

# Combo Module





# **SIM968**

SIM968 module is a compact Quad-Band GSM/GPRS-enable module base on PNX4851 platform which is also equipped with GNSS technology for satellite navigation. The complete design in a SMT type makes it easy to integrate GSM/GPRS&GPS as an all-in-one solution.

## **Smart Machine Smart Decision**

#### **General features**

- •Quad-Band GSM 850/900/18001900MHz
- •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 (3GPP TS 27.007 and SIMCom enhanced AT Commands)
- •SIM application toolkit
- •Supply voltage range:
  - -VBAT: 3.2 ~ 4.8
  - -V-GPS: 2.8 ~ 4.3V
  - -VCHG: 5V
- •Low power consumption
- •Dimensions: 30\*30\*3.0mm
- •Weight: 5.3g
- •Operation temperature:-40°C to +85 °C

# **Specifications for SMS via GSM / GPRS**

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

#### **Specifications for audio**

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

#### **Specifications for data transfer**

- •GPRS class 8/10: max. 85.6 kbps (downlink)
- •PBCCH support
- •Coding schemes CS 1, 2, 3, 4
- •PPP-stack
- •Integrated TCP/IP stack

#### **Specifications for CSD data**

- •CSD up to 14.4 kbps
- •USSD
- •Non transparent mode

#### Compatibility

AT cellular command interface

### **Specification for GNSS**

- Support GPS/GLONASS/Galileo/QZSS
- Support EASY<sup>TM</sup> self-generated orbit prediction
- Support EPO<sup>TM</sup> orbit prediction
- Support SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- Support Jamming Removing
- Integrated Low-noise amplifier
- Receiver type

33tracking/99 acquisition-channel GNSS receiver

- Max. update rate: 10Hz
- Sensitivity<sup>1</sup>

Tracking: -167 dBm
Reacquisition: -160 dBm
Cold starts: -148 dBm

Time-To-First-Fix<sup>1,2</sup>

Cold start: 28s Warm start: 26s Hot start: <1s

EPO Assist: 13s (CTTFF)

Accuracy

Automatic Position<sup>3</sup>: <2.5m CEP Speed<sup>4</sup>: 0.1m/s

#### Interfaces

- 80-pad with SMT type
- •one Interface for external SIM card :3V/ 1.8V
- •two analog audio interfaces
- •SPI interface
- •RTC backup
- •a serial interface and a debug interface for GSM/GPRS
- two serial interfaces for GNSS
- charge input
- 1.Demonstrated in lab
- 2.All SV @ -130 dBm
- 3.50% 24 hr static, -130dBm
- 4. 50%@ 30m/s

More about SIMCom SIM968 Please contact:

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All specifications are subject to change without prior notice.