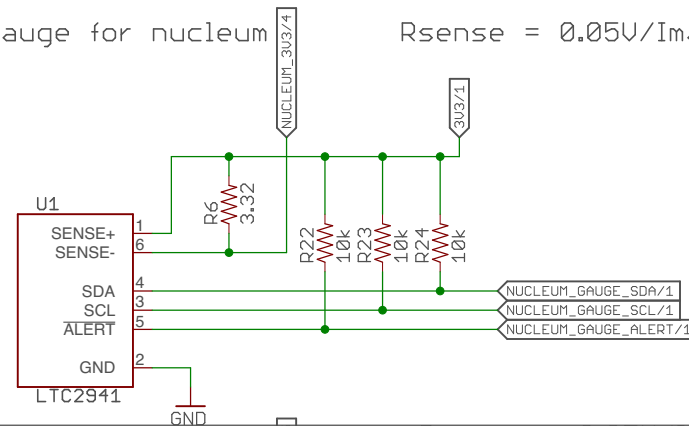


The Regulator Blocks

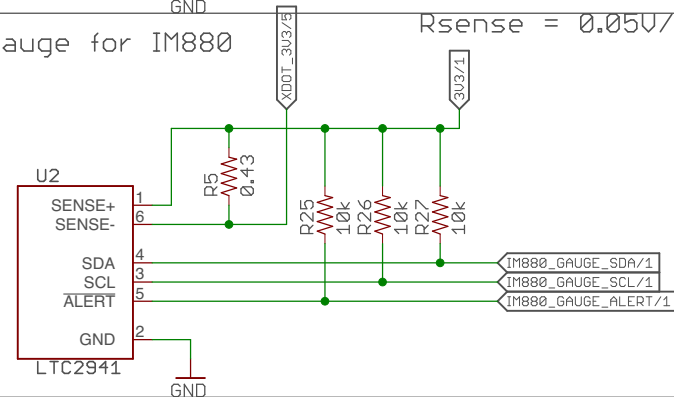
Energy gauge for nucleum

$$R_{sense} = 0.05V / I_{max} = 0.05V / 15mA$$



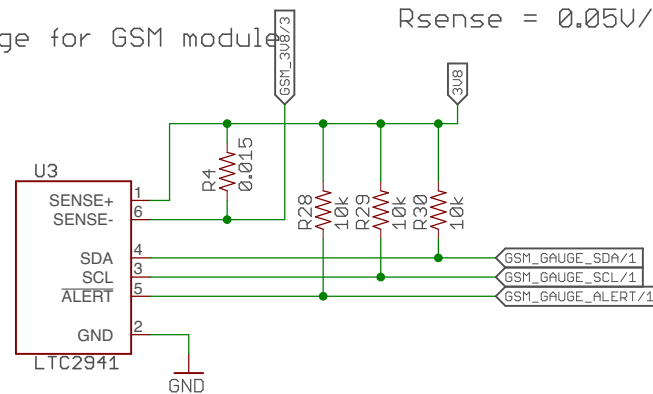
Energy gauge for IM880

$$R_{sense} = 0.05V / I_{max} = 0.05V / 118mA$$



Energy gauge for GSM module

$$R_{sense} = 0.05V / I_{max} = 0.05V / 3A$$



M Radio Module

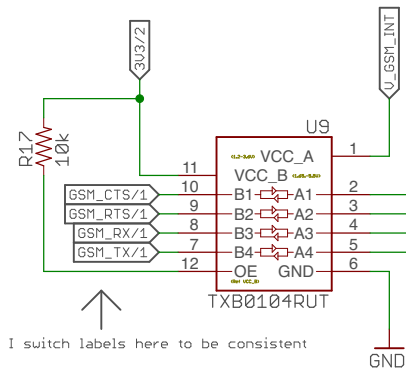
REV:
B

Author: Joshua Adkins

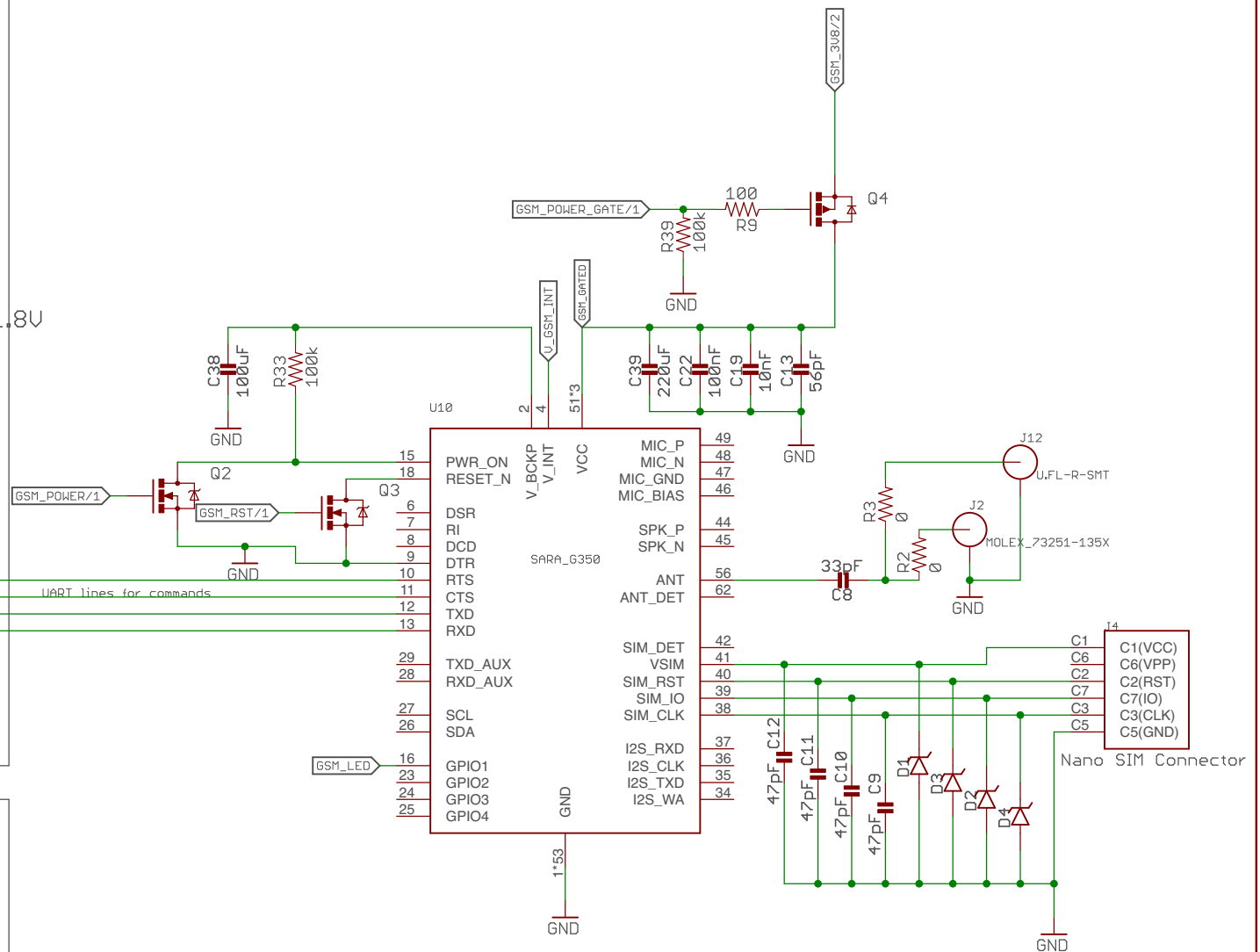
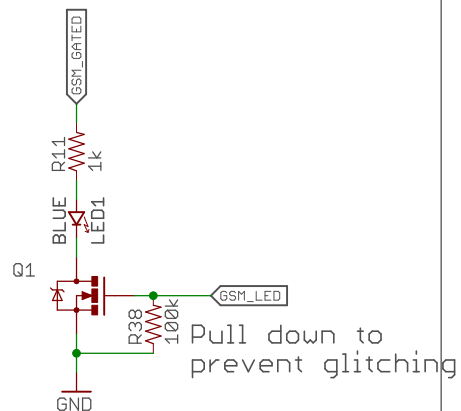
Date: 5/24/17 11:10 PM

