Description

The LinkIt 2523 HDK by SAC is a fully functional demonstration board for IoT and Wearables applications powered by MediaTek MT2523G, an ARM Cortex-M4 core-based microcontroller unit (MCU). It enables rich connectivity features, communication with cloud services and real-time control. The HDK supports development on Keil IDE and provides additional libraries to integrate a variety of peripherals and enable a new class of highly connected applications.

Supported Features

- ARM Cortex-M4 core-based MT2523G microcontroller.
  - Internal 160kB SRAM and 4MB PSRAM.
  - Internal 4MB serial flash.

- Flexible on-board power supply.
  - USB with power 5V.
  - External battery connector.

- Rich interfaces.
  - Three I^{2}Cs.
  - Four master SPIs and a slave SPI.
  - One master I^{2}S and one slave I^{2}S.
  - One PCM interface.
  - Four UARTs. The first set of UART is directly configured through pin headers, the other three sets are software configurable.
  - Five 12-bit ADCs.
  - Six PWMs by alternative voltage level.
  - Two SDMMCs.
  - JTAG debugging support.
  - Five sets of clock output channels.

- Peripherals.
  - One serial camera interface, up to 3-bit mode image capture.
  - Two display modes by serial interface with 240*240 pixels resolution and MIPI with 320*320 pixels resolution.
  - Keypad supported to simulate buttons like volume up/down, back, enter.
  - Onboard speaker, onboard analog microphone and audio jack.

- User-friendly customization.
  - Supports Bluetooth (2.4GHz) and GNSS with onboard antenna connectivity and also an SMA connector for dedicated external antenna connectivity.
  - Supports 2-wire SWD interface for debugging purposes.
  - Headers for convenient and accurate current measurement.

Board Specifications

- Recommended operating temperature: -40 to 85°C.

LinkIt 2523 HDK's front view