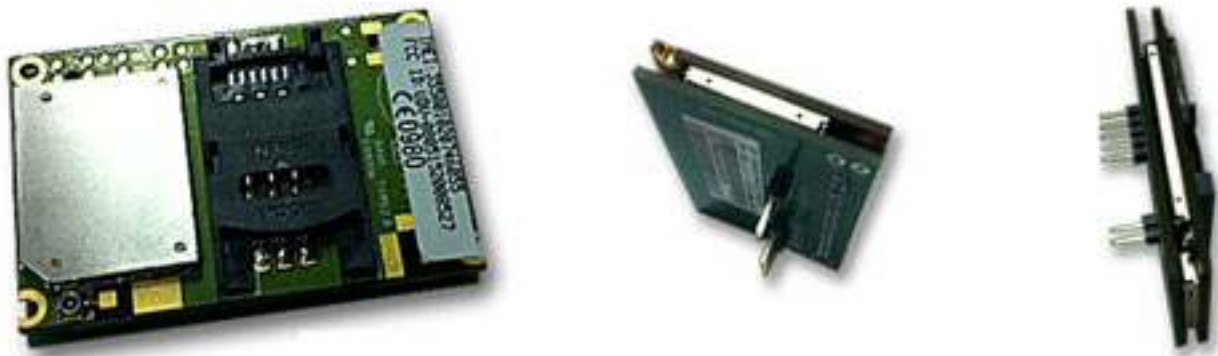


EZYSIM

GSM/GPRS+GPS Module



The EZYSIM is a Quad-Band GSM/GPRS enabled compact plug-in module based on SIMCOM's 548C hardware, which is also equipped with GPS technology for satellite navigation. Managed by an integrated multi-core processor, it facilitates the integration with any micro-controller equipped with a simple TTL level serial interface.

The compact design of the new EZYSIM makes it easy to integrate GSM/GPRS & GPS features as an all-in-one solution with practically no external components required.

Featuring an industry-standard GSM 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) or EZYSIM enhanced
- GPRS application software 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
- Memory: 256Mb flash and 1Mb SRAM
- Dimensions: 55*33*10.2mm

Specifications for SMS (GSM/GPRS)

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

Specifications for audio

- Tri-codec
 - Half rate (HR)
 - Full rate (FR)
 - Enhanced Full rate (EFR)
- Echo cancellation

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

Interfaces

- 7-pin DIP connector
 - TTL Serial I/O
 - User functions I/O
- Analog audio & microphone interface
- Two separate antenna connectors for
 - GSM/GPRS&GPS

Features

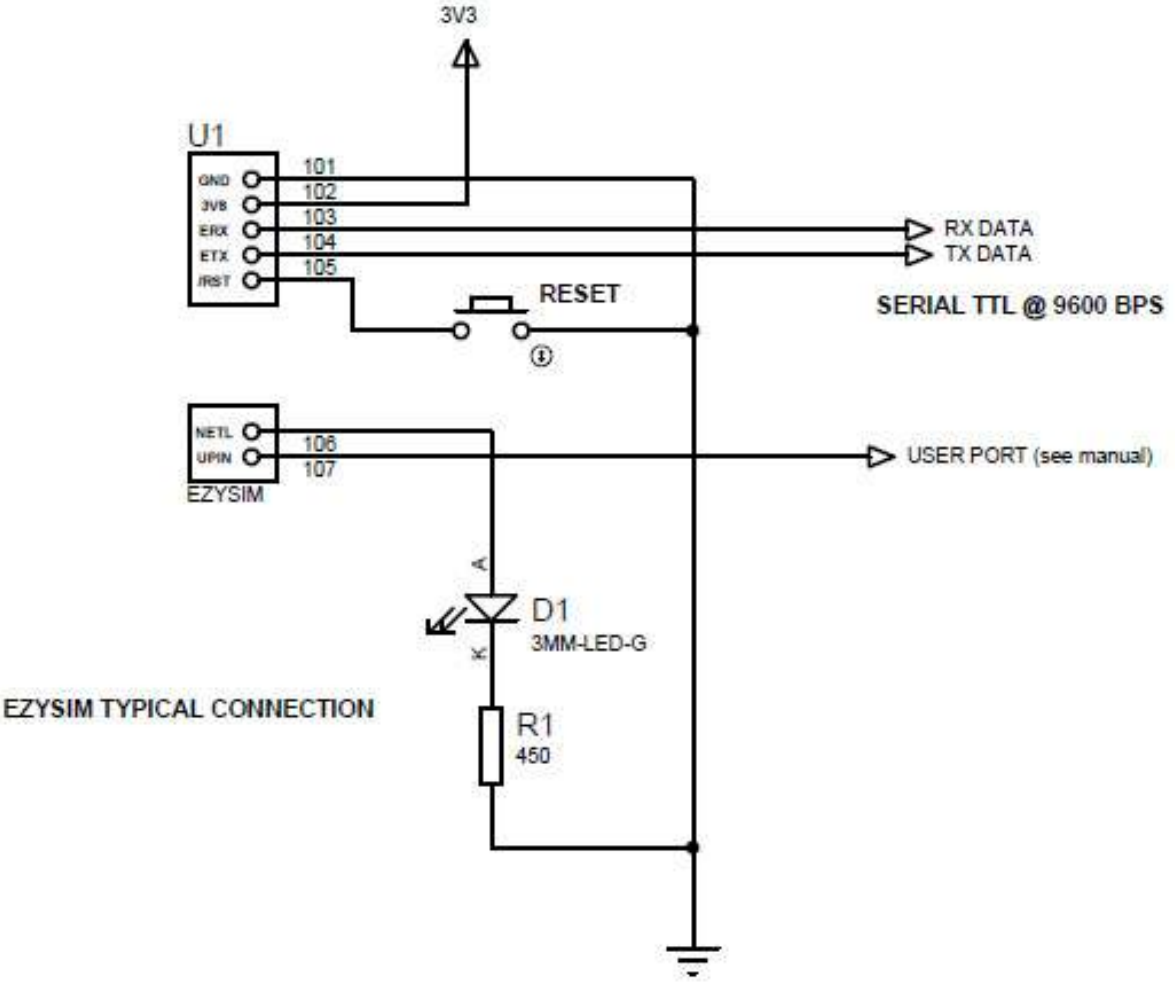
- Integrated GPS power supply
- Integrated RTC backup battery
- Embedded SIM card holder
- AT commands or EZYSIM enhanced
- Integrated multi-core processor with GPS & GPRS data processing
- Easy to use commands subset featuring single command GPRS connection
- Multifunction serial TTL interface used for both GPRS and GPS communication

Compatibility

- 3.3v TTL interface
- AT cellular command interface

Specification for GPS

- 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, 1µs synchronized to GPS time
- Sensitivity -158db
- Date WGS-84
- Acquisition rate
 - Hot start<1s, average, open sky
 - Warm start<38s, average, open sky
 - Cold start<42s, average, open sky
- Protocols
 - NMEA-0183, SiRF binary
- Crystal oscillator (TCXO), temperature compensated with frequency stability of ±0.5ppm



EZYSIM TYPICAL CONNECTION