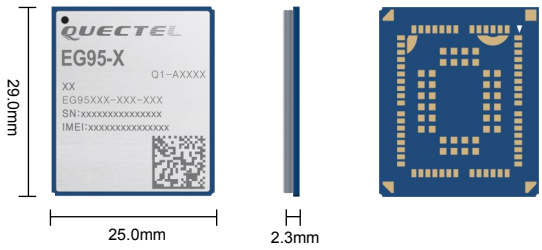
Quectel EG95 Series

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

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

LGA
LGA Package

Embedded Abundant Protocols

eCall
eCall*

Compact Size

USB 2.0 High Speed Interface

USB Drivers

AT
Quectel Enhanced AT Commands

Rev.: V1.8| Status: Released

Quectel EG95 Series

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

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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 2.6mA @Sleep, Typ. 31mA @Idle	15μA @Power off 2.6mA @Sleep, Typ. 31mA @Idle	15μA @Power off 2.6mA @Sleep, Typ. 31mA @Idle	15μA @Power off 2.6mA @Sleep, Typ. 31mA @Idle

Notes:

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

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