



Product Overview

NCV8770: Linear Voltage Regulator, LDO, Low Iq, 350 mA, with Reset

For complete documentation, see the data sheet

Product Description

The NCV8770 is 350 mA LDO regulator with integrated reset functions dedicated for microprocessor applications. Its robustness allows NCV8770 to be used in severe automotive environments. Ultra low quiescent current as low as 21 μ 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 NCV8770 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 21 μ A Typical
- Thermal Shutdown
- Short Circuit
- Very Wide Range of Cout and ESR Values for Stability

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 μ 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.

Applications

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

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 (μ V _{rms})	Package Type
NCV87706DS50R4G	AEC Qualified PPAP Capable Pb-free	Active	Single	Positive	5	0.35	45	0.44	0.021	54		D ² PAK-5
NCV87706DT50RKG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.35	45	0.44	0.021	54		DPAK-5

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

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