

Kernel driver max31790

Supported chips:

- Maxim MAX31790

Prefix: 'max31790'

Addresses scanned: -

Datasheet: <https://pdfserv.maximintegrated.com/en/ds/MAX31790.pdf>

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Description

This driver implements support for the Maxim MAX31790 chip.

The MAX31790 controls the speeds of up to six fans using six independent PWM outputs. The desired fan speeds (or PWM duty cycles) are written through the I2C interface. The outputs drive "4-wire" fans directly, or can be used to modulate the fan's power terminals using an external pass transistor.

Tachometer inputs monitor fan tachometer logic outputs for precise (+/-1%) monitoring and control of fan RPM as well as detection of fan failure. Six pins are dedicated tachometer inputs. Any of the six PWM outputs can also be configured to serve as tachometer inputs.

Sysfs entries

fan[1-12]_input	RO	fan tachometer speed in RPM
fan[1-12]_fault	RO	fan experienced fault
fan[1-6]_target	RW	desired fan speed in RPM
pwm[1-6]_enable	RW	regulator mode, 0=disabled (duty cycle=0%), 1>manual mode, 2=rpm mode
pwm[1-6]	RW	read: current pwm duty cycle, write: target pwm duty cycle (0-255)