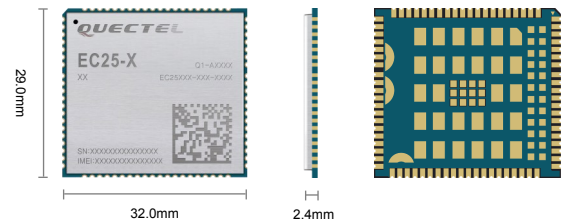


# Quectel EC25 Series

## IoT/M2M-optimized LTE Cat 4 Module



Quectel EC25 is a series of LTE Cat 4 module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel. 11 LTE technology, it delivers maximum data rates up to 150Mbps downlink and 50Mbps uplink. Designed in the compact and unified form factor, EC25 is compatible with Quectel multi-mode LTE Standard EC21/EC20 R2.0/EC20 R2.1/EG25-G/EG21-G modules and UMTS/HSPA+ UC20/UC200T module, which allows for flexible migration among them in design and manufacturing.












EC25 contains 13 variants: EC25-E, EC25-EU, EC25-EUX, EC25-J, EC25-A, EC25-V, EC25-AF, EC25-AFX, EC25-MX, EC25-AUT, EC25-AUTL, EC25-AU and EC25-AUX. This makes it backward-compatible with existing EDGE and GSM/GPRS networks, ensuring that it can be connected even in remote areas devoid of 4G or 3G coverage.

EC25 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.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB serial drivers for Windows 7/8/8.1/10, Linux, Android/eCall\*) 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 Benefits

- ✓ LTE Cat 4 module optimized for M2M and IoT applications
- ✓ Worldwide LTE, UMTS/HSPA(+) and GSM/GPRS/EDGE coverage
- ✓ Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment
- ✓ Feature refinements: supports DFOTA, eCall\* and DTMF
- ✓ MIMO technology meets demands for data rate and link reliability in modem wireless communication systems

 LTE Cat 4 Max 150Mbps (DL) Max 50Mbps (UL)	 Max 42Mbps (DL) Max 5.76Mbps (UL)	 LCC Package
 Wi-Fi	 BT*	 eCall*
 Embedded Abundant Protocols	 Multi-constellation GNSS	 USB 2.0 High Speed Interface
 USB Drivers	 Quectel Enhanced AT Commands	

