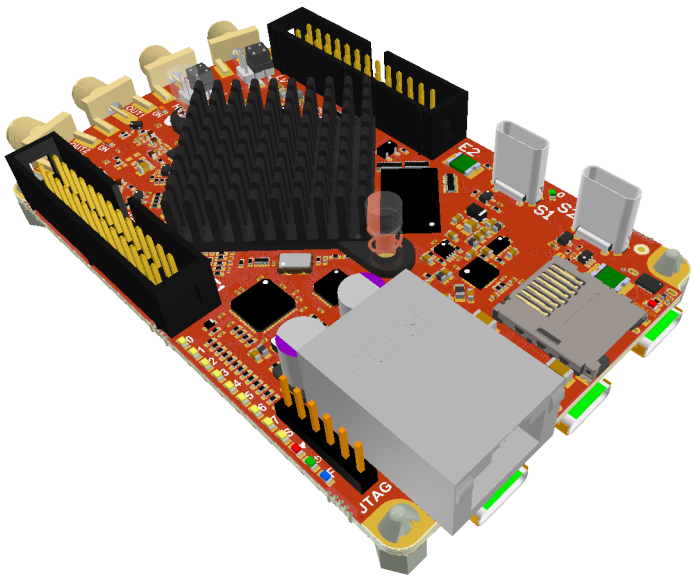

Red Pitaya d.o.o.
Velika pot 21
5250 Solkan
Slovenia

Electrical schematics & Assembly Drawings for:

Name:	***STEMlab TI***
Version:	***V1r3***
Assembly variant:	***65-16***
