



Quectel EG915U Series LTE Standard Module

Introduction

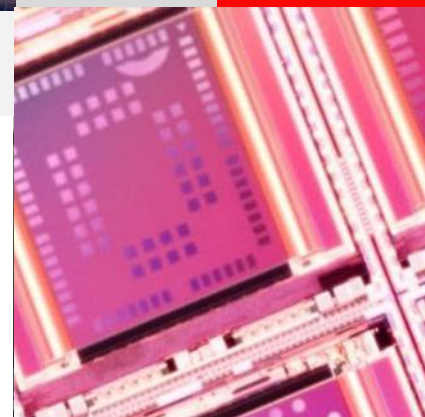
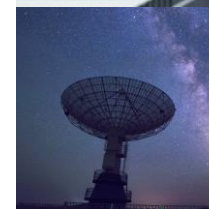
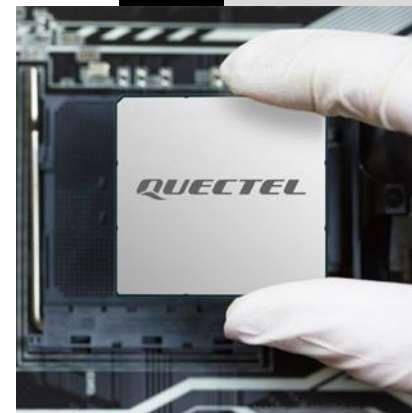
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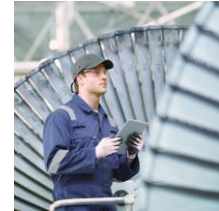
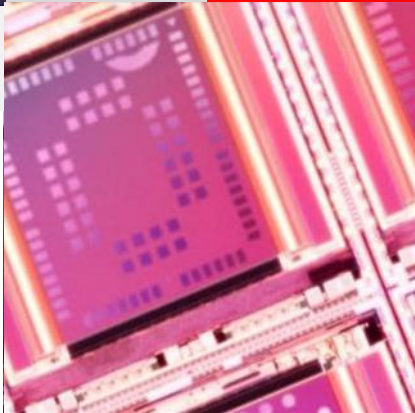
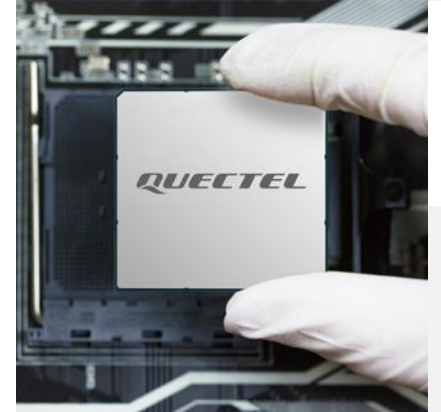
Highlights & Specifications

