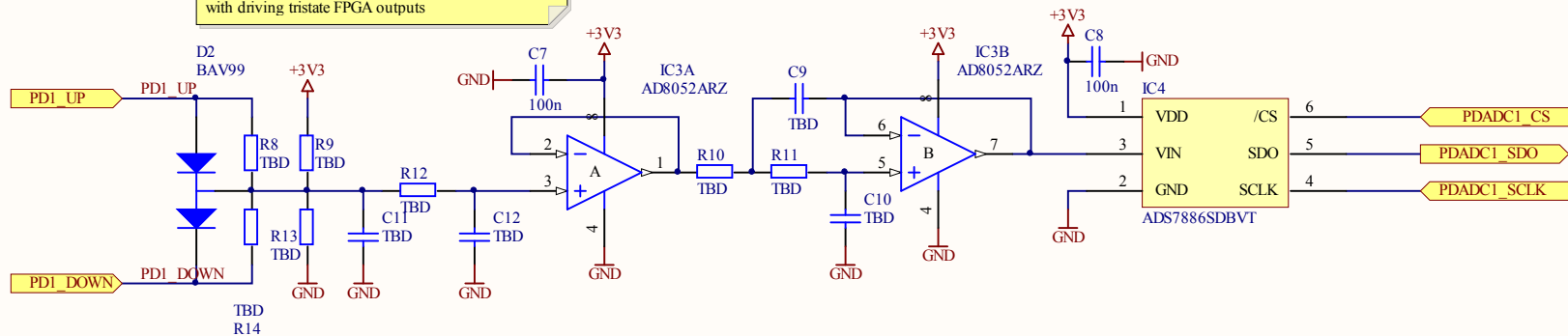
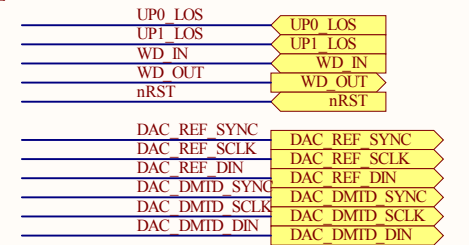
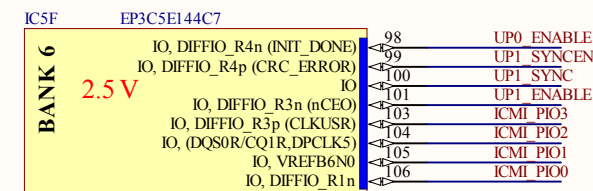
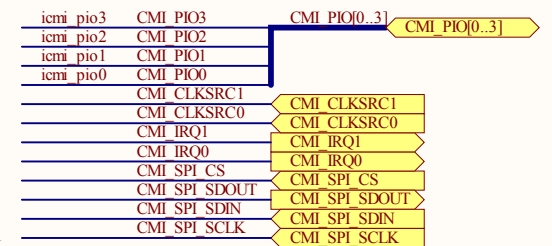
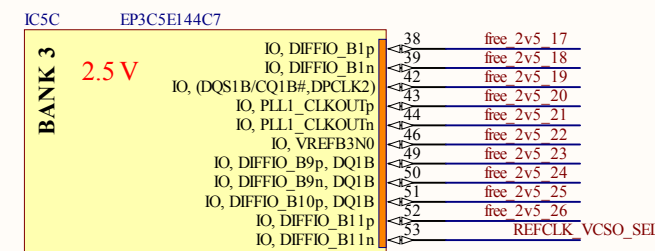
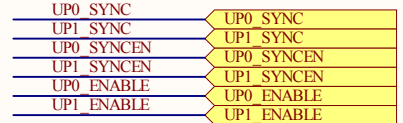
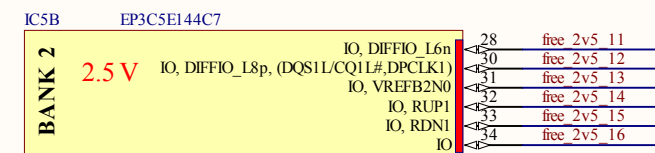
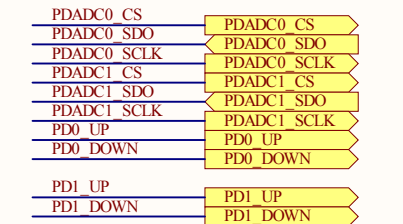
