



ZHEJIANG UNIU-NE Technology CO., LTD

浙江宇力微新能源科技有限公司



## U3115E Data Sheet

V 1.1

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## Half-bridge of power MOSFET/IGBT Drive

### General Description

The U3115E 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
ton/off (typ.)	450 & 150ns
Deadtime (typ.)	300 ns
Work Tem	-40 ~150 °C

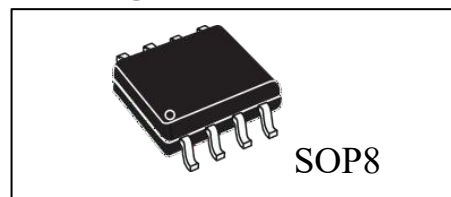
### Key Features

- Integrated bootstrap Diode<sup>(1)</sup>
- Floating channel designed for bootstrap operation
- Fully operational to +350V
- Tolerant to negative transient voltage dV/dt immune
- U3115E Gate drive supply range from 9 to 20V
- VCC under-voltage protection
- 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

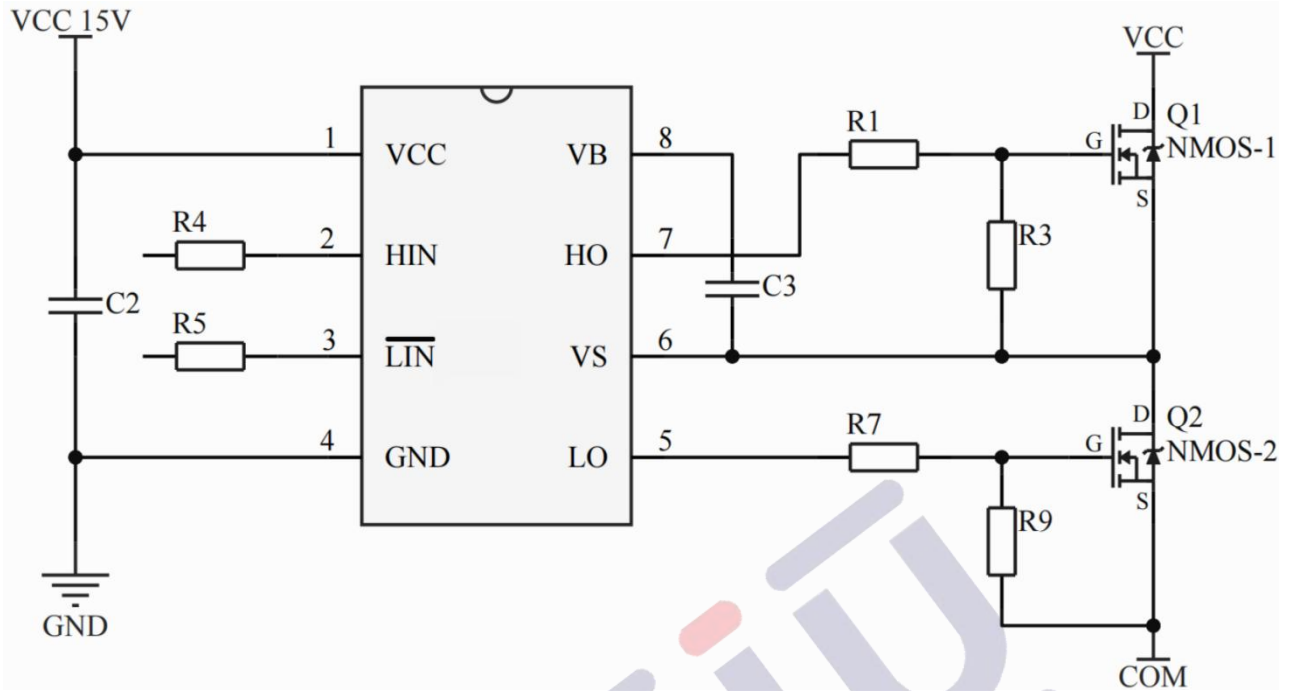


