



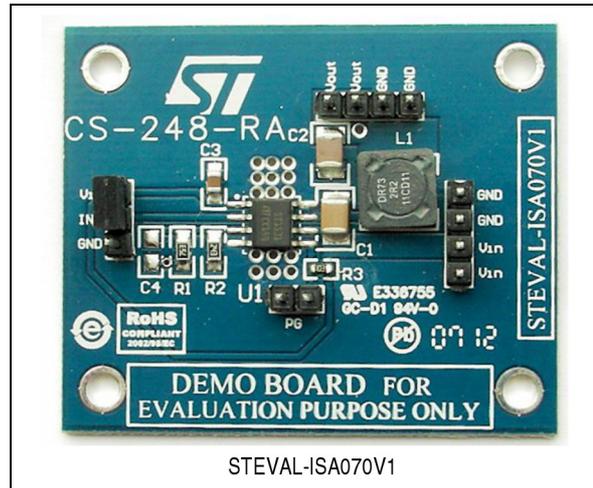
STEVAL-ISA070V1

3 A / 1.5 MHz step-down synchronous switching regulator based on the ST1S31 in SO-8 package

Data brief

Features

- 4 A peak output current
- 2.8 V to 5.5 V input voltage
- Output voltage adjustable from 0.8 V
- 1.5 MHz switching frequency
- Internal soft-start and enable
- Integrated 60 m Ω and 45 m Ω power MOSFETs
- All ceramic capacitor
- Power Good (POR)
- Cycle-by-cycle current limiting
- Current foldback short-circuit protection
- RoHS compliant



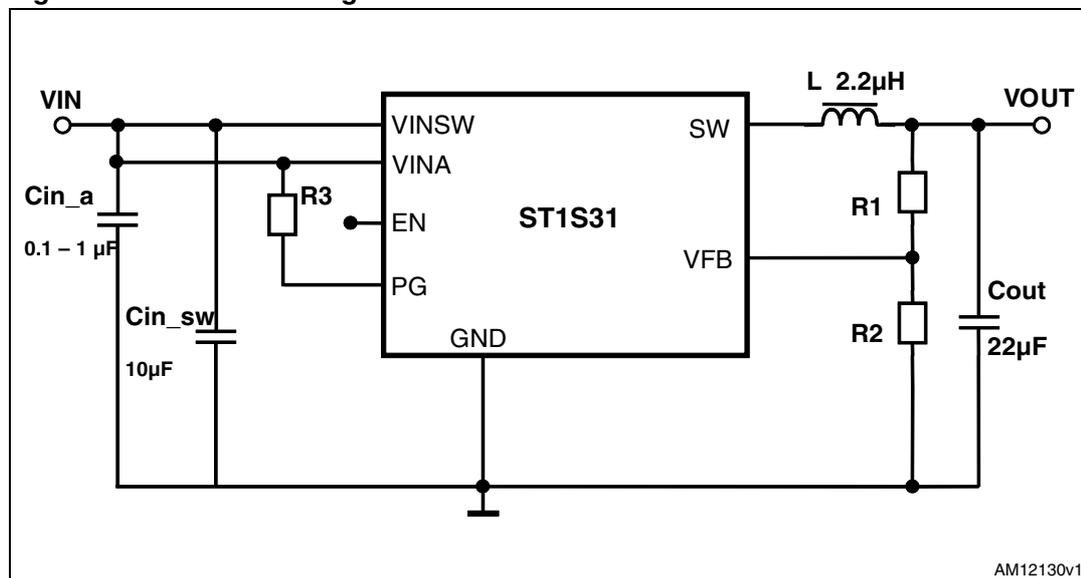
Description

The STEVAL-ISA070V1 demonstration board is based on the ST1S31, an internally compensated 1.5 MHz fixed-frequency PWM synchronous step-down regulator. This device operates from 2.8 V to 5.5 V input, while it regulates an output voltage as low as 0.8 V and up to V_{in} .

The peak current mode control with internal compensation delivers a very compact solution with a minimum component count.

1 Schematic diagram

Figure 1. Schematic diagram



2 Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|-------------|----------|------------------|
| 11-Apr-2012 | 1 | Initial release. |

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