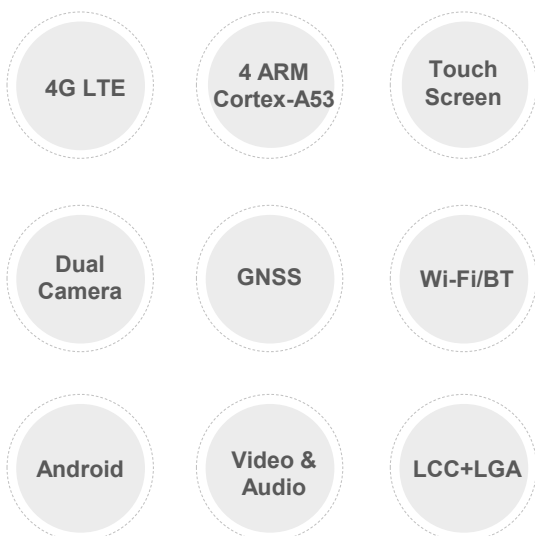
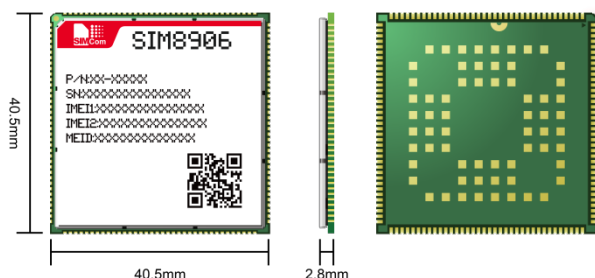


V: 2020.02

SIM8906 Series

SIMCom LTE Smart Module



Key Benefits

- ◆ Support dual SIM card
- ◆ Support charge management function
- ◆ Support 1080@30fps video recording and playing
- ◆ Support global multi network mode (LTE Cat 4)
- ◆ Support double camera
- ◆ Integrate GNSS function, supports rapid accurate positioning under different environment

Product Description

The SIM8906 series is the LTE Cat 4 smart module with Android system, it adopts Qualcomm 4-core 64-bit ARM Cortex-A53 processor, with frequency up to 1.3GHz and Adreno™ 308 GPU. It supports multiple high resolution camera and single screen display, and has powerful high data transfer and multimedia processing capability. With smart module operation system and high performance advantage, the module is ideal for rapid development of multimedia wireless communication products and applications.

The SIM8906 series highly integrates wireless communication, short distance communication and multiple satellite positioning receiver function. It supports multiple communication modes such as GSM/GPRS/EDGE, WCDMA/HSPA+, TD-SCDMA, CDMA2000/ EVDO, LTE-FDD and LTE-TDD. It supports GNSS multi-mode satellite positioning and short distance communication including Wi-Fi 802.11 a/b/g/n and BT4.2 BLE.

The SIM8906 series has abundant interfaces, it can be connected with camera, display screen, audio, sensors and other equipments. It supports multi-dimensional data collection and man-machine interaction. The interfaces including MIPI_DSI/CSI/UART/SPI/I2C/GPIO/USB greatly expand smart module applications, and make it suitable for smart POS, advertising media, automotive electronics, smart diagnostics, smart security devices and industry.

Frequency Bands

SIM8906E*

LTE-FDD	B1/B3/B5/B7/B8/B20
LTE-TDD	B38/B40/B41
WCDMA	B1/B2/B5/B8
GSM	850/900/1800/1900 MHz

SIM8006

WLAN	2.4G/5G, 802.11a/b/g/n
BT	BT4.2 BLE

Data Transfer

LTE	50Mbps(UL)
	150Mbps(DL)
HSPA+	5.76Mbps(UL)
	42 Mbps (DL)
UMTS	384Kbps(UL/DL)
EDGE	236.8Kbps(UL/DL)
GPRS	85.6Kbps (UL/DL)

Media & Software Feature

USB Drive	Microsoft Windows 2000/XP/ Vista/Win7/Win8/Win10/Linux
Operating System	Android 9.1/10.1
Video performance	Encode: 1080p 30 fps: H.264 480p 30 fps: MP4/H263 Decode: 1080p 30 fps: HEVC, H.264, VP8 Encode+Decode: 1080p 30 fps + 720p 30 fps
Audio Codec	MP3; AAC; He-AAC v1, v2; WMA 9/Pro; Dolby AC-3, eAC-3, DTS-HD M6 and DTS-HD M8
Firmware Upgrade	USB/OTA/TF card

Note

*: on going

Interface

LCM	4-lane MIPI_DSI, support HD 1440*720p@60fps Capacitive Touch Panel
Camera	MIPI_CSI, support two cameras 4-lane MIPI_CSI for rear camera, up to 13MP 2-lane MIPI_CSI for front camera, up to 8MP
Audio	3 input & 3 output
USB	one high-speed USB 2.0, support USB OTG
UART	*3, support 4Mbps with hardware flow control
I2C	*6
SPI	*5
ADC	*1 16bits ADC
UIM Card	*2, dual cards dual standby
SD Card	*1, SD3.0
GPIO	≥*21
PMW	*1
Motor Drive	*1
Keypad	PWRKEY, VOL UP, VOL DOWN
Antenna	Main & Diversity & GNSS & Wi-Fi/BT

General Feature

WLAN	2.4G /5G 802.11 a/b/g/n
BT	BT4.2
GNSS	BeiDou/GPS/GLONASS
Supply Voltage	3.4V ~ 4.4V
Memory	8GB eMMC + 1GB LPDDR3 16GB eMMC + 2GB LPDDR3(optional)
Temperature Range	-35°C ~ +75°C
Dimensions	40.5*40.5*2.8mm
Form Factor	LCC+LGA
Weight	Approx. 10.5g

Certification

RoHS*/REACH*/CE*/FCC*/GCF*