Rev.: V2.0 | Status: Released

# Quectel EC25 Series

LTE Cat 4	EC25-E	EC25-EU	EC25-EUX	EC25-J
<b>Region/Operator</b>	EMEA/South Korea/Thailand/India	EMEA/Thailand	EMEA/Thailand	Japan
<b>Dimensions (mm)</b>	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4
<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>	B1/B3/B5/B7/B8/B20	B1/B3/B7/B8/B20/B28A	B1/B3/B7/B8/B20/B28A	B1/B3/B8/B18/B19/B26
<b>LTE-TDD</b>	B38/B40/B41	B38/B40/B41	B38/B40/B41	B41
<b>WCDMA</b>	B1/B5/B8	B1/B8	B1/B8	B1/B6/B8/B19
<b>GSM/EDGE</b>	B3/B8	B3/B8	B3/B8	\
<b>GNSS</b>	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)
<b>Certifications</b>				
<b>Carrier</b>	<b>Global:</b> Vodafone <b>Europe:</b> Deutsche Telekom/Telefónica <b>South Korea:</b> SKT/KT*/LGU+*	<b>Europe:</b> Deutsche Telekom/ British Telecom	\	<b>Japan:</b> NTT DOCOMO/SoftBank/KDDI
<b>Regulatory</b>	<b>Global:</b> GCF <b>Europe:</b> CE <b>Taiwan (China):</b> NCC <b>Australia/New Zealand:</b> RCM <b>Thailand:</b> NBTC <b>Russia:</b> FAC <b>South Africa:</b> ICASA	<b>Global:</b> GCF <b>Europe:</b> CE <b>Taiwan (China):</b> NCC <b>Australia/New Zealand:</b> RCM	<b>Global:</b> GCF <b>Europe:</b> CE <b>Taiwan (China):</b> NCC <b>Australia/New Zealand:</b> RCM	<b>Japan:</b> JATE/TELEC
<b>Others</b>	RoHS/WHQL	RoHS/WHQL	RoHS/WHQL	RoHS/WHQL
<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>LTE-TDD Data Rate (Mbps)</b>	130 (DL)/ 30 (UL)	130 (DL)/ 30 (UL)	130 (DL)/ 30 (UL)	130 (DL)/ 30 (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)	296 (DL)/ 236.8 (UL)	\
<b>GPRS Data Rate (Kbps)</b>	107 (DL)/ 85.6 (UL)	107 (DL)/ 85.6 (UL)	107 (DL)/ 85.6 (UL)	\
<b>Interfaces</b>				
<b>(U)SIM</b>	x1	x1	x1	x1
<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>SDIO</b>	x2	x2	x1	x2
<b>SGMII</b>	x1	x1	x1	x1
<b>Bluetooth*</b>	x1	x1	\	x1
<b>ADC</b>	x2	x2	x2	x2
<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</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</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	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
<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.	3.3V~4.3V, 3.8V Typ.
<b>Power Consumption</b>	11µA @Power off 1.16mA @Sleep, Typ. 19.5mA @Idle	11µA @Power off 1.16mA @Sleep, Typ. 19.5mA @Idle	9.0µA @Power off 0.9mA @Sleep, Typ. 14.5mA @Idle	10µA @Power off 1.1mA @Sleep, Typ. 21mA @Idle

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

# Quectel EC25 Series

LTE Cat 4	EC25-A	EC25-V	EC25-AF	EC25-AFX	EC25-MX
<b>Region/Operator</b>	North America	Verizon	North America FirstNet	North America FirstNet	Mexico
<b>Dimensions (mm)</b>	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4
<b>Temperature Range</b>					
<b>Operation Temperature</b>	-35°C ~ +75°C	-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	-40°C ~ +85°C
<b>Frequency Bands</b>					
<b>LTE-FDD</b>	B2/B4/B12	B4/B13	B2/B4/B5/B12/B13/B14/B66/ B71	B2/B4/B5/B12/B13/B14/B66/ B71	B2/B4/B5/B7/B28/B66
<b>LTE-TDD</b>	\	\	\	\	\
<b>WCDMA</b>	B2/B4/B5	\	B2/B4/B5	B2/B4/B5	B2/B4/B5
<b>GSM/EDGE</b>	\	\	\	\	\
<b>GNSS</b>	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	\
<b>Certifications</b>					
<b>Carrier</b>	North America: AT&T/T-Mobile Canada: Rogers/Telus	North America: Verizon	North America: Verizon/AT&T/ T-Mobile/U.S. Cellular Canada: Rogers/Telus	North America: Verizon*/ AT&T*/T-Mobile*/U.S. Cellular*	\
<b>Regulatory</b>	North America: FCC/PTCRB Canada: IC	Global: GCF North America: FCC	Global: GCF North America: FCC/PTCRB Canada: IC	Global: GCF* North America: FCC/PTCRB* Canada: IC	North America: FCC/PTCRB Mexico: IFETEL
<b>Others</b>	RoHS/WHQL	RoHS/WHQL	RoHS/WHQL	RoHS/WHQL	RoHS/WHQL
<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)	150 (DL)/ 50 (UL)
<b>LTE-TDD Data Rate (Mbps)</b>	\	\	\	\	\
<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>	\	\	\	\	\
<b>GPRS Data Rate (Kbps)</b>	\	\	\	\	\
<b>Interfaces</b>					
<b>(U)SIM</b>	x1	x1	x1	x1	x1
<b>UART</b>	x2	x2	x2	x2	x2
<b>USB 2.0</b>	x1	x1	x1	x1	x1
<b>Audio Digital (PCM)</b>	x1	x1	x1	x1	x1
<b>I2C</b>	x1	x1	x1	x1	x1
<b>SDIO</b>	x2	x2	x2	x1	x1
<b>SGMII</b>	x1	x1	x1	x1	x1
<b>Bluetooth*</b>	x1	x1	x1	\	\
<b>ADC</b>	x2	x2	x2	x2	x2
<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	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	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)	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	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	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	Android 4.x/5.x/6.x/7.x/8.x/9.x
<b>NDIS</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	Windows 7/ 8/ 8.1/ 10
<b>MBIM</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	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	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.	3.3V~4.3V, 3.8V Typ.	3.3V~4.3V, 3.8V Typ.
<b>Power Consumption</b>	10µA @Power off 1.1mA @Sleep, Typ. 21mA @Idle	10µA @Power off 0.85mA @Sleep, Typ. 20mA @Idle	10µA @Power off 1.0mA @Sleep, Typ. 23.3mA @Idle	8.0µA @Power off 0.83mA @Sleep, Typ. 14.9mA @Idle	19µA @Power off 1.0mA @Sleep, Typ. 12.9mA @Idle

