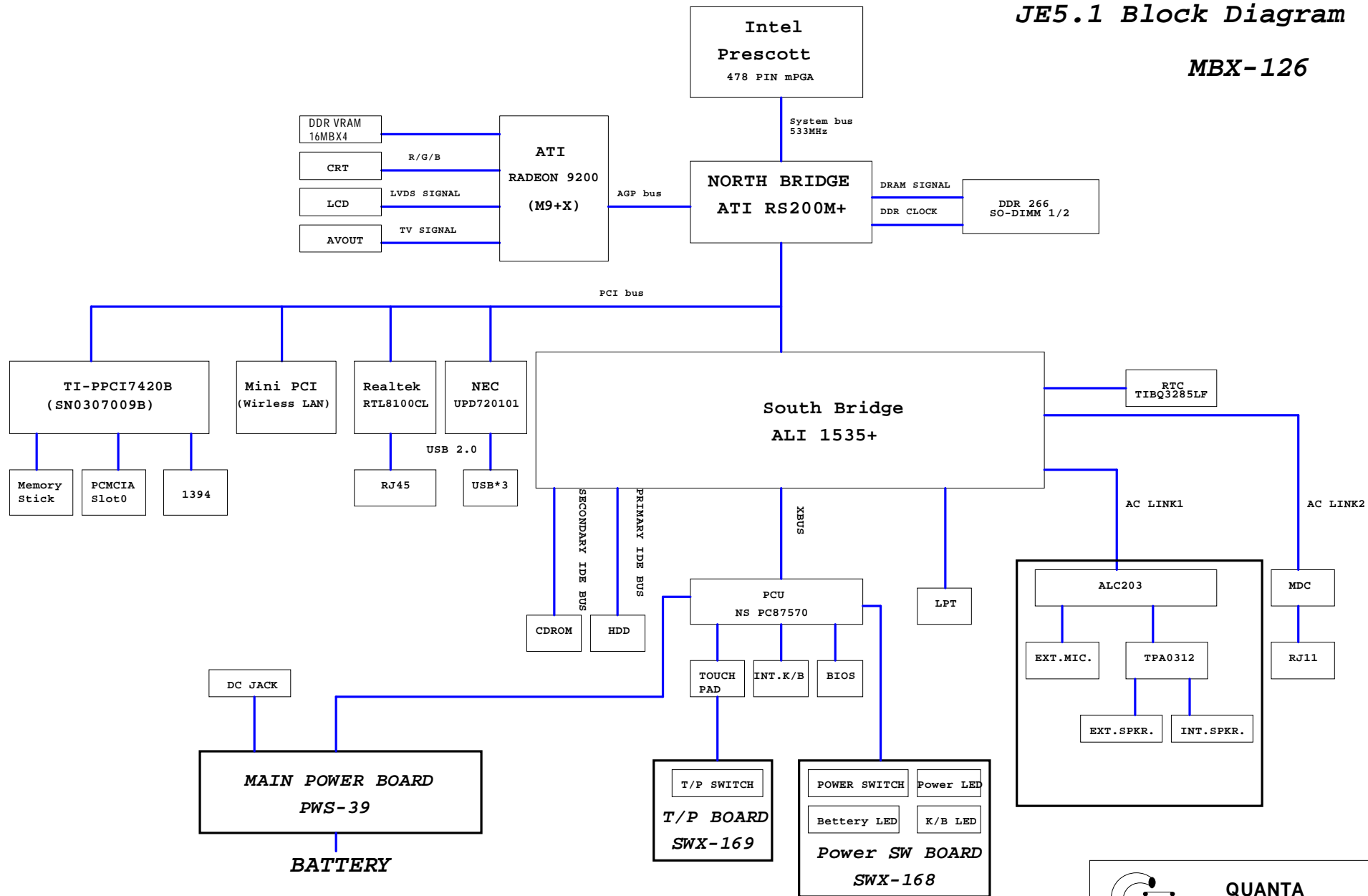



JE5.1 Block Diagram

MBX-126



Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

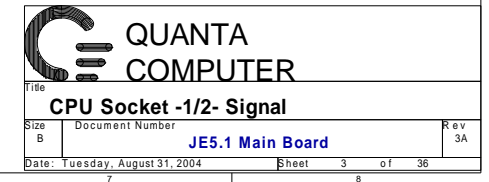


**QUANTA  
COMPUTER**

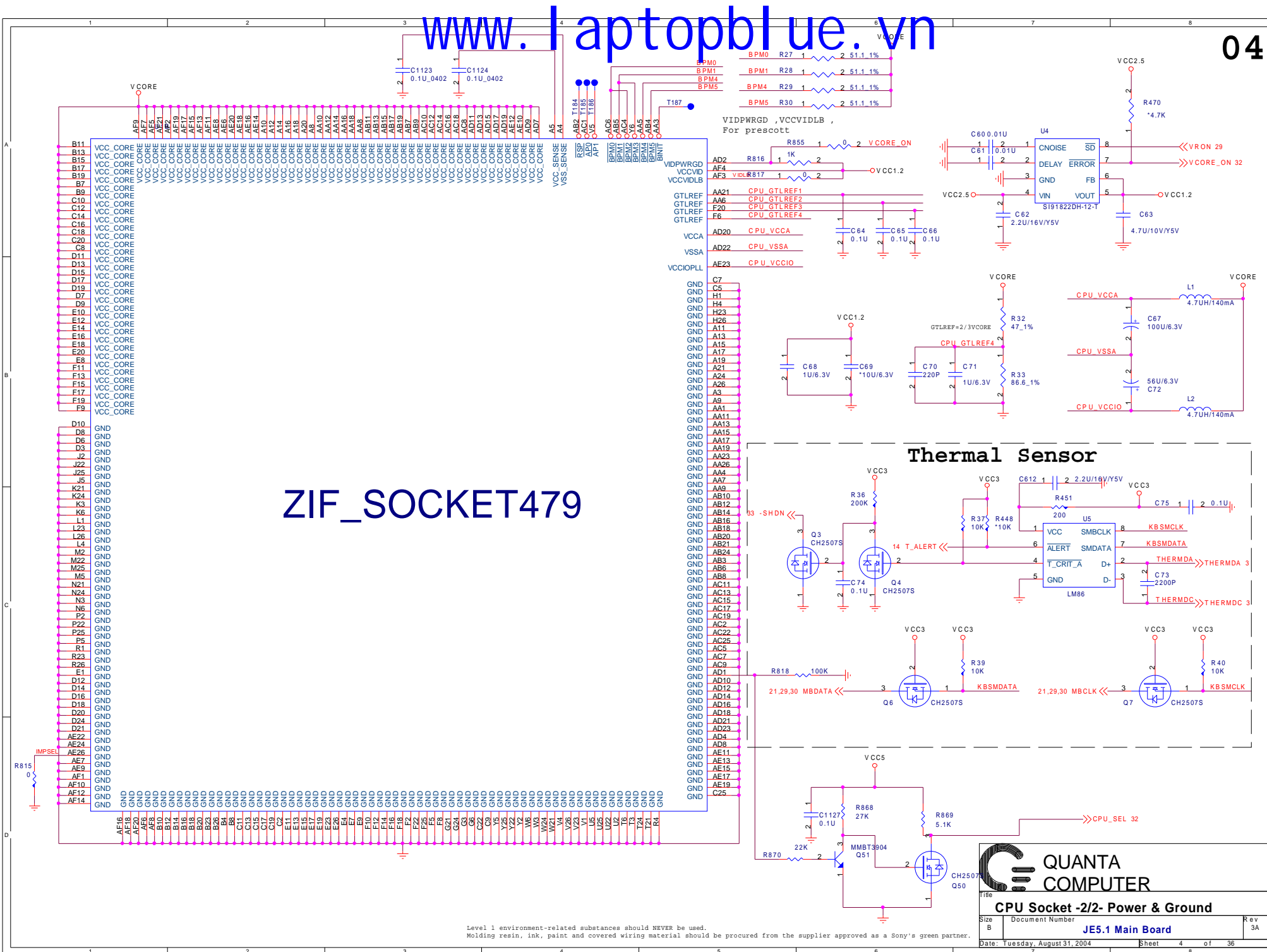
Size	Document Number <b>JE5.1 Main Board</b>	Rev <b>1A</b>
Date:	Monday, August 30, 2004	Sheet 1 of 36

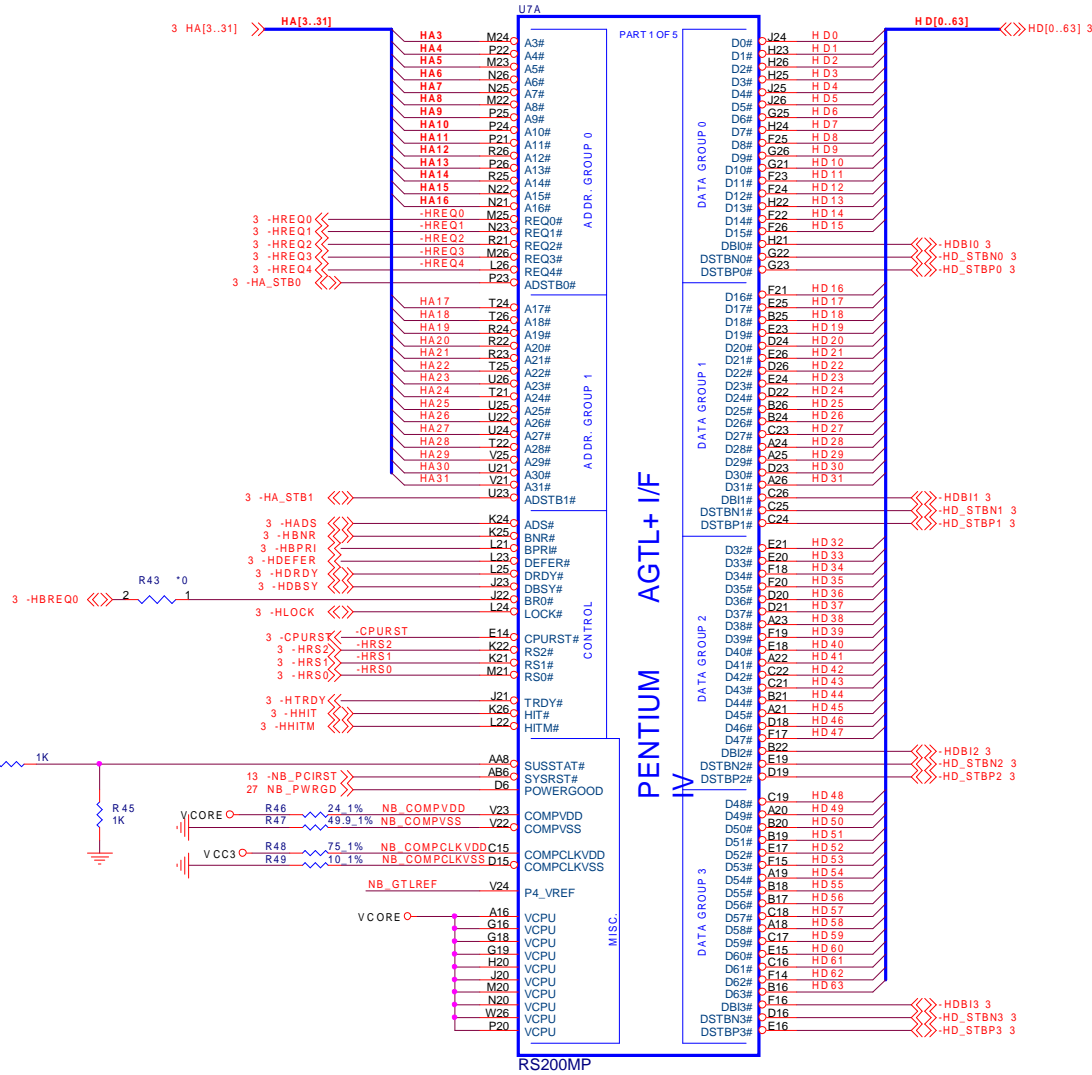
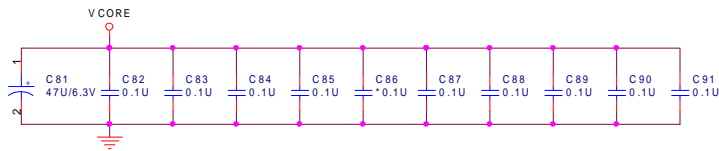
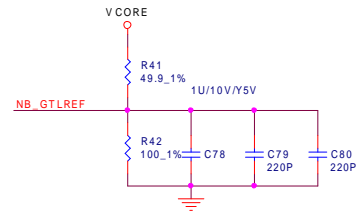
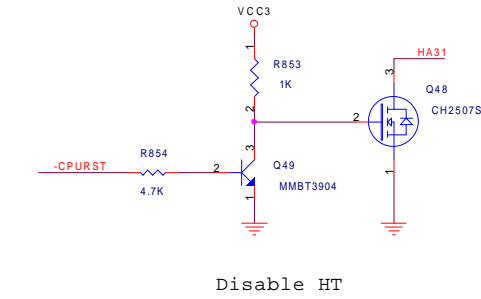
# Page List

