Telit ® wireless solutions

●● GL 868-DUAL

GSM | GPRS Embedded

Product Description

GL868-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 LCC castellation 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.

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 PYTHON Script Interpreter embedded in the GL868-DUAL makes it possible to run the customer's application inside the module, thus making it a compact and complete SMT platform for m2m solutions.

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.

Key Benefits

- LCC form factor suitable for manual soldering and removal, so it can also serve low volume, niche applications.

- PYTHON Script Interpreter - customers can run their applications directly inside the module

- Premium FOTA Management - Easy firmware update by transmitting only a small delta file

Family Concept

The Telit xL865 family was conceived to address system integrators and developers needing to start with low volumes (LCC mount) as well as those already running high volumes (VQFN mount). Its ultra-compact package allows integration into very small devices. The family includes products that are pin-to-pin and API compatible in GSM | GPRS, CDMA | 1xRTT and UMTS | HSPA.

Telit m2mLOCATE

This product supports m2mLO-CATE, a Telit cloud-based service that provides a device's position based on observed cellular Cell-IDs. Accessing a database of over 40 million cell-IDs globally, m2mLOCATE can provide a position for every use-case including indoors/underground, outdoors, and boundary situations.

m2mAIR Ready

This product is capable of supporting the extensive suite of m2mAIR value-added services and connectivity you can use to enhance your application and boost your competitive advantage.

ONE STOP.
ONE SHOP. NOW, INNOVATE!

GL 868-DUAL

Product features

- SMT mount technology
- 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: 3.5 grams
- DARP/SAIC support
- Output power
  - Class 4 (2W) @ 900 MHz
  - Class 1 (1W) @ 1800 MHz
- Supply voltage range: 3.22 - 4.5 VDC (3.8 V DC recommended)
- Power consumption (typical values)
  - Power off: < 65 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)
- 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 andadaptive 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

- CE

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
- Country SIM lock (APAC, Russia and CIS)

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

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

Join the Telit Technical Forum

For a quicker and more rewarding integration experience join the Telit Technical Forum. There you can browse the first open forum covering all m2m topics, get direct support by region (EMEA, North America, Latin America, APAC), take part in this quickly growing m2m community and exchange experiences.