

STPRDC02A

Data brief

High-voltage full-bridge driver with high impedance management and ZVD output



VFQFPN 4x4 mm

Features

- 60V full-bridge driver for N-channel MOSFETS
- Adjustable deadtime control
- High impedance management for STBuck applications
- Zero voltage detection output
- 2 A sink/source current
- Enable input
- VFQFPN, 4x4 mm package

Application

- High-current high performance step-down conversion
- STBuck architectures
- STC architectures

Description

The STPRDC02A is a 60 V, high-voltage, full-bridge MOSFET driver IC that can drive two independent half-bridges. It provides four high-current gate driver outputs, each capable of driving one or more N-channel power MOSFETS.

The device is configurable and optimizes the driving scheme of the STBuck topology to improve power density.

The zero voltage detection output allows to optimize STC application and to compensate for component tolerances improving the overall cost of the application.

Two PWM inputs control the two half-bridge sections independently. EN pin low, forces all the gate drives low regardless of the PWMs, thus implementing a HiZ.

The STPRDC02A is available in VFQFPN, 4x4 mm package with exposed pad.

Product status link		
STPRDC02A		
Product summary		
Order code	STPRDC02ATR	
Package	VFQFPN	
Packing	Tape & Reel	

Revision history

Table 1. Document revision history

Date	Version	Changes
11-Feb-2022	1	Initial release.

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