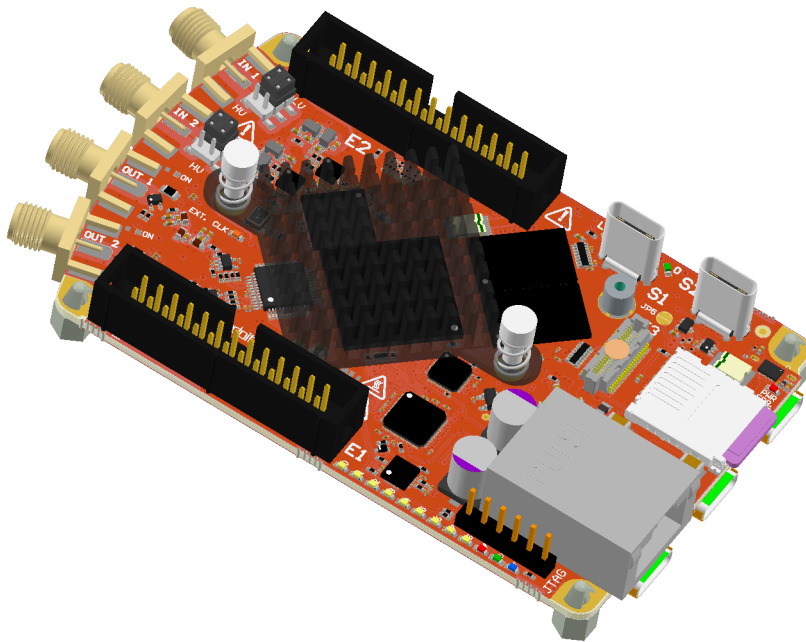




Red Pitaya d.o.o.
Velika pot 22
5250 Solkan
Slovenia



Electrical schematics & Assembly Drawings for:

Name: **STEMlab 125-14 Gen. 2**

Version: **V2r0**

Assembly variant: **PRO Z7020 Gen 2**

Release Date: **10.10.2025**



Disclaimer

STEMlab 125-14 Gen 2 Assembly variant: PRO Z7020 Gen 2

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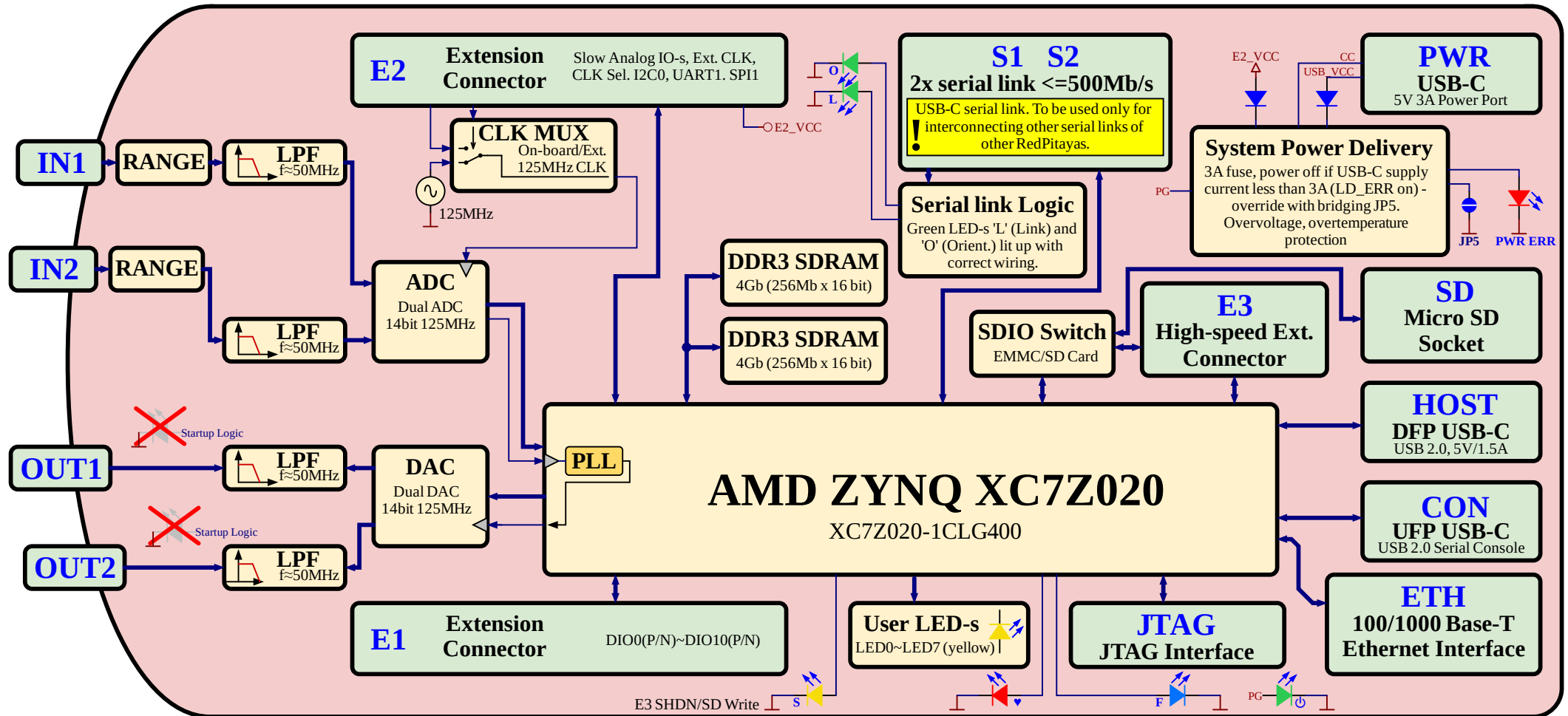
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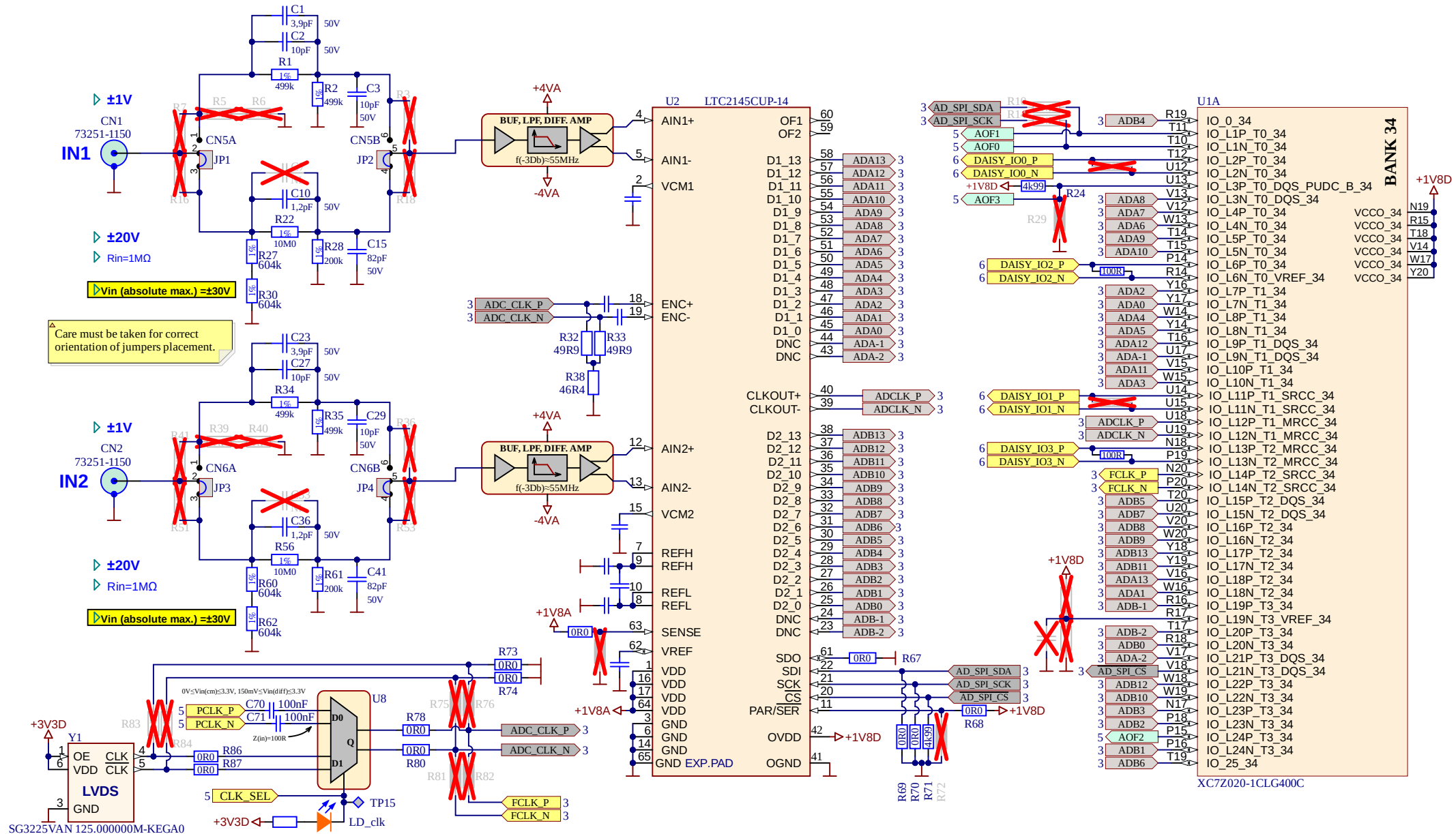
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Block Diagram



