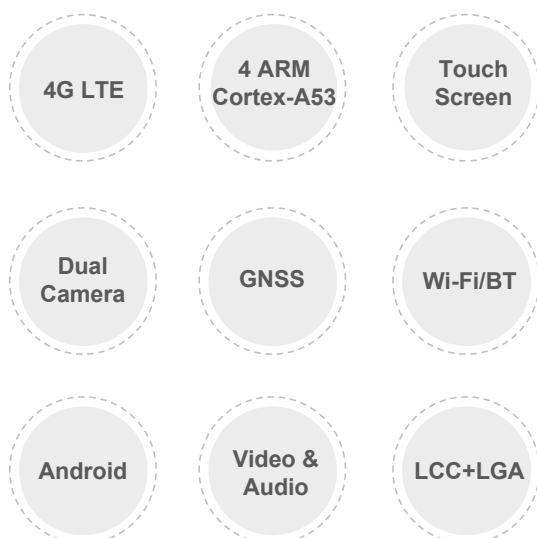
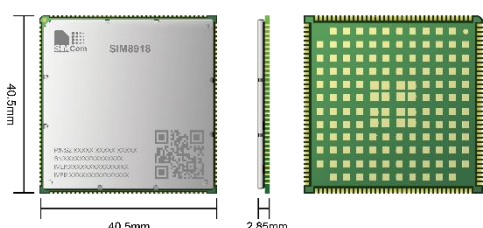


SIM8918 Series

SIMCom LTE Smart Module



Product Description

The SIM8918 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 2.0GHz and Adreno™ 702 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 SIM8918 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 BT5.0.

The SIM8918 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.

Key Benefits

- ◆ 4-lane MIPI_DSI(up to 1680*720 @60fps)
- ◆ 2x ISP (13 MP + 13 MP or 25 MP) at 30 fps ZSL
- ◆ Support recording and playback of 1080P videos at 30fps
- ◆ Support global multi network mode (LTE Cat 4)
- ◆ Integrates Android OS, Wi-Fi, Bluetooth and GNSS into one module
- ◆ Integrate GNSS function, supports rapid accurate positioning under different environment