### Product information

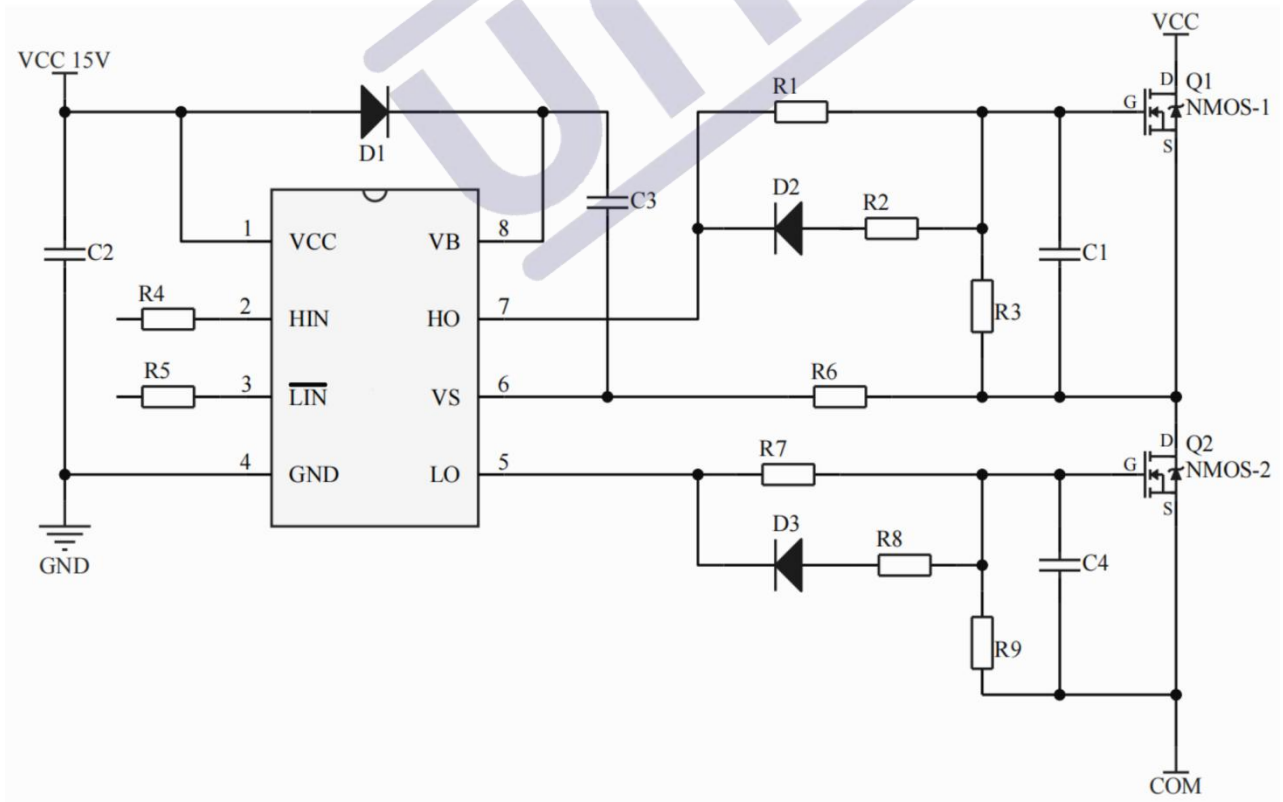
Base Part Number	Package Type	Standard OUT		V <sub>OFFSET</sub>	Logic Control
		IO+	IO-		
U3115E	SOP8	1.0A	1.2A	350V	HIN & $\overline{\text{LIN}}$

Note: (1) When using internal diode bootstrap power supply, please match the capacitor and MOS, and fully test and verify

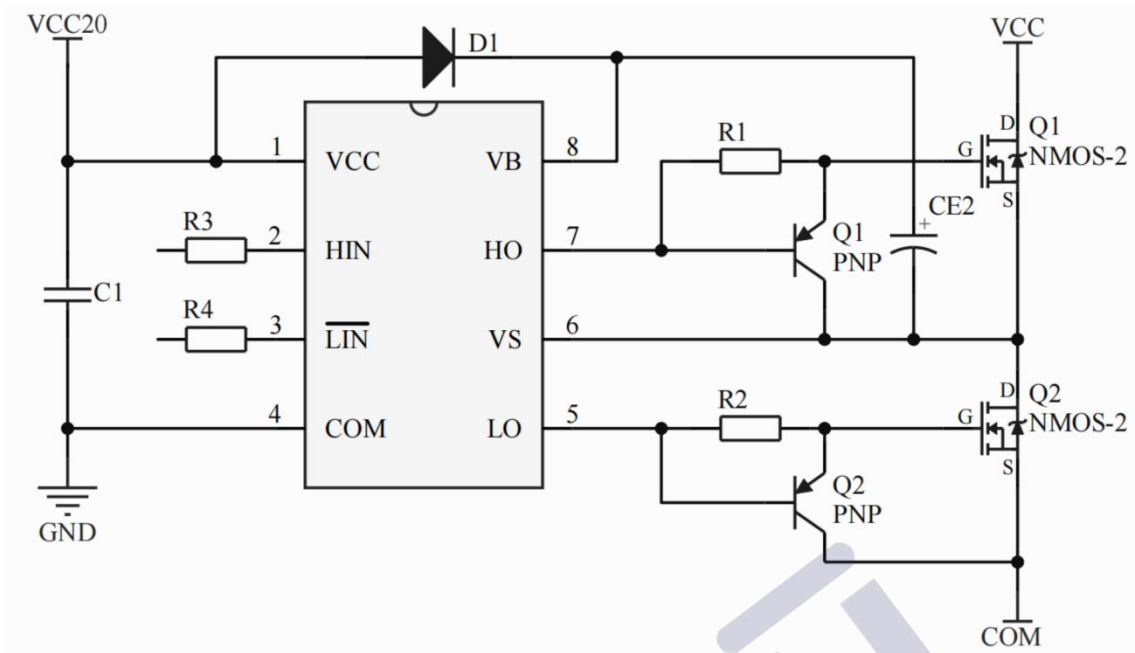
### Typical Connection



Small power application



Typical application



Much Big POWER application

**Note:** The above circuits and parameters are for reference only. The actual application circuit should be designed with the measured results in setting the parameters

## 1、版本记录

DATE	REV.	DESCRIPTION
2020/04/19	1.0	首次发布
2023/09/10	1.1	参数优化

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