

Remote Power Supply Remote Step-Down Module



AI Overview

Remote step-down modules are compact DC-DC converters that efficiently reduce input voltage to a regulated output while supporting remote sensing and high-current applications. Overview Remote step-down modules, also known as buck converters, are designed to convert a higher DC input voltage to a lower DC output voltage with high efficiency. They are widely used in electronics, industrial systems, and embedded applications where precise voltage regulation is required at the point-of-load. Many modules integrate features such as remote voltage sensing, current monitoring, and protection mechanisms to ensure stable and reliable operation. Key Features Remote Sensing: Modules like the TPSM8287Bxx and ISL8225M support differential remote voltage sensing, which compensates for voltage drops across PCB traces and ensures accurate voltage at the load. High Current Capability: Modules can deliver significant output currents, e.g., TPSM8287Bxx up to 30A and ISL8225M up to 30A per channel, with the ability to parallel multiple modules for higher currents. Compact Design: Many modules are low-profile and surface-mountable, saving PCB space and simplifying assembly. Integrated Components: Modern modules often include the inductor, input/output capacitors, and synchronous MOSFETs, reducing external component count and design complexity. Control and Monitoring: Some modules feature I2C interfaces for voltage adjustment, monitoring, and fault reporting, while others provide analog control and enable pins for external management. Protection Features: Overvoltage, overcurrent, and thermal shutdown protections are standard to enhance system reliability. Examples of Modules TPSM8287Bxx (Texas Instruments): Offers 2.7V–6V input, up to 30A output, $\pm 0.8\%$ voltage accuracy, and I2C control. Supports parallel operation and fast trans...

Article Content

TPS5430 Dual Buck Step Down Power Supply Module

It is a Dual Output Step Down Power Supply Module with input DC 13V~36V and output DC -12V and +12V. It can provide stable +/-12V output can maximum

Remote Power Panel | Floor

Discover efficient Remote Power Panels (RPP), Floor PDUs, Data Center PDUs, Rack PDUs, Volts, and Transformer PDUs for your power distribution needs.

Step-Down DC-DC Controller with Remote Sense

Inductor plays an important role in step-down converters because the energy from the input power rail is stored in it and then released to the load. From the viewpoint of efficiency, the dc resistance (DCR) of

Remote Sense Self Adjustable Power Supply

I been looking for an off the shelf power supply that can adjust its output voltage to compensate for losses, in my case in transmission line. Searching on DigiKey, I narrowed down my

SIMATIC ET 200SP

SIMATIC ET 200SP distinguishes itself as an advanced, high-performance I/O system for compact control cabinets. This system impresses with remarkable

Efficient Reduction: Step Down Power Supply Modules for Precise

Explore our Step Down Power Supply Modules for accurate voltage conversion. Ideal for DIY electronics, these modules offer precise control and efficient reduction of voltage levels.

Dps5015 DC 50v 15a Adjustable Step-down Regulated LCD Digital Power ...

Find many great new & used options and get the best deals for Dps5015 DC 50v 15a Adjustable Step-down Regulated LCD Digital Power Supply Modul at the best online prices at eBay! Free shipping for

LM2596S DC-DC Netzteil Adapter Step down Modul

Dank präziser Verarbeitung ist der Energieverlust beim Konvertieren geringer als 8%. Das Modul besitzt eine hohe Ausgangsleistung bis

TPSM8287Bxx 2.7V to 6V Input, 15A, 20A, 25A, and 30A, Parallelable ...

Leveraging proprietary integrated-magnetics MagPack packaging technology, these power modules deliver industry-leading power density, high efficiency, good thermal performance, ease of use, and

Maxim Integrated DC-DC Step-Down Power Module

Maxim High-Efficiency, DC-DC Step-Down Power Module with Integrated Inductor A user-friendly step-down power module that combines a switching power supply

Remote Power Systems | Cence Power

What is a remote power system? How do they work? And what options are available to supply loads with the power they need? Unfortunately, not all remote power

TPSM8287Bxx 2.7V to 6V Input, 15A, 20A, 25A, and 30A, Parallelable ...

3 Description The TPSM8287Bxx is a family of pin-to-pin, step-down, DC/DC power modules with differential remote sensing and I2C interface. The power modules use TI's MagPack technology to

A Smaller Step-down Power Module for Communications Equipment

A step-down DC/DC converter creates less heat than a linear regulator (LDO) and thus a lower temperature rise inside the base station; this is even more critical as the overall system channel and

WebProcure

WebProcure offers best-in-class functionality, reaching end-to-end from requester to procurement buyer to merchant, and all the way back! Designed specifically for the public sector.

Remote Power Panel

Remote Power Panels (RPPs) distribute power directly to the IT server racks or cabinets ensuring continuous operation in critical applications.

Step-Down DC-DC Controller with Remote Sense

For the current sensing application, the RT2702 can support the traditional DCR network current sense from inductor and further the smart power stage (SPS) which provides a current monitor (IMON).

TPSM8287Axx 2.7V to 6V Input, 6A, 10A, 12A, and 15A, Parallelable

The TPSM8287Axx is a family of pin-to-pin step-down DC/DC power modules with differential remote sensing and I2C interface. The power modules integrate a synchronous step-down converter, an

300W DC-DC Step Down Power Supply Module

Efficiently regulate your power with the 300W DC-DC Step Down Power Supply Module. This Buck Voltage Converter transforms input voltages from 3.5V-30V to

Buck (step-down) | TI

High-efficiency step-down solutions Our portfolio of high-efficiency DC/DC step-down buck switching regulators and low-dropout (LDO) linear regulators include more than 7,000 individual devices, from

Proposal of an External Remote Sensing Circuitry for

The circuitry is implemented with general-purpose electronic components and is provided as an external feature to be attached to power

ISL8225M

The ISL8225M is a fully-encapsulated step-down switching power supply that can deliver up to 100W output power from a small 17mm square PCB footprint. The

LM2596S DC-DC Netzteil Adapter Step down Modul

Der AZDelivery Step-Down Konverter dient zum stufenlosen und effizienten Regeln von Spannungen. Dank präziser Verarbeitung ist

Step-Down

Step-Down 2.75V to 6V, 3A, Ultra-Small and Ultra-Low Noise Power Module: MPM3834C Making Power Simpler Fast Design, Increased Power Density, Reduced BOM, Simple Manufacturing, Improved EMC

DC Step Down Module 9V-120V to 5V 3A Buck

Convert voltages efficiently with our DC Step Down Module. This non-isolated stabilizer is designed to convert input voltages ranging from 9V to 120V to a

DC Step Down Module Power Supply Buck Converter

Experience efficient power conversion with our DC Step Down Module. This non-isolated buck converter board smoothly transforms input voltages from 24V to

Step-Down Power Module | mEZ Plug & Play

Step-Down 2.75V to 6V, 3A, Ultra-Small and Ultra-Low Noise Power Module: MPM3834C Making Power Simpler Fast Design, Increased Power Density, Reduced BOM, Simple Manufacturing, Improved EMC

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