Product Overview

NCV4269A: Linear Voltage Regulator, LDO, 150 mA, with Delay, Adjustable Reset and Sense Output

For complete documentation, see the data sheet

Product Description

The NCV4269A is a 5.0 V precision micropower voltage regulator with an output current capability of 150 mA.

The output voltage is accurate within ±2.0% with a maximum dropout voltage of 0.5 V at 100 mA. Low quiescent current is a feature drawing only 240 µA with a 1.0 mA load. This part is ideal for any and all battery operated microprocessor equipment.

Microprocessor control logic includes an active reset output RO with delay and a SI/SO monitor which can be used to provide an early warning signal to the microprocessor of a potential impending reset signal. The use of the SI/SO monitor allows the microprocessor to finish any signal processing before the reset shuts the microprocessor down.

The active Reset circuit operates correctly at an output voltage as low as 1.0 V. The Reset function is activated during the power up sequence or during normal operation if the output voltage drops outside the regulation limits.

The reset threshold voltage can be decreased by the connection of an external resistor divider to the RADJ lead. The regulator is protected against reverse battery, short circuit, and thermal overload conditions. The device can withstand load dump transients making it suitable for use in automotive environments. The device has also been optimized for EMC conditions.

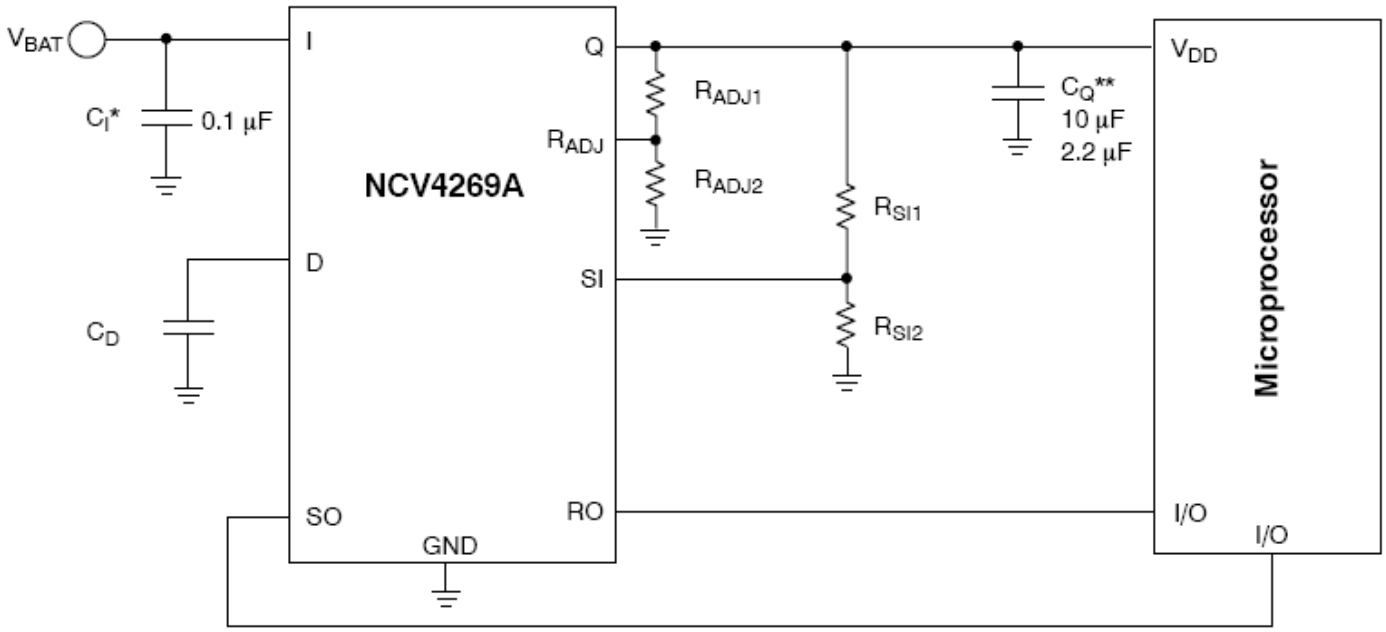
Features	Benefits
• 5.0V and 3.3V +/- 2% Output with 150mA Output Current Capability	• Tight Regulation Limits
• Active Reset Output Low Down to VQ=1.0V; Adjustable Reset Threshold	• Microprocessor power management feature, design flexibility
• Fault Protection: -40V Reverse Voltage Protection Short Circuit Protection Thermal overload protection	• No external components required to enable protections required within any automotive applications.
• Early Warning through SI/SO Leads, adjustable threshold via external resistor	• Microprocessor power management feature: warns microprocessor of impending reset event or can also be used as a general purpose comparator.
• AEC Q100 Qualified	• Meets automotive quality requirements
• Very Low Dropout Voltage	
• Integrated Pullup Resistor at Logic Outputs (To Use External Resistors, Select the NCV4279A)	

Applications	End Products
• Body and Chassis	• Automotive
• Powertrain	
• Infotainment	

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 (μV_{rms})	Package Type
NCV4269AD133R2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.15	45		0.19			SOIC-8
NCV4269AD150R2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.15	45	0.25	0.19			SOIC-8
NCV4269AD250R2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.15	45	0.25	0.19			SOIC-14
NCV4269ADW50R2G	AEC Qualified PPAP Capable Pb-free	Active	Single	Positive	5	0.15	45	0.25	0.19			SOIC-20W
NCV4269APD50R2G	AEC Qualified PPAP Capable Pb-free	Active	Single	Positive	5	0.15	45	0.25	0.19			SOIC-8 EP

Application Diagram



*C_I required if regulator is located far from the power supply filter.
** C_Q – minimum cap required for stability is 2.2 µF while higher over/under−shoots may be expected. Cap must operate at minimum temperature expected.

For more information please contact your local sales support at www.onsemi.com

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