

Product Overview

NCP1034: 100 V Synchronous Buck Controller

For complete documentation, see the data sheet.



The NCP1034 is a high voltage PWM controller designed for high performance synchronous Buck dc-dc applications. The NCP1034 drives a pair of external N-MOSFETs using a programmable switching frequency up to 500 kHz which allows flexibility to tune the operation of the IC to meet system level requirements. An external synchronization feature allows the simplification of system level filter design. The output voltage can be precisely regulated using the internal 1.25 V reference voltage for low voltage applications. Protections such as under voltage lockout and hiccup current limit are provided to give required system level security in the event of a fault.

Features

- Input voltage up to 100V
- 2 A Output Drive Capability
- 1.25 V +/-1.5% feedback voltage across temperature
- External Frequency Synchronization
- Programmable switching frequency up to 500 kHz

Benefits

- Wide input voltage to be used with +48V or +60V input
- Ability to use larger size FETs for increased efficiency
- Excellent system level accuracy across temperature
- Ability to sync to external frequency or output a sync pulse
- Optimization for efficiency and size

Applications

- 48 V Non-Isolated DC-DC Converter
- Distributed Point of Load Power Architectures
- General High Voltage DC-DC Converters

End Products

- Embedded Telecom Systems
- Networking and Computing Voltage Regulator

Part Electrical Specifications

Product	Compliance	Status	Topology	Phases	Control Mode	V _{CC} Min (V)	V _{CC} Max (V)	f _{sw} Typ (kHz)	Package Type
NCP1034DR2G	Pb-free	Active	Step-Down	1	Voltage Mode	8	100	Up to 500	SOIC-16
	Halide free						57		
							40		
							42		
							75		

Application Diagram



