

MicroMod Cellular Function Board

WRL-20409

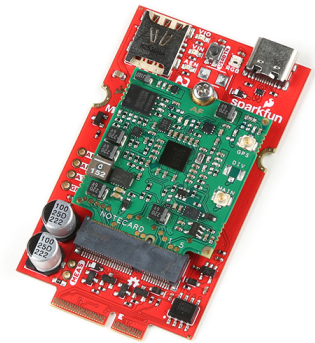
Product Overview

12/29/2023

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

Description

SparkFun MicroMod Cellular Function Board adds a cellular modem to the MicroMod ecosystem using the NOTE-NBGL-500 Notecard module. The Notecard includes a built-in SIM card, a 10-year subscription with 500MB of data, onboard GPS, and a 3-axis accelerometer with an on-chip temperature sensor. This Notecard module features outboard Device Firmware Updates (DFU), which allows the user to reprogram a connected processor remotely through the Notehub service.

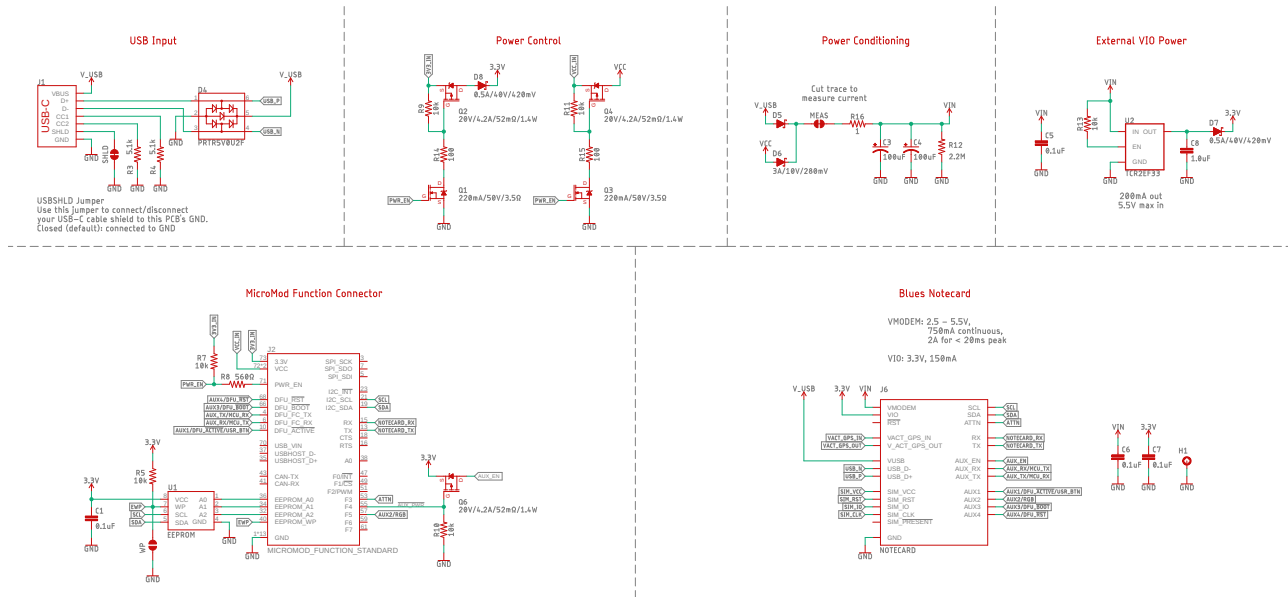


The cellular function board includes a PTH header, configurable user button, LEDs, solder jumpers, connectors, and ports. This board allows the user to choose the method of communication to the Notecard over I²C, UART, or USB and Serial modes.

