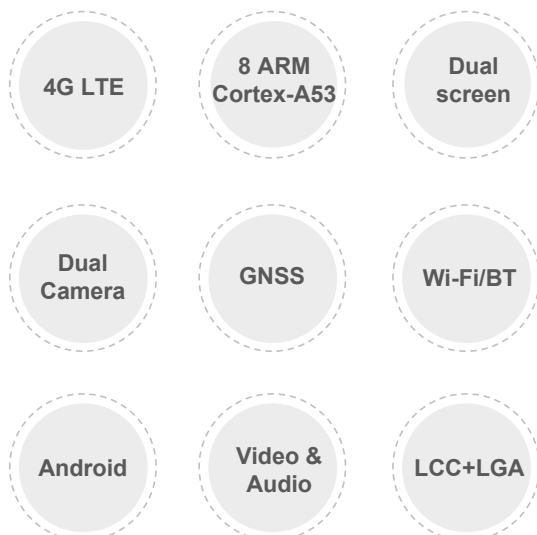
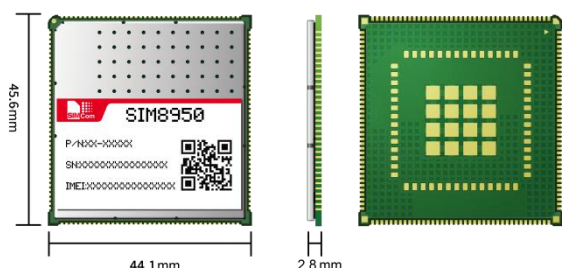


SIM8950 Series

SIMCom LTE Smart Module



Key Benefits

- ◆ Support dual SIM card
- ◆ Support charge management function (optional)
- ◆ Support 1080@60fps video recording and playing
- ◆ Integrate GNSS function, supports rapid accurate positioning under different environment
- ◆ Support double screen and double touch control
- ◆ Support double camera

Product Description

The SIM8950 series is the LTE Cat 4 smart module with Android system, it adopts Qualcomm 8-core 64-bit ARM Cortex-A53 processor, with frequency up to 1.8GHz and Adreno™ 506 GPU. It supports multiple high resolution camera and double screen double 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 SIM8950 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+, 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/ac and BT4.2 BLE.

The SIM8950 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 the module suitable for smart POS, advertising media, automotive electronics, smart diagnostics, smart security devices and industry.

Frequency Bands

| SIM8950EC | |
|------------|---------------------------------|
| LTE-FDD | B1/B3/B5/B7/B8/B20 |
| LTE-TDD | B38/B40/B41 |
| WCDMA | B1/B5/B8 |
| GSM | 850/900/1800 MHz |
| SIM8950AC | |
| LTE-FDD | B2/B4/B5/B7/B12/B13/B17/B25/B26 |
| LTE-TDD | B41 |
| WCDMA | B1/B2/B4/B5/B8 |
| GSM | 850/900/1900 MHz |
| SIM8950AU* | |
| LTE-FDD | B1/B3/B5/B7/B8/B28 |
| LTE-TDD | B40 |
| WCDMA | B1/B2/B5/B8 |
| GSM | 850/900/1800/1900 |
| SIM8050LH | |
| WLAN | 2.4G/5G, 802.11a/b/g/n/ac |
| BT | BT 4.2 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 7.1/8.1/9.1 |
| Video encoding and decoding | Encode: 1080p60, H.264, H.265, VP8 Decode: 1080p60, H.264, H.265, VP8, VP9 Wireless Display (Decode+Encode): 1080p60 Dec + 1080p30 Enc |
| Audio encoding and decoding | G711; Raw PCM; QCELP; EVRC; EVRC-B, EVRC-WB; AMR-NB, AMR-WB; GSM-EFR, GSM-FR, GSM-HR MP3; aacPlus ; eAAC, AMR-NB; AMR-WB; G.771Windows Media Audio(WMA) 9/10 Pro |
| Firmware Upgrade | USB/OTA/TF card |

Interface

| | |
|-------------|-------------------------------------------------------------------------------------------------------------------|
| LCM | 4-lane MIPI_DSI * 2 FHD 1920*1200 60fps |
| | Capacitive Touch Panel |
| Camera | MIPI_CSI * 2 Primary camera: 4-lane MIPI_CSI, up to 21MP Secondary camera: 2-lane MIPI_CSI, up to 8MP |
| Audio | 2 input & 4 output |
| USB | Compliant with USB 3.0/2.0, support USB OTG |
| UART | *4 |
| I2C | *8 |
| SPI | *5 |
| ADC | *1 16bits ADC |
| UIM Card | *2, dual cards dual standby |
| SD Card | *1 |
| GPIO | ≥*22 |
| 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/ac |
| BT | BT 4.2 BLE |
| GNSS | BeiDou/GPS/GLONASS |
| Supply Voltage | 3.4V ~ 4.4V |
| Memory | 16GB eMMC + 2GB LPDDR3 32GB eMMC + 3GB LPDDR3 (optional) 64GB eMMC + 4GB LPDDR3 (optional) |
| Temperature Range | -35°C ~ +75°C |
| Dimensions | 44.1*45.6*2.8mm |
| Form Factor | LCC+LGA |
| Weight | Approx. 12.5g |

Certification

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

Note

*: on going