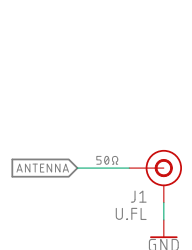
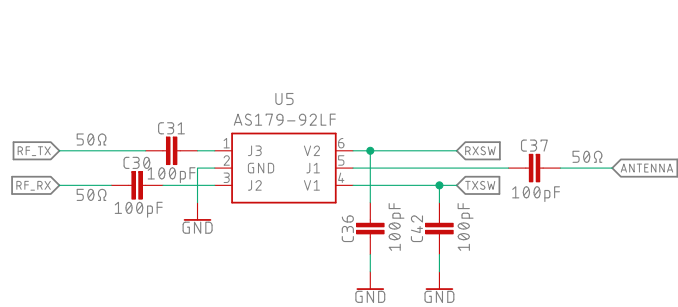
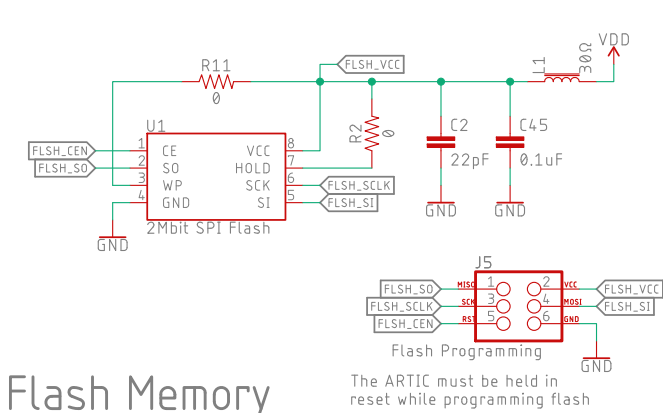
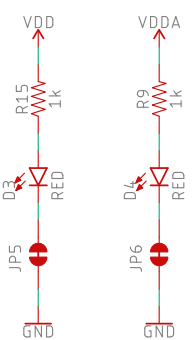
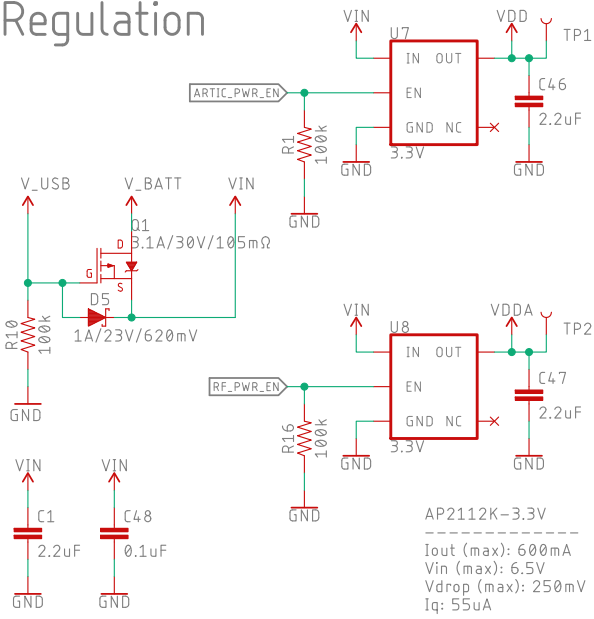


Power Switching & 3.3V Regulation



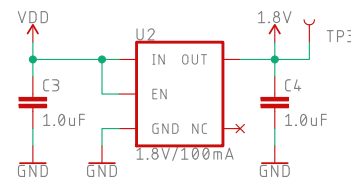
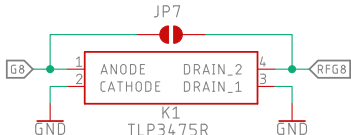
LEDs

