The Telit Evaluation Kit (EVK2) provides a robust, future-proof and flexible environment for rapid development of applications for the full range of GSM/GPRS, UMTS/HSDPA and CDMA module families, dramatically reducing time-to-market.

The kit is comprised of a motherboard, and an adapter board in which the relevant module is connected. This concept allows the EVK2 to be used across various form factors and product generations, both present and future.

The motherboard includes the basic interfaces, such as power input, SIM card holder, audio monitor outputs, RS-232, and USB 1.1, as well as a Reset button and power switch. The motherboard represents the recommended reference design for the module’s peripheral circuitry. Jumper blocks on the motherboard define the routing of the serial interfaces, audio signals, and power supply. The PC or DTE controlling the module over the AT-command interface can be connected via USB or RS-232.

Adapter boards are available in different models to allow development for the desired module family (board-to-board or BGA solder). The set of basic interfaces found on the motherboard. The set of interfaces specific to the module (e.g. antenna, general purpose inputs/outputs (GPIO), ADC/DAC, UART etc.) is found on the adapter board for connection to the user’s application, extension boards, or other development tools and measuring equipment.

**The Telit EVK2 is a tool for:**

- Developing applications based on current and future Telit GSM/GPRS, UMTS/HSDPA, and CDMA module families via AT commands through serial ports
- Programming and updating of all Telit modules
- Debugging Telit-module-based applications
- Implementing simple applications (stand alone function) by executing scripts using a Python interpreter equipped module without the need for an external microprocessor
RS-232 / USB 1.1 serial ports

The communication between the application and the Telit module is done through Asynchronous Serial Interfaces (ASC0 and ASC1), seen on the motherboard as a double stacked standard DB9 connector providing two serial communication ports (RS-232 up to 115 Kbps).

Alternatively, this communication can be done through a CMOS HUB, which provides two-way communication compliant to USB 1.1 specifications at higher data rates (up to 1.5 Mbps). The USB connection is provided through a USB-A USB-B cable. Serial port selection is made through configuration of jumpers on the motherboard.

Power supply inputs

The EVK2 is equipped with different power supply inputs enabling its use in the following environments:

- Automotive setup: 5 to 40 Volt supply
- Laboratory setup: from +3.8 Volt fixed supply
- Portable setup: rechargeable Li-ion battery pack

General purpose inputs / outputs

With the EVK2, all general purpose inputs/outputs are made accessible on the adapter boards by a set of pins on the PTH-type connector.

This allows developers to build their own interface boards best suited for their requirements, e.g. custom connectors, cables, relays, LEDs, etc.