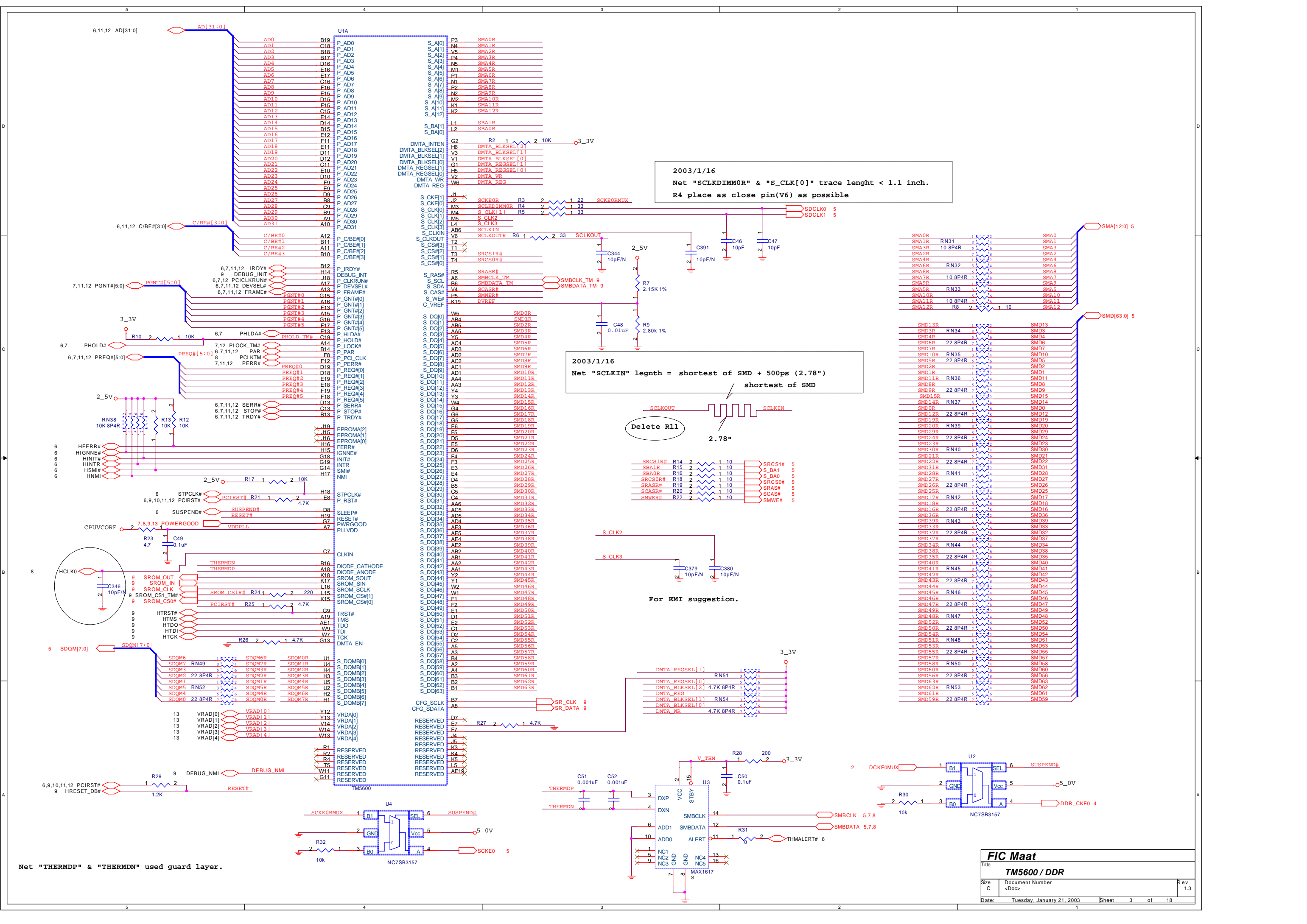


Add MC9-MC12



2003/1/16
 Net "SCLKDIMM0R" & "S_CLK[0]" trace lenght < 1.1 inch.
 R4 place as close pin(V6) as possible

2003/1/16
 Net "SCLKIN" legnth = shortest of SMD + 500ps (2.78")
 shortest of SMD

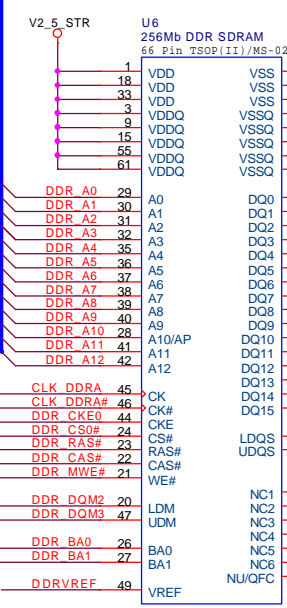
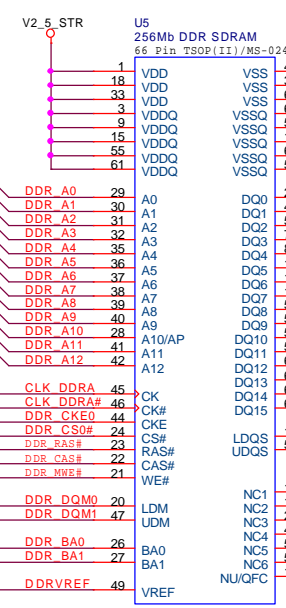
Delete R11

For EMI suggestion.

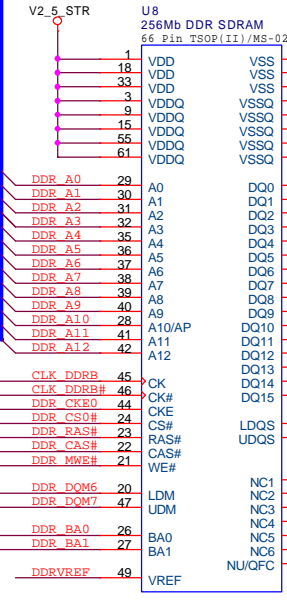
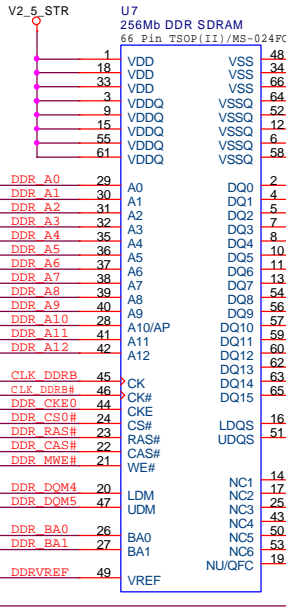
Net "THERMDP" & "THERMDN" used guard layer.

FIC Maat			
Title	TM5600 / DDR		
Size	Document Number	Rev	
C	<Doc>	1.3	
Date:	Tuesday, January 21, 2003	Sheet	3 of 18

2 DDR_A[12:0]
 2 DDR_DQ[63:0]
 2 DDR_DQS[7:0]
 2 DDR_DQM[7:0]

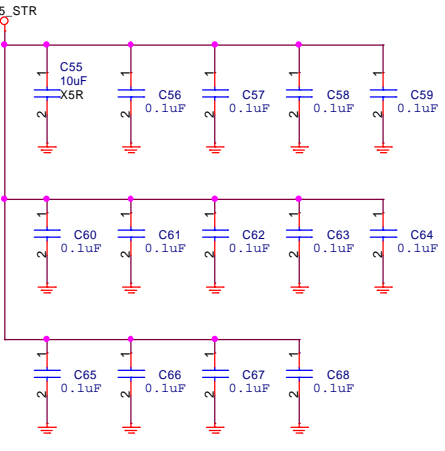
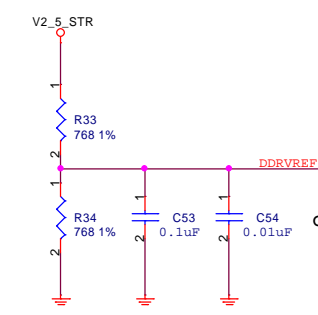


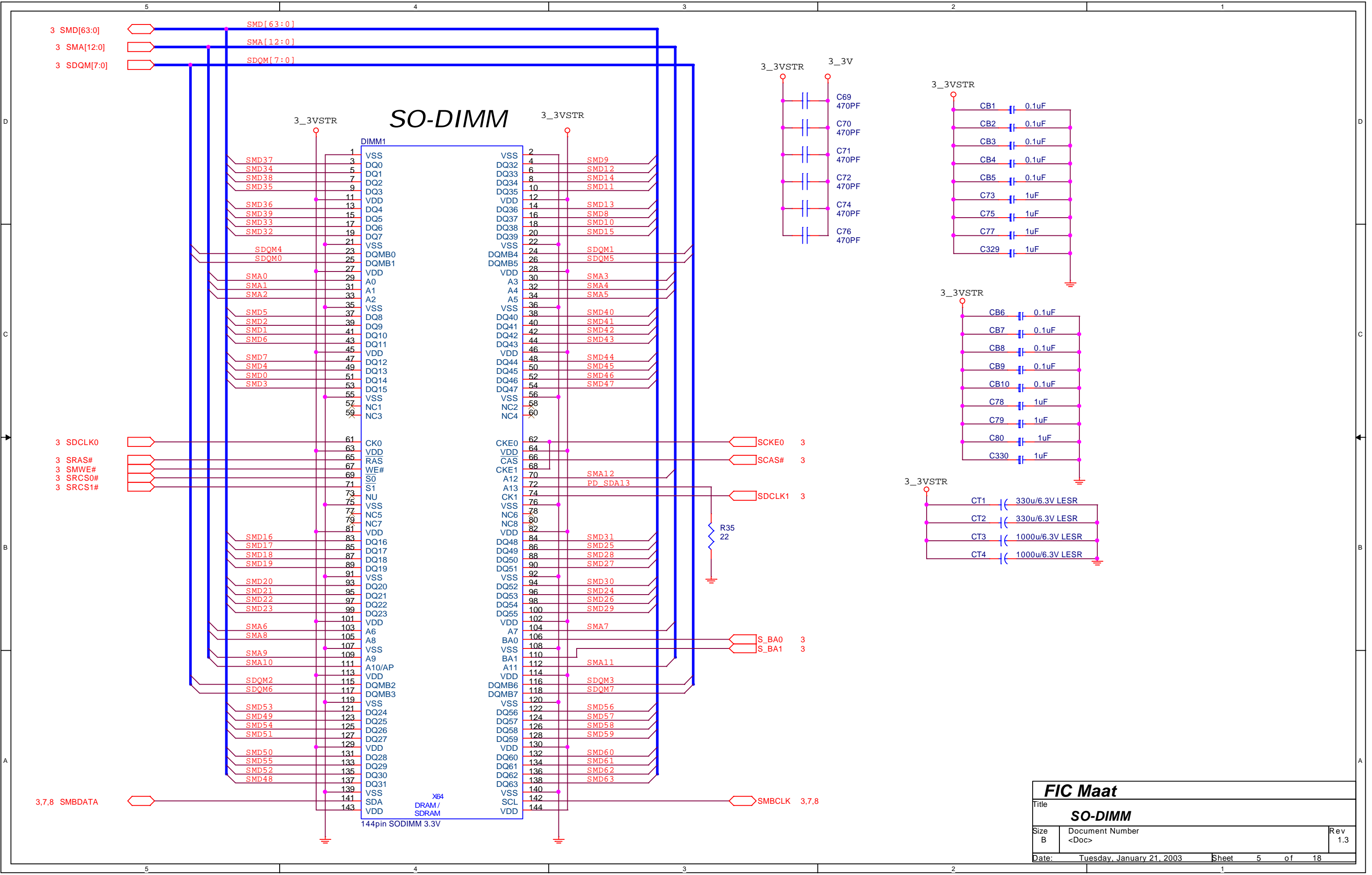
2 CLK_DDRA
 2 CLK_DDRA#
 3 DDR_CKE0
 2 DDR_CS0#
 2 DDR_RAS#
 2 DDR_CAS#
 2 DDR_MWE#
 2 DDR_BA0
 2 DDR_BA1