Release Date:	***14.10.2025***

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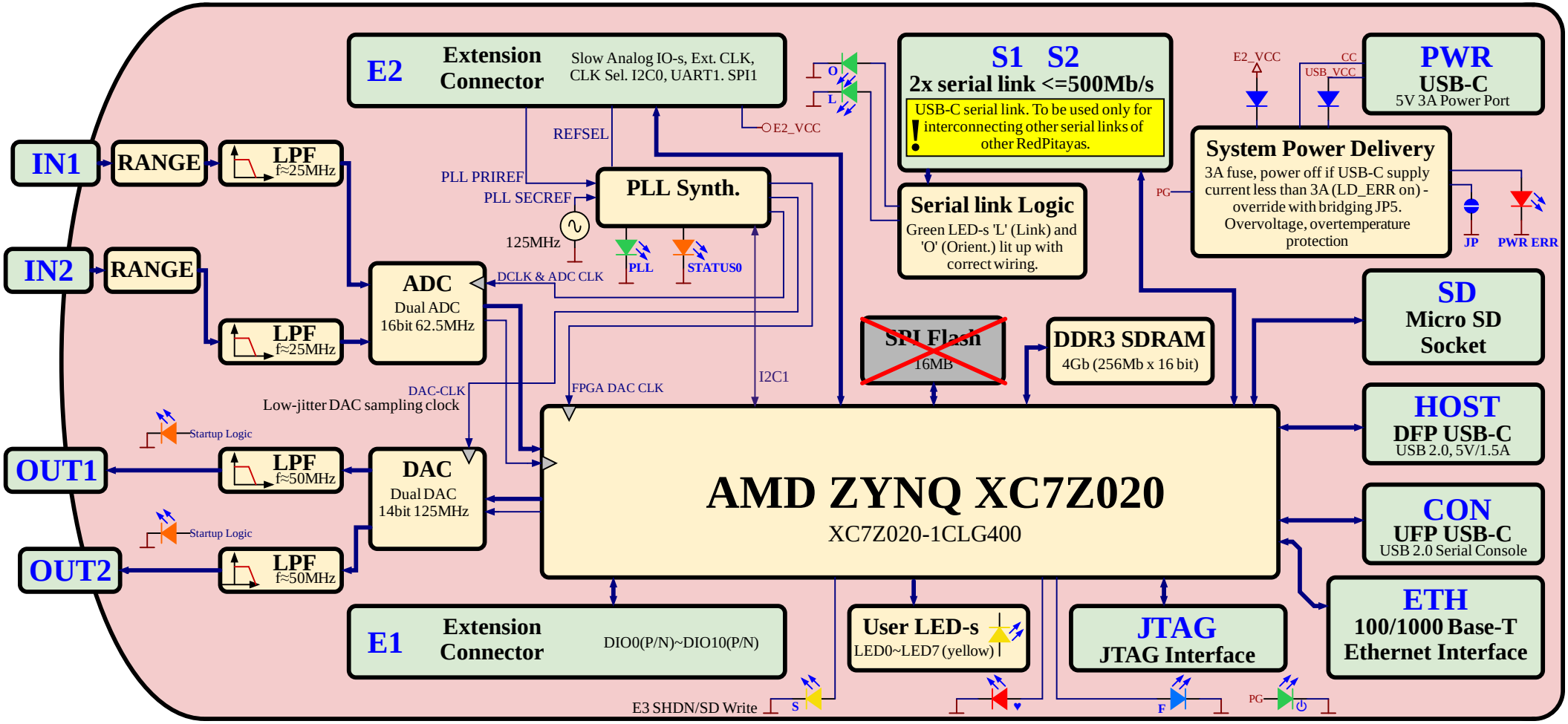
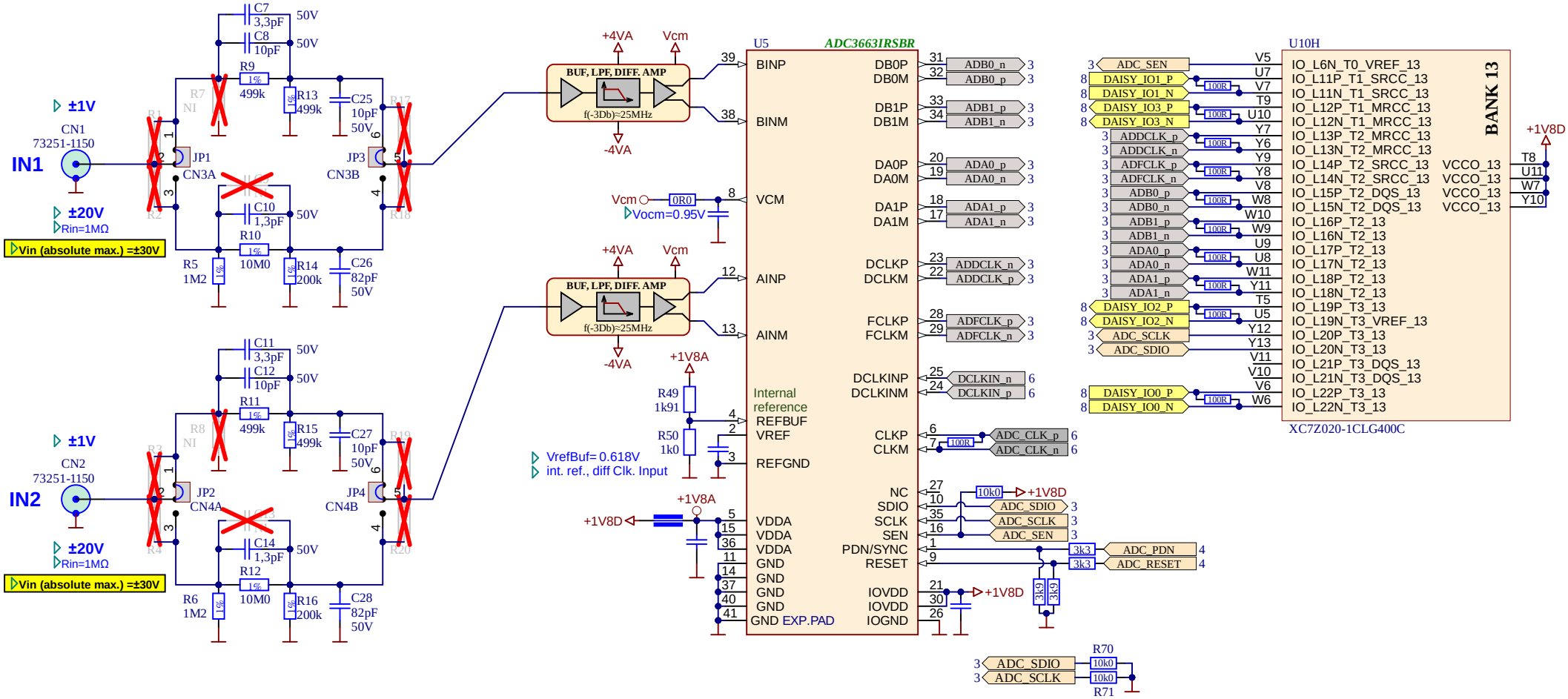
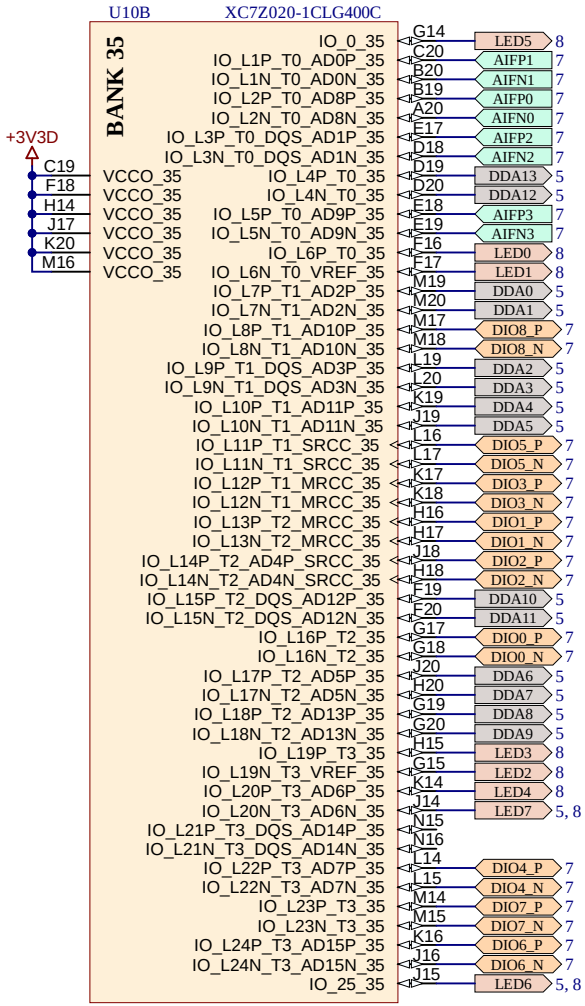
Block Diagram

