STEVAL-ISA069V1

3 A / 1.5 MHz step-down synchronous switching regulator based on the ST1S31 in DFN 3x3 package

Features

■ 4 A peak output current
■ From 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 mΩ and 45 mΩ power MOSFETs
■ All ceramic capacitors
■ Power Good (POR)
■ Cycle-by-cycle current limiting
■ Current foldback short-circuit protection
■ RoHS compliant

Description

The STEVAL-ISA069V1 demonstration board is based on the ST1S31, which is 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 Vin.

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

![Schematic diagram](image-url)
2 Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
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<tbody>
<tr>
<td>06-Apr-2012</td>
<td>1</td>
<td>Initial release.</td>
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