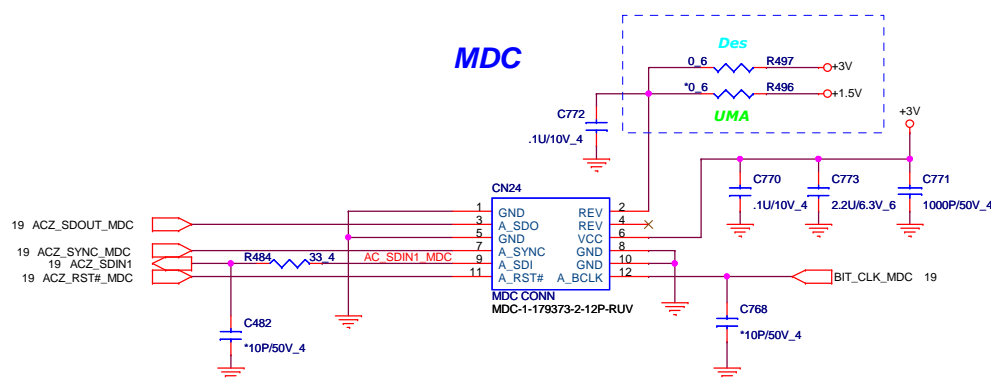
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB



AL001431K04  
AL6017A2K12  
APA2031 ,AL002031K00

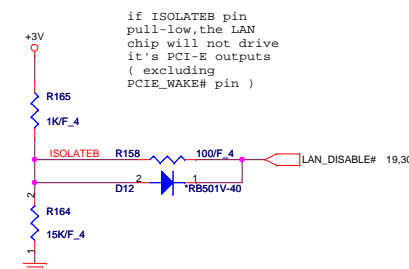
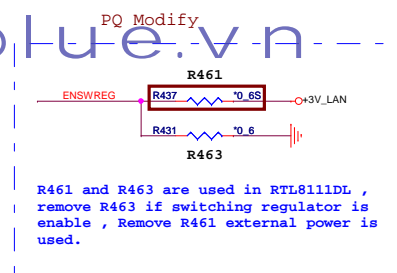


**INT. SPEAKER**

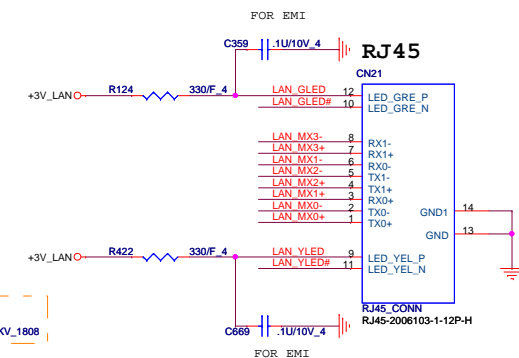
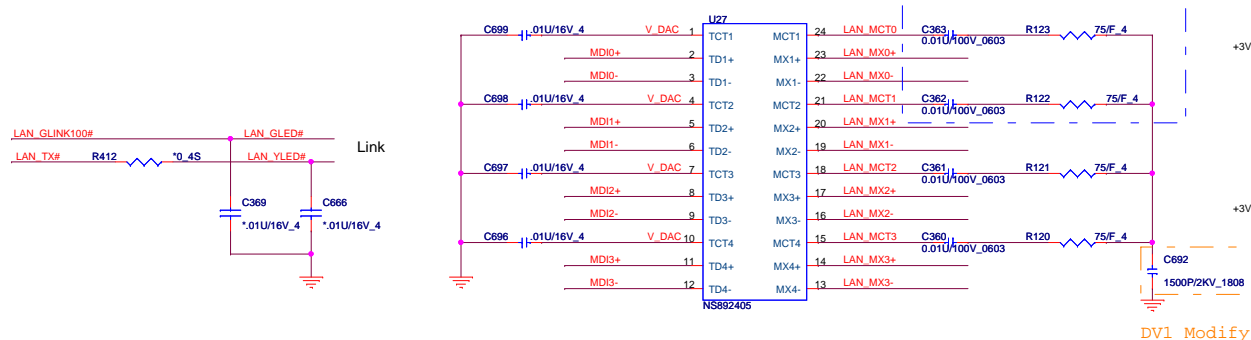


**PROJECT : Preso-II**  
Quanta Computer Inc.

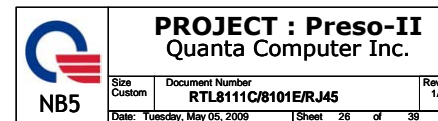
Size Custom	Document Number <b>AMP_TPA6017/MDC</b>	Rev 1A
Date: Tuesday, May 05, 2009		Sheet 25 of 39

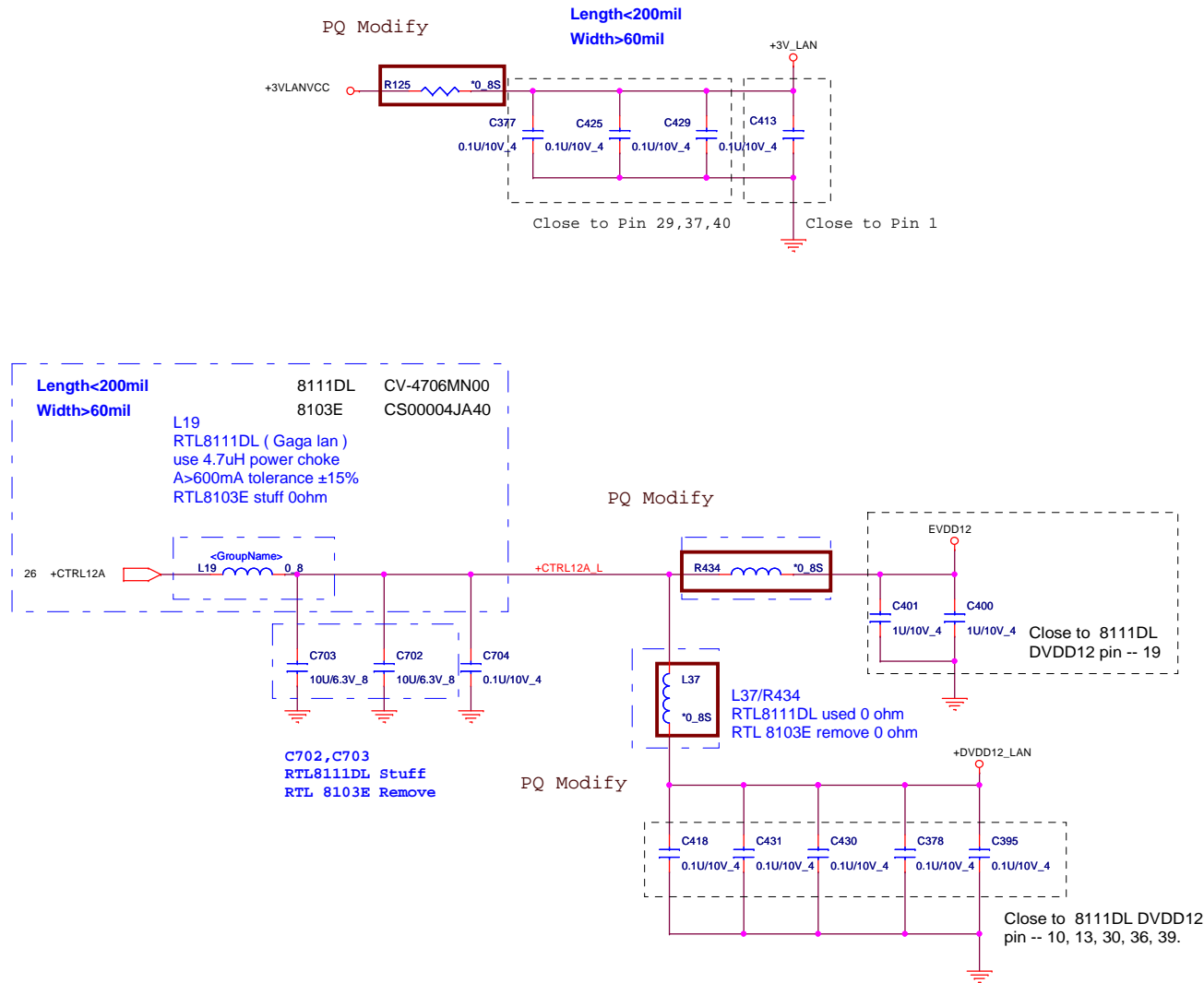


```
RTL8103EL(10/100Mbps):
R123,R122,C363,C362 use 0 ohm
```



