

# MicroMod Cellular Function Board

WRL-20409

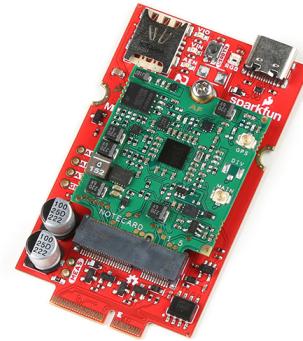
## Product Overview

12/29/2023

For the most up-to-date information, visit [www.mouser.com](http://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.



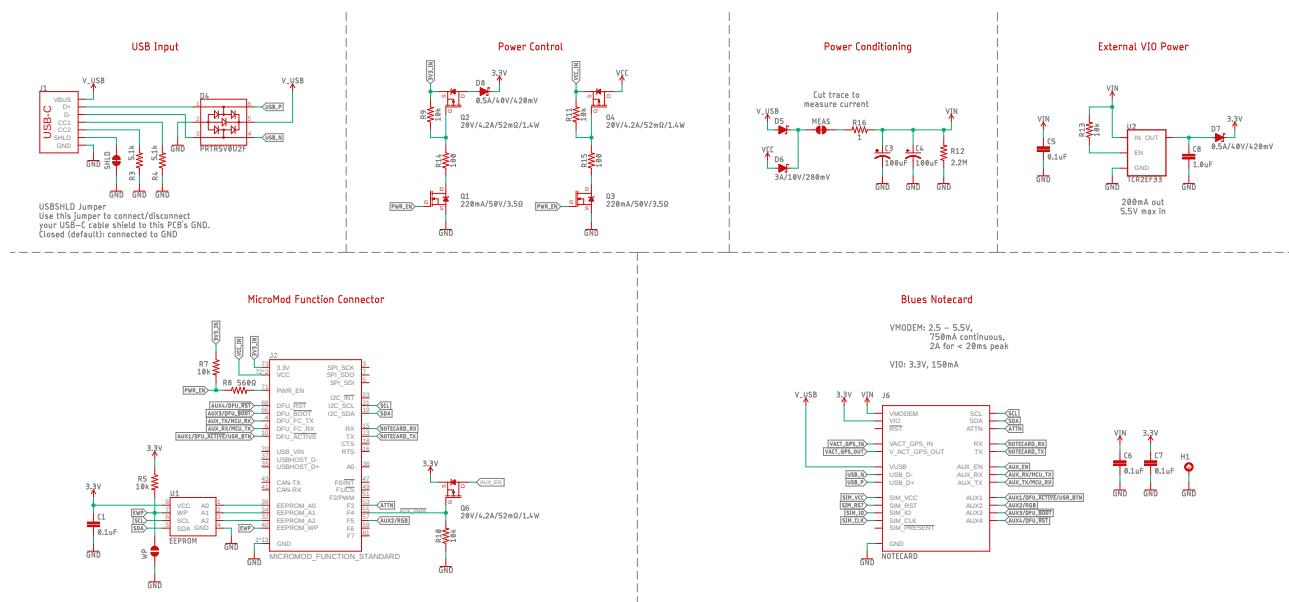
The cellular function board includes a PTH header, configurable user button, LEDs, solder jumpers, connectors, and ports. This board allows the user to choose the method of communication to the Notecard over I<sup>2</sup>C, UART, or USB and Serial modes.

## Features

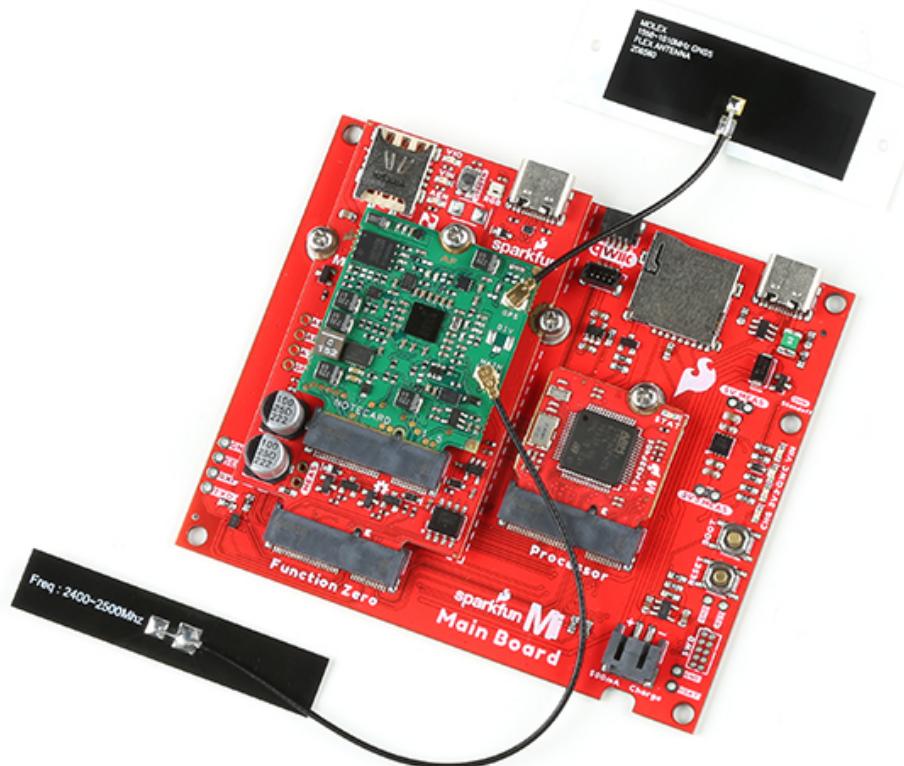
- Notecard NOTE-NBGL-500 cellular module:
  - Integrated GNSS module and 3-axis accelerometer
  - Built-in SIM card
  - u.FL connectors for cellular and GPS antennas
  - LEDs:
    - Green LED for modem activity
    - Red LED for user activity
- Cellular function board:
  - Empty Nano-SIM socket for external 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



