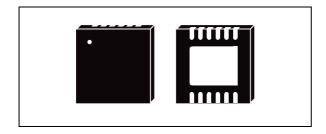


Synchronous rectifier smart driver

Data brief



Features

- Dual low-side driver for N-channel MOSFETs
- 4 A sink/source current
- Operating frequency up to 1 MHz
- Predictive ZCS / ZVS control
- · High impedance control
- START input
- DFN12, 3 x 3 mm package

Applications

High current high performance step down conversion

Description

The STRG02 smart driver implements a control scheme specific to secondary-side synchronous rectification in STVCOT ™ based resonant converters.

It provides two high current gate drive outputs, each capable of driving one or more N-channel low-side power MOSFETs. Both gate drivers are controlled by the combination of the START input and embedded predictive ZCD/ZVS control assuring the two external power MOSFETs to be switched in zero voltage / zero current conditions to achieve high efficiency power conversion.

The high impedance mode can be configured with the two external power MOSFETs immediately kept OFF.

The STRG02 is available in a DFN12, 3×3 mm package with an exposed pad.

Table 1. Device summary

Order code	Package	Packing
STRG02TR	DFN12	Tape and reel

Revision history STRG02

Revision history

Table 2. Document revision history

Date	Revision	Changes
03-Mar-2016	1	Initial release.

IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2016 STMicroelectronics - All rights reserved