2 DDR_A[12:0]
 2 DDR_DQ[63:0]
 2 DDR_DQS[7:0]
 2 DDR_DQM[7:0]

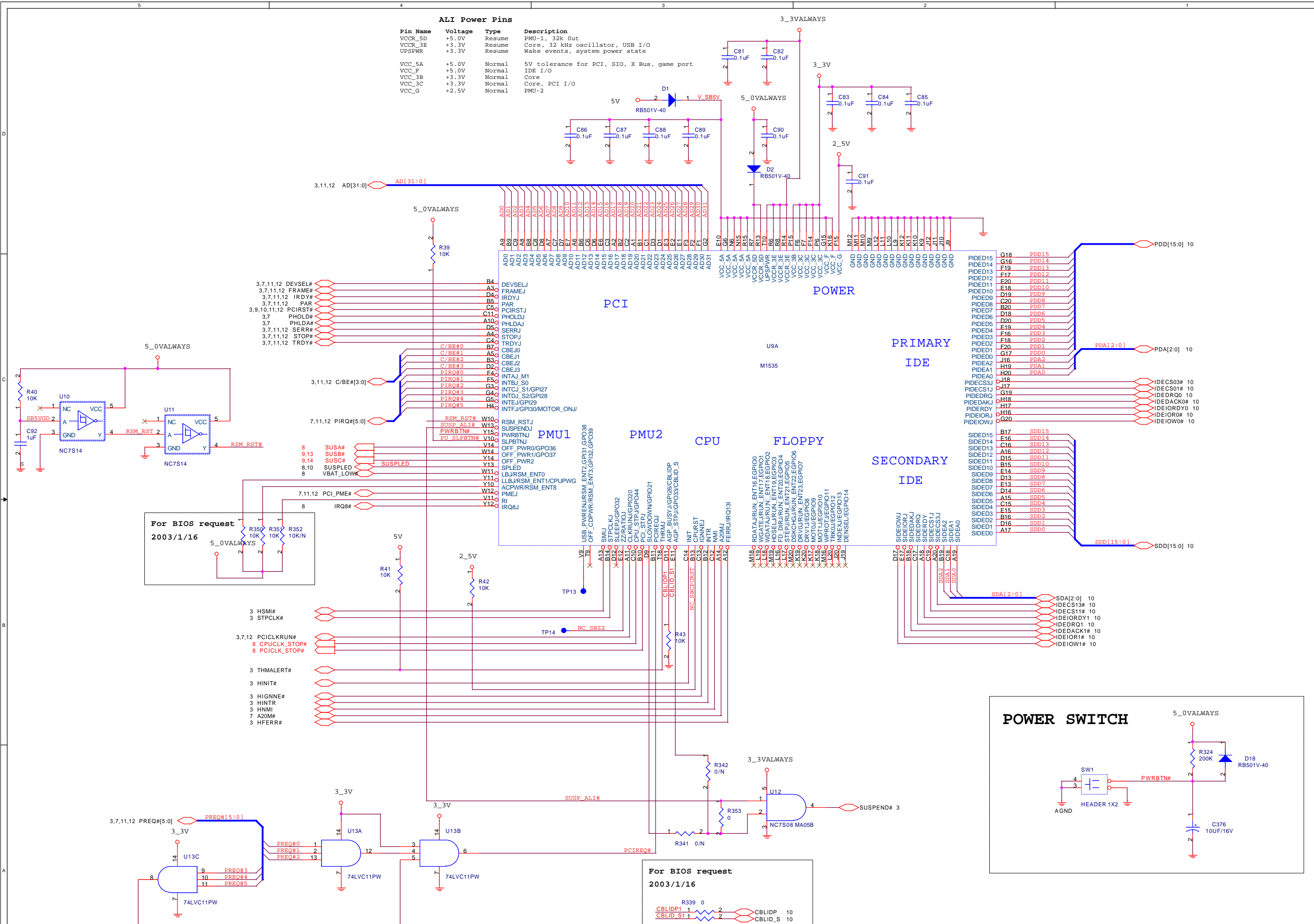
2 CLK_DDRB
 2 CLK_DDRB#
 3 DDR_CKE0
 2 DDR_CS0#
 2 DDR_RAS#
 2 DDR_CAS#
 2 DDR_MWE#
 2 DDR_BA0
 2 DDR_BA1





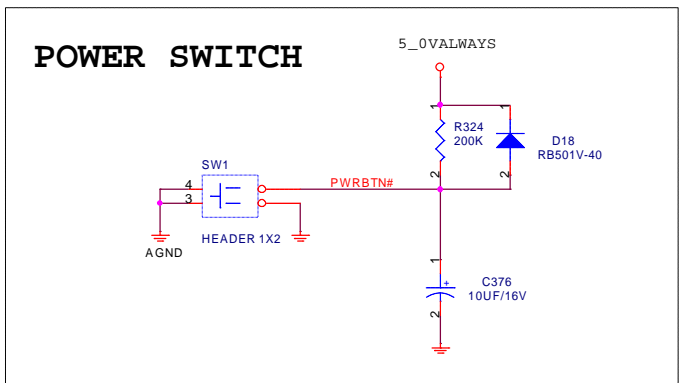
ALI Power Pins

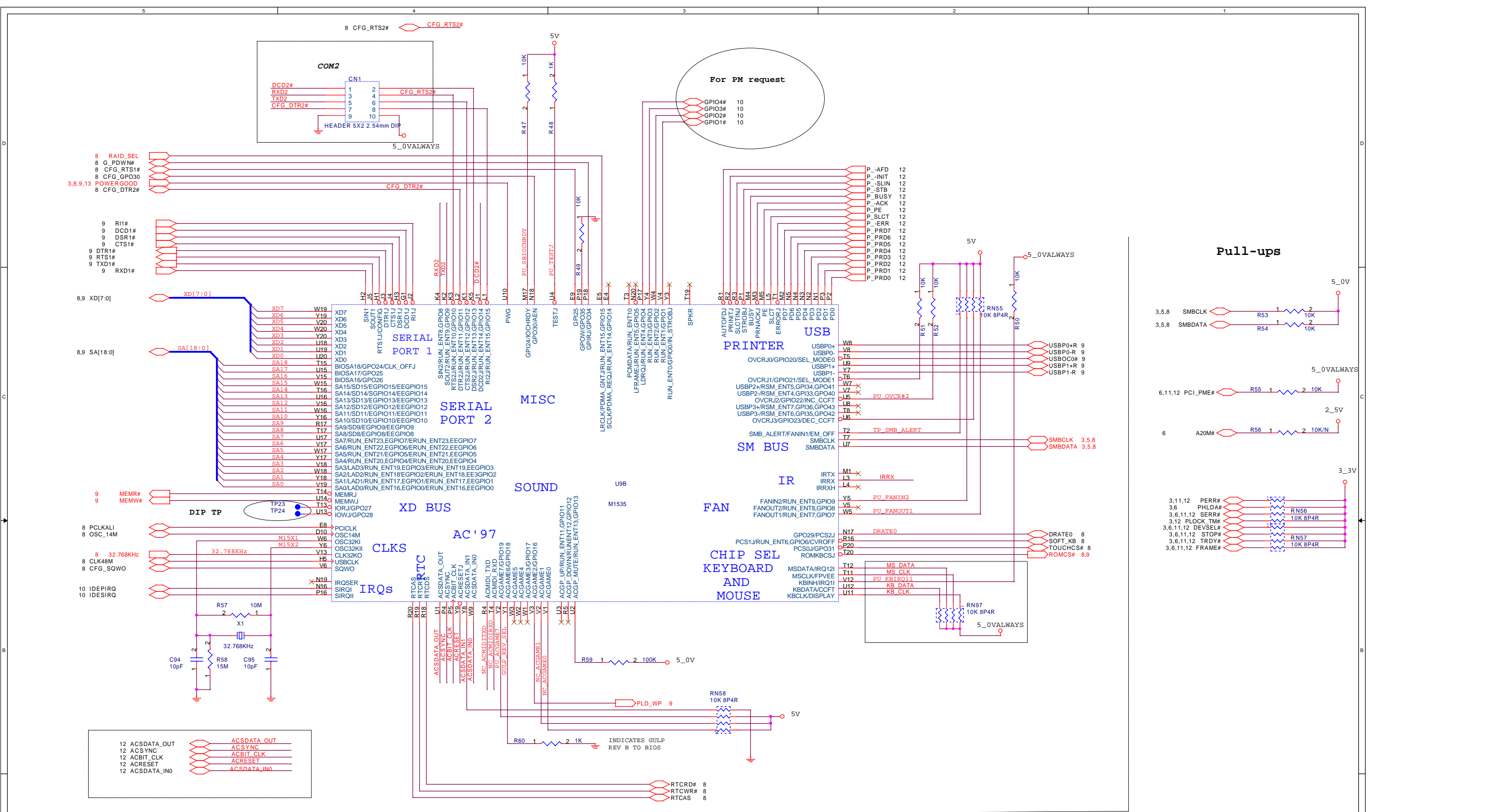
Pin Name	Voltage	Type	Description
VCCR_5D	+5.0V	Resume	PMU-1, 32k Out
VCCR_3E	+3.3V	Resume	Core, 32 kHz oscillator, USB I/O
UPSPWR	+3.3V	Resume	Wake events, system power state
VCC_5A	+5.0V	Normal	5V tolerance for PCI, SIO, X Bus, game port
VCC_F	+5.0V	Normal	IDE I/O
VCC_3B	+3.3V	Normal	Core
VCC_3C	+3.3V	Normal	Core, PCI I/O
VCC_G	+2.5V	Normal	PMU-2



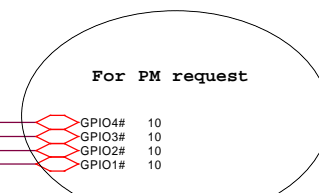
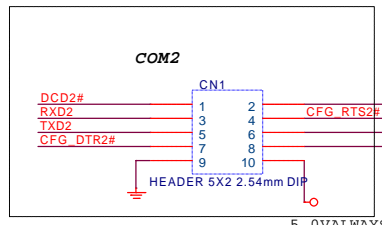
For BIOS request
2003/1/16

For BIOS request
2003/1/16





- 8 RAID_SEL
- 8 G_PDWN#
- 8 CFG_RTS1#
- 8 CFG_GPO30
- 3,8,9,13 POWERGOOD
- 8 CFG_DTR2#



- 9 R11#
- 9 DCD1#
- 9 DSR1#
- 9 CTS1#
- 9 DTR1#
- 9 RTS1#
- 9 TXD1#
- 9 RXD1#

8,9 XD[7:0]

8,9 SA[18:0]

- 9 MEMR#
- 9 MEMW#

8 PCLKALI

8 OSC_14M

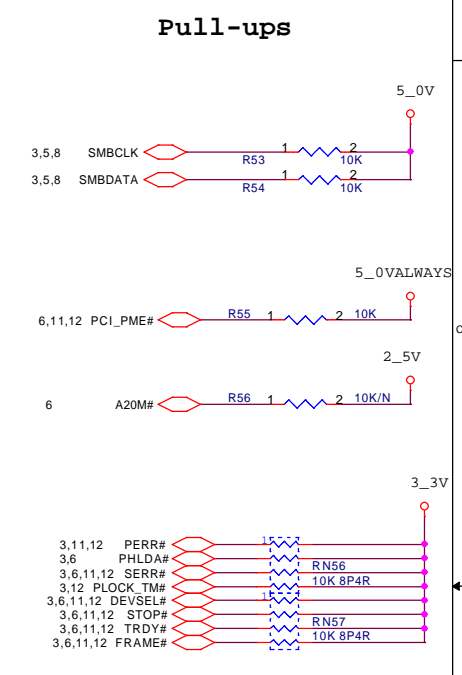
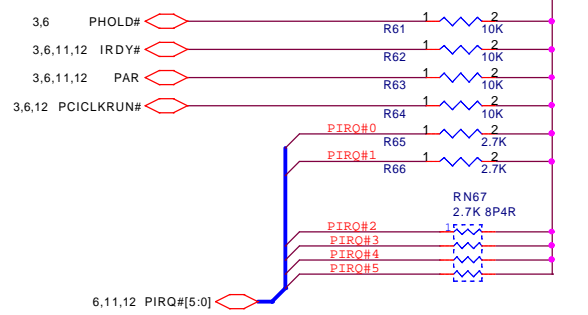
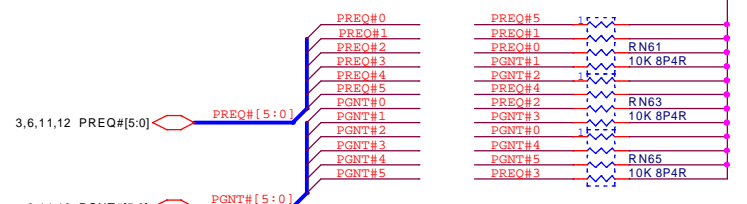
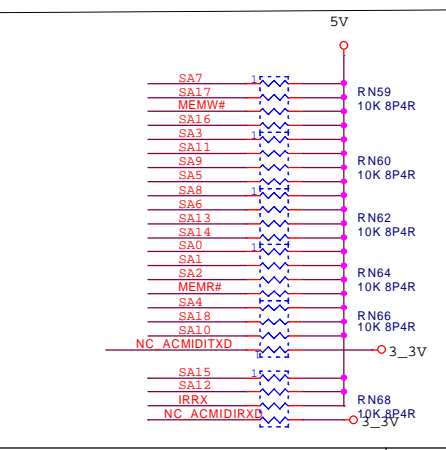
8 CLK48M

