Item no.: 356557

Low-powered microcontroller with ESP32-S3 design

from **6,43 EUR**

Item no.: 356557
shipping weight: 0.10 kg
Manufacturer: BPI

Product Description

Banana Pi BPI-PicoW-S3 is a low-powered microcontroller designed for IoT development and Maker DIY boards. It is designed with an ESP32-S3 chip and supports 2.4 GHz Wi-Fi and Bluetooth® LE dual-mode wireless communication. The peripheral is compatible with low-power hardware design, and the power consumption is only 10 uA in deep sleep mode. In terms of programming, the BPI-PicoW-S3 supports ESP-IDF, Arduino, micropython and other methods.

It is the same size as the Raspberry Pi Pico, and most GPIO definitions are compatible with Raspberry Pi Pico.

SoC: ESP32-S3, Xtensa® 32-bit LX7 dual coreBasic frequency: 240 MHz max.Operating temperature: -40°C ~+85°COn-chip ROM: 384 KBOn-chip SRAM: 320 KBOnboard Flash ROM: 2 MBOn-chip peripheral PSRAM: 8 MBWi-Fi: IEEE 802.11 b/g/n, 2.4 GHz band, 150 MbpsBluetooth: Bluetooth 5, Bluetooth meshGPIO: BPI-PicoW-S3 has led out 27 available GPIOsADC: 2x 12-bit SAR ADC supporting 18 analog channel inputsTOUCH capacitive touch sensor: 14SPI: 4I2C: 2, supports master or slave modeI2S: 2, input and output of serial stereo dataLCD: 1, supports 8-bit ~ 16-bit parallel RGB, I8080, MOTO6800 interfaceCamera: 1, supports 8-bit ~ 16-bit DVP image sensor interfaceUART: 3, supports asynchronous communication (RS232 and RS485) and IrDAPWM: 8x independent channels, 14-bit precisionMCPWM: 2USB: 1x Full Speed USB 2.0 OTG, MicroUSB femaleUSB Serial/JTAG Controller: 1, USB full speed standard, CDC-ACM, JTAGTemperature sensor: 1, the measurement range is –20°C to 110°C, for monitoring the internal temperature of the chipSD/MMC: 1x SDIO host interface, with 2 card slots, supports SD card 3.0 and 3.01, SDIO 3.0, CE-ATA 1.1, MMC 4.41, eMMC 4.5 and 4.51TWAI® controller: 1, compatible with ISO11898-1 (CAN specification 2.0)Generic DMA Controller: 5x receive channels and 5x transmit channelsRMT: 4-channel transmit, 4-channel receive, shared 384 x 32-bit RAMPulse counter: 4 pulse count controllers (units), each unit has 2 independent channelsTimer: 4x 54-bit general-purpose timers, 16-bit clock prescaler, 1x 52-bit system timer, 3x watchdog timersExternal crystal: 40 MHzRTC and low power management: Power Management Unit (PMU) + Ultra Low Power co-processor (ULP)Low power consumption current: 10 uAWorking voltage: 3.3 VInput voltage: 3.3 V ~ 5.5 VMaximum discharge current: 2 A @ 3.3 V DC/DCControllable full color LED: 1

Specifications

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