Kernel driver max6650

Supported chips:

- Maxim MAX6650

  Prefix: 'max6650'

  Addresses scanned: none

  Datasheet: http://pdfserv.maxim-ic.com/en/ds/MAX6650-MAX6651.pdf

- Maxim MAX6651

  Prefix: 'max6651'

  Addresses scanned: none

  Datasheet: http://pdfserv.maxim-ic.com/en/ds/MAX6650-MAX6651.pdf

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Description

This driver implements support for the Maxim MAX6650 and MAX6651.

The 2 devices are very similar, but the MAX6550 has a reduced feature set, e.g. only one fan-input, instead of 4 for the MAX6651.

The driver is not able to distinguish between the 2 devices.

The driver provides the following sensor accesses in sysfs:

fan1_input	ro	fan tachometer speed in RPM
fan2_input	ro	"
fan3_input	ro	"
fan4_input	ro	"
fan1_target	rw	desired fan speed in RPM (closed loop mode only)
pwm1_enable	rw	regulator mode, 0=full on, 1=open loop, 2=closed loop 3=off
pwm1	rw	relative speed (0-255), 255=max. speed. Used in open loop mode only.
fan1_div	rw	sets the speed range the inputs can handle. Legal values are 1, 2, 4, and 8. Use lower values for faster fans.

Usage notes

This driver does not auto-detect devices. You will have to instantiate the devices explicitly. Please see Documentation/i2c/instantiating-devices.rst for details.

Module parameters

If your board has a BIOS that initializes the MAX6650/6651 correctly, you can simply load your module without parameters. It won't touch the configuration registers then. If your board BIOS doesn't initialize the chip, or you want different settings, you can set the following parameters:

voltage_12V: 5=5V fan, 12=12V fan, 0=don't change prescaler: Possible values are 1,2,4,8,16, or 0 for don't change clock: The clock frequency in Hz of the chip the driver should assume [254000]

Please have a look at the MAX6650/6651 data sheet and make sure that you fully understand the meaning of these parameters before you attempt to change them.