Servo Driver with ESP32

This product is a bus servo control board based on ESP32 and we provide examples that can control bus servos through the WEB application.This product supports programming of servos to change the ID and working mode of the servos (servo mode/motor mode), etc. , in theory, it can control 253 bus servos and read the current angle, load, voltage, mode and other information of each servo, and can use the serial port to communicate with the upper computer, which is used to build the lower computer of the robot project, and the on-board OLED The screen can be used to display key information and is suitable for robot projects such as robotic arms, hexapod robots, humanoid robots, wheeled robots, etc. that require feedback on the angle and load of the steering gear.

Product Specifications

- Supply voltage: DC 6-12V(the input voltage and the servo voltage must be matched)
- Controloller: ESP32
- Control interface: UART
- Download interface: Type-C
- Power supply connector: 5.5*2.1mm DC
- Dimensions: 65mm x 30mm
- Fixing hole diameter: 3.0mm
- Mounting hole size: 2.75mm
- Mounting hole spacing: 23 × 58mm

Product Features

- Allows controlling up to 253 SC, ST series serial bus servos at the same time (adequate power supply required)
- Wide range voltage input 6-12V (the input voltage and the servo voltage must be matched)
- Built-in WiFi and Bluetooth, as well as ESP-NOW support, for remote control and servo debugging
- Automatic download circuit for easy uploading programs
- Open source web application and various robot structures
- Compact size and space saving, suitable for integration into sorts of space-limited projects

Open Source Project

You can download the relevant open source robot models in the product documentation for building your own projects.

Resources

Program

- [Sample program](#)

Software

- [Arduino IDE](#)

Open source structure

- [Open source robot](#)