MICRODUL

Customized Swiss Microelectronics

Ultra-Low-Power
Temperature Sensor

Enabling autonomous temperature sensing

Monitoring temperature has become a part of daily life. Temperature sensors are everywhere, in our buildings, vehicles, cities and work places. They measure temperature reliably and more accurately than ever before.

Microdul's current temperature sensor has a standby current of typically 20nA and an average current of just 80nA with one measurement per minute. This kind of performance allows long battery life and autonomous (energy harvesting) applications to be considered. Our next generation sensor has almost zero (5nA) standby current.

The MS1088D is a fully integrated, tested and calibrated digital temperature sensor with a typical measurement accuracy of 0.3°C between 10 and 40°C. Its temperature range is from -40°C to 120°C with a resolution of 0.05°C.

Sensor technology from Microdul
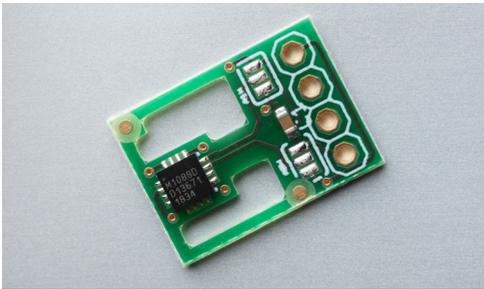
Our sensors are available in small plastic packages like QFN16 (3 x 3 mm) and chip scale packages (1.39 x 0.93mm). The picture on the left shows our evaluation board with the QFN16 package.

Datasheets, application notes and ordering information are available on our website www.microdul.com.

The chip scale package is supplied in tape and can be soldered like a conventional SMD component.

About Microdul

Microdul AG is a privately owned Swiss company and an MBO from Philips Semiconductors founded in 1991. We manufacture modules especially for medical applications including active implants and we are both ISO9001 and ISO13485 certified.

Our Semiconductors group develops and supplies ultra-low-power, mixed-signal, custom products as well as standard products. We have extensive experience in IC development for temperature monitoring, capacitive sensing, power management and 32kHz timing.