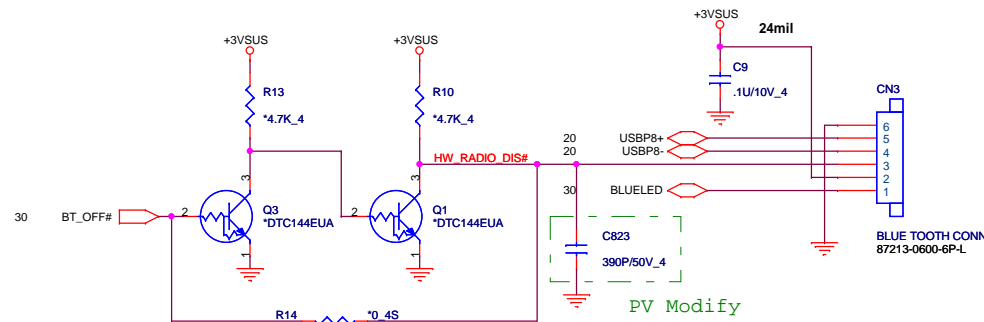
NS892402:1G	DB0AT9LAN05
NS892405:10/100	DB0ZB1LAN04



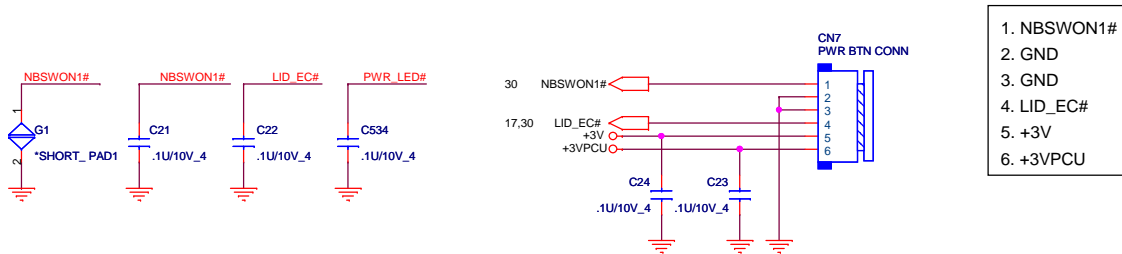




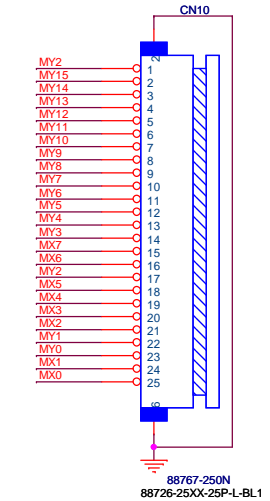
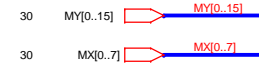
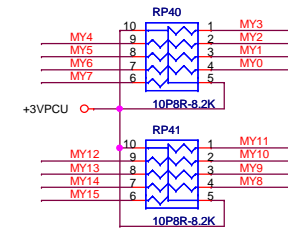
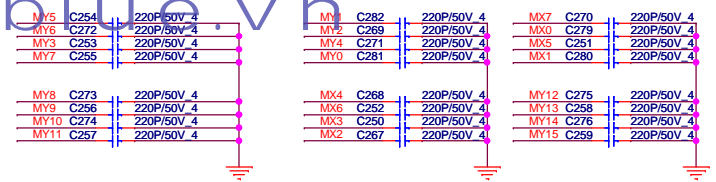
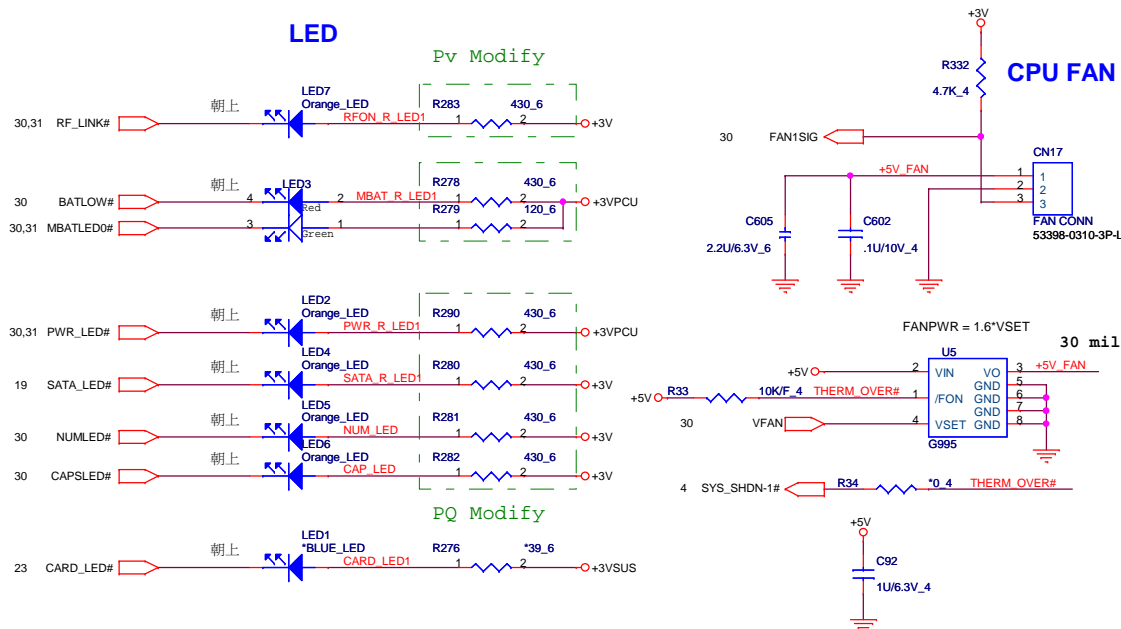




