



EiceDRIVER™ SIL/Boost

Next generation EiceDRIVER™ for hybrid and electric vehicle applications

The 1EDI2001AS is a high-voltage IGBT gate driver designed for automotive motor drives above 10kW. It's based on Infineon's Coreless Transformer (CLT) technology, providing galvanic insulation between low voltage and high voltage domains. A large spectrum of safety-related functions has been implemented in order to support functional safety requirements at system level. On the high voltage side ("secondary" side) the 1EDI2001AS is dimensioned to drive an external booster stage.

The 1EBN1001AE is based on high performance bipolar technology and replaces buffer stages based on discrete devices. Because of its thermally optimized exposed pad package, the 1EBN1001AEs is able to drive and sink peak currents up to 15 A. This makes this device suitable for most inverter systems in automotive applications.

The 1EDI2001AS and the 1EBN1001AE can be used optimally together with the Infineon HybridPack™ IGBT Modules to implement an optimized system for electric and hybrid vehicles.

Application

- Main inverter for Electric and Hybrid vehicles

Key Features

- On-chip galvanic isolation
- Supports active short circuit for ASIL C/D system certification
- Standard SPI interface for control and diagnosis
- Over-current monitoring (DESAT, OCP)
- AEC Q100 Qualified

Key Benefits

- Offers potential for a cost effective implementation of ASIL C/D on system level
- The chip-set saves significant PCB area