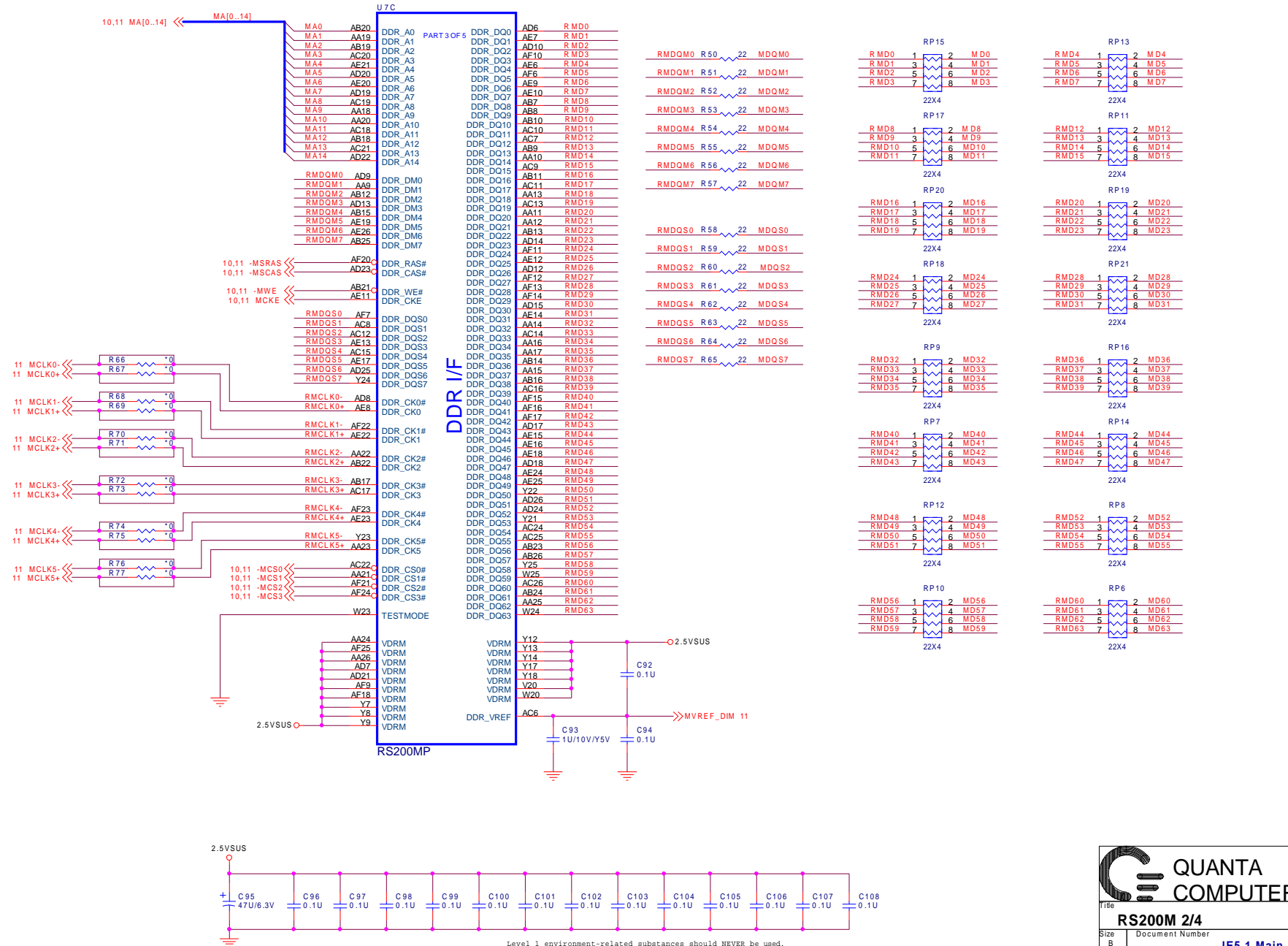
01	Block Diagram
02	Page List
03	Prescott CPU-1
04	Prescott CPU-2
05	RS200M-AGTL+
06	RS200M-DDR I/F
07	RS200M-PCI & AGP I/F
08	RS200M-VIDEO I/F & CLKGEN
09	SYSTEM CONFIGURATION
10	DDR Terminator
11	DDR SODIMMx2
12	CRT PORT/TV
13	ALI M1535+ (PCI,ISA)-1/2
14	ALI M1535+ (IDE)-2/2
15	USB2.0 Controller (NEC-uPD720101)
16	ATI M9+ 1/3
17	ATI M9+ 2/3
18	ATI M9+ 3/3
19	VGA DDR VRAMX2 1/2
20	VGA DDR VRAMX2 2/2
21	AGP SSC
22	TI7420-A (CARDBUS+1394+MS)
23	TI7420-B (CARDBUS+1394+MS)
24	Cardbus slot
25	LAN interface RTL8100CL
26	MiniPCI & MDC
27	RTC/POWER GOOD LOGIC
28	IDE/HDD/LPT Connector
29	PCU NS 87570
30	Int. Keyboard/Bios/FAN
31	VCORE POWER 1
32	MAX1546(VCORE POWER 2)
33	MAX1632(5V/3V/12V)
34	MAX1844(2.5V/1.8V/1.25V )
35	MAX1844(VCC1.5)
36	Load Switch

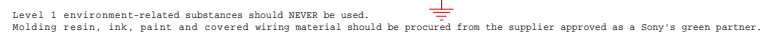


# ZIF\_SOCKET479

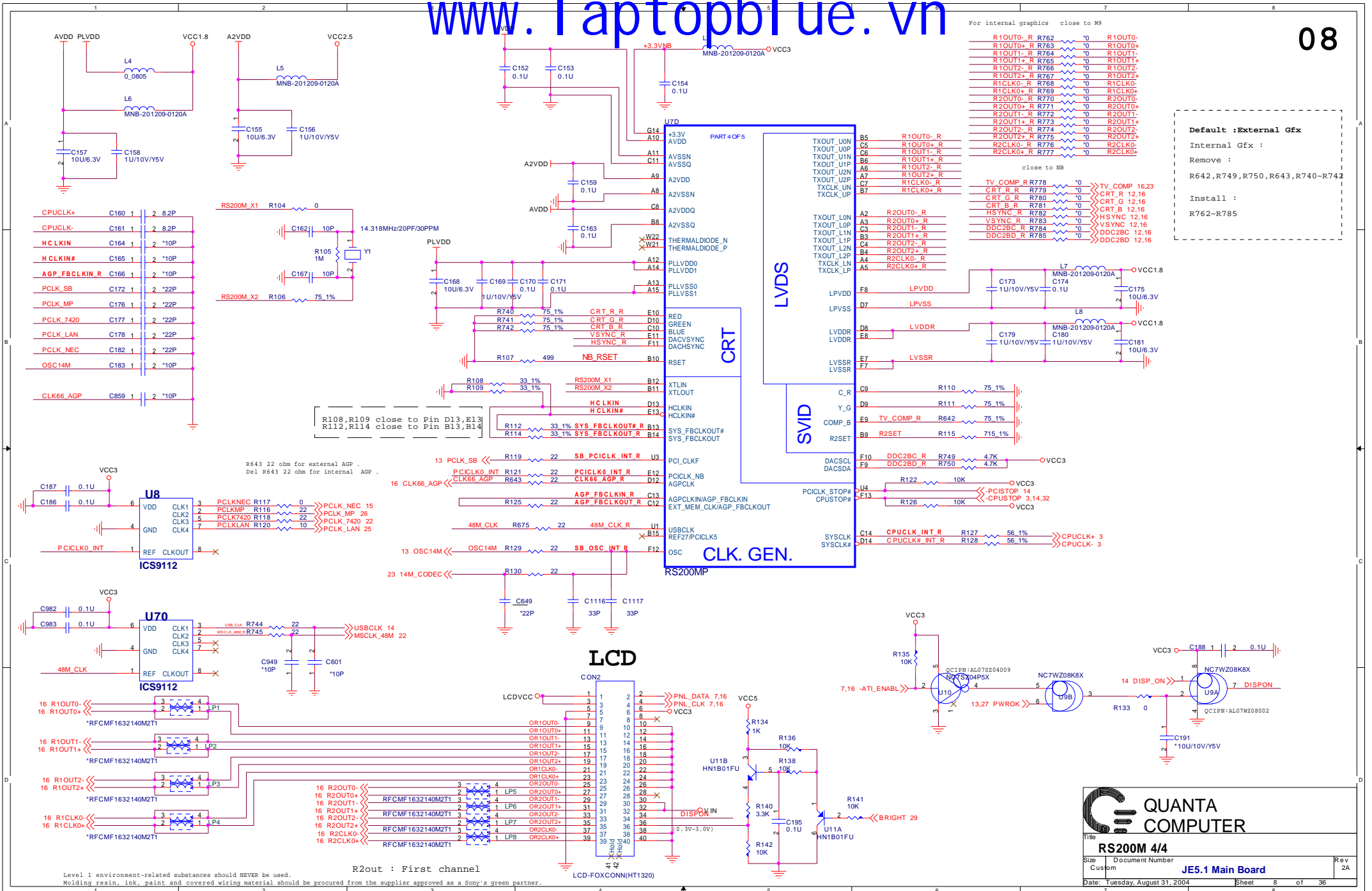












**QUANTA COMPUTER**

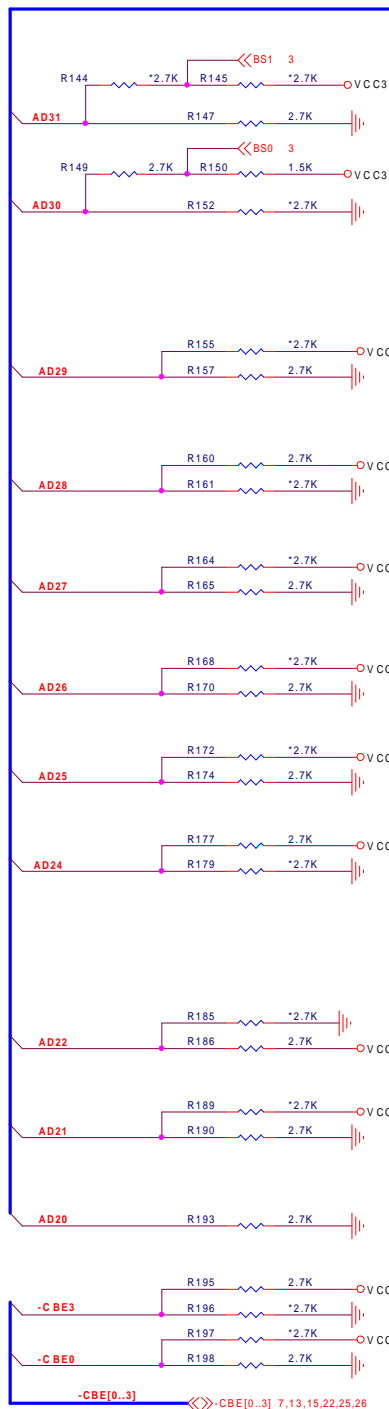
RS200M 4/4

JE5.1 Main Board

Rev 2A

Sheet 8 of 36





AD[31..30] : CLK SPEED  
DEFAULT: 01

00: 100 MHZ  
01: 133 MHZ  
10: 166MHZ  
11: 66 MHZ

AD29: RS200M FULL CONFIGURATION  
DEFAULT: 1

0: FULL CONFIGURATION  
1: USES DEFAULT VALUES

AD28: SPREAD SPECTRUM ENABLE  
DEFAULT: 1

0: DISABLE  
1: ENABLE

AD27: MCERR OBSERVATION  
DEFAULT: 0

0: ENABLE  
1: DISABLE

AD26: BUS PARKING  
DEFAULT: 0

0: ENABLE  
1: DISABLE

AD25: BINIT# OBSERVATION  
DEFAULT: 0

0: ENABLE  
1: DISABLE

AD24: IOQ ENABLE  
DEFAULT: 1

0: SET IOQ TO 1  
1: SET IOQ TO 12

AD22: REF27 ENABLE  
DEFAULT: 1

0: PCICLK5 OUTPUT  
1: 27 MHz REFERENCE CLOCK INPUT

AD21: CLK\_BYPASS (TEST ONLY)  
DEFAULT: 0

0: NORMAL  
1: TEST MODE

AD20: PCICLK EXPANSION  
DEFAULT: 0

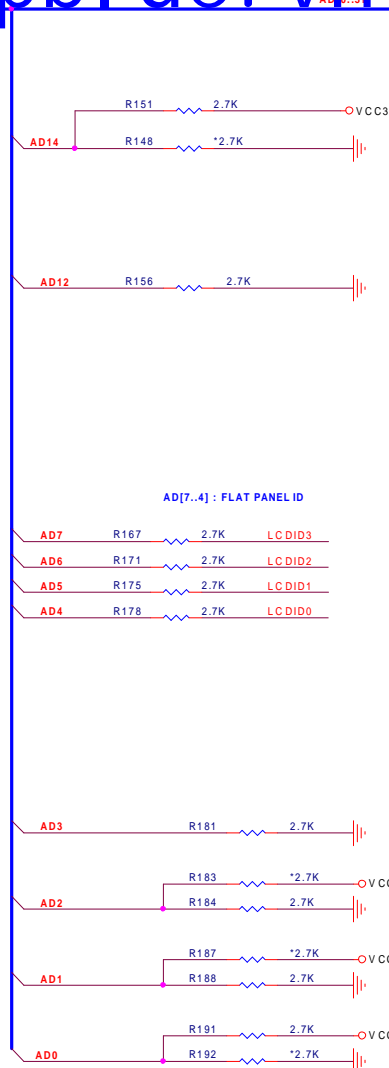
1: PCI\_REQ#3, PCI\_GNT#3 USED AS PCICLK  
0: PCI\_REQ#3, PCI\_GNT#3 USED AS REQ/GNT

CBE#3: PROD TEST  
DEFAULT: 1

0: SHORT TIMERS  
1: NORMAL OPERATION

CBE#0: RESERVE

Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

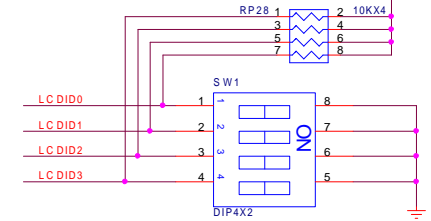


AD[0..31] 7,13,15,22,25,26

AD14: AGTL+ VDDQ  
0: 1.2V MOBILE PART  
1: 1.7V DESKTOP PART

AD[12]: FLAT PANEL ID MSB

AD[7..4]: FLAT PANEL ID



AD3: A\_LINK ENABLE  
DEFAULT: 0  
0: PCI- 33MHz, MULTI POINT CONNECTION  
1: A\_LINK, POINT TO POINT INTERCONNECT

AD2: AUTO CALIBRATION ENABLE  
DEFAULT: 0  
0: AUTO CALIBRATION ENABLE  
1: AUTO CALIBRATION DISABLE

AD1: FrcShortReset  
DEFAULT: 0  
0: NORMAL OPERATION  
1: TEST MODE

AD0: PCI/AGP CONFIG.  
DEFAULT: 1  
1: EXTERNAL AGP 66 MHz  
0: INTERNAL AGP 33 MHz

PCI\_PREQ#3: INTERNAL CLOCK GEN.  
DEFAULT: 1

0: DISABLE  
1: ENABLE

The AD0 signal strapping pull high for external AGP .  
The AD0 signal strapping pull low for internal AGP .