## POWER BOTTON CONNECT

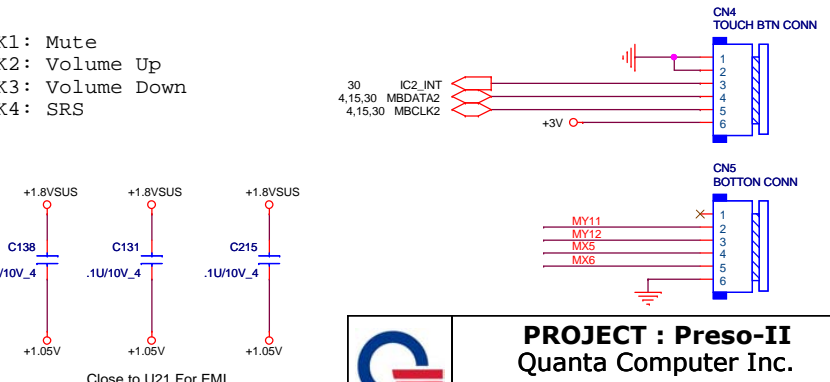


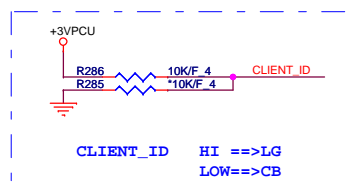
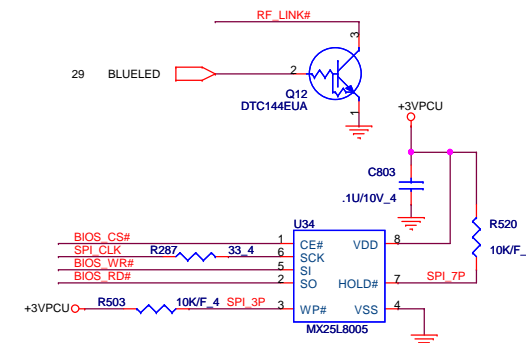
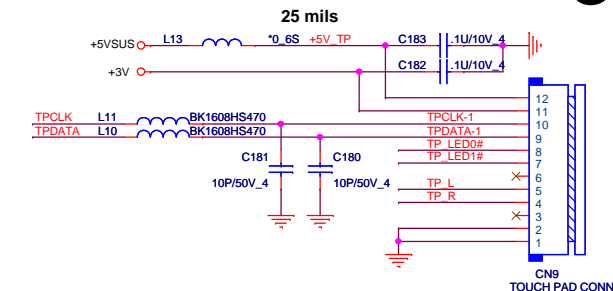
LED

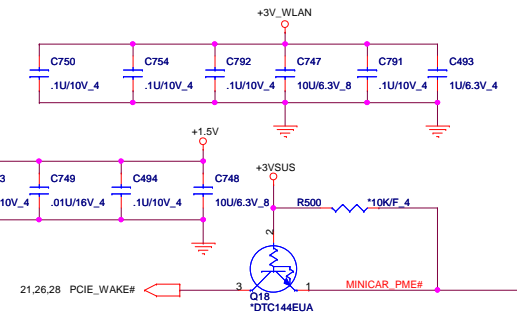
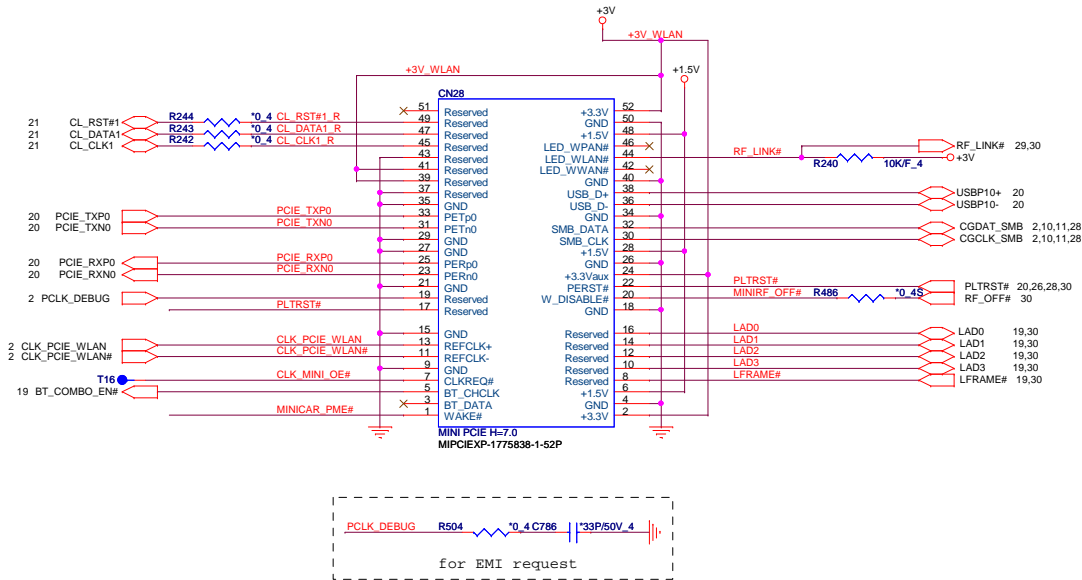


MX0	25	129 App		3 D	113 F2	59 Fn	46 Z	36 H	91 num 7		118 F7	119 F8			12 -	102 num 6	124 Prt
	24	17 Q	104 num Del	115 F4	112 F1	99 0	48 C	22 Y	122 F11	106 num +	117 F6	120 F9		108 num Ent	123 F12	125 Scr	126 Pause
	21	1 ~		31 A	104 Esc	93 num 1	6 %	7 ~	121 F10		116 F5	42 ~ #		127 L Win	11 0	13 +	76 Del
	20	19 E		4 #	3 @ 2	98 %	5 \$	8 &	10 ( 9		5 * 8	45 \	58 L Ctrl		26 P	15 BS	80 Home
	19	16 Tab		2 !	1 W	83 ↑	20 R	23 U	25 O	57 R Shift	24 I	92 num 4		27 (	28 )	86 PgDn	
MX7	18	30 Caps		114 F3	32 S	103 num 3	34 F	37 J	39 L	44 L Shift	38 K	79 =	K1	K2	40 :		85 PgUp
	16	96 num 8	62 R Alt	35 Q	47 X	84 V	49 V	52 M	54 -		53 <	101 num 5	K3	K4	55 ?	41 =	81 End
	15	56 /	60 L Alt	97 num 5	21 T	90 num Lk	50 B	51 N	95 num /		100 num *	89 +			105 num -	43 Ent	61 Space
	23	22	17	14	13	12	11	10	9	8	7	6	5	4	3	2	1
	MY0	1&17 pin short circuit															MY15

