Telit

UL865-N3G

UMTS | HSPA 7.2/5.76 **Embedded**

24.4 mm

24.4 mm

2.6 mm

Product Description

The UL865-N3G is a 3G-only, North American, dual-band module in the xL865 family. It is based on the latest Intel chipset to protect the developer's design investments as a long term availability solution. The UL865-N3G features VQFN packaging that is fully pad-level compatible with its 2G and 3G companions, the CL865-DUAL, GL865 V3 Series and UL865 Series.

Key Benefits

- Simple drop-in migration and technology upgrade solution to 3G high-speed performance for designs currently using 2G xL865 VQFN products
- Ideal for fleet management and track-and-tracing application with easy to follow reference designs pairing with Telit GPS and GPS / GLONASS receivers
- Internet application friendly with integrated TCP/IP and UDP/IP stacks
- Voice-capable for applications requiring digital (DVI) interface
- Complete SMT platform for m2m solutions running the customer application inside the module with embedded Python Script Interpreter
- Over-the-Air firmware update via Premium FOTA Management service
- Battery-friendly 1.8V GPIO

Family Concept

The Telit xL865 family was conceived to address system integrators and developers needing to start with low volumes (LCC mounting) as well as those already running high volumes (VQFN mounting). 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.

Variants

Single variant with band combination for North American applications only

IoT Connectivity Ready

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

ENABLING THE IoT IS WHAT WE DO.

UL865-N3G

Product Features

- Supported Frequencies
  UMTS | HSPA: 850 / 1900 MHz
- SIM Access Profile
- 3GPP release 7 compliant
- Control via AT commands according to
  3GPP TS27.005, 27.007 and customized Telit
  AT commands
- Serial port multiplexer 3GPP TS27.010
- SIM application Tool Kits 3GPP TS 51.014
- Built in UDP / TCP / FTP / SMTP stack
- Digital voice and SMS
- IP stack with TCP and UDP protocols
- Standard and extended AT command set

Data

**HSPA category 6 in Uplink and
up to category 8 in Downlink:**

- HSUPA up to 5.76 Mbps
- HSDPA up to 7.2 Mbps

Environmental

- Small dimensions 24.4 x 24.4 x 2.6 mm
- Temperature range -40°C to +85°C

Interfaces

- 8 I/O ports maximum including
  multifunctional I/Os (1.8 V logic level)
- I2S for digital audio interface
- USB 2.0 HS
- UART
- SPI
- 1.8 V / 3 V SIM interface
- 2 A/D plus 1 D/A converters

Approvals

- RoHS Compliant
- FCC, PTCRB, IC (North America)

Electrical

- Output power
  - Class 3 (0.25 W, 24 dBm) @ UMTS
- Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.4 - 4.2 VDC

Software

- Python* application resources
- Python* version = 2.7.2
- Python* script interpreter
  (module takes the application code
  directly in the Python* language)
- Memory: 2 MB of NV memory for
  the user scripts and 2 MB RAM for
  the Python engine usage

Additional features

- PFM (Premium FOTA Management)
  Over-The-Air Update service
- Remote AT commands
- Event monitor

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