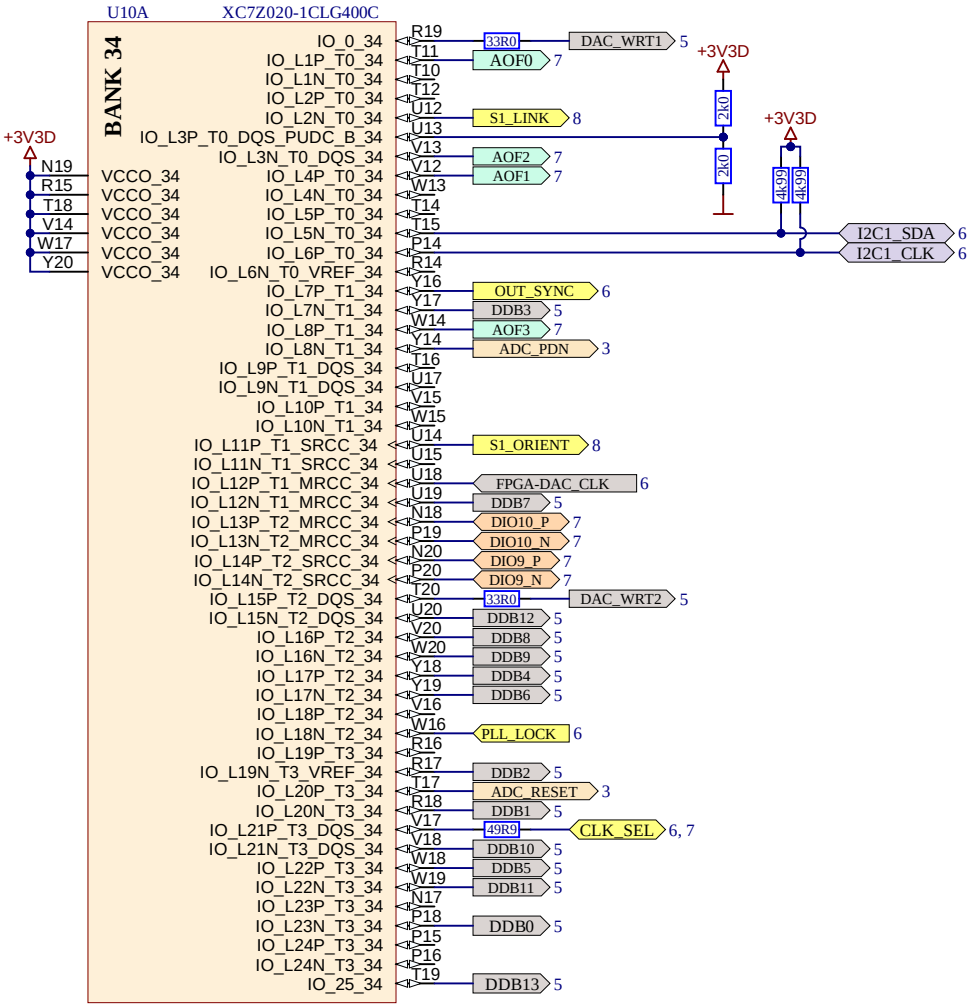


Fast Analog Inputs & ADC Interface

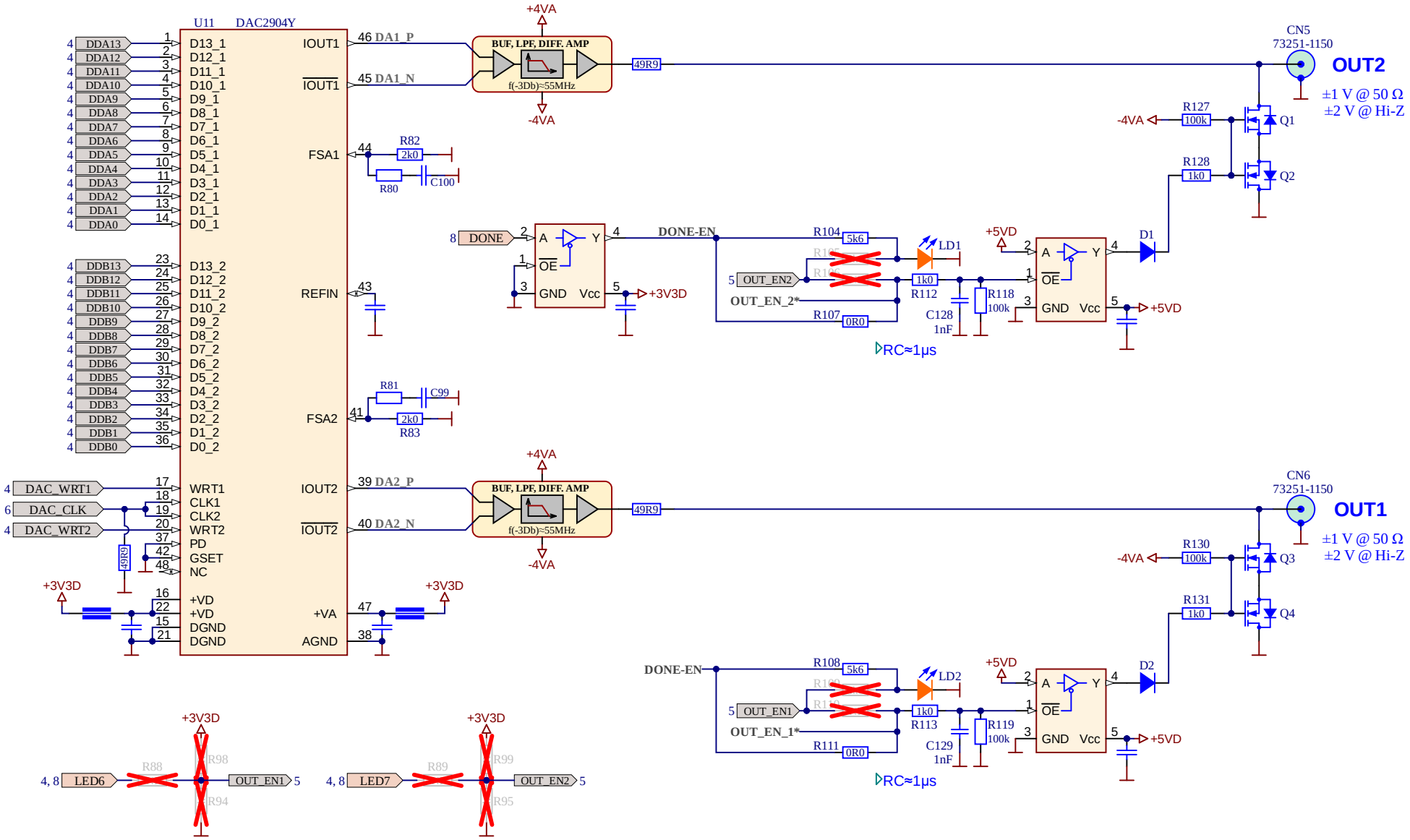


DAC Interface (BANK 34 & 35)

