

STEVAL-ISA104V1

Up to 3 A step-down switching regulator (Vin = 5.5 V to 48 V) based on the ST1S14

Data brief

Features

- 3 A DC output current
- Operating input voltage from 5.5 V to 48 V
- 850 kHz internally fixed switching frequency
- Internal soft-start
- Internal current limiting
- Inhibit for zero current consumption
- 2 mA maximum quiescent current overtemperature range
- Thermal shutdown
- RoHS compliant

Description

The STEVAL-ISA104V1 is designed in order to evaluate the ST1S14, a step-down monolithic power switching regulator able to deliver up to 3 A; this high current level is also achieved thanks to a HSOP8 package with exposed frame.

The output voltage can be set from 1.22 V.

An internal oscillator fixes the switching frequency at 850 kHz.

Power Good open collector output validates the regulated output voltage as soon as it reaches the regulation.

Pulse-by-pulse current limit offers an effective constant current short-circuit protection while the current foldback decreases overstress in persistent short-circuit condition.

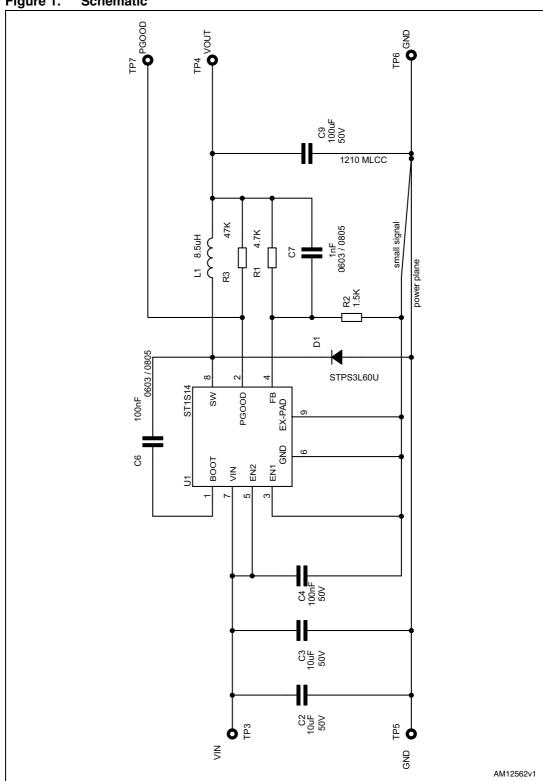
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Schematic STEVAL-ISA104V1

Schematic 1

Figure 1. **Schematic**



STEVAL-ISA104V1 Revision history

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
06-Aug-2012	1	Initial release.

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