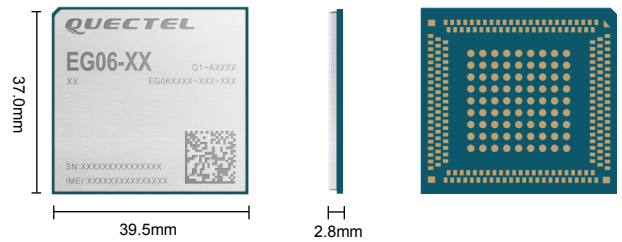




# Quectel EG06

## IoT/M2M-optimized LTE-A Cat 6 LGA Module



Quectel EG06 is a series of LTE Advanced category 6 module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel. 11 LTE technology, it delivers maximum data rates up to 300Mbps downlink and 50Mbps uplink.

Designed in the LGA form factor, EG06 contains 3 variants (EG06-E, EG06-A and EG06-AUTL) for different target regions and these variants nearly cover all the main stream carriers worldwide.

EG06 supports Qualcomm® IZat™ location technology Gen8C Lite (GPS, GLONASS, BeiDou/Compass, Galileo and QZSS). The integrated GNSS greatly simplifies product design, and provides quicker, more accurate and more dependable positioning capability.

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



### Key Benefits

- ✓ LTE-A Cat 6 module with LGA form factor, optimized for M2M and IoT applications
- ✓ Support LTE-A carrier aggregation
- ✓ Worldwide LTE-A and UMTS/HSPA(+) coverage
- ✓ Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment
- ✓ Feature refinements: supports DFOTA and DTMF
- ✓ MIMO technology meets demands for data rate and link reliability in modem wireless communication systems



LTE Cat 6  
Max 300Mbps (DL)  
Max 50Mbps (UL)



