Telit® wireless solutions

GSM | GPRS

GC 864-QUAD V2
Compact

The V2 family is the new generation of Telit modules which offers a GSM/GPRS protocol stack 3GPP Release 4, the Downlink Advance Receiver Performance (DARP) feature for Single Antenna Interference Cancellation (SAIC), the Enhanced Measurement Report, GERAN Feature package 1, which assists in supporting the Extended Uplink TBF and Network Assisted Cell Change (NACC), the control via remote AT Commands and Event Monitor.

The GC864 product family is one of the smallest GSM/GPRS quad-band modules with industrial connectors in the market.

According to Telit Unified Form Factor, the V2 modules are designed to be compatible with Telit's GSM/GPRS products in the compact, unified form factor family, allowing easy scalability and shorter time-to-market for new design.

With its ultra-compact design and extended temperature range, the Telit GC864-QUAD V2 is the perfect platform for medium-volume m2m applications and mobile data devices. Additional features such as integrated TCP/IP protocol stack and serial multiplexer give extend functionality of the application at no additional cost.

The GC864-QUAD V2 makes it furthermore possible to run the customer's application inside the module, thus making it one of the smallest, complete platforms for m2m solutions. GC864-QUAD V2 is also available with integrated SIM Holder.

All Telit modules, support Over-the-Air firmware update by means Premium FOTA Management. By embedding RedBend's vRapid® agent, a proven and battle-tested technology powering hundreds of millions of cellular handsets world-wide Telit is able to update its products by transmitting only a delta file, which represents the difference between one firmware version and another.

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

Feature icons

- Ultra Compact
- Telit Unified AT Command Set
- RUN AT Commands Remotely
- Telit Unified Form Factor
- Quad Band GPRS
- GPRS Class 10
- RoHS Compliant
- SIM Access Profile
- PYTHON* Script Interpreter
- 80 Pin Connector
- Embedded FTP and SMTP Client
- Extended Supply Voltage Range 3.25 – 4.5 V
- Extended Temperature Range –40° to +85° C
- Extended RF Sensitivity
- Serial Port Multiplexer (3GPP 27.010)
- Embedded TCP/IP Stack

optional
- Integrated SIM holder

TELIT INFINITA SERVICES
- Premium FOTA Management

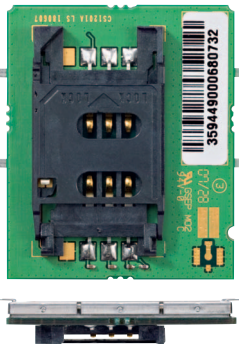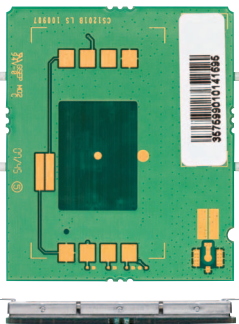intel Intelligent Systems Alliance

Product features

- Quad-band EGSM 850 / 900 / 1800 / 1900 MHz
- Output power
  - Class 4 (2W) @ 850 / 900 MHz
  - Class 1 (1W) @ 1800 / 1900 MHz
- 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
- Supply voltage range: 3.22–4.5 V DC (3.8 V DC recommended)
- TCP/IP stack access via AT commands

- Sensitivity:
  -107 dBm (typ.) @ 850 / 900 MHz
  -106 dBm (typ.) @ 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
- Dimensions: 30 x 36.2 x 3.2 mm
- Weight: 6.1 grams

Making machines talk.®

GC 864-QUAD V2
Compact

Telit is in it.

actual size GC864-QUAD

GC864-QUAD with SIM holder

Distributed by:

Telit ® wireless solutions

Product features

- Extended temperature range
  - 40°C to +85°C (operational)
  - 40°C to +85°C (storage temperature)
- RoHS compliant
- DARP/SAIC support

Interfaces

- 80-pin Molex connector
- 10 I/O ports maximum
- Analog audio (balanced)
- 2 A/D plus 1 D/A converters
- Buzzer output
- ITU-T V.24 serial link through UART:
  - CMOS level
  - Baud rate from 300 to 115,200 bps
  - Autobauding up to 115,000 bps
- 50 Ohm murata GSC antenna connector

Audio

- 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

Approvals

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

SMS

- Point-to-point mobile originated and mobile terminated SMS
- Concatenated SMS supported
- SMS cell broadcast
- Text and PDU mode
- SMS over GPRS

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)

GSM supplementary

- Call forwarding
- Call barring
- Call waiting & call hold
- Advice of charge
- Calling line identification presentation (CLIP)
- Calling line identification restriction (CLIR)
- Unstructured supplementary services mobile originated data (USSD)
- Closed user group

Additional features

- SIM phonebook
- SIM Holder (only for GC864-QUAD V2 variant with SIM holder)
- 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

Python* application resources

- Python* script interpreter (module takes the application code directly in the Python* language)
- Memory: 1.9 MB 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 GC864-QUAD

python

Telit's EASY features

- EASY SCAN ® automatic scan over GSM frequencies (also without SIM card)

Order No.

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

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