

## Product Overview

### NCP81255: Single-Phase Regulator for IMVP8

For complete documentation, see the data sheet.

The NCP81255 is a high-performance, low-bias current, single-phase regulator with integrated power MOSFETs intended to support a wide range of computing applications. The device is able to deliver up to 14 A TDC output current on an adjustable output with Intel proprietary interface. Operating in high switching frequency up to 1.2 MHz allows employing small size inductor and capacitors. The controller makes use of ON Semiconductor's patented high performance RPM operation. RPM control maximizes transient response while allowing for smooth transitions between discontinuous-frequency-scaling operation and continuous-mode full-power operation. The NCP81255 has an ultra-low offset current monitor amplifier with programmable offset compensation for high-accuracy current monitoring.

#### Features

- Auto DCM Operation in High Current Power States
- High Performance RPM Control System
- IMVP8 Intel proprietary interface Support
- Ultra Low Offset IOOUT Monitor
- Dynamic VID Feed-Forward
- Programmable Droop Gain
- Zero Droop Capable
- Digitally Controlled Operating Frequency
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

#### Benefits

- Better efficiency
- Easier to compensate
- Compatible with Intel CPUs
- Accuracy

#### Applications

- Industrial embedded systems

#### Part Electrical Specifications

Product	Compliance	Status	Topology	Phases	Control Mode	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	f <sub>sw</sub> Typ (kHz)	Package Type
NCP81255MNTXG	Pb-free Halide free	Active	Step-Up	1	Current Mode	4.75	5.25	600 - 1200	QFN-40

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

Created on: 7/20/2019