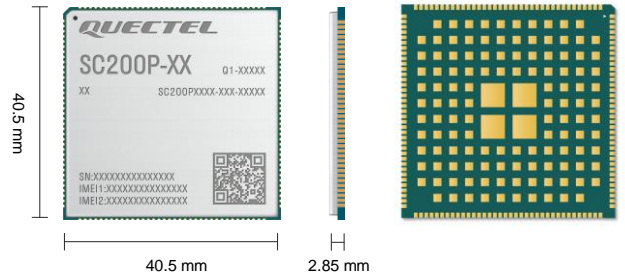


Quectel SC200P Series

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



SC200P series is Quectel's new generation of multi-mode Smart LTE Cat 4 module with built-in Android OS. Based on UIS7861 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. SC200P series module has four variants: SC200P-EU, SC200P-AU, SC200P-CN and SC200P-WF (only supports Wi-Fi & Bluetooth antenna) .

SC200P 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.

SC200P 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) @ 90 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 SC200P Series

| LTE Cat 4 | SC200P-EU | SC200P-AU | SC200P-CN | SC200P-WF |
|---------------------------------|---|---|---|---|
| Region/ Operator | EMEA/ South Korea/ South Asia/ India/ Australia/ New Zealand/ South Africa | Latin America | China/ India | Global |
| CPU | UIS7861, octa-core Dual-core A75 @ 1.6 GHz Hexa-core A55 @ 1.6 GHz | UIS7861, octa-core Dual-core A75 @ 1.6 GHz Hexa-core A55 @ 1.6 GHz | UIS7861, octa-core Dual-core A75 @ 1.6 GHz Hexa-core A55 @ 1.6 GHz | UIS7861, octa-core Dual-core A75 @ 1.6 GHz Hexa-core A55 @ 1.6 GHz |
| OS | Android 14/ 16 ^① / 18 ^① | Android 14/ 16 ^① / 18 ^① | Android 14/ 16 ^① / 18 ^① | Android 14/ 16 ^① / 18 ^① |
| Memory | 2 GB LPDDR4x + 16 GB eMMC (default) 4 GB LPDDR4x + 64 GB eMMC (optional) | 2 GB LPDDR4x + 16 GB eMMC (default) 4 GB LPDDR4x + 64 GB eMMC (optional) | 2 GB LPDDR4x + 16 GB eMMC (default) 4 GB LPDDR4x + 64 GB eMMC (optional) | 2 GB LPDDR4x + 16 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 (RED)/ CE (DA)*/ RCM | Anatel | CCC/ SRRC/ NAL | CE (RED)/ CE (DA)*/ 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 | ● | ● | ● | ● |

Notes:

- *: Under development/ in progress/ planning
- : Supported
- ①: To Be Determined

Quectel SC200P Series

| LTE Cat 4 | General Features |
|------------------------------|---|
| Interfaces | |
| LCM | One MIPI DSI 4-lane, with up to FHD+ (2520 × 1080) @ 60 fps/ HD+ (1680 × 720) @ 90 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 24 M @ 30 fps ZSL |
| Touch Panel | Capacitive touch panel |
| 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 |
| 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 (SC200P-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 |