

Product Overview

NCL30125: Fixed Frequency Current-Mode PWM Controller for Two Switch Forward topology

For complete documentation, see the data sheet.

The NCL30125 is a fixed frequency current-mode controller with integrated high voltage gate drivers. The HV pin allow a quick start-up with dynamic self supply (DSS) features. The skip cycle mode insures good efficiency in light load condition. And enable flexible & robust design with controllable soft-start time, switching frequency and various protections.

Features

- Internal 700 V high side gate driver
 - Skip cycle mode
 - Dynamic Self Supply (DSS)
 - Internal 700 V HV startup current source
 - Frequency Jittering
 - 35 V wide VCC operation
 - Adjustable operating frequency & soft start duration
 - Optional features (Skip threshold, BO level, OCP timer & etc.)
 - Auto-recovery or Latch option
 - Brown-out, OCP(SCP/OLP), VCC OVP, TSD
- For more features, see the data sheet

Benefits

- Save external pulse transformer
- Maximize Performance in Light Load Conditions
- Stable operation in transient & no load
- Fast startup & Low standby power
- Good EMI performance
- Design Flexibility
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- Robust system operation

Applications

- Power Supply
- Lighting Advertisement power board

End Products

- Advertisement Board
- Power tool charger
- PC Silver Boxes
- Games Adapter

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	V _I Min (V)	V _I Max (V)	V _O Max (V)	I _O Max (mA)	f _{sw} Typ (kHz)	Package Type
NCL30125A2DR2G	0.6	Pb-free Halide free	Active	Forward	17	700	700	+0.9/-1.2 A	Adjustable	SOIC-16 NB
NCL30125B2DR2G	0.6	Pb-free Halide free	Active	Forward	17	700	700	+0.9/-1.2 A	Adjustable	SOIC-16 NB

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