80 W high performance transition mode PFC evaluation board based on L6562A

Data brief

Description
The L6562A is a current-mode PFC controller operating in transition mode (TM). With the same pinout as its L6562 predecessor, the L6562A offers improved performance mainly in terms of efficiency and noise immunity.

The STEVAL-ISA102V2 implements an 80 W, wide-range mains input and a PFC pre-conditioner suitable for lighting, adapters, consumer smps, etc.

Features
- Line voltage range: 88 to 265 V<sub>AC</sub>
- Minimum line frequency (f<sub>L</sub>): 47 Hz
- Regulated output voltage: 400 V
- Rated output power: 80 W
- Maximum 2f<sub>L</sub> output voltage ripple: 10 V pk-pk
- Hold-up time: 20 ms (V<sub>DROP</sub> after hold-up time: 300 V)
- Minimum switching frequency: 35 kHz
- Minimum estimated efficiency: 92% (V<sub>IN</sub> = 90 V<sub>AC</sub>, P<sub>OUT</sub> = 80 W)
- Maximum ambient temperature: 50 °C
- PCB type and size: single-side, 35 μm, CEM-1, 108 x 57 mm
- RoHS compliant
1 Schematic diagram

Figure 1: STEVAL-ISA102V2 circuit schematic

Schematic diagram
2 Revision history

Table 1: Document revision history

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<thead>
<tr>
<th>Date</th>
<th>Version</th>
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<tr>
<td>29-Sep-2016</td>
<td>1</td>
<td>Initial release.</td>
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