NAME

fpemul − floating point interpreter

SYNOPSIS

sys   signal; 4; fptrap

DESCRIPTION

Fpemul is a simulator of the 11/45 FP11-B floating point unit. On a machine equipped with floating point hardware, the module contains a dummy routine which simply re-executes the trapped instruction. On machines without floating point hardware, it contains code to intercept illegal instruction faults and examine the offending operation codes for possible floating point operations, which are then emulated using non-floating instructions.

The emulation routines are automatically loaded only when required by modules using floating point definitions or operations.

SEE ALSO

signal(2), cc(1)

DIAGNOSTICS

A breakpoint trap is given when a real illegal instruction trap occurs.

BUGS

The emulation will not work with 411 (−i option) files, since *fpemul* needs to examine the offending instruction.

Rounding mode is not interpreted. The inefficiencies of using illegal instruction traps to emulate floating point seriously compromise speed; *fpemul* is very slow.