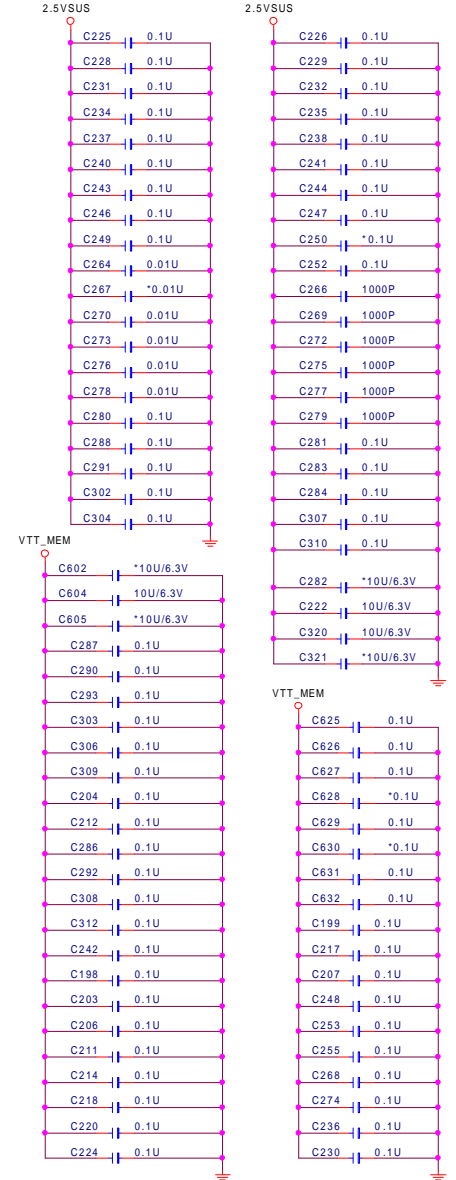
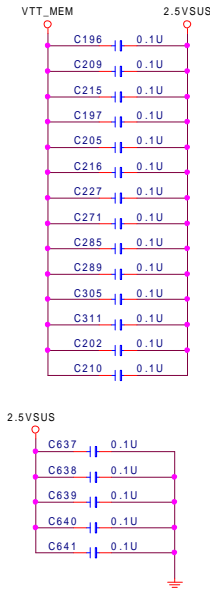
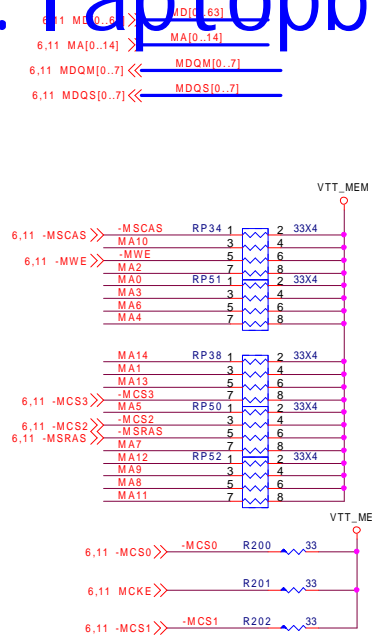
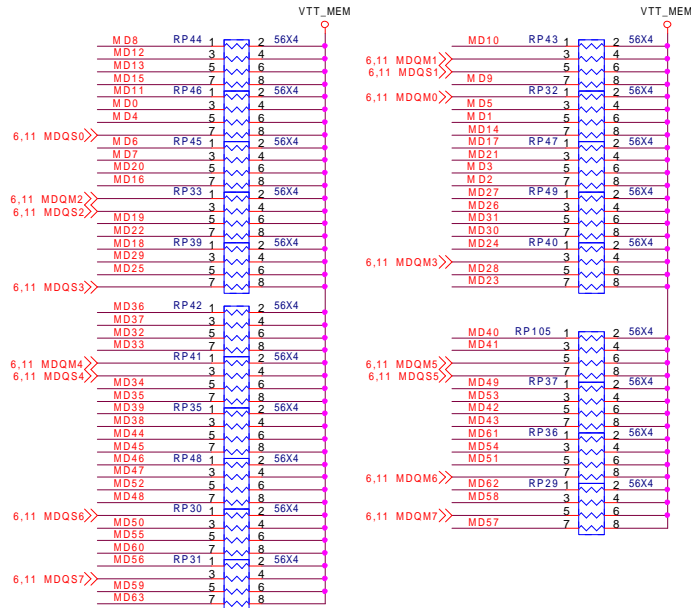
7,14 -PCIREQ >> R194 2.7K VCC3

QUANTA  
COMPUTER

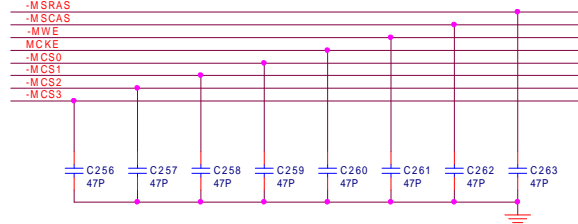
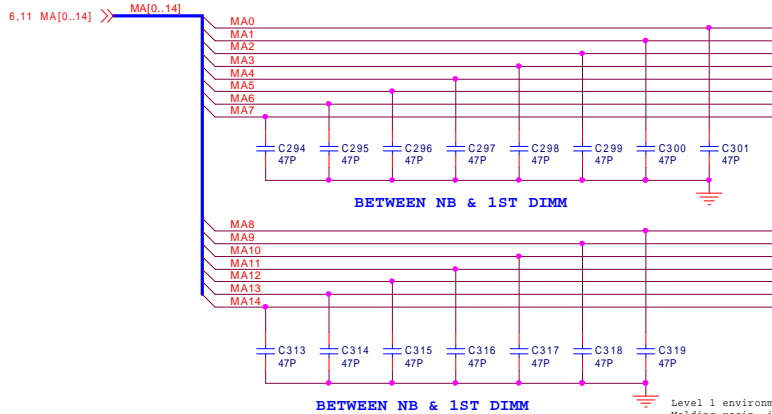
SYSTEM CONFIG

Size B	Document Number	Rev 1A
JE5.1 Main Board		
Date: Tuesday, August 31, 2004	Sheet 9 of 36	

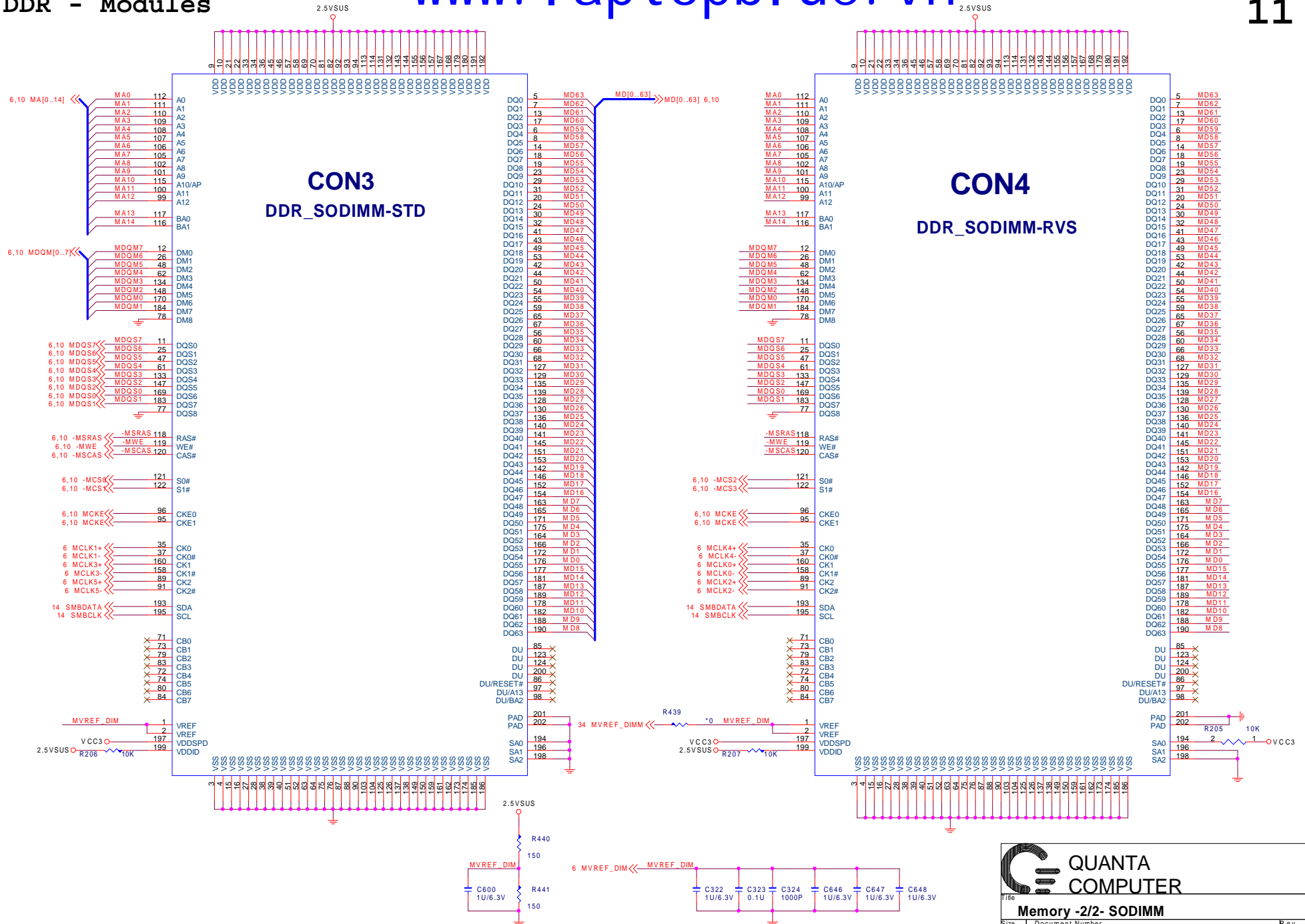
# DDR TERMINATOR



## MA Terminator



## DDR - Modules

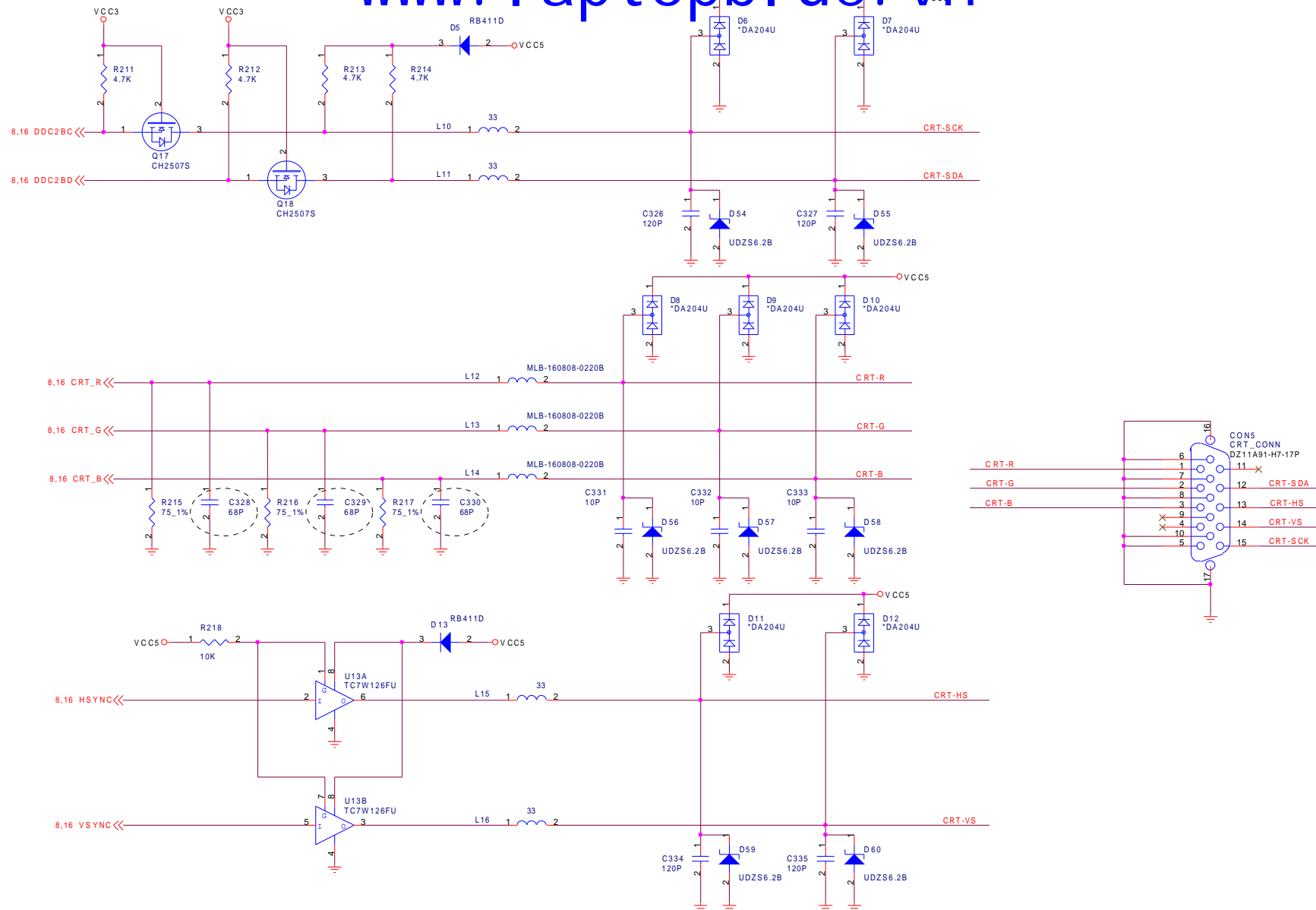


**QUANTA**  
**COMPUTER**

Memory -2/-2- SODIMM

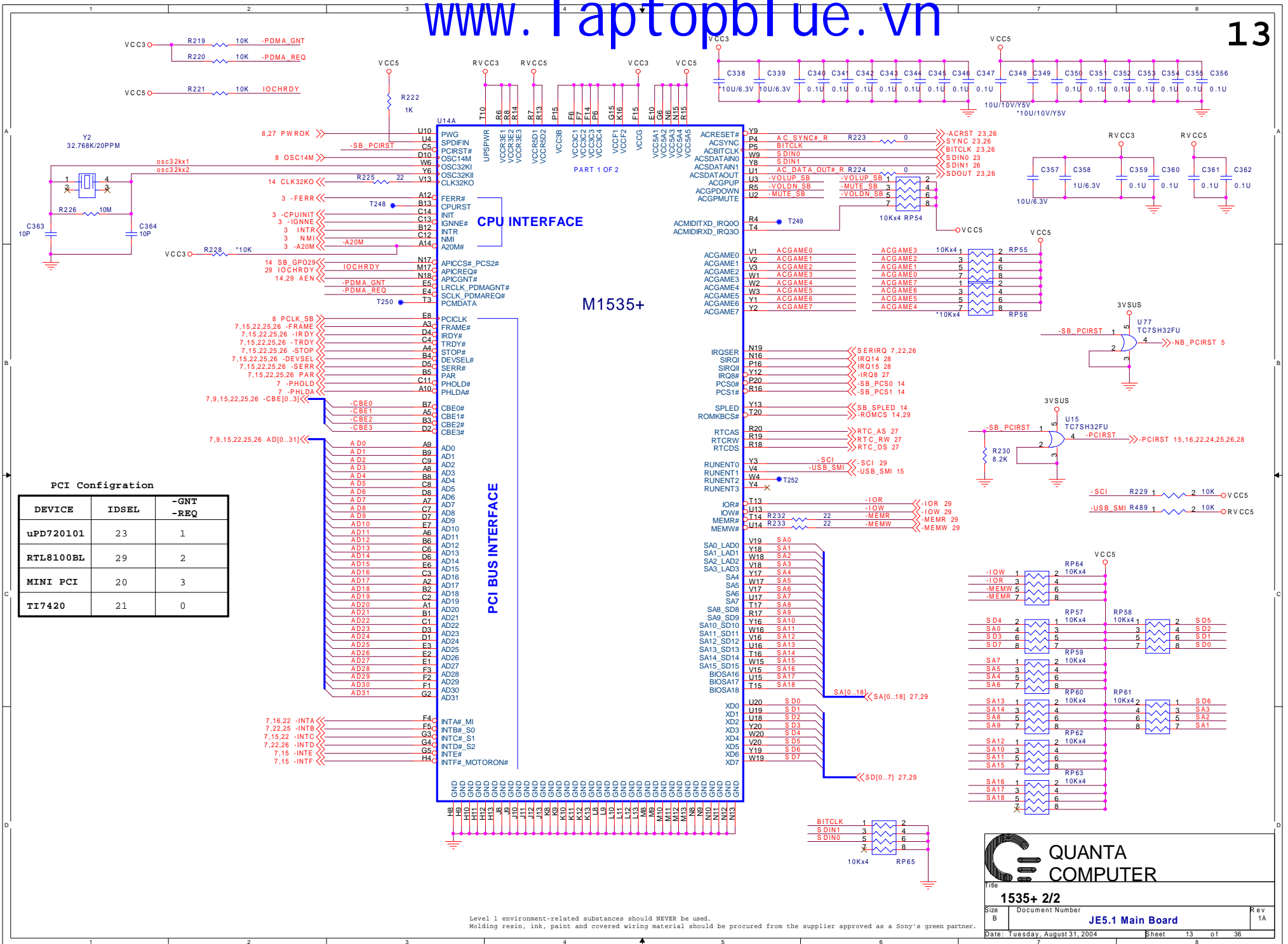
Size B Document Number **JE5.1 Main Board** Rev 1A

