

NCP5318

Two/Three/Four-Phase Buck CPU Controller

Product Overview

For complete documentation, see the data sheet.

The NCP5318 provides full-featured and flexible control conforming to the Intel VRM 10.1 specification for high-performance CPUs. The IC can be programmed as a two-, three- or four-phase buck controller, and the per-phase switching frequency can be as high as 1.0 MHz. Combined with external gate drivers and power components, the controller implements a compact, highly integrated multi-phase buck converter.

Features

- Programmable 2/3/4 Phase Operation
- Lossless Current Sensing
- Enhanced V2 Control Method Provides Fast Transient Response
- Programmable Up to 1.0 MHz Switching Frequency Per Phase
- Programmable Adaptive Voltage Positioning
- Programmable Soft Start Time
- Differential Current Sense Pins for Each Phase
- Current Sharing Within 10% Between Phases
- Programmable Latching Overcurrent Protection
- Latched Overvoltage Protection

For more features, see the data sheet