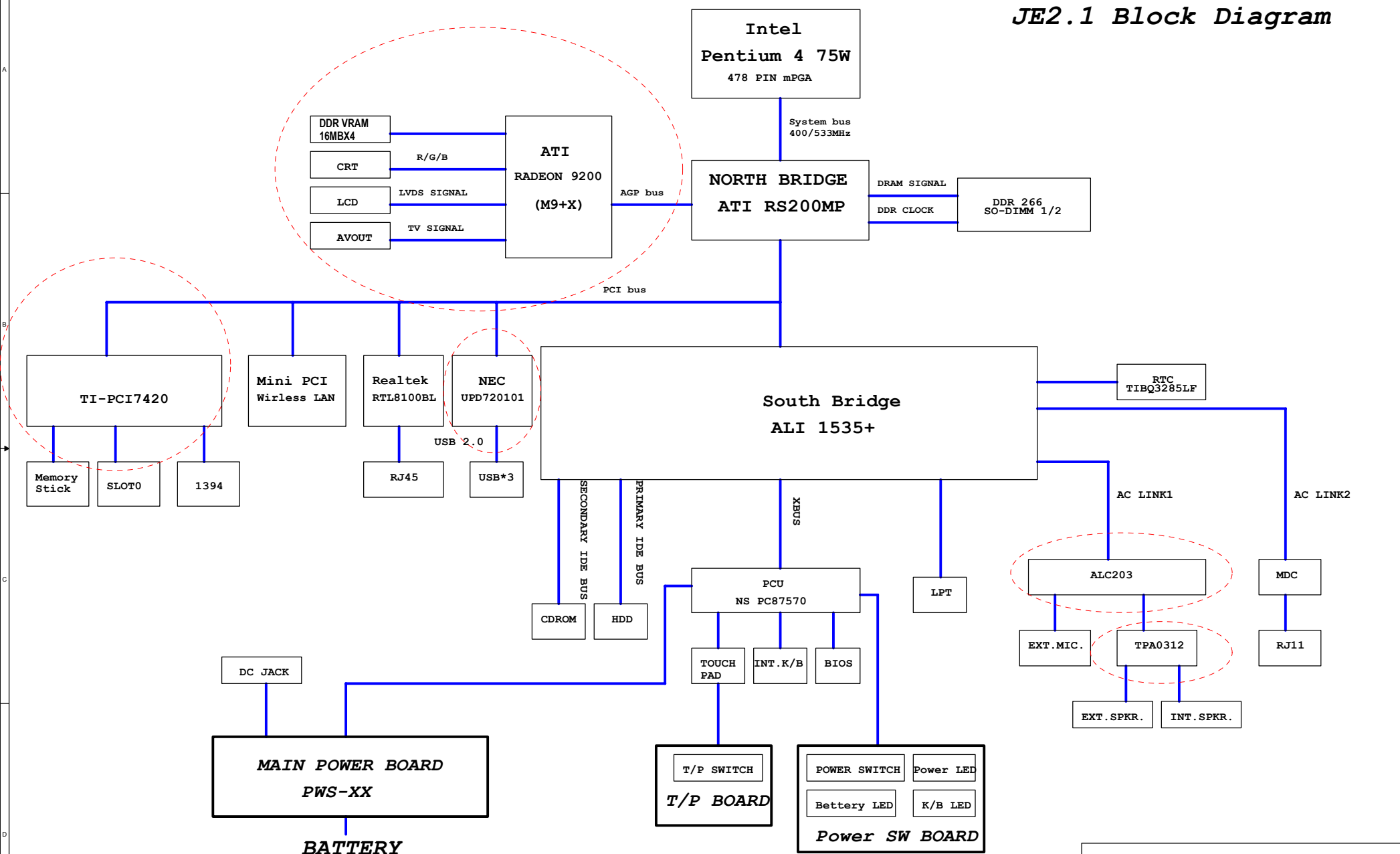


JE2.1 Block Diagram

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Page List

01 Block Diagram
02 Page List
03 Northwood CPU-1
04 Northwood 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
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21 AGP SSC/FAN3
22 TI7420-A (CARDBUS+1394+MS)
23 TI7420-B (CARDBUS+1394+MS)
24 Cardbus slot
25 LAN interface RTL8100B

26 Audio CODEC
27 Audio AMP & Int. Speaker
28 MiniPCI & MDC
29 RTC/POWER GOOD LOGIC
30 IDE/HDD/LPT Connector

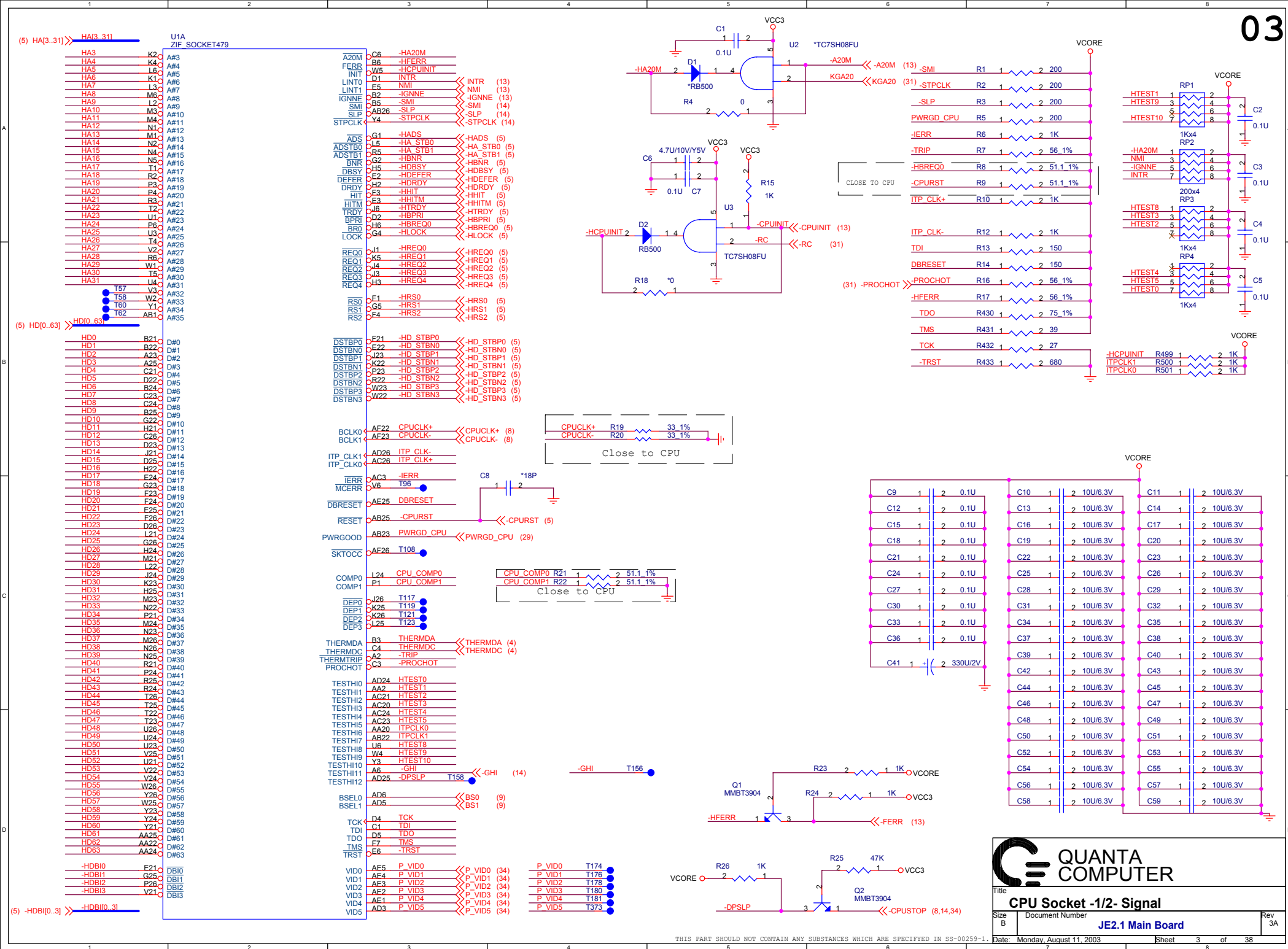
31 PCU NS 87570
32 Int. Keyboard/Bios/FAN
33 VCORE POWER 1
34 MAX1546 (VCORE POWER 2)
35 MAX1632 (5V/3V/12V)

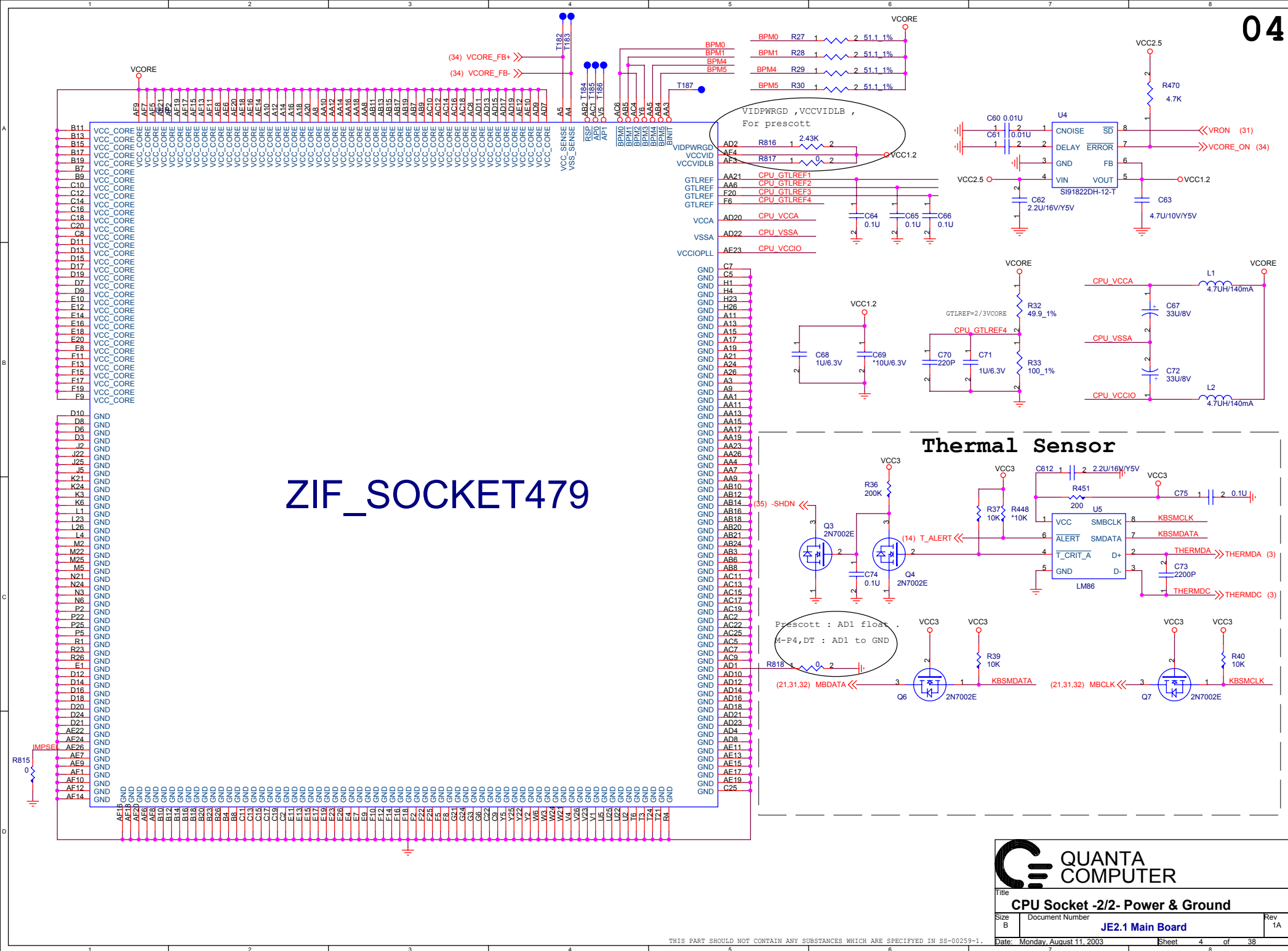
36 MAX1844 (2.5V/1.8V/1.25V)
37 MAX1844 (VCC1.5)
38 Load Switch

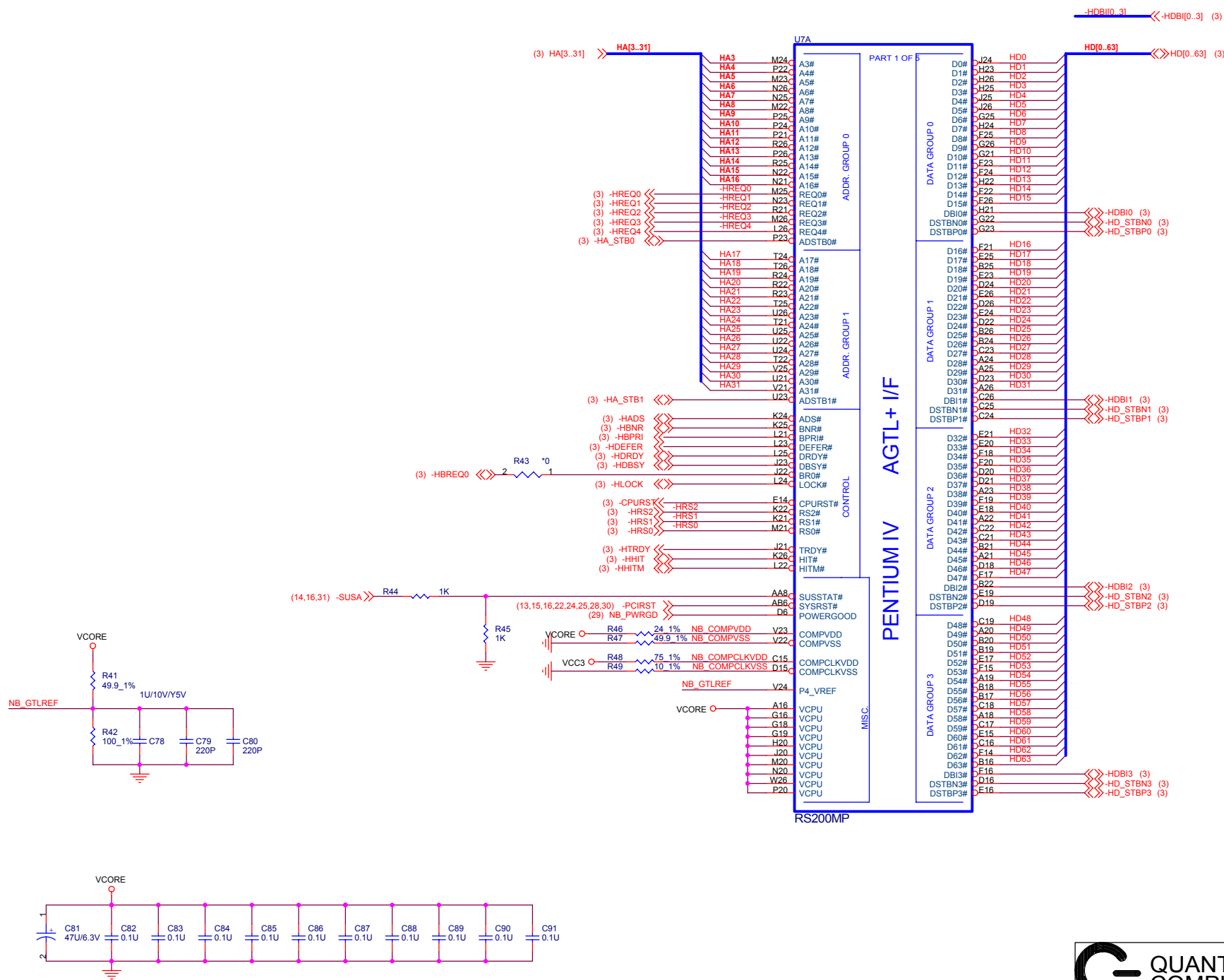
		QUANTA COMPUTER	
Title COVER PAGE			
Size B	Document Number JE2.1 Main Board		Rev 1A
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COMPUTER





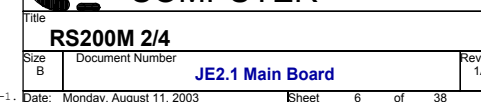
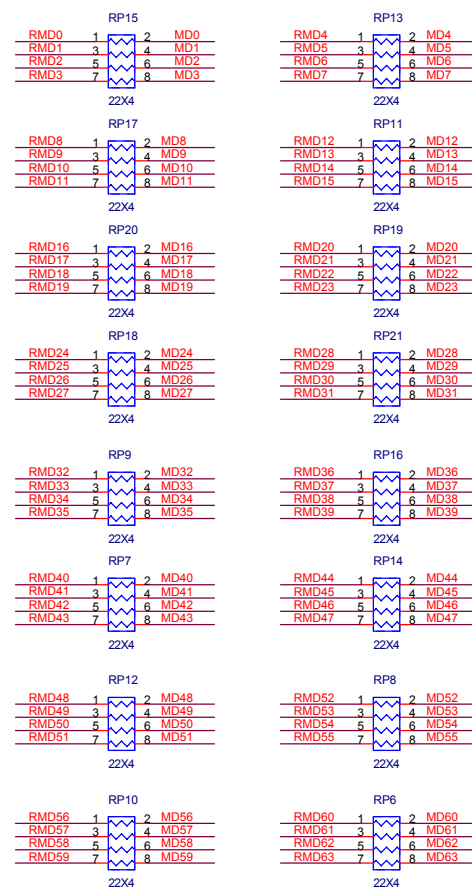


