

Q-Newsletter

Quectel Wireless Solutions is a leading global provider of GSM/GPRS, UMTS/HSPA and GNSS modules.

M2M Application

Automotive Solution
Energy Solution

Technology

eCall
Qcamera

New Product

Quectel UC20 3G Module

Events





Saudi Arabia
North latitude 24°41'16.81"
East longitude 46°43'20.76"



Automotive

Green, clean, cost effective and intelligent travel has become a new trend in this era.

It has proven that M2M-enabled technology has the power to improve transportation systems in five significant areas: road safety, navigation, environmental impact, freight and logistics management and traffic management. In addition to, telematics and infotainment will soon become standard in new vehicles.

The challenges facing Quectel Wireless are:

- Rugged, high quality components
- Cost effective, high volume components for vehicle life span
- Tools and services to simplify integration and accelerate product development
- Real-time data collection and monitoring
- Data security and reliable data transmission

Quectel Wireless Solutions takes these challenges and turns them into opportunities to develop GSM/GPRS and GNSS modules for automotive applications:

CEmergency call

- Navigation and driver assistance
- Infotainment
- Vehicle diagnostics
- Stolen vehicle tracking & recovery

The advantages of Quectel modules:

- **High Quality:** Quectel modules that are used in automotive applications are subject to rigid mandatory tests and all modules are manufactured in the ISO/TS16949 certified facility. They all can meet stringent environmental & temperature requirements (-40 °C ~ +80 °C).

- **Long Durability:** Ensure durability that lasts the lifetime of the vehicle with ruggedized designs that meet the industry's toughest quality and life span requirements.

- **eCall function:** Quectel M95 module is equipped with eCall emergency system, which can automatically contact the nearest Public Safety Answering Point (PSAP), transferring vital information such as time of accident, location of vehicle, vehicle description, Vehicle Identification Number, registered owner, etc. Emergency assistance can be dispatched immediately to shorten response time and save lives.

- **Accurate and fast positioning:** Advanced EASY technology and Location Based Service (LBS) respectively ensures Quectel GPS and GSM/GPRS modules used in automotive applications accurate and fast positioning in the conditions of no GPS signal reception.

- **Test to Speech function:** To meet the requirements on the Voice Navigation, Voice Operation and taking photos and video, Quectel launched its multifunctional driver with Test-to-Speech function and built-in camera. This driver is dramatically simplifies the customer's application design and reduce the total cost of the ownership.

- **SMD Packaging:** SMD packaging makes Quectel modules much a smaller compact size, which successfully reduce vibration induced by rough road.

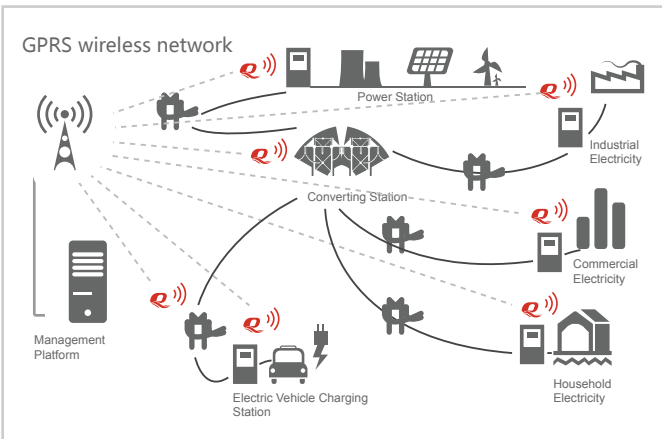




Energy

With the new energy economy trend of innovation and smart communication penetrating into m2m industry, Quectel wireless solutions designed the solution that integrates wireless communication technology with smart grid, which both meet the wireless communication needs and make the energy supply smart, secure, sustainable and reliable.

big temperature difference between day and night. So, the high reliability of GSM/GPRS module is of prime important. With the advanced product design standard, optimized software algorithm, and amounts of MTBF and RF testing, Quectel modules can performance well even in the areas of poor or no GSM/GPRS signal reception.



