

Product Overview

NCP1595: Synchronous Buck Regulator, 1 MHz, 1.5 A

For complete documentation, see the data sheet.

The NCP1595A is a current mode PWM buck converter with integrated power switch and synchronous rectifier. It can provide up to 1.5A output current with high conversion efficiency. High frequency PWM control scheme can provide a low output ripple noise. Thus, it allows the usage of small size passive components to reduce the board space. In a low load condition, the controller will automatically change to PFM mode which provides a higher efficiency at low load. The NCP1595A is pin to pin compatible to the 2A NCP1597A.

Features

- High Efficiency
- Synchronous Rectification for Higher Efficiency in PWM Mode
- Integrated MOSFET
- Fully Internal Compensation
- High Switching Frequency, 1.0 MHz
- Low Output Ripple
- Current Mode Control
- Short Circuit Protection
- Built-in Slope Compensation for Current mode PWM converter
- + / - 1.5% Reference Voltage

For more features, see the data sheet

Applications

- Hard Disk Drive
- USB Power Devices
- Wireless and DSL Modems

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
NCP1595AMNR2G	0.3943	Pb-free Halide free non AEC-Q and PPAP	Active	Step-Down	Current Mode	4	5.5	0.8 to 4.95	1.5	95	Up to 1200	DFN-6
NCP1595AMNTWG	0.3943	Pb-free Halide free non AEC-Q and PPAP	Active	Step-Down	Current Mode	4	5.5	0.8 to 4.95	1.5	95	Up to 1200	DFN-6
NCP1595MNR2G	0.3943	Pb-free Halide free non AEC-Q and PPAP	Active	Step-Down	Current Mode	4	5.5	0.8 to 4.95	1.5	95	Up to 1200	DFN-6

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

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