

# UC15 UMTS/HSDPA Module Presentation

February, 2015

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**Highlights**

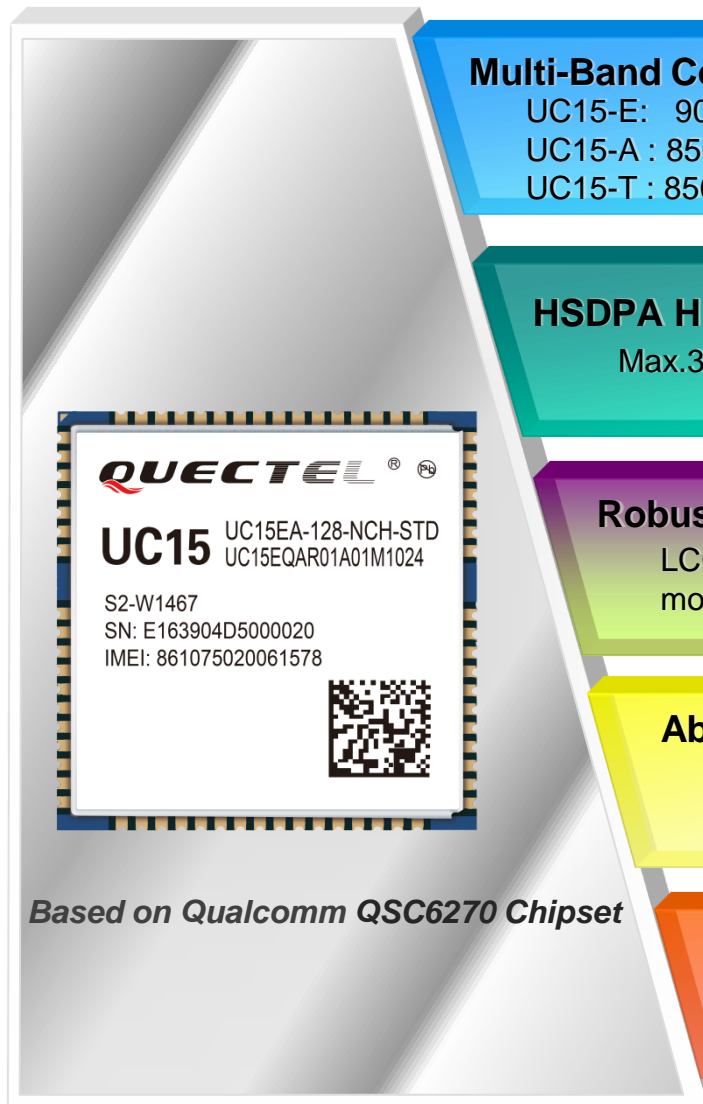
**Advanced Features**

**UC15 Vs. Competitor's Products**

**Support Package**



# Highlights



## Multi-Band Combination

UC15-E: 900/2100MHz @UMTS, 900/1800MHz @GSM  
UC15-A : 850/1900MHz @UMTS, 850/900/1800/1900MHz @GSM  
UC15-T : 850/2100MHz @UMTS, 850/900/1800/1900MHz @GSM

## HSDPA High Speed Packet Access

Max.3.6 Mbps (DL), Max.384 Kbps (UL)

## Robust Package

LCC package with heat sink design, compatible with GSM/GPRS M10 module in unified form factor

