

Programmable Device Power Supply, Integrated 16 Bit Level Setting DACs , 1.2A

Manufacturers	Analog Devices, Inc
Package/Case	TQFP-64
Product Type	Specialty Amplifiers ; ATE: DPS & PMU
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD5560JSVUZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD5560 is a high performance, highly integrated device power supply consisting of programmable force voltages and measure ranges. This part includes the required DAC levels to set the programmable inputs for the drive amplifier, as well as clamping and comparator circuitry. Offset and gain correction is included on-chip for DAC functions. A number of programmable measure current ranges are available: five internal fixed ranges and two external customer-selectable ranges (EXTFORCE1 and EXTFORCE2) that can supply currents up to ± 1.2 A and ± 500 mA, respectively. The voltage range possible at this high current level is limited by headroom and the maximum power dissipation. Current ranges in excess of ± 1.2 A or at high current and high voltage combinations can be achieved by paralleling or ganging multiple DPS devices. Open-drain alarm outputs are provided in the event of overcurrent, overtemperature, or Kelvin alarm on either the SENSE or DUTGND line.

The DPS functions are controlled via a simple 3-wire serial interface compatible with SPI, QSPI™, MICROWIRE™, and DSP interface standards running at clock speeds of up to 50 MHz.

Features

Programmable device power supply (DPS)

FV, MI, MV, FNMV functions

5 internal current ranges (on-chip RSENSE)

2 external high current ranges (external RSENSE)

EXTFORCE1: ± 1.2 A maximum

EXTFORCE2: ± 500 mA maximum

Integrated programmable levels

All 16-bit DACs: force DAC, comparator DACs, clamp DACs, offset DAC, OSD DAC, DGS DAC

Programmable Kelvin clamp and alarm

Offset and gain correction registers on-chip

Ramp mode on force DAC for power supply slewing

Programmable slew rate feature, 1 V/ μ s to 0.3 V/ μ s

DUTGND Kelvin sense and alarm

25 V FV span with asymmetrical operation within -22 V/ $+25$ V

On-chip comparators

Gangable for higher current

Guard amplifier

System PMU connections

Current clamps

Die temperature sensor and shutdown feature

On-chip diode thermal array

Diagnostic register allows access to internal nodes

Open-drain alarm flags (temperature, current clamp, Kelvin alarm)

SPI-/MICROWIRE-/DSP-compatible interface

64-lead (10 mm \times 10 mm) TQFP with exposed pad (on top)

72-ball (8 mm \times 8 mm) flip-chip BGA

Application

Automatic test equipment (ATE)

Device power supply

Related Products



[ADF4350BCPZ](#)
Analog Devices, Inc
LFCSP-32



[AD9516-4BCPZ](#)
Analog Devices, Inc
LFCSP64



[ADF4111BRUZ](#)
Analog Devices, Inc
TSSOP-16



[ADF4113BRUZ](#)
Analog Devices, Inc
TSSOP-16



[ADF4116BRUZ](#)
Analog Devices, Inc
TSSOP-16



[ADF4110BRUZ](#)
Analog Devices, Inc
TSSOP-16



[ADF4193BCPZ](#)
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LFCSP-32



[AD2S99BPZ](#)
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PLCC-20