Kernel driver max16065

Supported chips:

- Maxim MAX16065, MAX16066

  Prefixes: 'max16065', 'max16066'

  Addresses scanned: -

  Datasheet:

  http://datasheets.maxim-ic.com/en/ds/MAX16065-MAX16066.pdf

- Maxim MAX16067

  Prefix: 'max16067'

  Addresses scanned: -

  Datasheet:

  http://datasheets.maxim-ic.com/en/ds/MAX16067.pdf

- Maxim MAX16068

  Prefix: 'max16068'

  Addresses scanned: -

  Datasheet:

  http://datasheets.maxim-ic.com/en/ds/MAX16068.pdf

- Maxim MAX16070/MAX16071

  Prefixes: 'max16070', 'max16071'

  Addresses scanned: -

  Datasheet:

  http://datasheets.maxim-ic.com/en/ds/MAX16070-MAX16071.pdf

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Description

[From datasheets] The MAX16065/MAX16066 flash-configurable system managers monitor and sequence multiple system voltages. The MAX16065/MAX16066 can also accurately monitor (+/-2.5%) one current channel using a dedicated high-side current-sense amplifier. The MAX16065 manages up to twelve system voltages simultaneously, and the MAX16066 manages up to eight supply voltages.

The MAX16067 flash-configurable system manager monitors and sequences multiple system voltages. The MAX16067 manages up to six system voltages simultaneously.

The MAX16068 flash-configurable system manager monitors and manages up to six system voltages simultaneously.

The MAX16070/MAX16071 flash-configurable system monitors supervise multiple system voltages. The MAX16070/MAX16071 can also accurately monitor (+/-2.5%) one current channel using a dedicated high-side current-sense amplifier. The MAX16070 monitors up to twelve system voltages simultaneously, and the MAX16071 monitors up to eight supply voltages.

Each monitored channel has its own low and high critical limits. MAX16065, MAX16066, MAX16070, and MAX16071 support an additional limit which is configurable as either low or high secondary limit. MAX16065, MAX16066, MAX16070, and MAX16071 also support supply current monitoring.

Usage Notes

This driver does not probe for devices, since there is no register which can be safely used to identify the chip. You will have to instantiate the devices explicitly. Please see Documentation/i2c/instantiating-devices.rst for details.

WARNING: Do not access chip registers using the i2cdump command, and do not use any of the i2ctools commands on a command register (0xa5 to 0xac). The chips supported by this driver interpret any access to a command register (including read commands) as request to execute the command in question. This may result in power loss, board resets, and/or Flash corruption. Worst case, your board may turn into a brick.

Sysfs entries

in[0-11]_input	Input voltage measurements.
in12_input	Voltage on CSP (Current Sense Positive) pin. Only if the chip supports current sensing and if current sensing is enabled.
in[0-11]_min	Low warning limit. Supported on MAX16065, MAX16066, MAX16070, and MAX16071 only.
in[0-11]_max	High warning limit. Supported on MAX16065, MAX16066, MAX16070, and MAX16071 only. Either low or high warning limits are supported (depending on chip configuration), but not both.
in[0-11]_lcrit	Low critical limit.
in[0-11]_crit	High critical limit.
in[0-11]_alarm	Input voltage alarm.
curr1_input	Current sense input; only if the chip supports current sensing and if current sensing is enabled. Displayed current assumes 0.001 Ohm current sense resistor.
curr1_alarm	Overcurrent alarm; only if the chip supports current sensing and if current sensing is enabled.