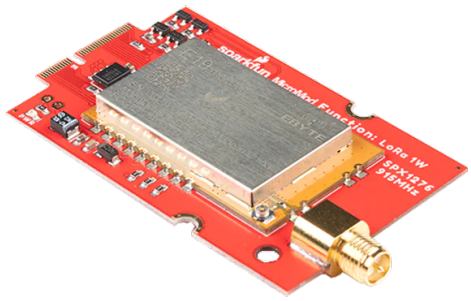
MicroMod LoRa Function Board

Product Overview

10/14/2022

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description



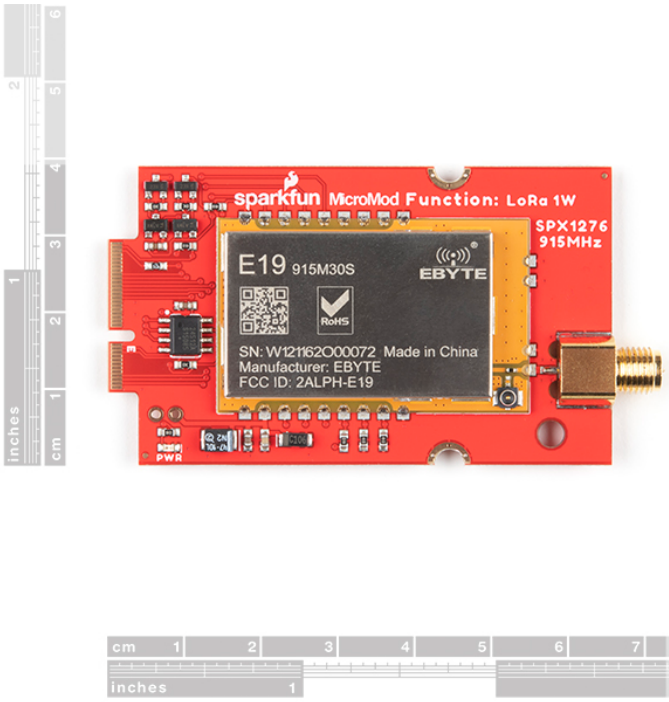
SparkFun MicroMod LoRa Function Board provides LoRA and LoRaWAN capabilities to the MicroMod projects. This function board can be used with a MicroMod Processor Board and a MicroMod main Board, which is responsible for the electrical interface between a processor board and the function board

The LoRa Function Board uses the 915M30S LoRa module from EBYTE, which is a 30dBm transceiver based around the SX1276 from Semtech. This board includes a robust edge mount RP-SMA connector for large LoRa (915MHz) antennas that is also available with modification, a U.FL connector. This LoRA module operates on a 900MHz to 931MHz frequency range, up to 30dBm power, and LoRa, FSK, GFSK, MSK, GMSK, and OOK modulations. LoRa function board is tested with a 12 miles line-of-sight transmission and was successful.

Features

- Board features:
  - M.2 MicroMod edge interface
    - Keyed screw slots
  - RP-SMA antenna connector
    - Configurable U.FL antenna connector
- 1W 915M30S LoRa module features:
  - Based on SX1276 chipset from Semtech
  - 900MHz to 931MHz frequency range
  - 28.5dBm to 30dBm (max) transmit power
  - LoRa, FSK, GFSK, MSK, GMSK, OOK modulation
  - Data Rate:
    - 1.2kbps to 300kbps for FSK
    - 0.018kbps to 37.5kbps for LoRa
  - 50Ω antenna impedance
- MicroMod peripherals used:
  - 5V Power
  - I²C Bus (EEPROM)
  - SPI Bus
  - GPIO (7 pins)

Board Dimensions



Board Overview

Additional Resources

- Schematic
- Hookup guide
- Eagle guide

Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/sparkfun/sparkfun-micromod-lora-function-board/