

Product Overview

NCP1400A: Boost Converter, Fixed Frequency, PWM, Micropower, 100 mA, 180 kHz

For complete documentation, see the data sheet.

The NCP1400A series are micropower step-up DC to DC converters that are specifically designed for powering portable equipment from one or two cell battery packs. These devices are designed to start-up with a cell voltage of 0.8 V and operate down to less than 0.2 V. With only four external components, this series allows a simple means to implement highly efficient converters that are capable of up to 100 mA of output current. Each device consists of an on-chip fixed frequency oscillator, pulse width modulation controller, phase compensated error amplifier that ensures converter stability with discontinuous mode operation, soft-start, voltage reference, driver, and power MOSFET switch with current limit protection. Additionally, a chip enable feature is provided to power down the converter for extended battery life. The NCP1400A device series are available in the TSOP-5 package with seven standard regulated output voltages. Additional voltages that range from 1.8 V to 4.9 V in 100 mV steps can be manufactured.

Features

- Extremely Low Start-Up Voltage of 0.8 V
- Operation Down to Less than 0.2 V
- Only Four External Components for Simple Highly Efficient Converters
- Up to 100 mA Output Current Capability
- Fixed Frequency Pulse Width Modulation Operation
- Phase Compensated Error Amplifier for Stable Converter Operation
- Chip Enable Power Down Capability for Extended Battery Life
- Pb-Free Packages are Available

Applications

- Cellular Telephones
- Pagers
- Personal Digital Assistants
- Electronic Games
- Digital Cameras

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

Created on: 10/29/2020