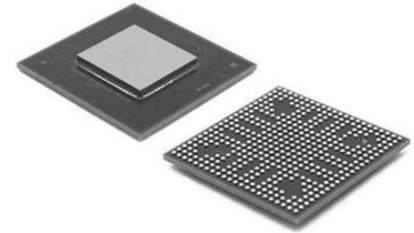


DC-DC CONVERTER, BUCK, 1.4MHZ, Topology:Synchronous Buck (Step Down), Input Voltage Min:4.5V, Input Voltage Max:20V, No. of Outputs:1Outputs, Output Current:4A, Output

Manufacturers	Analog Devices, Inc
Package/Case	LFCSP-24
Product Type	Power Management ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for ADP2384ACPZN-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADP2384 is a synchronous step-down, dc-to-dc regulator with an integrated 44 mΩ, high-side power MOSFET and an 11.6 mΩ, synchronous rectifier MOSFET to provide a high efficiency solution in a compact 4 mm × 4 mm LFCSP package. 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 ADP2384 can be programmed between 200 kHz to 1.4 MHz. To minimize system noise, the synchronization function allows the switching frequency to be synchronized to an external clock.

The ADP2384 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 4 A of continuous current. Each IC draws less than 100 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.

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

The ADP2384 operates over the -40°C to +125°C junction temperature range and is available in a 24-lead, 4 mm × 4 mm LFCSP package.

Features

Input voltage: 4.5 V to 20 V

Integrated MOSFET: 44 mΩ/11.6 mΩ

Reference voltage: 0.6 V ± 1%

Continuous output current: 4 A

Programmable switching frequency: 200 kHz to 1.4 MHz

Synchronizes to external clock: 200 kHz to 1.4 MHz

180° out of phase clock synchronization

Precision enable and power good

External compensation

Internal soft start with external adjustable option

Startup into a precharged output

Supported by ADIsimPower 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



[ADP3367ARZ](#)

Analog Devices, Inc
SOIC-8



[ADP3330ARTZ3.3-RL7](#)

Analog Devices, Inc
SOT-23-6



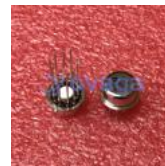
[ADR421ARZ](#)

Analog Devices, Inc
SOP-8



[AD737JRZ](#)

Analog Devices, Inc
SOP-8



[AD636JH](#)

Analog Devices, Inc
TO-100-10



[ADR434BRZ](#)

Analog Devices, Inc
SOIC-8



[ADR3412ARJZ-R7](#)

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