# UDOO KEY

**THE WORLD'S MOST FLEXIBLE AI PLATFORM.**

Built on Raspberry Pi RP2040, ESP32 and Clea AI Platform.

((CLEA

## BASED ON RP2040

The Pico-compatible part is built upon a Raspberry Pi RP2040 dual-core ARM Cortex-M0+, with a QSPI 64M-bit Flash, a 133MHz clock and 264KB of on-chip SRAM.

## FEATURING ESP32

The fully programmable ESP32, based on a dual-core Xtensa 32-bit LX6, with a 16MB flash memory, 8MB PSRAM, Wi-Fi and Bluetooth.

## FULLY WIRELESS CONNECTIVITY

Wi-fi / Bluetooth / BLE

## ADVANCED SENSING CAPABILITIES

9-axis IMU + Microphone

www.udoo.org/udookey

UDOO
Part of **SECO**

# SPECS

**UDOO KEY**

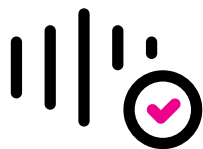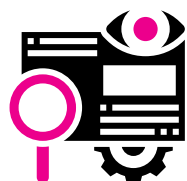| | | |
|---|---|---|
| **Microcontrollers** | ESP32-WROVER-E | RP2040 |
| **Memory** | 8 MB PSRAM | 264 KB SRAM |
| **Flash Storage** | 16 MB Internal flash | 64 M-bit External QSPI Flash |
| **Connectivity** | Wi-Fi/BT/BLE | |
| **Sensors** | On chip Temperature Sensor (RP2040)<br>9-AXIS IMU Motion Sensors / Omnidirectional Digital Microphone* | |
| **I/O** | UEXT Connector (I2C, SPI, UART) | 26 Multifunction GPIO pins,<br>including 3 analog imputs<br><br>(1 x UART, 2 x SPI controllers,<br>2 x I2C controllers, 16 × PWM channels)<br><br>(8 × Programmable I/O (PIO)) |
| **Power In** | 5VDC via USB-C | |
| **Dimensions** | 130mm X 40mm / 5,11" X 1,57" | |

*available only on UDOO KEY Pro

**SOUND RECOGNITION**

**GESTURE RECOGNITION**

**PREDICTIVE MAINTENANCE**

**OBJECT DETECTION & CLASSIFICATION**

**KEYWORD RECOGNITION**

**FACE RECOGNITION**