8 CFG_SQWO

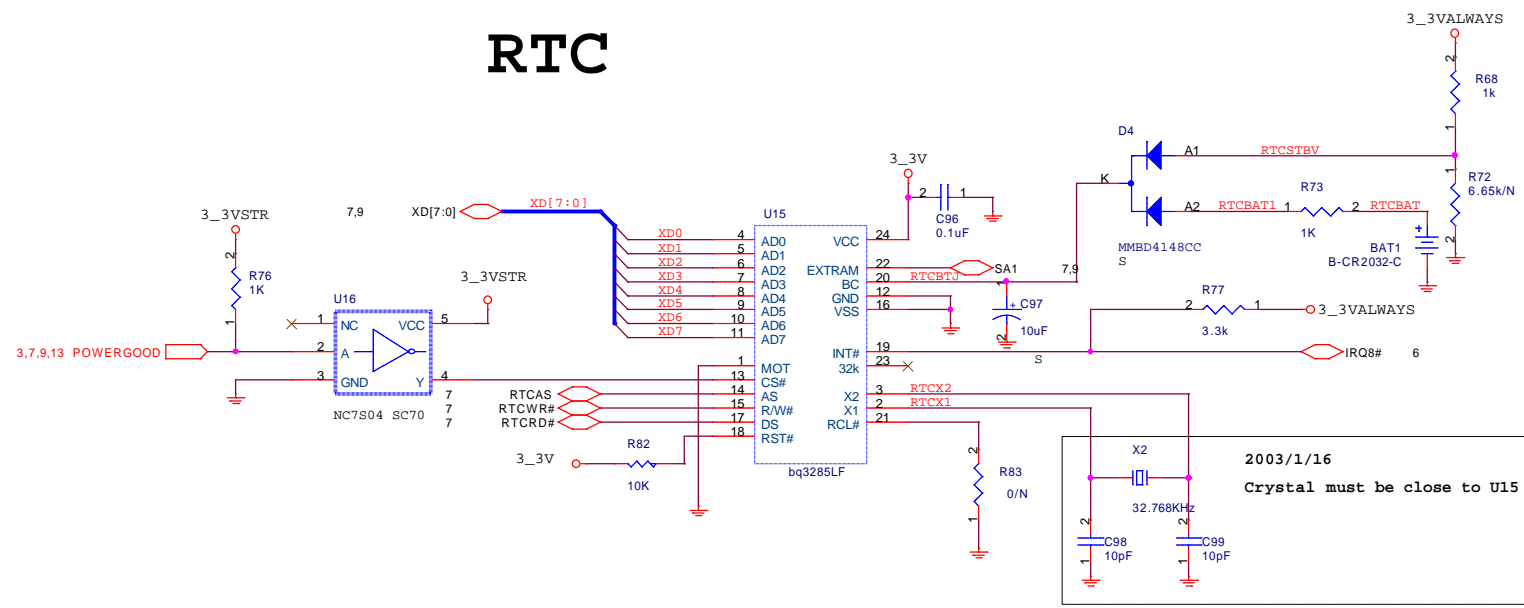
10 IDEPIRQ

10 IDESIRQ

- 12 ACSDATA_OUT
- 12 ACSYNC
- 12 ACBIT_CLK
- 12 ACRESET
- 12 ACSDATA_IN0



RTC



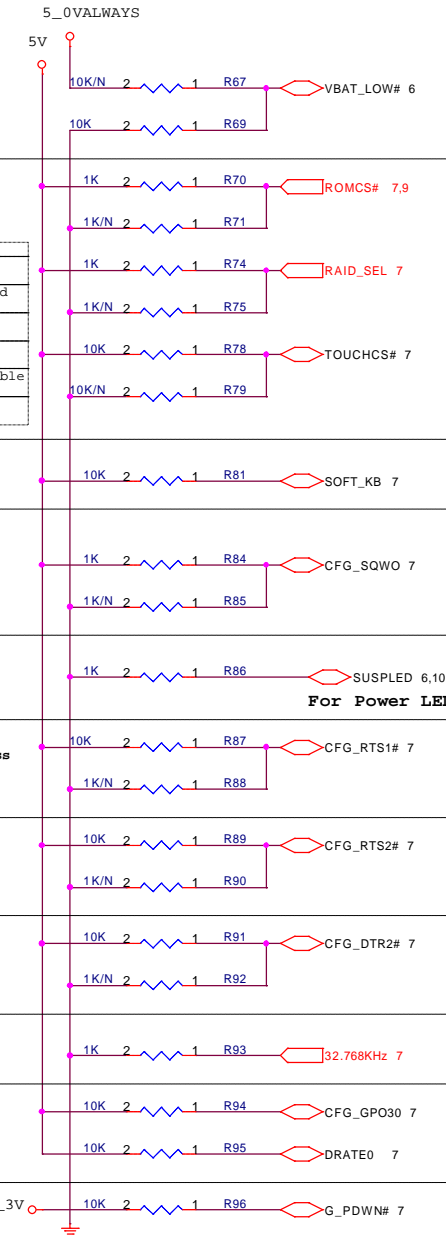
2003/1/16
Crystal must be close to U15

ALI M1535 Strapping Options

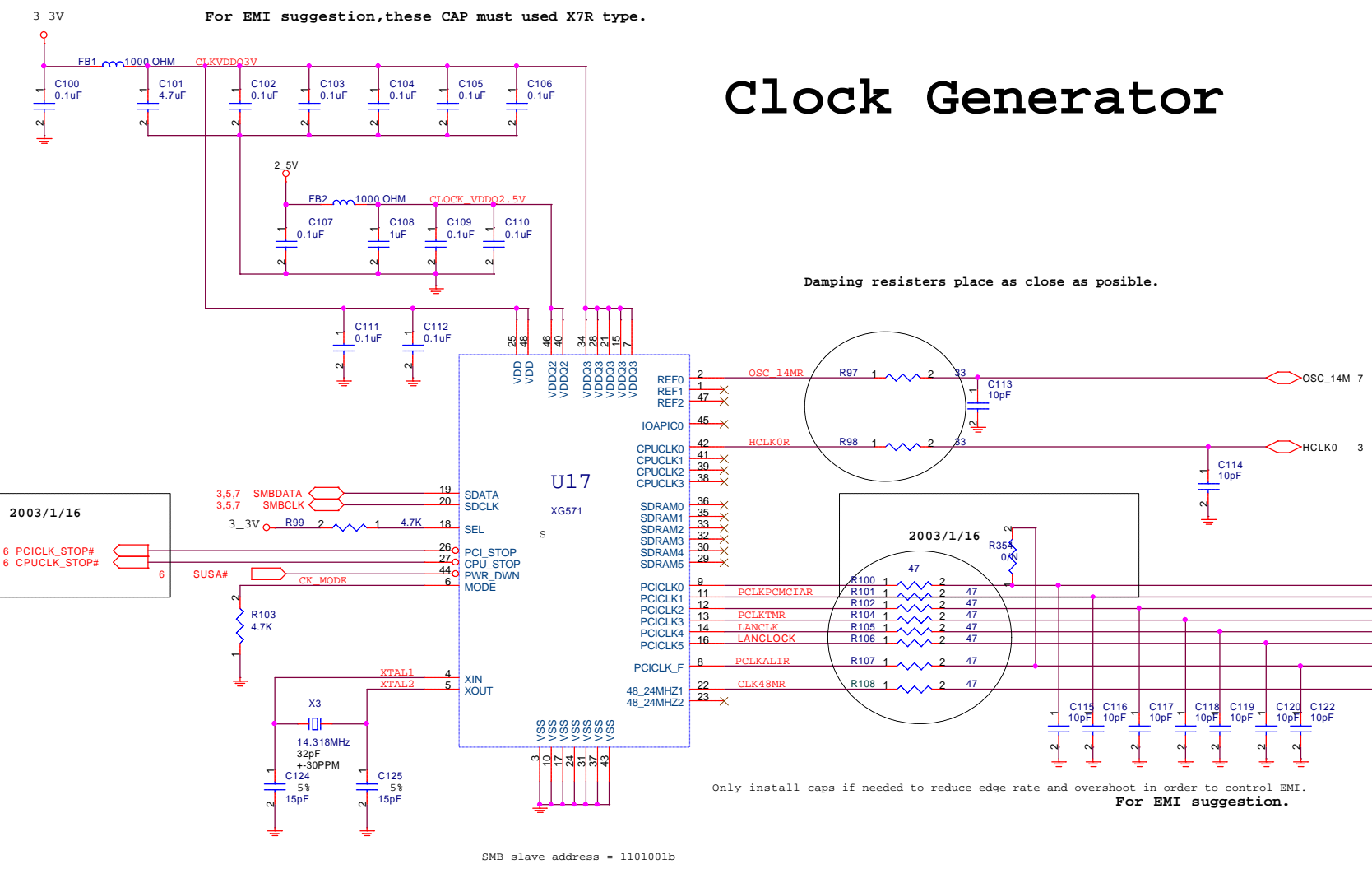
LB#	OFF_PWR[2:1]	Polarity	
L	Active-low		
H	Active-high		

ROMKCS#, AUDAMP_ON, TOUCHCS#	X-Bus Addressing for BIOS ROM
L L X	Reserved: undefined behavior
L H L	8 Mb (1 MB): enable BIOSA19 and BIOSA18
L H H	Reserved: undefined behavior
H L L	4 Mb (512 KB): disable BIOSA19 and enable BIOSA18
H L H	2 Mb (256 KB) or smaller: disable both BIOSA19 and BIOSA18
H H X	Use LPC bus instead of X Bus

PCSI#	IOCHRDY and AEN Support on X Bus	
L	Pin M17 = IOCHRDY, pin N18 = AEN	
H	Pin M17 = GPI24, pin N18 = GPO30	
SQWO	CPU Mode	
L	Pentium: CPURST is active-high Pin D12 = GPO32	
H	Pentium II/III: CPURST is active-low Pin D12 = SLEEP#	
SPLD	Power State When Power is Restored After Mechanical Off (ACPI G3)	
L	Soft off (ACPI S5)	
H	On (ACPI S0)	
RTS1#	Super I/O Config Register Base Address	
L	370h	
H	3F0h	
RTS2#	Internal Keyboard Controller Support	
L	Disable	
H	Enable	
DTR2#	Internal Keyboard Controller Mode	
L	AT Mode	
H	PS/2 Mode	
32.768KHz	32 kHz Input Test Mode	
L	Normal operation	
H	Test mode	
GPO30, GPO29	Reserved	
H	Normal operation	
All others	Undefined behavior	
GPIR#	Reserved	
L	Undefined behavior	
H	Normal operation	
PHOLD#	Reserved	
L	Undefined behavior	
H	Normal operation	

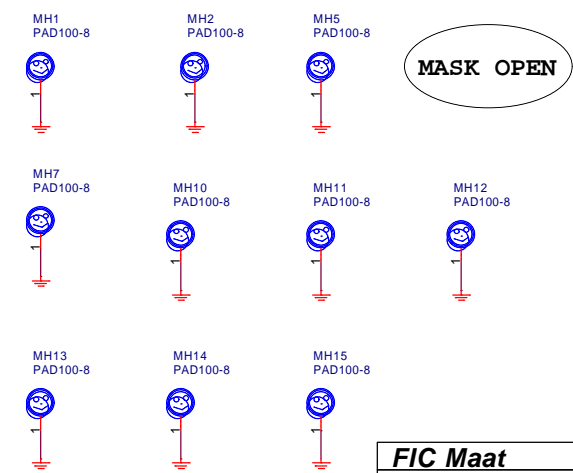


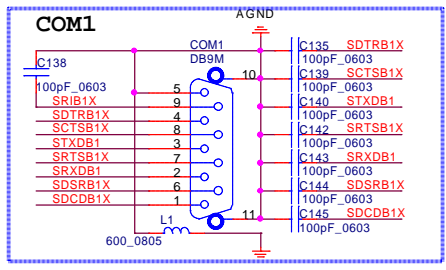
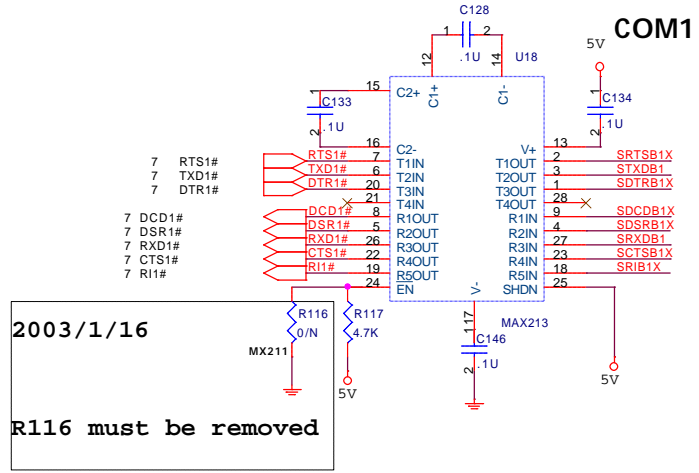
Clock Generator



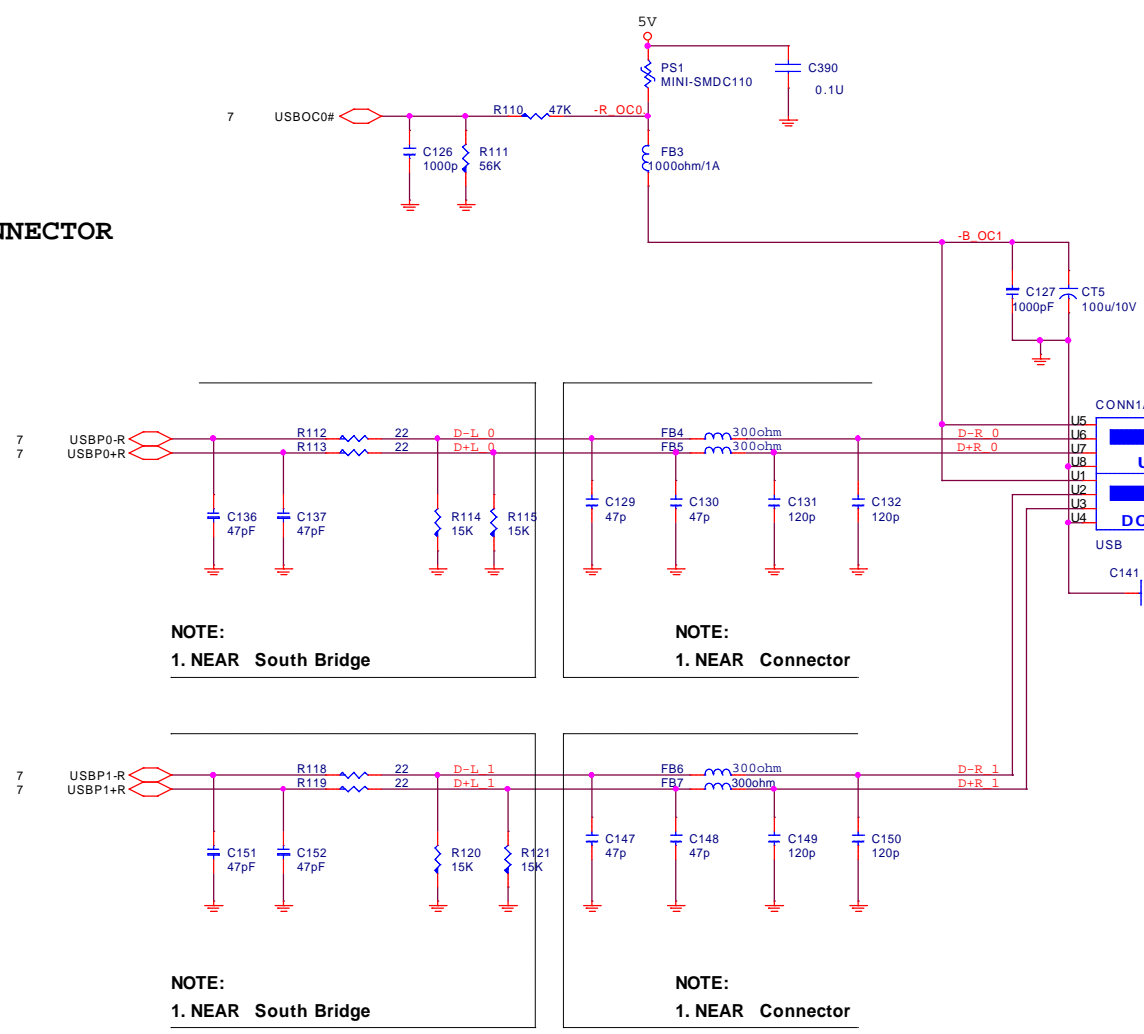
Damping resistors place as close as possible.

