
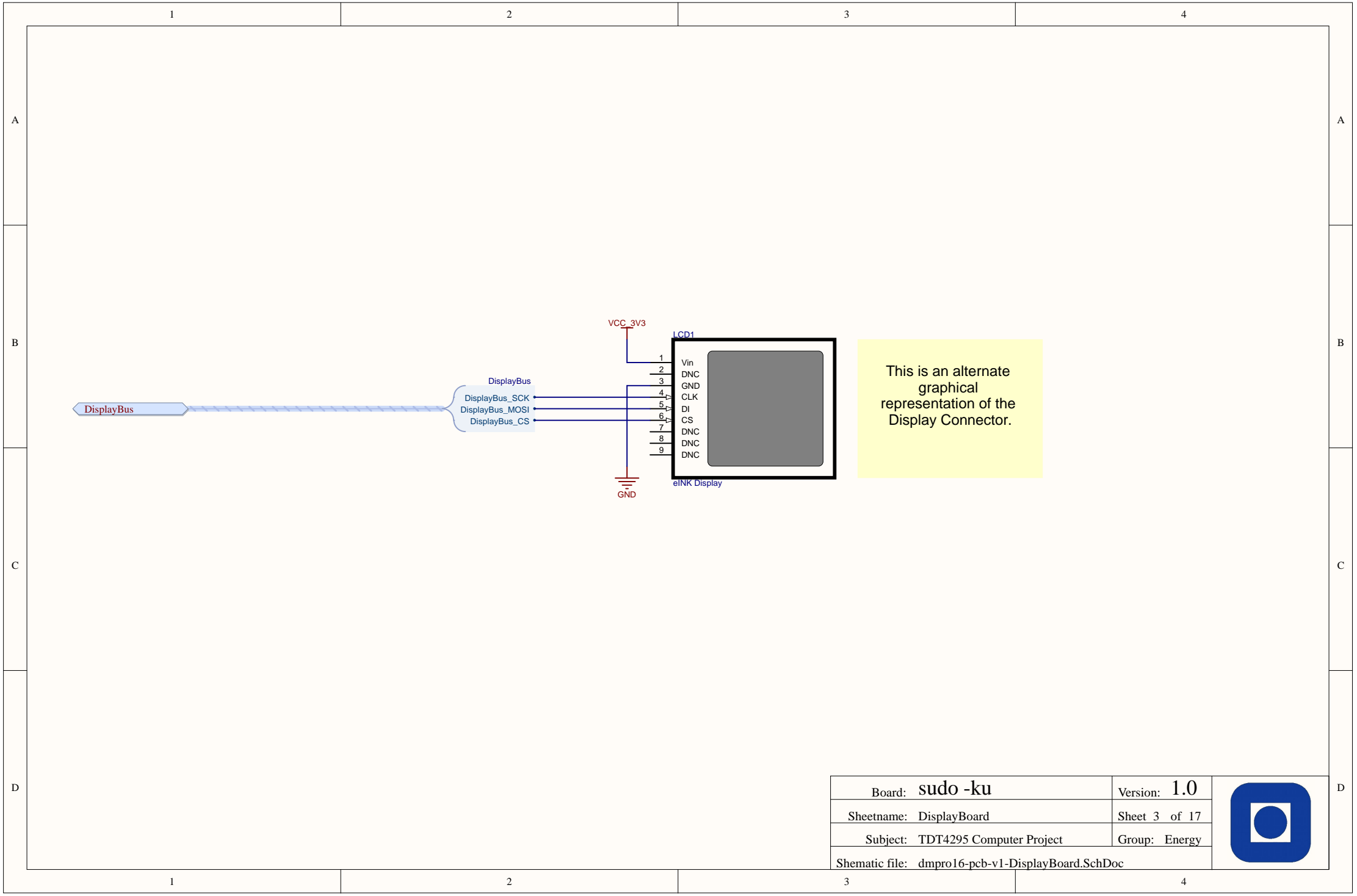
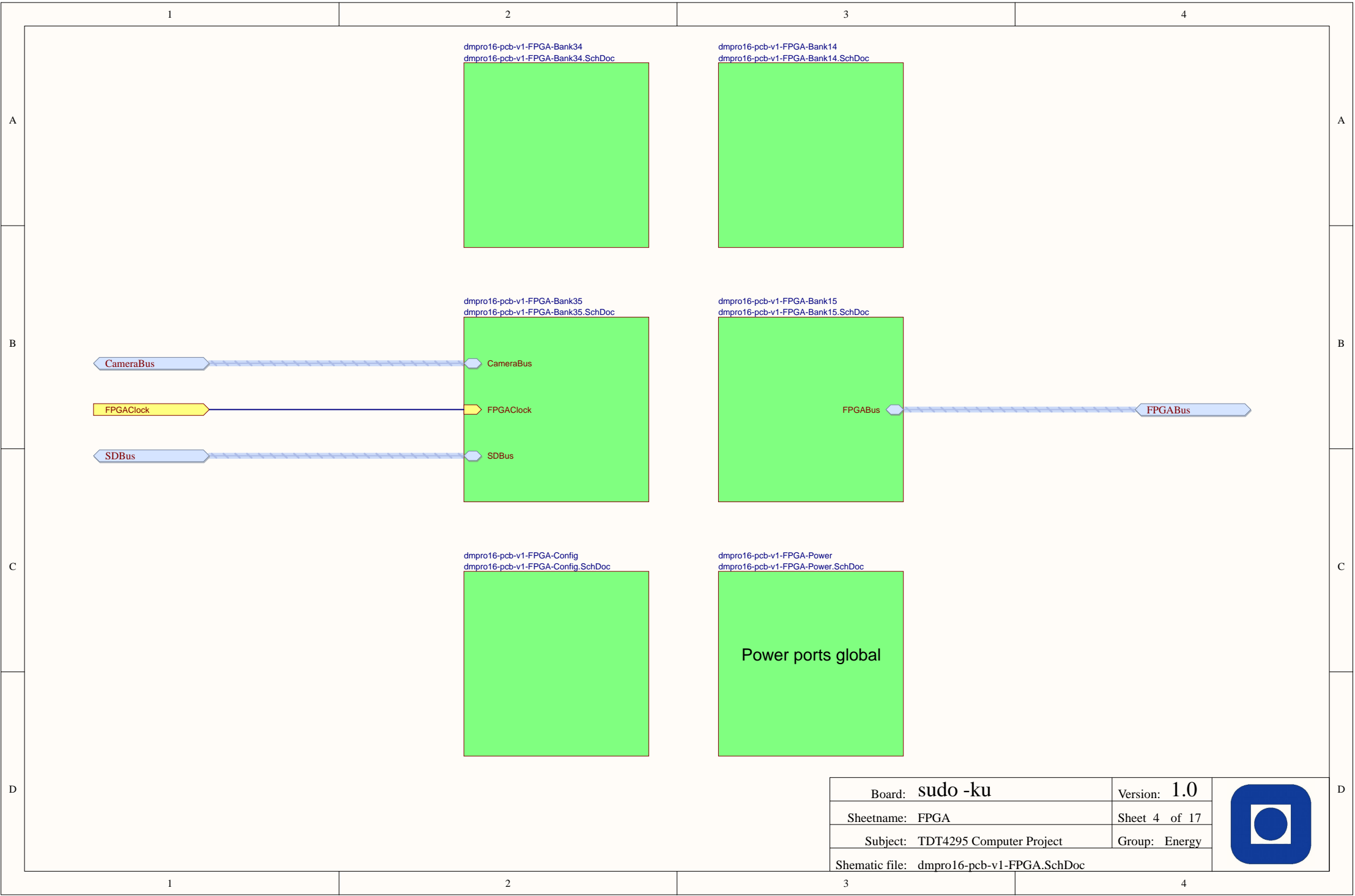
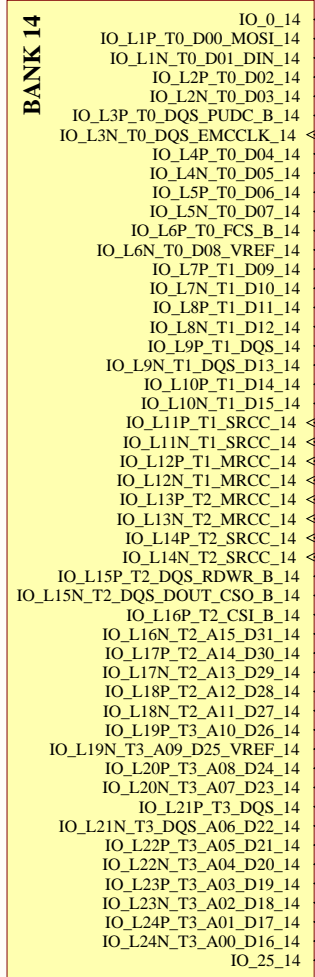


