

## Product Overview

### NCP3235: 4.5 V to 23 V, DC/DC Converter with Integrated MOSFETs

For complete documentation, see the data sheet.

The NCP3235 is a 15 A DC/DC converter with internal MOSFETs and offers flexibility in design. The device can deliver an adjustable output voltage as low as 0.6V to over 80% of the input voltage. Features include adjustable current limit, output voltage, and soft-start timing. Pin selectable features enable switching frequencies of 550 kHz or 1 MHz, selecting DCM/CCM operating modes, and the ability latch off or hiccup mode during over current. The part can be configure to operate in ultra-sonic mode to stay out of the audio band. The part is offered in a thermally enhanced 6mm by 6mm TQFN package.

#### Features

- Accurate 0.6 V reference
- DCM/CCM selectable options
- 550kHz/1.1MHz switching frequency
- Ultra-sonic mode
- Thermally enhanced QFN package
- Wide operating range 4.5 V to 21 V
- Adjustable soft start

#### Applications

- Computing/Servers
- Datacom/Networking
- FGPA, ASIC, DSP power
- 12 V Point of load

#### Benefits

- Adjustable output to set desired voltage as low as 0.6 V
- Operate in discontinuous mode for higher efficiency at light loads
- Design flexibility to select higher efficiency or smaller output filter
- Keeps capacitors from making audio sounds
- Higher dissipation with 3 exposed pads
- Allows for use across multiple applications
- Allows smooth ramp up during power up

#### End Products

- Desktops
- Servers
- Networking

### 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
NCP3235MNTXG	1.1333	Pb-free Halide free non AEC-Q and PPAP	Active	Step-Down	Voltage Mode	4.5	21	0.6	15	up to 97	550, 1100	QFN-40

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