Raspberry Pi 4

Arm Virtual Hardware (AVH) provides a board model for the Raspberry Pi 4 Model B. In the AVH documentation this virtual board is referenced as "Raspberry Pi 4" or "Rpi 4" in short form.

This chapter guides through usage specific to the virtual Raspberry Pi 4 board. 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 Raspberry Pi 4 provides a simple step-by-step guide on setting up a virtual Rpi 4 board.
- **Board model details:**
    - Supported Hardware Components for Raspberry Pi 4 lists the hardware components supported in the virtual Raspberry Pi 4 model.
- **Firmware:**
    - Stock Firmware for Raspberry Pi 4 explains the ready-to-use firmware packages available for virtual Raspberry Pi 4 on AVH.
    - Custom Firmware for Raspberry Pi 4 describes how to package and run a custom Linux firmware on a virtual Raspberry Pi 4.
    - Storage Files for Raspberry Pi 4 provides information about the storage files in AVH firmware packages for Raspberry Pi 4.
- **Usage examples:**
    - Connect to Wi-Fi on Raspberry Pi 4 explains how to connect a virtual Rpi 4 board to a WiFi network available in the AVH environment.
    - Connect to BLE on Raspberry Pi 4 describes how to use Bluetooth Low Energy (BLE) for communication between a virtual Rpi 4 board and a virtual Android phone.
    - Use vMMIO on Raspberry Pi 4 provides an example for using virtual Memory Mapped I/O (vMMIO) for external handler.
    - [Updating Linux Kernel on Raspberry Pi 4](/devices/rpi4/rpi4-kernel-update explains how to update the Linux Kernel and helps fixing potential issues.

- Running Docker on Raspberry Pi 4 demonstrates how to run Docker.