

Item no.: 353137

## ABX00042 - Portenta H7 IoT Cloud compatible Board

from **104,14 EUR**

Item no.: 353137  
shipping weight: 0.10 kg  
Manufacturer: Arduino



### Product Description

#### Portenta H7 IoT Cloud compatible Board

Portenta H7 allows you to build your next smart project. Ever wanted an automated house? Or a smart garden? Well, now it's easy with the Arduino IoT Cloud compatible boards. It means: you can connect devices, visualize data, control and share your projects from anywhere in the world. Whether you're a beginner or a pro, Arduino has a wide range of plans to make sure you get the features you need.

Portenta H7 simultaneously runs high level code along with real time tasks. The design includes two processors that can run tasks in parallel. For example, it is possible to execute Arduino compiled code along with a MicroPython one, and have both cores to communicate with one another. The Portenta functionality is two-fold, it can either be running like any other embedded microcontroller board, or as the main processor of an embedded computer.

Portenta can easily run processes created with TensorFlow™ Lite, you could have one of the cores computing a computer vision algorithm on the fly, while the other could be making low-level operations like controlling a motor, or acting as a user interface.

- Microcontroller: STM32H747XI dual Cortex®-M7+M4 32bit low power Arm® MCU
- Radio module: Murata 1DX dual WiFi 802.11b/g/n 65 Mbps and Bluetooth® (Bluetooth® Low Energy. 5 via Cordio stack, Bluetooth® Low Energy 4.2 via Arduino Stack)
- Secure element (default): NXP SE0502
- Board power supply (USB/V in): 5 V
- Supported battery: Li-Po single cell, 3.7 V, 700 mAh minimum (integrated charger)
- Circuit operating voltage: 3.3 V
- Display connector: MIPI DSI host & MIPI D-PHY to interface with low-pin count large display
- GPU: Chrom-ART graphical hardware Accelerator™
- Timers: 22x timers and watchdogs
- UART: 4x ports (2x with flow control)
- Ethernet PHY: 10/100 Mbps (through expansion port only)
- SD card: Interface for SD card connector (through expansion port only)
- Operational temperature: -40°C to +85°C
- MKR headers: Use any of the existing industrial MKR shields on it
- High-density connectors: 2x 80-pin connectors will expose all of the board's peripherals to other devices
- Camera interface: 8-bit, up to 80 MHz
- ADC: 3x ADCs with 16-bit max. resolution (up to 36 channels, up to 3.6 MSPS)
- DAC: 2x 12-bit DAC (1 MHz)
- USB-C: Host/device, DisplayPort out, High/full speed, power delivery

### Specifications

Scan this QR code to  
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All details, up-to-date  
prices and availability