## Abundant Functionalities and Interfaces

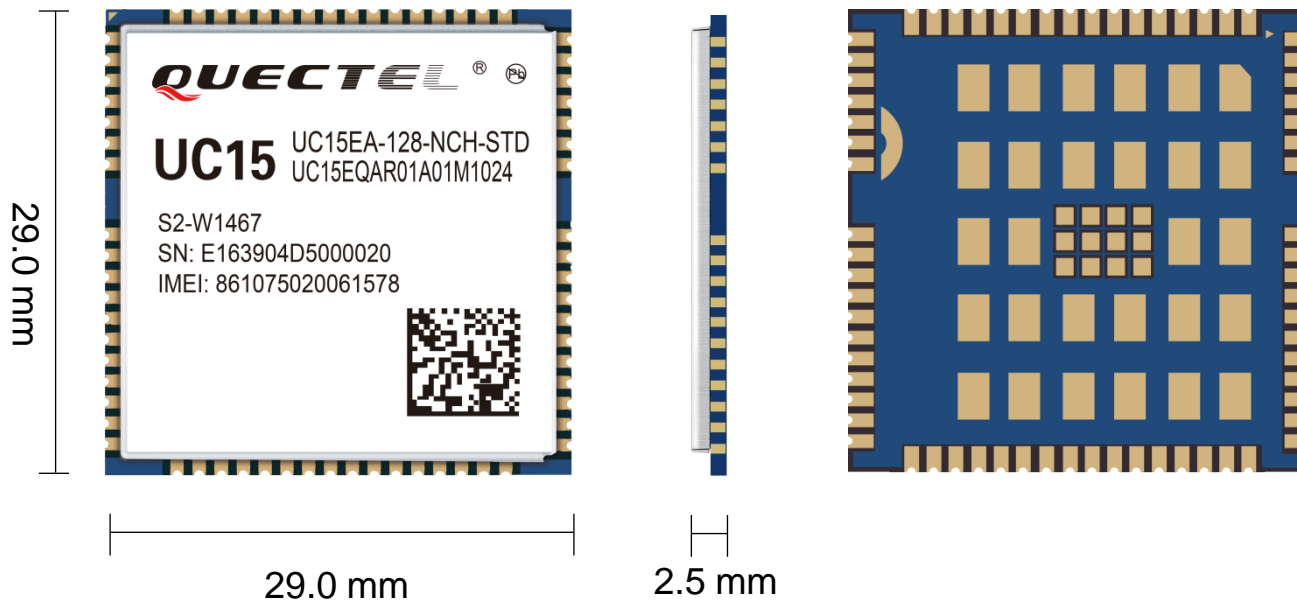
USB/UART/USIM/Analog Audio (optional)/PCM/ADC/RESET/  
NETLIGHT/eCall