Only install caps if needed to reduce edge rate and overshoot in order to control EMI.
For EMI suggestion.

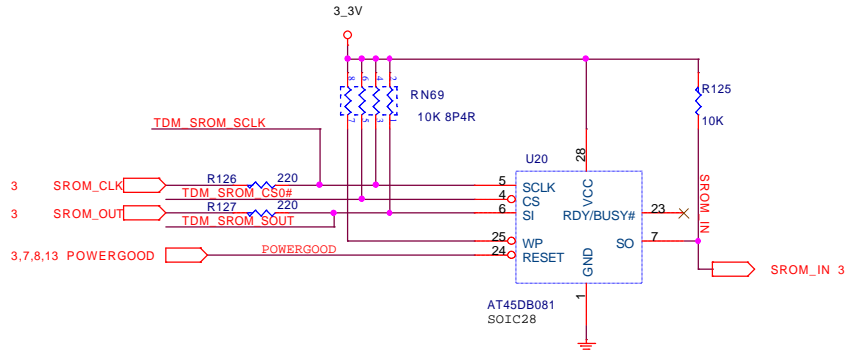




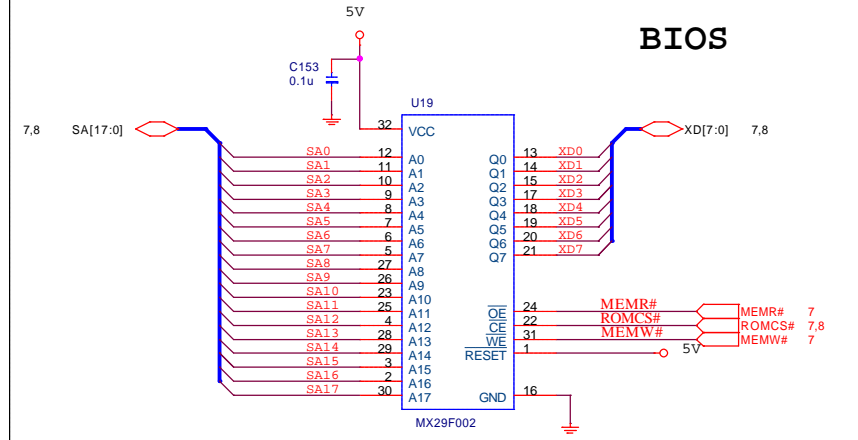
USB_CONNECTOR



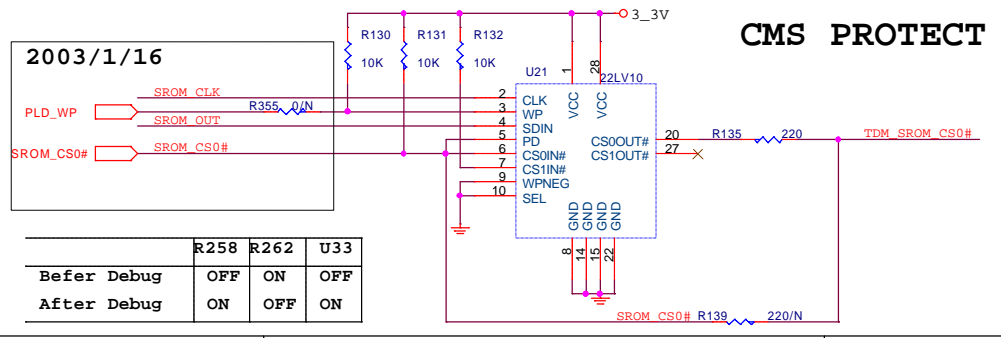
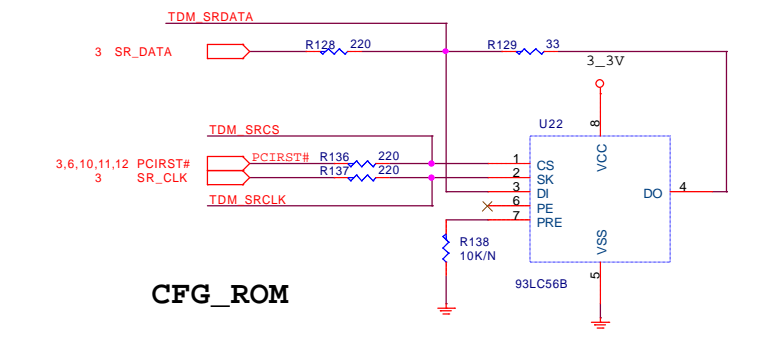
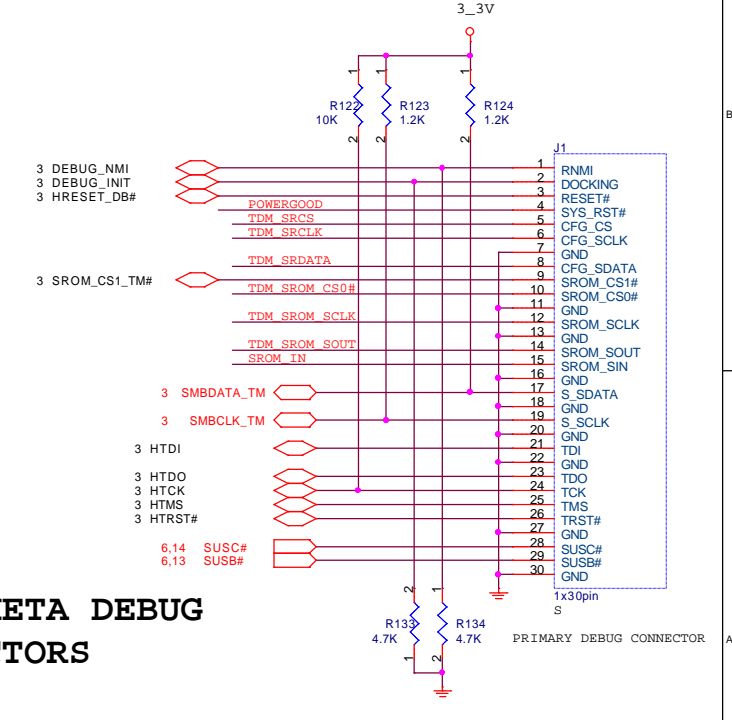
CMS



