

# Kernel driver sch5636

Supported chips:

- SMSC SCH5636

Prefix: 'sch5636'

Addresses scanned: none, address read from Super I/O config space

Author: Hans de Goede <[hdegoede@redhat.com](mailto:hdegoede@redhat.com)>

## Description

SMSC SCH5636 Super I/O chips include an embedded microcontroller for hardware monitoring solutions, allowing motherboard manufacturers to create their own custom hwmon solution based upon the SCH5636.

Currently the sch5636 driver only supports the Fujitsu Theseus SCH5636 based hwmon solution. The sch5636 driver runs a sanity check on loading to ensure it is dealing with a Fujitsu Theseus and not with another custom SCH5636 based hwmon solution.

The Fujitsu Theseus can monitor up to 5 voltages, 8 fans and 16 temperatures. Note that the driver detects how many fan headers / temperature sensors are actually implemented on the motherboard, so you will likely see fewer temperature and fan inputs.

The Fujitsu Theseus hwmon solution also contains an integrated watchdog. This watchdog is fully supported by the sch5636 driver.

An application note describing the Theseus' registers, as well as an application note describing the protocol for communicating with the microcontroller is available upon request. Please mail me if you want a copy.