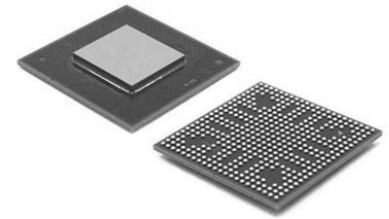



Buck Regulator with LDO 4.5V to 15.5V 48-Pin LFCSP EP T/R



Images are for reference only

[Inquiry](#)

| | |
|----------------------|--|
| Manufacturer: | Analog Devices, Inc |
| Package/Case: | LFCSP48 |
| Product Type: | Power Management ICs |
| RoHS: | RoHS Compliant/Lead free  |
| Lifecycle: | Active |

General Description

The ADP5052 combines four high performance buck regulators and one 200 mA low dropout (LDO) regulator in a 48-lead LFCSP package that meets demanding performance and board space requirements. The device enables direct connection to high input voltages up to 15 V with no preregulators. Channel 1 and Channel 2 integrate high-side power MOSFETs and low-side MOSFET drivers. External NFETs can be used in low-side power devices to achieve an efficiency optimized solution and deliver a programmable output current of 1.2 A, 2.5 A, or 4 A. Combining Channel 1 and Channel 2 in a parallel configuration can provide a single output with up to 8 A of current. Channel 3 and Channel 4 integrate both high-side and low-side MOSFETs to deliver output current of 1.2 A. The switching frequency of the ADP5052 can be programmed or synchronized to an external clock. The ADP5052 contains a precision enable pin on each channel for easy power-up sequencing or adjustable UVLO threshold. The ADP5052 integrates a general-purpose LDO regulator with low quiescent current and low dropout voltage that provides up to 200 mA of output current.

Key Features

- Wide input voltage range (4.5 to 15V)
- ±1.5% Output accuracy over full temperature range
- 250kHz to 1.4MHz Adjustable switching frequency
- Adjustable/fixed output options via factory fuse
- Power regulation
- Single 8A output (channel 1 and channel 2 operated in parallel)
- Precision enable with 0.8V accurate threshold
- Active output discharge switch
- FPWM or automatic PWM/PSM mode selection
- Frequency synchronization input or output
- Power-good flag on selected channels
- UVLO, OCP and TSD protection

Application

- Small cell base stations
- FPGA and processor applications
- Security and surveillance
- Medical applications

Recommended For You

ADP196ACPZN-R7

Analog Devices, Inc
LFCSP-6

ADP191ACBZ-R7

Analog Devices, Inc
WLCSP4

AD581LH

Analog Devices, Inc
CAN3

AD1583BRTZ-REEL7

Analog Devices, Inc
SOT-23

ADL5315ACPZ-R7

Analog Devices, Inc
LFCSP8

ADP5023ACPZ-R7

Analog Devices, Inc
LFCSP-24

ADR01TUJZ-EP-R7

Analog Devices, Inc
5-LeadTSOT

AD581KH

Analog Devices, Inc
CAN3

AD780BRZ

Analog Devices, Inc
SOP8

AD580SH

Analog Devices, Inc
CAN3

ADM660ARZ

Analog Devices, Inc
SOP8

ADM660ARZ-REEL7

Analog Devices, Inc
SOP8

ADP1612ARMZ-R7

Analog Devices, Inc
MSOP8

ADR444BRZ

Analog Devices, Inc
SOP8

AD589JH

Analog Devices, Inc
CAN