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 over-temperature range
- Thermal shutdown
- RoHS compliant

Description

The STEVAL-ISA095V1 demonstration board is designed to provide an evaluation platform for testing the ST1S14, a step-down monolithic power switching regulator capable of delivering up to 3 A of output current. The high current level is possible thanks to an 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.

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

Pulse-by-pulse current limiting offers effective constant current short-circuit protection, while the current foldback decreases overstress in persistent short-circuit conditions.
1 Schematic diagram

Figure 1. STEVAL-ISA095V1 circuit schematic
2 Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
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<tbody>
<tr>
<td>23-Dec-2011</td>
<td>1</td>
<td>Initial release.</td>
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