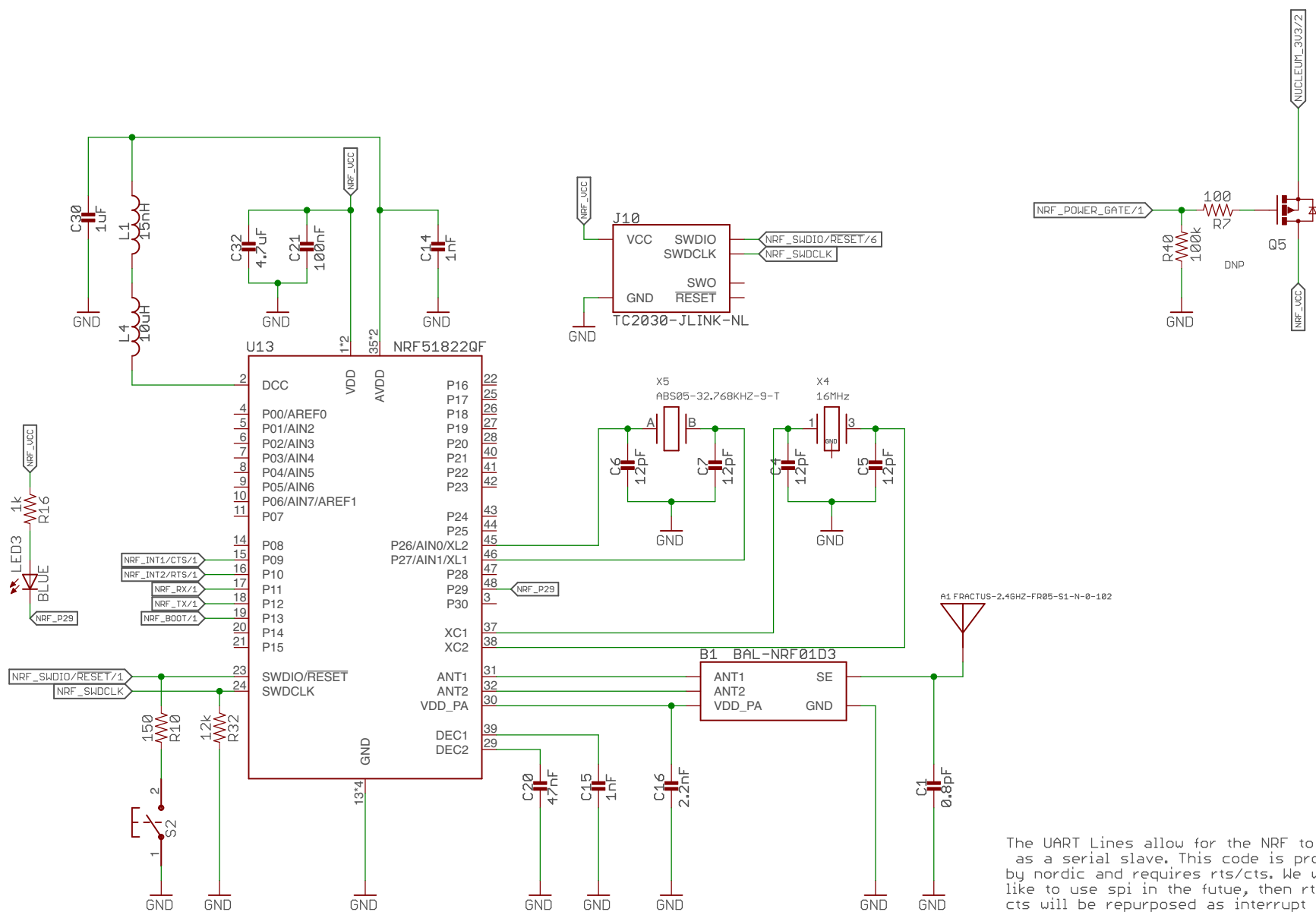
Sheet: 2/6

Level Translator, GSM_INT = 1.8V

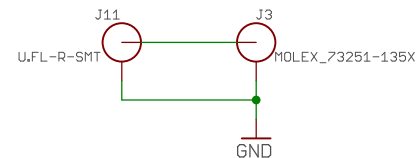


Network Indicator LED

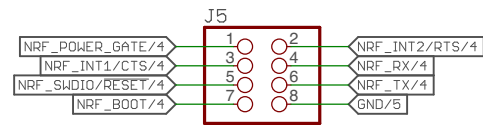




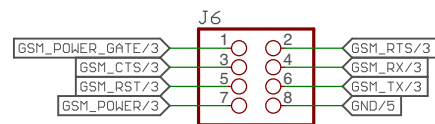
The UART Lines allow for the NRF to act as a serial slave. This code is provided by nordic and requires rts/cts. We would like to use spi in the future, then rts and cts will be repurposed as interrupt pins for the spi interface.



