

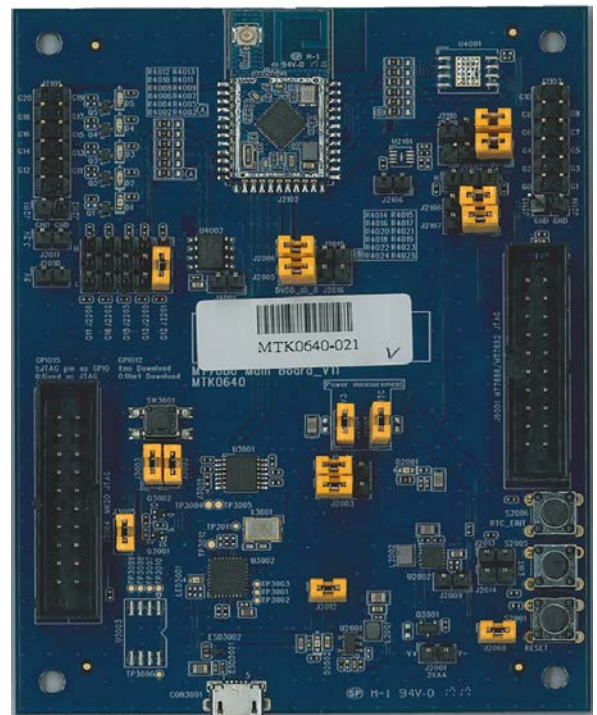
Description

MediaTek MT7682 hardware development kit (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 MT7682, with ARM Cortex-M4 with floating point unit microprocessor in QFN40 package. The HDK enables rich connectivity features, communication with cloud services and real-time control. The HDK provides additional libraries to integrate a variety of peripherals and enable a new class of highly connected applications.

Supported Features

- IEEE single chip 802.11b/g/n Wireless Connectivity with QFN40 package.
- Supports [FreeRTOS](#).
- Flexible on-board power supply.
 - [USB](#) with power (V_{BUS} , 5 V).
 - External V_{IN} (1.8~3.63V).
- LEDs
 - UART communication LEDs (**LED3001**).
 - Power LEDs (**D2001, D2002**).
 - User customized LEDs (**D1, D2, D3, D4, D5**).
- Three push buttons.
 - System reset
 - External interrupt
 - RTC interrupt
- Crystal oscillator (XTAL).
 - 26MHz 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.

- Mass storage device (MSD) flash programming interface.
- USB re-enumeration connectors and interfaces.
 - Coresight Debug Access Port ([CMSIS-DAP](#)) USB.
 - Virtual COM port UART through USB on the PC



Front view of the MT7682 HDK

- On-board printed circuit board antenna with [U.FL](#) for conducted testing.
- Micro-USB connector to power up the system and debug operations.
- Reserved headers for power consumption (current) measurement.

Board specifications

- Recommended operating conditions: -40 to 85° C ambient.
- Weight: 35 g
- Size: 80 x 100mm (3.15 x 3.94 inches).