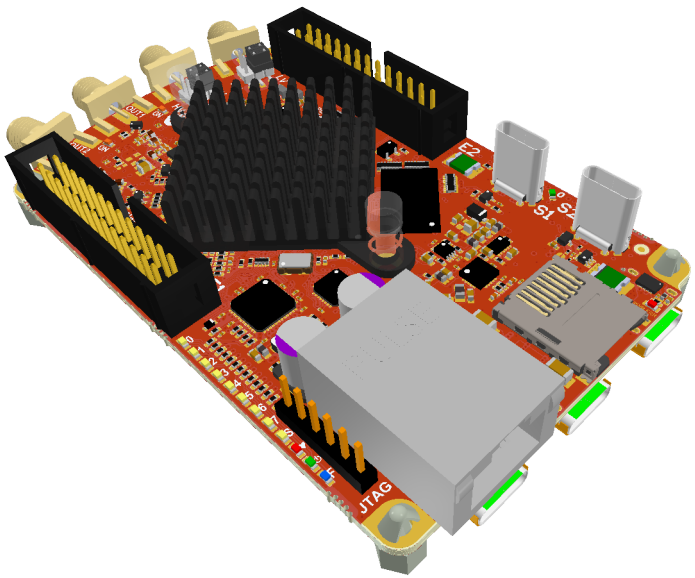


Red Pitaya d.o.o.
Velika pot 21
5250 Solkan
Slovenia

Electrical schematics & Assembly Drawings for:

Name:	***STEMlab TI***
Version:	***V1r3***
Assembly variant:	***125-14***
Release Date:	***14.10.2025***

Disclaimer

Red Pitaya and the Red Pitaya logo are registered trademarks of Red Pitaya d.o.o. All trademarks and trade names are the properties of their respective owners and Red Pitaya d.o.o. disclaims any proprietary interest or right in trademarks, service marks and trade names other than its own.

Red Pitaya is not responsible for typographical or other errors or omissions or for direct, indirect, incidental or consequential damages related to this material or resulting from its use.

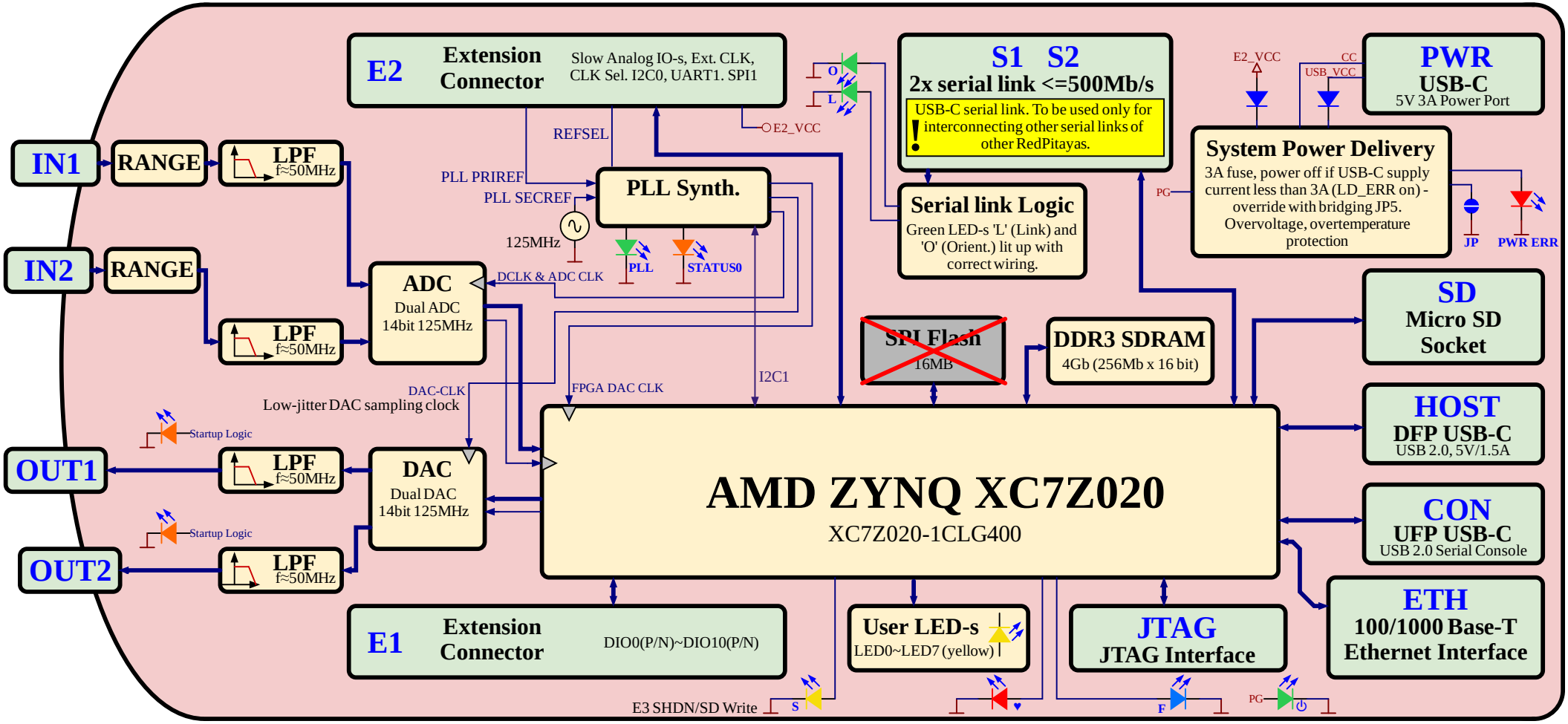
Red Pitaya makes no warranty or representation respecting this material, which is provided on an "AS IS" basis.

RED PITAYA HEREBY DISCLAIMS ALL WARRANTIES OR LIABILITY OF ANY KIND WITH RESPECT THERETO, INCLUDING, WITHOUT LIMITATION , REPRESENTATIONS REGARDING ACCURACY AND COMPLETENESS, ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY, SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE, TITLE AND/OR NON-INFRINGEMENT.

