ZHEJIANG UNIU-NE Technology CO.,LTD

浙 江 宇 力 微 新 能 源 科 技 有 限 公 司

U2103/6 Data Sheet

V 1.1

High Current IO+/- 0.5/0.8A HALF-BRIDGE DRIVER

General Description

The U2103/U2106 Fully operated to +600V 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 op-erates up to 600 volts.

Product Summary

V_{OFFSET}	600V max
I_O+/-	0.5A / 0.8A
V_{OUT}	9V ~ 21V
$t_{on/off}$ (typ.)	680/320 &120/260ns
Deadtime (typ.)	560 & 50ns
Work Tem	-40 ~150 ℃

Key Features

- Floating channel designed for bootstrap operation
- Fully operational to +600V
- Tolerant to negative transient voltage dV/dt immune
- Gate drive supply range from 9 to 21V
- 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

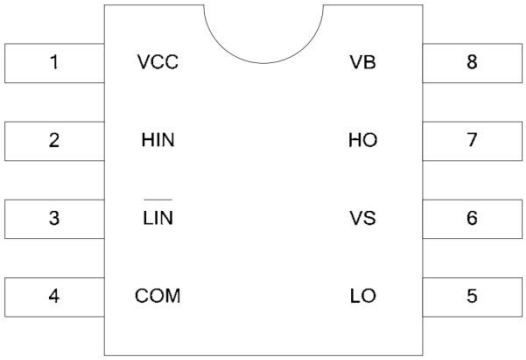
Packages

8-Lead SOP

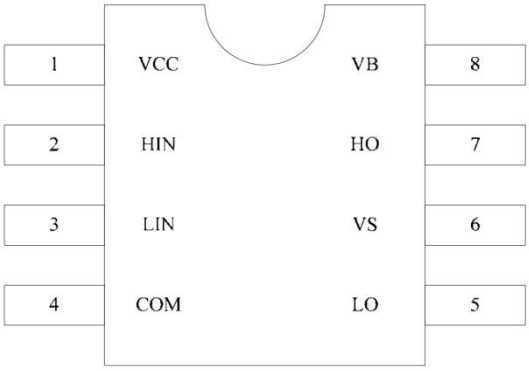
Products Information

Base Part Number	Package Type	Standard OUT		VOFFSET	Logic Control
		IO+	IO-		
U2103	SOP8	0.5A	0.8A	600V	HIN & $\overline{\text{LIN}}$
U2106	SOP8	0.5A	0.8A	600V	HIN & LIN

