

ZIKODRIVE 1 Brushless DC Motor controller - Technical Datasheet (REV-A)



Product Definition: A high quality, easy to use Brushless DC motor controller designed and manufactured in United Kingdom.

Key Features:

- Efficient
- UART Connectivity
- Dedicated Software
- Programmable Output Pin
- Analogue speed and direction control
- 4 Quadrant Bipolar Operation
- Self-Optimisation
- Easy to operate
- Clean and compact design

Technical Specifications:

Specification	Value
Maximum Power	300 W
Rated Power	150 W
Drive Method	High Frequency Sensor less Trapezoidal
Minimum Voltage	5 V
Analogue Input	0-3.3 V
Operating Temperature	-20 to 85 Celsius
Weight (Without Casing)	20 g
Weight (With Casing)	115 g
Maximum Voltage	28 V
Running Current	6 A ^{**}
Maximum Current	15 A
UL Rating	ULV94
ROHS Compliant	Yes
REACH Compliant	Yes
Country of Origin	UK
Overtemperature Protection	Yes
Cable Diameter for Connectors	1.5 sq. mm
Header Pin Pitch	2.54 mm
2-way and 3-way Connectors Pitch	1.27 mm

**** NOTE:** Under certain operating conditions (for example high current, low speed at a relatively high ambient temperature and 100% duty cycle), the controller will get hot. Care must be taken to ensure the unit is adequately heatsinked and cooled in such circumstances. If you have a specific requirement or application where this may be relevant, then please contact our team to discuss suitability and we will be happy to advise.

Connections:

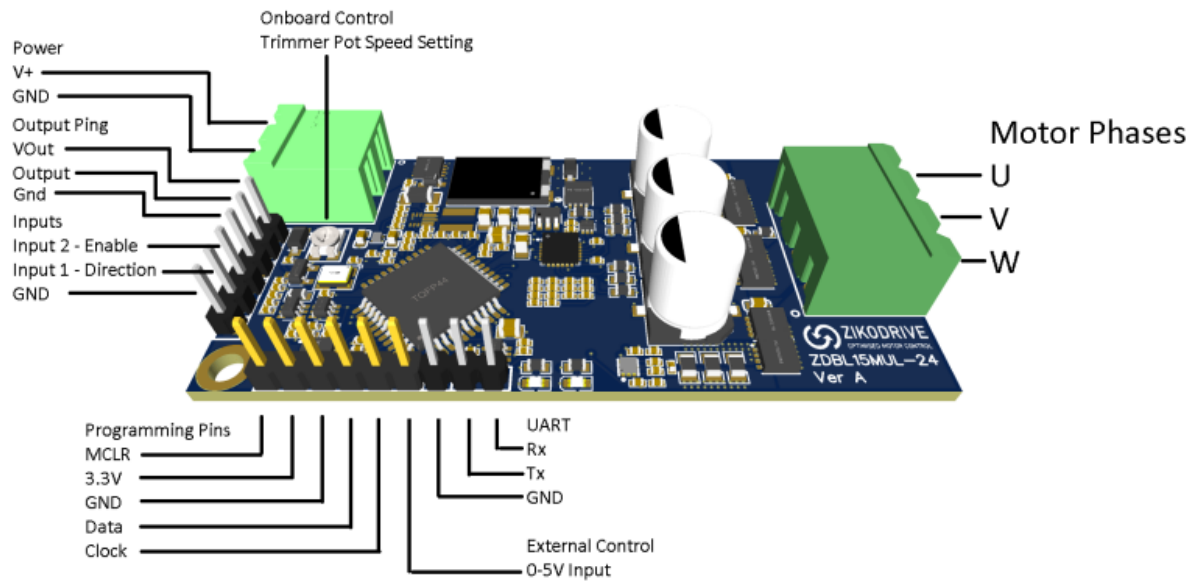


Figure 1: ZIKODRIVE 1 Terminal Connections

Terminals		Terminals	
V+	Power	MCLR	Reset Controller
GND	Terminals	3.3 V	3V3 Output
VOUT	Voltage Output	GND	Ground
OUTPUT	Programmable Output	DATA	Programming Pin
GND	Ground	CLOCK	
INPUT 2	ENABLE	Rx	Receiver
INPUT 1	DIRECTION	Tx	Transmitter
GND	Ground	GND	Ground

