

H-Bridge Motor Driver Automotive 16-Pin SO N T/R



General Description

The device is a full bridge motor driver intended for a wide range of automotive applications. The device incorporates a dual monolithic high-side driver and two low-side switches.

Both switches are designed using STMicroelectronics' well known and proven proprietary VIPower®M0 technology that allows to efficiently integrate on the same die a true Power MOSFET with an intelligent signal/protection circuitry. The three dies are assembled in SO-16N package on electrically isolated leadframes.

Moreover, its fully symmetrical mechanical design allows superior manufacturability at board level. The input signals IN_Aand IN_Bcan directly interface the microcontroller to select the motor direction and the brake condition. A SEL0 pin is available to address the information available on the MultiSense to the microcontroller. The MultiSense pin allows to monitor the motor current by delivering a current proportional to the motor current value. The PWM, up to 20 kHz, allows to control the speed of the motor in all possible conditions. In all cases, a low level state on the PWM pin turns off both the LS_Aand LS_Bswitches.

Key Features

AEC-Q100 qualified

Output current: 15 A

3 V CMOS-compatible inputs

Undervoltage shutdown

Overvoltage clamp

Thermal shutdown

Cross-conduction protection

Current and power limitation

Recommended For You

VN5050JTR-E

STMicroelectronics, Inc HSSOP12

VNS3NV04PTR-E

STMicroelectronics, Inc SOP8

VN330SP-E

STMicroelectronics, Inc HSOP10

VN7007AHIR STMicroelectronics, Inc TO252-7

VND5E160AJTR-E STMicroelectronics, Inc HSSOP12

VNLD5160TR-E

STMicroelectronics, Inc SOP8

VN7003ALHTR STMicroelectronics, Inc Octapak-7

VNL5050N3TR-E STMicroelectronics, Inc SOT-223

VNV35N07 STMicroelectronics, Inc HSOP10

VNN7NV04PTR-E STMicroelectronics, Inc SOT223 VND5T050AKTR-E

STMicroelectronics, Inc SSOP24

VND7140AJ12TR STMicroelectronics, Inc HSSOP12

VNB35NV04TR-E

STMicroelectronics, Inc TO-263

VND5050AJTR-E STMicroelectronics, Inc HSSOP12

VN7004CLHIR STMicroelectronics, Inc TO-252