

## Product Overview

### NCP3231: High Current Synchronous Buck Converter

For complete documentation, see the data sheet.



The NCP3231 is a high current, high efficiency voltage-mode synchronous buck converter which operates from 4.5 V to 18 V input and generates output voltages down to 0.6 V at up to 25 A DC load or 30 A instantaneous load.

#### Features

- Wide input voltage range from 4.5V to 18V
  - 500KHz switching frequency
  - Lossless low-side FET current sensing
  - 0.6V internal reference voltage
  - External programmable soft-start
  - Output Over-voltage Protection and Under-voltage Protection
  - System Over-temperature Protection using a Thermistor or Sensor
  - 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
- Requires small inductor and low number of output capacitors
- Improve efficiency

#### Applications

- 25A voltage regulators in a 6x6 QFN package
- ASIC, FPGA, DSP and CPU Core and I/O Supplies

#### End Products

- Cellular Base Stations
- Telecom and Network Equipment
- Server and Storage System

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	V <sub>O</sub> Typ (V)	I <sub>O</sub> Typ (A)	Efficiency (%)	f <sub>sw</sub> Typ (kHz)	Package Type
NCP3231MNTXG	1.3333	Pb-free Halide free	Active	Step-Down	Voltage Mode	4.5	18	3.3	25	94	500	QFN-40

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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