Dimensions:

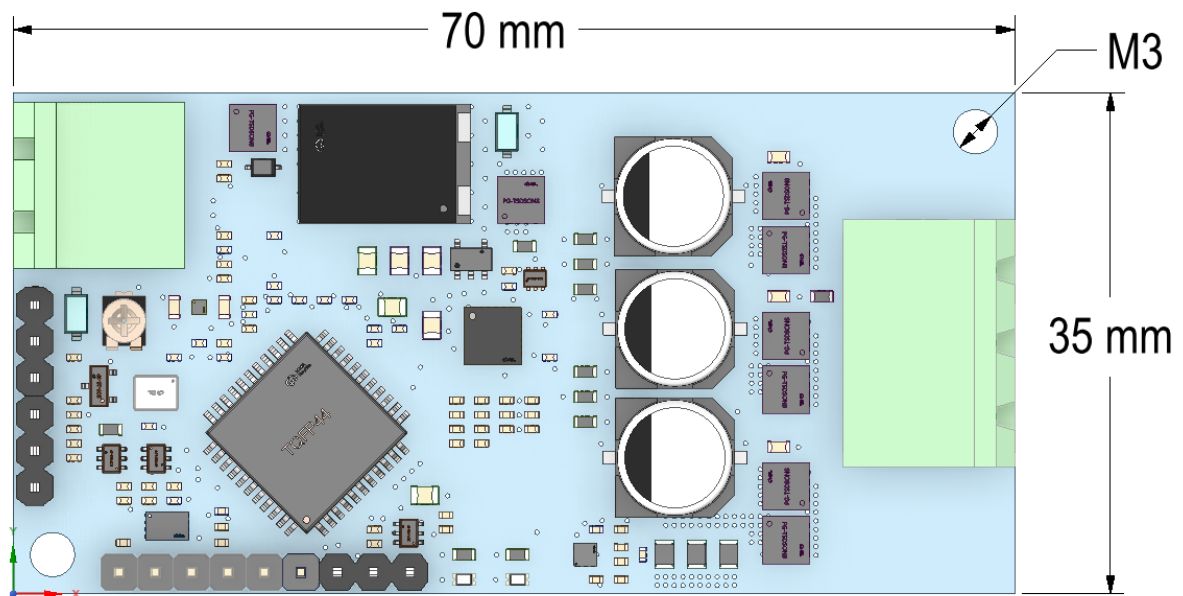


Figure 2: Top View (Without Casing)

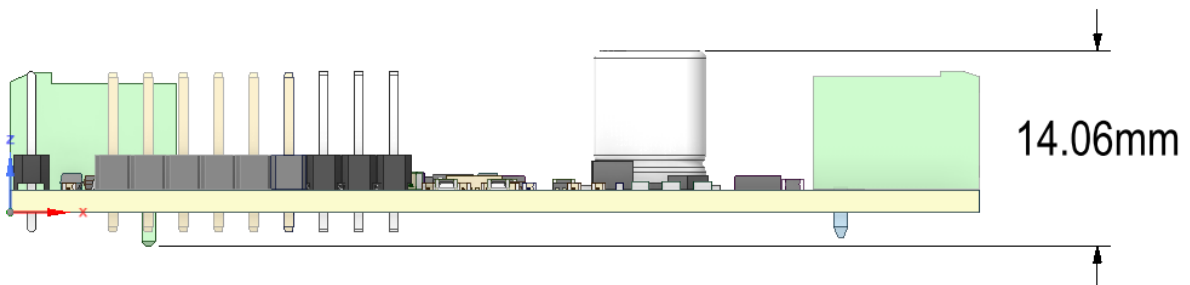


Figure 3: Front View (Without Casing)