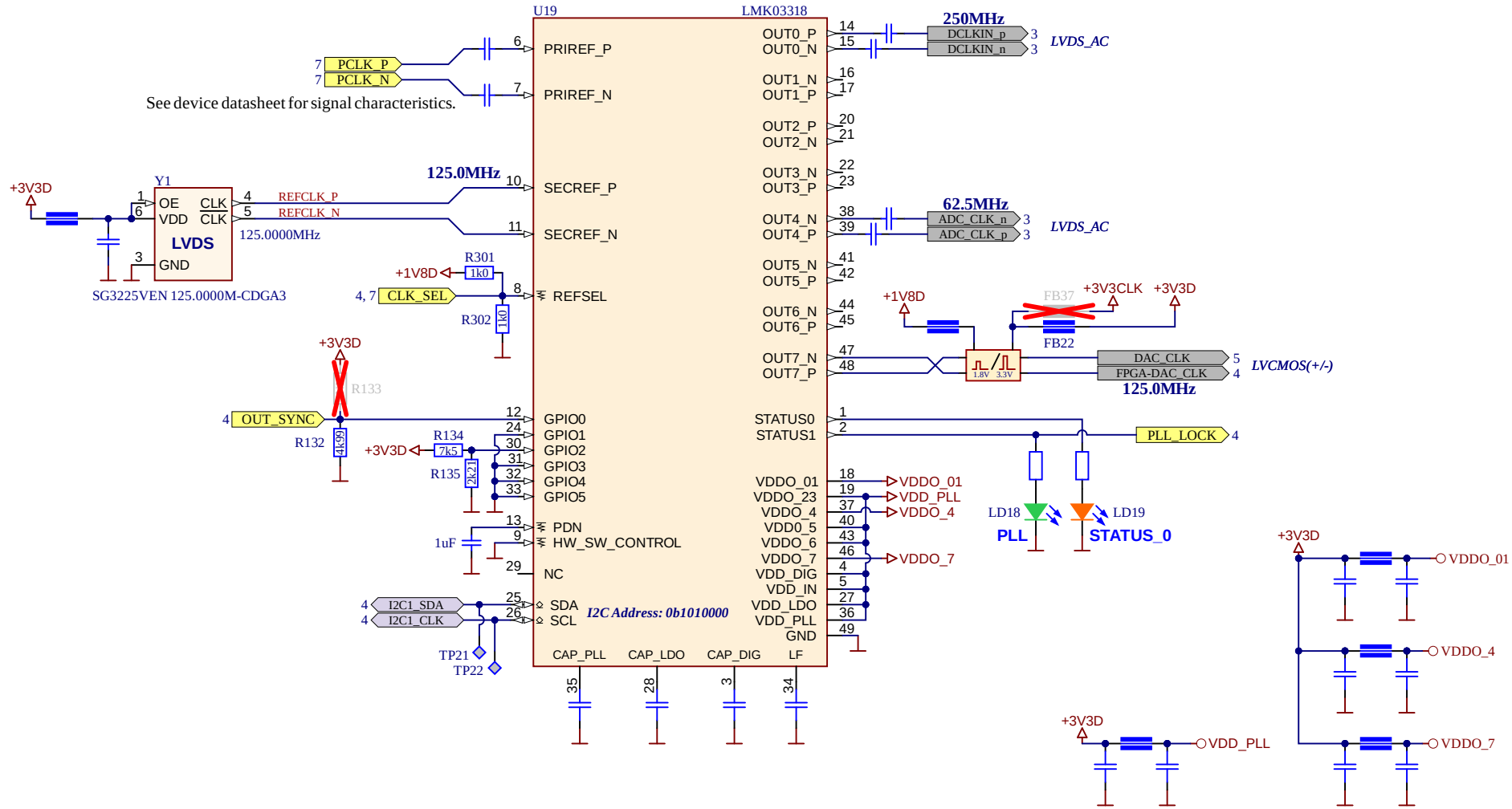




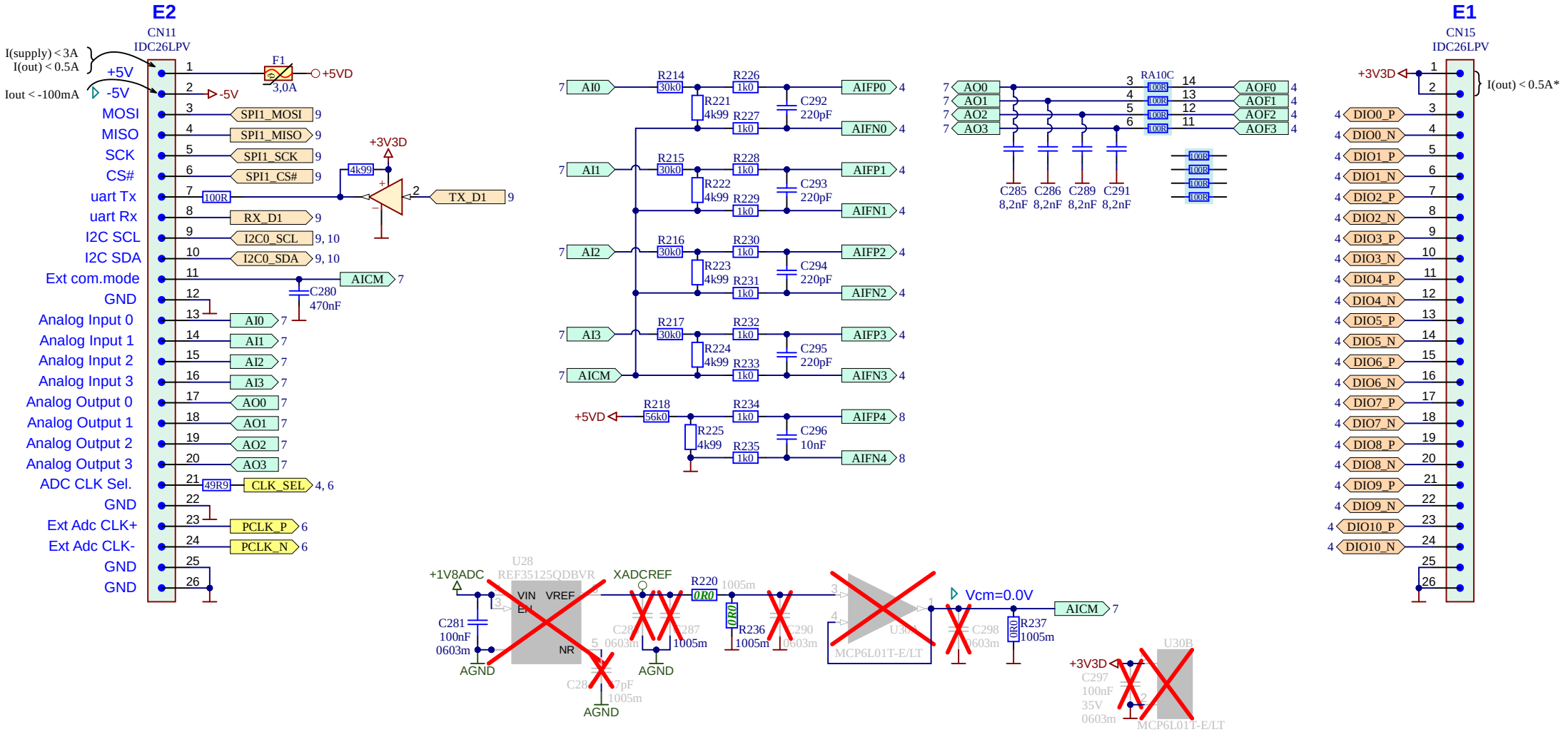
DAC & Fast Analog Output



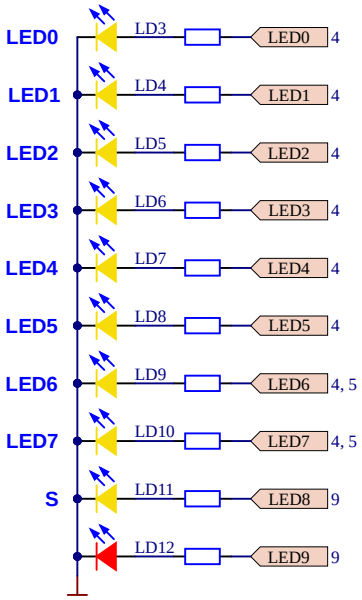
PLL Synthesizer and Clock Tree

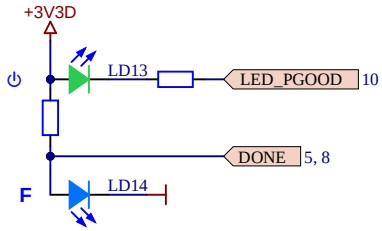


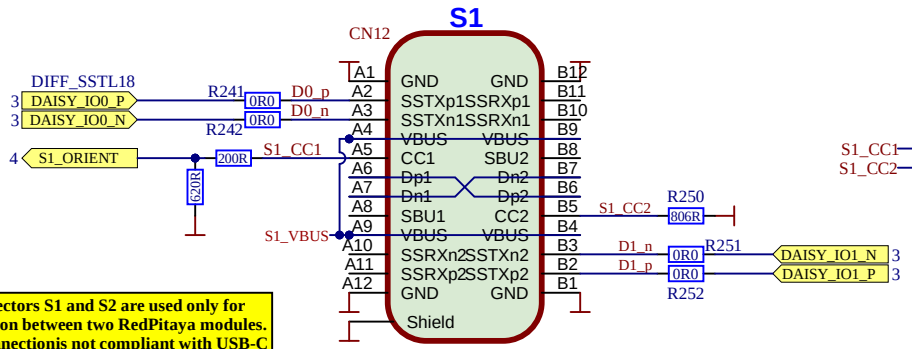
Extension Connectors E1 & E2, Slow Analog IO



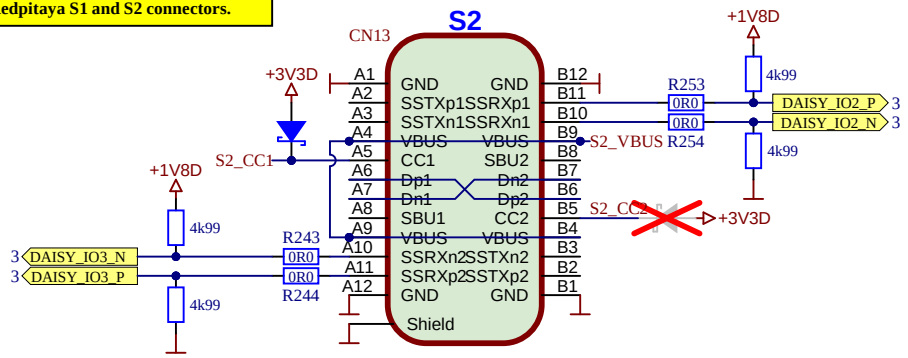
LED-s, JTAG, I, SD, E3, Synchronization

