SIM7020G

NB-IoT Module

Global-Band

NB-IoT R14

LCC+LGA

LWM2M/COAP

Compact Size

FOTA

TCP/UDP

PSM/eDRX

HTTP/SSL

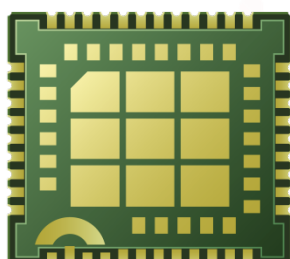## Product Description

The SIM7020G is Global-Band NB-IoT module solution in a SMT type .

It has strong extension capability with rich interfaces including UART, SPI,I2C, GPIO etc. The module provides much flexibility and ease of integration for customer's application.

The package (LCC part) of SIM7020G is compatible with SIM800C (2G module with LCC package). This also maximizes the investments of customers, and enables a short time-to-market.

It is designed for applications that need low latency, Low 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, asset tracking, remote monitoring , E-health etc..

Key Benefits

● With Power Save Mode(PSM) and Extended Discontinuous Reception(eDRX), SIM7020G can extend battery life to 10 years

● SIM7020G provides deeper coverage enhancement compared to GSM

● The package and AT commands of SIM7020G mostly are compatible with SIM800C.

General Features

Support Bands:
B1/B2/B3/B4/B5/B8/B12/B13/B17/B18/B19/
B20/B25/B26/B28/B66/B70/B71
Control Via AT Commands
Supply voltage range: 2.1V-3.6V
Operation temperature: -40℃ to +85℃
Dimensions: 17.6 X 15.7 X 2.3mm
Weight: TBD

Data

Uplink: 150Kbps   Downlink:126Kbps

SMS

Text and PDU mode

Consumption

PSM: 3.4 uA
sleep: 0.4mA
Idle: 5.6mA
eDRX: 30uA （eDRX=655.36s）

Other Features

TCP/UDP
HTTP/HTTPS/TLS/DTLS/DNS/NTP/PING
LWM2M/COAP/MQTT
Ayla Cloud*
Firmware update via UART
FOTA
EAT*

Interfaces

UART
SIM card (1.8V/3V)
SPI
I2C
GPIO
ADC
Netlight
PSM_EINT
Reset
Powerkey

Certifications(plan)
CE/FCC
RoHS / REACH

* In development

Smart machine Smart decision