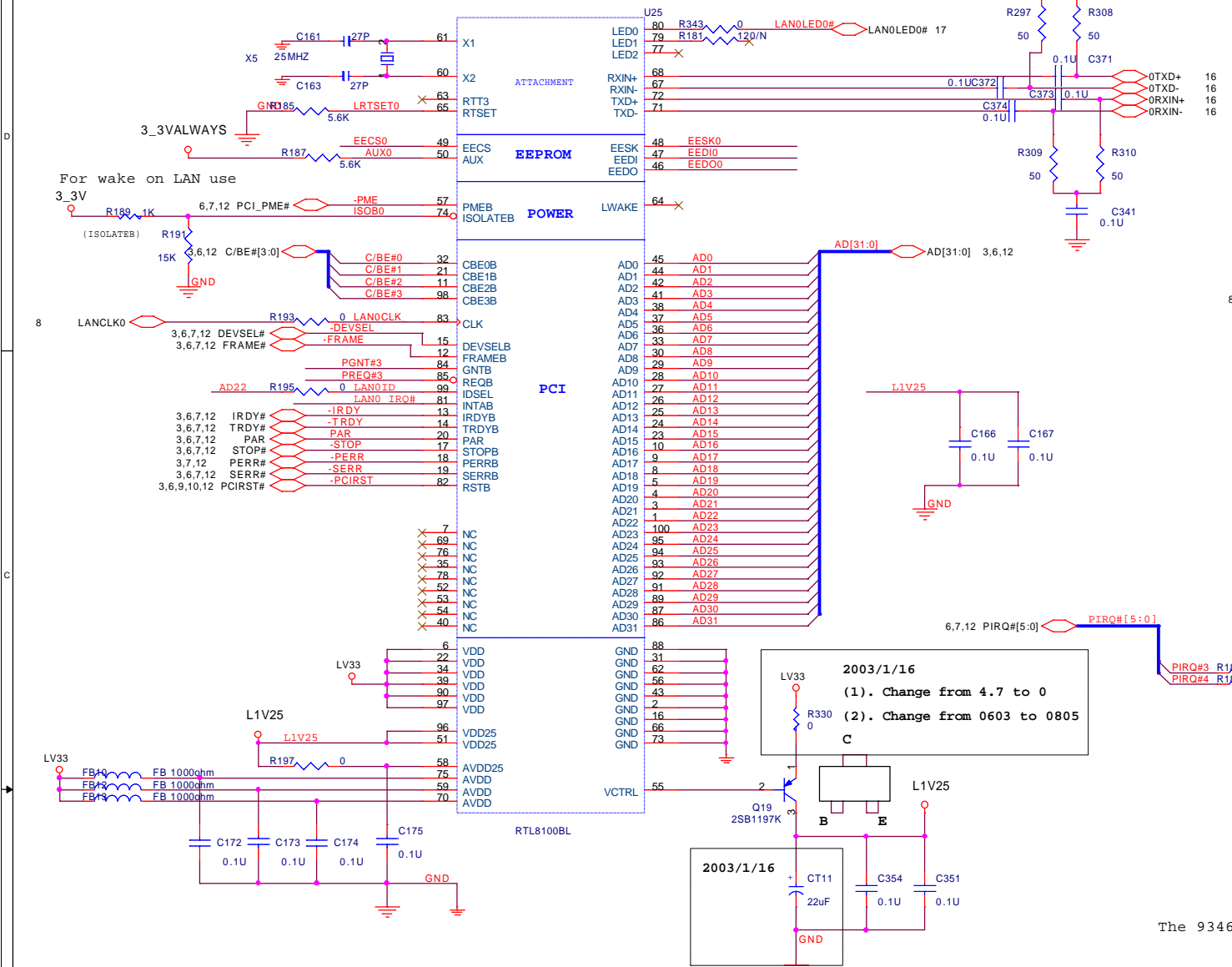
BIOS



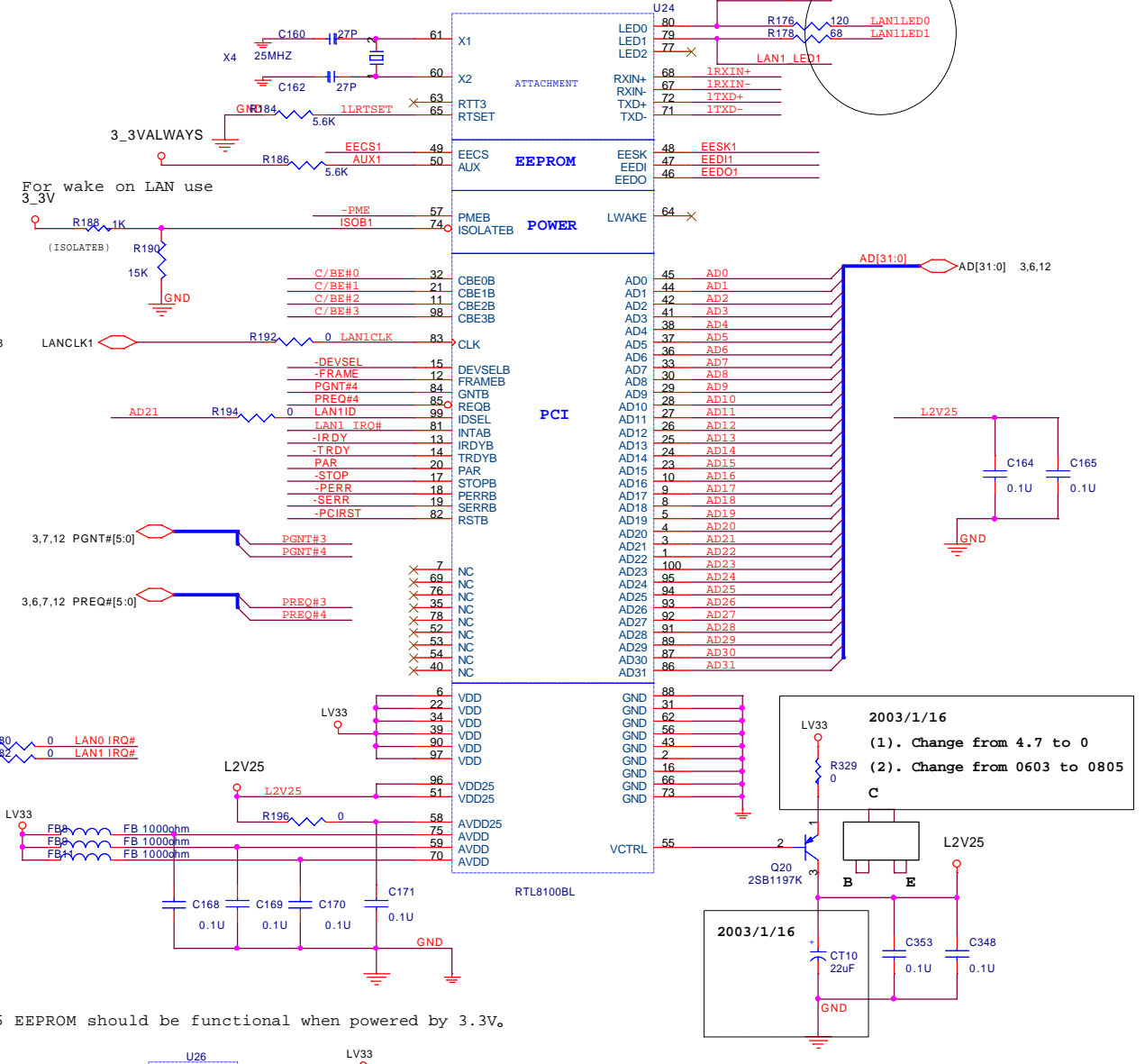
TRANSMETA DEBUG CONNECTORS



LAN-1

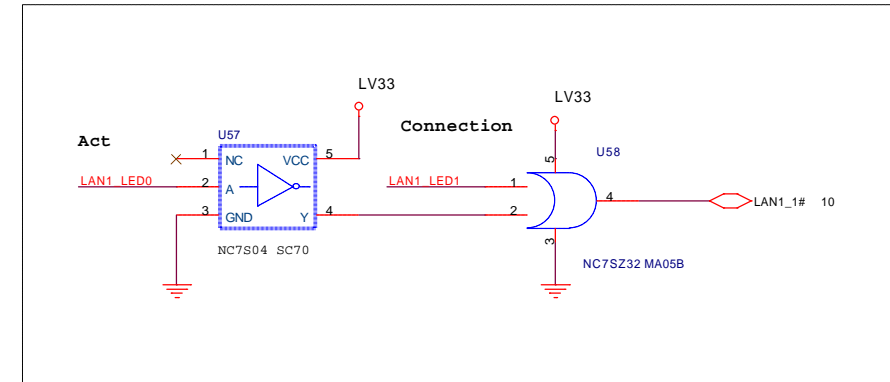
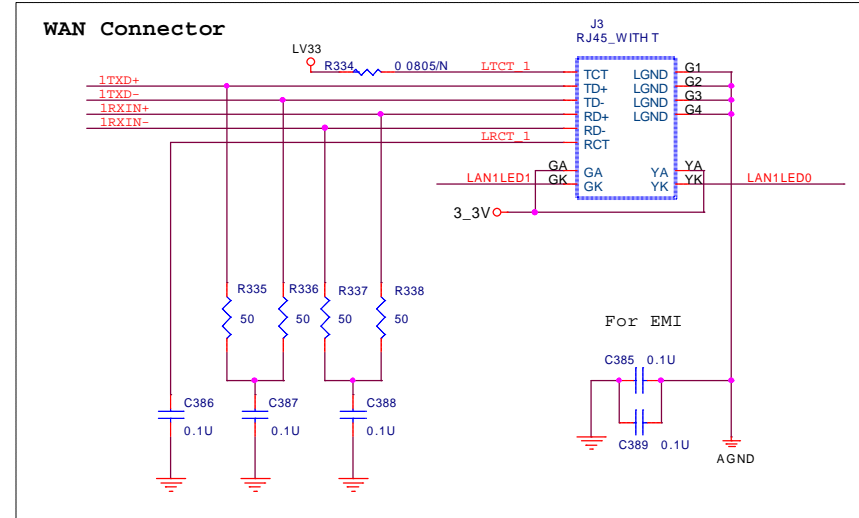
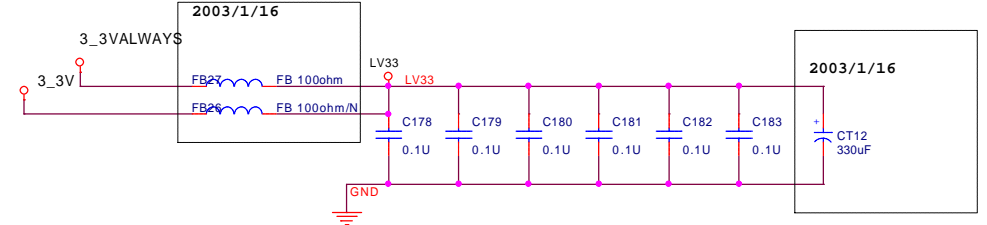
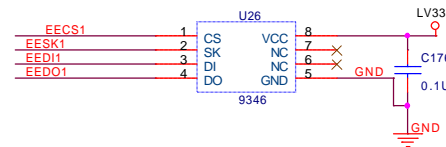
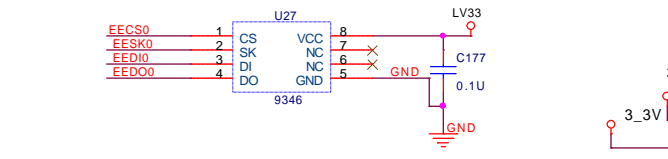


LAN-0

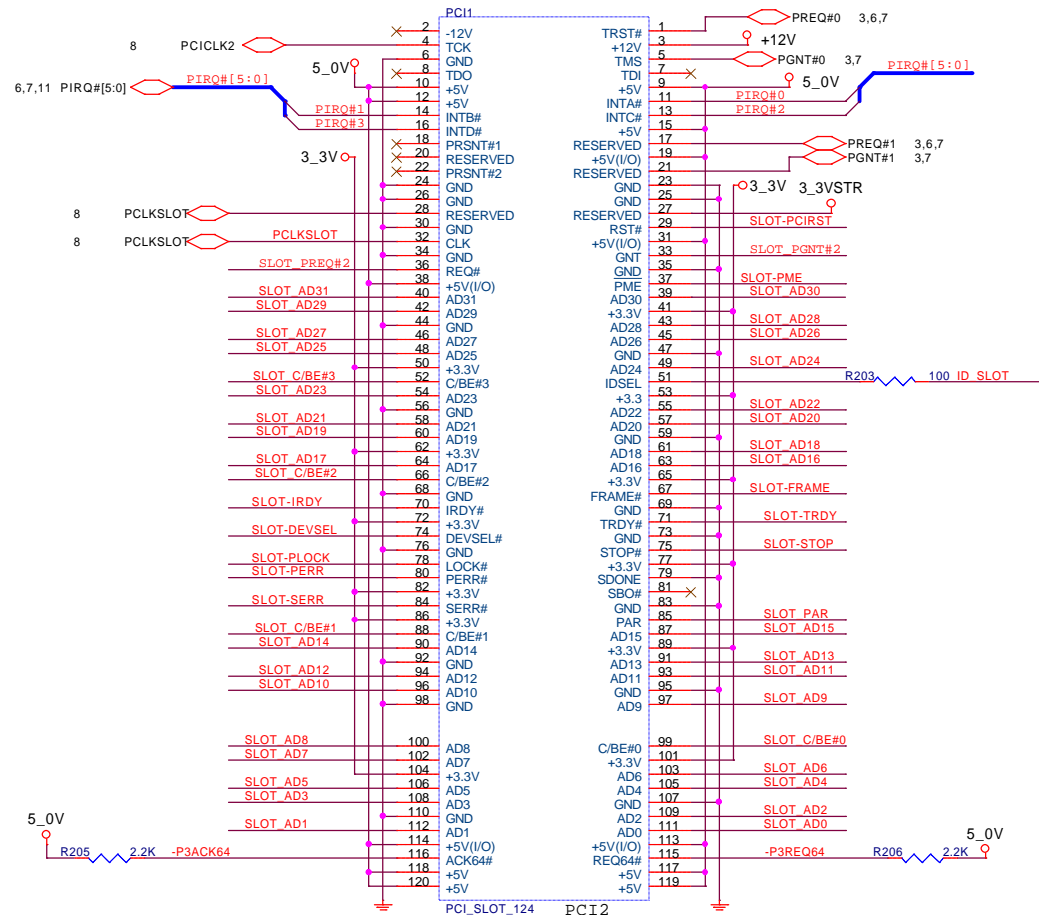


The 9346 EEPROM should be functional when powered by 3.3V.

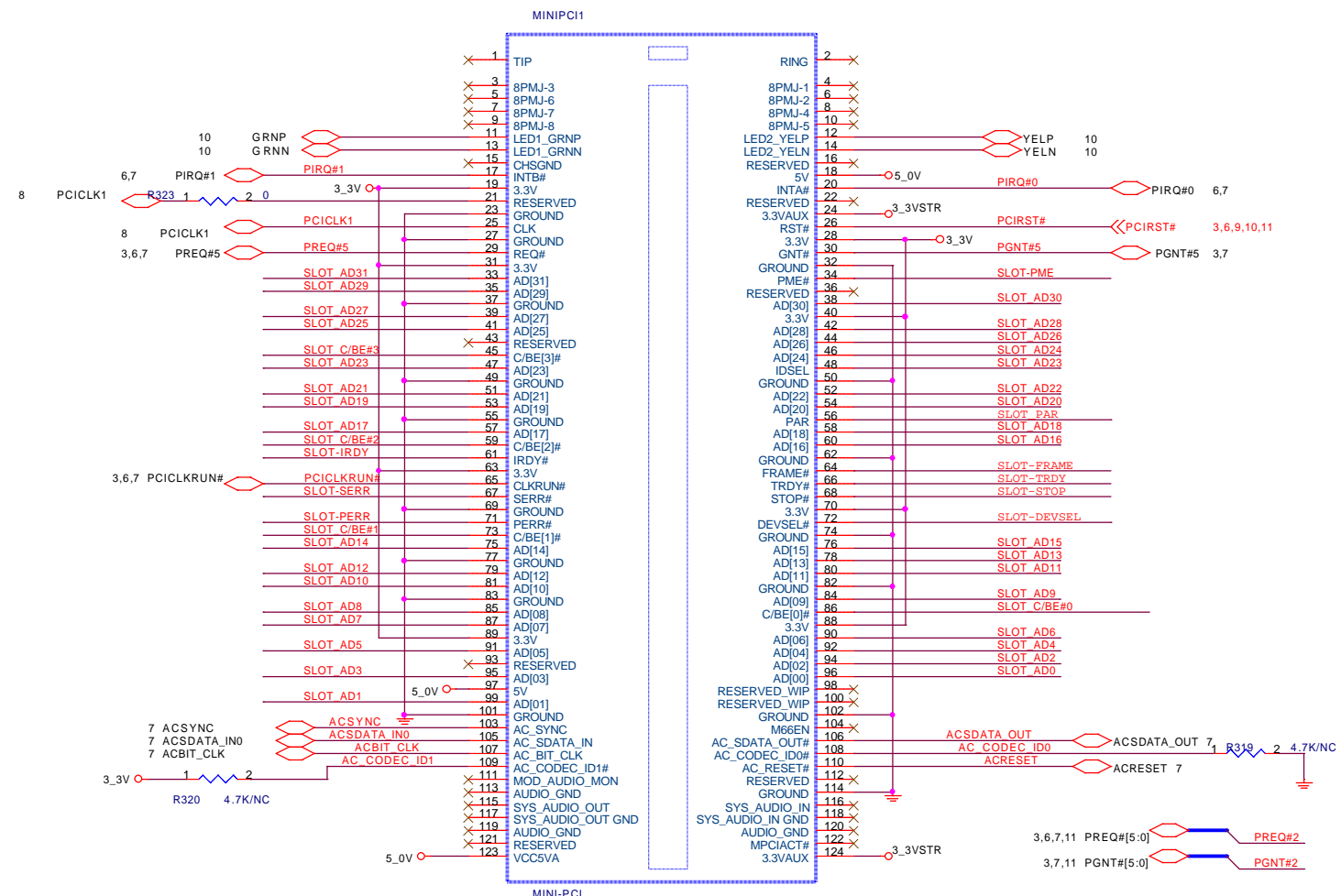
The 9346 EEPROM should be functional when powered by 3.3V.



