

GSM | GPRS

# GL868-DUAL V3

Embedded



- Ultra Compact
- Telit Unified AT Command Set
- RUN AT Commands Remotely
- SMD Component
- QFN 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 TS 27.010)
- Embedded TCP/IP Stack

**TELIT INFINITA SERVICES**

Premium FOTA Management



The GL868-DUAL V3 is the new generation module in GL868 family. It is based on the latest Intel 2G chipset, protecting our customers' design investments with a long-term availability solution. The new V3 variant features QFN packaging versus the LCC castellation in the original GL868, maintaining full pad-level compatibility, thereby providing a soft transition replacement to the highly popular and widely deployed GL868-DUAL.

It is highly recommended for new designs requiring 2G coverage in a sleek and robust QFN package, which implies easy integration and low impact on final application costs. Ease of production and small foot print makes it the ideal solution for applications in security alarms, automated meter reading, and pos terminals. Embedded SIM-chip is also available as a mounting option.

The new generation GL868-DUAL V3 operates with 1.8V GPIOs versus its predecessor's 2.8V, minimizing power consumption and making it even more ideally suited for battery powered and wearable device applications.

The GL868-DUAL V3 can be easily bundle-designed with Telit's GPS or GPS/GLONASS receivers for applications requiring location awareness such as fleet management and track-and-tracing; with the aid of available reference designs and global technical integration support from Telit.

The GL868-DUAL V3 makes it possible to run the customer's application inside the module by means its embedded Python Script Interpreter, thus making it a 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).

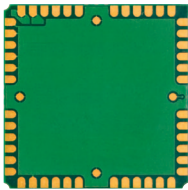
### Product features

- VQFN 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 2.6 mm
- Weight: 2.8 grams
- DARP/SAIC support
- Output power
  - Class 4 (2W) @ 900 MHz
  - Class 1 (1W) @ 1800 MHz
- Optional SIM-chip

**Making machines talk.®**

# GL 868-DUAL V3

Embedded



actual size

## Product features

- Supply voltage range: 3.2 - 4.5 VDC (3.8 V DC recommended)
- Power consumption (typical values)
  - Power off: 2 uA (typical)
  - Idle (registered, power saving): 0.9 mA @ DRX=9
  - Dedicated mode: 200 mA @ max power level
  - GPRS cl.10: 330 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

- 8 I/O ports maximum (1.8V logic level)
- 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
- Embedded DTMF decoder

## Approvals

- CE
- CCC, SRRC

## 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



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