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Schematics and other handouts serve for informational purposes only!

Drawn by	VG
Checked by	IG
Assembly variant	41I-4-D
Created by	VG
Modified by	-
Modified at	16.03.2023



Title: Legal Notices Modules		
A4	Number: TE0722 41I-4-D	Rev. 04
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REV	Description	
-01	Initial revision	
-02	<p>1. component change: 1) replaced R7 on 10K, R15 on 19K1 2) added series resistors(33 Ohm) to RGB led (R29 .. R31) 3) added pull-up resistors (10K) to SD-card (R23 .. R28) 4) added series resistors 33 Ohm (R32, R21)</p> <p>2. pin change: -functionality change: 1) Added testpoints for control voltages 2) Rebuilt all polygons 3) Changed voltage on resistor R7 (input sense supervisor) 3.3V -> 1.0V</p>	
-03	<p>1. U2, U3 EN5311QI were replaced by MPM3834CGPA 2. L1, L2, L4, L5 Ferrit beads BKP0603HS121-T replaced by MPZ0603S121HT000 3. Proximity/ambient light sensor Si1143-A11-GMR is EOL and not supported anymore 4. Clock generator SiT8008AI-73-XXS-33.333333E is replaced by SiT8008BI-73-XXS-33.333333E 5. Added Legal notices, power diagram</p>	VG (15.03.2023)
-04	<p>1. Added resistors R37, R38, R39 (DNP) 2. Added J4 (JTAG only Enable) 3. Added resistor R40 (10K) 4. The signals were renamed: - SPI-DQ0/M0 ----> SPI-DQ0/M3; - SPI-DQ3/M3 ----> SPI-DQ3/M0. According to AMD Table 6-4. 5. Added capacitor C27 (22µF). 6. Added testpoints TP6, TP9.</p>	VG (20.09.2023)

