GE910-QUAD V3

Product Description
The GE910-QUAD V3 is a quad-band 850 / 900 / 1800 / 1900 MHz GSM | GPRS wireless module designed for the global market of applications in 2G technology, delivering GPRS class-10, 3GPP Release 4 compliant data communications capabilities. It is a member of the xE910 family featuring complete pin-to-pin compatibility with companion products in GSM | GPRS, UMTS | HSPA, HSPA+, CDMA 1xRTT, EV-DO and LTE.

The GE910-QUAD V3 adds the Telit xE910 form factor family a cost optimized, long-term available 2G variant enabling integrators and developers to design applications once and take advantage of the global coverage and service flexibility afforded by the broad set of companion products in all prevalent cellular technologies worldwide.

The GE910-QUAD V3 enables reliable, secure, and cost-effective GSM | GPRS cellular connectivity. It is equipped with two ITU-T V.24 UART interfaces and ten 1.8V I/O ports making it an ideal platform for applications on GSM | GPRS networks anywhere, such as telemetry, telematics, automated meter reading, POS terminals, security usage based insurance, m-health, security alarm panels, and other low-speed friendly application areas. Additional features such as integrated Python Script Language interpreter, TCP/IP and UDP/IP stack provide extended functionality, adding value to the customer application without adding cost.

The GE910-QUAD V3 is voice-capable supporting both analog and digital (DVI) interfaces. It is also offered with an optional factory-mounted SIM chip from Telit m2mAIR which provides additional remote diagnostics and control functionalities for the deployed application while eliminating the need for an external SIM card holder, generating additional BOM cost savings.

Key Benefits
• Cost optimized
• Long-term available 2G variant
• Two ITU-T V.24 UART interfaces
• Ten 1.8V I/O ports
• TCP/IP and UDP/IP stacks
• Python Script Language interpreter
• Voice-capable supporting both analog and digital (DVI) interface
• Pin compatible with companion products in GSM | GPRS, UMTS | HSPA, HSPA+, CDMA 1xRTT, EV-DO and LTE

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).

Telit IoT LOCATE
This product supports IoT LOCATE, 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 Ready
This product is capable of supporting the extensive suite of IoT Connectivity value-added services and connectivity you can use to enhance your application and boost your competitive advantage.
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Product Features
• Quad-band GSM | GPRS: 850 / 900 / 1800 / 1900 MHz
• Quad Band GPRS class 10
• 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
• Voice and SMS
• IP stack with TCP and UDP protocol
• Standard and extended AT command set
• Jammer rejection
• TLS 1.2

Data
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)

Environmental
• Small 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
• 2 UART
• 1.8 V / 3 V SIM interface

Approvals
• RoHS Compliant
• 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
• Sensitivity
  - -107 dBm @ GSM 850 / 900 MHz
  - -107 dBm @ DCS1800 / PCS1900 MHz
• Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.2 - 4.5 VDC