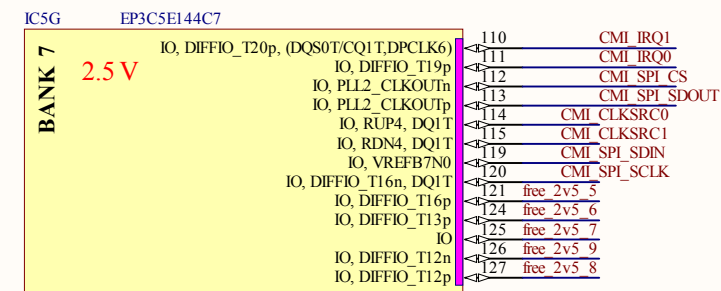
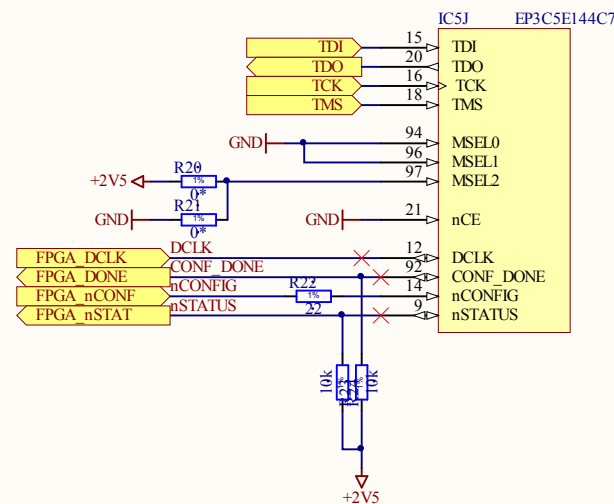
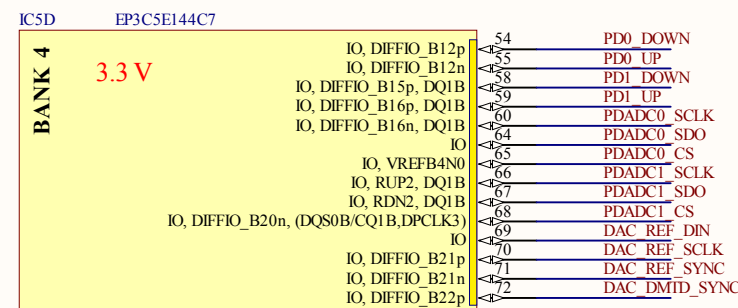
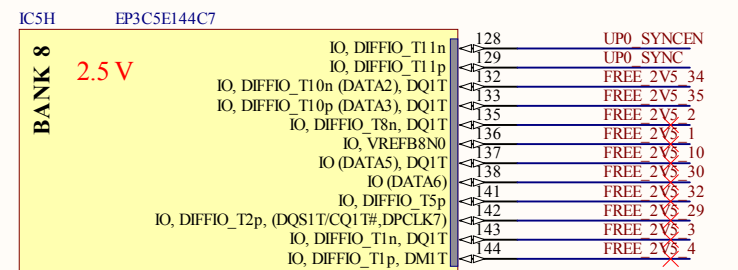
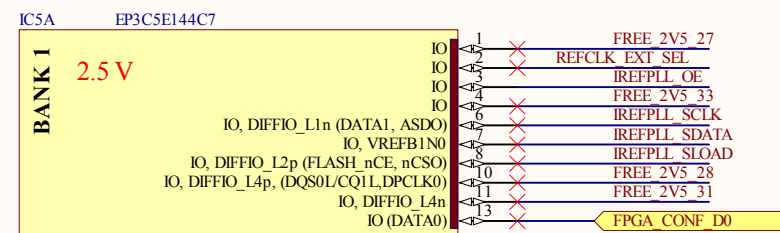
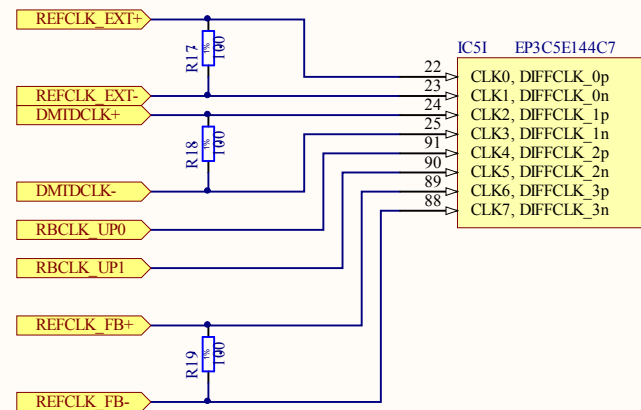
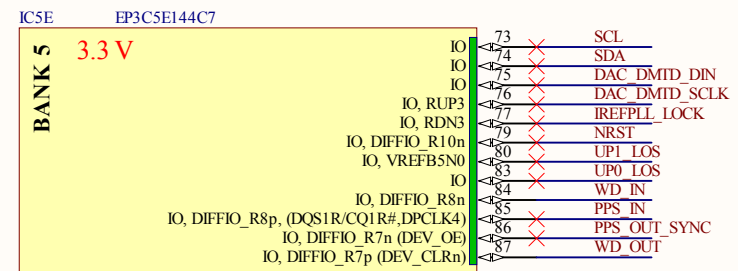
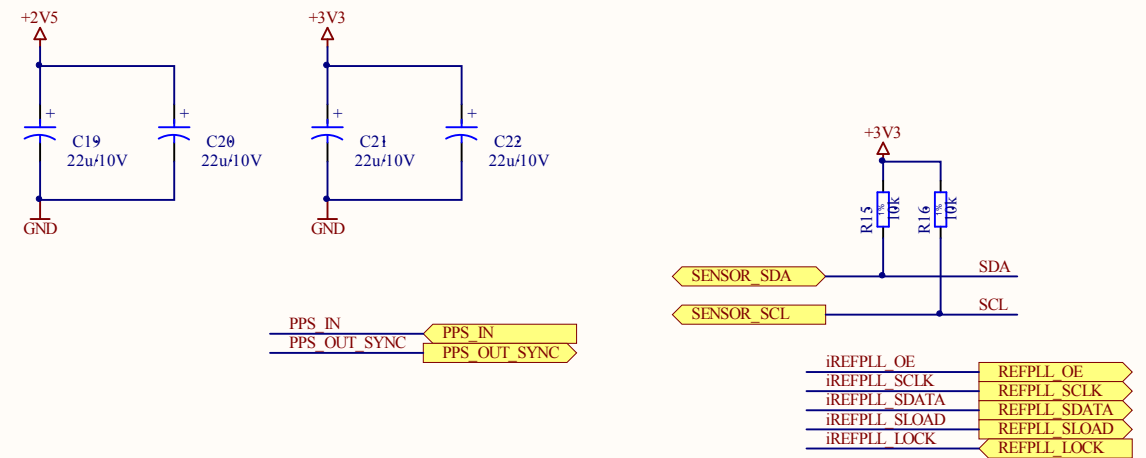