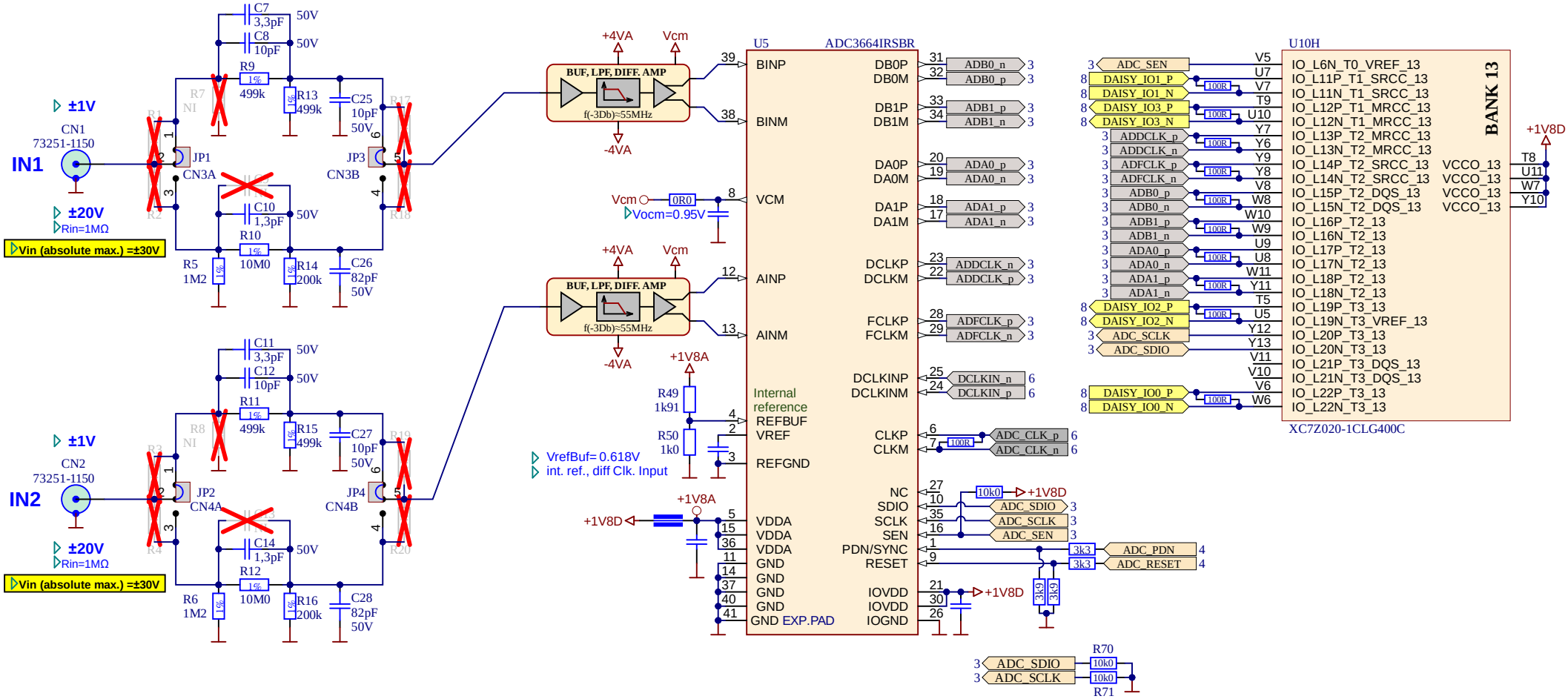
This material is not designed, intended or authorized for use in any applications in which the failure of the product could result in personal injury, death or property damage.

Any party using or selling products for use in any such applications do so at their sole risk and agree that Red Pitaya is not liable, in whole or in part, for any claim or damage arising from such use, and agree to fully indemnify, defend and hold harmless Red Pitaya from and against any and all claims, damages, loss, cost, expense or liability arising out of or in connection with the use or performance of products in such applications.