Development Timeline

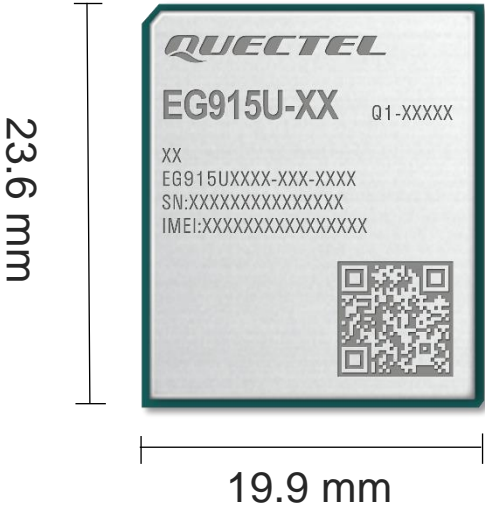
Technical Details

Applications

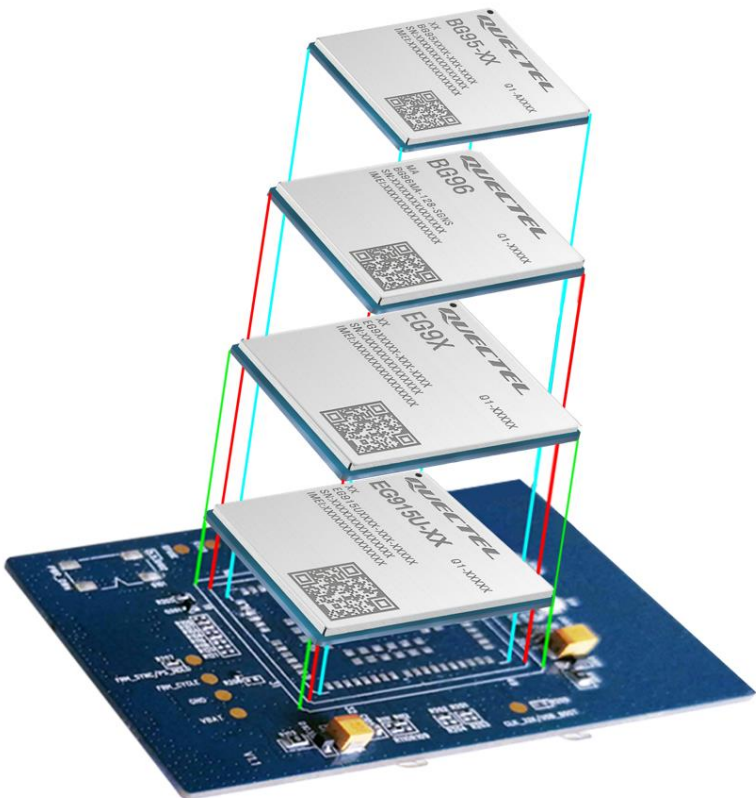
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EG915U Series Compatible Modules



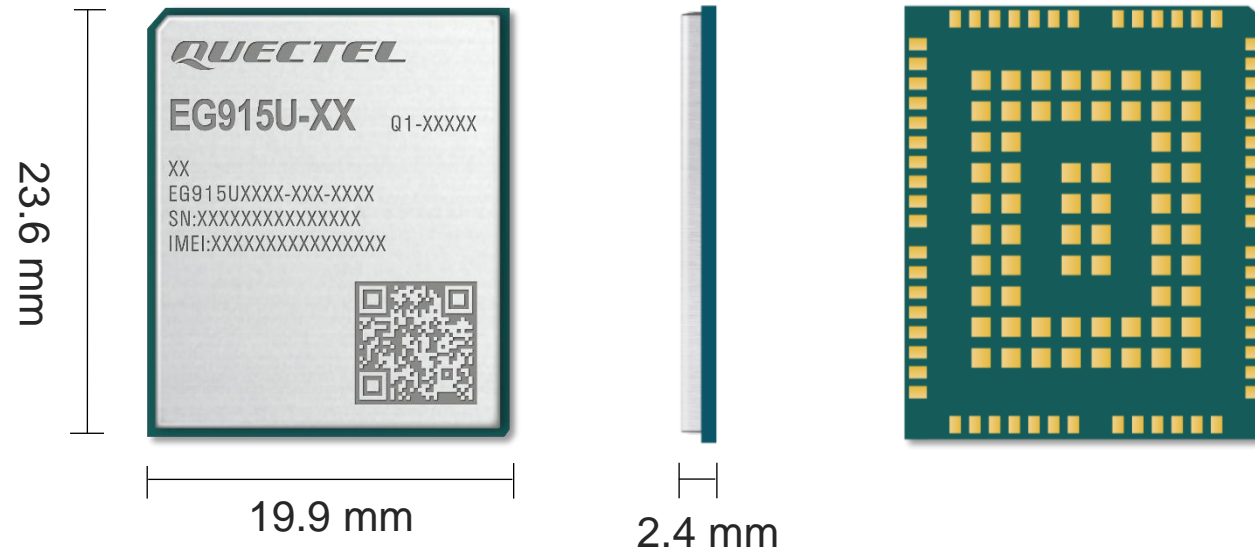
EG915U series module is compatible with Quectel EG9x series, BG95 series and BG96 modules.