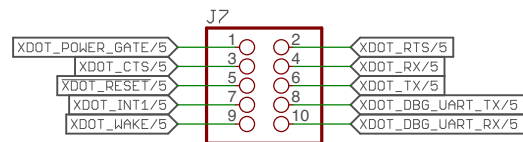
NRF Debug Header



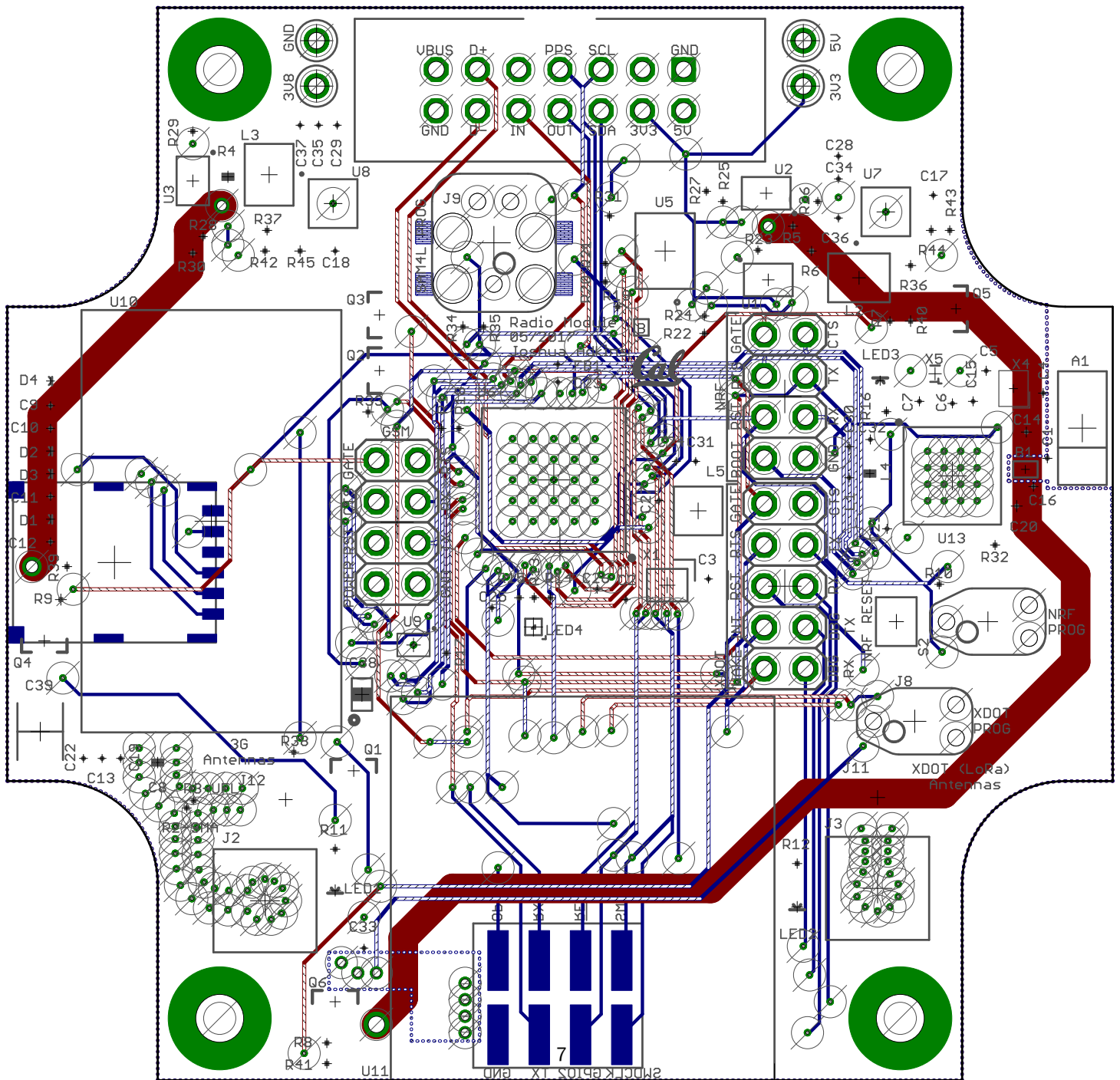
GSM Debug Header



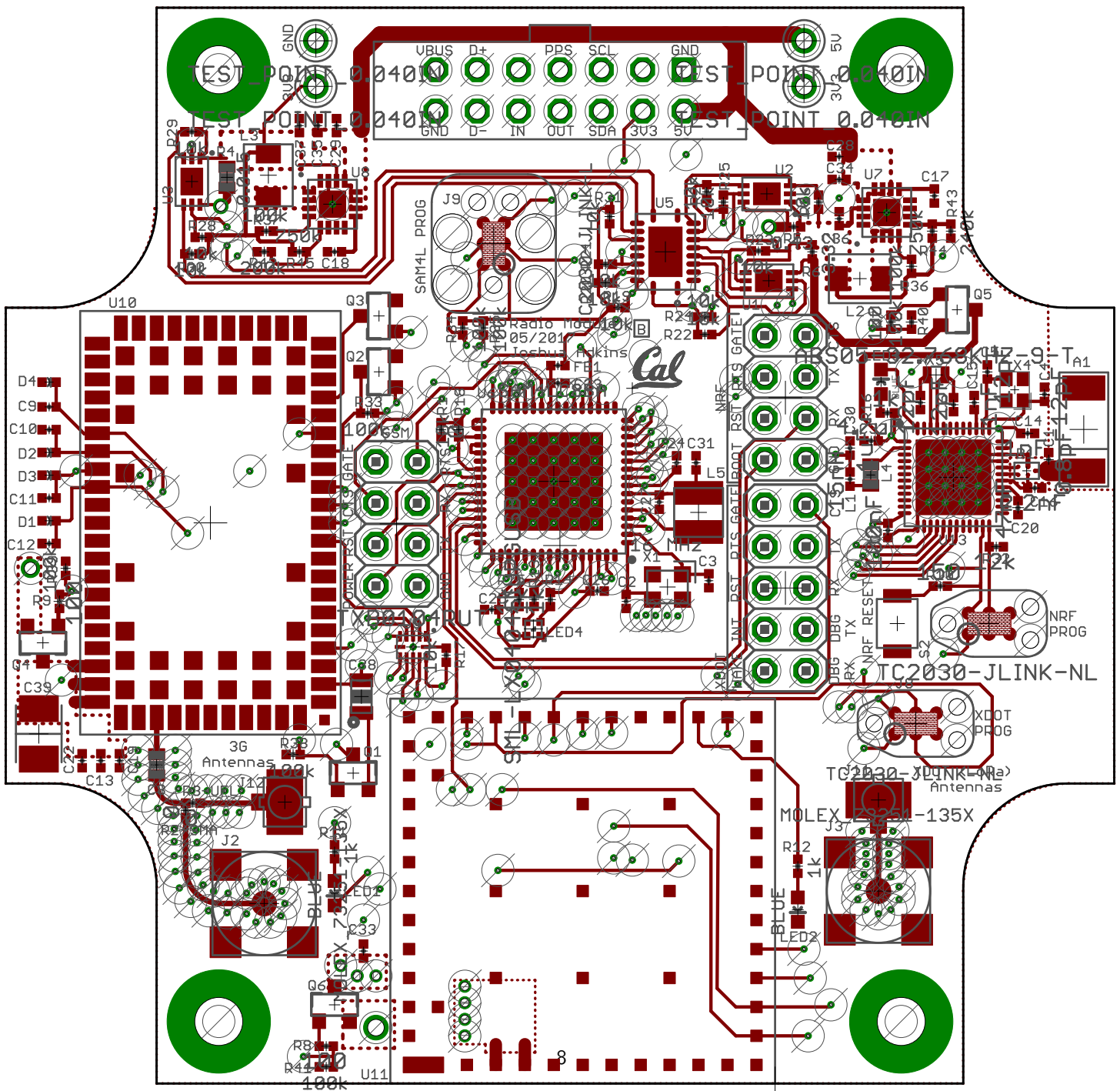