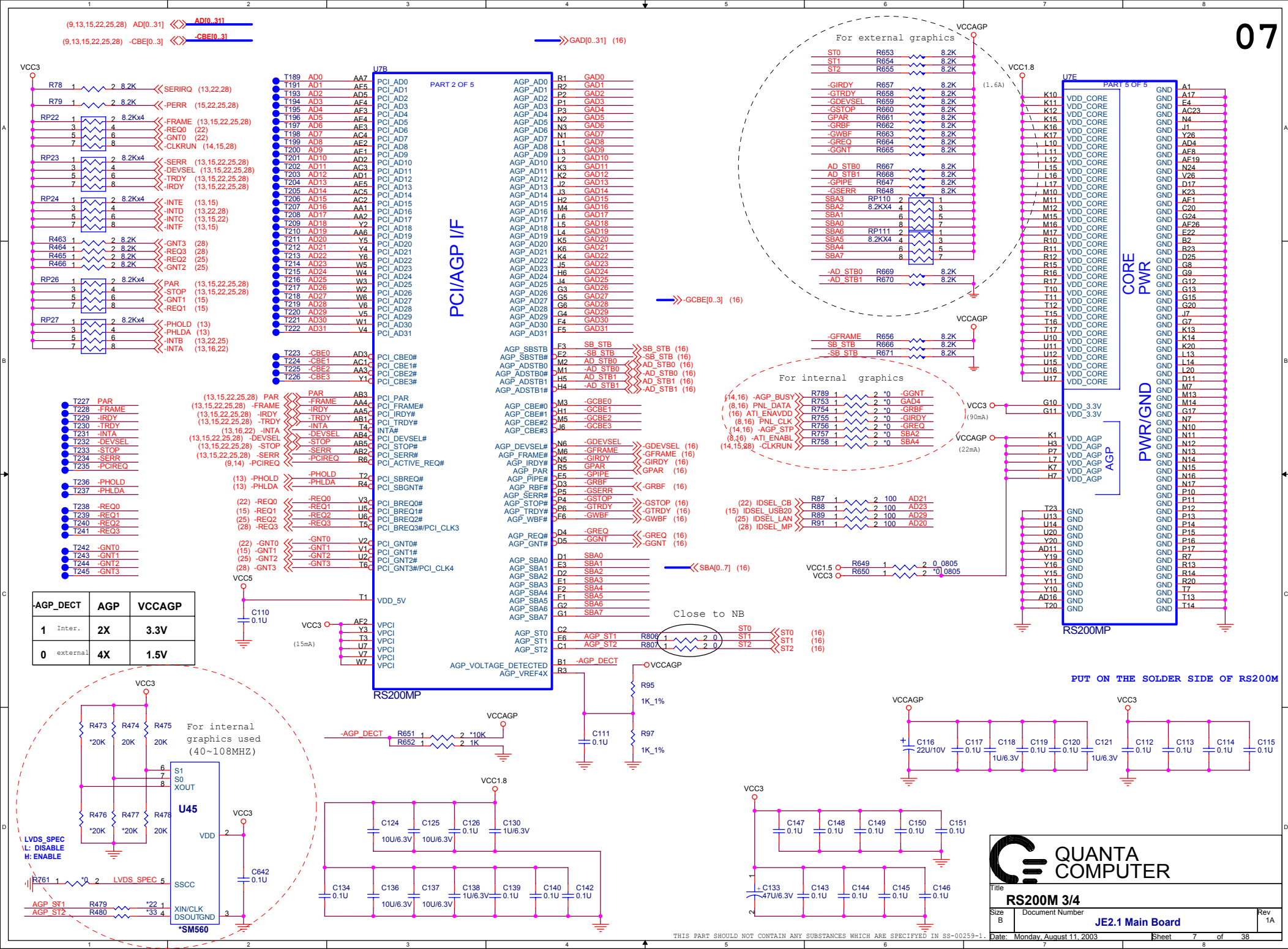
Title
RS200M 1/4

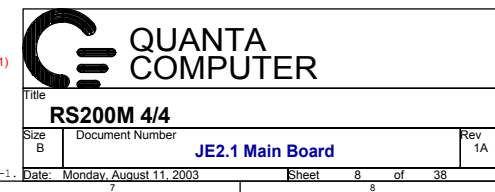
Size B Document Number
JE2.1 Main Board

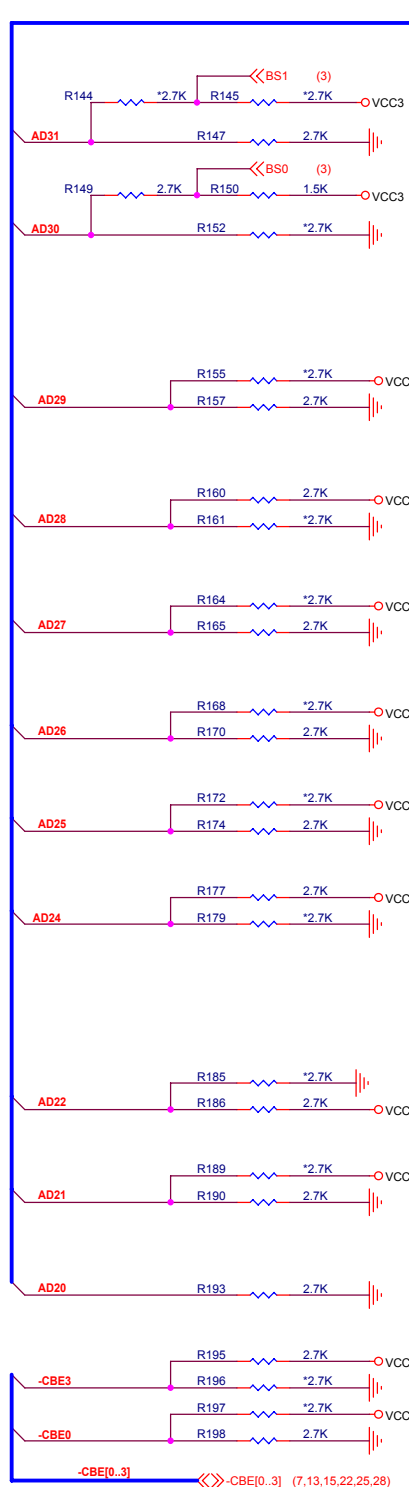
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06









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 MHzREFERENCE CLOCK INPUT

AD21 : CLK_BYPASS(TEST ONLY)
DEFAULT : 0

0: NORMAL
1: TEST MODE

AD20 : PCICLK EXPANSION
DEFAULT : 0

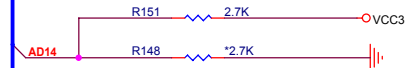
1: PCI_REQ#3, PCI_GNT#3 USED AS PCICLK
0: PCI_REQ#3, PCI_GNT#3 USED AS REQ/GNT

CBE#3: PROD TEST
DEFAULT : 1

0: SHORT TIMERS
1: NORMAL OPERATION

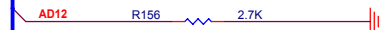
CBE#0:RESERVE

AD[0..31] <<<>>> AD[0..31] (7,13,15,22,25,28)

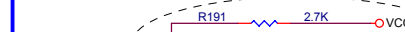
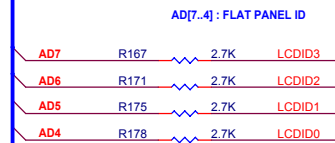


AD14 : AGTL+ VDDQ

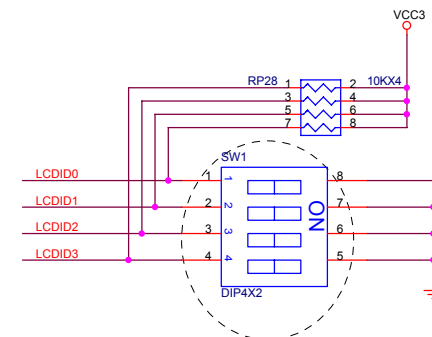
0: 1.2V MOBILE PART
1: 1.7V DESKTOP PART



AD[12] : FLAT PANEL ID MSB



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



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_PREQACT#: INTERNAL CLOCK GEN.
DEFAULT : 1

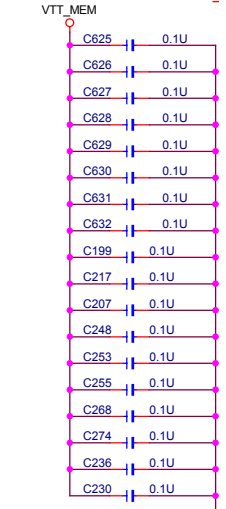
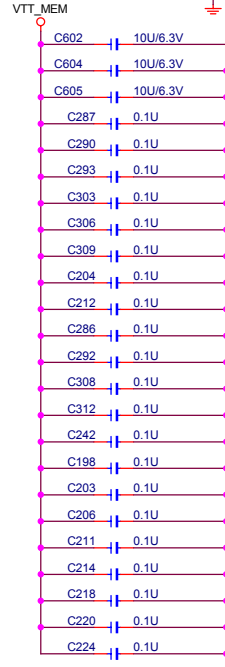
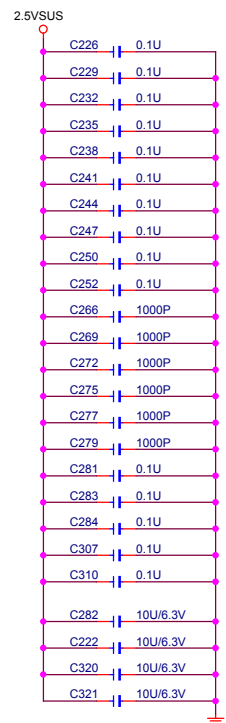
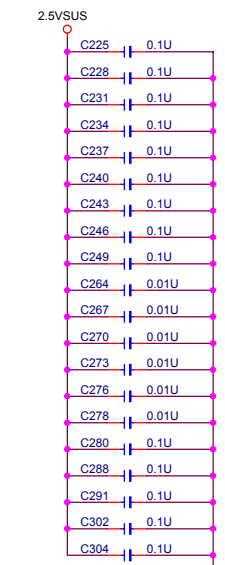
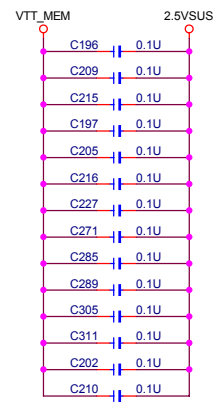
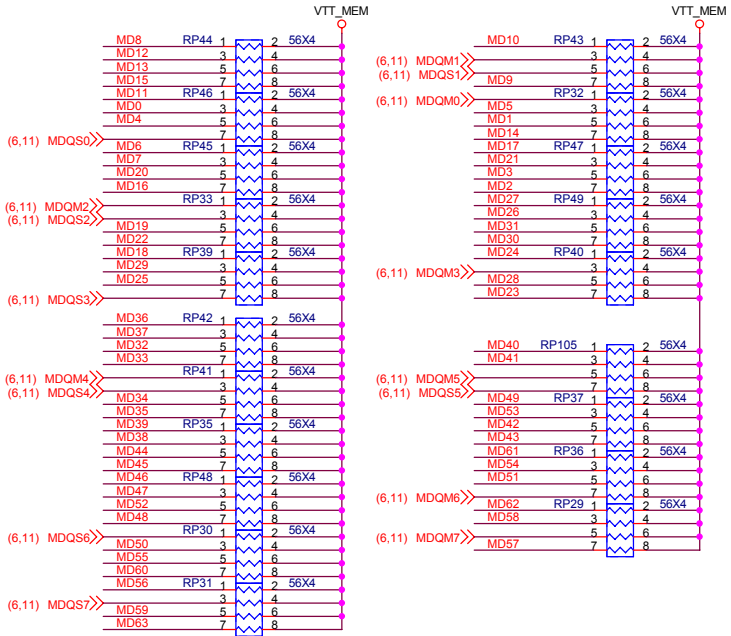
0: DISABLE
1: ENABLE



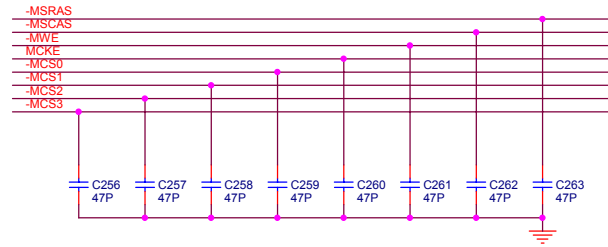
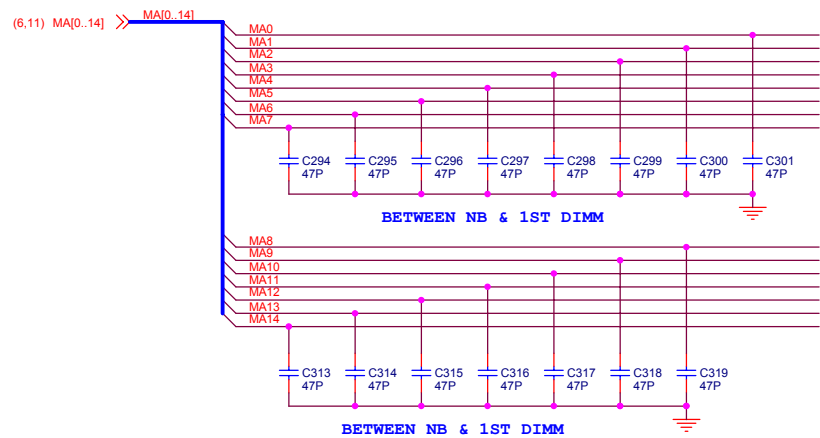
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DDR TERMINATOR

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MA Terminator





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Title

Memory -1/2- Terminator

Size B Document Number

JE2.1 Main Board

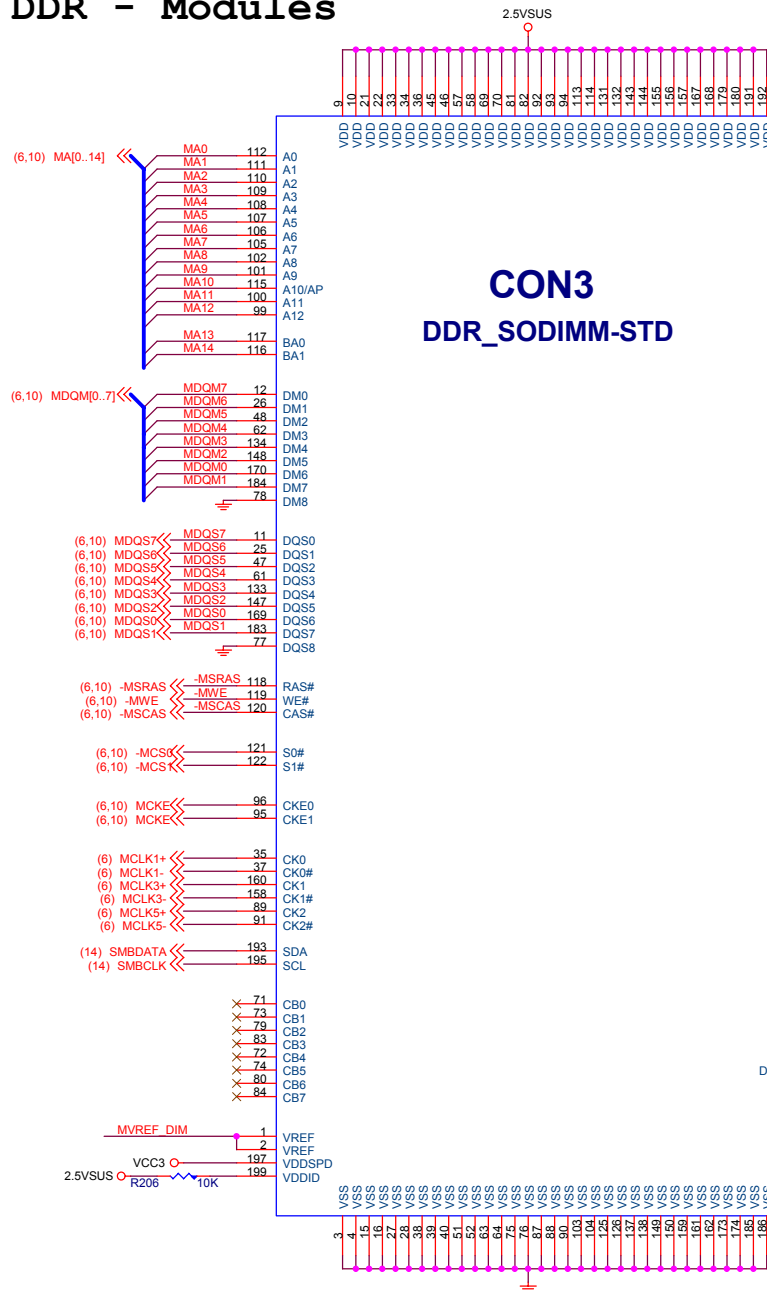
Rev 1A

Date: Monday, August 11, 2003

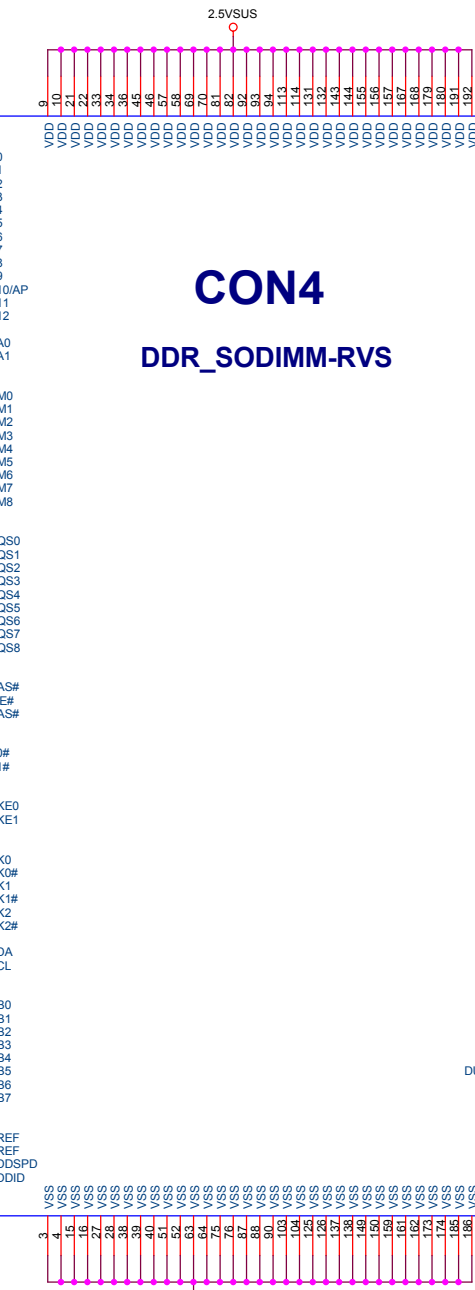
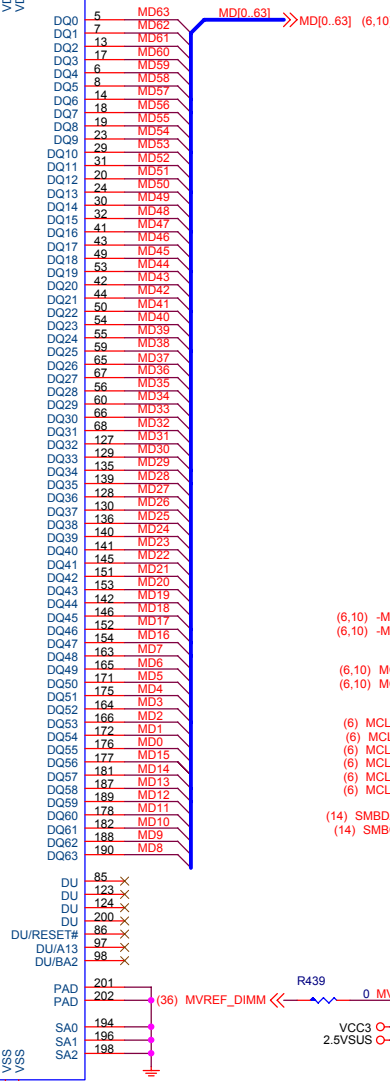
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DDR - Modules