## Extended Temperature Range

-40°C ~ +85°C

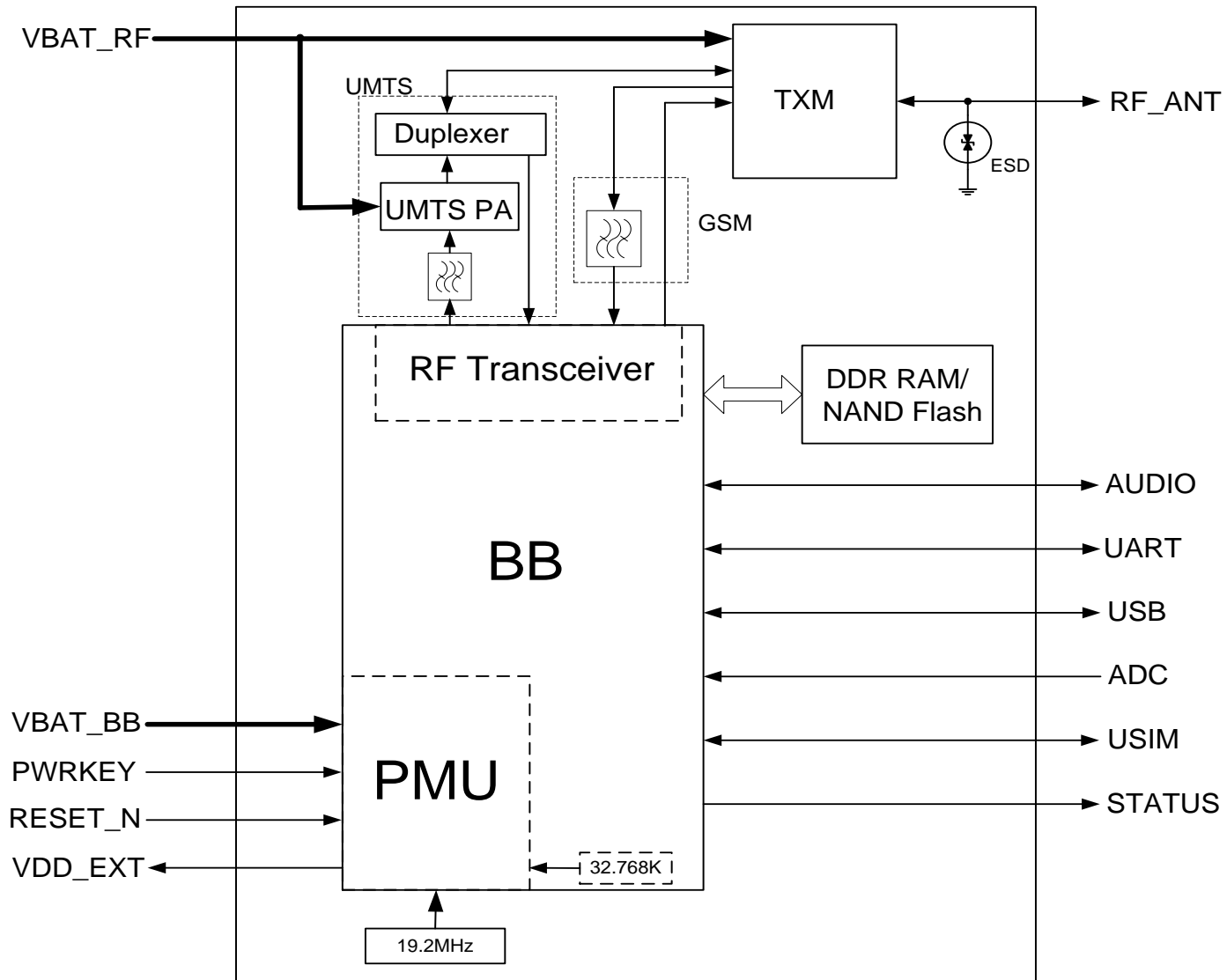
*\* Under development*

# Mechanical Dimensions



Length:	29.0 mm ( $\pm 0.15\text{mm}$ )
Width:	29.0 mm ( $\pm 0.15\text{mm}$ )
Height:	2.5 mm ( $\pm 0.2\text{mm}$ )
Weight:	Approx. 4.3g

# Hardware Architecture



# Software Advantages

## USB Serial Drivers

- Windows XP/ Vista/ 7/ 8/ Windows Mobile 6.1/6.5\*
- Windows CE5.0/6.0/7.0
- Linux 2.6 or later
- Android 2.3 or later

## Quality Guarantee

- Reliable network protocol
- Steady flash protected mechanism
- Superior audio algorithms
- High sensitivity

## Mux&RIL Drivers

- RIL: Windows CE6.0\*, Windows Mobile 6.1/6.5 \*
- MUX: Linux 2.6 or later  
Android 2.3 or later

## Flexible Applications

- eCall
- Sim card detection
- DTMF

## Abundant Protocols

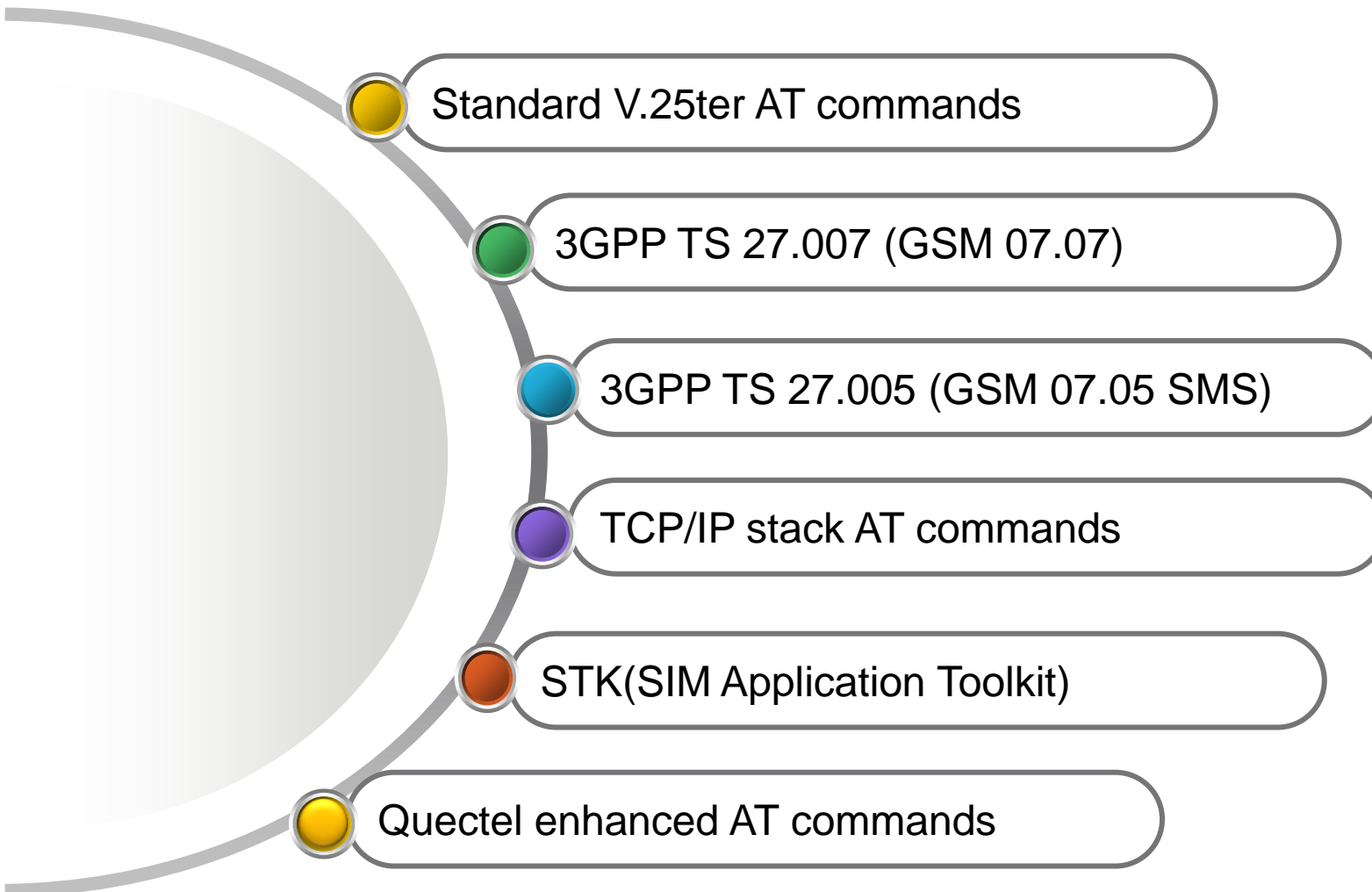
- TCP, UDP, PPP
- SMS
- FTP, HTTP, MMS, SMTP
- MUX, SSL