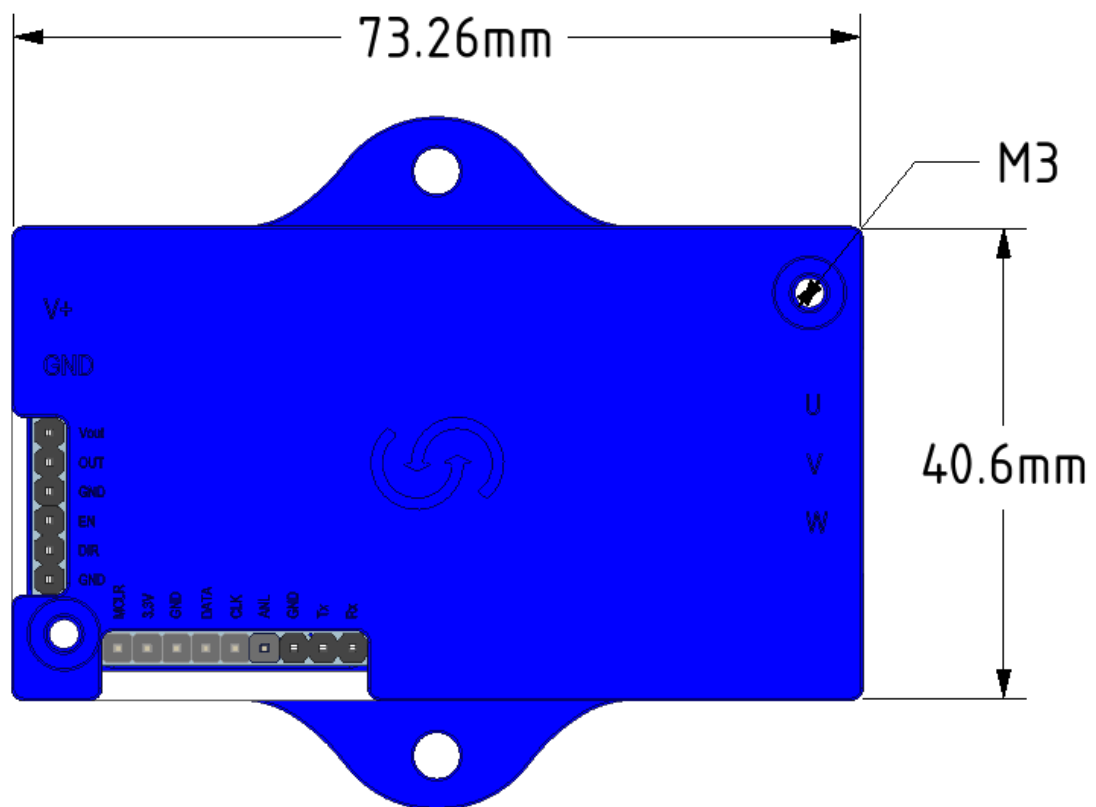


Figure 4: Top View (With Casing)

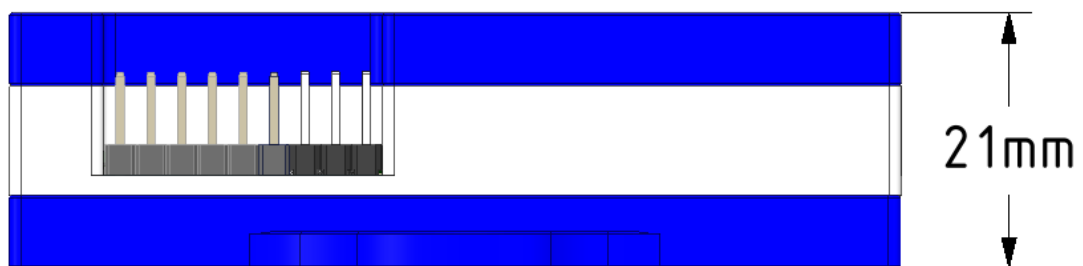


Figure 5: Front View (With Casing)