EG915U Series Mechanical Dimensions



Multi-Mode LTE Module



Length: 23.6 mm (± 0.15 mm)
Width: 19.9 mm (± 0.15 mm)
Height: 2.4 mm (± 0.2 mm)
Weight: Approx. 2.5 g

EG915U Series Specifications



■ Multi-Mode LTE Cat 1 Module

23.6 mm × 19.9 mm × 2.4 mm
10 Mbps DL/ 5 Mbps UL

Variant		EG915U-CN	EG915U-EU	EG915U-LA
LTE	LTE-FDD	B1/ B3/ B5/ B8	B1/ B3/ B5/ B7/ B8/ B20/ B28	B2/ B3/ B4/ B5/ B7/ B8/ B28/ B66
	LTE-TDD	B34/ B38/ B39/ B40/ B41	-	-
WCDMA		-	-	-
GSM		B3/ B8	B2/ B3/ B5/ B8	B2/ B3/ B5/ B8
QuecLocator®		●	●	●
VoLTE		●	●	●
Wi-Fi Scan		●	●	●
GNSS		-	-	-
Bluetooth		●	●	●
DFOTA		●	●	●
Power Supply		3.3–4.3 V, typ. 3.8 V	3.3–4.3 V, typ. 3.8 V	3.3–4.3 V, typ. 3.8 V
Region		China/ India	Europe/ Australia/ New Zealand	Latin America
Certification		-	Regulatory: GCF*/ CE*/ Anatel*/ RCM*	Regulatory: FCC*/ Anatel*

“*” means under development/ongoing.

“-” means unsupported.

“●” means supported.

EG915U Series Highlights



Highlights	Description
Hardware Interfaces	USB 2.0/ PCM/ Analog Audio/ (U)SIM/ UART/ ADC/ I2C/ RESET_N/ SPI/ PWRKEY/ Antenna (Main antenna and Wi-Fi Scan/ Bluetooth antenna)
USB Serial Driver	Windows 7/ 8/ 8.1/ 10, Linux 2.6–5.14, Android 4.x–11.x
RIL Driver	Android 4.x–11.x
USB RNDIS Driver	Windows 7/ 8/ 8.1/ 10, Linux 2.6–5.14
USB ECM Driver	Linux 2.6–5.14
Abundant Protocols	TCP/ UDP/ PPP/ NITZ/ PING/ FILE/ MQTT/ NTP/ HTTP/ HTTPS/ SSL/ FTP/ FTPS/ CMUX/ MMS
Enhanced Features	DFOTA (Delta Firmware Upgrade Over-The-Air) (U)SIM card detection
SMS	Text and PDU mode Point-to-point MO and MT SMS cell broadcast SMS storage: ME & SM
Audio	Support 1 digital audio interface (PCM) and 2 analog audio interfaces (microphone and loudspeaker) GSM: AMR-NB/ AMR-WB Support echo cancellation and noise suppression



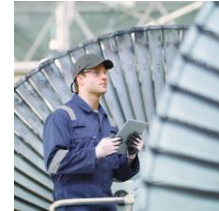
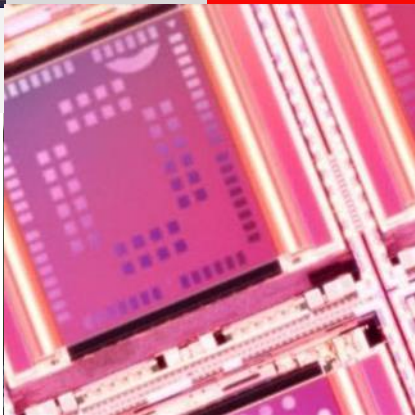
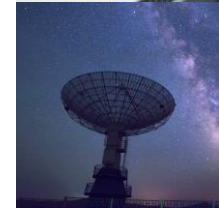
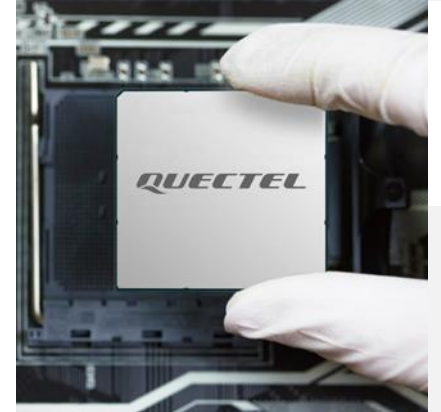
Highlights & Specifications

Development Timeline

Technical Details

Applications

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EG915U-EU Timeline



2021												2022	
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.