Board: sudo -ku	Version: 1.0	
Sheetname: CameraBoard	Sheet 2 of 17	
Subject: TDT4295 Computer Project	Group: Energy	
Schematic file: dmp16-pcb-v1-CameraBoard.SchDoc		

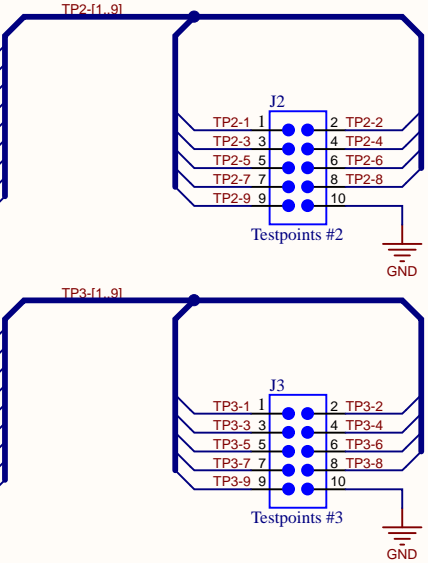
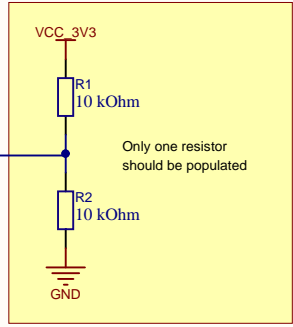





