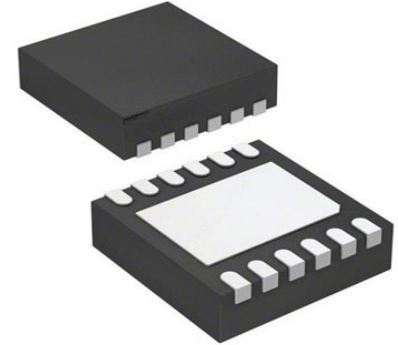


Conv DC-DC 2.15V to 6.5V Synchronous Step Down Single-Out 0.8V to 5V 0.5A 10-Pin LFCSP EP T/R

| | |
|---------------|-------------------------------------|
| Manufacturers | Analog Devices, Inc |
| Package/Case | 10-WDFN, CSP |
| Product Type | Power Management ICs |
| RoHS | |
| Lifecycle | |



Images are for reference only

Please submit RFQ for ADP5300ACPZ-2-R7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADP5300 is a high efficiency, ultralow quiescent current step-down regulator that draws only 180 nA quiescent current to regulate the output at no load.

The ADP5300 runs from an input supply voltage range of 2.15 V to 6.50 V, allowing the use of multiple alkaline or 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 ADP5300 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 ADP5300 contains a VOUTOK flag, which monitors the output voltage and runs at a 2 MHz switching frequency in PWM mode. SYNC/MODE can be synchronized to an external clock from 1.5 MHz to 2.5 MHz.

The ADP5300 includes an STOP pin that can disable the regulator switching temporarily, in this way a quiet system environment can be achieved to benefit noise sensitive circuitry, such as data conversion, RF data transmit, and analog sensors.

Other key features in the ADP5300 include separate enabling, QOD, and safety features such as overcurrent protection (OCP), thermal shutdown (TSD), and input undervoltage lockout (UVLO).

The ADP5300 is available in 10-lead, 3 mm × 3 mm LFCSP rated for -40°C to +125°C junction temperature range.

Multifunction pin names may be referenced by their relevant function only.

Features

Input supply voltage range: 2.15 V to 6.50 V

Operates down to 2.00 V voltage

Ultralow 180 nA quiescent current

Selectable output voltage of 0.8 V 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

Ultrafast stop switching control

100% duty cycle operation mode

2.0 MHz typical switching frequency in PWM mode with optional SYNC clock range from 1.5 MHz to 2.5 MHz

See data sheet for additional features

Application

Energy (gas and water) metering

Portable and battery-powered equipment

Medical applications

Keep-alive power supplies

Related Products



[ADP3336ARMZ-REEL7](#)

Analog Devices, Inc
MSOP-8



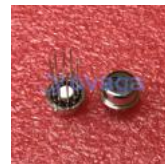
[AD737JRZ](#)

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SOIC-8



[AD636JH](#)

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