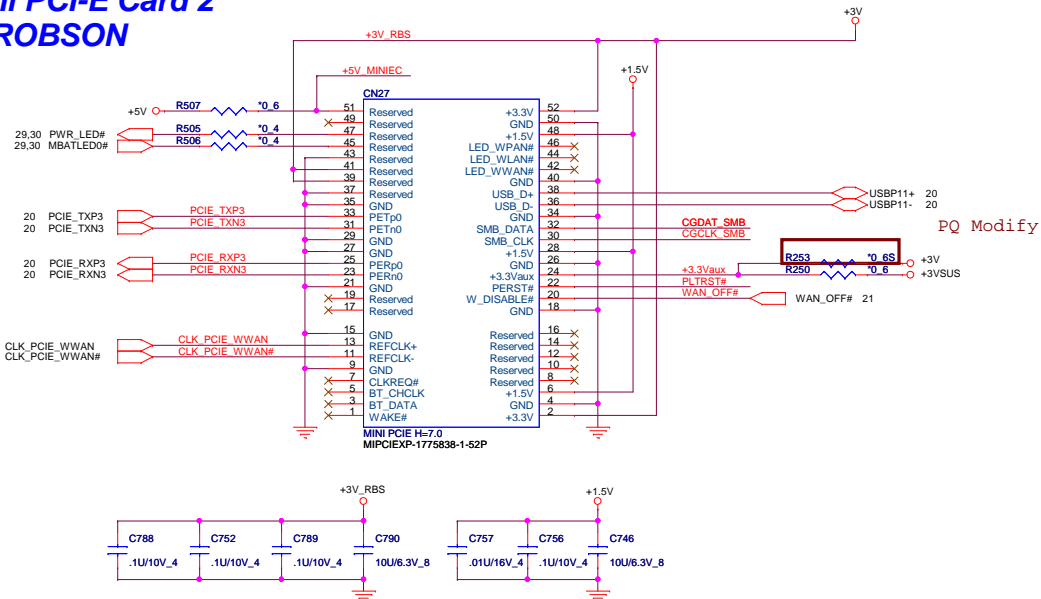
```
K1: Mute
K2: Volume Up
K3: Volume Down
K4: SRS
```



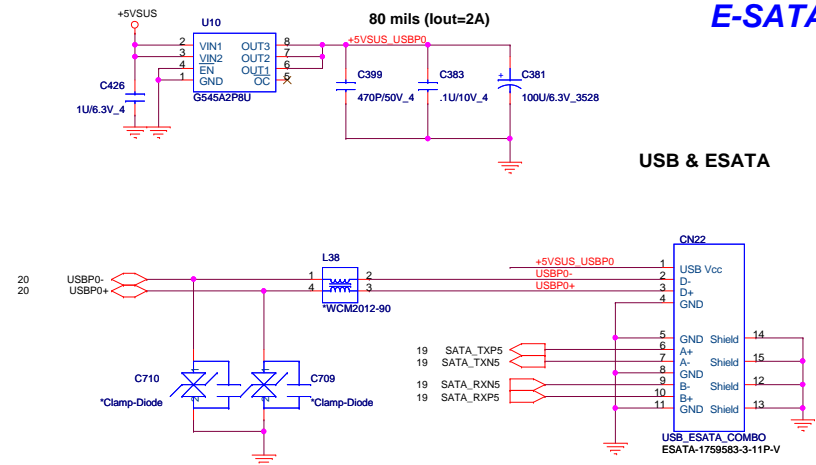




## Mini PCI-E Card 2 ROBSON

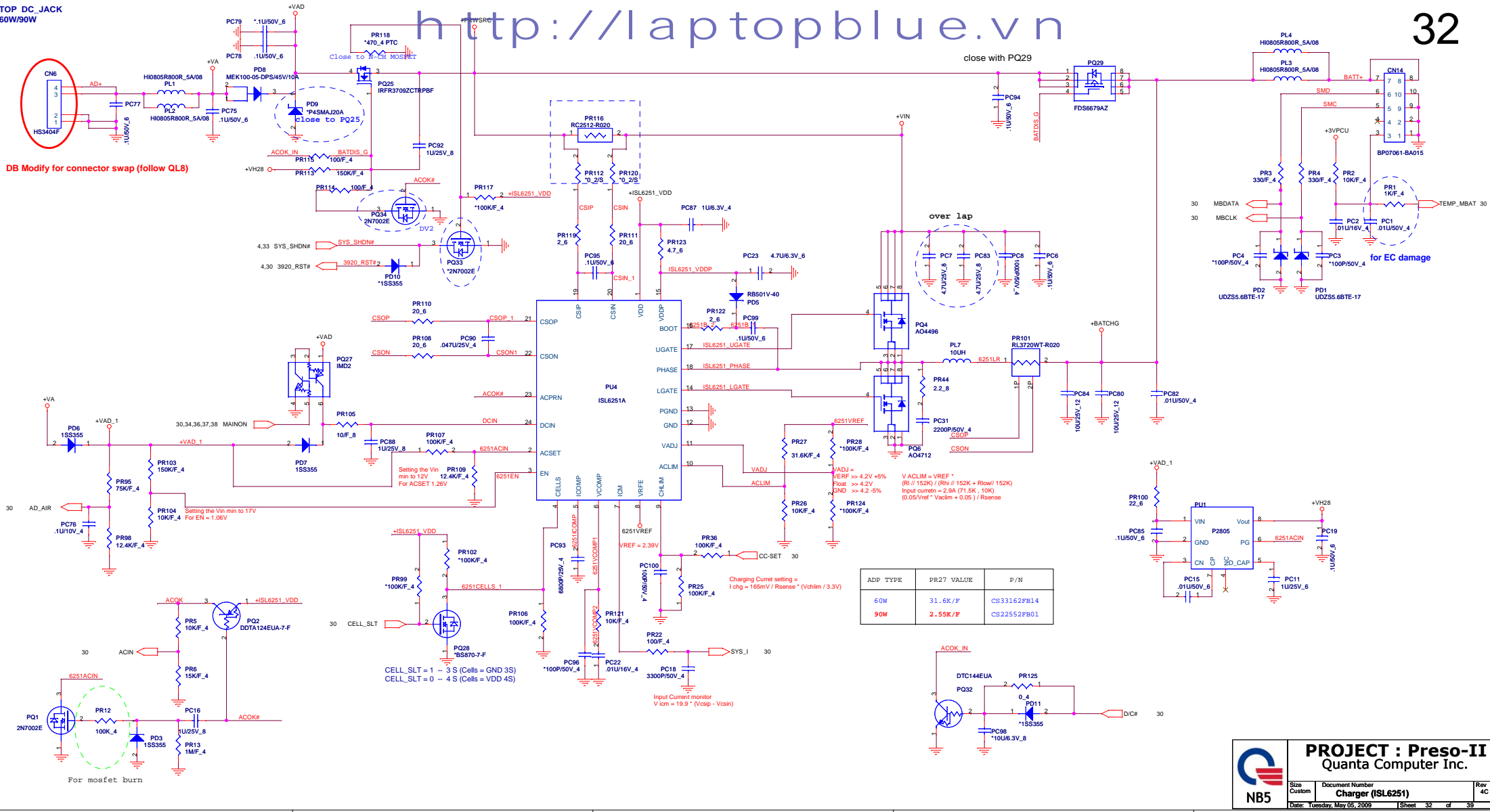


## E-SATA/USB COMBO




TOP DC JACK  
60W/90W

DB Modify for connector swap (follow QL8)



