

1

2

3

4

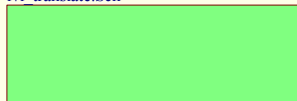
D

D

FPGA_IF
FPGA_IF.Sch



lvl_translate
lvl_translate.Sch



USB_VIP1_SD
USB_VIP1_SD.Sch



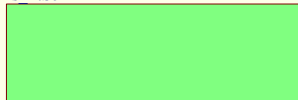
one_wire
one_wire.Sch



C

C

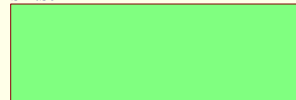
rs_if
rs_if.Sch



ADC_DAC
ADC_DAC.Sch



SPI
SPI.Sch



B

B

A

A

Title		
CIII General Purpose Interface Board - Top sheet		
Size	Number	Revision
A4		2.0
Date:	12-Dec-2008	Sheet 1 of 8
File:	D:\CIII Expansion Board\Protel\CIII Expansion Board Rev1.ddb	

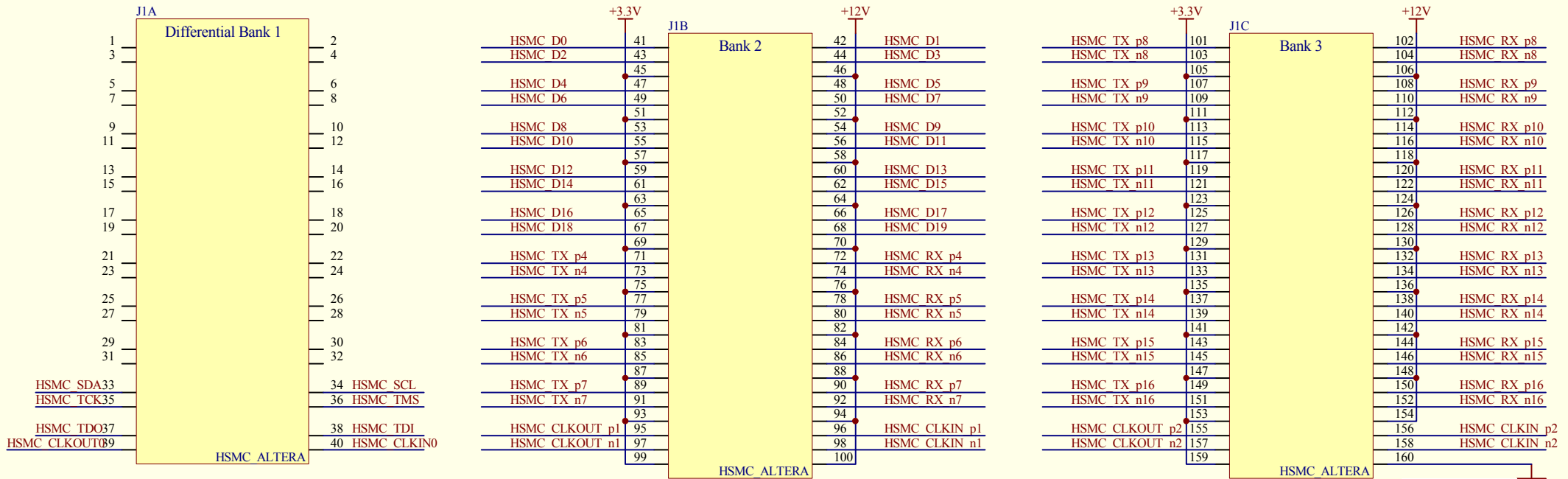
1

2

3

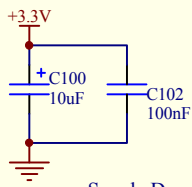
4

CIII Starter Board Interface Connector - J1

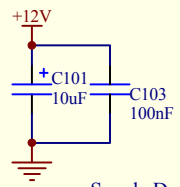


Note these names are as given on the CIII datasheet. For example, clkout will be a clkout from the starter board, not clkout from this board.

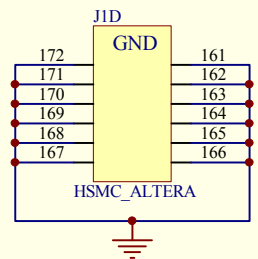
This is the HSMC_Prsnt_N signal, which is pulled to ground so as to activate an LED on host board when connected.