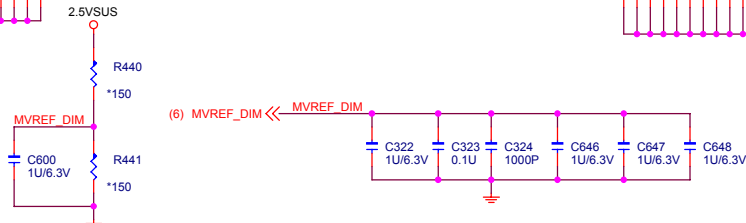
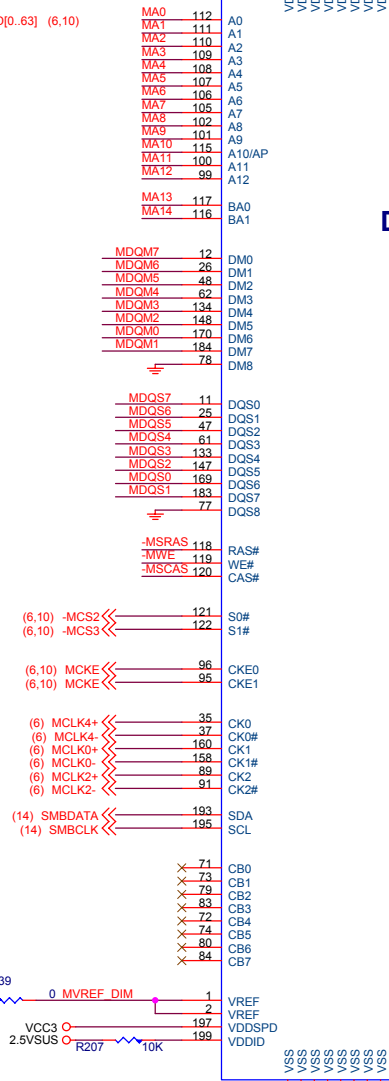
11



CON3
DDR_SODIMM-STD



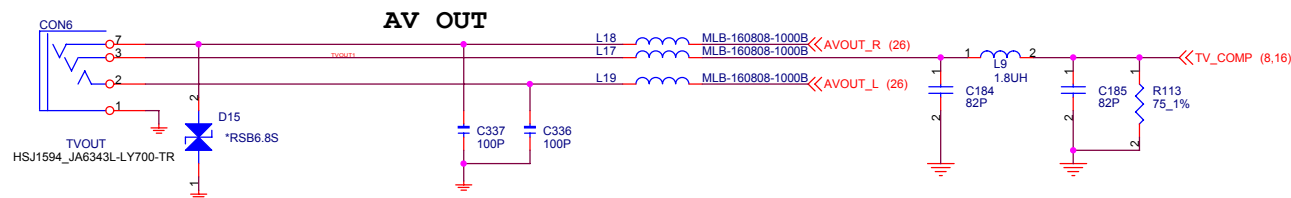
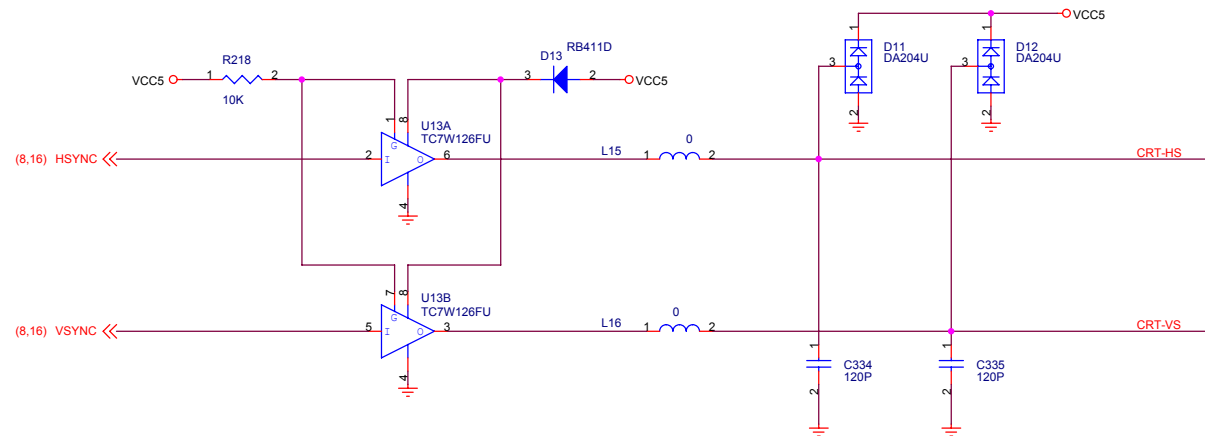
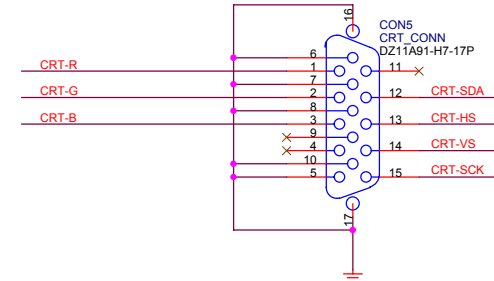
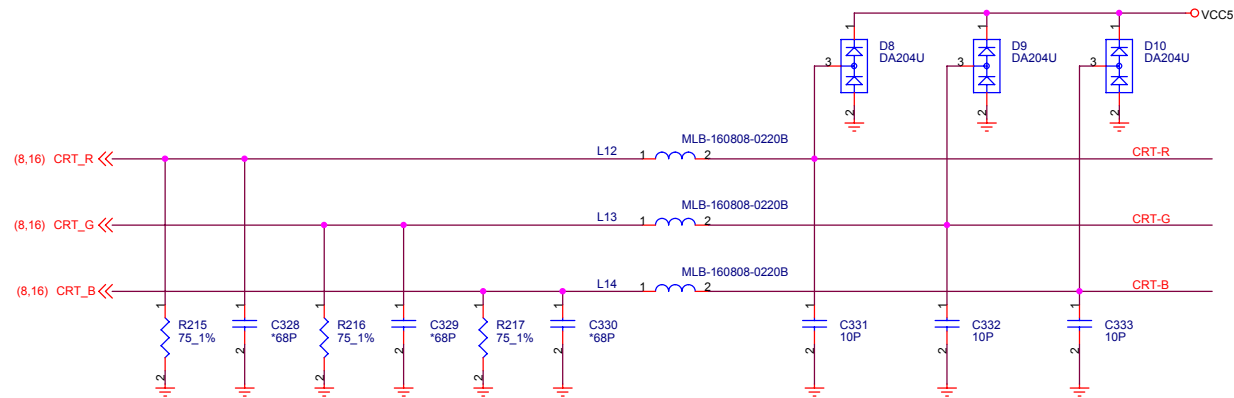
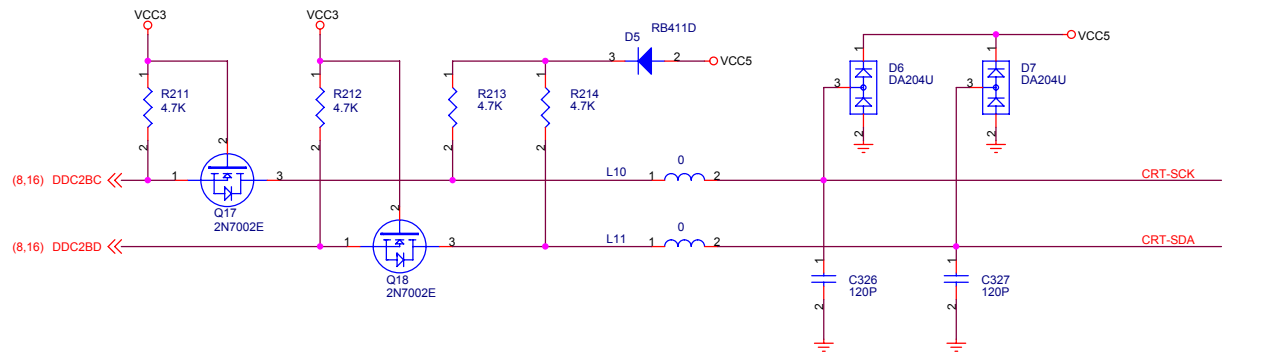
CON4
DDR_SODIMM-RVS



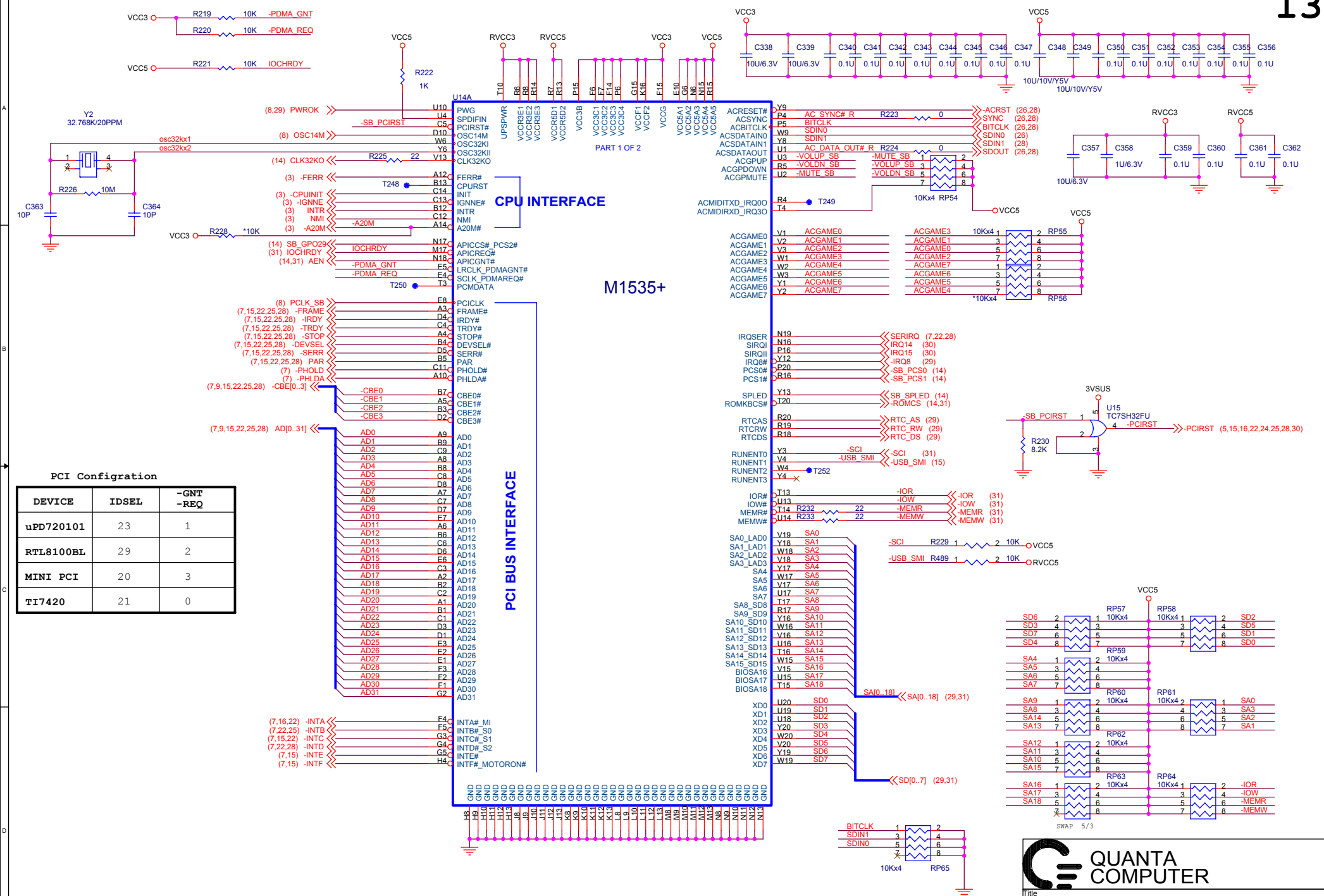
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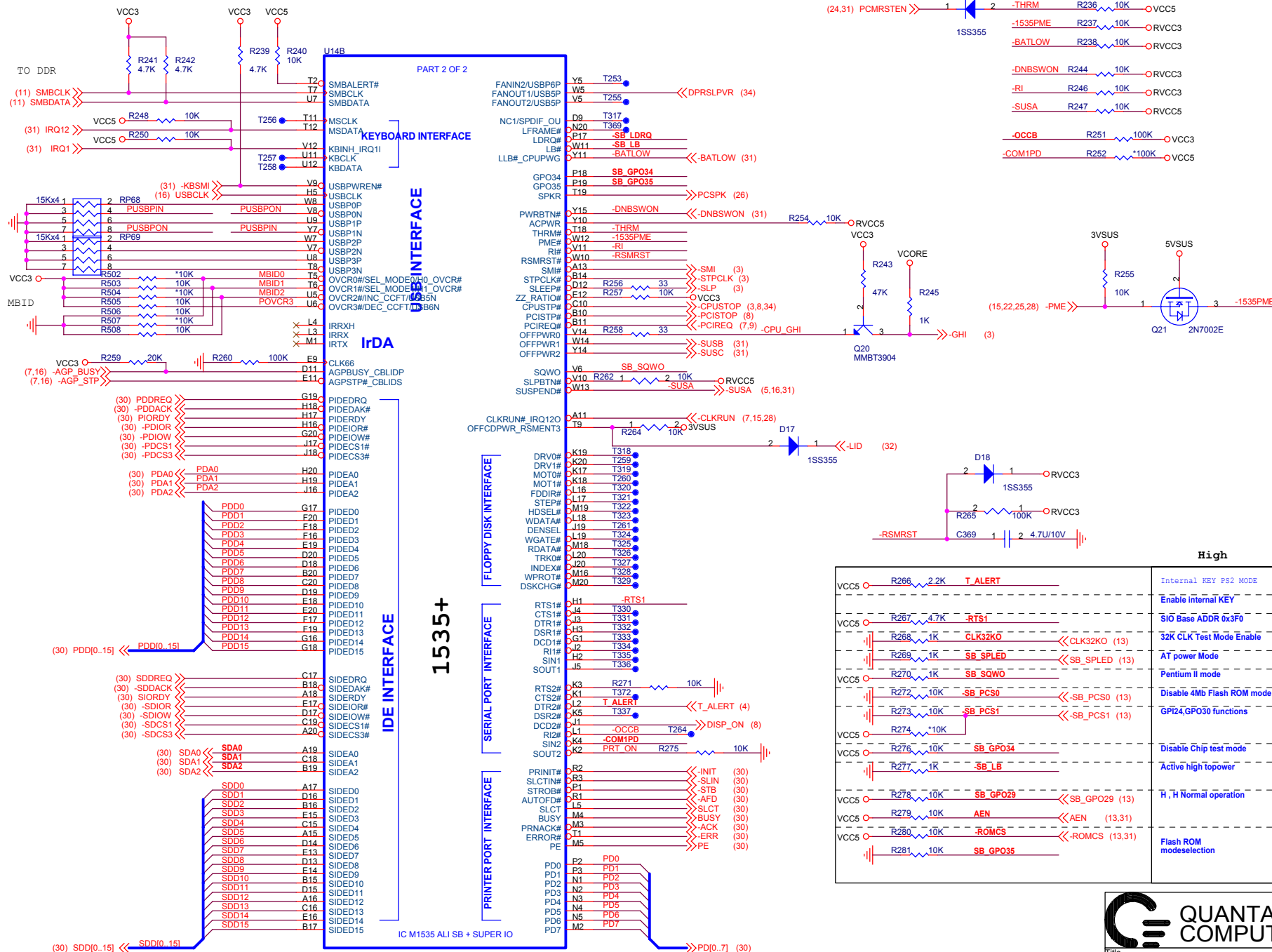
Memory -2/2- SODIMM		
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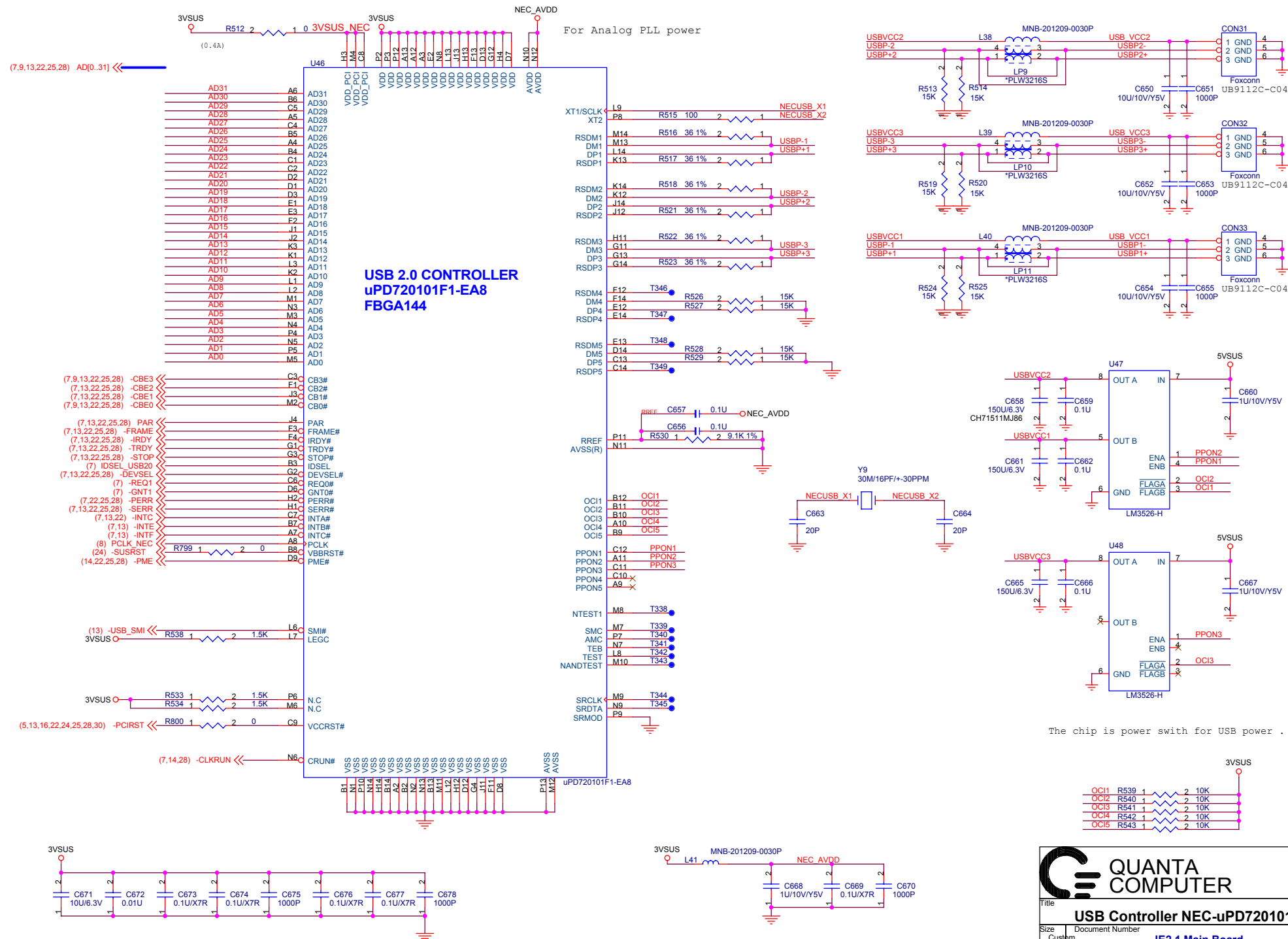
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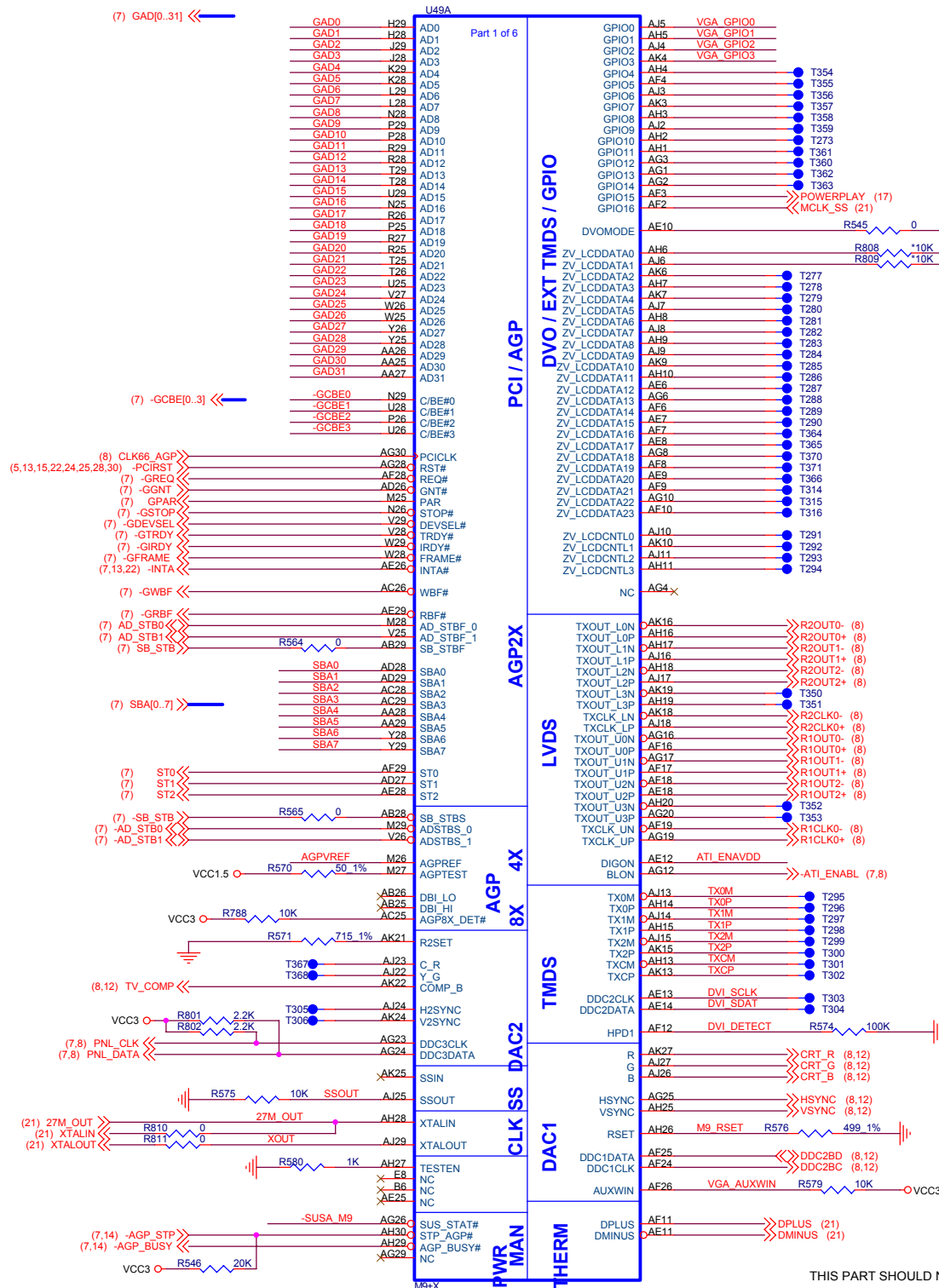