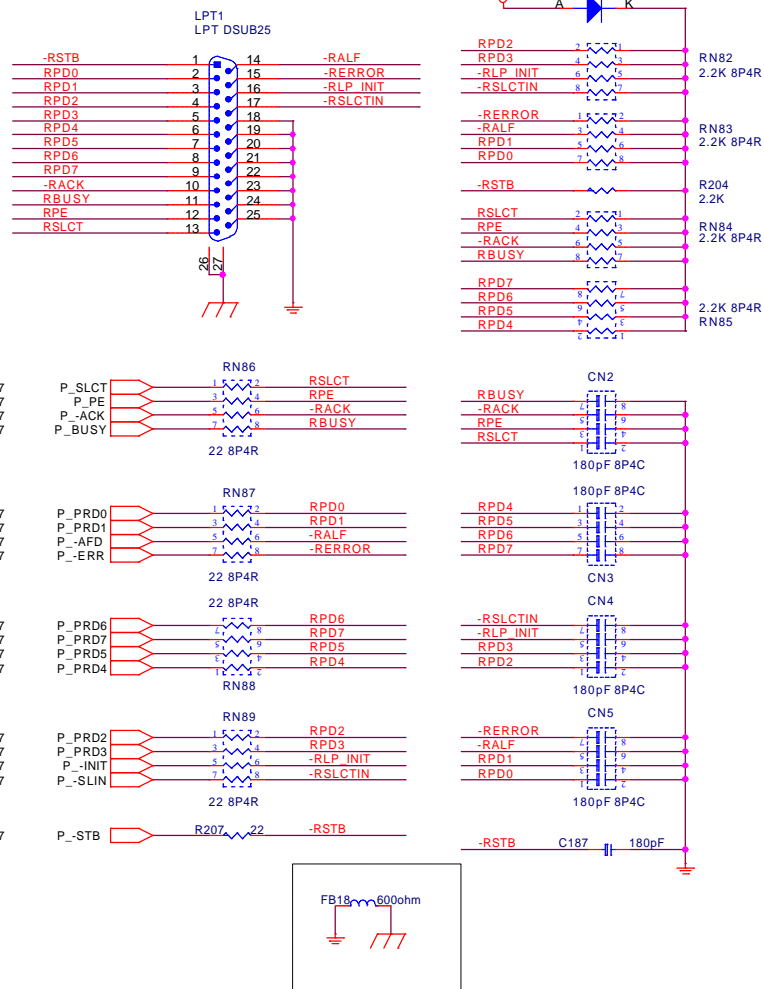
PCI



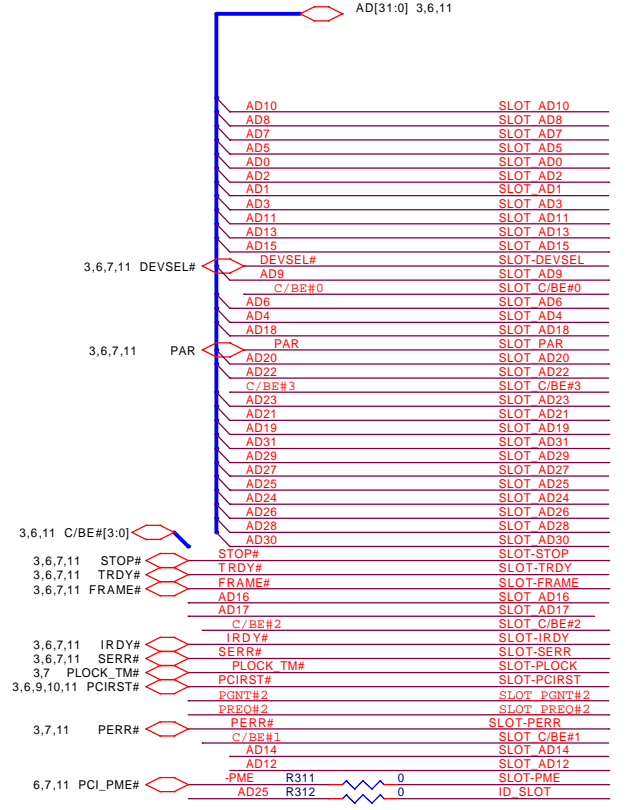
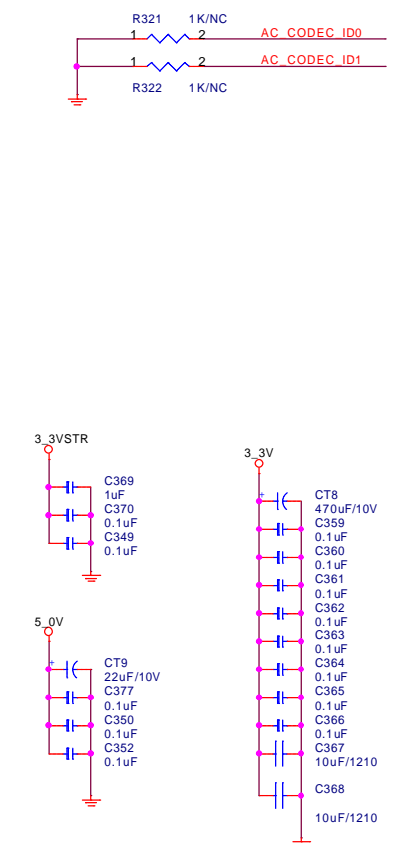
MINI PCI SLOT



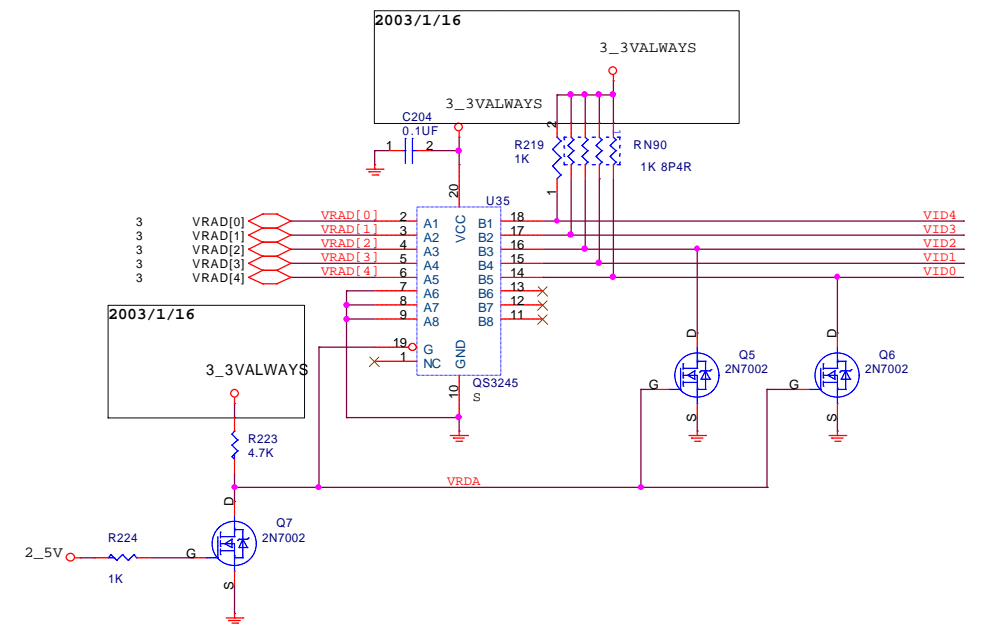
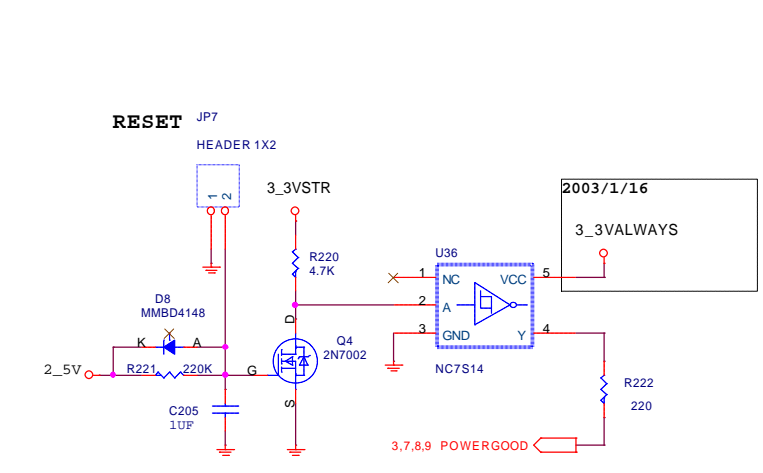
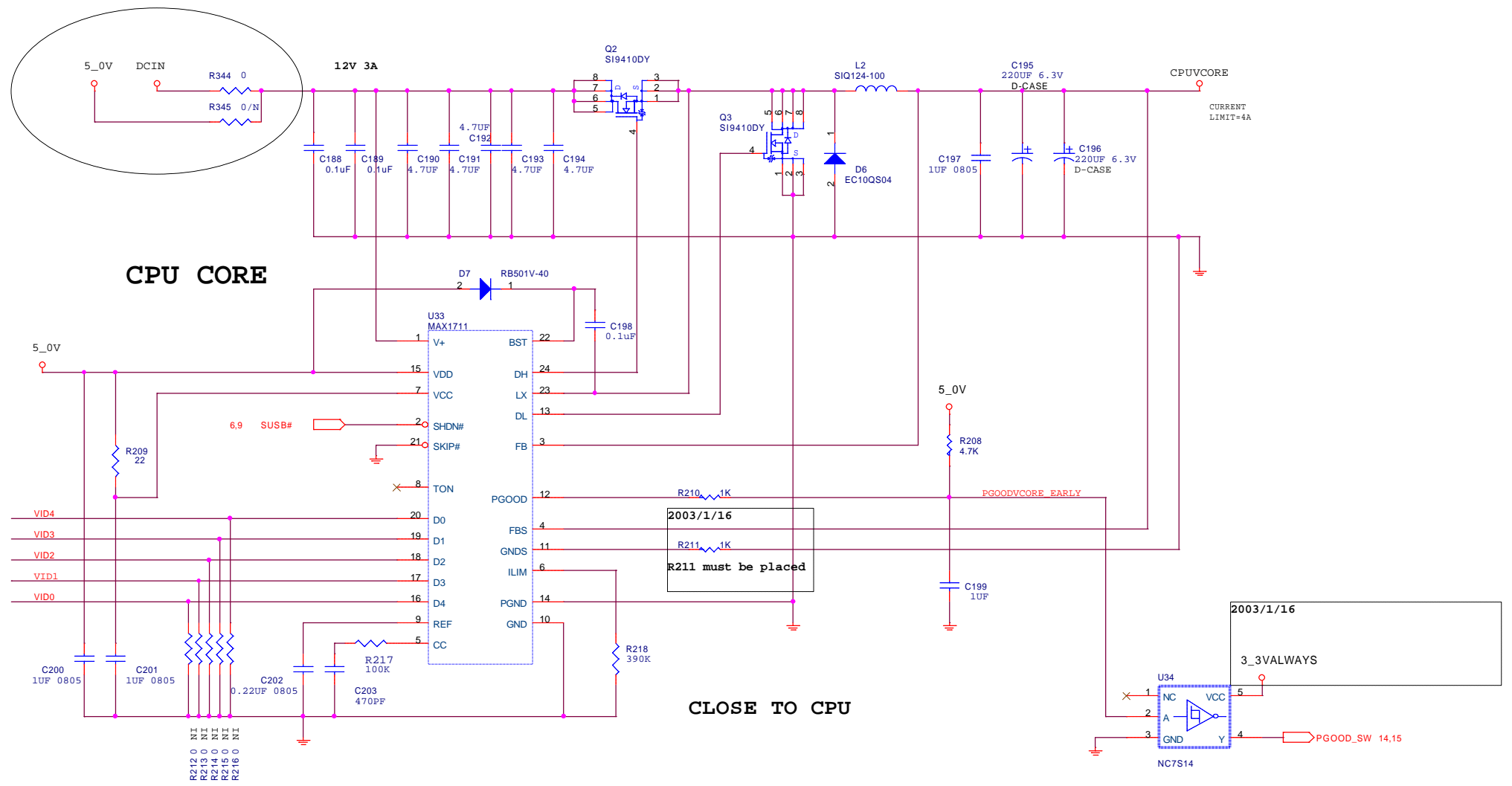
LPT

