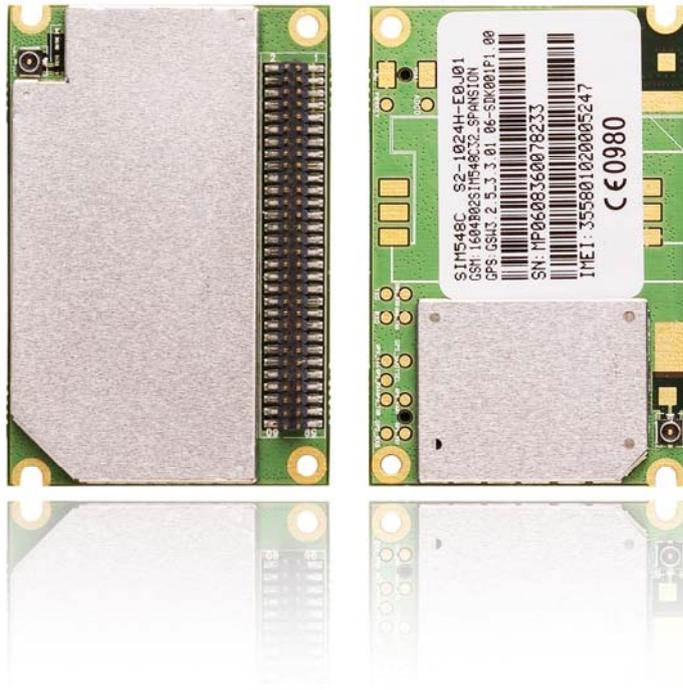


SIM548C

GSM/GPRS+GPS Module



SIM548C module is a Quad-Band GSM/GPRS enabled a compact plug-in module that is also equipped with GPS technology for satellite navigation. The compact design of the new SIM548C makes it easy to integrate GSM/GPRS & GPS as an all-in-one solution. You will save significantly both time and cost for the integration of additional hardware components.

Featuring an industry-standard interface and GPS function, the combination of both technologies allows goods, vehicles and people to be tracked seamlessly at any location and anytime with signal coverage.

General features

- Quad-Band 850/900/1800/1900MHz
- GPRS multi-slot class 10
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
 - Class 4 (2 W @ 850/900 MHz)
 - Class 1 (1 W @ 1800/1900MHz)
- Control via AT commands (GSM 07.07 ,07.05 and SIMCOM enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4 ... 4.5 V
- Low power consumption
- Normal operation temperature:
 - 30 °C to +80°C
- Restricted operation temperature:
 - 40°C to -30°C and +80°C to +85°C
- Storage temperature:
 - 45°C to +90°C
- Dimensions: 55*33*8.2mm

Interfaces

- 60-pin DIP connector
- Multiplexer
- Interface to external SIM 3V/ 1.8V
- Dual analog audio interfaces
- AT commands via GSM/GPRS serial interface
- Embedded SIM card holder
- LCD interface
- RTC backup
- Charge interface
- A serial interface and a debug interface for GSM/GPRS
- Dual serial interface for GPS
- Two separate antenna connectors for GSM/GPRS&GPS, and two antenna pads for GSM/GPRS&GPS

Compatibility

- AT cellular command interface

Specifications for SMS via GSM / GPRS Specification for GPS

- Point-to-point MO and MT
- SMS cell broadcast
- Text and PDU mode

- Receiver 20 channels, L1 1575.42 MHz, C/A code 1,023 MHz chip rate
- Accuracy Position 10m CEP
 - without SA/Velocity 0.1m/s,
 - without SA/Time 1µs synchronized to

Specifications for audio

- Tricodec
 - Half rate (HR)
 - Full rate (FR)
 - Enhanced Full rate (EFR)
- Hands-free operation
- Echo cancellation

GPS time

- Date WGS-84
- Acquisition rate (TTFF defined at 95% of first position local station)
 - Hot start<1s, average, open sky
 - Warm start<38s, average, open sky
 - Cold start<42s, average, open sky
- Support AGPS
- Operating voltage 3.3V DC ±5%
- Low power consumption about 200mW at 3.3V
- Protocols
 - NMEA-0183
 - SiRF binary
 - RTCM SC-104
- Crystal oscillator (TCXO), temperature compensated with frequency stability of ±0.5ppm
- Memory: 4 Mb flash and 1Mb SRAM

Specifications for data transfer

- GPRS class 8/10: max. 85.6 kbps (downlink)
- PBCCH support
- Coding schemes CS 1, 2, 3, 4
- CSD up to 14.4 kbps
- USSD
- Non transparent mode
- PPP-stack
- Integrated TCP/IP stack

Specifications for fax

- Group 3, class 1