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A

A

B

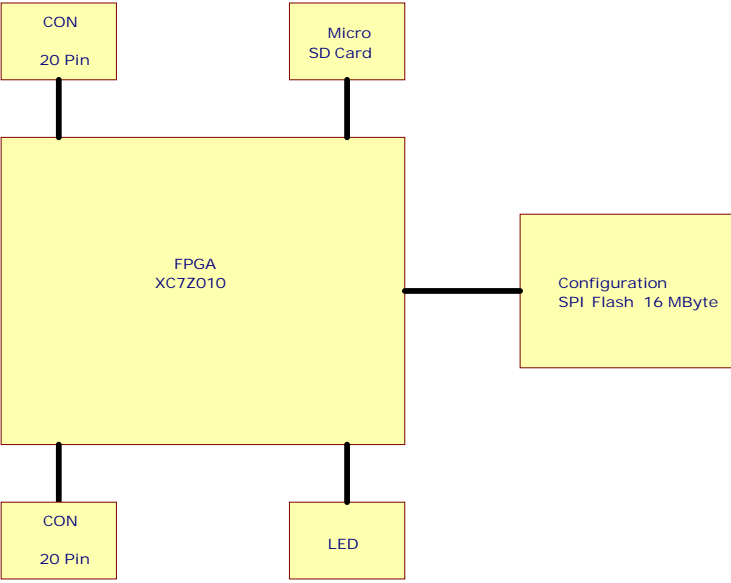
B

C

C

D

D



U_TE0722
TE0722.SchDoc



Serial
Serialnumber 6,3 x 6.3mm

UKCA1
CE Logo on Top Overlay
CE-TOPOVERLAY



Title: Overview		
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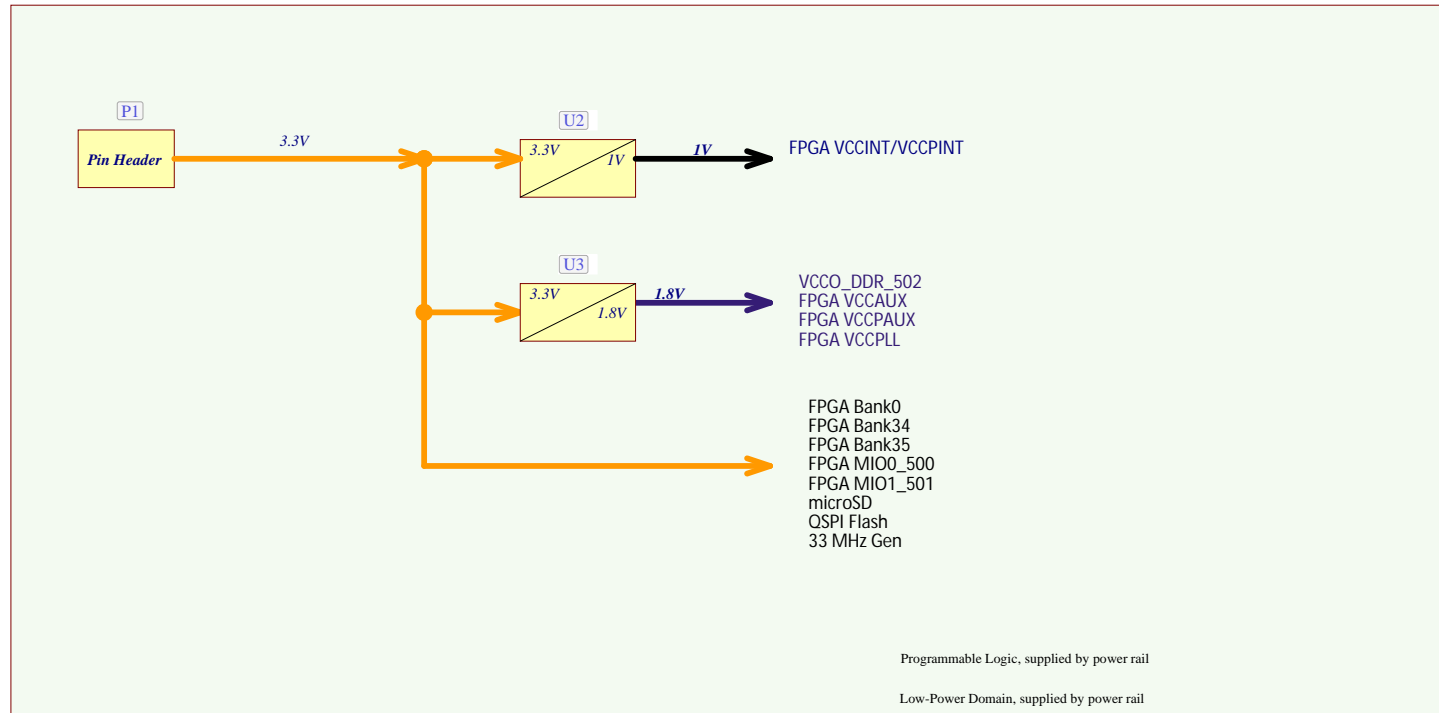
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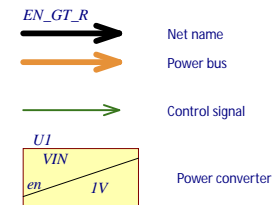
4

Power-on sequencing:



Supported Voltage Ranges:

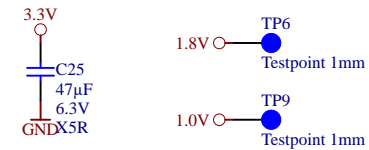
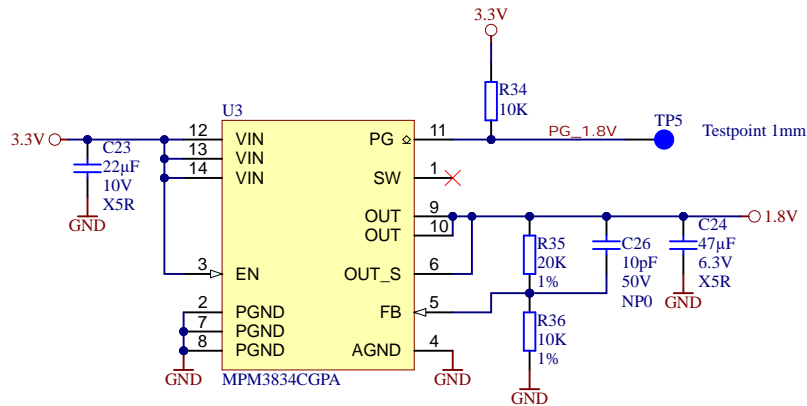
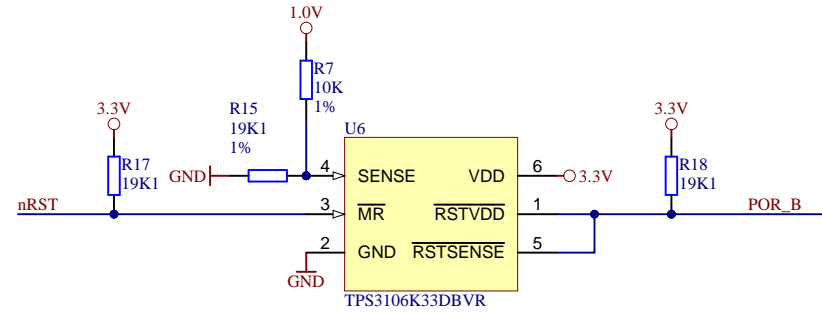
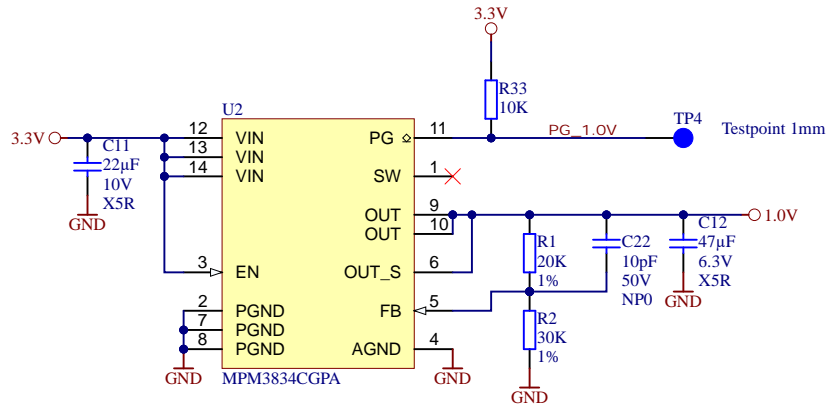
Power Rail	Direction	Range	Tolerance	Description	Note
3.3V from P1, P2	IN	3.3V	+/-3%	Micromodule Power	FPGA MIO0_500, MIO1_501, Bank0, Bank34, Bank35 micro SD, QSPI Flash, 33 MHz Gen




U_PowerSupply
POWER.SchDoc



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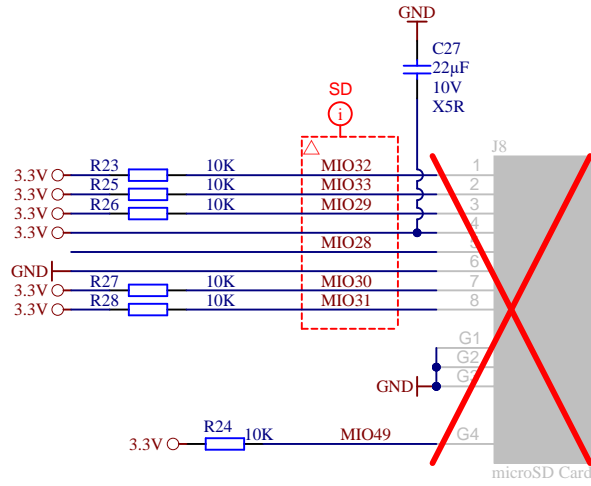
U_FPGA_B34
FPGA_B34.SchDoc

