

MIC4608

600V Half-Bridge MOSFET Driver

APPLICATIONS



FULL- AND HALF-BRIDGE MOTOR DRIVES



INDUSTRIAL CONTROLS



WHITE GOODS



THREE-PHASE MOTOR DRIVES



INVERTERS/UPS

BENEFITS

» Robust

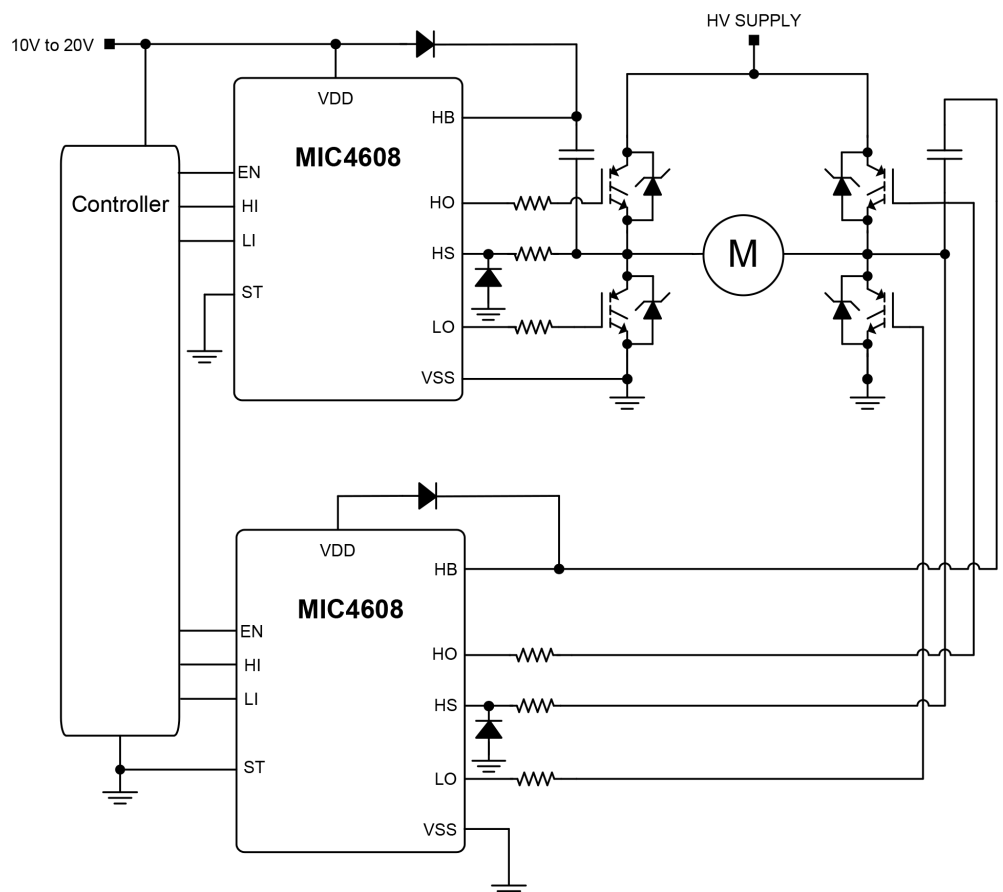
- Operational up to 600V
- Shoot-Through protection prevents cross-conduction
- 200ns filter provides noise immunity
- Rated for -40°C to +125°C operation

» Flexible

- STATE pin allows for single-input control (PWM) or independent control of high-side and low-side drivers
- 10V to 20V gate drive
- Drives N-Channel MOSFETs or IGBTs

» High Performance

- 1A source and sink current for driving large MOSFETs or IGBTs
- Separate UVLO for high-side and low-side drivers
- Low power consumption: 42µA supply current and 1µA shutdown supply current



MIC4608

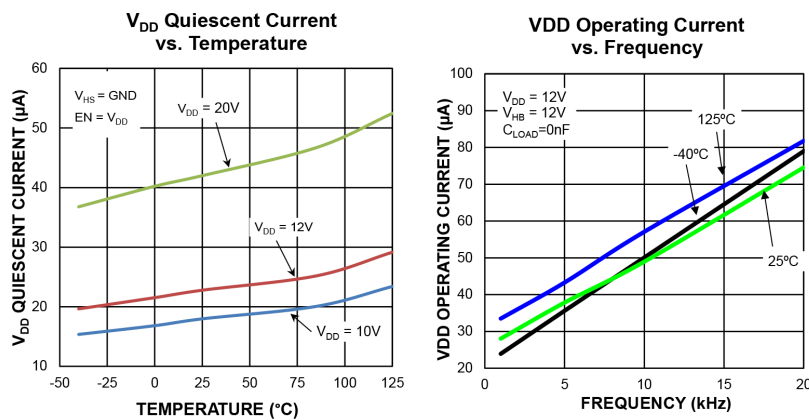
DESCRIPTION

The MIC4608 is a 600V half-bridge IGBT or MOSFET driver. The MIC4608 features a 450ns propagation delay including a 200ns input filtering time to prevent unwanted pulses. The low-side and high-side gate drivers are independently controlled (with shoot thru protection) or controlled with a single PWM signal. The MIC4608 has TTL input thresholds.

The robust operation of the MIC4608 ensures that the outputs are not affected by supply glitches, HS ringing below ground, or HS slewing with high-speed voltage transitions. Undervoltage protection is provided on both the low-side and high-side drivers.

The MIC4608 is available in a 14-pin SOIC package. The MIC4608 has an operating junction temperature range of -40°C to $+125^{\circ}\text{C}$.

OPERATING PERFORMANCE



ORDERING INFORMATION

Part	Input	Junction Temperature Range	Package
MIC4608YM	TTL	-40°C to $+125^{\circ}\text{C}$	14-Pin SOIC

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