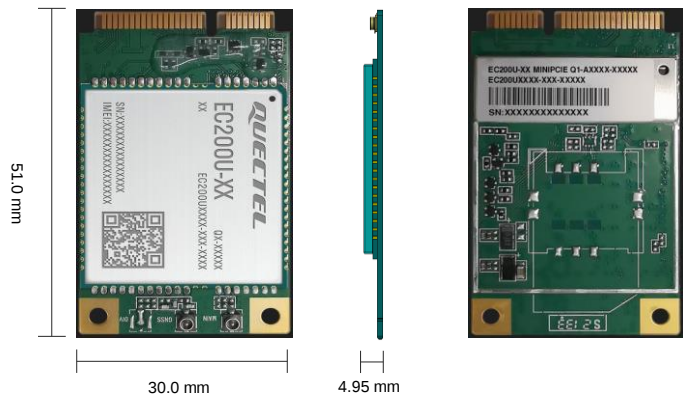




Quectel EC200U Series Mini PCIe

LTE Cat 1 Module
IoT/M2M-optimized



Quectel EC200U series Mini PCIe is an LTE Cat 1 module adopting PCI Express Mini Card form factor. Using LTE 3GPP Rel-13 technology, it delivers maximum data rates up to 10 Mbps downlink and 5 Mbps uplink.

Designed in the compact and unified form factor, it is compatible with Quectel multi-mode LTE Cat 4 EC20-CE Mini PCIe. It is backward-compatible with existing GSM and GPRS networks, ensuring that it can be connected even in remote areas devoid of 4G or 3G coverage.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB drivers for Windows 7/8/8.1/10/11, Linux, Android) extend the applicability of the module to a wide range of M2M applications such as tablet PC, router, shared equipment, data card, energy control and monitoring, and industrial PDA.



Key Features

- ✓ LTE Cat 1 module optimized for M2M and IoT applications
- ✓ Worldwide LTE, GSM/GPRS coverage
- ✓ Abundant functional interfaces
- ✓ Built-in GNSS (optional)
- ✓ Feature refinements: support FOTA
- ✓ High performance



LTE Cat 1
Max. 10 Mbps (DL)
Max. 5 Mbps (UL)



Mini PCIe Package



Embedded Abundant
Protocols



FOTA



USB 2.0 High Speed
Interface



GNSS (Optional)



Quectel Enhanced
AT Commands

Quectel EC200U Series Mini PCIe

LTE Cat 1		EC200U-EU Mini PCIe	EC200U-AU Mini PCIe
Region/Operator		EMEA/Australia/New Zealand	Latin America
Dimensions (mm)		30.0 × 51.0 × 4.95	30.0 × 51.0 × 4.95
Weight (g)		Approx. 5.96	Approx. 5.96
Temperature Range			
Operating Temperature		-35 °C to +75 °C	-35 °C to +75 °C
Extended Temperature		-40 °C to +80 °C	-40 °C to +80 °C
Frequency Bands			
LTE-FDD		B1/3/5/7/8/20/28	B1/2/3/4/5/7/8/28/66
LTE-TDD		B38/40/41	B38/40/41
GSM		B2/3/5/8	B2/3/5/8
GNSS (Optional)		GPS/GLONASS/BDS/Galileo/QZSS	GPS/GLONASS/BDS/Galileo/QZSS
Bandwidth		1.4/3/5/10/15/20 MHz	1.4/3/5/10/15/20 MHz
Certifications			
Regulatory		Europe: CE Australia/New Zealand: RCM	America: FCC Brazil: Anatel
Max. Data Rate			
LTE-FDD (Mbps)		10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)
LTE-TDD (Mbps)		8.96 (DL) / 3.1 (UL)	8.96 (DL)/ 3.1 (UL)
GSM (kbps)		85.6 (DL) / 85.6 (UL)	85.6 (DL)/ 85.6 (UL)
Interfaces			
(U)SIM		× 1	× 1
UART		× 1	× 1
USB 2.0		× 1	× 1
Audio Digital (PCM)		× 1	× 1
UART_DTR (Sleep control)		× 1	× 1
W_DISABLE# (Flight control)		× 1	× 1
LED_WWAN# (Network indication status)		× 1	× 1
RESET#		× 1	× 1
GNSS Antenna (Optional)		× 1	× 1
Main Antenna		× 1	× 1
Enhanced Features			
FOTA		●	●
GNSS		○	○
Audio Playback/Audio Recording		●	●
QuecLocator®		●	●
QuecFile®		●	●
(U)SIM Card Detection		●	●
Software Features			
Protocols		TCP/UDP/PPP/NITZ/PING/FILE/MQTT/NTP/ HTTP/HTTPS/SSL/FTP/FTPS/CMUX/MMS	TCP/UDP/PPP/NITZ/PING/FILE/MQTT/NTP/HTTP/ HTTPS/SSL/FTP/FTPS/CMUX/MMS
Driver	RIL driver	Android 4.x–13.x	Android 4.x–13.x
	USB RNDIS driver	Windows 7/8/8.1/10/11 Linux 2.6–6.5	Windows 7/8/8.1/10/11 Linux 2.6–6.5
	GNSS driver (optional)	Android 4.x–13.x	Android 4.x–13.x
	USB ECM driver	Linux 2.6–6.5	Linux 2.6–6.5
	USB serial driver	Windows 7/8/8.1/10/11 Linux 2.6–6.5 Android 4.x–13.x	Windows 7/8/8.1/10/11 Linux 2.6–6.5 Android 4.x–13.x
Electrical Features			
Supply Voltage Range		3.0–3.6 V, 3.3 V Typ.	3.0–3.6 V, 3.3 V Typ.
Power Consumption (Typical)		4.53 mA @ LTE sleep (PF = 128)	4.92 mA @ LTE sleep (PF = 128)
		4.30 mA @ LTE sleep (PF = 256)	4.65 mA @ LTE sleep (PF = 256)
		37.13 mA @ Idle (PF = 64, USB Connected)	38.36 mA @ Idle (PF = 64, USB Connected)
		22.38 mA @ Idle (PF = 64, USB Disconnected)	37.08 mA @ Idle (PF = 64, USB Disconnected)

NOTE:

1. ●: Supported.
2. ○: Optional.