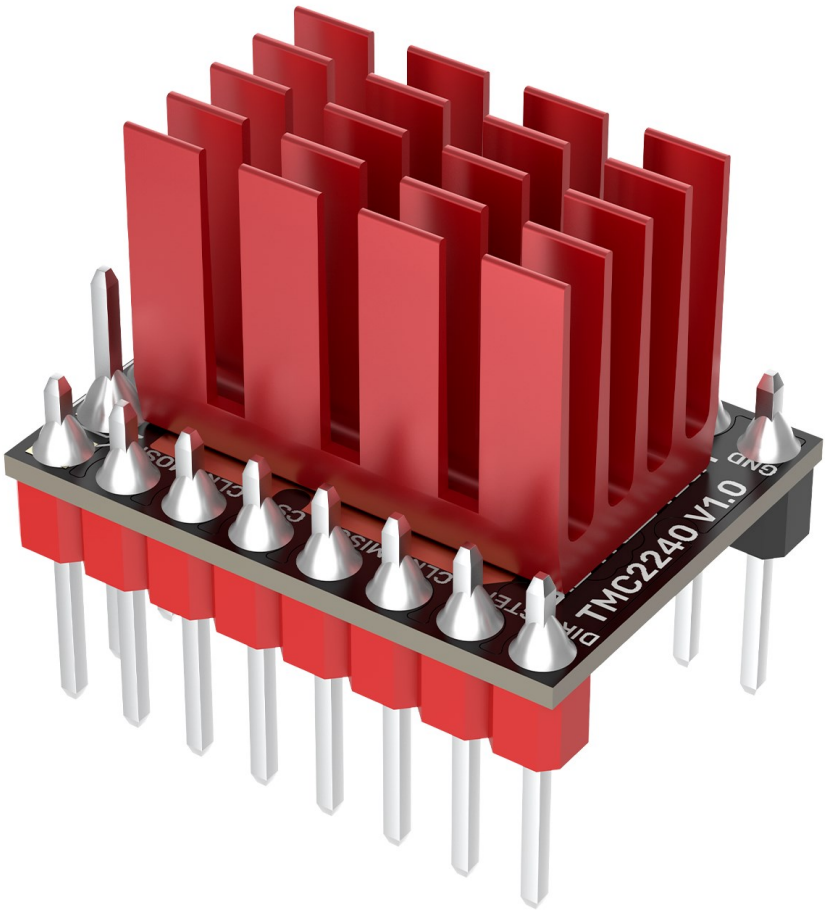
# BIGTREETECH TMC2240 V1.0

## User Manual




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## Revision History

| Version | Revisions | Date |
|---|---|---|
| 01.00 | Original | 2023/04/08 |
| 01.01 | Description of changing mode selection | 2026/08/04 |
| | | |

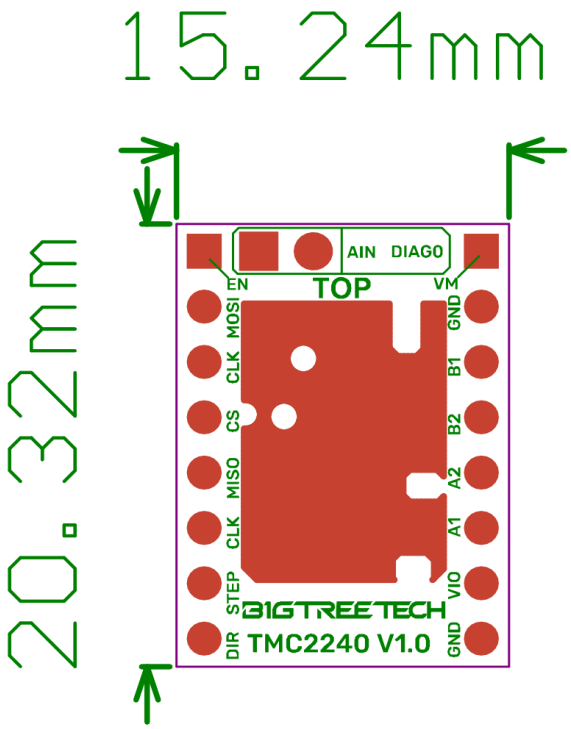
## Product Profile

The BIGTREETECH TMC2240 driver is a new generation of silent drivers, supporting a higher voltage range and a larger current output.

