



ZHEJIANG UNIÜ-NE Technology CO., LTD

浙江宇力微新能源科技有限公司



U3115D-6D Data Sheet

V 1.0

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Half-bridge of power MOSFET/IGBT Drive

General Description

The U3115D/U3116D Fully operated to +350V is high voltage, high speed power MOSFET and IGBT driver with dependent high and low side referenced output channels.

The logic input is compatible with standard CMOS or LSTTL output, down to 3.3V logic. The output drivers feature a high pulse current buffer stage designed for minimum driver cross-conduction. The floating channel can be used to drive an N-channel power MOSFET or IGBT in the high side configuration which operates up to 350 volts.

Product Summary

V _{OFFSET}	350V
I _{O+/-}	1.0A / 1.2A
V _{CCon/off} (typ.)	4.5V & 4.2V
V _{Bon/off} (typ.)	5V & 4.9V
ton/off (typ.)	450 & 150ns
Deadtime (typ.)	300 ns
Work Tem	-40 ~150 °C

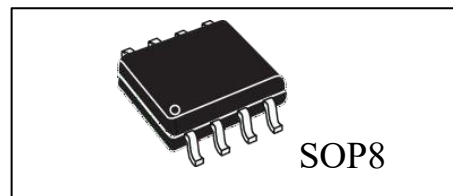
Key Features

- Integrated bootstrap Diode
- Floating channel designed for bootstrap operation
- Fully operational to +350V
- Tolerant to negative transient voltage dV/dt immune
- Gate drive supply range from 5 to 20V
- Undervoltage lockout
- 3.3V, 5V and 15V input logic compatible
- Cross-conduction prevention logic
- Matched propagation delay for both channels

Applications

- Home appliances
- Industrial applications and drives
- Motor drivers
- DC- AC Converter, PMDC and PMAC motors
- Induction heating
- HVAC

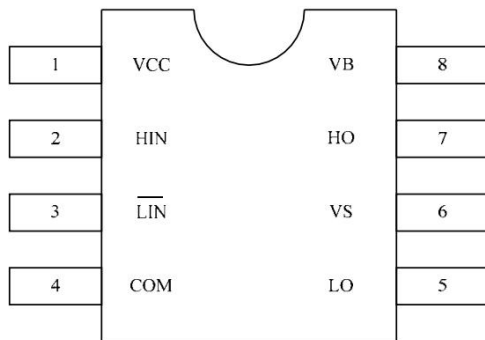
Packages



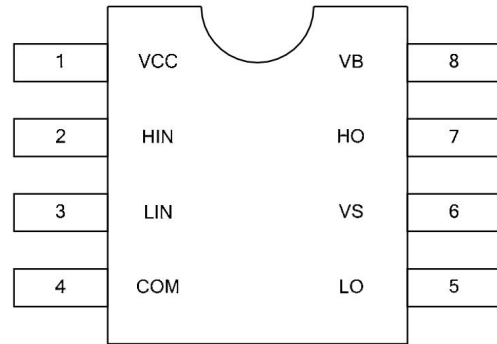
Product information

Base Part Number	Package Type	Standard OUT		V _{OFFSET}	Logic Control
		IO+	IO-		
U3115D	SOP8	1.0A	1.2A	350V	HIN & LIN
U3116D	SOP8	1.0A	1.2A	350V	HIN & LIN

