

Cover Sheet	1
Block Diagram	2
Clock & Dimm Buffer	3
VRM11 ST L6703	4
Intel LG775 - Signals	5
Intel LG775 - Power	6
Intel LG775 - GND	7
SIS 671FX - CPU / PCI-E	8
SIS 671FX - Memory	9
SIS 671FX - MuTIO L	10
SIS 671FX - Power	11
DDR II 1,2	12
DDR Termination	13
PCI -EXPRESS X16	14
968-1 (PCI / IDE / HyperZip)	15
968-2 (LPC / MII / GPIO)	16
968-3 (USB / SATA)	17
968-4 Power	18
Audio ALC883 & ALC888	19
PCI 1,2 PCIE X1	20
LAN RTL8211B & RTL8201CL	21
IEEE1394 VT6308	22
W83627DHF	23
MS_7 ACPI controller	24
ATX/FAN	25
VGA Connector	26
Power Map	27
History	28

# MS-7317

Version:1.0

## CPU:

Intel LGA775 Conroe Processor 1066MHz

## System Chipset:

SIS: 968

SIS: 671FX

## On Board Chipset:

BIOS -- FWH EEPROM

Azalia Codec -- ALC883/ALC888

LPC Super I/O -- W83627DHG

LAN --RTL8211B/RTL8201CL

CLOCK --RTM876-660

## Main Memory:

DDR II \* 2

## Expansion Slots:

PCI EXPRESS X16 SLOT \* 1

PCI EXPRESS X1 SLOT \* 1

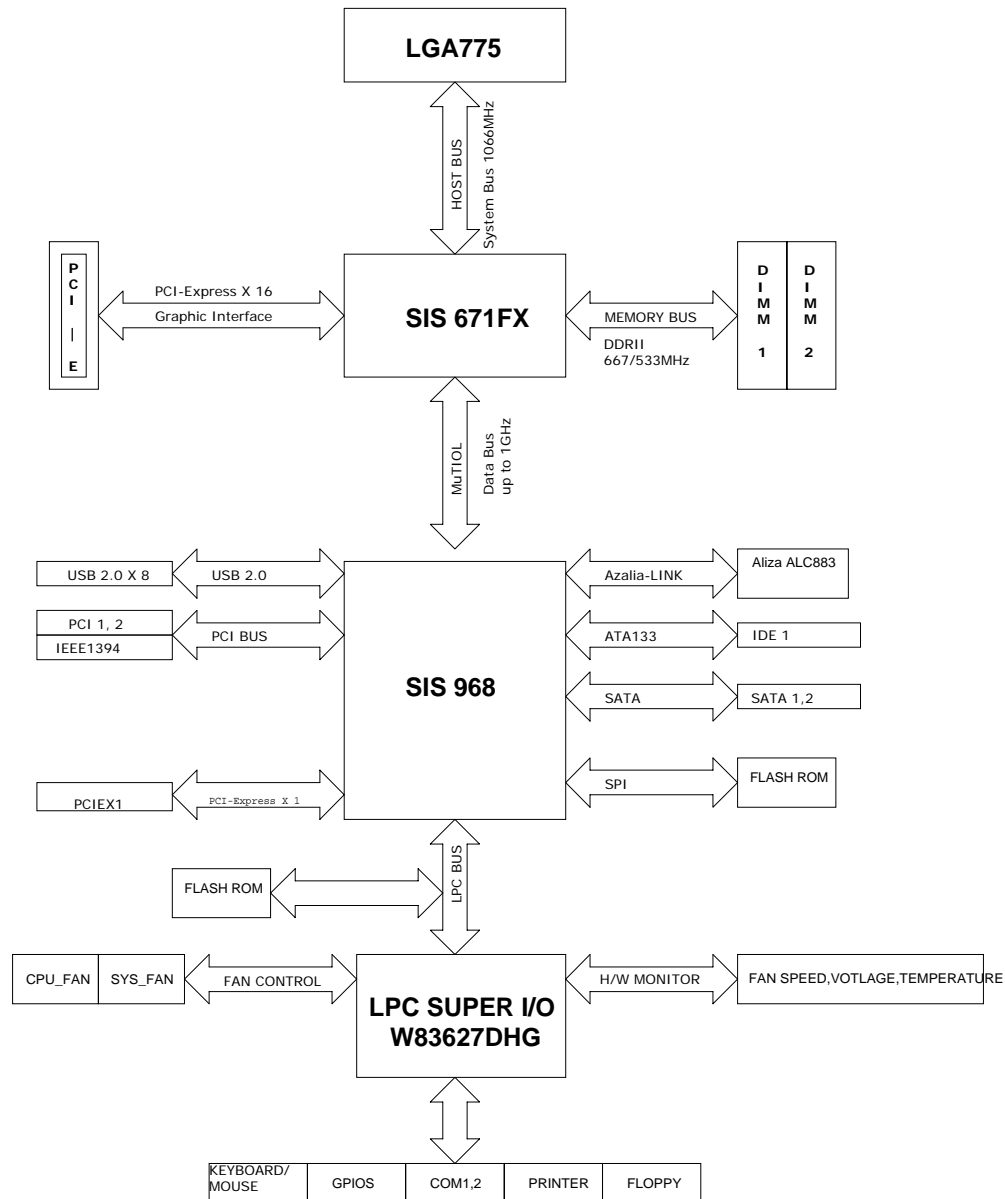
PCI SLOT \* 2

## PWM:

Controller: ST L6703

<b>Micro-Star</b>	Title <b>MS7317</b>	Rev <b>1.0</b>
Document Number	Cover Sheet	
Last Revision Date: Tuesday, December 26, 2006	Sheet 1 of 30	

## System Block Diagram



## GPIO Table on SIS968

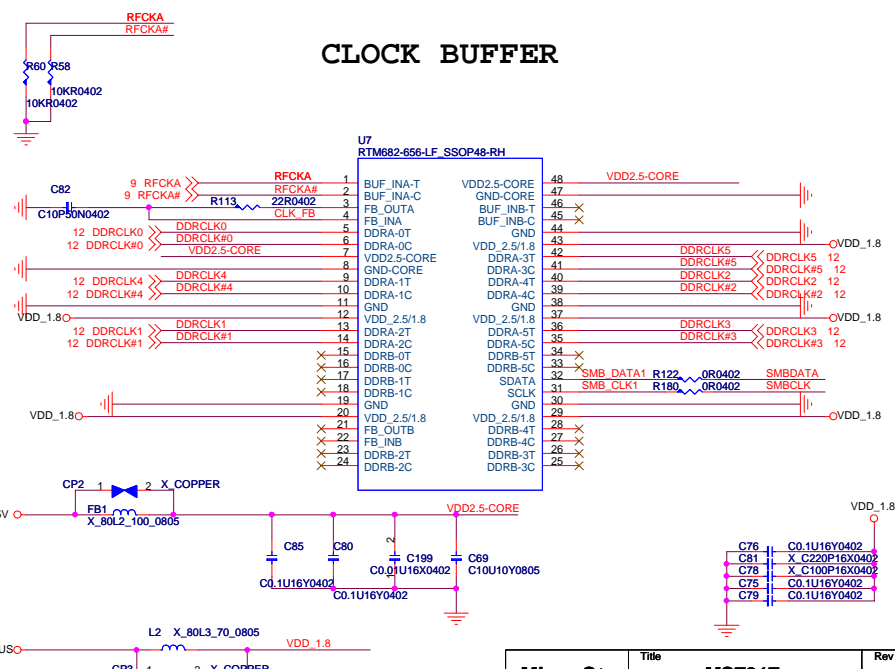
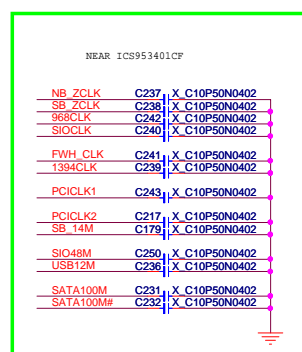
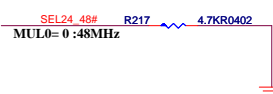
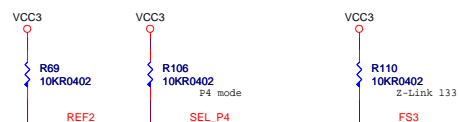
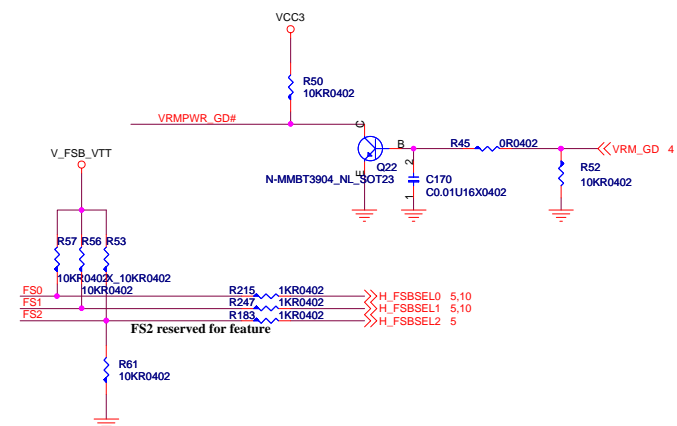
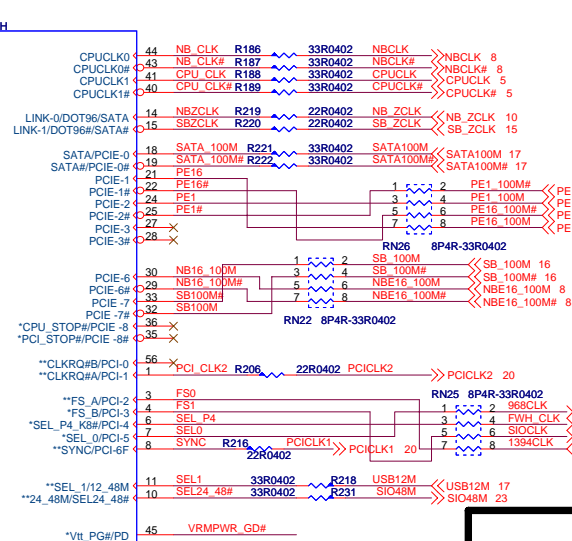
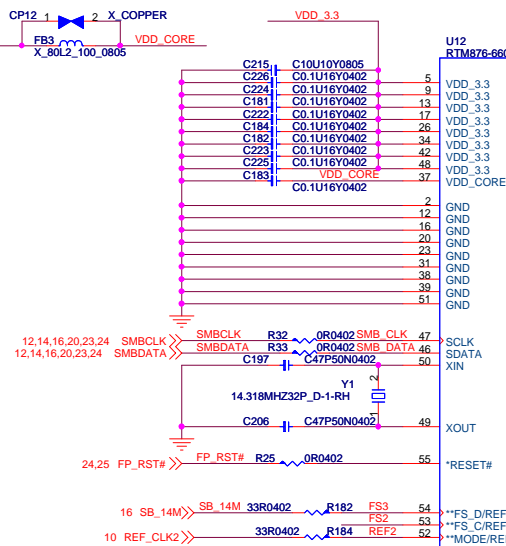
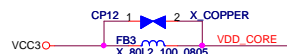
GPIO_0	I/O	MAIN	Flash Rom protection
GPIO_1	I/O	MAIN	Pull-Up
GPIO_2	I/O	MAIN	THERM#
GPIO_3	I/O	MAIN	Pull-Up
GPIO_4	I/O	MAIN	Pull-Up
GPIO_5	I/O	MAIN	Pull-Up
GPIO_6	I/O	MAIN	Pull-Up
GPIO_7	I/O	MAIN	Pull-Up
GPIO_8	I/O	RESUME	Pull-Up
GPIO_9	I/O	RESUME	Pull-Down
GPIO_10	I/O	RESUME	Pull-Down
GPIO_11	I/O	RESUME	Pull-Up
GPIO_12	I/O	RESUME	Pull-Up
GPIO_13	I/O	RESUME	Pull-Up
GPIO_14	I/O	RESUME	Pull-Up
GPIO_15	I/O	RESUME	RESERVED
GPIO_16	O	RESUME	RESERVED
GPIO_17	O	RESUME	RESERVED
GPIO_18	O	RESUME	RESERVED
GPIO_19	I/O	MAIN	SMBCLK
GPIO_20	I/O	MAIN	SMBDAT
GPIO_21	I	RESUME	RESERVED
GPIO_22	I	RESUME	RESERVED
GPIO_23	I	RESUME	RESERVED
GPIO_24	I	RESUME	RESERVED