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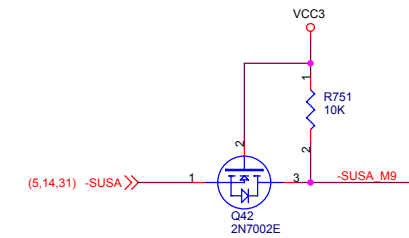
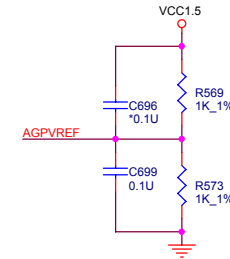
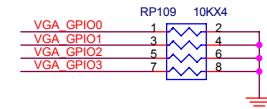
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1535+ 2/2		
Size	Document Number	Rev
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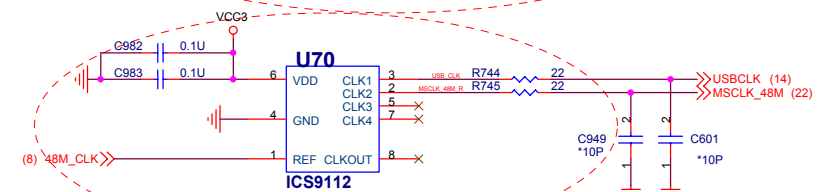
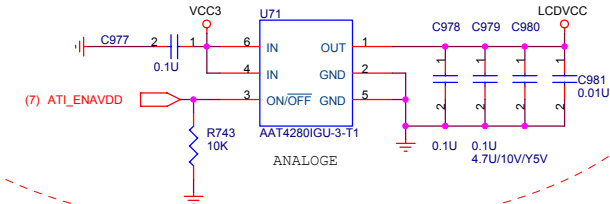


R808 select 64MB or 32MB VRAM

R809 select SAMSUNG or Hynix VRAM



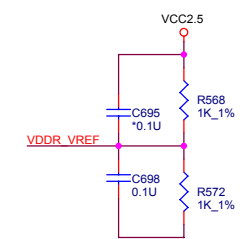
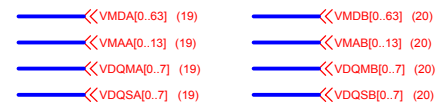
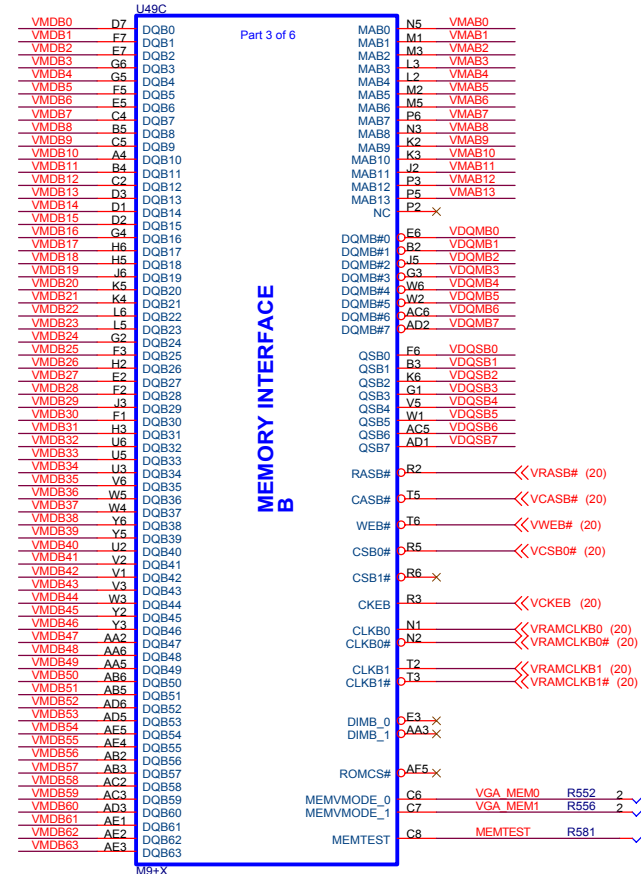
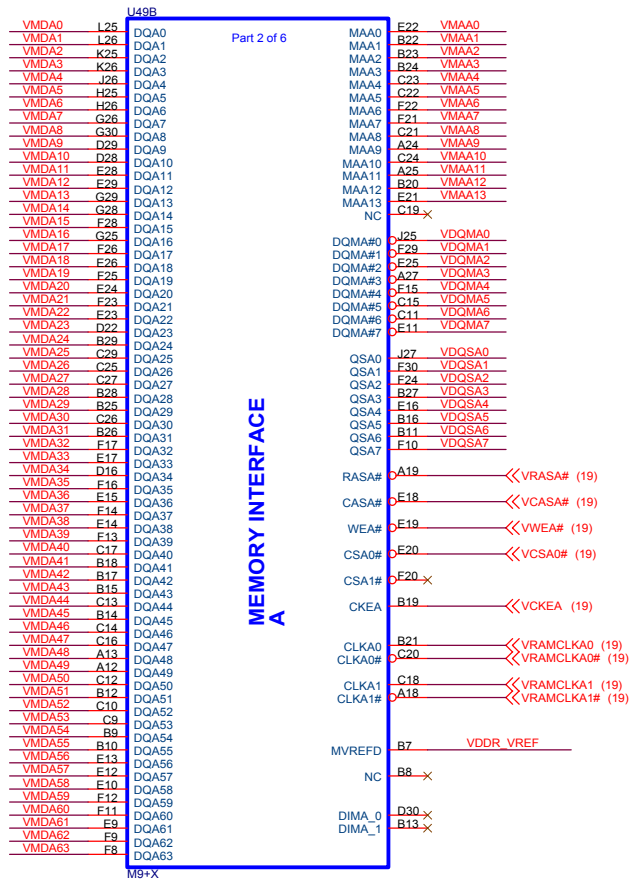
This is power switch for LCDVCC .
The chip's function is same as the original circuit and saving the space . (2.3A)



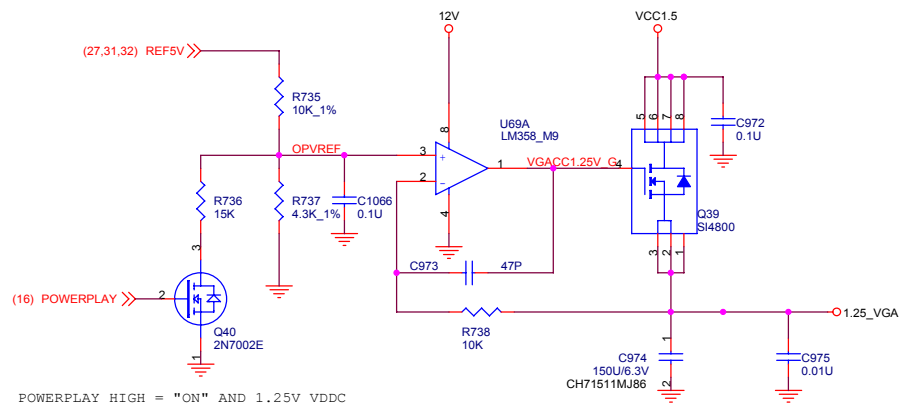
The chip is CLK buffer for 48MHz
It provide CLK to SB,MS



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MEMORY IO VOLTAGE = 2.5V



POWERPLAY HIGH = "ON" AND 1.25V VDDC

POWERPLAY LOW = "OFF" AND 1.5V VDDC

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ATI M9+X

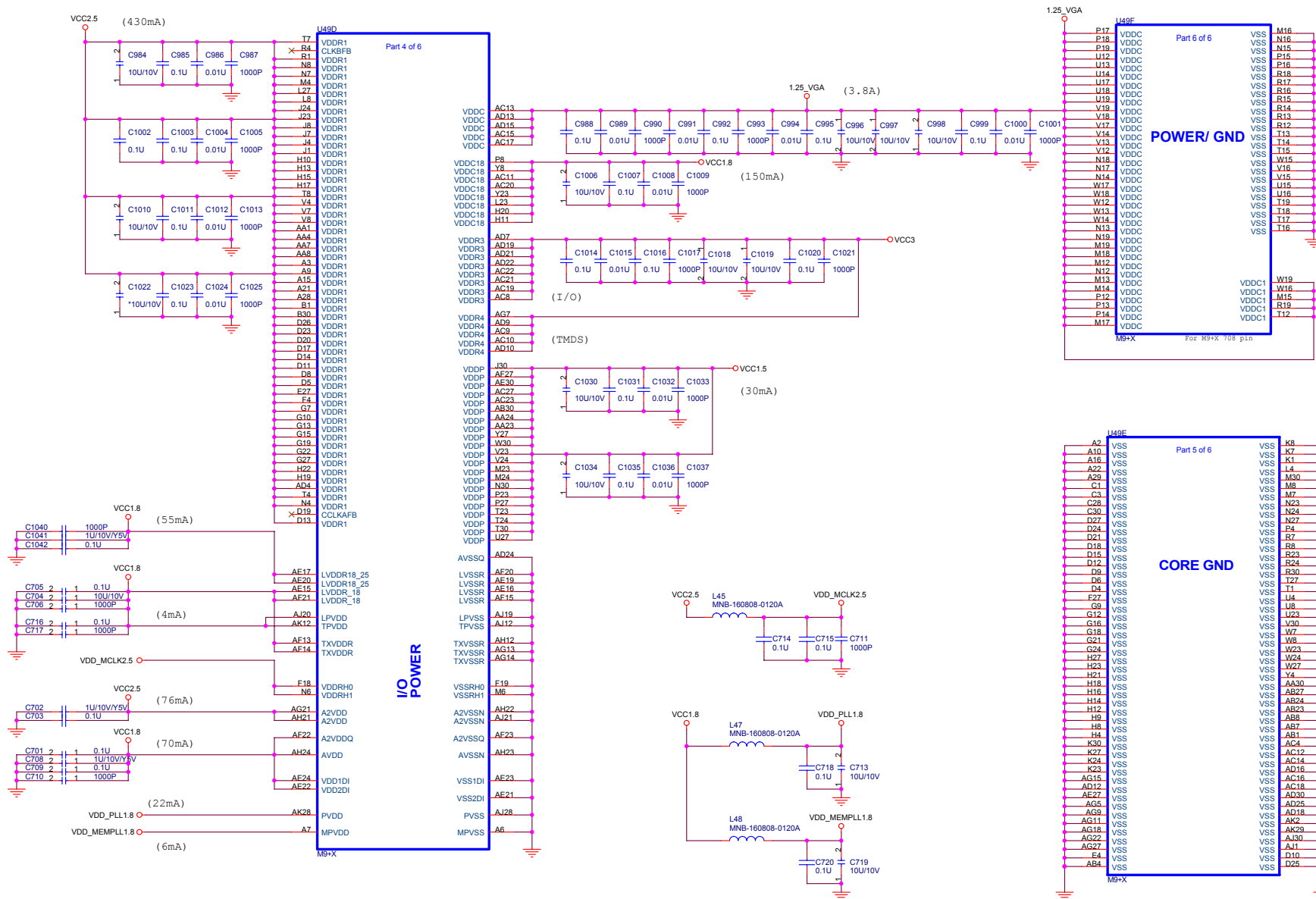
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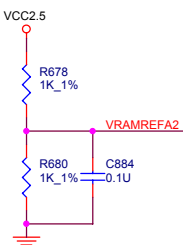
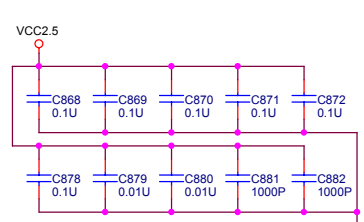
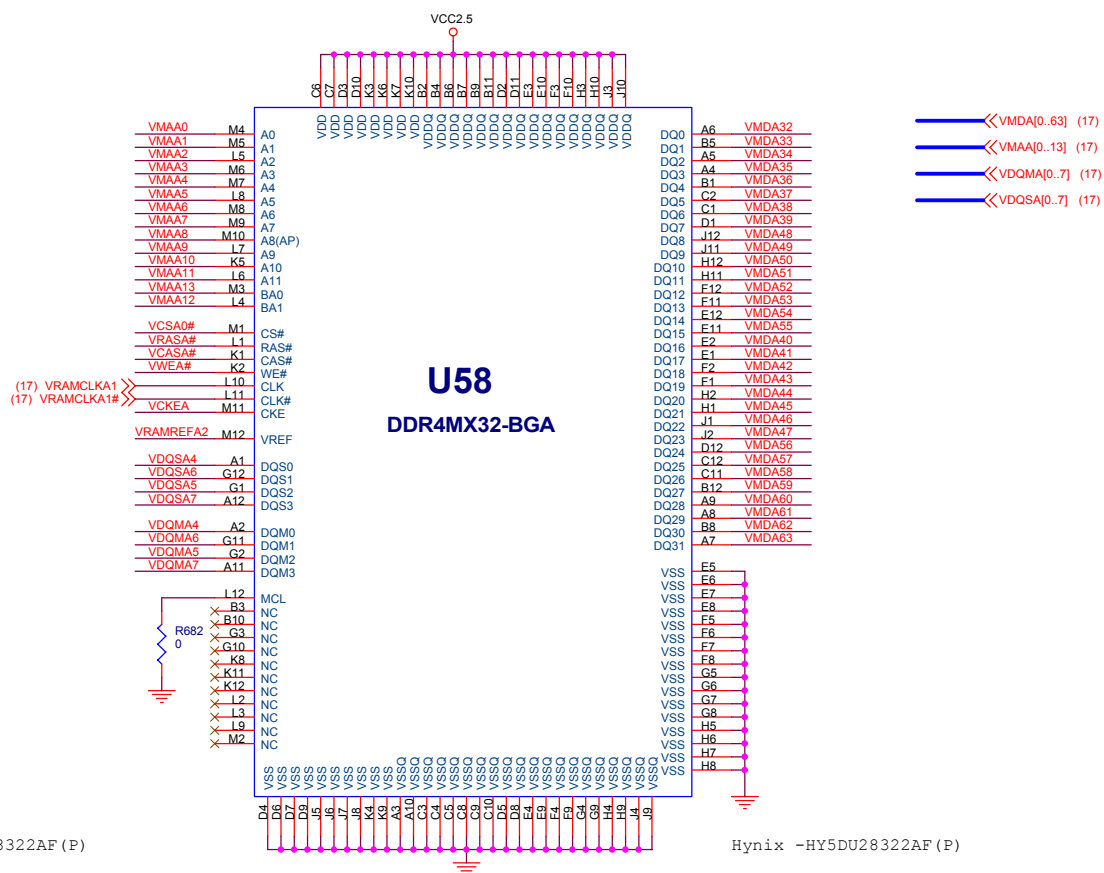
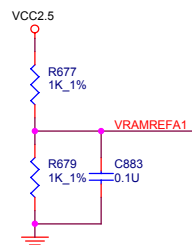
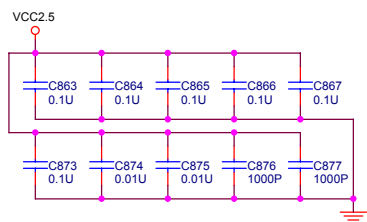
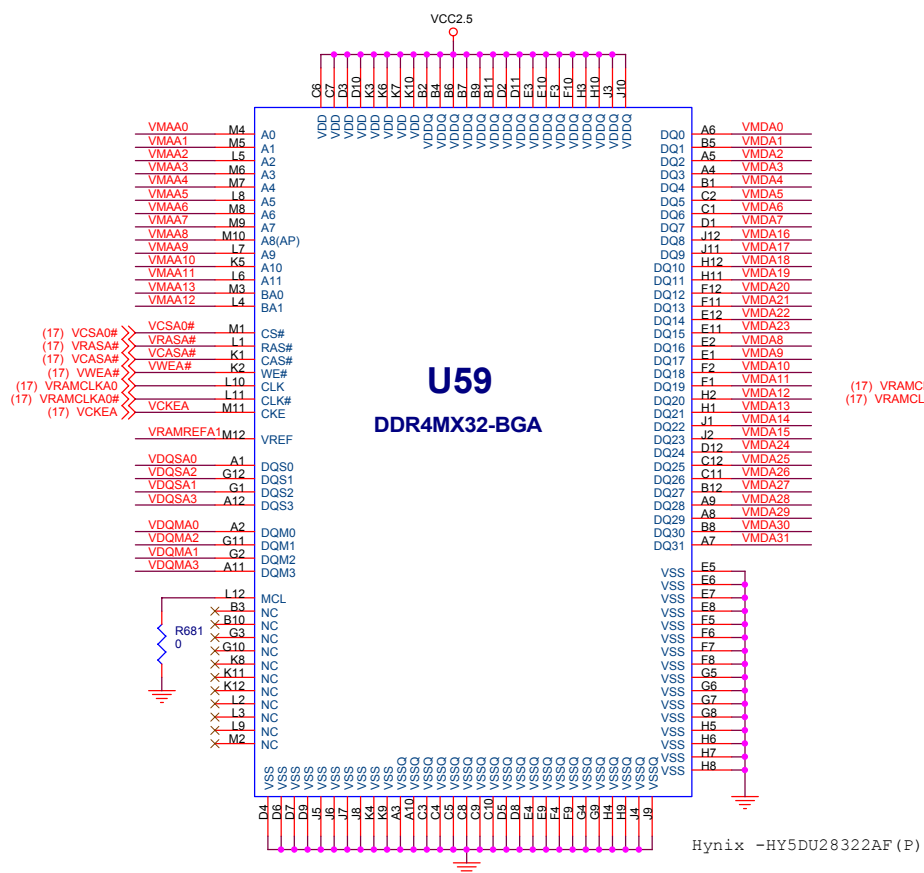
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 VMDA[0..63] (17)
 VMAA[0..13] (17)
 VDQMA[0..7] (17)
 VDQSA[0..7] (17)



