

Kernel driver sbtsi_temp

Supported hardware:

- Sideband interface (SBI) Temperature Sensor Interface (SB-TSI) compliant AMD SoC temperature device.

Prefix: 'sbtsi_temp'

Addresses scanned: This driver doesn't support address scanning.

To instantiate this driver on an AMD CPU with SB-TSI support, the i2c bus number would be the bus connected from the board management controller (BMC) to the CPU. The i2c address is specified in Section 6.3.1 of the SoC register reference: The SB-TSI address is normally 98h for socket 0 and 90h for socket 1, but it could vary based on hardware address select pins.

Datasheet: The SB-TSI interface and protocol is available as part of the open source SoC register reference at:

https://www.amd.com/system/files/TechDocs/56255_OSRR.pdf

The Advanced Platform Management Link (APML) Specification is available at:

<http://developer.amd.com/wordpress/media/2012/10/41918.pdf>

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Description

The SBI temperature sensor interface (SB-TSI) is an emulation of the software and physical interface of a typical 8-pin remote temperature sensor (RTS) on AMD SoCs. It implements one temperature sensor with readings and limit registers encode the temperature in increments of 0.125 from 0 to 255.875. Limits can be set through the writable thresholds, and if reached will trigger corresponding alert signals.