



# Full Wave Active Bridge Rectifier Controller

## TEA2208T

Last Updated: Jan 6, 2025

The TEA2208T, a controller IC for active bridge rectifiers, is the first product in our new generation of active bridge rectifier controllers replacing the traditional diode bridge.

This active bridge IC comes with high-current rail-to-rail MOS output drivers, minimizing power dissipation and gate charge losses to as low as 2mW combined.

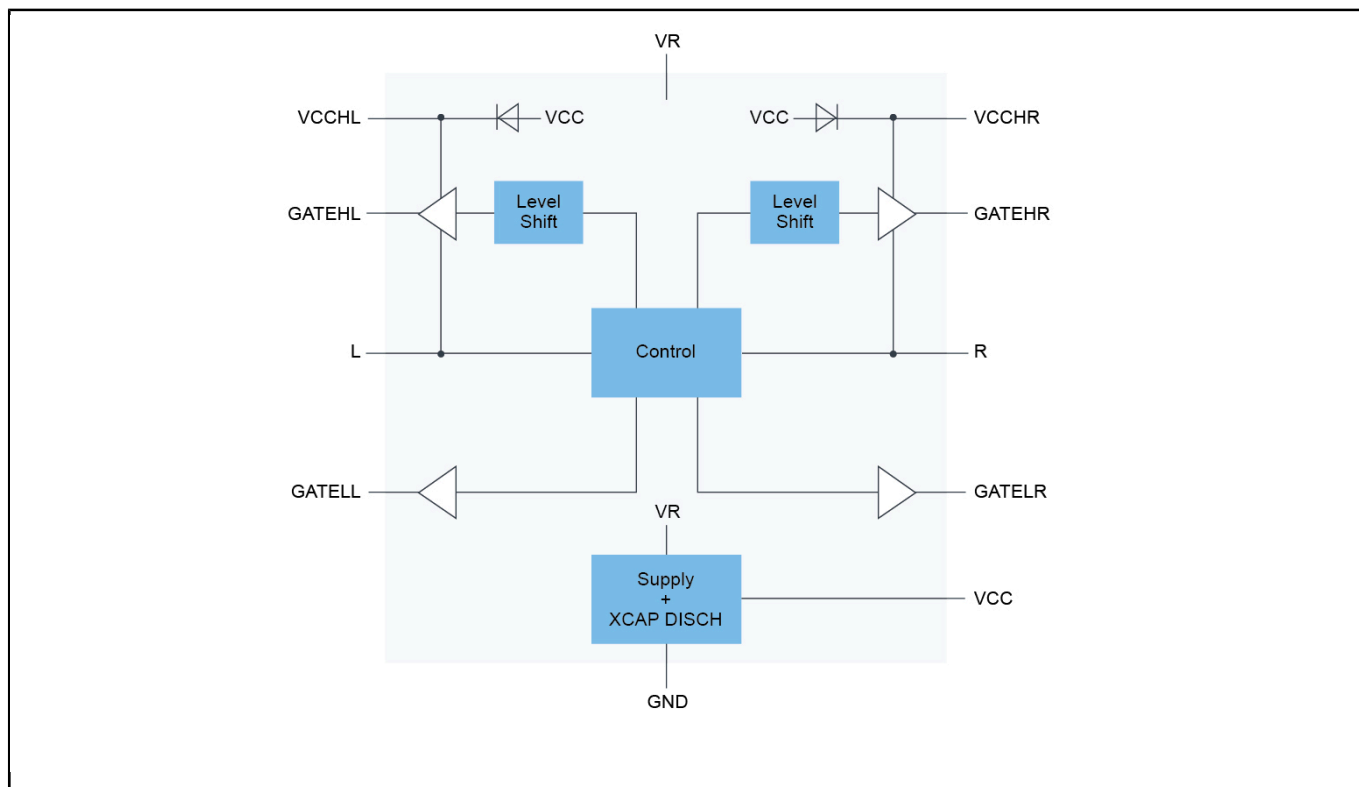
Using the TEA2208T with low-ohmic high-voltage external MOSFETs significantly improves the efficiency of the power converter, as the typical rectifier diode-forward conduction losses are eliminated.

With the TEA2208T's power MOSFET drain-source protection and minimum mains voltage feature, efficiency can improve up to about 1.4 % at 90 V (AC) mains voltage.

As a full wave rectifier, the TEA2208T is capable of driving four MOSFETs in an active bridge, which makes it perfect for power supplies with a boost-type power-factor controller as a first stage. For second stage application, the TEA2208T can be used as a flyback controller, resonant controller, or be applied in other controller topologies.

Additionally, this active bridge rectifier can be used in all highly efficient power supplies, such as adapters and PC power supplies.

## TEA2208T Block Diagram



View additional information for [Full Wave Active Bridge Rectifier Controller](#).

**Note:** The information on this document is subject to change without notice.

**www.nxp.com**

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.