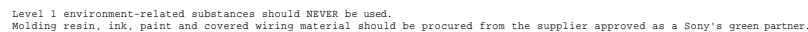
Date: Tuesday, August 31, 2004 Sheet 11 of 36

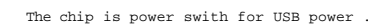


Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

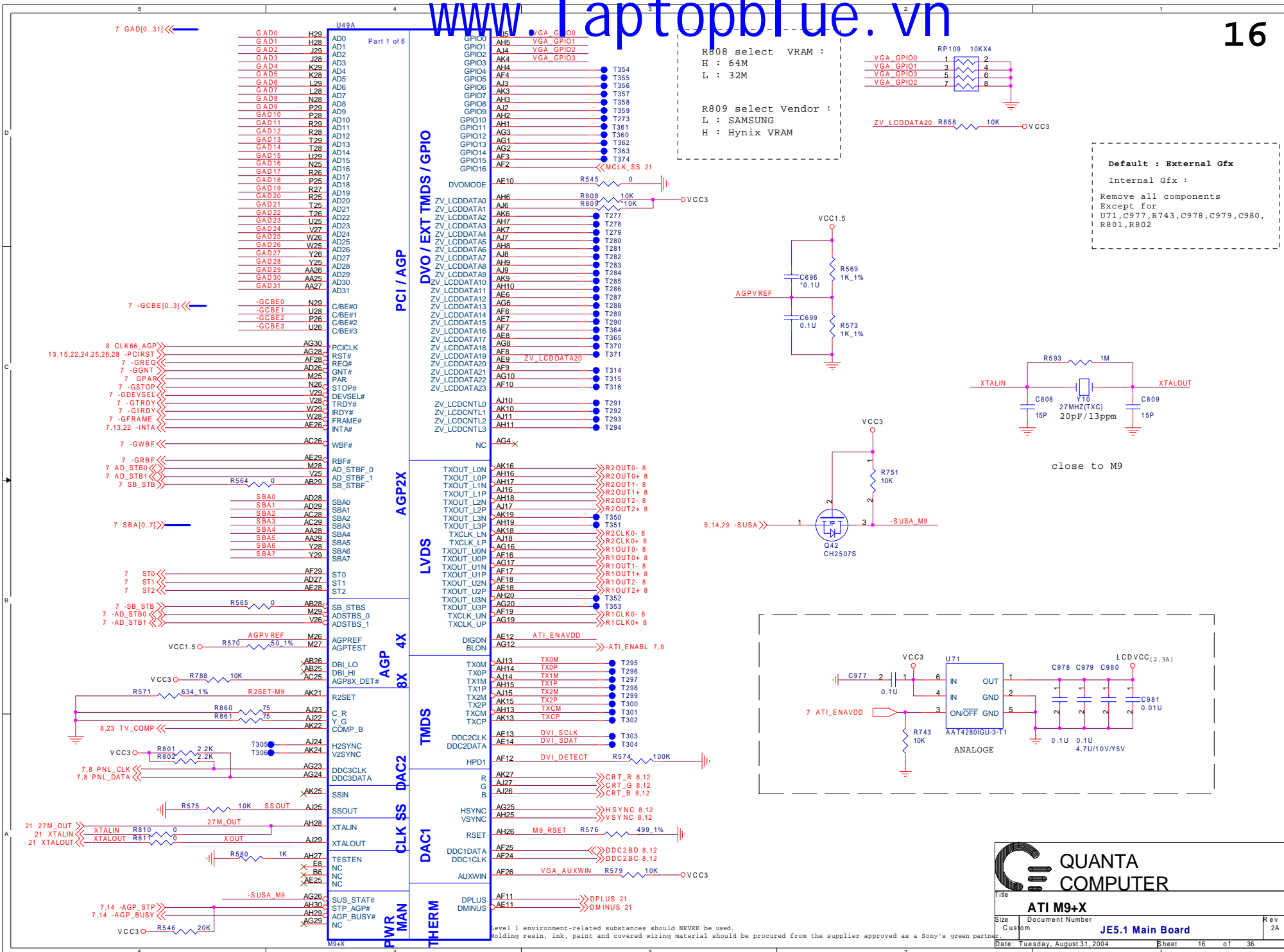
<b>CRT PORT/TV</b>		
Size B	Document Number	Rev 1A
<b>JE5.1 Main Board</b>		
Date: Tuesday, August 31, 2004	Sheet 12 of 36	





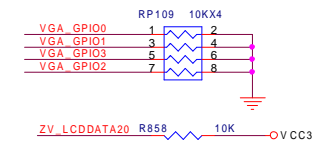




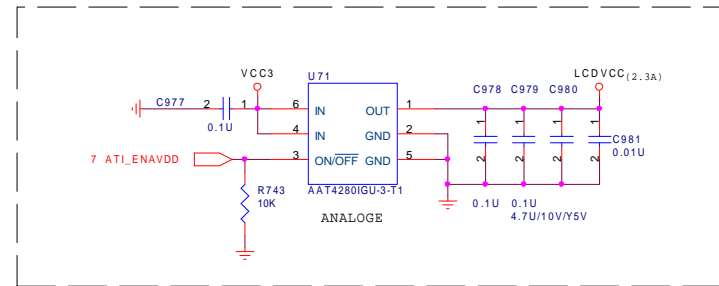
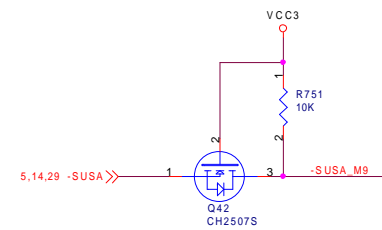
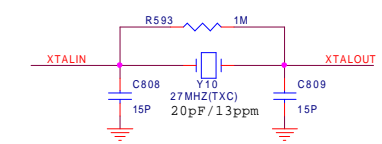
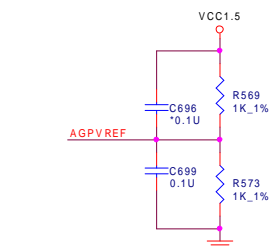


R808 select VRAM :  
H : 64M  
L : 32M

R809 select Vendor :  
L : SAMSUNG  
H : Hynix VRAM

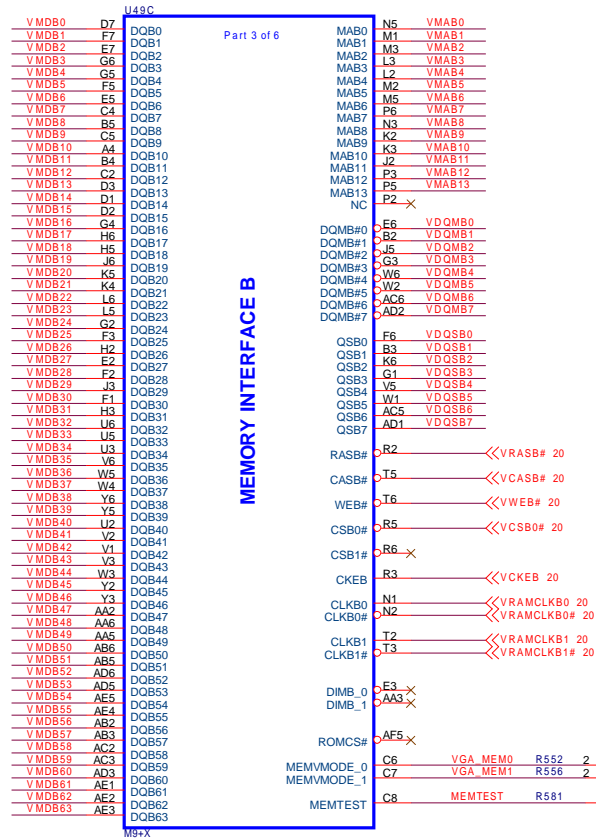
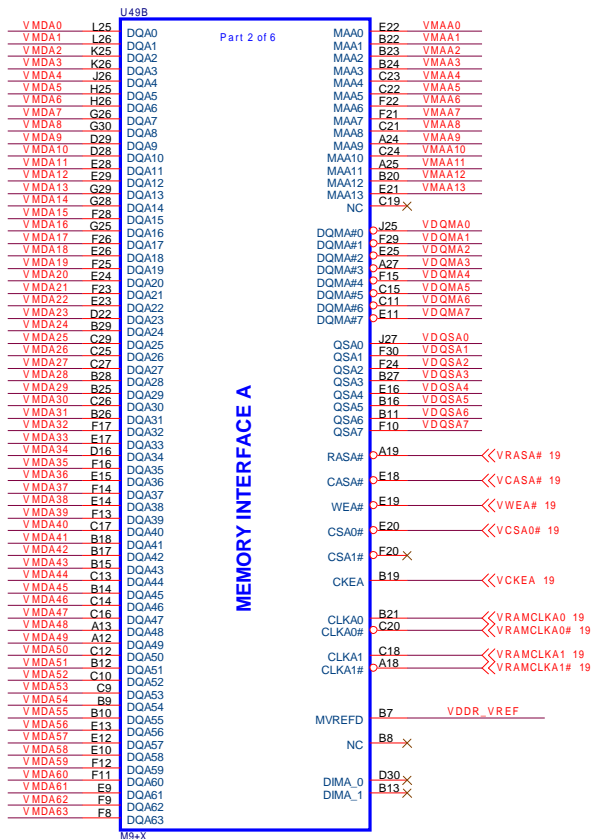


Default : External Gfx  
Internal Gfx :  
Remove all components  
Except for  
U71, C977, R743, C978, C979, C980,  
R801, R802



QUANTA  
COMPUTER

ATI M9+X

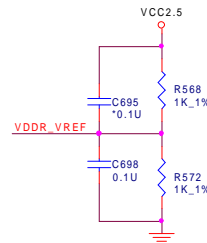


Default : External Gfx

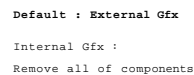
Internal Gfx :

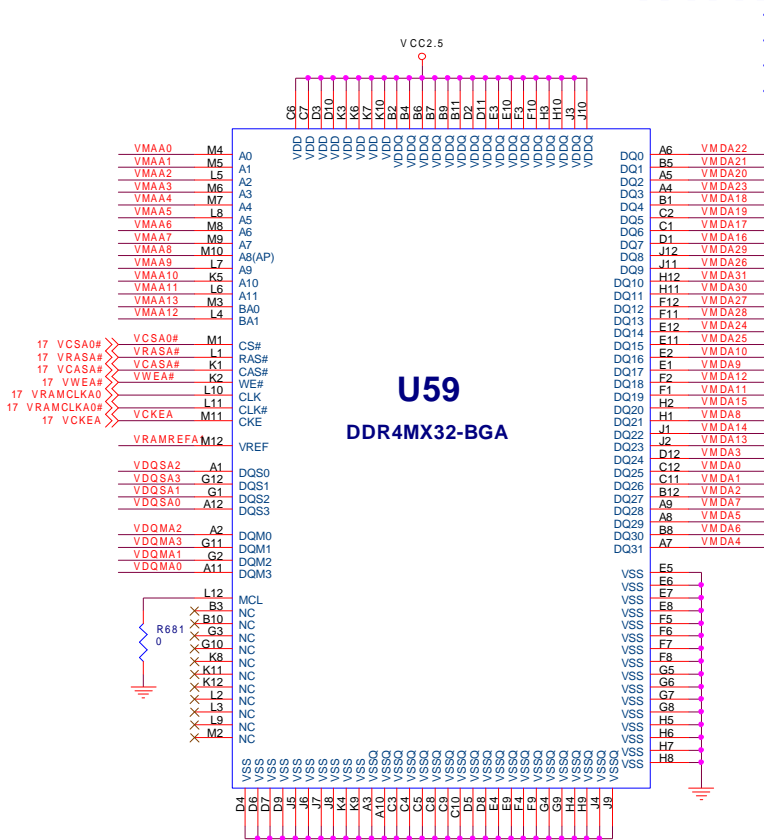
Remove all components .