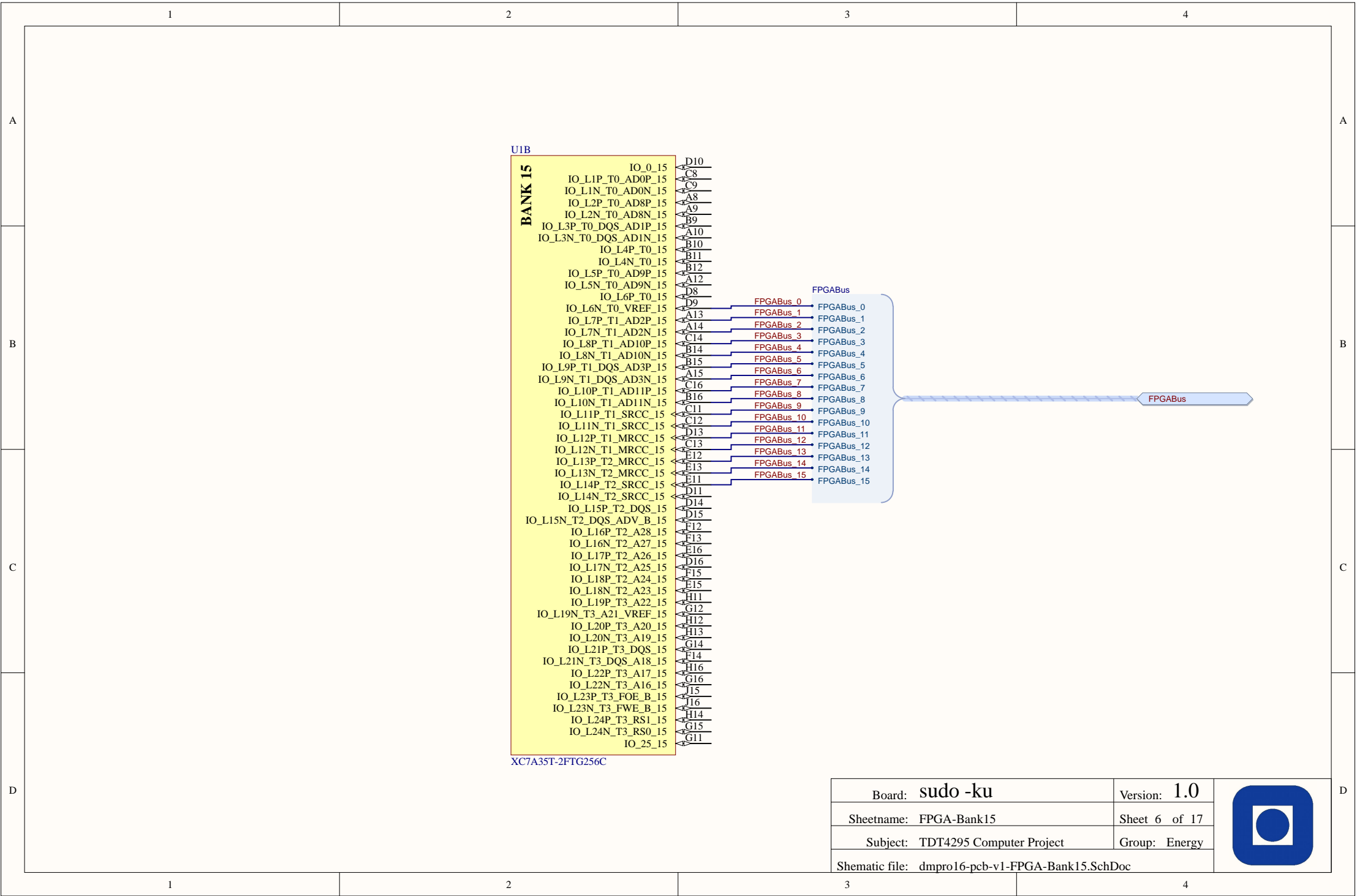
U1A



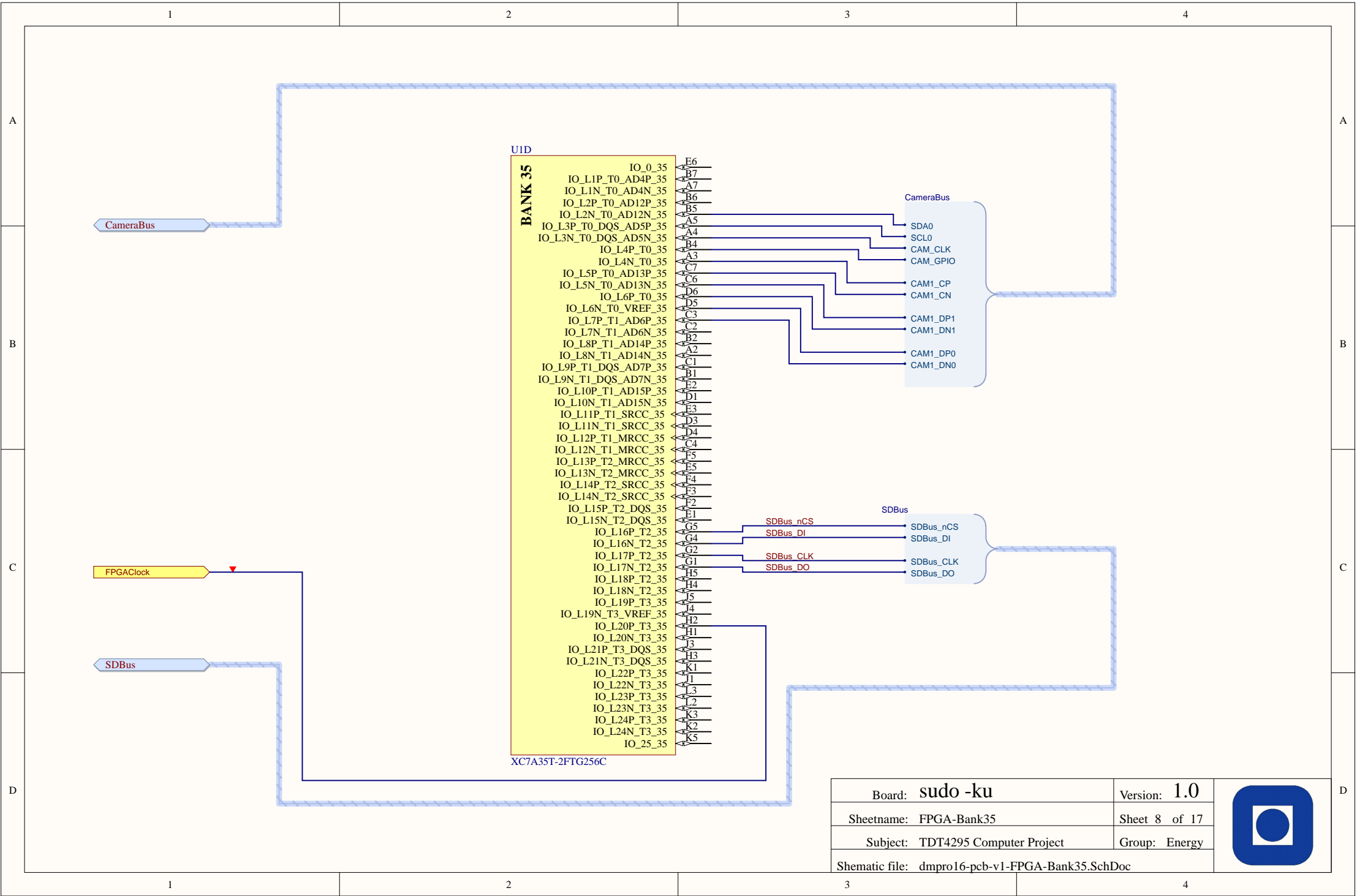
XC7A35T-2FTG256C



Board: sudo -ku	Version: 1.0	
Sheetname: FPGA-Bank14	Sheet 5 of 17	
