Automotive-grade LDO with configurable output voltage and diagnostic features based on L99VR02J

Features

- Eight selectable fixed output voltages: (0.8, 1.2, 1.5, 1.8, 2.5, 2.8, 3.3, and 5 V) with up to 500 mA load current capability
- Protection and diagnostics features:
  - Enable pin
  - Reset
  - Watchdog
  - Advanced thermal warning with output overvoltage detection
  - Programmable short circuit output current (Ishort)
  - Fast output discharge

Description

The AEK-POW-LDOV02J is an evaluation board based on the L99VR02J. It can be used in several electronic applications such as microcontroller supplies, automotive display drivers, sensors, and infotainment processors.

Thanks to its operating temperature range (Tj=−40°C to 175°C), the device is suitable for electronic applications with high temperature environments and for applications that require stable power supplies.
1 Block diagram

Figure 1. AEK-POW-LDOV02J block diagram
Figure 2. AEK-POW-LDOV02J circuit schematic
3  Board versions

Table 1. AEK-POW-LDOV02J versions

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<th>PCB version</th>
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<td>AEK$POW-LDOV02JA (1)</td>
<td>AEK$POW-LDOV02JA schematic diagrams</td>
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1. This code identifies the AEK-POW-LDOV02J evaluation board first version. It is printed on the board PCB.
# Revision history

**Table 2. Document revision history**

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<tr>
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<td>11-May-2023</td>
<td>1</td>
<td>Initial release.</td>
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