

80V/2.5A Peak, High Frequency Full Bridge FET Driver with Charge Pump and Independent Control Inputs; Temperature Range: -40°C to 85°C; Package: 20-SOIC T&R

Manufacturers	Renesas Technology Corp
Package/Case	SOIC-20
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for HIP4081AIBZT or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The HIP4081A is a high frequency, medium voltage Full Bridge N-Channel FET driver IC, available in 20 lead plastic SOIC and DIP packages. The HIP4081A can drive every possible switch combination except those which would cause a shoot-through condition. The HIP4081A can switch at frequencies up to 1MHz and is well suited to driving Voice Coil Motors, high-frequency switching power amplifiers, and power supplies. For example, the HIP4081A can drive medium voltage brush motors, and two HIP4081As can be used to drive high performance stepper motors, since the short minimum "on-time" can provide fine micro-stepping capability. Short propagation delays of approximately 55ns maximizes control loop crossover frequencies and dead-times which can be adjusted to near zero to minimize distortion, resulting in rapid, precise control of the driven load. A similar part, the HIP4080A, includes an on-chip input comparator to create a PWM signal from an external triangle wave and to facilitate "hysteresis mode" switching.

Features

Independently Drives 4 N-Channel FET in Half Bridge or Full Bridge Configurations

Bootstrap Supply Max Voltage to 95V_{DC}

Drives 1000pF Load at 1MHz in Free Air at 50°C with Rise and Fall Times of Typically 10ns

User-Programmable Dead Time

On-Chip Charge-Pump and Bootstrap Upper Bias Supplies

DIS (Disable) Overrides Input Control

Input Logic Thresholds Compatible with 5V to 15V Logic Levels

Very Low Power Consumption

Undervoltage Protection

Pb-free Available

Related Products



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Renesas Technology Corp
SOIC-16



[HIP4086ABZ](#)

Renesas Technology Corp
SOIC-24



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