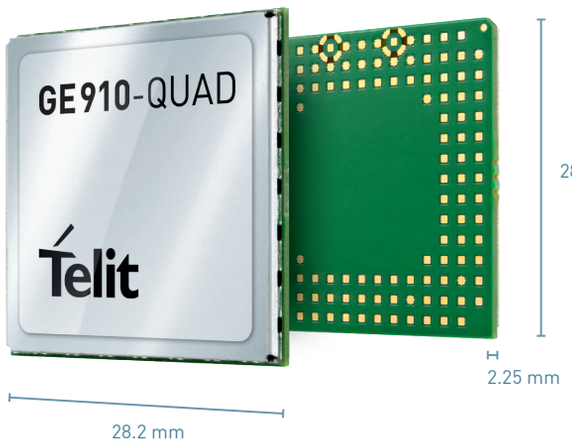
GE910-QUAD

GSM | GPRS Embedded



Product Description

The GE910 is a 2.5G cellular module designed to be fully compatible with Telit's HSPA and EV-DO products, also member of the compact, and connector-less xE910 unified form factor family. This allows you to design your application once and take advantage of global coverage by replacing the module with an UMTS, HSPA+, 1xRTT, EV-DO, or LTE alternate for your next market or for higher data rates. The LGA (Land-Grid Array) package enables an ultra-low profile, integrated solution while at the same time providing enhanced mechanical resistance to shock. An on-board ARM11 processor lets you deploy even the most demanding applications with high processing power requirements.

The GE910 is Telit first GSM | GPRS series of cellular modules to provide USB 2.0 Full Speed interface. Furthermore, the GE910 makes it possible to run the customer's applications inside the module using Python Script Interpreter, thus making it one of the smallest, complete platforms for IoT solutions. The GE910 supports embedded SIM chip as a mounting option, making it the ideal solution for durable and rugged designs, and reducing BOM cost and size on the customer's application. The IoT Connectivity SIM chip provides an all-in-one connectivity solution.

Key Benefits

- Design once and deploy globally, thanks to the xE910 unified form factor
- Ideal platform for medium-to-high-volume IoT applications
- Superior performance processor suitable for applications requiring high computing capacity

Family Concept

The xE910 Unified Form Factor family is comprised of pin-to-pin compatible modules in Telit's broadest range of cellular air interfaces and band combinations making it a pillar of the concept "design once and deploy globally".

A one-time design and integration effort enables worldwide or regional device re-use across different data rates and wireless technologies with air interfaces in GSM | GPRS, UMTS | HSPA+, 1xRTT, EV-DO, and LTE (pre-release).

The xE910 family was conceived to enable applications to be easily upgraded in a number of ways. For example: migrating from 2G to 3G or 4G; or upgrading from 2 bands to 3, 4, or more. The family fully preserves the core design of the application or device from launch to phase-out with modules packaged in a common 28.2 x 28.2 mm LGA footprint. It is recommended for mid to high-volume, compact sized applications.

Telit IoT LOCATE

IoT LOCATE is a Telit portal-based service that provides a device's position based on observed cellular Cell-IDs. Accessing a database of over 40 million cell-IDs globally, IoT LOCATE can provide a position for every use-case including indoors / underground, outdoors, and boundary situations.

IoT Connectivity and Portal Ready

This product is capable of supporting the extensive suite of Value Added Services from IoT Connectivity including Module Management and others which make the management of IoT deployments under mobile networks effective, enhancing profitability and reliability. It is also Portal-ready which means that the AT command library in this module includes a set of high-level commands designed exclusively for quick and hassle-free on-boarding of the device to the portal and to back-end systems and servers. Telit Portal-ready modules powered by deviceWISE make application-level data flows and controls simple to program, maintain and improve.

AVAILABLE FOR

- EMEA
- North America
- Latin America
- APAC
- Korea
- Australia

Click-to-Cloud – with Powerfull AT Commands

Combine your **Cellular** module with

Short Range modules

GNSS modules

www.telit.com

Complete, Ready to Use Access to the Internet of Things

IoT MODULES
IoT CONNECTIVITY
IoT PLATFORMS
IoT KNOW-HOW

ENABLING END-TO-END
IoT SOLUTIONS

GE910-QUAD

Product Features

- 4 Bands GSM | GPRS:
  850 / 900 / 1800 / 1900 MHz
- Quad Band GPRS class 10
- SIM Access Profile
- 3GPP release 4 compliant
- Control via AT commands according to 3GPP TS27.005, 27.007 and customized Telit AT commands
- Serial port multiplexer 3GPP TS27.010
- SIM application Tool Kits 3GPP TS 51.014
- Built in UDP/TCP/FTP/SMTP stack
- Voice and SMS
- Standard and extended AT command set
- Jammer rejection

Data

GPRS

- GPRS class 10
- Mobile station class B
- Coding scheme 1 to 4
- PBCCH support
- GERAN Feature Package 1 support (NACC, Extended TBF)

CSD

Environmental

- Dimensions 28.2 x 28.2 x 2.25 mm
- Weight: 3.6 grams
- Extended temperature range

Interfaces

- 10 I/O ports maximum including multifunctional I/Os
- Analog and digital Audio
- USB 2.0 FS Device Mode
- 2 UART
- I^2C (SW emulated)
- 1.8 V / 3 V SIM interface

Approvals

- CE, GCF (Europe)
- FCC, PTCRB, IC (North America)

Electrical & Sensitivity

- Output power
  - Class 4 (2 W, 33 dBm) @ GSM 850 / 900
  - Class 1 (1 W, 30 dBm) @ GSM 1800 / 1900
- Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.22 - 4.5 VDC
- Sensitivity

-107 dBm @ GSM 850 / 900 MHz
-107 dBm @ DCS1800 / PCS1900 MHz

Software

- Python* application resources
- Python* script interpreter (module takes the application code directly in the Python* language)
- Memory: 2 MB of NV memory for the user scripts and 2 MB RAM for the Python* engine usage

AppZone C application resources

- Programming language: C
- IDE: Eclipse
- Dedicated File System: 5 MB**
- Separate App. RAM Space: 2 MB**

**Available on dedicated ordering code.

Python and AppZone are mutually exclusive and either one or the other is supported depending on part number.

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For a quicker and more rewarding integration experience join the Telit Technical Forum. There you can browse the first open forum covering all IoT topics, get direct support by region (EMEA, North America, Latin America, APAC), take part in this quickly growing IoT community and exchange experiences.

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