Xdot Debug



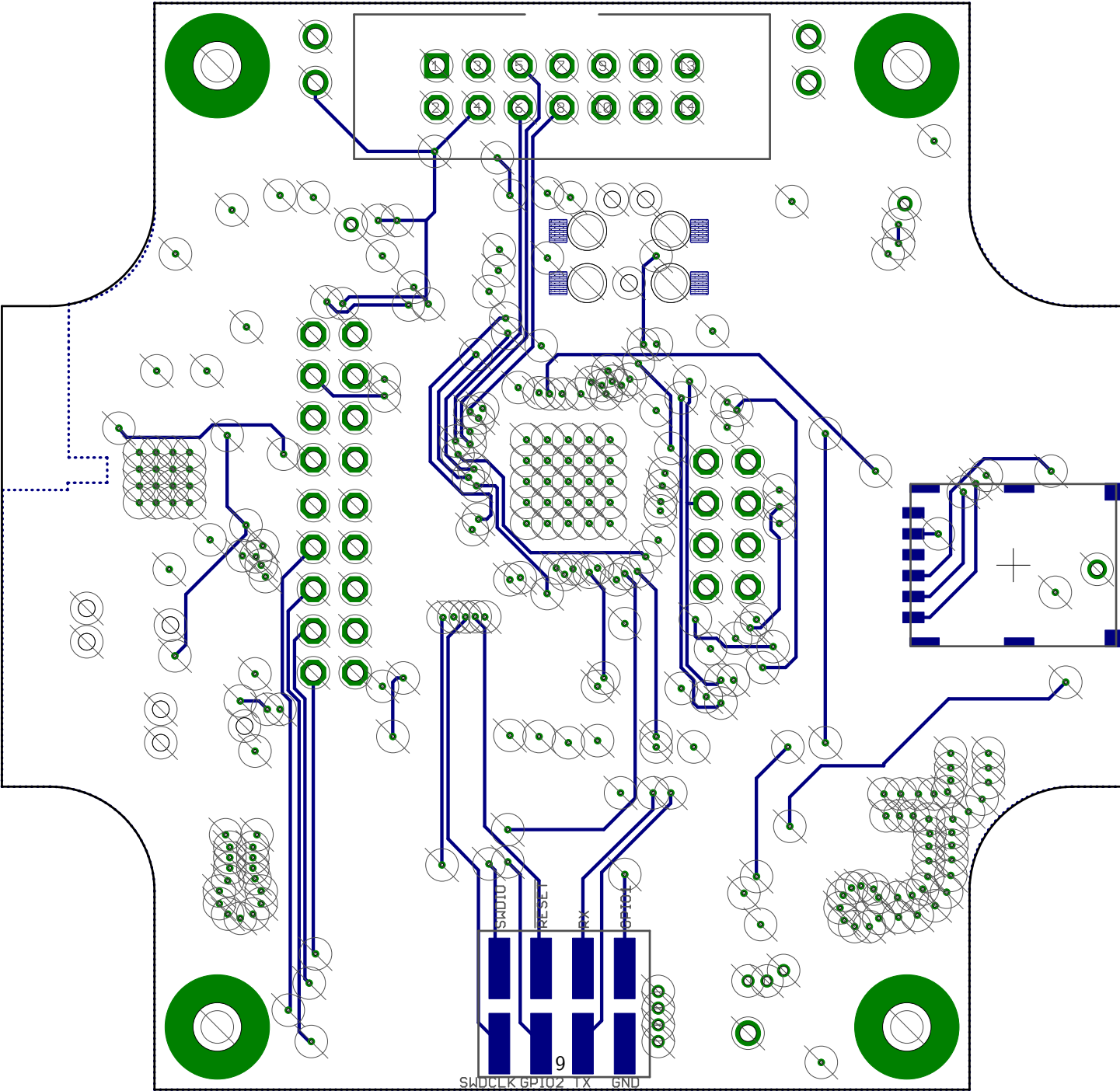
Top and Bottom Layers



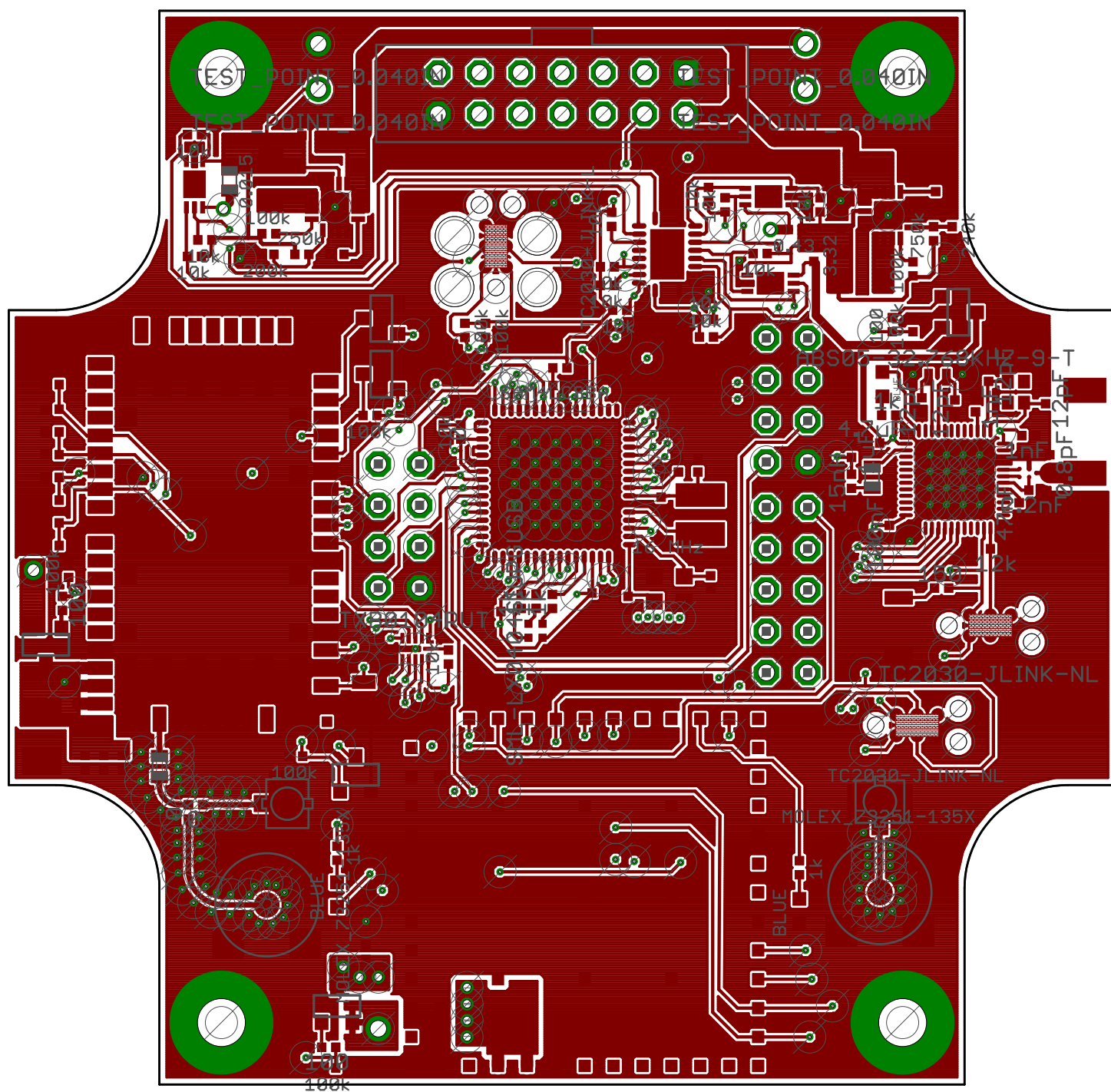
Top Layer



