

LTC1595ACS8#PBF

Data Sheet

DAC 1-CH R-2R 16-bit 8-Pin SOIC N Tube

Manufacturers Analog Devices, Inc

Package/Case SOIC-8

Product Type Data Conversion ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC1595ACS8#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC1595/LTC1596/LTC1596-1 are serial input, 16-bit multiplying current output DACs. The LTC1595 is pin and hardware compatible with the 12-bit DAC8043 and comes in 8-pin PDIP and SO packages. The LTC1596 is pin and hardware compatible with the 12-bit DAC8143/AD7543 and comes in the 16-pin SO wide package.

Both are specified over the industrial temperature range. Sensitivity of INL to op amp V_{OS} is reduced by five times compared to the industry standard 12-bit DACs, so most systems can be easily upgraded to true 16-bit resolution and linearity without requiring more precise op amps.

These DACs include an internal deglitching circuit that reduces the glitch impulse by more than ten times to less than 1nV-s typ.

The DACs have a clear input and a power-on reset. The LTC1595 and LTC1596 reset to zero-scale. The LTC1596-1 is a version of the LTC1596 that resets to mid-scale.

Applications

Features

SO-8 Package (LTC1595)

DNL and INL: 1LSB Max

Low Glitch Impulse: 1nV-s Typ

Fast Settling to 1LSB: 2µs (with LT1468)

Pin Compatible with Industry Standard 12-Bit DACs:

DAC8043

4-Quadrant Multiplication

Low Supply Current: 10µA Max

Power-On Reset

LTC1595/LTC1596: Resets to Zero Scale

LTC1596-1: Resets to Midscale

3-Wire SPI and MICROWIRE

Daisy-Chain Serial Output (LTC1596)

Asynchronous Clear Input

LTC1596: Clears to Zero Scale

LTC1596-1: Clears to Midscale

DAC8043

LTC1595/LTC1596: Resets to Zero Scale

LTC1596-1: Resets to Midscale

LTC1596: Clears to Zero Scale

LTC1596-1: Clears to Midscale

Application

Process Control and Industrial Automation

Software Controlled Gain Adjustment

Digitally Controlled Filter and Power Supplies

Automatic Test Equipment



Related Products



LTC1860IMS8#PBF

Analog Devices, Inc MSOP-8



LT1171CQ

Analog Devices, Inc TO-263



LTC2485IDD#PBF

Analog Devices, Inc DFN-10



LTC2418IGN#PBF

Analog Devices, Inc SSOP28



LTC2351IUH-14#PBF

Analog Devices, Inc QFN-32



LTC2600CGN#PBF

Analog Devices, Inc SSOP16



LTC2642CMS-16#PBF

Analog Devices, Inc 10MSOP



LTC1865AIMS#PBF

Analog Devices, Inc MSOP-1