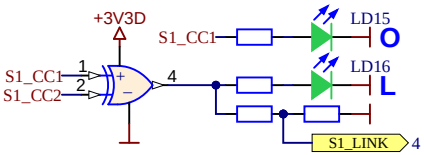


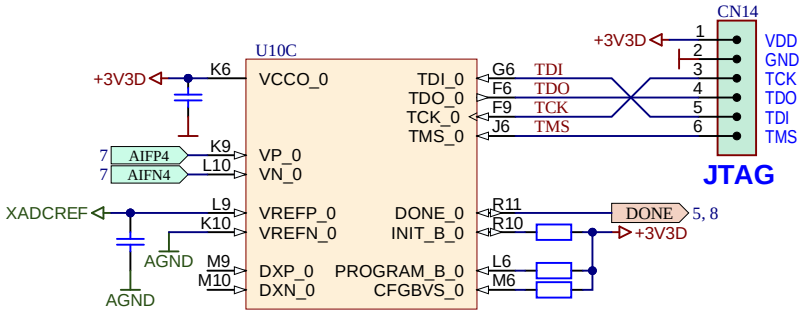


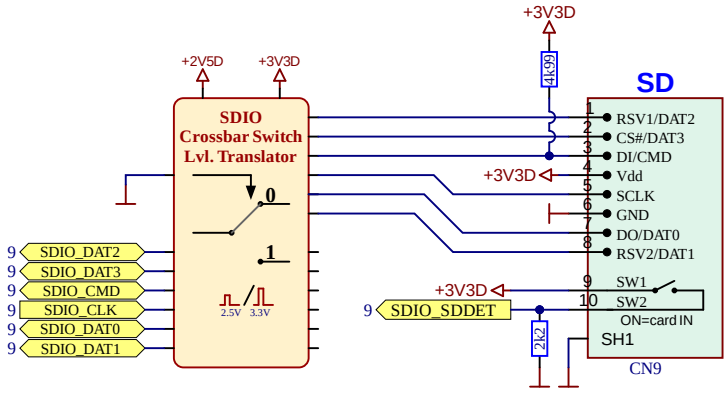


The Connectors S1 and S2 are used only for interconnection between two RedPitaya modules. Note that connectionis not compliant with USB-C specification.
Do not connect S1 or S2 to any other USB-C ports except Redpitaya S1 and S2 connectors.