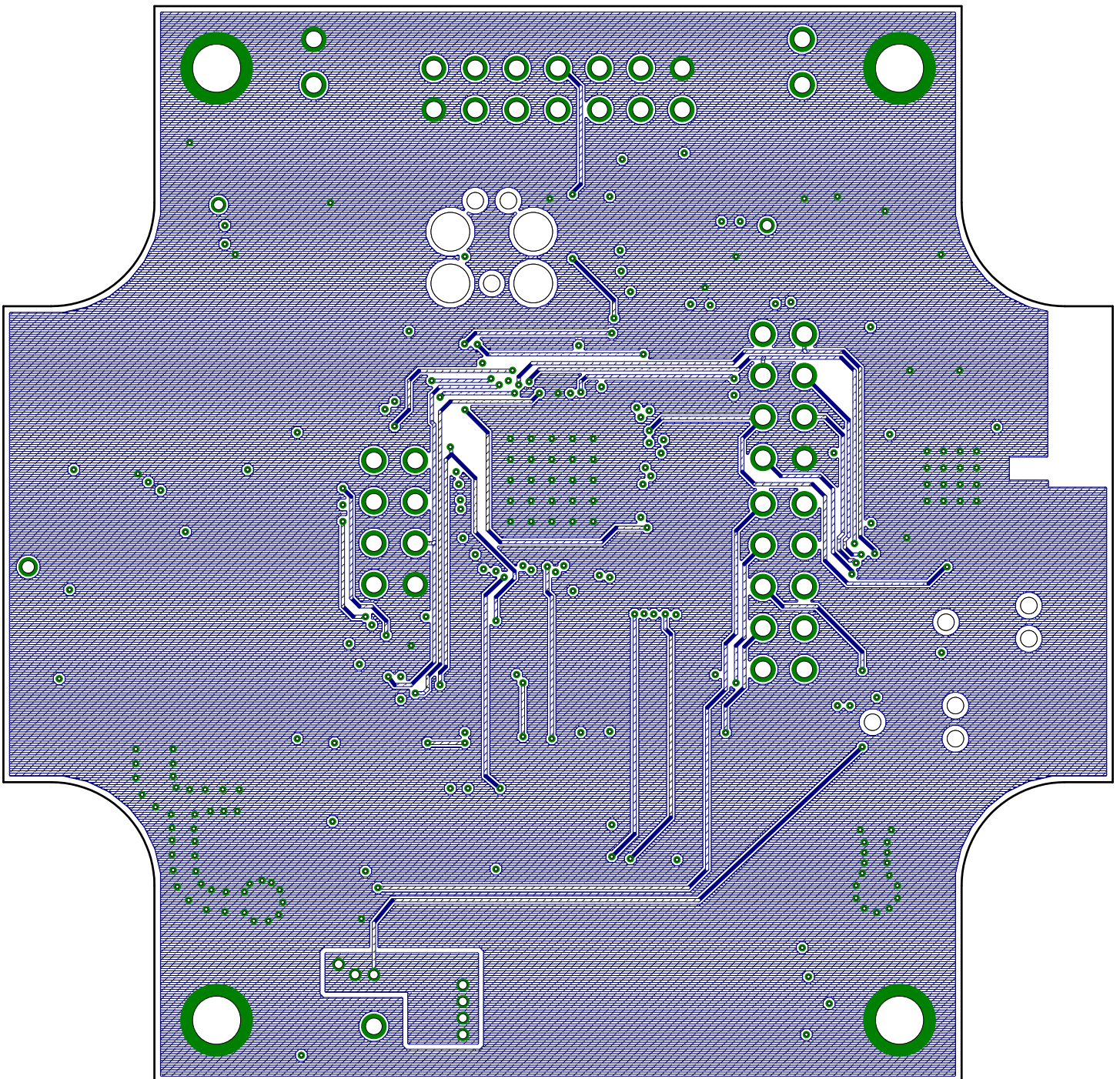
Bottom Layer



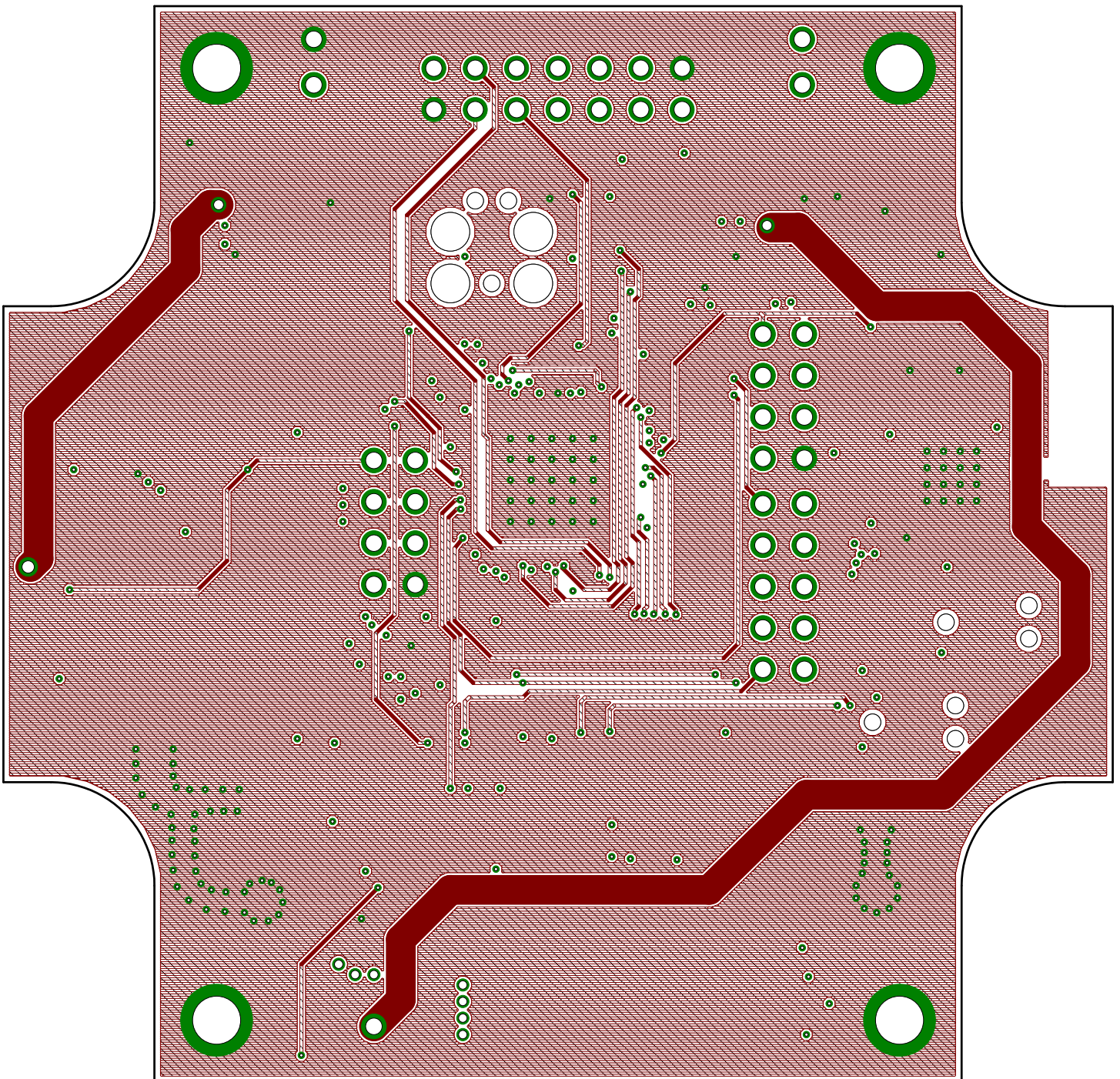
Top Copper Layer



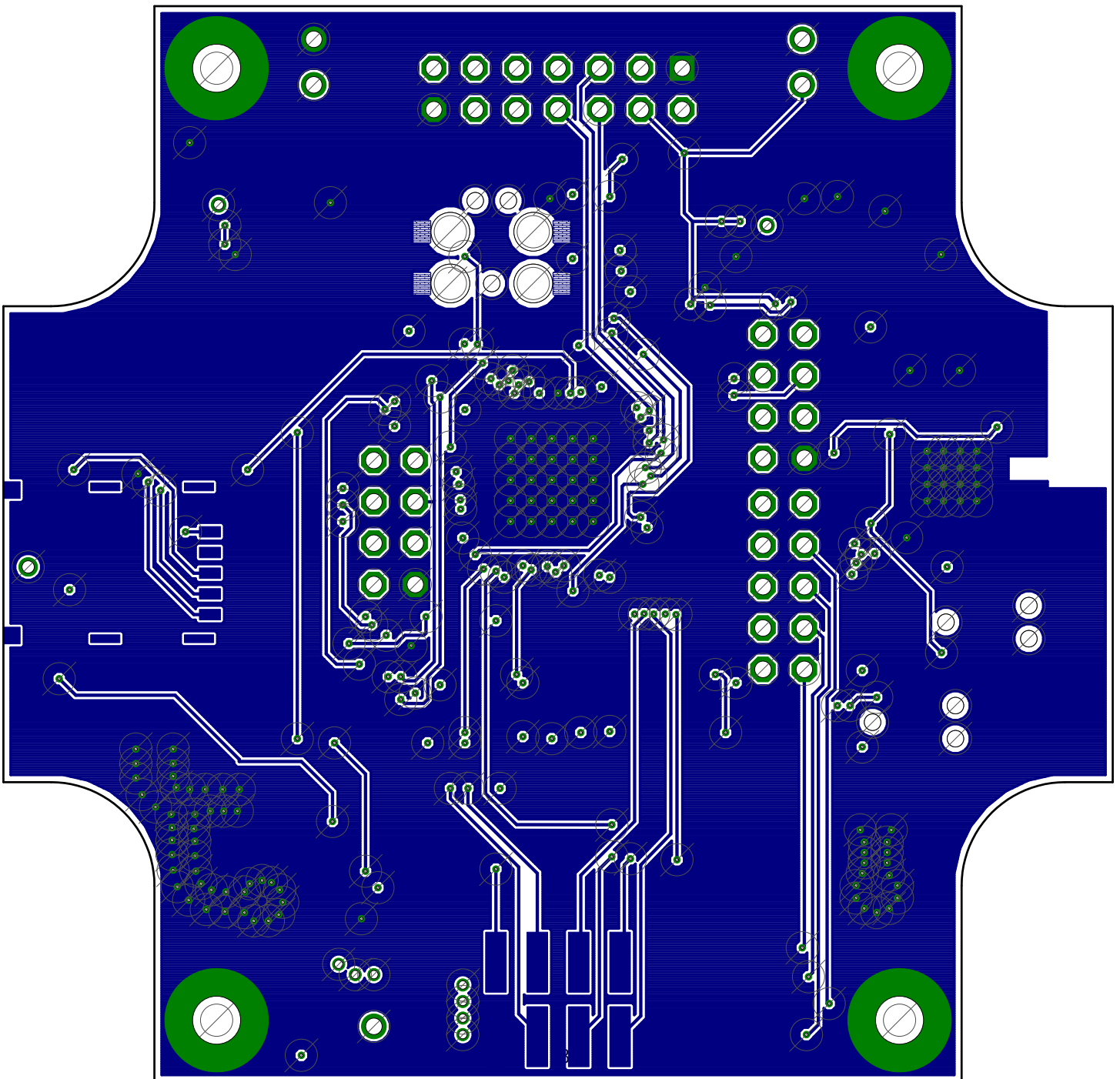
