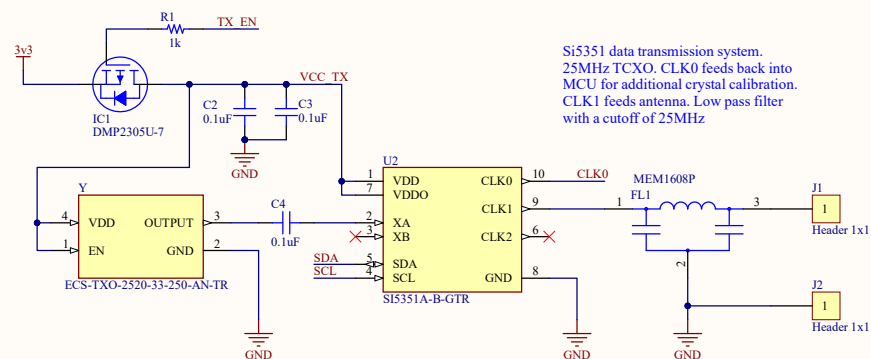
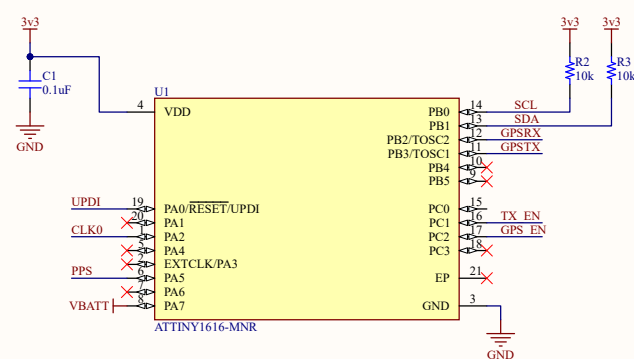


SI5351 Transmitter



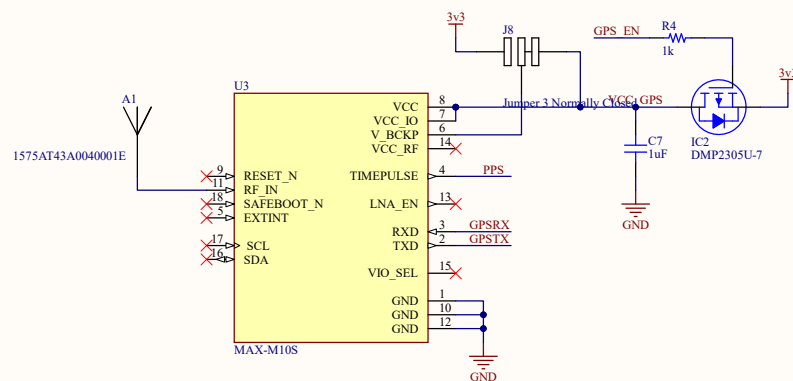
Si5351 data transmission system.
25MHz TCXO. CLK0 feeds back into
MCU for additional crystal calibration.
CLK1 feeds antenna. Low pass filter
with a cutoff of 25MHz

ATTINY1616 MCU



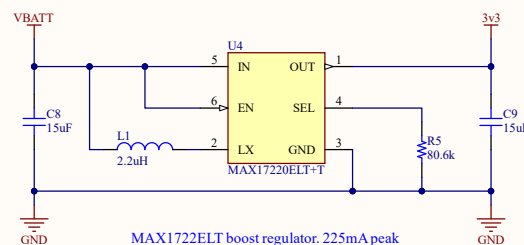
ATTINY1616 MCU. 20MHz
internal clock. I2c pullups.

UBlox MAX-M10S GPS



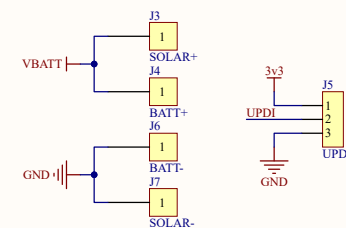
UBlox MAX-M10S GPS module. Fed by a small SMD ceramic antenna. PPS is used for additional TCXO calibration. Jumper for $\overline{V}_{BKUP}$ is used to select whether to keep RTC powered when GPS is powered or not.

3.3V Boost Converter

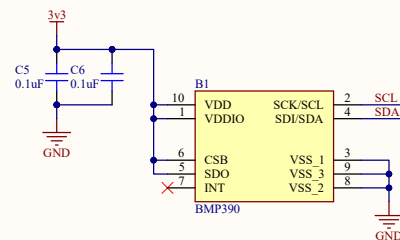


MAX1722ELT boost regulator. 225mA peak current. 80.6k resistor selects 3.3v output. 800mA inductor.

Connections



BMP390 Sensor



Title		
Size B	Number	Revision
Date: 7/12/2025	Sheet of	Drawn By:
File: C:\Users\j\PicoballoonTracker_V1_Sch		