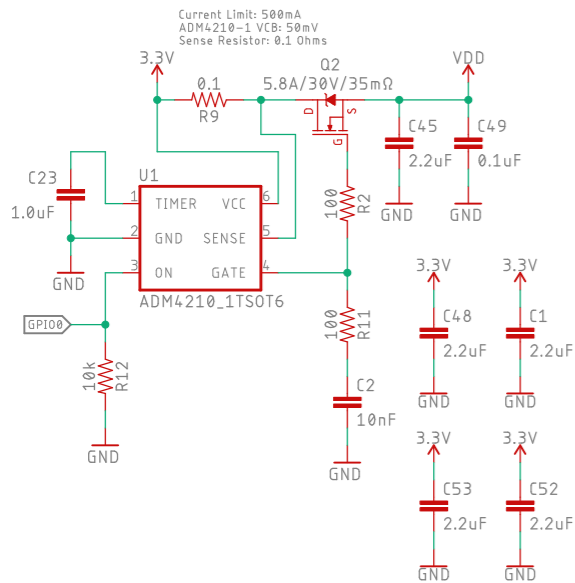
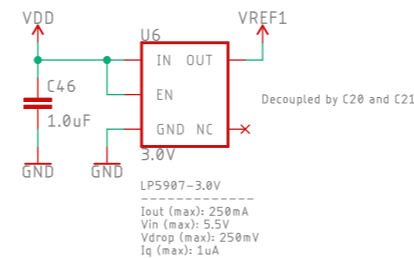
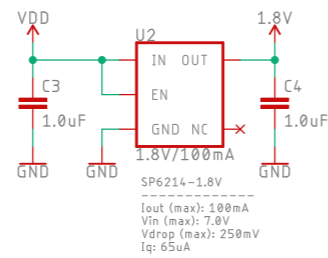


