



ZHEJIANG UNI-NE Technology CO., LTD

浙江宇力微新能源科技有限公司



U1001A Data Sheet

V 1.2

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Independent Single-Channel Gate Driver

General Description

The U1001A is high voltage, high speed power MOSFET and IGBT driver with independent high and low side referenced output channels. Proprietary HVIC and latch immune CMOS technologies enable ruggedized monolithic construction. 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 30 volts.

Product Summary

V_{OFFSET}	30V max
$I_{\text{O+/-}}$	2.0 A / 2.5A
VCC	5V - 30V
Work Tem	-40 ~150 °C

Key Features

- Floating channel designed for bootstrap operation
- Built IN SD Function
- Tolerant to negative transient voltage dV/dt immune
- Gate drive supply range from 5 to 30V
- Undervoltage lockout
- 3.3V, 5V input logic compatible
- Cross-conduction prevention logic
- Internally set deadtime
- High side output in phase with input
- Shut down input turns off both channels
- Matched propagation delay for both channels

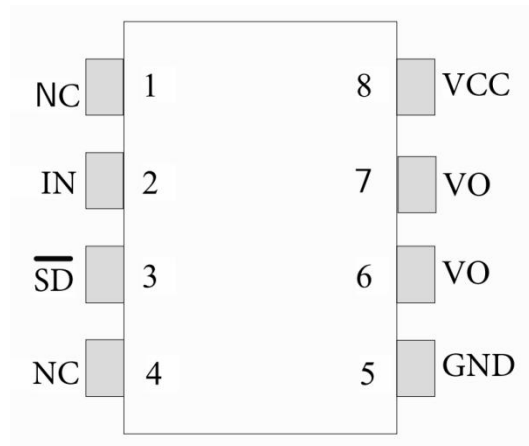
Packages



Products Information

Base Part Number	Package Type	Standard OUT		V_{OFFSET}	Logic Control
		IO+	IO-		
U1001A	SOP8	2.0A	2.5A	30V	IN & $\overline{\text{SD}}$

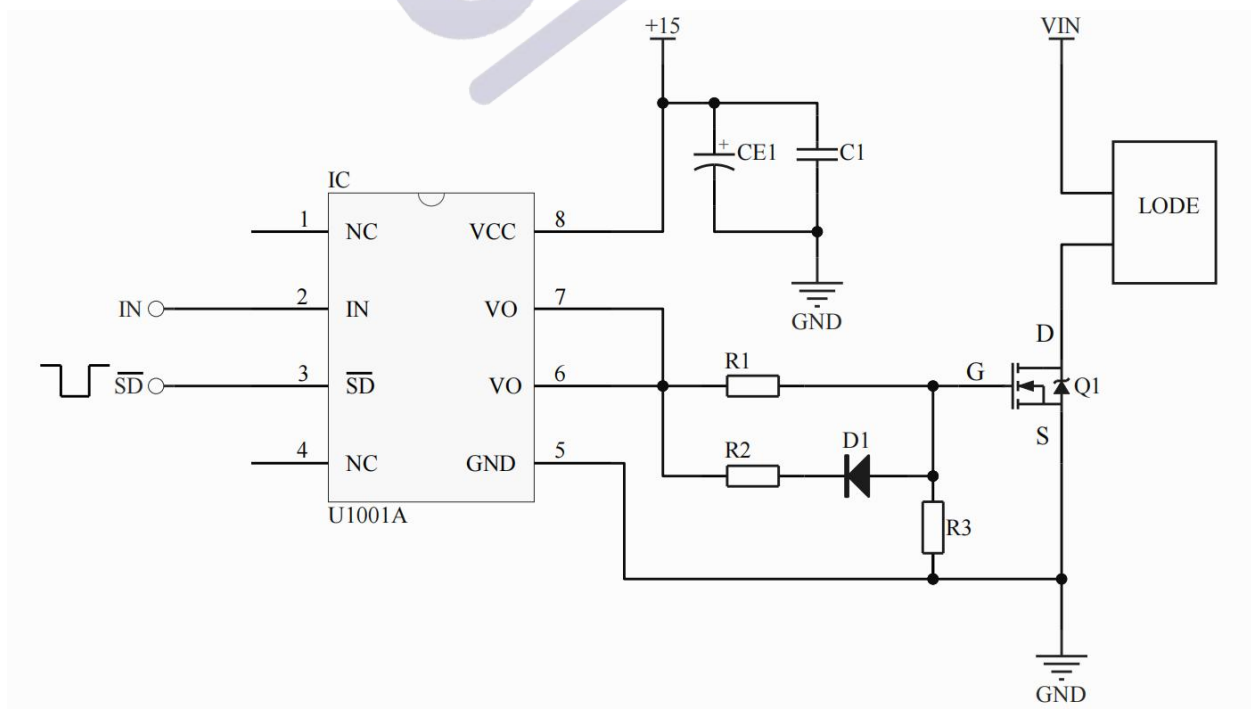
Pin Assignments



Pin Function

Number	Symbol	Description
1, 4	NC	Suggested overhang
2	IN	Logic input
3	$\overline{\text{SD}}$	Logic input for shutdown
5	GND	Ground
6, 7	VO	Gate drive output
8	VCC	Power supply

Typical Application



1、版本记录

DATE	REV.	DESCRIPTION
2018/04/19	1.0	首次发布
2020/05/21	1.1	变更封装
2023/3/18	1.2	参数调整

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