

## NCL30100

# LED Driver Controller, Fixed, Off Time, Switch Mode



## Product Overview

For complete documentation, see the data sheet.

The NCL30100 is a compact switching regulator controller intended for space constrained constant current high brightness LED driver applications where high efficiency and small size are important. The controller is based on a peak current, quasi fixed off time control architecture optimized for continuous conduction mode stepdown (buck) operation. This allows the output filter capacitor to be eliminated. In this configuration, a reverse buck topology is used to control a cost effective N-channel MOSFET.

### Features

- Quasi-Fixed Off Time, Peak Current Control Method
- Reverse Buck Switching Topology
- Up to 700 kHz Switching Frequency
- Up to 95%+ Efficiency
- No Output Capacitor Needed
- Vcc Operation from 6.35-18 V
- -40 to 125 °C

### Benefits

- No Loop Compensation Needed
- N-FET MOSFETs can be used
- Allows smaller inductors

### Applications

- Low Voltage Halogen LED Replacement (MR-16)
- LED Light Bars
- LED Track Lighting
- Landscape Lighting
- Transportation Lighting

### End Products

- LED Based General Lighting
- LED Channel Lettering

## Application Diagram

6.5 – 24 V