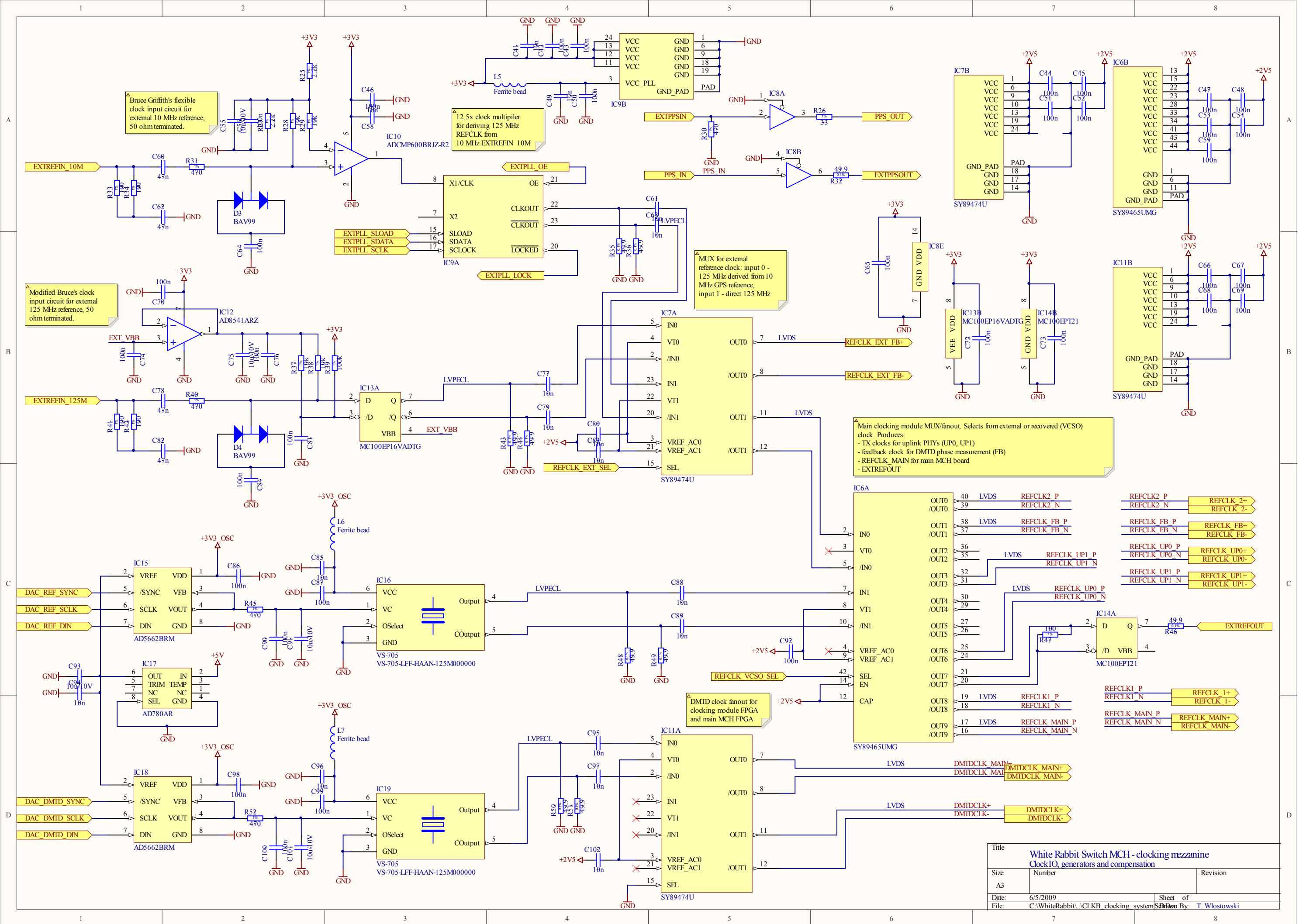
Optional external charge pump, filter and ADC for PLL. Diodes are optional in case we have problems with driving tristate FPGA outputs