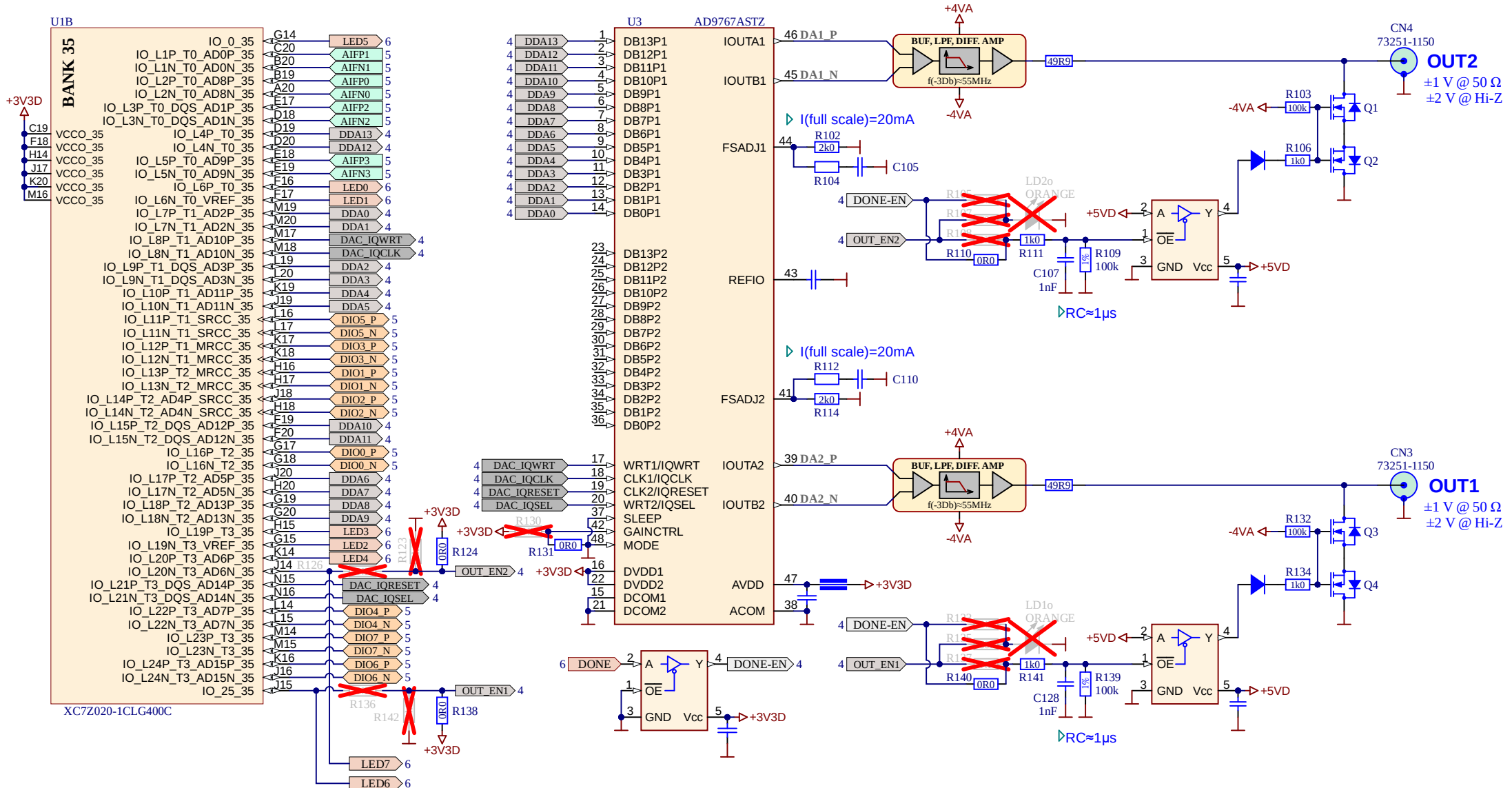
Fast Analog Inputs & ADC Interface





STEMlab 125-14 Gen 2 Assembly variant: PRO Z7020 Gen 2

Fast Analog Outputs and DAC Interface

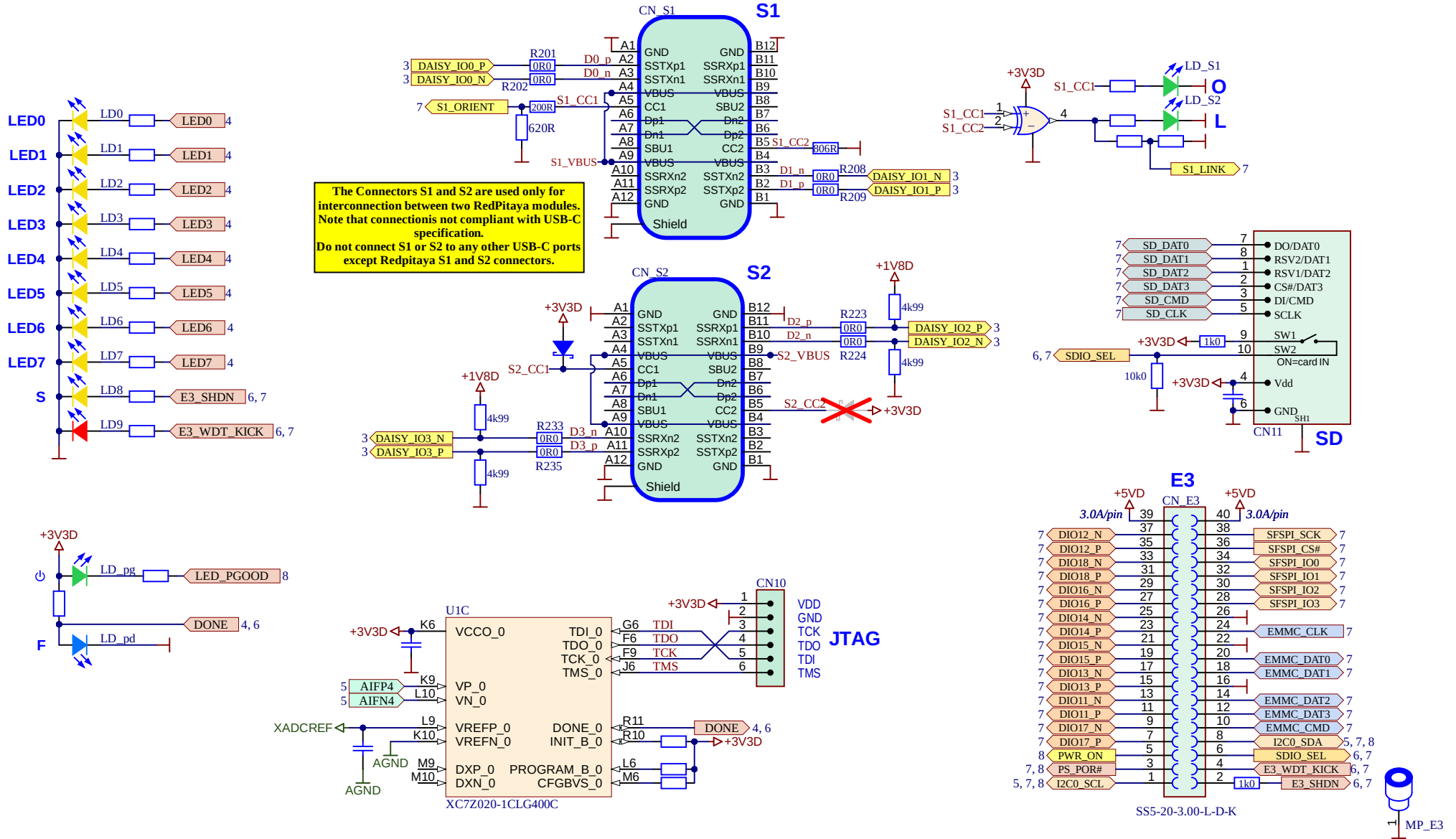






STEMlab 125-14 Gen 2 Assembly variant: PRO Z7020 Gen 2

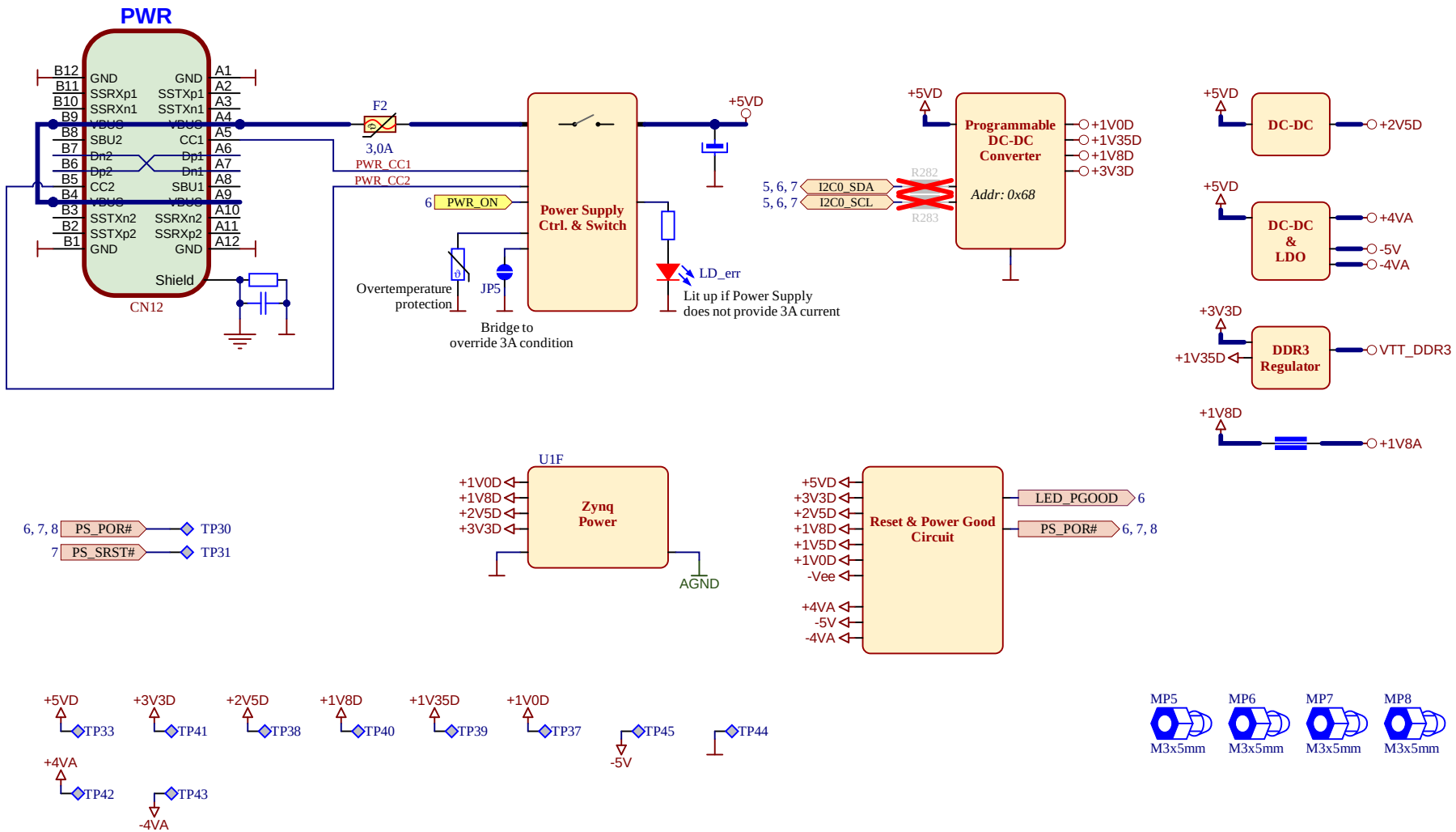