## Special Features

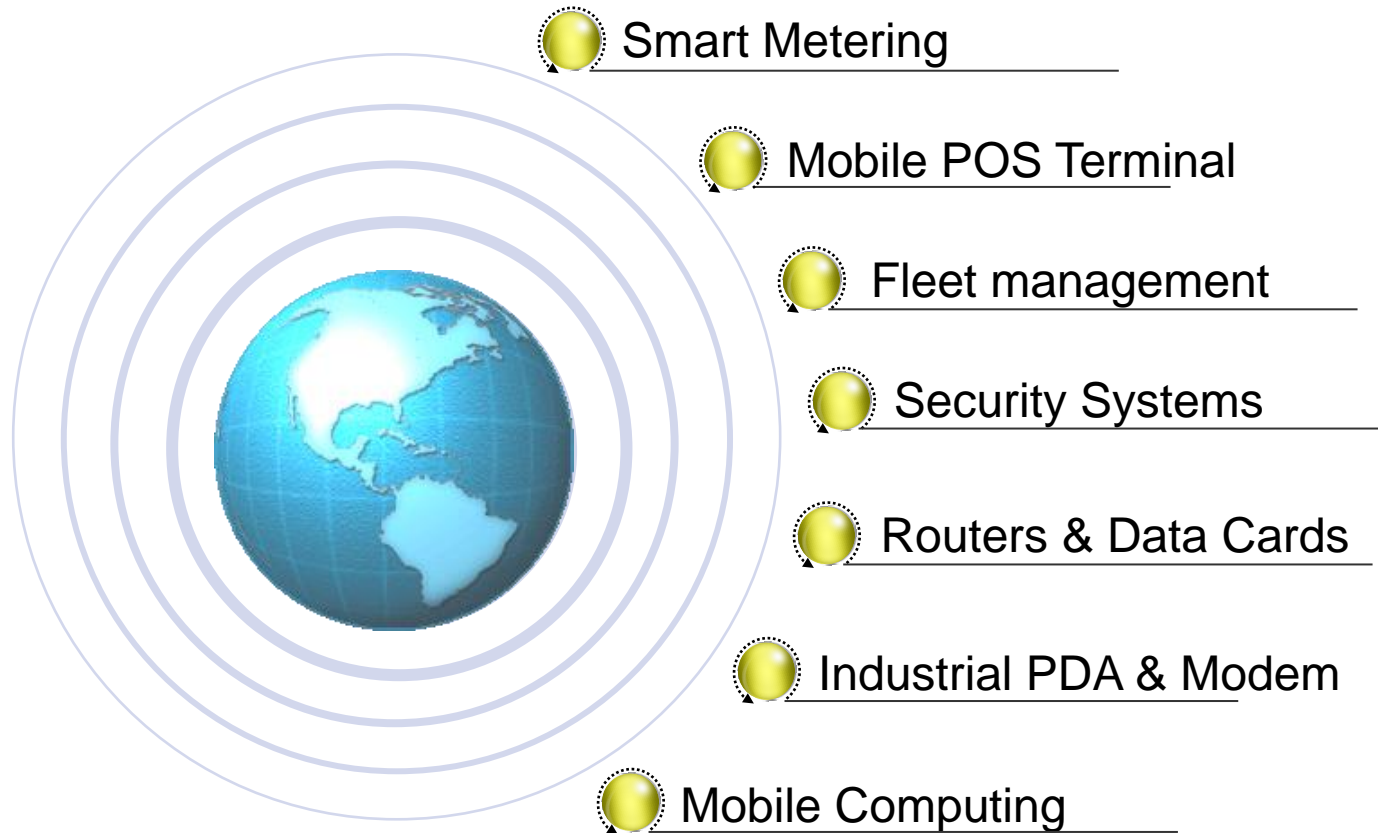
- QuecFOTA
- QuecFile
- QuecLocator
- Over Temp.& Voltage Protection