Project schedule



ES: Engineering samples ready. Basic functions are available for customers’ simple demo purpose.
CS: Commercial samples ready. Stable hardware design and quite stable software design. New software features can be added upon request.
MP: Hardware and software ready for mass production. For certification status, please refer to the “certification schedule”.

Regulatory Certification

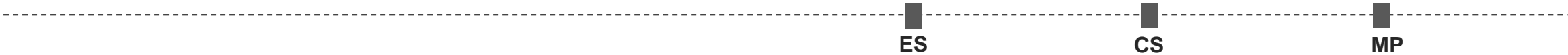


EG915U-LA Timeline



2021												2022	
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.

Project schedule



ES: Engineering samples ready. Basic functions are available for customers’ simple demo purpose.
CS: Commercial samples ready. Stable hardware design and quite stable software design. New software features can be added upon request.
MP: Hardware and software ready for mass production. For certification status, please refer to the “certification schedule”.

Regulatory Certification

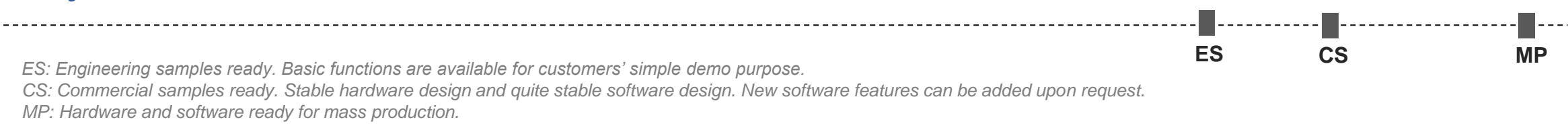


EG915U-CN Timeline



2021												2022	
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.

