

Conv DC-DC 2.15V to 6.5V Synchronous Step Down Single-Out 1.2V to 3.6V/0.8V to 5V  
0.05A/0.5A 9-Pin WLCSP T/R

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	9-WFBGA, WLCSP
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ADP5301ACBZ-3-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The ADP5301 is a high efficiency, ultralow quiescent current step-down regulator that draws only a 180 nA quiescent current to regulate the output at no load.

The ADP5301 runs from an input startup voltage range of 2.15 V to 6.50 V, allowing the use of multiple alkaline/NiMH, Li-Ion cells, or other power sources. The output voltage is selectable from 0.8 V to 5.0 V by an external VID resistor and factory fuse. The total solution requires only four tiny external components.

The ADP5301 can operate between hysteresis mode and PWM mode via the SYNC/MODE pin. The regulator in hysteresis mode achieves excellent efficiency at a power of less than 1 mW and provides up to 50 mA of output current. The regulator in PWM mode produces a lower output ripple and supplies up to 500 mA of output current. The flexible configuration capability during operation of the device enables very efficient power management to meet both the longest battery life and low system noise requirements.

The ADP5301 contains a VOUTOK flag, which monitors the output voltage and runs at a 2 MHz switching frequency in PWM mode. SYNC/MODE can synchronize to an external clock from 1.5 MHz to 2.5 MHz.

Other key features in the ADP5301 include separate enabling, quick output discharge (QOD), and safety features such as overcurrent protection (OCP), thermal shutdown (TSD), and input undervoltage lockout (UVLO).

The ADP5301 is available in a 9-ball, 1.65 mm × 1.87 mm WLCSP rated for a -40°C to +125°C junction temperature range.

## Features

Input start-up voltage range: 2.15 V to 6.50 V

Operates down to 2.00 V voltage

Ultralow 180 nA quiescent current with no load

Selectable output voltage of 1.2 V to 3.6V or 0.8V to 5.0V

Selectable hysteresis mode or PWM operation mode

Output current

Up to 50 mA in hysteresis mode

Up to 500 mA in PWM mode

VOUTOK flag monitors the output voltage

100% duty cycle operation mode

2 MHz switching frequency with optional synchronization input from 1.5 MHz to 2.5 MHz

QOD option

UVLO, OCP, and TSD protection

9-ball, 1.65 mm × 1.87 mm WLCSP

## Application

Energy (gas and water) metering

Portable and battery-powered equipment

Medical applications

Keep-alive power supplies

## Related Products



### [ADP3336ARMZ-REEL7](#)

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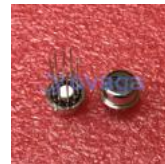
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