Product Overview

NCP6324: Synchronous Buck Converter, 3 MHz, 2.0 A

For complete documentation, see the data sheet.

The NCP6324B/C, a family of synchronous buck converters, which is optimized to supply different sub systems of portable applications powered by one cell Li-ion or three cell Alkaline/NiCd/NiMH batteries. The devices are able to deliver up to 2 A on an external adjustable voltage. Operation with 3 MHz switching frequency allows employing small size inductor and capacitors. Input supply voltage feedforward control is employed to deal with wide input voltage range. Synchronous rectification and automatic PWM/PFM power save mode offer improved system efficiency. The NCP6324B/C is in a space saving, low profile 2.0 x 2.0 x 0.75 mm WDFN-8 package.

Features

- 2.5 V to 5.5 V Input Voltage Range
- 3 MHz Switching Frequency
- Automatic Power Save Mode (NCP6324B) or Operating Mode Selection (NCP6324C)

Benefits

- Support Latest Battery
- Reduced output inductor and capacitor size
- Lower Quiescent Current, Save Battery Life

Applications

- Portable & Wireless Applications
- Computing & Peripherals Applications
- Consumer Applications

End Products

- Cellular Phones, Smart Phones, and PDAs
- Portable Media Players
- Digital Still Cameras
- USB Powered Devices
- Game and Entertainment System

Part Electrical Specifications

Product	Pricing ($/Unit)	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
NCP6324BMTAATBG	0.3333	Pb-free Halide free non AEC-Q and PPAP	Active	Step-Down	Voltage Mode	2.5	5.5	0.6 to 5.0	2	96	3000	WDFN-8
NCP6324CMTAATBG	0.3667	Pb-free Halide free non AEC-Q and PPAP	Active	Step-Down	Voltage Mode	2.5	5.5	0.6 to 5.0	2	96	3000	WDFN-8

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

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