

An aerial night view of a city with a network overlay. The city is illuminated with blue and white lights, and a complex network of glowing blue lines and nodes is superimposed over the scene, representing a communication network. The background is dark, making the city lights and network nodes stand out.

**QUECTEL**

# Quectel UC200A-GL UMTS & HSPA+ Module

Introduction

Build a Smarter World

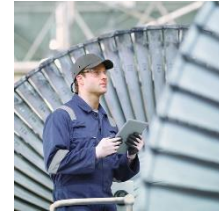
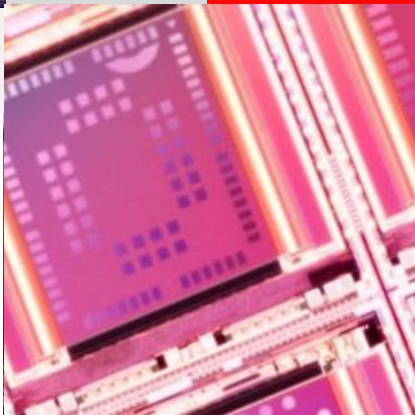
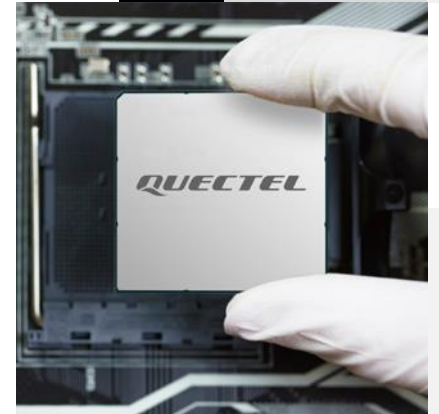




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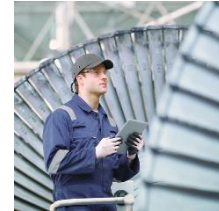
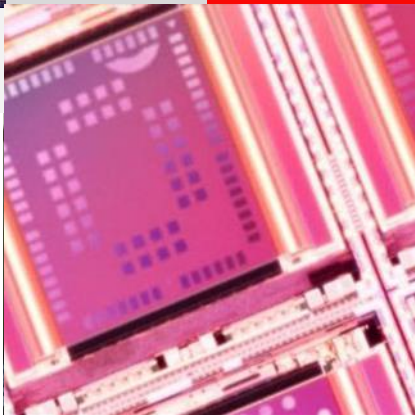
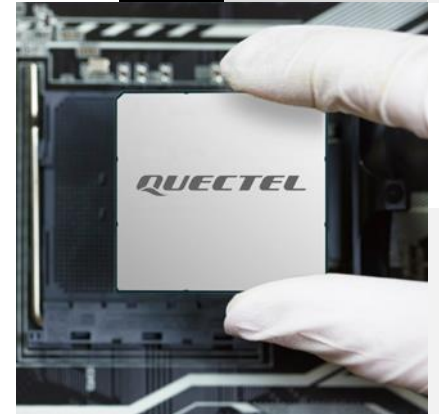
# Highlights

Specifications

Enhanced Technologies

Typical Applications

Build a Smarter World



# UC200A-GL Highlights



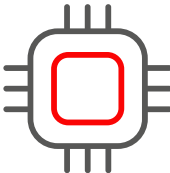
Worldwide coverage.



Cost-optimized solution for industrial applications.



Classic Form Factor: 29.0 × 32.0 × 2.4 mm



Chipset platform: ASR1803.

Compatible with EC2x series, EG2x-G and EC200x series.





