

SIM7000C

eMTC/NB-IoT/EDGE Module











Product Description

The SIM7000C is Multi-Band LTE-FDD and Dual-Band
GPRS/EDGE module solution in a SMT type which supports
LTE CAT-M1(eMTC) and NB-IoT up to 375kbps data
transfer

It has strong extension capability with rich interfaces including UART, USB2.0, GPIO etc. The module provides much flexibility and ease of integration for customer's application.

The package of SIM7000C is compatible with SIM900 and SIM800 series. AT commands of SIM7000C are mostly compatible with SIM800 series. This also enables a short time-to-market.

It is designed for applications that need low latency, medium throughput data communication in a variety of radio propagation conditions. Due to the unique combination of performance, security and flexibility, this module is ideally suited for M2M applications, such as metering, telematics, asset tracking, remote monitoring, E-health, mobile pos terminals and sharing bike.

Key Benefits

- With Power Save Mode(PSM) and Extended
 Discontinuous Reception(eDRX), SIM7000C can extend
 battery life to 10 years
- SIM7000C provides deeper coverage enhancement compared to GSM
- The package and AT commands of SIM7000C mostly are compatible with SIM900 and SIM800 series.



General features

Quad-Band FDD-LTE B1/B3/B5/B8 GPRS/EDGE 900/1800 MHz Output power

- GSM900: 2W - DCS1800: 1W

Control Via AT Commands

Supply voltage range: $3.0V^{\sim} 4.3V$, Typ: 3.8V Operation temperature: -40° C to $+85^{\circ}$ C

Dimension: 24 x 24 x 2.6mm

Weight: 3.0g

GNSS (GPS,GLONASS and BeiDou/Compass,

Galileo, QZSS)

Data

LTE CAT-M1(eMTC)

- Uplink up to 375kbps, Downlink up to 300kbps **NB-IoT**
- Uplink up to 66kbps, Downlink up to 34kbps **EDGE Class**
- Uplink up to 236.8Kbps, Downlink up to 236.8Kbps **GPRS**
- Uplink up to 85.6Kbps, Downlink up to 85.6Kbps

Specifications for SMS

Point to point MO and MT Text and PDU mode

Other Features

USB Driver for Microsoft Windows XP/Vista/7/8

USB Driver for Windows CE/Mobile

USB Driver for Linux/Android

Firmware update via USB

TCP/IP

UDP

PPP

SMS

EMAIL

FTP/HTTP/SSL

VoLTE *

FOTA *

Interfaces

USB2.0 x1 (high-speed)

UART x2 (7-wire UART and 2-wire UART

interface multiplex from GPIO)

SIM card x1 (1.8V and 3V)

х1

I2C x1 GPIO x5

ADC

Consumption

Power off: 7uA PSM: 9uA Sleep: 1mA Idle: 11mA

Certifications

RoHS / REACH / TA (doing) / CCC * / CTA *