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

# Quectel EC25 Series

LTE Cat 4	EC25-AUT	EC25-AUTL	EC25-AU	EC25-AUX
<b>Region/Operator</b>	Australia	Australia	Latin America/Australia/New Zealand	Latin America/ Australia/New Zealand
<b>Dimensions (mm)</b>	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4	32.0 × 29.0 × 2.4
<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>	B1/B3/B5/B7/B28	B3/B7/B28	B1/B2 <sup>①</sup> /B3/B4/B5/B7/B8/B28	B1/B2 <sup>①</sup> /B3/B4/B5/B7/B8/B28
<b>LTE-TDD</b>	\	\	B40	B40
<b>WCDMA</b>	B1/B5	\	B1/B2/B5/B8	B1/B2/B4/B5/B8
<b>GSM/EDGE</b>	\	\	B2/B3/B5/B8	B2/B3/B5/B8
<b>GNSS</b>	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	\	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)	GPS/GLONASS/BeiDou (Compass)/Galileo/QZSS (Optional)
<b>Certifications</b>				
<b>Carrier</b>	\	\	<b>Australia:</b> Telstra*	
<b>Regulatory</b>	<b>Australia/New Zealand:</b> RCM	<b>Australia/New Zealand:</b> RCM	<b>Global:</b> GCF <b>North America:</b> FCC <b>Taiwan (China):</b> NCC <b>Brazil:</b> Anatel <b>Australia/New Zealand:</b> RCM	<b>Europe:</b> CE <b>Taiwan (China):</b> NCC <b>Brazil:</b> Anatel <b>Australia/New Zealand:</b> RCM
<b>Others</b>	RoHS/WHQL	RoHS/WHQL	RoHS/WHQL	RoHS/WHQL
<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>LTE-TDD Data Rate (Mbps)</b>	\	\	130 (DL)/ 30 (UL)	130 (DL)/ 30 (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>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>	x1	x1	x1	x1
<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>SDIO</b>	x2	x2	x2	x1
<b>SGMII</b>	x1	x1	x1	x1
<b>Bluetooth*</b>	x1	x1	x1	\
<b>ADC</b>	x2	x2	x2	x2
<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<sup>®</sup></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
<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</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</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	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
<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.	3.3V~4.3V, 3.8V Typ.
<b>Power Consumption</b>	10µA @Power off 1mA @Sleep, Typ. 17mA @Idle	10µA @Power off 1mA @Sleep, Typ. 17mA @Idle	11µA @Power off 1.3mA @Sleep, Typ. 22mA @Idle	9.0µA @Power off 0.9mA @Sleep, Typ. 16.9mA @Idle

## Notes:

- ① LTE-FDD B2 of EC25-AU and EC25-AUX does not support Rx-diversity.
- \* means under development.
- means supported.