Flash Memory

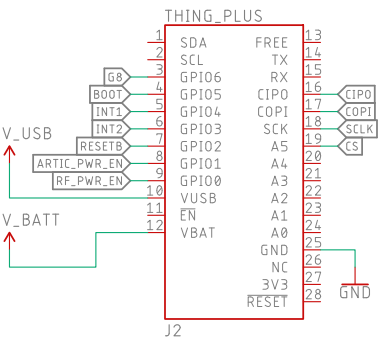
Antenna Switch

Antenna

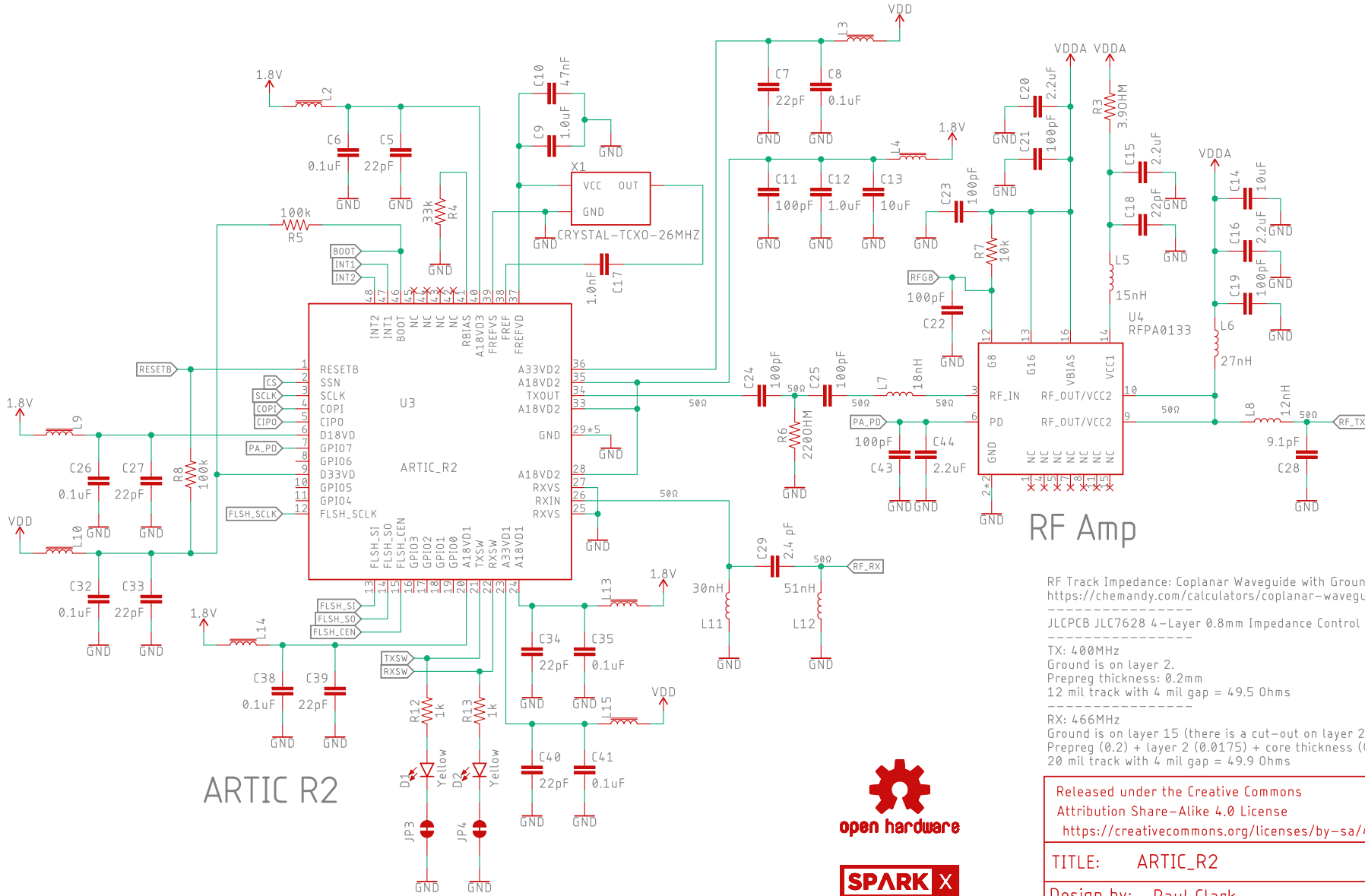
Gain Opto-Isolation



1.8V Regulator



Pins



ARTIC R2

RF Amp

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



Special Instructions	
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TITLE: ARTIC_R2	
Design by: Paul Clark Based on the Icoteq Reference Design	REV: X02
Date: 15/10/2020 16:13	Sheet: 1/1