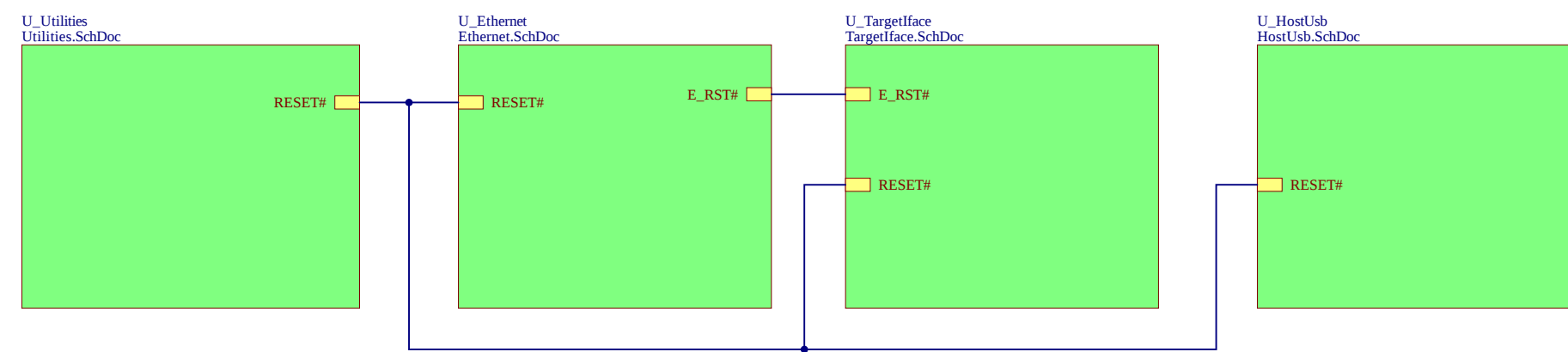
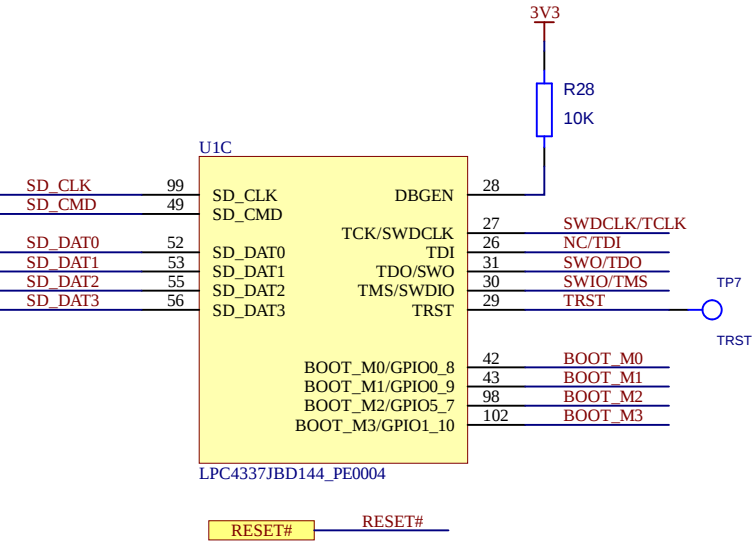
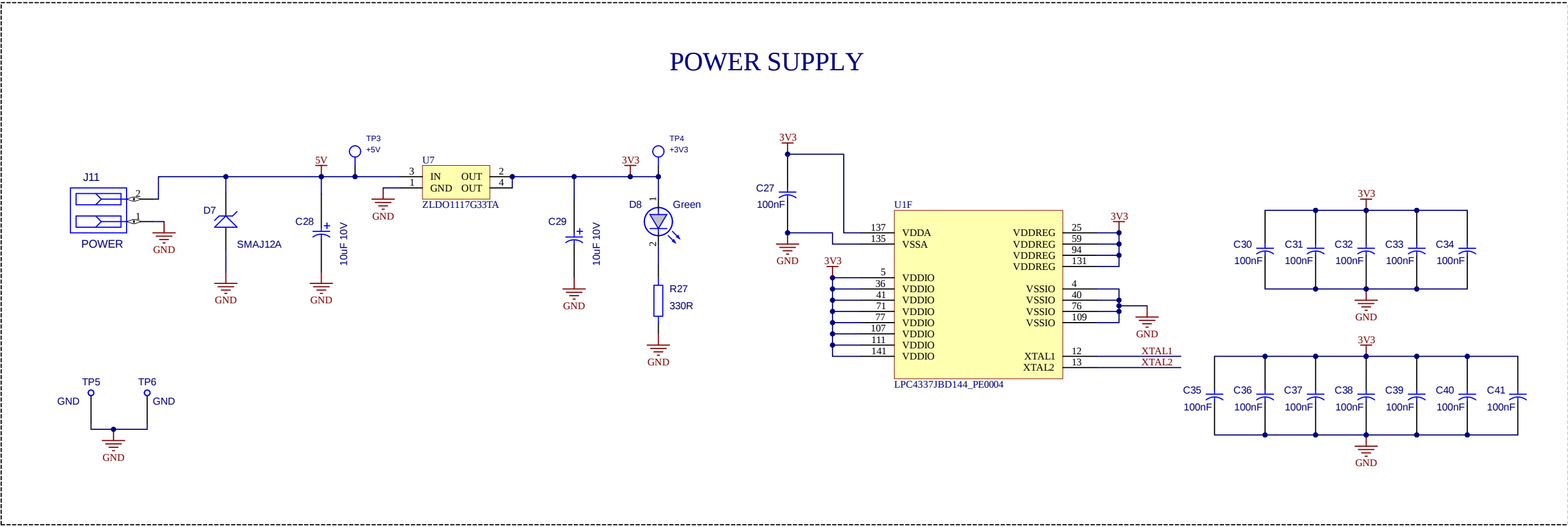




