Integrated bidirectional power supply design diagram

The bi-directional control system of EPC9151 is based on the conventional Average Current Mode Control (ACMC). An outer voltage loop regulates the output voltage ...

Dual-quadrant programmable power supply is a bidirectional programmable DC power supply that integrates the functional characteristics of power supply and feedback load.

This article introduces a reference design for an "isolated bidirectional DC-DC power supply" that can be used as the basis for high-power conversion applications, including EV charging stations and ...

This design is a proof of concept that will help customers design their own bidirectional AC-DC conversion systems. It has been fully developed, validated and tested.

Abstract--A 6.6kW 500kHz bidirectional isolated DC/DC converter based on GaN and SiC wide band gap (WBG) semiconductor devices is developed for 800V electric vehicle (EV) on-board charging, ...

By combining the two power stages into a single bidirectional power stage, this TIDA-00476 reference design proposes an optimized solution in terms of performance, cost, and size. The design utilizes a ...

This reference design represents a complete solution for high power bidirectional DC-DC power converter in dual active bridge topology based on ACEPACK2 SiC power modules.

This article presents a solution immune to input voltage changes while generating power and enabling reverse current flow, that is, from output to input. Bipolar, Bidirectional Power Supply ...

The bi-directional control system of EPC9151 is based on the conventional Average Current Mode Control (ACMC). An outer voltage loop regulates the output voltage by comparing the most recent ...

This reference design shows how to implement a three-level ANPC converter that limits the voltage stress on all the power components to only half of the DC bus voltage, allowing use of power ...

As shown in Fig. 4, (including the input EMI filter, totem pole PFC, CLLC resonant converter, control board, and auxiliary power board), a 6.6kW bidirectional OBC prototype is built to verify the design.

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