



STEVAL-ISA101V1

2 A DC step-down switching regulator with 4 V/36 V input voltage range based on the L5973D

Data brief

Features

- V_{in} : 4 V to 36 V
- V_{out} : 1.235 V to 36 V
- Output current: 2 A DC
- Internal oscillator switching frequency: 250 kHz
- Short-circuit protection
- Inhibit and thermal shutdown
- RoHS compliant

Description

The STEVAL-ISA101V1 demonstration board is based on the L5973D, a step-down monolithic switching regulator with 2 A DC (2.5 A switch peak current) current capability over the output voltage range (1.235 V to 36 V).

The operating input voltage ranges from 4 V to 36 V. The device is based on BCD5 technology. The embedded power element is a P-channel D-MOS transistor so the driving stage does not require any bootstrap capacitor and the duty cycle can range up to 100%.

An internal oscillator fixes the switching frequency at 250 kHz. A synchronization pin is available when a higher switching frequency (up to 700 kHz) is required.

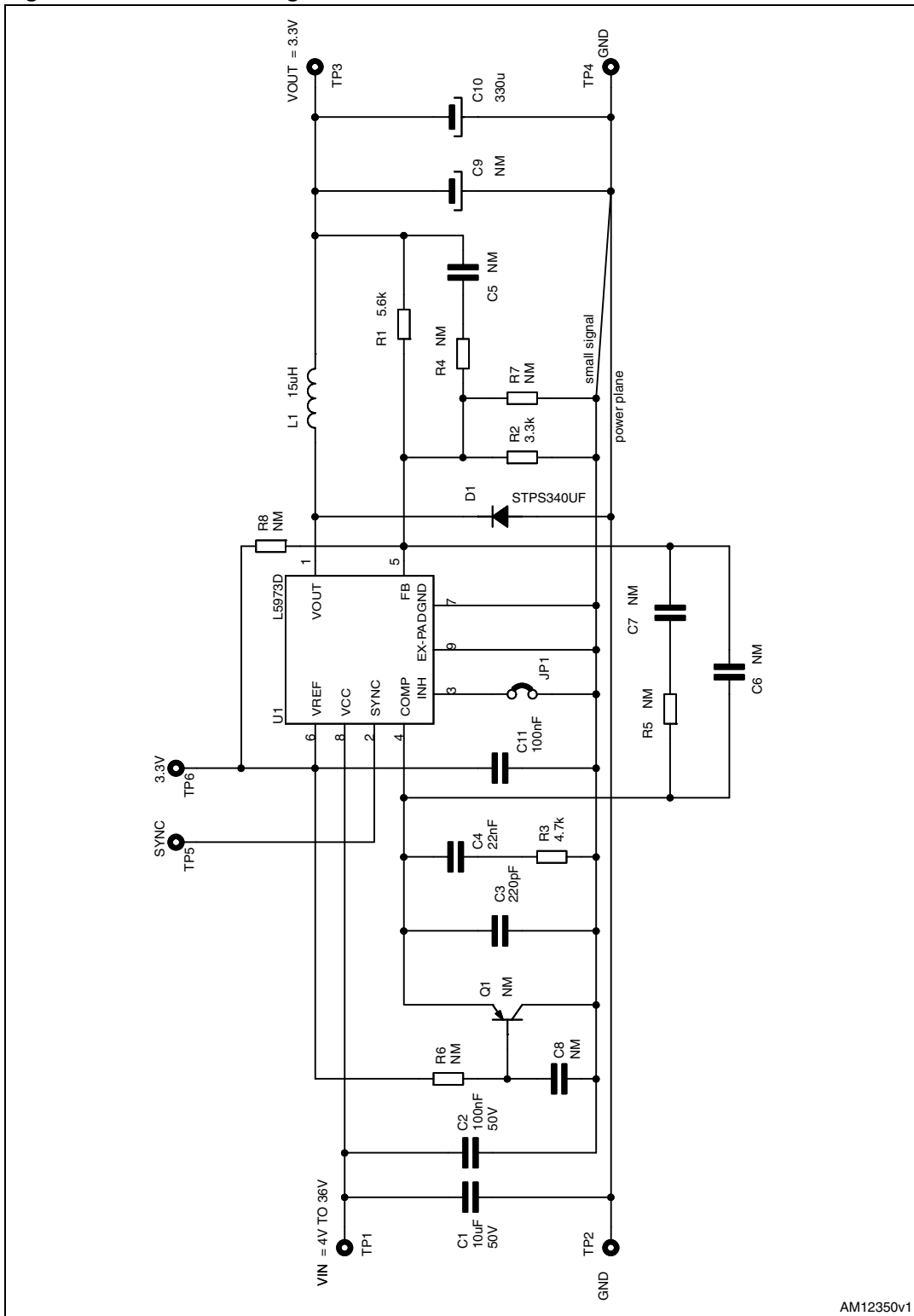
Pulse-by-pulse current protection and a frequency foldback feature always guarantee an effective short-circuit protection. Other features include voltage feed-forward, protection against feedback disconnection, inhibit and thermal shutdown.

Previous sales code: EVAL5973D.



1 Schematic diagram

Figure 1. Schematic diagram



AM12350v1

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
30-May-2012	1	Initial release.

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