STEVAL-ISA156V1

38 V, 2 A synchronous step-down switching regulator evaluation board based on the L6986

Features

- 4 V to 38 V operating input voltage
- Low consumption mode or low noise mode
- 30 μA IQ at light load (LCM \( V_{\text{OUT}} = 3.3 \text{ V} \))
- 5 μA \( I_{\text{SHTDWN}} \)
- Adjustable \( f_{\text{SW}} \) (250 kHz - 2 MHz)
- Output voltage adjustable from 0.85 V to \( V_{\text{IN}} \)
- Embedded output voltage supervisor
- Synchronization
- Adjustable soft-start time
- Internal current limiting
- Overvoltage protection
- Output voltage sequencing
- Peak current mode architecture
- \( R_{\text{DS(on) HS}} = 180 \text{ mΩ}, R_{\text{DS(on) LS}} = 110 \text{ mΩ} \)
- Thermal shutdown

Description

The STEVAL-ISA156V1 is a product evaluation board based on ST’s L6986, a 38 V, 2 A synchronous step-down switching regulator with 30 μA quiescent current. It can be used for 12 V and 24 V buses, programmable logic controllers (PLCs), decentralized intelligent nodes & sensors and low noise applications (LNM).
1 Schematic diagram

Figure 1: STEVAL-ISA156V1 circuit schematic
2 Revision history

Table 1: Document revision history

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<tr>
<th>Date</th>
<th>Revision</th>
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<tr>
<td>18-Jul-2014</td>
<td>1</td>
<td>Initial release</td>
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