

描述/Description

- XNS06S82F6基于Trench FS-IGBT技术，是一款先进的DIP24 IPM，为交流感应、直流无刷电机和PMSM电机提供非常全面的高性能逆变器输出平台。
XNS06S82F6 is an Advanced DIP24 IPM Based on Trench FS-IGBT Technology, Providing a Fully-featured, High-performance Inverter Output Stage for AC Induction, BLDC, and PMSM Motors.
- XNS06S82F6综合优化了IGBT的栅极驱动以最小化电磁干扰和能量损耗，同时也提供多重保护特性，包括集成欠压闭锁、过流保护、温度检测和故障报告。
XNS06S82F6 Optimized Gate Drive of the Built-in IGBTs to Minimize EMI and Losses, while also Providing Multiple Protection Features Including Under-voltage Lockouts, Over-current Shutdown, Thermal Monitoring, Fault Reporting.
- XNS06S82F6内置高速HVIC，提供无光耦单电源IGBT栅极驱动能力，进一步减小了逆变器系统设计的总体尺寸。
XNS06S82F6 Combines High Speed HVIC Provides Opto-Coupler-Less Single-Supply IGBT Gate Driving Capability that Further Reduce the Overall Size of the Inverter System Design.
- 独立的IGBT负端在每个相位均有效，可支持大量不同种类的控制算法。
Separate Negative IGBT Terminals are Available for Each Phase to Support the Widest Variety of Control Algorithms.

主要特点

- 600V-6 A三相IGBT逆变器，包含栅极驱动和保护的控制IC
- 低损耗、短路额定的IGBT
- 内置带限流电阻的自举二极管
- 低端IGBT的独立发射极开路引脚用于三相电流感测
- 内置负温度系数的电阻用于温度检测
- 全封装DIP24封装
- 绝缘级别2000V_{rms}/1min
- 单接地电源供电
- 无铅工艺；符合ROHS

Features

- 600V-6A 3-Phase IGBT Inverter Bridge Including Control ICs for Gate Driving and Protection
- Low-Loss, Short-Circuit Rated IGBTs
- Built-In Bootstrap Diodes with Current Limiting Resistor
- Separate Open-Emitter Pins from Low-Side IGBTs for Three-Phase Current Sensing
- Built-In NTC Thermistor for Temperature Monitoring
- Compact DIP24 Package
- Isolation Rating: 2000 V_{rms}/min
- Single-Grounded Power Supply
- Lead-free Terminal Plating; RoHS Compliant

