ADVANCEINFORMATION

First Page of Data Sheet in Preparation



Voltage Output, 12-Bit Multiplying DAC

General Description

The MAX501/MAX502 are 12-bit, 4-quadrant, votlageoutput, multiplying digital-to-analog converters (DACs) with an output amplifier. Thin-film resistors, lasertrimmed at the wafer level, maintain accuracy over the full operating temperature range.

The MAX501/MAX502 has buffered latches that are easily interfaced with microprocessors. Data is transferred into the input register from a right-justified 8+4-bit format (MAX501) or a 12-bit wide data path (MAX502). For the MAX501, an \$\overline{LDAC}\$ signal transfers data from the input register to the DAC register. For the MAX502, the input registers are controlled by standard \$\overline{CHIP}\$ SELECT (\$\overline{CS}\$), \$\overline{WRITE}\$ (\$\overline{WR}\$) signals. For stand-alone operation, the \$\overline{CS}\$ and \$\overline{WR}\$ inputs are grounded making all latches transparent. All logic inputs are level-triggered and compatible with TTL and +5V CMOS logic levels.

The internally compensated, low input offset-voltage output amplifier provides an output voltage from +10V to -10V while sourcing and sinking up to 5mA.

Applications

Attenuators

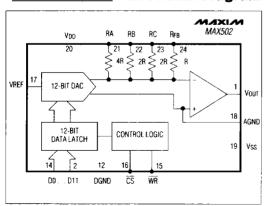
Programmable-Gain Amplifiers

Servo Controls

Digital-to-4-20mA Converters

Automatic Test Equipment

Functional Diagram



♦ 12-Bit Voltage Output DAC

- ♦ Monotonic Over Temperature
- Four Range-Scaling Resistors
- Available in Commercial, Extended & Military Temperature Ranges
- ♦ 24-Pin DIP & Wide SO Packages

Pin Configurations

Features