Pin Assignments



U2103

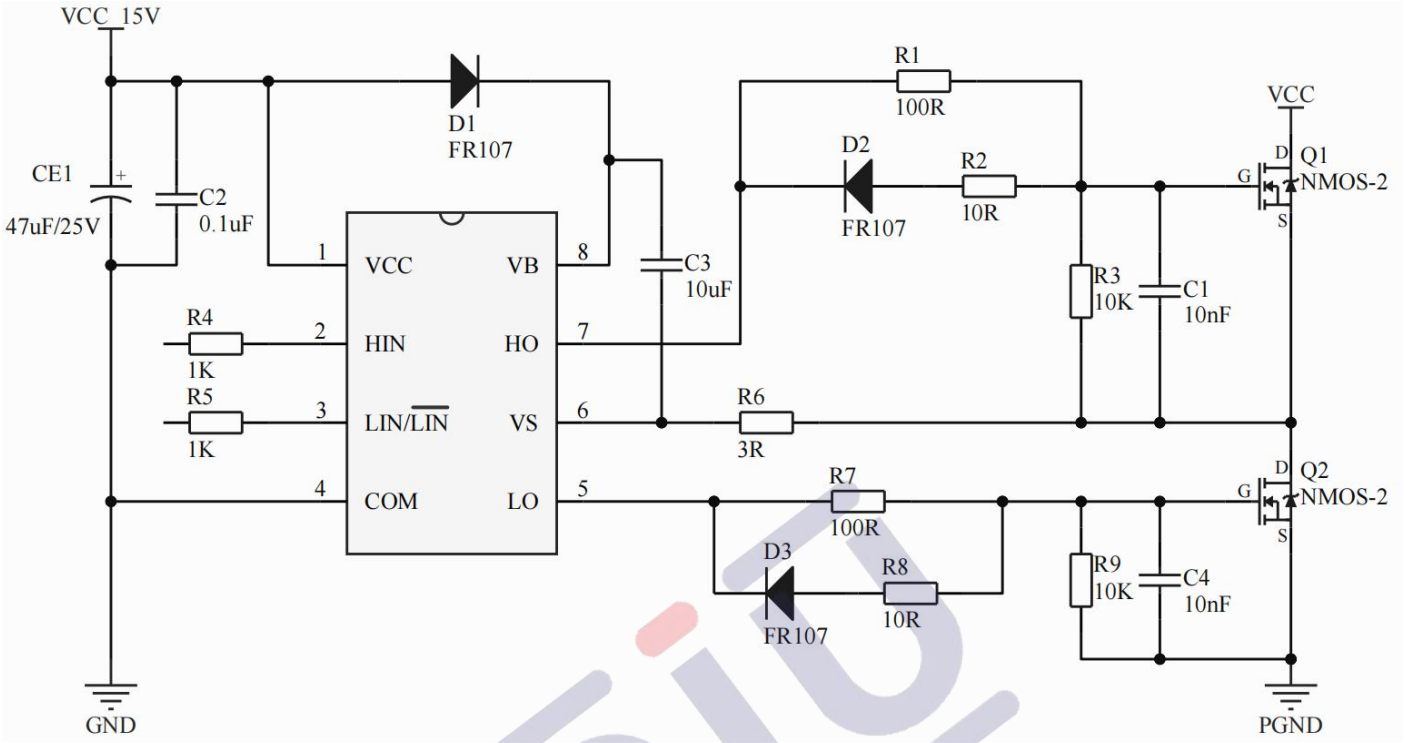


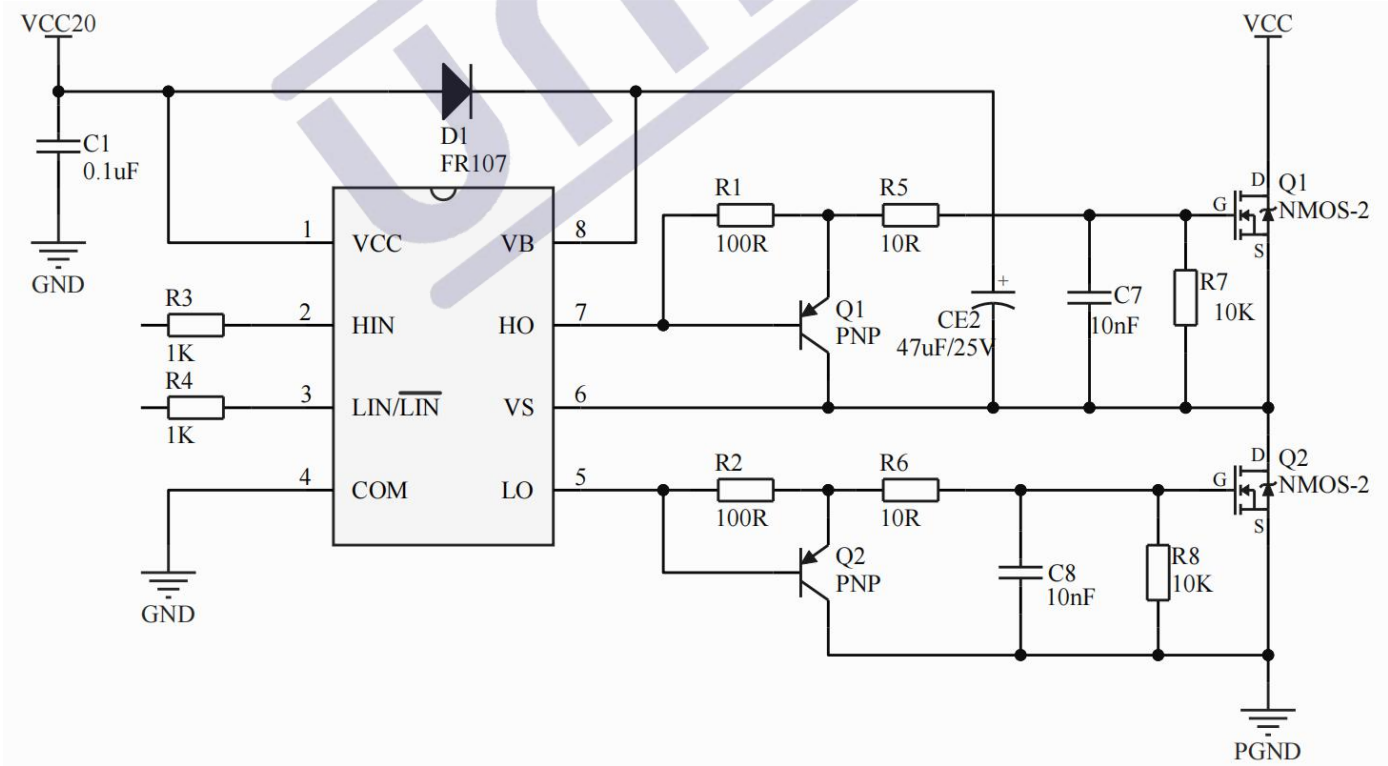
U2106

Pin Function

Number	Symbol	Description
1	VCC	Low side and logic fixed supply
2	HIN	Logic input for high side gate driver outputs (HO), in phase
3	LIN	Logic input for low side gate driver outputs (LO), in phase
	$\overline{\text{LIN}}$	Logic input for low side gate driver outputs (LO), out of phase
4	COM	Low side return
5	LO	Low side gate drive output
6	VS	High side floating supply return
7	HO	High side gate drive output
8	VB	High side floating supply

Typical Connection





Much Big POWER application

1.版本记录

DATE	REV.	DESCRIPTION
2018/04/19	1.0	First Release
2020/05/21	1.1	Change the package

2.免责声明

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