\* Under development

# Enhanced AT Commands



# Target Applications





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Advanced Features

UC15 Vs. Competitor's Products

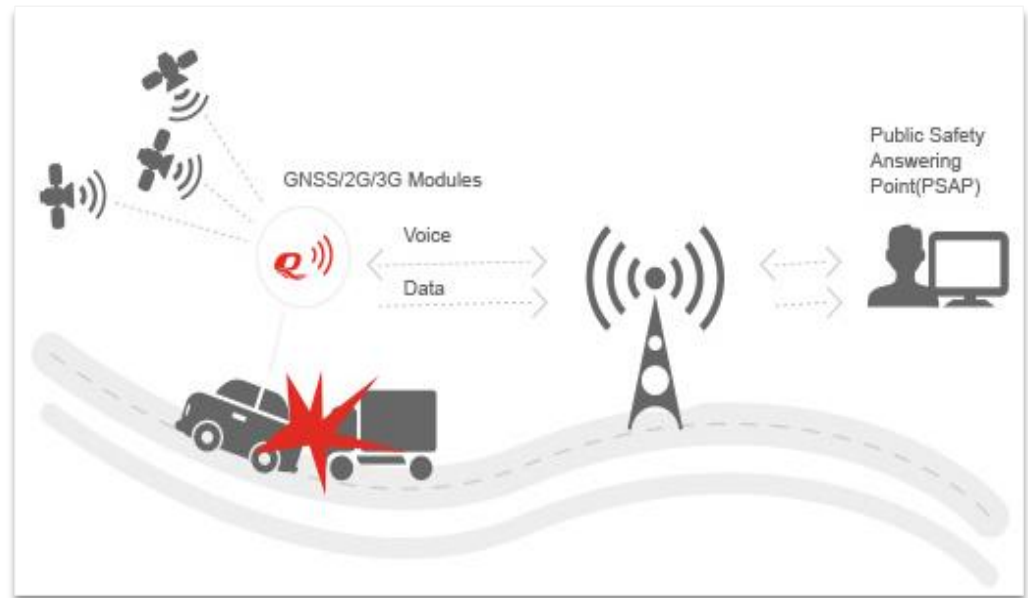
Support Package



UC15 supports eCall function.



A car will have an electronic safety system automatically calling emergency services in case of a serious accident. Even if the driver is unconscious, the system will inform rescue workers of the crash site's exact whereabouts, and the rescues will be on its way within minutes. The system is named as "eCall".

