LTE Cat-M1 Cellular IoT Module
RENESAS RYZ014A

Visit RYZ014A Page

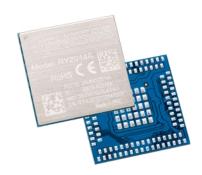## Integrated Cellular IoT Module for Global Deployment

The Renesas RYZ014A module is an all-in-one, single-mode LTE category M1 module with worldwide deployment and roaming capability.

The module comprises an LTE Cat-M1 platform and all other elements necessary for a complete LTE Cat-M1 modem system. These include an LTE-optimized transceiver, a single complete RF front-end to support LTE Cat-M1 bands worldwide, and key interfaces, all in a single compact LGA package.

The RYZ014A module also includes a carrier-proven LTE Cat-M1 protocol stack and a comprehensive software package for over-the-air device management and packet routing.

Features

- Integrated cellular IoT module for LTE Cat-M1
- 3GPP Release 13
- Field proven LTE Cat-M1 software stack
- AT command interface
- 20.25 x 21.35mm LGA package with 108 pads
- uSIM Interface
- Voltage 3.1V to 4.5V
- RoHS-compliant, halogen-free
- High output power supporting both power class options 20 and 23dBm

Applications

- Metering (Electricity/Gas/Water, Automated Meter Reading)
- Smart Home (HVAC, Thermostats)
- Infrastructure (Charge Poles, Parking Systems)
- Industry (Pumps)
- Agriculture
- Wearables & Trackers

RF & Carrier Certifications

Pre-certified to global RF regulations and multiple mobile network operators.

AT&T
verizon

Deutsche Telekom

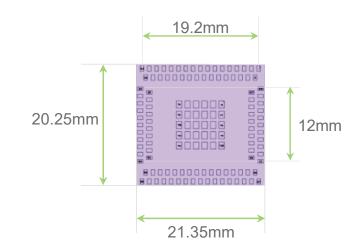KDDI
NTT docomo

Telstra

FC CE PTCRB
GCF IC

RENESAS RYZ014A

Benefits

- Reduced development cost and effort compared to chipset design
- Support for world-wide frequency bands in a single design removing the need to create multiple customer platforms for different global regions
- Ultra-low current consumption in power saving mode of only 1µA
- Pre-certified to global RF regulations and multiple mobile network operators

Package

19.2mm

20.25mm

12mm

21.35mm

Evaluation Kit

- Cellular modem evaluation kit based on Renesas module
- Usage and possible operations
  - Connecting to a host PC (Windows / Linux) through an external Serial Terminal Emulator Software
  - Sending AT commands to the kit
  - Connecting the EVK to a testing equipment
  - Connecting the EVK to a commercial network
  - Sending data through PPP

Ordering References

Part name	Description	MSL Rating	Shipping Packaging	Operating Temperature
RYZ014A000FZ00#HD0	LTE Cat-M1 Cellular Module	3	Tape&Reel	-30 to +85 degree
RYZ014A-NA-EVK	RYZ014A Evaluation Kit (N. America)			
RYZ014A-GB-EVK	RYZ014A Evaluation Kit (Global)			

For more details, please visit renesas.com/RYZ014A

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www.renesas.com