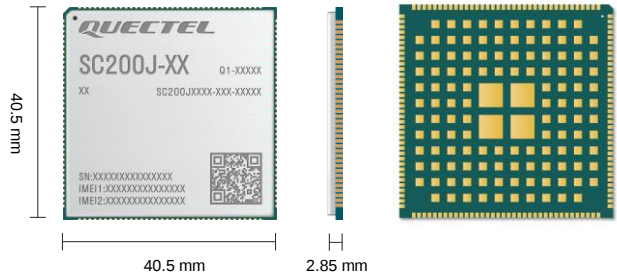


Quectel SC200J Series

Multi-mode Smart LTE Module with Wi-Fi & Bluetooth



SC200J series is Quectel's new generation of multi-mode Smart LTE Cat 4 module with built-in Android OS. Based on UIS7863 dual-core ARM Cortex-A75 processor and hexa-core ARM Cortex-A55 processor with built-in ARM Mali™ -G57 GPU, it is an ideal solution for a wide range of industrial and consumer applications requiring high data rates and multimedia functions. SC200J series module has four variants: SC200J-EU, SC200J-AU, SC200J-CN and SC200J-WF (only supports Wi-Fi & Bluetooth antenna) .

SC200J series module supports Multiple-Input Multiple-Output (MIMO) technology. The concurrent use of multiple antennas on the same frequency band at the receiver end greatly minimizes bit error rate and optimizes the communication quality. The module also integrates multi-constellation GNSS (GPS, GLONASS, BDS and Galileo) receiver for fast and accurate positioning.

SC200J series module integrates a rich set of interfaces (such as LCM, camera, touch panel, microphone, speaker, UART, USB, I2C and SPI), which widely extends the module's applicability to a wide range of M2M applications, including smart cash registers, smart POS, tax control machines, smart safety, automotive equipment, high-end information acquisition equipment, smart robots, smart home, smart hardware, industrial smart handheld equipment, audio and video recorders, smart interphones, smart wearables, vending machines, logistics cabinets, etc.

Key Features

- ✓ LTE Cat 4, with up to 150 Mbps downlink data rate
- ✓ Full coverage of different network modes
- ✓ Can be controlled through a single screen and the touch panel, with the main screen supporting up to FHD+ (2520 × 1080) @ 60 fps/ HD+ (1680 × 720) @ 120 fps
- ✓ Up to 3 cameras, which can work concurrently
- ✓ Multi-constellation GNSS receiver for fast and accurate positioning in different environments
- ✓ H.265/ H.264 1080P @ 60 fps recording and playback

 Dual-core ARM Cortex-A75 Hexa-core ARM Cortex-A55	 ARM Mali™ -G57 GPU	 Android
 Smart LTE Cat 4 Max. 150 Mbps (DL) Max. 50 Mbps (UL)	 IEEE 802.11 a/ b/ g/ n/ ac	 Bluetooth 5.0 (BR/ EDR + BLE)
 GPS/ GLONASS/ BDS/ Galileo	 Powerful Multimedia Function	 LCC + LGA Package

