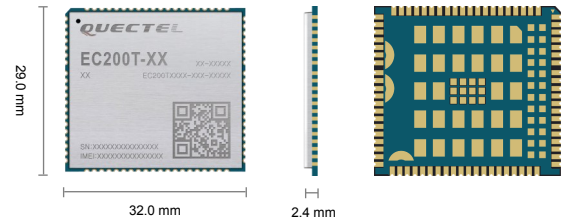




Quectel EC200T Series

IoT/M2M-optimized LTE Cat 4 Module



Quectel EC200T is a series of LTE Cat 4 modules optimized specially for M2M and IoT applications. Adopting the 3GPP Rel. 9 LTE technology, it delivers 150 Mbps downlink and 50 Mbps uplink data rates. Designed in compact and unified form factor, EC200T series is compatible with Quectel multi-mode LTE Standard EC2x (EC25/EC21/EC20 R2.1) series, and UMTS/HSPA+ UC200T series modules, which allows for flexible migration among them in design and manufacturing. EC200T series also supports standard Mini PCIe package to meet the needs of product applications in different industries.

EC200T series contains three variants: EC200T-CN, EC200T-EU and EC200T-AU*, which meet the frequency band coverage of different countries and regions. EC200T series adopts the laser engraving process to ensure more good-looking appearance, strong metal texture, better heat dissipation, information not easy to be erased, and more suitable for automation requirements.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB serial drivers for Windows 7/8/8.1/10, Linux, Android) extend the applicability of the module to a wide range of M2M and IoT applications such as industrial router, industrial PDA, rugged tablet PC, video surveillance, and digital signage.



Key Features

- ✓ LTE Cat 4 module optimized for M2M and IoT applications
- ✓ Worldwide LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage
- ✓ Support Firmware Upgrade Over-The-Air (FOTA)
- ✓ MIMO technology meets demands for data rate and link reliability in modem wireless communication systems
- ✓ Super cost-effective



LTE Cat 4
Max. 150 Mbps (DL)
Max. 50 Mbps (UL)



Max. 42 Mbps (DL)
Max. 5.76 Mbps (UL)



