

Product Overview

STK551U392A-E: Intelligent Power Module (IPM), 600 V, 15 A

For complete documentation, see the data sheet.

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 small SIP 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
- Thermistor for case temperature monitor
- Certification : UL1557 (File Number : E339285)

Applications

- 3-phase Motor

Benefits

- Fast speed protection is possible (Self protection)
- All IGBT Gate shutdown at abnormal for safety
- System malfunction can reduce by noise
- High precision monitor is possible

End Products

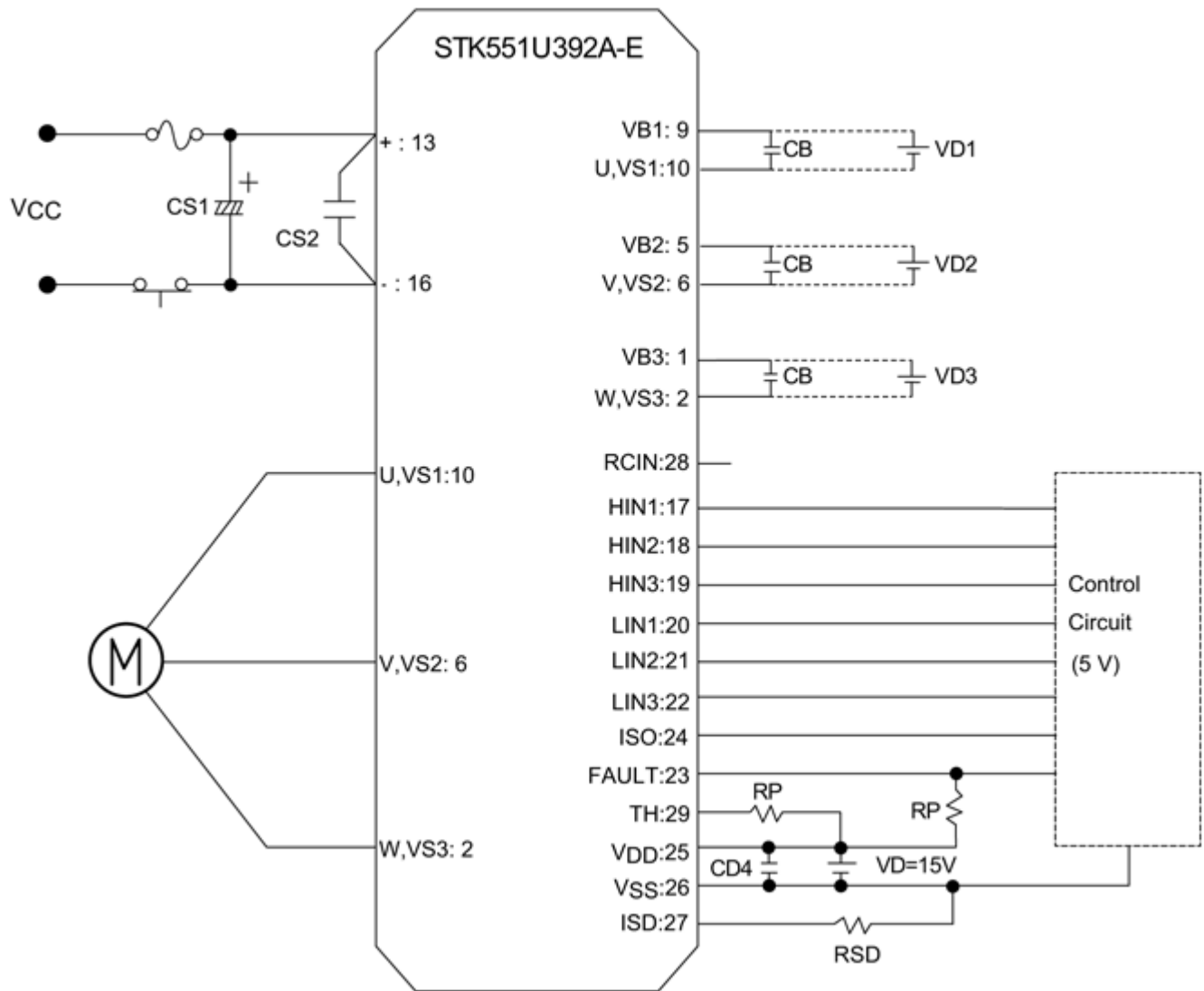
- HVAC
- Clothes Washer / Dryer
- Dish Washer
- Refrigerator
- Motor Control System

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Family	Rated Voltage Min (V)	I_o @ 25 °C Min (A)	$V_{CE(sat)}$ @ 25 °C Typ (V)	$R_{DS(on)}$ (Ω)	Emitter Configuration	Shutdown Pin	Package Type
STK551U392A-E	9.8664	Pb-free	Active	SIP1A IPM Series	600	15	1.8	N/A	Combined emitter pin with internal sense resistor	Yes	SIP-29

Application Diagram

Sample Application Circuit



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

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