Subject: TDT4295 Computer Project	Group: Energy	
Schematic file: dmpro16-pcb-v1-FPGA-Bank14.SchDoc		





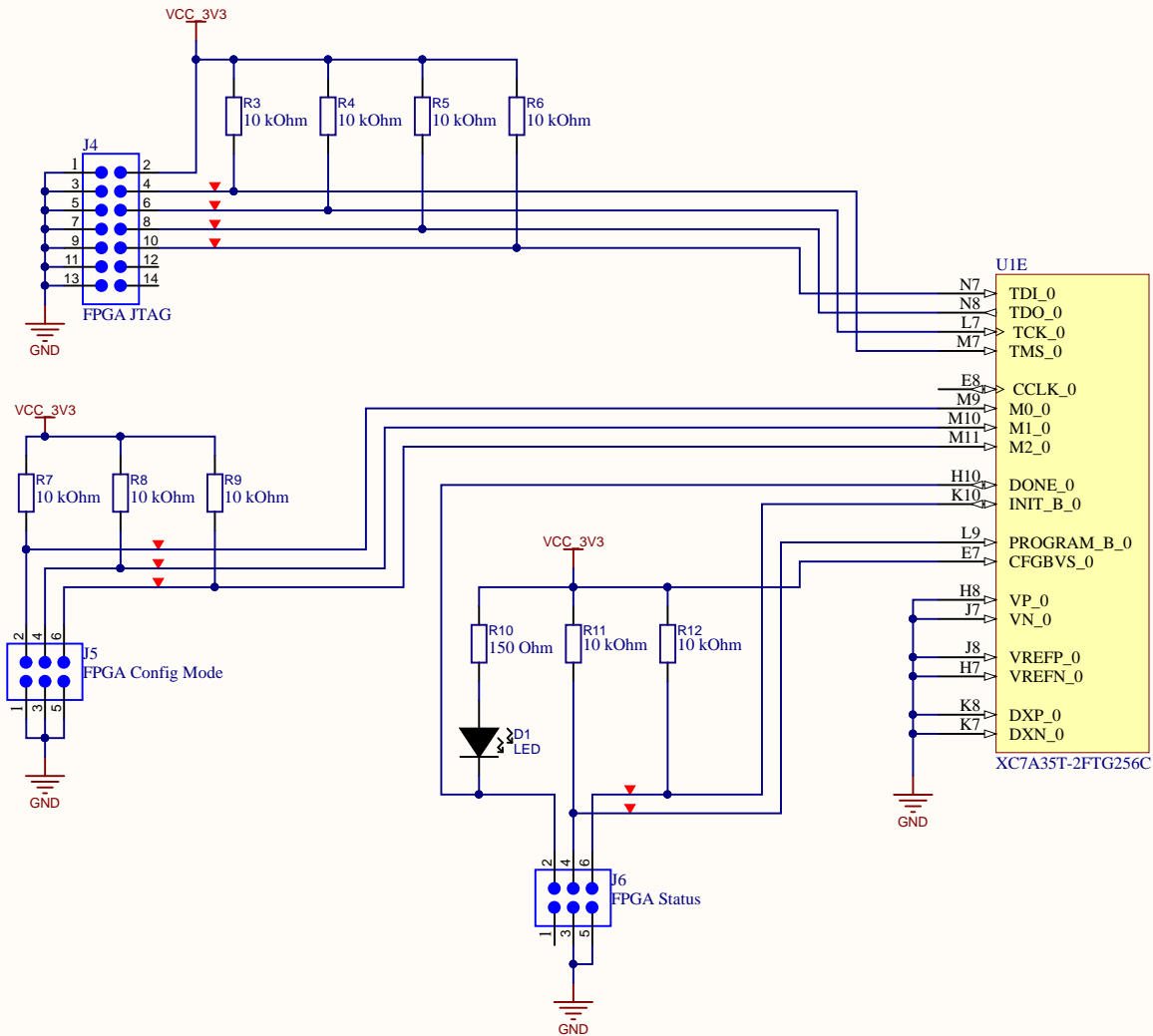




Default value = 0x111 = slave serial (internal pull ups in FPGA)

