Kernel driver emc2103

Supported chips:

- SMSC EMC2103

  Addresses scanned: I2C 0x2e

  Prefix: 'emc2103'

  Datasheet: Not public

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Description

The Standard Microsystems Corporation (SMSC) EMC2103 chips contain up to 4 temperature sensors and a single fan controller.

Fan rotation speeds are reported in RPM (rotations per minute). An alarm is triggered if the rotation speed has dropped below a programmable limit. Fan readings can be divided by a programmable divider (1, 2, 4 or 8) to give the readings more range or accuracy. Not all RPM values can accurately be represented, so some rounding is done. With a divider of 1, the lowest representable value is 480 RPM.

This driver supports RPM based control, to use this a fan target should be written to fan1_target and pwm1_enable should be set to 3.

The 2103-2 and 2103-4 variants have a third temperature sensor, which can be connected to two anti-parallel diodes. These values can be read as temp3 and temp4. If only one diode is attached to this channel, temp4 will show as "fault". The module parameter "apd=0" can be used to suppress this 4th channel when anti-parallel diodes are not fitted.