Supply Decoupling

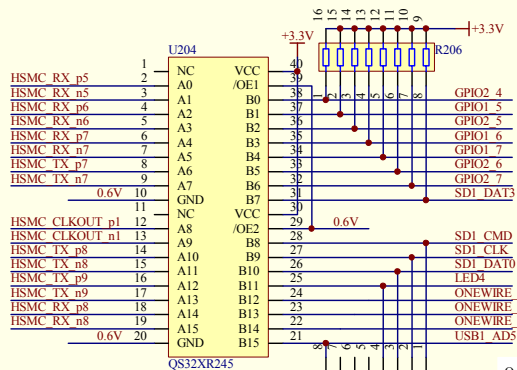
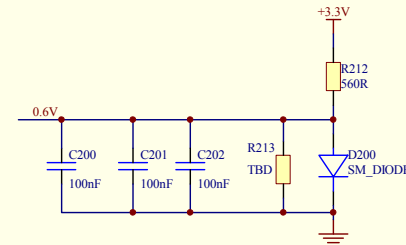
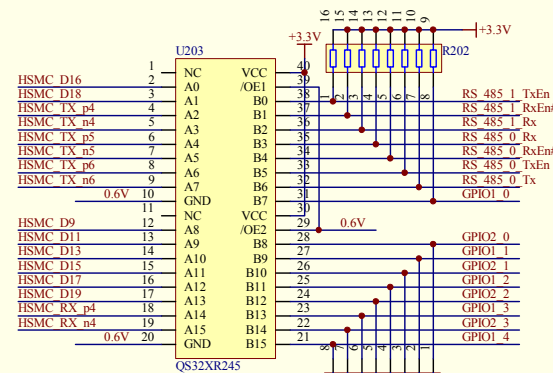
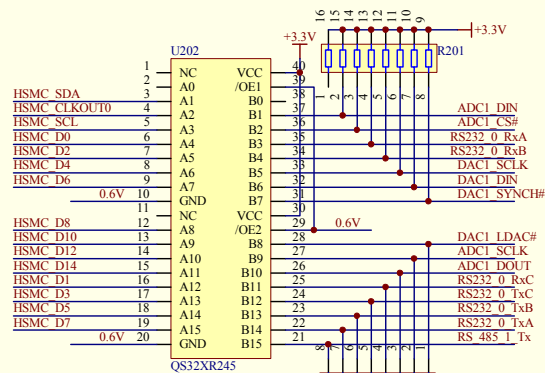


Supply Decoupling

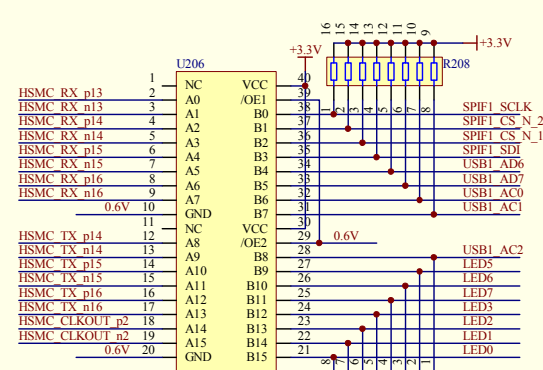
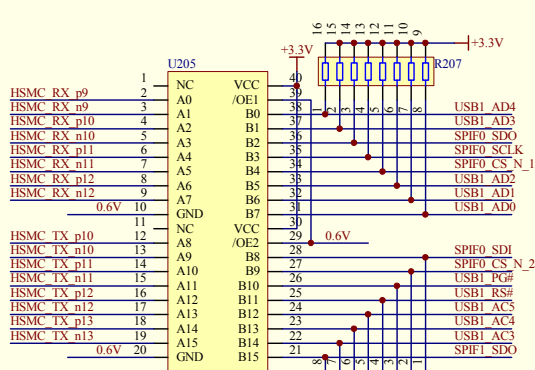


N.B. Board Mounting Holes on Starter Board and on this Expansion board are tied to GND.