U_FPGA_B35
FPGA_B35.SchDoc

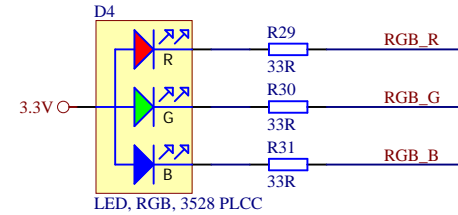
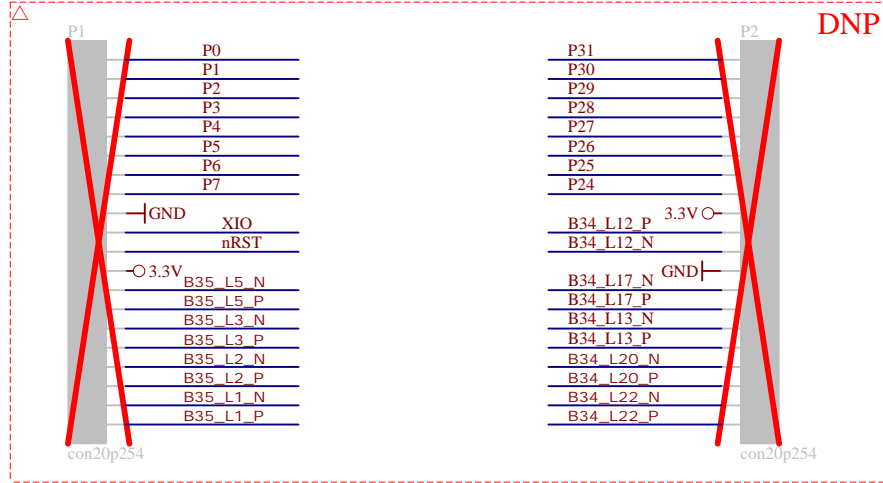
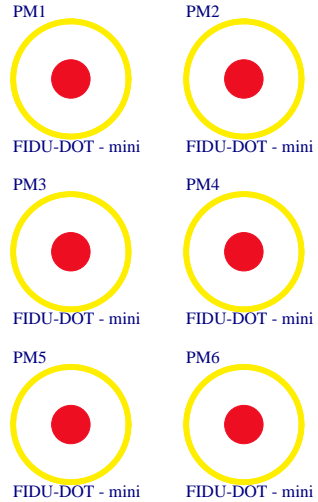
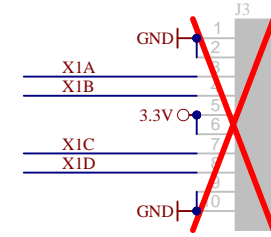
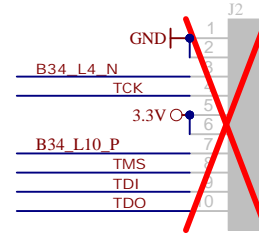
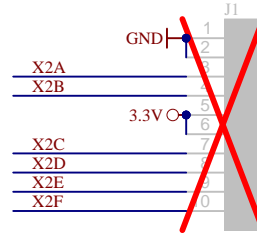
U_FPGA_MIO
FPGA_MIO.SchDoc

