UL865-EU Series

Product Description
The UL865-EU is a 3G 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-EU features VQFN packaging that is fully pad-level compatible with its 2G companion, the GL865-DUAL V3.

Key Benefits
- Simple drop-in migration and technology upgrade path to 3G high-speed performance for designs currently using the GL865-DUAL V3
- Ideal for fleet management and track-and-tracing application with easy to follow reference designs for 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 IoT solutions running the customer application inside the module with embedded Python Script Interpreter
- Over-the-Air firmware update by means Premium FOTA Management

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.

IoT Connectivity and Portal Ready
This product is capable of supporting the extensive suite of Value Added Services IoT Connectivity including Module

Management and others which make the management of IoT deployments under mobile networks effective, enhancing profitability and reliability. It is also Portal-ready which means that the AT command library in this module includes a set of high-level commands designed exclusively for quick and hassle-free on-boarding of the device to the portal and to back-end systems and servers. Telit Portal-ready modules powered by deviceWISE make application-level data flows and controls simple to program, maintain and improve.
Support bands
- 2 Bands GSM | GPRS EDGE 900 / 1800 MHz
- 2 Bands UMTS | HSPA 900 / 2100 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 protocol
Standard and extended AT command set
Built-in UDP /TCP/FTP/SMTP stack

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

Software and Application Development
AppZone application resources
- Programming language: C
- IDE: Eclipse
- Dedicated File System: 5 MB
- Separate App. RAM Space: 2 MB

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

Electrical
- Output power
  - Class 4 (2 W, 33 dBm) @ GSM 850/900
  - Class 1 (1 W, 30 dBm) @ EDGE 1800/1900
  - Class 3 (0.25 W, 24 dBm) @ UMTS
  - Class E2 (0.5 W, 27 dBm) @ EDGE 850/900
  - Class E2 (0.4 W, 26 dBm) @ EDGE 1800/1900
- Supply voltage
  - Nominal: 3.8 VDC
  - Range: 3.4 - 4.2 VDC
  - Extended Range: 3.1 - 4.5 VDC

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