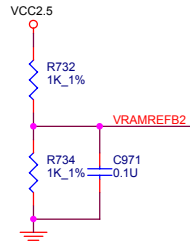
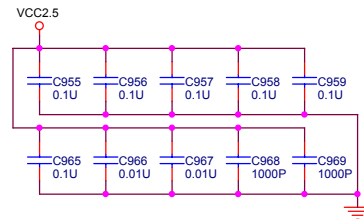
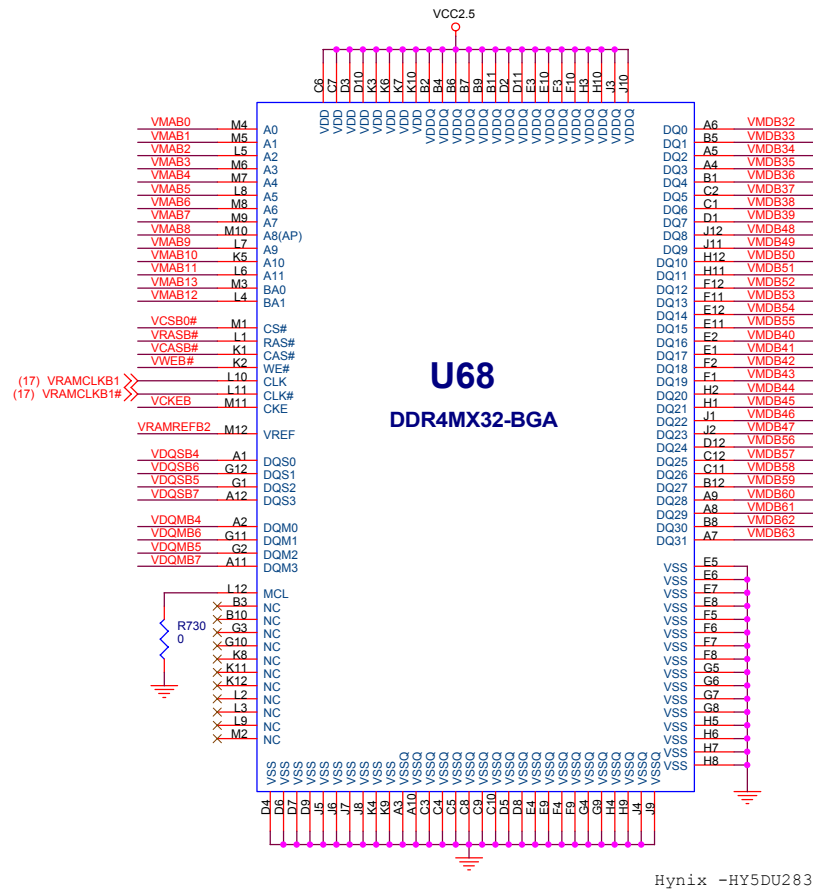
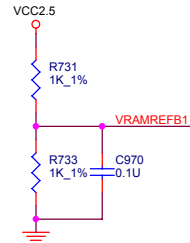
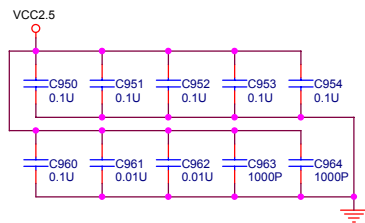
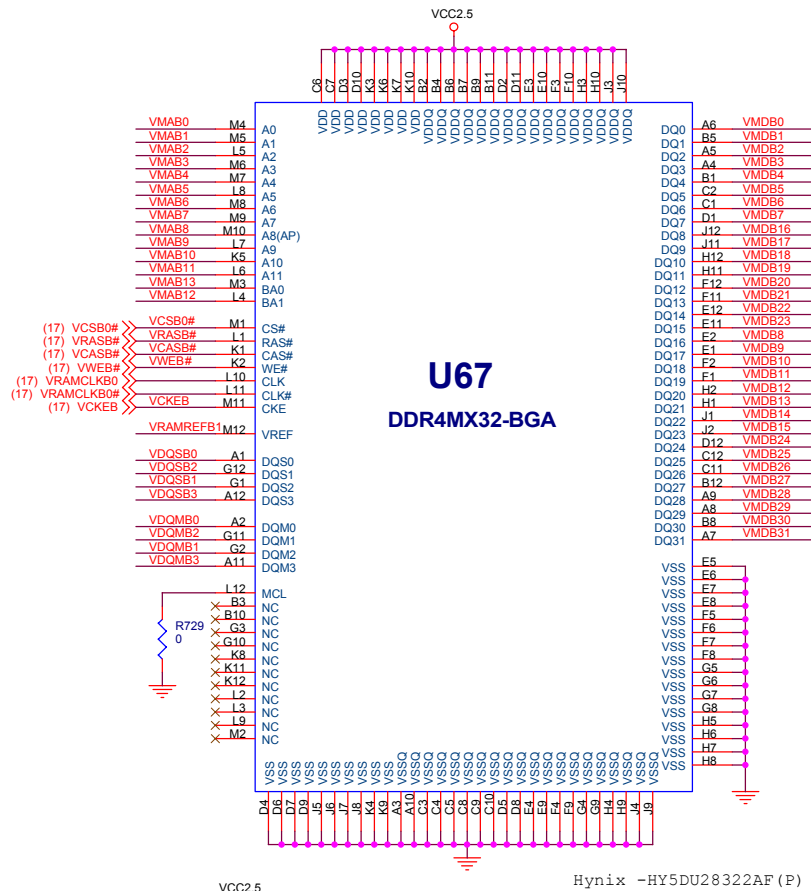
VGA DDR VRAMx2 1/2

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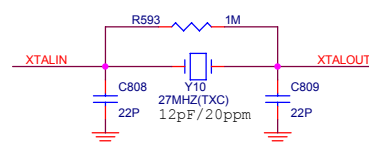
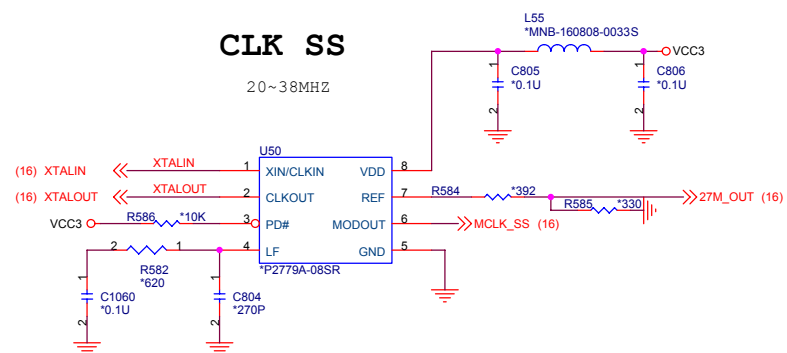
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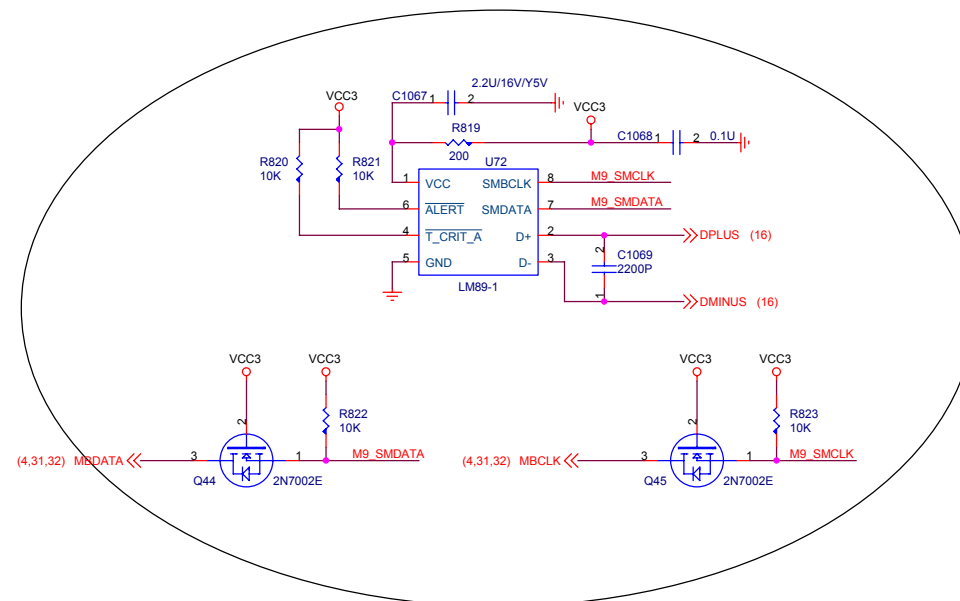
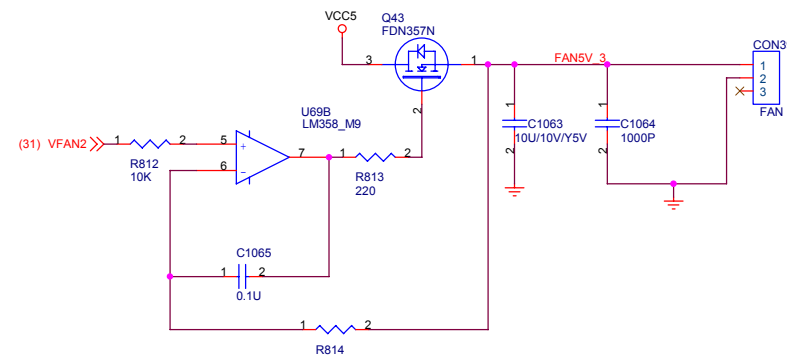
VMDB[0..63] (17)
VMAB[0..13] (17)
VDQMB[0..7] (17)
VDQSB[0..7] (17)

FAN3 UNIT

MCLK (230MHZ) SPREAD SPECTRUM LOGIC



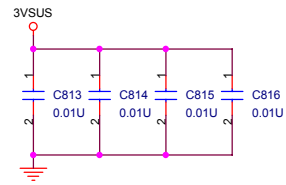
close to M9



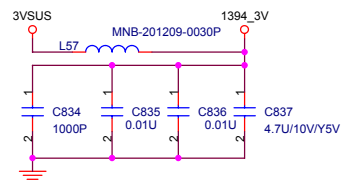
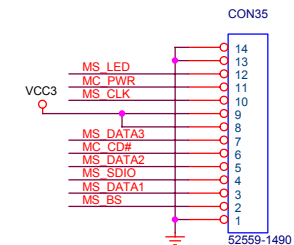
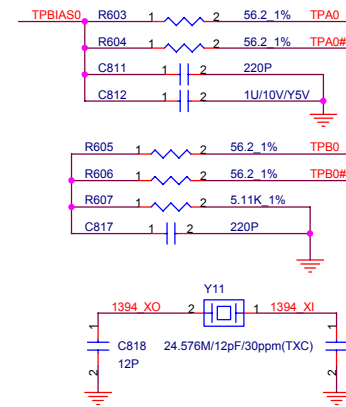
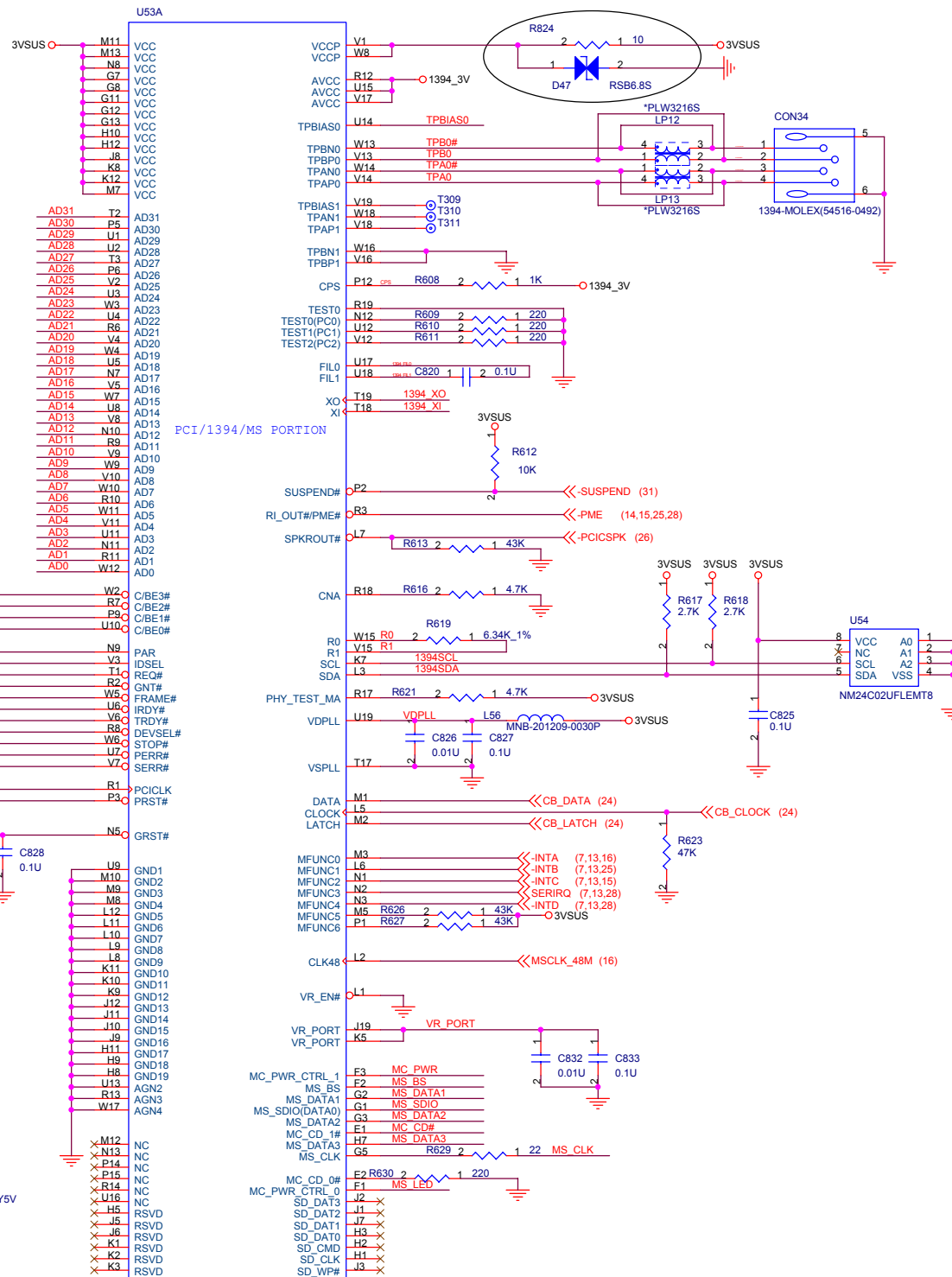
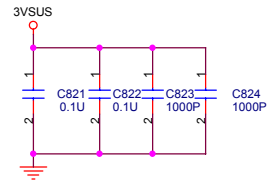
Title	AGP SSC / FAN3		
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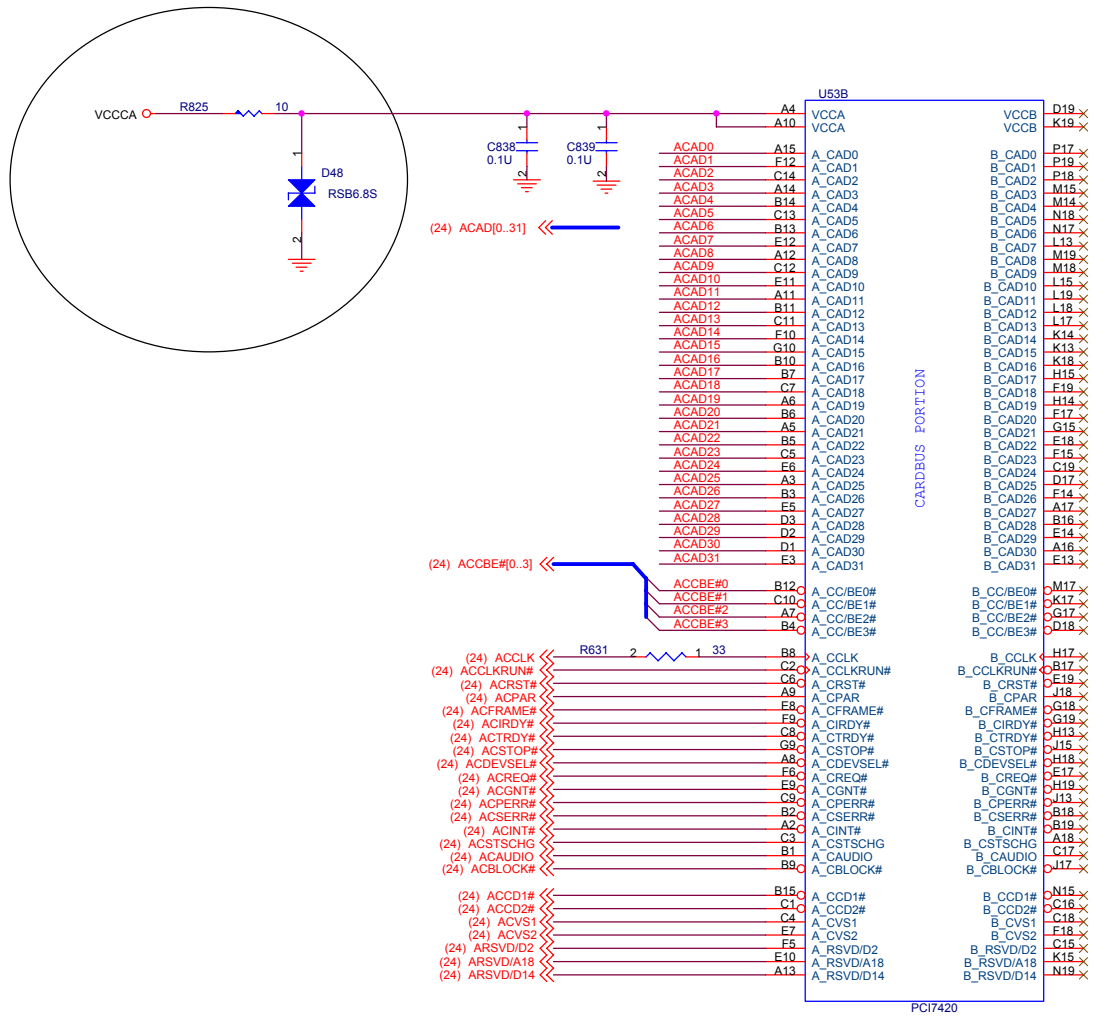


