



# EiceDRIVER™

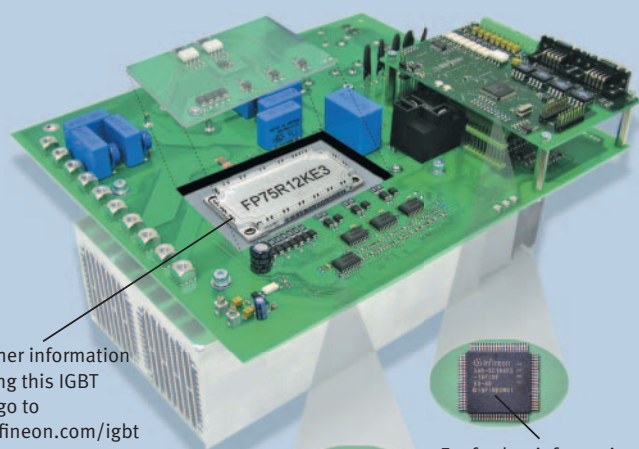
## 1200V Half-Bridge Gate Driver IC

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  $\mu s$ . 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](http://www.infineon.com/igbt)

For further information regarding this EiceDRIVER please go to [www.infineon.com/gatedriver](http://www.infineon.com/gatedriver)

For further information regarding this microcontroller please go to [www.infineon.com/microcontrollers](http://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

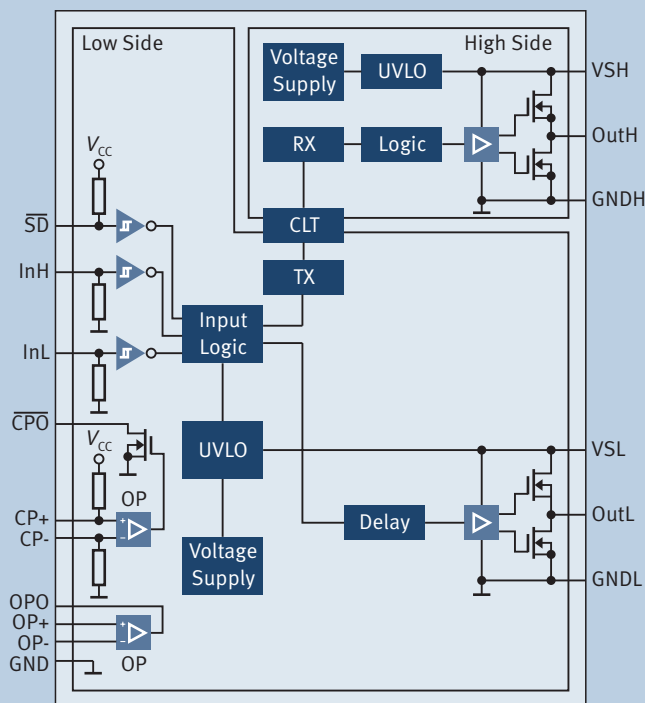
### Product Highlights

- 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

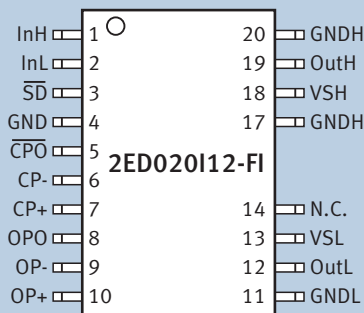
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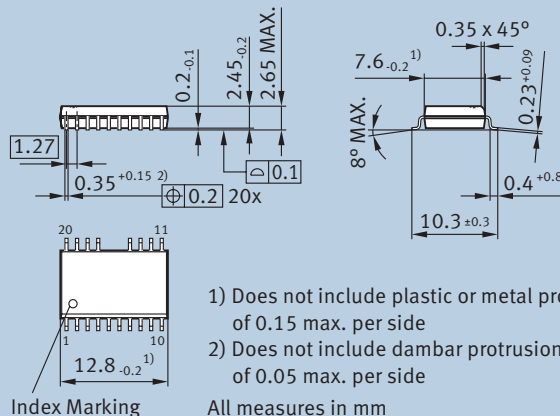
Block Diagram 2ED02012-FI



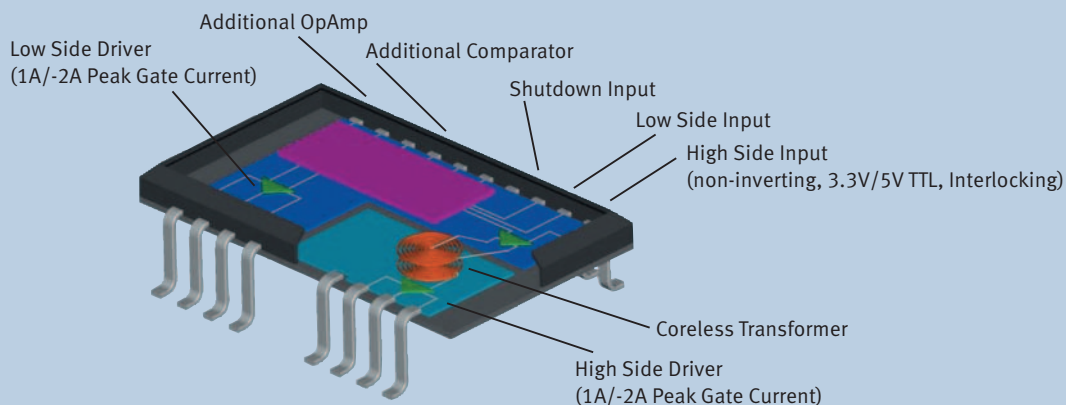
Pin Configuration



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:  
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