



EiceDRIVER™

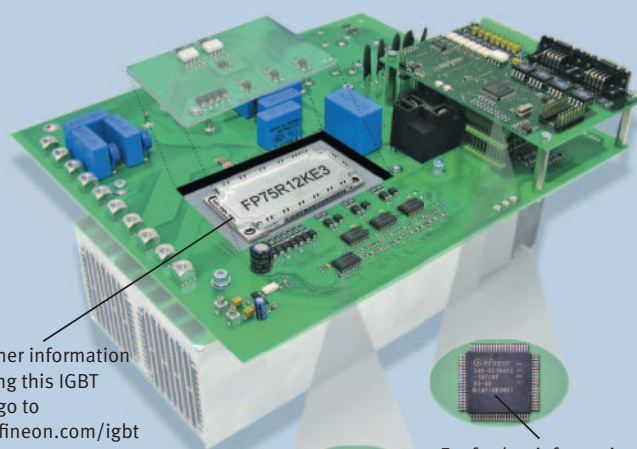
1200V Half-Bridge Gate Driver IC

INTRODUCING THE 2ED020I12-FI, a half-bridge driver IC, Infineon Technologies offers a reliable and cost effective solution for driving IGBT and MOSFET power stages up to 1200V breakdown voltage. The IC, part of the EiceDRIVER™ family, is included in a PG-DSO-18-1 package. It is based on the new coreless transformer technology, which is combining the advantages of inductive signal transmission and isolation with compact IC driver stage design.

The driver is able to handle dv/dt 's up to 50kV per μs . In addition the driver features a rail-to-rail OP with a gain bandwidth of 20MHz and a separate comparator.

Compared to optocouplers no degradation over time takes place. Targeted applications are AC-standalone drives, UPS, welding and various applications using 600V and 1200V transistors.

Typical Application - General Purpose Drive 22kW



For further information regarding this IGBT please go to www.infineon.com/igbt

For further information regarding this EiceDRIVER please go to www.infineon.com/gatedriver

For further information regarding this microcontroller please go to www.infineon.com/microcontrollers

Features

- Matched propagation delay for both channels
- Floating channel designed for direct supply and bootstrap operation
- Tolerant to negative transient voltage
- Undervoltage lockout for both channels
- 3.3V and 5V TTL compatible inputs
- CMOS Schmitt-triggered inputs with pull-down
- Non-inverting inputs
- Interlocking inputs
- Dedicated shutdown input with pull-up
- IEC 61000-4-4 compliant
- RoHS compliant

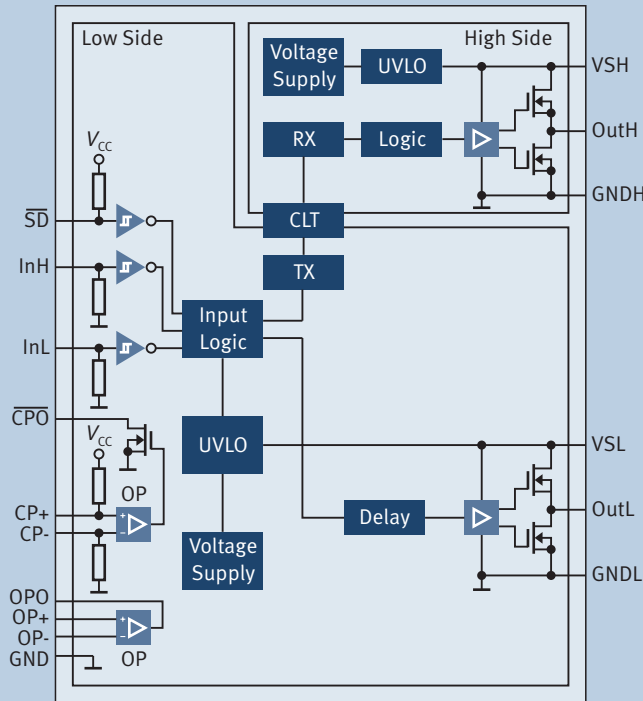
Product Highlights

- Fully operational to $\pm 1200V$
- Floating high-side driver
- Gate drive supply range from 13 to 18V
- Gate drive currents of +1A / -2A
- Matched propagation delay for both channels
- High dv/dt immunity
- General purpose operational amplifier
- General purpose comparator

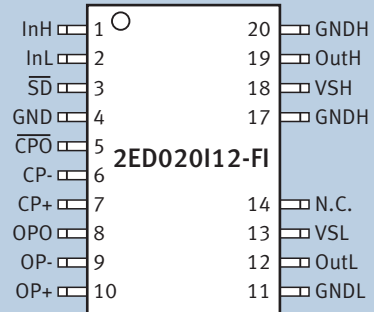
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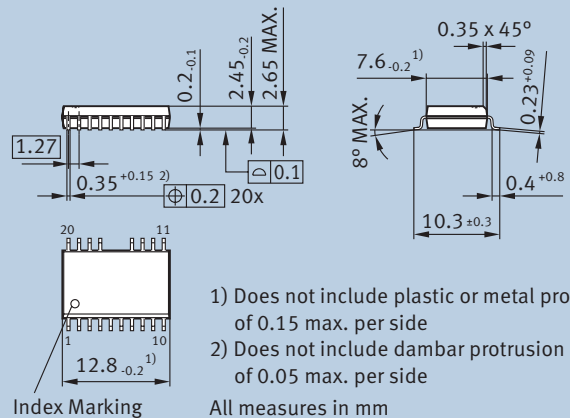
Block Diagram 2ED02012-FI



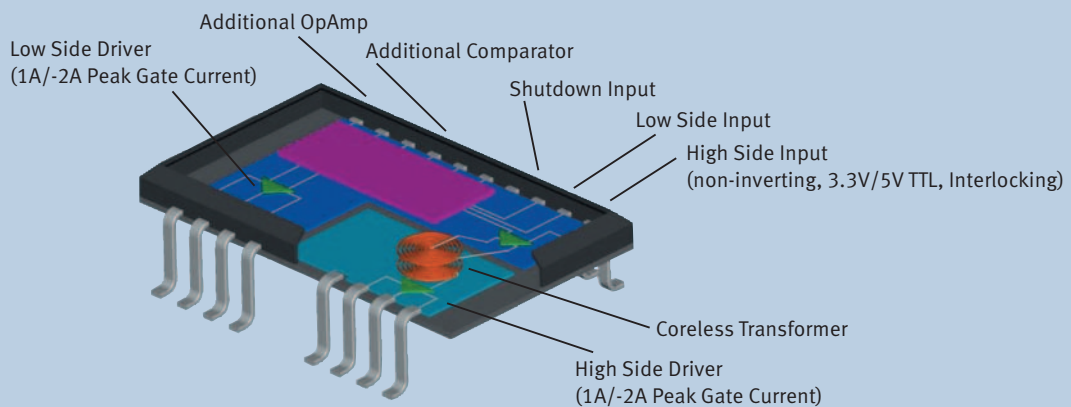
Pin Configuration



Dimensions



Functional Units and Principals



Only 1 driver IC 2ED02012-FI is necessary to drive an IGBT/MOSFET half-bridge and measuring/ detecting over- and short-circuit currents!

How to reach us:
<http://www.infineon.com>

Published by
 Infineon Technologies AG
 81726 Munich, Germany

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