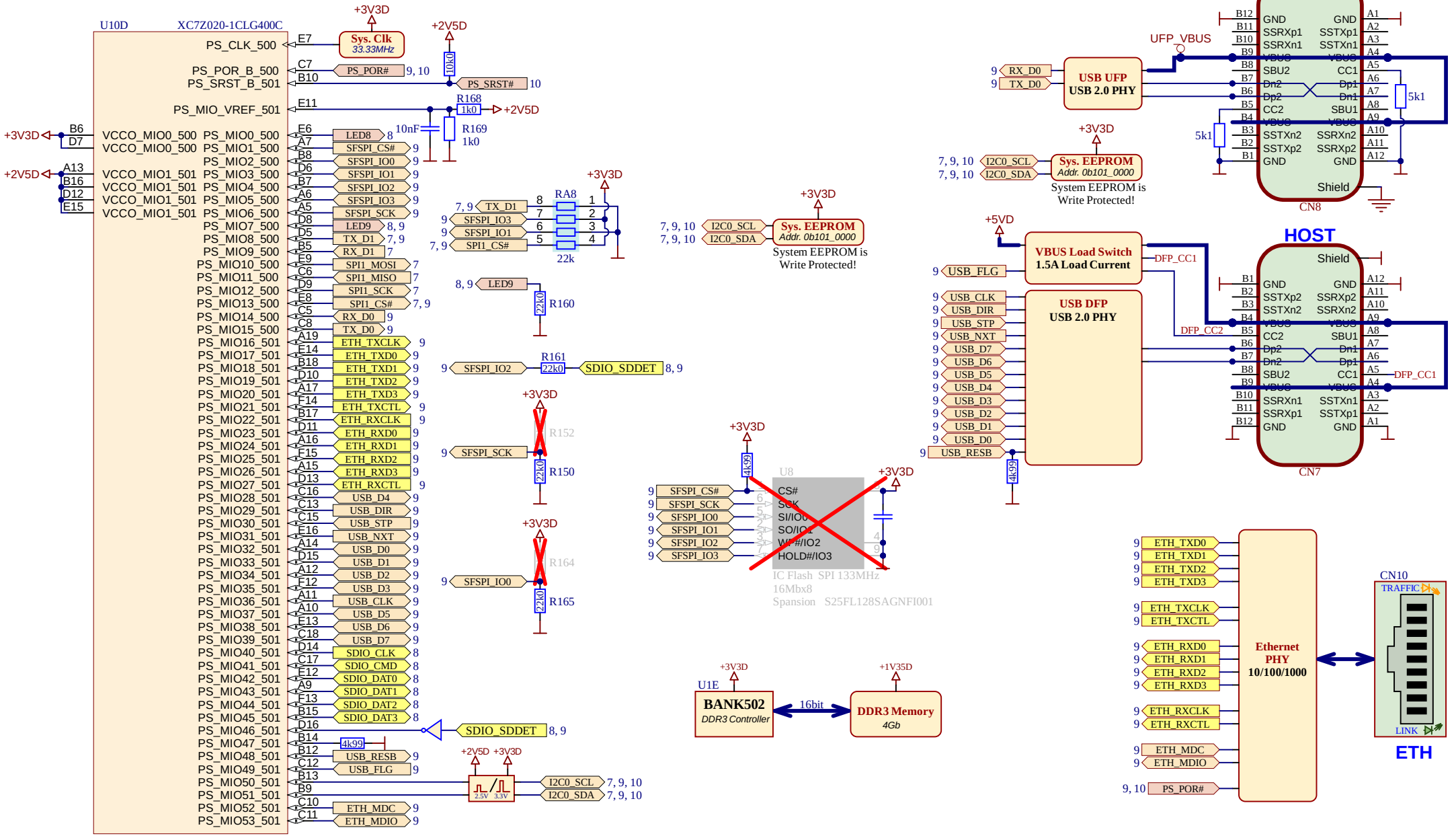




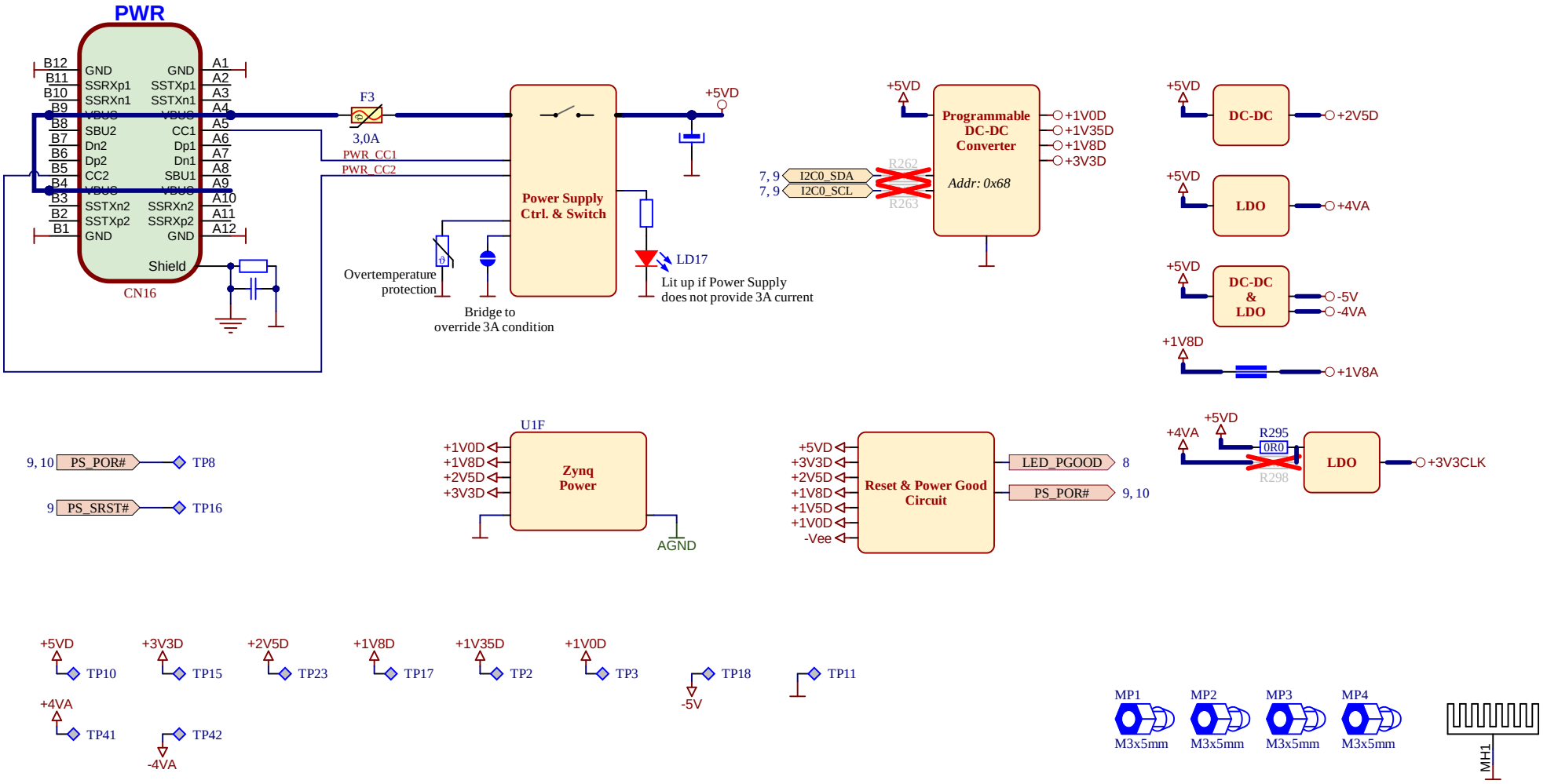




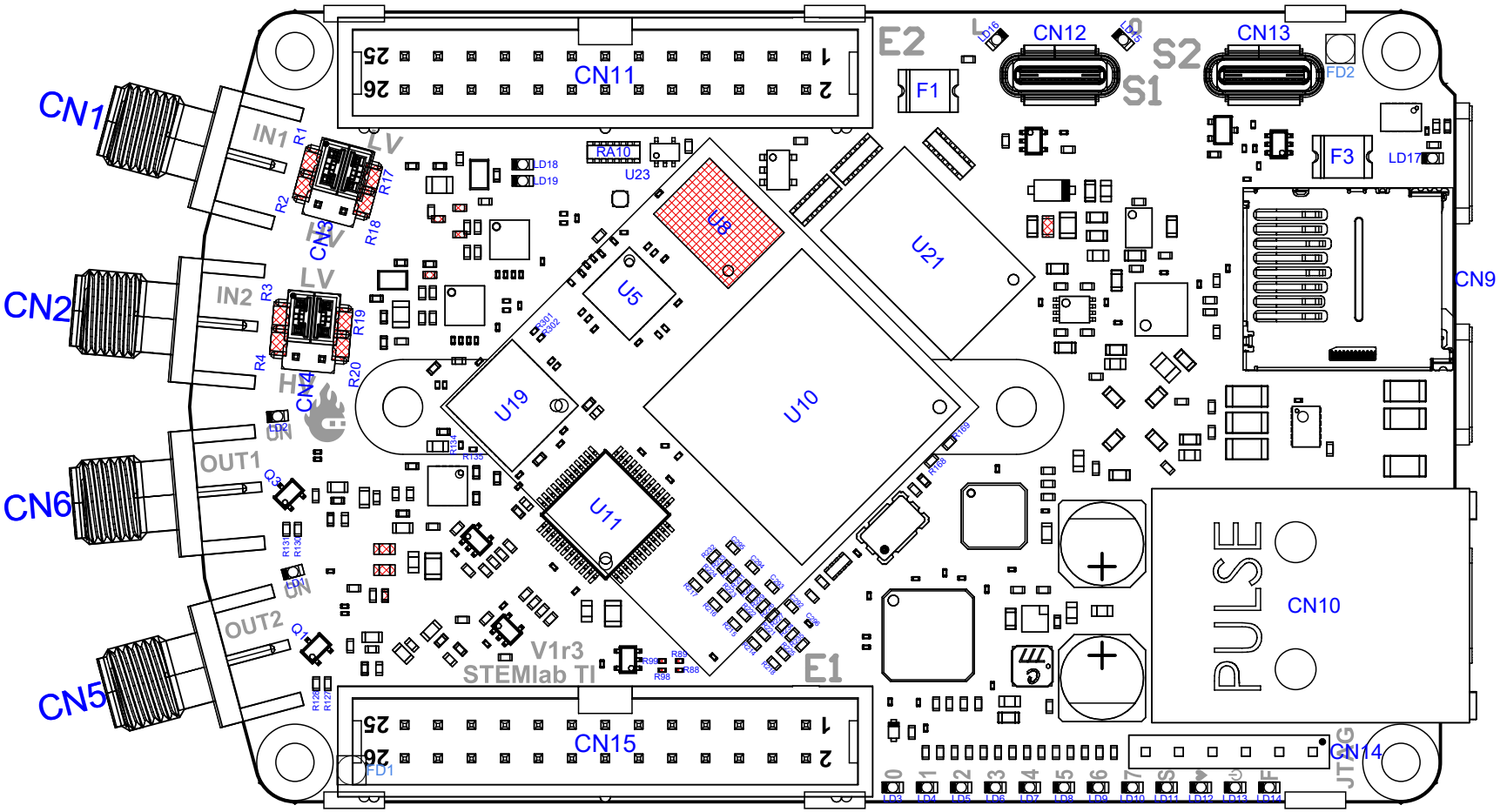
PS-Interface, ETH, Console, Host



Power Supply

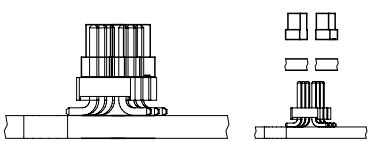


