

NCP3125

Synchronous Buck Regulator, High Efficiency, Switching, PWM, 4.0 A



Product Overview

For complete documentation, see the data sheet.

The NCP3125 is a flexible synchronous PWM Switching Buck Regulator. The NCP3125 is capable of producing output voltages as low as 0.8 V. The NCP3125 also incorporates voltage mode control. To reduce the number of external components, a number of features are internally set, including soft-start and switching frequency. The NCP3125 is currently available in an SOIC-8 package. Family of parts that are pin to pin compatible. NCP3125 (4A), NCP3126 (3A), NCP3127 (2A)

Features

- +5V or +12V Input Voltage
- 60mΩ High-side, 36mΩ Low-side MOSFET
- Output voltage adjustable down to 0.8V
- 4A Continuous Output Current
- Fixed 350kHz PWM Operation
- 1.0% Initial Output Accuracy
- Programmable Current Limit
- Family of parts that are pin to pin compatible. NCP3125 (4A), NCP3126 (3A), NCP3127 (2A)

Benefits

- Ability to use for various input voltages
- High efficiency solution due to low R_{ds(on)}
- Ability to output different voltages
- High power density designs
- No external components required to set frequency
- High accuracy output and system design
- Ability to use high efficiency solution for lower output current

Applications

- High Efficiency DC-DC

End Products

- Set-Top-Box (STB)
- LCD-TV / DTV / PDP

Application Diagram

