

According To Requirements

I will deliver :

1. Compact PCB design (with Gerber files)
2. Complete documentation
3. BOM
4. Guidelines

Based on the features:

1. Two ESP32 DEVKIT V1 on a single board, 6 A4988 Stepper Driver, 1 Servo Driver, Drive 2 cooling fan.
2. Need at least 3 switching regulators for 6 motors. And 1 regulator for the ESPs and the cooling fan.
3. But 2 ESP32 DEVKIT1 may not handle 6 encoders.
4. Also A4988 is not an efficient driver. Creates lots of Motion Noise.
6. Camera generally does not work on SPI Bus nor I2C Bus.
7. You need to use more advanced ESP32 modules for camera and 6 encoders.