## PCI Config.

DEVICE	MCP1 INT Pin	REQ#/GNT#	IDSEL	CLOCK
PCI Slot 1	PIRQ#A PIRQ#B PIRQ#C PIRQ#D	PCI_REQ#0 PCI_GNT#0	AD23	PCICLK1
PCI Slot 2	PIRQ#B PIRQ#C PIRQ#D PIRQ#A	PCI_REQ#1 PCI_GNT#1	AD24	PCICLK2
1394	PIRQ#C	PCI_REQ#3 PCI_GNT#3	AD22	1394CLK

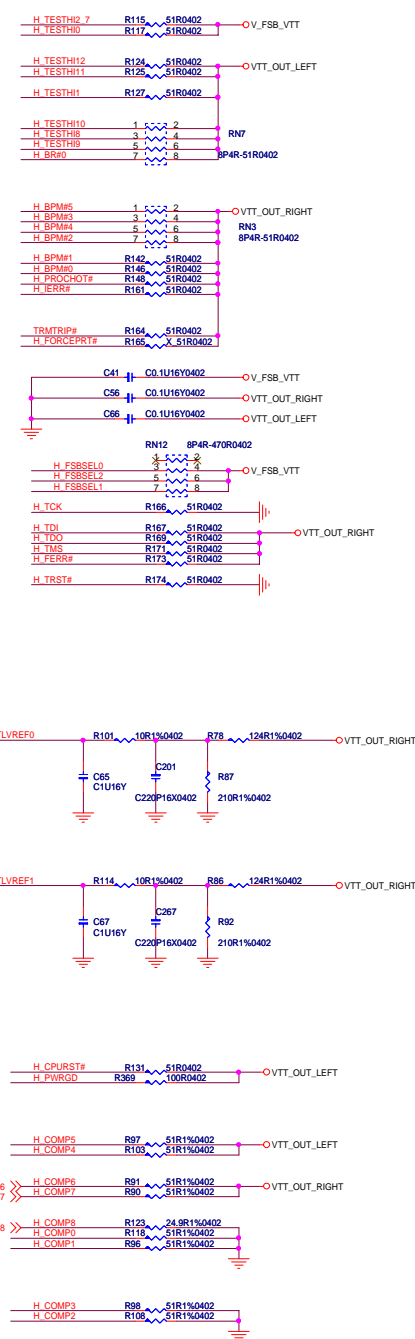
## PCI RESET DEVICE

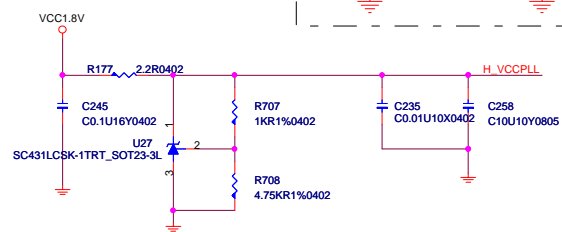
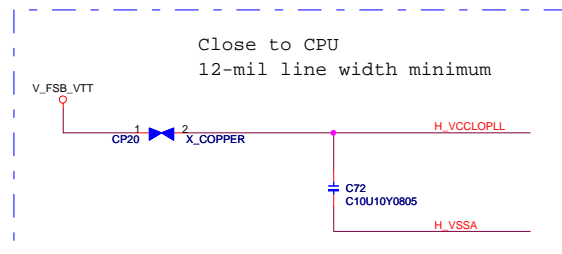
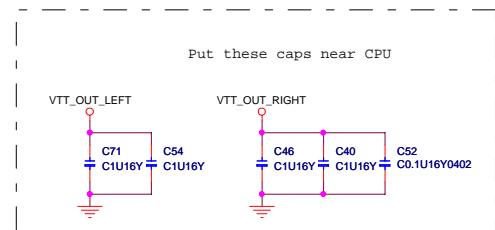
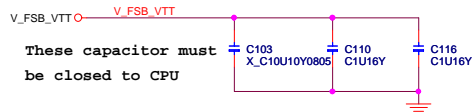
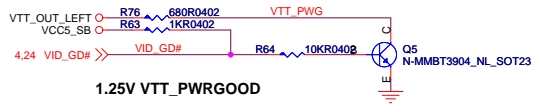
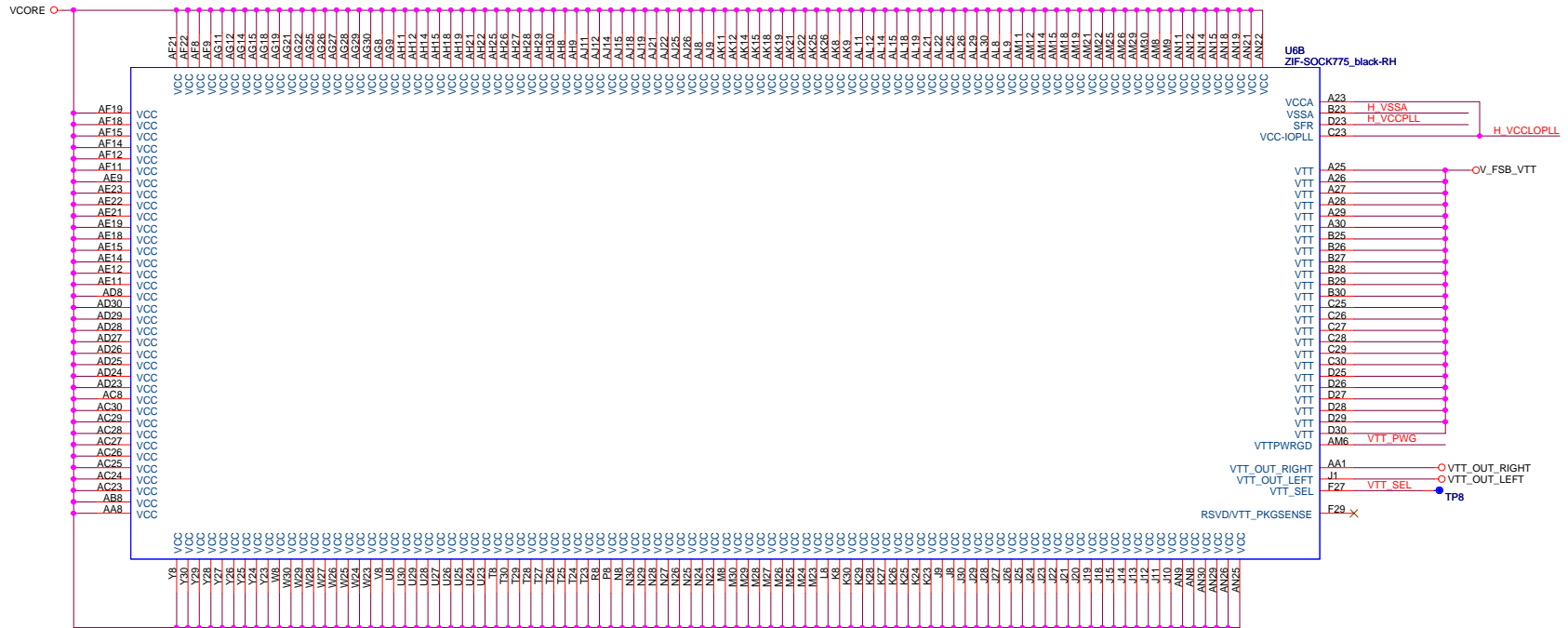
Signals	Target
PCI_RST#	PCIE_X16
SLOT_RST#	PCI1~2, PCI_E1
HD_RST#	Primary IDE
DEV_RST#	LAN
CHIP_RST#	S/IO, Flash Rom, SIS649



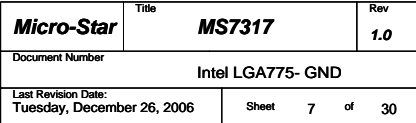
<b>Micro-Star</b>	Title <b>MS7317</b>	Rev <b>1.0</b>
Document Number		
Clock & Dimm Buffer		
Last Revision Date: Tuesday, December 26, 2006		Sheet 3 of 30

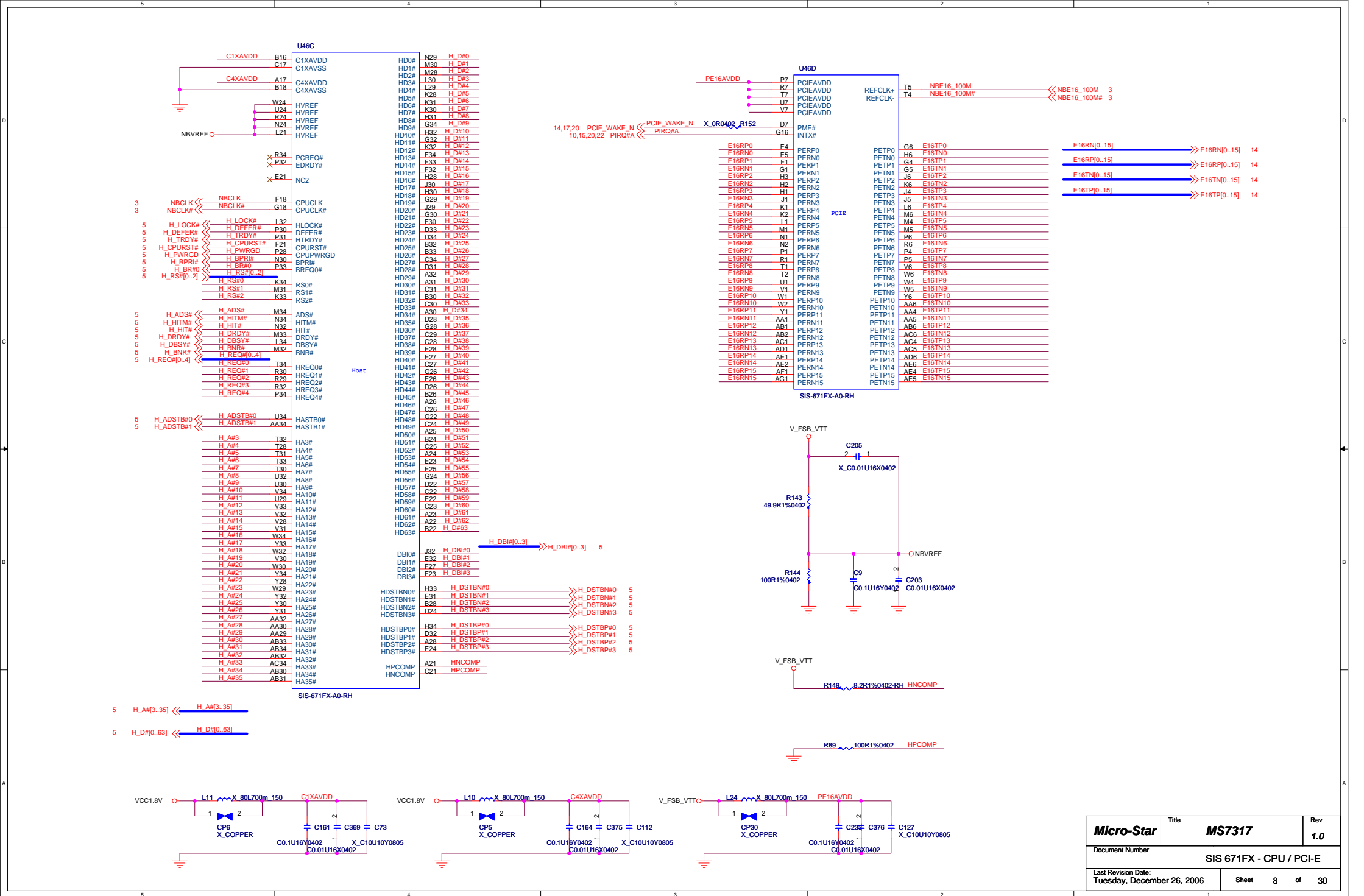




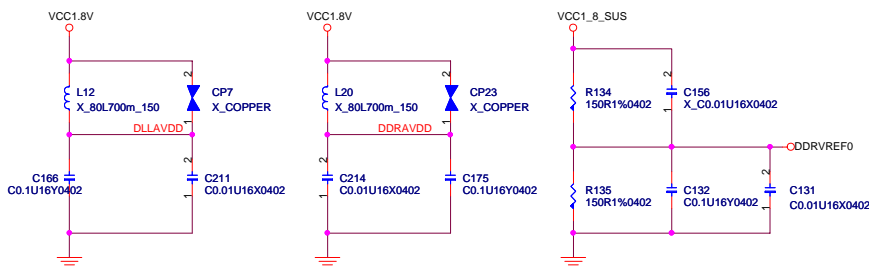


Title		Rev
MS7317		1.0
Document Number		
Intel LG775 - Power		
Last Revision Date:		Sheet
Tuesday, December 26, 2006		6 of 30