Project schedule





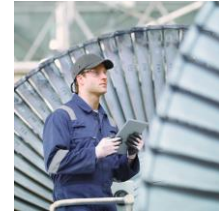
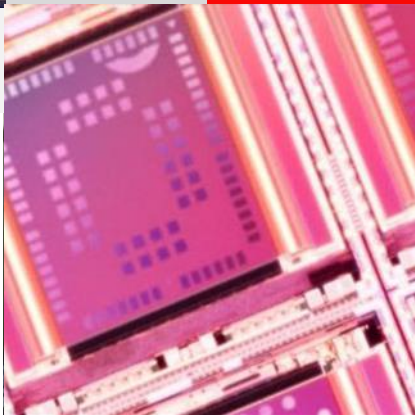
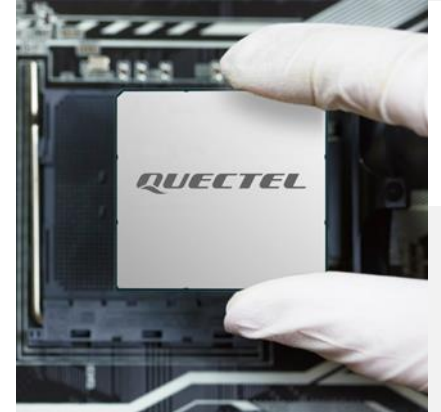
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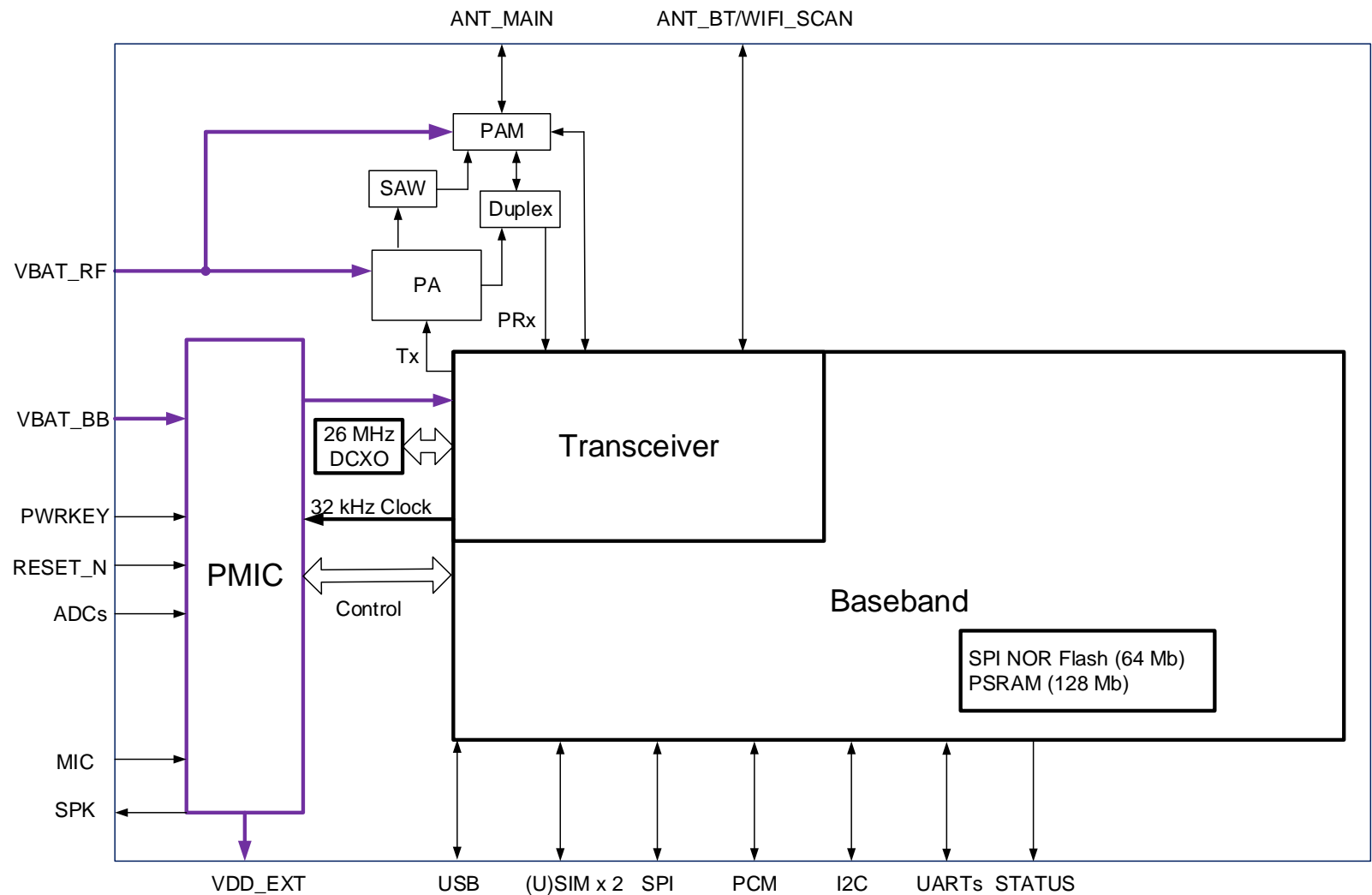
Technical Details

Applications

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Hardware Architecture



Software Advantages



USB Serial Driver

- Windows 7/ 8/ 8.1/ 10
- Linux 2.6–5.14
- Android 4.x–11.x

Quality Guarantee

- Reliable network protocols
- Steady flash protection mechanism
- Superior audio algorithms

Special Features

- QuecPython®^①
- QuecLocator®

RIL & USB RNDIS & USB ECM Drivers

- RIL Drivers: Android 4.x–11.x
- USB RNDIS Drivers:
Windows 7/ 8/ 8.1/ 10, Linux 2.6–5.14
- USB ECM Drivers: Linux 2.6–5.14

Flexible Applications

- (U)SIM card detection
- DTMF
- VoLTE

Enhanced AT Commands

- 3GPP TS 27.007 (GSM 07.07)
- 3GPP TS 27.005 (GSM 07.05 SMS)
- Quectel Enhanced AT Commands

^① means QuecPython® feature is optional.

