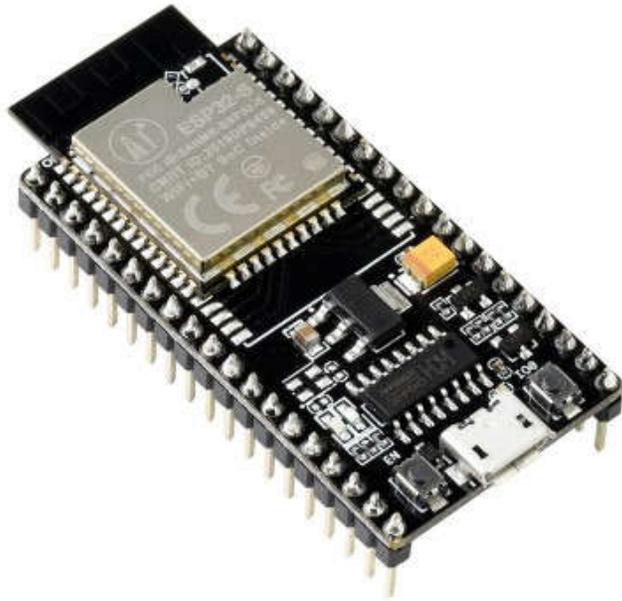


ESP32 MODULE AI-THINKER (CH340)



NodeMCU-32S, ESP32 WiFi+Bluetooth Development Board

Description

Package Content

NodeMCU-32S, ESP32 Development Board, WiFi / Bluetooth / UART / Keys / Extension Headers

Overview

This is the NodeMCU development board based on ESP32, features WiFi+Bluetooth connectivity, onboard CH340 and keys. What's more, all the I/O pins of ESP32-S module are accessible via the extension headers.

Thanks to the rich open-source resources, it supports development in various ways such as Lua/AT commands/MicroPython/Arduino/IOT source code, etc. helps you to fast prototype IoT applications.

Features

- Onboard ESP32-S module
- Onboard CH340, USB to UART converter
- USB port for power input, firmware programming, or UART debugging
- 2x19pin extension headers, breakout all the I/O pins of the module
- 2x keys, used as reset or user-defined

Revision log:

UART converter **CH340** is used for new versions, instead of the **CP2102**. Most Windows systems should recognize it automatically, if not, please download and install [the driver](#).

Specifications

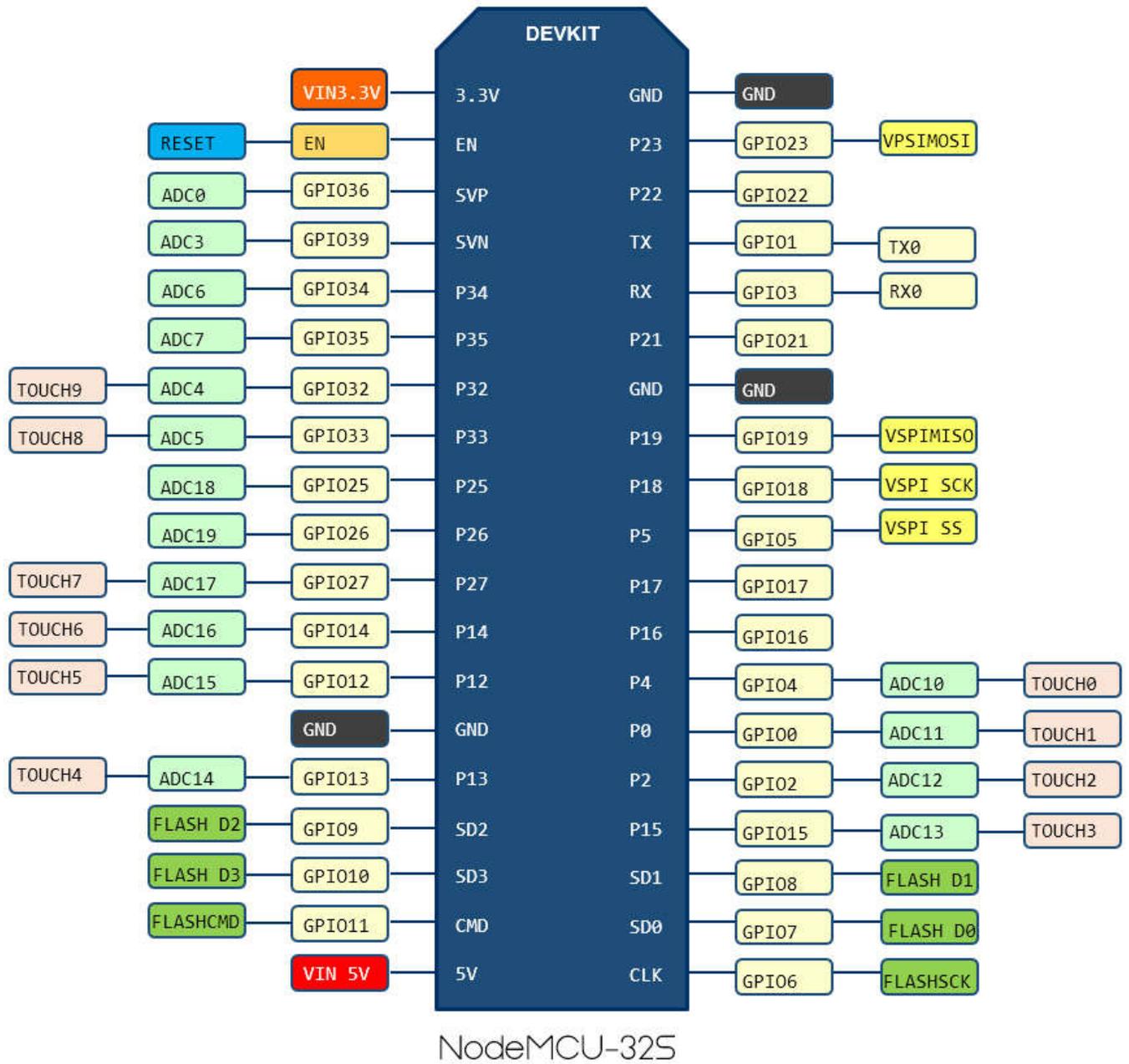
- WIFI module: ESP32-S
 - Processor: ESP32
- Built-in Flash: 32Mbit
- Antenna: Onboard PCB antenna
- Peripheral interface: UART/GPIO/ADC/DAC/SDIO/PWM/I2C/I2S
- WiFi protocol: IEEE 802.11 b/g/n
- Bluetooth: Bluetooth 4.2
- Frequency range: 2.4G ~ 2.5G (2400M ~ 2483.5M)
- WIFI mode: Station / SoftAP / SoftAP+Station
- Power supply: 5V
- Logic level: 3.3V
- Dimensions: 48.26mm x 25.4mm

Applications

The NodeMCU-32S suit for IOT applications such as:

- Smart home
- Intelligent building
- Industrial automation
- Wearable devices
- IP camera
- Intelligent agriculture

Pinouts



Development Resources

Wiki : www.waveshare.com/wiki/NodeMCU-32S