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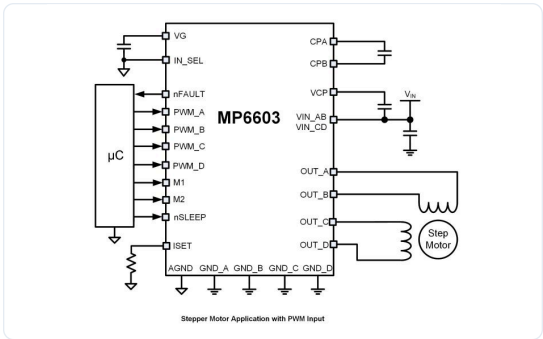
MP6603

# MP6603

55V, Dual Full-Bridge Motor Driver with Internal Current Sense

New

[Datasheet](#)



## Description

The MP6603 is a dual full-bridge motor driver with integrated low-on resistance ( $R_{DS(ON)}$ ) MOSFETs.

High integration and a small QFN package make the MP6603 a cost-effective solution for brushed DC motor drivers and stepper motor drivers.

The MP6603 operates across an 8V to 55V input voltage ( $V_{IN}$ ) range. It can deliver a motor current up to 5A peak per full bridge, depending on the ambient temperature and PCB layout.

The MP6603 has unique independent ground pins for each half-bridge. These pins make it possible to provide current measurements through the external shunt resistor.

Two configurable input modes are available for the MP6603: a pulse-width modulation (PWM) input interface and an indexer interface. The IN\_SEL pin configures the input interface.

Internal safety and diagnostic features include over-current protection (OCP), short-circuit protection (SCP), under-voltage protection (UVP), and thermal shutdown.

The MP6603 is available in a QFN-25 (4mmx5mm) package.

Show less

### Features & Benefits

- Wide 8V to 55V Operating Input Voltage ( $V_{IN}$ ) Range
- Two Internal Full-Bridge Drivers
- Selectable Input Interface: Simple Pulse-Width Modulation (PWM) Input or Indexer Input
- Indexer Interface Offers Full-, Half-, Quarter-, and Eighth-Step Modes by Setting the M1 and M2 Pins
- Low On Resistance ( $R_{DS(ON)}$ ): 65mΩ High-Side MOSFET (HS-FET) and 50mΩ Low-Side MOSFET (LS-FET)
- Up to 5A of Current in Full-Bridge Mode
- Up to 10A of Current in Parallel Mode
- PWM Operating Frequency Up to 100kHz
- Independent Ground Pins for Each Half-Bridge
- Over-Current Protection (OCP)
- Thermal Shutdown


Active Part Numbers:

MP6603GV-Z MP6603GV-P

Part numbers ending in P and Z are the same parts. P and Z only indicates reel size.

Meaning of P & Z ^

Related Products



**EV6603-V-00A 55V, 5A, Dual Full-Bridge Motor Driver Evaluation Board**

The EV6603-V-00A is an evaluation board designed to demonstrate the capabilities of the MP6603, a dual full-bridge motor driver with a built-in, microstepping translator.

The MP6603 operates from a supply voltage of up to 55V, and it can deliver a motor current up to 5A. It can drive one or two DC motors or a bipolar stepper motor in full-, half-, quarter-, and eighth-step modes by setting M2 and M1. The input control signals for the MP6603 are applied through the CN1 connector or generated on the board.

The MP6603 is available in a QFN-25 (4mmx5mm) package. It is recommended to read the MP6603 datasheet prior to making any

\$100.00

+ tax

Learn more

MP6603 Resources

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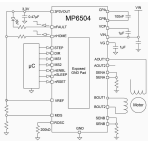
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**STEPPER MOTORS**

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PRODUCT

8V to 32V, 2A, Stepper Motor Driver with Integrated MOSFETs