



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 1.1

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

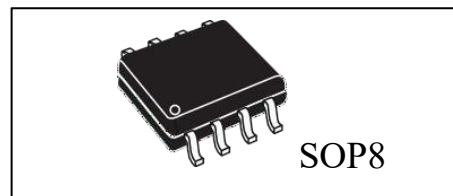
### Key Features

- Integrated bootstrap Diode(IF max 0.8A)
- 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

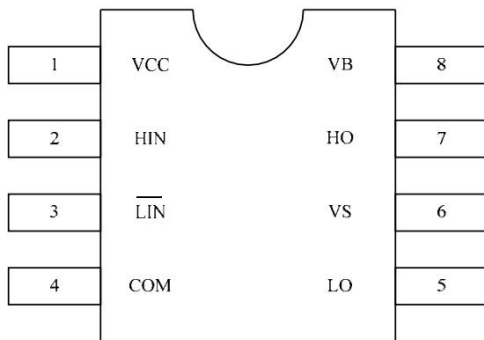
### Packages



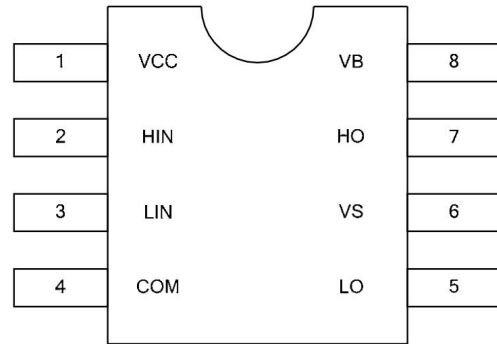
### Product information

Base Part Number	Package Type	Standard OUT		V <sub>OFFSET</sub>	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

