



# GPS Module



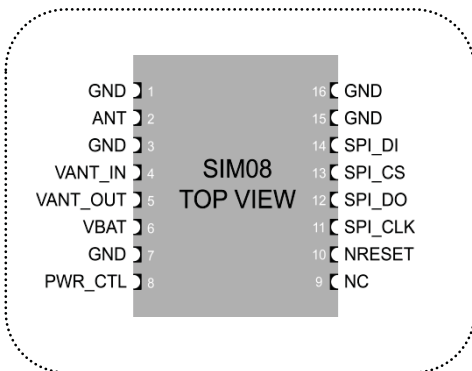
## SIM08

SIMCom presents a high performance host-based GPS module-SIM08, It cooperates with SIM900 which host the GPS software inside for many wireless applications, such as automotive, tracking, etc. With Embedded AT running inside SIM900, it will eliminate the needs of external MCU to lower the total product cost and enables faster time-to-market.

### Smart Machine Smart Decision

#### Mechanical data

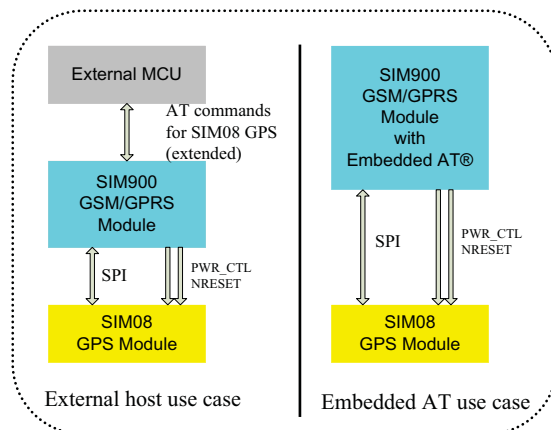
- Dimensions: 11.5mm\*9.5mm\*2.3mm
- 16 SMT pads (castellation). 1.2mm pitch
- Weight: 0.4g



#### Interfaces

- Serial interfaces Work with SIM900 over SPI
- Digital I/O PWR\_CTL  
NRESET
- Protocols NMEA0183

#### Application Scenario:



(1)

(2)

scenario 1: MCU+SIM08+SIM900

scenario 2: SIM08+SIM900+Embedded AT

#### Performance data

- Receiver type 42-channel GPS L1 C/A code, High-performance STE engine
- Max. update rate 1 Hz
- Sensitivity<sup>1</sup>
  - Tracking: -161 dBm
  - Reacquisition: -151 dBm
  - Cold starts: -144 dBm
- Time-To-First-Fix<sup>2</sup>
  - Cold starts: 35s (typ.)
  - Hot starts: 3s (typ.)
- Accuracy
  - Horizontal position<sup>3</sup>: <2.5m CEP
- Operation temperature: -40° C to +85° C

#### Electrical data

- Power supply: 3.0 V to 5.5V
- Power consumption<sup>4</sup>
  - Acquisition 43mA
  - Tracking 41mA
- Antenna type Active and passive
- Antenna power External or internal VANT\_OUT 2.8V

#### Support tool

- SIM08 EVB KIT

#### Certifications

- ROHS

1. Demonstrated with a good active antenna
2. All SV @ -130 dBm
3. 50% 24 hr static, -130dBm
4. Test with a passive antenna