

FEATURES

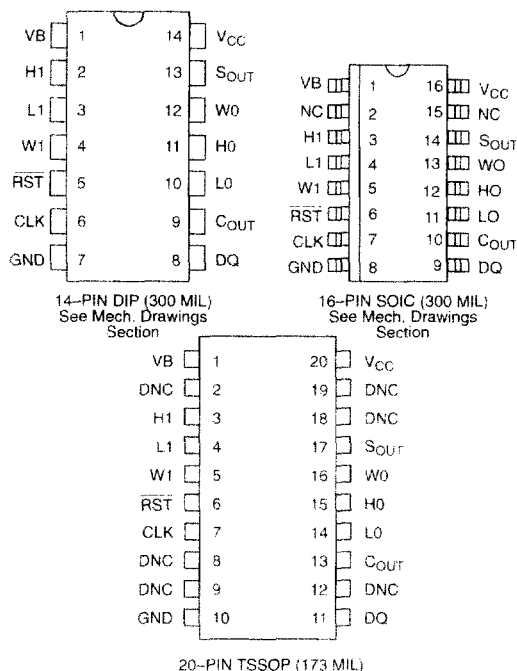
- Ultra low power consumption, quiet, pumpless design
- Two digitally controlled, 256-position potentiometers
- Serial port provides means for setting and reading both potentiometers
- Resistors can be connected in series to provide increased total resistance
- 14-pin DIP, 16-pin SOIC, 20-pin TSSOP packages
- Resistive elements are temperature compensated to ± 0.3 LSB relative linearity
- Standard resistance values:
 - DS1267-10 $\sim 10K\Omega$
 - DS1267-50 $\sim 50K\Omega$
 - DS1267-100 $\sim 100K\Omega$
- Temperature:
 - Commercial: 0°C to 70°C
 - Industrial: -40°C to 85°C

DESCRIPTION

The DS1267 consists of two digitally controlled solid-state potentiometers. Each potentiometer is composed of 256 resistive sections. Between each resistive section and both ends of the potentiometer are tap points which are accessible to the wiper. The position of the wiper on the resistive array is set by an 8-bit value that controls which tap point is connected to the wiper output. Communication and control of the device are accomplished via a 3-wire serial port interface. This interface allows the device wiper position to be read or written.

Both potentiometers can be connected in series (or stacked) for an increased total resistance with the same resolution. For multiple device single processor environments, the DS1267 can be cascaded or daisy chained. This feature provides for control of multiple devices over a single 3-wire bus.

PIN ASSIGNMENT



PIN DESCRIPTION

L ₀ , L ₁	– Low End of Resistor
H ₀ , H ₁	– High End of Resistor
W ₀ , W ₁	– Wiper Terminal of Resistor
V _B	– Substrate Bias Voltage
S _{OUT}	– Stacked Configuration Output
R _{ST}	– Serial Port Reset Input
D _Q	– Serial Port Data Input
CLK	– Serial Port Clock Input
C _{OUT}	– Cascade Port Output
V _{CC}	– +5 Volt Supply
GND	– Ground
NC	– No Internal Connection
DNC	– Do Not Connect