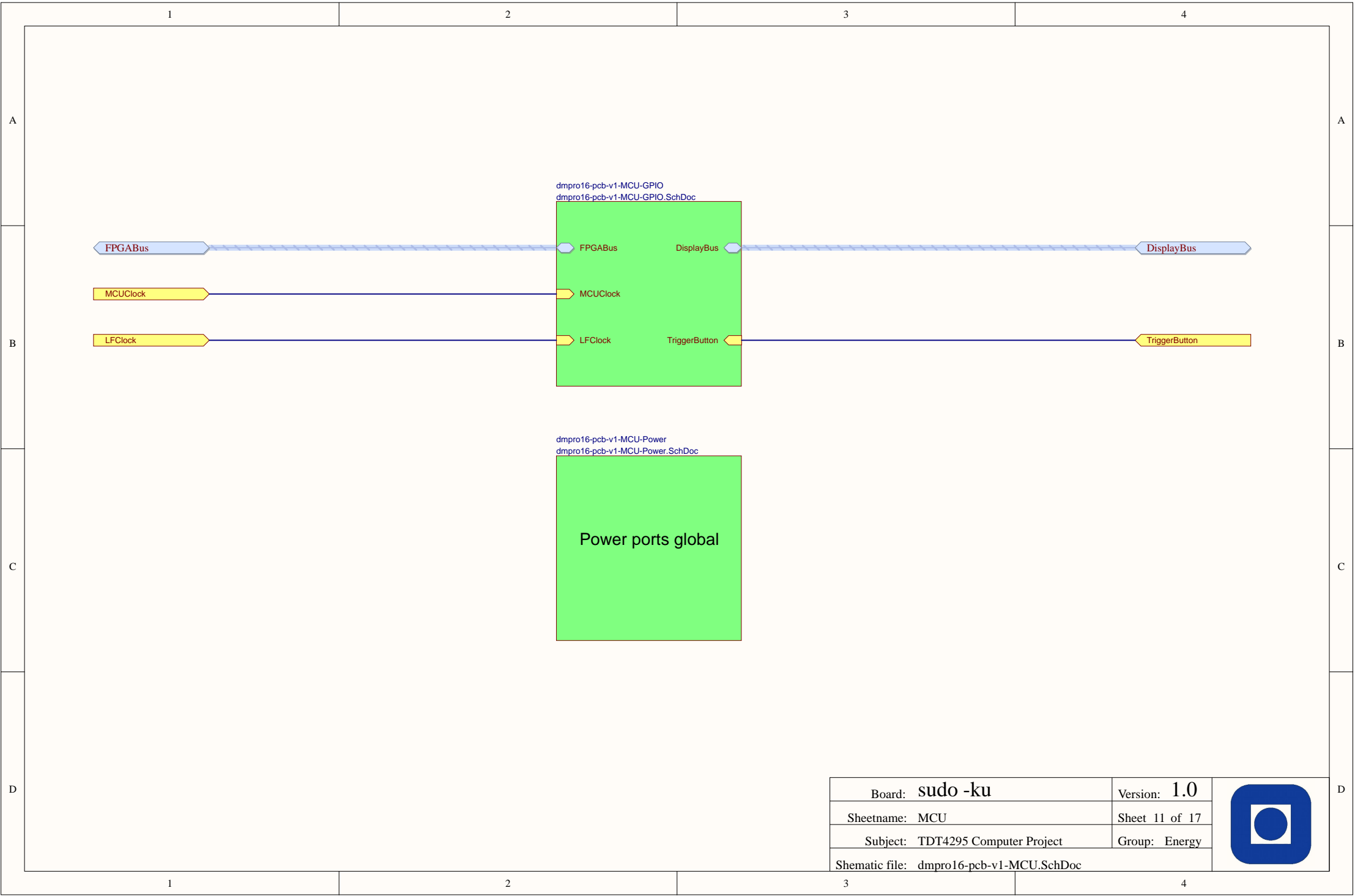
M[2:0]=  
 0x111 : Slave serial  
 0x101 : JTAG only  
 0x001 : Master SPI x1, x2, x4  
 0x000 : Master Serial

