

STD

6 Pack 2.0 External

Motor_Drive_Module

5k

0

3

5

Profile: A version of the 6 Pack Controller specifically designed to control external

License: GPL 3.0

Project source: Cloned from [6 Pack 2.0](#)

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Description

This is a CNC controller for use with an ESP32 and [FluidNC](#) firmware. It uses plug in CNC I/O modules to allow it to control a vast array of external devices, like RS485 Spindles, lasers, coolant devices, etc. Check out my [other projects](#) to see what is available.

Features

- Control up to 6 external motor drivers. The signals are 5V with enough current to drive opto isolators. You can use 3 to 6 lettered axes (XYZABC) or you can control dual motor axes like XXYYZA.
- 6 built in opto-isolated inputs. This saves you from having to buy an input module. If 6 is not enough

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- 2 built in 5V output signals. Each has a status LED.
- 3 CNC I/O Modules. #1 and #2 use GPIO and can support any module. #3 is output only. RS485, %V Ouput and Relay shown in product image.
- Socket for standard ESP32-DevKitC modules in the 2x19 pin formats. It supports both 0.9" and 1.0" wide versions.
- 6 extra digital outputs on pin headers.
- Micro SD card socket.
- 9VDC to 24VDC power input.
- No jumpers or compiling. Everything is setup with a config file. (see attachments for an example)
- Full support via [Discord](#) or [Github Issues](#)

All connections use plug in terminal blocks.

Buying from me.

I sell on Tinie (link coming soon) Contact me via [Discord](#)

Buying from JLCPCB

You need to buy the following mating connectors from LCSC

- (6) Stepper Motor Driver KF2EDGK-3.5-4P [C440849](#)
- (3) Input/Output KF2EDGK-2.54-6P [C577530](#)
- (1) Power Input XY2500F-A-5.0-2P LCSC P/N [C504904](#)
- (3) MOD1-MOD3 12P Female Header LCSC P/N C225509 can be C350303

You also need a ESP32 Module in the [2x19 format ESP32-DevKitC](#)

Alternate Parts

I sugest cloning the project and testing any alternates for fit

U6,U7,U8,U9 (Should be a 74AHCT595 in SOIC-16)



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Schematic

Layout

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Fold


1	100nF	C1,C2,C9,C10,C11,C13,C14,C15
2	47uF	C3,C4
3	2.2uF	C5,C6
4	39pF	C7
5	6.8nF	C8

Unfold

Project Attachments

Order	File name	Download times
1	6_Pext_XYZABC.yaml	65
2	6ext_pinout.png	79

Project Members



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⚠ Target complaint

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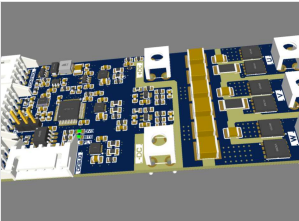
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