NAME

BUS_GET_CPUS, bus_get_cpus - request a set of device-specific CPUs

SYNOPSIS

#include <sys/param.h>
#include <sys/bus.h>
#include <sys/cpuset.h>

int

BUS_GET_CPUS(device_t dev, device_t child, enum cpu_sets op, size_t setsize, cpuset_t *cpuset);

int

bus_get_cpus(device_t dev, enum cpu_sets op, size_t setsize, cpuset_t *cpuset);

DESCRIPTION

The **BUS_GET_CPUS**() method queries the parent bus device for a set of device-specific CPUs. The *op* argument specifies which set of CPUs to retrieve. If successful, the requested set of CPUs are returned in *cpuset*. The *setsize* argument specifies the size in bytes of the set passed in *cpuset*.

BUS_GET_CPUS() supports querying different types of CPU sets via the *op argument*. Not all set types are supported for every device. If a set type is not supported, **BUS_GET_CPUS**() fails with EINVAL. These set types are supported:

LOCAL_CPUS The set of CPUs that are local to the device. If a device is closer to a specific memory domain in a non-uniform memory architecture system (NUMA), this will return the set of CPUs in that memory domain.

INTR_CPUS The preferred set of CPUs that this device should use for device interrupts. This set type must be supported by all bus drivers.

The bus_get_cpus() function is a simple wrapper around BUS_GET_CPUS().

RETURN VALUES

Zero is returned on success, otherwise an appropriate error is returned.

SEE ALSO

cpuset(2), BUS_BIND_INTR(9), device(9)

HISTORY

The BUS GET CPUS() method and bus get cpus() function first appeared in FreeBSD 11.0.