ADP TYPE	PR27 VALUE	P/N
60W	31.6K/F	CS33162FB14
90W	2.55K/F	CS2552FB01



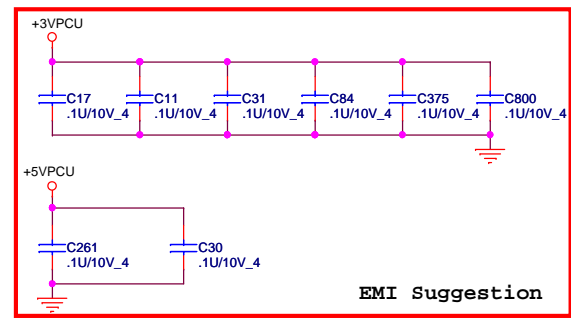
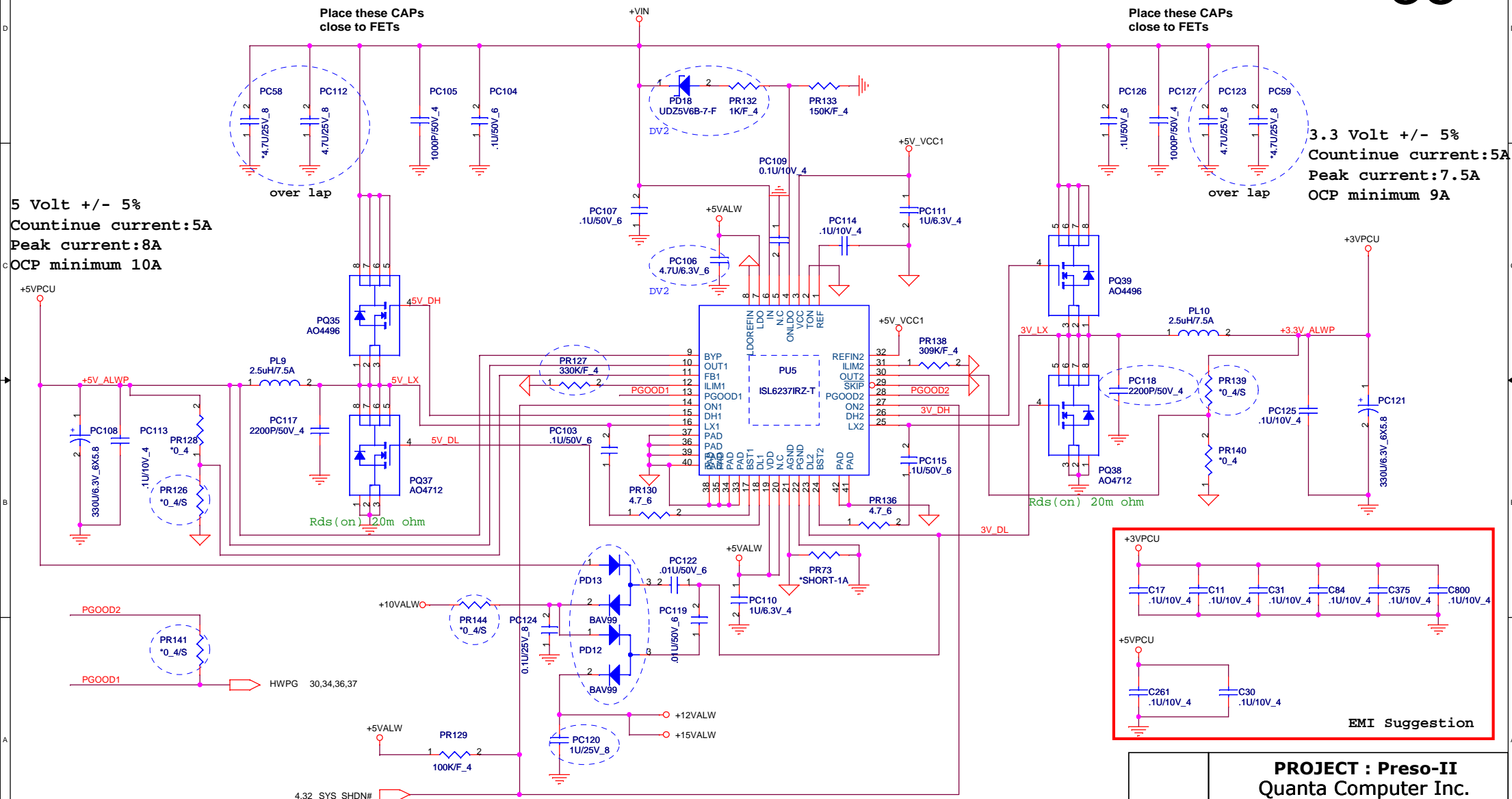
**PROJECT : Preso-II**  
Quanta Computer Inc.

Size Custom  
Document Number  
**Charger (ISL6251)**  
Date: Tuesday, May 05, 2009

