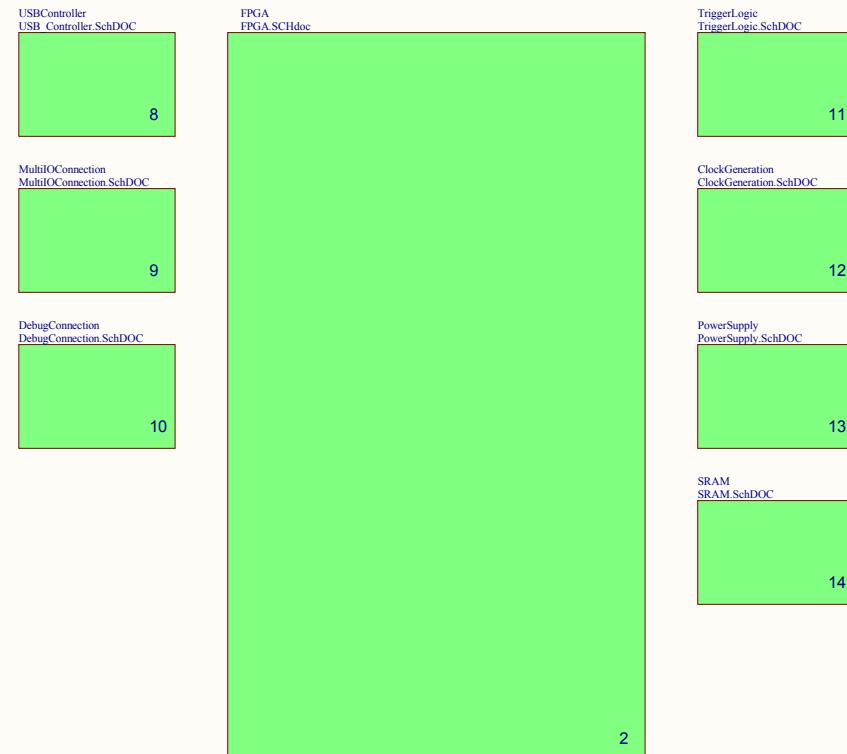


# S3b-Multi IO-Top-Schematic

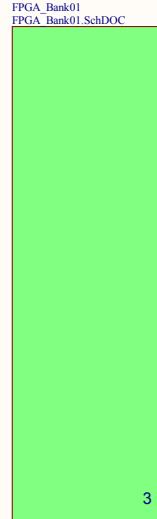


Project Options are set to:

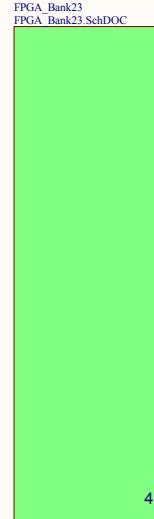
Project -> Project Options -> Net Identifier Scope -> only Port Connectors are global

# FPGA - Block Overview

FPGA\_Bank01  
FPGA\_Bank01.SchDOC



FPGA\_Bank23  
FPGA\_Bank23.SchDOC



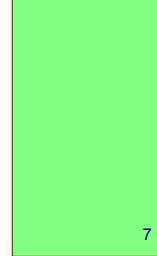
FPGA\_Bank45  
FPGA\_Bank45.SchDOC



FPGA\_Bank67  
FPGA\_Bank67.SchDOC



FPGA\_supply&config-pins  
FPGA\_supply&config-pins.SchDOC

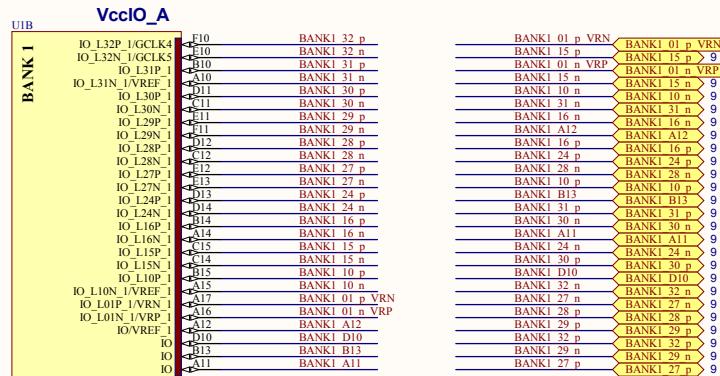
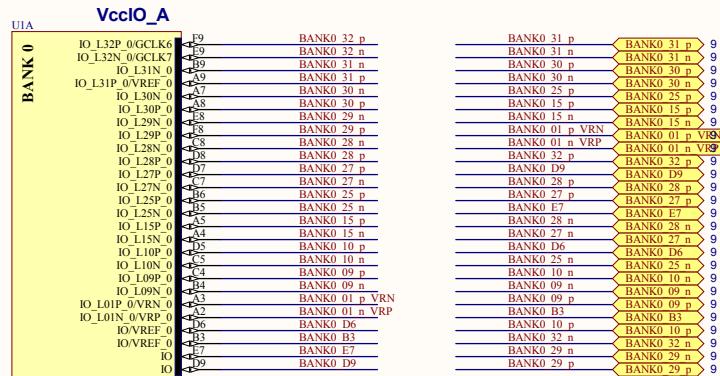


