AA88368

10-BIT DAC

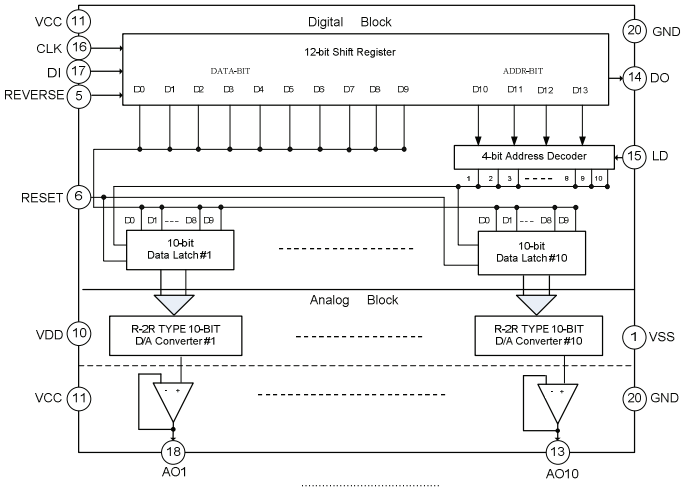
■ DESCRIPTION

The AA88368 is a 10-bit resolution digital to analog converter (DAC), designed for interface with 10 bits micro-controller. The AA88368 has 10 channels with operational amplifier output buffers. Digital data are input serially in max. 10MHz by individual channel units. The latched digital data are converted into analog DC voltages by the D/A converter in 20μs settling time. AA88368 is a single 5V power DAC. Output could be full swing as the analog power is equal to the system power. The AA88368 has 10 operational amplifier output buffers for each one of 10 channels. These operational amplifier output buffers are used to provide high current drive/sink capability. The AA88368 is suitable for electronic volumes and replacement for potentiometers for adjustment, in addition to normal D/A converter applications. AA88368 is a 20 pins SSOP package. Its operation temperature range is specified over -10℃ to 75℃. Figure 2 shows its pin assignment.

■ FEATURES

- 14 bits serial data input (3 wire serial data transfer method, DI, CLK, LD)
- R-2R resistor ladder used for D/A conversion
- 10 channels with 10 bits resolution monotonic D/A converter
- 10channel buffer operational amplifiers operating in the full voltage range from VCC to GND
- Max. +/- 3.5 LSBs Integral Non-Linearity
- Max +/- 1 LSB Differential Non-Linearity
- Max. 10 MHz Serial data input
- Serial I/O for cascade application
- Max. 2.0 mA analog output drive/sink current
- Two separate power supply/ground lines for system and analog power supply
- Single +5 V system power supply
- Silicon-gate CMOS process

■ BLOCK DIAGRAM



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