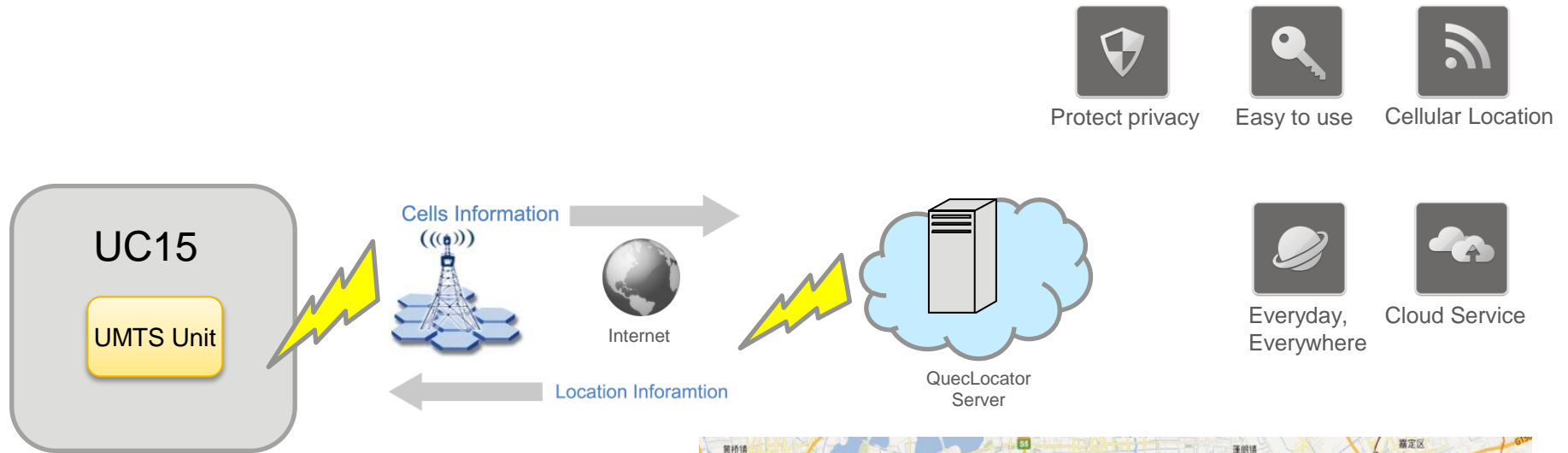


- *Quectel supports eCall in 2G Modules as well and has been working on eCall since late 2011.*
- *Quectel has enough development experience on eCall to support and assist with customer's eCall application development.*

# QuecLocator

## QuecLocator, Quectel Cell Locate Technology

Since Quectel modules have its own cloud server, customers can be free to get cell location information through Internet.



