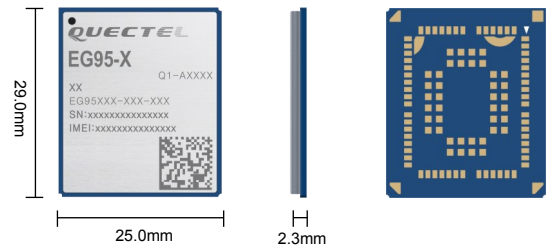


# Quectel EG95 Series

## IoT/M2M-optimized LTE Cat 4 Module



Quectel EG95 is a series of LTE category 4 module optimized specially for M2M and IoT applications. Adopting 3GPP Rel. 11 LTE technology, it delivers maximum data rates up to 10Mbps downlink and 5Mbps uplink. These make EG95 an ideal solution for numerous IoT applications that are not reliant on high speed connectivity but still require the longevity and reliability of LTE network.

EG95 contains 4 variants: EG95-E, EG95-EX, EG95-NA and EG95-NAX. EG95 is pin-to-pin compatible with Quectel UMTS/HSPA+ UG95/UG96 and LTE Cat M1/Cat NB1 BG95/BG96 modules. And it is backward-compatible with existing GSM/GPRS & UMTS/HSPA+ networks, ensuring that it can be connected even in remote areas devoid of 4G network coverage.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB serial drivers for Windows 7/8/10, 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, digital signage and so on.



### Key Benefits

- ✓ LTE category 4 module optimized for M2M and IoT applications
- ✓ Multi-band LTE, UMTS/HSPA+ and GSM/GPRS/EDGE coverage
- ✓ Compact SMT form factor ideal for size-constrained applications with extended operation temperature range
- ✓ Embedded power management unit (PMU) featuring ultra-low deep-sleep current consumption
- ✓ Simple migration from 2G/3G to 4G with a flexible and scalable platform



