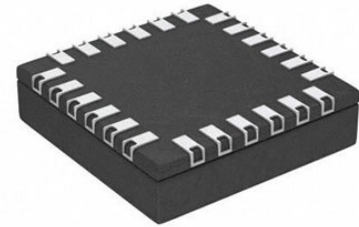


Conv DC-DC 4.5V to 20V Synchronous Step Down Single-Out 0.6V to 18V 6A 24-Pin LFCSP EP T/R

Manufacturers	Analog Devices, Inc
Package/Case	24-WFQFN, CSP
Product Type	Power Management ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADP2387ACPZN-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADP2387 is a synchronous step-down, dc-to-dc regulator with an integrated 44 mΩ, high-side power, metal oxide semiconductor field effect transistor (MOSFET) and an 11 mΩ, synchronous rectifier MOSFET to provide a high efficiency solution in a compact 4 mm × 4 mm LFCSP. This device uses a peak current mode, constant frequency pulse-width modulation (PWM) control scheme for excellent stability and transient response. The switching frequency of the ADP2387 can be programmed between 200 kHz to 1400 kHz.

The ADP2387 requires minimal external components and operates from an input voltage of 4.5 V to 20 V. The output voltage can be adjusted from 0.6 V to 90% of the input voltage and delivers up to 6 A of continuous current. Each IC draws less than 110 μA current from the input source when it is disabled.

This regulator targets high performance applications that require high efficiency and design flexibility. External compensation and an adjustable soft start function provide design flexibility. The power-good output and precision enable input provide simple and reliable power sequencing. The programmable current-limit function allows the inductor to be optimized by output current.

Other key features include undervoltage lockout (UVLO), overvoltage protection (OVP), overcurrent protection (OCP), short-circuit protection (SCP), and thermal shutdown (TSD).

The ADP2387 operates over the -40°C to +125°C junction temperature range and is available in a 24-lead, 4 mm × 4 mm LFCSP.

Features

Input voltage range: 4.5 V to 20 V

Integrated MOSFET: 44 m Ω typical/11 m Ω typical

Reference voltage: 0.6 V \pm 1%

Continuous output current: 6 A

Programmable current-limit threshold

Programmable switching frequency: 200 kHz to 1400 kHz

Precision enable and power good

External compensation

Internal soft start with external adjustable option

Startup into a precharged output

Supported by design tool

Application

Communications infrastructure

Networking and servers

Industrial and instrumentation

Healthcare and medical

Intermediate power rail conversion

DC-to-dc point of load applications

Related Products



[ADP3336ARMZ-REEL7](#)

Analog Devices, Inc
MSOP-8



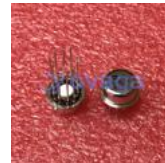
[AD737JRZ](#)

Analog Devices, Inc
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[ADP3367ARZ](#)

Analog Devices, Inc
SOIC-8



[AD636JH](#)

Analog Devices, Inc
TO-100-10



[ADP3330ARTZ3.3-RL7](#)

Analog Devices, Inc
SOT-23-6



[ADR434BRZ](#)

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[ADR421ARZ](#)

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[ADR3412ARJZ-R7](#)

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SOT-23-6