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LMR24220 5-Watt Multi-Rail Power Supply Reference Board

(ACTIVE) LMR24220RB

Description & Features

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Description

The LMR24220 Multi-Rail reference board implements an extremely compact solution. It is designed to convert from 12V or 24V rails down to typical point-of-load voltages of 3.3V, 1.8V and 1.2V. This design utilizes an LMR24220 Nano Regulator and two LMZ10501 Nano Modules to demonstrate a complete solution for space constrained multi-rail applications. The LMR24220 Nano Regulator is ideal for intermediate rail conversions and can withstand input voltages up to 42V. It uses a constant on-time (COT) with emulated ripple mode architecture that requires no loop compensation and allows the use of low ESR ceramic capacitors. To further reduce conducted noise on the input supply a pi filter has been implemented on the LMR24220. The LMZ10501 Nano Module is ideal at the point-of-load and uses a current mode architecture combined with an integrated inductor for high efficiency, low noise, and low EMI. The complete solution size is 20.32 mm x 13.34 mm x 2 mm with all components placed on a single side. The board can be plugged into a standard 8-pin header with 100 mil spacing and total thickness less than 100 mils for ease of prototyping.



Features

- 5V to 32V Input Voltage Range
- 3.3V / 1.8V / 1.2V Output Voltage Rails
- Up to 1000 mA Output Current Per Rail
- Small Solution Size (20.32 mm x 13.34 mm x 2 mm)
- No External Compensation Require

Contents:

- LMR24220RB Reference Board
- AN-2193 LMR24220 Multi-Rail Reference Board Application Note

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Part Number	Buy from Texas Instruments or Third Party	Buy from Authorized Distributor	Status	Lead-Free	RoHS
LMR24220RB/NOPB: LMR24220 5-Watt Multi-Rail Power Supply Reference Board	\$25.00(USD) In Stock Typically Ships in 1 to 3 Business Days Buy from TI	Pricing may vary. Buy from distributor	ACTIVE	Yes	Yes

Contact a Distributor

TI's Standard Terms and Conditions for Evaluation Modules apply.

Technical Documents

User Guides (1)

Title	Abstract	Type	Size (KB)	Date	Views
AN-2193 LMR24220 Multi-Rail Reference Board (Rev. A)	Read Abstract	PDF	301	24 Apr 2013	98

Related Products

TI Devices (2)

Part Number	Name	Product Family
LMR24220	SIMPLE SWITCHER® 42Vin, 2.0A Step-Down Voltage Regulator in micro SMD	Converter (Integrated Switch)
LMZ10501	1A SIMPLE SWITCHER Nano Module with 5.5V Maximum Input Voltage	Non-Isolated Module

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