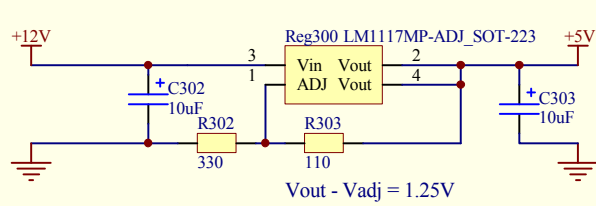
Title		
CIII Expansion Board FPGA Interface (HSMC Connector)		
Size	Number	Revision
A4		2.0
Date:	12-Dec-2008	Sheet 2 of 8
File:	D:\CIII Expansion Board\Protel\CIII Expansion Board Rev1.ddb	



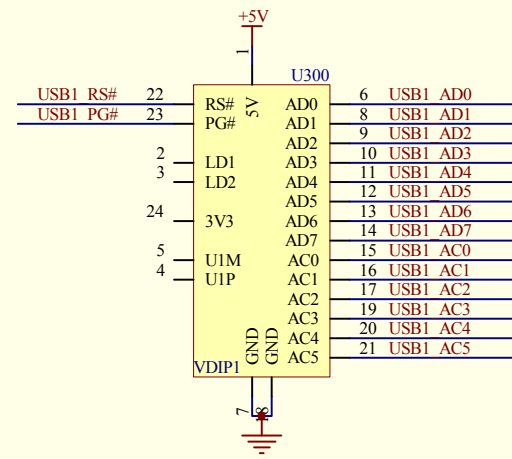
Onewire inputs are pulled to +3.3V or +5V through pullup resistors going to header J405



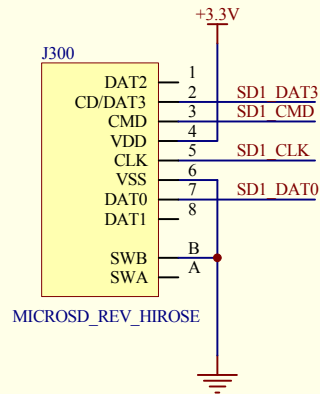
Title		
Quickswitch Level Shifting FPGA Interface		
Size	Number	Revision
A3		2.0
Date:	12-Dec-2008	Sheet of 3
File:	D:\CUI Expansion Board\Protel\CUI Expansion Board Rev1.ddb	



FTDI VDIP1 Socket



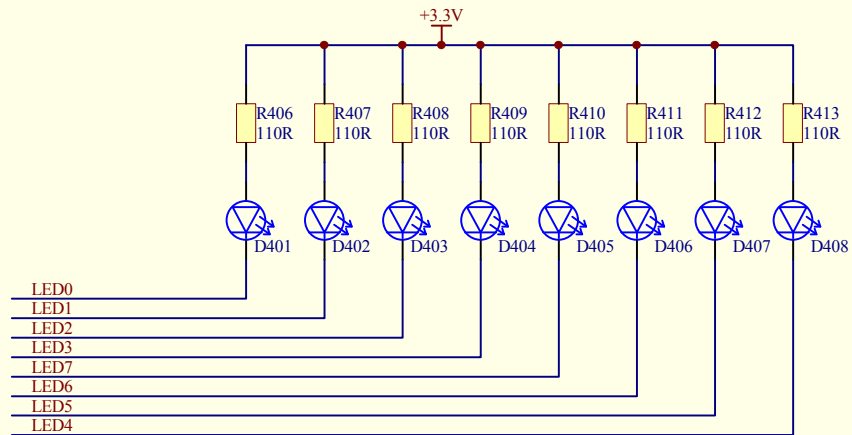
Pullups implemented @ quickswitch



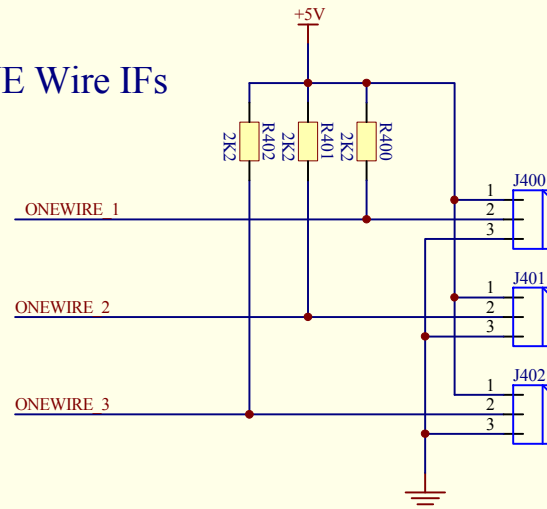
Mini SD Socket

Title		
USB Daughter Board Header & Mini SD Card Slot		
Size	Number	Revision
A4		2.0
Date:	12-Dec-2008	Sheet 4 of 8
File:	D:\CIII Expansion Board\Protel\CIII Expansion Board Rev1.ddb	