LCC Package



Quectel Enhanced
AT Commands



FOTA



Embedded
Abundant Protocols



USB 2.0 High Speed
Interface



USB Drivers

Version: 1.1 | Status: Released

Quectel EC200T Series

| LTE Cat 4 | EC200T-CN | EC200T-EU | EC200T-AU* |
|--|--|--|--|
| Region/Operator | China/India | Europe | Latin America/Australia/New Zealand |
| Dimensions (mm) | 32.0 × 29.0 × 2.4 | 32.0 × 29.0 × 2.4 | 32.0 × 29.0 × 2.4 |
| Temperature Range | | | |
| Operating Temperature | -35 °C to +75 °C | -35 °C to +75 °C | -35 °C to +75 °C |
| Extended Temperature | -40 °C to +85 °C | -40 °C to +85 °C | -40 °C to +85 °C |
| Frequency Bands | | | |
| LTE-FDD | B1/B3/B5/B8 | B1/B3/B7/B8/B20/B28 | B1/B2/B3/B4/B5/B7/B8/B28/B66 |
| LTE-TDD | B34/B38/B39/B40/B41 | B38/B40/B41 | B40 |
| WCDMA | B1/B5/B8 | B1/B8 | B1/B2/B4/B5/B8 |
| GSM/EDGE | B3/B8 | B3/B8 | B2/B3/B5/B8 |
| Certifications | | | |
| Carrier | China: China Telecom/China Mobile | / | / |
| Regulatory | China: SRRC/NAL/CCC | Europe: CE Australia/New Zealand: RCM | America: FCC* Europe: CE* Australia/New Zealand: RCM* Brazil: Anatel* |
| Others | RoHS/WHQL | RoHS/WHQL | RoHS/WHQL |
| Data Transmission | | | |
| LTE-FDD Data Rates (Mbps) | 150 (DL)/ 50 (UL) | 150 (DL)/ 50 (UL) | 150 (DL)/ 50 (UL) |
| LTE-TDD Data Rates (Mbps) | 130 (DL)/ 30 (UL) | 130 (DL)/ 30 (UL) | 130 (DL)/ 30 (UL) |
| DC-HSPA+ Data Rates (Mbps) | 21 (DL)/ 5.76 (UL) | 21 (DL)/ 5.76 (UL) | 21 (DL)/ 5.76 (UL) |
| WCDMA Data Rates (kbps) | 384 (DL)/ 384 (UL) | 384 (DL)/ 384 (UL) | 384 (DL)/ 384 (UL) |
| EDGE Data Rates (kbps) | 236.8 (DL)/ 236.8 (UL) | 236.8 (DL)/ 236.8 (UL) | 236.8 (DL)/ 236.8 (UL) |
| GPRS Data Rates (kbps) | 85.6 (DL)/ 85.6 (UL) | 85.6 (DL)/ 85.6 (UL) | 85.6 (DL)/ 85.6 (UL) |
| Interfaces | | | |
| (U)SIM | x 1 | x 1 | x 1 |
| UART | x 2 | x 2 | x 2 |
| USB 2.0 | x 1 | x 1 | x 1 |
| Audio Digital (PCM) | x 1 | x 1 | x 1 |
| NET_STATUS | x 1 | x 1 | x 1 |
| NET_MODE | x 1 | x 1 | x 1 |
| ADC | x 2 | x 2 | x 2 |
| SDIO* (for SD Card* and Wi-Fi*^①) | x 2 | x 2 | x 2 |
| RESET | x 1 | x 1 | x 1 |
| PWRKEY | x 1 | x 1 | x 1 |
| Antennas | x 2 (Primary and Rx-diversity Antennas) | x 2 (Primary and Rx-diversity Antennas) | x 2 (Primary and Rx-diversity Antennas) |
| Voice | | | |
| Speech Codec Modes | HR/FR/EFR/AMR/AMR-WB | HR/FR/EFR/AMR/AMR-WB | HR/FR/EFR/AMR/AMR-WB |
| Echo Algorithm | Echo Cancellation/Noise Suppression | Echo Cancellation/Noise Suppression | Echo Cancellation/Noise Suppression |
| Voice | Digital Audio | Digital Audio | Digital Audio |
| Enhanced Features | | | |
| DTMF | ● | ● | ● |
| FOTA | ● | ● | ● |
| Audio Playback/Audio Recording | ● | ● | ● |
| QuecLocator® | ● | ● | ● |
| QuecFile® | ● | ● | ● |
| VoLTE | ● | ● | ● |
| (U)SIM Card Detection | ● | ● | ● |
| Internet Protocols | | | |
| Internet Protocols | TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ HTTP/ PING/ CMUX/ HTTPS/ FTPS/ SSL/ FILE/ MQTT/ MMS/ | TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ HTTP/ PING/ CMUX/ HTTPS/ FTPS/ SSL/ FILE/ MQTT/ MMS/ SMTP*/ SMTSPS* | TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ HTTP/ PING/ CMUX/ HTTPS/ FTPS/ SSL/ FILE/ MQTT/ MMS/ SMTP*/ SMTSPS* |
| Drivers | | | |
| USB Serial Driver | Windows 7/8/8.1/10, Linux 2.6–5.4 Android 4.x/5.x/6.x/7.x/8.x/9.x | Windows 7/8/8.1/10, Linux 2.6–5.4, Android 4.x/5.x/6.x/7.x/8.x/9.x | Windows 7/8/8.1/10, Linux 2.6–5.4, Android 4.x/5.x/6.x/7.x/8.x/9.x |
| RIL Driver | Android 4.x–10.x | Android 4.x–10.x | Android 4.x–10.x |
| RNDIS Driver | Windows 7/8/8.1/10, Linux 2.6–5.4 | Windows 7/8/8.1/10, Linux 2.6–5.4 | Windows 7/8/8.1/10, Linux 2.6–5.4 |
| ECM Driver | Linux 2.6–5.4 | Linux 2.6–5.4 | Linux 2.6–5.4 |
| Electrical Characteristics | | | |
| Supply Voltage | 3.4–4.5 V, 3.8 V Typ. | 3.4–4.5 V, 3.8 V Typ. | 3.4–4.5 V, 3.8 V Typ. |
| Consumption | 11 µA @ Power off 2.0mA @ LTE Sleep (PF=128) 1.5 mA @ LTE Sleep (PF=256) 36 mA @ Idle | 11 µA @ Power off 2.0mA @ LTE Sleep (PF=128) 1.5 mA @ LTE Sleep (PF=256) 36 mA @ Idle | TBD |

Notes:

1. * means under development.

2. ● means supported.

① means only supported by QuecOpen® solution.