<<VMDA[0..63] 19 <<VMD8[0..63] 20  
<<VMAA[0..13] 19 <<VMAB[0..13] 20  
<<VDQMA[0..7] 19 <<VDQMB[0..7] 20  
<<VDQSA[0..7] 19 <<VDQSB[0..7] 20



MEMORY IO VOLTAGE = 2.5V





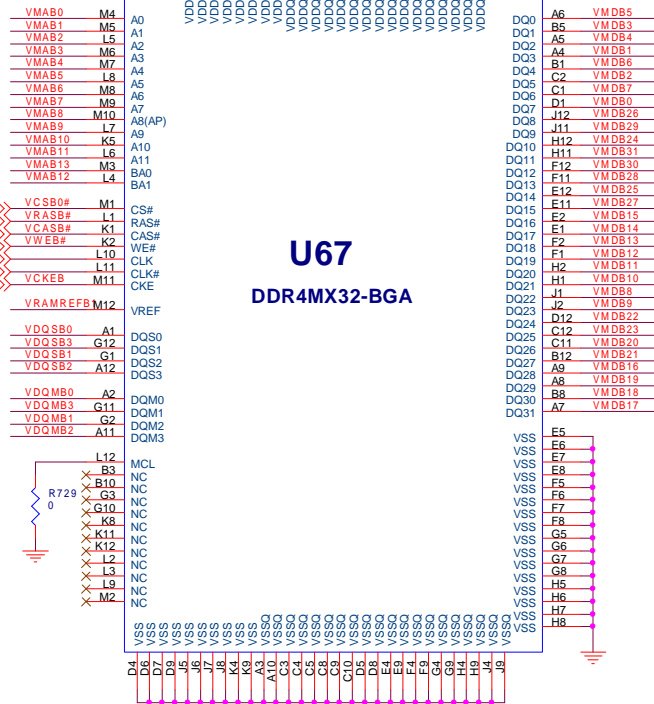
If 32M VRAM of M9+X only install  
U67,U68

<< VDB[0..63] 17  
<< VMAB[0..13] 17  
<< VDQMB[0..7] 17  
<< VDQSB[0..7] 17

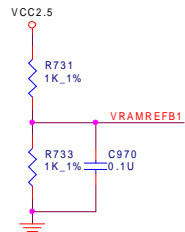
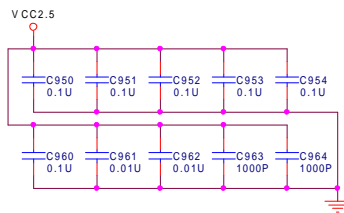
Default : External Gfx

Internal Gfx :  
Remove all components .

**U67**  
**DDR4MX32-BGA**

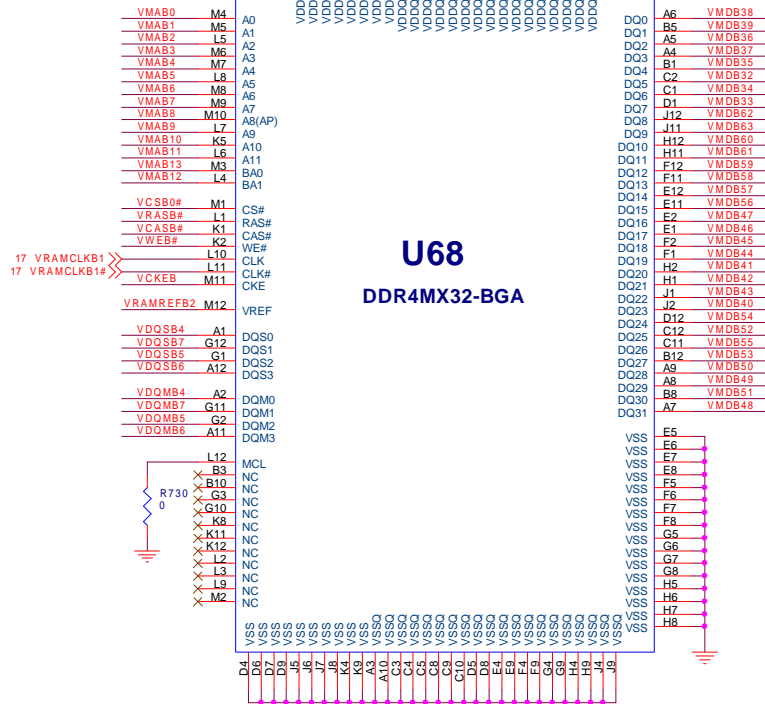


Samsung K4D263238E-VC33  
(Hynix -HY5DU28322AF(P))

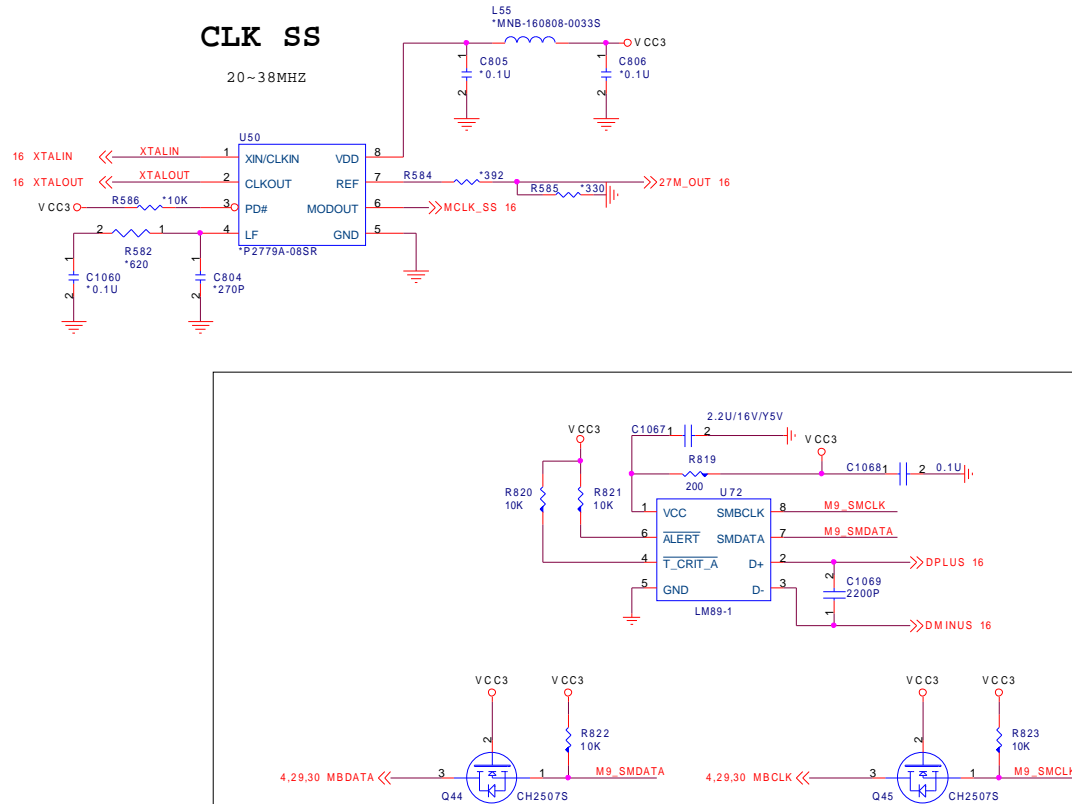


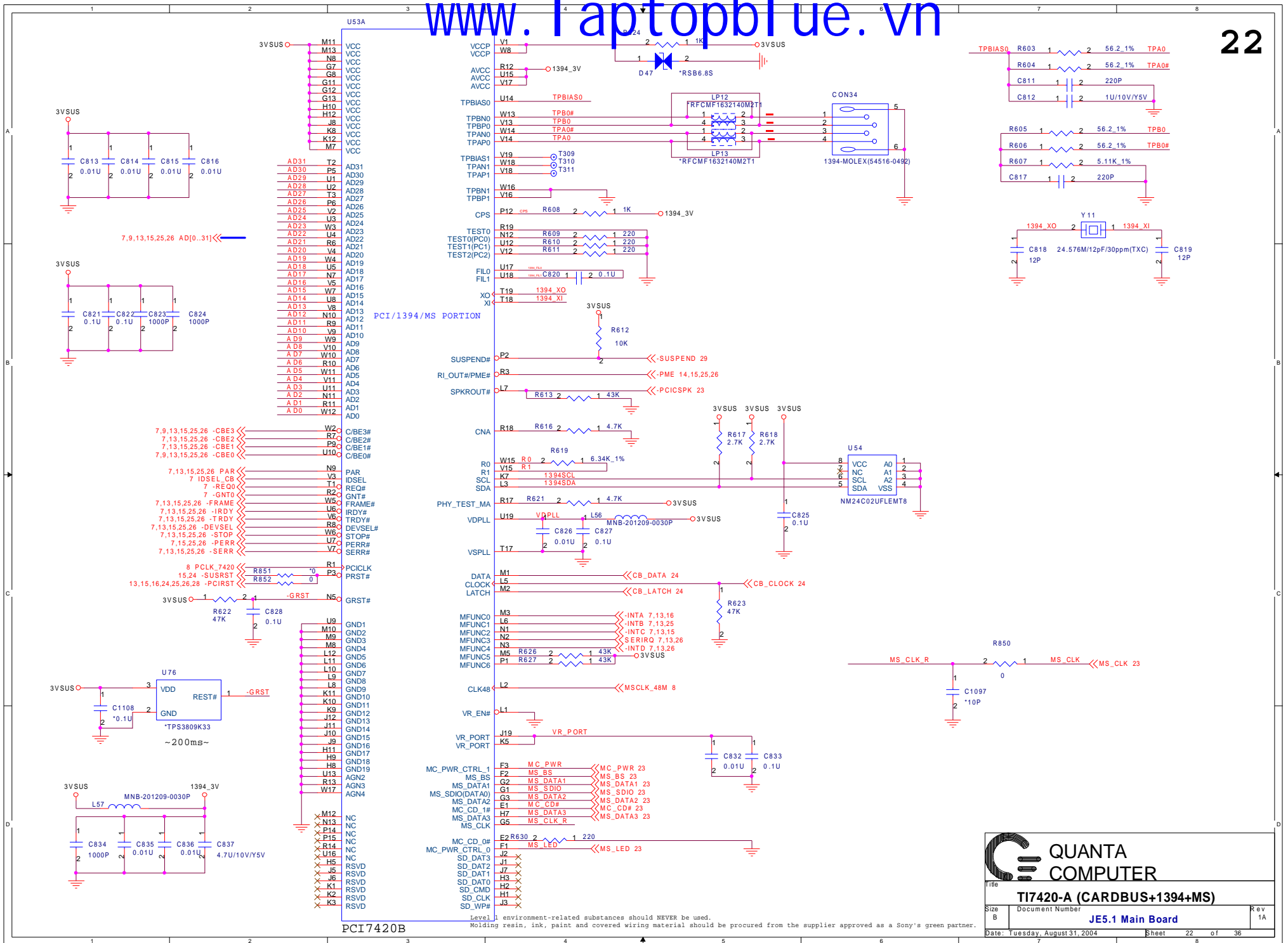
Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

