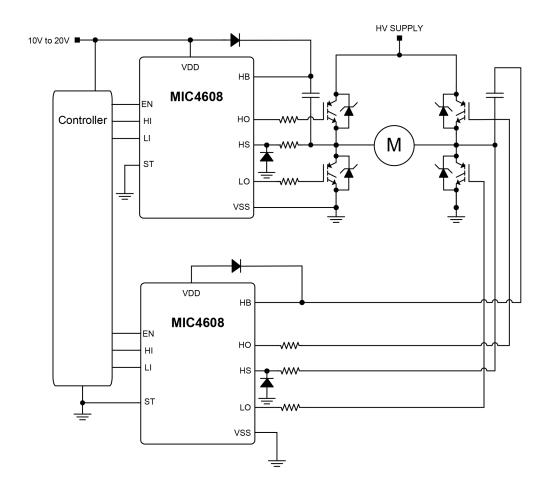


MIC4608

600V Half-Bridge MOSFET Driver

BENEFITS FEATURES Operational up to 600V » Robust • 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 • Separate UVLO for high-side and low-side drivers Low power consumption: 42μA supply current and 1μA shutdown supply current







FULL- AND HALF-BRIDGE MOTOR DRIVES



INDUSTRIAL CONTROLS



WHITE GOODS



THREE-PHASE MOTOR DRIVES



INVERTERS/UPS

MIC4608

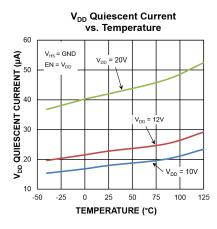
DESCRIPTION

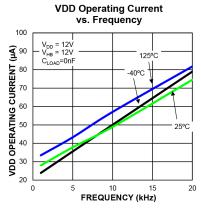
The MIC4608 is a 600V half-bridge IGBT or MOSFET driver. The MIC4608 features a 450ns propagation delay including a 200ns input filtering time to prevent unwanted pulses. The low-side and high-side gate drivers are independently controlled (with shoot thru protection) or controlled with a single PWM 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 $+125^{\circ}$ C.

OPERATING PERFORMANCE





Micrel, Inc. is a leading global manufacturer of IC solutions for the worldwide high performance linear and power, LAN and timing and communications markets. The Company's products include advanced mixed-signal, analog and power semiconductors; high performance communication, clock management, Ethernet switch and physical layer transceiver ICs. Company customers include leading manufacturers of enterprise, consumer, industrial, mobile, telecommunications, automotive, and computer products. Corporation headquarters and state-of-the-art wafer fabrication facilities are located in San Jose, CA, with regional sales and support offices and advanced technology design centers situated throughout the Americas, Europe and Asia. In addition, the Company maintains an extensive network of distributors and reps worldwide.

ORDERING INFORMATION

Part	Input	Junction Temperature Range	Package
MIC4608YM	TTL	-40°C to +125°C	14-Pin SOIC



Contact Micrel, Inc.

Corporate HQ:

2180 Fortune Drive, San Jose, CA 95131 1.800.944.0800 Tel 1.408.474.1000 Fax

www.micrel.com