

Arduino NB-IoT/LTE/GPRS Expansion Shield

DFR0572

Product Overview

08-05-2022

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

Description

DFRobot DFR0572 Arduino NB-IoT/LTE/GPRS Expansion Shield is a wireless communication module based on the SIMCom SIM7000 chip. This expansion shield is designed for Arduino controllers, supporting multi-frequency LTE-FDD communication, dual-frequency GPRS/EDGE communication, and NB-IoT communication. The DFR0572 expansion board is an ideal solution for applications of low power consumption, low latency, and middle throughput. This SIM7000 supports American GPS, Russian GLONASS, European Galileo, Japanese QZSS, and the Chinese BeiDou navigation satellite system. Typical IoT applications include long-distance control and data uploading, movement tracking, and shared bikes.



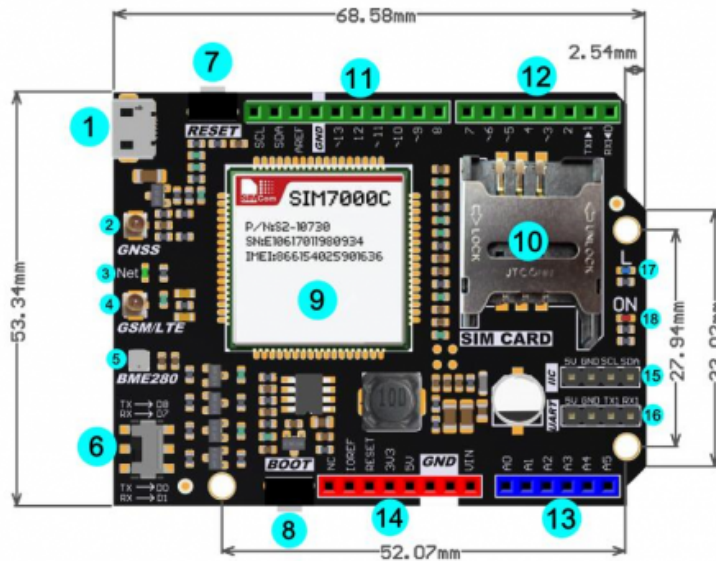
Features

- -40°C to 85°C optional temperature range
- 3.0V to 4.3V supply voltage range
- 1.8V/3.0V SIM card and NB-IoT card

Specifications

- 7V_{IN} to 12V_{DC} (20V maximum) input voltage
- 53.4mm x 68.6mm/2.1" x 2.7" dimensions
- SIM7000E communication module:
 - Single-band TDD-LTE B39
 - Quad-band FDD-LTE B1/B3/B5/B8 (SIM7000C)
 - Quad-band FDD-LTE B3/B8/B20/B28 (SIM7000E)
 - 900/1800MHz GPRS/EDGE
- 53.4mm x 68.6mm/2.1" x 2.7" dimensions
 - 2W GSM900
 - 1W DCS1800
 - Control via AT commands
 - GNSS (GPS, GLONASS, BeiDou, Compass, Galileo, QZSS)
 - Firmware update via USB2.0

Board Overview



- | | |
|--|-----------------------------------|
| 1 USB Firmware Update Interface | 10 SIM Socket |
| 2 GNSS Antenna | 11 Arduino Digital Interface |
| 3 Network Indicator | 12 Arduino Digital Interface |
| 4 GSM/LTE Antenna | 13 Arduino Analog Interface |
| 5 BME280 Sensor | 14 Arduino Power Supply Interface |
| 6 Software/Hardware Serial Port Switch | 15 Arduino IIC Interface |
| 7 Arduino RESET | 16 Arduino UART Interface |
| 8 SIM7000 Control Button | 17 Arduino Blink Indicator |
| 9 SIM7000 Module | 18 Power Supply Indicator |

Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-dfr0572-expansion-shield/>