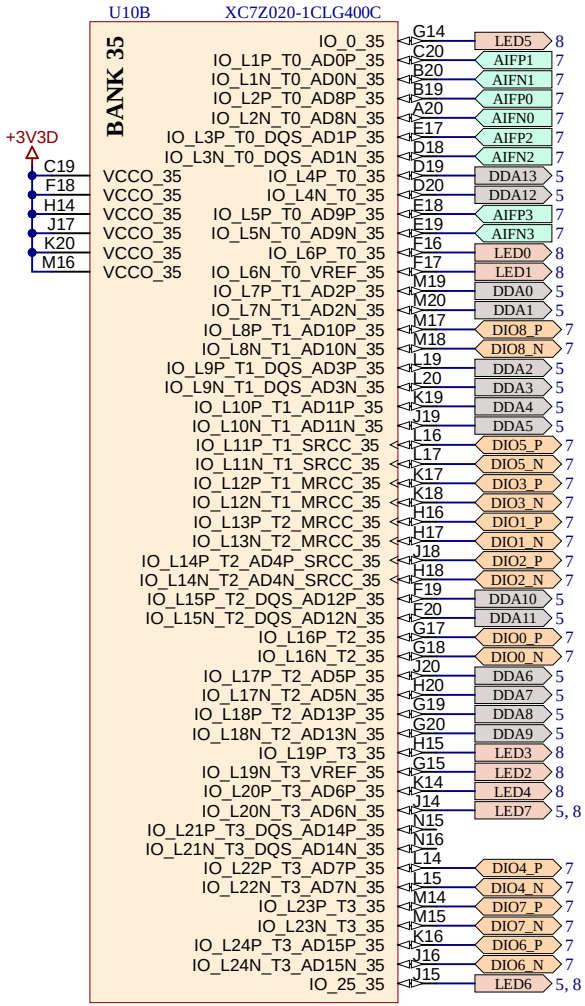
Block Diagram

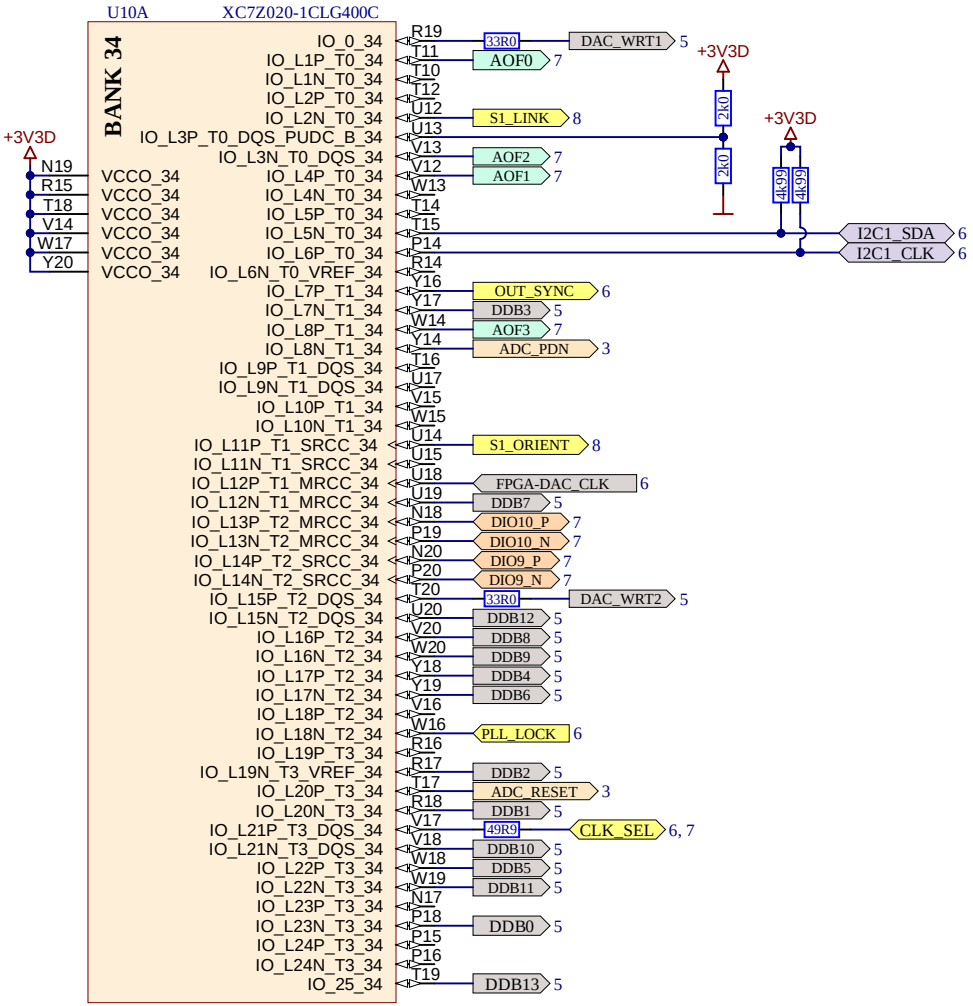


Fast Analog Inputs & ADC Interface

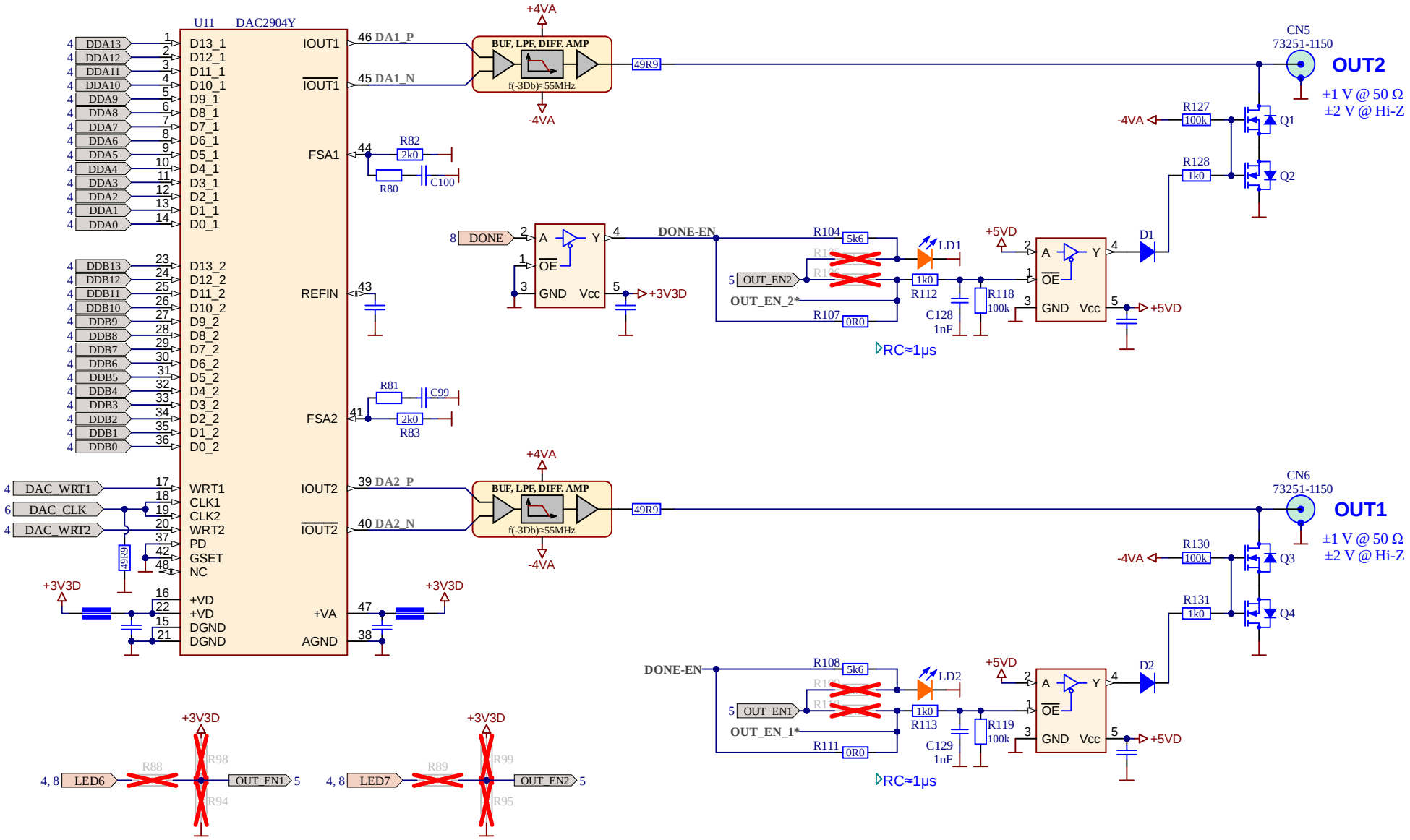


DAC Interface (BANK 34 & 35)