Title: FPGA.SchDoc	Drawn by: JS / HK
Project: MultiIO Board	Revision: 1.04
Date: 24.02.2011	Time: 15:54:19
File: D:\cwiki\svn\SVN\3MultiIO\tag\1.04\pcb\FPGA.SchDoc	Sheet 2 of 14

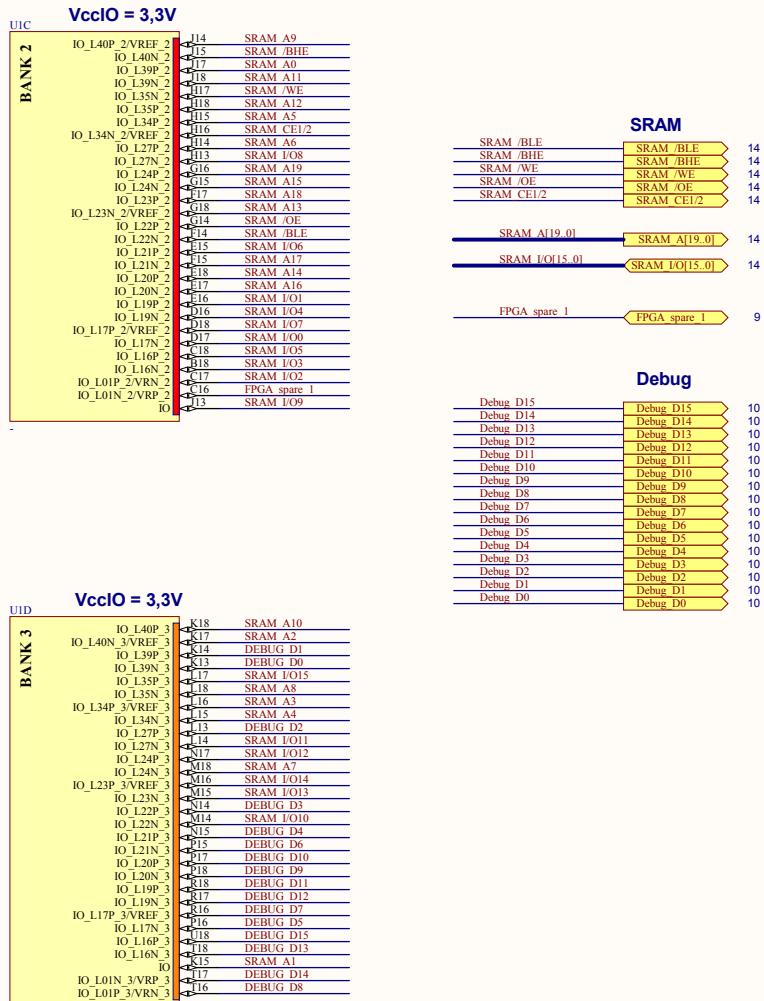


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53115 Bonn