### Specifications

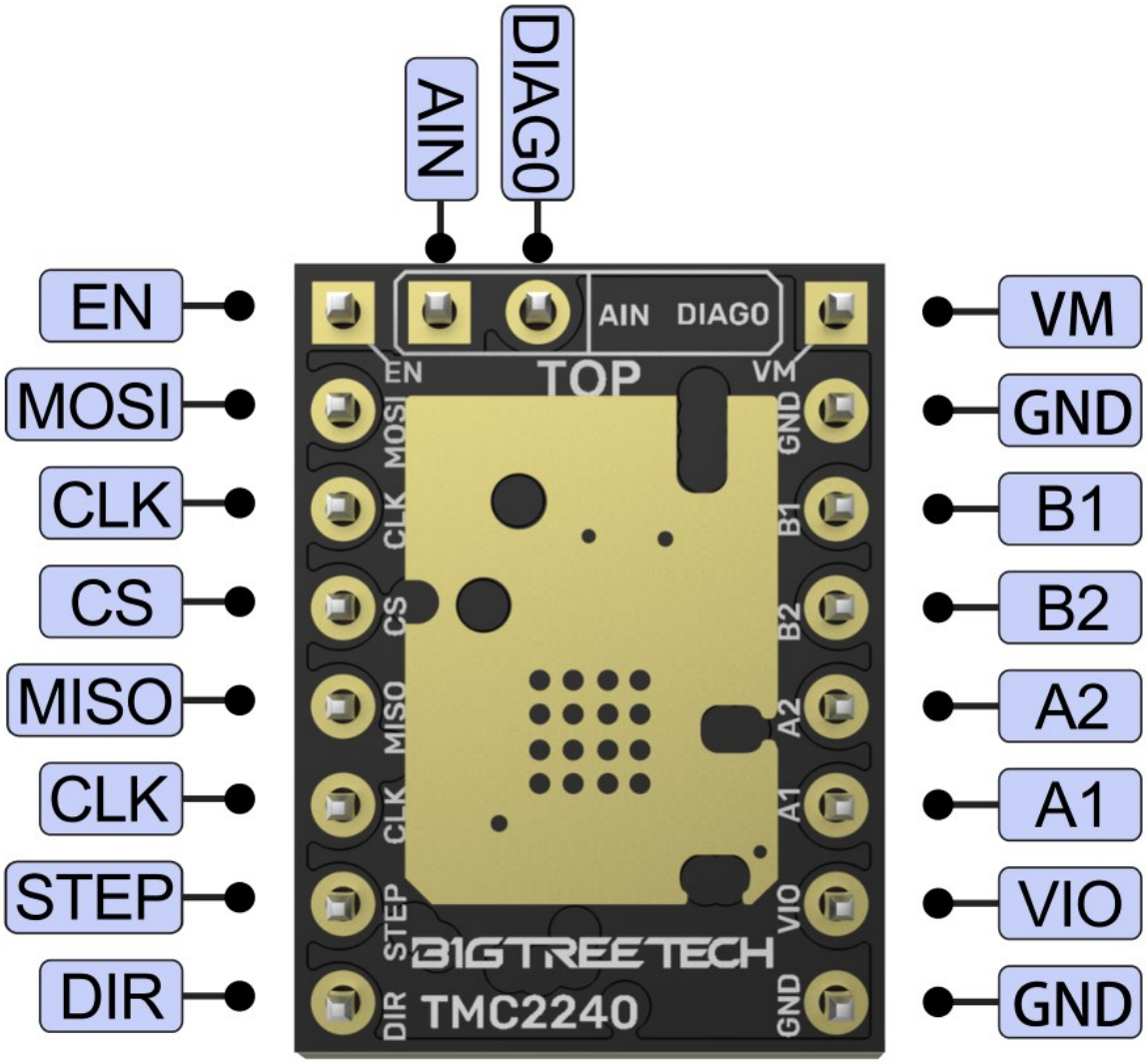
1. Supports High Subdivision: 256 microsteps
2. Supports Voltage: 4.5-36V DC
3. Supports Maximum Current: IRMS=2.1A IFS=3A
4. Supports Sensorless Homing
5. Low on-resistance: Rdson (H+L) = 230mΩ
6. Communication Modes: SPI or UART (SPI by default)
7. Overheating Protection, Overvoltage Protection, Stall Protection
8. Supports Analog Signal Input
9. Real-time Monitoring of Motor and Drive Temperatures

