

TEA2206T ACTIVE BRIDGE RECTIFIER CONTROLLER

OVERVIEW

Using the TEA2206T with low-ohmic high-voltage external MOSFETs significantly improves the efficiency of the power converter as the typical rectifier-diode forward conduction losses are reduced by 50%. Efficiency can improve up to about 0.7% at 90 V (AC) mains voltage. The TEA2206T is fabricated in a silicon-on-insulator (SOI) process.

KEY FEATURES AND BENEFITS

Efficiency Features

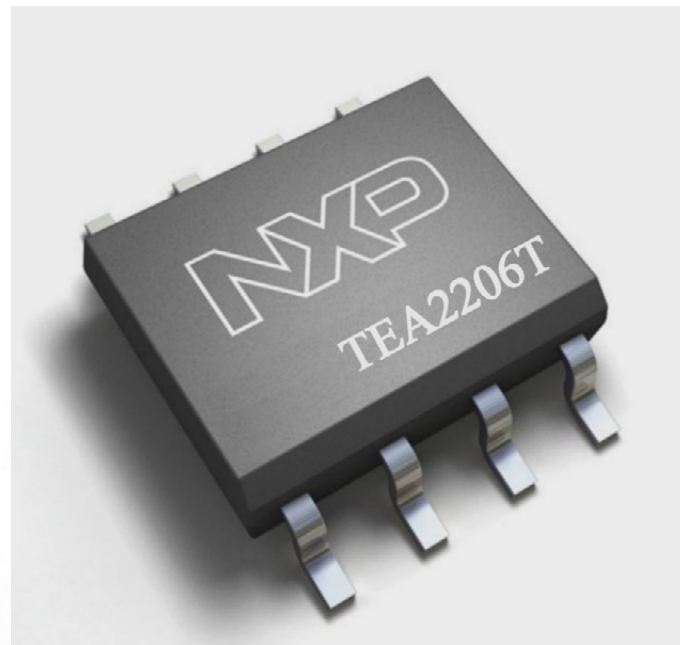
- Forward conduction losses of the diode rectifier bridge are reduced
- Very low IC power consumption (2 mW)

Application Features

- Directly drives two rectifier MOSFETs
- Very low external part count
- Integrated X-capacitor discharge (2 mA)
- Self-supplying
- SO8 package

Control Features

- Undervoltage lockout (UVLO)
- Drain-source overvoltage protection for all external power MOSFETs
- Gate pull-down currents at start-up for all external power MOSFETs

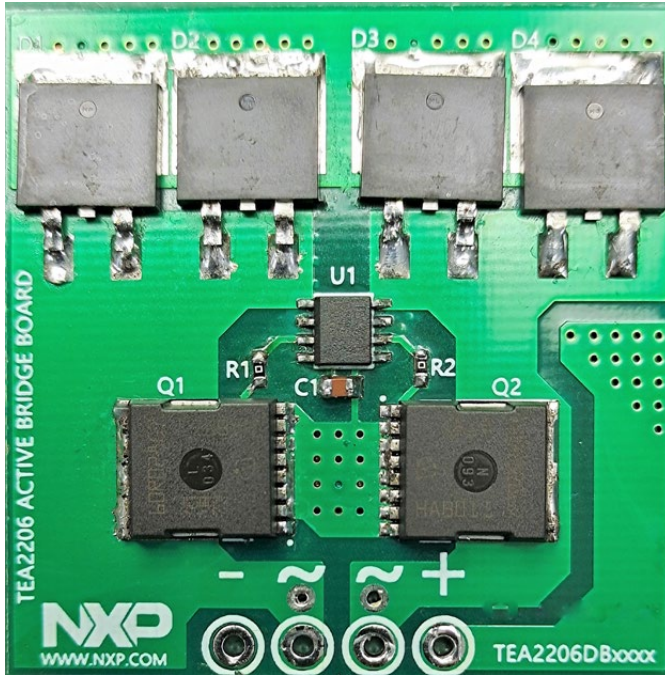


TARGET APPLICATIONS

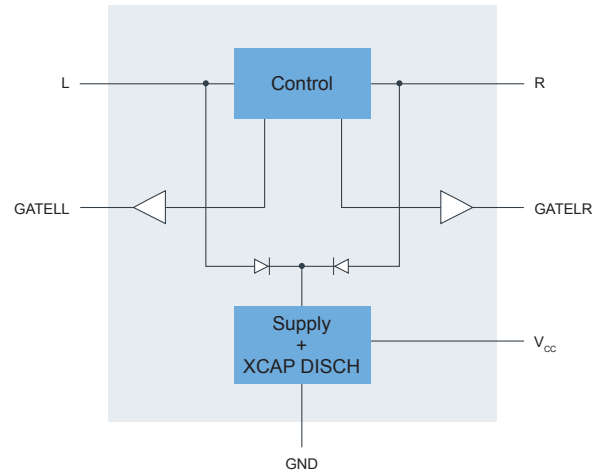
The TEA2206T controller is intended for power supplies with a boost-type power-factor controller as a first stage. The second stage can be a resonant controller, a flyback controller, or any other controller topology. It can be used in all power supplies requiring high efficiency.

- Adapters
- Power supplies for desktop PC and all-in-one PC
- Power supplies for television
- Power supplies for servers

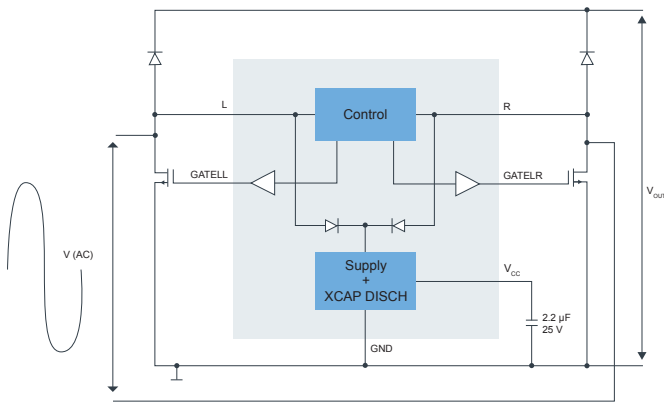
DEMO BOARD



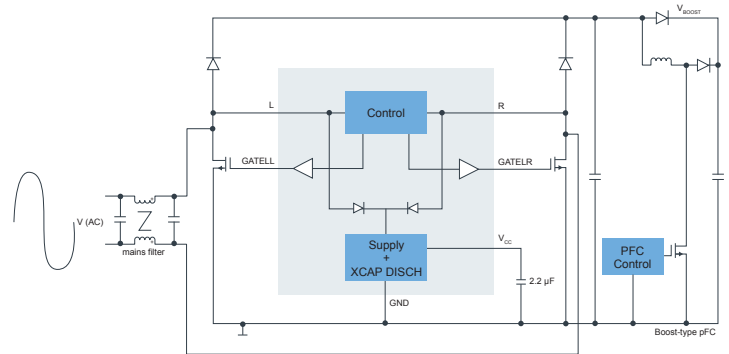
TEA2206T BLOCK DIAGRAM



TYPICAL CONFIGURATION



APPLICATION DIAGRAM



ORDERING INFORMATION

TYPE NUMBER	PACKAGE		
	Name	Description	Version
TEA2206T/1	SO8	Plastic small outline package; 8 leads; body width 3.9 mm	SOT96-1

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Document Number: TEA2206FS REV 0