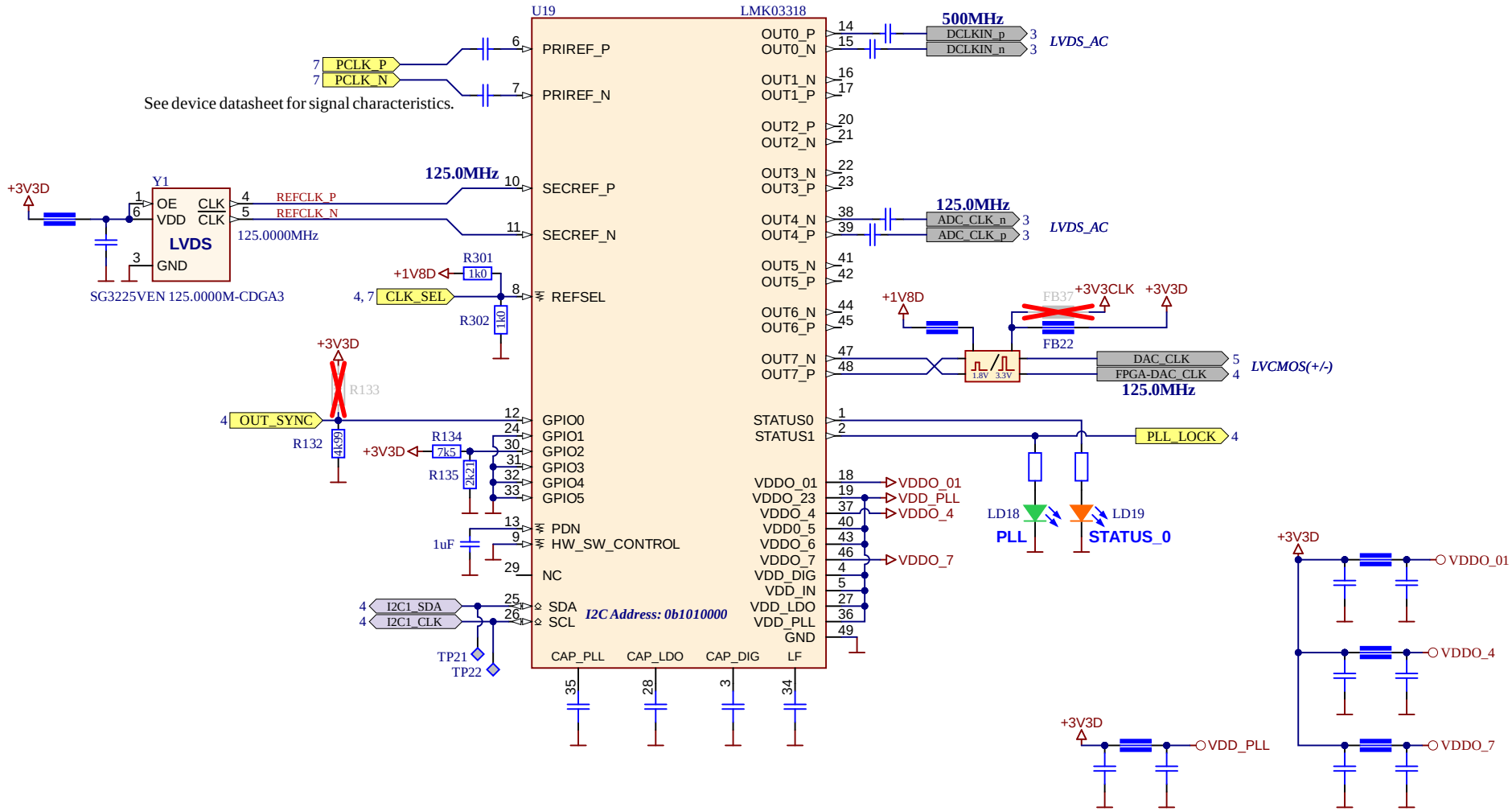




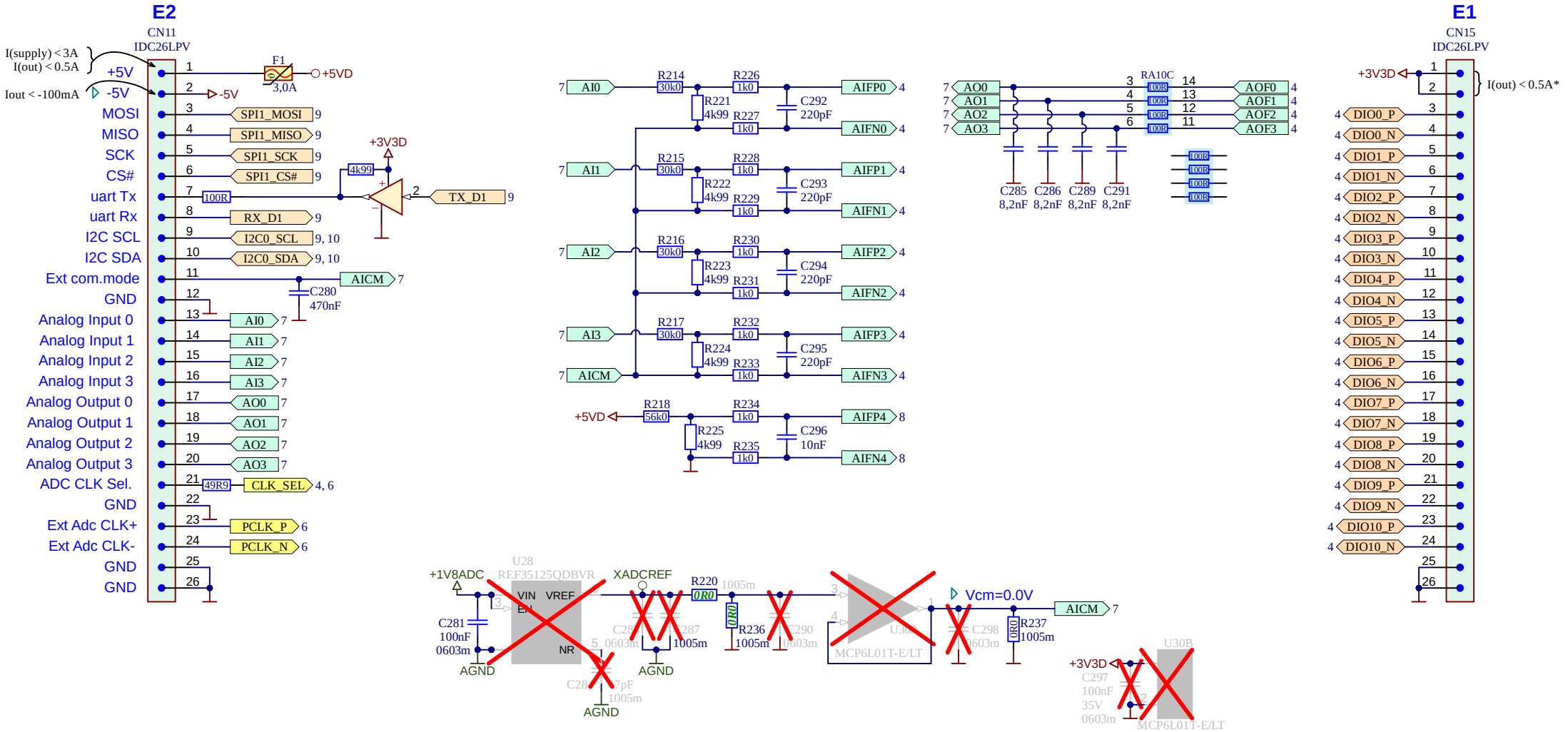
DAC & Fast Analog Output



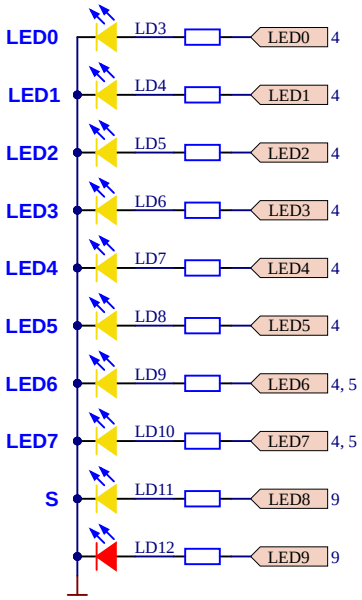
PLL Synthesizer and Clock Tree

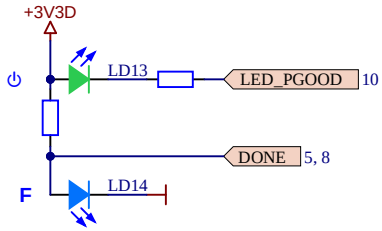


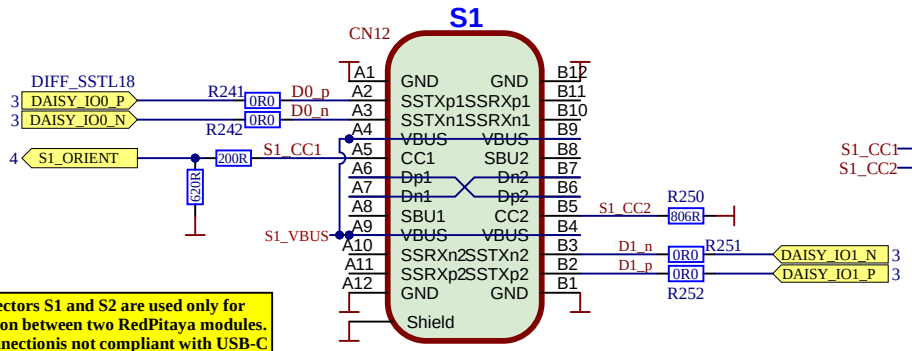
Extension Connectors E1 & E2, Slow Analog IO