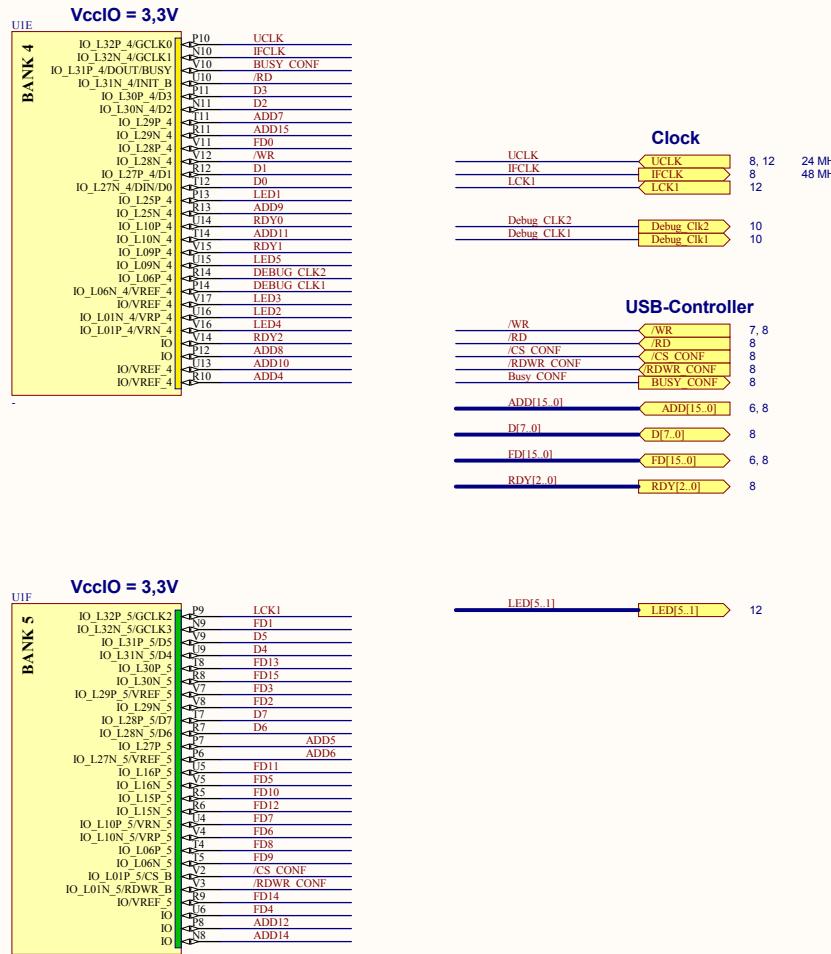
# FPGA - Bank 0, 1



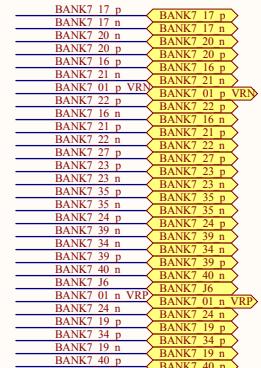
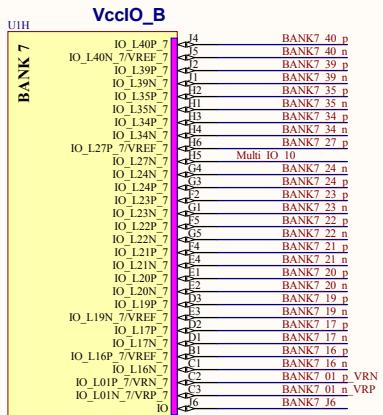
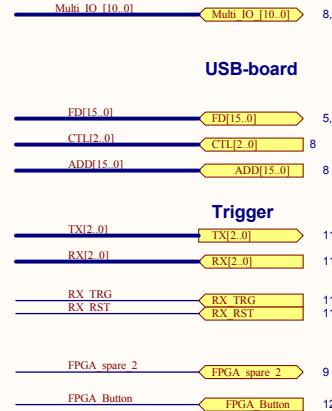
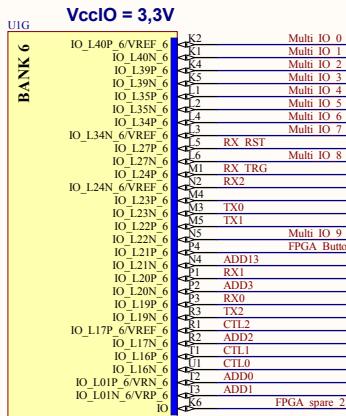
# FPGA - Bank 2, 3



