



Product Overview

NCP4302: Synchronous Rectification Controller for Flyback SMPS

For complete documentation, see the [data sheet](#)

Product Description

The NCP4302 is a full featured controller and driver that provides all the control and protection functions necessary for implementing a synchronous rectifier operation in a flyback converter. With the use of the NCP4302, the space conscious flyback applications such as Adaptors, chargers, set top boxes can achieve significant efficiency improvements at minimal extra cost. In addition to the synchronous rectifier control, the IC incorporates an accurate TL431 type shunt regulator, current monitoring circuit and optocoupler driver to provide a single IC secondary solution. The NCP4302 works with any type of flyback topology (continuous mode, Quasi resonant mode or discontinuous mode) providing a high level of versatility.

Features

- Self contained Control of Synchronous Rectifier in CCM, DCM, and QR Flyback Applications
- Integrated controller and driver; wide operating voltage
- Built-in voltage reference (TL431 functionality)
- True Secondary Zero Current Detection
- High Gate Drive Currents (2.5 A Source/Sink)
- Current Sense Flexibility (MOSFET RDS(on) OR CS Resistor)
- Accurate Low Voltage Reference, 1%
- Programmable Independent Secondary Side ton and toff Delays
- Maximum Frequency of Operation up to 250 kHz

Benefits

- Single IC secondary solution
- Ease of implementation and simplified system design
- Fewer components, reduced system cost

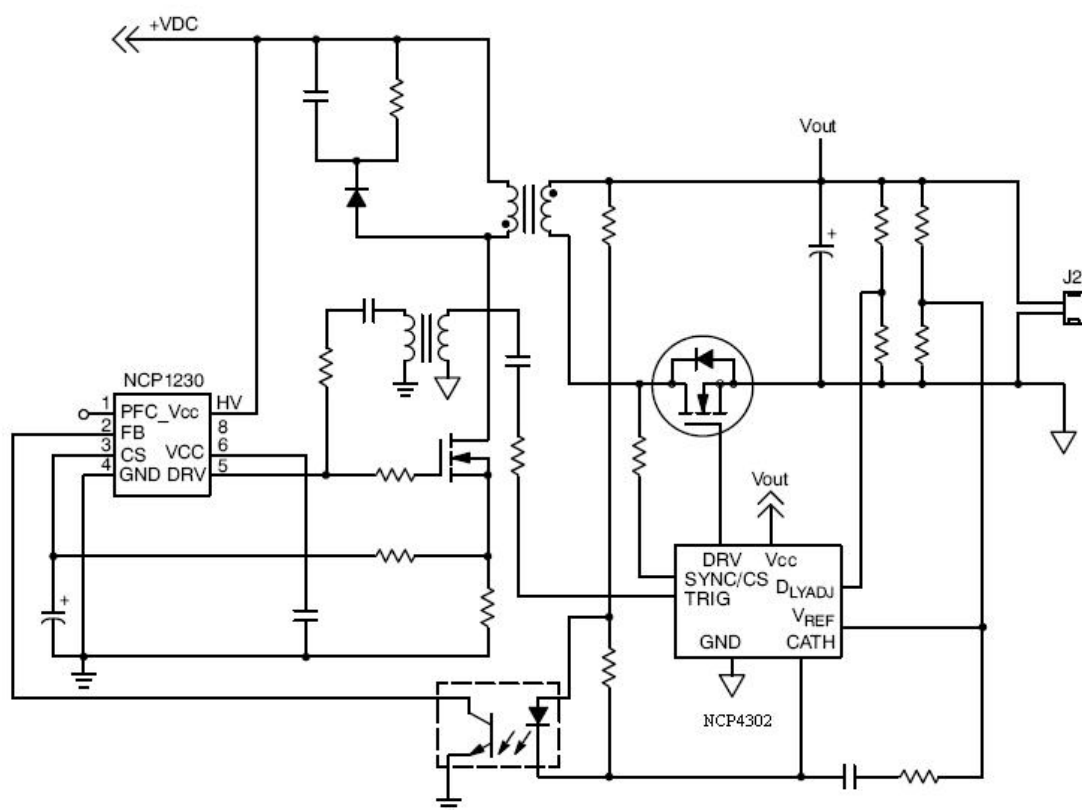
Applications

- Notebook Adapters
- LCD TV Adapters
- Power Over Ethernet Applications (IP phones, Wireless Access Points)

End Products

- Consumer Appliances such as DVD, VCR
- Battery Chargers

Application Diagram



For more information please contact your local sales support at www.onsemi.com

Created on: 7/11/2015