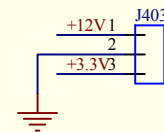
LEDs



ONE Wire IFs



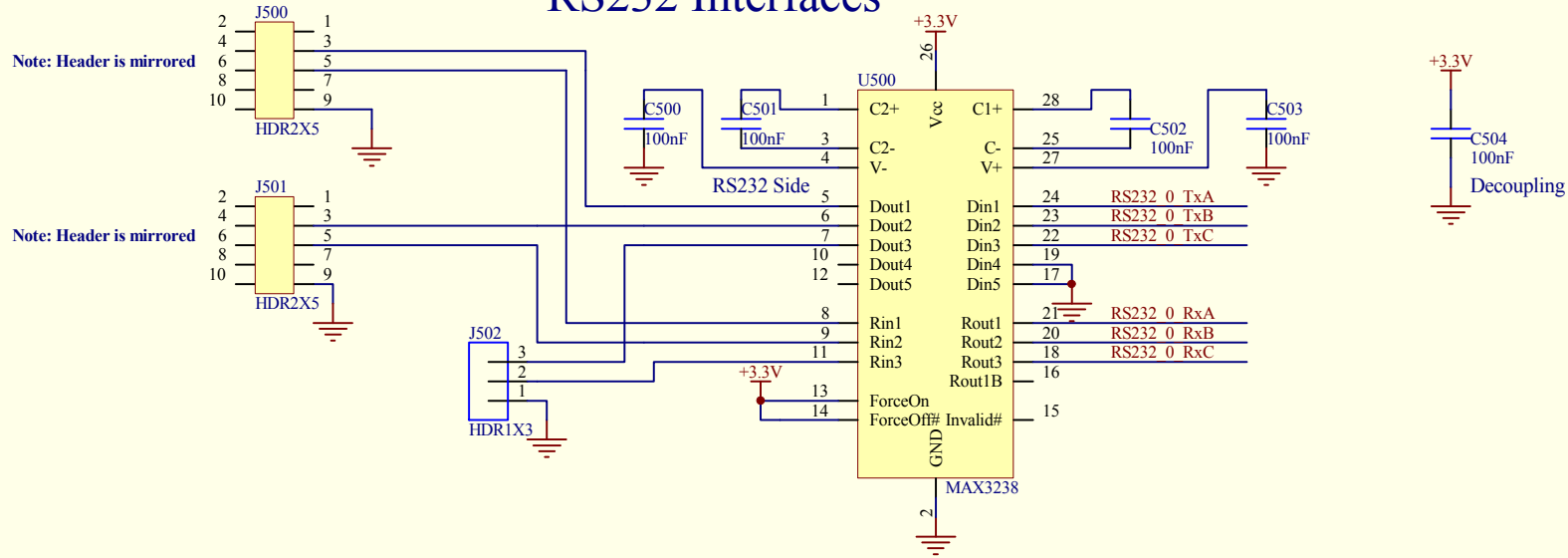
PWR Header



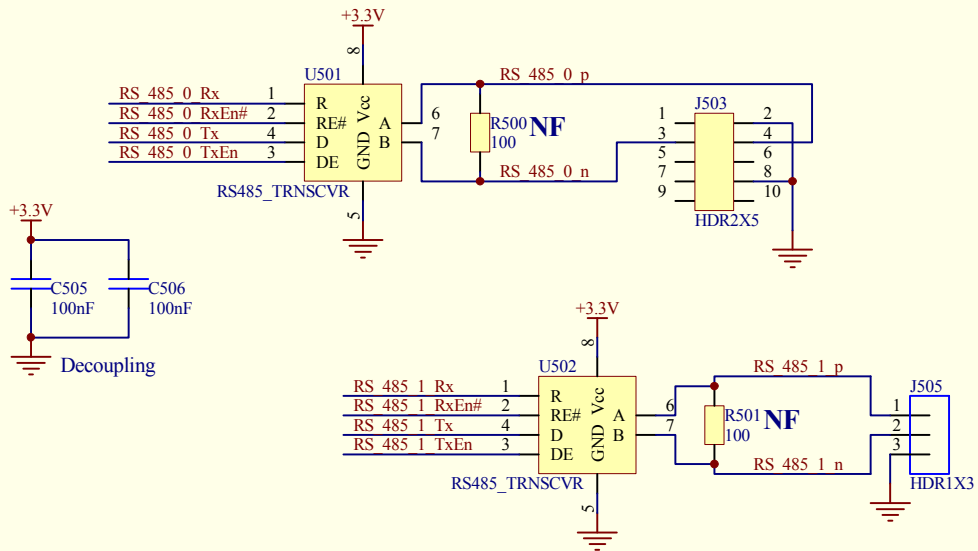
Pullups have been removed from quickswitches for these three nets