Layer 2 Copper



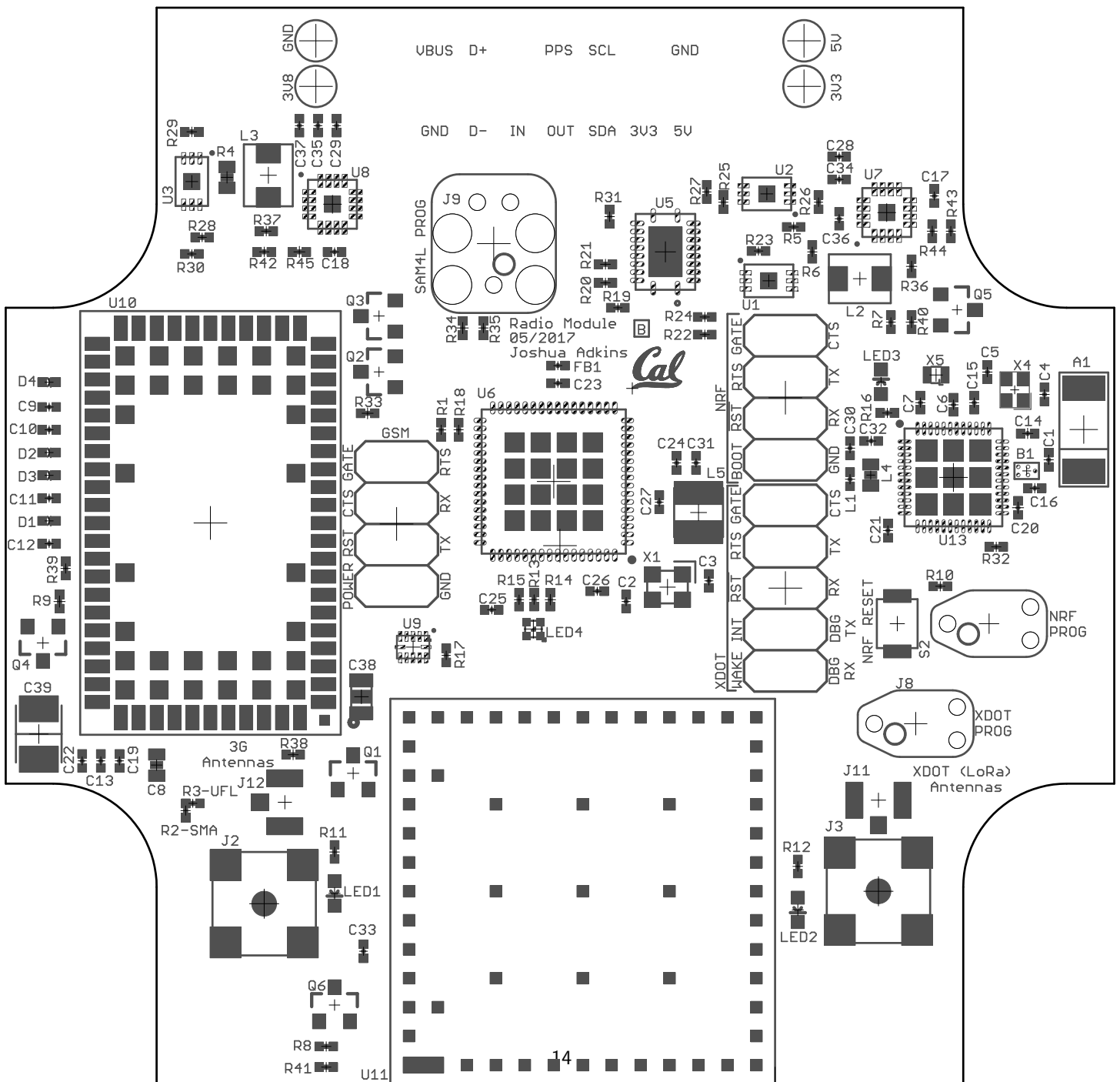
Layer 3 Copper



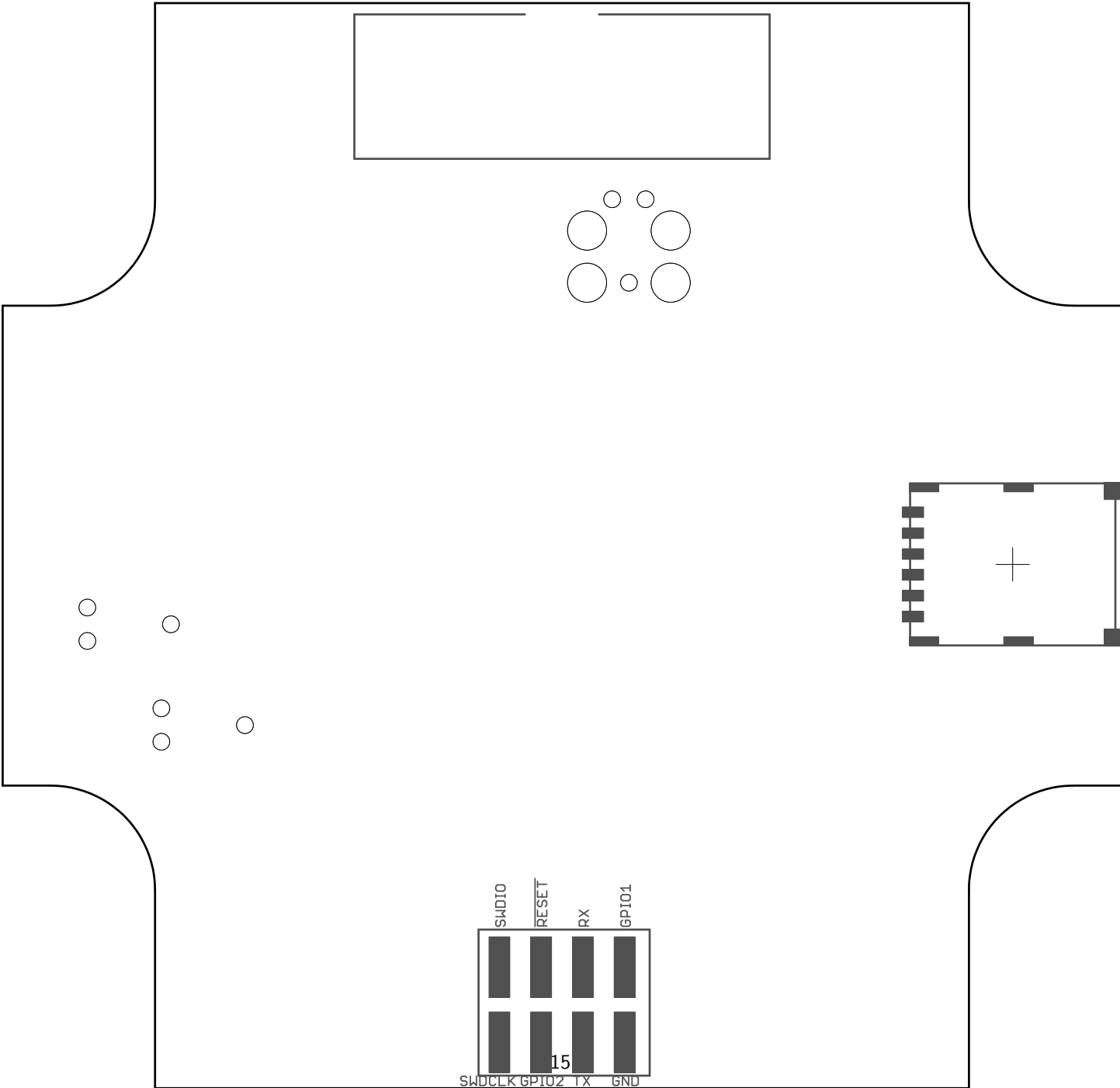
