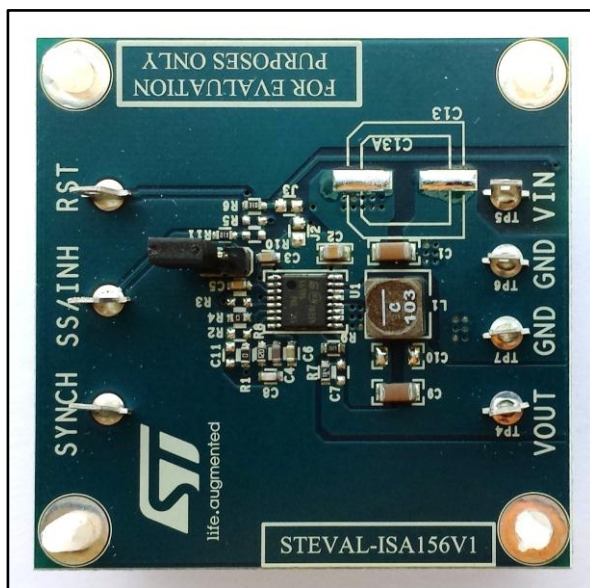


## 38 V, 2 A synchronous step-down switching regulator evaluation board based on the L6986

Data brief



### Features

- 4 V to 38 V operating input voltage
- Low consumption mode or low noise mode

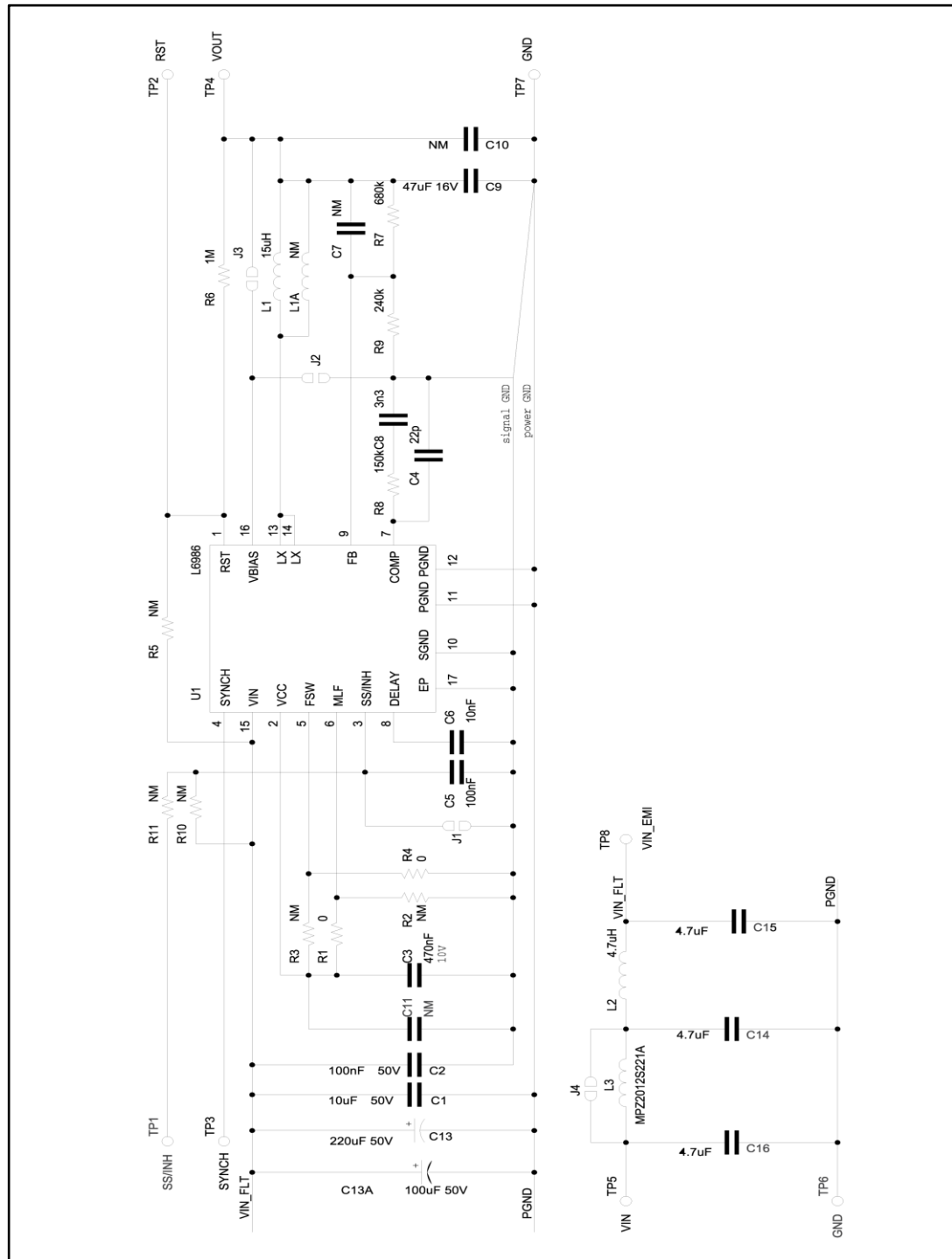
- 30  $\mu$ A  $I_Q$  at light load (LCM  $V_{OUT} = 3.3$  V)
- 5  $\mu$ A  $I_{Q-SHTDWN}$
- Adjustable  $f_{SW}$  (250 kHz - 2 MHz)
- Output voltage adjustable from 0.85 V to  $V_{IN}$
- Embedded output voltage supervisor
- Synchronization
- Adjustable soft-start time
- Internal current limiting
- Overvoltage protection
- Output voltage sequencing
- Peak current mode architecture
- $R_{DS(on) HS} = 180$  m $\Omega$ ,  $R_{DS(on) LS} = 110$  m $\Omega$
- Thermal shutdown

### Description

The STEVAL-ISA156V1 is a product evaluation board based on ST's L6986, a 38 V, 2 A synchronous step-down switching regulator with 30  $\mu$ A quiescent current. It can be used for 12 V and 24 V buses, programmable logic controllers (PLCs), decentralized intelligent nodes & sensors and low noise applications (LNM).

# 1 Schematic diagram

Figure 1: STEVAL-ISA156V1 circuit schematic



## 2 Revision history

Table 1: Document revision history

Date	Revision	Changes
18-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

# Mouser Electronics

Authorized Distributor

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

[STMicroelectronics:](#)

[STEVAL-ISA156V1](#)