

STM32U5 IoT Discovery Kit

Arm Virtual Hardware (AVH) provides a board model based on the [B-U585I-IOT02A Discovery kit for the STM32U5 series](#) from STMicroelectronics. Throughout the AVH documentation, this virtual platform is referenced as "STM32U5 IoT Discovery" or "STM32U5" in short form.

This chapter guides through usage specific to the virtual STM32U5 IoT Discovery Kit. It explains how to get started, lists the hardware features supported in the model, and provides usage examples relevant for it. The chapter is structured as follows:

- **Getting started:**
 - [Quickstart for STM32U5 IoT Discovery](#) provides a simple step-by-step guide on setting up a virtual STM32U5 IoT Discovery board with a default example.
- **Board model details:**
 - [Supported Hardware Components for STM32U5](#) lists the hardware components supported in the virtual STM32U5.
- **Firmware:**
 - [Stock Firmware for STM32U5](#) explains the ready-to-use firmware packages available for virtual STM32U5 IoT Discovery Kit on AVH.
 - [Storage Files for STM32U5](#) provides information about the storage files in AVH firmware packages for STM32U5 IoT Discovery.
- **Usage examples:**
 - [IoT HTTP Web Server on STM32U5](#) example runs a web-server on the STM32U5 device that displays on-board sensor measurements and can be accessed from a web browser remotely.
 - [TF-M example on STM32U5](#) shows usage of Trusted Firmware for Cortex-M (TF-M) for secure operations.
 - [Detect Audio through the Microphone on STM32U5 Board](#) describes how to detect audio level using the virtual STM32U5 board.