

ESP32

The Family

The ESP32 is a whole family of microcontrollers. Depending on the type, they differ from e.g. CPU or Wi-Fi capabilities.

Overview

Chip	CPU	Wi-Fi	Bluetooth	USB
ESP32	1-2× Xtensa, 240 MHz	Wi-Fi 4	BT Classic + BLE	□
ESP32-S2	1× Xtensa, 240 MHz	Wi-Fi 4	□	USB OTG
ESP32-S3	2× Xtensa LX7, 240 MHz	Wi-Fi 4	BLE 5	USB OTG
ESP32-C2	1× RISC-V	Wi-Fi 4	BLE	□
ESP32-C3	1× RISC-V, 160 MHz	Wi-Fi 4	BLE 5	USB Serial/JTAG
ESP32-C5	1× RISC-V, 240 MHz	Wi-Fi 6, 2.4 + 5 GHz	BLE 5.2	USB Serial/JTAG
ESP32-C6	1× RISC-V, 160 MHz	Wi-Fi 6	BLE 5	USB Serial/JTAG
ESP32-H2	1× RISC-V, 96 MHz	□	BLE 5	USB Serial/JTAG
ESP32-P4	RISC-V	□	□	USB OTG
ESP32-S31	2× RISC-V, 320 MHz	Wi-Fi 6	BT 5.4	USB OTG