EICEDRIVER™

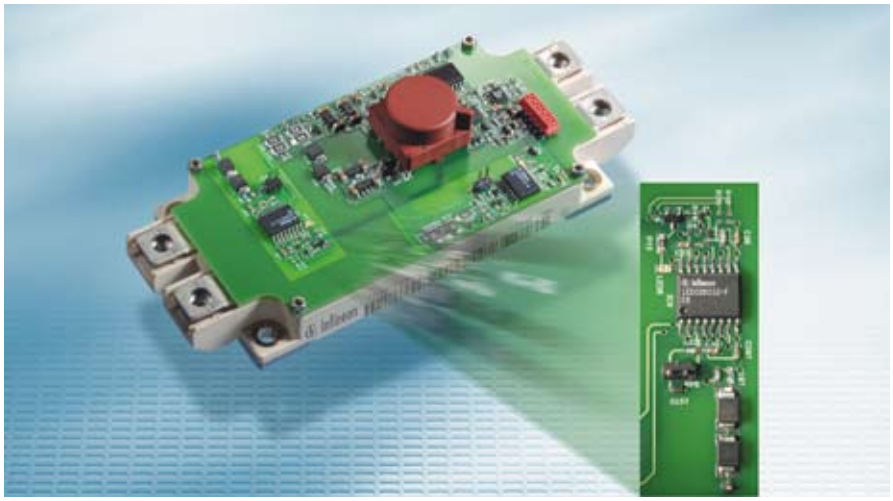
Single Channel IGBT Driver



INFINEON® EICEDRIVER™ 1ED020I12-F(A) is a single channel IGBT Driver IC providing galvanic isolation and bidirectional signal transmission with high ambient temperature capability. It enables extremely short propagation delays keeping the designer's flexibilities at the highest level, while the circuit is easy to use and the features comfortable to handle. 1ED020I12-F(A) operates stable in harsh EMC environments. The device drives up to 100A/1200V IGBTs with its integrated 2A output stage. V_{CEsat}-detection and Active Miller Clamp features complete the picture of this new driver IC.

Outstanding reliability at an optimized cost performance ratio makes this device the first choice for applications such as drives, UPS, solar inverter and industrial power supplies. The well suited feature set for these applications combined with basic isolation according to IEC60747-5-2, reduces the number of used components and thus the used board space significantly compared to other semi-integrated solutions.

EconoDUAL™ with Evaluationboard using 1ED020I12-F



Applications

- Industrial drive
- UPS
- Solar inverter
- Hybrid electric vehicle (FA type)

Key Features

- Single channel isolated IGBT driver
- For 600V/1200V IGBTs
- 2 A rail-to-rail output
- V_{CEsat}-detection
- Active Miller Clamp
- Separate/FLT and RDY outputs

Benefits

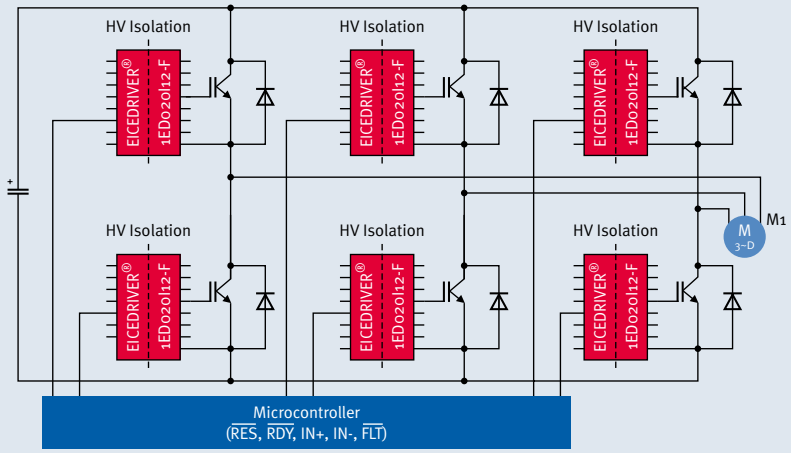
- Increased ambient temperature rating
- Very low propagation delay
- Protection features matched to latest Infineon IGBT technologies
- +15V/-8V or +15V/0V
- Easy gate voltage clamping
- Compatible to booster stage

www.infineon.com/gatedriver

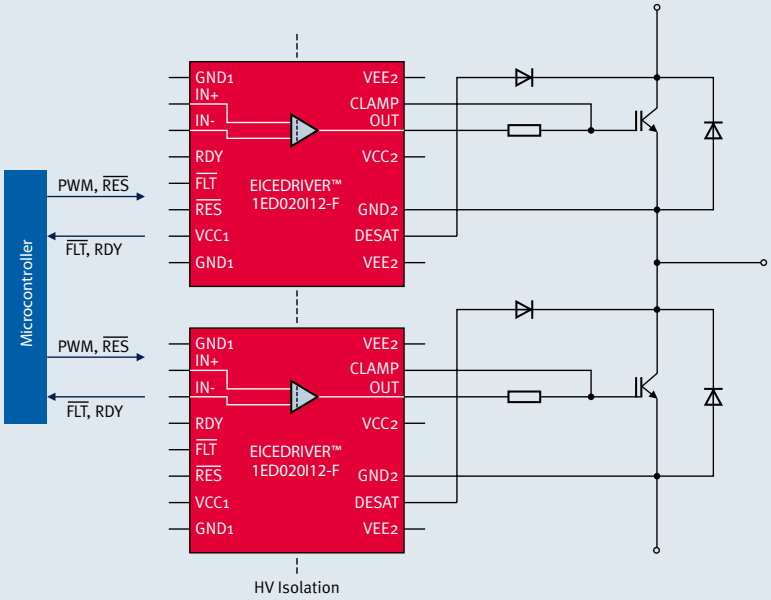
Power Management & Drives

Never stop thinking

Block Diagram 1ED020I12-F Drive Application



Detailed Configuration of One Phase Leg



Packages

- PG-DSO-16 (F Type)
  - Industrial qualified
  - Smallest footprint
  - Ta Rating 105°C



Packages

- PG-DSO-20 (FA Type)
  - Automotive qualified
  - Improved Cooling
  - Ta Rating 125°C



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Information

For further information on technology, delivery terms and conditions and prices, please contact the nearest Infineon Technologies Office (www.infineon.com).

Warnings

Due to technical requirements, components may contain dangerous substances. For information on the types in question, please contact the nearest Infineon Technologies Office.

Infineon Technologies components may be used in life-support devices or systems only with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.

Ordering No. B152-H9218-X-X-7600