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in Part #/Keyword

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n Cross - Reference

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HOME

**PRODUCTS** 

**DESIGN SUPPORT** 

**APPLICATIONS** 

QUALITY

My ON: Sign In

| Careers

» Advanced

■ Design Support

Technical Documentation



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

NCP1606BOOSTGEVR-NCP1606 100 W BOOST Evaluation

### 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.

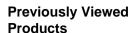
#### **Features and Applications**

#### **Features**

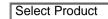
- ? Unity Power Factor
- ? No need for input voltage sensing
- Latching PWM for Cycle by Cycle On Time Control (Voltage Mode)
- High Precision Voltage Reference ( ± 2.4% over the Vcc and temp. ranges)
- γ Very Low Startup Current Consumption (? 50 μ A)
- 2 Low Typical Operating Current (3 mA)
- 2 -500 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 Status Parts Used Action NCP1606BOOSTGEVB NCP1606 100 W BOOST Evaluation Board Active NCP1606BPG Contact Local Sales Office

Technical Documents			
Туре	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



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Design Resources
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