

## STEVAL-ISA202V1

# 1.5 A step down switching regulator ( $V_{IN} = 8$ to 55 V) based on I 4971

Data brief



### **Description**

The STEVAL-ISA202V1 product evaluation board provides a platform for evaluation of the L4971, a 1.5 A asynchronous step-down power switching regulator with zero load current operation capability.

Based on the selection of the external components, the device can operate in the entire input voltage range of 8 V <  $V_{IN}$  < 55 V. The output voltage is limited by the voltage rating of the output capacitor, so it can be adjusted within the 3.3 V <  $V_{OUT}$  < 30 V range through voltage divider R2, R3.

The input and output capacitors are capable of sustaining the RMS current within the operating range.

#### **Features**

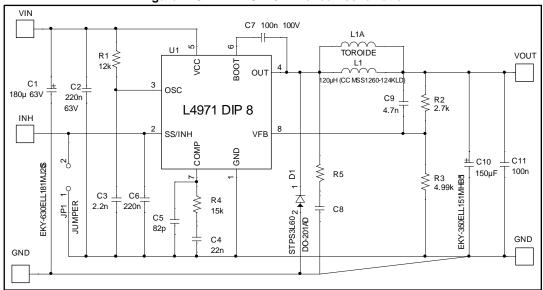
- Input voltage range: 8 V to 55 V
- Output voltage: 5.1 V ± 3% (line, load and thermal)
- Output ripple: less than 51 mV
  Output current range: up to 1.5 A
  Max output ripple current: 30%
- Current limit: 2.5 A typ.
- Switching frequency: 200 kHz
- RoHS compliant

office

Schematic diagram STEVAL-ISA202V1

## 1 Schematic diagram

Figure 1: STEVAL-ISA202V1 circuit schematic



2/4 DocID030876 Rev 1

STEVAL-ISA202V1 Revision history

## 2 Revision history

Table 1: Document revision history

Date	Version	Changes
04-Aug-2017	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.

© 2017 STMicroelectronics - All rights reserved

