

NCP3286

40A Stackable Synchronous Buck Regulator with PMBUS Interface

Product Overview

For complete documentation, see the data sheet.

The NCP3286, a highly-efficient stackable synchronous buck regulator with PMBUSTM interface, is capable of operating with an input range from 3V to 18V and supporting up to 40A continuous load currents. Higher output currents can be achieved by 2, 3, or 4 parallel NCP3286 devices operating as an interleaved multi-phase buck regulator.

The NCP3286 utilizes fixed-frequency current-mode control to provide accurate voltage regulation and fast transient response. Flexible programming of function and parameters supports multiple applications.

Features

- 150°C Operating Junction Temperature
- VOUT: 0.5-5.5V with Remote Output Voltage Sense
- VIN: 3-18V with Input Feed-Forward
- 40A Continuous Output Current – Stackable to 160A
- Programmable Fixed Frequency Current Mode Control
- Integrated 5V LDO or External Supply
- Enable with Programmable VIN UVLO
- Programmable Boot-Up Voltage
- Programmable Soft-Start
- Programmable Current Limit

For more features, see the data sheet

Applications

- Telecom Digital Baseband and Radio Unit
- Networking – Routers and Switches
- Server and Desktop Computers, Notebooks, Gaming
- High Density Power Solutions
- DC/DC Modules

End Products

- 5G Telecom Baseband and Radio Unit
- Networking – Routers and Switches
- Server and Desktop Computers, Notebooks, Gaming

Part Electrical Specifications

Product	Status	Compliance	Topology	Control Mode	V _{CC} Min (V)	V _{CC} Max (V)	V _O Typ (V)	I _O Typ (A)	Efficiency (%)	f _{sw} Typ (kHz)	Package Type	Cas e Outline	MSL Typ e	MSL Temp (°C)	Cont ainer Typ e	Cont ainer Qty.
NCP3286MNTX G	Active		Step - Down	Curr ent Mod e	3	18	1	40	96	200 0	WQFN-34	510 CL.P DF	1	260	REEL	300 0