



Product Overview

STK5F1U3E2D-E: Intelligent Power Module for 3-Phase Motor Driver

For complete documentation, see the data sheet

Product Description

This 'Inverter Power H-IC' is Highly integrated device containing all High Voltage (HV) control from HV-DC to 3-phase outputs in a single DIP module. Output stage uses IGBT/FRD technology and implements Under Voltage Protection (UVP) and Over Current Protection (OCP). Internal Boost diodes are provided for high side gate boost drive.

Features

- Over-current Protection Circuit
- Under-voltage lockout for all channels
- Upper/lower ON prevention circuit
- Direct input of CMOS level control signals without an insulating is possible
- Thermistor for case temperature monitor

Benefits

- Fast speed protection is possible (Self protection)
- All IGBT Gate shutdown at abnormal for safety
- System malfunction can reduce by noise
- No need photo-coupler design
- High precision monitor is possible

Applications

- Industrial Applications
- Consumer Applications

End Products

- Motor Control System
- Industrial /General Control System
- HVAC
- Clothes Washer /Dryer
- Dish Washer

Part Electrical Specifications

Product	Compliance	Status	Type	V _M Min (V)	V _M Max (V)	V _{CC} Min (V)	V _{CC} Max (V)	I _O Max (A)	I _O Peak Max (A)	Step Resolution	Control Type	Feedback Method	Current Sense	Regulator Output	Fault Detection	Flyback Protection	R _{DS(on)} Typ (Ω)	Package Type
STK5F1U3E2D-E	Pb-free	Active	Inverter	-	600	-	20	50	76		PWM	None	Full y Integrated Full y integrated	No	Over-Cur rent Over- current Thermal UV LO	External		Hybrid Integrated Module

For more information please contact your local sales support at www.onsemi.com

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