DFOTA

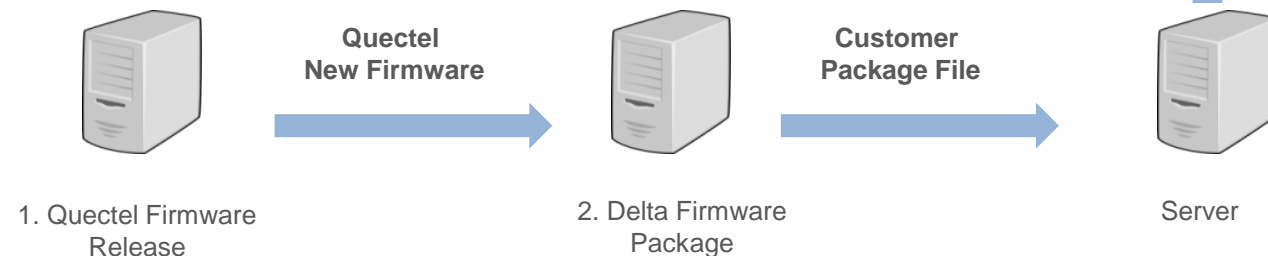


DFOTA refers to Delta Firmware Upgrade Over-The-Air, which enables customers to upgrade firmware wirelessly.

In DFOTA, a delta firmware package, which only contains the differences between the source and the target firmware versions, occupies small memory. Thus the firmware can be upgraded quickly over LTE/ GSM/ GPRS networks, eliminating the need for users to bring the device to a service facility.

Firmware Upgrade Process via DFOTA

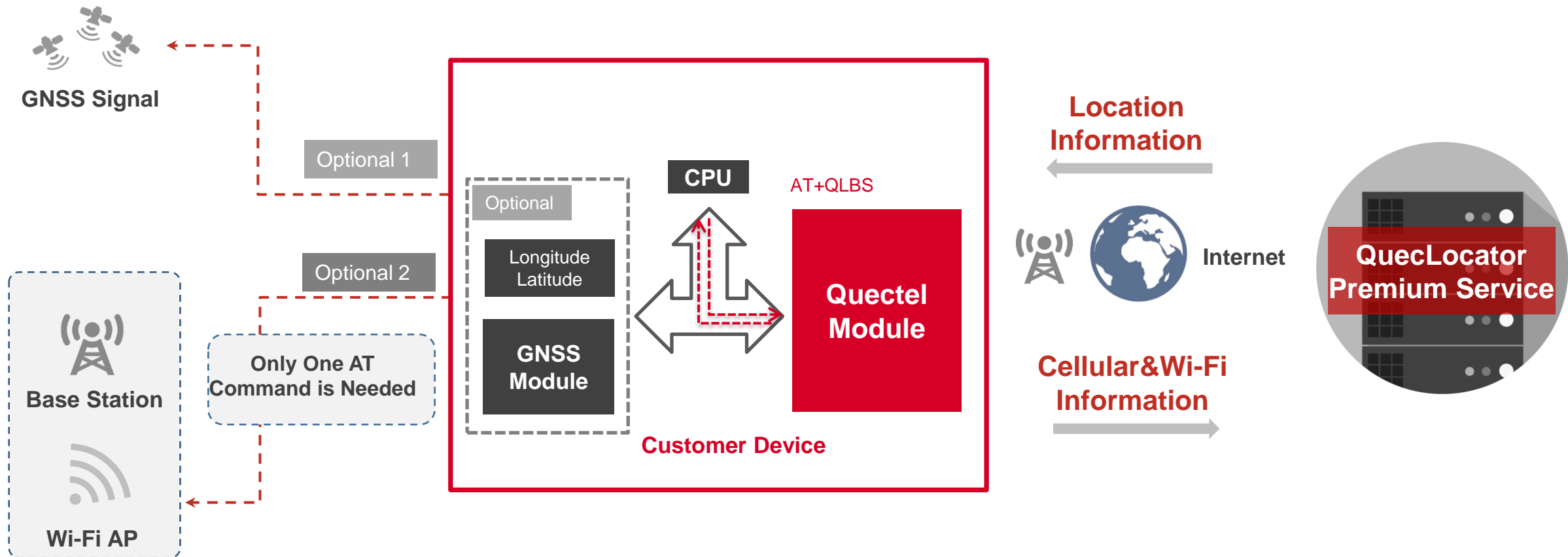
- Get Delta Firmware Package
- Put Delta Package on Server
- Execute **AT+QFOTADL** Command
- Download and Upgrade Firmware Automatically



QuecLocator[®] Working Process



QuecLocator[®] is an easy and reliable positioning service providing secure and accurate positioning **Anytime, Anywhere.**



NOTE: There is no need for extra GNSS modules when using QuecLocator[®].

