

## Dual Full-Bridge Low-Voltage Motor Driver

Allegro is announcing a new Dual Full-Bridge Low-Voltage Motor Driver: A3901.

The A3901 is Allegro's first entry into low-voltage, bi-directional motor drivers targeting the portable market. It offers the flexibility of operating brush DC or stepper motors and fits the market need for small package size, low-voltage operation and low sleep-mode current. The device is a dual H-bridge motor driver designed for low-voltage portable applications involving bipolar stepper or brush DC motors. The outputs have been optimized for low-voltage drop with currents up to  $\pm 400$  mA ( $\pm 800$  mA outputs paralleled) and an operating voltage range of 2.5 V to 5.5 V.

The four inputs (IN1 to IN4) can control a bipolar stepper motor in full- or half-step mode, or dc motors in forward, reverse, or brake mode. The input signals can be provided by PWM for current or speed control at frequencies up to 250 kHz.

Internal protection circuitry includes thermal shut down (TSD) and crossover (shoot-through) protection.

The A3901 is supplied in a 3 x 3 x 0.75 mm nominal, 10-lead MLP package, with exposed thermal pad (package "EJ"). This small footprint package is lead (Pb) free, with 100% matte tin leadframe plating..

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