Title		
White Rabbit Switch MCH - clocking mezzanine Analog phase detector & ADC		
Size	Number	Revision
A		0.0.5
Date:	6/5/2009	Sheet of
File:	C:\WhiteRabbit\CLKB_analog_phase_detector\Doc	Doc

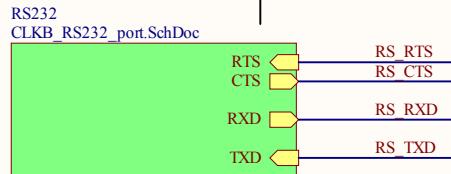


Project: White Rabbit Switch MCH - clocking mezzanine Sheet: Clocking FPGA	
Version: 0.1.1 Author: Tomasz Wlostowski Company: CERN BE-CO-HT	Date: 2009/04/21 License: Open Hardware License (OHL)

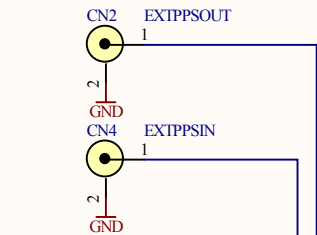
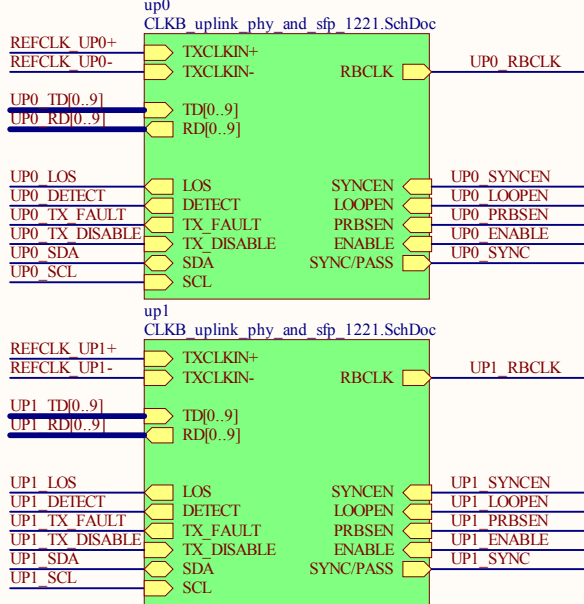


