

Dual Channel H-Bridge BOT[™](**H-BOT**) **Driver**

Description

Southwest Research Institute's[®] (SwRI[®]) Dual H-Bridge BOT (H-BOT) is a two-channel power driver module. It uses H-bridge topology and pulse width modulation enabling motors or any DC load to run at variable speeds, either forward or reverse. The module contains two independent monolithic ICs, which provides flexibility and reliable high power operation. Typical applications include electronic throttle body control, PWM controlled valves, bidirectional solenoids and reversible motor mechanisms.



Dual H-Bridge BOT is a two-channel power driver module.

CS1

Motor

Controller 1

CS2

Motor

Controller 2

Features

CAN connected input

- Digital input command
- Four auxiliary I/O pins
- Two analog inputs
- Encoder input (A/B/Z)
- Two CAN channels

Two independent outputs

- Independent channels
- Current monitor
- Full motor control
 - PWM speed control
 - Forward/reverse
 - Brake/freewheel
 - Current control

12V DC powered

Test cell and vehicle mountable

Environmentally sealed

- Splash and dust-resistant enclosure
- Heavy-duty 40-pin Deutsch DRC connector
 - Mates with included Deutsch connector

Each device in SwRI's BOT series may be configured to meet specific customer needs. The potential for these devices far exceeds their generic configurations.

Encoder

Analog

Can bus 1

Can bus 2

Motor 1

Motor 2

13.2 V

1/0

Microcontroller

Power regulator