Rev 4C  
Sheet 32 of 39

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

3.3 Volt +/- 5%  
Countinue current:5A  
Peak current:7.5A  
OCP minimum 9A



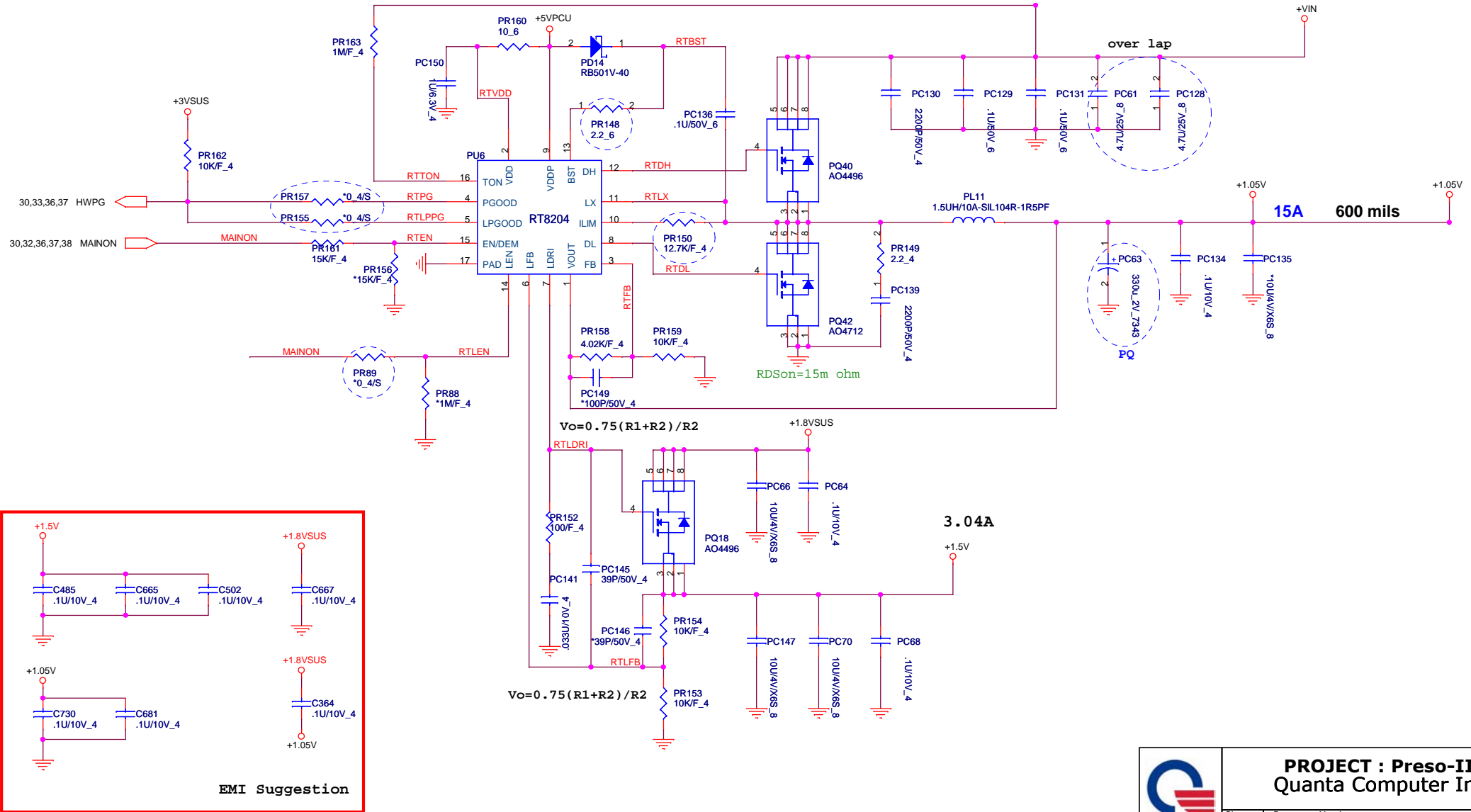
PROJECT : Preso-II Quanta Computer Inc.			
NB5	Size B	Document Number	Rev 4C
		+5V/+3V (ISL6237)	
Date: Tuesday, May 05, 2009 Sheet 33 of 39			

VCCP1.05V & +1.5V

<http://laptopblue.vn>

+1.05Volt +/- 5%  
 Countinue current:7.5A  
 Peak current:10A  
 OCP minimum 15A

34



**PROJECT : Preso-II**  
 Quanta Computer Inc.

Size B	Document Number	Rev
	<b>+1.05V/+1.5V (RT8204)</b>	4C
Date: Tuesday, May 05, 2009	Sheet 34 of 39	





