

SOC Smart Module SC820

Qualcomm Octa-Core

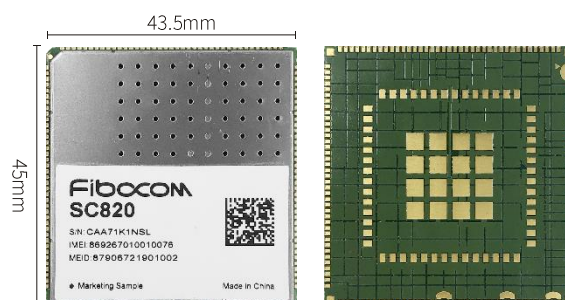
1920x1200 60fps

WIFI 802.11a/b/g/n/ac

BT 4.2 BLE and earlier

GPS/ GLONASS/Beidou

SC820 smart module is designed based on Qualcomm MSM8953 platform, using eight-core Cortex-A53 processor, 2.0GHz main frequency, and internal integration of high-performance graphics engine, which can smoothly play 1080p video, support dual-screen display, support multi-camera input and also support seven types of long-distance communication mode and dual-frequency WIFI/BT close-range communication. Line transmission technology, supporting GNSS wireless positioning technology. SC820 preset open Android operating system, with MIPI / USB / UART / SPI / I2C and other extended interfaces. It is the preferred solution for the core system of wireless intelligent products.



SOC Smart Module SC820



Product Feature

- Dimensions: 45mm *43.5mm *2.85mm
- Package: 156 LCC pin + 76 LGA pin
- Weight: About 12.3±1g
- CPU: Octa-core ARM Cortex-A53 processor 2.0GHz
- Memory(Default):2GB LPDDR3 RAM +16GB eMMC Flash
- Operating temperature: -25~ +75°C
- Operating voltage: DC 3.5-4.35V ,Typical 3.8V

Multi-Media

- GPU: Adreno506, 3D Graphic Processing Unit
- Display: 1920 × 1200 60fps
- Video Dec: 4k @ 30fps, 1080p60, H.265
- Video Enc: 4k @ 30fps, 1080p60, H.265
- Camera: 2xISP, MIPI_CSI up to 2.1Gbps
2x MIPI_CSI 4 lanes(up to 24MP)
- Audio: Analog Audio

Network	SC820-CN	SC820-W
LTE-FDD	B1/B3/B5/B8	
LTE-TDD	B34/B38/B39/B40/B41	
UMTS	B1/B8	
CDMA/EVDO	EVDO Rev.A 800MHz	
TD-SCDMA	Band 34/39	
GSM/EDGE	900/1800MHz	
WIFI	802.11 a/b/g/n/ac, 2.4G+5G	802.11 a/b/g/n/ac, 2.4G+5G
BT	4.2BLE and earlier	4.2BLE and earlier
GNSS	GPS/GLONASS/Beidou	
Area	China	Global
Cert.	RoHS/CCC	

DATA

- FDD-LT: Max 150Mbps(DL)/Max 50Mbps(UL)
- TDD-LTE: Max 130Mbps(DL)/Max 30Mbps(UL)
- UMTS/HSPA/HSPA+: 3GPP R6 HSUPA: Max 5.76Mbps(UL)
3GPP R8 HSPA+: Max 42Mbps(DL)
- TD-SCDMA: 3GPP R8 Max 4.2Mbps(DL)/Max 2.2Mbps(UL)
- CDMA EVDO: Max 3.1Mbps(DL)/Max 1.8Mbps(UL)
- EDGE/GPRS(Kbps): EDGE: Max 296Kbps(DL)/Max 236.8Kbps (UL)
GPRS: Max 107Kbps(DL)/Max 85.6Kbps(UL)

Interfaces

- Dual-SIM Dual Standby, 1.8V/3.0V
- USB2.0x1 up to 480Mbps
- UARTx2, up to 4Mbps; SPIx1, up to 50Mbps
- I2Cx2, up to 3.4Mbps
- SD3.0x1
- GPIOx25
- MIPI-DSI, MIPI-CSI
- Speakerx1, Receiver x1,
- Handset Speaker_L/Rx1, Micx2

Operation System

- Android 7.1

Note: * = Planning ** = Developing