

Product Overview

NCP3232N: High Current Synchronous Buck Converter

For complete documentation, see the data sheet.

The NCP3232N is a high current, high efficiency voltage-mode synchronous buck converter which operates from 4.5V to 21V input and generates output voltages down to 0.6V at up to 15A load.

Features

- Wide Input Voltage Range from 4.5 V to 21 V
- 0.6V Internal reference voltage
- 500kHz switching frequency
- External programmable soft-start
- Lossless low-side FET current sensing
- Output over-voltage and under-voltage protection
- System over-temperature protection using a thermistor or sensor through OTS pin
- Hiccup mode operation for all faults
- Pre-bias start-up
- Adjustable output voltage

For more features, see the data sheet

Benefits

- Supports wide range of applications
- Supports small inductor and low number of output capacitors
- Good thermal performance

Applications

- ASIC, FPGA, DSP and CPU Core and I/O Supplies
- 15A Point of Load Power Module for Telecom and Network Applications

End Products

- Cellular Base Stations
- Telecom and Network Equipment
- Server and Storage System
- Computing 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
NCP3232NMNTXG	1.2666	Pb-free Halide free	Active	Step-Down	Voltage Mode	4.5	21	1.5	15	90	500	QFN-40

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

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