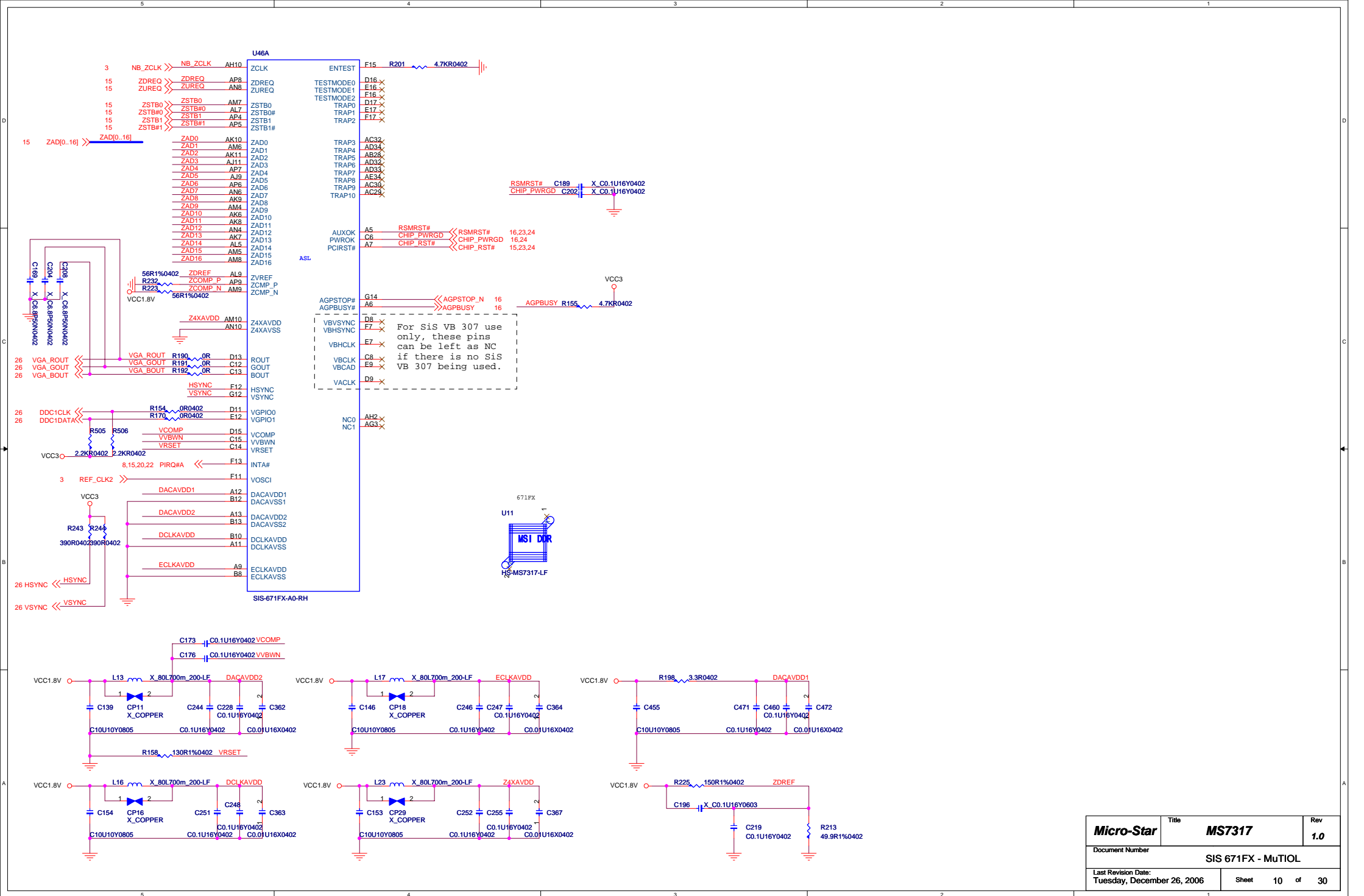


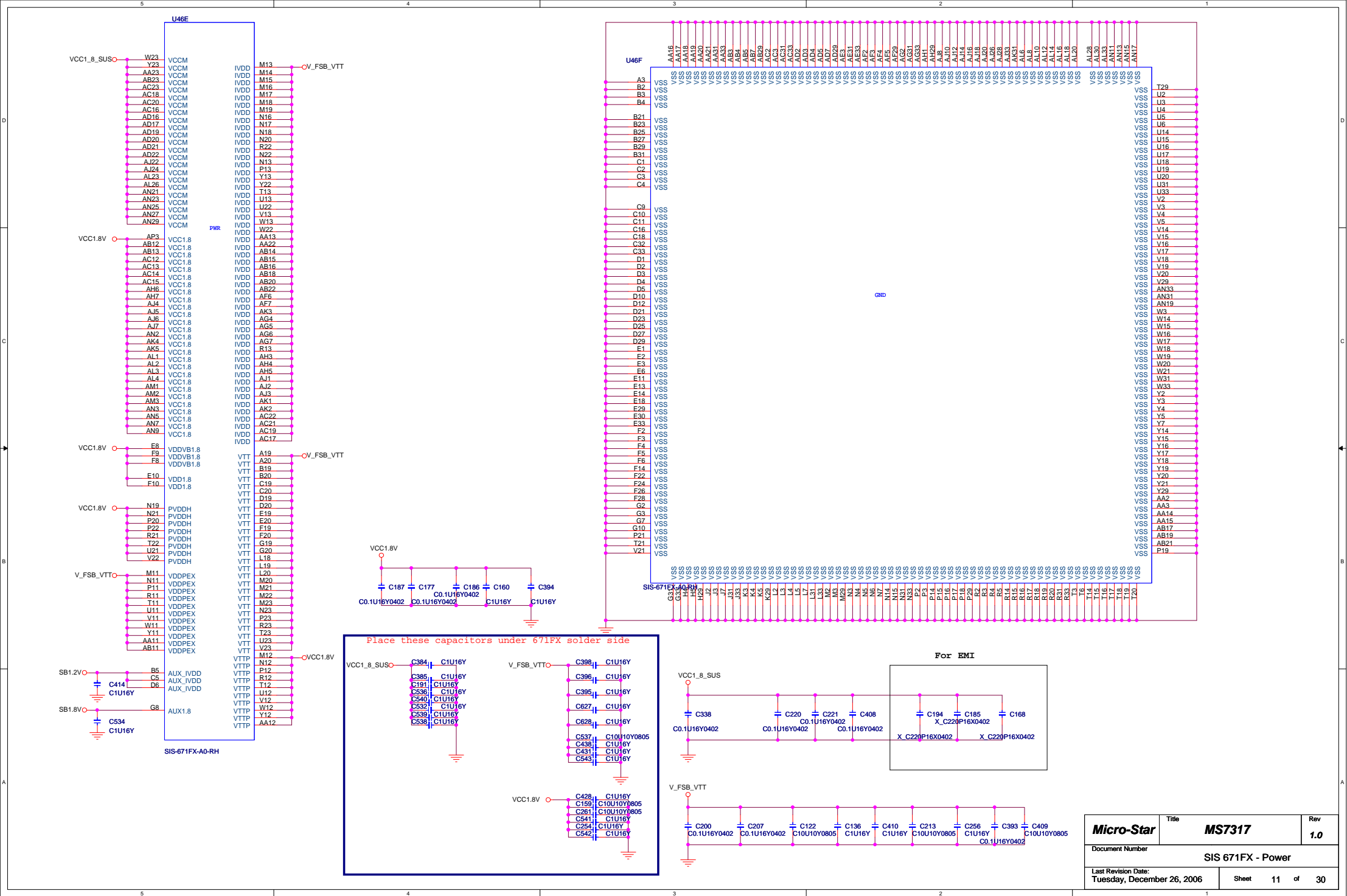


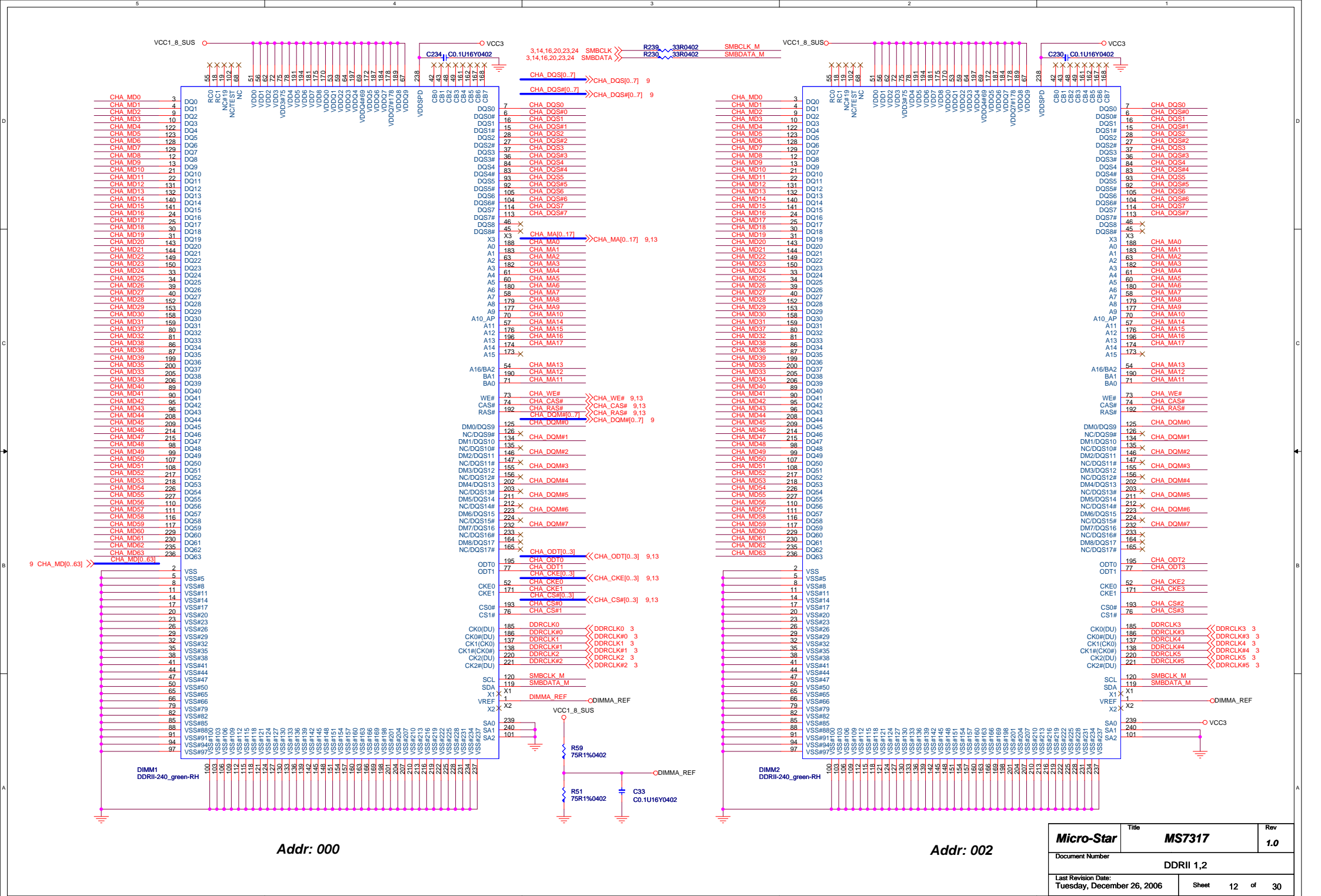




<b>Micro-Star</b>	Title <b>MS7317</b>	Rev <b>1.0</b>
Document Number <b>SIS 671FX - Memory</b>		
Last Revision Date: <b>Tuesday, December 26, 2006</b>		Sheet <b>9</b> of <b>30</b>