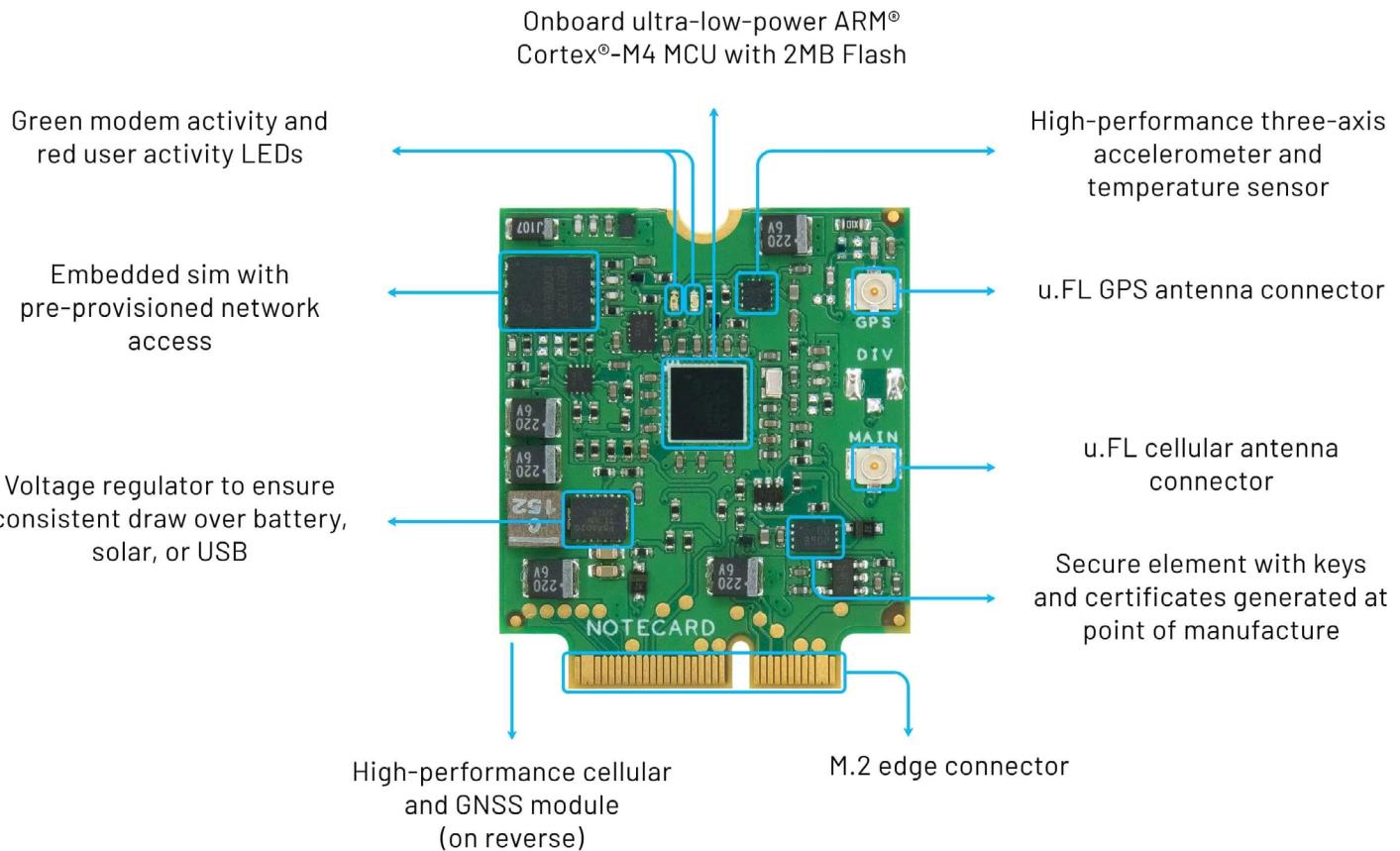
## Schematic Diagram



## Connection Diagram



## Notecard Overview



## Mouser Part Number

[View Part](#)

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