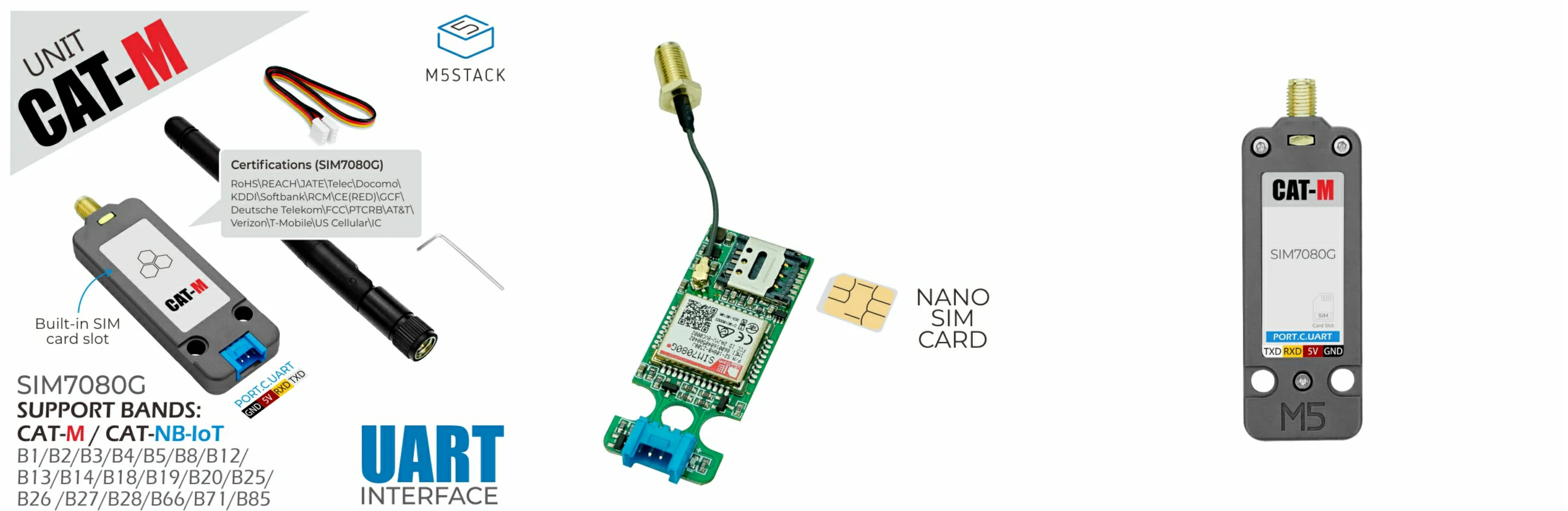


UNIT CatM

SKU:U128



Description

UNIT **SIM7080G Dual Mode Wireless Module CatM** is the international version of the dual-mode wireless communication module. The 'SIM7080G' supports both 'CAT-M' and 'NB-IoT', this serial communication module CatM with adaptive response rates, supports 'Types of Protocols' . CatM Integrated **SMA** external antenna interface to upgrade the communication quality and signal stability. Well suited for remote control, remote monitoring, remote medical, and other IoT applications.

Product Features

- **SIM7080G** / **UART** interface, **AT Command** control
- Dual Mode supports **CatM** and **NB-IoT**
- Support frequency band:
 - CAT-M: B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25/B26 /B27/B28/B66/B85
 - CAT-NB: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B28 /B66/B71/B85
- Up and down speed:
 - Cat-M: Uplink: **1119Kbps** Downlink: **589Kbps**

◦ NB-IoT: Uplink: **150Kbps** Downlink: **136Kbps**

- Protocol Support: TCP/UDP/HTTP/HTTPS/TLS/DTLS/PING/LWM2M/COAP/MQTT and other communication protocols
- Card slot specification: Nano
- Development Platform:
 - Arduino, UIFlow
- Module certification:
 - Softbank\Telec\RoHS\REACH\JATE\Docomo\KDDI\RCM\CE(RED)\GCF
 - Deutsche Telekom\FCC\PTCRB\AT&T\Verizon\T-Mobile\US Cellular\IC

Include

- 1x CardKB Unit
- 1x HY2.0-4P cable
- 1x hexagon wrench

Application

- Remote Data Collection/Cloud

Specification

Specifications	Parameters
Module Model	SIM7080G
Support CAT-M band	B1/B2/B3/B4/B5/B8/B12/B13/B14/B18/B19/B20/B25/B26 /B27/B28/B66/B85
Support CAT-NB frequency band	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B28 /B66/B71/B85

Cat-M uplink and downlink speed	Parameters Uplink: 1119Kbps Downlink: 589Kbps
NB-IoT uplink and downlink speed	Uplink: 150Kbps Downlink: 136Kbps
RF Power Class	Class 5 (Typ. 21dbm)
Standby working current	49.4mA
Low power mode operating current	PSM: verifying
Communication interface	UART: baud 115200 8N1
Net weight	19.4g
Gross weight	44g
Product size	72 * 24 * 8 mm
Packing size	95 * 65 * 25mm

