

# 10 I/Os Modules - CPU ESP32

## Product Overview

11/30/2022

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

DFRobot 10 I/Os Modules - CPU ESP32 is based on the ESP32 devkit and provides a solution to industrial monitoring and control applications. These modules are easy to install and support RS485, Ethernet, and optoisolated input/output. The 10 I/Os modules - CPU ESP32 features 12V<sub>DC</sub> to 24V<sub>DC</sub> power input range, 30W rated power, 2MB PSRAM, and 4MB SRAM. These modules are used to control and automate machines and control AC and DC motors.



## Features

- With 10 I/O interfaces
- Standardized connectors
- Supports RS485

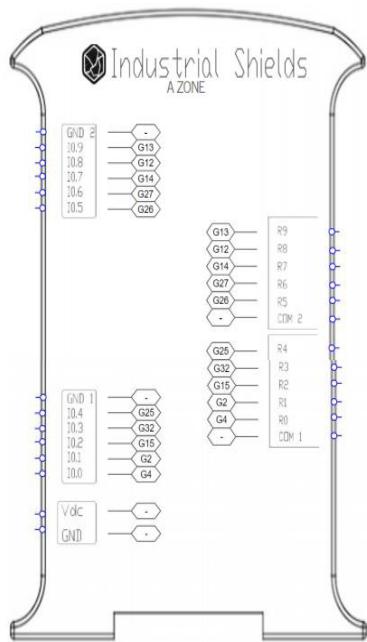
## Specifications

• ESP32 devkit MCU	• 30V <sub>AC</sub> maximum power consumption
• 12V <sub>DC</sub> to 24V <sub>DC</sub> power input range	• 5V <sub>DC</sub> to 24V <sub>DC</sub> digital isolated relay output
• 24V <sub>DC</sub> input-rated voltage	• 0°C to 60°C operating temperature range
• 30W rated power	• Ethernet Port
• 1.5A maximum current	• TCP IP
• Clock speed:	• Modbus TCP
• External 240MHz	• Modbus RTU
• Internal 8MHz	
• 4MB flash	
• 4MBSRAM	
• 2MB PSRAM	
• Communication:	
• USB-RS485-ETH-WiFi-BLE	
• 11.4V <sub>DC</sub> to 25.4V <sub>DC</sub> operating voltage range	

## Applications

- Control and automation of machines
- Control of AC and DC motors

## Overview



10 I/Os Connector	ESP32 Pin	Function
<b>GND 2</b>	-	Ground
<b>10.9</b>	G13	Digital Input
<b>10.8</b>	G12	Digital Input
<b>10.7</b>	G14	Digital Input
<b>10.6</b>	G27	Digital Input
<b>10.5</b>	G26	Digital Input
<b>GND 1</b>	-	Ground
<b>10.4</b>	G25	Digital Input
<b>10.3</b>	G32	Digital Input
<b>10.2</b>	G15	Digital Input
<b>10.1</b>	G2	Digital Input
<b>10.0</b>	G4	Digital Input



## Input Pins

10 I/Os Connector	ESP32 Pin	Function
<b>R9</b>	G13	Relay Output
<b>R8</b>	G12	Relay Output
<b>R7</b>	G14	Relay Output
<b>R6</b>	G27	Relay Output
<b>R5</b>	G26	Relay Output
<b>COM2</b>	-	Common Ground
<b>R4</b>	G25	Relay Output
<b>R3</b>	G32	Relay Output
<b>R2</b>	G15	Relay Output
<b>R1</b>	G2	Relay Output
<b>R0</b>	G4	Relay Output
<b>COM1</b>	-	Common Ground



## Relay Rips

## Relay Pins

*The information contained in this document should be used as a guideline only.*

## Mouser Part Numbers

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