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



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



LGA Package



Embedded Abundant  
Protocols



eCall\*



Compact Size



USB 2.0 High Speed  
Interface



USB Drivers



Quectel Enhanced  
AT Commands

# Quectel EG95 Series

| LTE Cat 4                               | EG95-NA   | EG95-NAX  | EG95-E   | EG95-EX   |
|---|---|---|--|---|
| <b>Region/Operator</b>                  | North America   | North America   | EMEA   | EMEA  |
| <b>Dimensions (mm)</b>                  | 29.0 × 25.0 × 2.3   | 29.0 × 25.0 × 2.3   | 29.0 × 25.0 × 2.3  | 29.0 × 25.0 × 2.3   |
| <b>Temperature Range</b>                |   |   |  |   |
| <b>Operation Temperature</b>            | -35°C ~ +75°C   | -35°C ~ +75°C   | -35°C ~ +75°C  | -35°C ~ +75°C   |
| <b>Extended Temperature</b>             | -40°C ~ +85°C   | -40°C ~ +85°C   | -40°C ~ +85°C  | -40°C ~ +85°C   |
| <b>Frequency Bands</b>                  |   |   |  |   |
| <b>LTE FDD</b>                          | B2/B4/B5/B12/B13  | B2/B4/B5/B12/B13/B25/B26  | B1/B3/B7/B8/B20/B28A   | B1/B3/B7/B8/B20/B28   |
| <b>WCDMA</b>                            | B2/B4/B5  | B2/B4/B5  | B1/B8  | B1/B8   |
| <b>GSM/EDGE</b>                         | \   | \   | B3/B8  | B3/B8   |
| <b>GNSS</b>                             | GPS/GLONASS/BeiDou/Galileo/QZSS (Optional)  | GPS/GLONASS/BeiDou/Galileo/QZSS (Optional)                                      | \  | GPS/GLONASS/BeiDou/Galileo/QZSS (Optional)  |
| <b>Certifications</b>                   |   |   |  |   |
| <b>Carrier</b>                          | <b>North America:</b> Verizon/AT&T/ T-Mobile/ U.S. Cellular<br><b>Canada:</b> Rogers/ Telus | <b>North America:</b> Verizon*/AT&T*/ T-Mobile*/ Sprint*/ U.S. Cellular*        | \  | \   |
| <b>Regulatory</b>                       | <b>Global:</b> GCF<br><b>North America:</b> FCC/ PTCRB<br><b>Canada:</b> IC                 | <b>Global:</b> GCF*<br><b>North America:</b> FCC*/ PTCRB*<br><b>Canada:</b> IC* | <b>Global:</b> GCF<br><b>Europe:</b> CE<br><b>Australia &amp; New Zealand:</b> RCM<br><b>Russia:</b> FAC | <b>Global:</b> GCF*<br><b>Europe:</b> CE<br><b>Australia &amp; New Zealand:</b> RCM |
| <b>Others</b>                           | WHQL/ RoHS Compliant  | WHQL/ RoHS Compliant  | WHQL/ RoHS Compliant   | WHQL/ RoHS Compliant  |
| <b>Data Transmission</b>                |   |   |  |   |
| <b>LTE FDD Data Rate (Mbps)</b>         | 150 (DL)/ 50 (UL)   | 150 (DL)/ 50 (UL)   | 150 (DL)/ 50(UL)   | 150 (DL)/ 50 (UL)   |
| <b>DC-HSPA+ Data Rate (Mbps)</b>        | 42 (DL)/ 5.76 (UL)  | 42 (DL)/ 5.76 (UL)  | 42 (DL)/ 5.76 (UL)   | 42 (DL)/ 5.76 (UL)  |
| <b>WCDMA Data Rate (Kbps)</b>           | 384 (DL)/ 384 (UL)  | 384 (DL)/ 384 (UL)  | 384 (DL)/ 384 (UL)   | 384 (DL)/ 384 (UL)  |
| <b>EDGE Data Rate (Kbps)</b>            | \   | \   | 296 (DL)/236.8 (UL)  | 296 (DL)/236.8 (UL)   |
| <b>GPRS Data Rate (Kbps)</b>            | \   | \   | 107 (DL)/85.6 (UL)   | 107 (DL)/85.6 (UL)  |
| <b>Interfaces</b>                       |   |   |  |   |
| <b>(U)SIM</b>                           | x2  | x2  | x2   | x2  |
| <b>UART</b>                             | x2  | x2  | x2   | x2  |
| <b>USB 2.0</b>                          | x1  | x1  | x1   | x1  |
| <b>Audio Digital (PCM)</b>              | x1  | x1  | x1   | x1  |
| <b>I2C</b>                              | x1  | x1  | x1   | x1  |
| <b>NETLIGHT</b>                         | x1  | x1  | x1   | x1  |
| <b>SPI</b>                              | x1  | x1  | x1   | x1  |
| <b>Main Antenna</b>                     | x1  | x1  | x1   | x1  |
| <b>Rx-Diversity Antenna</b>             | x1  | x1  | x1   | x1  |
