

**NAME**

msr – x86 CPU MSR access device

**DESCRIPTION**

*/dev/cpu/CPUNUM/msr* provides an interface to read and write the model-specific registers (MSRs) of an x86 CPU. *CPUNUM* is the number of the CPU to access as listed in */proc/cpuinfo*.

The register access is done by opening the file and seeking to the MSR number as offset in the file, and then reading or writing in chunks of 8 bytes. An I/O transfer of more than 8 bytes means multiple reads or writes of the same register.

This file is protected so that it can be read and written only by the user *root*, or members of the group *root*.

**NOTES**

The *msr* driver is not auto-loaded. On modular kernels you might need to use the following command to load it explicitly before use:

```
$ modprobe msr
```

**SEE ALSO**

Intel Corporation Intel 64 and IA-32 Architectures Software Developer's Manual Volume 3B Appendix B, for an overview of the Intel CPU MSRs.