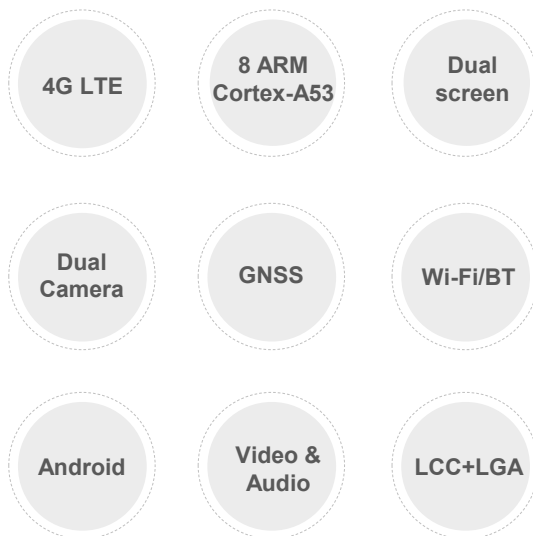
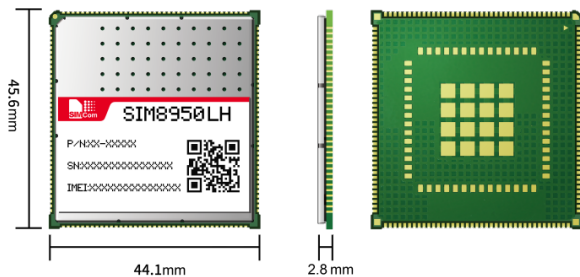


SIM8950 Series

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 2.0GHz 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+, 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/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

SIM8950E*	
LTE-FDD	B1/B3/B5/B7/B8/B20
LTE-TDD	B38/B40/B41
WCDMA	B1/B2/B5/B8
GSM	850/900/1800/1900 MHz
SIM8950A*	
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
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℃ ~ +75℃
Dimensions	44.1*45.6*2.8mm
Form Factor	LCC+LGA
Weight	Approx. 12.5g

Certification

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

Note

*: on going