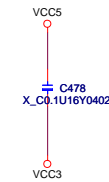
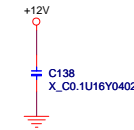
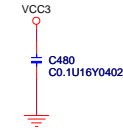
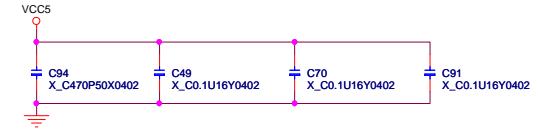
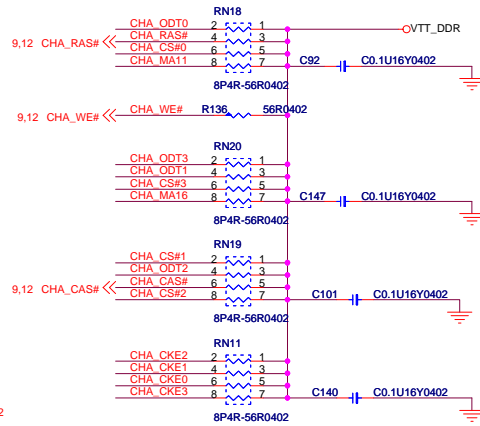
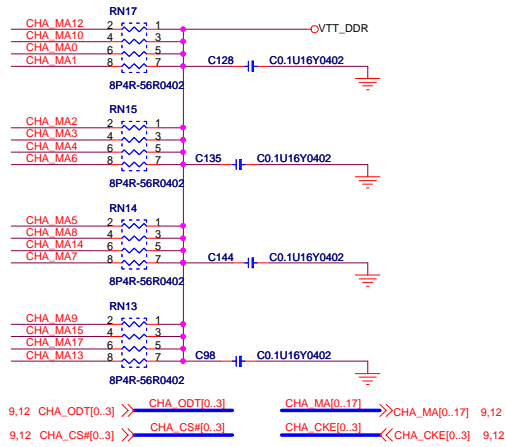




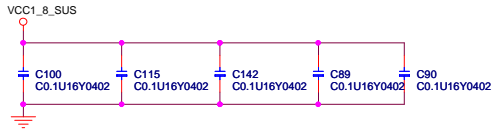
Addr: 000

Addr: 002

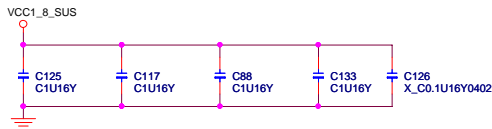
Micro-Star		Title	MS7317	Rev	1.0
Document Number		DDR11 1,2			
Last Revision Date:		Tuesday, December 26, 2006			
		Sheet	12	of	30



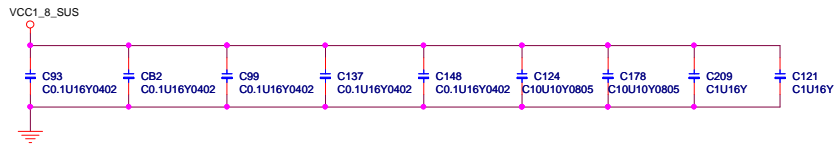
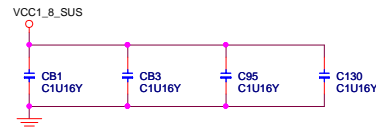
DECOUPLING CAPACITOR FOR SSTL-2 END TERMINATION VTT ISLAND  
0603 Package placed within 200mils of VTT Termination R-packs  
right side of DIMM2



Right side of DIMM1



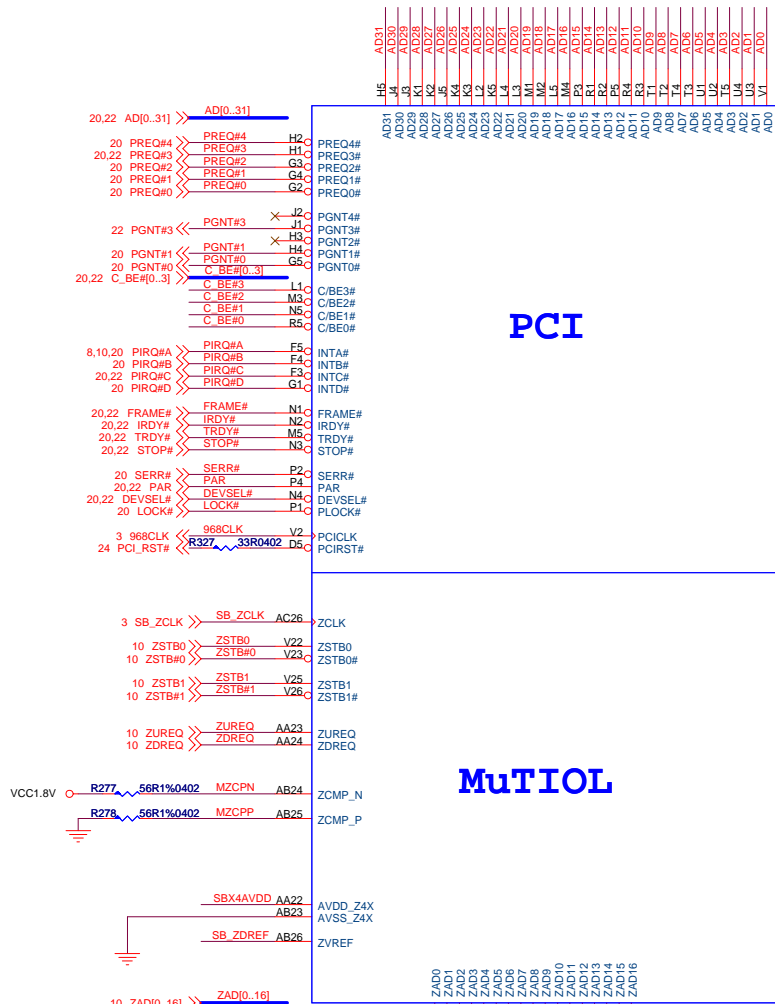
left side of DIMM1



EMI  
Requested

<b>Micro-Star</b>	Title	<b>MS7317</b>		Rev	<b>1.0</b>
Document Number		DDR Termination			
Last Revision Date:					
Tuesday, December 26, 2006		Sheet	13	of	30

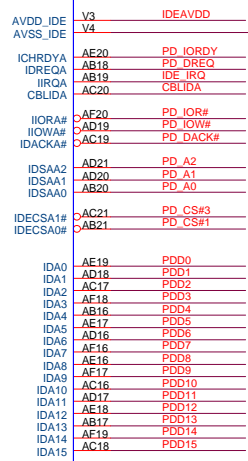




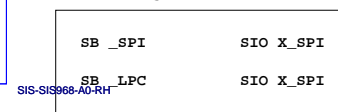
**IDE**

**SPI**

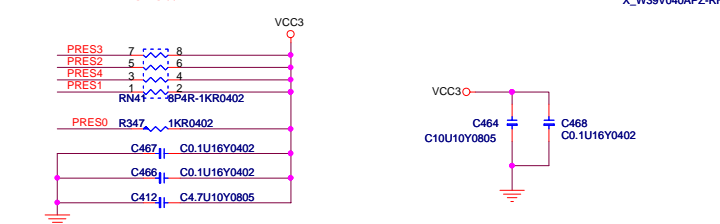
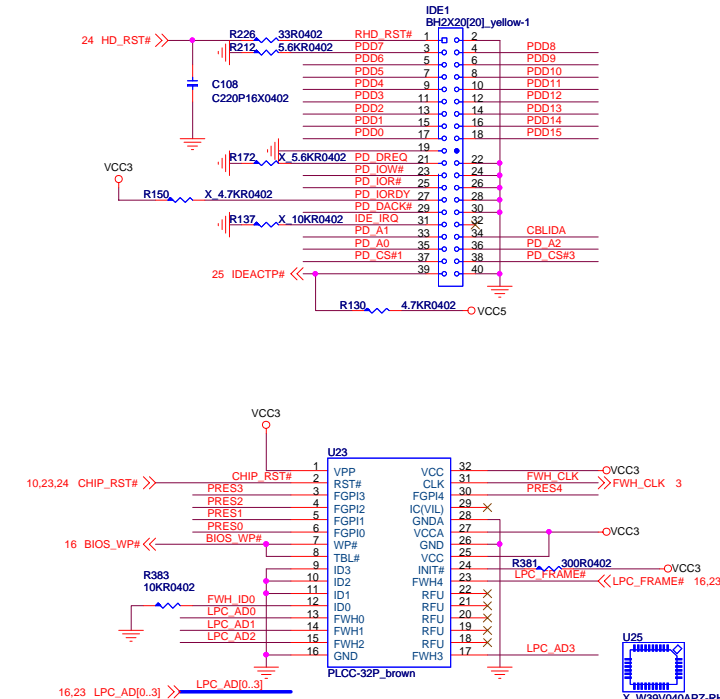
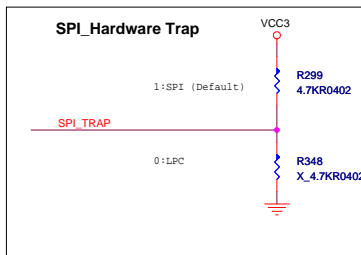
U71A



