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1EDI2002AS EVALKIT

Overview

The 1EDI2002AS is a high-voltage IGBT gate driver designed for motor drives above 5 kW. The 1EDI2002AS is based on Infineon's Coreless Transformer (CLT) technology, providing galvanic insulation between low voltage and high voltage domains. The device has been designed to support IGBT technologies up to 1200 V.

On the high voltage side ("secondary" side), the 1EDI2002AS is dimensioned to drive an external booster stage. Short propagation delays and controlled internal tolerances lead to minimal distortion of the PWM signal.

A large panel of safety-related functions has been implemented in the 1EDI2002AS, in order to support functional safety requirements at system level (as per ISO 26262). Besides, those integrated features ease the implementation of Active Short Circuit (ASC) strategies.

The 1EDI2002AS can be used optimally with Infineon's 1EBN100XAE "EiceDRIVER™ Boost" booster stage family. To make use of the full functionality of the 1EDI2002SA EvalKit, it has to be used in combination with the **AURIX™ TC277 (/cms/en/product/evaluation-boards/kit_aurix_tc277_trb/)** micro controller.

Summary of Features

- Supervision of all power supplies
- Programmable SPI interface
- Safe internal state machine & internal monitors
- Weak turn-on functionality
- System failure injection
- Programmable Two-Level turn Off (4 levels)
- Short circuit protection (DESAT & CSENSE)

Benefits

- Support for active short circuit strategies
- Cost effective implementation of ASIL C/D on system level
- Significant PCB area savings
- Software Driver (Source Code) for 1EDI2002AS

- Compatibility to EiceDRIVER™ Boost
- On-chip galvanic isolation
- AEC-Q100 qualified

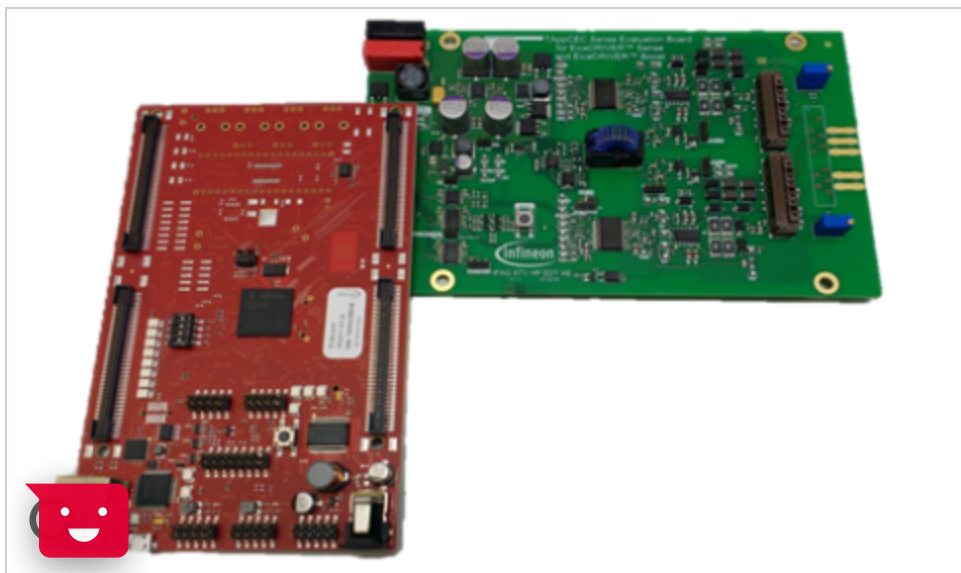
Summary of EvalKit Features:

- Full functionality of EiceDRIVER™ SIL available (1EDI2002AS)
- Testing and configuring of all 1EDI2002AS features
- Simple IGBT connection and testing
- Includes GUI for user friendly operation
- 12 V DC input power supply
- Communication via AURIX™ TC277

Potential Applications

- Inverters for automotive Hybrid and Electric Vehicles (HEV)
- High-voltage DC-DC converter
- Industrial drive

 Follow



Parametrics

Parametrics	1EDI2002AS EVALKIT
Board Type	Evaluation Board
Family	Gate Driver
Input Type	DC
Mounting	SMD
Product Description	EiceDRIVER™ SIL IGBT gate driver evaluation kit for traction inverter applications
Qualification	Automotive
Supply Voltage min	12.0 V
Target Application	Electromobility
Topology	Half Bridge

Order

Sales Product Name	1EDI2002AS EVALKIT
OPN	1EDI2002ASEVALKITTOBO1
Product Status	active and preferred
Infineon Package name	--
Standard Package name	
Order online	

Sales Product Name Completely lead free	1EDI2002AS EVALKIT
Halogen free	
RoHS compliant	no
Packing Size	1
Packing Type	CONTAINER
Moisture Level	
Moisture Packing	NON DRY


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Notes on processing

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