

## Product Overview

### NCP81611: 4/3/2/1 Multi-Phase Buck Controller with PWM\_VID and I2C Interface

For complete documentation, see the data sheet.

The NCP81611 is a multiphase synchronous controller optimized for new generation computing and graphics processors. The device is capable of driving up to 4 phases and incorporates differential voltage and phase current sensing, adaptive voltage positioning and PWM\_VID interface to provide and accurately regulated power for computer or graphic controllers. The integrated power saving interface (PSI) allows for the processors to set the controller in one of three modes, i.e. all phases on, dynamic phases shedding or fixed low phase count mode, to obtain high efficiency in light-load conditions. The dual edge PWM multiphase architecture ensures fast transient response and good dynamic current balance

### Features

- Compliant with NVIDIA OVR4i+ Specifications
- Supports up to 4 Phases
- 2.8 V to 20 V Supply Voltage Range
- 250 kHz to 1.2 MHz Switching Frequency (4 Phase)
- Per Phase Over Current Limiting (OCL)
- System Over Current Protection (OCP)
- Over Voltage Protection (OVP)
- Under Voltage Protection (UVP)
- Phase-to-Phase Dynamic Current Balancing
- Current Mode Dual Edge Modulation for Fast Initial Response to Transient Loading

For more features, see the data sheet

### Applications

- GPU and CPU Power
- Graphic Cards
- Desktop, Notebook, Server systems

### End Products

- Graphic Cards
- Desktop, Notebook, Server 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
NCP81611MNTXG	Pb-free Halide free	NEW							QFN-40

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

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