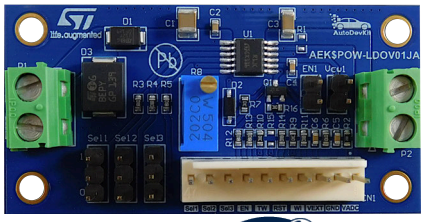
AEK-POW-LDOV01J

Data brief

Automotive-grade LDO with configurable output voltage and diagnostic features based on the L99VR01JTR



AutoDevKit

SPC5 Studio

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 200 mA load current capability
- Protection and diagnostics features:
  - Enable pin
  - Reset
  - Watchdog
  - Advanced thermal warning with output overvoltage detection
  - In-short control
  - Fast output discharge

Description

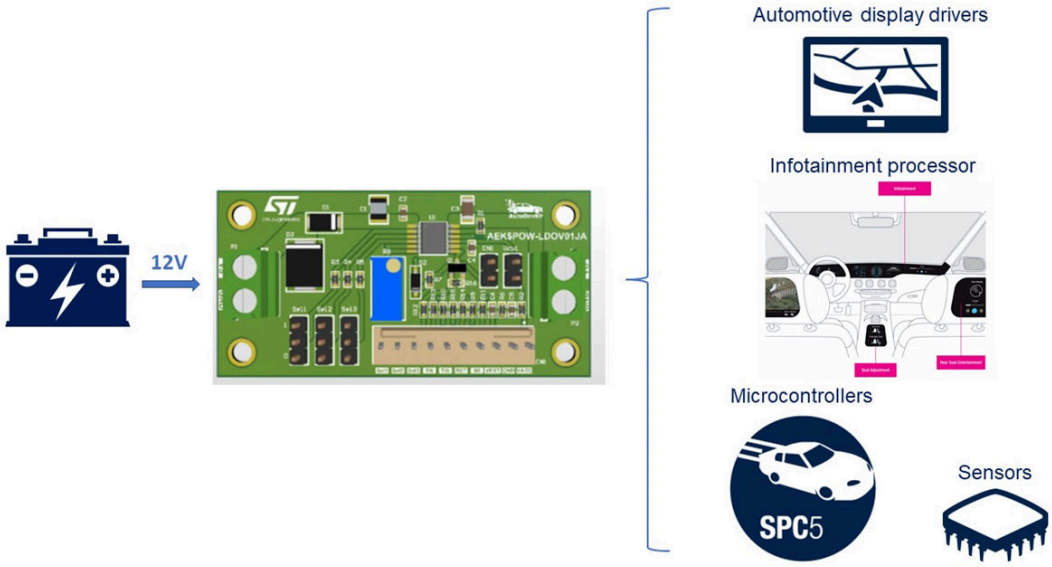
The AEK-POW-LDOV01J is an evaluation board based on the L99VR01JTR. It can be used in several electronic applications such as microcontroller supplies, automotive display drivers, sensors, and infotainment processors.

Thanks to its thermal performance up to 170°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 L99VR01JTR	AEK-POW-LDOV01J
Automotive linear voltage regulator with configurable output voltage and 200 mA current capability	L99VR01JTR
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

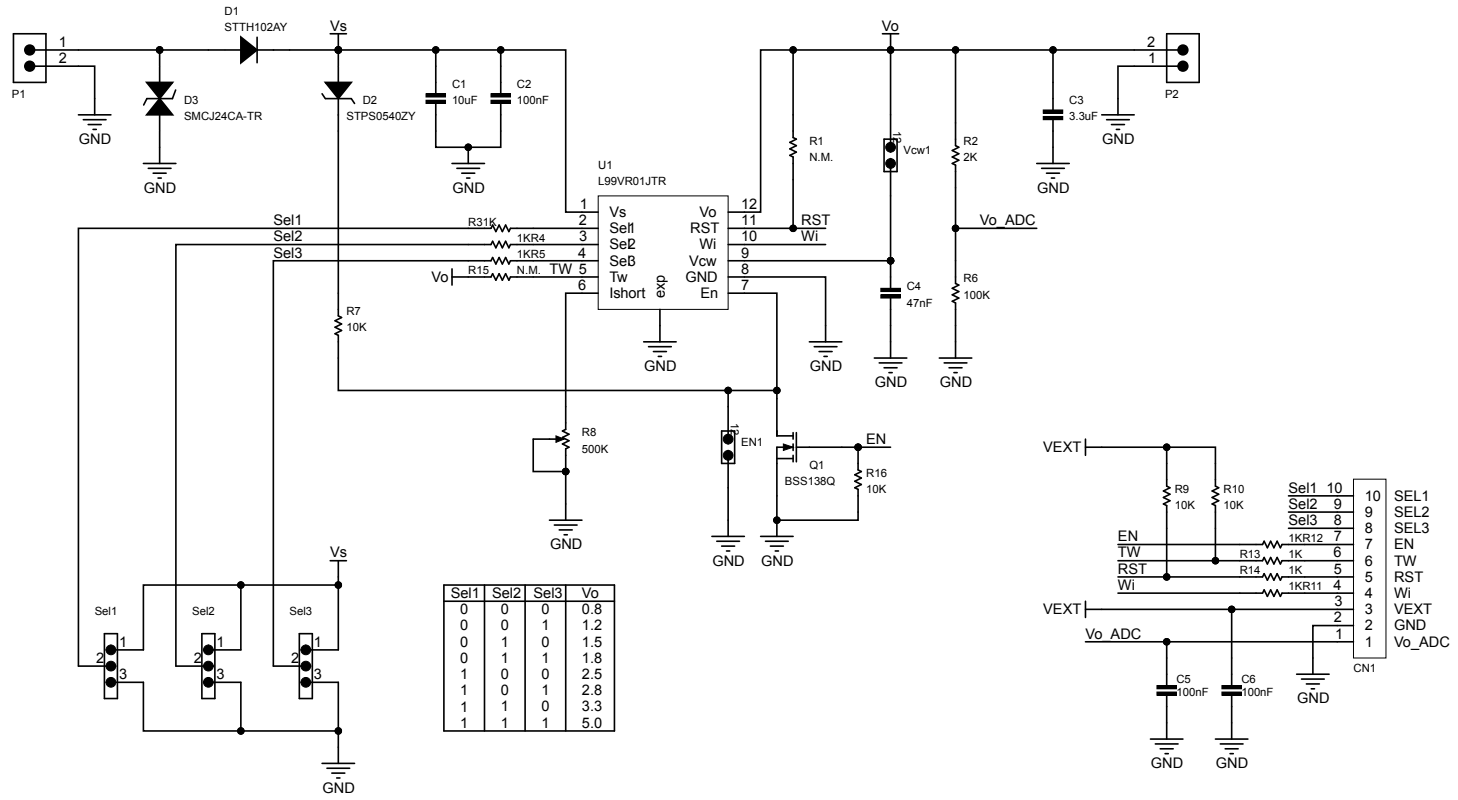
1 Block diagram

Figure 1. **AEK-POW-LDOV01J block diagram**



2 Schematic diagrams

Figure 2. **AEK-POW-LDOV01J 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-LDOV01J versions

PCB version	Schematic diagrams	Bill of materials
AEK$POW-LDOV01JA (1)	AEK$POW-LDOV01JA schematic diagrams	AEK$POW-LDOV01JA bill of materials

1. *This code identifies the AEK-POW-LDOV01J evaluation board first version. It is printed on the board PCB.*

Revision history

Table 2. **Document revision history**

Date	Revision	Changes
26-Jul-2022	1	Initial release.
02-Sep-2022	2	Minor text changes.

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