Support Package - Technical Materials & EVB Kit



Technical Materials Package

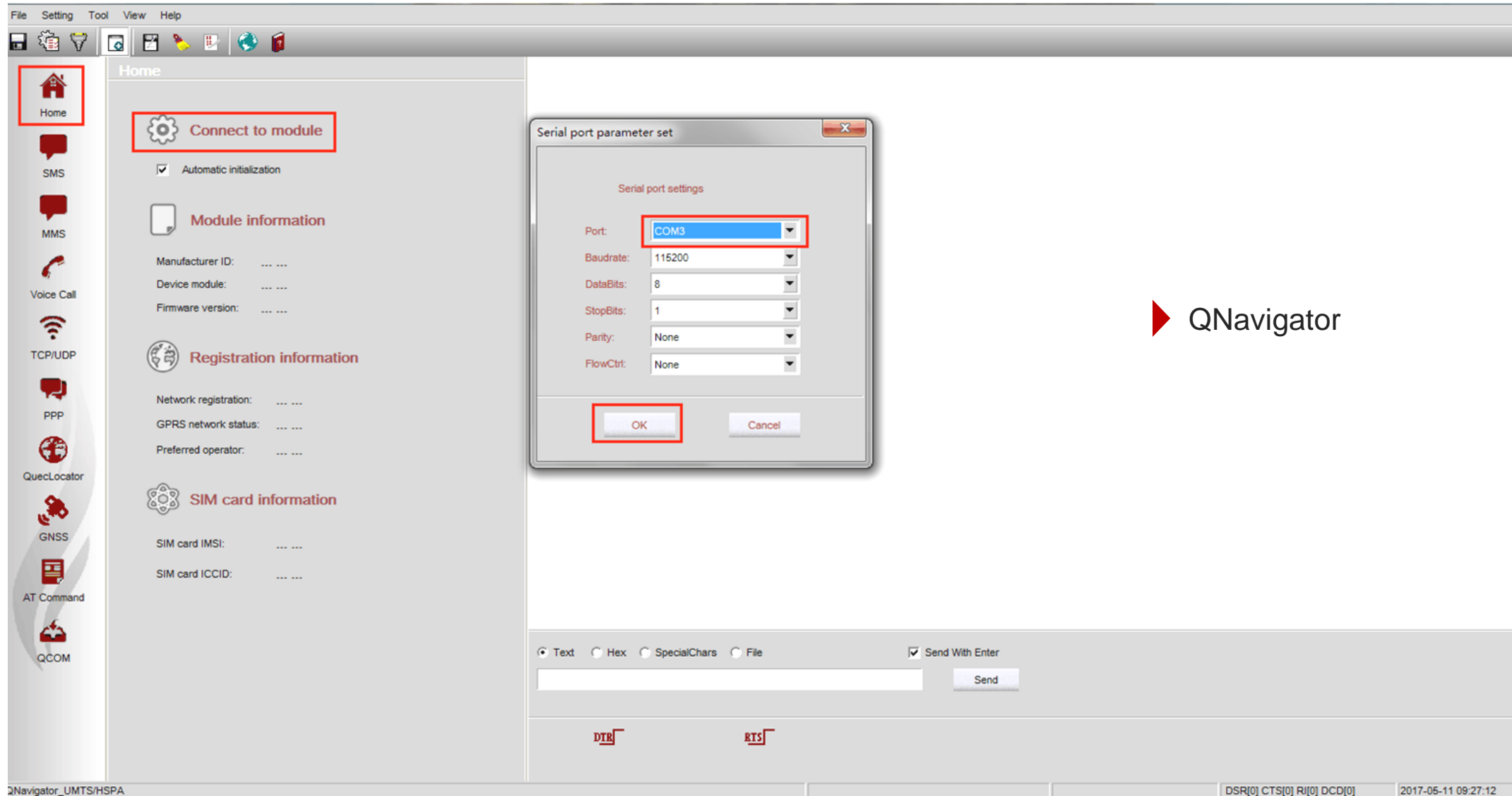
- Hardware & software documents
- Debug tools, download tools, test tools, EVB kit & USB drivers
- Approvals & test reports
- QNavigator