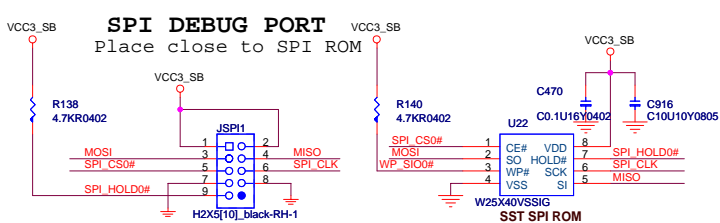
**SPI config**



**SPI\_Hardware Trap**



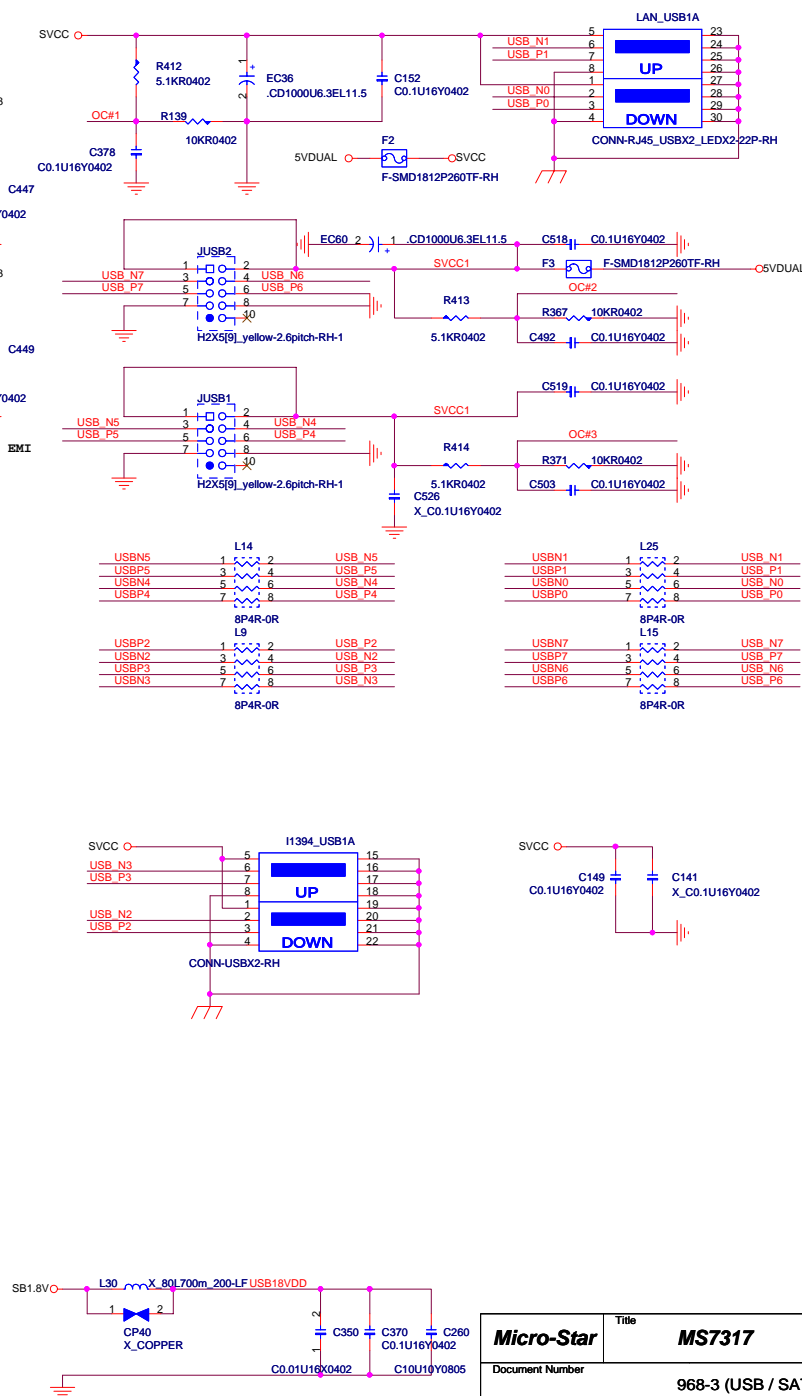
**SPI DEBUG PORT**  
Place close to SPI ROM



Micro-Star	Title	MS7317	Rev	1.0
Document Number	968-1 (PCI / IDE / MuTIOL)			
Last Revision Date:	Wednesday, December 27, 2006			
Sheet	15	of	30	

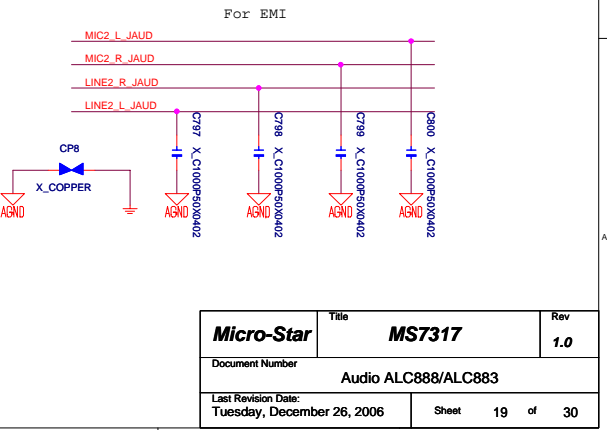
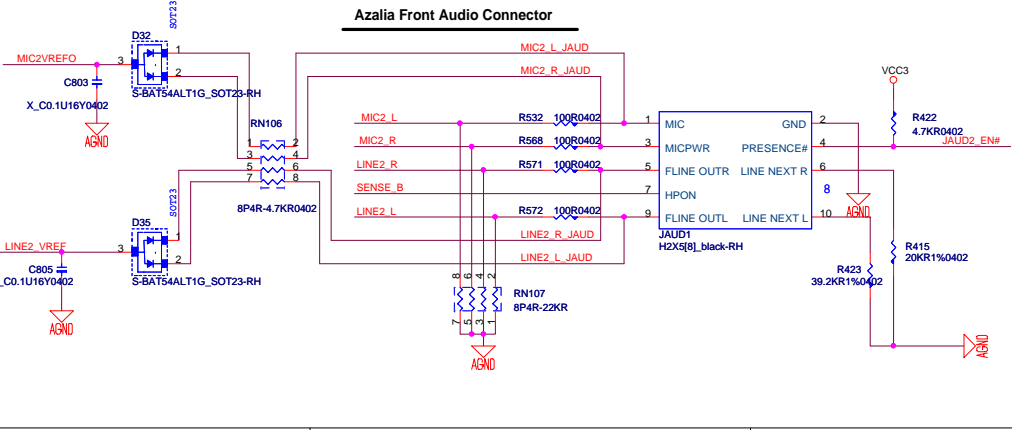
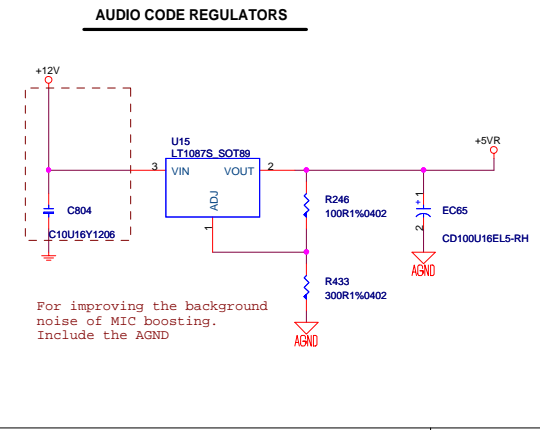
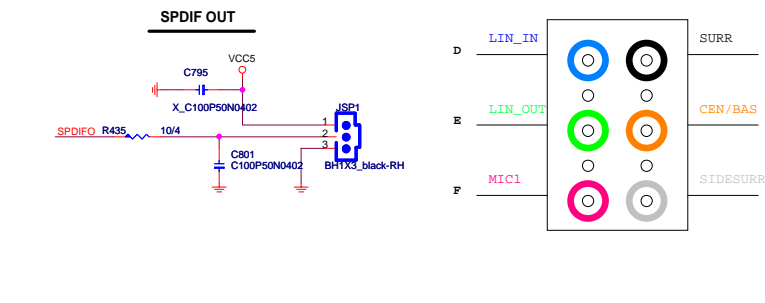
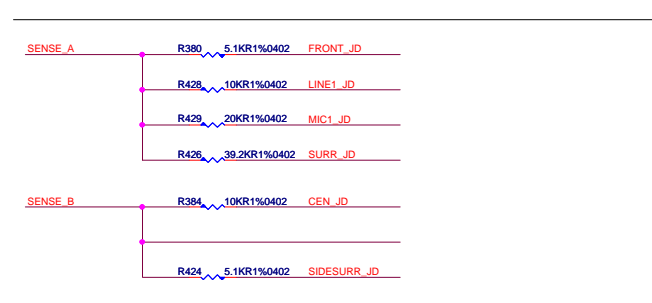
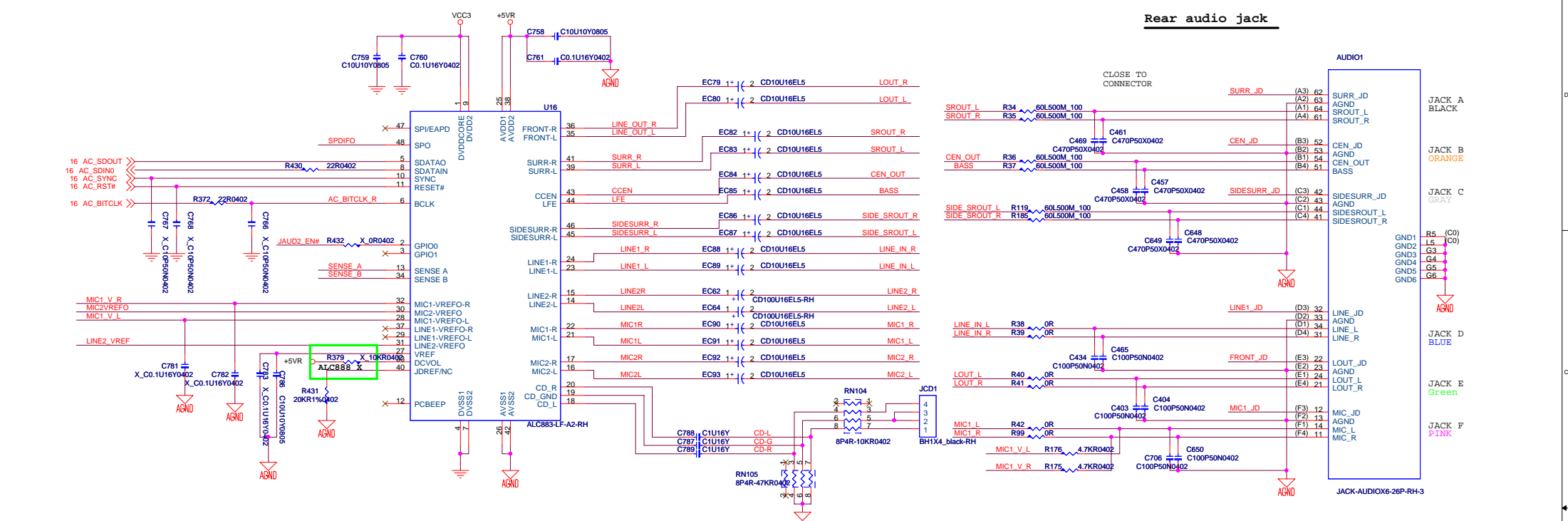