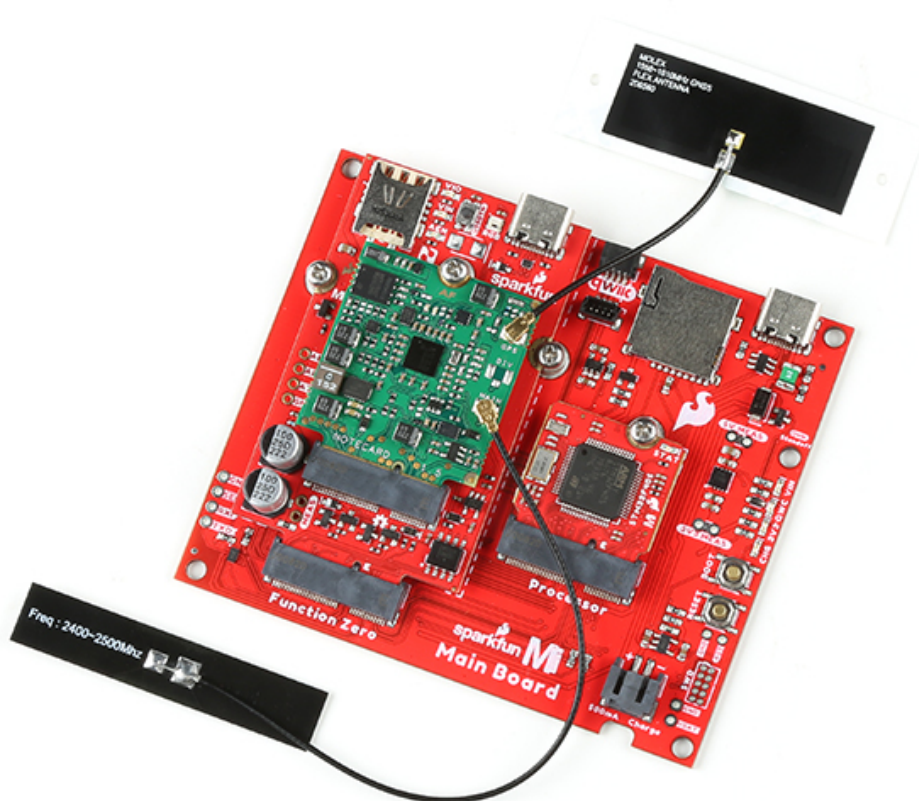
Features

- Notecard NOTE-NBGL-500 cellular module:
 - Integrated GNSS module and 3-axis accelerometer
 - Built-in SIM card
 - u.FL connectors for cellular and GPS antennas
 - LEDs:
 - Green LED for modem activity
 - Red LED for user activity
- Cellular function board:
 - Empty Nano-SIM socket for external SIM card addition
 - PTH header:
 - AUX enable
 - AUX RX/MCU TX
 - AUX TX/MCU RX
 - Ground
 - Configurable user button
 - LEDs:
 - VIO: 3.3V I/O voltage status
 - VIN: Notecard power status
 - AEN: Auxiliary UART status
 - RGB: WS2812 LED connected to Notecard AUX2
 - Solder jumpers:
 - SHLD
 - VIO_LED
 - PWR_LED
 - AUX_EN_LED
 - RGB
 - ANT_PWR
 - WP
 - MEAS
 - Connectors and ports:
 - 1x M.2 MicroMod connector
 - 1x USB Type C™ – direct serial interface with the Notecard

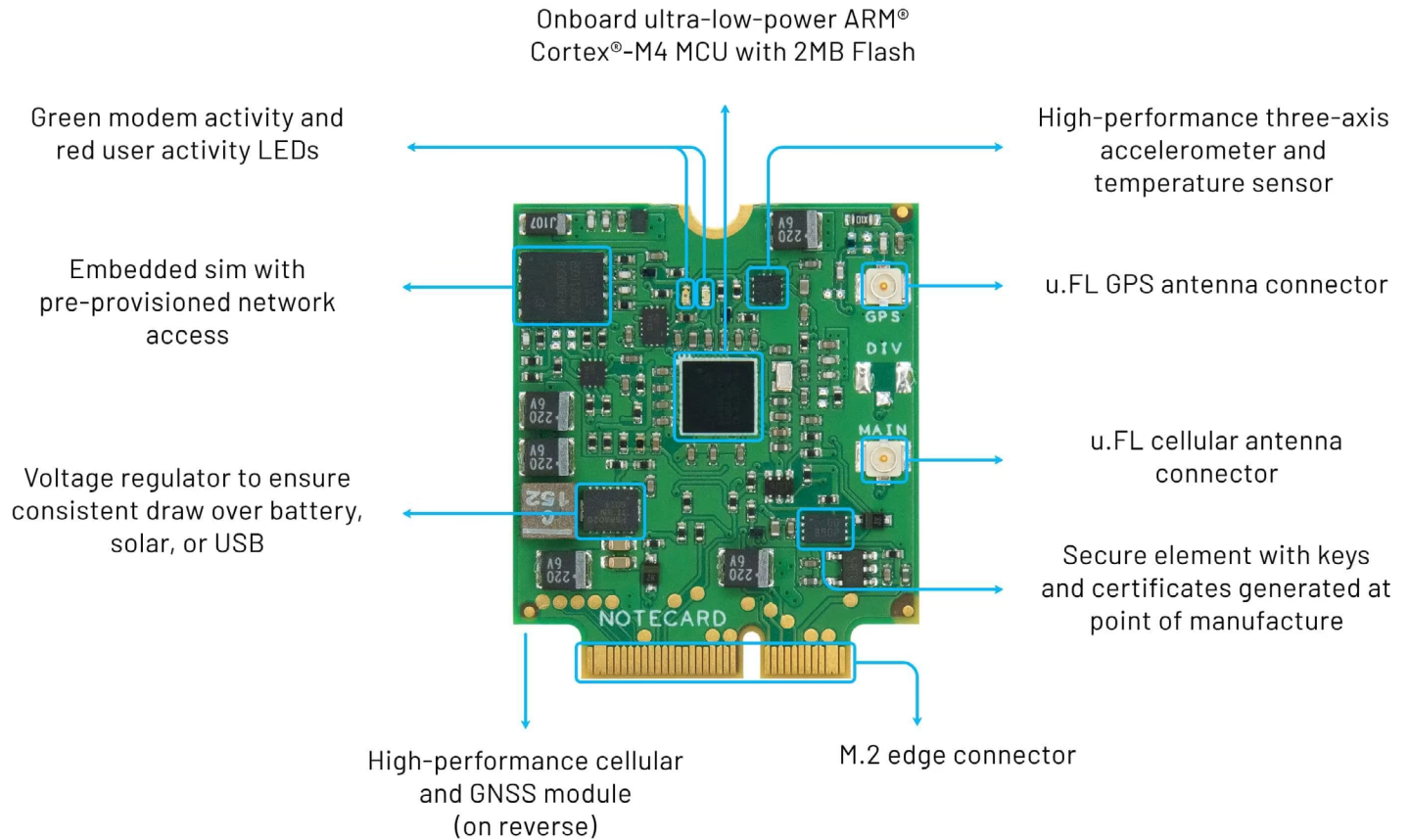
Schematic Diagram



Connection Diagram



Notecard Overview



Mouser Part Number

[View Part](#)

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