Remote diagnosis, over-the-air updates and automated warning system

Remote diagnosis, over-the-air software patches and automated warning system have increased security for the field staff, who are no longer required to enter high voltage substation to read meters.

Secure data transmission

Interference detection and security mechanisms for data transmission have been taken to guarantee the data transmission secure in the GPRS network.

Home-area networks

The main challenge faced today by the energy distribution companies is to balance the available energy supply of renewable energy sources and the current electricity demand from the customer. Quectel has embedded HAN into its modules, through which customers can know the electricity value consumed and the latest value list of Electricity Company and two-way communications between customer and electricity have been established.

GSM/GPRS modules play an important role in the whole system of smart grid, which is the bridge between sensor and base station, as well as the environment of smart meter deployment is varied. So, GSM/GPRS modules need to be solid and reliable year in and year out. Quectel modules address the requirements mentioned above through:

Reliable data connection in hazard condition

Smart meters are equipped in the varied temperatures from the lowest -40 to the highest +80°C, or in the area where there is



eCall

eCall is a European initiative intended to bring rapid assistance to motorists involved in a collision anywhere in the European Union. The eCall initiative aims to deploy a device installed in all vehicles that will automatically dial 112 in the event of a serious road accident, and wirelessly send airbag deployment and impact sensor information, as well as GPS coordinates to local emergency agencies.

eCall provides reliable full-duplex data transmission between In-vehicle System (IVS) and Public Safety Answering Point (PSAP) in addition to emergency voice call via the cellular network and can be initiated either automatically or manually. The eCall In-band modem ensures reliable data transmission of the eCall Minimum Set of Data from IVS to PSAP via the voice channel of cellular and PSTN network. In the event of a vehicle collision, the in-band modem transmits vehicle location, airbag deployment, and other relevant information timely and reliably from the in-vehicle system (IVS) over the cellular network voice channel to the public safety answering point (PSAP). As soon as the PSAP received the emergency call, it will dispatch the rescue assistance to accident site, which can shorten response time and save lives.

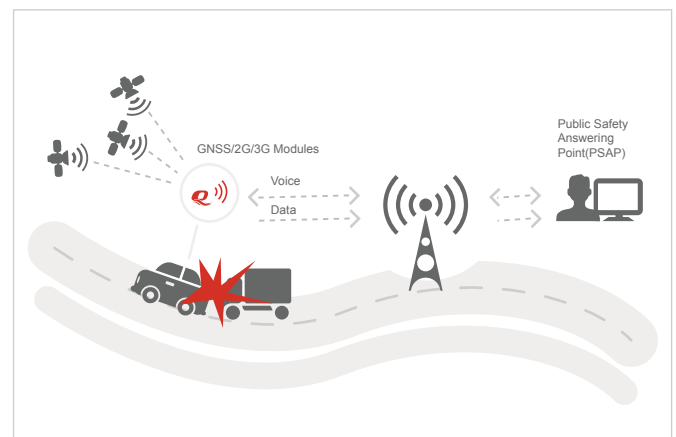
The requirements on the products for eCall

- High Reliability and Sensitivity To ensure Minimum Set Data can be timely and reliably send to the PSAP from the IVS after the strong collision, high reliability and sensitivity of the products is of prime importance in addition to supporting backup battery.

- Remotely Upgrade Firmware The firmware in the products can be updated remotely via FOTA function, which can dramatically reduce cost in maintenance.

- Compact Form Factor The products with tiny size can be easily embedded in the automotive applications.

Diagram for eCall Emergency system



Advantages of Quectel Wireless Solutions for eCall

- Low Current Consumption
- Ultra Compact Form Factor
- High RF performance and High sensitivity <-108.5dBm
- Firmware can be updated over the air by QuecFOTA

New Product

UC20 Key Benefits

Worldwide UMTS/ HSPA and GSM/ GPRS/ EDGE coverage

Minimal SMT form factor ideal for small end products with tight space

High-quality transmission of data and images even in hazard conditions and dark environment

Fast time-to-market: reference designs, evaluation tools and timely technical support minimize design-in time and effort

Equivalent noise-figure performance is archived by primary and diversity receive patches of WCDMA

