

GPS-15733

NEO-M9N GPS Breakout Board, Onboard Chip Antenna

Product Overview

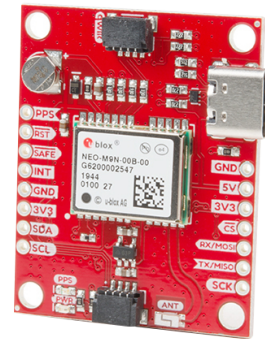
12-21-2021

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

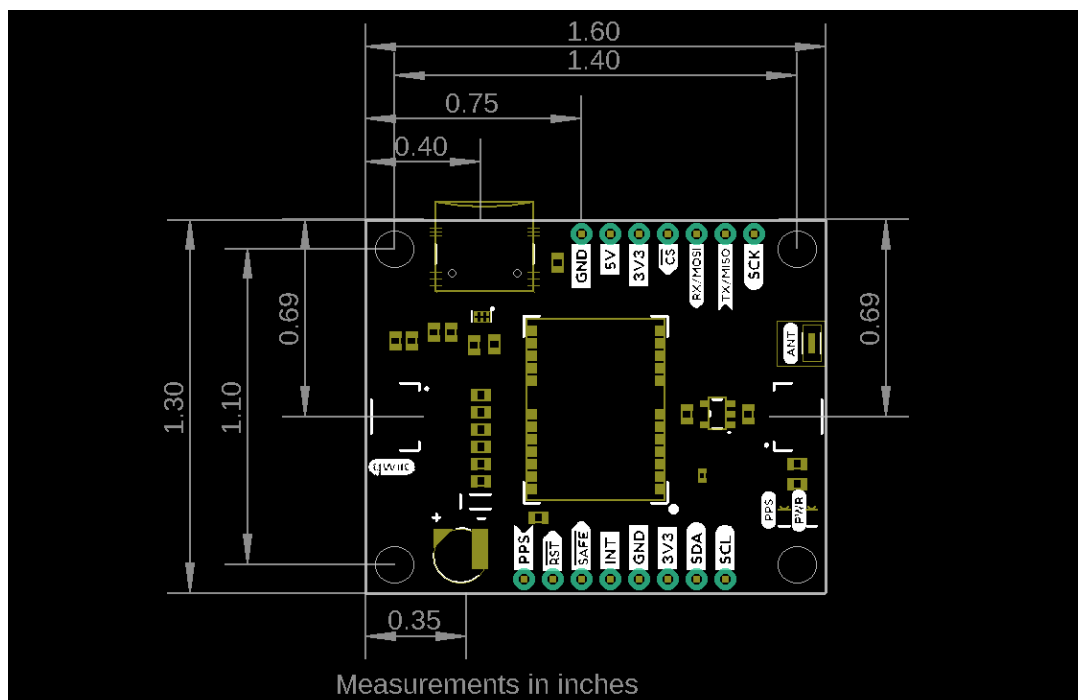
Description

SparkFun NEO-M9N GPS Breakout Board, Onboard Chip Antenna is a global positioning satellite board with versatile configuration options. NEO-M9N GPS breakout board includes an integrated chip antenna. The 92-channel u-blox M9 engine Global Navigation Satellite System (GNSS) receiver can receive signals from the GPS, GLONASS, Galileo, and BeiDou constellations with 1.5-mtr accuracy.

The NEO-M9N GPS breakout board utilizes the concurrent reception of four GNSS to maximize position accuracy in challenging conditions. This enables increased precision and decreased lock time. The NEO-M9N GPS breakout board is also equipped with an onboard rechargeable battery that provides power to the RTC on the NEO-M9N. The u-blox receiver supports I²C, which makes it ideal for Qwiic compatibility.



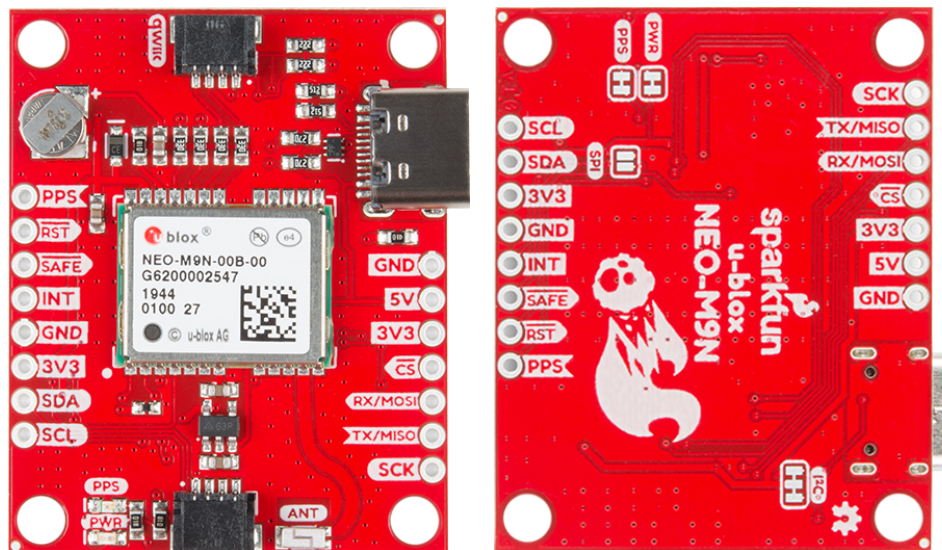
Board Dimensions



Features

- Integrated chip antenna
- 92-channel GNSS receiver
- 1.5m horizontal accuracy
- 25Hz maximum update rate (4x concurrent GNSS)
- Time To First Fix (TTFF):
 - Cold: 24s
 - Hot: 2s
- Max. altitude: 80000m
- Max. G: ≤ 4
- Max. velocity: 500m/s
- Velocity accuracy: 0.05m/s
- Heading accuracy: 0.3 degrees
- Time pulse accuracy: 30ns
- 3.3V VCC and I/O:
 - Current consumption: 31mA tracking GPS+GLONASS
- Software configurable:
 - Geofencing
 - Odometer
 - Spoofing detection
 - External interrupt
 - Pin control
 - Low power mode
- Supports NMEA, UBX, and RTCM protocols over UART or I²C interfaces

Board Top & Bottom View



Additional Resource

- [NEO-M9N u-blox M9 standard precision module Datasheet](#)

Mouser Part Number

[View Part](#)

To learn more, visit

<https://www.mouser.com/new/sparkfun/sparkfun-neo-m9n-gps-breakout-chip-antenna/>