

Unit NB-IoT

SKU:U111



Description

Unit NB-IoT The **NB-IoT** wireless communication module applicable to the **global range** Cat-NB frequency band. Built-in **SIM7020G** communication module, using serial communication (AT command set control), integrated SMA external antenna interface, improving the device communication quality and signal stability, SIM7020G module is the best low-latency, low-throughput application. The excellent solution is very suitable for IoT applications such as metering, remote control, asset tracking, remote monitoring, telemedicine, and shared bicycles.

Product Features

- Global version/multi-band support
- Strong signal access capability
- AT command control
- SIM card type: Nano
- External antenna: SMA antenna
- Serial communication: UART 115200bps
- Cat-NB frequency band:
 - B1/B2/B3/B4/B5/B8/ B12/B13/B17/B18/B19/ B20/B25/B26/B28/ B66/B70/B71/B85
- Data transmission (kbps):
 - 126(DL)/150(UL)
- Network protocol: -TCP/UDP/HTTP/HTTPS/ TLS/DTLS/DNS/NTP/ PING/LWM2M/COAP/ MQTT/MQTTS

Include

- 1x Unit NB-IoT
- 1x SMA antenna

- 1x HEX KEY

Applications

- Smart meter
- Remote monitoring
- Shared bicycles

Certification

- RoHS\REACH\RCM\Telstra\CE(RED)\GCF\ATEX\TIM\Deutsche Telekom\Vodafone\FCC\PTCRB\T-Mobile\IC

Operator certification

- Telstra*/Vodafone/Deutsche Telekom

Specification

Resources	Parameter
Module	SIM7020G
Support Cat-NB frequency band	B1/B2/B3/B4/B5/B8/ B12/B13/B17/B18/B19/ B20/B25/B26/B28/ B66/B70/B71/B85
Network protocol	TCP/UDP/HTTP/HTTPS/ TLS/DTLS/DNS/NTP/ PING/LWM2M/COAP/ MQTT/MQTTS
communication	UART 115200bps
Net weight	12.8g
Gross weight	55g
Product Size	71.5*24*8mm
Package Size	95*65*25mm

Related Link

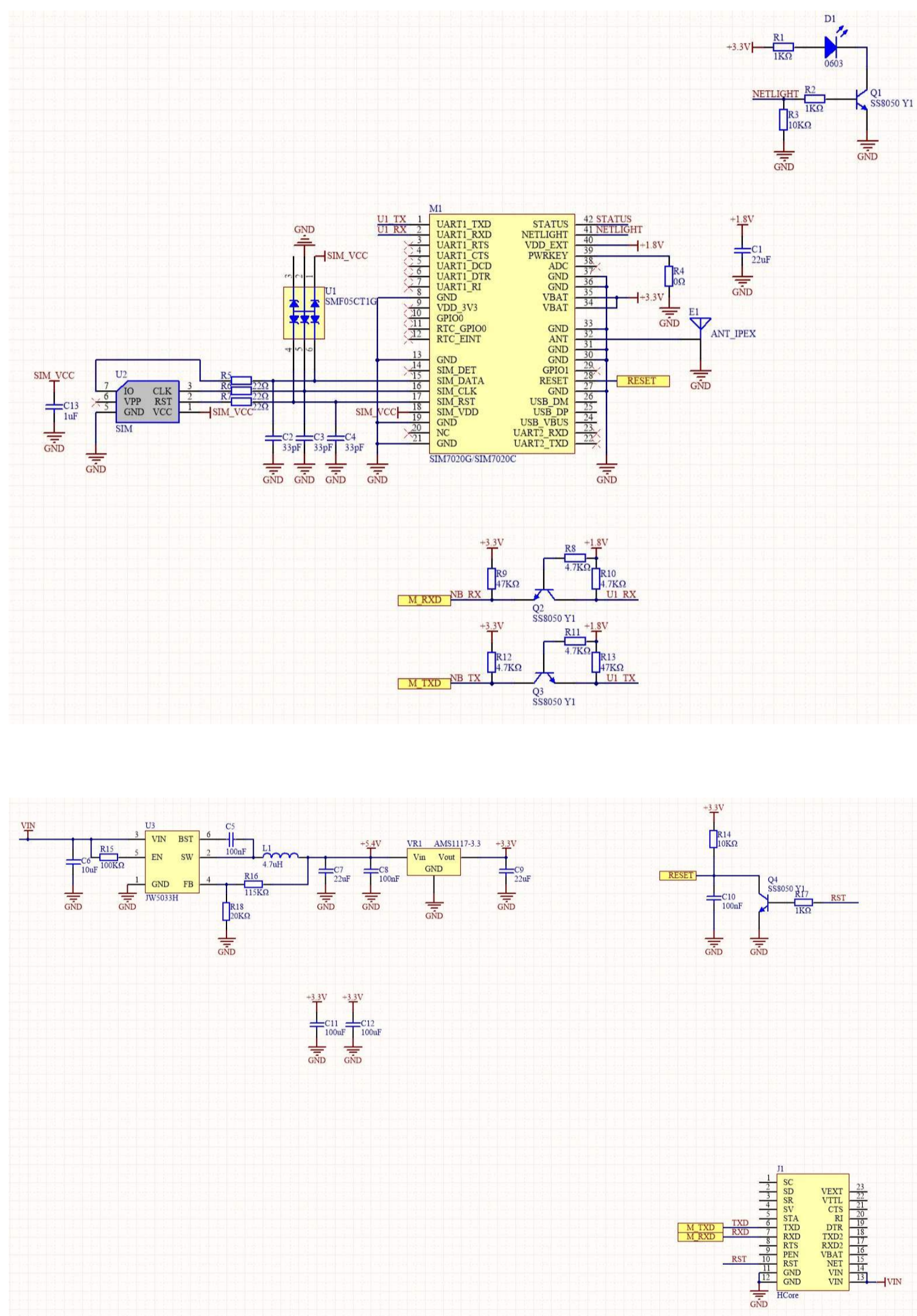
- **Datasheet**
 - [SIM7020 Series datasheet](#)
 - [SIM7020 Series_Ayla_Application Note_V1.03](#)
 - [SIM7020 Series_CTBURST_Application Note_V1.01](#)
 - [SIM7020 Series_CoAP_Application Note_V1.03](#)
 - [SIM7020 Series_EAT_Environment & Compilation & Burning Guide_V1.02.](#)
 - [SIM7020 Series_FOTA_Application_Note_V1.02](#)
 - [SIM7020 Series_HTTP\(S\)_Application Note_V1.04](#)
 - [SIM7020 Series_LWM2M_Application Note_V1.03](#)
 - [SIM7020 Series_Low Power Mode_Application Note_V1.05](#)
 - [SIM7020 Series_MQTT\(S\)_Application Note_V1.05](#)
 - [SIM7020 Series_NVRAM_Application Note_V1.02](#)

- SIM7020 Series_NVRAIM_Application Note_V1.02
- SIM7020 Series_SAT_Application Note_V1.01
- SIM7020 Series_SNTP_Application Note_V1.03
- SIM7020 Series_TCPIP_Application Note_V1.04
- **AT Command**
 - SIM7020 Series_AT Command Manual_V1.05

Pin mapping

M5Stack	TX(GPIO17)	RX(GPIO16)	5V	GND
Unit NB-IoT	RX	TX	VIN	GND

Schematic



Example

- [Arduino code example](#), Configure the serial port pin to G16/17 before use

Video