

ADVANCE INFORMATION

All information in this data sheet is preliminary and subject to change.

10/96

MAXIM

High-Speed (165MSPS/275MSPS), 8-Bit DAC

MAX5018

General Description

The MAX5018 is a monolithic, 8-bit digital-to-analog converter (DAC) capable of accepting video data at a 165MSPS or 275MSPS rate. Complete with video controls—Sync, Blank, Bright, Reference White (force high)—the MAX5018 directly drives doubly terminated 50Ω or 75Ω loads to standard composite video levels. The standard set-up level is 7.5 IRE.

The MAX5018 is pin compatible with the HDAC10180 and TDC1018, with improved performance. It contains data and control input registers, video control logic, a reference buffer, and current switches. This device is available in a 24-pin DIP package in the industrial temperature range.

Applications

High-Resolution Color or Monochrome Raster Graphics Displays

Medical Electronics: CAT, PET, MR Imaging Displays

CAD/CAE Workstations

Solids Modeling

General-Purpose High-Speed D/A Conversion

Digital Synthesizers

Automated Test Equipment

Digital Transmitters/Modulators

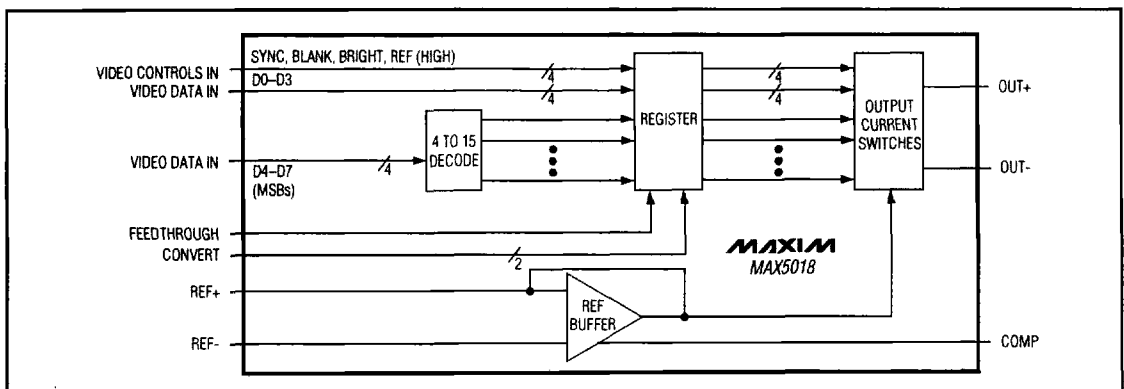
Features

- ◆ 275MSPS Conversion Rate (MAX5018A)
- ◆ 165MSPS Conversion Rate (MAX5018B)
- ◆ Compatible Upgrade to HDAC10180 and TDC1018
- ◆ RS-343-A Compatible
- ◆ Complete Video Controls: Sync, Blank, Bright, and Reference White (force high)
- ◆ 10kHz, 100k ECL Compatible
- ◆ Single Power Supply
- ◆ Registered Data and Video Controls
- ◆ Differential Current Outputs
- ◆ ESD-Protected Data and Control Inputs

Ordering Information

PART	TEMP. RANGE	PIN-PACKAGE
MAX5018AIPG	-20°C to +85°C	24 Wide Plastic DIP
MAX5018BIPB	-20°C to +85°C	24 Wide Plastic DIP

Functional Diagram



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Pin Configuration

