ON Semiconductor®



Product Overview

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NCP5383: Two Phase Buck Controller with Integrated Gate Drivers and AVP

For complete documentation, see the data sheet

Product Description

The NCP5383 is a two phase buck controller used in low voltage, high current power supplies. Dual edge pulse width modulation combined with inductor current sensing and adaptive voltage positioning reduces system cost by providing the fastest initial response to transient loads thereby requiring less bulk and ceramic output capacitors to satisfy transient load line requirements. A high performance operational error amplifier is provided, which allows for easy compensation of the system. Protection features include overcurrent protection, undervoltage lockout and thermal shutdown and power good monitor.

Features Benefits • Dual Edge PWM • Fast initial response to transient loading

- High Performance Operational Error Amplifier
- Phase to Phase Current Balancing
- Differential Current Sense Amplifier for each Phase
- Programmable Soft Start Time
- 1% Internal Reference Voltage Accuracy
- Frequency Range: 100kHz 400kHz Set by the Resistor
- Power Good Output with Internal Delays
- Integrated Gate Drivers

- Ease of use
- Reduced cost
- Ease of use
- · Ease of use
- Enhanced Performance
- Enhanced Performance
- Added Protection
- Reduced Cost

Selected Electrical Specifications

Symbol	Boundary	Value	Unit
V _{cc}	min	4.5	V
V _{cc}	max	13.2	V
Mode		Voltage Mode	

Package Availability

Туре	PB Free	Standard
QFN 4x4 mm, 24 PIN	Х	

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