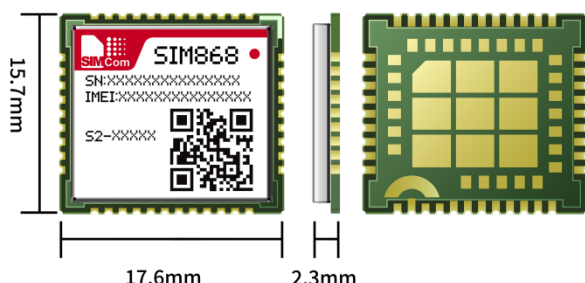


SIM868

SIMCom GSM/GPRS+GNSS Module

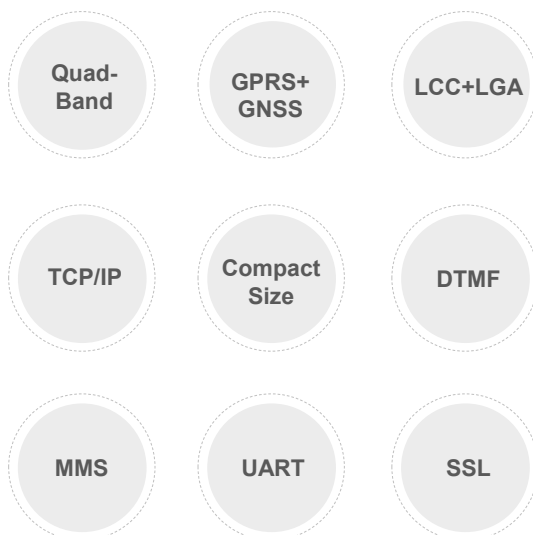


Product Description

SIM868 module is the complete Quad-Band GSM/GPRS module which combines GNSS(GPS/GLONASS/BDS) technology for satellite navigation. It has strong extension capability with abundant interfaces including UART, USB2.0, GPIO etc. The module provides much flexibility and ease of integration for customer's applications.

The form factor of SIM868 is LCC+LGA. The compact design with LCC and LGA pads will significantly save both time and costs for customers to develop GNSS enabled applications. Featuring an industry-standard interface and GNSS function, it allows variable assets to be tracked seamlessly at any location and anytime with signal coverage.

Due to the unique combination of performance, security and flexibility, this module is ideally suited for many applications.



Key Benefits

- ◆ Small size quad-band GSM/GPRS + GNSS module
- ◆ LCC+LGA form factor with abundant interfaces
- ◆ Abundant software functions: DTMF, MMS, MUX
- ◆ Low Power consumption
- ◆ Embedded TCP/UDP protocols
- ◆ Multi-constellation GNSS receiver support: GPS, GLONASS, BeiDou

General Features

Frequency Bands	850/900/1800/1900MHz
GPRS multi-slot class	12/10
Dimensions	17.6*15.7*2.3mm
Weight	1.5±0.1g
Supply Voltage	3.4V ~ 4.4V
Operation temperature	-40°C ~ +85°C
Compliant GSM phase 2/2+	Class 4 (2W @ 850/900MHz) Class 1 (1W @ 1800/1900MHz)
Control Via AT Commands(3GPP TS 27.007, 27.005 & SIMCom enhanced AT Commands)	
Low Power consumption	
GPRS mobile station class B	

Specifications for GPRS Data

GPRS class 12: Uplink/Downlink up to	85.6Kbps
PBCCH support	
Coding schemes CS 1, 2, 3, 4	
PPP-stack	
USSD	

Specifications for SMS via GSM/GPRS

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

Specification for GNSS

Receiver type	33 tracking/99 acquisition channel
Sensitivity	
-Tracking	-167 dBm
-Reacquisition	-161 dBm
-Cold starts	-149 dBm
Time-To-First-Fix	
-Cold starts	28s(typ.)
-Hot starts	<1s
-Warm starts	22s
Accuracy	
-Horizontal position	<2.5m CEP

Note

*: optional

Software Features

0710 MUX protocol	
Embedded TCP/UDP protocol	
FTP/HTTP/POP3/SMTP	
MMS	
DTMF	
Jamming Detection	
Audio Record	
LBS*	
SSL/TLS*	
BT 3.0*	
TTS*	
EAT*	

Specifications for Voice

Speech Codec Modes	AMR/HR/FR/EFR
Echo Arithmetic	AEC/EES

Interfaces

Analog audio interface	
UART	
USB	
(U)SIM card(1.8V/3V)	
SD	
RTC GNSS backup	
ADC	
I2C	
GPIO	
Antenna: GSM/GNSS/BT*	

Certifications

CE/ACMA/FCC	
3C/SRRC/NAL	
RoHS/REACH	
Deutsche Telekom	