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



LGA Package



Embedded Abundant  
Protocols



Voice over LTE



Multi-constellation  
GNSS



USB 2.0/3.0 Interface



USB Drivers



Quectel Enhanced  
AT Commands

Rev.: V1.7 | Status: Released

# Quectel EG06 Series

LTE Cat 6	EG06-E	EG06-A	EG06-AUTL <sup>③</sup>
<b>Region/Operator</b>	EMEA/APAC <sup>①</sup> /Brazil	North America/Mexico	Australia
<b>Dimensions (mm)</b>	37.0 × 39.5 × 2.8	37.0 × 39.5 × 2.8	37.0 × 39.5 × 2.8
<b>Temperature Range</b>			
<b>Operation Temperature</b>	-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
<b>Frequency Bands</b>			
<b>LTE-FDD</b>	B1/B3/B5/B7/B8/B20/B28/B32 <sup>②</sup>	B2/B4/B5/B7/B12/B13/B25/B26/B29 <sup>②</sup> /B30/B66	B3/B7/B28
<b>LTE-TDD</b>	B38/B40/B41	\	\
<b>2xCA</b>	B1+B1/B5/B8/B20/B28; B3+B3/B5/B7/B8/B20/B28; B7+B5/B7/B8/B20/B28; B20+B32 <sup>②</sup> ; B38+B38; B40+B40; B41+B41	B2+B2/B5/B12/B13/B29 <sup>②</sup> ; B4+B4/B5/B12/B13/B29 <sup>②</sup> ; B7+B5/B7/B12/B26; B25+B5/B12/B25/B26; B30+B5/B12/B29 <sup>②</sup> ; B66+B5/B12/B13/B29 <sup>②</sup> /B66	B3+B3/B7/B28; B7+B7/B28
<b>WCDMA</b>	B1/B3/B5/B8	B2/B4/B5	\
<b>GNSS</b>	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/LONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)
<b>Certifications</b>			
<b>Carrier</b>	<b>Europe:</b> Deutsche Telekom/British Telecom <b>Australia:</b> Telstra	<b>North America:</b> Verizon/AT&T/U.S. Cellular	<b>Australia:</b> Telstra
<b>Regulatory</b>	<b>Global:</b> GCF <b>Europe:</b> CE <b>South Korea:</b> KC <b>Australia &amp; New Zealand:</b> RCM	<b>Global:</b> GCF <b>North America:</b> FCC/PTCRB <b>Canada:</b> IC	<b>Global:</b> GCF <b>Australia &amp; New Zealand:</b> RCM
<b>Others</b>	RoHS/WHQL	RoHS/WHQL	RoHS/WHQL
<b>Data Transmission</b>			
<b>LTE-FDD Data Rate (Mbps)</b>	300 (DL) <sup>③</sup> /50 (UL)	300 (DL) <sup>③</sup> /50 (UL)	300 (DL) <sup>③</sup> /50 (UL)
<b>LTE-TDD Data Rate (Mbps)</b>	226 (DL)/28 (UL)	226 (DL)/28 (UL)	226 (DL)/28 (UL)
<b>DC-HSPA+ Data Rate (Mbps)</b>	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)
<b>Interfaces</b>			
<b>USB 2.0/3.0</b>	x1 (Support Master* and Slave Modes)	x1 (Support Master* and Slave Modes)	x1 (Support Master* and Slave Modes)
<b>PCM (Digital Audio)</b>	x1	x1	x1
<b>(U)SIM</b>	x1, 1.8V/3.0V	x1, 1.8V/3.0V	x1, 1.8V/3.0V
<b>GPIOs</b>	x2	x2	x2
<b>UART</b>	x3	x3	x3
<b>PCIe (RC)* (PCIe Gen 2, for Wi-Fi, Ethernet Functions)</b>	x1	x1	x1
<b>SD Card*</b>	x1	x1	x1
<b>ADC</b>	x2	x2	x2
<b>I2C</b>	x1	x1	x1
<b>RESET_N</b>	x1	x1	x1
<b>Antennas</b>	x3 (Main, Diversity and GNSS Antennas)	x3 (Main, Diversity and GNSS Antennas)	x3 (Main, Diversity and GNSS Antennas)
<b>Voice</b>			
<b>Speech Codec Modes</b>	AMR/AMR-WB	AMR/AMR-WB	AMR/AMR-WB
<b>Echo Arithmetic</b>	Echo Cancellation/Noise Suppression	Echo Cancellation/Noise Suppression	Echo Cancellation/Noise Suppression
<b>VoLTE</b>	CSFB and VoLTE (Voice over LTE) (Optional)	CSFB and VoLTE (Voice over LTE) (Optional)	CSFB and VoLTE (Voice over LTE) (Optional)
<b>Enhanced Features</b>			
<b>MIMO (2x2, 4x2, DL)</b>	●	●	●
<b>DFOTA</b>	●	●	●
<b>DTMF</b>	●	●	●
<b>Digital Audio and VoLTE (Voice over LTE)</b>	Optional	Optional	Optional
<b>Ethernet*/Wi-Fi* Function through PCIe Interface</b>	●	●	●
<b>GNSS</b>	●	●	●
<b>(U)SIM Card Detection</b>	●	●	●
<b>Drivers</b>			
<b>USB 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
<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
<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
<b>NDIS Driver</b>	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	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
<b>QMI_WWAN Driver</b>	Linux 3.4~5.4	Linux 3.4~5.4	Linux 3.4~5.4
<b>Electrical Features</b>			
<b>Supply Voltage Range</b>	3.3V~4.3V, 3.8V Typ.	3.3V~4.3V, 3.8V Typ.	3.3V~4.3V, 3.8V Typ.
<b>Power Consumption</b>	10µA @Power off 1.5mA @Sleep (PF=128) 1.5mA @Sleep (PF=64) 18mA @Idle	8µA @Power off 1.7mA @Sleep (PF=128) 2.1mA @Sleep (PF=64) 20mA @Idle	10µA @Power off 1.5mA @Sleep (PF=128) 1.5mA @Sleep (PF=64) 18mA @Idle

#### Notes:

1. \* means Under Development.

2. ● means supported.

① Excluding Japan and CMCC.

② LTE-FDD B29 and B32 support receiving only, and are only for secondary component carrier in 2xCA.

③ EG06-AUTL supports 400Mbps DL peak data rates with 256-QAM modulation.