LED-s, JTAG, I, SD, E3, Synchronization

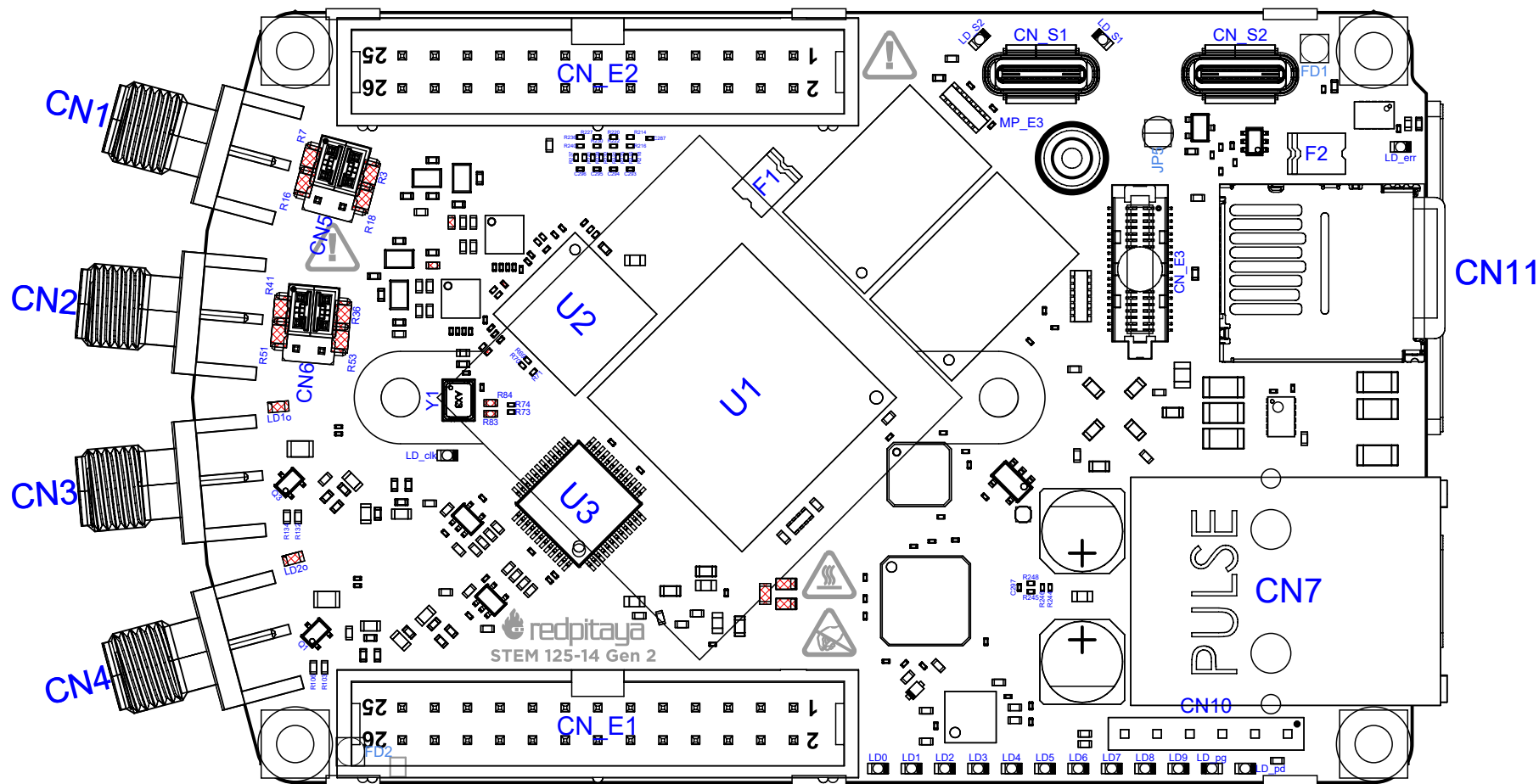




The schematic diagram illustrates the USB and Ethernet interfaces of the T1040 module. It shows the connection of the USB UFP and USB DFP PHYs to the USB 2.0 ports (CN8 and CN9). It also shows the connection of the Ethernet PHY to the Ethernet port (CN7). The USB UFP PHY is connected to the USB 2.0 ports (CN8) and the USB DFP PHY is connected to the USB 2.0 ports (CN9). The Ethernet PHY is connected to the Ethernet port (CN7). The diagram includes labels for various pins and components, such as USB UFP, USB DFP, Ethernet PHY, and the various pins of the connectors.