Front panel

RS232 port



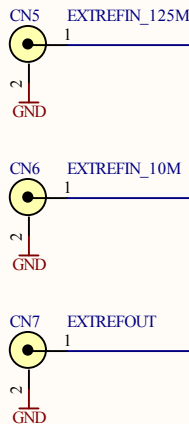
Uplink ports (PHY + SFP)



Clocks and PPS

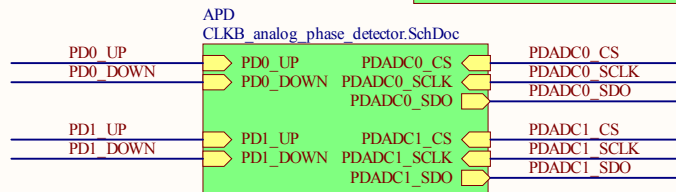
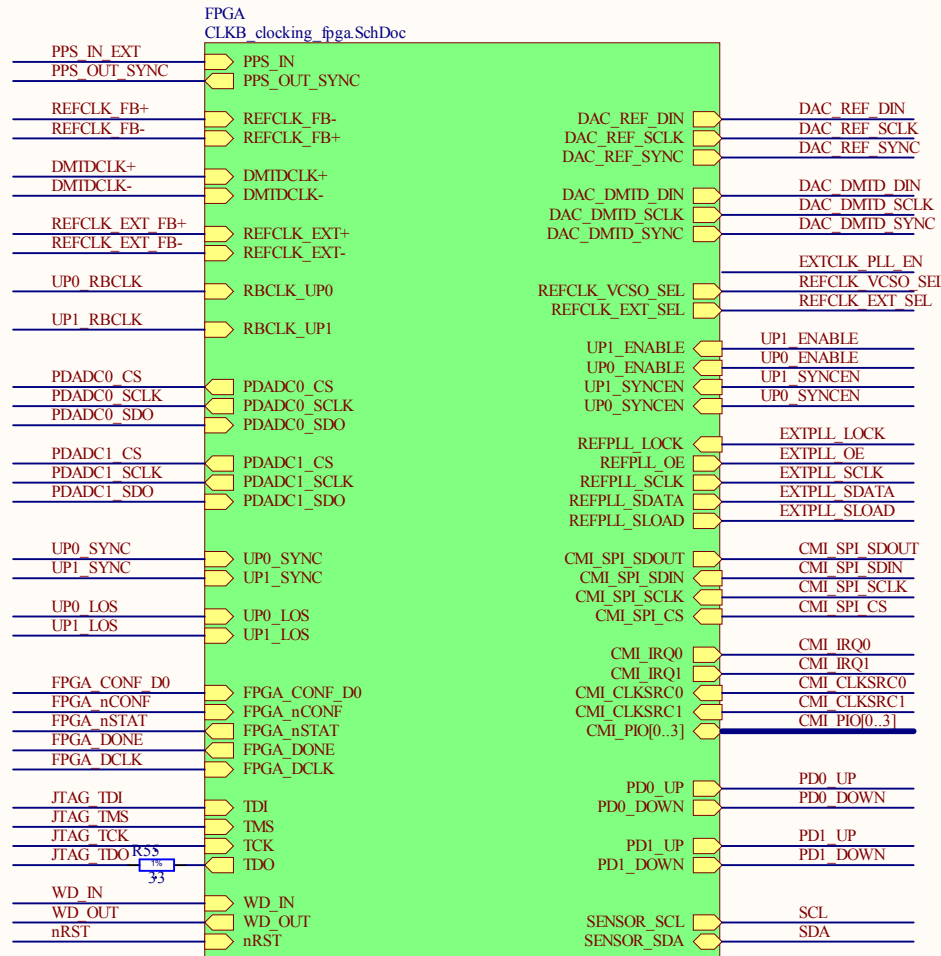
Edge-soldered piggyboard

(not SMB connectors)