# VGA Core & VCC1.1

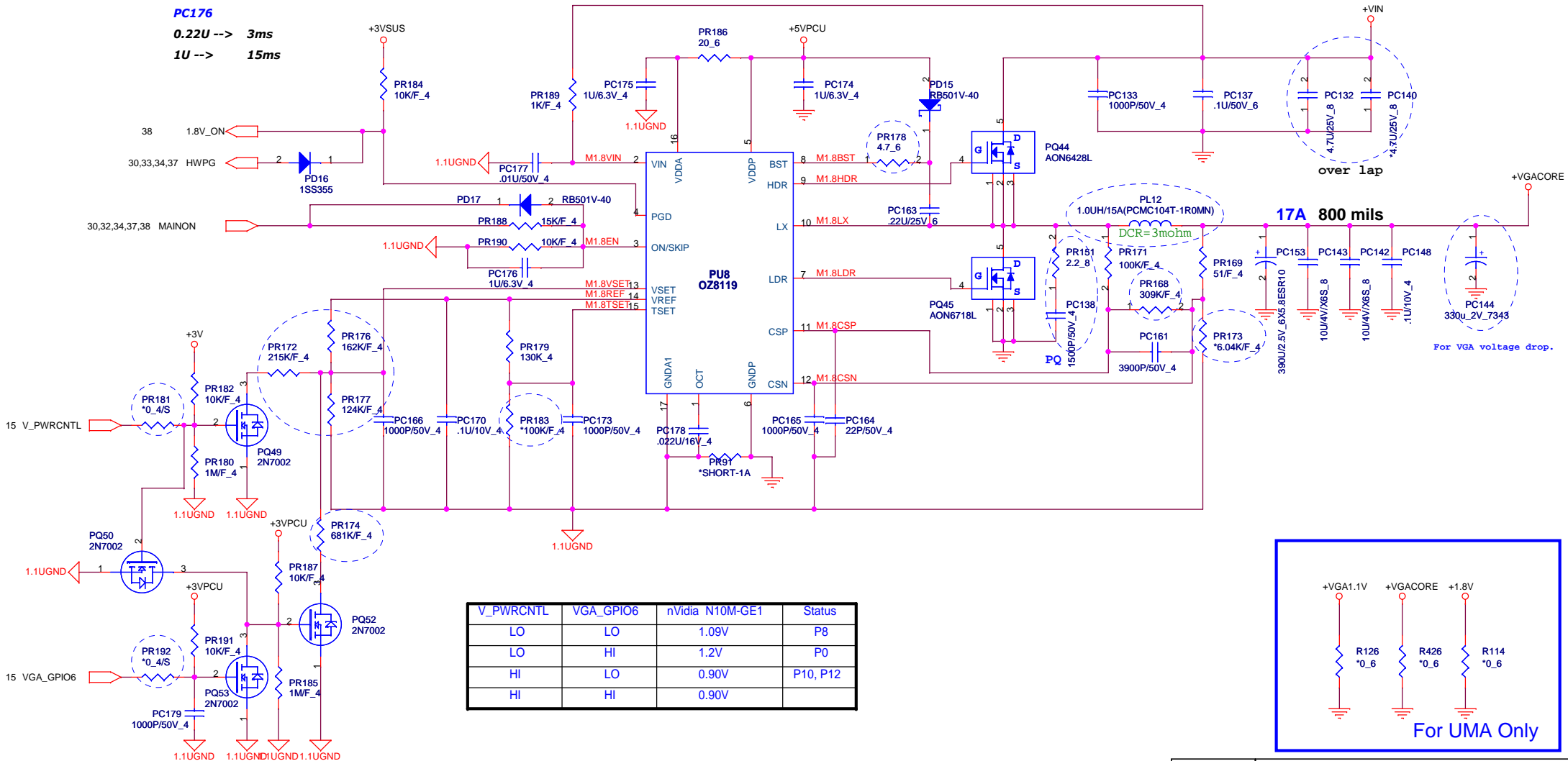
<http://laptopblue.vn>

+1.1Volt +/- 5%  
Countinue current:15A  
Peak current:17A  
OCP minimum 22A

36

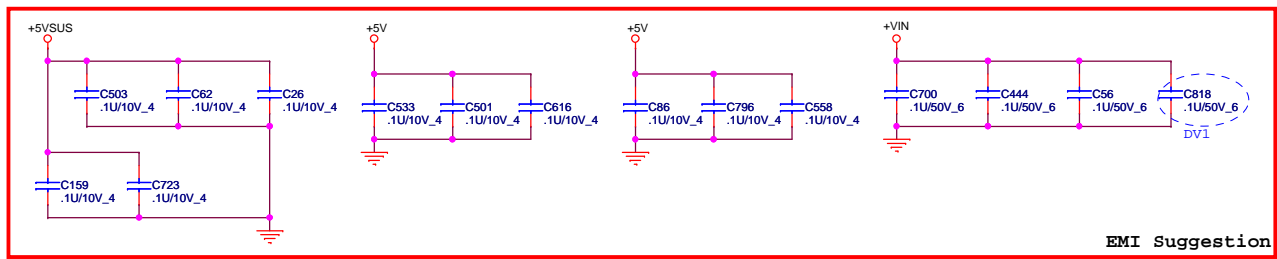
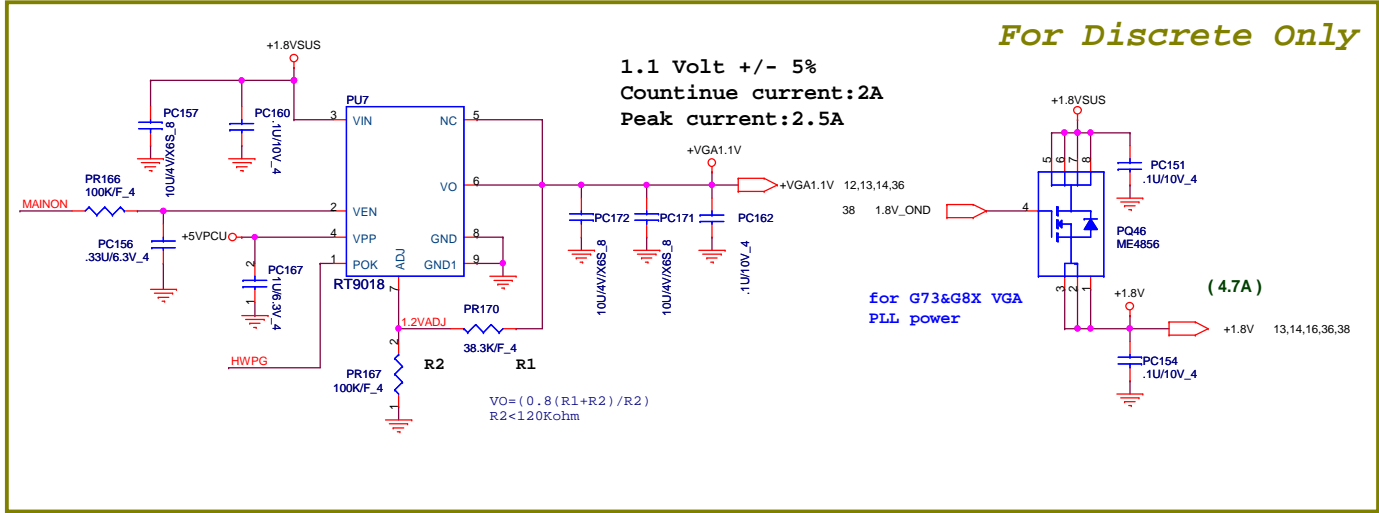
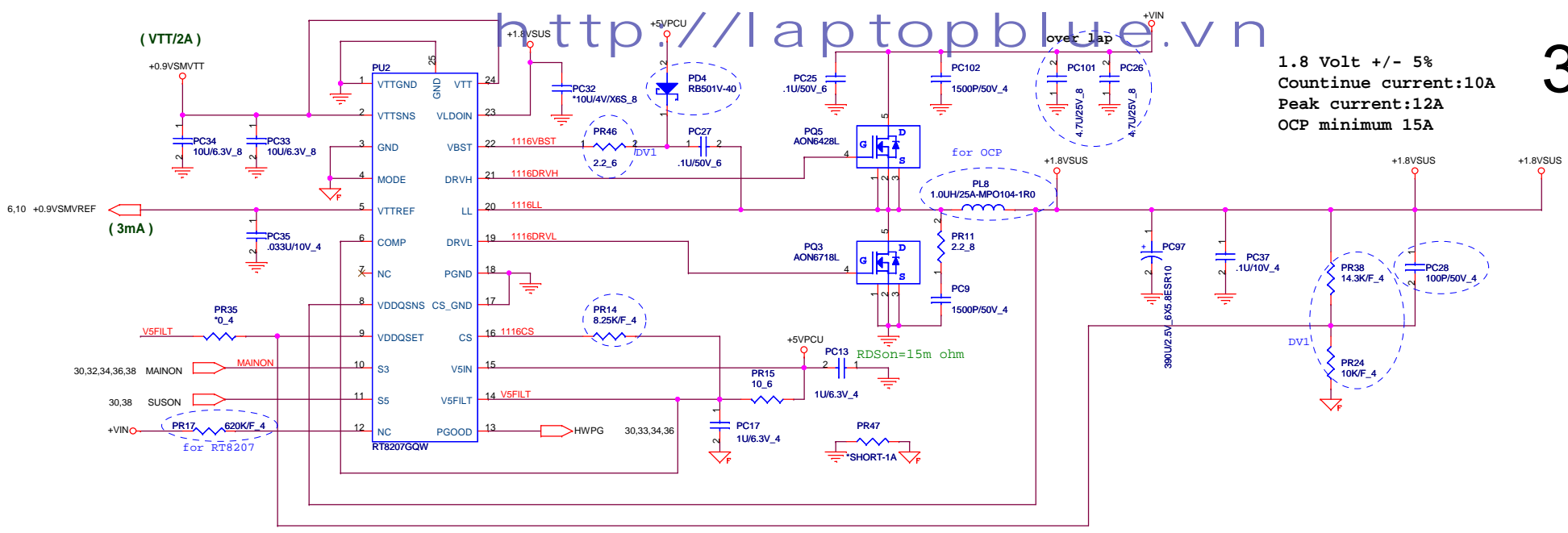
PC176

