

NCV6324

Synchronous Buck Converter, 3 MHz, 2.0 A

Product Overview

For complete documentation, see the data sheet.

The NCV6324B/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 NCV6324B/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)

Applications

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

Benefits

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

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
NCV6324BMTA ATBG	0.2964		Active	Step-Down	Voltage Mode	2.5	5.5	0.6 to 5.0	2	96	3000	WDFN-8
NCV6324BMTA AWTBG	0.2964		Active	Step-Down	Voltage Mode	2.5	5.5	0.6 to 5.0	2	96	3000	WDFN W-8
NCV6324CMTA ATBG	0.2964		Active	Step-Down	Voltage Mode	2.5	5.5	0.6 to 5.0	2	96	3000	WDFN-8
NCV6324CMTA AWTBG	0.2964		Active	Step-Down	Voltage Mode	2.5	5.5	0.6 to 5.0	2	96	3000	WDFN W-8