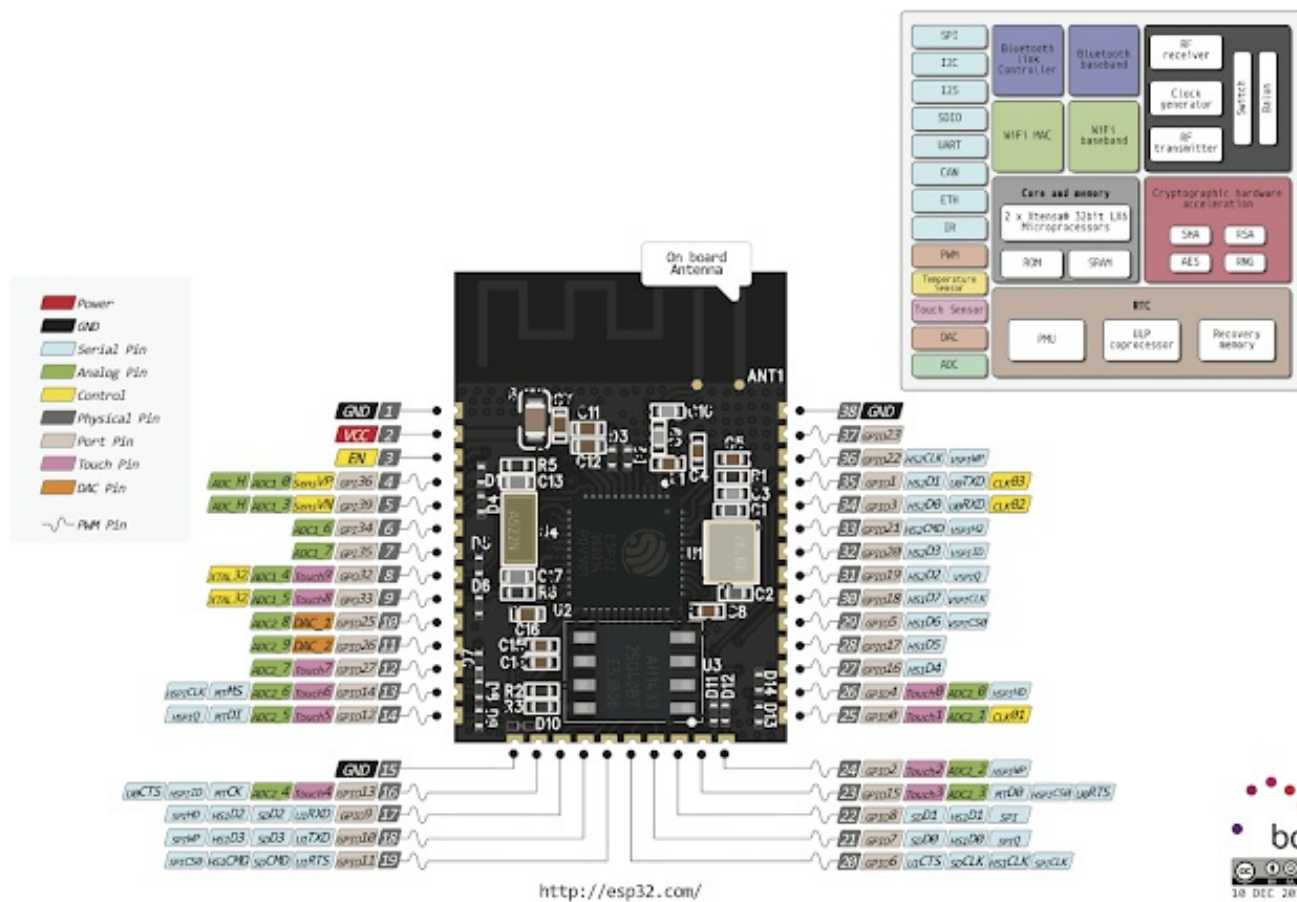


CAN Newsletter Online

32-BIT SYSTEM-ON-CHIP

Implements optionally a CAN module

ESP32 by Espressif (China) is a series of low-cost, low-power SoC s with integrated Wi-Fi and dual-mode Bluetooth interfaces. Some versions provide CAN connectivity.



The 32-bit SoC is manufactured by Taiwan Semiconductor Manufacturing Company (Photo: Espressif)

The ESP32 series employs a Tensilica Xtensa LX6 microprocessor in both dual-core and single-core variations. The SoC (system-on-chip) was developed by Espressif Systems, a Shanghai-based Chinese company, and is manufactured by TSMC (Taiwan) using their 40-nm process. The CPU is clocked with 160 MHz or 240 MHz. The product features 520 KiB of SRAM. It implements a broad range of interfaces including Ethernet, three UARTs, four SPIs, etc. The chip also features on-chip A/D and D/A converters. The on-chip Classical CAN module is accompanied by cryptographic functionality and a random number generator implemented in hardware. The flash memory is encrypted and the boot procedure is secured, reports the Chinese company, which is fabless semiconductor supplier.

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