



## Product Overview

### STK551U3A2A-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 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
- Motor Control System

#### Benefits

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

#### Applications

- Motor Driver modules

#### End Products

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

#### Part Electrical Specifications

Product	Compliance	Status	Type	V <sub>M</sub> Min (V)	V <sub>M</sub> Max (V)	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	I <sub>O</sub> Max (A)	I <sub>O</sub> Peak Max (A)	Step Reso lution	Cont rol Type	Feed back Method	Curr ent Sense	Reg ulator Out put	Fault Dete ction	Flyb ack Protec tion	R <sub>DS(on)</sub> Typ ()	Pack age Type
STK551U3A2A-E	Pb-free	Active	Inver ter	-	600	-0.3	20	20	40		PW M	Non e	Fully Integrated	No	Over-Cur rent The rmal UV LO	Exter nal		SIP-29

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com)

Created on: 7/11/2015