



NXP GreenChip controllers for synchronous rectification TEA1761, TEA1762 & TEA1791

Efficient synchronous rectification control

Designed for switched-mode power supplies (SMPS), these extremely efficient and highly integrated GreenChip ICs control synchronous rectification, so you can design simple, cost-effective power supplies with very few external components.

Key features

- ▶ Strong drive capability
- ▶ High driver output voltage (10 V) compatible with all MOSFETs
- ▶ Discriminates between primary stroke and ringing at low mains
- ▶ Wide Vcc range (8.5 to 38 V)
- ▶ Low current consumption
- ▶ Supports high-side drive (EMI friendly)
- ▶ Accurate internal voltage reference
- ▶ Integrated primary-side control / feedback function
- ▶ On-chip protection features including OTP and UVLO

Key benefits

- ▶ Very simple design
- ▶ Minimizes board space
- ▶ Low external component count
- ▶ Low current consumption
- ▶ No auxilliary winding needed for supply

Key applications

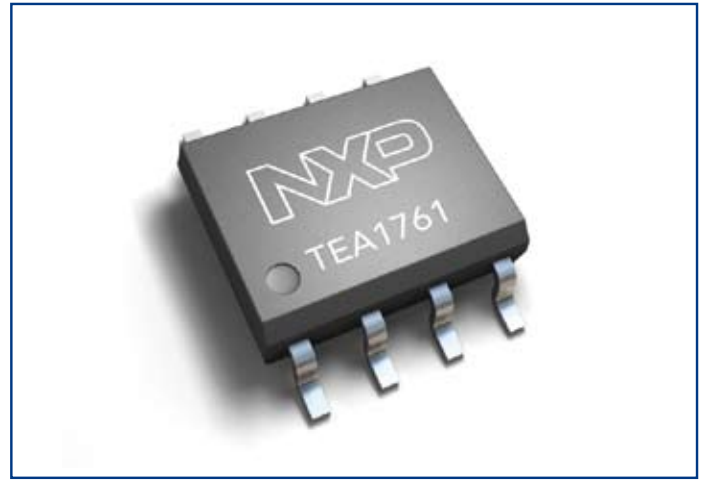
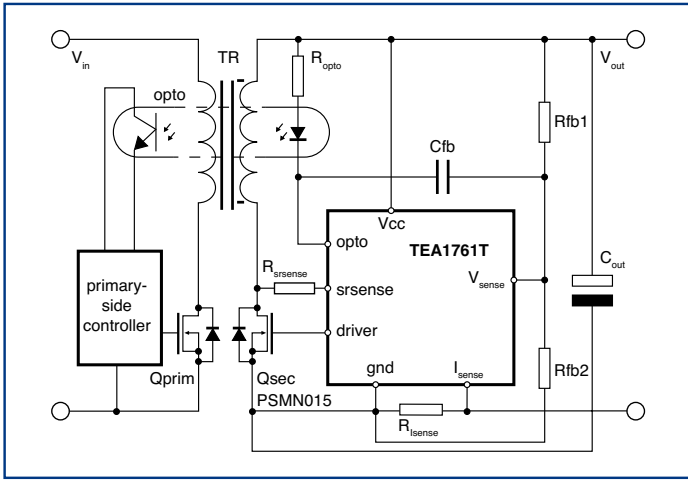
- ▶ Adapters
- ▶ Chargers
- ▶ LCD TV

The high integration level and built-in green functions of our new GreenChip devices lead to improved efficiency at all power levels and help keep SMPS costs down. Ideal for synchronous rectification on the secondary side of discontinuous conduction mode and quasi resonant flyback converters, they provide you with a proven solution that helps simplify design.

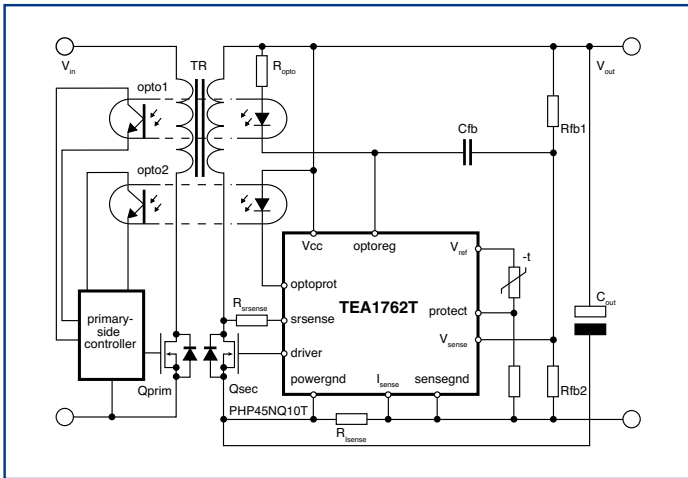
The TEA1761 is a highly integrated device that delivers excellent performance at a competitive price. The TEA1762 builds on the functionality of the TEA1761 by adding extra protection, including a latch input and a reference output accurate to 2.5V. It also offers improved capabilities for voltage control, and increases flexibility with an additional opto coupler drive. The TEA1791 is a next-generation device, intended for adapters, that provides an even higher level of integration.

To keep designs as simple as possible, both devices are housed in small, space-saving packages. The TEA1761 and TEA1791 use an SO8 package, the TEA1762 a compact SO14.

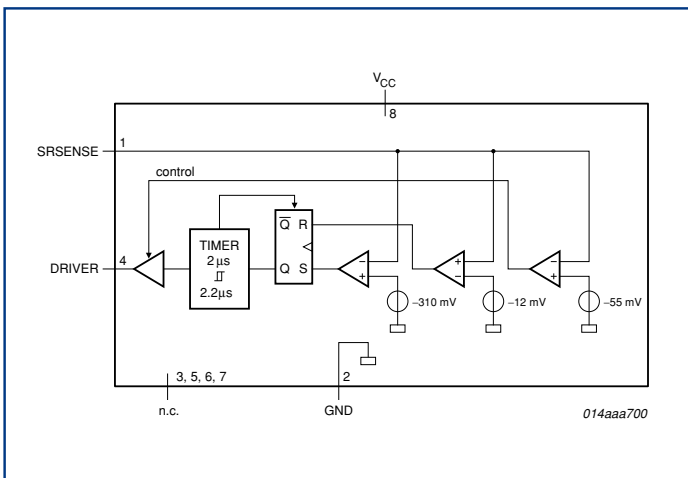
Fabricated in the same advanced SOI (Silicon On Insulator) process used for all our GreenChip ICs, all three devices deliver robust performance and accept a wide voltage range.



TEA1761



TEA1762



TEA1791