Bottom Copper Layer

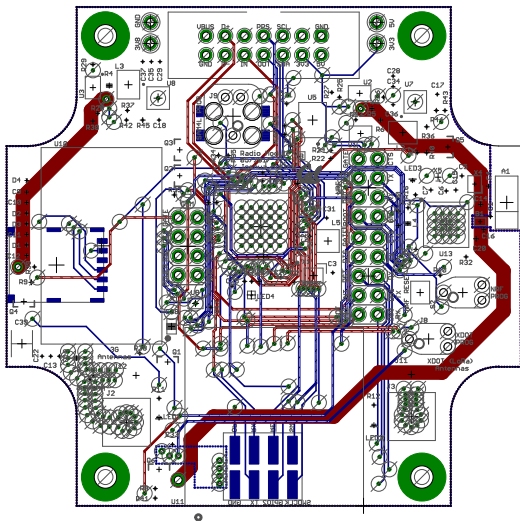


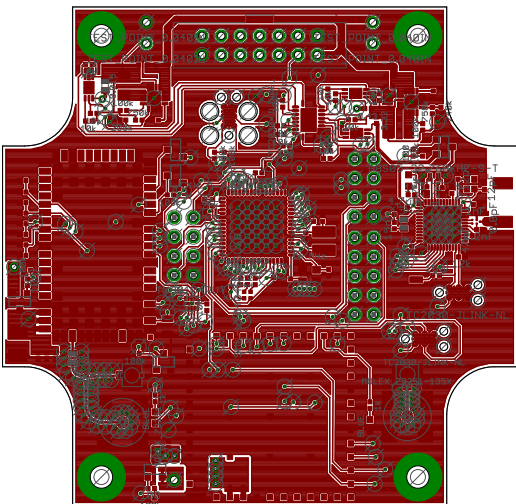
Top Paste Layer with Silkscreen