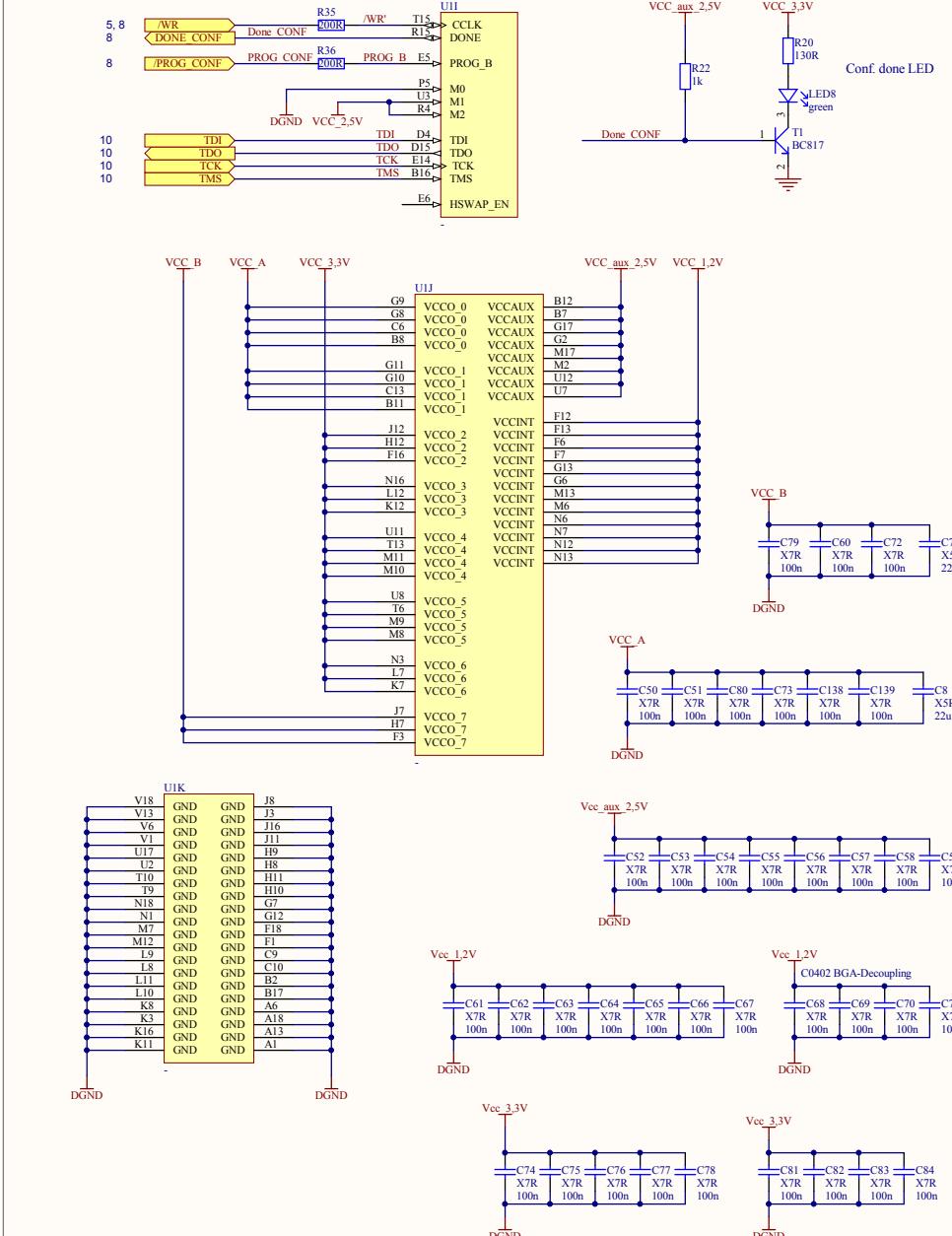
# FPGA - Bank 4, 5



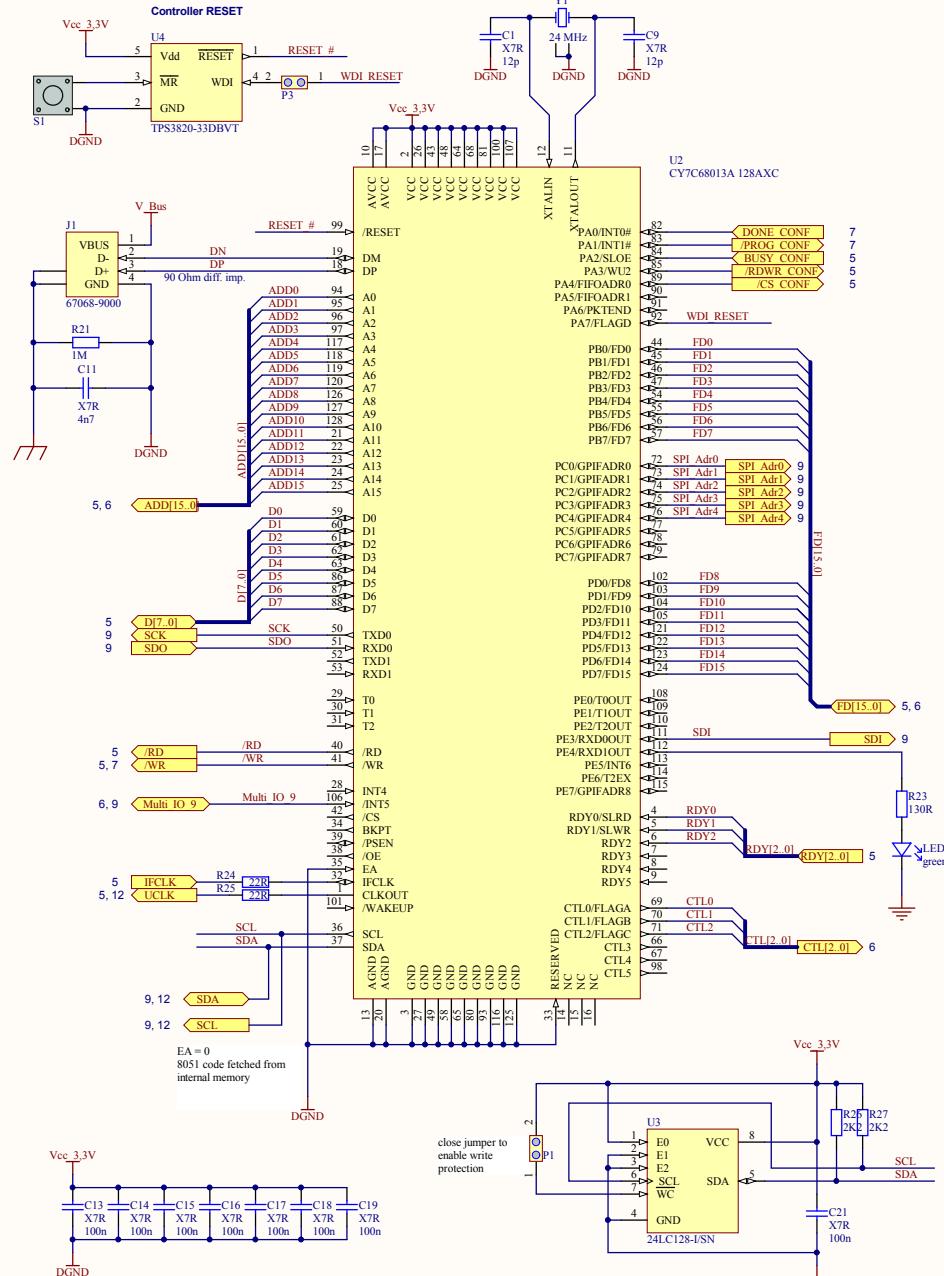
# FPGA - Bank 6, 7



# FPGA - Supply & Config-Pins



# USB Controller



Title: USB\_Controller.SCHDOC