应用

- 运动控制 – 家用设备 / 工业电机

Applications

- Motion Control – Home Appliance / Industrial Motor

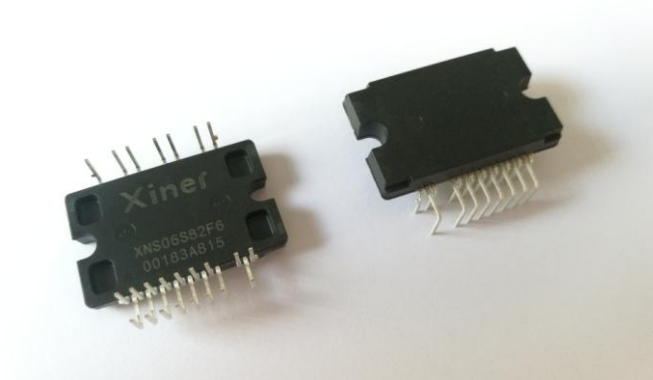
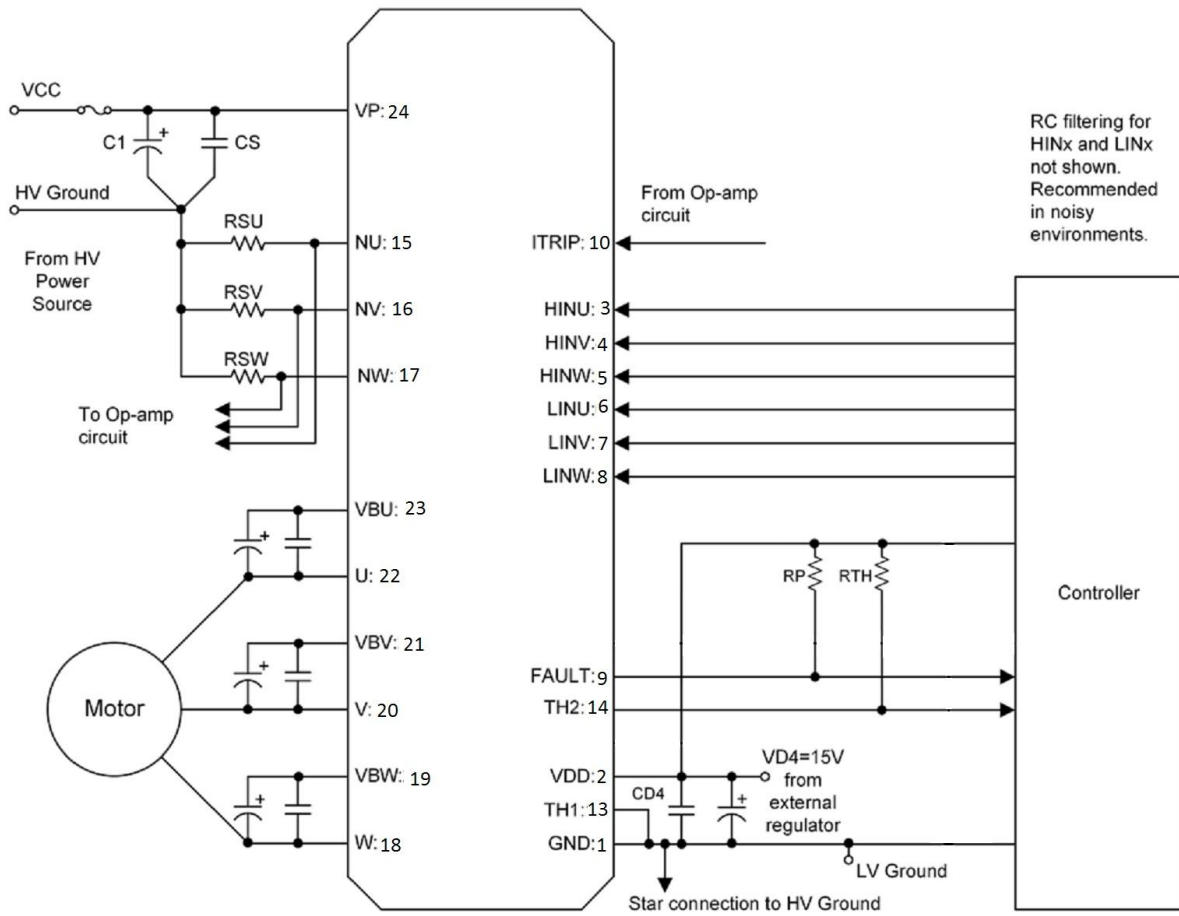


图1. 封装概览

Figure1. Package Overview

引脚号/Pin Number	引脚名/Pin Name	引脚描述/Pin Description
1	GND	Common Supply Ground 下桥臂参考地端
2	VDD	Common Bias Voltage for IC and IGBTs Driver 控制电源正端
3	HINU	Signal Input for High-Side U Phase 上半桥U相逻辑输入端
4	HINV	Signal Input for High-Side V Phase 上半桥V相逻辑输入端
5	HINW	Signal Input for High-Side W Phase 上半桥W相逻辑输入端
6	LINU	Signal Input for Low-Side U Phase 下桥臂U相逻辑输入端
7	LINV	Signal Input for Low-Side V Phase 下桥臂V相逻辑输入端
8	LINW	Signal Input for Low-Side W Phase 下桥臂W相逻辑输入端
9	FAULT	Fault Output 故障信号输出端
10	ITRIP	Capacitor for Short-Circuit Current Detector Input 过流电流保护电压检测端
11	NC	No connection 空引脚
12	NC	No connection 空引脚
13	TH1	热敏电阻输出端子1 NTC Output1
14	TH2	热敏电阻输出端子2 NTC Output2
15	NU	Negative DC-Link Input for U-Phase 逆变器直流电源负端（U相）
16	NV	Negative DC-Link Input for V-Phase 逆变器直流电源负端（V相）
17	NW	Negative DC-Link Input for W-Phase 逆变器直流电源负端（W相）
18	W	Output for W-Phase 逆变器W相输出端
19	VBW	High-Side Bias Voltage for W-Phase IGBT Driving 上桥臂W相驱动正端
20	V	Output for V-Phase 逆变器V相输出端
21	VBV	High-Side Bias Voltage for V-Phase IGBT Driving 上桥臂V相驱动正端
22	U	Output for U-Phase 逆变器U相输出端
23	VBU	High-Side Bias Voltage for U-Phase IGBT Driving 上桥臂U相驱动正端
24	VP	Positive DC-Link Input 逆变器直流电压正端



Typical Application Circuit