(7,9,13,15,25,28) AD[0..31] <<—



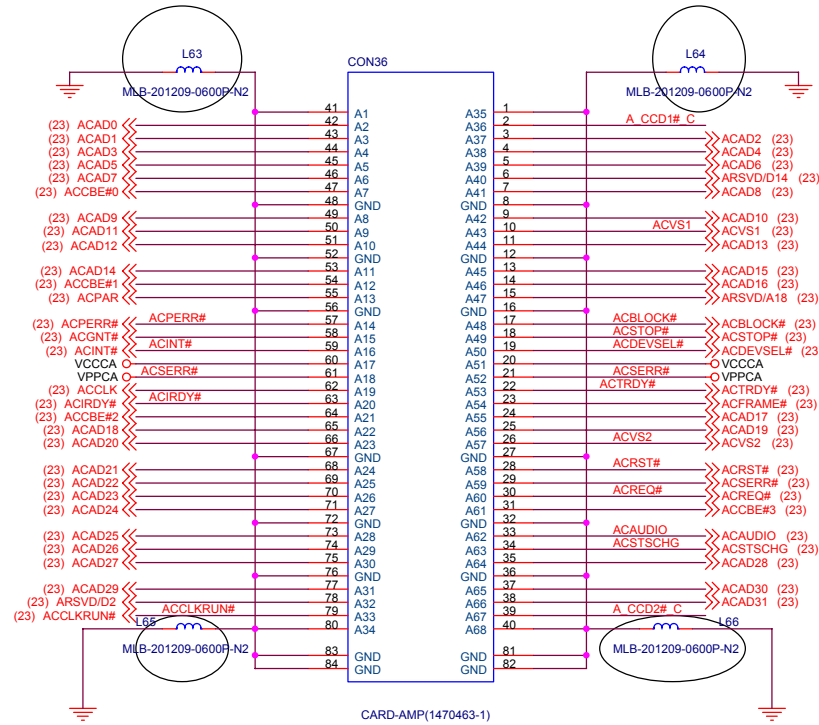
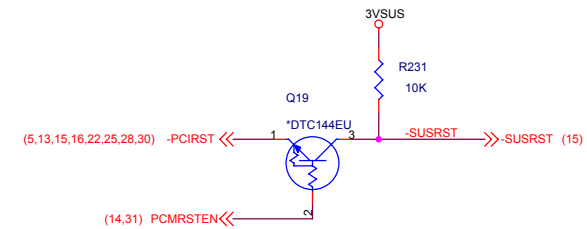
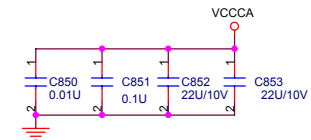
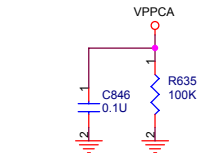
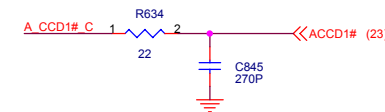
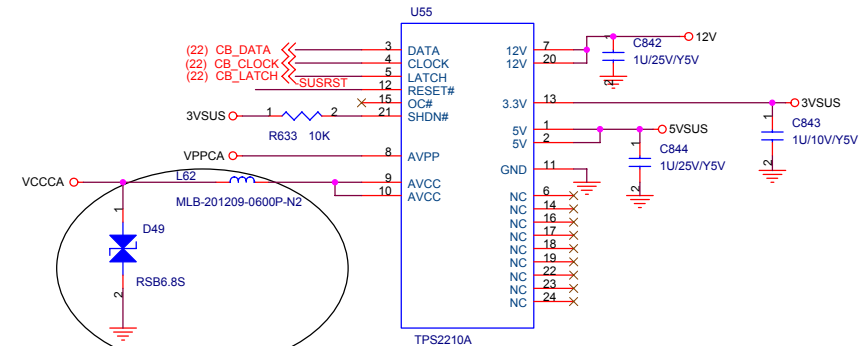
TI7420

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1



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

CardBus power switch chip



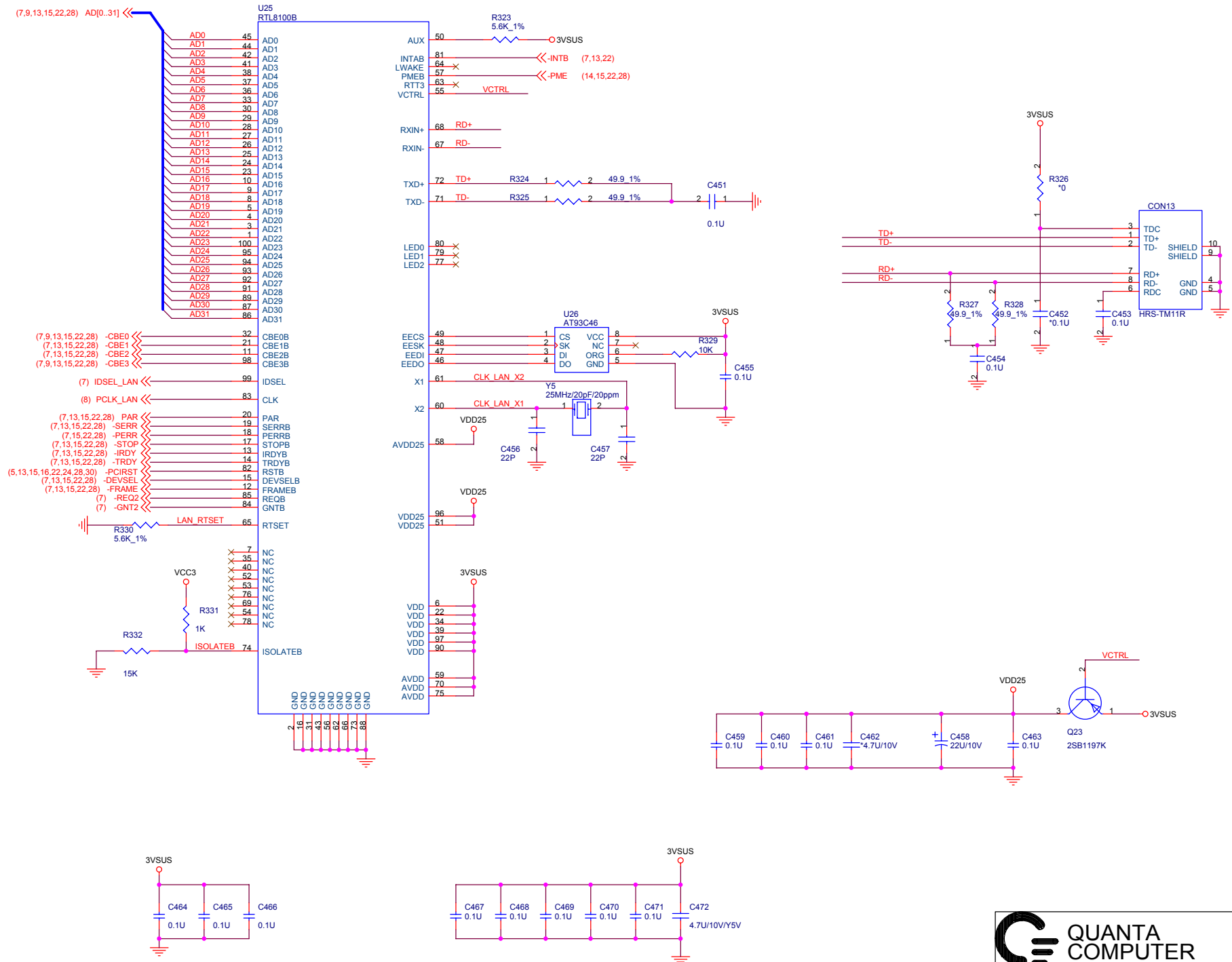
Title
CARDBUS SLOT

Size B Document Number
JE2.1 Main Board

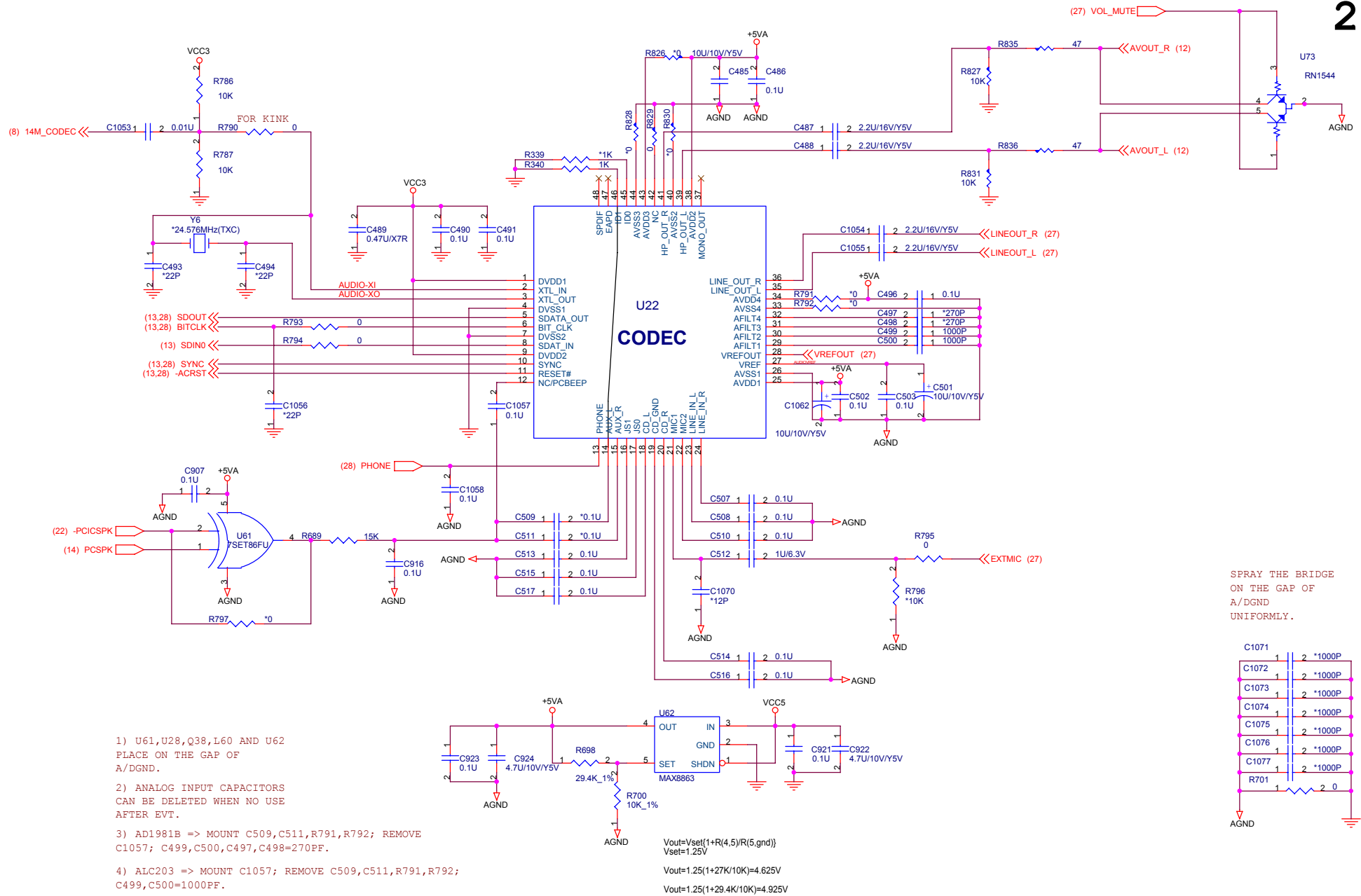
Date: Monday, August 11, 2003

Sheet 24 of 38

Rev 1A

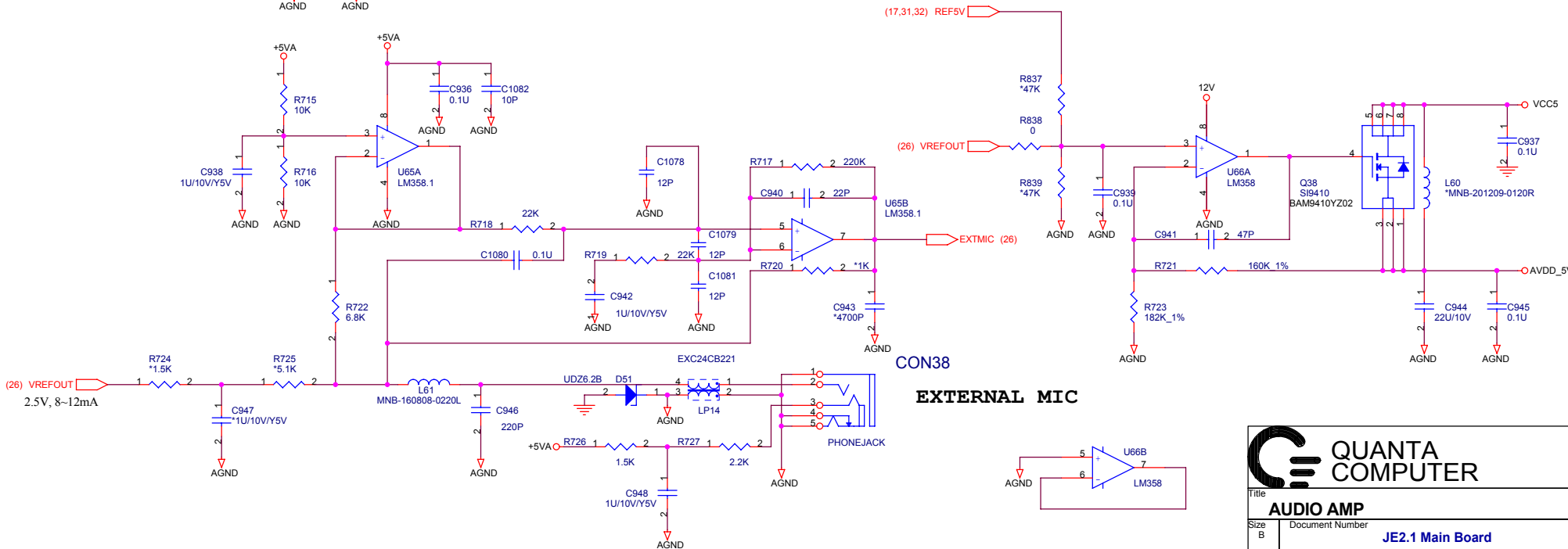
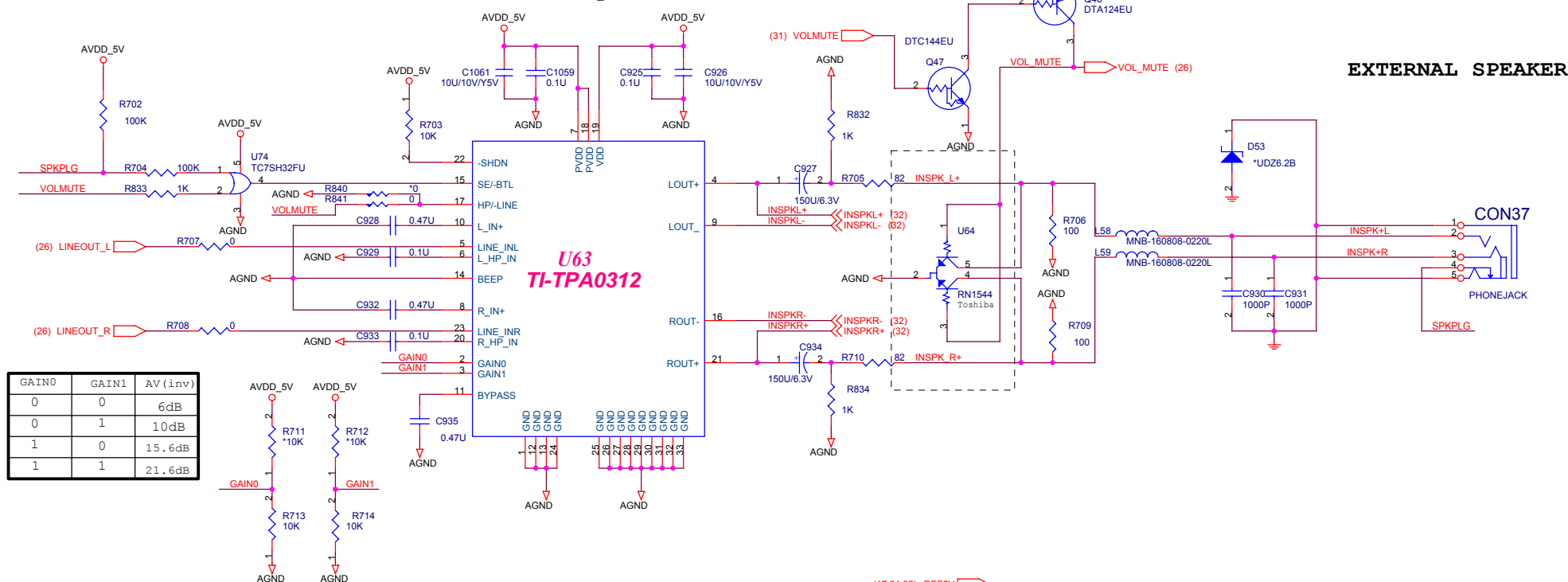