Title		
One Wire Interfaces & Power Header		
Size	Number	Revision
A4		2.0
Date:	12-Dec-2008	Sheet of
File:	D:\CIII Expansion Board\Protel\CIII Expansion Board Rev1.ddb	

RS232 Interfaces

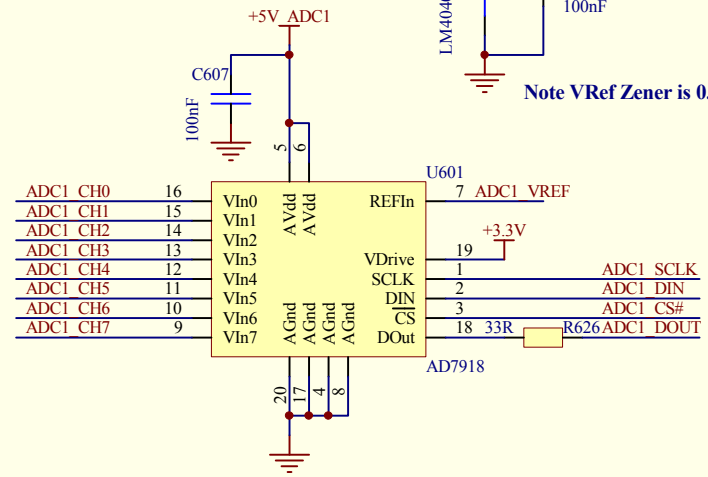
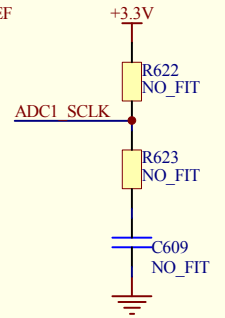
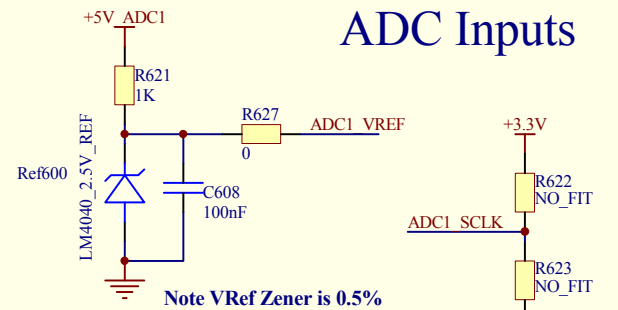
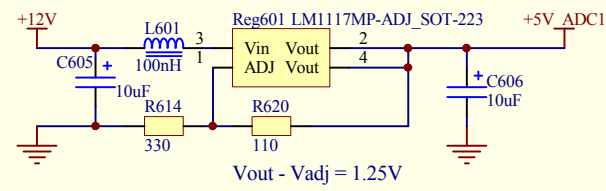
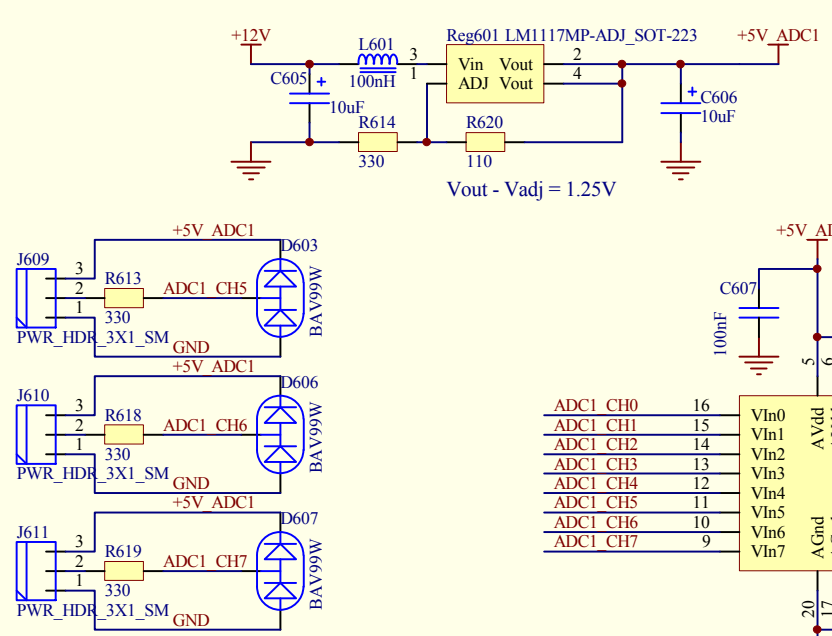
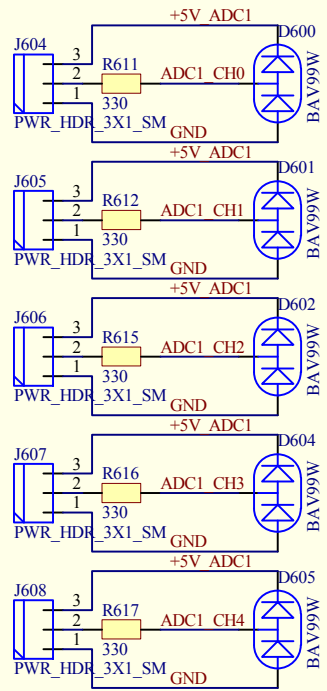


