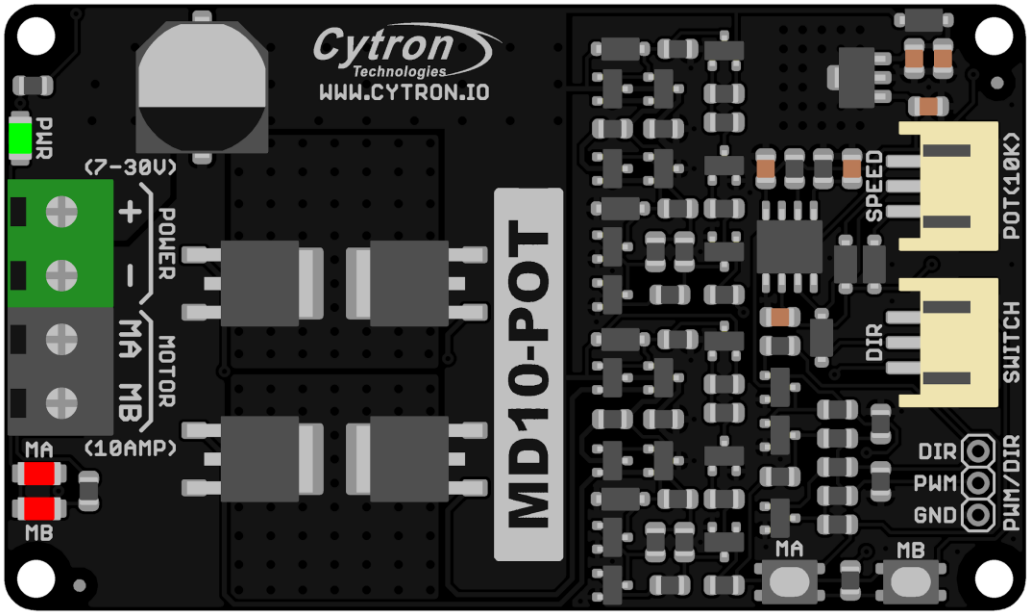
MD10-POT
Potentiometer and Switch Control
10Amp DC Motor Driver



Datasheet

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1. BOARD LAYOUT & FUNCTION

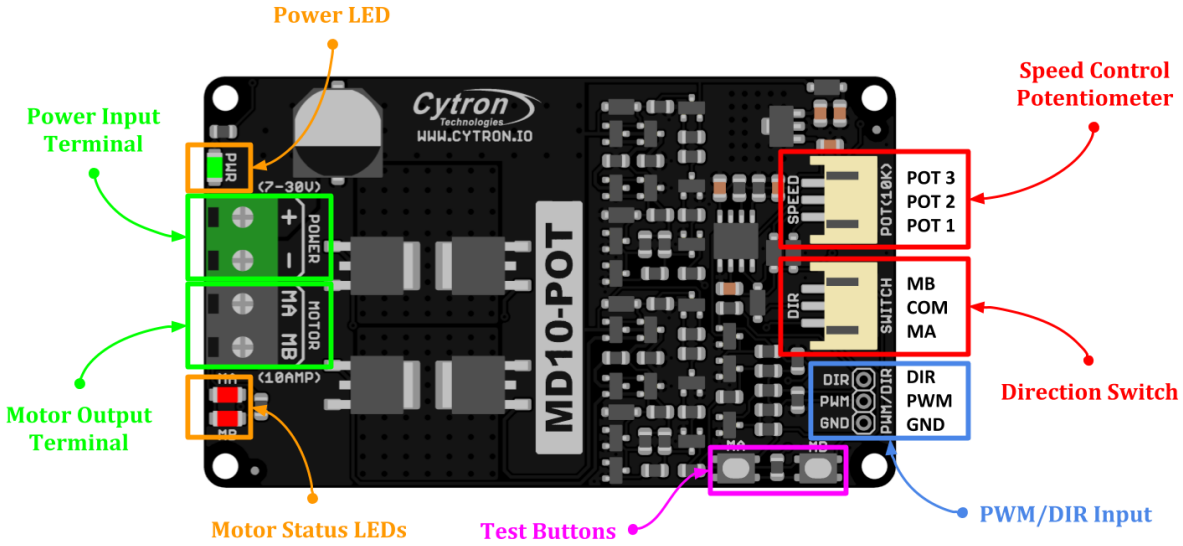

Figure 1: MD10-POT Board Functions

Function	Description
Power Input Terminal	Connect to battery.
Motor Output Terminal	Connect to motor.
Power LED	Turn on when power up.
Motor Status LEDs	Turn on when the motor is running.
Test Buttons	Press to test the functionality of the motor / driver.
Speed Control Potentiometer	Connect to 10KΩ potentiometer for motor speed control.
Direction Switch	Connect to SPDT Switch for motor direction control.
PWM/DIR Input	Use this to control the motor with PWM signal. DIR pin is used for direction control. Refer to Table 2 below for truth table.

