

NAME

__setfpucw – set FPU control word on i386 architecture (obsolete)

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

```
#include <i386/fpu_control.h>
```

```
[[deprecated]] void __setfpucw(unsigned short control_word);
```

DESCRIPTION

__setfpucw() transfers *control_word* to the registers of the FPU (floating-point unit) on the i386 architecture. This was used to control floating-point precision, rounding and floating-point exceptions.

STANDARDS

This function was a nonstandard GNU extension.

NOTES

As of glibc 2.1 this function does not exist anymore. There are new functions from C99, with prototypes in *<fenv.h>*, to control FPU rounding modes, like **fegetround(3)**, **fesetround(3)**, and the floating-point environment, like **fegetenv(3)**, **feholdexcept(3)**, **fesetenv(3)**, **feupdateenv(3)**, and FPU exception handling, like **feclearexcept(3)**, **fegetexceptflag(3)**, **feraiseexcept(3)**, **fesetexceptflag(3)**, and **fetestexcept(3)**.

If direct access to the FPU control word is still needed, the **_FPU_GETCW** and **_FPU_SETCW** macros from *<fpu_control.h>* can be used.

EXAMPLES

```
__setfpucw(0x1372)
```

Set FPU control word on the i386 architecture to

- extended precision
- rounding to nearest
- exceptions on overflow, zero divide and NaN

SEE ALSO

feclearexcept(3)

<fpu_control.h>