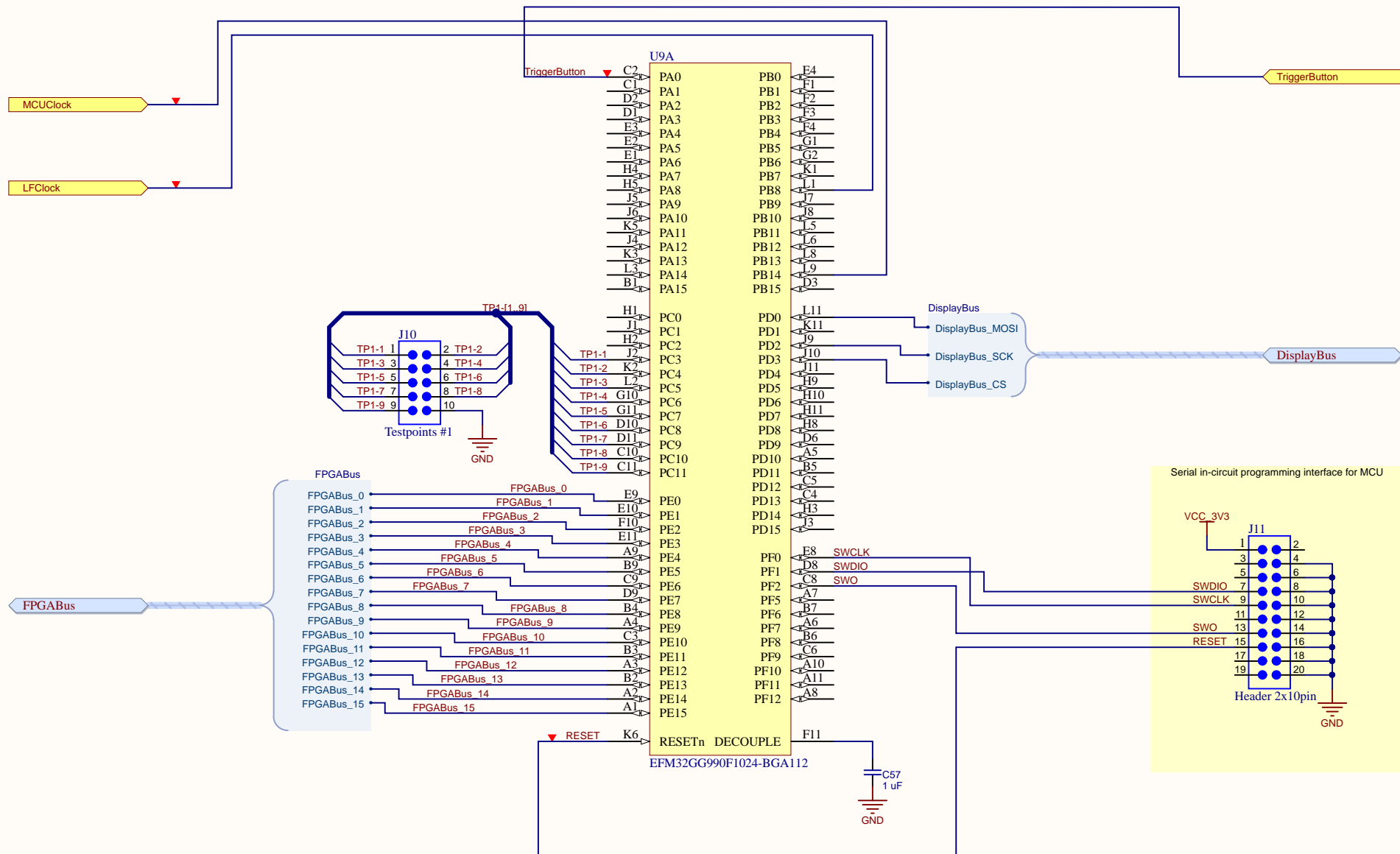
Put one jumper on the two middle pins to enable JTAG only.




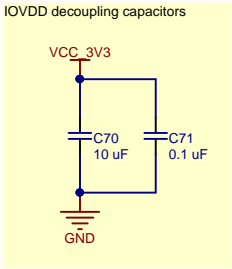
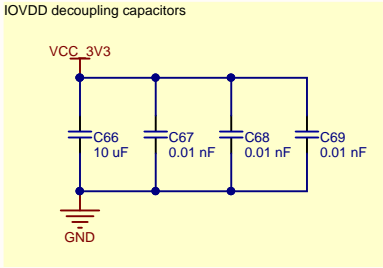
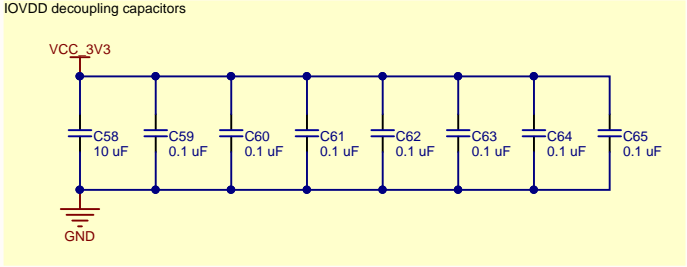
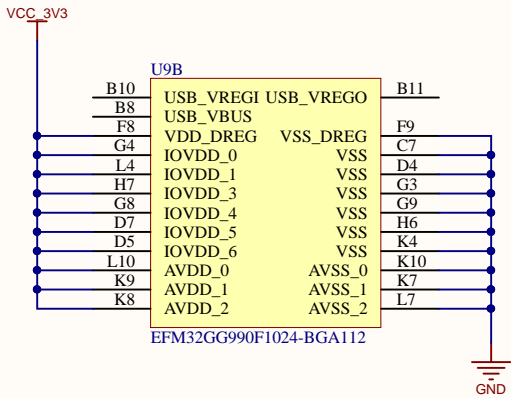
Board: sudo -ku	Version: 1.0	
Sheetname: FPGA-Config	Sheet 9 of 17	
Subject: TDT4295 Computer Project	Group: Energy	
Schematic file: dmp16-pcb-v1-FPGA-Config.SchDoc		






