Programmer's Manual"

NAME

__ppc_set_ppr_med, __ppc_set_ppr_very_low, __ppc_set_ppr_low, __ppc_set_ppr_med_low, __ppc_set_ppr_med_high − Set the Program Priority Register

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

#include <sys/platform/ppc.h>

void __ppc_set_ppr_med(void);
void __ppc_set_ppr_very_low(void);
void __ppc_set_ppr_low(void);
void __ppc_set_ppr_med_low(void);
void __ppc_set_ppr_med_high(void);

DESCRIPTION

These functions provide access to the *Program Priority Register* (PPR) on the Power architecture.

The PPR is a 64-bit register that controls the program's priority. By adjusting the PPR value the programmer may improve system throughput by causing system resources to be used more efficiently, especially in contention situations. The available unprivileged states are covered by the following functions:

__ppc_set_ppr_med()
sets the Program Priority Register value to *medium* (default).

__ppc_set_ppr_very_low()
sets the Program Priority Register value to *very low*.

__ppc_set_ppr_low()
sets the Program Priority Register value to *low*.

__ppc_set_ppr_med_low()
sets the Program Priority Register value to *medium low*.

The privileged state *medium high* may also be set during certain time intervals by problem-state (unprivileged) programs, with the following function:

__ppc_set_ppr_med_high()
sets the Program Priority to *medium high*.

If the program priority is medium high when the time interval expires or if an attempt is made to set the priority to medium high when it is not allowed, the priority is set to medium.

VERSIONS

The functions **__ppc_set_ppr_med**(), **__ppc_set_ppr_low**(), and **__ppc_set_ppr_med_low**() are provided since glibc 2.18. The functions **__ppc_set_ppr_very_low**() and **__ppc_set_ppr_med_high**() first appeared in glibc 2.23.

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes**(7).

Interface	Attribute	Value
__ppc_set_ppr_med(), **__ppc_set_ppr_very_low**(), **__ppc_set_ppr_low**(), **__ppc_set_ppr_med_low**(), **__ppc_set_ppr_med_high**()	Thread safety	MT-Safe

STANDARDS

These functions are nonstandard GNU extensions.

NOTES

The functions **__ppc_set_ppr_very_low**() and **__ppc_set_ppr_med_high**() will be defined by<*sys/platform/ppc.h*> if **_ARCH_PWR8** is defined. Availability of these functions can be tested using **#ifdef _ARCH_PWR8**.

SEE ALSO

__ppc_yield(3)

Power ISA, Book II - Section 3.1 (Program Priority Registers)