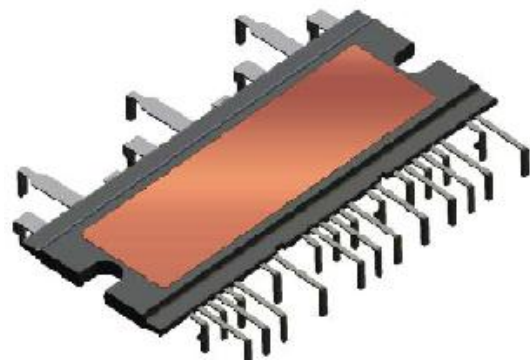




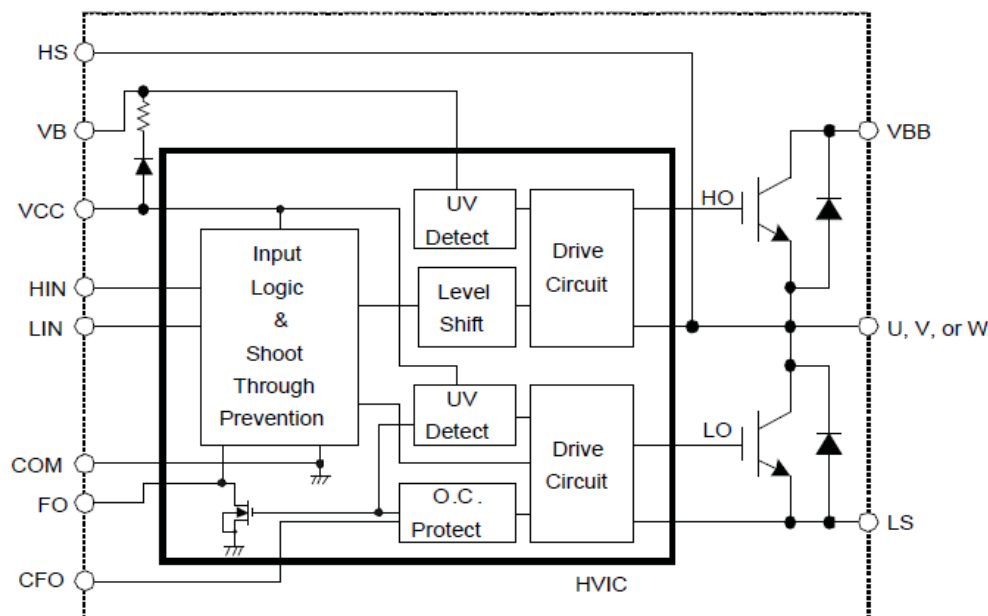
## SCM110MF - High Voltage 3-Phase Motor Driver

### General Description:

The SCM110MF inverter power module (IPM) device provides a robust, highly-integrated solution for optimally controlling 3-phase motor power inverter systems and variable speed control systems used in energy-conserving designs to drive motors of residential and commercial appliances. These ICs take 85 to 253 VAC input voltage, and 15 A (continuous) output current. They can withstand voltages of up to 600 V (IGBT breakdown voltage).



The SCM1100M series employs a new, small-footprint proprietary DIP package with exposed thermal pad for enhanced power dissipation capacity. The IC itself consists of all of the necessary power elements (six IGBTs), pre-drive ICs (three), and flyback diodes (six), needed to configure the main circuit of an inverter, as well as a bootstrap circuit (three bootstrap diodes and three boot resistors) as a high-side drive power supply. This enables the main circuit of the inverter to be configured with fewer external components than traditional designs.



## Key Features:

- Each half-bridge circuit consists of a pre-driver circuit that is completely independent from the others
- Protection against simultaneous high- and low-side turning on
- Bootstrap diodes with series resistors for suppressing inrush current are incorporated
- CMOS compatible input (3.3 to 5 V) Designed to minimize simultaneous current through both high- and low-side IGBTs by optimizing gate drive resistors
- UVLO protection with auto restart
- Overcurrent protection with off-time period adjustable by an external capacitor
- Fault (FO indicator) signal output at protection activation:UVLO (low side only), OCP, and STP
- Proprietary power DIP package
- UL Recognized Component

## Applications:

- Air conditioner fan motor
- Refrigerator compressor motor
- Washing machine main motor
- Air conditioner compressor motor

## Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
SCM1110MF	1791397	67R9072	High Voltage 3-Phase Motor Drivers-Power DIP