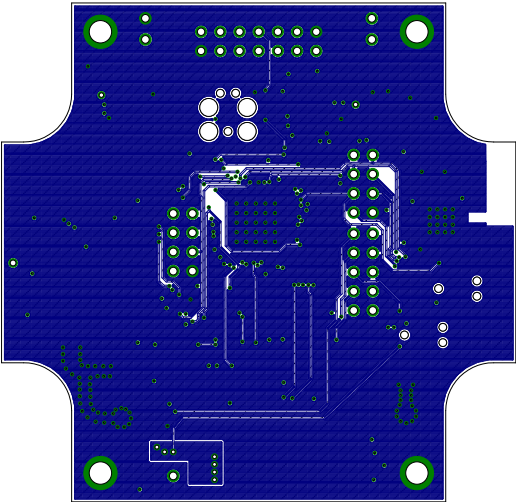


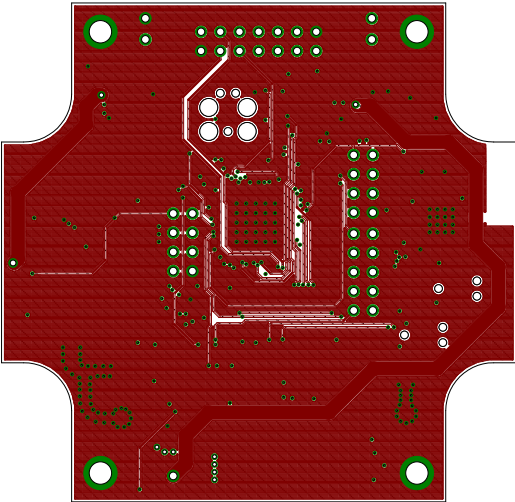
Bottom Paste Layer with Silkscreen











Bottom Copper Layer 1:1 Scale