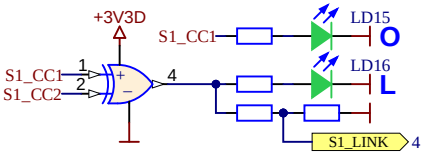


LED-s, JTAG, I, SD, E3, Synchronization

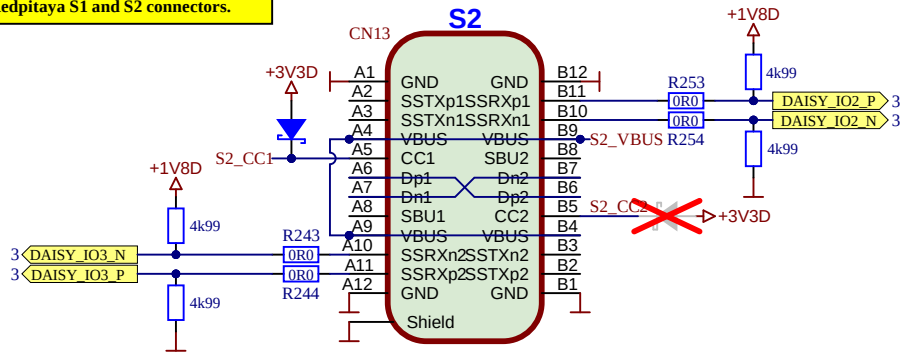


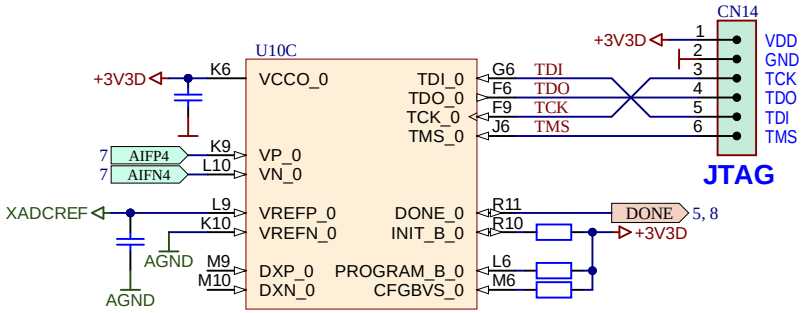


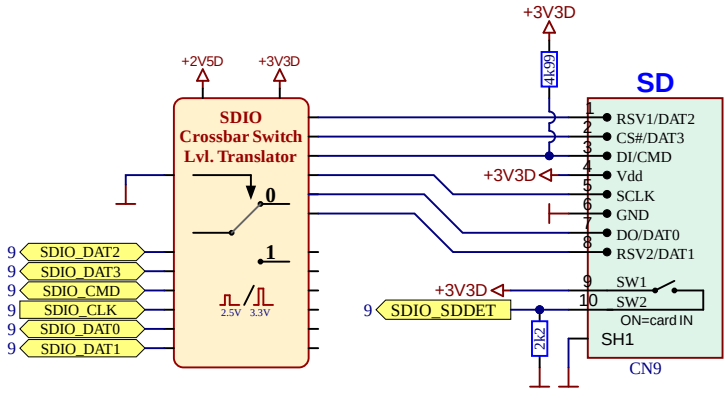




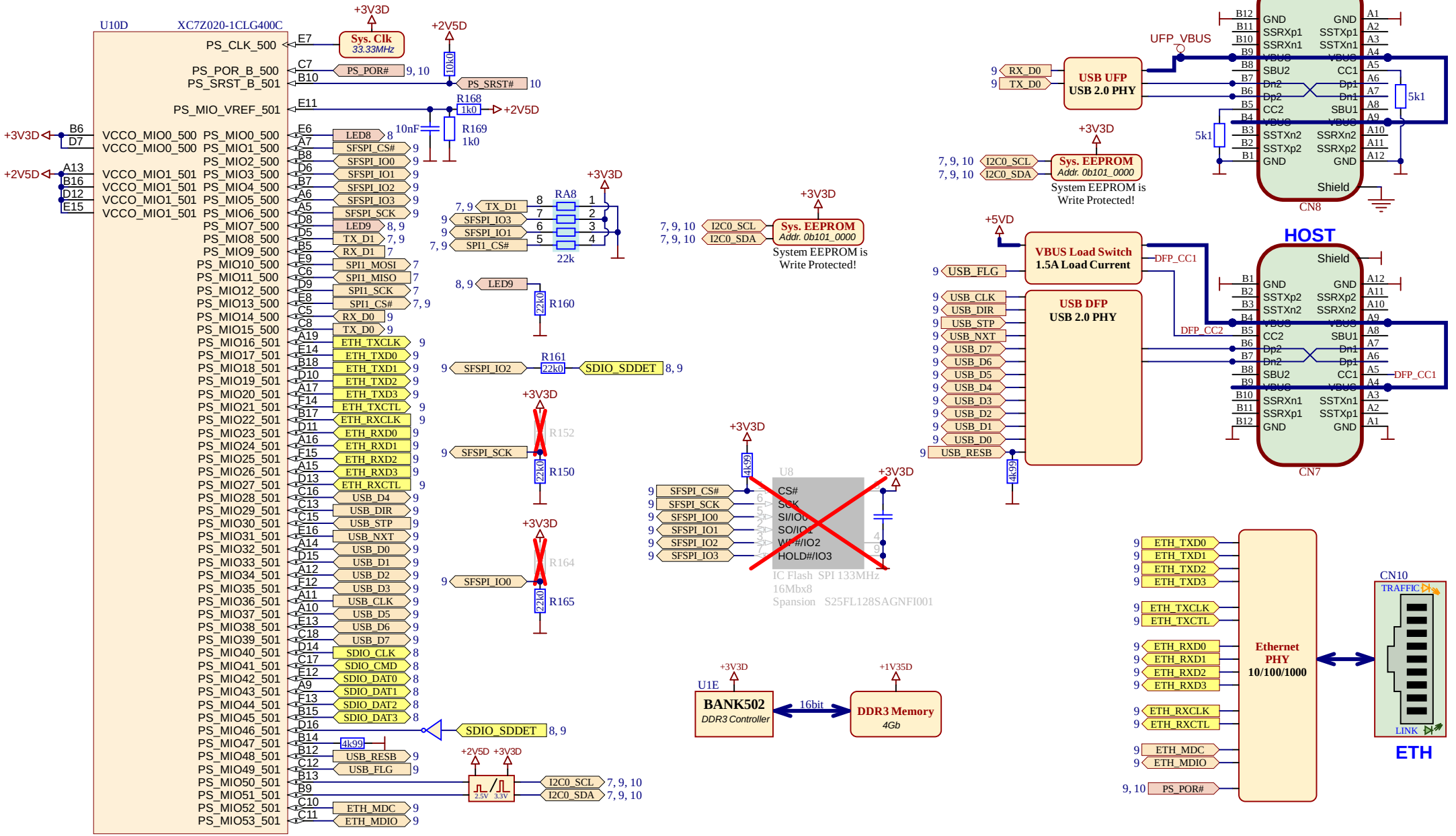
The Connectors S1 and S2 are used only for interconnection between two RedPitaya modules. Note that connectionis not compliant with USB-C specification.
Do not connect S1 or S2 to any other USB-C ports except Redpitaya S1 and S2 connectors.