Project: MultiIO Board

Date: 24.02.2011 Time: 15:54:20 Revision: 1.04

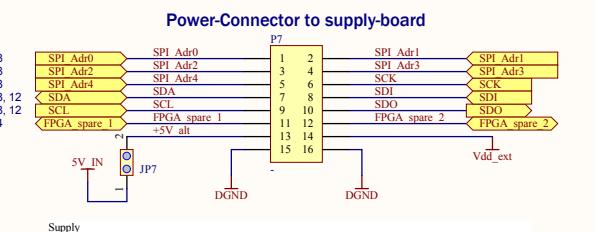
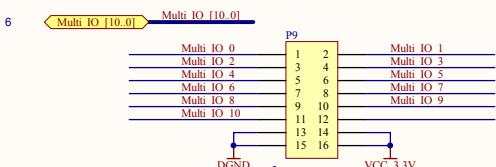
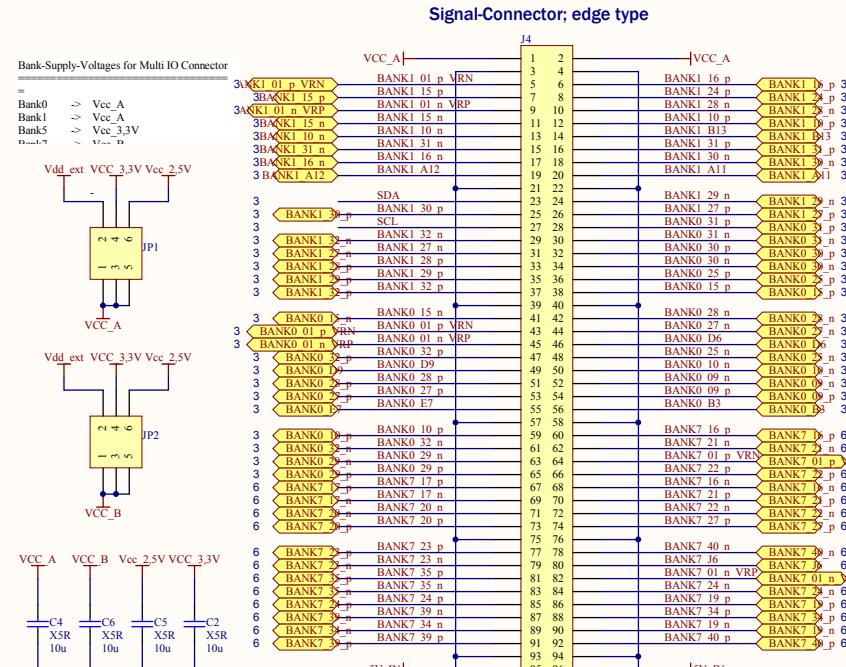
Sheet 8 of 14