RS485 Transceivers



Title RS232 & RS485 Interfaces		
Size A4	Number	Revision 2.0
Date:	12-Dec-2008	Sheet 6 of 8
File:	D:\CIII Expansion Board\Protel\CIII Expansion Board Rev1.ddb	

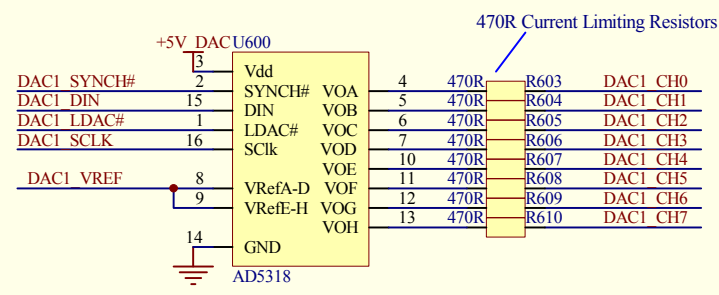
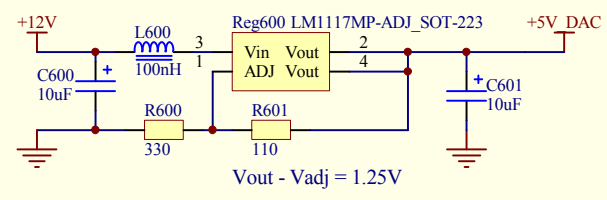
D



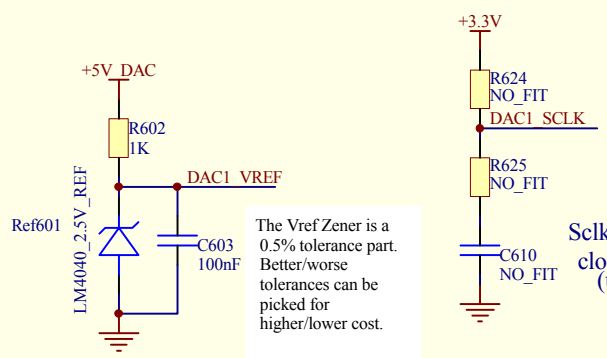
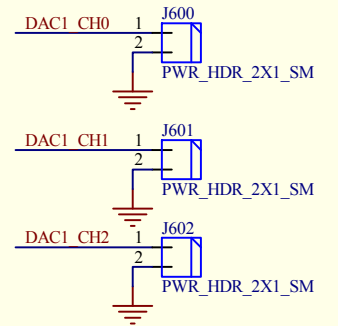
Sclck Termination. Place as close to device as possible (underneath?)

C

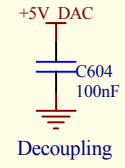
B



DAC Outputs



Sclck Termination. Place as close to device as possible (underneath?)



