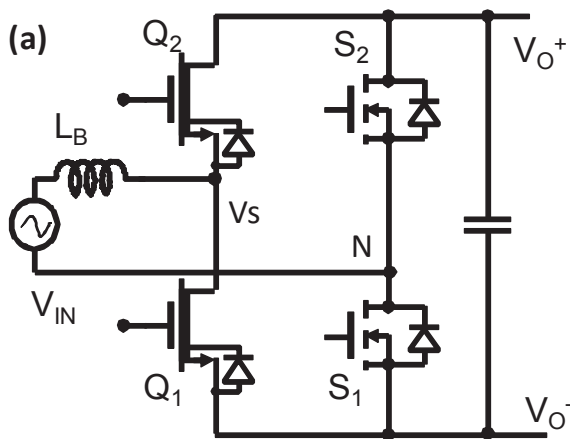
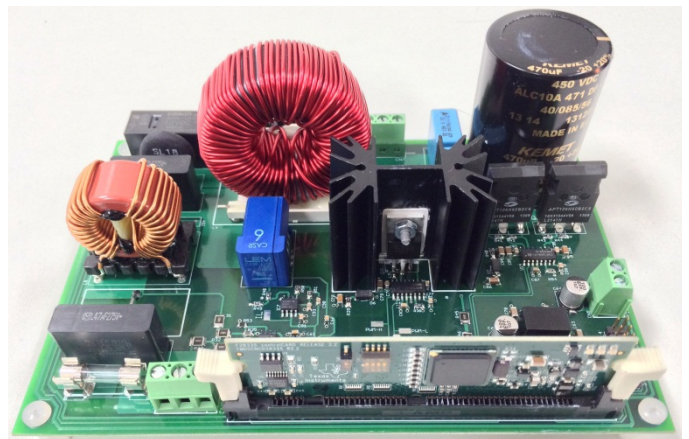


EZ-GaN Evaluation Board, Totem-Pole PFC

Complete 1000 W Totem-Pole PFC Evaluation Board with HV GaN HEMTs and 99% Peak Efficiency

The introduction of Transphorm's 600V GaN power transistors allows unconventional circuits previously impractical to implement. The simultaneously low on-resistance and low reverse recovery charge from these 1st-generation GaN-on-Si high electron mobility transistors (HEMTs) offer a new keystone in building a long-awaited totem-pole power factor correction (PFC) circuit.

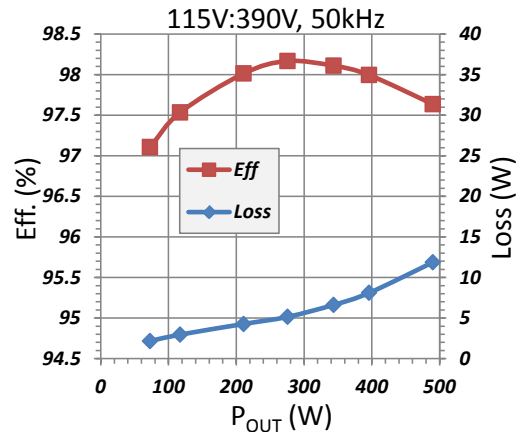
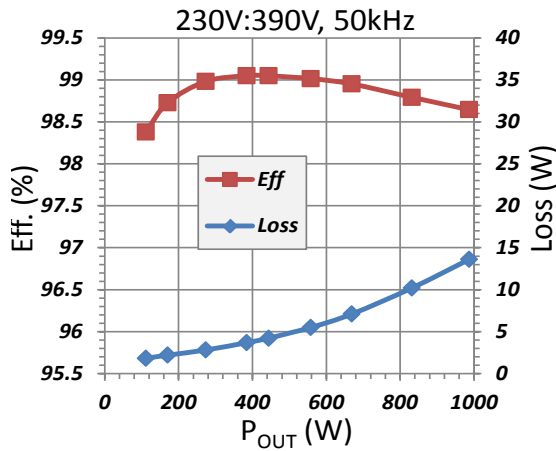
In addition to excellent potential for low common-mode EMI noises, this elegant GaN-based PFC features the least number of fast power devices and offers the least resistance paths for the main current, enabling a prototype to achieve 99% efficiency.



A GaN HEMT totem pole PFC in CCM mode consists of a pair of fast GaN HEMTs (Q1 and Q2) operating at a high pulse-width-modulation (PWM) frequency, as well as a pair of slow but very-low resistance MOSFETs (S1 and S2) operating at 60Hz.

- Option of Quiet-Tab™ packages for lower EMI design
- Extremely efficient design with >99% peak efficiency
- Simple and elegant bridgeless PFC topology

TDPS500E2C1-KIT - Complete Totem-Pole PFC Eval Board



Performance of the GaN-based Totem Pole PFC with synchronous rectification showing >99% at Vin=230 Vrms and >98% at Vin=115 Vrms (GaN HEMTs: TPH3006PS x2 or TPH3006LS & TPH3006LD).

Parts Available

	Description	Minimum Order	Delivery
TDPS500E2C1-KIT	Totem-Pole PFC Evaluation Board Kit	1	Stock to 12 weeks
TPH3002PS	600 V / 0.29 Ω GaN HEMT, TO-220	20	Stock to 12 weeks
TPH3002PD	600 V / 0.29 Ω GaN HEMT, TO-220	20	Stock to 12 weeks
TPH3002LS	600 V / 0.29 Ω GaN HEMT, PQFN88	20	Stock to 12 weeks
TPH3002LD	600 V / 0.29 Ω GaN HEMT, PQFN88	20	Stock to 12 weeks
TPH3006PS	600 V / 0.15 Ω GaN HEMT, TO-220	10	Stock to 12 weeks
TPH3006PD	600 V / 0.15 Ω GaN HEMT, TO-220	10	Stock to 12 weeks
TPH3006LS	600 V / 0.15 Ω GaN HEMT, PQFN88	10	Stock to 12 weeks
TPH3006LD	600 V / 0.15 Ω GaN HEMT, PQFN88	10	Stock to 12 weeks