

ADP5023ACPZ-R7

Buck Regulator with LDO 2.3V to 5.5V 24-Pin LFCSP EP T/R

Manufacturer: <u>Analog Devices, Inc</u>

Package/Case: LFCSP-24

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only



General Description

The ADP5023 combines two high performance buck regulators and one low dropout (LDO) regulator in a small, 24-lead 4 mm \times 4 mm LFCSP to meet demanding performance and board space requirements.

The high switching frequency of the buck regulators enables tiny multilayer external components and minimizes the board space. When the MODE pin is set high, the buck regulators operate in forced PWM mode. When the MODE pin is set low, the buck regulators operate in PWM mode when the load current is above a predefined threshold. When the load current falls below a predefined threshold, the regulator operates in power save mode (PSM) improving the light-load efficiency.

The two bucks operate out of phase to reduce the input capacitor requirement. The low quiescent current, low dropout voltage, and wide input voltage range of the ADP5023 LDO extends the battery life of portable devices. The ADP5023 LDO maintains power supply rejection greater than 60 dB for frequencies as high as 10 kHz while operating with a low headroom voltage.

Regulators in the ADP5023 are activated though dedicated enable pins. The default output voltages can be externally set in the adjustable version or factory programmable to a wide range of preset values in the fixed voltage version.

Key Features	Application

±1.8% Regulator accuracy

Factory programmable or external adjustable VOUTx

Power for processors, ASIC, FPGAs, and RF chipsets

Portable instrumentation and medical devices

Space constrained devices



Recommended For You

ADP196ACPZN-R7

Analog Devices, Inc

LFCSP-6

AD1583BRTZ-REEL7

Analog Devices, Inc

SOT-23

AD581KH

Analog Devices, Inc

CAN3

ADM660ARZ

Analog Devices, Inc

SOP8

ADR444BRZ

Analog Devices, Inc

SOP8

ADP191ACBZ-R7

Analog Devices, Inc

WLCSP4

ADL5315ACPZ-R7

Analog Devices, Inc

LFCSP8

AD780BRZ

Analog Devices, Inc

SOP8

ADM660ARZ-REEL7

Analog Devices, Inc

SOP8

AD589JH

Analog Devices, Inc

CAN

AD581LH

Analog Devices, Inc

CAN3

ADR01TUJZ-EP-R7

Analog Devices, Inc

5-LeadTSOT

AD580SH

Analog Devices, Inc

CAN3

ADP1612ARMZ-R7

Analog Devices, Inc

MSOP8

AD1582ARTZ-REEL7

Analog Devices, Inc

SOT-23