Kernel driver corsair-psu

Supported devices:

- Corsair Power Supplies

  Corsair HX550i

  Corsair HX650i

  Corsair HX750i

  Corsair HX850i

  Corsair HX1000i

  Corsair HX1200i

  Corsair RM550i

  Corsair RM650i

  Corsair RM750i

  Corsair RM850i

  Corsair RM1000i

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Description

This driver implements the sysfs interface for the Corsair PSUs with a HID protocol interface of the HXi and RMi series. These power supplies provide access to a micro-controller with 2 attached temperature sensors, 1 fan rpm sensor, 4 sensors for volt levels, 4 sensors for power usage and 4 sensors for current levels and addtional non-sensor information like uptimes.

Sysfs entries

curr1_input	Total current usage
curr2_input	Current on the 12v psu rail
curr2_crit	Current max critical value on the 12v psu rail
curr3_input	Current on the 5v psu rail
curr3_crit	Current max critical value on the 5v psu rail
curr4_input	Current on the 3.3v psu rail
curr4_crit	Current max critical value on the 3.3v psu rail
fan1_input	RPM of psu fan
in0_input	Voltage of the psu ac input
in1_input	Voltage of the 12v psu rail
in1_crit	Voltage max critical value on the 12v psu rail
in1_lcrit	Voltage min critical value on the 12v psu rail
in2_input	Voltage of the 5v psu rail
in2_crit	Voltage max critical value on the 5v psu rail
in2_lcrit	Voltage min critical value on the 5v psu rail
in3_input	Voltage of the 3.3v psu rail
in3_crit	Voltage max critical value on the 3.3v psu rail
in3_lcrit	Voltage min critical value on the 3.3v psu rail
power1_input	Total power usage
power2_input	Power usage of the 12v psu rail
power3_input	Power usage of the 5v psu rail
power4_input	Power usage of the 3.3v psu rail
temp1_input	Temperature of the psu vrm component
temp1_crit	Temperature max cirtical value of the psu vrm component
temp2_input	Temperature of the psu case
temp2_crit	Temperature max critical value of psu case

Usage Notes

It is an USB HID device, so it is auto-detected and supports hot-swapping.

Flickering values in the rail voltage levels can be an indicator for a failing PSU. The driver also provides some additional useful values via debugfs, which do not fit into the hwmon class.

Debugfs entries

uptime	Current uptime of the psu
uptime_total	Total uptime of the psu
vendor	Vendor name of the psu
product	Product name of the psu