Pin mapping

M5Core	TX(GPIO17)	RX(GPIO16)	VCC	GND
UNIT CatM	RX	TX	VCC	GND

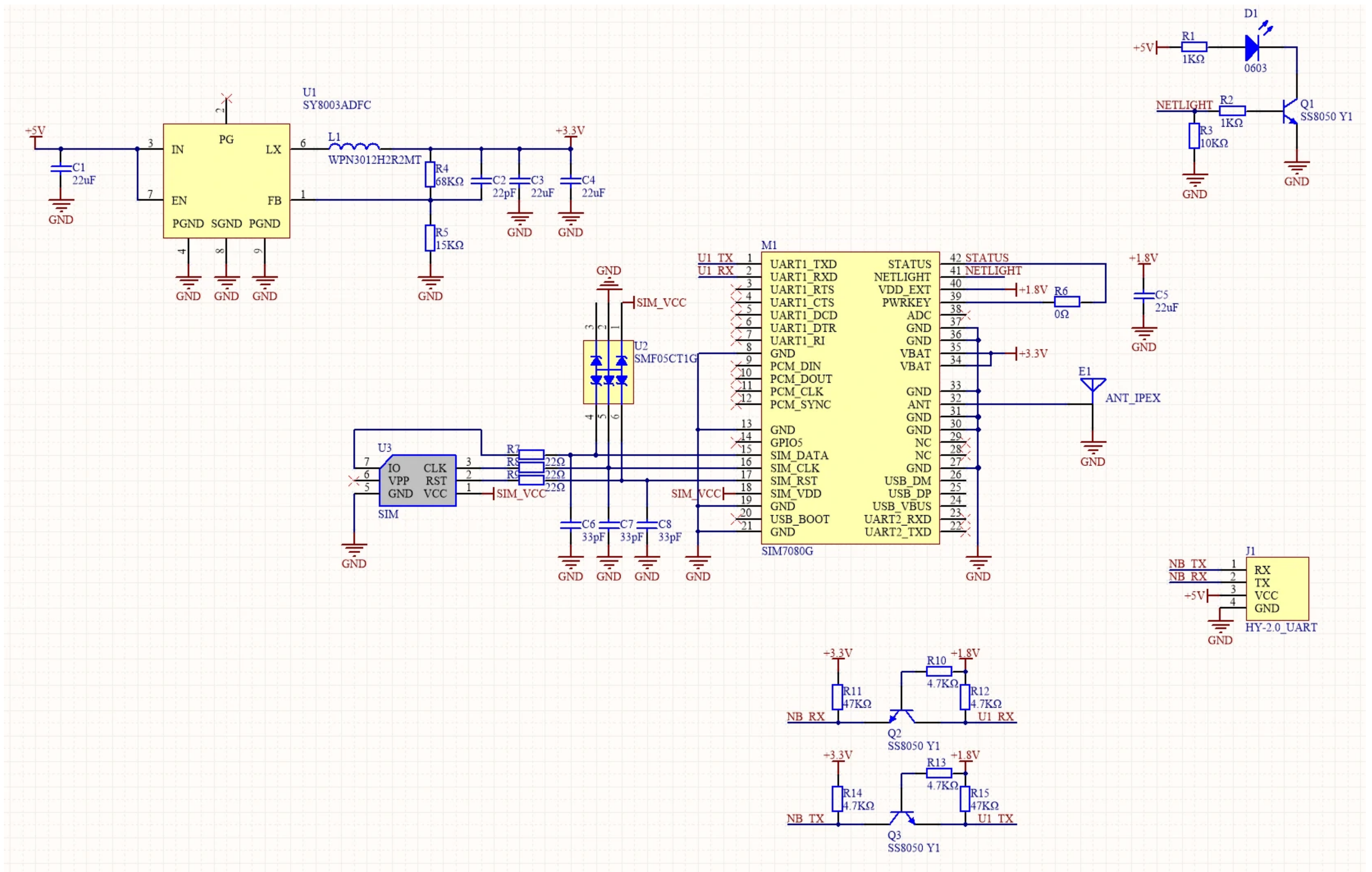
Related Links

- Application

- [SIM7070_SIM7080_SIM7090 Series_CTBURST_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_CoAP\(S\)_Application Note_V1.03](#)
- [SIM7070_SIM7080_SIM7090 Series_Email_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_FOTA_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_FS_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_FTP\(S\)_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_GNSS_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_HTTP\(S\)_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_Linux_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_Low Power Mode_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_LwM2M_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_MQTT\(S\)_Application Note_V1.03](#)
- [SIM7070_SIM7080_SIM7090 Series_PING_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_SAT_Application Note_V1.02](#)
- [SIM7070_SIM7080_SIM7090 Series_SSL_Application Note_V1.00](#)
- [SIM7070_SIM7080_SIM7090 Series_TCPUDP\(S\)_Application Note_V1.03](#)
- **Datasheet**
- [SIM7080_Series_SPEC_20200427](#)
- **AT Command**
- [SIM7070_SIM7080_SIM7090 Series_AT Command Manual_V1.04](#)
- **Certificate**
- [SIM7080G_AT&T_Certificate_2020](#)
- [SIM7080G_GCF_Certificate_2020](#)
- [SIM7080G_NCC_2020](#)
- [SIM7080G_PTCRB_Certificate_2020](#)
- [SIM7080G_RCM_Compliance Certificate_2020](#)
- [SIM7080G_T-mobile_Certificate_2021](#)

- SIM7080G_US Cellular_Certificate_2021

Schematic



Examples

Arduino

- M5_SIM7080G- MQTT TEST