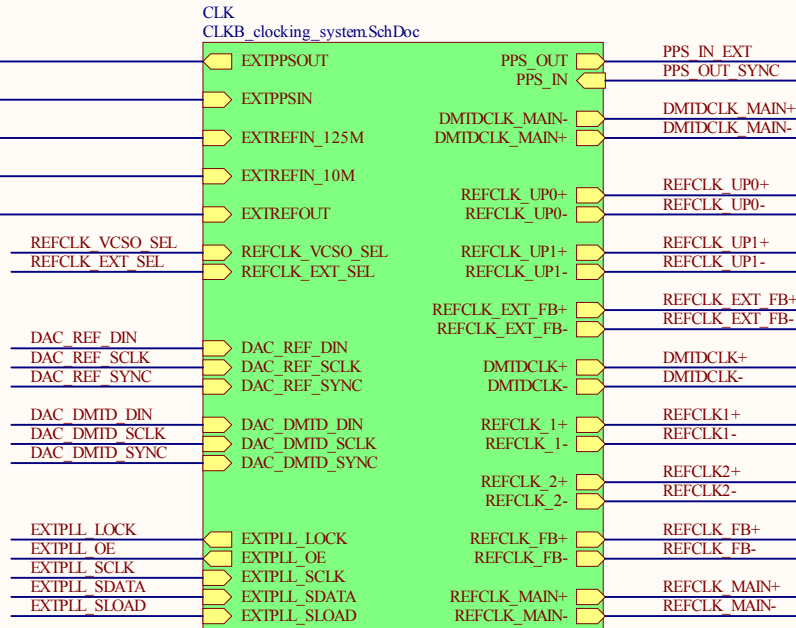


SMI
CLKB_SMI_if_1_6.SchDoc

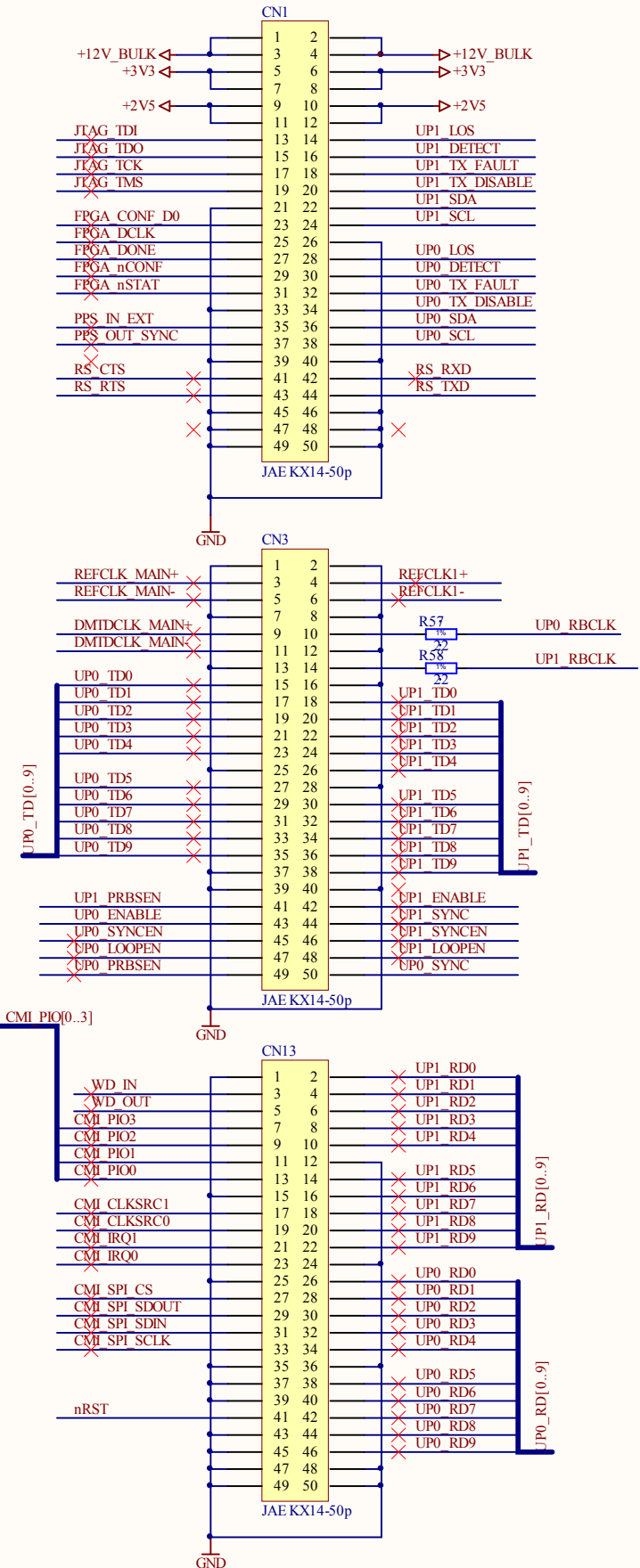
SMI backplane I/F



PWR
CLKB_power_regulators.SchDoc



Mainboard connectors