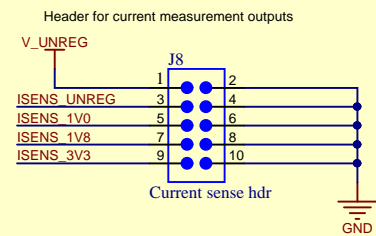
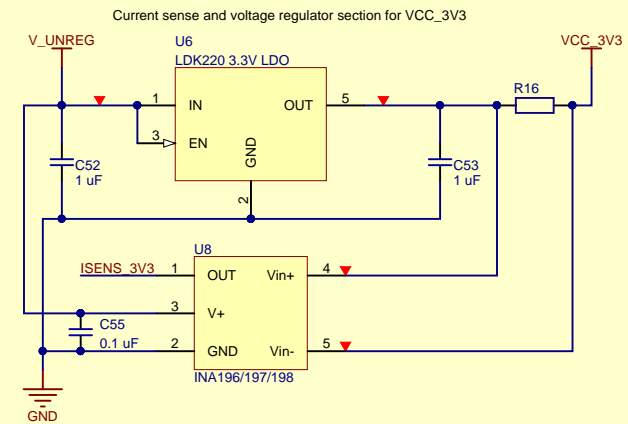
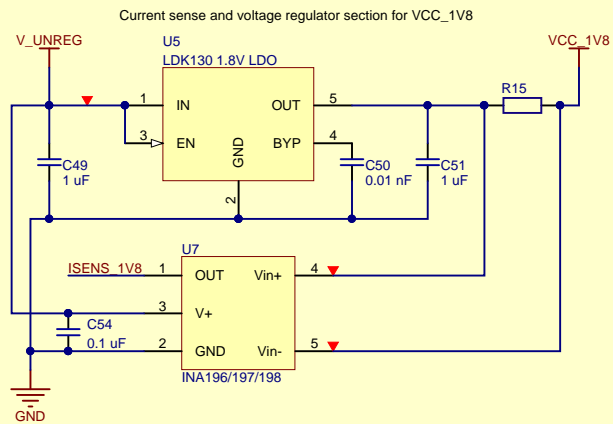
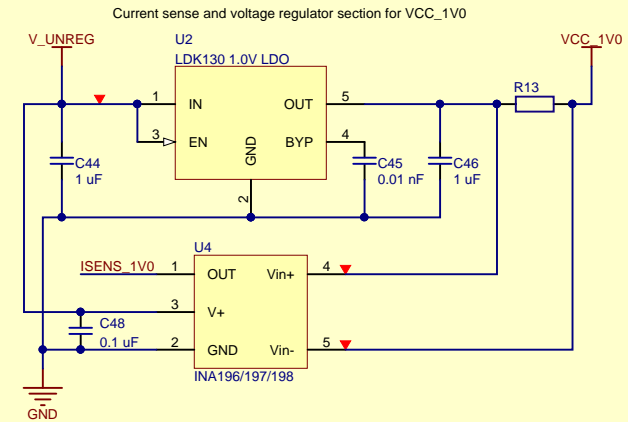
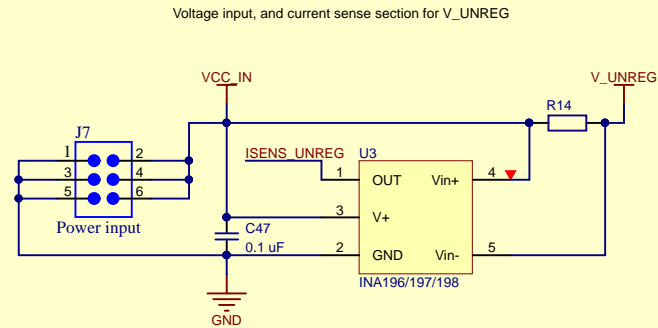


Board: sudo -ku	Version: 1.0	
Sheetname: MCU-GPIO	Sheet 12 of 17	
Subject: TDT4295 Computer Project	Group: Energy	
Schematic file: dmpro16-pcb-v1-MCU-GPIO.SchDoc		



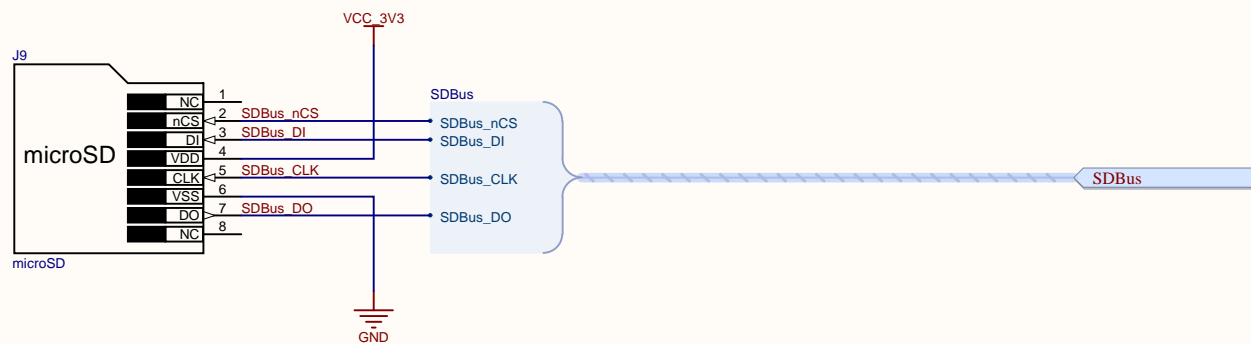
Board: <b>sudo -ku</b>	Version: <b>1.0</b>	
Sheetname: MCU-Power	Sheet 13 of 17	
Subject: TDT4295 Computer Project	Group: Energy	
Schematic file: dmp16-pcb-v1-MCU-Power.SchDoc		


▲ We assume 4 AAA cells provide battery power to the device. Ideally, one would use Li-ion batteries and switch mode power supplies