| <b>GNSS Antenna</b>                     | x1  | x1  | \  | x1  |
| <b>PWRKEY</b>                           | x1  | x1  | x1   | x1  |
| <b>RESET_N</b>                          | x1  | x1  | x1   | x1  |
| <b>USB_BOOT</b>                         | x1  | x1  | x1   | x1  |
| <b>Voice</b>                            |   |   |  |   |
| <b>Speech Codec Modes</b>               | HR/FR/EFR/AMR/AMR-WB  | HR/FR/EFR/AMR/AMR-WB  | HR/FR/EFR/AMR/AMR-WB   | HR/FR/EFR/AMR/AMR-WB  |
| <b>Echo Arithmetic</b>                  | Echo Cancellation/Noise Suppression   | Echo Cancellation/Noise Suppression   | Echo Cancellation/Noise Suppression  | Echo Cancellation/Noise Suppression   |
| <b>VoLTE</b>                            | Digital Audio and VoLTE (Voice over LTE) (Optional)   | Digital Audio and VoLTE (Voice over LTE) (Optional)                             | Digital Audio and VoLTE (Voice over LTE) (Optional)  | Digital Audio and VoLTE (Voice over LTE) (Optional)                                 |
| <b>Enhanced Features</b>                |   |   |  |   |
| <b>eCall*</b>                           | \   | \   | ●  | ●   |
| <b>DTMF</b>                             | ●   | ●   | ●  | ●   |
| <b>DFOTA</b>                            | ●   | ●   | ●  | ●   |
| <b>QMI/ RmNet</b>                       | ●   | ●   | ●  | ●   |
| <b>Audio Playback/ Audio Recording*</b> | Optional  | Optional  | Optional   | Optional  |
| <b>QuecLocator®</b>                     | ●   | ●   | ●  | ●   |
| <b>QuecFile</b>                         | ●   | ●   | ●  | ●   |
| <b>(U)SIM Card Detection</b>            | ●   | ●   | ●  | ●   |
| <b>Drivers</b>                          |   |   |  |   |
| <b>USB Serial Driver</b>                | Windows 7/ 8/ 8.1/ 10, Linux 2.6~5.4, Android 4.x/ 5.x/ 6.x/ 7.x/ 9.x                       | Windows 7/ 8/ 8.1/ 10, Linux 2.6~5.4, Android 4.x/ 5.x/ 6.x/ 7.x/ 9.x           | Windows 7/ 8/ 8.1/ 10, Linux 2.6~5.4, Android 4.x/ 5.x/ 6.x/ 7.x/ 9.x                                    | Windows 7/ 8/ 8.1/ 10, Linux 2.6~5.4, Android 4.x/ 5.x/ 6.x/ 7.x/ 9.x               |
| <b>GNSS Driver</b>                      | Android 4.x/5.x/6.x/7.x/8.x/9.x   | Android 4.x/5.x/6.x/7.x/8.x/9.x   | Android 4.x/5.x/6.x/7.x/8.x/9.x  | Android 4.x/5.x/6.x/7.x/8.x/9.x   |
| <b>RIL Driver</b>                       | Android 4.x/5.x/6.x/7.x/8.x/9.x   | Android 4.x/5.x/6.x/7.x/8.x/9.x   | Android 4.x/5.x/6.x/7.x/8.x/9.x  | Android 4.x/5.x/6.x/7.x/8.x/9.x   |
| <b>NDIS Driver</b>                      | Windows 7/ 8/ 8.1/ 10   | Windows 7/ 8/ 8.1/ 10   | Windows 7/ 8/ 8.1/ 10  | Windows 7/ 8/ 8.1/ 10   |
| <b>MBIM Driver</b>                      | Windows 8/8.1/10, Linux 3.18~5.4  | \   | Windows 8/8.1/10, Linux 3.18~5.4   | \   |
| <b>GobiNet Driver</b>                   | Linux 2.6~5.4   | Linux 2.6~5.4   | Linux 2.6~5.4  | Linux 2.6~5.4   |
| <b>QMI_WWAN Driver</b>                  | Linux 3.4~5.4   | Linux 3.4~5.4   | Linux 3.4~5.4  | Linux 3.4~5.4   |

# Quectel EG95 Series

| LTE Cat 4            | EG95-NA  | EG95-NAX   | EG95-E   | EG95-EX  |
|----------------------|--|--|--|--|
| Electrical Features  |  |  |  |  |
| Supply Voltage Range | 3.3V~4.3V, 3.8V Typ.                               | 3.3V~4.3V, 3.8V Typ.                               | 3.3V~4.3V, 3.8V Typ.                               | 3.3V~4.3V, 3.8V Typ.                               |
| Power Consumption    | 15μA @Power off<br>2.6mA @Sleep, Typ<br>31mA @Idle | 15μA @Power off<br>2.6mA @Sleep, Typ<br>31mA @Idle | 15μA @Power off<br>2.6mA @Sleep, Typ<br>31mA @Idle | 15μA @Power off<br>2.6mA @Sleep, Typ<br>31mA @Idle |

**Notes:**

1. \* means under development.
2. ● means supported.