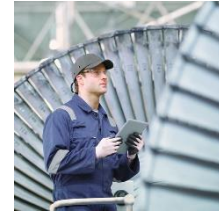
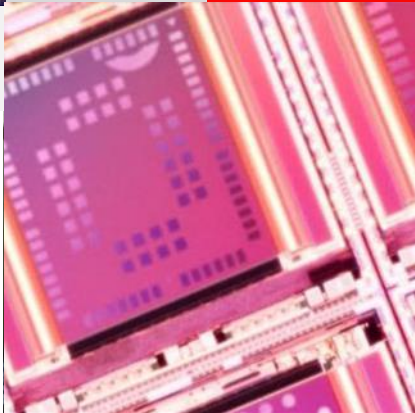
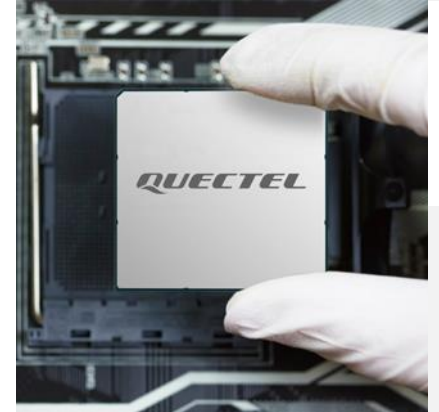
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# UC200A-GL Specifications

29.0 mm × 32.0 mm × 2.4 mm  
21 Mbps DL/ 5.76 Mbps UL



<b>Variant</b>		<b>UC200A-GL</b>
<b>Region</b>		Global
<b>Chipset</b>		ASR1803
<b>UMTS</b>	<b>WCDMA Band</b>	B1/ 2/ 5/ 8
	<b>TD-SCDMA Band</b>	-
<b>GSM</b>		Quad-band
<b>Power Supply</b>		3.4–4.5 V, typ. 3.8 V
<b>Interface</b>		(U)SIM/ UART/ USB/ Audio Digital (PCM)/ I2C/ ADC/ Antenna
<b>Protocol</b>		TCP/ UDP/ PPP/ NTP/ NITZ/ FTP/ HTTP/ PING/ CMUX/ HTTPS/ FTPS/ SSL/ FILE/ MQTT/ MMS/ SMTP/ SMTPS/ CSD*
<b>Feature</b>		DFOTA/ QuecLocator®/ (U)SIM Card Detection/ RIL Driver/ USB RNDIS Driver/ USB Serial Driver/ USB ECM Driver
<b>Certification</b>	<b>Regulatory</b>	CE/ FCC/ Anatel/ RCM
<b>Project Stage</b>		MP

\* : Under development.



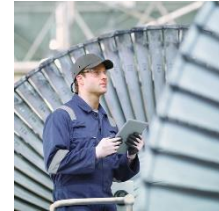
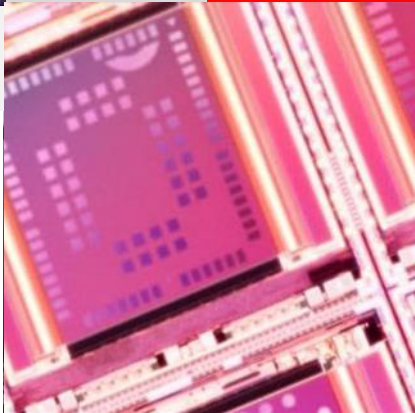
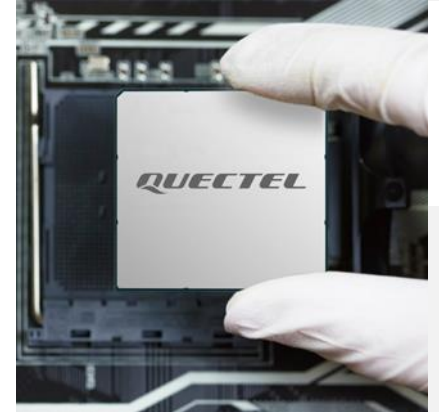
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Specifications

