

RSM3517 High-Efficiency 600W Isolated 12V Bus Converter with PMBus

Features

High-Efficiency Power Conversion

- 36V to 75V input range
- Regulated 12V output with $\pm 10\%$ trim capability via the TRIM pin
- Up to 600W continuous output power
- Up to 95% peak efficiency

Digital Monitoring & Control

- PMBus telemetry and configuration
- Input/output voltage monitoring
- Output current and temperature monitoring
- Fault reporting and diagnostics

Integrated Protection

- Overvoltage protection
- Overcurrent protection
- Overtemperature protection
- Positive enable control

Package & Manufacturing

- Industry-standard Eighth-Brick form factor
- 58.4mm \times 22.8mm \times 12.7mm package
- Select models support wave and reflow soldering
- MSL3 rated

Applications

- Artificial Intelligence Systems
- Data Center
- Networking Systems
-

Typical Application Circuit

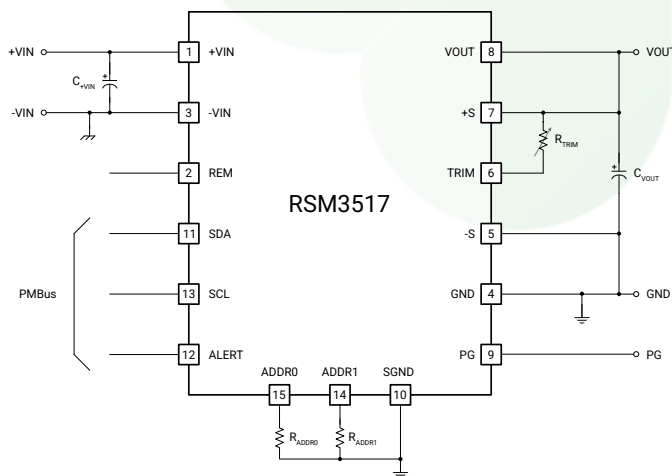


Figure 1. Typical Application Circuit

Description

The RSM3517 is a high-efficiency, isolated 600W DC/DC intermediate bus converter designed for AI servers, datacenter infrastructure, networking equipment, and distributed power systems. Operating from a 36V to 75V input, the module provides a regulated 12V output with up to 95% peak efficiency.

The output voltage can be adjusted from -20% to +10% through PMBus configuration. Integrated PMBus telemetry enables monitoring of input voltage, output voltage, output current, temperature, and fault conditions while supporting remote configuration and diagnostics.

The RSM3517 is available in an industry-standard Eighth-Brick package with options offered both with and without an integrated heatsink plate (HSP). Selected models support reflow soldering, providing flexibility for different thermal and manufacturing requirements. Comprehensive protection features help ensure reliable operation in demanding applications.

Recommended Part Numbers

Model Name	HSP	Pin Configuration
RSM3517NSHPN	•	15-pin Version, positive REM logic, reflow not supported
RSM3517SDHNR	•	No remote sense or trim pins, negative REM logic, reflow supported
RSM3517NDONR		No remote sense or trim pins, negative REM logic, reflow supported

Efficiency Plot

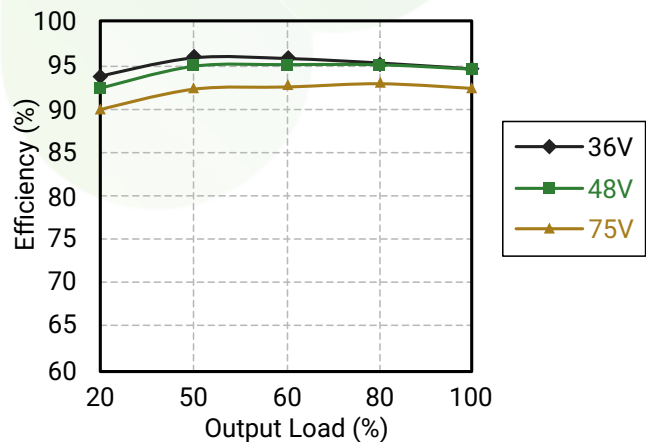


Figure 2. Typical Efficiency vs. Output Load