File: D:\icwiki\_svn\SVN\3MultiIO\tag\VI\_04\pcb\USB\_Controller.SCHDOC



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# Multi IO Connection



DGND: digital ground for FPGA-board and DUT-PCB  
Vdd\_ext: externe IO Bank Versorgung zur Anpassung an DUT-Devices  
+5V\_alt: hiermit kann das S3b\_MultiIO\_Board über eine DUT-powerSupply-PCB gespeist werden

# Debug Connection

for Agilent 1692A LogicAnalyzer

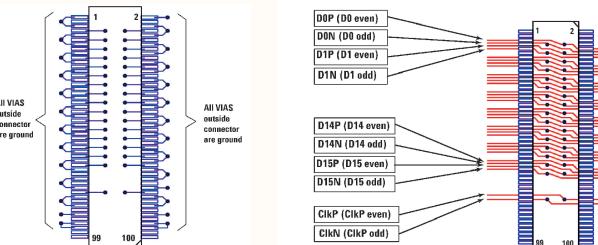
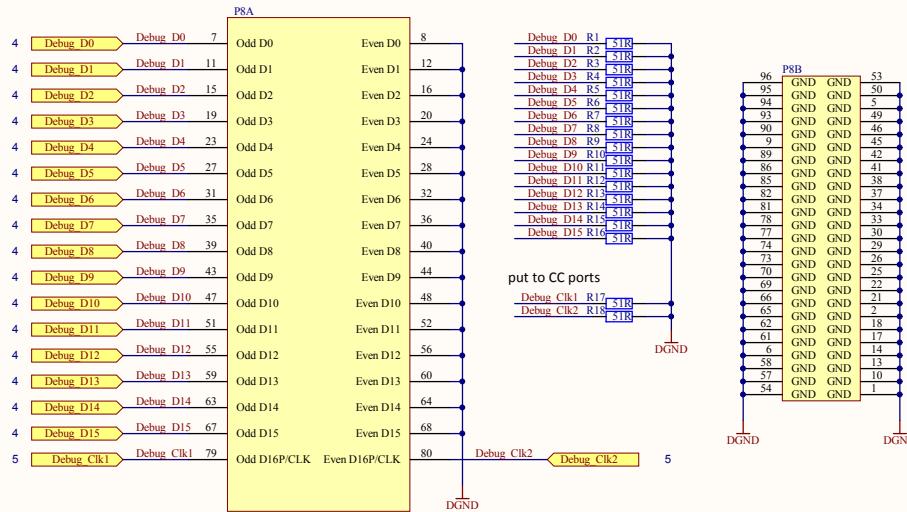


