

# Kernel driver tmp421

Supported chips:

- Texas Instruments TMP421  
Prefix: 'tmp421'  
Addresses scanned: I2C 0x2a, 0x4c, 0x4d, 0x4e and 0x4f  
Datasheet: <http://focus.ti.com/docs/prod/folders/print/tmp421.html>
- Texas Instruments TMP422  
Prefix: 'tmp422'  
Addresses scanned: I2C 0x4c, 0x4d, 0x4e and 0x4f  
Datasheet: <http://focus.ti.com/docs/prod/folders/print/tmp421.html>
- Texas Instruments TMP423  
Prefix: 'tmp423'  
Addresses scanned: I2C 0x4c and 0x4d  
Datasheet: <http://focus.ti.com/docs/prod/folders/print/tmp421.html>
- Texas Instruments TMP441  
Prefix: 'tmp441'  
Addresses scanned: I2C 0x2a, 0x4c, 0x4d, 0x4e and 0x4f  
Datasheet: <https://www.ti.com/product/tmp441>
- Texas Instruments TMP442  
Prefix: 'tmp442'  
Addresses scanned: I2C 0x4c and 0x4d  
Datasheet: <https://www.ti.com/product/tmp442>

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## Description

This driver implements support for Texas Instruments TMP421, TMP422, TMP423, TMP441, and TMP442 temperature sensor chips. These chips implement one local and up to one (TMP421, TMP441), up to two (TMP422, TMP442) or up to three (TMP423) remote sensors. Temperature is measured in degrees Celsius. The chips are wired over I2C/SMBus and specified over a temperature range of -40 to +125 degrees Celsius. Resolution for both the local and remote channels is 0.0625 degree C.

The chips support only temperature measurement. The driver exports the temperature values via the following sysfs files:

**temp[1-4]\_input**

**temp[2-4]\_fault**

Each sensor can be individually disabled via Devicetree or from sysfs via:

**temp[1-4]\_enable**

If labels were specified in Devicetree, additional sysfs files will be present:

**temp[1-4]\_label**