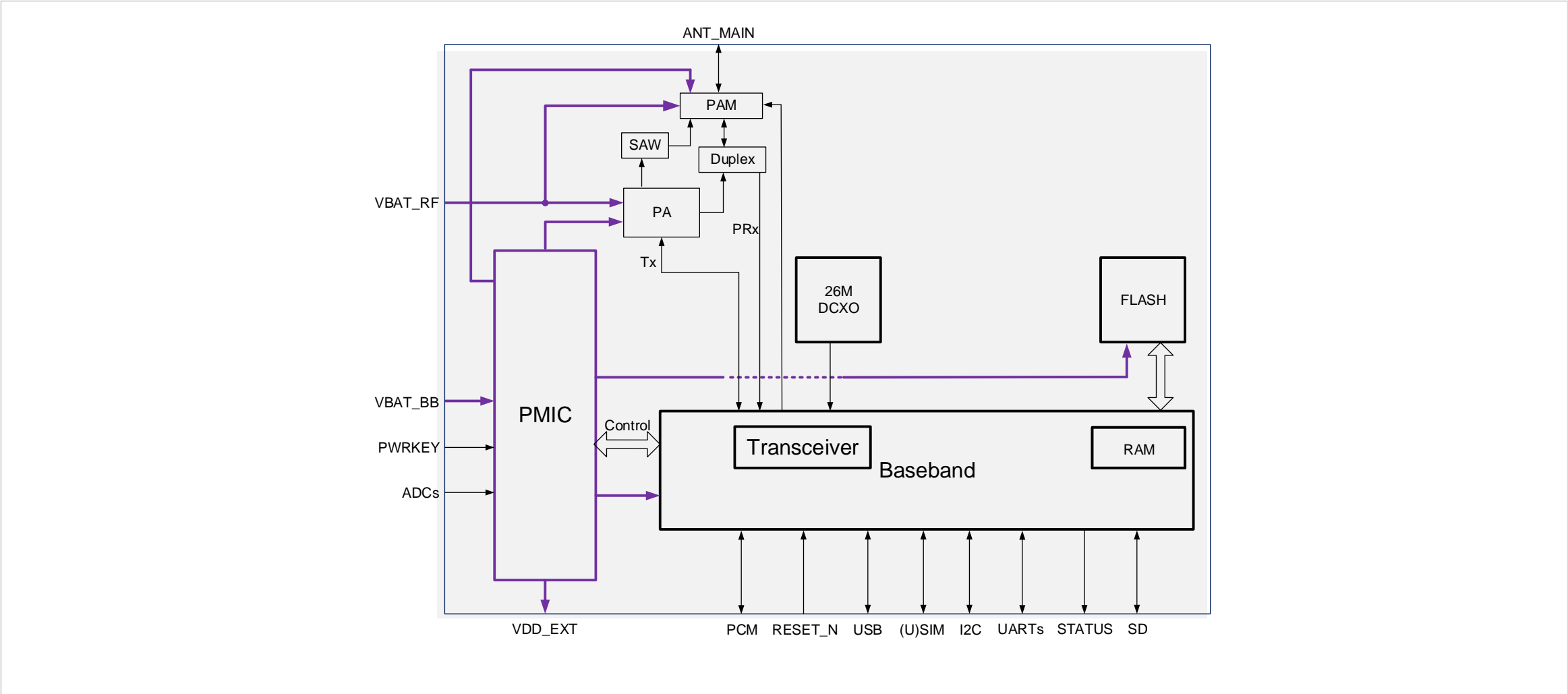
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# Hardware Architecture





## USB Serial Driver

- Windows 7/ 8/ 8.1/ 10/ 11
- Linux 2.6–5.18
- Android 4.x–12.x

## Other Drivers

- RIL Driver: Android 4.x–12.x
- USB RNDIS Driver:  
Windows 7/ 8/ 8.1/ 10/ 11  
Linux 2.6–5.18
- USB ECM Driver:  
Linux 2.6–5.18