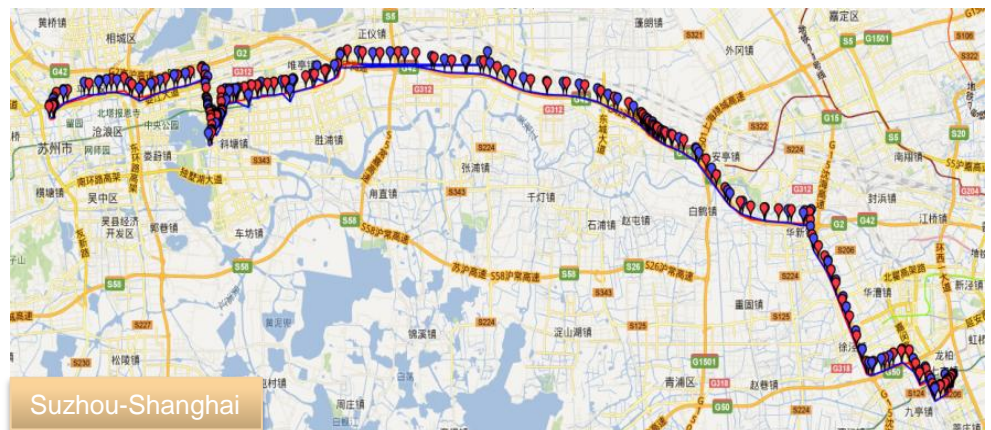
## Field Test Result



GPS signal records



UMTS signal records

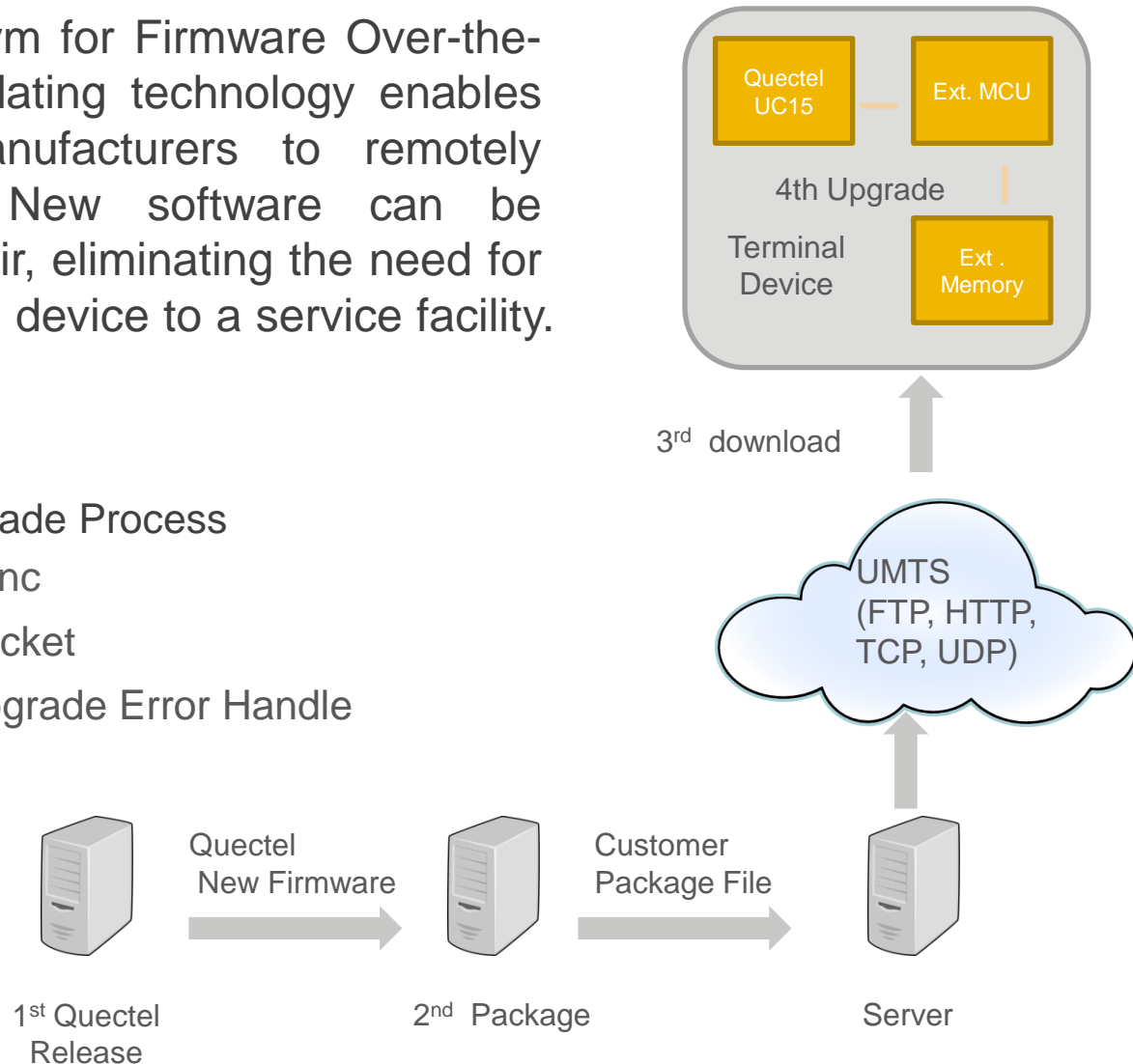


# QuecFOTA

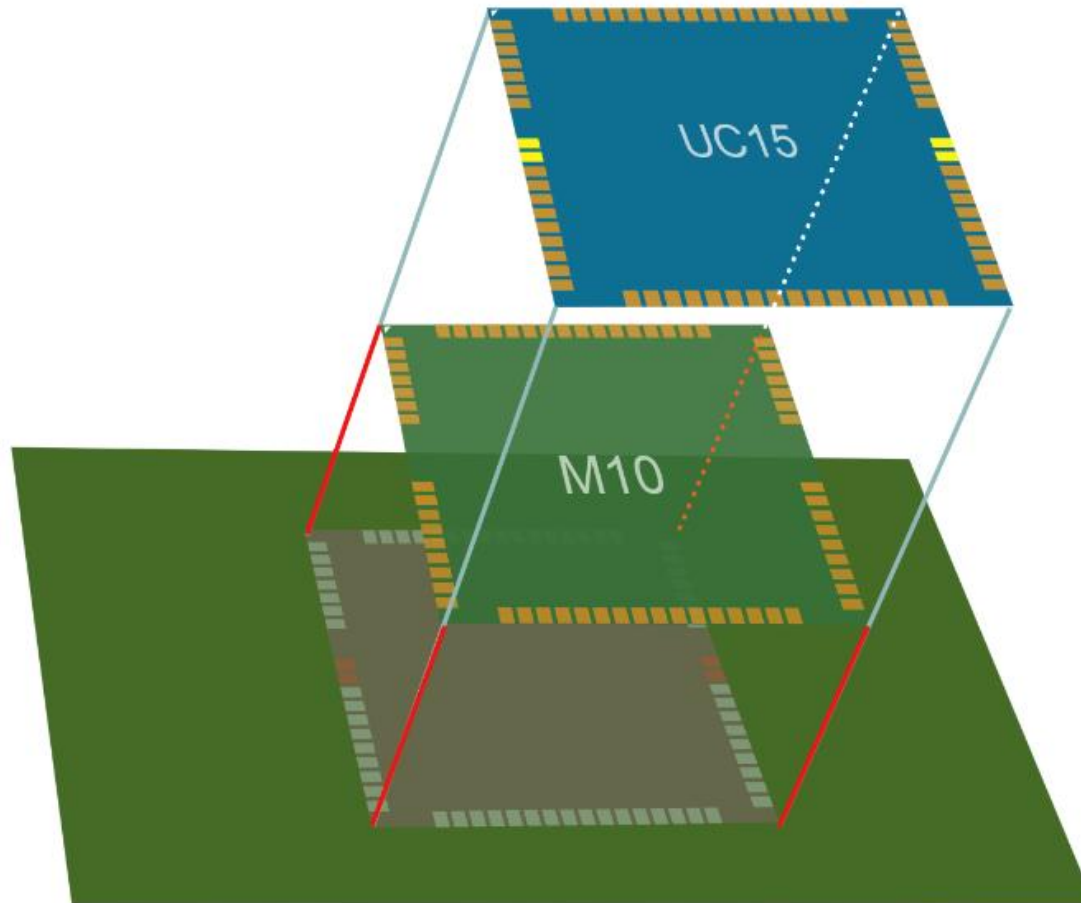
FOTA is an acronym for Firmware Over-the-Air. QuecFOTA updating technology enables mobile device manufacturers to remotely update software. New software can be delivered over the air, eliminating the need for the user to bring the device to a service facility.

