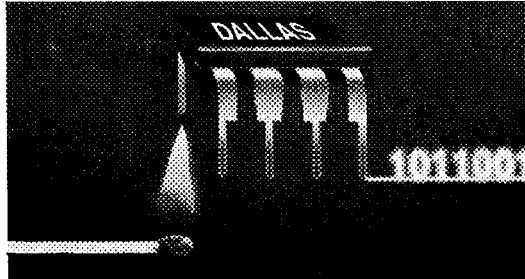


Direct-To-Digital Temperature Sensor

Dallas Semiconductor makes thermal management easy with its line of direct-to-digital temperature sensors. These sensors provide a digital reading of temperature directly, eliminating the need for A/D converters dedicated to temperature measurement. Factory-calibrated to relieve the user of linearity corrections and other compensation, Dallas' sensors provide a range and accuracy unparalleled in the industry.



Beginning with our DS1620 Digital Thermometer and Thermostat, thermal management is made easy with three thermostatic outputs, which change based on where the temperature is in relation to user-programmed

trip points. These trip points are stored in onboard EEPROM memory and are nonvolatile.

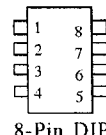
For multi-point sensing applications, some temperature sensors can be multidropped, either through a two-wire interface or, for minimal wiring, through the Dallas 1-Wire™ interface.

Specialized functions are also available in programmable standalone thermostats for heat limit switches and fan controls, as well as in a product which has a temperature sensor and 256 bytes of EEPROM memory for storage of temperature-related correction coefficients and other system-related lookup tables.

Applications

- Fan control for computing equipment
- Clock speed adjustment to minimize temperature rise for high-power microprocessors like Pentium, Alpha, and PowerPC
- Scientific and analytical measurements
- Building automation and environmental controls
- Temperature compensation of crystal oscillators in sensitive time or frequency measurement applications

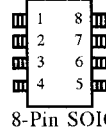
Packages



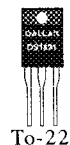
8-Pin DIP



16-Pin SSOP

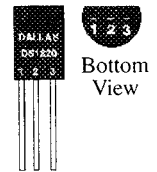


8-Pin SOIC



To-220

PR35 Package



Bottom View

Part Number	Interface	Vcc	Resolution	Thermostat Outputs	Multidrop	Memory	Packages
DS1620	3-Wire	5V	> 9-bit	High, Low, Com	No	TH, TL	8-pin DIP 8-pin SOIC
DS1621	2-Wire	3V/5V	> 9-bit	Com	Yes, up to 8	TH, TL	8-pin DIP 8-pin SOIC
DS1624	2-Wire	3V/5V	13-bit	None	Yes, up to 8	256 bytes EEPROM	8-pin DIP 8-pin SOIC
DS1820	1-Wire	3V/5V or parasite	> 9-bit	Alarm Search	Yes, 64-bit serial number	TH, TL	PR-35 16-pin SSOP
DS1821	1-wire	3V/5V	> 8-bit	Com	No	TH, TL	PR-35 8-pin SOIC TO-220
DS75	2-wire	3V/5V	9-12 bits (configurable)	Com	Yes, up to 8	SRAM only	8-pin SOIC

Dallas Semiconductor, 4401 South Beltwood Parkway, Dallas, Texas 75244-3292
Phone (972) 371-4448 Fax (972) 371-3715