Table 1: MD10-POT Board Functions

PWM	DIR	Output A (MA)	Output B (MB)	Motor
Low	**X (Don't Care)**	Low	Low	Brake
High	**Low**	High	Low	Forward
High	**High**	Low	High	Reverse

Table 2: PWM/DIR Input Truth Table

2. SPECIFICATIONS

No	Parameters	Min	Max	Unit
1	Power Input Voltage	7	30	V
2	Maximum Motor Current - Continuous	-	10	A
3	Maximum Motor Current - Peak (Less than 10 seconds)	-	30	A
4	Logic Input Voltage - Low Level (PWM, DIR)	0	0.5	V
5	Logic Input Voltage - High Level (PWM, DIR)	3	30	V
6	Internal PWM Generator Frequency *(Output frequency when potentiometer is used)*	9	11	KHz
7	External PWM Input Frequency *(Output Frequency = Input Frequency)*	DC	20	KHz

Table 3: MD10-POT Absolute Maximum Ratings

3. DIMENSION

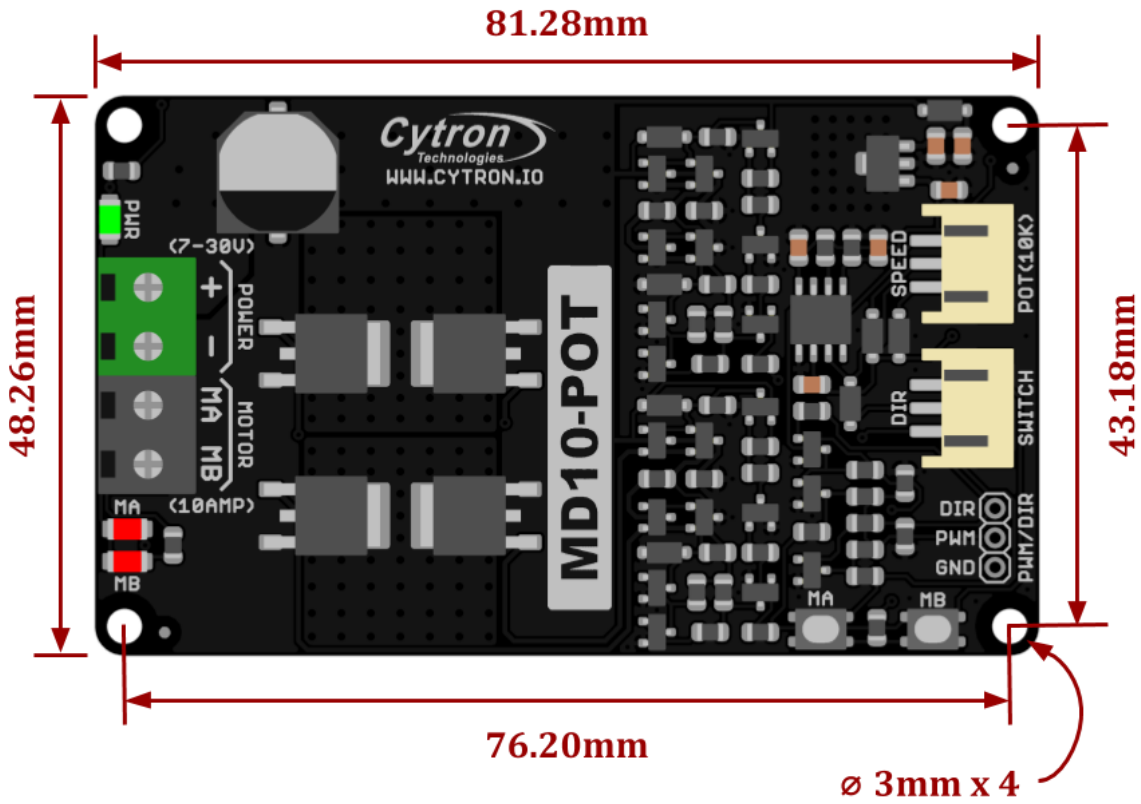

Figure 2: MD10-POT Dimension

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