## Quality Guarantee

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

## Special Features

- TTS
- QuecFile®
- DFOTA

## Flexible Applications

- (U)SIM card detection
- DTMF

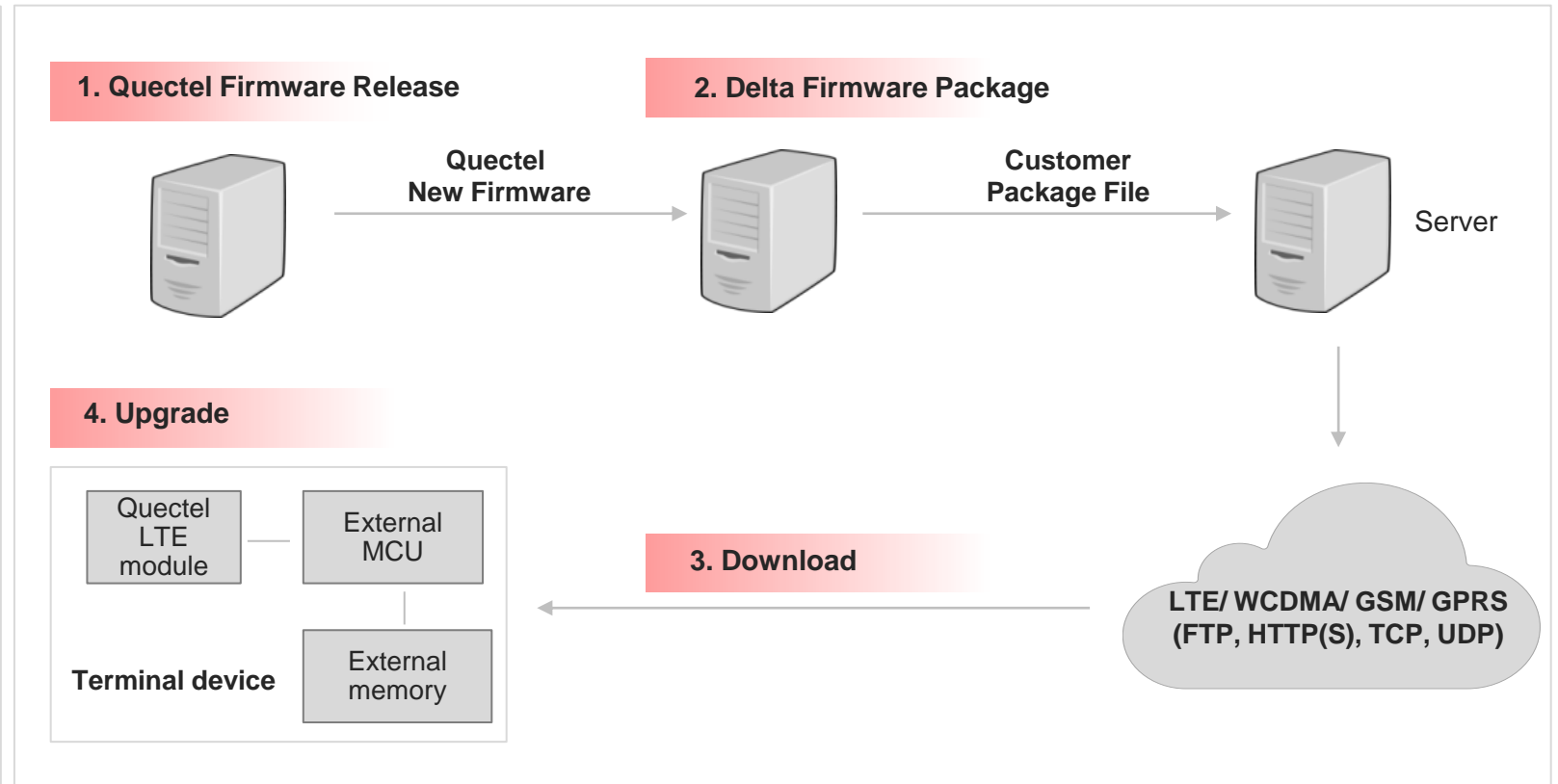
## Enhanced AT Commands

- Standard V.25ter AT commands
- 3GPP TS 27.007 (GSM 07.07)
- 3GPP TS 27.005 (GSM 07.05 SMS)
- TCP/IP stack AT commands
- STK ((U)SIM Application Toolkit)

DFOTA is an acronym for Delta Firmware Upgrade Over-The-Air. DFOTA technology enables mobile device manufacturers to remotely update software. New software can be delivered over the air, eliminating the need for users to bring the device to a service facility.

