

STK5U4UF90D-E

Product Preview 15A/1200V Intelligent Power Module in DIP package

The STK5U4UF90D-E is a fully-integrated inverter power module consisting of an independent gate driver, six IGBT's and a thermistor, suitable for driving permanent magnet synchronous (PMSM) motors, brushless DC (BLDC) motors and AC asynchronous motors. The IGBT's are configured in a 3-phase bridge with separate emitter connections for the lower legs for maximum flexibility in the choice of control algorithm. The power stage has under-voltage lockout protection (UVP) and desaturation protection (DESATP) with a fault detection output flag. Internal boost diodes are provided for high side gate boost drive.

Features

- Three-phase 15A/1200V IGBT module with independent drivers.
- Negative logic interface.
- Built-in under-voltage protection (UVP) and V_{CE} desaturation Protection (DESATP) with a fault detection output flag.
- Integrated bootstrap diodes and resistors.
- Separate low-side IGBT emitter connections for individual current sensing of each phase
- Thermistor.

Typical Applications

- Industrial Drives
- Industrial Pumps
- Industrial Fans
- Industrial Automation

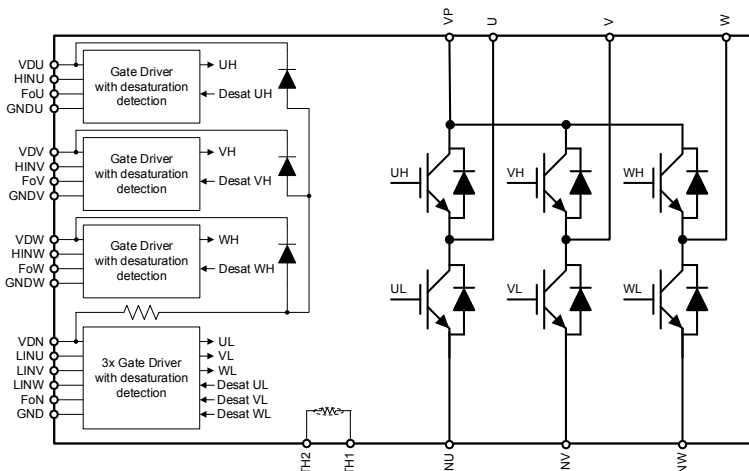


Figure 1. Functional Diagram

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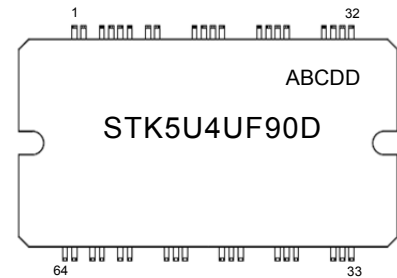
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PACKAGE PICTURE



