



GPS Module

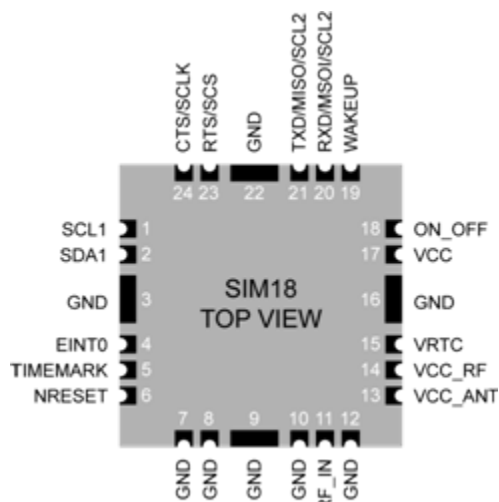


SIM18

SIMCom presents an ultra compact and reliable GPS module-SIM18. This is a standalone L1 frequency GPS module in a SMT type and it is designed with SiRF4 high sensitivity navigation engine, which allows you to benefit from small dimensions and cost-effective solutions.

Smart Machine Smart Decision

Mechanical data



•Dimensions: 11*11*2.2mm

•Weight: 0.5g

Interfaces

- Serial interfaces UART, SPI or I²C
 Additional master mode I²C
- Digital I/O
 1 NReset
 1 EINT0 input
 1 ON_OFF input
 1 WAKEUP output
 1 time pulse
- Protocols NMEA, OSP

Support product

- SIM18 EVB KIT with USB V2.0 full speed interface

Certificate

- CE (available at Nov. 2010)

Performance data

- Receiver type 48-channel SiRF4 engine
 GPS L1, C/A Code
- Max. update rate 1Hz
- Sensitivity¹
 Tracking: -161 dBm
 Reacquisition: -160 dBm
 Cold starts: -147 dBm
- Time-To-First-Fix²
 Cold starts: 35 s (typical)
 Hot starts: 0.6 s (typical)
- Accuracy
 Position³: 2.5m CEP
 Speed⁴: <0.01m/s
- Operational limits
 Velocity: <1850km/h
 Altitude: <18288km
- Operation temperature: -40° C to +85 ° C

Electrical data

- Power supply 1.71V to 1.89V
- Backup power 1.71V to 1.89V
- Power consumption^{2,5}
 Acquisition 45mA (average)
 Tracking 40mA (average)
 Sleep 18 μ A(average)
- Antenna type Active and passive
- Antenna power External or internal VCC_ANT

1. Demonstrated with a good active antenna

2. All SV @ -130 dBm

3. 50% 24 hr static, -130dBm

4. 50% @ 30m/s

5. @ 1.8V with a passive antenna

More about SIMCom SIM18

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