

5 V / 0.36 A buck converter using VIPerPlus – VIPer11







Features

- Universal AC main input voltage range: 85 265 VAC
- Output range: 5 V/0.36 A
- Rated output power: 1.8 W
- Input power in standby at 230 V_{AC}: less than 18 mW
- Active mode efficiency: > 65%
- EMI: according to EN55022-Class-B
- RoHS compliant

Description

The STEVAL-ISA195V1 evaluation board implements a wide range mains buck converter (5 V/0.36 A) developed for general purpose applications.

The design is built around the VIPer11 off-line high voltage converter from the VIPerPlus family, which intelligently integrates an 800 V rugged power MOSFET with a current-mode control PWM.

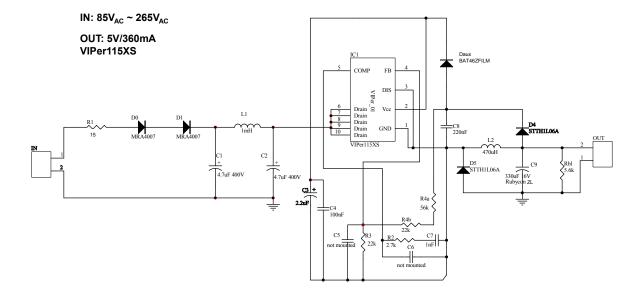
The main characteristics of the evaluation board are its single layer, small size and minimal BoM, high efficiency and low standby consumption.

Product summary		
5 V / 0.36 A buck converter using VIPerPlus - VIPer11	STEVAL- ISA195V1	
energy saving off- line high voltage converter	VIPER11	
Applications	Home and Professional Appliances	
	Power supplies and Converters	



1 Schematic diagrams

Figure 1. STEVAL-ISA195V1 circuit schematic



DB3396 - Rev 2 page 2/4



Revision history

Table 1. Document revision history

Date	Version	Changes
09-May-2018	1	Initial release.
11-Dec-2020	2	Updated cover page image and product summary table.

DB3396 - Rev 2 page 3/4



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. For additional information about ST trademarks, please refer to www.st.com/trademarks. 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.

© 2020 STMicroelectronics - All rights reserved

DB3396 - Rev 2 page 4/4

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

STMicroelectronics: STEVAL-ISA195V1