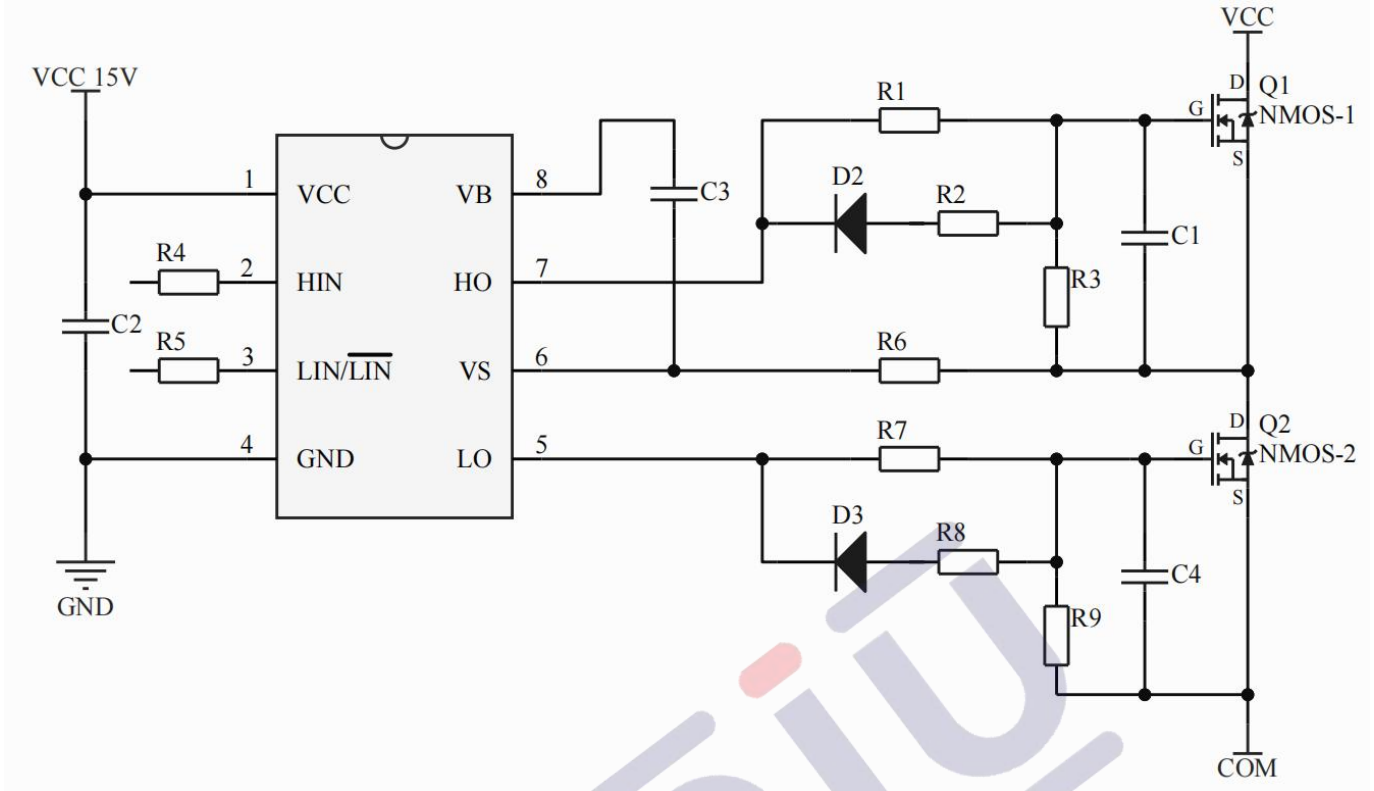


U3116D

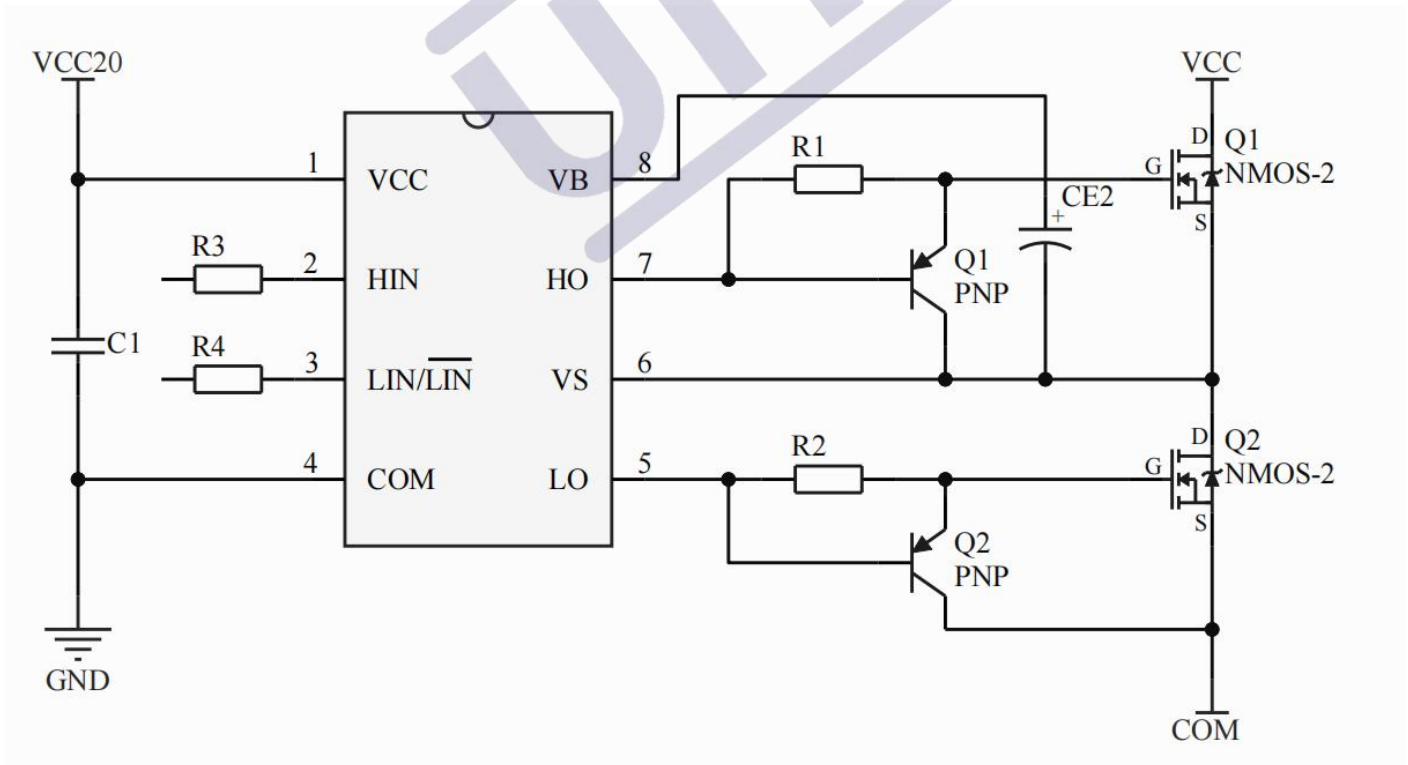
## Pin Function

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



Typical application



Much Big POWER application

## 1、版本记录

DATE	REV.	DESCRIPTION
2023/7/25	1.0	首次发布
2023/10/12	1.1	优化应用图

## 2、免责声明

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