NAME

get_cyclecount - get the CPU's fast counter register contents

SYNOPSIS

#include <sys/param.h>
#include <sys/systm.h>
#include <machine/cpu.h>

uint64_t
get_cyclecount(*void*);

DESCRIPTION

The **get_cyclecount**() function uses a register available in most modern CPUs to return a value that is monotonically increasing inside each CPU.

On SMP systems, there will be a number of separate monotonic sequences, one for each CPU running. The value in the SMP case is selected from one of these sequences, dependent on which CPU was scheduled to service the request.

The speed and the maximum value of each counter is CPU-dependent. Some CPUs (such as the Intel 80486) do not have such a register, so **get_cyclecount**() on these platforms returns a (monotonic) combination of numbers represented by the structure returned by binuptime(9).

The AMD64 and Intel 64 processors use the TSC register.

SEE ALSO

binuptime(9)

HISTORY

The **get_cyclecount**() function first appeared in FreeBSD 5.0.

AUTHORS

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