Telit® wireless solutions

GSM | GPRS

GC864-QUAD
Compact

- 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

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

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

The GC864-PY makes it possible to run the customer's application inside the module, thus making it one of the smallest, complete platforms for m2m solutions. State-of-the-art SPI and IIC interfaces provide connectivity to external peripherals such as sensors and displays.

All Telit modules, support Over-the-Air firmware update by means Premium FOTA Management. By embedding RedBend's vCurrent® 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).

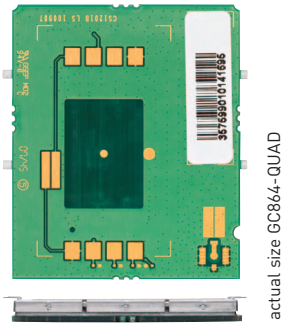
Product features

- 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 GSM 07.05, 07.07 and Telit enhancements
- Serial port multiplexer GSM 7.10
- SIM access profile
- Supply voltage range: 3.22–4.5 V DC (3.8 V DC recommended)
- TCP/IP stack access via AT commands
- Power consumption (typical values)
  - Power off: ‹ 26 uA
  - Idle (registered, power saving): 2.6 mA
  - Dedicated mode: 200 mA
  - GPRS cl.10: 370 mA
- Sensitivity:
  -107 dBm (typ.) @ 850 / 900 MHz
  -106 dBm (typ.) @ 1800 / 1900 MHz
- Dimensions: 30 x 36.2 x 3.2 mm
- Weight: 6.1 grams
- Extended temperature range
  - 40°C to +85°C (operational)
  - 40°C to +85°C (storage temperature)
- RoHS compliant

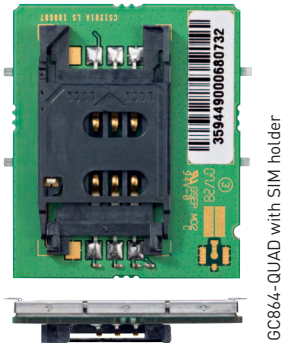
Making machines talk.®

GC864-QUAD

Compact



actual size GC864-QUAD



GC864-QUAD with SIM holder

Distributed by:

Interfaces

- 80-pin Molex connector
- 22 I/O ports maximum
- Analog audio (balanced and unbalanced)
- 3 A/D plus 1 D/A converter
- Buzzer output
- ITU-T V.24 serial link through UART:
  - CMOS level
  - Baud rate from 300 to 115,200 bps
  - Autobauding from 1,200 to 115,200 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
- Handset & hands-free operations
- 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

Circuit switched data transmission

- Asynchronous transparent circuit switched data (CSD) up to 14.4 kbps
- 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

Fax

- Group 3, class 1

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 variant with SIM holder)
- Fixed dialing number (FDN)
- Real-time clock
- Alarm management
- Battery management
- Network LED support
- IRA character SET, UCS2 and GSMDefault
- Jamming detection & report
- Embedded TCP/IP stack, including TCP, IP, UDP, SMTP and FTP protocols
- PFM (Premium FOTA Management) Over the Air Update
- MUX driver
- RIL driver

Python* application resources (GC864-PY ONLY)

- 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
- IIC Bus and SPI Bus controlled in Python*

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

Telit® wireless solutions

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