Telit® wireless solutions

GL 865-DUAL
Embedded

- Ultra Compact
- Telit Unified AT Command Set
- RUN AT Commands Remotely
- SMD Component
- LCC Package
- Dual Band GPRS
- GPRS Class 10
- RoHS Compliant
- SIM Access Profile
- PYTHON* Script Interpreter
- Embedded FTP and SMTP Client
- Extended Temperature Range −40° to +85° C
- Extended RF Sensitivity
- Serial Port Multiplexer (3GPP 27.010)
- Embedded TCP/IP Stack

TELIT INFINITA SERVICES
- Premium FOTA Management

intel Intelligent Systems Alliance

GL865-DUAL is a dual band 900/1800 GSM/GPRS device in LCC castellation packaging with extremely low power consumption, extended temperature range and compact profile.

The low profile and small size of SMT package combined with a very low power consumption enables the design of very compact applications with increased autonomy. Since connectors are eliminated, the solution cost is significantly reduced compared to conventional mounting.

The GL865-DUAL modules with LCC castellation package technology are surface mount package devices, which use metalized pads on the sides of the package. This kind of packaging is ideally suited for uncomplicated and low-cost applications based on Four-Layer PCB (printed circuit board). Moreover, with the option for manual soldering and removal, it can also serve niche applications with a low volume production.

Additional features such as integrated TCP/IP protocol stack, serial multiplexer and Remote AT commands extend the functionality of the application at no additional cost.

The GL865-DUAL makes it possible to run the customer's application inside the module by means its embedded Python Script Interpreter, thus making it the smallest, complete SMT platform for m2m solutions.

All Telit modules, support Over-the-Air firmware update by means Premium FOTA Management. By embedding Red Bend Software vRapid Mobile® 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
- LCC Castellation form factor
- Dual-band EGSM 900 / 1800 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
- TCP/IP stack access via AT commands
- SIM application toolkit 3GPP TS 51.014
- Dimensions: 24.4 x 24.4 x 2.7 mm
- Weight: 2.8 grams
- DARP/SAIC support
- Output power
  - Class 4 (2W) @ 900 MHz
  - Class 1 (1W) @ 1800 MHz

Making machines talk.®

GL 865-DUAL
Embedded

Telit is in it.

actual size

Distributed by:

Product features

- Supply voltage range: 3.22 - 4.5 VDC (3.8 V DC recommended)
- Power consumption (typical values)
  - Power off: ‹ 5 uA
  - Idle (registered, power saving): 1.5 mA @ DRX=9
  - Dedicated mode: 230 mA @ max power level
  - GPRS cl.10: 360 mA @ max power level
- Sensitivity:
  - 108 dBm (typ.) @ 900 MHz
  - 107 dBm (typ.) @ 1800 MHz
- Extended temperature range
  - 40°C to +85°C (operational)
  - 40°C to +85°C (storage temperature)

Interfaces

- Interfaces
- 8 I/O ports maximum
- Analog audio (balanced), digital audio
- 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

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 R&TTE directive
- CE, GCF

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
- 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

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