The STEVAL-ISA075V1 product evaluation board is a compact solution designed for testing the performance of the L6738.

The L6738 is a single-phase step-down controller with integrated high-current drivers that provides complete control logic and protection for DC-DC converters.

Features

- Compact size (25.4 mm x 14.6 mm)
- 4 layers
- $V_{IN} < 6$ V
- $V_{OUT}$ up to 3.5 V
- $I_{OUT}$ up to 8 A (depending on $V_{OUT}$)
- $F_{SW} = 600$ KHz
- Dual power MOS option (2 x STL 3x3 or 1 x Dual SO8)
- $C_{IN} = 2 \times$ GRM21BR60J226ME39 (22 uF, 6.3 V, 0805)
- $C_{OUT} = 2 \text{ or } 3 \times$ GRM31CC70G226KE01 (22 uF, 4 V, 1206)
- Dual choke options (WE 744310095 or VITEC 59Px8970)
- RoHS compliant
1 Schematic diagram

Figure 1. STEVAL-ISA075V1 circuit schematic

R13 = \frac{F(V_{out})}{V_{out} - 0.8V} = \frac{0.8V \cdot R9}{V_{out} - 0.8V} = \frac{2.16k \cdot V_{out}}{V_{out} - 0.8V}
2 Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-Jan-2014</td>
<td>1</td>
<td>Initial release.</td>
</tr>
</tbody>
</table>