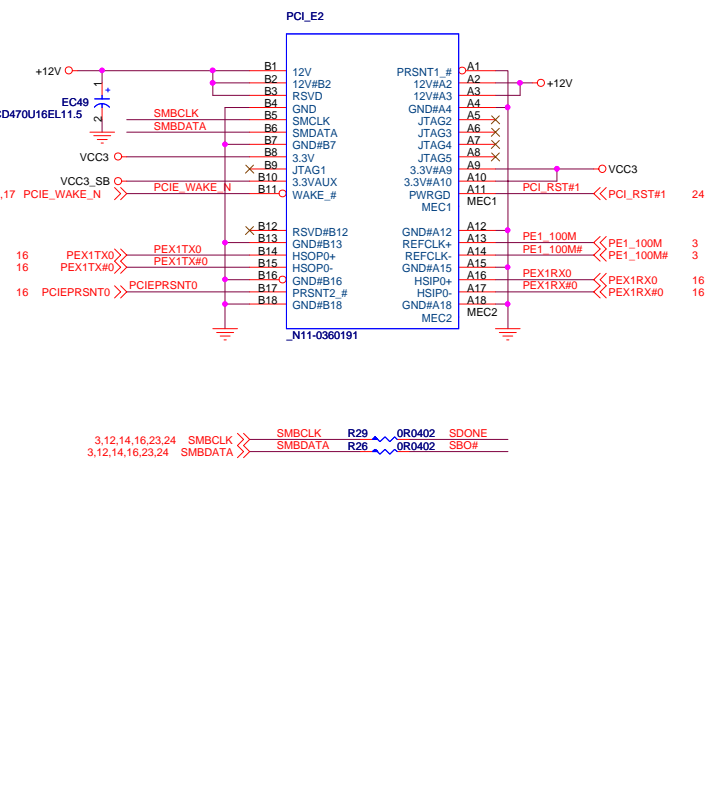
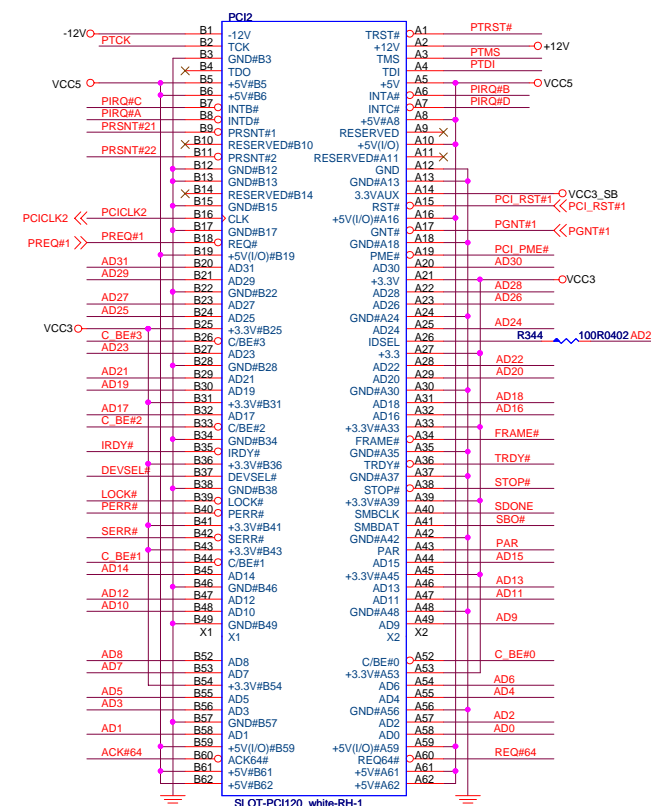
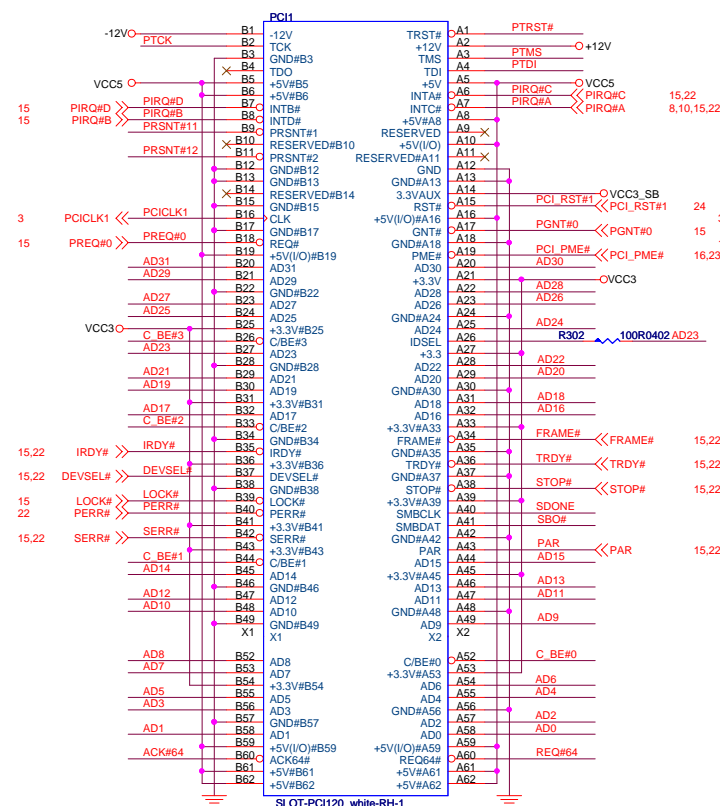




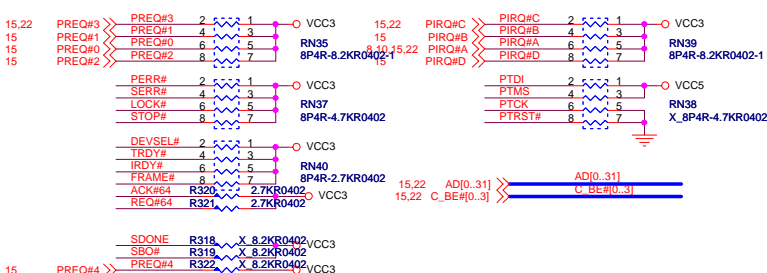
<b>Micro-Star</b>	Title	<b>MS7317</b>	Rev	<b>1.0</b>
Document Number		<b>968-3 (USB / SATA)</b>		
Last Revision Date: Tuesday, December 26, 2006		Sheet    17    of    30		