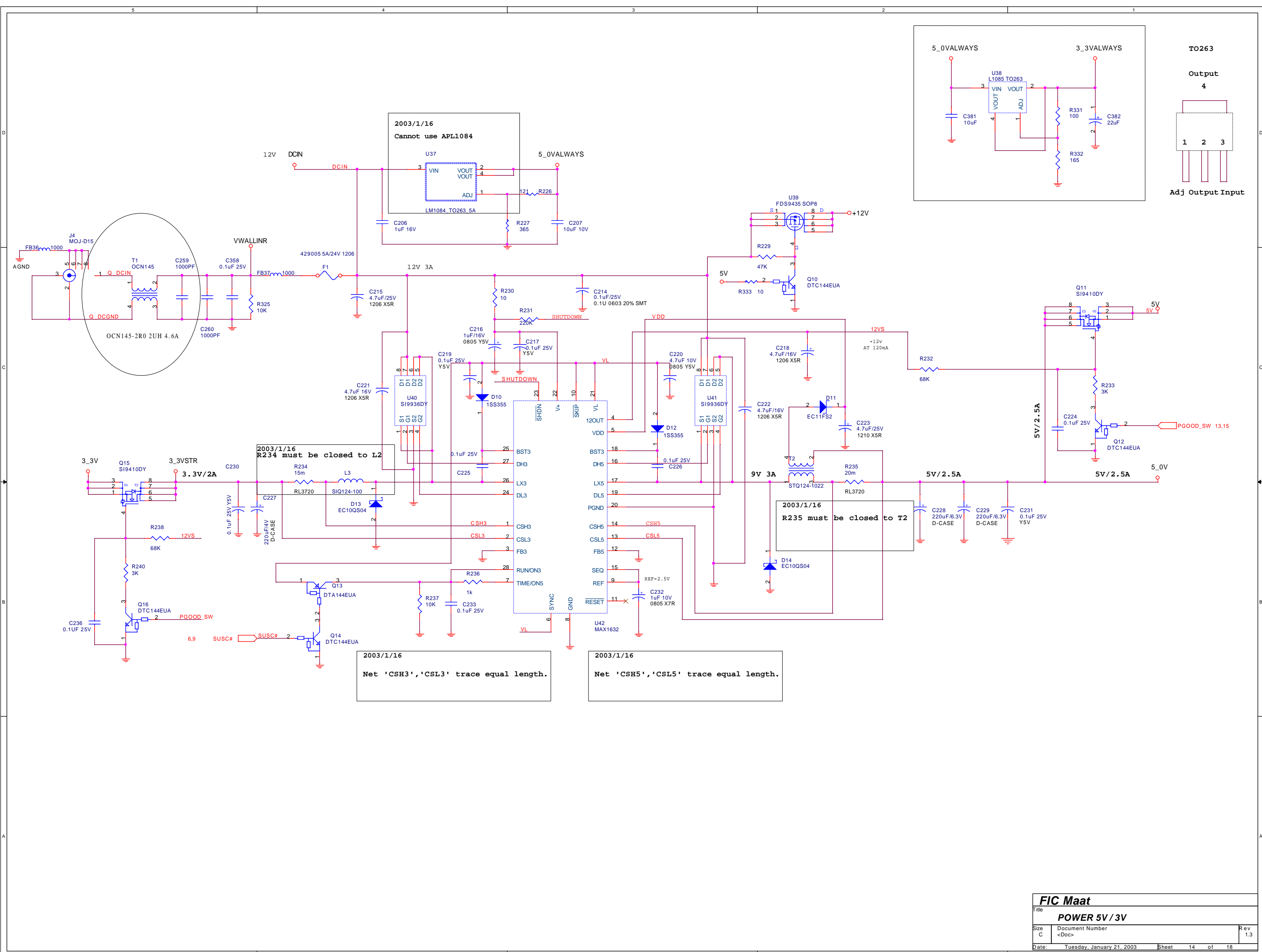


HEIGHT IS 4.0mm



FIC Maat			
Title	PCI Slot / LPT PORT		
Size	Document Number		Rev
C	<Doc>		1.3
Date:	Tuesday, January 21, 2003	Sheet	12 of 18

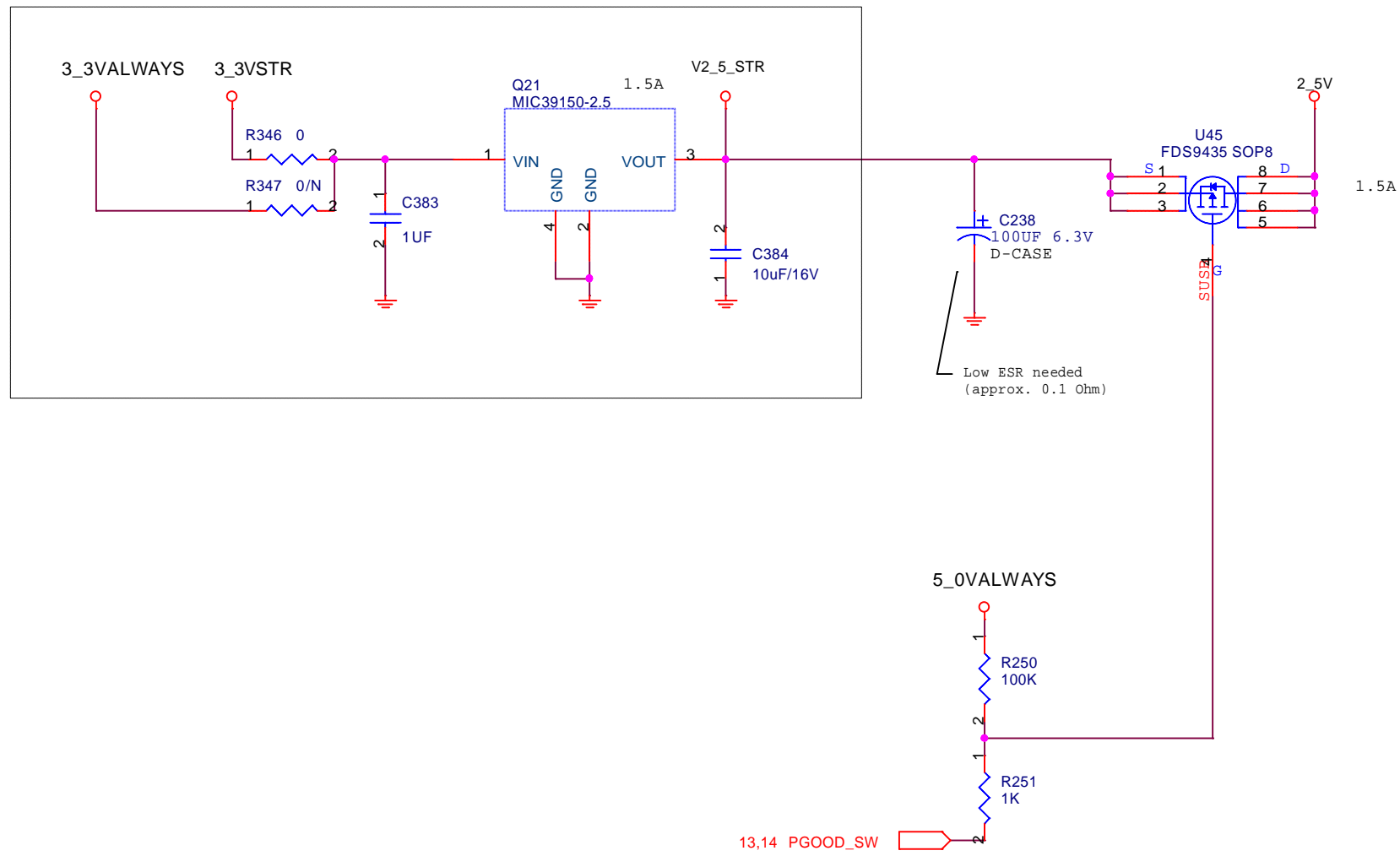




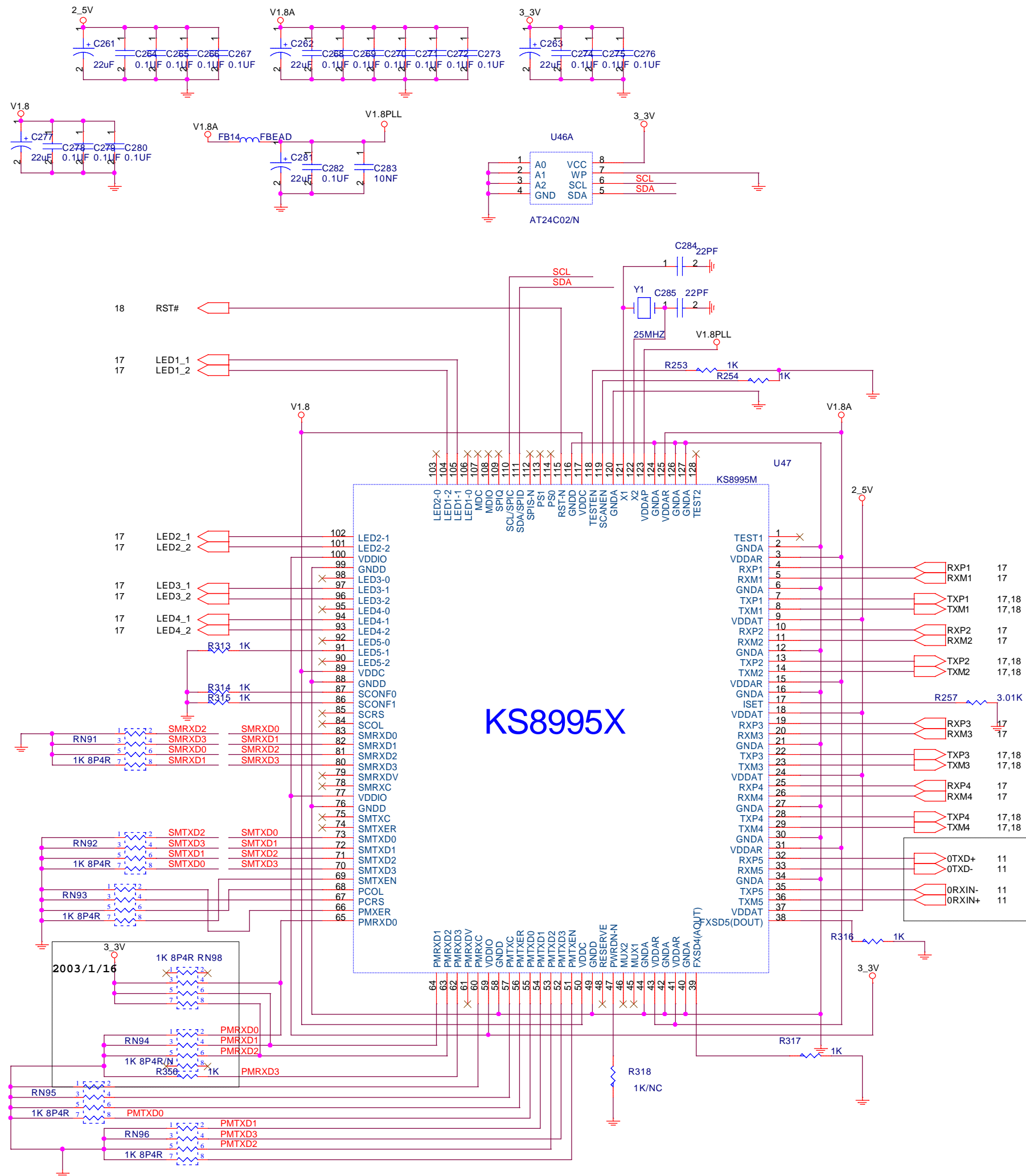
2003/1/16
Net 'CSH3', 'CSL3' trace equal length.

2003/1/16
Net 'CSH5', 'CSL5' trace equal length.

For DDR VOLATGE



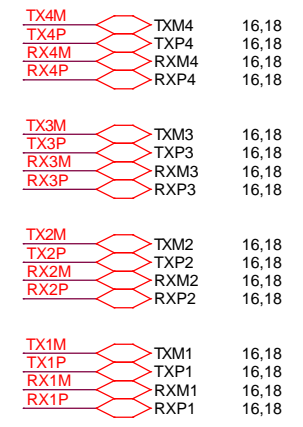
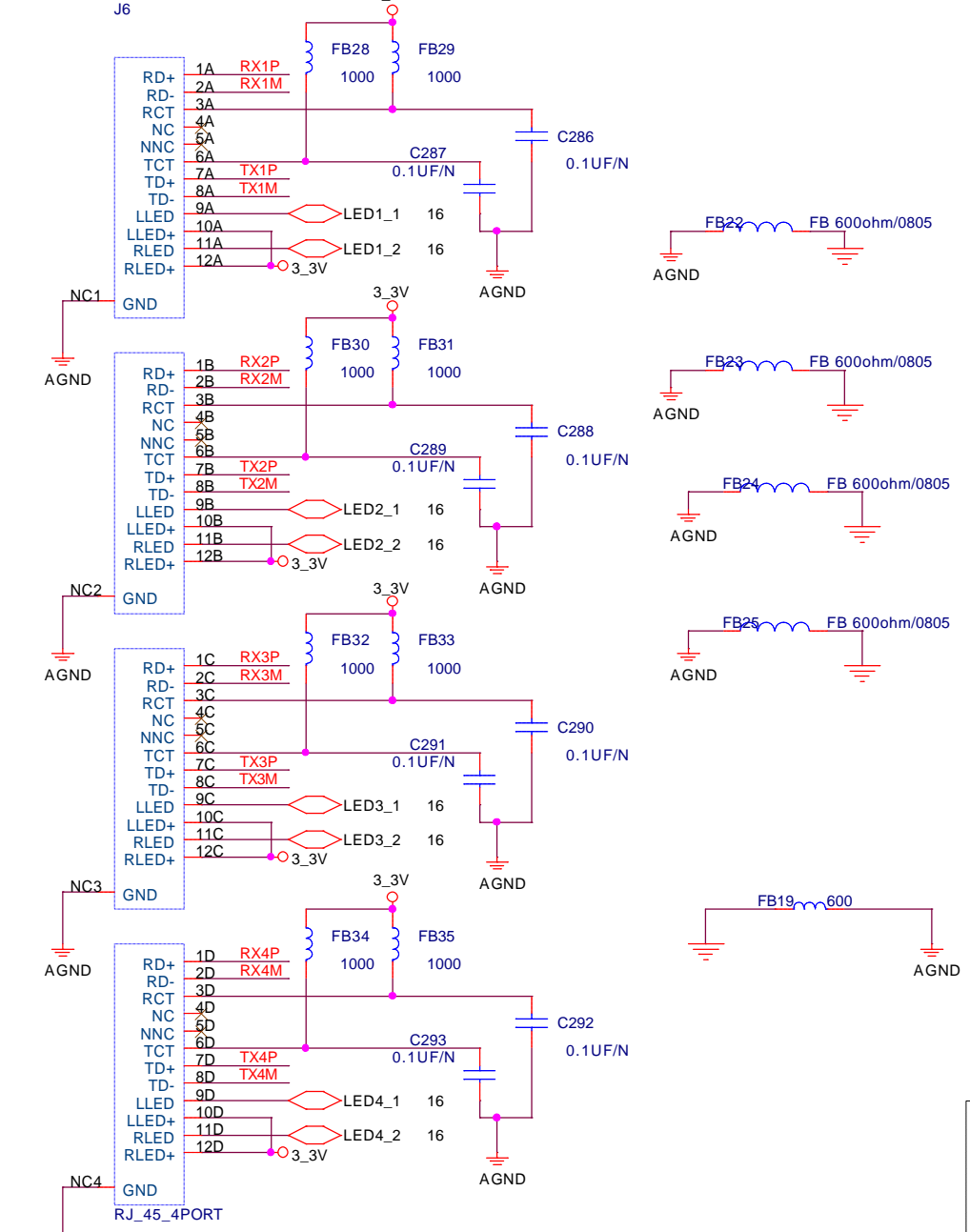
FIC Maat		
Title		
POWER 2.5V		
Size	Document Number	Rev
B	<Doc>	1.3
Date:	Tuesday, January 21, 2003	Sheet 15 of 18



