

NCP4307

Secondary Side Synchronous Rectification Driver with Dual Supply

Product Overview

For complete documentation, see the data sheet.

The NCP4307 is high performance driver tailored to control a synchronous rectification MOSFET in switch mode power supplies. Thanks to its high performance drivers and versatility, it can be used in various topologies such as DCM or CCM flyback, quasi resonant flyback, active clamp flyback and forward. Self-supply capability and dual VCC pin option optimizes designs for wide VOUT range applications, such as USB PD, and can be configured for high side or low side operation.

Features

- Precise True Secondary Zero Current Detection
- Dual Supply Pins
- Self Supply
- Positive dV/dt detection
- Light load detection

Applications

- USB PD
- High Density SMPS

Benefits

- Allows for proper timing of SR MOSFET turn on and turn off
- Selects optimal Vcc source to minimize power loss
- Allows to use in high side configuration and low output voltage without AUX supply source
- For Active Clamp Flyback Designs, detects proper conduction phase during transition from DCM to ACF mode
- Improves light load efficiency

End Products

- USB PD Adapters
- SMPS

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	V _{CC} Max (V)	V _{ref} Typ (V)	I _{CC} Max (A)	T _A Min (°C)	T _A Max (°C)	Package Type
NCP4307AASN T1G	0.292		NEW	35	4.7	1.6	-40	125	TSOP-6
NCP4307FASNT 1G	0.292		NEW	35	4.7	1.6	-40	125	TSOP-6
NCP4307FBSNT 1G	0.292		NEW	35	8.9	1.6	-40	125	TSOP-6
NCP4307WASN T1G	0.292		NEW	35	4.7	1.6	-40	125	TSOP-6