

## Driver 1A 4-OUT High and Low Side Full Brdg/Half Brdg/H Brdg Inv/Non-Inv Automotive 16-Pin SOIC N Tube

Manufacturer: Renesas Technology Corp

Package/Case: SOP16

**Product Type:** Drivers

RoHS: RoHS Compliant/Lead free RoHS

**Lifecycle:** Active



Images are for reference only

Inquiry

## **General Description**

The ISL83202 is a medium-frequency H-Bridge FET driver capable of 1A (typ) of peak drive current that is designed to drive high- and low-side N-Channel MOSFETs in medium voltage applications. Optimized for PWM motor control and uninterruptible power supply systems, the ISL83202 enables simple and flexible bridge-based design. With typical input-to-output propagation delays as low as 25ns and with a user programmable dead-time range of 0.1µs to 4.5µs, the ISL83202 is ideal for switching frequencies up to 200kHz. The dead-time of the ISL83202 is programmable via a single resistor. The ISL83202's four independent driver control inputs (ALI, AHI, BLI, and BHI) allow driving of every possible switch combination except those that would cause a shoot-through condition. A global disable input, DIS, overrides input control and causes the ISL83202 to refresh the bootstrap capacitor when pulled low. Integrated undervoltage protection and shoot-through protection ensure reliable system operation. The ISL83202 is available in compact 16 Ld SOIC and 16 Ld PDIP packages and operates over the range of -55°C to +125°C.

## **Key Features**

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

Bootstrap Supply Max Voltage: 70VDC

Drives a 1000pF Load in Free Air at +50°C with Rise and Fall Times of 15ns (typ)

User-Programmable Dead Time from 0.1 to  $4.5\mu s$ 

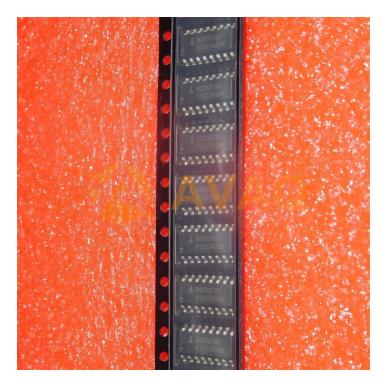
DIS (Disable) Overrides Input Control and Refreshes Bootstrap Capacitor when Pulled Low

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

Shoot-Through Protection

Undervoltage Protection

Pb-Free Plus Anneal Available (RoHS Compliant)



## **Recommended For You**

ISL9492ERZ

Renesas Technology Corp

QFN

ISL95836HRTZ-T

Renesas Technology Corp

QFN40

ISL9301IRZ

Renesas Technology Corp

DFN10

ISL95870HRUZ-T

Renesas Technology Corp

QFN16

ISL95870BIRZ-T

Renesas Technology Corp

QFN20

ISL6520ACBZ-T

Renesas Technology Corp

SOP8

ISL95837HRZ-T

Renesas Technology Corp

QFN40

ISL95835HRZ

Renesas Technology Corp

QFN

ISL6521IBZ

Renesas Technology Corp

SOP16

ISL78214ARZ

Renesas Technology Corp

QFN

ISL62883CHRTZ

Renesas Technology Corp

QFN

ISL95837HRZ

Renesas Technology Corp

QFN40

ISL95812HRZ

Renesas Technology Corp

QFN

ISL62882CHRTZ

Renesas Technology Corp

QFN

ISL88739HRZ

Renesas Technology Corp

QFN