

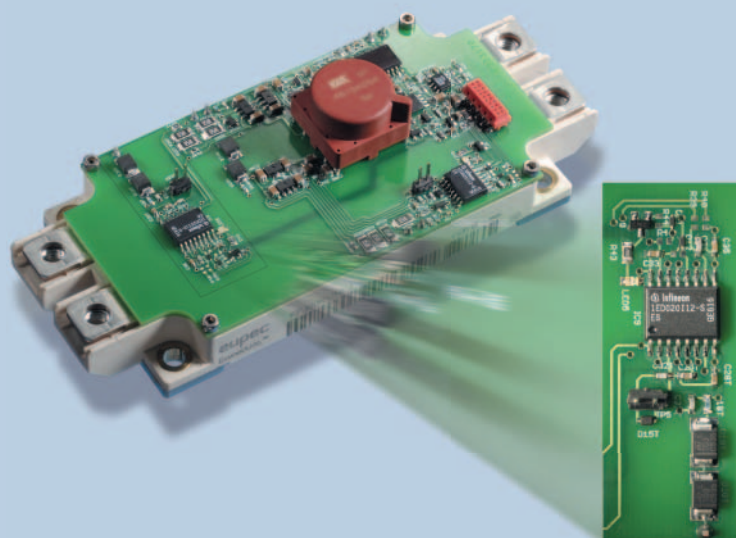
EiceDRIVER™

1200V Single Channel Isolated Gate Driver IC

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

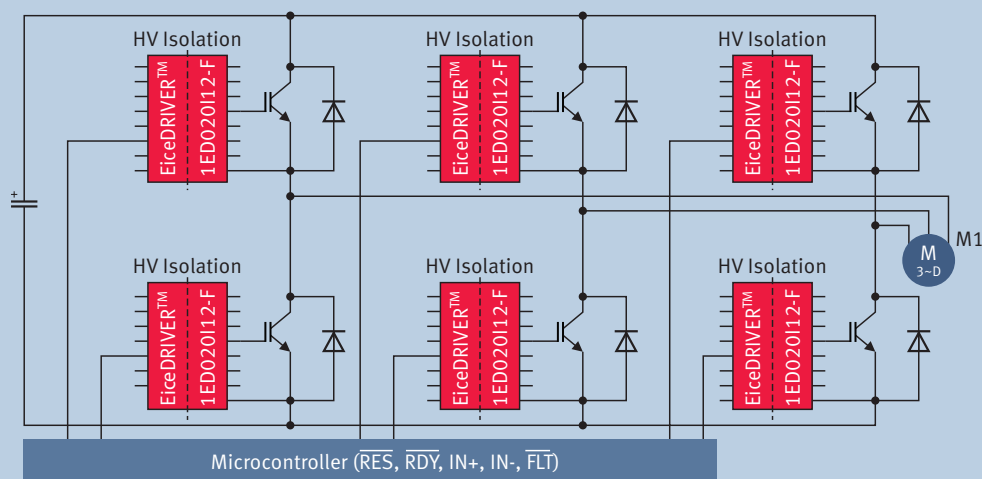
Benefits

- 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

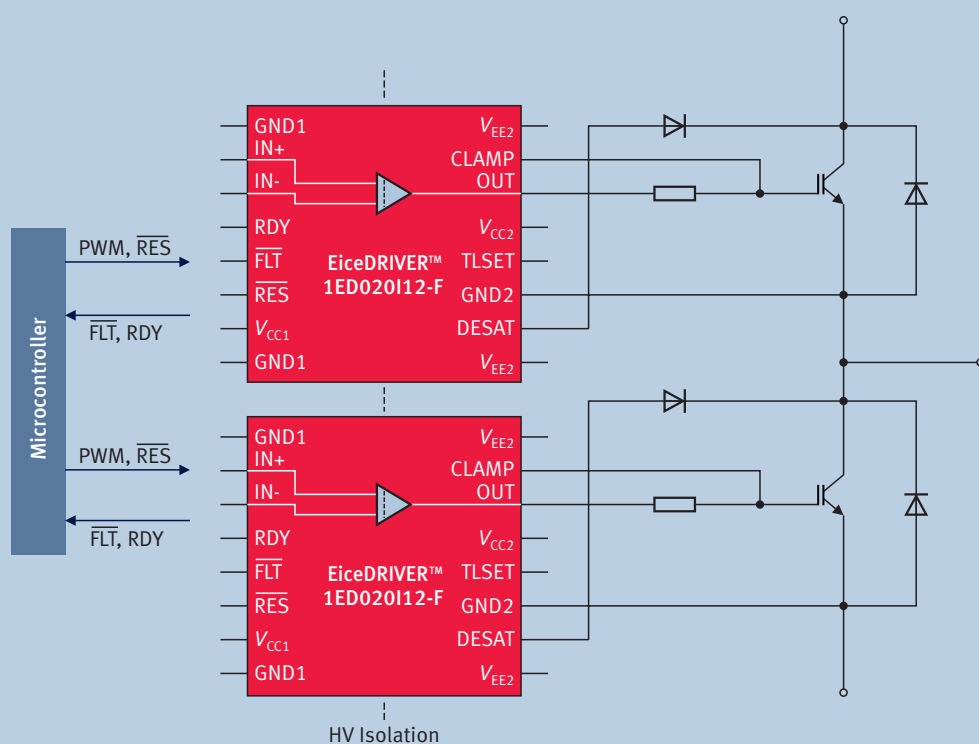
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Block Diagram 1ED020I12-F Drive Application



Detailed Configuration of One Phase Leg



Packages

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



Packages

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



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