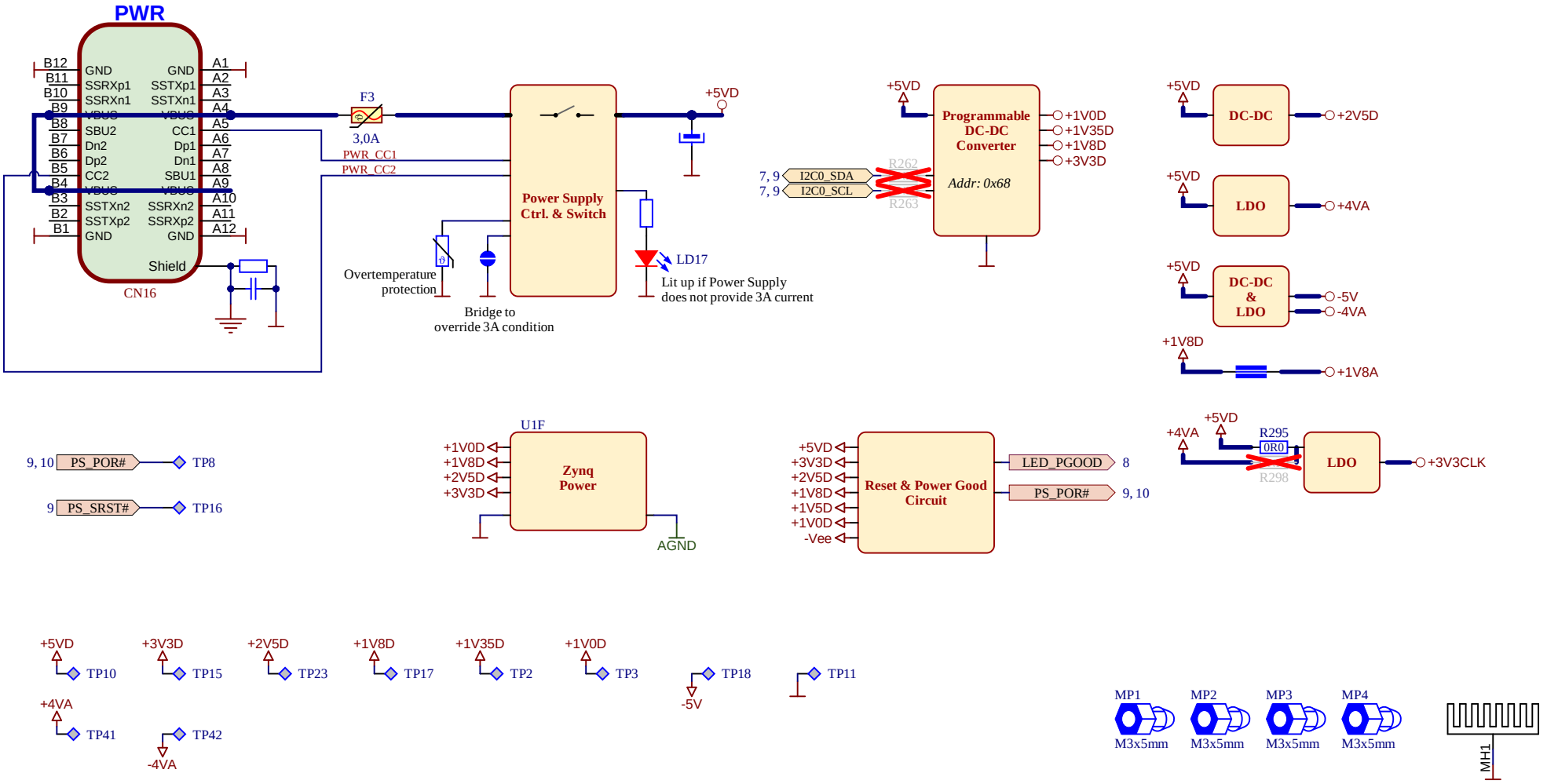




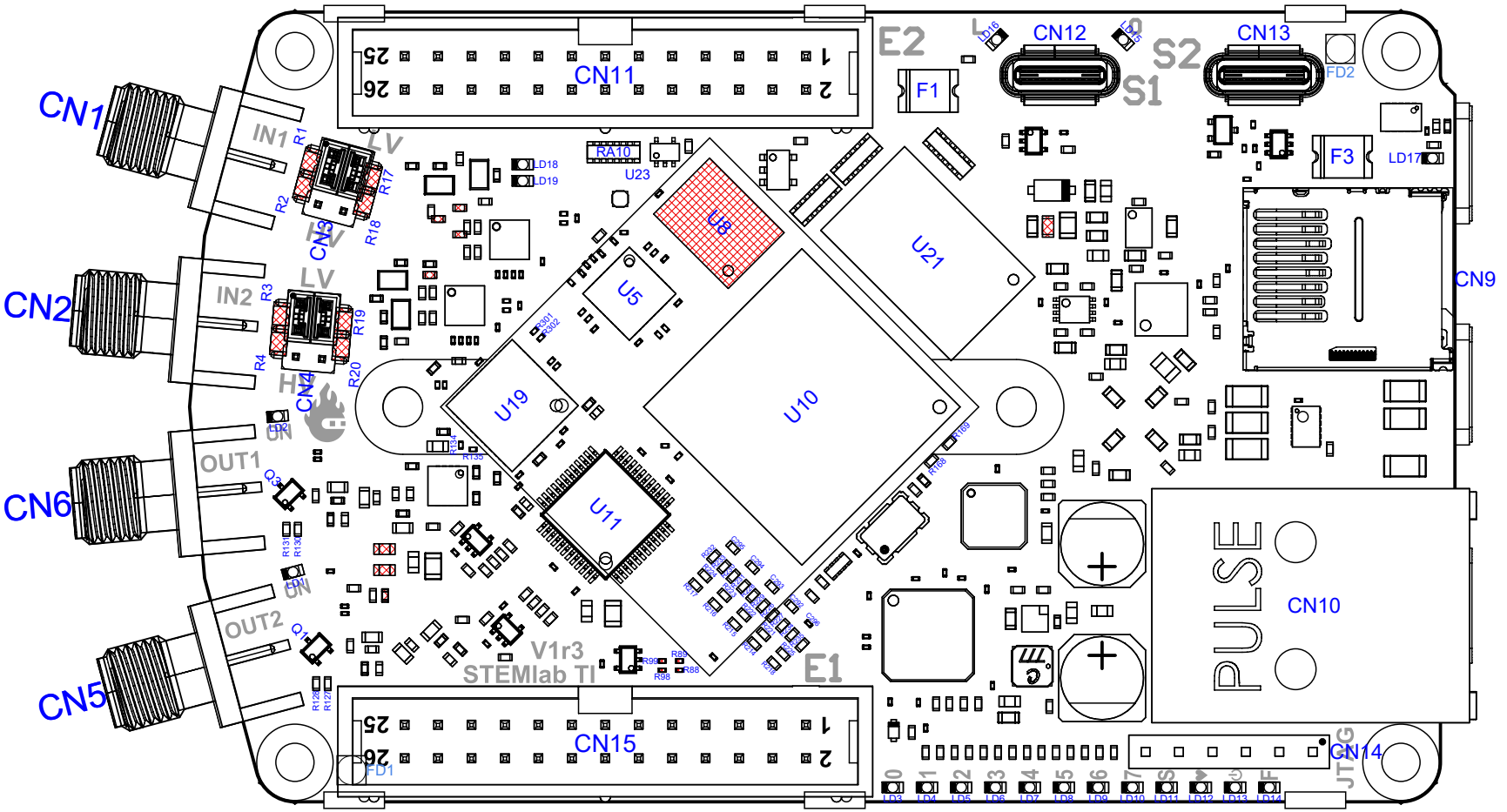
PS-Interface, ETH, Console, Host



Power Supply

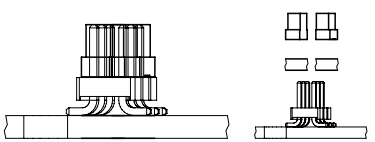