Quectel SC200J Series

LTE Cat 4	SC200J-EU	SC200J-AU	SC200J-CN	SC200J-WF
Region/ Operator	EMEA/ South Korea/ South Asia/ India/ Australia/ New Zealand/ South Africa	Latin America	China/ India	Global
CPU	UIS7863, octa-core 2 × A75 @ 2.0 GHz + 6 × A55 @ 1.8 GHz	UIS7863, octa-core 2 × A75 @ 2.0 GHz + 6 × A55 @ 1.8 GHz	UIS7863, octa-core 2 × A75 @ 2.0 GHz + 6 × A55 @ 1.8 GHz	UIS7863, octa-core 2 × A75 @ 2.0 GHz + 6 × A55 @ 1.8 GHz
OS	Android 14/ 16	Android 14/ 16	Android 14/ 16	Android 14/ 16
Memory	2 GB LPDDR4x + 32 GB eMMC (default) 4 GB LPDDR4x + 64 GB eMMC (optional)	2 GB LPDDR4x + 32 GB eMMC (default) 4 GB LPDDR4x + 64 GB eMMC (optional)	2 GB LPDDR4x + 32 GB eMMC (default) 4 GB LPDDR4x + 64 GB eMMC (optional)	2 GB LPDDR4x + 32 GB eMMC (default) 4 GB LPDDR4x + 64 GB eMMC (optional)
Dimensions (mm)	40.5 × 40.5 × 2.85	40.5 × 40.5 × 2.85	40.5 × 40.5 × 2.85	40.5 × 40.5 × 2.85
Package	LCC + LGA	LCC + LGA	LCC + LGA	LCC + LGA
Weight (g)	Approx. 10.57	Approx. 10.57	Approx. 10.57	Approx. 10.57
Temperature Range				
Operating Temperature	-30 °C to +75 °C	-30 °C to +75 °C	-30 °C to +75 °C	-30 °C to +75 °C
Frequency Bands				
LTE-FDD	B1/ 3/ 5/ 7/ 8/ 20/ 28	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 28	B1/ 3/ 5/ 8	-
LTE-TDD	B38/ 40/ 41	B38	B34/ 38/ 39/ 40/ 41	-
WCDMA	B1/ 5/ 8	B1/ 2/ 4/ 5/ 8	B1/ 8	-
GSM (MHz)	900/ 1800	850/ 900/ 1800/ 1900	900/ 1800	-
GNSS	GPS/ GLONASS /BDS/ Galileo	GPS/ GLONASS/ BDS/ Galileo	GPS/ GLONASS/ BDS/ Galileo	-
Bluetooth	Bluetooth 5.0 (BR/ EDR + BLE)	Bluetooth 5.0 (BR/ EDR + BLE)	Bluetooth 5.0 (BR/ EDR + BLE)	Bluetooth 5.0 (BR/ EDR + BLE)
Wi-Fi	2.4 & 5 GHz, 802.11 a/ b/ g/ n/ ac	2.4 & 5 GHz, 802.11 a/ b/ g/ n/ ac	2.4 & 5 GHz, 802.11 a/ b/ g/ n/ ac	2.4 & 5 GHz, 802.11 a/ b/ g/ n/ ac
Certifications				
Regulatory	CE/ RCM	Anatel	CCC/ SRRC/ NAL	CE/ RCM
Data Rates				
LTE FDD (Mbps)	150 (DL)/ 50 (UL)	150 (DL)/ 50 (UL)	150 (DL)/ 50 (UL)	-
LTE TDD (Mbps)	130 (DL)/ 30 (UL)	130 (DL)/ 30 (UL)	130 (DL)/ 30 (UL)	-
WCDMA (Kbps)	384 (DL)/ 384 (UL)	384 (DL)/ 384 (UL)	384 (DL)/ 384 (UL)	-
EDGE (Kbps)	296 (DL)/ 236.8 (UL)	296 (DL)/ 236.8 (UL)	296 (DL)/ 236.8 (UL)	-
GPRS (Kbps)	107 (DL)/ 85.6 (UL)	107 (DL)/ 85.6 (UL)	107 (DL)/ 85.6 (UL)	-
Enhanced Features				
3GPP E-UTRA	Release 12	Release 12	Release 12	Release 12
Bandwidth (MHz)	1.4/ 3/ 5/ 10/ 15/ 20	1.4/ 3/ 5/ 10/ 15/ 20	1.4/ 3/ 5/ 10/ 15/ 20	-
Rx-diversity	●	●	●	-
DL MIMO 2 × 2	●	●	●	-
(U)SIM Card Detection	●	●	●	-
DSDS	●	●	●	-
Firmware Upgrade via USB	●	●	●	●
Firmware Upgrade via OTA	●	●	●	●

Note:
●: Supported

Quectel SC200J Series

LTE Cat 4	General Features
Interfaces	
LCM	One MIPI DSI 4-lane, with up to FHD+ (2520 × 1080) @ 60 fps/ HD+ (1680 × 720) @ 120 fps
Camera	2 × 4-lane MIPI CSIs + 1 × 1-lane MIPI CSI, with up to 2.5 Gbps/ lane data rate; up to 3 cameras which can work concurrently; a single camera can support up to 48 M @ 17 fps ZSL
Audio	Analog outputs × 3: speaker, headset and earpiece Analog inputs × 3: MIC1, MIC2 and MIC3
Video	Encoding + decoding: H.265/ H.264 1080P @ 60 fps
USB	× 1, USB 2.0
(U)SIM	× 2, 1.8/ 2.95 V (U)SIM card, (U)SIM card hot-swap detection and DSDS
UART	× 4 (Up to 3 can operate simultaneously)
Motor Driver	× 1
SD Card	× 1, SD 3.0, 4-bit SDIO
I2C	× 7
I2S	× 2
ADC	× 1, general-purpose ADC interface
SPI	× 4
Charging	Supported
RTC (Real-Time Clock)	Supported
PWRKEY	× 1, internally pulled up
GPIO	× 36
Antenna	× 4, Main, Rx-diversity, GNSS, Wi-Fi & Bluetooth antennas respectively (SC200J-WF: × 1, Wi-Fi & Bluetooth antenna)
Electrical Features	
Supply Voltage Range	3.55 V to 4.4 V; Typ. 3.8 V
Power Consumption	80 uA @ shut down; Typ. 3.8 mA @ sleep mode