## QuecFOTA Upgrade Process

- QuecFOTA Sync
- QuecFOTA Packet
- QuecFOTA Upgrade Error Handle



# Layout Compatibility



UC15 is compatible with GSM/GPRS M10 module. Compatibility design accommodates both M10 and UC15 modules on the same PCB footprint.



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# UC15 Vs. Competitors' Products

Feature	UC15	Sx808	Ux910 V2	Sxx5320	Mx509
Platform	QSC6270	QSC6270	QSC6270	QSC6270	QSC6270
Package	LCC	LGA	LGA	LCC	LGA
Dimension	29×29×2.5 mm	25×30×2.35 mm	28.2×28.2×2.2 mm	30×30×2.9 mm	30×30×2.65 mm
Supply Voltage	3.3 to 4.3 V	3.3 to 4.3V	3.4 to 4.2V	3.4 to 4.2V	3.3 to 4.2V
Data Rate	DL 3.6 Mbps UL 384 Kbps	DL 3.6 Mbps UL 384 Kbps	DL 3.6 Mbps UL 384 Kbps	DL 3.6 Mbps UL 384 Kbps	DL 3.6 Mbps UL 384 Kbps
Voice	Supported (digital & analog)	Optional (digital & analog)	Optional (digital & analog)	Supported (digital & analog)	Supported ( digital & analog)
eCall	Supported	Unknown	Unknown	Supported	Not supported
Over Temp&Voltage Protection	Supported	Unknown	Unknown	Supported	Not supported
Compatibility with 2G Module	With M10	With SL6087	With GE910	Not supported	Not supported
Temperature Range	-40°C ~ +85°C	-30°C ~ +75°C	-30°C ~ +85°C	-30°C ~ +80°C	-30°C ~ +75°C
Quec Enhanced Function	QuecFile QuecFOTA ...				

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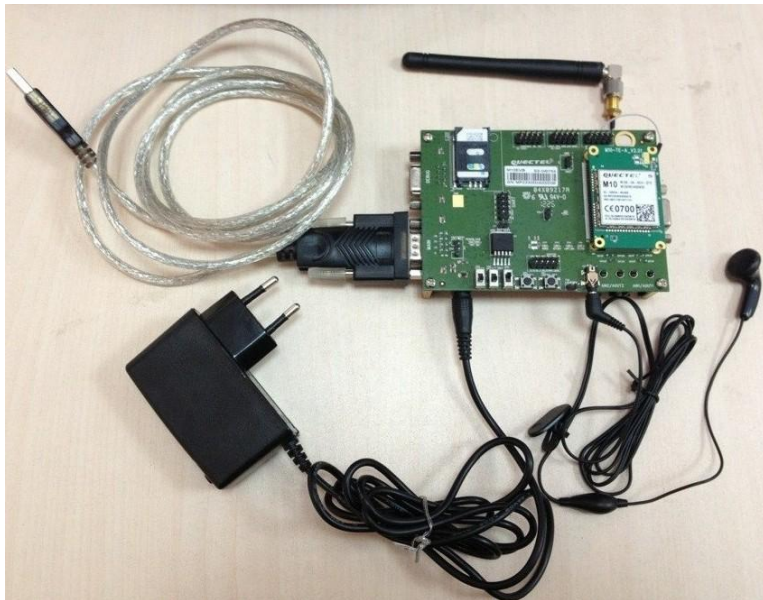




# Technical Materials Package

## ➤ Technical materials package

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



## ➤ Development Tool

- Interfaces
  - ✓ RS-232 interfaces
  - ✓ USB interface
  - ✓ Power supply
  - ✓ Antenna interface
  - ✓ Handset interface
  - ✓ Earphone interface
  - ✓ Test interface
- Features
  - ✓ Digital or analog audio interface
  - ✓ Network status LED
  - ✓ Power key
  - ✓ Reset key

***Thank you***