U_FPGA_PWR
FPGA_PWR.SchDoc

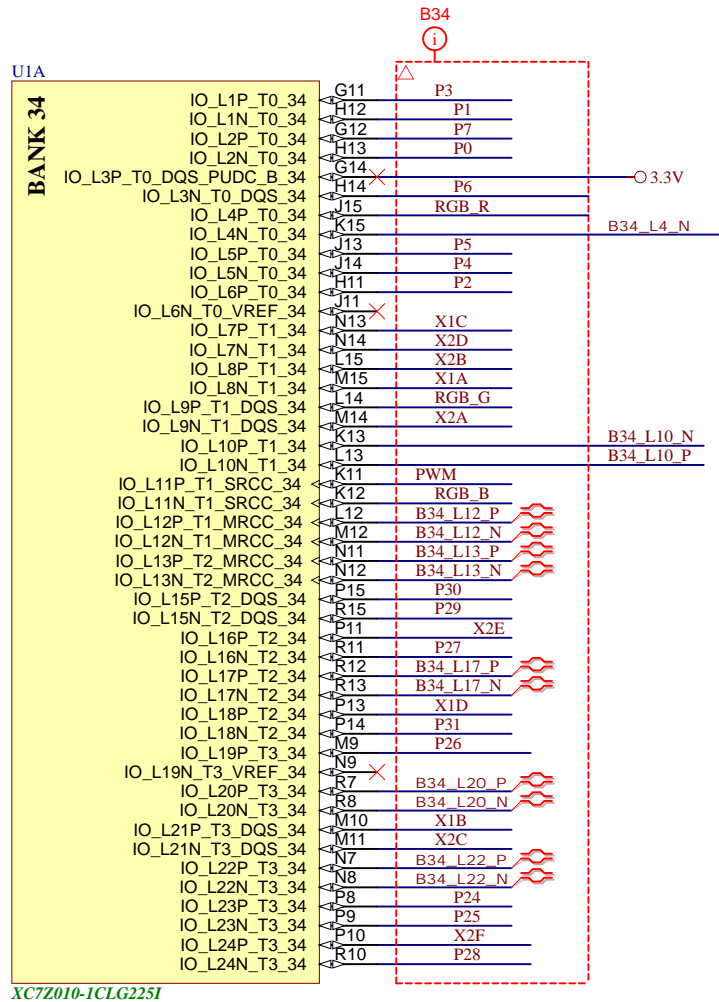
U_POWER
POWER.SchDoc



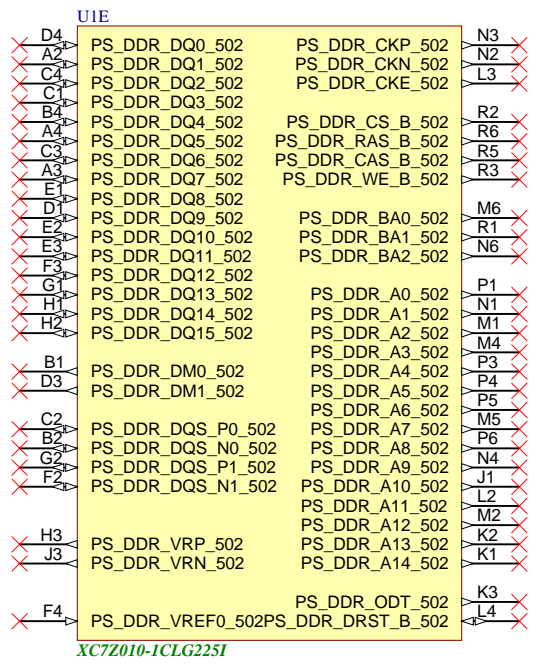
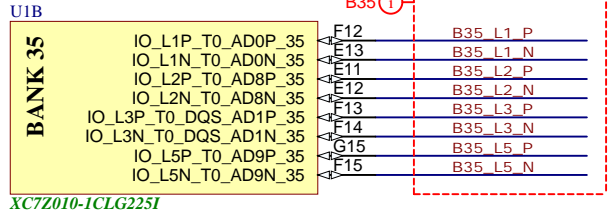

