

List of temperature sensors

1 Mechanical temperature sensors

- [Thermometer](#)
- [Therm](#)

2 Electrical temperature sensors

- **Thermistor**- Thermistors are thermally sensitive resistors whose prime function is to exhibit a large, predictable and precise change in electrical resistance when subjected to a corresponding change in body temperature. Negative Temperature Coefficient (NTC) thermistors exhibit a decrease in electrical resistance when subjected to an increase in body temperature and Positive Temperature Coefficient (PTC) thermistors exhibit an increase in electrical resistance when subjected to an increase in body temperature.^[1]
- [Thermocouple](#)
- [Resistance thermometer](#)
- [Silicon bandgap temperature sensor](#)

3 Integrated circuit sensors

3.1 Manufacturers

Non-exhaustive list of manufacturers.

- [Analog Devices](#)^[2]
- [Microchip](#)^[3]
- [Texas Instruments](#)^[4]

3.2 List

Non-exhaustive list of products classified by manufacturer.

3.2.1 Legend

- **Manufacturer** : IC Manufacturer
- **Part Number** : IC Part Number

- **Output Type** : We can find 3 different Output types : Analog, Digital and Switch
- **Designation** : IC Designation
- **Temperature Range** : Die temperature range where the IC can operate.
- **Accuracy (Type)** : Typical IC accuracy
- **Accuracy (Max)** : Maximum IC accuracy
- **Linear Temperature Slope** : Linear temperature slope (available for Analog output ICs). Generally expressed in $\mu\text{A}/^\circ\text{C}$ or $\text{mV}/^\circ\text{C}$ Units
- **Input Voltage Range** : Input voltage range where the IC can operate
- **Supply Current** : IC supply current
- **Output Voltage Range** : Output voltage range (available for some Analog output ICs). It generally depends of the temperature range and the linear temperature slope values.
- **Package** : IC package(s) Availability
- **Datasheet** : Manufacturer's datasheet link

3.2.2 Contents

Contents are extract from the manufacturer datasheet. Each manufacturer may have different method with different accuracy process, so take care with these values. Please always read the manufacturer datasheet to know the real test conditions.

4 See also

- [Celsius degree](#)
- [Fahrenheit degree](#)
- [Kelvin](#)
- [Temperature units](#)

5 References

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6.1 Text

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