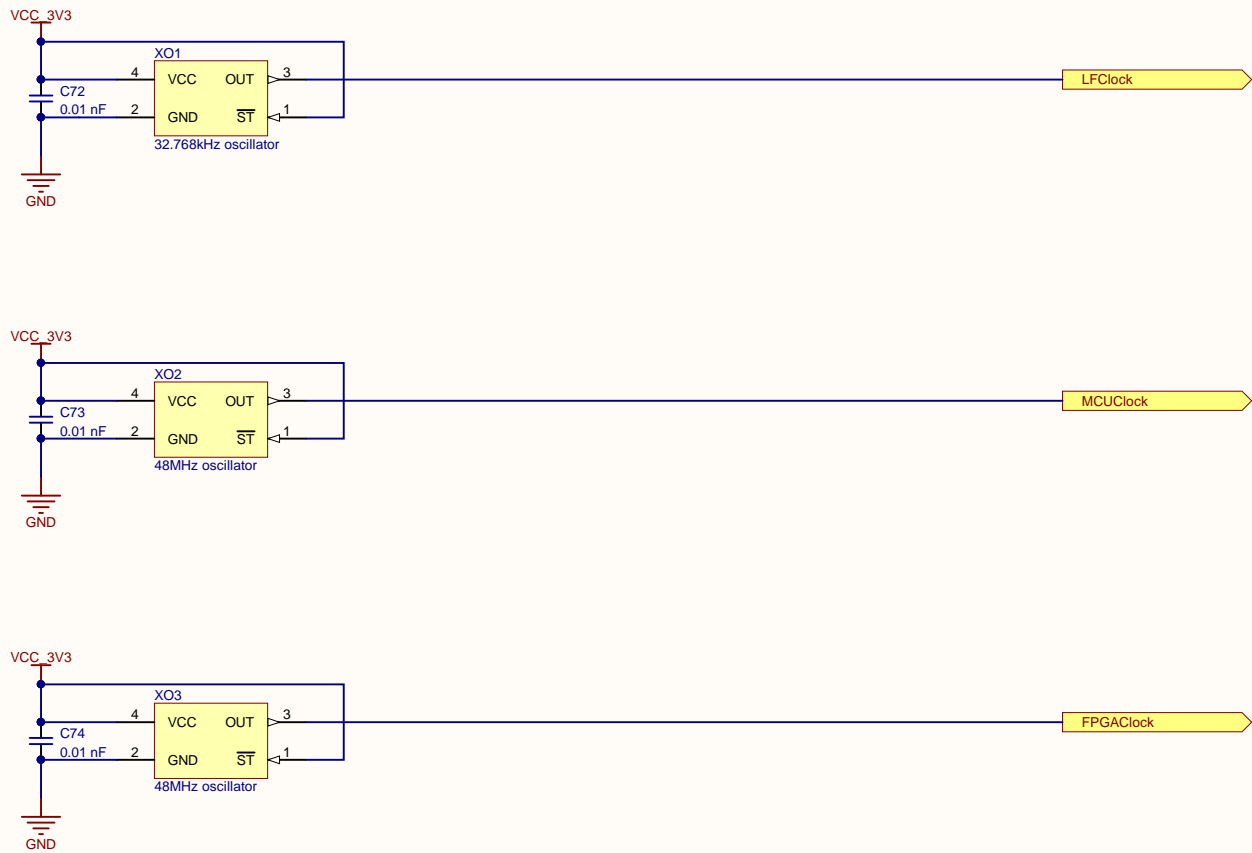



Board: <b>sudo -ku</b>	Version: <b>1.0</b>
Sheetname: PowerSupply	Sheet 14 of 17
Subject: TDT4295 Computer Project	Group: Energy
Schematic file: dmp1r6-pcb-v1-PowerSupply.SchDoc	



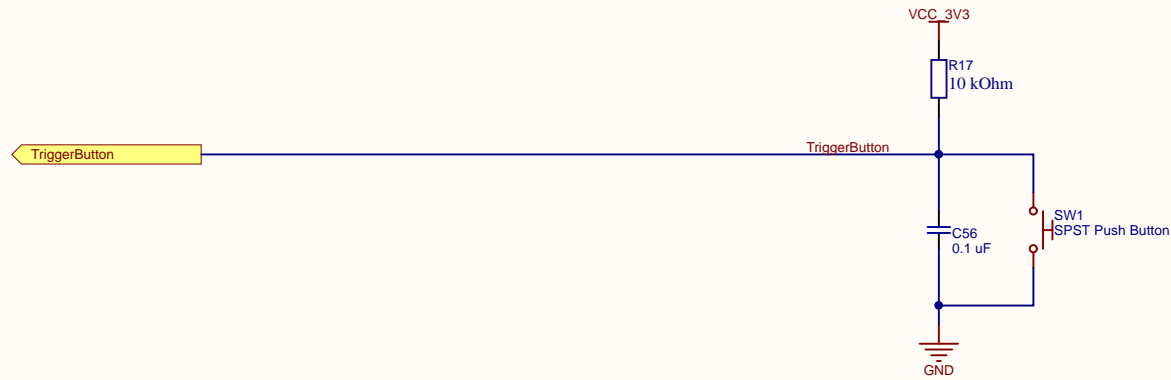


Board: sudo -ku	Version: 1.0	
Sheetname: SDcard	Sheet 15 of 17	
Subject: TDT4295 Computer Project	Group: Energy	
Schematic file: dmp16-pcb-v1-SDcard.SchDoc		




Board: sudo -ku	Version: 1.0	
Sheetname: SystemClock	Sheet 16 of 17	
Subject: TDT4295 Computer Project	Group: Energy	
Schematic file: dmpro16-pcb-v1-SystemClock.SchDoc		





Trigger Button: Triggers the MCU to wake up from sleep and start a new acquisition.

Board: <b>sudo -ku</b>	Version: <b>1.0</b>	
Sheetname: UserInput	Sheet 17 of 17	
Subject: TDT4295 Computer Project	Group: Energy	
Schematic file: dmp16-pcb-v1-UserInput.SchDoc		