

ADP5032: 2 buck regulators, 2 LDO regulators in a WLCSP

Product Status: Recommended for New Designs

The ADP5032 combines two high performance buck regulators, two low dropout (LDO) regulators in a tiny 16-ball, 2 mm x 2 mm WLCSP to meet demanding performance and board space requirements.

The high switching frequency of the buck regulators enables the use of tiny multilayer external components and minimizes board space. When the MODE pin is set to high, the buck regulators operate in [...More](#)

- | | |
|--|--|
| <ul style="list-style-type: none"> ▪ Technical Documentation ▪ Tools, Software & Simulation Models ▪ Quality and Reliability Information | <ul style="list-style-type: none"> ▪ Training, Tutorials & Seminars ▪ Lead(Pb)-Free Data |
|--|--|

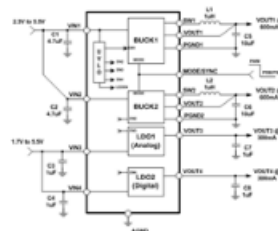
Power Solutions

 [Budgetary Price & Packaging](#) | [Samples](#) | [Check Inventory & Purchase](#)

FEATURES

- Main input supply voltage range: 2.3 V to 5.5 V
- 2 buck regulators at 600 mA each
- 2 LDOs at 300 mA each
- Tiny 16-ball, 2 mm × 2 mm WLCSP package
- Thermal protection
- Overcurrent protection on all channels
- Soft start on all channels
- Undervoltage lockout
- Current-mode architecture for excellent transient response
- 3 MHz operating frequency
- Uses tiny multilayer inductors and capacitors
- Forced PWM and automatic PWM/PSM modes
- Out-of-phase operation for reduced input filtering
- LDO low input supply voltage from 1.7 V to 5.5 V
- LDO1: 54 dB PSRR, 1 kHz to 10 kHz, at VOUT3 = 2.8 V; LDO2: 54 dB PSRR, 1 kHz to 10 kHz at VOUT4 = 1.2 V
- Low output noise: LDO1 100 μ V rms typical output noise at VOUT3 = 2.8 V; LDO2 60 μ V rms

ADP5032 FUNCTIONAL BLOCK DIAGRAM



[Symbols and Footprints](#)
[Download All SPICE Models \(zip\)](#)

 Enlarge

typical output noise at
VOUT4 = 1.2 V

Low dropout voltage:
75 mV typical at 300
mA load

POWER
SOLUTIONS

Enter values and click on **ADIsimPower** to find power management solutions.

Available System Voltage

Vin (min) V

Vin (max) V

Operating Voltage Rail

Vout V

Load Current

Iout A



[BUDGETARY PRICE & PACKAGING](#) | [SAMPLES](#) | [CHECK INVENTORY & PURCHASE](#)

ADP5032 Model Options

[Print Table](#)

Model	Package	Pins	Temp. Range	Packing, Qty	Price* (100-499)	Price* 1000 pcs	RoHS	View PCN / PDN	Check Inventory/ Purchase/ Sample
ADP5032ACBZ-1-R7 Status: Production	CHIPS W/ SOLDER BUMPS/ WLSCP	16	Ind	Reel, 3000	- Y	Material Info		PCN	Purchase Sample
ADP5032ACBZ-2-R7 Status: Pre-Release	CHIPS W/ SOLDER BUMPS/ WLSCP	16	Ind	Reel	-	-	Y Material Info	PCN	Contact ADI

*The USA list pricing shown is for BUDGETARY USE ONLY, shown in United States dollars (FOB USA per unit for the stated volume), and is subject to change. International prices may differ due to local duties, taxes, fees and exchange rates. For volume-specific price or delivery quotes, please contact your local Analog Devices, Inc. sales office or authorized distributor. Pricing displayed for Evaluation Boards and Kits is based on 1-piece pricing.

[BACK TO TOP](#)

[» View Sales and Distribution Offices](#)