microSD Card Header with Detect Switch



Title: Connectors		
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Title: B35		
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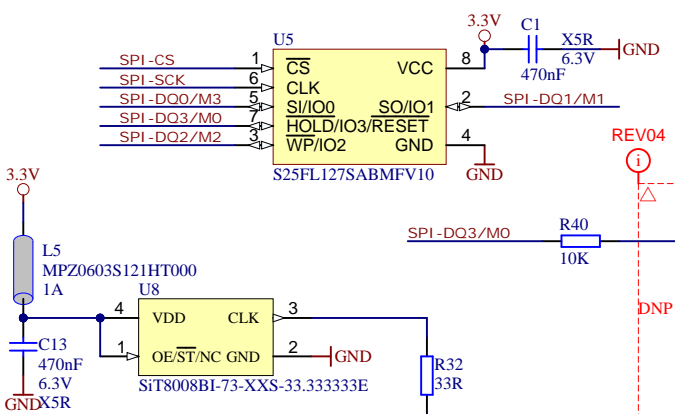
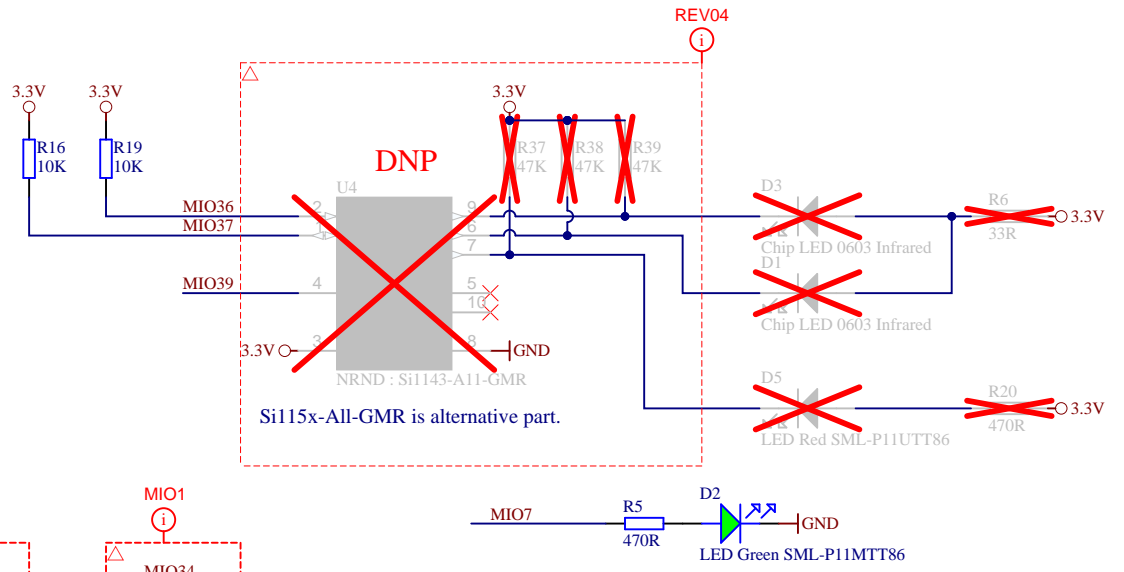
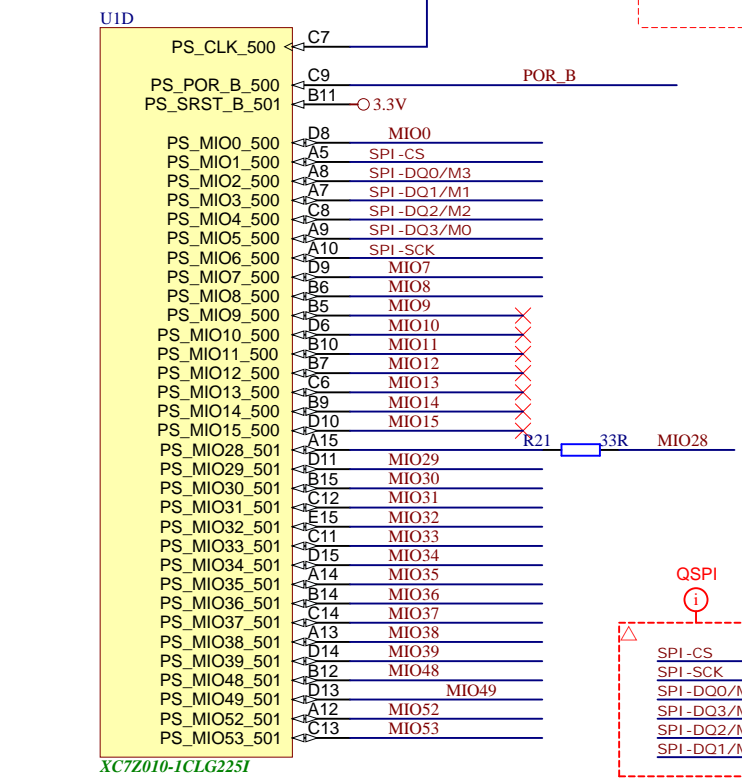


