## MP6500 Stepper Motor Driver Carrier, Potentiometer Current Control



This breakout board for the MPS MP6500 microstepping bipolar stepper motor driver has a pinout and interface that are very similar to that of our popular **A4988 carriers**, so it can be used as a drop-in replacement for those boards in many applications. The MP6500 offers up to 1/8-step microstepping, operates from 4.5 V to 35 V, and can deliver up to approximately 1.5 A per phase continuously without a heat sink or forced air flow (up to 2.5 A peak). This version of the board uses an **on-board trimmer potentiometer for setting the current limit**, and the board ships with 0.1" male header pins included but not soldered in.

Alternatives available with variations in these parameter(s): current limit control header pins soldered? **Select variant...** 

or .

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#### **Dimensions**

**Size:** 0.6" × 0.8"

**Weight:** 1.4 g<sup>1</sup>

#### **General specifications**

Minimum operating voltage: 4.5 V

Maximum operating voltage: 35 V

Continuous current per phase:  $1.5 A^2$ 

Maximum current per phase:  $2.5 A^{3}$ 

Minimum logic voltage:  $2.1 \vee \frac{4}{}$ 

Maximum logic voltage:  $6 \lor \frac{5}{}$ 

Microstep resolutions: full, 1/2, 1/4, and 1/8

Current limit control: potentiometer

Reverse voltage protection?: N

Header pins soldered?:	N
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# **Identifying markings**

PCB dev codes: md33a, md33b

**Other PCB markings:** 0J10855, 0J11019

### Notes:

- 1 Without included optional headers.
- 2 Without a heat sink or forced air flow.
- 3 With sufficient additional cooling.
- **4** This is the input logic high threshold.
- **5** Absolute maximum voltage on any input is 6.5 V.