Project: White Rabbit Switch MCH - clocking mezzanine

Sheet: Main (top-level) diagram

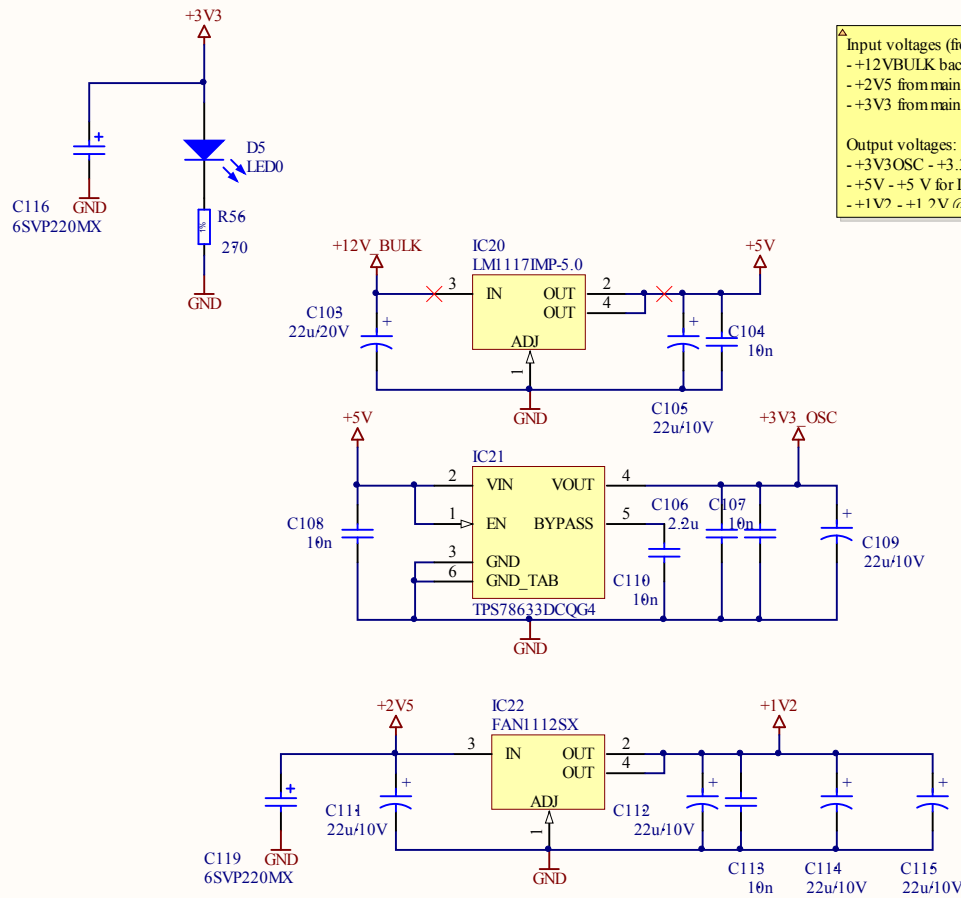
Version: 0.1.1

Date: 2009/04/21

Author: Tomasz Wlotoski

License: Open Hardware License (OHL)