**U68**  
**DDR4MX32-BGA**

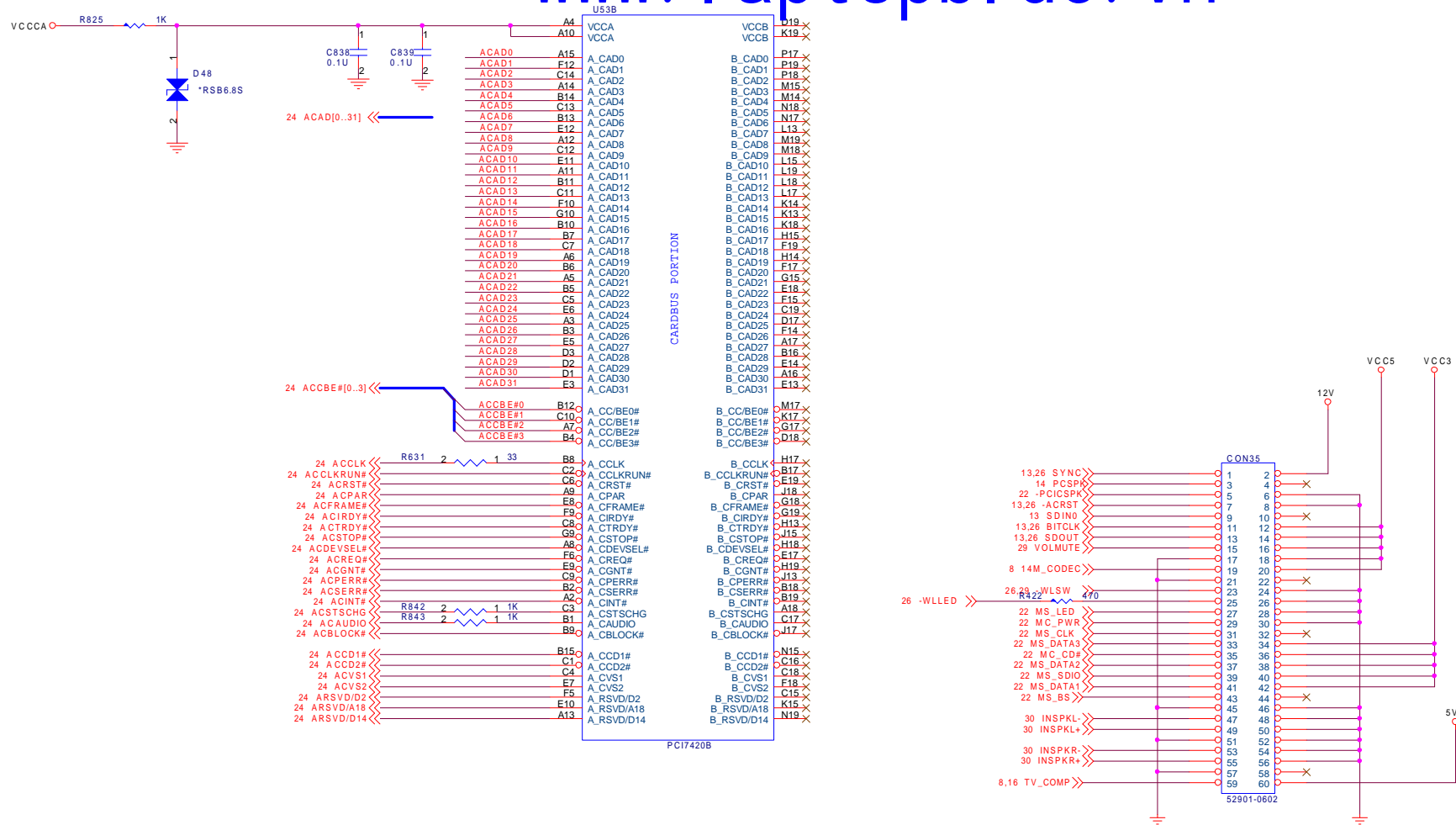


# MCLK (230MHZ) SPREAD SPECTRUM LOGIC





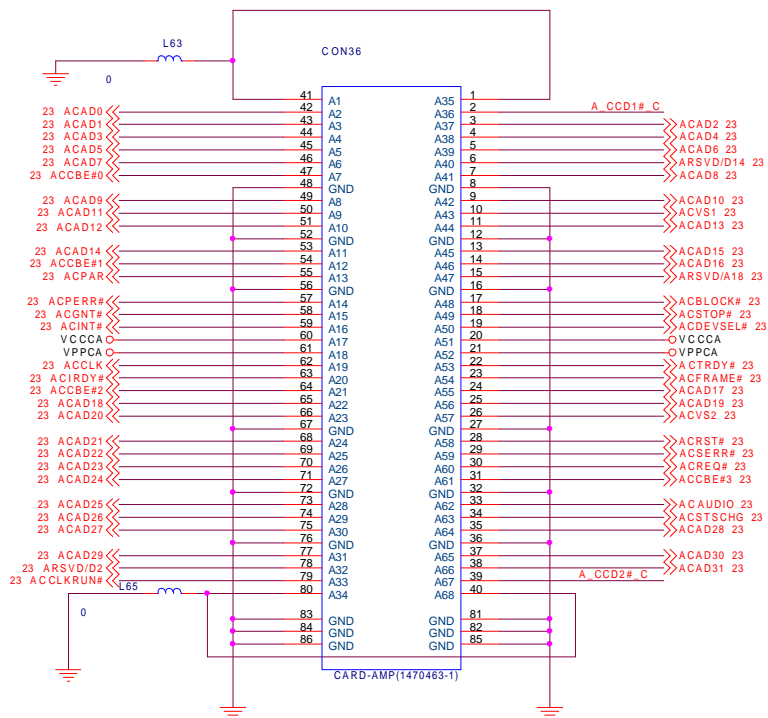




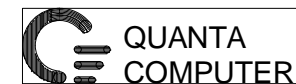
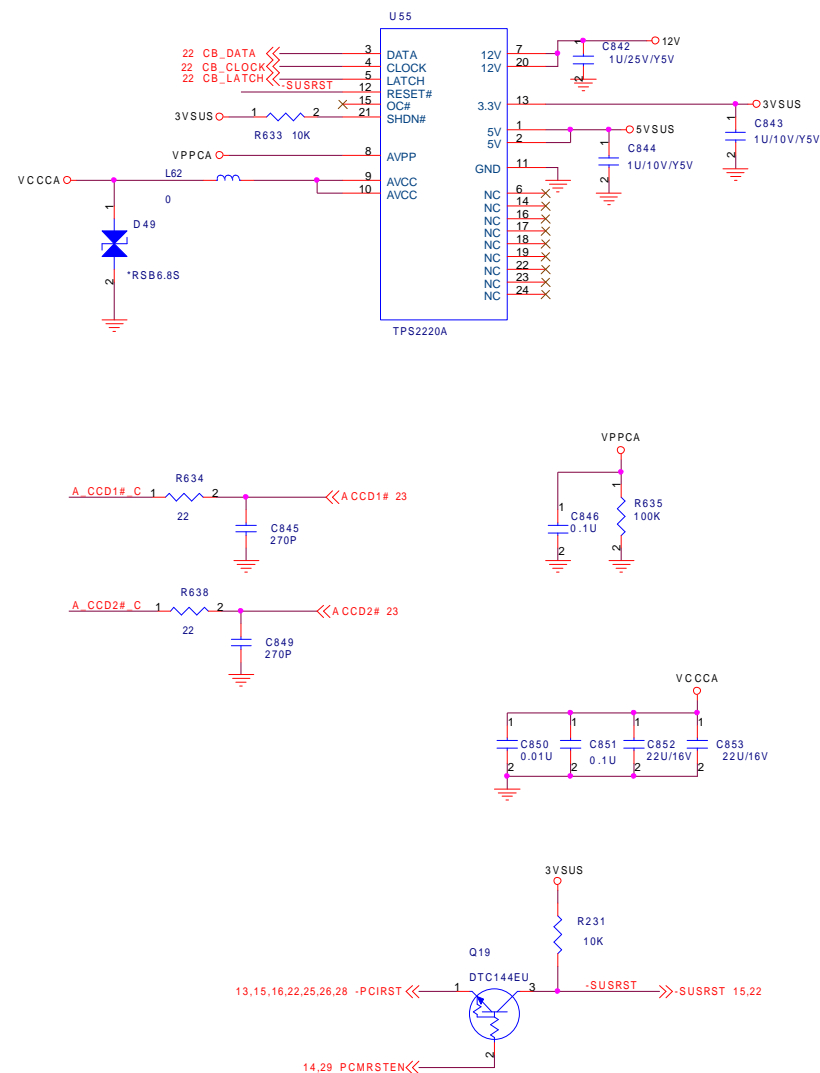
Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

<b>TI7420-A (CARDBUS+1394+MS)</b>		
Size	Document Number	Rev
Custom	<b>JE5.1 Main Board</b>	1A
Date: Tuesday, August 31, 2004		Sheet 23 of 36

23 ACAD[0..31] <<   
23 ACCBE#[0..3] << 



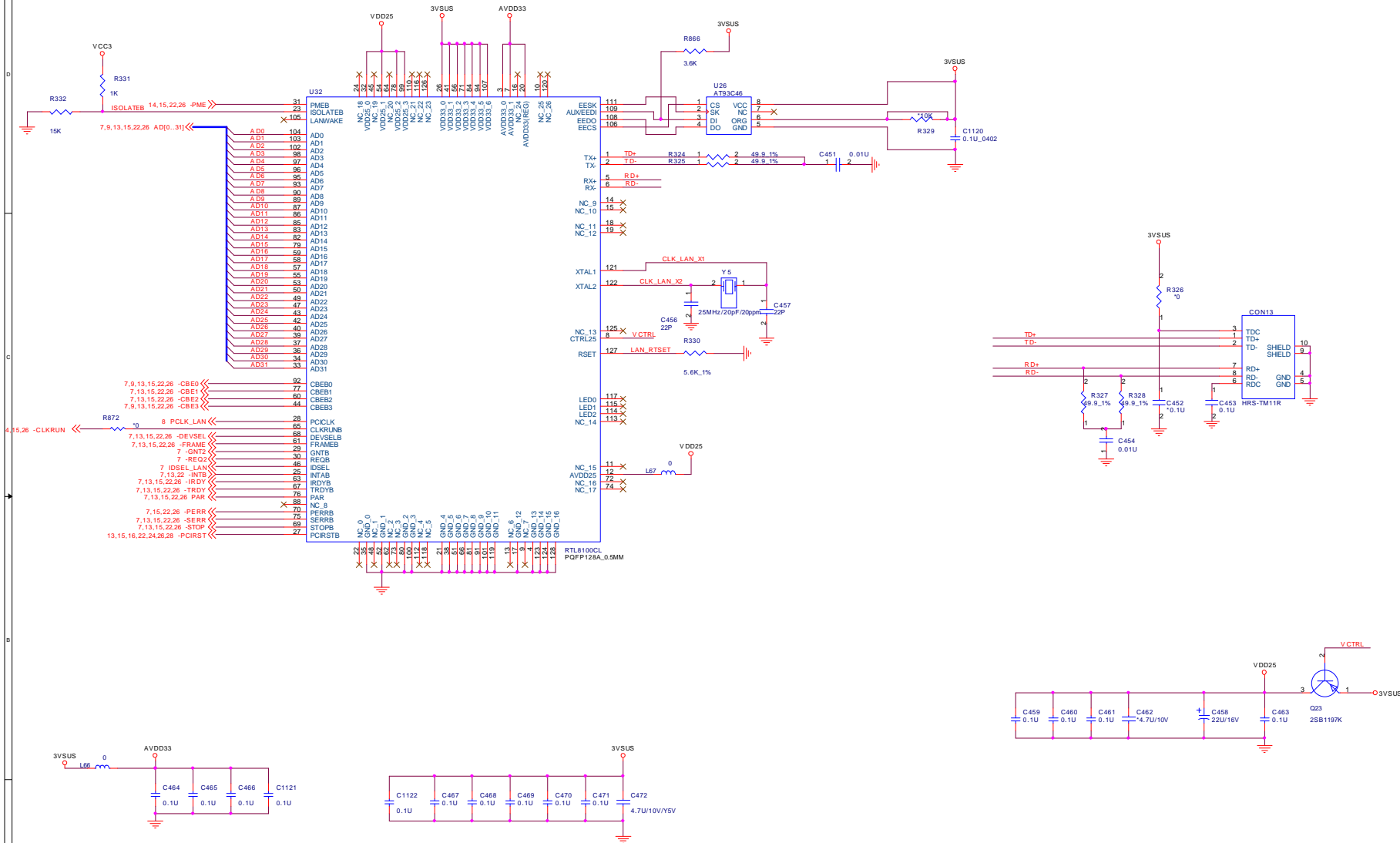
# CardBus power switch chip



## CARDBUS SLOT

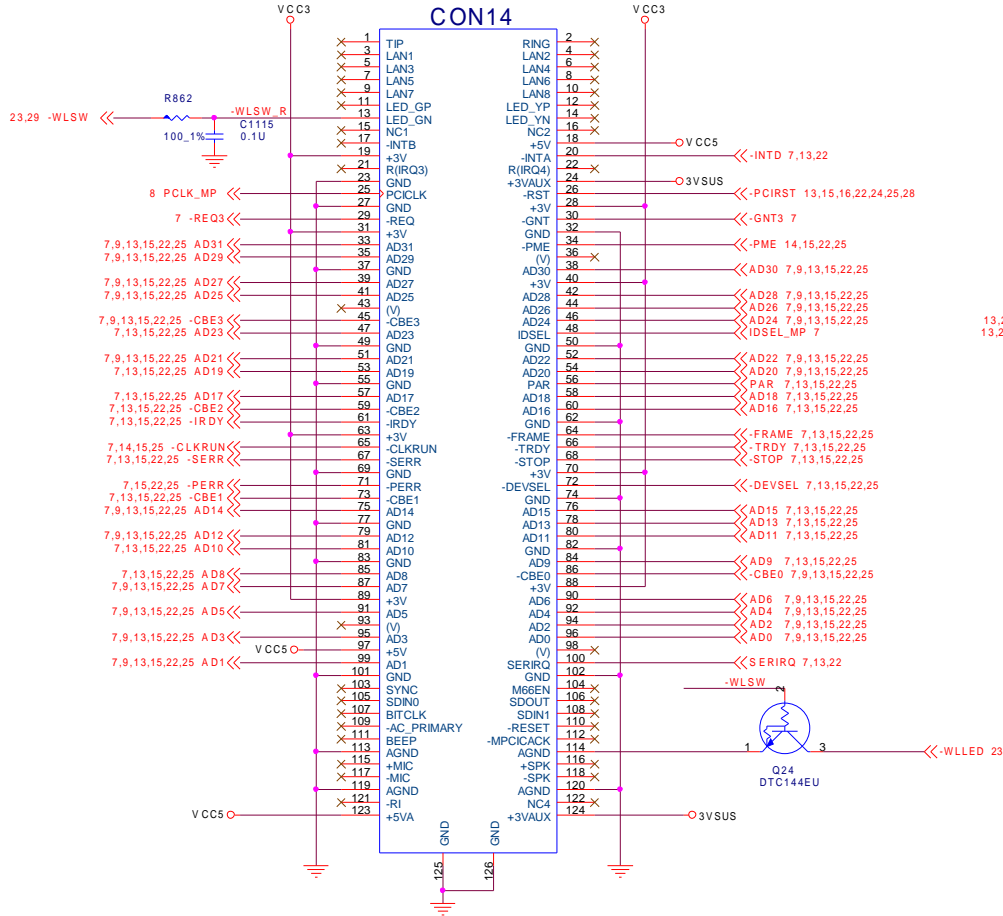
Size B	Document Number	JE5.1 Main Board	Rev 1A
Date: Tuesday, August 31, 2004	Sheet 24	of 36	

Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

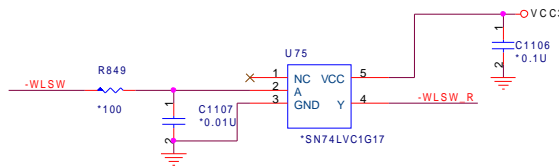
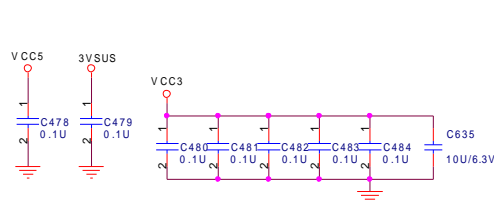
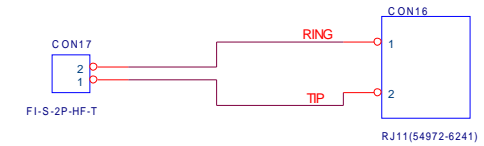
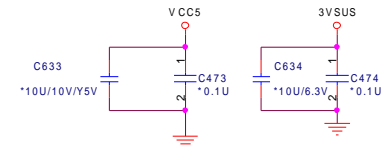
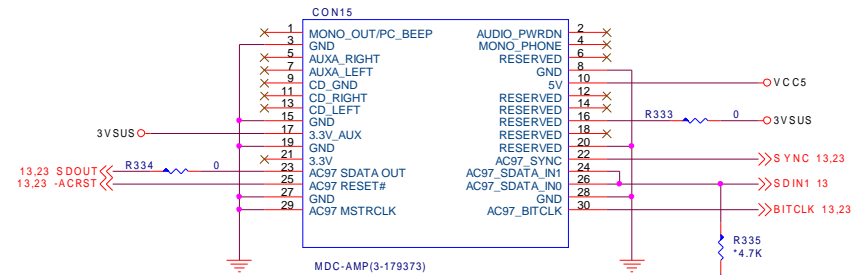


MINIPCI-AMP(440073-124)

CON14



MDC (Height 4.4mm)



