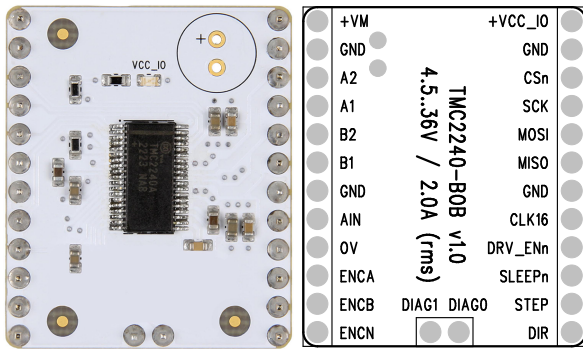


TMC2240-BOB

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Module Top/Bottom View



Features and additional Resources

- TMC2240 stepper motor driver
- Supply voltage 4.5-36V
- I_{phase} up to $2.0A_{RMS}$
- Flexible wave table and phase shift
- **StealthChop2™** silent PWM mode
- **StallGuard4™** sensorless motor load detection
- Control via Step&Dir and SPI interface
- Board width 1.0", board height 1.2"
- 2x12 pin 0.1" header rows for pins/connectors
- Link to [additional information and IC data sheet](#)

Pin List

| Pin | Left Header | Right Header |
|-----|-------------|--------------------|
| 1 | +VCC_IO | +VM |
| 2 | GND | GND |
| 3 | SPL_CSn | A2 (Motor Phase A) |
| 4 | SPL_SCK | A1 (Motor Phase A) |
| 5 | SPL_MOSI | B2 (Motor Phase B) |
| 6 | SPL_MISO | B1 (Motor Phase B) |
| 7 | GND | GND |
| 8 | CLK | AIN (1.25V max.) |
| 9 | DRV_ENn | OV |
| 10 | SLEEPn | ENCA |
| 11 | STEP | ENCB |
| 12 | DIR | ENCN |
| TP | DIAG0 | DIAG1 |

Bill of Materials

| Pcs. | Value | Footprint | Description |
|------|------------|-----------|---|
| 1 | 1k/1% | 0603 | Resistor |
| 2 | 4k7/1% | 0603 | Resistor |
| 1 | 12k/1% | 0603 | Resistor |
| 1 | 1uF, 16V | 0603 | Capacitor |
| 2 | 1uF, 50V | 0603 | Capacitor |
| 1 | 2u2, 6.3V | 0603 | Capacitor |
| 1 | 22nF, 50V | 0603 | Capacitor |
| 1 | 100nF, 16V | 0603 | Capacitor |
| 2 | 100nF, 50V | 0603 | Capacitor |
| 1 | blue/0603 | 0603 | LED |
| 1 | TMC2240 | TSSOP38 | Trinamic Stepper Motor Driver |

Schematics