Figure 82. Surface layer, flow-through routing

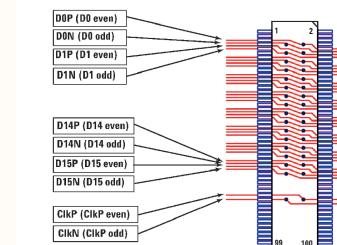
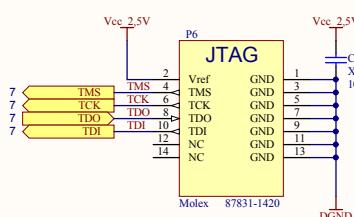
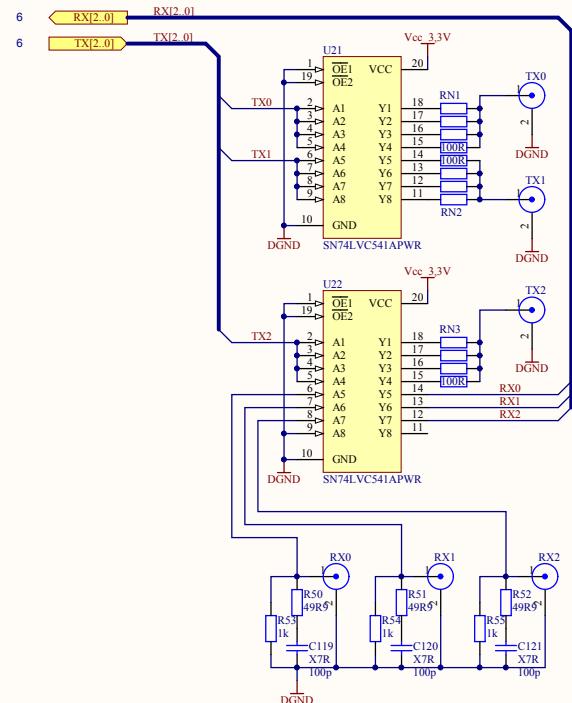


Figure 83. Signal layer 2, flow-through routing. Signal callouts in parentheses are for single-ended signals (E5378A probe)

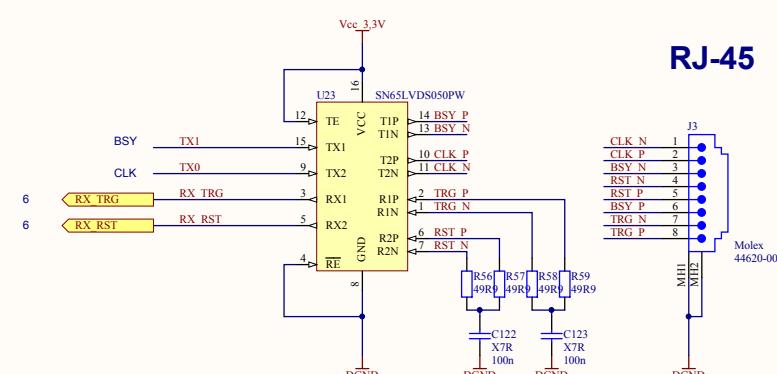


**LogicAnalyzer 1692A**  
68 channels on 4 pod-cables  
use  
  
E5385A 34-ch single-ended Samtec connector probe, connects to 40-pin LA cable  
<http://cp.literature.agilent.com/litweb/pdf/E5385-92001.pdf>  
  
Use  
Samtec 100-pin surface mount receptacles, Agilent part number 1253-3620 or Samtec part number ASP-65067-01  
needs SHROUD-SNUGGER LONG, Part Number: 16760-02303 , 9US\$  
  
samtec  
<http://www.samtec.com/ftp/pub/Cpdf/E506701AGI.PDF>  
  
suggested layout (last pages)  
<http://literature.agilent.com/litweb/pdf/5988-2989EN.pdf>

# Trigger Logic

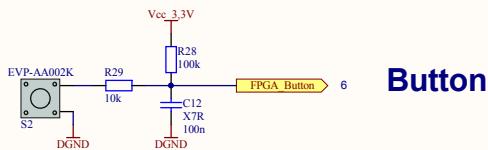
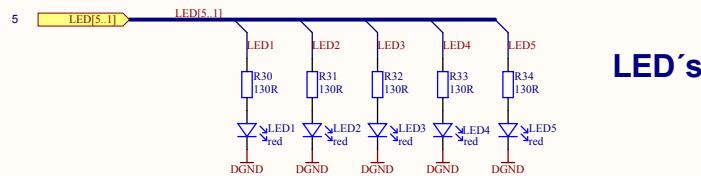
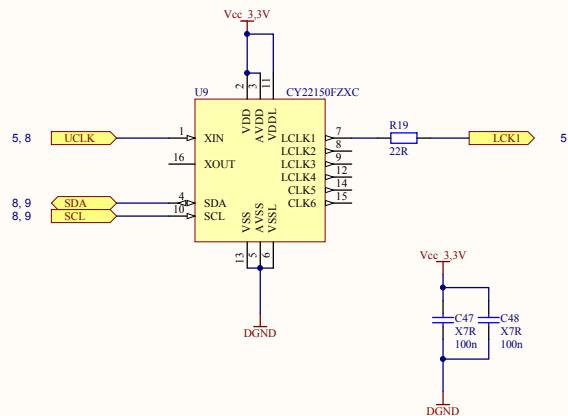


