MEDIATEK labs @

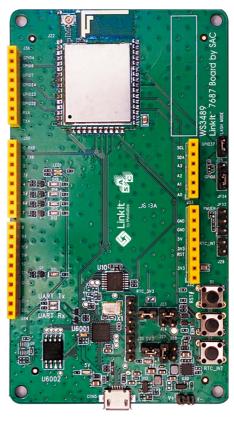
Description

LinkIt 7687 HDK is a low-cost and easy to use Internet of Things (IoT) development platform for RTOS to design, prototype, evaluate and implement IoT projects. It is based on MT7687F, with ARM Cortex-M4 with floating point MCU in QFN68 package. The HDK enables rich connectivity features, communication with cloud services and real-time control. LinkIt 7687 HDK provides additional libraries to integrate a variety of peripherals and enable a new class of highly connected applications.

Supported Features

- MT7687F IoT IEEE single chip 802.11b/g/n
 Wireless Connectivity with QFN68 package.
- Arduino Uno (Revision 3) pin compatibility plus an eight pin extension connector.
- Supports <u>FreeRTOS</u>.
- Flexible on-board power supply.
 - \circ <u>USB</u> with power (V_{Bus} , 5 V).
 - \circ External V_{IN} (1.8~3.2V).
- LEDs
 - UART communication LEDs (**D9, D10**).
 - o Power LEDs (**D6, D5**).
 - User customized LEDs (LED1, D11, D12, D13, D14, D15).
- Three Push Buttons.
 - o System Reset.
 - Real Time Clock (RTC) Interrupt.
 - o External Interrupt.
- XTAL (Crystal Oscillator).
 - 40MHz source crystal oscillator clock support with low power consumption in idle mode.
 - 32.768kHz source crystal clock for the RTC mode or external 32.768kHz mode.
- USB re-enumeration connectors/interfaces.
 - Mass storage device (MSD) flash programming interface
 - CMSIS-DAP (Coresight Debug Access Port (DAP)) USB.
 - Virtual COM port UART through USB on the PC

LinkIt 7687 HDK Product Brief



The top view of the LinkIt 7687 development board

- On-board printed circuit board antenna with U.FL for conducted testing.
- Micro USB connector for power and debug connections.
- Reserved headers for power consumption (current) measurement.

Board specifications

Recommended operating conditions: -40 to 85°C ambient.

Weight: 25 g

Size: 60.5 x 108.5mm (2.4 x 4.27 inches).