



Product Overview

NCV5171: Boost Converter, 280 kHz, 1.5 A, for Automotive

For complete documentation, see the data sheet

Product Description

The NCV5171/73 products are 280 kHz/560 kHz boost regulators with a high efficiency, 1.5 A integrated switch. The part operates over a wide input voltage range, from 2.7 V to 30 V. The flexibility of the design allows the chip to operate in most power supply configurations, including boost, flyback, forward, inverting, and SEPIC. The IC utilizes current mode architecture, which allows excellent load and line regulation, as well as a practical means for limiting current. Combining high frequency operation with a highly integrated regulator circuit results in an extremely compact power supply solution. The circuit design includes provisions for features such as frequency synchronization, shutdown, and feedback controls for positive voltage regulation. These parts are pin-to-pin compatible with LT1372/1373 and are the automotive versions of CS5171 and CS5173.

Features

- Built-in Overcurrent Protection
- Wide Input Range: 2.7V to 30V
- High Frequency Allows for Small Components
- Minimum External Components
- Frequency Foldback Reduces Component Stress During an Overcurrent Condition
- Thermal Shutdown with Hysteresis
- Easy External Synchronization
- Integrated Power Switch: 1.5A Guaranteed
- Pin-to-Pin Compatible with LT1372/1373
- These are Pb-free device

Part Electrical Specifications

Product	Compliance	Status	Topology	Control Mode	V _{CC} Min (V)	V _{CC} Max (V)	V _O Typ (V)	I _O Typ (A)	Efficiency (%)	f _{sw} Typ (kHz)	Package Type
NCV5171EDR2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Step-Up	Current Mode	2.7	30	Up to 30	1.5	80	Up to 600	SOIC-8

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

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