



STEVAL-ISA093V1

3 A step-down switching power supply demonstration board
based on the L7981 (QFN)

Data brief

Features

- 3 A DC output current
- 4.5 V to 28 V input voltage
- Output voltage adjustable from 0.6 V
- 250 kHz switching frequency, programmable up to 1 MHz
- Internal soft-start and enable
- Low dropout operation: 100% duty cycle
- Voltage feed-forward
- Zero load current operation
- Overcurrent and thermal protection
- RoHS compliant

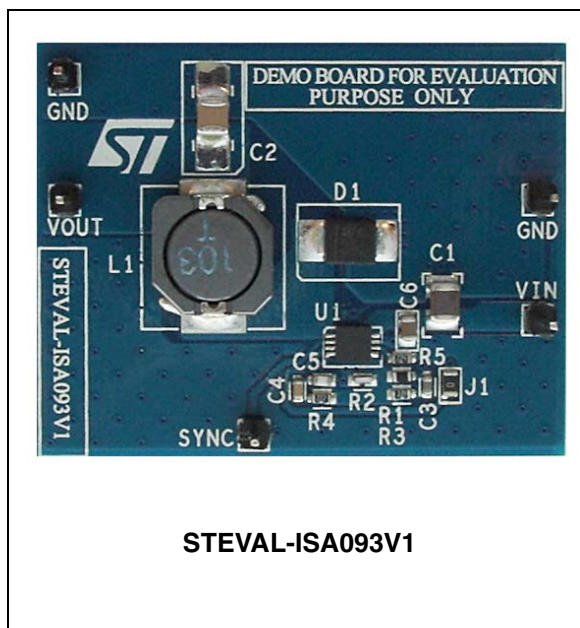
Description

The STEVAL-ISA093V1 is a step-down switching power supply based on STMicroelectronics' L7981 switching regulator in a QFN package.

The L7981 features an embedded power MOSFET and is capable of delivering up to 3 A of current to the load, depending on the application conditions.

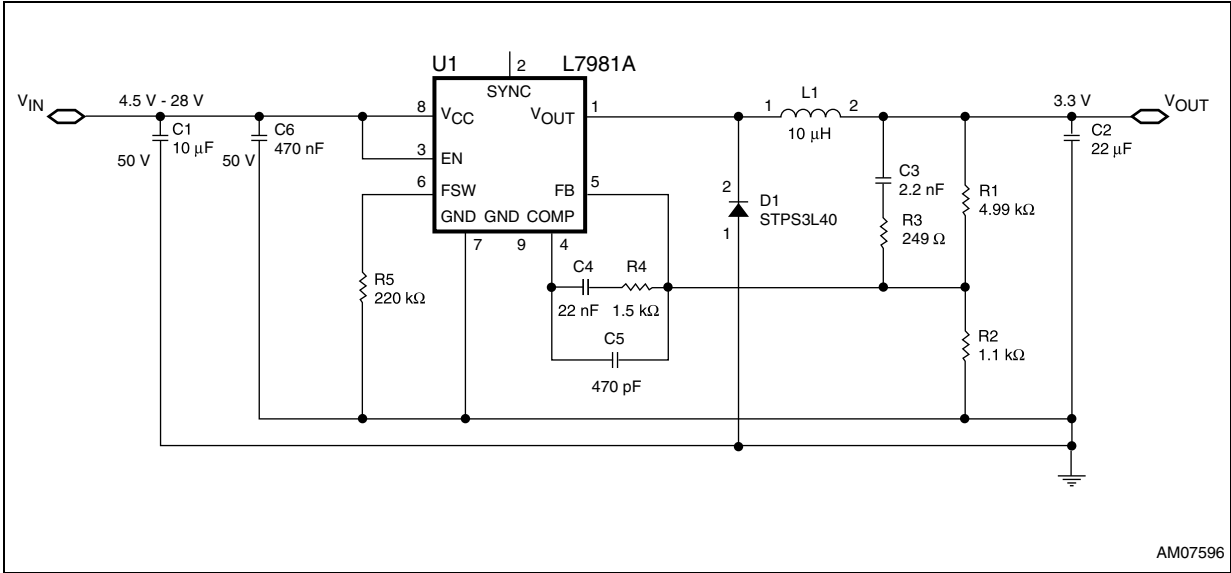
The input voltage can range from 4.5 V to 28 V, while the output voltage can be set from 0.6 V to V_{IN} .

Requiring a minimum number of external components, the device includes an internal 250 kHz switching frequency oscillator that can be externally adjusted up to 1 MHz.



1 Schematic diagram

Figure 1. STEVAL-ISA093V1 circuit schematic



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
23-Dec-2011	1	Initial release.

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