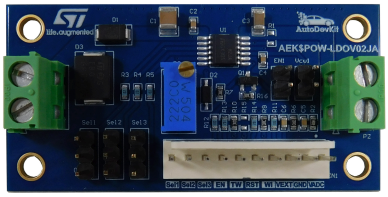
AEK-POW-LDOV02J

Data brief

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

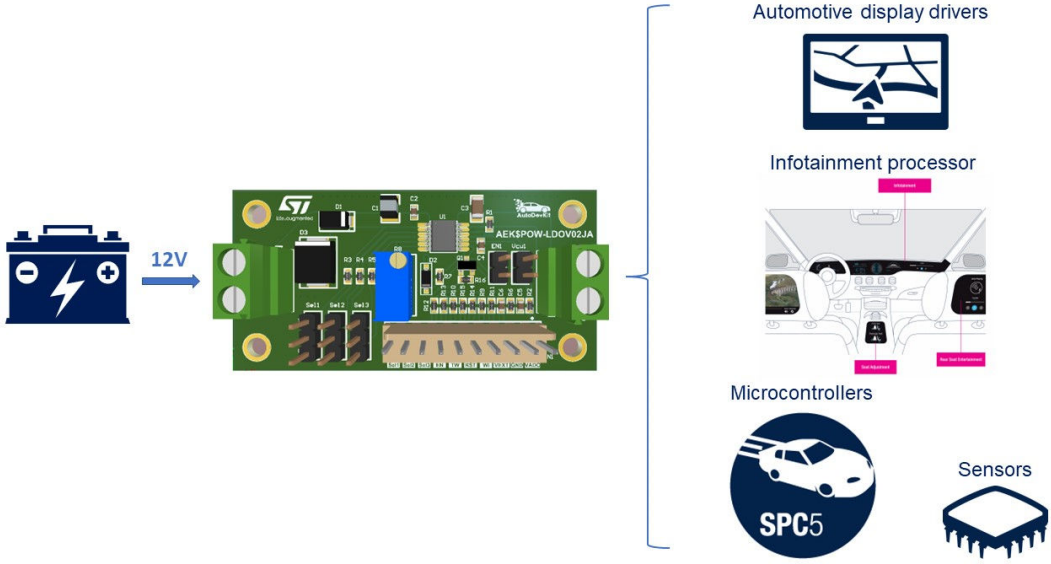
The AEK-POW-LDOV02J is an evaluation board based on the L99VR02J. It can be used in several electronic applications such as microcontroller supplies, automotive display drivers, sensors, and infotainment processors.

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.

Product summary	
Automotive-grade LDO with configurable output voltage and diagnostic features based on L99VR02J	AEK-POW-LDOV02J
Automotive Linear Voltage Regulator with Configurable Output Voltage having 500mA current capability	L99VR02J
AutoDevKit library plugin for SPC5-STUDIO	STSW-AUTODEVKIT
Code generator, quick resource configurator and Eclipse development environment for SPC5 MCUs	SPC5-Studio
Application	Power Distribution/ Digital Power

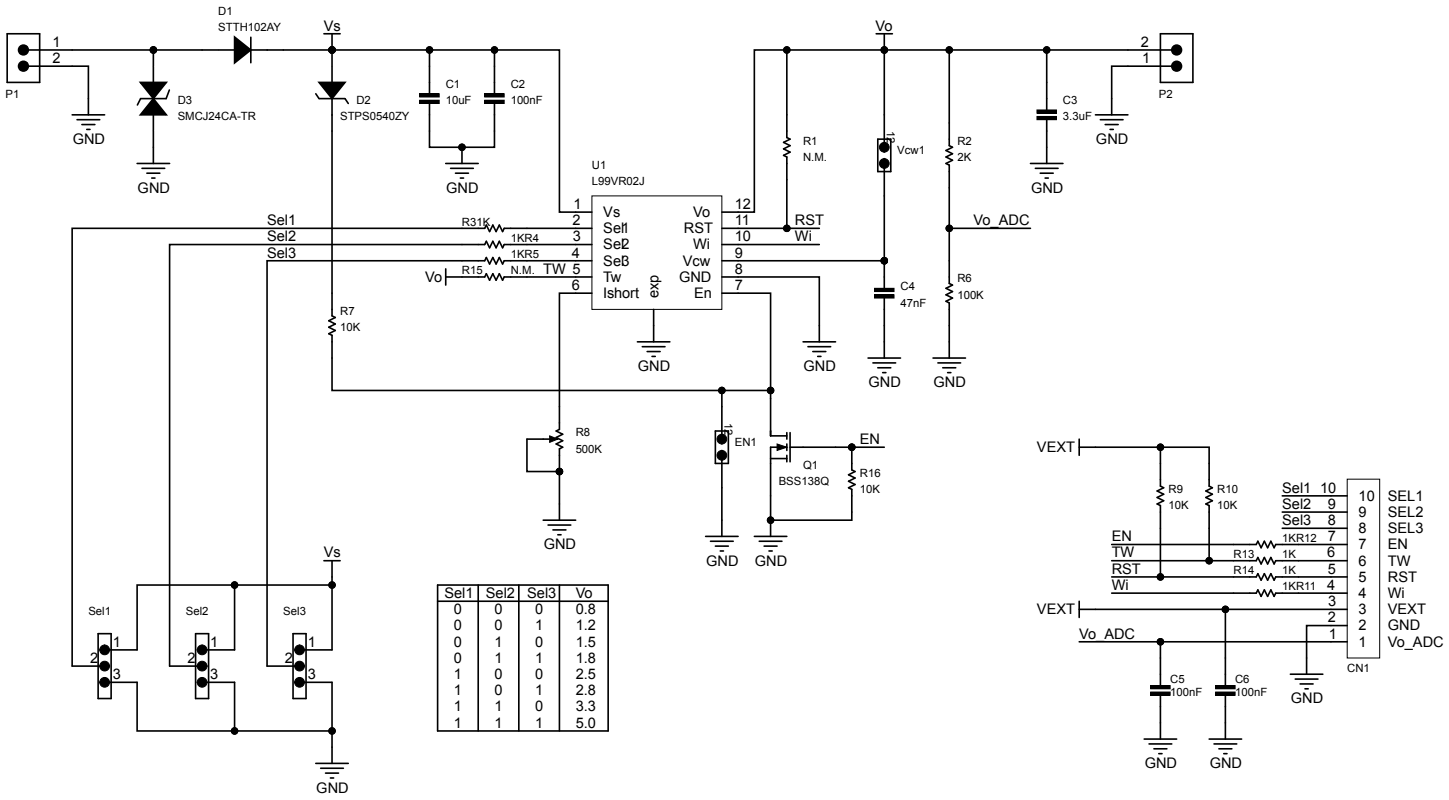
1 Block diagram

Figure 1. **AEK-POW-LDOV02J block diagram**



2 Schematic diagrams

Figure 2. AEK-POW-LDOV02J circuit schematic



Sel1	Sel2	Sel3	Vo
0	0	0	0.8
0	0	1	1.2
0	1	0	1.5
0	1	1	1.8
1	0	0	2.5
1	0	1	2.8
1	1	0	3.3
1	1	1	5.0

3 Board versions

Table 1. AEK-POW-LDOV02J versions

PCB version	Schematic diagrams	Bill of materials
AEK$POW-LDOV02JA (1)	AEK$POW-LDOV02JA schematic diagrams	AEK$POW-LDOV02JA bill of materials

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**

Date	Revision	Changes
11-May-2023	1	Initial release.

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