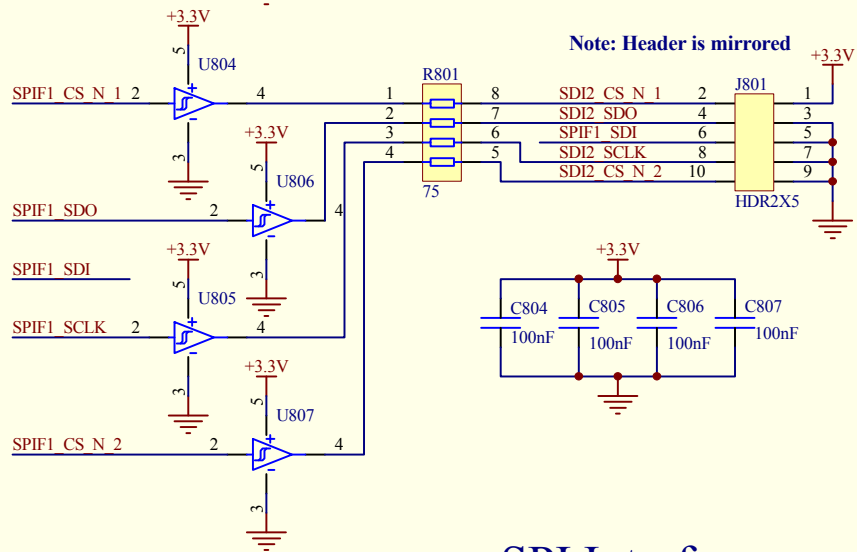
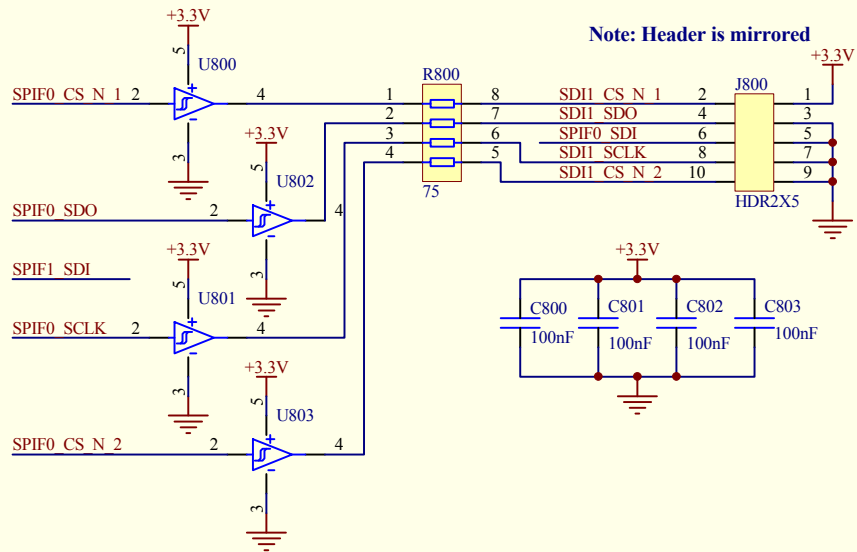
Title		
DAC & ADC		
Size	Number	Revision
A4		2.0
Date:	12-Dec-2008	Sheet 7 of 8
File:	D:\CIII Expansion Board\Protel\CIII Expansion Board Rev1.ddb	

D

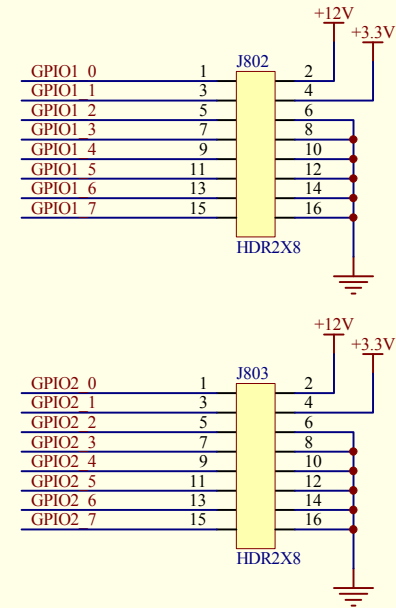
C

B

A



SPI Interfaces



General Purpose Dig IO

Title SPI Interface & General Purpose I/O		
Size A4	Number	Revision 2.0
Date:	12-Dec-2008	Sheet 8 of 8
File:	D:\CIII Expansion Board\Protel\CIII Expansion Board Rev1.ddb	