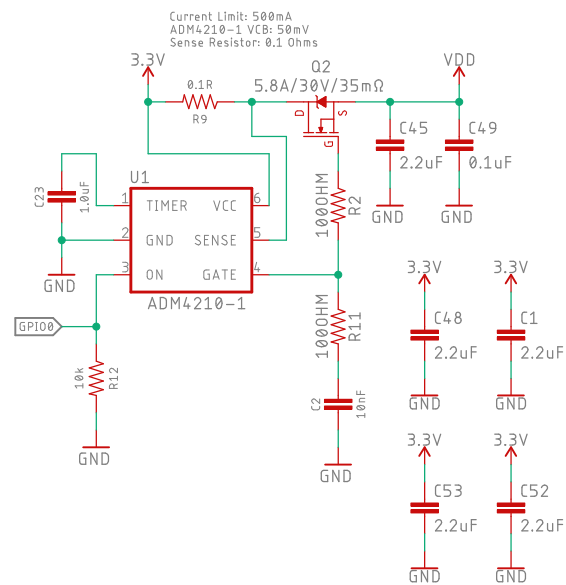
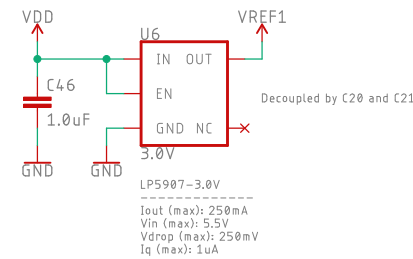
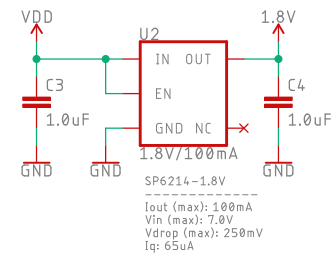


