

Product Overview

CS5171: Boost Regulator, Positive, 1.5 A, 280 kHz

For complete documentation, see the data sheet.

The CS5171/2/3/4 products are 280 kHz/560 kHz switching regulators with a high efficiency, 1.5 A integrated switch. These parts operate over a wide input voltage range, from 2.7 V to 30 V. The flexibility of the design of the Boost Regulator allows the chips to operate in most power supply configurations, including boost, flyback, forward, inverting and SEPIC. The ICs utilize 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 either positive or negative voltage regulation. These parts are pin-to-pin compatible with LT1372 / 1373.

Features

- Wide Input Range: 2.7V to 30V
- High Frequency Operation
- Minimum External Components
- Easy External Synchronization
- Built-in Overcurrent Protection
- Frequency Foldback
- Thermal Shutdown with Hysteresis
- Integrated Power Switch: 1.5A Guaranteed
- Pin-to-Pin Compatible with LT1372 / 1373
- Wide Ambient Temperature Range-Industrial Grade: -40C to 85C-Commercial Grade: 0C to 70C

For more features, see the data sheet

Benefits

- Ability to use with various input supply types
- Allows for Small Components
- Small PCB size / High power density
- Synchronize frequency to reduce noise in the system
- Protection Feature
- Reduces Component Stress During an Overcurrent Condition
- Protection feature
- Reduced size / High power density
- Easy to replace Linear Tech product
- Guaranteed performance over wide temp range

Applications

- DC-DC Boost
- Multiple Output Flyback Supplies
- Inverting Supplies

End Products

- CCFL Backlight Driver

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	V _{OC} Min (V)	V _{OC} Max (V)	V _O Typ (V)	I _O Typ (A)	Efficiency (%)	f _{SW} Typ (kHz)	Package Type
CS5171EDR8G	0.96	AEC Qualified PPAP Capable Pb-free Halide free	Active	Flyback Step-Down Step-Up	Current Mode	2.7	30	3-39	1.5	90	275	SOIC-8
CS5171GDR8G	0.9333	AEC Qualified PPAP Capable Pb-free Halide free	Active	Flyback Step-Down Step-Up	Current Mode	2.7	30	3-39	1.5	90	275	SOIC-8

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

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