

# Kernel driver tmp401

Supported chips:

- Texas Instruments TMP401  
Prefix: 'tmp401'  
Addresses scanned: I2C 0x4c  
Datasheet: <http://focus.ti.com/docs/prod/folders/print/tmp401.html>
- Texas Instruments TMP411  
Prefix: 'tmp411'  
Addresses scanned: I2C 0x4c, 0x4d, 0x4e  
Datasheet: <http://focus.ti.com/docs/prod/folders/print/tmp411.html>
- Texas Instruments TMP431  
Prefix: 'tmp431'  
Addresses scanned: I2C 0x4c, 0x4d  
Datasheet: <http://focus.ti.com/docs/prod/folders/print/tmp431.html>
- Texas Instruments TMP432  
Prefix: 'tmp432'  
Addresses scanned: I2C 0x4c, 0x4d  
Datasheet: <http://focus.ti.com/docs/prod/folders/print/tmp432.html>
- Texas Instruments TMP435  
Prefix: 'tmp435'  
Addresses scanned: I2C 0x48 - 0x4f  
Datasheet: <http://focus.ti.com/docs/prod/folders/print/tmp435.html>

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## Description

This driver implements support for Texas Instruments TMP401, TMP411, TMP431, TMP432, and TMP435 chips. These chips implement one or two remote and one local temperature sensors. Temperature is measured in degrees Celsius. Resolution of the remote sensor is 0.0625 degree. Local sensor resolution can be set to 0.5, 0.25, 0.125 or 0.0625 degree (not supported by the driver so far, so using the default resolution of 0.5 degree).

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

The TMP411 and TMP431 chips are compatible with TMP401. TMP411 provides some additional features.

- Minimum and Maximum temperature measured since power-on, chip-reset  
Exported via sysfs attributes tempX\_lowest and tempX\_highest.
- Reset of historical minimum/maximum temperature measurements  
Exported via sysfs attribute temp\_reset\_history. Writing 1 to this file triggers a reset.

TMP432 is compatible with TMP401 and TMP431. It supports two external temperature sensors.