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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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# SIM808 GSM/GPRS/GPS Arduino IOT Board

SKU:DFR0355



## INTRODUCTION

This is an Arduino Leonardo with SIM808 GSM/GPRS/GPS. The SIM808 with Leonardo mainboard is the latest Arduino board developed by DFRobot for multi-purpose applications. The onboard SIM808 module includes an integrated quad-band GSM/GPRS and GPS satellite navigation module, and a 4 layer PCB integrates the microcontroller, microphone, headphone jack and GPRS/GPS, giving this board the tiny footprint of a regular credit card! Meanwhile, the board includes a sleep mode feature for extra-low power consumption. And an on-board 3.7V Lipo battery power supply and battery-charging circuit has been integrated into the board, making it ideal for applications such as real-time car tracking, security patrolling and IoT projects.

Compared with the existing SIM808 modules on the market, this SIM808 uses the latest version with better stability.

## APPLICATIONS

- GPRS network nodes
- Remote communications
- Satellite positioning
- Real-time car tracking systems
- Security
- Internet of things (IoT)

## SPECIFICATION

- **AVR Arduino MCU: ATmega32u4 (Bootloader: Leonardo)**
- Operating voltage: 5V
- Input Voltage: 5V (USB)/7~23V(Vin)/3.5~4.3V (BAT)
- Low-power consumption: (100mA@7V-GSM mode)
- Digital I/O Pins: 20
- PWM Channels: 7
- Analog Input Pins: 12
- DC Current per I/O Pin: 40 mA
- DC Current for 3.3V Pin: 50 mA
- Flash Memory: 32 KB (of which 4 KB is used by the bootloader)
- SRAM: 2.5 KB
- EEPROM: 1 KB
- Clock Speed: 16 MHz
- **Wireless Module: SIM808 GSM/GPRS/GPS module**
- Quad-band 850/900/1800/1900MHz – 2G GSM network
- GPRS multi-slot class 12/10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
  - Class 4 (2 W @ 850/900MHz)
  - Class 1 (1 W @ 1800/1900MHz)
- Bluetooth: Compliant with 3.0 + EDR (Not open in this version)
- Time-To-First-Fix
  - Cold starts: 30s (typ.)
  - Hot starts: 1s (typ.)
  - Warm starts: 28s (typ.)
- Accuracy: Horizontal position 2.5m CEP
- Update rate: 5Hz
- Control: AT command (GSM07.07, 07.05 and SIMCom enhanced AT commands)
- Dimension: 73\*54mm / 2.87\* inches
- Weight: 50g

## SHIPPING LIST

- SIM808 with Leonardo mainboard x1
- Built-in Spring GSM Antenna x1
- Built-in GPS antenna x1