

LDO Regulator Pos 0.8V1.2V1.5V1.8V2.5V2.8V3.3V5V 0.2A Automotive 8-Pin SO T/R



Images are for reference only

Manufacturer: [STMicroelectronics, Inc](#)

Package/Case: SOP8

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

L99VR01 is a low dropout linear voltage regulator designed for automotive applications available in SO-8 and in PowerSSO-12 packages. The LDO delivers up to 200 mA of load current and consumes as low as 1 μ A of quiescent current when the regulator is disabled. The input is 40 V tolerant to withstand load dump, while the operating input voltage range is between 2.15 V and 28 V. The L99VR01 can be configured, through SELx pins, to generate a fixed selectable output voltage (0.8 V; 1.2 V; 1.5 V; 1.8 V; 2.5 V; 2.8 V; 3.3 V or 5 V). High output voltage accuracy ($\pm 2\%$) is kept over wide temperature range, line and load variation. The L99VR01 features enable, reset, autonomous watchdog, advanced thermal warning, fast output discharge and IShort control (IShort control, autonomous watchdog and advanced thermal warning are available only for the L99VR01J). The regulator output current is internally limited so that the device is protected against short-circuit and overload, besides it features over temperature protection; the short current value is configurable by an external resistance in the L99VR01J version. The L99VR01 can operate both in post regulation, attached to a pre-regulated voltage or directly connected to battery.

Key Features

AEC-Q100 qualified

Operating DC power supply voltage range from 2.15 V to 28 V

Battery and post regulation operating modes are allowed

Low dropout voltage

Low quiescent current consumption

User-selectable output voltage (0.8 V; 1.2 V; 1.5 V; 1.8 V; 2.5 V; 2.8 V; 3.3 V or 5 V)

Output voltage precision $\pm 2\%$

Enable input for enabling/disabling the voltage regulator

Output voltage monitoring with reset output

Negligible ESR effect on output voltage stability for load capacitor

Programmable autonomous watchdog through external capacitor (L99VR01J only)

Undervoltage lockout UVLO

Fast output discharge

Thermal shutdown and short-circuit current limitation

Advanced thermal warning and output overvoltage diagnostic (L99VR01J only)

Programmable short-circuit output current (L99VR01J only)

Wide operating temperature range (TJ = -40°C to 175°C L99VR01J only)

Limited documentation available for customers that need support when dealing with ASIL requirements as per ISO 26262

Recommended For You

L9651

STMicroelectronics, Inc

HSOP20

L9678PTR

STMicroelectronics, Inc

LQFP-64

L9904

STMicroelectronics, Inc

SOP20

L9822EPD

STMicroelectronics, Inc

HSOP20

L9951

STMicroelectronics, Inc

HSSOP36

L9680TR

STMicroelectronics, Inc

LQFP100

L9949

STMicroelectronics, Inc

HSOP20

L9950

STMicroelectronics, Inc

HSSOP36

L9848

STMicroelectronics, Inc

SOP28

L9950XP

STMicroelectronics, Inc

SSOP36

L9952GXP

STMicroelectronics, Inc

SSOP36

L9733XP

STMicroelectronics, Inc

SSOP28

L9958SBTR

STMicroelectronics, Inc

SSOP16

L9651-TR

STMicroelectronics, Inc

HSOP20

L9374TRLF

STMicroelectronics, Inc

SSOP36