## Firmware Upgrade Procedures via DFOTA

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

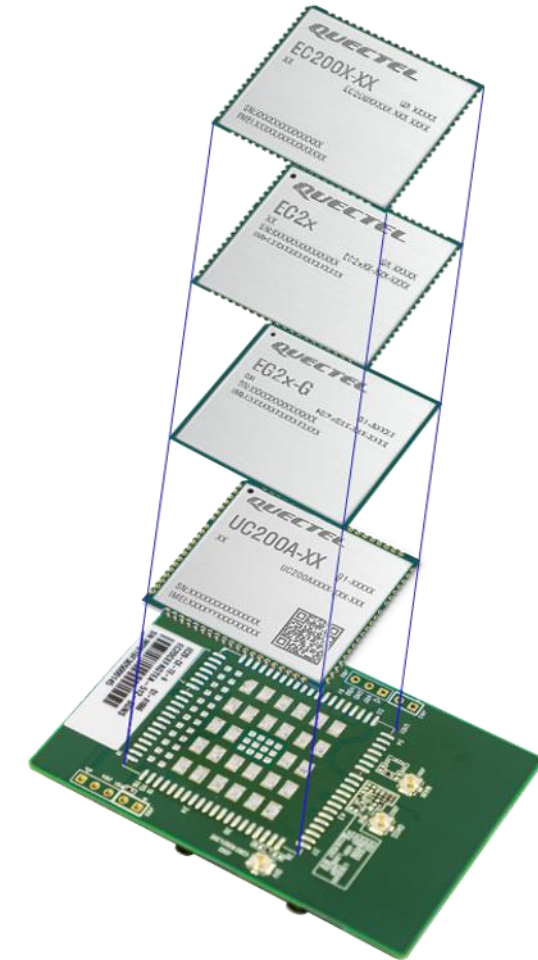


# UC200A-GL Layout Compatibility

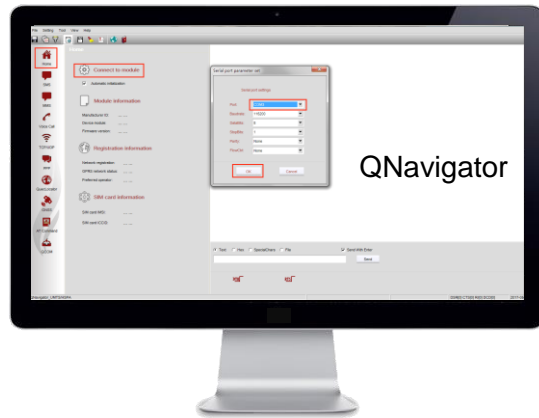


**UC200A-GL is compatible with the following Quectel modules:**

- LTE Standard EC2x series/ EG2x-G/ EC200x series



The compatibility diagram shown above is for illustration purpose only.  
The actual appearance of the modules may be different.



## Technical Materials Package

- Hardware & software specifications
- Application note package
- Debug tool, download tool, test tool, EVB package & USB drivers
- Approvals & test report package
- QNavigator

## EVB Kit



UMTS&LTE EVB Kit

### • Interfaces

- a) RS-232 interfaces
- b) USB interface
- c) Power supply
- d) Antenna interface
- e) Handset interface
- f) Earphone interface
- g) Test points

### • Features

- a) Digital or analog audio interface
- b) Network status LED
- c) Power key
- d) Reset key





