Product Description

The Telit Evaluation Kit (EVK2) provides a robust, future-proof and flexible environment to streamline all application development based on Telit GSM | GPRS, UMTS | HSPA, CDMA 1x | EV-DO, LTE, CatM and NB IoT module families, significantly reducing time-to-market.

The kit includes a motherboard and an adapter board where the target 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; as well as a Reset button and power switch. The circuit implemented in the EVK2 motherboard is based on the recommended reference design for the module’s peripheral components and I/O connections.

Adapter boards are available for all the different module families. Adapter boards for modules with board-to-board connectors may be used for development with a number of different target modules sharing the same form factor.

Key Benefits

The Telit EVK2 is a tool designed for engineers, programmers, and developers who are looking to:

- Develop and test applications based on current and future Telit GSM | GPRS, UMTS | HSPA, CDMA 1x | EV-DO, LTE, CatM and NB IoT module families via AT commands through serial ports
- Program and/or update any Telit module
- Debug and/or Improve applications based on Telit modules
- Implement simple applications (stand alone function) by executing scripts with an IoT AppZone equipped module without the need for an external microprocessor
- Develop a first-pass proof-of-concept device for a new application
**EVK 2**

**Product Features**

- Develop and test applications based on current and future Telit GSM | GPRS, UMTS | HSPA, CDMA 1x/EV-DO, LTE, CatM and NB IoT module families via AT commands through serial ports
- Program and/or update any Telit module
- Debug and/or Improve applications based on Telit modules
- Implement simple applications (stand alone function) by executing scripts with a Python interpreter-equipped module without the need for an external microprocessor
- Develop a first-pass proof-of-concept device for a new application without the need for an external microprocessor
- RESET & power ON button
- Battery charger control
- OV protection on all input DC lines
- Reverse polarity protection on all input DC lines
- 2 LED indicators
- SIM card holder
- Automatic mute control

**Interfaces**

- RS-232 / USB 1.1 serial ports
  The application communicates with the Telit module in the EVK2 through two asynchronous serial interface ports (ASC0 and ASC1), which are embedded in the motherboard as a double stacked standard.
  DB9 connector providing serial communication (RS-232 up to 115 Kbps).
- Serial ports: 2 x RS-232 or 2 x USB
- Speaker output:
  2 output power options:
  - Option 1 - max 10mW / 16Ω on standard 2.5 mm headset socket
  - Option 2 - max 675mW / 8Ω on PTH pin connector
- Microphone lines: 1x Single-ended [INT/EXT]
- Earpiece output: 1x Single-ended [INT/EXT] max 10mW/16Ω
- General purpose inputs / outputs
  - With the EVK2, all general purpose inputs/outputs can be accessed on the adapter boards by a set of header pins on the PTH-type connector.
  This arrangement allows developers to build their own interface boards best suited for their requirements, e.g. custom connectors, cables, relays, LEDs, etc.
- GPIOs (all available on the interface board)

**Electrical & Sensitivity**

- 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: +3.8 Volt fixed supply
  - Portable setup: Rechargeable Li-Ion battery pack