MARKING DIAGRAM

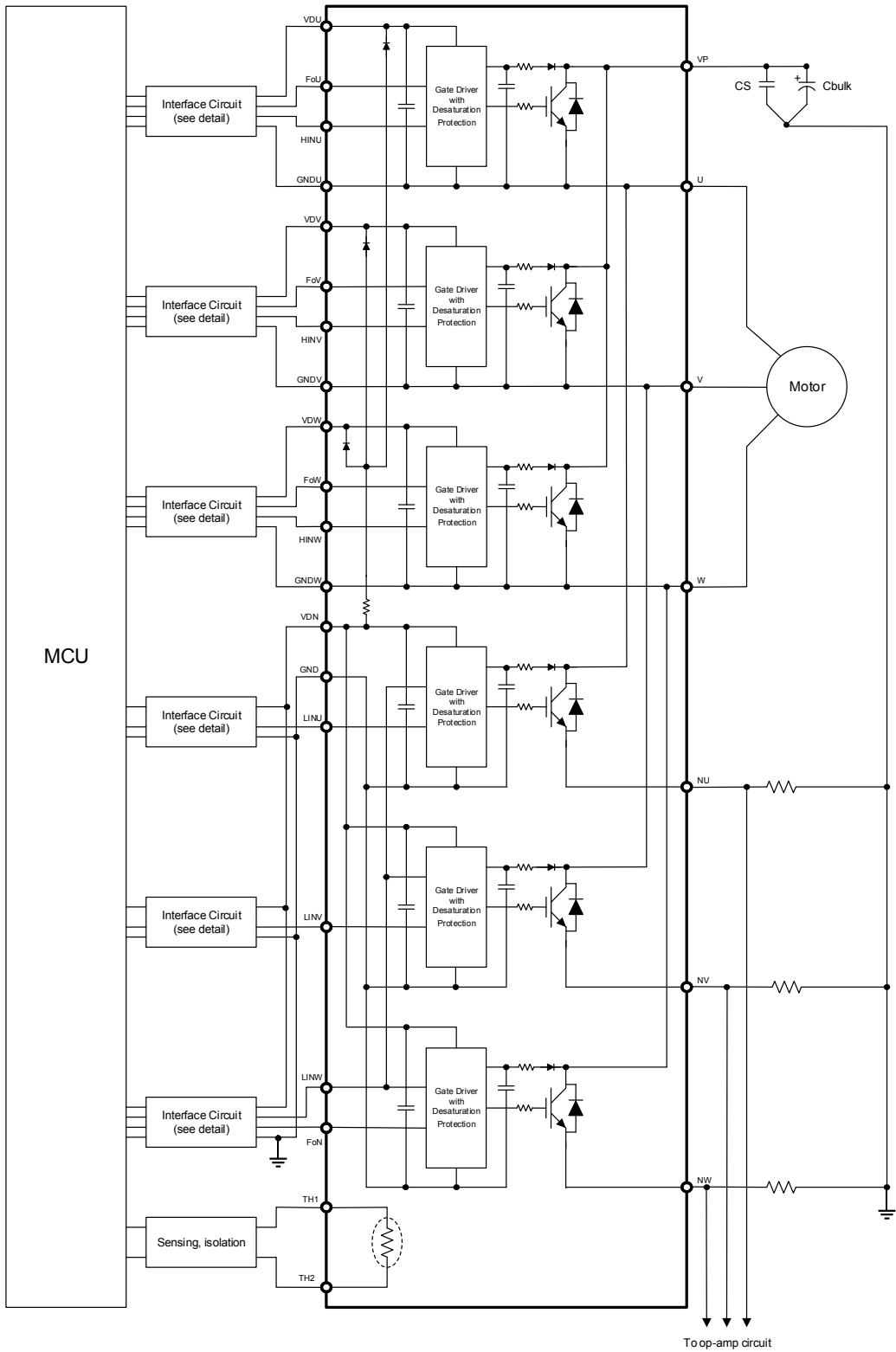


STK5U4UF90D = Specific Device Code
A = Year
B = Month
C = Production Site
DD = Factory Lot Code

ORDERING INFORMATION

Device	Package	Shipping (Qty / Packing)
STK5U4UF90D-E	TBD	TBD

STK5U4UF90D-E



Sample interface circuit detail

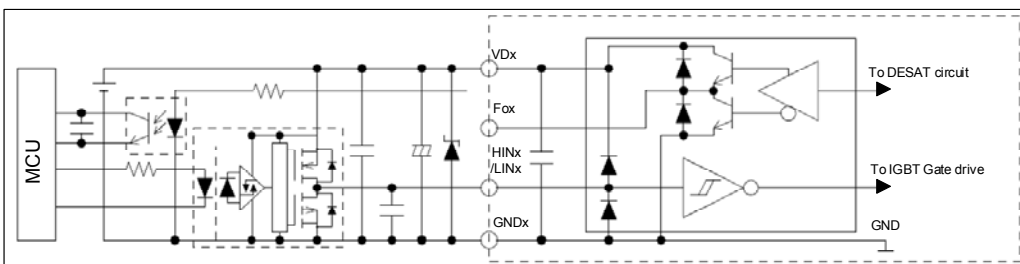


Figure 2. Application Schematic