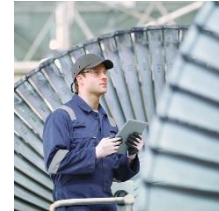
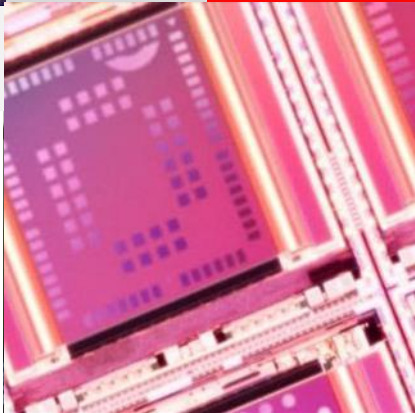
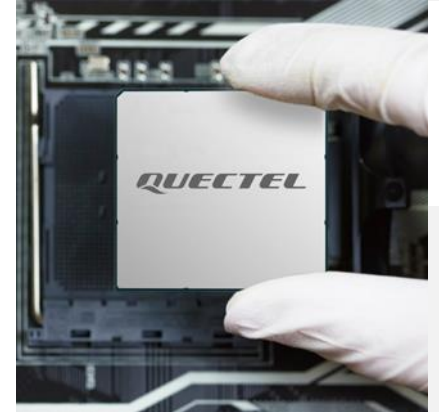
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# Typical Applications



## Intelligent Transportation

- IoV
- CVI
- Vehicle Tracking
- Asset Tracking
- Ship Tracking
- Fleet Management
- OBD
- DVR
- UBI

## Smart Energy

- Ammeter
- Gas Meters
- Water Meters
- Thermal Meters
- Smart Grid
- Wind Generators
- Solar Power Generation
- Charging Piles

## Payment

- Wireless POS
- Cash Registers
- ATM
- Vending Machines
- Top-up Machines



# Typical Applications



## Smart City

- Street Lighting
- Traffic Lights
- Sharing Economy
- Elevator Monitoring
- Smart Parking
- Parking Meters
- Toll Collection Systems
- Digital Indicators
- Advertising Boards
- Smart Bins
- LED Landscape Lighting Control

## Wireless Gateway

- DTUs
- Consumers Routers
- Industrial Routers
- VoIP
- Servers
- Wi-Fi Hotspots

## Intelligent Agriculture & Environmental Monitoring

- Food Traceability
- Farmland Monitoring
- Farm Management
- Meteorological Stations
- Wildlife Protection
- Farm Irrigation
- Environmental Monitoring





# Typical Applications



## Intelligent Industrial

- Industrial PDAs/ Scanners
- Industrial PCs
- Industrial Computers
- Pipeline Monitoring
- Robots
- Flowmeters
- UAV
- Industrial Refrigeration
- Indoor Air Detection
- Water Valves/ Pump Controls

## Smart Life & Healthcare

- Personal Trackers
- Pet Trackers
- Wearables
- Home Automation
- Elderly Monitoring
- Remote Medical Equipment
- Glucometers
- Blood Pressure Meters
- Game Machines
- Patient Monitoring
- Mobile PCs

## Smart Safety

- Alarms
- Intrusion Detectors
- Smoke Detectors
- Gas Detectors
- Motion Sensors
- Asset Protection







**We are a global IoT solutions provider, backed by outstanding support and services, to deliver a smarter world.**

- Unbeatable choice from the broadest module portfolio in the world
- High quality range of off-the-shelf and customized antennas
- Providing Connectivity-as-a-Service
- Superb support with the largest R&D team in the industry
- Continuous innovation – in 5G, LPWA, CV2X, Smart Modules
- A passionate, dedicated team of “Quectelers” ensure our customers always come first

*Thank You*

**Build a Smarter World**

Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China

Tel: **+86 21 5108 6236** Sales Support: [sales@quectel.com](mailto:sales@quectel.com)

Technical Support: [support@quectel.com](mailto:support@quectel.com) General: [info@quectel.com](mailto:info@quectel.com)