Lemo



RJ-45

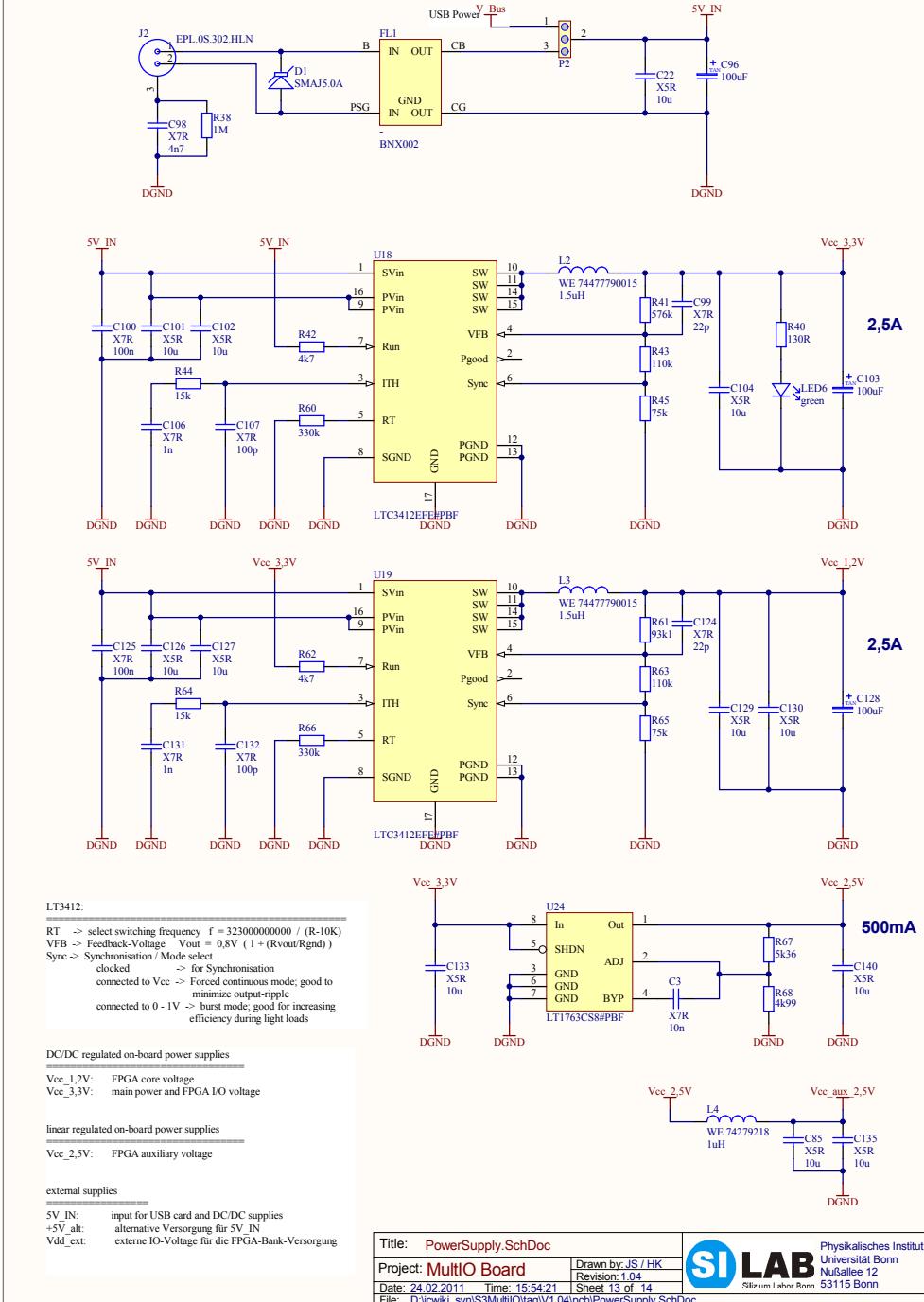
# Clock Generation



**LED's**

**Button**

# Power Supply



# SRAM