### Dimensions



## Peripheral Interface

### Pin Description

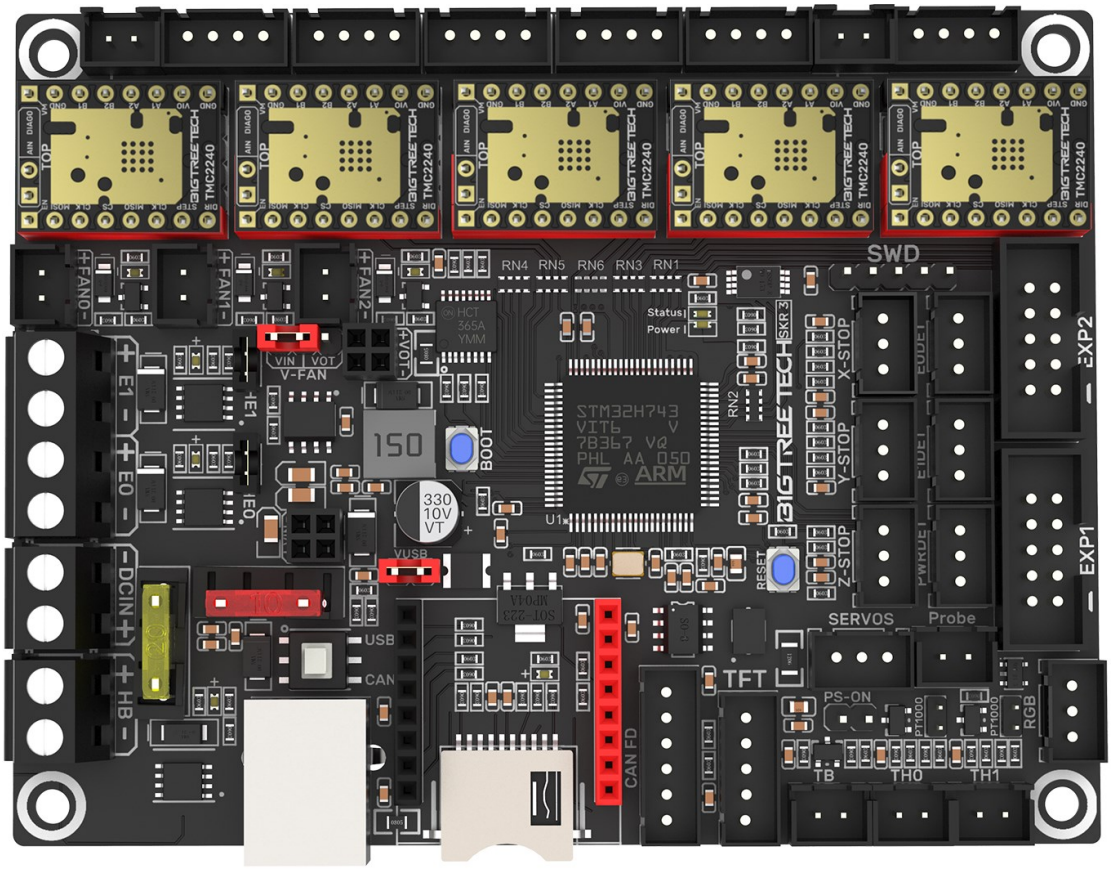


# Usage Examples

## Mode Selection

The factory default is SPI mode. If the customer wishes to use UART mode, customization is acceptable.

## Work with SKR 3




# Precautions

1. When plugging in the drive, be sure to orient the connector correctly to avoid reversing the polarity and damaging the drive.

2. When using high voltage (greater than 24V) or high current (greater than 1.2A), active cooling must be used to prevent the drive from overheating.

3. The factory default mode for the driver is SPI. This mode is recommended for most users. If UART mode is required, manual soldering is necessary. It is not recommended for users without soldering experience to attempt this, as it may cause injury.

If you require additional resources for this product, please visit https://github.com/bigtreetech/ to find them. If you cannot locate the resources you need, please contact our customer support.

If you encounter other problems during use, please feel free to contact us, and we will be more than happy to assist you. If you have any suggestions or feedback for our products, we are open to hearing them. Thank you for choosing BIGTREETECH products!