

Product Overview

NCP1529: Buck Converter, DC-DC, High Efficiency, Adjustable Output Voltage, Low Ripple, 1.7 MHz, 1 A

For complete documentation, see the data sheet.

The NCP1529 step-down DC-DC converter is a monolithic integrated circuit for portable applications powered from one cell Li-ion or three cell Alkaline/NiCd/NiMH batteries. The device is able to deliver up to 1.0 A on an output range externally adjustable from 0.9 V to 3.9 V or fixed at 1.2 V or 1.35 V. It uses synchronous rectification to increase efficiency and reduce external part count. The device also has a built-in 1.7 MHz (nominal) oscillator which reduces component size by allowing a small inductor and capacitors. Automatic switching PWM/PFM mode offers improved system efficiency. Additional features include integrated soft-start, cycle-by-cycle current limiting and thermal shutdown protection. The NCP1529 is available in a space saving, low profile 2x2x0.5 mm UDFN6 package and TSOP-5 package.

Features

- 96% efficiency, 28 uA quiescent current, 0.3 uA shutdown current
- 1.7 MHz switching frequency
- Auto-switching between PWM and PFM mode at light load conditions
- Adjustable output voltage from 0.9V to 3.9V
- Best in class Low Ripple even in PFM mode

Applications

- Battery powered applications power management
- Power supply for processor with low core voltage
- USB powered devices
- Low Voltage DC rails power management

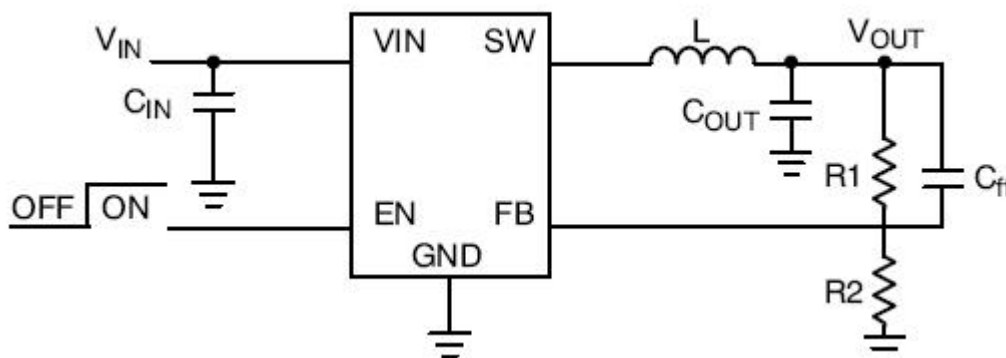
Benefits

- Extends battery life and 'play-time'
- Allows use of smaller inductor and capacitor
- Low power consumption at light loading

End Products

- Cellular phones, smart phones, and PDAs
- MP3 players and portable audio systems

Application Diagram



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

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