

## Product Overview

### NCL30000: LED Driver, Dimmable, Power Factor Corrected

For complete documentation, see the data sheet.



The NCL30000 is a switch mode power supply controller intended for low to medium power single stage power factor (PF) corrected isolated flyback LED Drivers. It employs a Critical Conduction Mode (CrM) control technique to ensure near unity power factor across a wide range of input voltages and output power.

#### Features

- Constant on-time PWM control
- Cycle-by-cycle current protection
- Low current sense threshold of 500 mV
- Reference design for TRIAC line dimmers
- Source 500 mA / Sink 800 mA totem pole gate driver
- Low 2.0 mA typical operating current
- Very low 24  $\mu$ A typical startup current
- PbFree, halogen free/BFR free and RoHS compliant

#### Applications

- <40 W single stage high power factor constant current drivers
- Commercial and residential LED fixtures

#### Benefits

- Near ideal power factor
- Robust protection
- Improves overall efficiency
- Reduces development time

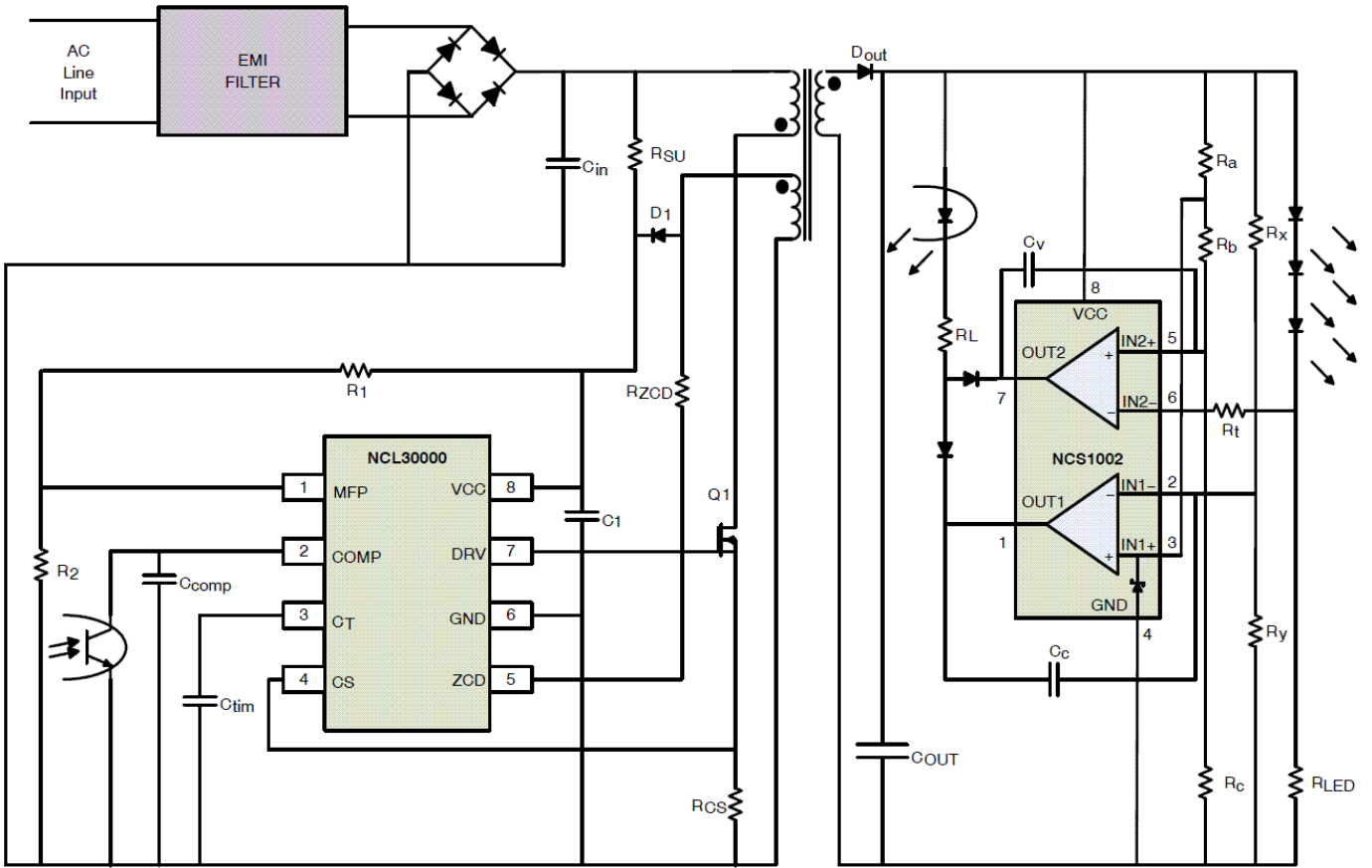
#### End Products

- LED driver power supplies
- LED-based down lights
- TRIAC dimmable LED-based PAR lamps
- Power factor corrected constant voltage supplies

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	V <sub>I</sub> Min (V)	V <sub>I</sub> Max (V)	V <sub>O</sub> Max (V)	I <sub>O</sub> Max (mA)	f <sub>sw</sub> Typ (kHz)	Package Type
NCL30000DR2G	0.34	Pb-free Halide free non AEC-Q and PPAP	Active	Flyback	12.5	308 V <sub>AC</sub>	20 V <sub>GATE</sub>	500/800 - Source/Sink	Variable	SOIC-8

# Application Diagram



For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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