Table 6-4: Boot Mode MIO Strapping Pins

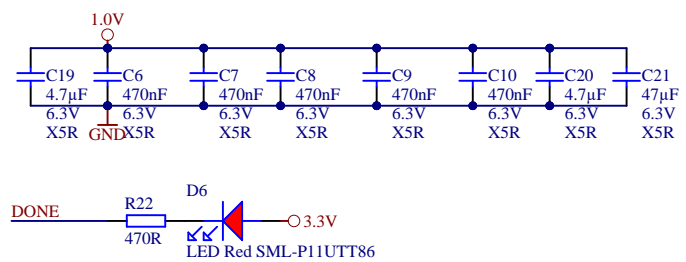
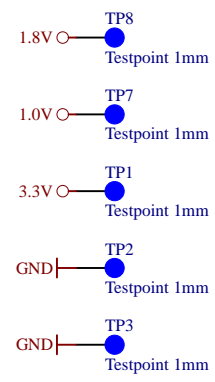
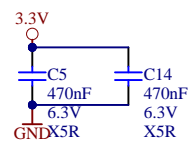
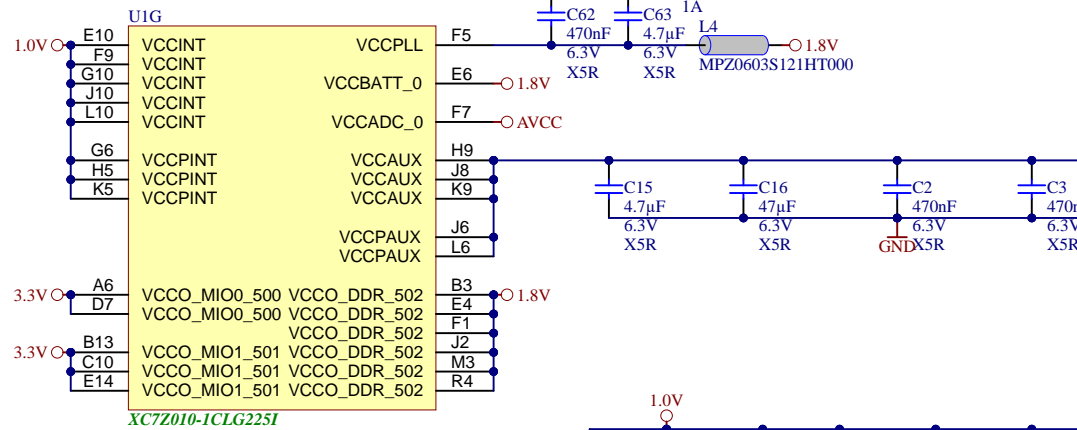
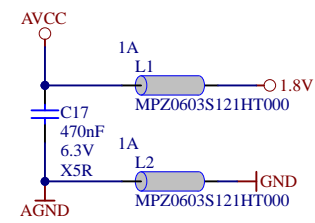
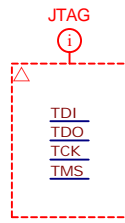
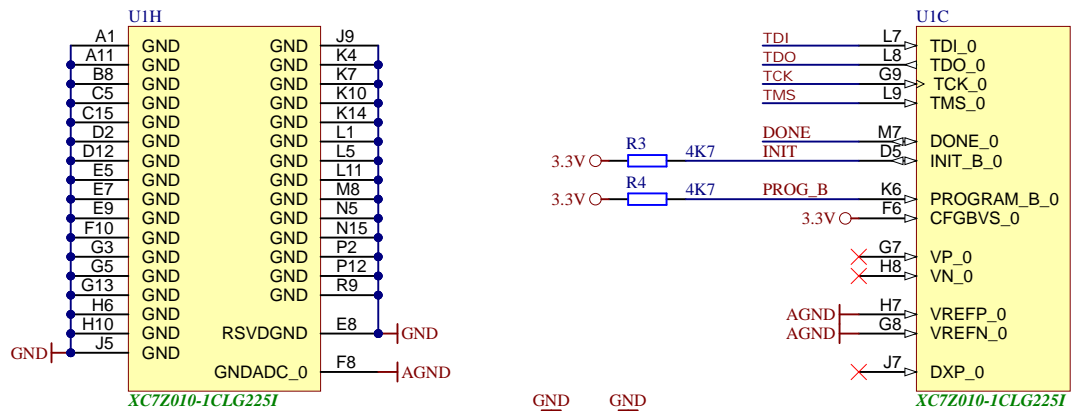
Pin-signal / Mode	MIO[8]	MIO[7]	MIO[6]	MIO[5]	MIO[4]	MIO[3]	MIO[2]
	VMODE[1]	VMODE[0]	BOOT_MODE[4]	BOOT_MODE[0]	BOOT_MODE[2]	BOOT_MODE[1]	BOOT_MODE[3]
Boot Devices							
JTAG Boot Mode; cascaded is most common ^[1]	0	0	0	0	0	0	JTAG Chain Routing ^[2]
NOR Boot ^[3]	0	0	1	0	0	0	0: Cascade mode 1: Independent mode
NAND	0	1	0	0	0	0	
Quad-SPI ^[3]	1	0	0	0	0	0	
SD Card	1	1	0	0	0	0	



QSPI	MIO1
SPI-CS	MIO34
SPI-SCK	MIO35
SPI-DQ0/M3	MIO36
SPI-DQ3/M0	MIO37
SPI-DQ2/M2	MIO38
SPI-DQ1/M1	MIO39
	MIO48
	MIO49
	MIO52
	MIO53



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