

Product Overview

NCV8674: Linear Voltage Regulator, LDO, Very Low I_q

For complete documentation, see the data sheet

Product Description

The NCV8674 is a precision 5.0 V or 12 V fixed output, low dropout integrated voltage regulator with an output current capability of 350 mA. Careful management of light load current consumption, combined with a low leakage process, achieve a typical quiescent current of 30 μ A.

The output voltage is accurate within $\pm 2.0\%$, and maximum dropout voltage is 600 mV at full rated load current.

It is internally protected against input supply reversal, output overcurrent faults, and excess die temperature. No external components are required to enable these features.

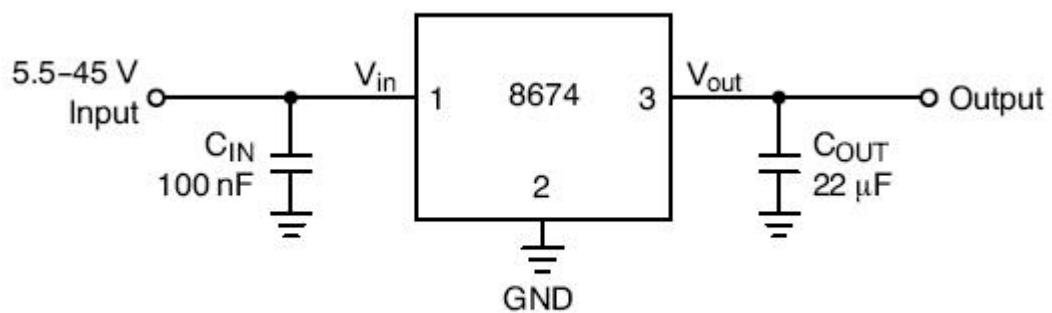
Features	Benefits
<ul style="list-style-type: none"> 5.0 V and 12 V Output Voltage Options with 2.0% Output Accuracy, Over Full Temperature Range 40 A Maximum Quiescent Current at I_{OUT} = 100 A 600 mV Maximum Dropout Voltage at 350 mA Load Current Wide Input Voltage Operating Range of 5.5 V to 45 V Internal Fault Protection <ul style="list-style-type: none"> -42 V Reverse Voltage Short Circuit/Overcurrent Thermal Overload AEC-Q100 Qualified 	<ul style="list-style-type: none"> Perfect for monitoring new microprocessors as well as communication nodes Meet 100 μA max module car manufacturer ignition off quiescent current requirement Maintains output voltage regulation at low input voltage. Maintains regulation even during load dump Cost and space saving as no external device is required Meet automotive qualification requirements

Applications	End Products
<ul style="list-style-type: none"> Engine Control Module Body and Chassis Powertrain 	<ul style="list-style-type: none"> 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 (μ V _{rms})	Package Type
NCV8674DS120G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	12	0.35	45	0.3	0.031	67		D ² PAK-3
NCV8674DS120R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	12	0.35	45	0.3	0.031	67		D ² PAK-3
NCV8674DS50R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.35	45	0.3	0.027	67		D ² PAK-3

Application Diagram



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

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