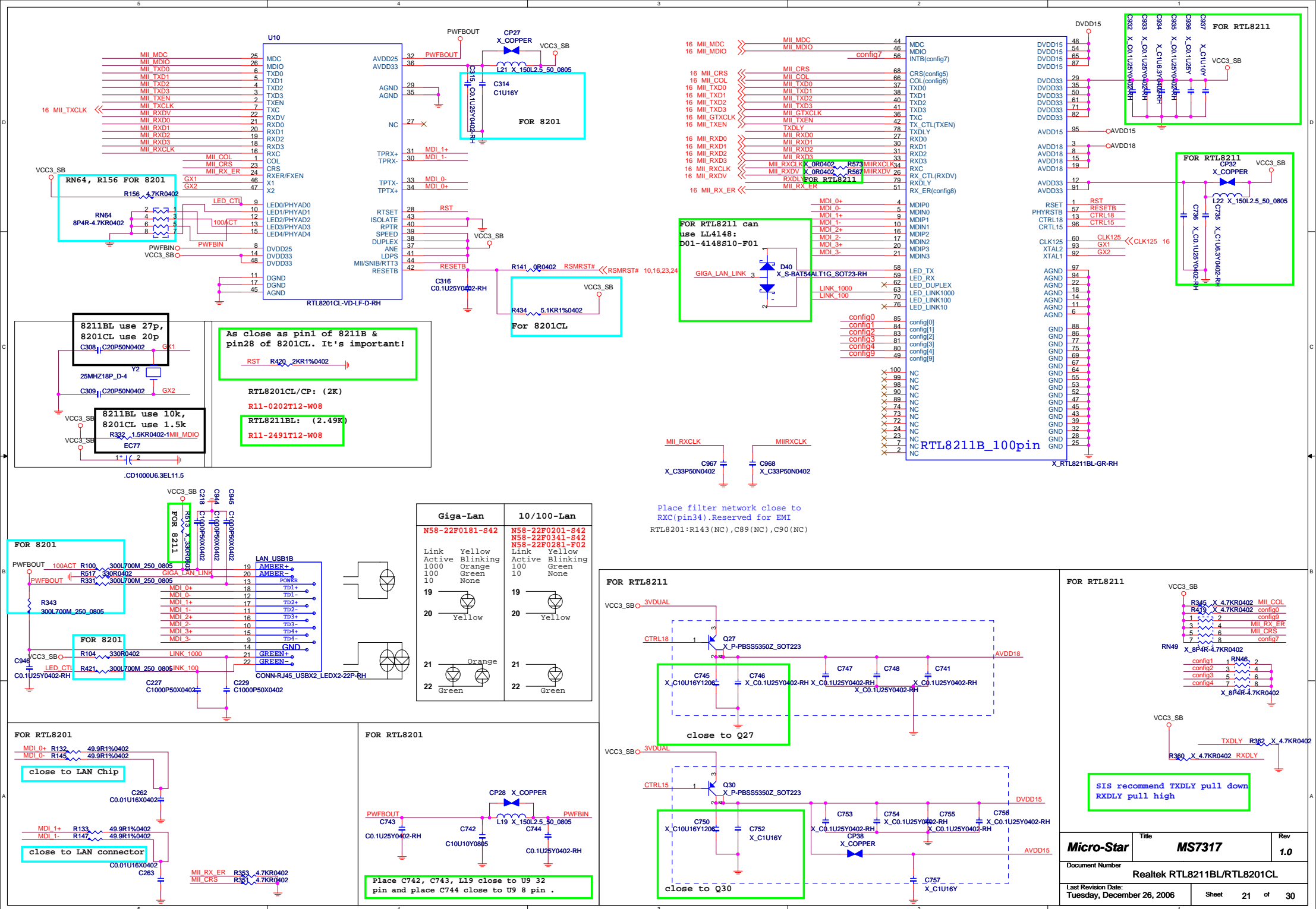




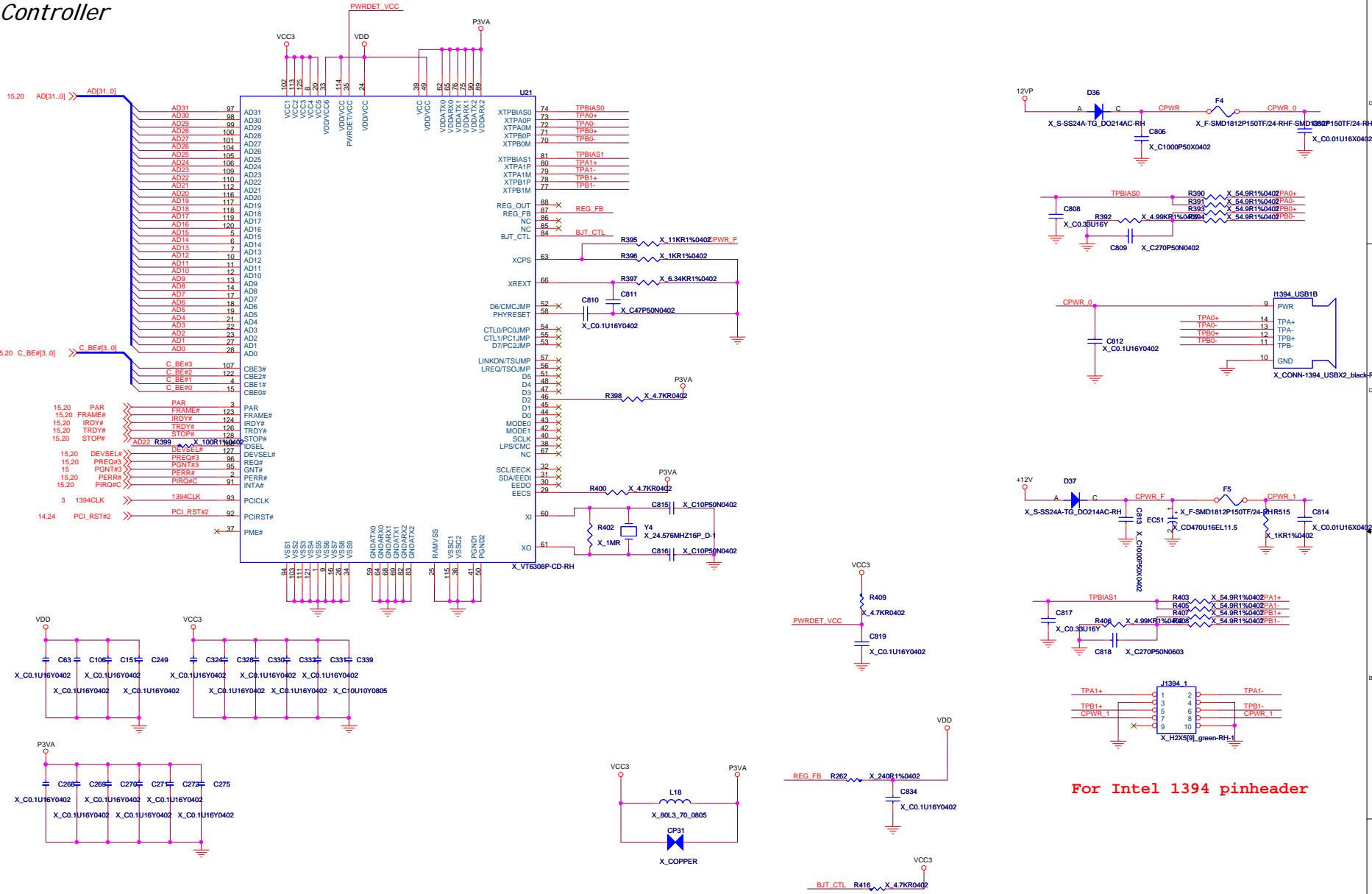


## PCI PULL-UP / DOWN RESISTORS



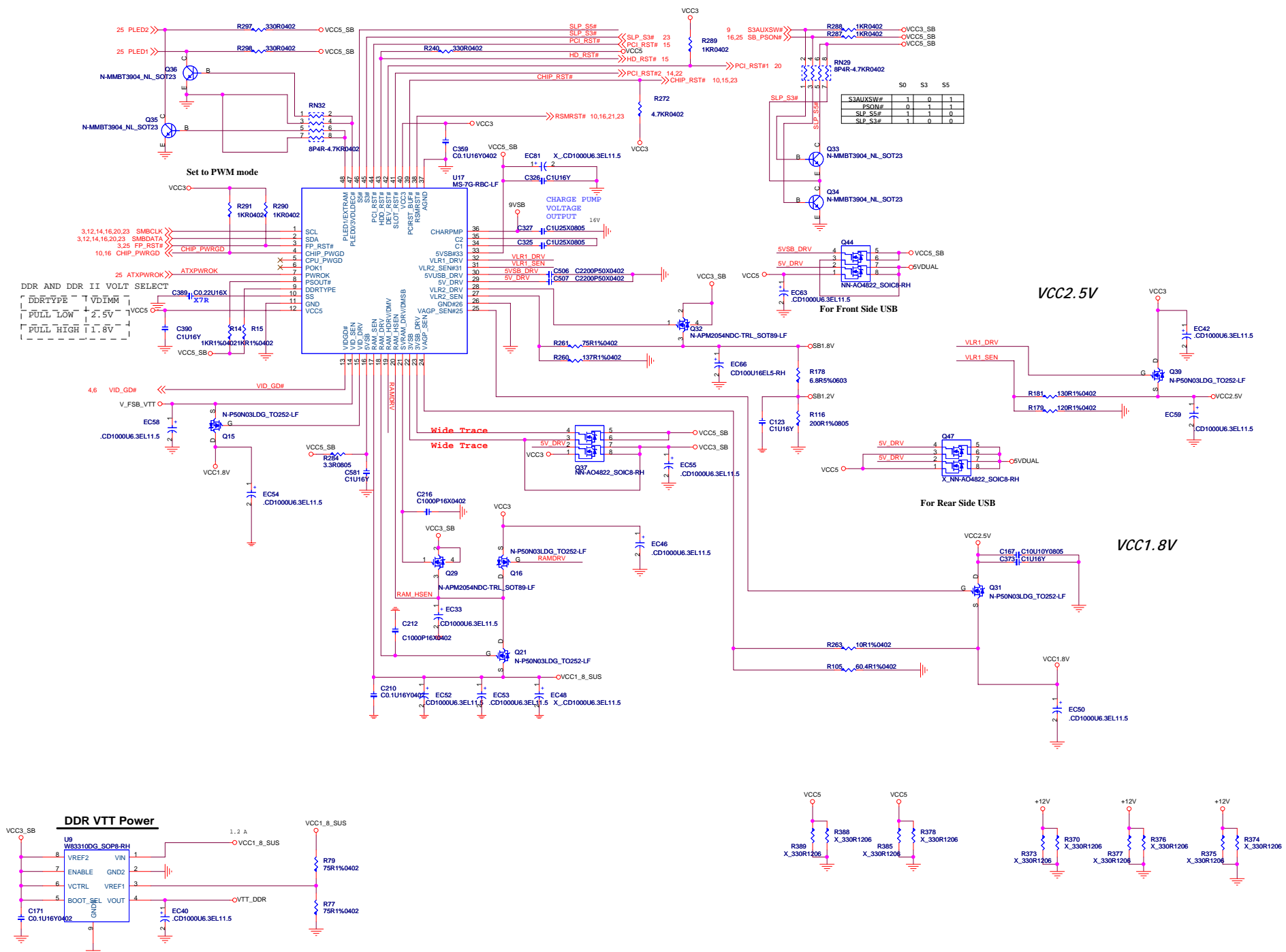


1394a OHCI Link Layer  
Controller



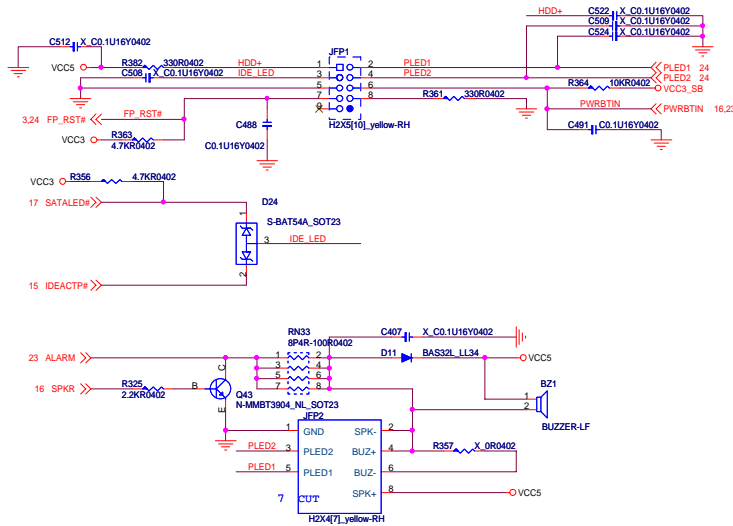
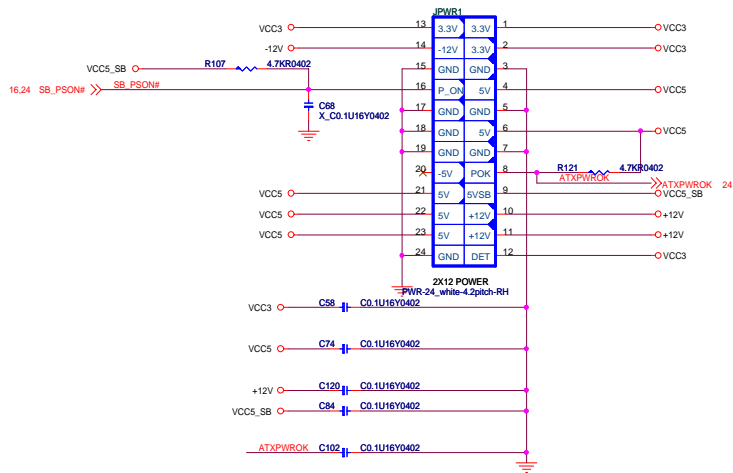




