



Shaoxing Yuli Semiconductor CO., LTD

绍兴宇力半导体有限公司



U21276 Data Sheet

V 1.0

版权归绍兴宇力半导体有限公司

CURRENT SENSING SINGLE CHANNEL DRIVER

General Description

The U21276 is a high voltage, high speed power MOSFET and IGBT driver. Proprietary HVIC and latch immune CMOS technologies enable ruggedized monolithic construction. The logic input is compatible with standard CMOS or LSTTL outputs, down to 3.3V. The protection circuitry detects over-current in the driven power transistor and terminates the gate drive voltage. An open drain $\overline{\text{FAULT}}$ signal is provided to indicate that an over-current shutdown has occurred. The output driver features a high pulse current buffer stage designed for minimum cross-conduction. The floating channel can be used to drive an N-channel power MOSFET or IGBT in the high side or low side configuration which operates up to 600 volts.

Product Summar

VOFFSET	600V max.
IO+/-	4A/6A
VOUT	9-20V
VCSt _h	1.2V
ton/off (typ.)	220&220ns

Key Features

- Floating channel designed for bootstrap operation Fully operational to +600V Tolerant to negative transient voltage dV/dt immune .
- Application- specific gate drive range: 9 to 20V
- Undervoltage lockout
- 3.3V, 5V and 15V input logic compatible
- $\overline{\text{FAULT}}$ lead indicates shutdown occurred
- Output in phase with input
- Available in Lead-Free

Applications

- Home appliances
- Industrial applications and drives
- Motor drivers
- Robot applications and drivers
- Induction heating
- Power drive of automotive electronics

Pakeages



Product information

Base Part Number	Package Type	Standard OUT		VOFFSET	Logic Control
		IO+	IO-		
U21276	SOP8	4A	6A	600V	IN&CS

1、Version Record

Date	Rev.	Description
2023/07/19	1.0	First Release

2、Contact

Shaoxing Yuli Semiconductor CO.,LTD

Shaoxing Address: 4th & 5th Floors, Building 45, CECEP Science and Technology Innovation Park, No. 25 Paodu Road, Doumen Subdistrict, Yuecheng District, Shaoxing City, Zhejiang Province, China

Telephone: 0575-85087896 (R&D Department)

Fax: 0575-88125157

E-mail: htw@uni-semic.com

Wuxi Address: Room 503, Building 1# (Comprehensive Building), China Electronics (Wuxi) Digital Chip City, No. 6 Xianfeng Middle Road, Xishan District, Wuxi City, Jiangsu Province, China

Telephone: 0510-85297939

E-mail: zh@uni-semic.com

Shenzhen Address: Room 410, Yonghui International Business Building, Baoyuan Road, Nanchang Community, Xixiang Subdistrict, Bao'an District, Shenzhen, Guangdong Province, China

Telephone: 0755-84510976

E-mail: htw@uni-semic.com

Disclaimers:

1. Shaoxing Yuli Semiconductor Co., LTD., (referred to as "Yuli"), reserves the right to modify user manuals, application guidelines, etc., without prior notice. When purchasing, customers should obtain the latest version of our company's materials and verify whether the relevant information is up-to-date and complete. Before using the products, please carefully read the user manuals, application guides, and other relevant materials along with all precautions contained therein.

2. This product is intended for consumer electronics use and Yuli makes no guarantees as to the suitability of Yuli products for any particular purposes. The products must not be applied in any equipment or system whose manufacture, use, or sale is prohibited by applicable laws or regulations. If Yuli's products are utilized in such prohibited devices or systems, all risks associated with such applications shall be solely borne by the customer, and Yuli shall not be held liable for any consequences arising therefrom.

3. The applications of the products described in this document and related materials such as application guides are provided for illustrative reference only. The parameters provided in this document may and do vary in different applications, and the actual performance may change accordingly. Further evaluation, testing, and validation are required during use. Yuli disclaims all responsibility for any assistance provided in the application of its products or the design of customer products.

4. Customers must utilize the products within their valid storage period. If customers have any questions regarding the valid storage period of Yuli's products, please contact Yuli's sales personnel or customer service support immediately. Yuli shall not assume any responsibility for the use of products beyond their storage period.

5. Without the prior written consent of Yuli, the files and products shall not be disassembled, altered, modified, or copied.

6. When purchasing products, please verify the Yuli trademark and product specifications. For any inquiries, please contact Yuli for clarification. Third-party purchasers are advised to confirm whether the seller holds authorized credentials from Yuli and must contact our company prior to procurement to ensure the products are genuine Yuli-manufactured items.

7. When using or applying the products, customers must comply with all applicable laws and regulations, including but not limited to trade control regulations, etc. This product is designated for civilian electronic purposes. It must not be used in non-civilian fields.

8. Product improvement is an endless journey. Our company remains fully committed to delivering superior products to our customers!