







GSM | GPRS Embedded

Product Description

The V3 variant of the GL865-DUAL is based on the latest chipset technology, designed to protect your design investments as a low-cost, long-term availability solution. It is recommended for any new cost-sensitive designs requiring 2G GSM/GPRS coverage and long term application cost stability, such as security alarms, automated meter reading, and POS terminals.

The new generation GL865-DUAL V3 operates with 1.8 V GPIOs versus its predecessor's 2.8 V, minimizing power consumption and making it even more ideally suited for battery powered and wearable device applications.

Embedded Python Script Interpreter in the GL865-DUAL V3 makes it possible to run the customer's application inside the module making it a complete SMT platform for m2m solutions.

An optional factory mounted m2mAIR embedded SIM-chip is available.

Key Benefits

- Easy upgrade path for applications currently using other modules of the GL865 series
- Recommneded platform for applications requiring ultra low power consumtion
- PYTHON Script Interpreter customers can run their Python applications directly inside the module
- Long-term availability solution ideal for cost-sensitive applications
- Premium FOTA Management Easy firmware update by transmitting only a small delta file

Family Concept

24.4 mm

The Telit GL865 series features a compact LCC castellation (VQFN for the GL865-DUAL-V3) packaging that offers the option for manual soldering and removal, making this product suitable for low-volume niche applications. Versions are available having different supported bands: GL865-DUAL and GL865-QUAD.

Telit m2mL0CATE

m2mLOCATE is 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.

Find more information on www.m2mair.com

AVAILABLE FOR

- FMFA
- North America
- Latin America
- APAC
- Australia

Combine your Cellular module with

• Short Range modules

GNSS modules



www.telit.com

Complete, Ready to Use Access to the Internet of Things



Telit Modules + m2mAIR Value-Added Services including Connectivity



www.m2mAIR.com



GL865-DUAL V3

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
- SIM application toolkit 3GPP TS 51.014
- DARP/SAIC support
- SMS support
- SMS over GPRS
- 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
- 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
- Telit's EASY features EASY SCAN ® automatic scan over GSM frequencies (also without SIM card)

Data

GPRS

- GPRS class 10
- Mobile station class B
- Coding scheme 1 to 4
- PBCCH support
- GERAN Feature Package 1 support (NACC, Extended TBF)

Environmental

- Dimensions: 24.4 x 24.4 x 2.6 mm
- Weight: 2.8 grams
- Extended temperature range
 - 40°C to +85°C (operational)
 - 40°C to +85°C (storage temperature)

Interfaces

- 8 I/O ports maximum (1.8 V 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

Approvals

- Fully type approved conforming R&TTE directive
- CE. GCF

Electrical & Sensitivity

- Output power
 - Class 4 (2W) @ 900 MHz
 - Class 1 (1W) @ 1800 MHz
- 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

Software

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

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