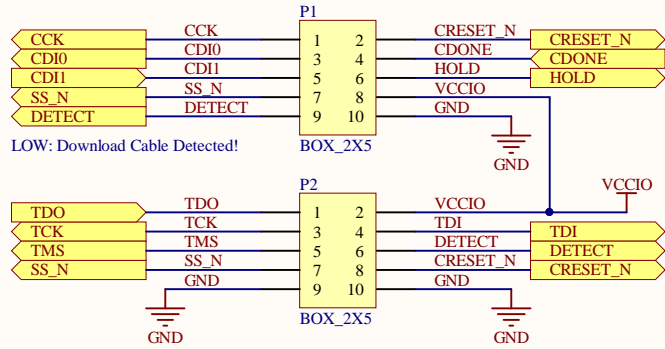
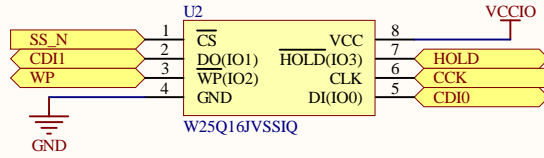


SPI / JTAG Header



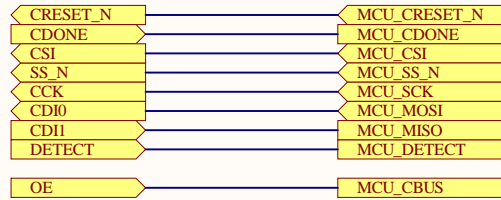
SPI Flash (for SPI Active Mode)



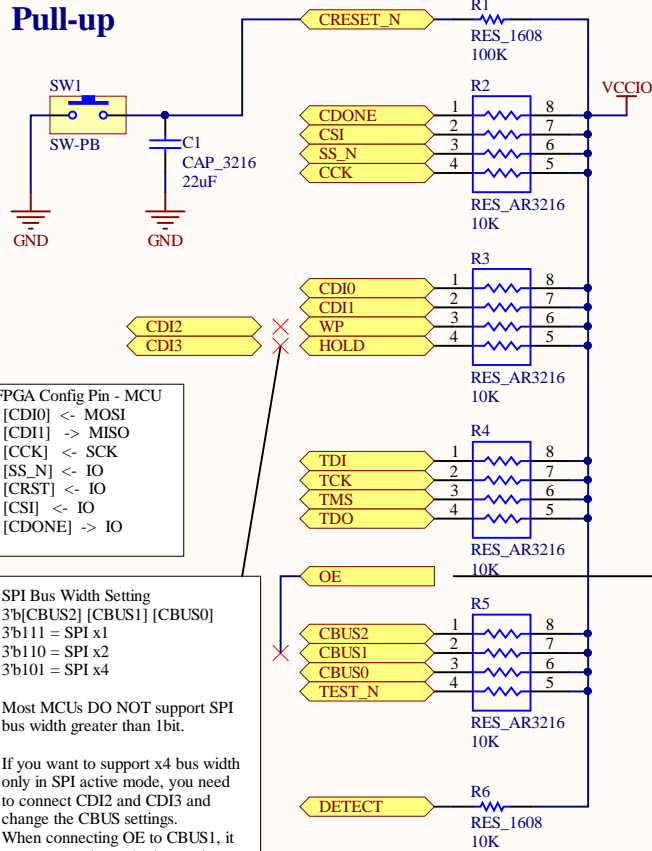
Opt : MCU Interface (for SPI Passive Mode x1)

FPGA Side 3.3V

MCU Side 3.3V



Pull-up



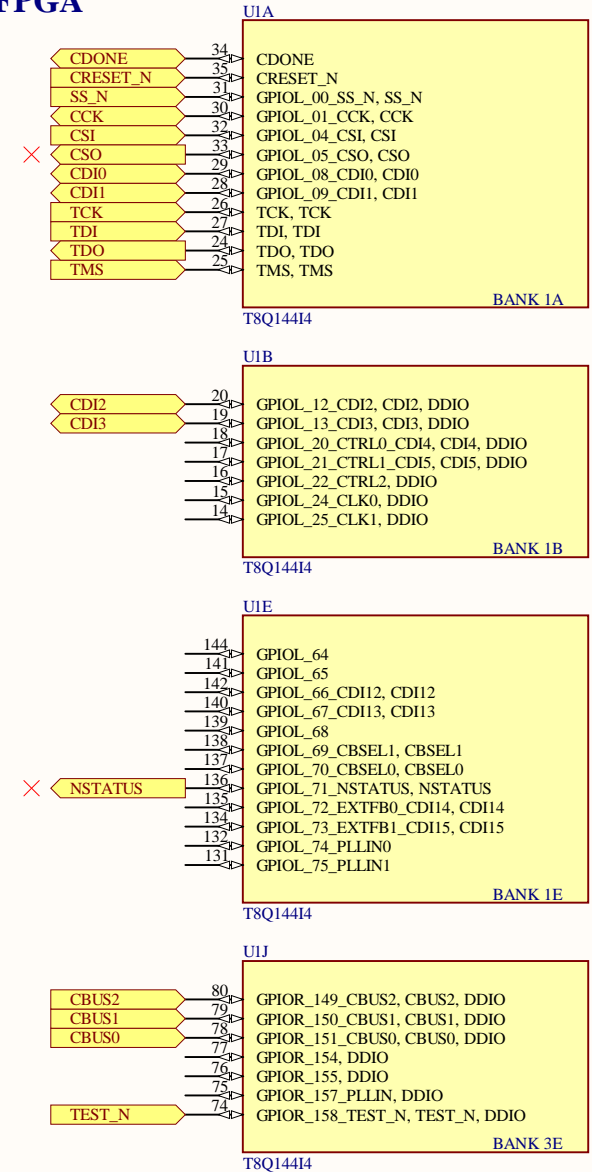
FPGA Config Pin - MCU
 [CDIO] <- MOSI
 [CDI1] -> MISO
 [CCK] <- SCK
 [SS_N] <- IO
 [CRST] <- IO
 [CSI] <- IO
 [CDONE] -> IO

SPI Bus Width Setting
 3'b[CBUS2][CBUS1][CBUS0]
 3'b111 = SPI x1
 3'b110 = SPI x2
 3'b101 = SPI x4

Most MCUs DO NOT support SPI bus width greater than 1bit.

If you want to support x4 bus width only in SPI active mode, you need to connect CD12 and CD13 and change the CBUS settings. When connecting OE to CBUS1, it seems to work at x4 when active and x1 when passive.

FPGA



Title		
Size	Number	Revision
A4		
Date:	2024/05/15	Sheet of
File:	C:\Users\...\SPI_Active_and_Passive.SchDoc Drawn By:	