Assembly & 3D Drawings

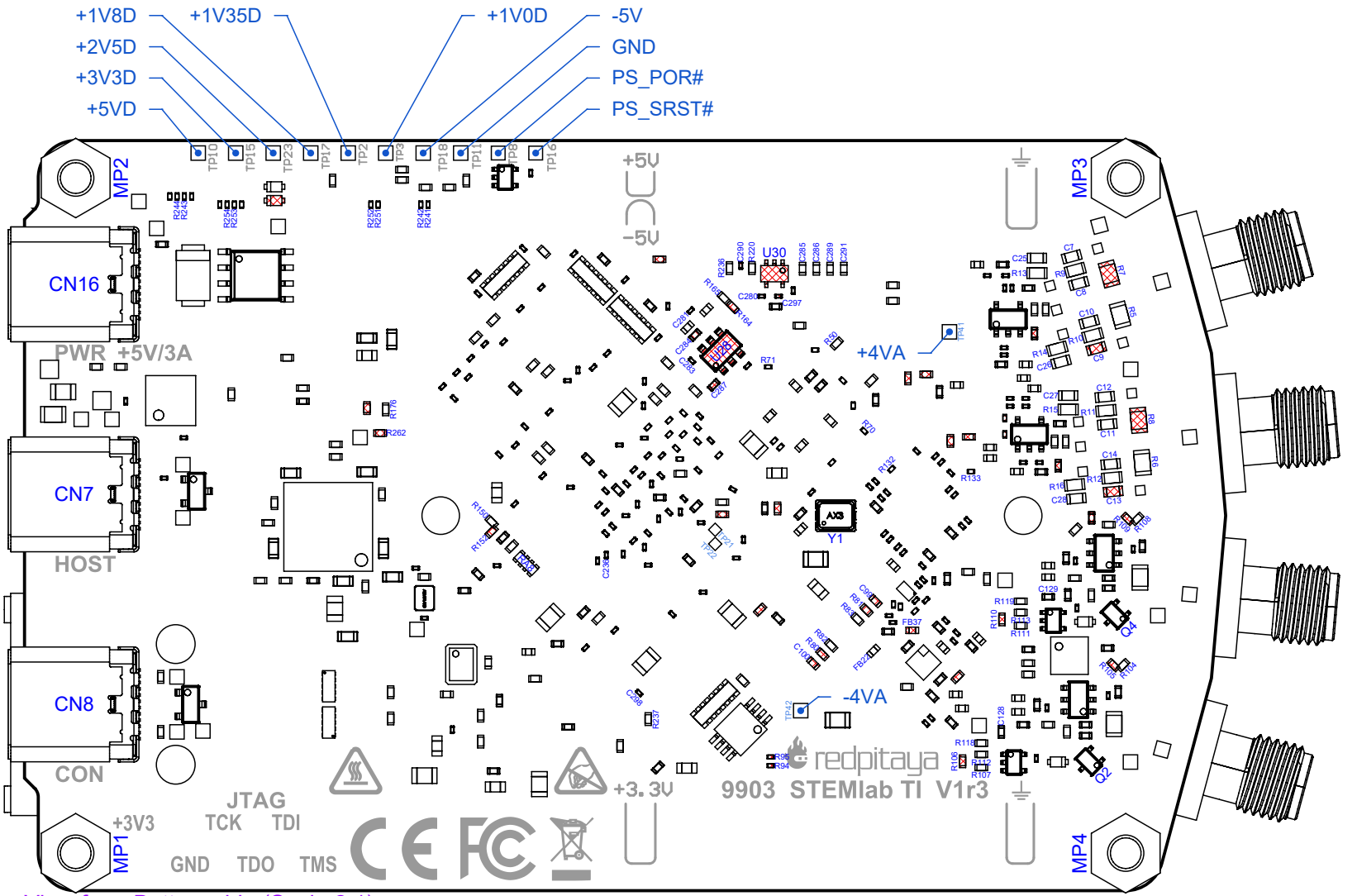


View from Top side (Scale 2:1)

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

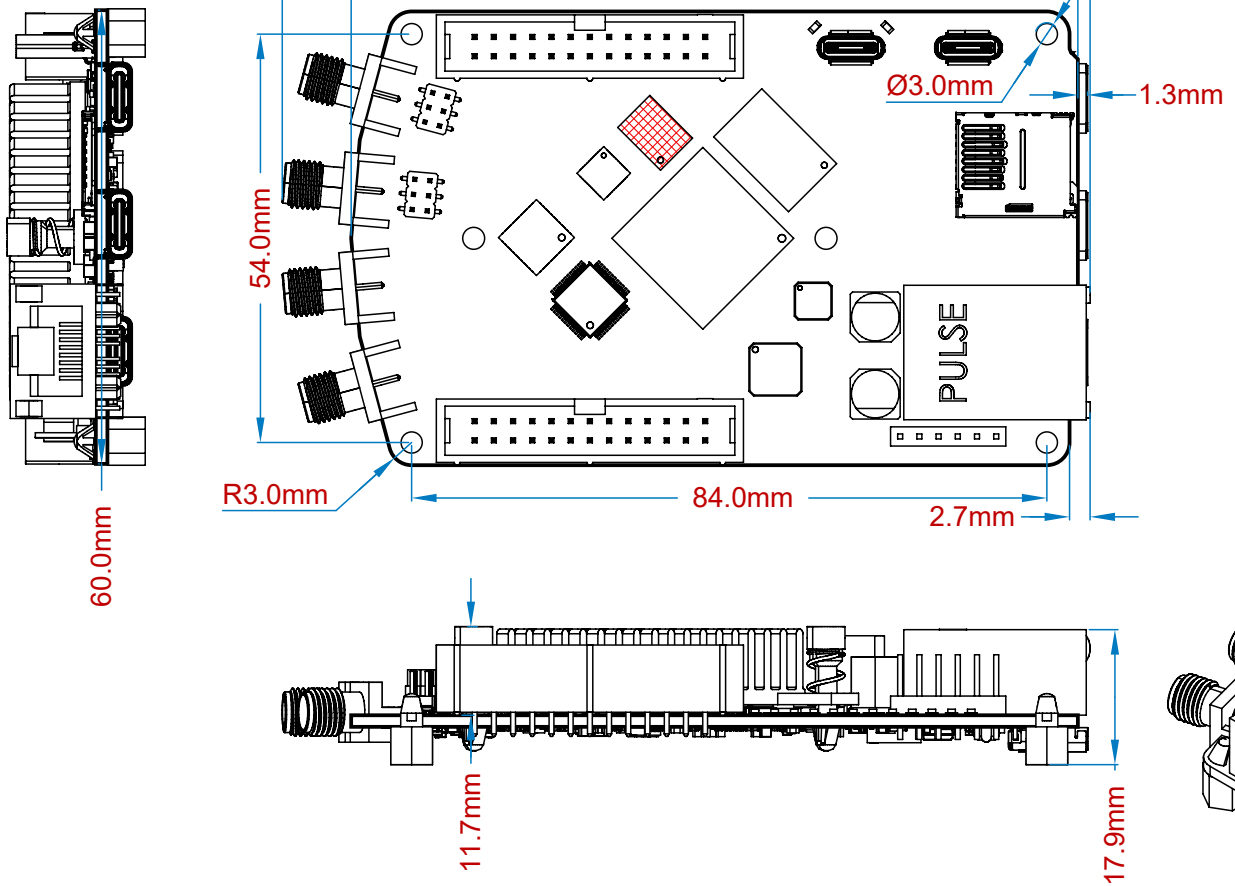


