MAX5110

9-Channel, 14-Bit Current DAC with SPI Interface

Industry's First Multichannel Current-Output DAC Optimized to Bias Fiber Optic Tunable Laser Sources

Status

Active: Data sheet on request only

Data Sheet

Request Full Data Sheet
Custom Order

Description

The MAX5110 is a 14-bit, 9-channel, current output digital-to-analog converter (DAC). The device operates from a low +3.0V power supply and provides 14-bit performance without any adjustment.

The device's output ranges are optimized to bias a high-power tunable laser source. Each of the 9 channels provides a current source. Connect DAC outputs in parallel to obtain additional current or to achieve higher resolution. The MAX5110 contains an internal reference.

An SPI™ interface drives the device with clock rates up to 25MHz. An active-high asynchronous CLR input resets DAC codes to zero independent of the serial interface. The device provides a separate power-supply input for driving the interface logic.

The MAX5110 is specified over a temperature range of -40°C to +105°C and are available in 3mm x 3mm 36-WLP and 5mm x 5mm 32-TQFN packages.

An evaluation board is available: MAX5110EVKIT

Key Features

- Low 3.0V Supply
- Integrated Multiplexers for Outputs 1 and 2
- Increased Current or Resolution with Outputs Connected in Parallel
- SPI-Compatible Serial Interface
- Internal Reference
- Overtemperature Protection
- Operates Over the -40°C to +105°C Temperature Range
- Available in 36-Bump WLP or 32-Pin TQFN Packages

Applications/Uses

- Tunable Laser Diode Biasing

Technical Documents

App Note 4862 Reserved or "Don't Care" Bit Programming in the MAX5110/MAX5111 Multichannel DACs

Product Guides

Signal Chain (PDF)

Reliability Reports

Reliability Report: MAX5110.pdf

Ordering Information

Part Number	Free Sample	Buy	Status	Package: TYPE PINS FOOTPRINT DRAWING CODE/VAR *	Temp	RoHS/Lead-Free? Materials Analysis
MAX5110GTJ+	Sample	Buy	Active: Data sheet on request only	TQFN;32 pin;26 mm² Package Details	-40°C to +105°C	RoHS/Lead-Free: Lead Free Materials Analysis
MAX5110GTJ+G074		Buy	Active: Data sheet on request only	QFN; Package Details	-40°C to +105°C	See data sheet
MAX5110GTJ+T		Buy	Active: Data sheet on request only	TQFN;32 pin;26 mm² Package Details	-40°C to +105°C	RoHS/Lead-Free: Lead Free Materials Analysis
MAX5110GTJ+TG074		Buy	Active: Data sheet on request only	TQFN;32 pin;26 mm² Package Details	-40°C to +105°C	RoHS/Lead-Free: Lead Free Materials Analysis
MAX5110GWX+	Sample	Buy	Active: Data sheet on request only	WLP;36 pin;10.1 mm² Package Details	-40°C to +105°C	RoHS/Lead-Free: Lead Free Materials Analysis
MAX5110GWX+T		Buy	Active: Data sheet on request only	WLP;36 pin;10.1 mm² Package Details	-40°C to +105°C	RoHS/Lead-Free: Lead Free Materials Analysis
MAX5110GWX+TG074		Buy	Active: Data sheet on request only	WLP;36 pin;10.1 mm² Package Details	-40°C to +105°C	RoHS/Lead-Free: Lead Free Materials Analysis

Notes:

1. Other options and links for purchasing parts are listed at: http://www.maximintegrated.com/sales.
2. Didn't Find What You Need? Ask our applications engineers. Expert assistance in finding parts, usually within one business day.
3. Part number suffixes: T or T&R = tape and reel; + = RoHS/lead-free; # = RoHS/lead-exempt; -D = drypack; -U/+U on DS parts = cut tape. More: See Full Data Sheet or Maxim Product Naming Conventions.
4. * Some packages have variations, listed on the drawing. "PkgCode/Variation" tells which variation the product uses. Note that "+", "#", "-" in the part number suffix describes RoHS status. Package drawings may show a different suffix character.

Similar Products by Function

MAX5111 9-Channel, 14-Bit, Current DAC with I²C Interface

Evaluation Kits

MAX5110EVKIT Evaluation Kit for the MAX5110

Products with Similar Part Numbers

MAX5110EVKIT Evaluation Kit for the MAX5110

Didn't Find What You Need?

- Next Day Product Selection Assistance from Applications Engineers
- Parametric Search
- Applications Help

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