Robust mounting and interfaces

General Features

HSPA 14.4M/5.76M

29.0 x 32.0 x 2.5mm

WCDMA: 850/ 1900 or 900/ 2100MHz

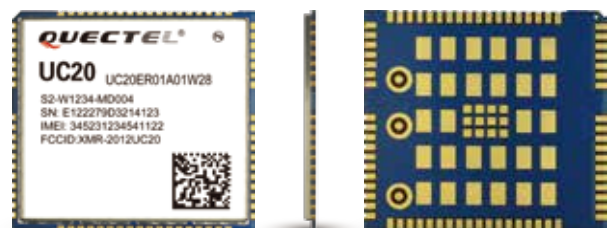
GSM: 850/ 900/ 1800/ 1900MHz

LCC package

USB/ UART/ PCM/ ADC/ SPI

TCP/IP support

Linux/Android/WinCE



Scale 1:1

Quectel Wireless Solutions becomes the member of Shanghai IoT (Internet of Things) Association



Quectel officially becomes the member of Shanghai IoT Association in February, 2013, devoted to make greater contributions to the development of IoT industry.

The aim of Shanghai IoT Association is to speed up IoT innovative technology development, improve resource integration and IoT demonstration application, and enhance the core competition of Shanghai IoT industry and promote its sustainable development, all of which aim to establish a Smart City of Shanghai, and stimulate Shanghai's economy and society to greater development.

China's Twelfth Five-year Plan clearly put forward with IoT (Internet of Things) development program. Currently, Internet of Things have been applied in many areas, such as security protection, power management, transportation, logistics, medical, recycle and environment protection, etc. Many application modes are becoming

more and more mature. Although many progresses have been made in industry development, technology research, standardization and application promoting, there are some bottlenecks and constraints in the development of Internet of Things. It is mainly shown in following area: kernel technologies and high-end products still has wide gap with foreign countries; industries are short of leading enterprises; many applications are in low level and lack of large-scale applications; and there still have some potential issues in information security area, etc.

Quectel Marketing department manager Jacob Xia said, Shanghai IoT Association will become the leader in the IoT industry in the future depending on Shanghai's influence in international economy, commercial, transportation. We are very honored to be the member of Shanghai IoT Association and continues to be grounded in IoT industry as well as hope to participate in formulating standards and have deep cooperation in the industrial chain.

Quectel Wireless Solutions opens offices in Italy, Poland and Russia



Quecel, a leading provider of GSM/GPRS/GNSS/UMTS modules, announces today the opening of its three new overseas offices, respectively located in Milan, Italy; Warsaw, Poland and Moscow, Russia.

2012 is a tough year for Quectel's business expansion as the complicated marketing environment especially Euro zone. Product's upgrade brings difficulty in customer's expansion as well. Thanks to customer's trust on Quectel and joint efforts with partners, Quectel successfully occupies overseas market in North and South America. Quectel CEO Patrick Qian said, "We need initiate to win our customers not waiting. The opening of Italian, Poland and Russian office will offer our customers' a local platform to understand Quectel as well as enable us to provide customers with timely support and service".

The contact information for the Quectel Italian, Poland and Russian office is:

Quectel Italian Office

Contact: Pasquale Lenoci

Email: pasquale.lenoci@quectel.com

Quectel Poland Office

Contact: Tomasz Wiczorek

Email: tomasz.wiczorek@quectel.com

Quectel Russian Office

Contact: Alexey Kotov

Email: alexey.kotov@quectel.com

Quectel to participate at "Embedded World Exhibition & Conference 2013"



Quectel Wireless Solutions will participate at the " Embedded World Exhibition & Conference 2013" in Nuremberg, Germany from February 26 through 28 2013.

The embedded world Exhibition & Conference is the world's biggest exhibition and conference on the design and application of embedded hard- and software. It presents embedded technologies across all sectors, from automotive to data and telecommunica-

tions systems or industrial and consumer electronics. This is the annual international summit for design engineers and meeting point for innovative brains of a whole industry which is very aware that its ideas and products are the driving force and guarantor of economic growth and social peace on this planet.

Quectel will be exhibiting in Hall 4A, booth 421. Please visit us to learn more about our latest products.

