

Design Support

Technical Documentation

Design Resources

Design & Development Tools

Conversion Services

Evaluation Boards

Evaluation Board Documents

Mixed - Signal Foundry Services

Sample Kits

Simulation Models

Software

Product Recommendation Tools

Video

Technical Support

Home > Support > Design Support > Design Resources > Evaluation Boards

## NCP1606BOOSTGEVB:NCP1606 100 W BOOST Evaluation Board

### Evaluation Board Description

The NCP1606 is an active power factor controller specifically designed for use as a pre -converter in electronic ballasts, ac -dc adapters and other medium power off line converters (typically up to 300 W). It embeds a Critical Conduction Mode (CRM) scheme that substantially exhibits unity power factor across a wide range of input voltages and power levels. Housed in a DIP8 or SOIC -8 package, the NCP1606 minimizes the number of external components. Its integration of comprehensive safety protection features makes the NCP1606 an excellent driver for rugged PFC stages.



This evaluation board is a PFC pre -converter featuring the NCP1606B. It is designed to operate over universal lines (88 - 264 Vac, 47 - 63 Hz) and produce a 400 V output at up to 100 W. This output is suitable for driving typical SMPS stages or resistive loads.

### Features and Applications

#### Features

- Unity Power Factor
- No need for input voltage sensing
- Latching PWM for Cycle by Cycle On Time Control (Voltage Mode)
- High Precision Voltage Reference ( ± 2.4% over the Vcc and temp. ranges)
- Very Low Startup Current Consumption (? 50 μ A)
- Low Typical Operating Current (3 mA)
- 500 mA / +800 mA Totem Pole Gate Driver
- Undervoltage Lockout with Hysteresis
- Pin to pin compatible with L6561/2, TDA4863, FAN7527, etc.
- Programmable Overvoltage Protection
- Protection against Open Loop (Undervoltage Protection)
- Accurate and Programmable On Time Limitation
- Overcurrent Limitation

| Evaluation Board Information |                                      |        |            |                            |
|------------------------------|--------------------------------------|--------|------------|----------------------------|
| Evaluation Board             | Short Description                    | Status | Parts Used | Action                     |
| NCP1606BOOSTGEVB             | NCP1606 100 W BOOST Evaluation Board | Active | NCP1606BPG | Buy                        |
|                              |                                      |        |            | Contact Local Sales Office |

| Technical Documents        |                                                   |                                                |     |
|----------------------------|---------------------------------------------------|------------------------------------------------|-----|
| Type                       | Document Title                                    | Document ID/Size                               | Rev |
| Eval Board: BOM            | NCP1606BOOSTGEVB Bill of Materials ROHS Compliant | NCP1606BOOSTGEVB_BOM - 94.0 KB                 | 0   |
| Eval Board: Gerber         | NCP1606BOOSTGEVB Gerber Layout Files (Zip Format) | NCP1606BOOSTGEVB_GERBERS - 95.0 KB             | 0   |
| Eval Board: Schematic      | NCP1606BOOSTGEVB Schematic                        | NCP1606BOOSTGEVB_SCHEMATIC - 137.0 KB          | 0   |
| Eval Board: Test Procedure | NCP1606BOOSTGEVB Test Procedure                   | NCP1606BOOSTGEVB_TEST_PROCEDURE.PDF - 173.0 KB | 0   |

Previously Viewed Products

Select Product ...

Go

Clear List

Design Support

Technical Documentation

Design Resources

Technical Support

Sales Support