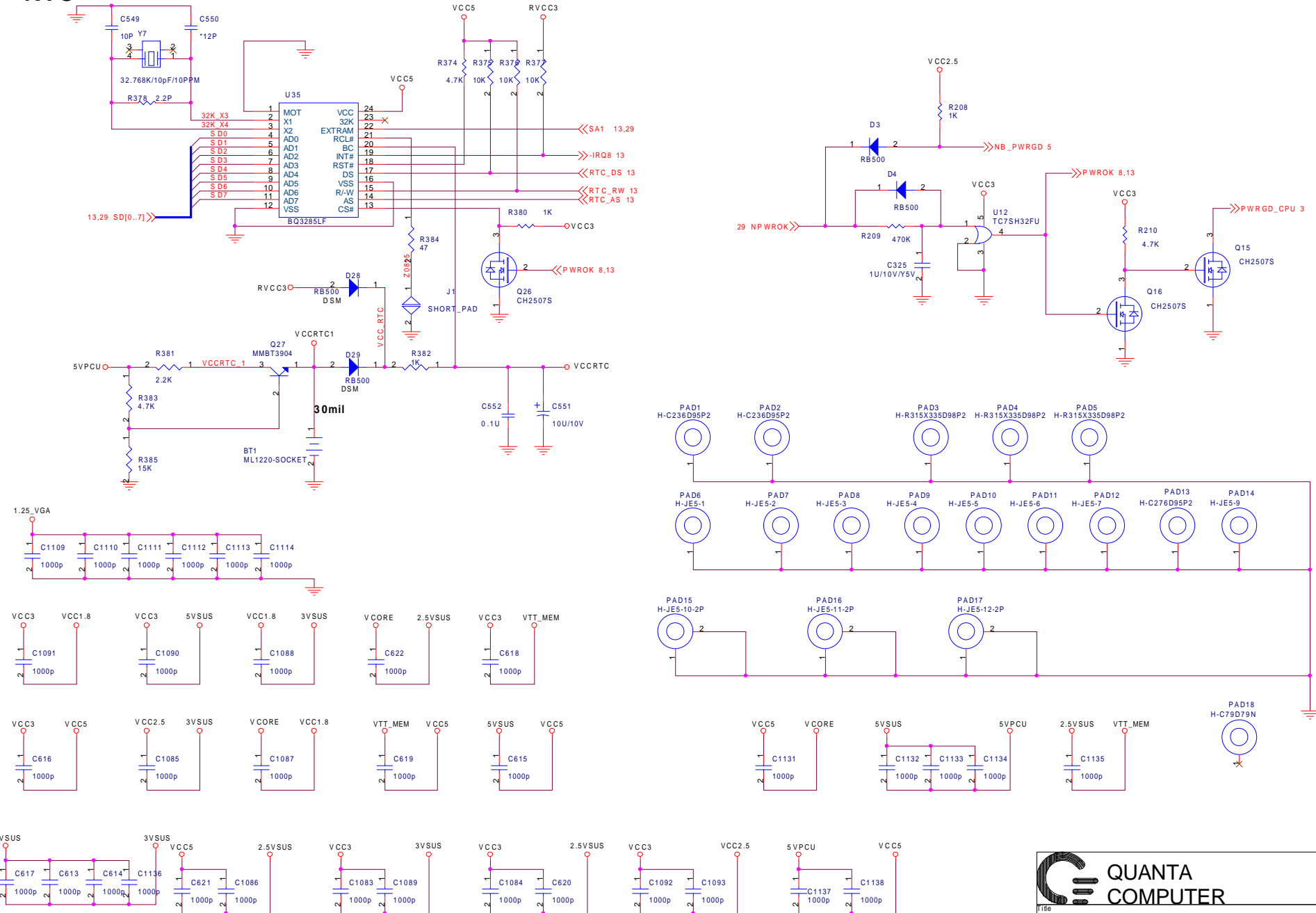
QUANTA  
COMPUTER

MiniPCI & MDC


Size	Document Number	Rev
B	JE5.1 Main Board	2A
Date:	Tuesday, August 31, 2004	Sheet 26 of 36

Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

# RTC



Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

 <b>QUANTA COMPUTER</b>		
<b>RTC/POWER GOOD LOGIC</b>		
Size B	Document Number	Rev 2A
<b>JE5.1 Main Board</b>		
Date: Tuesday, August 31, 2004	Sheet 27 of 36	

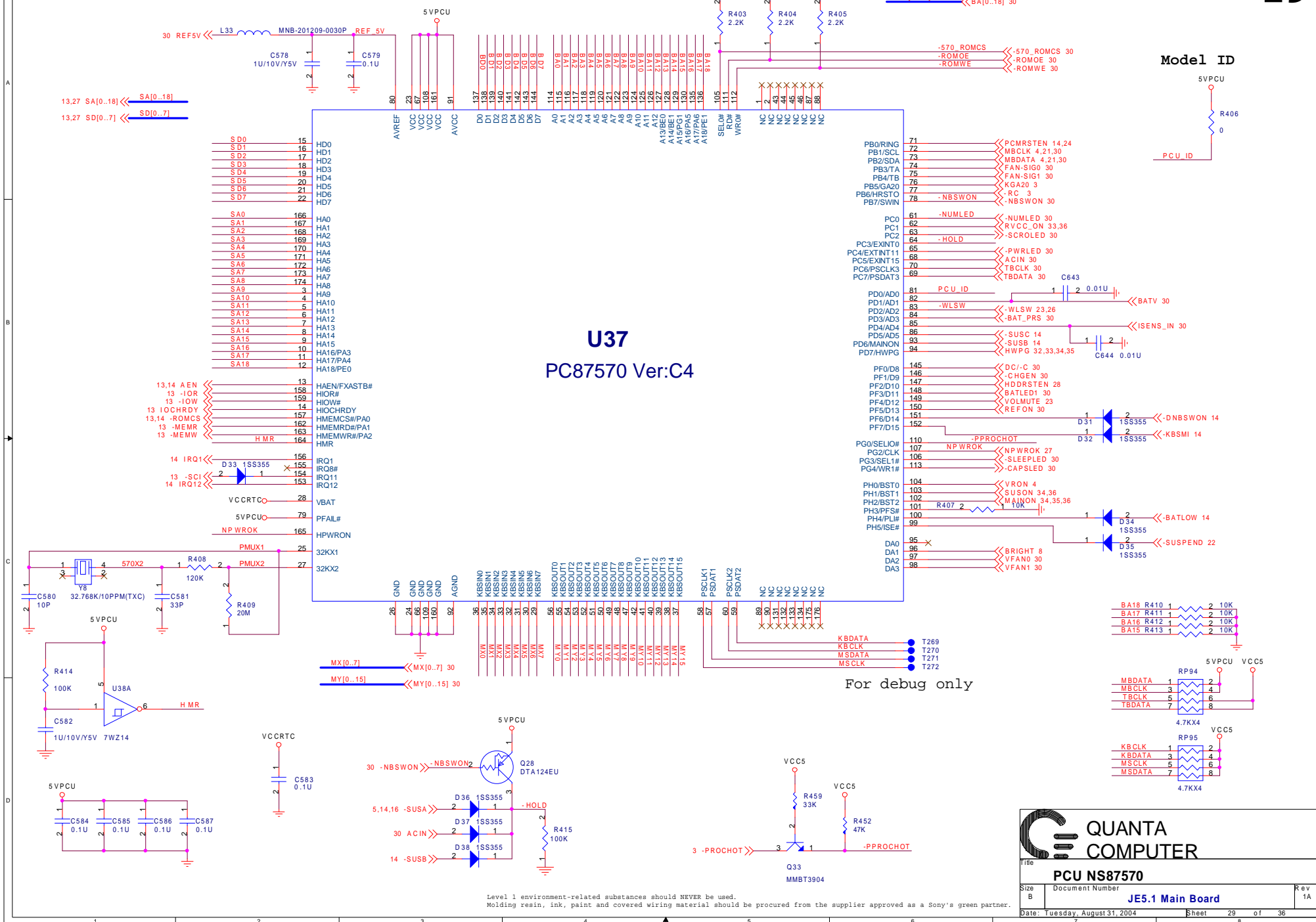


(Height 13mm)



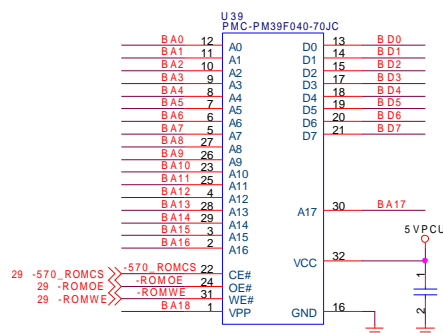
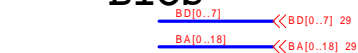
CON22



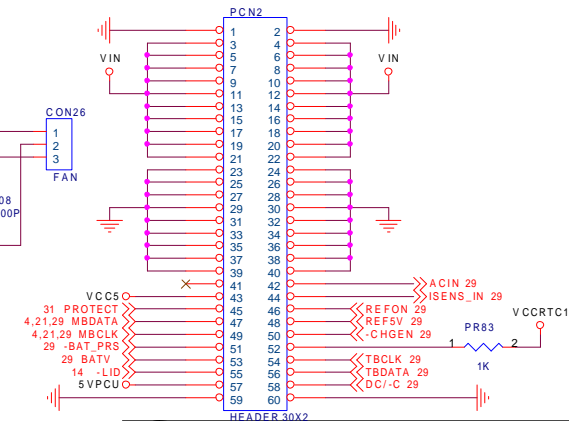
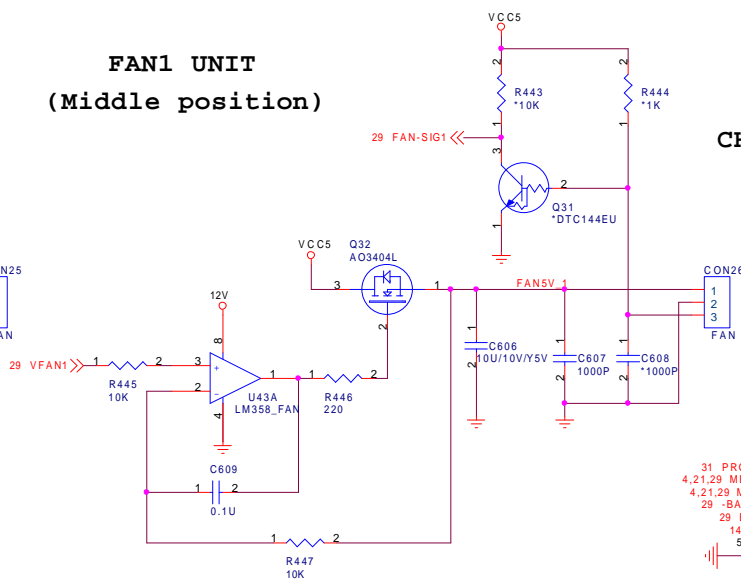




## BIOS

[illegible]

## CHARGER BOARD CONNECTOR

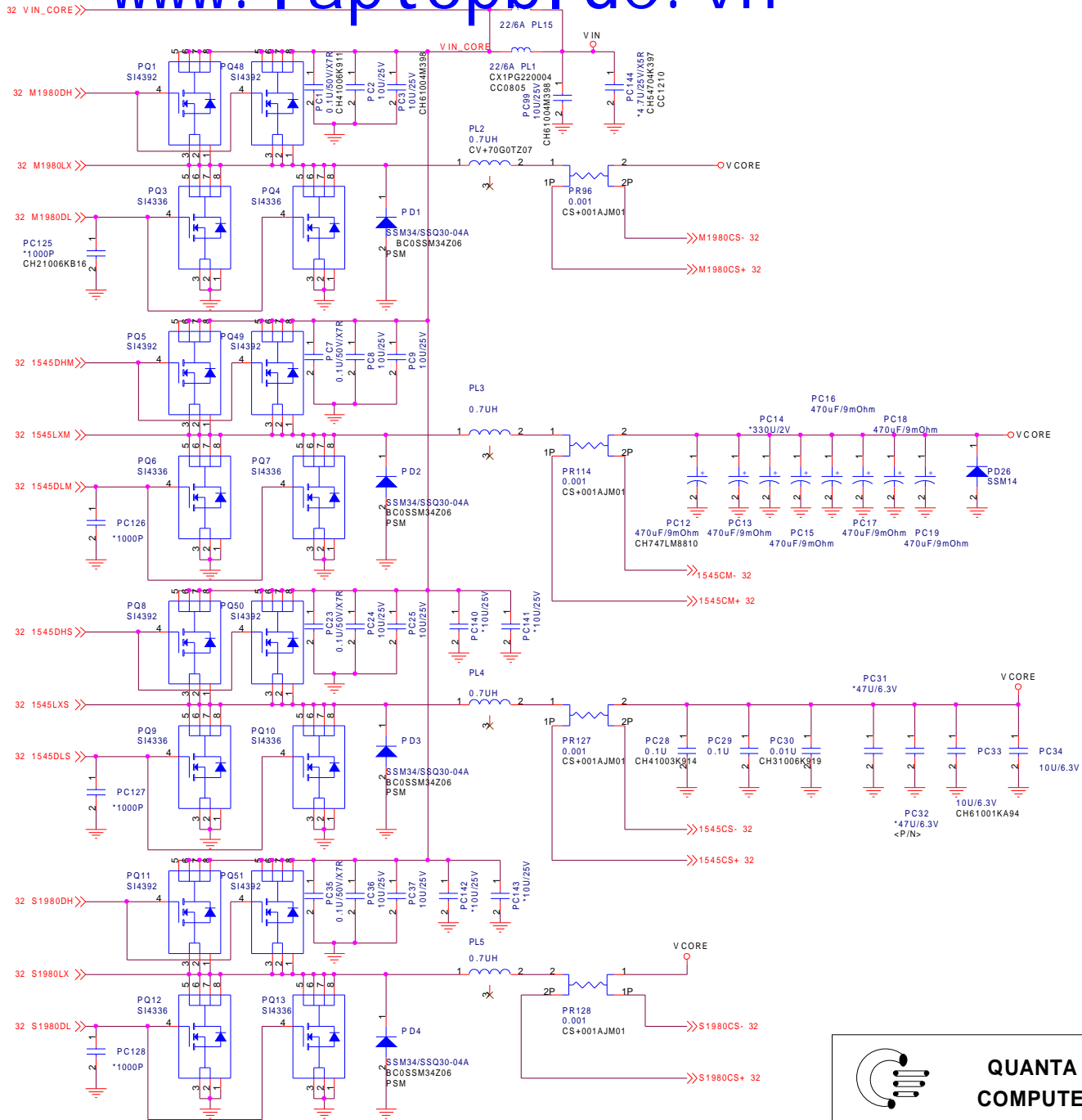
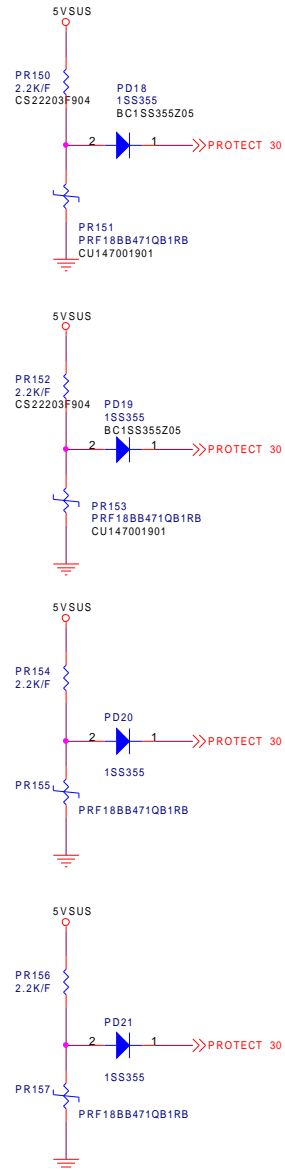


QUANTA  
COMPUTER


**INT. KEYBOARD/FAN**

Size	Document Number	Rev
Custom	<b>JE5.1 Main Board</b>	1/
Date: <b>Tuesday, August 31, 2004</b>	Sheet <b>30</b> of <b>36</b>	

Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

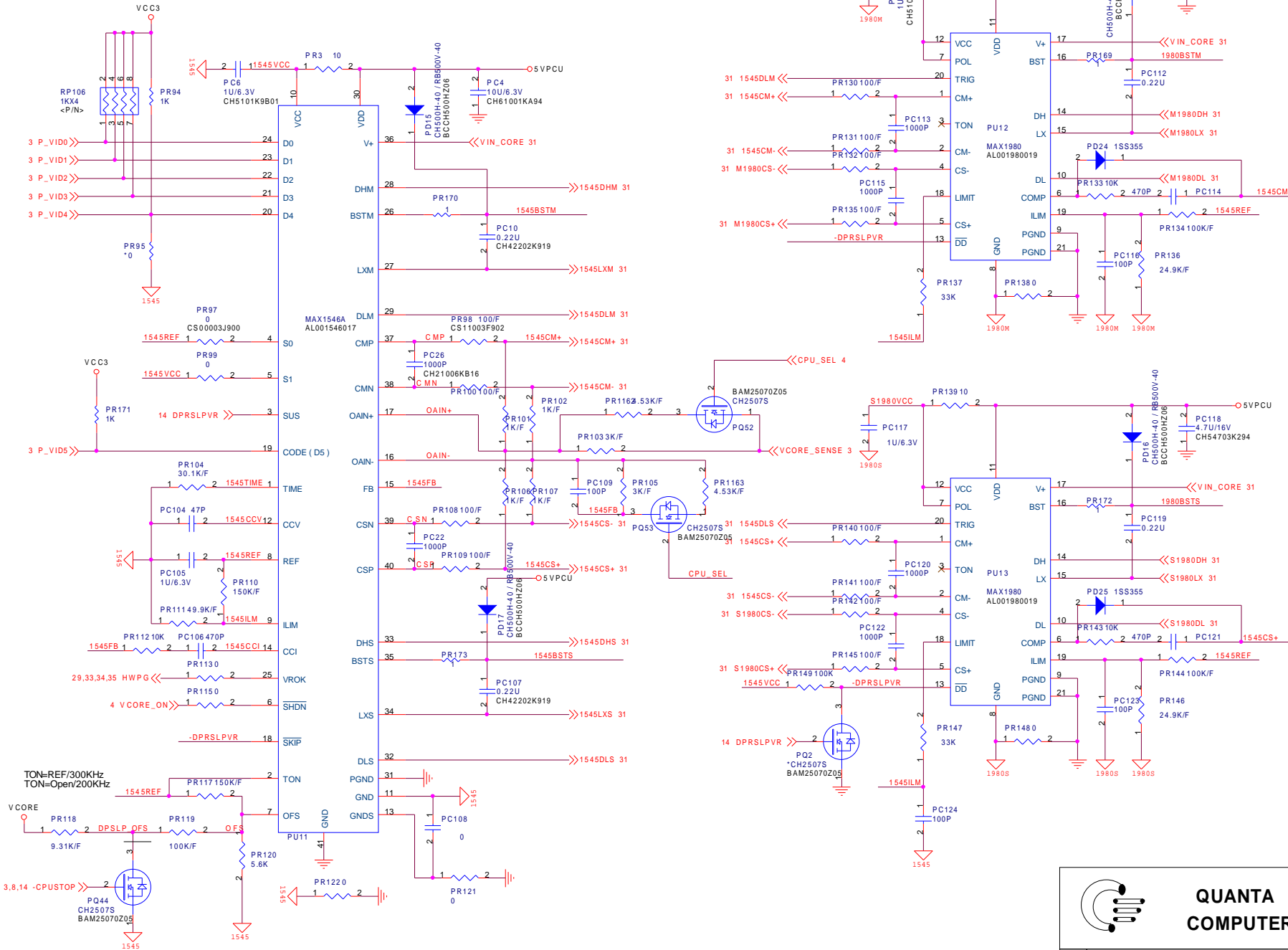


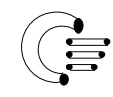
Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.



**QUANTA  
COMPUTER**

Size	Document Number	Rev
	<b>JE5.1 Main Board</b>	<b>2A</b>
Date:	Monday, August 30, 2004	Sheet 31 of 36



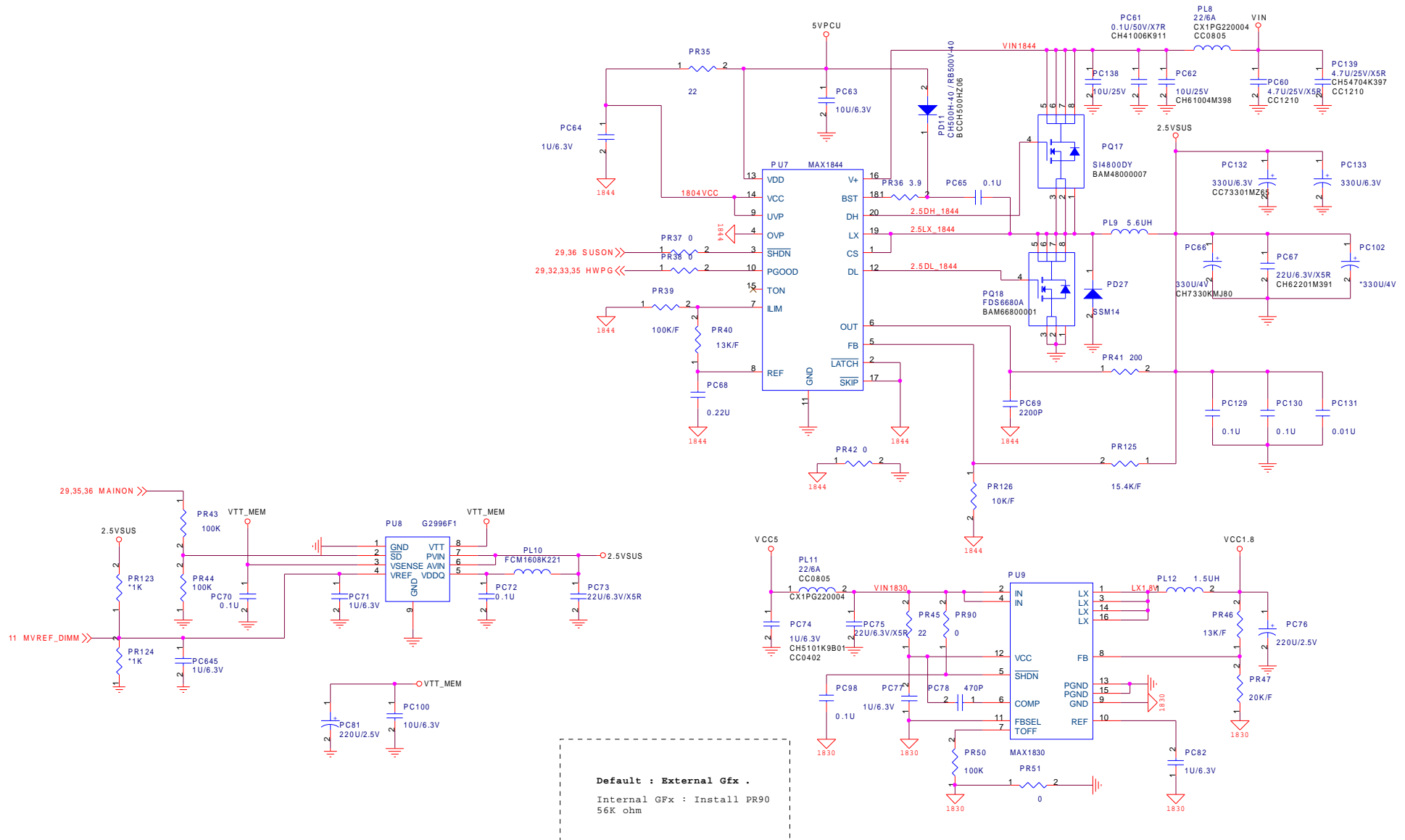


**QUANTA  
COMPUTER**

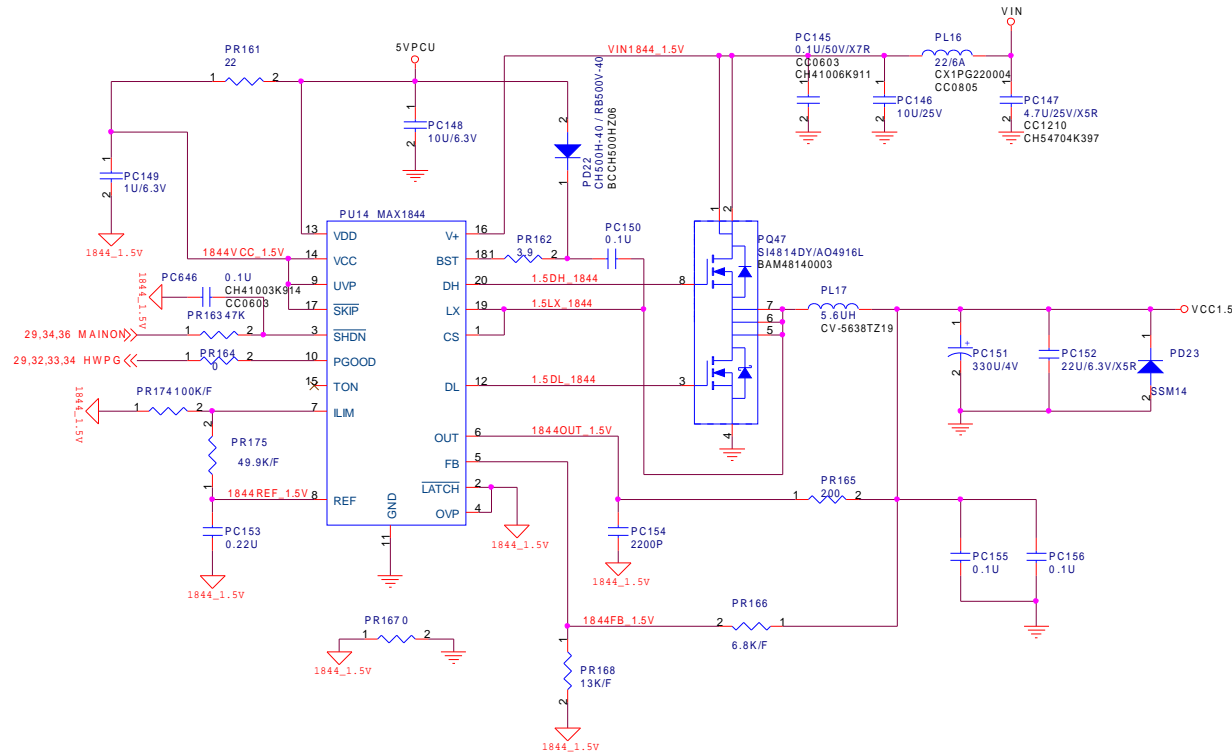
Size	Document Number	Rev
	<b>JE5.1 Main Board</b>	<b>2A</b>
Date:	Monday, August 30, 2004	Sheet 32 of 36

Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.





**QUANTA  
COMPUTER**



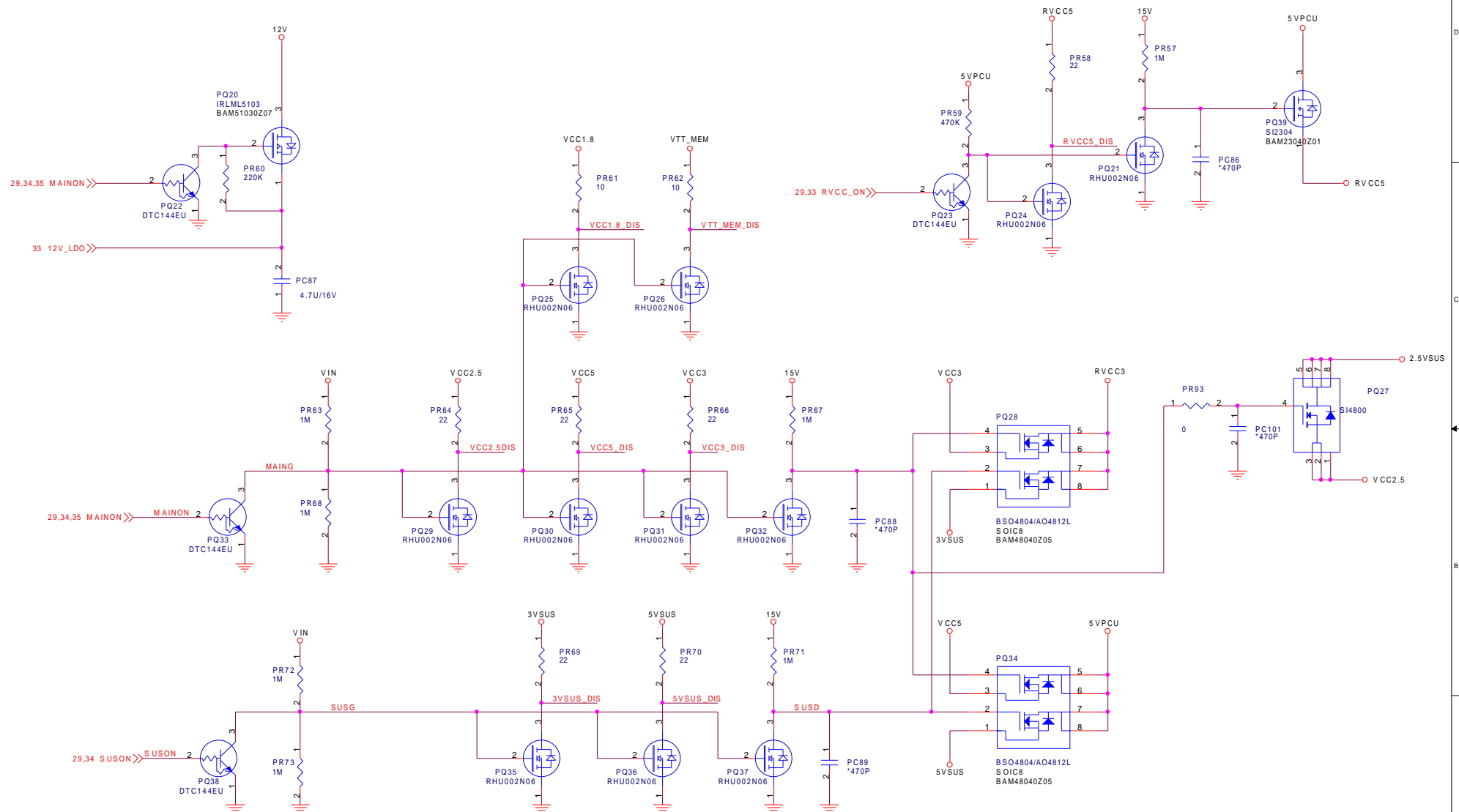
Default : External Gfx  
Internal Gfx :  
Remove all of components  
.




QUANTA  
COMPUTER

Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

Size	Document Number	Rev
	JE5.1 Main Board	2A
Date:	Monday, August 30, 2004	Sheet 35 of 36



Level 1 environment-related substances should NEVER be used.  
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.



**QUANTA  
COMPUTER**

Size: **JE5.1 Main Board**

Document Number: **JE5.1 Main Board**

Date: **Monday, August 30, 2004**

Rev: **1A**

Sheet: **36** of **36**