



Product Overview

STK5F4U3C2D-E: Intelligent Power Module for 3-Phase Motor Driver

For complete documentation, see the data sheet

Product Description

This Intelligent Power Module (IPM) is a highly integrated device containing all High Voltage (HV) control from HV-DC to 3-phase outputs in a single DIP module (Dual-In line Package). Output stage uses IGBT/FRD technology and implements Under Voltage Protection (UVP) and Over Current Protection (OCP) with a Fault Detection output flag. 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
- Thermistor for temperature monitor
- Direct input of CMOS level control signals without an insulating

Benefits

- Having separate emitters and VTRIP terminal for protection
- All IGBT Gate shutdown at abnormal for safety
- System malfunction can reduce by noise
- High precision monitor is possible
- No need photo-coupler design

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
STK5F4U3C2D-E	Pb-free	Active	Inverter		600		20	30	45		PWM	None	External Resistor	No	Thermal UVLO	External		Hybrid Integrated Module

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

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