Title		
RTL8100BL PCI LAN		
Size	Document Number	Rev
B	JE2.1 Main Board	1A



Title		Audio ALC203	
Size	B	Document Number	JE2.1 Main Board
Rev	1A	Date: Monday, August 11, 2003	Sheet 26 of 38

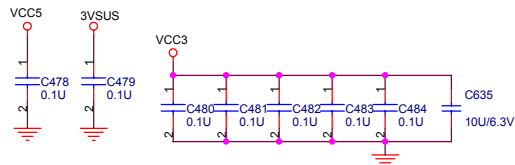
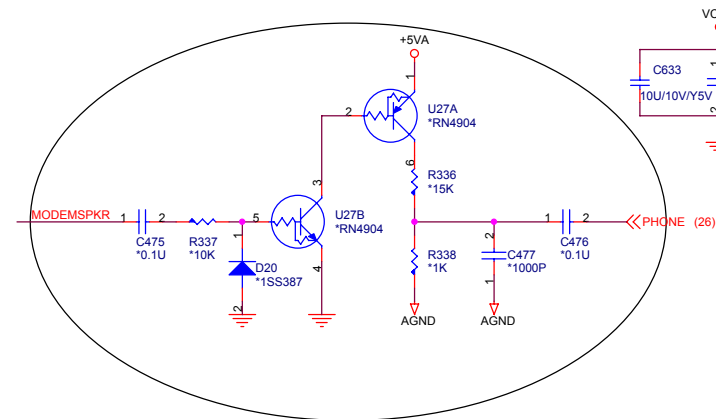
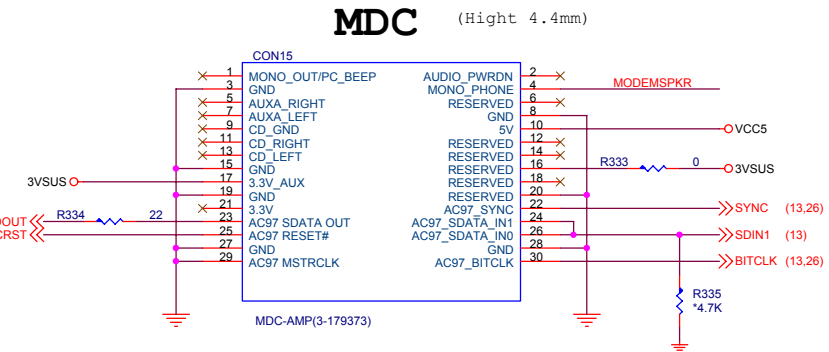
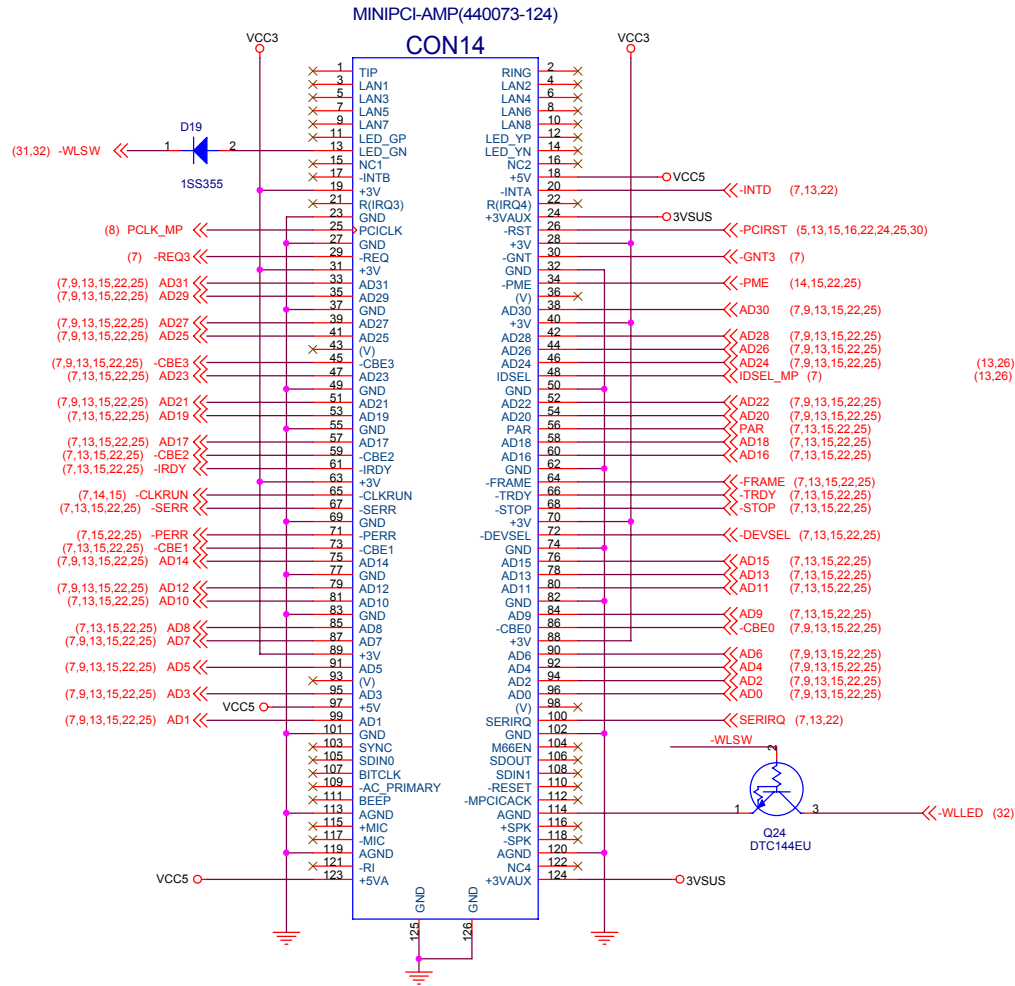
Audio amplifier



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AUDIO AMP

Size B Document Number **JE2.1 Main Board** Rev 1A



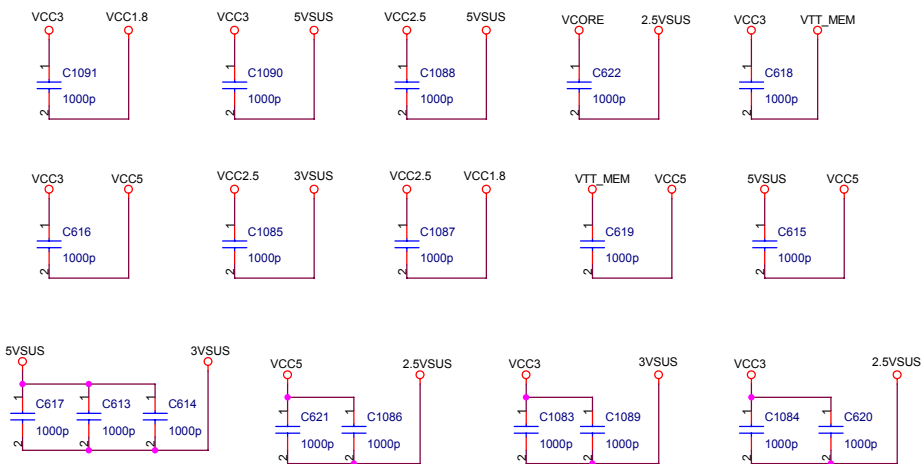
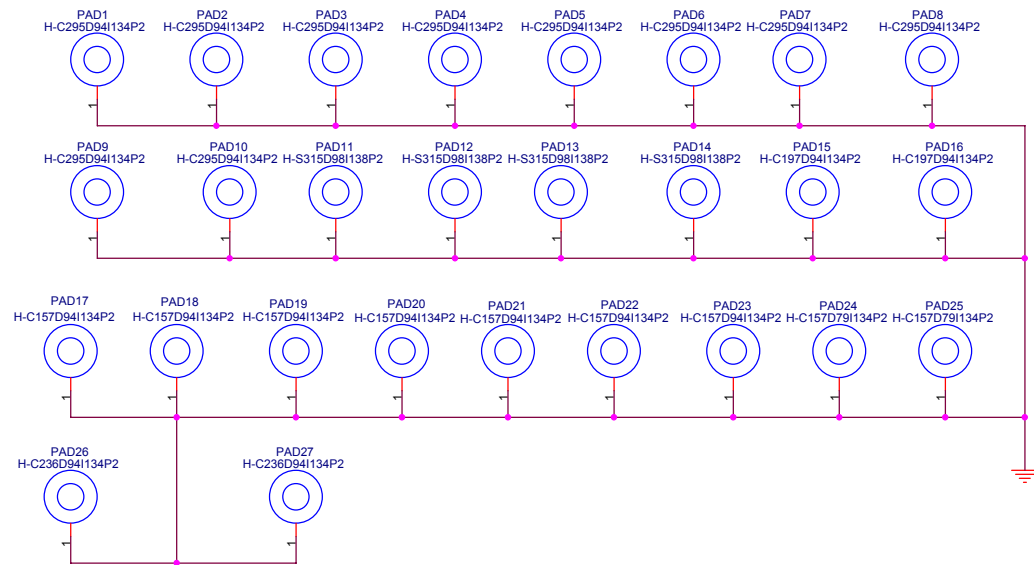
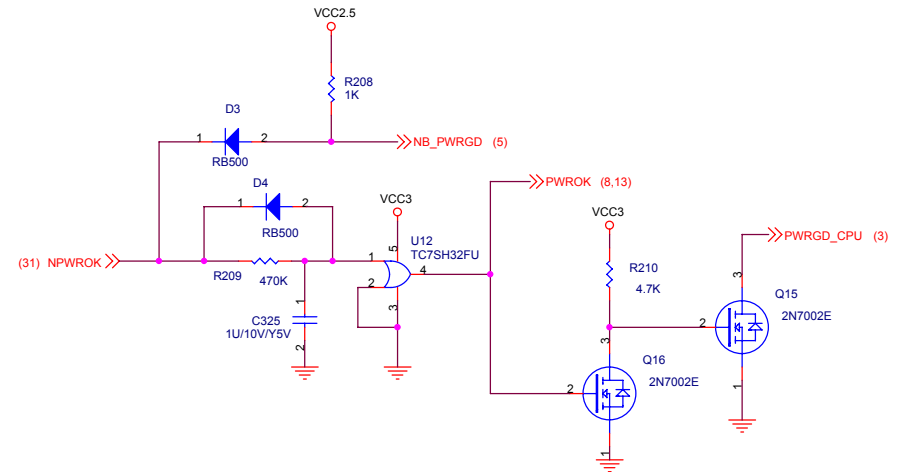
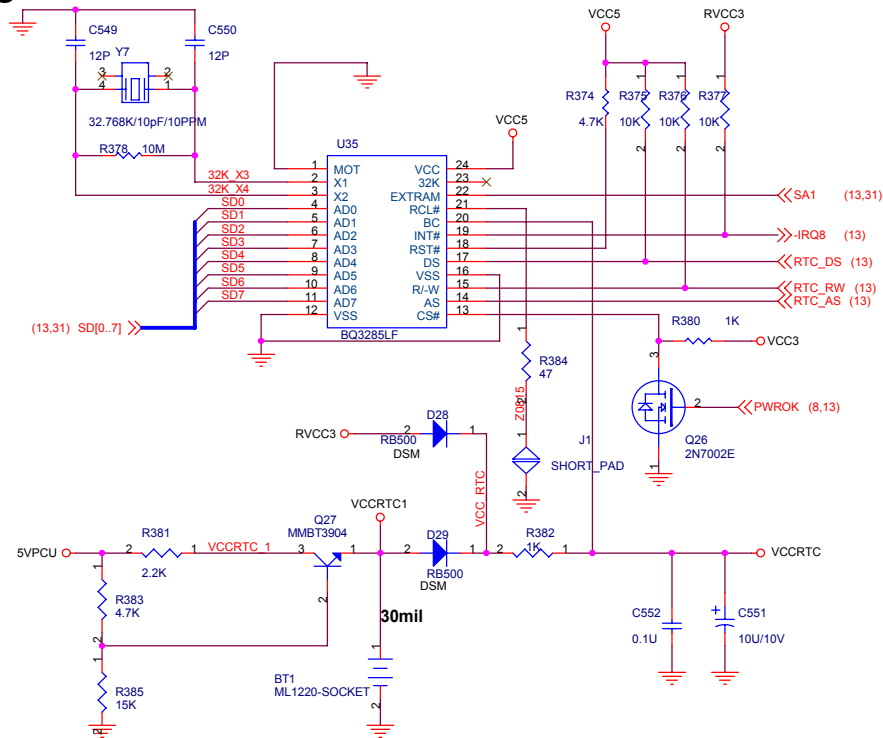
MiniPCI & MDC

Document Number

JE2.1 Main Board

Rev 3A

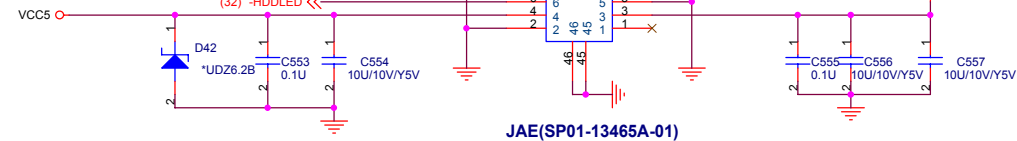
RTC



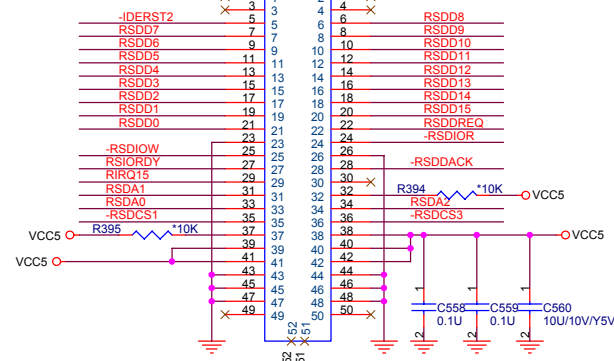
Title **RTC/POWER GOOD LOGIC**

Size B	Document Number JE2.1 Main Board
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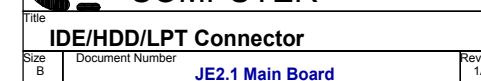
1. Date: Monday, August 11, 2003 Sheet 29 of 38



CON21



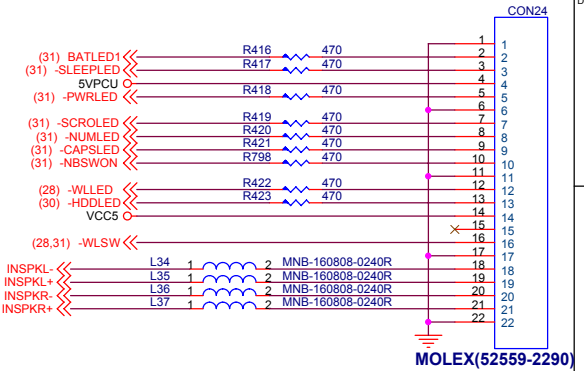
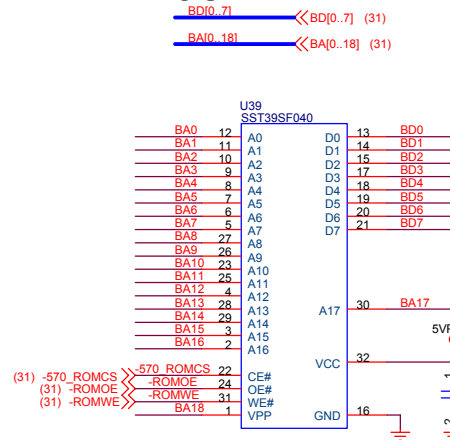
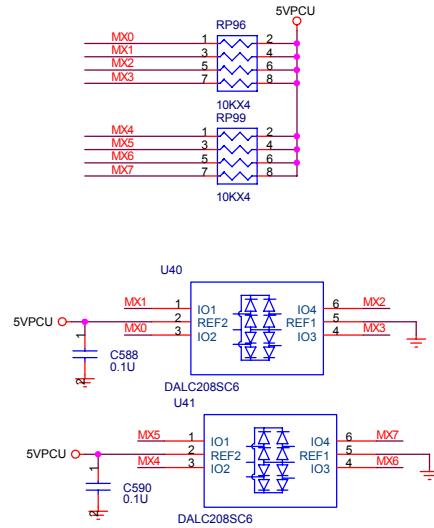
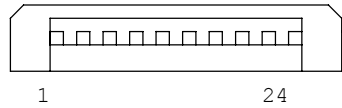
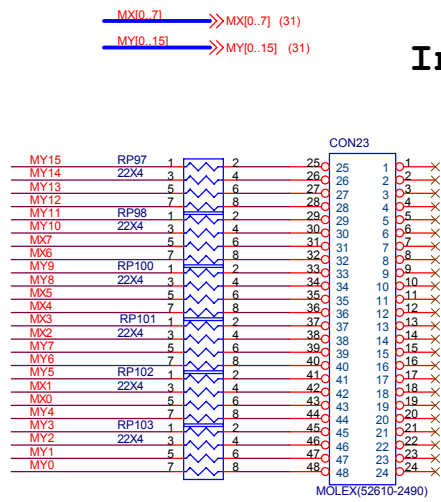
The schematic diagram illustrates the LPT-FOX connector interface. It features a 25-pin D-sub connector (CON22) on the left, which is connected to a 27-pin LPT-FOX connector on the right. The LPT-FOX connector is labeled with signals: -STB, -AFD, PD0, -ERR, PD1, -INIT, PD2, -SLIN, PD3, PD4, PD5, PD6, PD7, P ACK, P BUSY, P PE, P SLCT, SLCT, PE, BUSY, and ACK. The diagram includes a VCC5 supply, a 1S355 diode, and various resistors (R401, R402, RP86, RP87, RP89, RP90, RP92, RP93). The LPT-FOX connector is also connected to a series of capacitors (C561 to C577) which are connected to ground.