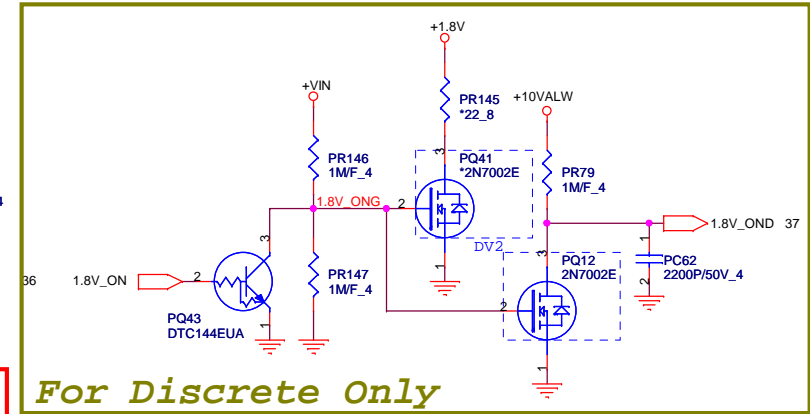
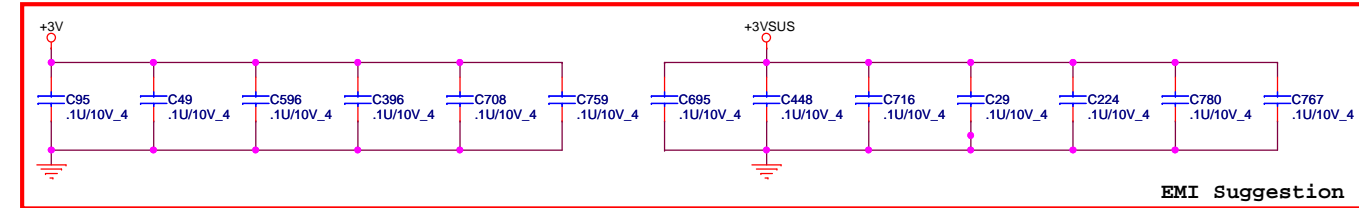
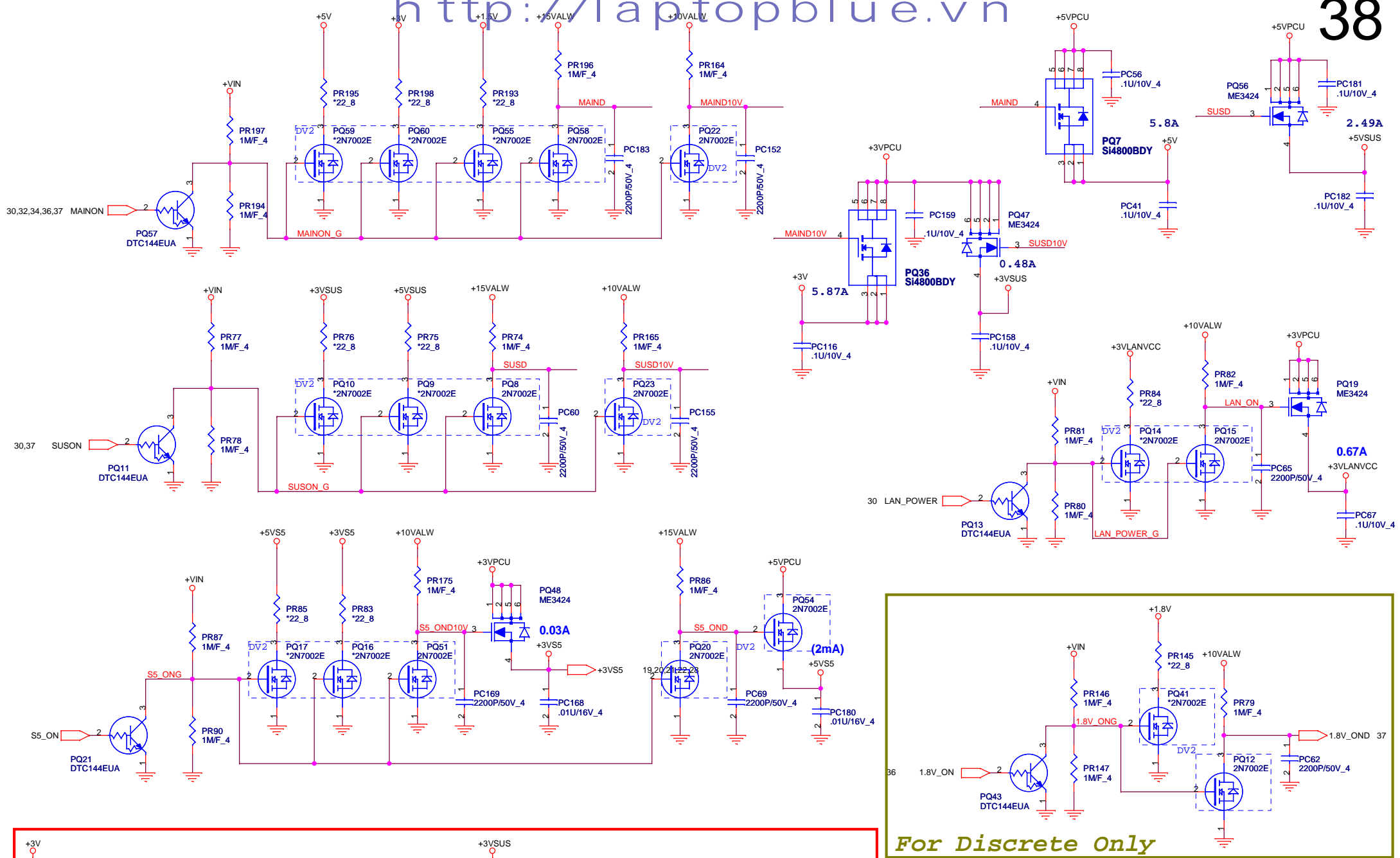
0.22U --> 3ms  
1U --> 15ms



**PROJECT : Preso-II**  
**Quanta Computer Inc.**

Size B	Document Number <b>VGA CORE OZ8119</b>	Rev 4C
Date: Tuesday, May 05, 2009	Sheet 36 of 39	





	Voltage level	AC MODE				DC MODE			
		S0	S3	S4	S5	S0	S3	S4	S5
+3VPCU	3.3V +/- 5%	V	V	V	V	V	V	V	V
+5VPCU	5V +/- 5%	V	V	V	V	V	V	V	V
+3VRTC	3.3V +/- 5%	V	V	V	V	V	V	V	V
+3VS5	3.3V +/- 5%	V	V	V	V	V	V		
+5VS5	5V +/- 5%	V	V	V	V	V	V		
+3VSUS	3.3V +/- 5%	V	V			V	V		
+5VSUS	5V +/- 5%	V	V			V	V		
+1.8VSUS	1.8V +/- 5%	V	V			V	V		
+0.9VSMVTT	0.9V +/- 5%	V	V			V	V		
+1.5V	1.5V +/- 5%	V				V			
+1.05V	1.05V +/- 5%	V				V			
+VCORE	0.9~1.15V	V				V			
+VGA_CORE	0.9~1.2V	V				V			
+VGA1.1V	1.1V +/- 5%	V				V			
+1.8V	1.8V +/- 5%	V				V			
+3VLAVCC	3.3V +/- 5%	V				V			