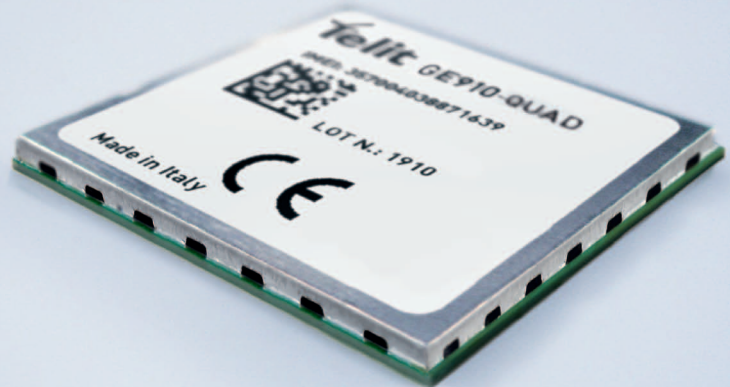


GSM | GPRS

GE910 Family Embedded



	Ultra Compact
	Telit Unified AT Command Set
	RUN AT Commands Remotely
	LGA Package
	Quad Band GPRS
	32 Channel GNSS Receiver
	RoHS Compliant
	SIM Access Profile
	Telit AppZone
	Programming in C
	Embedded FTP and SMTP Client
	USB 2.0 Full Speed Compatible
	Extended RF Sensitivity
	Serial Port Multi-plexer (3GPP 27.010)
	Embedded TCP/IP Stack



The GE910 is the GSM/GPRS product line of Telit's xE910 Unified Form Factor Family: m2m cellular modules with common LGA form factor, supporting all the different radio access technologies. With pin-to-pin compatibility across the xE910 Family, a one-time integration enables a seamless path to higher data rates and different wireless technologies with UMTS, HSPA+, CDMA 1xRTT, EV-DO and coming soon LTE.

The GE910 is Telit's first GSM/GPRS family of cellular modules to provide USB 2.0 full speed interface. It boasts a powerful ARM11 providing plenty of processing power and on board memory to run customers' applications, thereby reducing BOM final cost. The LGA package not only allows space and weight saving in portable devices thanks to its low profile, but it also enhances the mechanical resistance to shock and reduces the integration cost in medium-to-high-volume industrial processes.

The GE910-QUAD features quad-band GPRS wireless data connectivity, as well as analog and digital voice. Standard plus extended AT command set and built-in TCP/IP and UDP protocol stacks provide augmented functionality, adding value to the end application.

The GE910-GNSS variant adds a competitively priced GSM/GPRS plus GNSS combo solution supporting both GPS and GLONASS, significantly improving the overall receiver performance, aimed at opening up new m2m location aware telematics segments from automotive and fleet management applications, PDA's and mobile computing to livestock tracking and more.

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 m2m solutions.

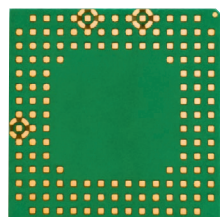
The GE910 Family will also feature the Telit AppZone platform: an embedded software environment enabling easy m2m application development with industry standard C code. The Telit AppZone eliminates the need for an external microprocessor, further reducing the application size and design/integration cost. With the GE910 and the Telit AppZone the Time to Market will be faster than ever.

The GE910 will support 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. m2mAIR SIM chip will be embedded as a standard to provide an all-in-one connectivity solution.

As a part of Telit's corporate policy of environmental protection, all Telit products comply with the RoHS (Restriction of Hazardous Substances) directive of the European Union (EU Directive 2002/95/EG).

GE910 Family

Embedded



actual size

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Distributed by:

Product features

- Supported bands
4 Bands GSM/GPRS:
850/900/1800/1900 MHz
- Quad Band GPRS class 10
- Small dimensions 28.2 x 28.2 x 2.25 mm
- Weight: 3.6 grams
- Extended temperature range
- Embedded SIM chip option
- 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

Interfaces

- 10 I/O ports maximum including multifunctional I/Os
- Analog and digital audio
- USB 2.0 FS Device Mode
- 2 UART
- 1 I2C
- 1.8 V / 3 V SIM interface
- 1PPS for precise timing
- EGNOS, WAAS and MSAS

Circuit switched data transmission

- Asynchronous non-transparent CSD up to 9.6 kbps
- V.110

GPRS data

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

Electrical

- Output power
 - Class 4 (2 W, 33 dBm) @ GSM 850 / 900
 - Class 1 (1 W, 30 dBm) @ GSM 1800 / 1900
- Sensitivity
 - -107 dBm @ GSM 850 / 900 MHz
 - -107 dBm @ DCS1800 / PCS1900 MHz
- Supply voltage
 - Nominal: 3.8 VDC
 - Range: 3.22 - 4.5 VDC

Optional GPS | GLONASS receiver

- Frequency Band: GPS (L1), Glonass (L1, FDMA), Galileo (E1)
- Standards: NMEA, RTCM
- 32 Channel GPS architecture
- Sensitivity
 - Acquisition: -146 dBm
 - Navigation: -160 dBm
 - Tracking: -162 dBm
- Positional accuracy (CEP50): 1.5 m
- Accuracy
 - Speed: < 0.05 m/s
 - Heading: < 0.01 deg
- Time to first fix (@ -130 dBm)
 - Hot Start: 1 s
 - Cold Start: < 35 s

Additional features

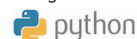
- Voice and SMS
- IP stack with TCP and UDP protocol
- Standard and extended AT command set
- A-GPS: ephemeris file injection
- Jammer rejection

Approvals

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

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 application resources (Available soon)

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



Order No.

Please contact your Telit representative for order codes and all further information



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