Pin Assignments



U3115D

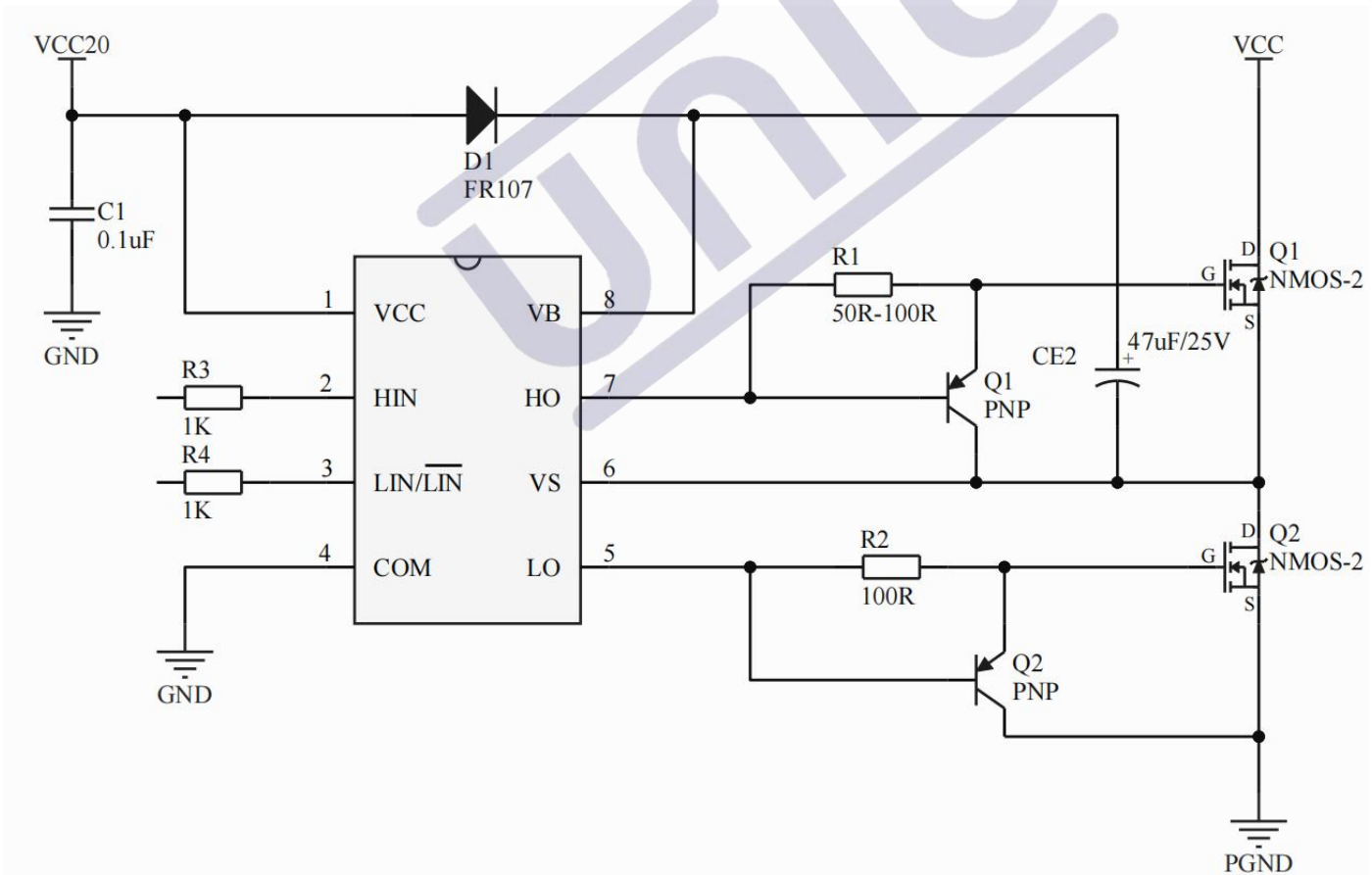
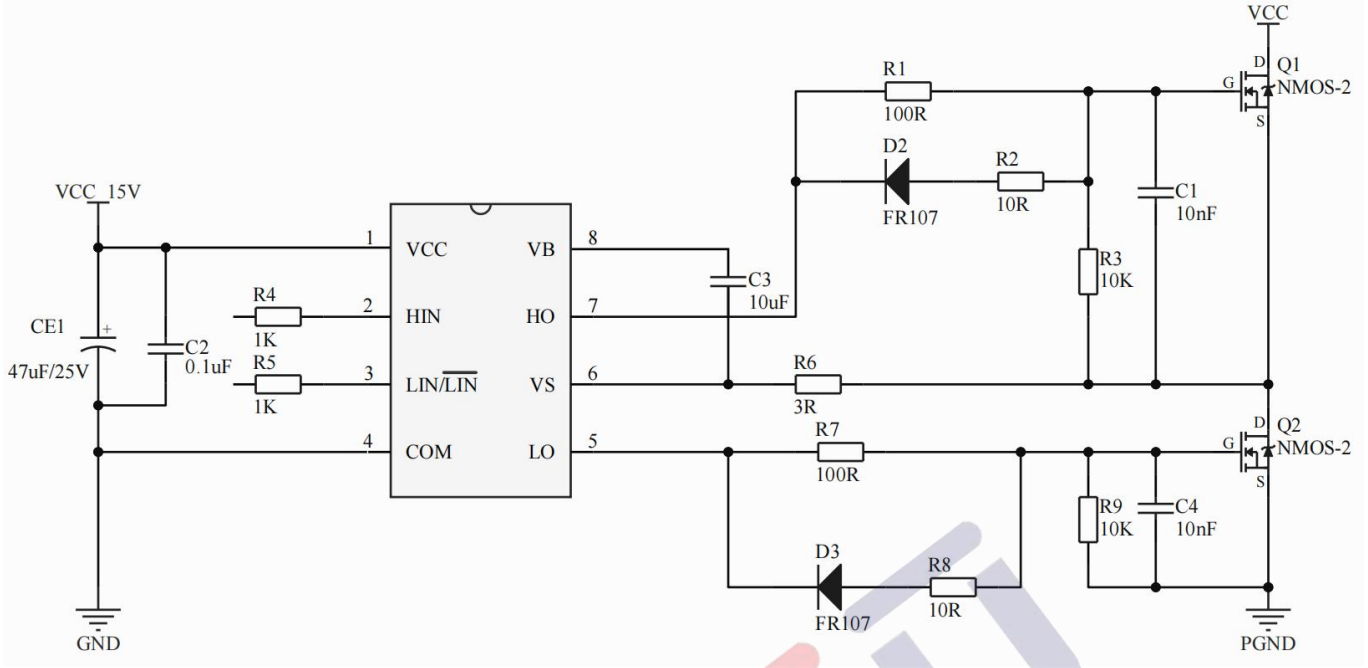


U3116D

Pin Function

Number	Symbol	Type	Description
1	VCC	P	Low side and logic fixed supply
2	HIN	I	High side driver logic input (active high)
3	LIN	I	Low side driver logic input (active high)
	$\overline{\text{LIN}}$	I	Low side driver logic input (active low)
4	COM	P	Low side return
5	LO	O	Low side gate drive output
6	VS	P	High side floating supply return
7	HO	O	High side gate drive output
8	VB	P	High side floating supply

Typical Connection



Much Big POWER application

1、版本记录

DATE	REV.	DESCRIPTION
2023/7/25	1.0	首次发布

2、免责声明

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