



## Product Overview

### NCV8772: Linear Voltage Regulator, LDO, 350 mA, with Enable, Delay and Reset

For complete documentation, see the [data sheet](#)

#### Product Description

The NCV8772 is 350 mA LDO regulator with integrated reset functions dedicated for microprocessor applications. Its robustness allows NCV8772 to be used in severe automotive environments. Ultra low quiescent current as low as 24  $\mu$ A typical makes it suitable for applications permanently connected to battery requiring ultra low quiescent current with or without load. This feature is especially critical when modules remain in active mode when ignition is off. The Enable function can be used for further decrease of quiescent current in shutdown mode to 1  $\mu$ A. The NCV8772 contains protection functions as current limit, thermal shutdown and reverse output current protection.

Features	Benefits
<ul style="list-style-type: none"><li>• Fixed Output Voltage of 5 V</li><li>• 2 % Output Voltage up to <math>V_{in} = 40</math> V</li><li>• Output Current up to 350 mA</li><li>• RESET Output</li><li>• NCV Prefix for Automotive</li><li>• Low Dropout Voltage</li><li>• Ultra Low Quiescent Current of 24 <math>\mu</math>A Typical</li><li>• Thermal Shutdown</li><li>• Short Circuit</li><li>• Very Wide Range of <math>C_{out}</math> and ESR Values for Stability</li></ul>	<ul style="list-style-type: none"><li>• Perfect for powering microprocessors.</li><li>• Maintains regulated voltage through load dump.</li><li>• Our vast portfolio of automotive regulators allows you to select the one which fits your application.</li><li>• Prohibits the microprocessor from performing unrequested tasks at low voltage.</li><li>• Meets automotive Site and change control &amp; AEC-Q100 Qualification requirements.</li><li>• Maintains output voltage regulation at low input voltages (especially during automotive cranking).</li><li>• Meets the latest automotive module requirement of less than 100 <math>\mu</math>A.</li><li>• Protects the device from permanent damage at high temperatures.</li><li>• Protects the device from creating metal opens on-chip due to excessive current.</li><li>• Ensures stability for any type of Output capacitor.</li></ul>

#### Applications

- Body Control Module
- Instrument and Clusters
- Occupant Protection and Comfort
- Powertrain

#### End Products

- Automotive

## Part Electrical Specifications

Product	Compliance	Status	Output	Polarity	V <sub>O</sub> (V)	I <sub>O</sub> Typ (A)	V <sub>I</sub> Max (V)	V <sub>DO</sub> Typ (V)	I <sub>q</sub> Typ (mA)	PSRR (dB)	Noise (μV <sub>rms</sub> )	Package Type
NCV87721D5S50R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.35	45	0.44	0.024	60		D <sup>2</sup> PAK-5
NCV87722D5S33R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.35	45	0.44	0.024	60		D <sup>2</sup> PAK-5
NCV87722DT33RKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.35	45	0.44	0.024	60		DPAK-5
NCV87722DT50RKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.35	45	0.44	0.024	60		DPAK-5
NCV87725D7S50R4G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.35	45	0.44	0.024	60		D <sup>2</sup> PAK-7

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

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