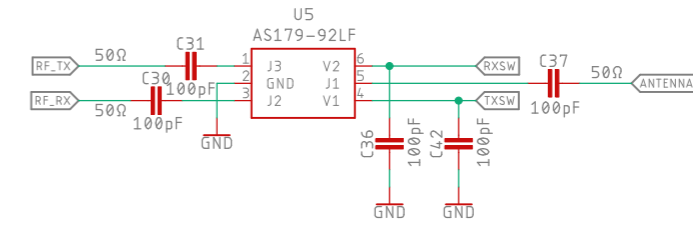
Power Switching & Inrush Current Limit



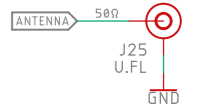
Voltage Regulation



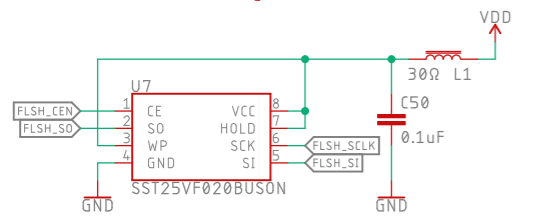
Antenna Switch



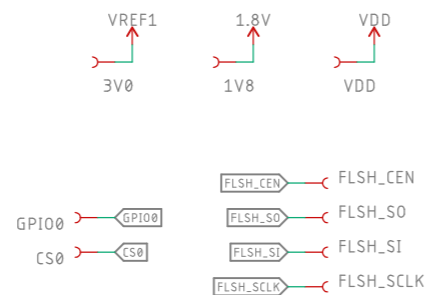
Antenna



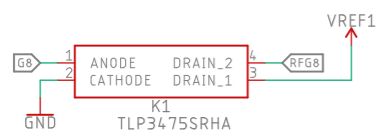
FLASH Memory



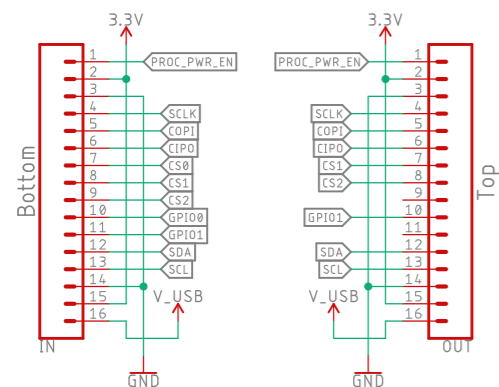
Test Points



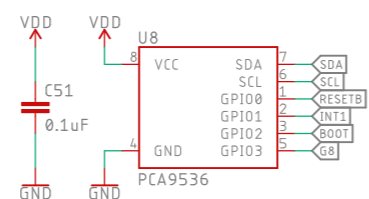
Gain Opto-Isolation



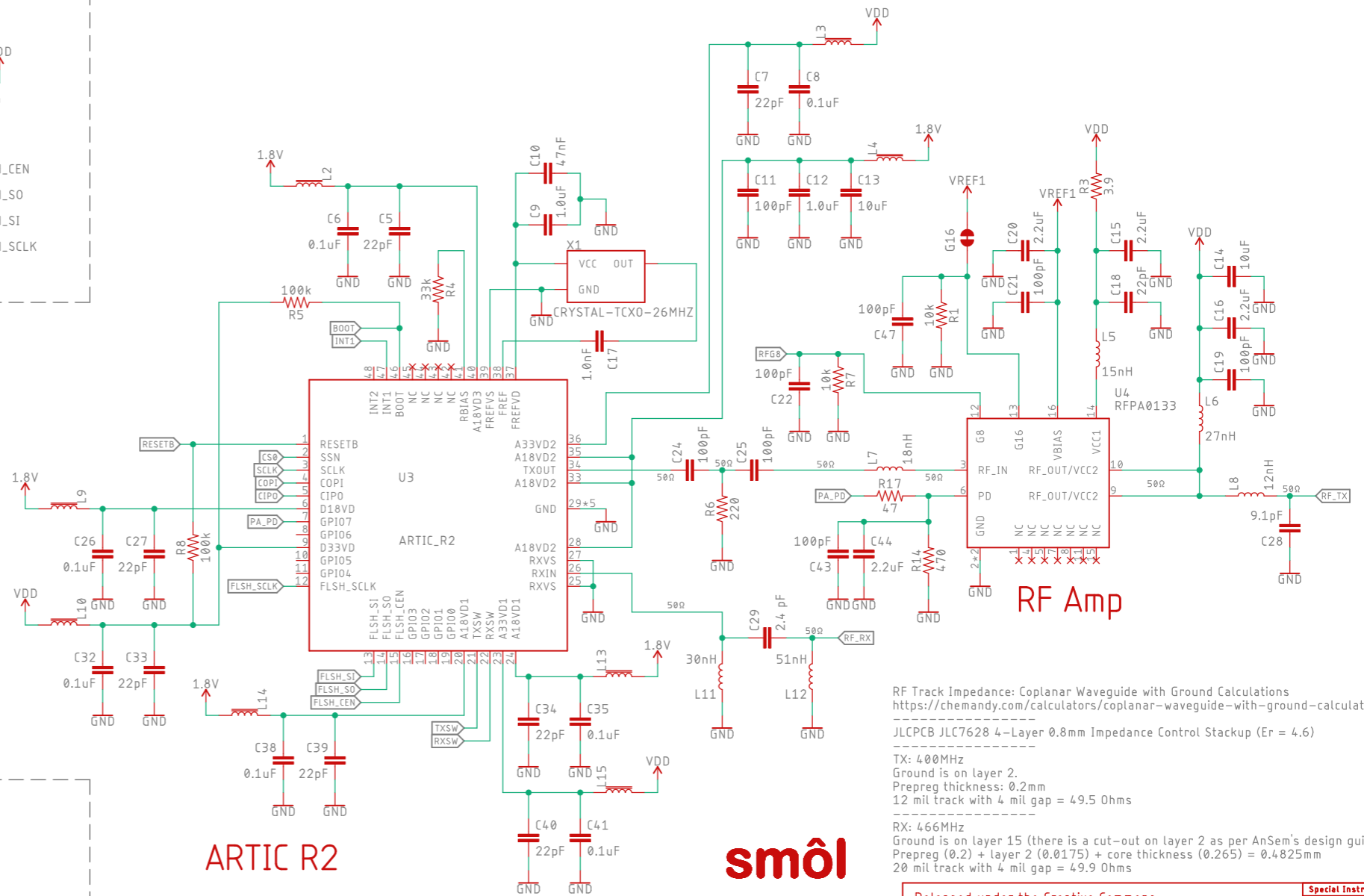
smol Connectors



I2C GPIO



ARTIC R2



RF Track Impedance: Coplanar Waveguide with Ground Calculations
<https://chemandy.com/calculators/coplanar-waveguide-with-ground-calculator.htm>

JLPCB JL7628 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

smol



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TITLE: SparkX_smol_ARTIC_R2		
Design by: Paul Clark Based on the Icoteq Reference Design		REV: X01
Date: 20/08/2021 13:33	Sheet: 1/1	