

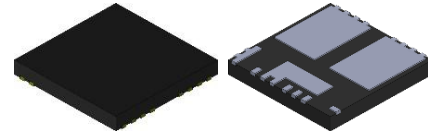
## Description

CRM50TD02R1 is half-bridge Modules (IPM) designed for advanced appliance motor drive applications such as energy efficient fans and pumps.

These modules Integrated 2 fast recovery MOSFET and 1 high voltage gate driver in a familiar package. The modules are optimized for low EMI characteristics.

## Features

- 500V half-bridge including high voltage gate drivers
- HVIC Temperature-Sensing Built-In for temperature Monitoring
- Works with 3.3V/5V MCU, Active-High interface
- HVIC for Under-voltage Protection
- Integrated bootstrap functionality
- Isolation Rating 1500V



QFN7x7

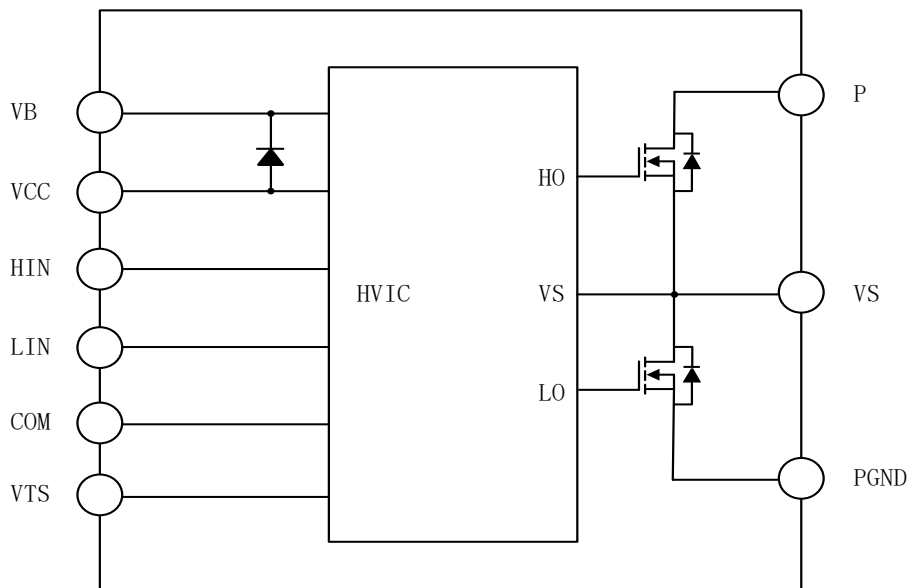
## Applications

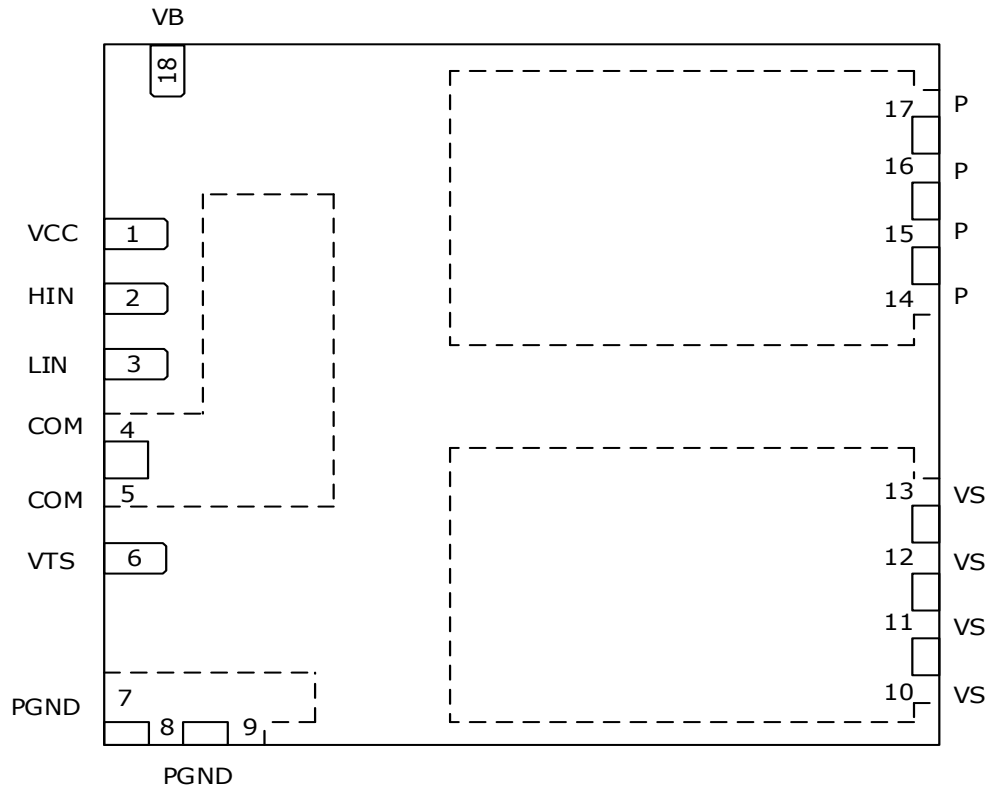
- Energy efficient fans
- Pumps

## Package Marking and Ordering Information

Part #	Marking	Package	Packing	Quantity	V <sub>TS</sub>	Green
CRM50TD02R1	CRM50TD02R1	QFN7x7	Taping	3000	Yes	RoHS/HF

## Internal Electrical Schematic



**Module Pin-Out Description**


Pin Number	Pin Name	Description
1	VCC	Power supply for Low side
2	HIN	Logic Input for High Side Gate Driver
3	LIN	Logic Input for Low Side Gate Driver
4,5	COM	Logic Ground
6	VTS	Temperature-sensing Voltage Output
7,8,9	PGND	Source for low side MOSFET
10,11,12,13	VS	High Side Floating Offset Voltage
14,15,16,17	P	DC Bus Voltage Positive
18	VB	High Side Floating Supply Voltage

**Application Circuit**