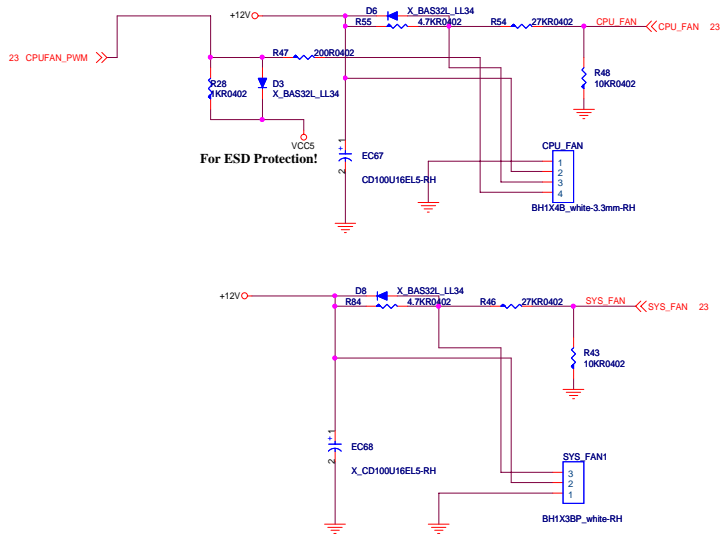




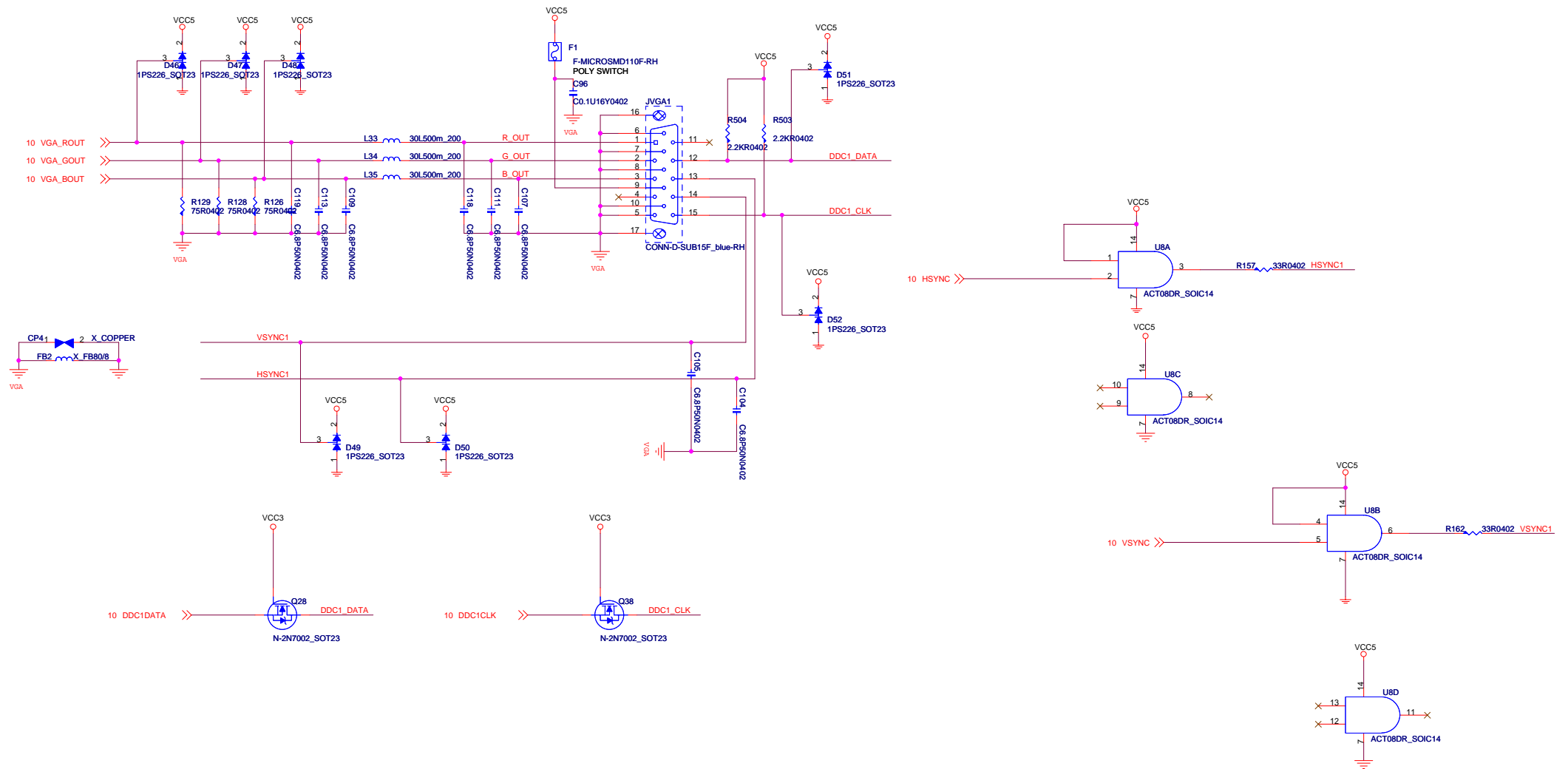
ATX Power and Front Pannel



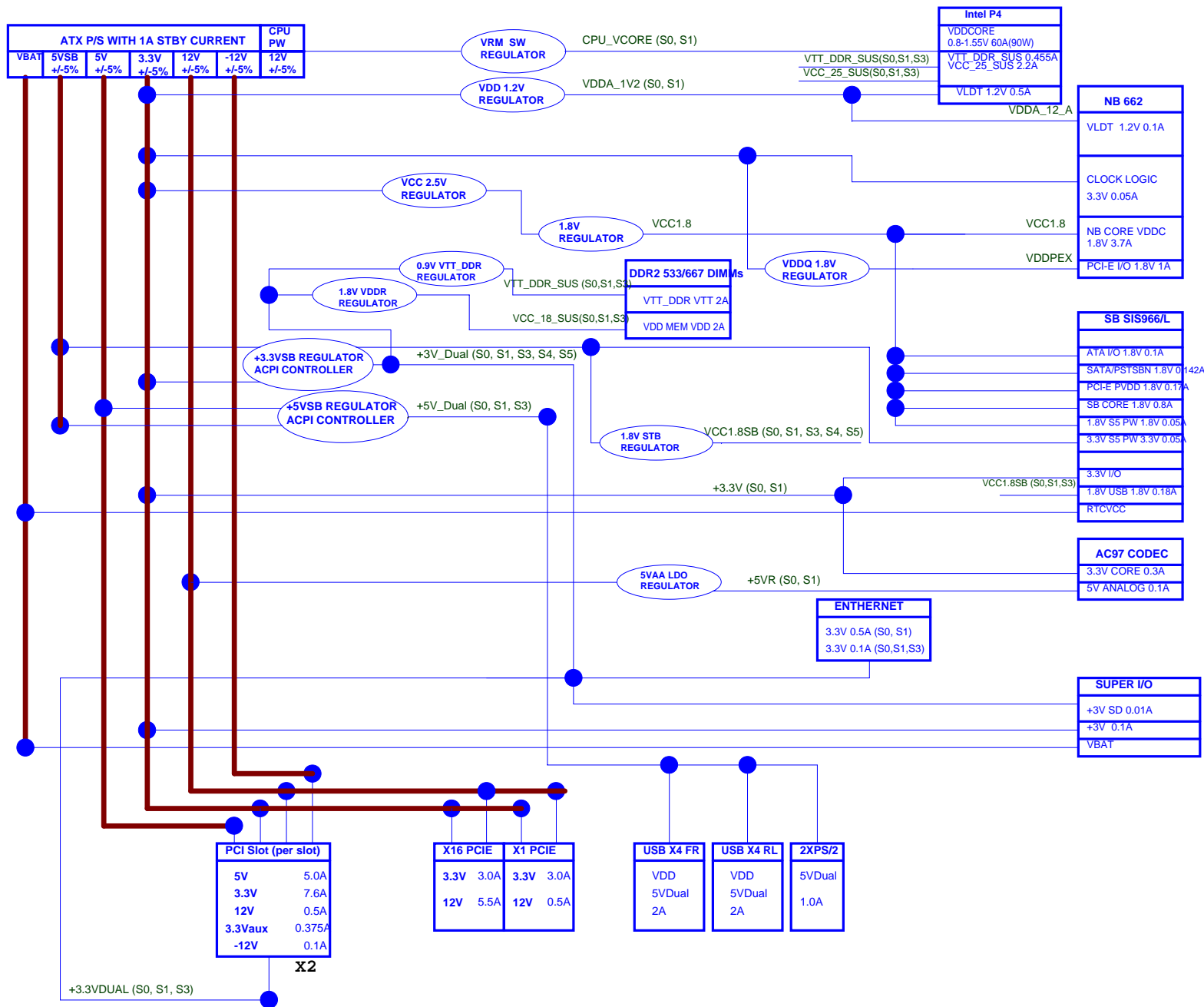
FAN



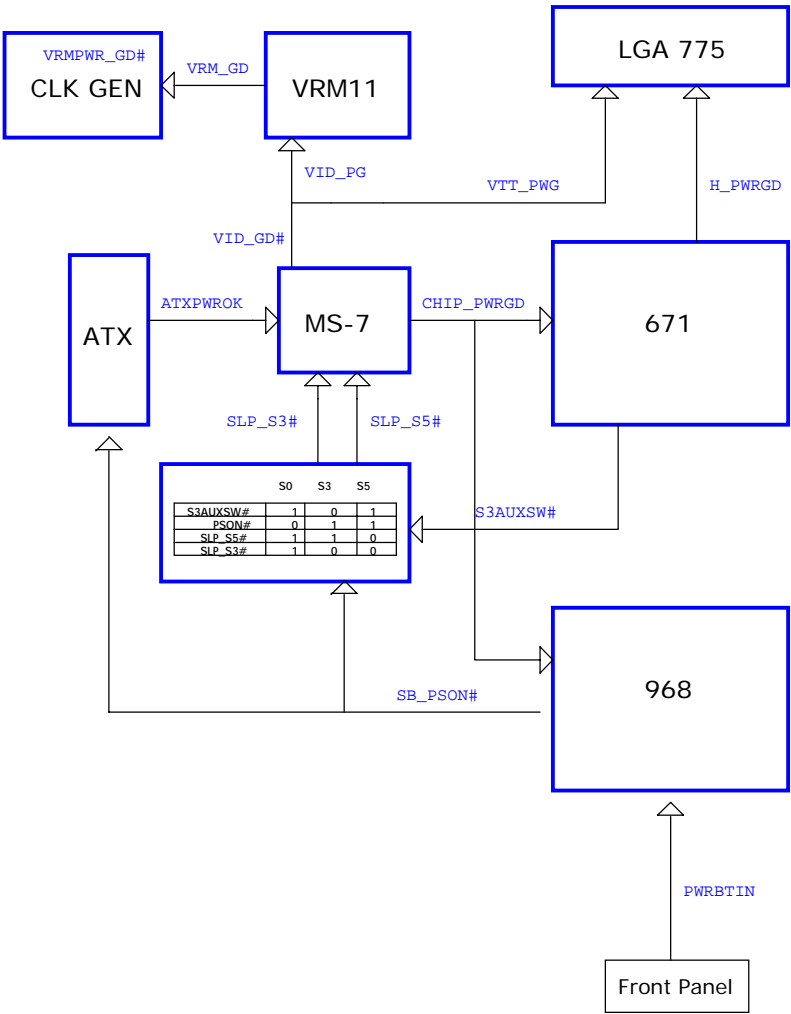
# VGA CONNECTOR



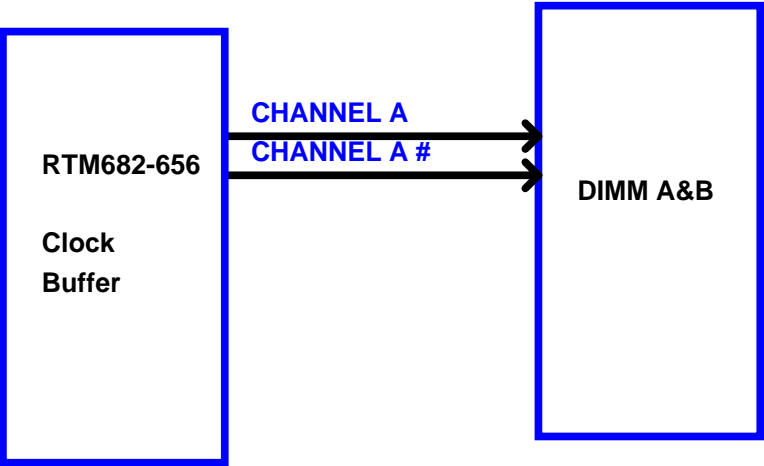
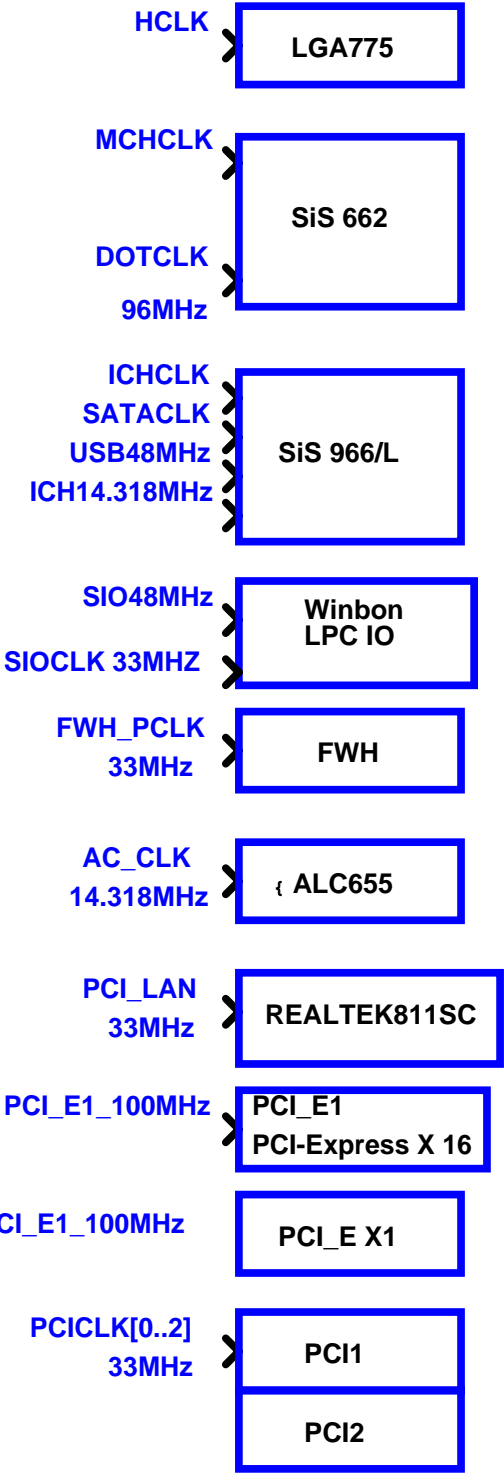
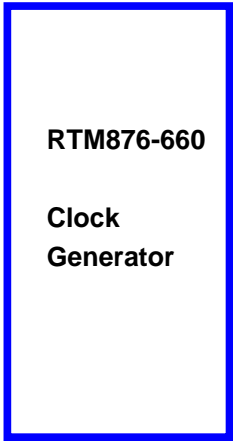
Micro-Star	Title <b>MS7317</b>	Rev <b>1.0</b>
Document Number	VGA Connector	
Last Revision Date: Tuesday, December 26, 2006	Sheet	26 of 30



# System Reset Diagram



# CLOCK MAP



# List Of Change

- 0A----->1.0    2006.05.18
1. EC21 change ASM COMM
  2. Remove R176 R177 R178 R179 RN27 RN21 R236 R237
  3. Remove SIO Sensor for VCC3 -- LPC\_+3VIN
  4. R148 chagne to 100 1%ohm
  5. NBVREF change to 0.67.VTT $\overline{C}$ 49.9 to 100ohm
  6. Change the power solution of the 1.8V for NB&SB
  7. Add resistors from 5VCC } 5VDIMM to GND
  8. Add D21 for MS11 application
  9. Remove Debug Port : JLPC1
  10. Follow PM's request ,change Connectors NEW PN
  11. Remove PCREQ#
  11. Remove PCREQ#

Micro-Star	Title MS7317	Rev 1.0
Document Number History		
Last Revision Date: Tuesday, December 26, 2006		Sheet    30    of    30