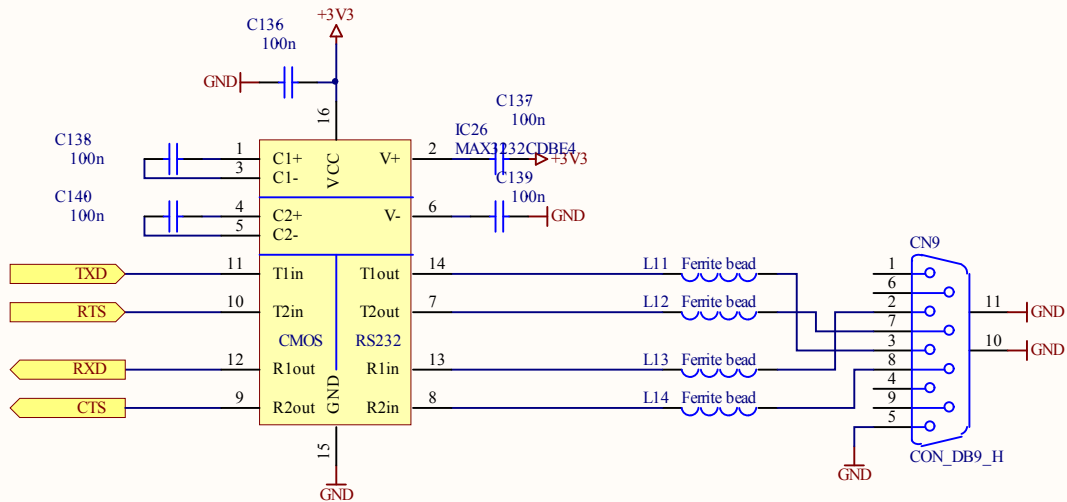
Company: CERN BE-CO-HT



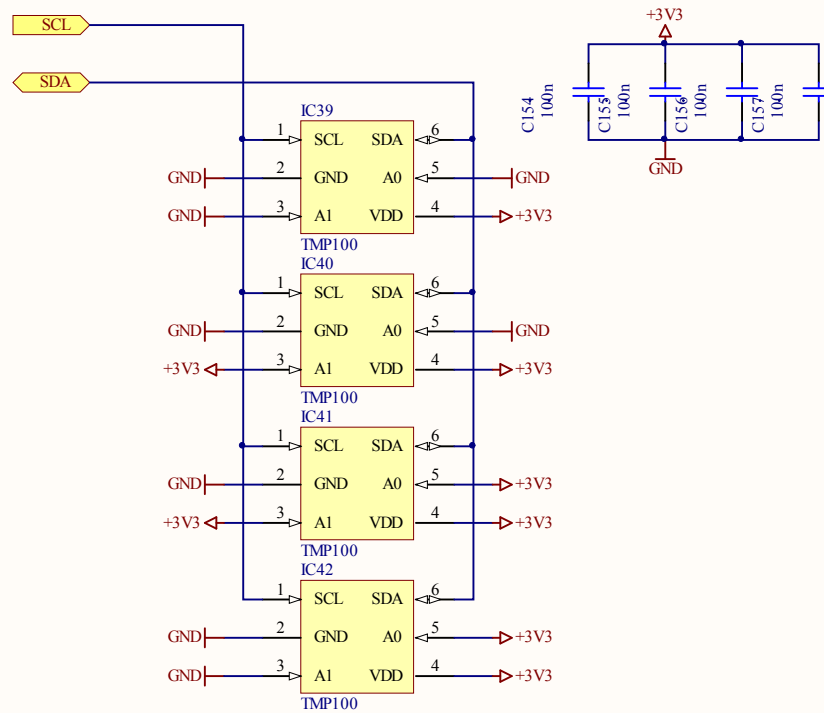
Input voltages (from main MCH board):
- +12VBULK backplane bulk power (+12 V)
- +2V5 from main regulator (+2.5 V, several amps)
- +3V3 from main regulator (+3.3 V, several amps)

Output voltages:
- +3V3OSC - +3.3 V @200 mA ultralow-noise supply for VCSOs and DACs
- +5V - +5 V for DAC reference and +3V3OSC LDO supply
- +1V2 - +1.2 V @0.5 A for FPGA Vcore

Title		
White Rabbit Switch MCH - clocking mezzanine Power supply regulators		
Size	Number	Revision
A4		
Date:	6/5/2009	Sheet of
File:	C:\WhiteRabbit\...\CLKB_power_regulators	Drawn By:



Title		
White Rabbit Switch MCH - clocking mezzanine RS232 port		
Size	Number	Revision
A		
Date:	6/5/2009	Sheet of
File:	C:\WhiteRabbit\CLKB_RS232_port.SchDoc	Drawn By:



Title			White Rabbit Switch MCH - clocking mezzanine Temperature sensors		
Size	Number			Revision	
A					
Date:	6/5/2009			Sheet of	
File:	C:\WhiteRabbit\CLKB_temp_sensors			Drawn By:	

