Kernel driver tmp108

Supported chips:

- Texas Instruments TMP108

  Prefix: 'tmp108'

  Addresses scanned: none

  Datasheet: https://www.ti.com/product/tmp108

Author:

John Muir <john@jmuir.com>

Description

The Texas Instruments TMP108 implements one temperature sensor. An alert pin can be set when temperatures exceed minimum or maximum values plus or minus a hysteresis value. (This driver does not support interrupts for the alert pin, and the device runs in comparator mode.)

The sensor is accurate to 0.75C over the range of -25 to +85 C, and to 1.0 degree from -40 to +125 C. Resolution of the sensor is 0.0625 degree. The operating temperature has a minimum of -55 C and a maximum of +150 C. Hysteresis values can be set to 0, 1, 2, or 4C.

The TMP108 has a programmable update rate that can select between 8, 4, 1, and 0.5 Hz.

By default the TMP108 reads the temperature continuously. To conserve power, the TMP108 has a one-shot mode where the device is normally shut-down. When a one shot is requested the temperature is read, the result can be retrieved, and then the device is shut down automatically. (This driver only supports continuous mode.)

The driver provides the common sysfs-interface for temperatures (see Documentation/hwmon/sysfs-interface.rst under Temperatures).