Int. keyboard

BIOS

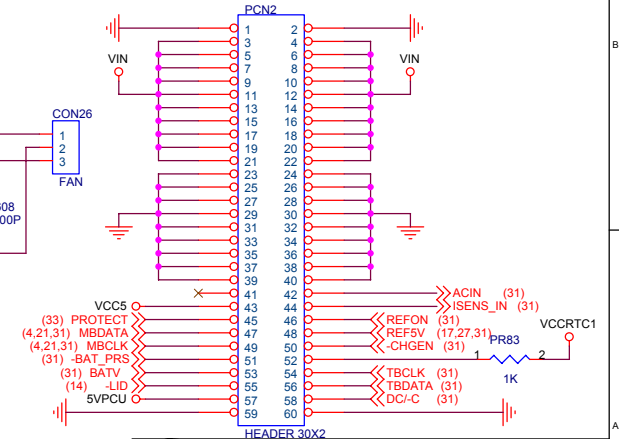
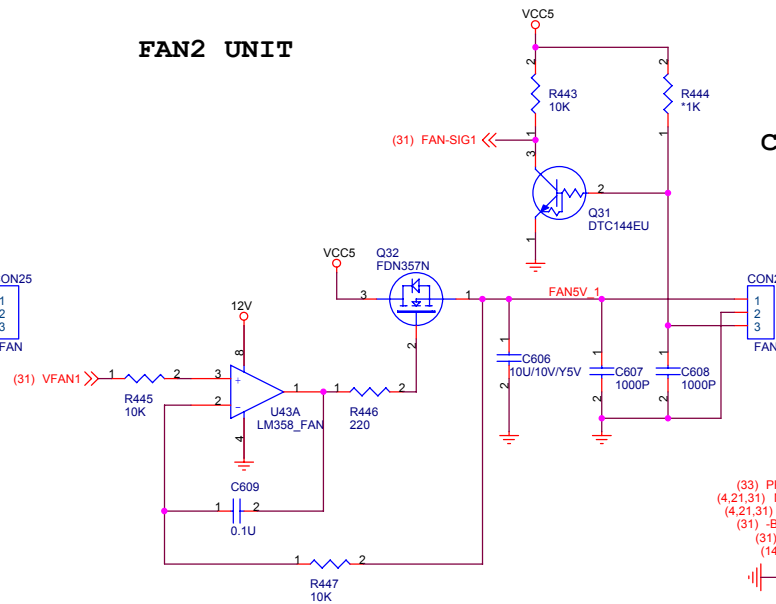
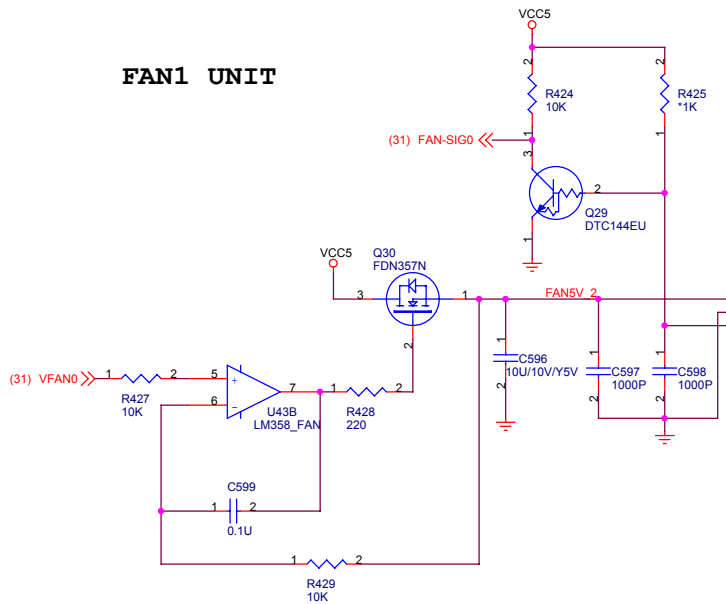
POWER SWITCH BOARD CONNECTOR



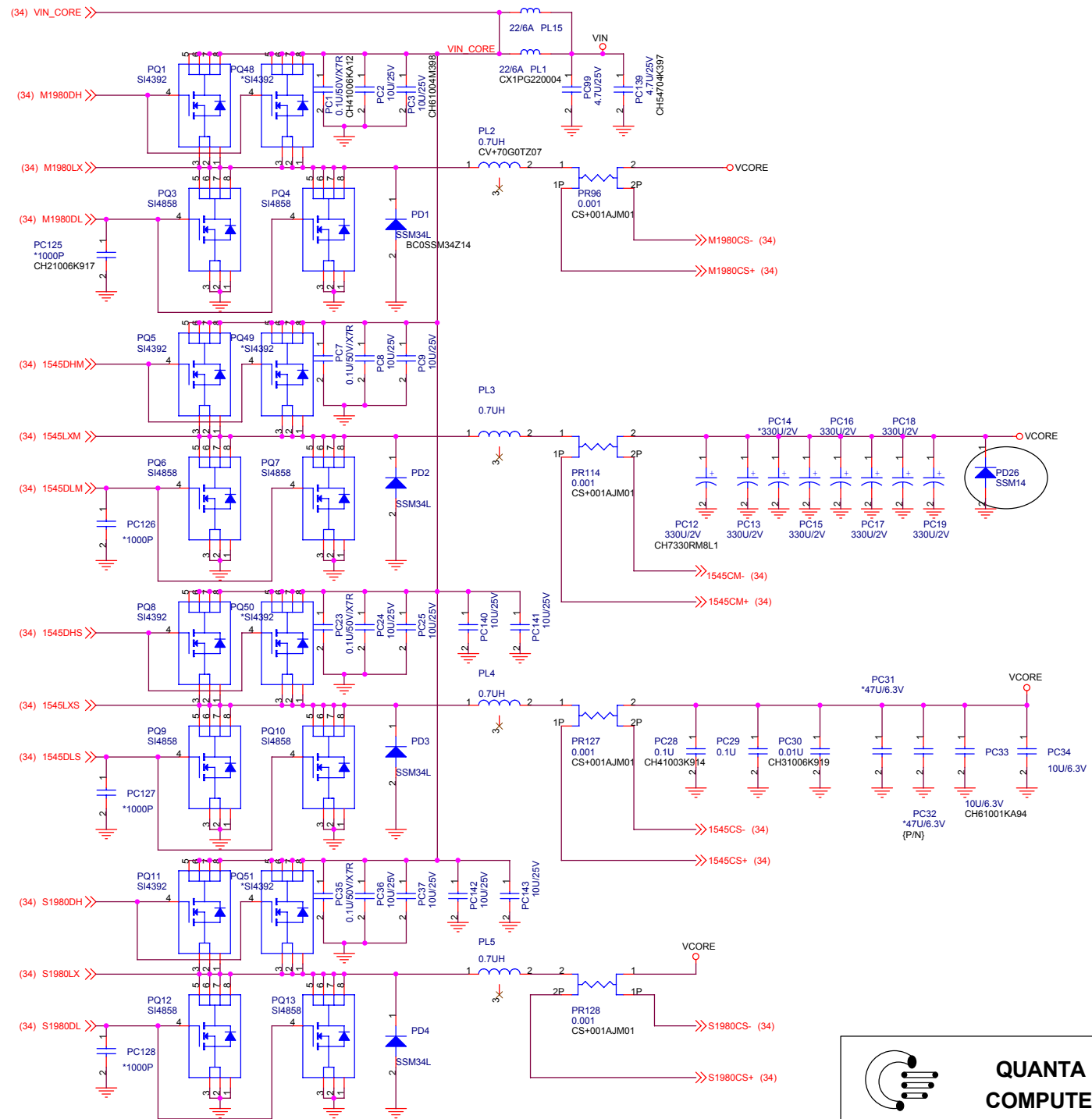
FAN1 UNIT

FAN2 UNIT

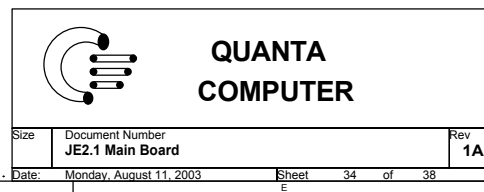
CHARGER BOARD CONNECTOR

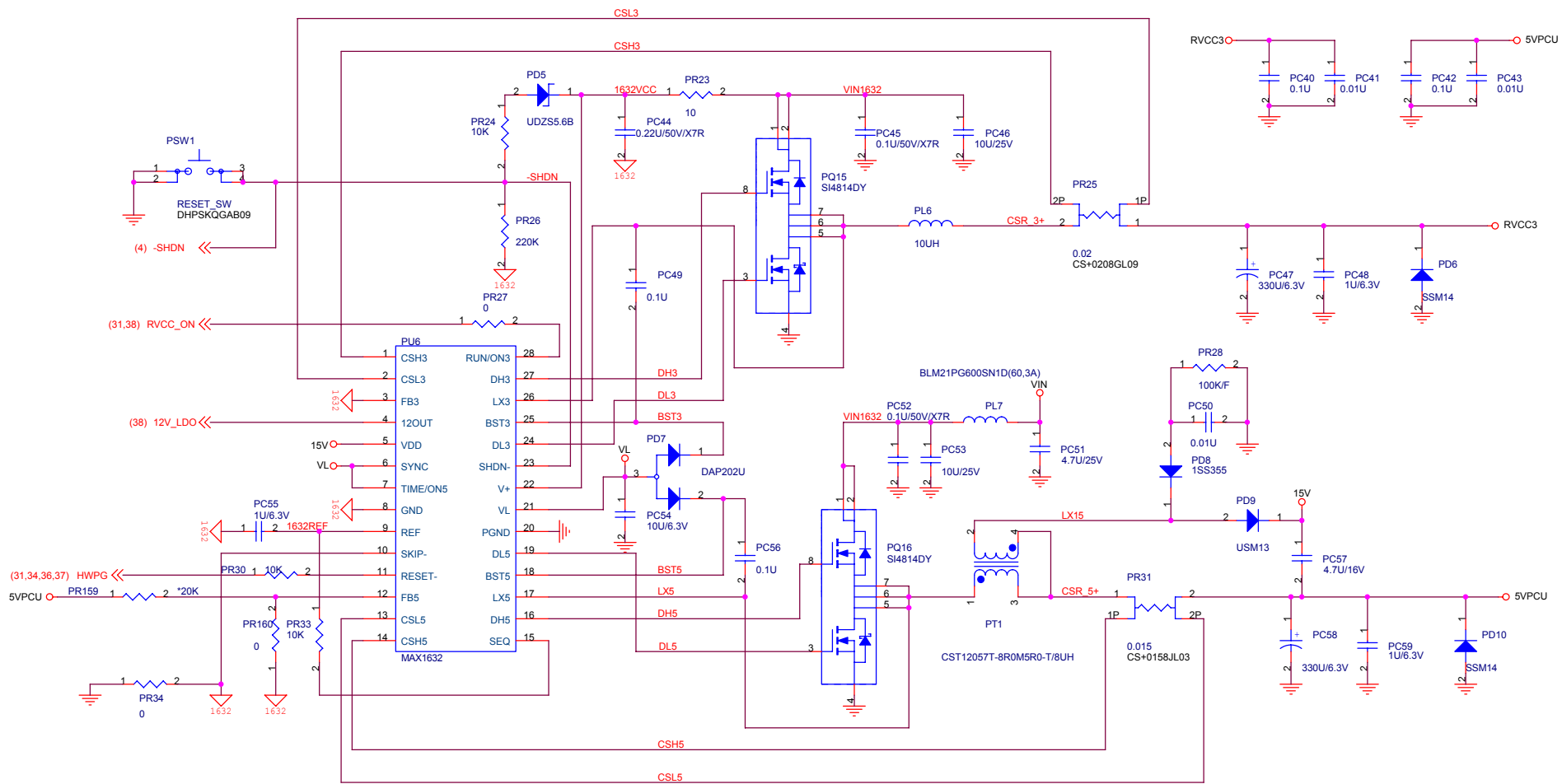
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Title	INT. KEYBOARD/FAN	
Size	Document Number	Rev
Custom	JE2.1 Main Board	3A

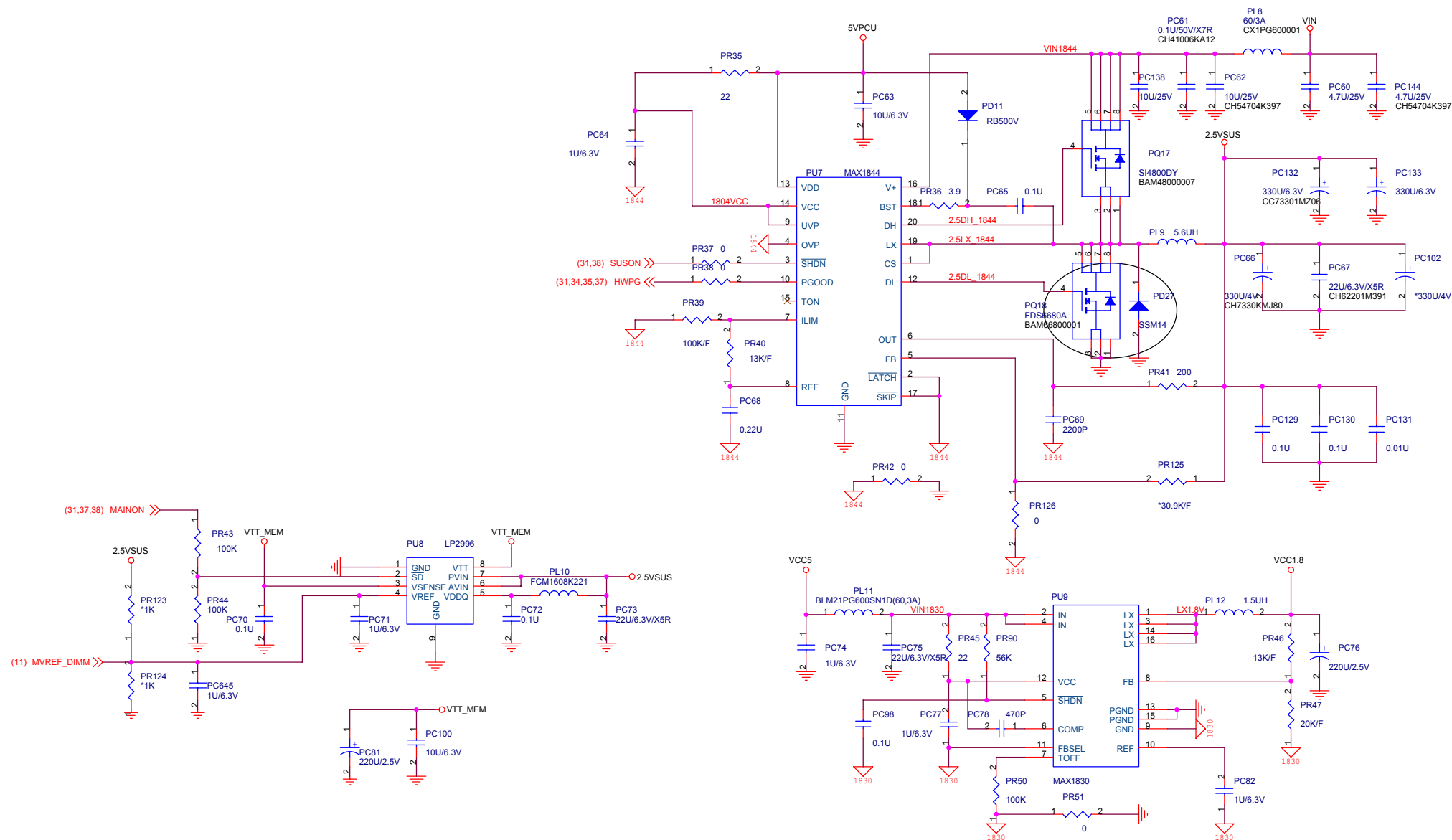


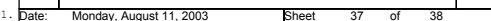
THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFIED IN SS-00259-1.

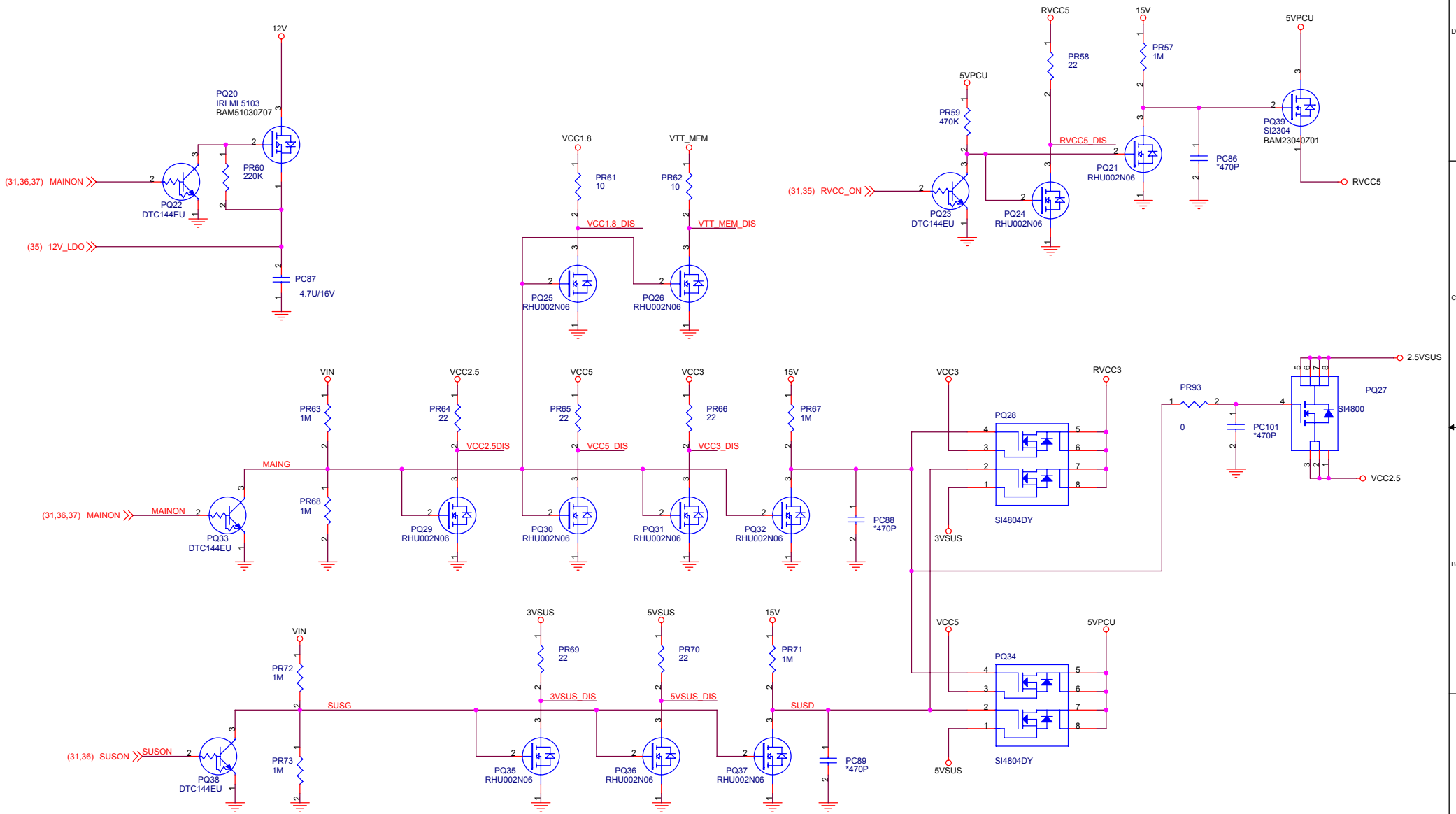




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