
**2.8 V - 500 mA, 6 MHz synchronous step-down converter based
on ST1S15J28R**

Data brief

**Description**

STEVAL-ISA131V2 is an evaluation board designed around the ST1S15, a high efficiency miniaturized step-down converter able to provide 500 mA output current from an input voltage of 2.3 V to 5.5 V. This converter working at 6 MHz switching frequency and is specifically designed for applications where high efficiency and small application area are the key factors.

Features

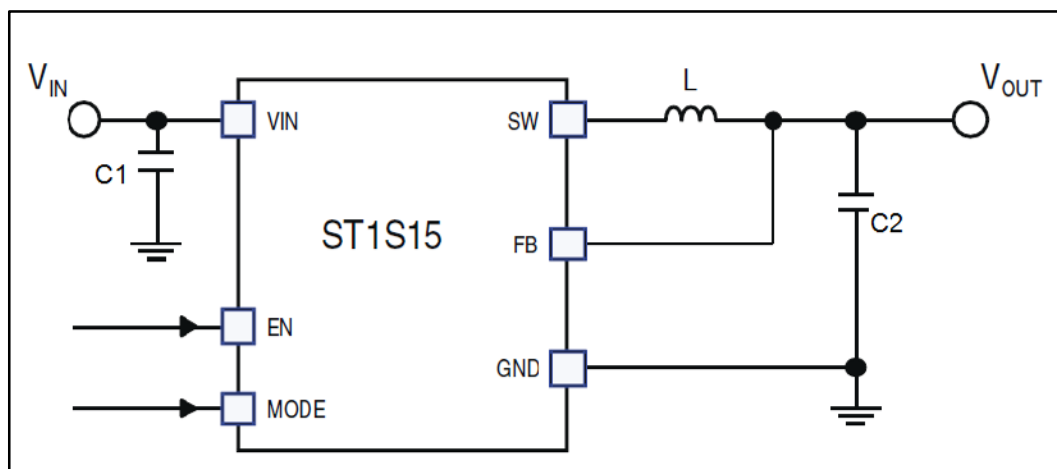
- 85% typical efficiency
- 500 mA output current capability
- 45 μ A typical quiescent current
- PFM or PWM operation for best efficiency over whole load range
- Ultra-fast load and line transient
- Short-circuit and thermal protection
- Tiny external components
- Auto or forced PWM selection with dedicated pin
- ST1S15J28R in Flip Chip 6 bumps Package
- RoHS compliant

Contents

1	Schematic diagram.....	3
2	Revision history	4

1 Schematic diagram

Figure 1: Schematic circuit



2 Revision history

Table 1: Document revision history

Data	Revision	Changes
29-Jul-2014	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.

© 2014 STMicroelectronics – All rights reserved