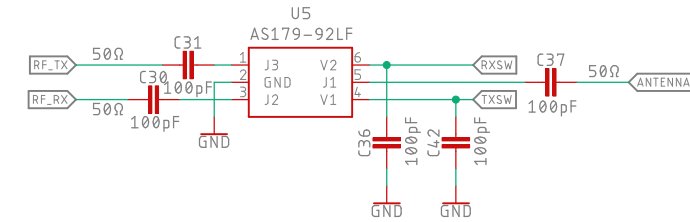
Power Switching & Inrush Current Limit



Voltage Regulation



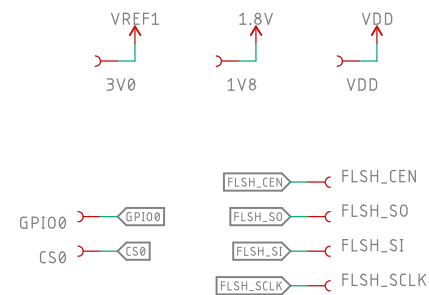
Antenna Switch



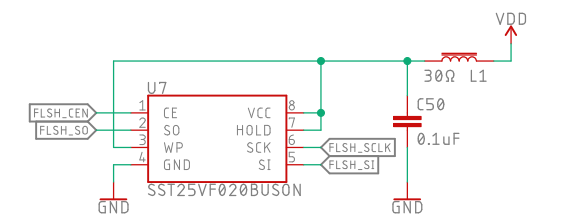
Antenna



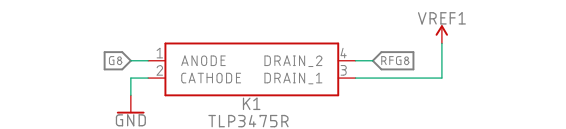
Test Points



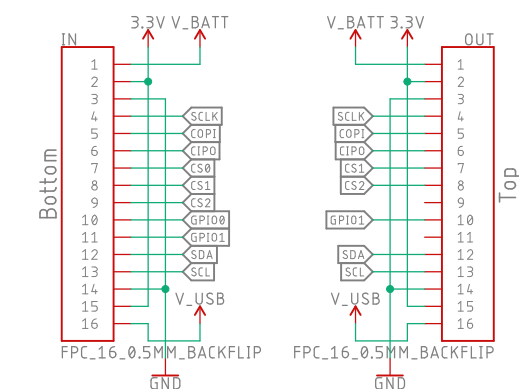
FLASH Memory



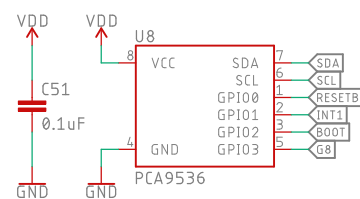
Gain Opto-Isolation



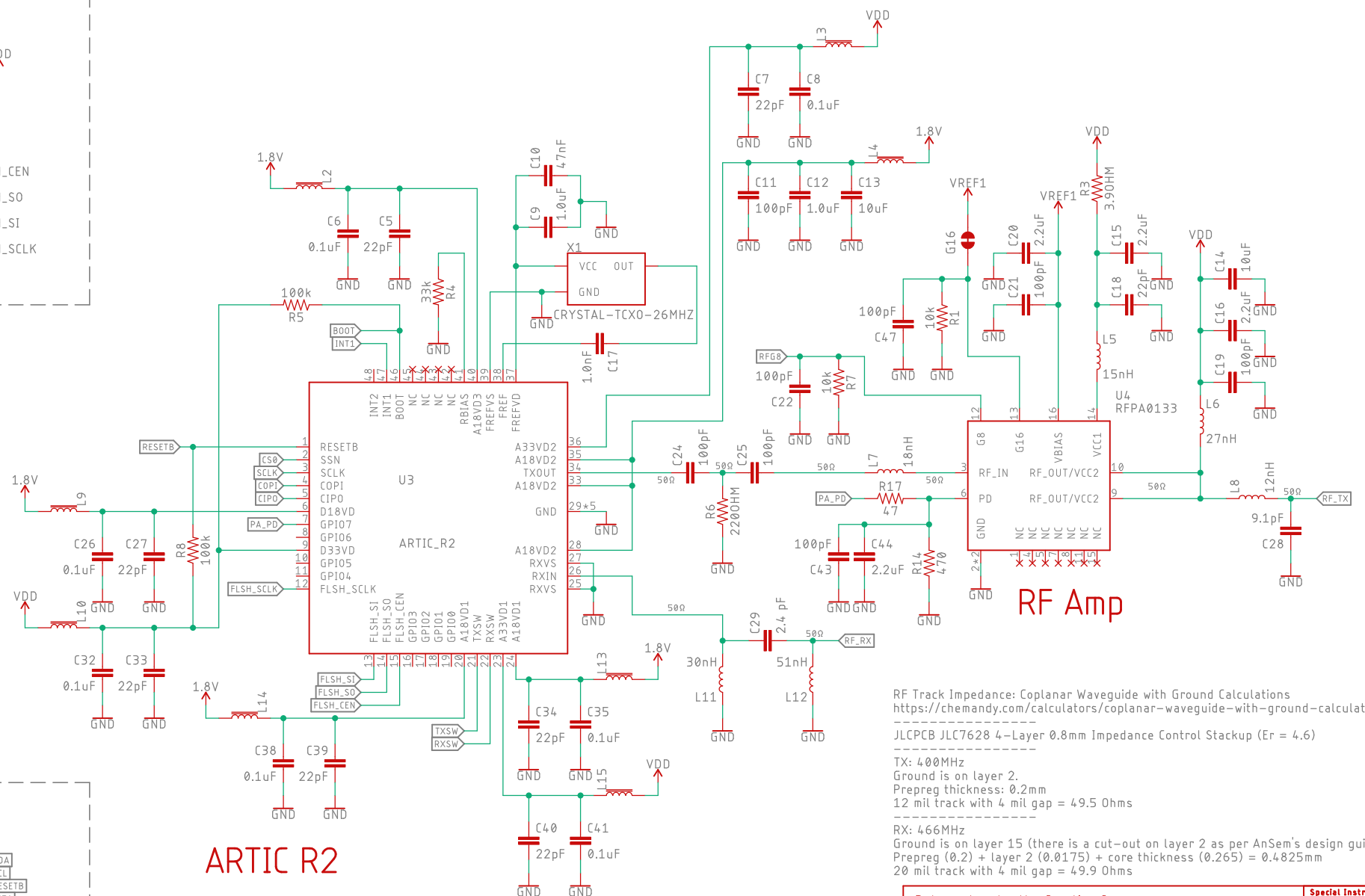
EZ Connectors



I2C GPIO



ARTIC R2



RF Track Impedance: Coplanar Waveguide with Ground Calculations
<https://chemandy.com/calculators/coplanar-waveguide-with-ground-calculator.htm>
 JLCPCB JLC7628 4-Layer 0.8mm Impedance Control Stackup (Er = 4.6)
 TX: 400MHz
 Ground is on layer 2.
 Prepreg thickness: 0.2mm
 12 mil track with 4 mil gap = 49.5 Ohms
 RX: 466MHz
 Ground is on layer 15 (there is a cut-out on layer 2 as per AnSem's design guide).
 Prepreg (0.2) + layer 2 (0.0175) + core thickness (0.265) = 0.4825mm
 20 mil track with 4 mil gap = 49.9 Ohms



| | | |
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| TITLE: SparkX_EZ_ARTIC_R2 | | |
| Design by: Paul Clark Based on the Icoteq Reference Design | | REV: X01 |
| Date: 02/05/2021 09:20 | Sheet: 1/1 | |