



## Product Overview

### NCV4299AD: Linear Voltage Regulator, LDO, 150 mA

For complete documentation, see the data sheet

#### Product Description

The NCV4299A is a 150 mA precision micropower voltage regulator available with output voltages of 5.0 V or 3.3 V. It is available in an 14-lead SOIC (fused) and TSSOP-14 EPAD packages. The output voltage is accurate within  $\pm 2\%$  with a maximum dropout voltage of 0.5 V at 100 mA for the 5.0 V version. The NCV4299A features low quiescent current of only 65  $\mu\text{A}$  with a 100  $\mu\text{A}$  load.

The device features an adjustable reset output and an adjustable system monitor to provide shutdown early warning. The device includes an inhibit function to turn the device off while consuming less than 1.0  $\mu\text{A}$  of quiescent current.

#### Features

- 5.0 V, 3.3 V  $\pm 2\%$ , 150 mA
- Low Current Consumption 65  $\mu\text{A}$  (Typ) in the ON Mode  
Extremely Low Current Consumption 1.0  $\mu\text{A}$  in the Off Mode
- Early Warning Output Capability
- Adjustable Reset Threshold and Reset Output Low Down to  $V_Q = 1.0$  V
- Fault protection:  
60 V (Typ) peak Transient Voltage protection  
-40 V Reverse Input Voltage protection  
Short circuit protection  
Thermal overload protection

#### Benefits

- Tight regulation limits
- Save battery life
- Microprocessor power management feature, design flexibility
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- No external components required to enable protections required within any automotive applications

#### Applications

- Body and Chassis
- Powertrain, Engine Control Unit

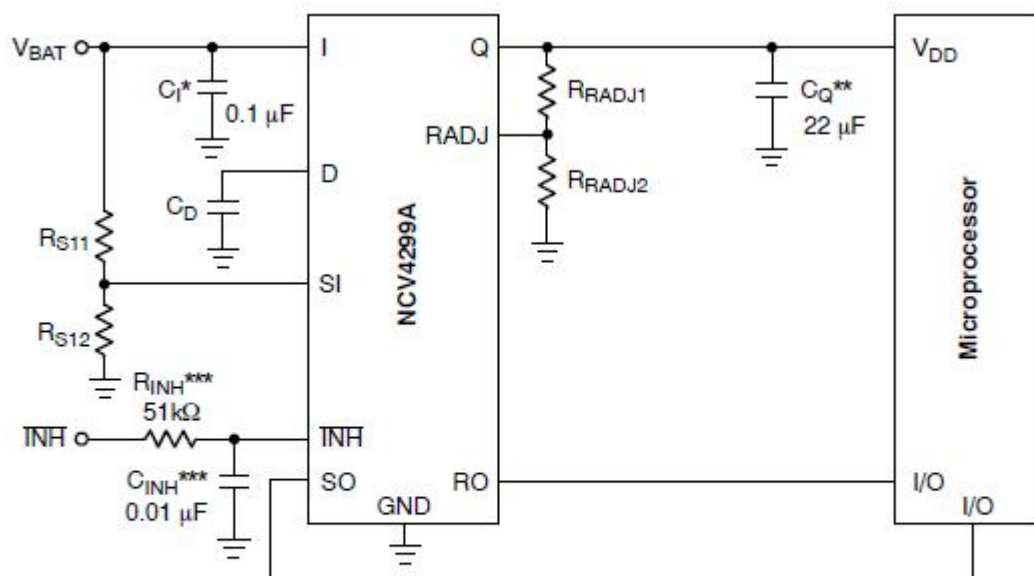
#### End Products

- Automotive

#### Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	$V_O$ (V)	$I_O$ Typ (A)	$V_I$ Max (V)	$V_{DO}$ Typ (V)	$I_q$ Typ (mA)	PSRR (dB)	Noise ( $\mu\text{V}_{\text{rms}}$ )	Package Type
NCV4299AD233R2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.15	45		0.065	66		SOIC-14
NCV4299AD250R2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.15	45	0.22	0.065	66		SOIC-14
NCV4299APA50R2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.15	45	0.22	0.065	66		TSSOP-14 EP

## Application Diagram



\* $C_I$  required if regulator is located far from the power supply filter.

\*\* $C_Q$  required for stability. Cap must operate at minimum temperature expected.

\*\*\*This RC filter is only required when transients with slew rate in excess of 10 V/ $\mu\text{s}$  may be present on the **INH** voltage source during operation. The filter is not required when **INH** is connected to a noise-free DC voltage.

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com)

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