

## Product Overview

### NCV8772: LDO Regulator, 350 mA, Low Iq

For complete documentation, see the data sheet.

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

- Fixed Output Voltage of 5 V
  - 2 % Output Voltage up to  $V_{in} = 40$  V
  - Output Current up to 350 mA
  - RESET Output
  - NCV Prefix for Automotive
  - Low Dropout Voltage
  - Ultra Low Quiescent Current of 24  $\mu$ A Typical
  - Thermal Shutdown
  - Short Circuit
  - Very Wide Range of Cout and ESR Values for Stability
- For more features, see the data sheet

#### Applications

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

#### Benefits

- Perfect for powering microprocessors.
- Maintains regulated voltage through load dump.
- Our vast portfolio of automotive regulators allows you to select the one which fits your application.
- Prohibits the microprocessor from performing unrequested tasks at low voltage.
- Meets automotive Site and change control & AEC-Q100 Qualification requirements.
- Maintains output voltage regulation at low input voltages (especially during automotive cranking).
- Meets the latest automotive module requirement of less than 100  $\mu$ A.
- Protects the device from permanent damage at high temperatures.
- Protects the device from creating metal opens on-chip due to excessive current.
- Ensures stability for any type of Output capacitor.

#### End Products

- Automotive

## Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Output	Polarity	V <sub>O</sub> (V)	I <sub>O</sub> Typ (A)	V <sub>I</sub> Min (V)	V <sub>I</sub> Max (V)	V <sub>DO</sub> Typ (V)	I <sub>q</sub> Typ (mA)	PSR R (dB)	Noise (μV <sub>rms</sub> )	Enable	Power Good	Package Type
NCV87722D5S33R4G	1.1816	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.35	4.5	45	0.44	0.024	60	-	Yes	Yes	DPA K-5
NCV87722DT33RKG	1.2482	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.35	4.5	45	0.44	0.024	60	-	Yes	Yes	DPA K-5
NCV87722DT50RKG	1.078	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.35	4.5	45	0.44	0.024	60	-	Yes	Yes	DPA K-5
NCV87725D7S50R4G	1.7416	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.35	4.5	45	0.44	0.024	60	-	Yes	Yes	DPA K-7

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

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