High power portable DC-DC power supply design

My dissertation includes the motivation for investigating each of those circuit techniques and relevant power supply designs as well as application examples.

This article introduces the method and principle of applying a microcontroller control system to a portable emergency DC power supply, and proposes a method for a portable emergency DC power ...

Portable power conversion applications present unique and challenging design considerations. Innovative, small electronics require solutions with small footprints. In order to maintain battery life, ...

Browse discrete topologies (circuit configurations) that match the requirements of the DC-DC equipped application along with optimal devices. Please use this to reduce design workload.

These power supplies (Table 1) all provide high, reliable power with low noise and excellent regulation and can be controlled from the front panel or remotely through a number of interface options.

This post is intended to give you a basic understanding of high-voltage power-supply design, and how design tools can make it simple to design for these applications. There are three main things that you ...

The following sections, present the fundamentals and design considerations of various portable DC-DC conversion topologies including Buck, Boost, non-inverting Buck-Boost, Flyback and Charge Pump ...

Aiming at the energy supply needs of pulse-driven sources in mobile working environments, this paper designs a compact portable high-voltage DC power supply based on the ...

Output Power ExpansionMulti-RangeTwo-In-OneTable 1: Single-Output High-Voltage Programmable DC Power SuppliesThe dual range feature of the 9185 gives users the ability to select between higher current capability at a lower voltage range (up to 400V and 500mA) or higher voltage capability at a lower current range (up to 600V and 350mA). This allows more applications to be addressed by a single supply.See more on mouser IOPscience[PDF]Design of a Portable Emergency DC Power SupplyThis article introduces the method and principle of applying a microcontroller control system to a portable emergency DC power supply, and proposes a method for a portable emergency DC power ...

This paper presents the design of a portable, multiple-output, adjustable DC power supply based on synchronous Buck and Buck-Boost converter topologies. Powered by a Li-ion battery pack (two ...

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