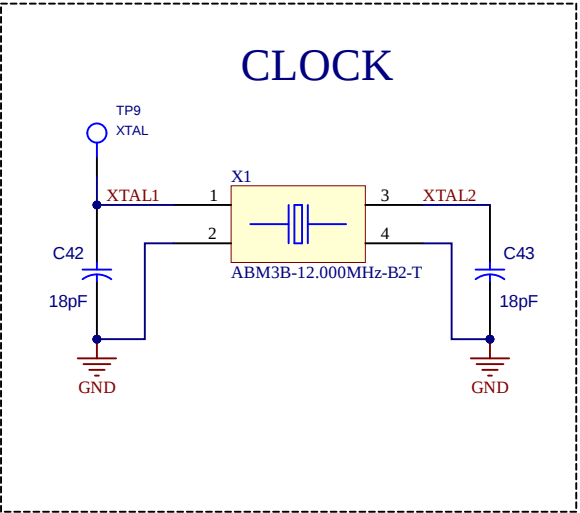
High Resolution
Circuit Diagrams
for
PE0004 Rev. A01
Jan 2026



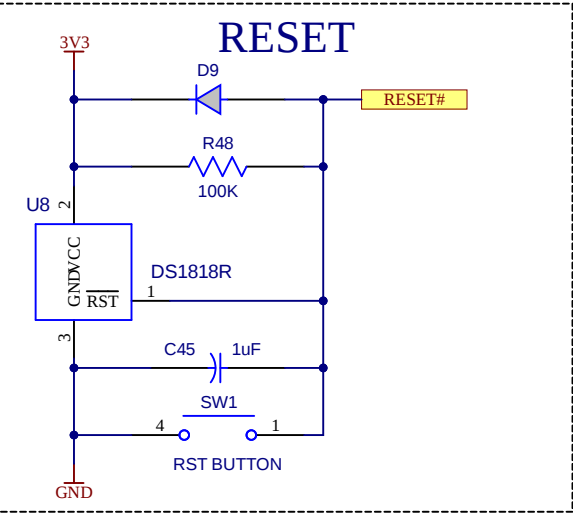
POWER SUPPLY



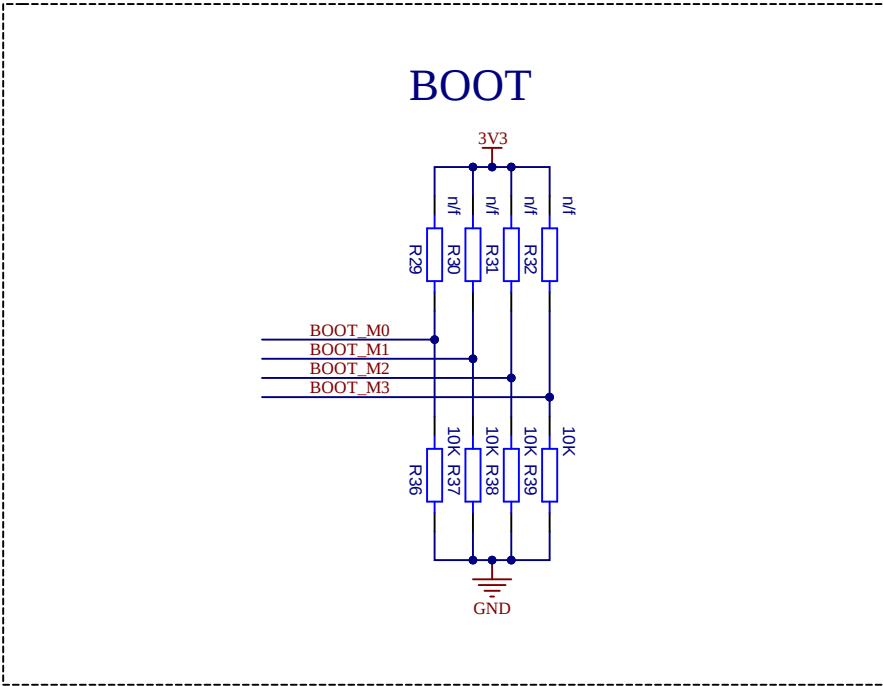
CLOCK



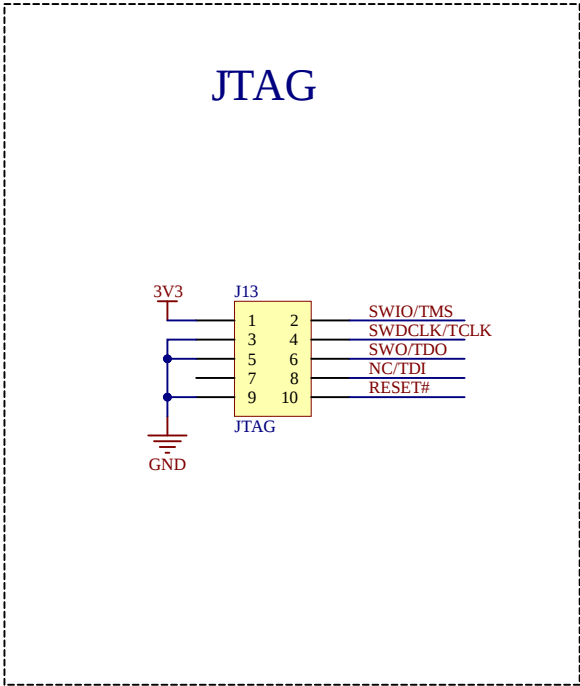
RESET



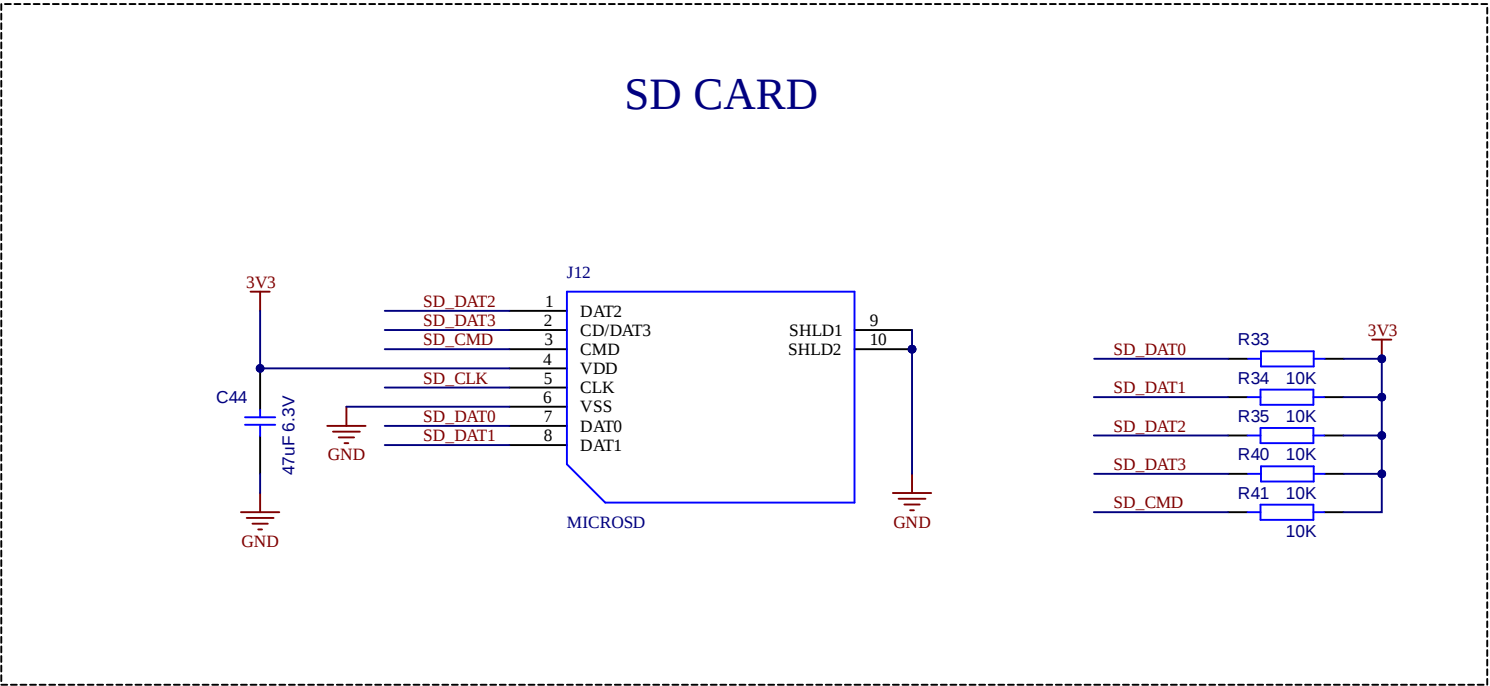
BOOT

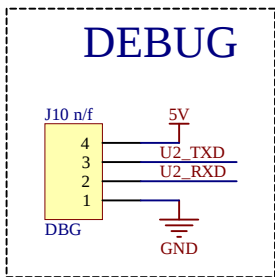