Assembly & 3D Drawings

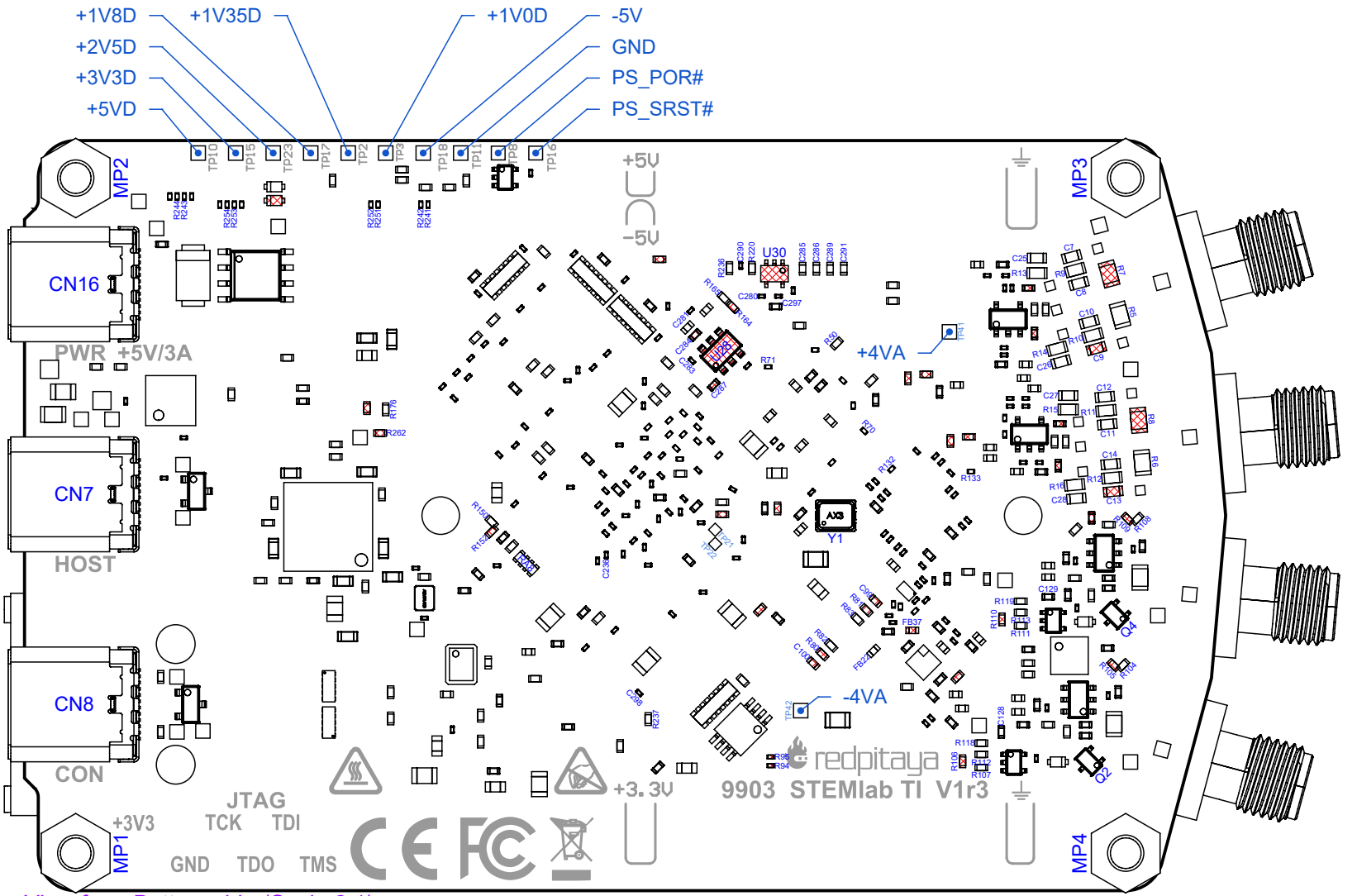


View from Top side (Scale 2:1)

Follow the specified jumper orientation to improve step-response of input channel:

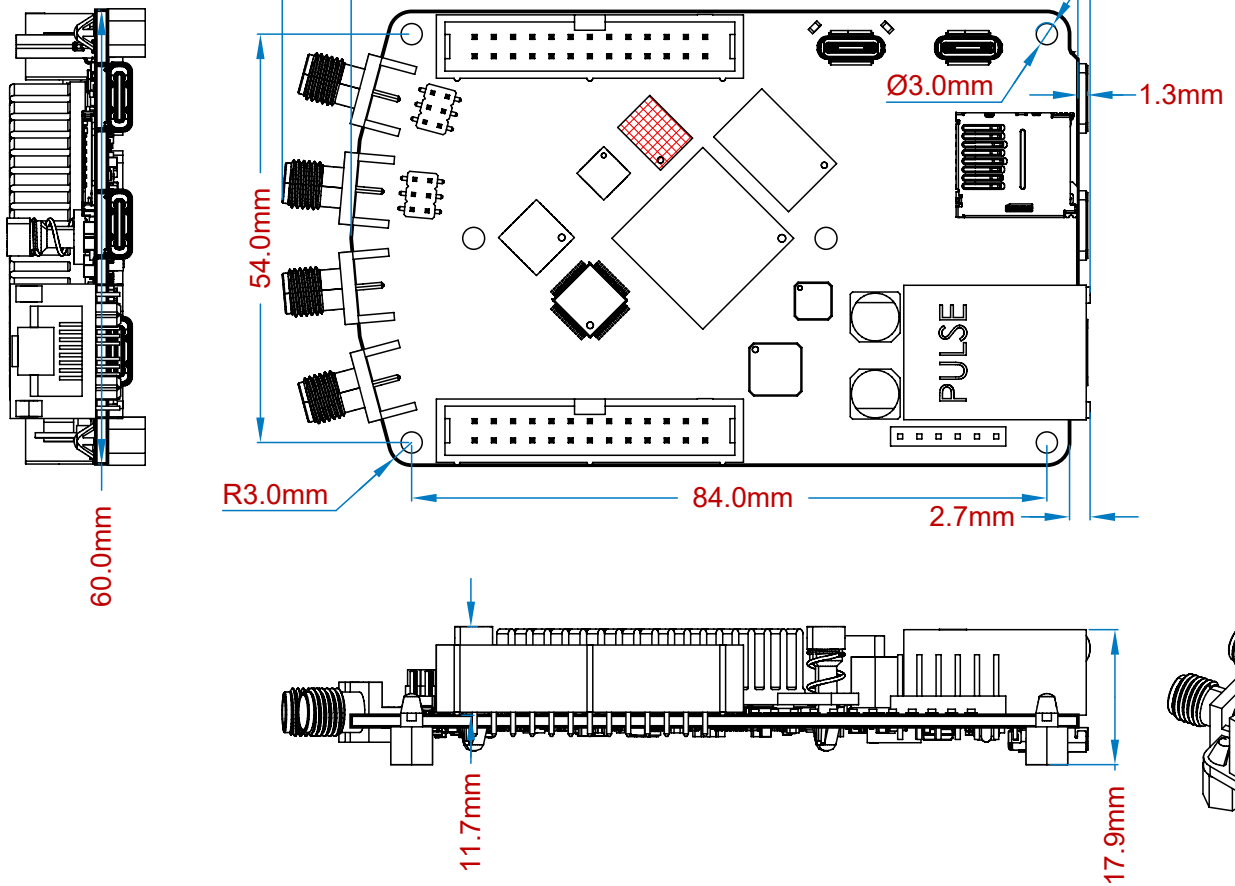


