



DESCRIPTION

The AA88349 is a CMOS processed digital to analog converter (DAC) with 8-bit resolution, low leakage and operating current. The AA88349 has 3 channels with build in operational amplifier output buffers which could operate in the full-swing voltage range from VCC to GND and enhance the Drive/Sink ability up to max. 1mA. Digital data (DI) input serially in a max. 2.5MHz clock (CLK) rate. The latched 12-bit digital data is converted into an analog DC voltage in the range from GND to VCC with 8-bit resolution in one of the 3 channels by the D/A converter in a max. 100µs setting time. AA88349 is a single 5V power DAC. Analog DC output could be full voltage swing as the analog power is equal to the system power. In addition to normal D/A converter applications, AA88349 is also available for electronic volume and instead of potentiometers for adjustment due to its high stability on the capacitive load. 8 pins TSSOP package type are available for AA88349. Its operational temperature range is specified over -20°C to 85°C.

FEATURES

- 12 bits serial data input (3 wire serial data transfer method, DI, CLK, LD)
- R-2R resistor ladder used for D/A conversion
- 3 channels with 8-bit resolution monotonic D/A converter
- 3 channels buffer operational amplifiers operating in the full voltage range from VCC to GND
- Max. 2.5 MHz serial digital data input
- Serial I/O for cascade application
- Max. 1.0 mA output drive/sink current
- Single +5 V system power supply

APPLICATION

- DVD, CD-R, CD-RW, DVC, digital camera, and other industrial equipments

BLOCK DIAGRAM