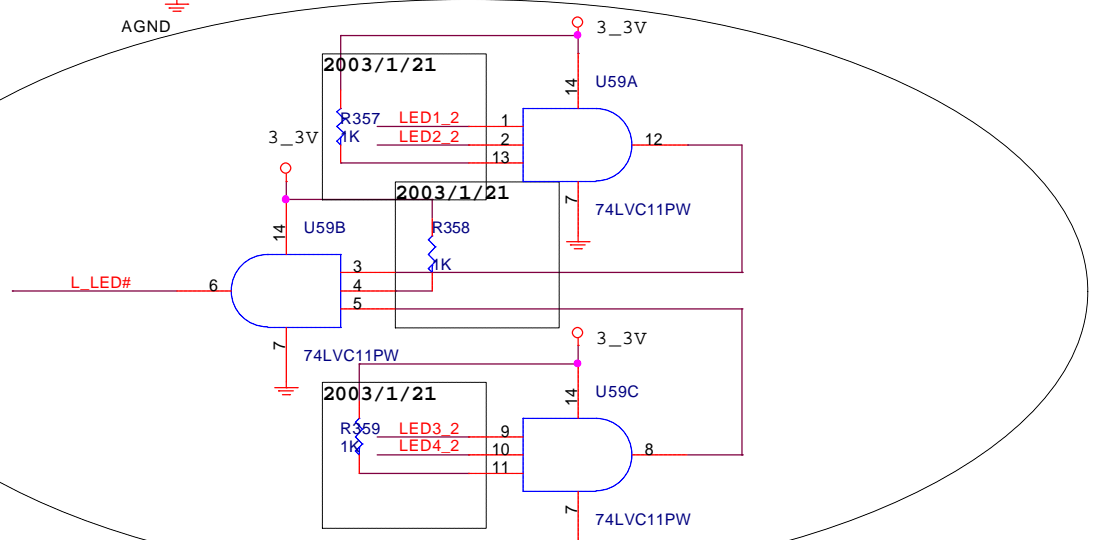
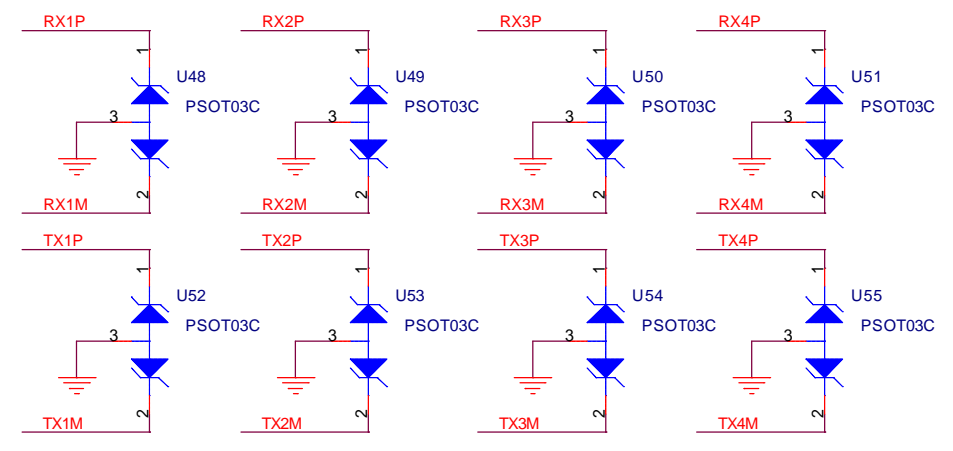
KS8995X

FIC Maat		
Title KS8995M 4 port		
Size	Document Number	Rev 1.3
Date:	Tuesday, January 21, 2003	Sheet 16 of 18

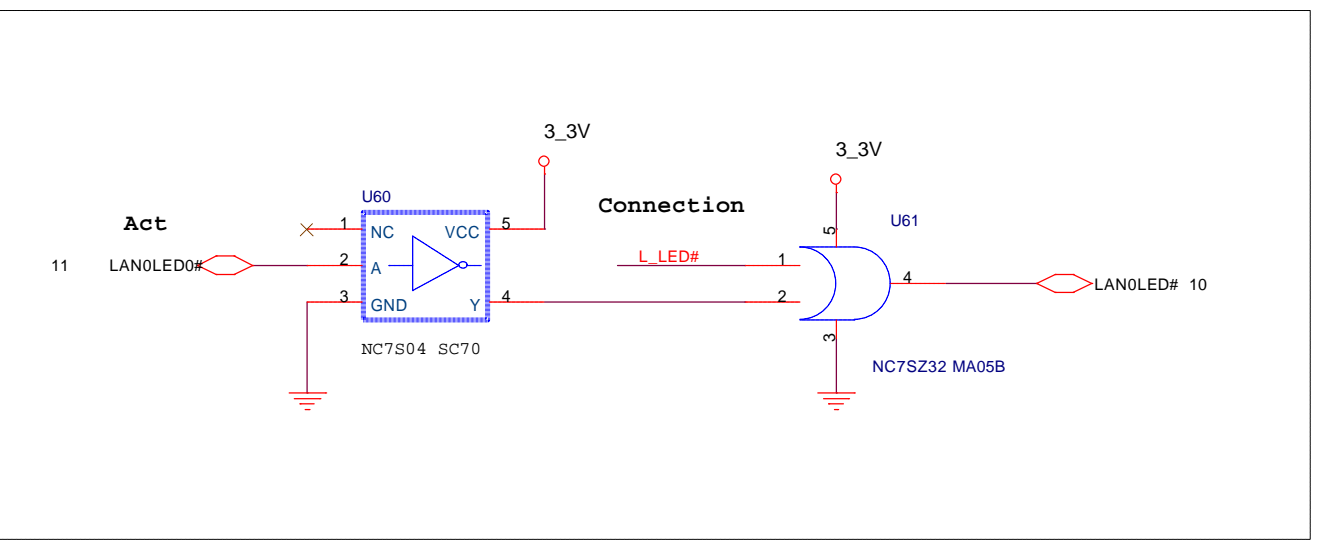
BEAD For EMI Suggestion



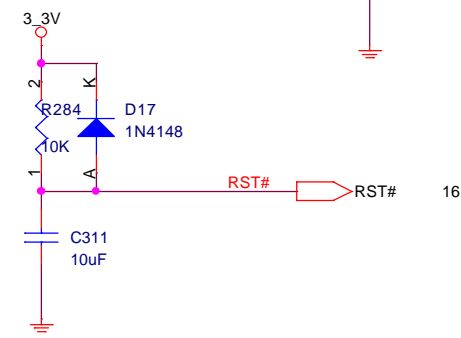
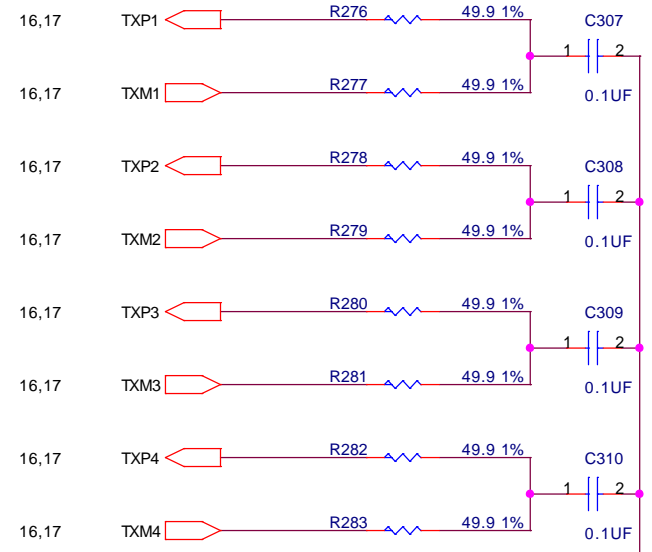
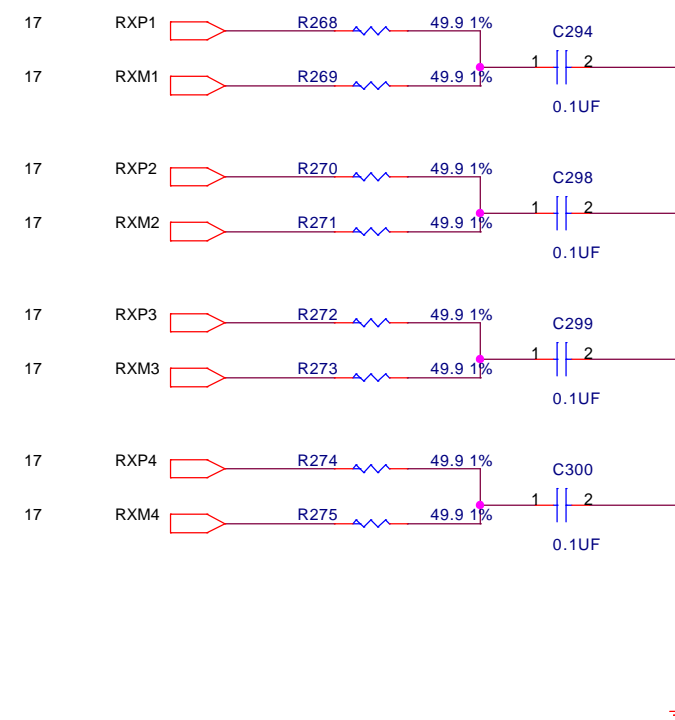
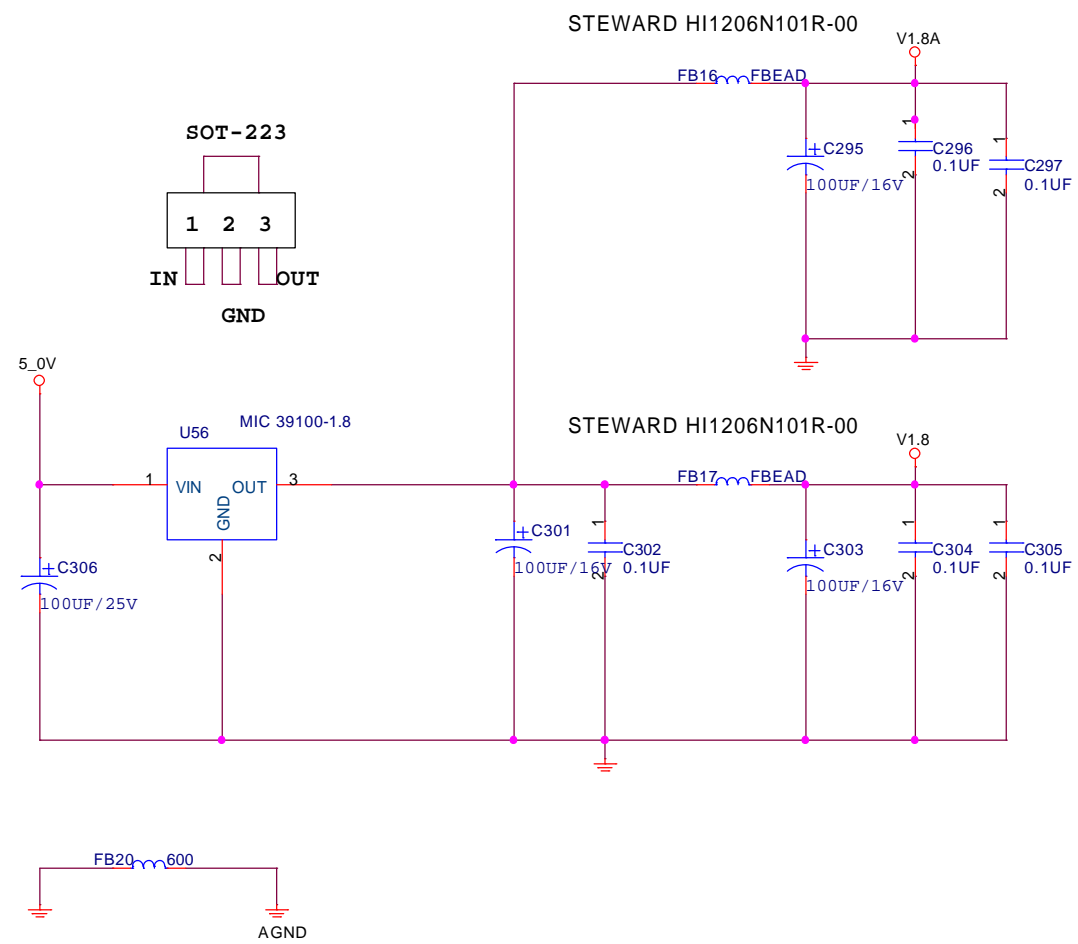
PROTEK TVS ESD PROTECTION DEVICE



Peter suggests pull high with resistor



FIC Maat		
Title KS8995M 4 port		
Size	Document Number	Rev 1.3
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FIC Maat		
Title KS8995M 4 port		
Size	Document Number	Rev 1.3
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