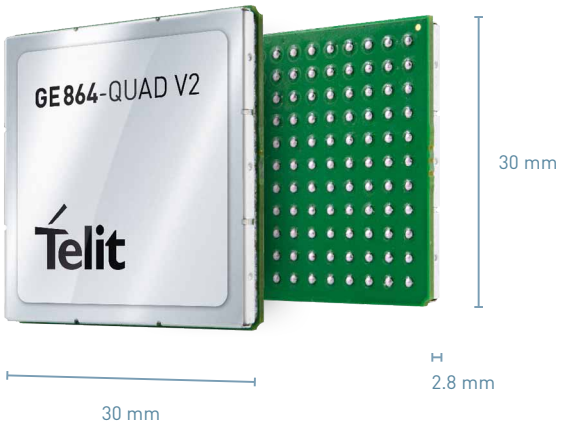
GE864-QUAD V2

GSM | GPRS Embedded



Product Description

The GE864-QUAD V2 is the chipset-generation evolution of the best seller GE864-QUAD quad-band module. You can take advantage of the enhanced features and power profile of the V2 with an easy migration from previous module versions, upgrading your devices with short time-to-market. Since connectors are eliminated, compared to the conventional mounting, costs are significantly reduced. A well-documented subset of the ball grid is pin-to-pin compatible with its predecessor and the V2 features an enhanced GSM | GPRS protocol stack 3GPP Release 4.

The compact BGA package and extended temperature range make this module the ideal choice for high-volume industrial applications and mobile data services. The built-tin Python Interpreter allows you to run their applications inside the module itself, making it a comprehensive m2m platform.

Key Benefits

- RUN AT Remote Commands and Event Monitoring services
- PYTHON Script Interpreter - customers can run their Python applications directly inside the module
- Premium FOTA Management - Easy firmware update by transmitting only a small delta file
- Easy migration from previous Telit versions and short time-to-market
- BGA package enables the design of compact applications, with reduced cost compared to board-to-board connector mounting
- Perfect platform for high-volume M2M applications and mobile data services

Family Concept

The GE864 quad-band GSM | GPRS series of cellular modules includes a standard variant, an ATEX certified variant, an automotive variant and a GPS-equipped variant; all featuring a common 30 x 30 mm footprint, low profile BGA package. This allows developers and integrators to easily drop in different variants of the GE864 family with little design and integration time and effort.

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.

AVAILABLE FOR

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

Combine your **Cellular** module with

Short Range modules

GNSS modules

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Complete, Ready to Use Access to the Internet of Things

ENABLING THE IoT
IS WHAT WE DO.

GE864-QUAD V2

Product Features

- Quad-band EGSM 850 / 900 / 1800 / 1900 MHz
- GSM | GPRS protocol stack 3GPP Release 4 compliant
- Control via AT commands according to 3GPP TS 27.005, 27.007 and Telit custom AT commands
- Serial port multiplexer 3GPP TS 27.010
- SIM access profile
- SIM application toolkit 3GPP TS 51.014
- SMS support
- SMS over GPRS
- DARP/SAIC support
- Telephony, emergency call
- Half rate, full rate, enhanced full rate and adaptive multi rate voice codecs (HR, FR, EFR, AMR)
- Superior echo cancellation & noise reduction
- Multiple Audio profiles pre-programmed and fully configurable by mean AT commands
- DTMF
- SIM phonebook
- Fixed dialing number (FDN)
- Real-time clock
- Alarm management
- Network LED support
- IRA, GSM, 8859-1 and UCS2 character set
- Jamming detection
- Embedded TCP/IP stack, including TCP, IP, UDP, SMTP, ICMP and FTP protocols
- PFM (Premium FOTA Management) Over The-Air Update service
- Remote AT commands
- Event monitor
- Telit's EASY features EASY SCAN® automatic scan over GSM

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: 30 x 30 x 2.8 mm
- Weight: 6 grams
- Extended temperature range
  -40°C to +85°C (operational)
  -40°C to +85°C (storage temperature)

Interfaces

- 10 I/O ports maximum
- Analog Audio (balanced)
- 2 A/D plus 1 D/A converter
- Buzzer output
- ITU-T V.24 serial link through CMOS UART:
  - Baud rate from 300 to 115,200 bps
  - Autobauding up to 115,200 bps

Approvals

- Fully type approved conforming with R&TTE directive
- CE, GCF, FCC, PTCRB, IC, Anatel

Electrical & Sensitivity

- Output power:
  - Class 4 (2W) @ 850 / 900 MHz
  - Class 1 (1W) @ 1800 / 1900 MHz
- Power consumption (typical values)
  - Power off: ‹ 62 uA
  - Idle (registered, power saving): 1.5 mA @ DRX=9
  - Dedicated mode: ‹ 240 mA @ max power level
  - GPRS cl.10: ‹ 420 mA @ max power level
- Supply voltage range: 3.22 – 4.5 V DC (3.8 V DC recommended)
- Sensitivity:
  - 107 dBm (typ.) @ 850 / 900 MHz
  - 106 dBm (typ.) @ 1800 / 1900 MHz

Software

- Python* application resources
- Python* script interpreter (module takes the application code directly in the Python* Language)
- Memory: 800 kB of NV memory for the user scripts and 1 MB RAM for the Python* engine usage
- Over-the-air application SW update
- Script execution speed increased up to 4 times compared to the GE864-QUAD

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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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