

NAME

bus_release_resource - release resources on a bus

SYNOPSIS

```
#include <sys/param.h>
```

```
#include <sys/bus.h>
```

```
#include <machine/bus.h>
```

```
#include <sys/rman.h>
```

```
#include <machine/resource.h>
```

```
int
```

```
bus_release_resource(device_t dev, int type, int rid, struct resource *r);
```

DESCRIPTION

Free a resource allocated by `bus_alloc_resource(9)`. The resource must not be in use on release, i.e., call an appropriate function before (e.g. `bus_tearardown_intr(9)` for IRQs).

dev is the device that owns the resource.

type is the type of resource that is released. It must be of the same type you allocated it as before. See `bus_alloc_resource(9)` for valid types.

rid is the resource ID of the resource. The *rid* value must be the same as the one returned by `bus_alloc_resource(9)`.

r is the pointer to *struct resource*, i.e., the resource itself, returned by `bus_alloc_resource(9)`.

RETURN VALUES

EINVAL is returned, if the device *dev* has no parent, 0 otherwise. The kernel will panic, if it cannot release the resource.

EXAMPLES

```
/* deactivate IRQ */
bus_tearardown_intr(dev, foosoftc->irqres, foosoftc->irqid);

/* release IRQ resource */
bus_release_resource(dev, SYS_RES_IRQ, foosoftc->irqid,
                    foosoftc->irqres);
```

```
/* release I/O port resource */  
bus_release_resource(dev, SYS_RES_IOPORT, foosoftc->portid,  
                    foosoftc->portres);
```

SEE ALSO

bus_alloc_resource(9), device(9), driver(9)

AUTHORS

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