LTE CAT4	SIM8918CE	SIM8918JP	SIM8918EA
Package	LCC+LGA	LCC+LGA	LCC+LGA
Dimensions	40.5*40.5*2.85(mm)	40.5*40.5*2.85(mm)	40.5*40.5*2.85(mm)
CPU	QCM2290, 4 core 64-bit ARM Cortex-A53 CPU @ 2.0 GHz	QCM2290, 4 core 64-bit ARM Cortex-A53 CPU @ 2.0 GHz	QCM2290, 4 core 64-bit ARM Cortex-A53 CPU @ 2.0 GHz
GPU	Adreno 702 GPU	Adreno 702 GPU	Adreno 702 GPU
Memory	16GB eMMC + 2GB LPDDR4X 32GB eMMC + 2GBLPDDR4X(optional)	16GB eMMC + 2GB LPDDR4X 32GB eMMC + 2GB LPDDR4X(optional)	16GB eMMC + 2GB LPDDR4X 32GB eMMC + 2GB LPDDR4X(optional)
Supply Voltage	3.4V ~ 4.4V	3.4V ~ 4.4V	3.4V ~ 4.4V
Temperature	-35 °C ~ +75 °C	-35 °C ~ +75 °C	-35 °C ~ +75 °C
Weight	Approx. 10.5g	Approx. 10.5g	Approx. 10.5g
Frequency Bands			
LTE-FDD	B1/B3/B5/B8	B1/B3/B8/B18/B19/B26/B28	B1/B2/B3/B4/B5/B7/B8/B20/B28
LTE-TDD	B34/B38/B39/B40/B41	B41	B38/B40/B41
WCDMA	B1/B8		B1/B2/B4/B5/B8
GSM	900/1800 MHz		850/900/1800/1900 MHz
WLAN	2.4G/5G Hz 802.11 a/b/g/n/ac	2.4G/5G Hz 802.11 a/b/g/n/ac	2.4G/5G Hz 802.11 a/b/g/n/ac
BT	BT5.0	BT5.0	BT5.0
GNSS	GPS/BeiDou/GLONASS/Galileo/QZSS	GPS/BeiDou/GLONASS/Galileo/QZSS	GPS/BeiDou/GLONASS/Galileo/QZSS
Data Transfer			
LTE(Mbps)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)
HSPA+(Mbps)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)
WCDMA(Kbps)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)
GSM(Kbps)	107(DL)/85.6(UL)	107(DL)/85.6(UL)	107(DL)/85.6(UL)
Media & Software Feature			
USB Drive	Microsoft Windows 2000/XP/Vista/Win7/Win8/Win10/Linux		
Operating System	Android 11/12/13		
Video encoding and decoding	Encode: 1080p 30fps(H.264,MPEG4,H.263) Decode: 1080p 30fps(H.264,MPEG4,VP8) Encode+Decode: 1080p 30 decode + 720p 30 encod		
Audio encoding and decoding	Voice codec: EVS, EVRC, EVRC-B, EVRC-WB G.711 and G.729A/AB GSM-FR, GSM-EFR, and GSM-HR AMR-NB and AMR-WB Audio codec: MP3; AAC; HE AAC v1, v2; FLAC; APE; ALAC; AIF		
Firmware Upgrade	USB/OTA/TF card		
Interface			
LCM	One 4-Lane MIPI_DSI interface, the highest resolution is 720*1680, HD+		
Camera	MIPI_CSI * 2 ; Primary camera:4-lane MIPI_CSI, up to 13MP ; Secondary camera: 4-lane MIPI_CSI, up to 13MP 2x ISP (13 MP + 13 MP or 25 MP) at 30 fps ZSL		
UIM Card	Support Dual Card Dual Standby: 1.8V/3.0V Dual Voltage Adaptive		
UART	Support up to 3 Serial Ports		
USB	USB 3.1/2.0 , Support Type-C, USB OTG		
Audio	3 input & 3 output ; 4-Channel Digital Microphone Input		
ADC	*1 16bits ADC		
GPIO	≥ *25		
SD Card	SDC2 external interface supports SD3.0 TF card (Maximum 256G), hot-join support		
SPI	Support up to 2*SPI interfaces, support master mode, the highest rate 50MHz		
I2C	Support up to 8 I2C for touch screen, camera, sensor and other peripherals		
I2S	*2		
Antenna	Main & Diversity & GNSS & Wi-Fi/BT		
Certification			
Certification	RoHS*/REACH* /CCC*/SRRC*	RoHS*/REACH*	RoHS/REACH/CE/UKCA

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LTE CAT4	SIM8918SA	SIM8918NA*	SIM8918W
Package	LCC+LGA	LCC+LGA	LCC+LGA
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Weight	Approx. 10.5g	Approx. 10.5g	Approx. 10.5g
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LTE-FDD	B1/B2/B3/B4/B5/B7/B8/B28/B66	B2/B4/B5/B7/B12/B13/B17/B25/B26/B66/B71	-
LTE-TDD	B40	B41	-
WCDMA	B1/B2/B5/B8	B2/B4/B5	-
GSM	850/900/1800/1900 MHz	-	-
WLAN	2.4G/5G Hz 802.11 a/b/g/n/ac	2.4G/5G Hz 802.11 a/b/g/n/ac	2.4G/5G Hz 802.11 a/b/g/n/ac
BT	BT5.0	BT5.0	BT5.0
GNSS	GPS/BeiDou/GLONASS/Galileo/QZSS	GPS/BeiDou/GLONASS/Galileo/QZSS	GPS/BeiDou/GLONASS/Galileo/QZSS(optional)
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Antenna	Main & Diversity & GNSS & Wi-Fi/BT		
Certification			
Certification	RoHS*/REACH*	RoHS*/REACH*/FCC*/GCF*/PTCRB*/IC*	RoHS/REACH/3C*

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