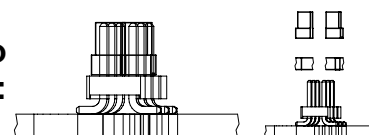
Power Supply



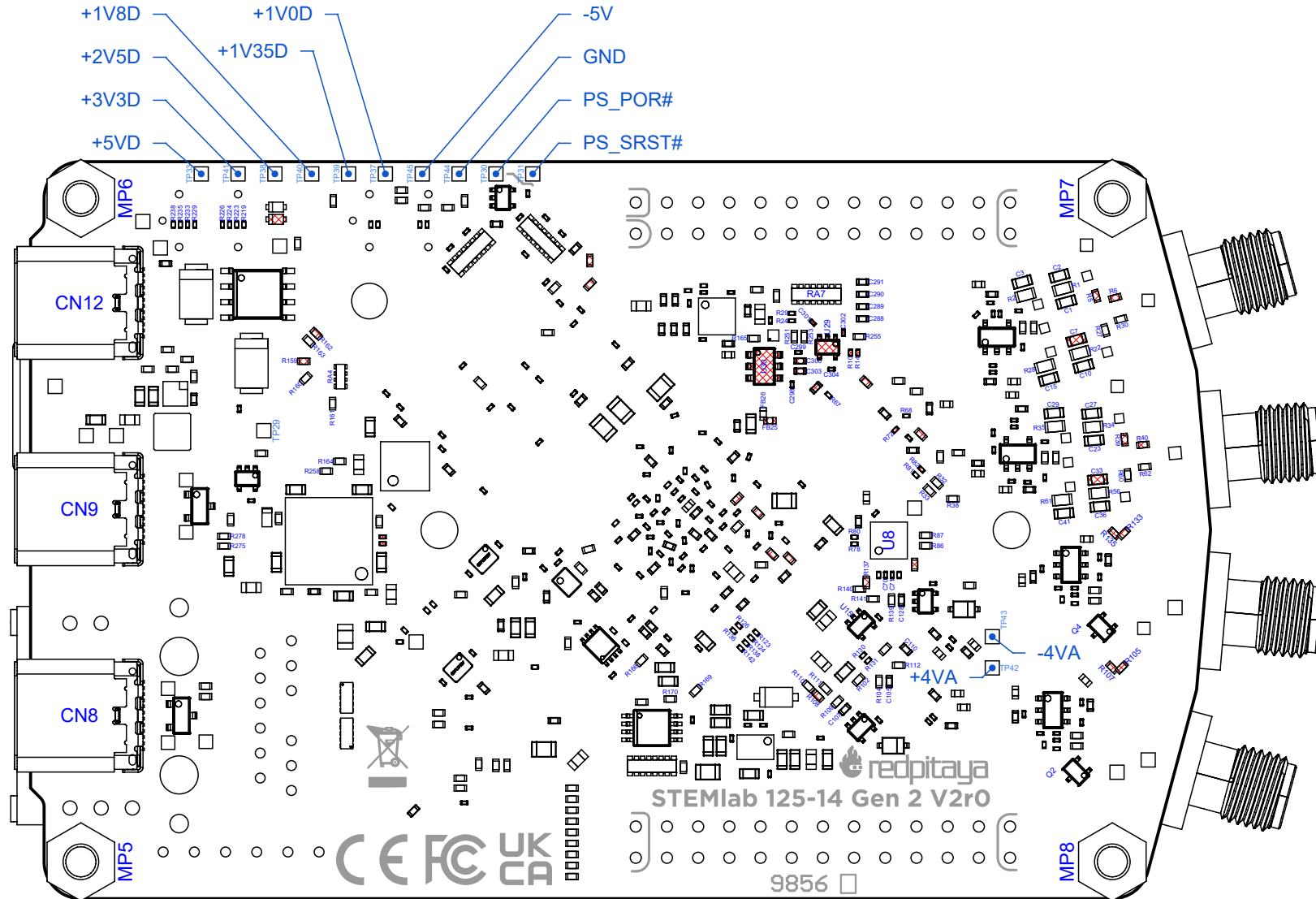


View from Top side (Scale 2:1)

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