Development Tool (UMTS<E EVB Kit)

- Connectors
 - a) Power supply connectors
 - b) USB connector
 - c) UART connectors
 - d) (U)SIM card connector
 - e) SD card connector
 - f) Digital and audio connectors
- Auxiliaries
 - a) Network status LED
 - b) Power key
 - c) Reset key
 - d) Test points



Support Package - QNavigator



► QNavigator

Technical Support Team





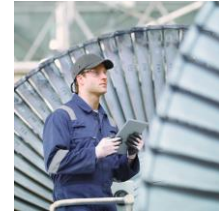
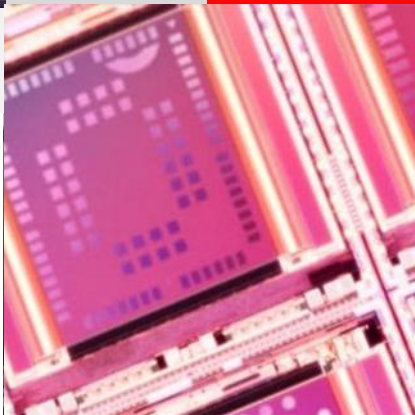
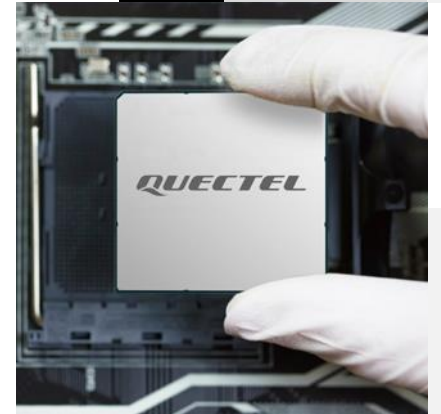
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Applications

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Target Applications



Telematics & Transport

- Automotive OEM
- Vehicle Tracking
- Container Tracking
- Ship Tracking
- Fleet Management
- OBD
- DVR
- Insurance Box



Energy

- Electricity Meter
- Gas Meter
- Water Meter
- Heat Meter
- Smart Grid
- Wind Turbines
- Solar Panel
- Charging Pile



Payment

- Wireless POS
- Cash Register
- ATM
- Vending Machine
- Top-up Machine



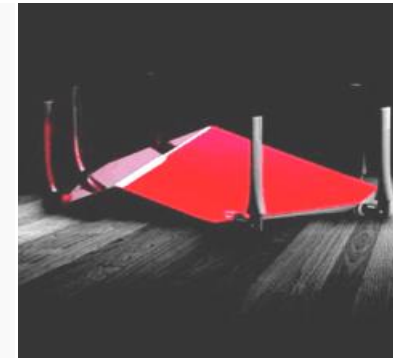
Security

- Alarm
- Camera
- Video Surveillance
- Intrusion Detection
- Smoke Detector
- Asset Protection



Smart City

- Street Lighting
- Sharing Economy
- Traffic Light
- Elevator
- Digital Signage
- Advertisement Display
- LED Lighting
- Garbage Bin Monitoring
- Parking



Gateway

- DTU
- Consumer Router
- Industrial Router
- VoIP
- Server
- Wi-Fi Hotspot



Industry

- Industrial PDA
- Rugged Tablet PC
- Pipeline Management
- UAV
- Robot
- Flow Meter
- Refrigerator
- Industrial Control
- Industrial Monitoring



Life & Healthcare

- Personal Tracker
- Household Appliances
- Pet Tracker
- Wearables
- Elderly Monitoring
- Remote Medical Equipment
- Glucometer
- Blood Pressure Monitor
- Gambling Machine



Agriculture & Environment

- Trail Camera
- Food Traceability
- Farm Machinery
- Irrigation
- Meteorological Station
- Wildlife Tracking
- Environment Monitoring
- Pollution Monitoring



The number one cellular module vendor in the world and a leading GNSS module supplier

- Unbeatable choice from the broadest module portfolio in the world
- The highest quality products for the best possible prices
- Superb support with the largest R&D team in the industry
- Continuous innovation – first to market with 5G, LPWA, CV2X, snapdragon
- A passionate, dedicated team of “Quectelers” ensure our customers always come first

Thank You

Build a Smarter World

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