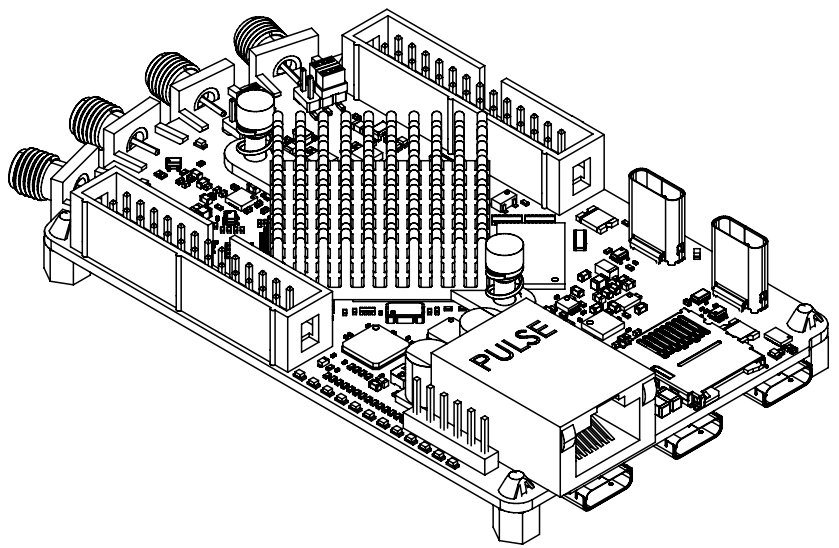
Assembly & 3D Drawings



View from Bottom side (Scale 2:1)

Assembly & 3D Drawings





For all other dimensions, see STEP model avaliable at www.redpitaya.com.

Released: 14.10.2025