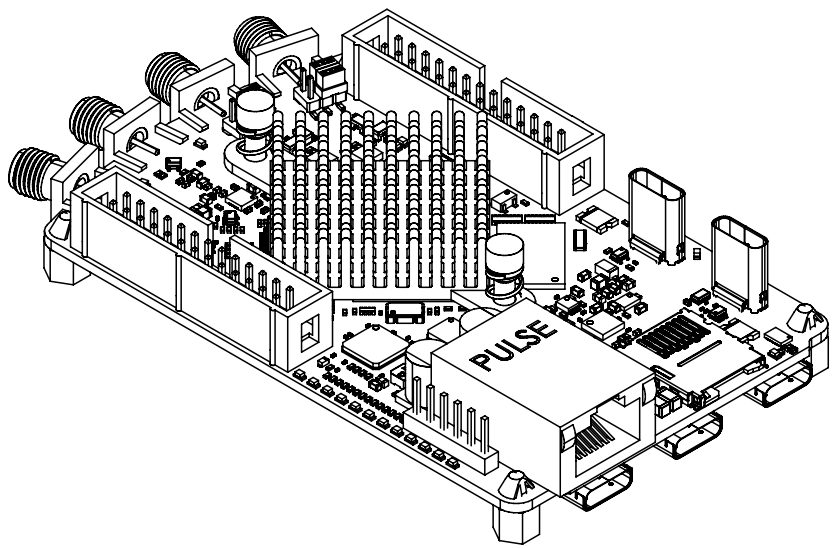
Assembly & 3D Drawings



View from Bottom side (Scale 2:1)

Assembly & 3D Drawings





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