

Kernel driver max31785

Supported chips:

- Maxim MAX31785, MAX31785A

Prefix: 'max31785' or 'max31785a'

Addresses scanned: -

Datasheet: <https://datasheets.maximintegrated.com/en/ds/MAX31785.pdf>

Author: Andrew Jeffery <andrew@aj.id.au>

Description

The Maxim MAX31785 is a PMBus device providing closed-loop, multi-channel fan management with temperature and remote voltage sensing. Various fan control features are provided, including PWM frequency control, temperature hysteresis, dual tachometer measurements, and fan health monitoring.

For dual-rotor configurations the MAX31785A exposes the second rotor tachometer readings in attributes fan[5-8]_input. By contrast the MAX31785 only exposes the slowest rotor measurement, and does so in the fan[1-4]_input attributes.

Usage Notes

This driver does not probe for PMBus devices. You will have to instantiate devices explicitly.

Sysfs attributes

fan[1-4]_alarm	Fan alarm
fan[1-4]_fault	Fan fault.
fan[1-8]_input	Fan RPM. On the MAX31785A, inputs 5-8 correspond to the second rotor of fans 1-4
fan[1-4]_target	Fan input target
in[1-6]_crit	Critical maximum output voltage
in[1-6]_crit_alarm	Output voltage critical high alarm
in[1-6]_input	Measured output voltage
in[1-6]_label	"vout[18-23]"
in[1-6]_lcrit	Critical minimum output voltage
in[1-6]_lcrit_alarm	Output voltage critical low alarm
in[1-6]_max	Maximum output voltage
in[1-6]_max_alarm	Output voltage high alarm
in[1-6]_min	Minimum output voltage
in[1-6]_min_alarm	Output voltage low alarm
pwm[1-4]	Fan target duty cycle (0..255)
pwm[1-4]_enable	0: Full-speed 1: Manual PWM control 2: Automatic PWM (tach-feedback RPM fan-control) 3: Automatic closed-loop (temp-feedback fan-control)
temp[1-11]_crit	Critical high temperature
temp[1-11]_crit_alarm	Chip temperature critical high alarm
temp[1-11]_input	Measured temperature
temp[1-11]_max	Maximum temperature
temp[1-11]_max_alarm	Chip temperature high alarm