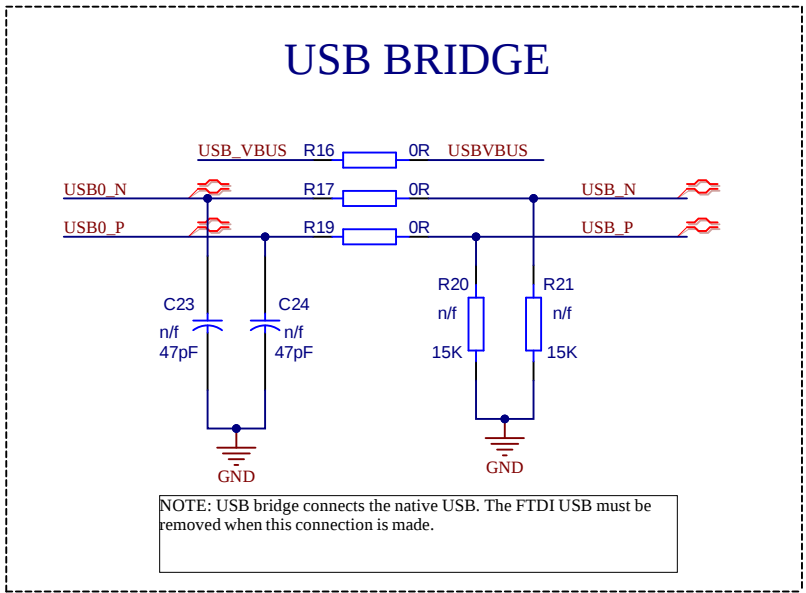
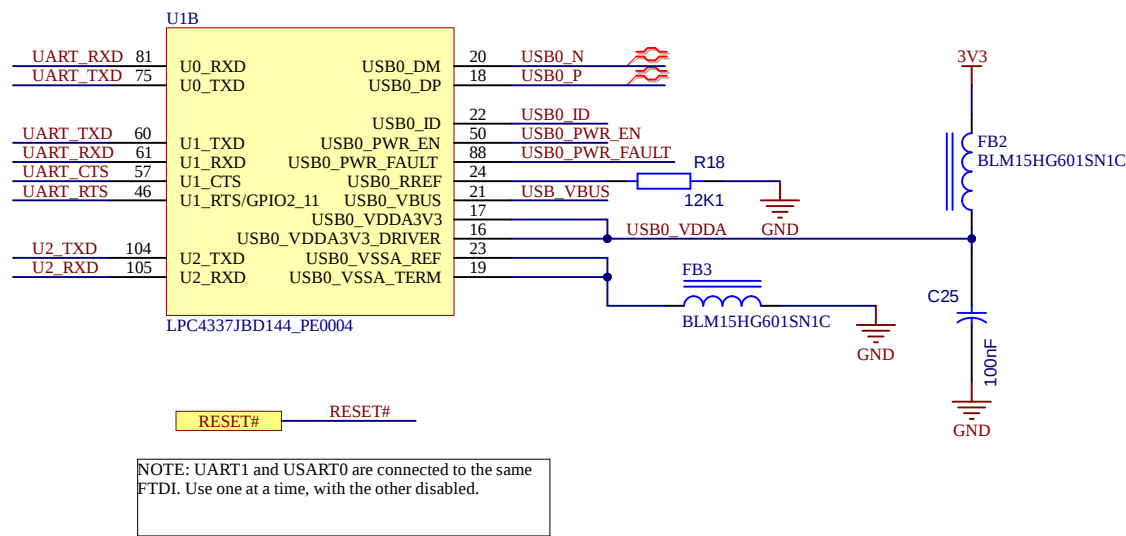


JTAG

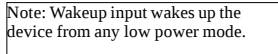


SD CARD





ETHERNET



ROUTING GUIDELINES

#NAME? Keep trace length difference between TX+ and TX- (or RX+ and RX-) in 700 mils.

#NAME? Keep RX+/- signal on the top layer, the RX+/- signal should avoid any vias, if possible. Avoid right angle signal trace.

#NAME? crystal/oscillator clock and the switching noise from digital signals should be far away from TX+/-, RX+/- pairs.

#NAME? TX, RX differential signals running symmetric, equal length, and closely. The trace spacing between TX+ and TX- between RX+ and RX- pair should be 8 to 10 mils.

The better spacing between TX+/- and RX+/- pairs should be larger than 200 mils

#NAME? trace length from LAN8720 to the transformer should not be longer than 5 inches, keep the trace as straight as possible, and keep it parallel for differential pairs.

#NAME? termination resistors 49.9Ohm and capacitors of TX± and RX± pairs should be placed near the transformer side and should be shorter than 400 mils.

