800 mA, 3 MHz, adjustable output high efficiency dual-mode buck-boost DC-DC converter based on the STBB2

Features
- Input voltage: from 2.3 V to 5.5 V
- Output voltage: 3.3 V
- Output current: 800 mA
- Operating frequency: 3 MHz
- RoHS compliant

Description
The STEVAL-ISA109V2 is designed to aid in the evaluation of the STBB2, a high efficiency buck-boost DC-DC converter capable of providing regulated output voltages in the range of 1.2 V to 5.5 V with an input voltage between 2.3 V and 5.5 V.

The board comes with the adjustable version of the STBB2 pre-mounted, with the output voltage set to 3.3 V. For this version, the VSEL pin must be connected to VIN.

The board can also demonstrate the performance of the fixed version of the STBB2, by replacing R1 with a 0 Ω resistor and disconnecting R2.
1 Schematic diagram

Figure 1. STEVAL-ISA109V2 circuit schematic
2 Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
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<tbody>
<tr>
<td>16-Apr-2013</td>
<td>1</td>
<td>Initial release.</td>
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