

**NAME**

XkbFreeDeviceInfo - Free an XkbDeviceInfoRec structure

**SYNOPSIS**

```
void XkbFreeDeviceInfo (XkbDeviceInfoPtr device_info, unsigned int which, Bool free_all);
```

**ARGUMENTS**

*device\_info*

pointer to XkbDeviceInfoRec in which to free items

*which*

mask of components of device\_info to free

*free\_all*

True => free everything, including device\_info

**DESCRIPTION**

If *free\_all* is True, the *XkbFreeDeviceInfo* frees all components of *device\_info* and the XkbDeviceInfoRec structure pointed to by *device\_info* itself. If *free\_all* is False, the value of *which* determines which subcomponents are freed. *which* is an inclusive OR of one or more of the values from Table 1. If *which* contains XkbXI\_ButtonActionsMask, all button actions associated with *device\_info* are freed, *device\_info->btn\_acts* is set to NULL, and *device\_info->num\_btns* is set to zero. If *which* contains all bits in XkbXI\_IndicatorsMask, all XkbDeviceLedInfoRec structures associated with *device\_info* are freed, *device\_info->leds* is set to NULL, and *device\_info->sz\_leds* and *device\_info->num\_leds* are set to zero. If *which* contains XkbXI\_IndicatorMapsMask, all indicator maps associated with *device\_info* are cleared, but the number of LEDs and the leds structures themselves is preserved. If *which* contains XkbXI\_IndicatorNamesMask, all indicator names associated with *device\_info* are cleared, but the number of LEDs and the leds structures themselves is preserved. If *which* contains XkbXI\_IndicatorStateMask, the indicator state associated with the *device\_info* leds are set to zeros but the number of LEDs and the leds structures themselves is preserved.

Table 1 XkbDeviceInfoRec Mask Bits

Name	XkbDeviceInfoRec Value	Capability If Set
XkbXI_KeyboardsMask	(1L <<0)	Clients can use all Xkb requests and events with KeyClass devices supported by the input

device extension.

**XkbXI\_ButtonActionsMask** num\_btns (1L <<1) Clients can assign key  
btn\_acts actions to buttons  
non-KeyClass input  
extension devices.

**XkbXI\_IndicatorNamesMask** leds->names (1L <<2) Clients can assign  
names to indicators on  
non-KeyClass input  
extension devices.

**XkbXI\_IndicatorMapsMask** leds->maps (1L <<3) Clients can assign  
indicator maps to  
indicators on  
non-KeyClass input  
extension devices.

**XkbXI\_IndicatorStateMask** leds->state (1L <<4) Clients can request  
the status of indicators  
on non-KeyClass input  
extension devices.

**XkbXI\_IndicatorsMask** sz\_leds (0x1c) XkbXI\_IndicatorNamesMask |  
num\_leds XkbXI\_IndicatorMapsMask |  
leds->\* XkbXI\_IndicatorStateMask

**XkbXI\_UnsupportedFeaturesMask** unsupported (1L <<15)

**XkbXI\_AllDeviceFeaturesMask** Those selected (0x1e) XkbXI\_IndicatorsMask |  
by Value Column XkbSI\_ButtonActionsMask  
masks

**XkbXI\_AllFeaturesMask** Those selected (0x1f) XkbSI\_AllDeviceFeaturesMask |  
by Value Column XkbSI\_KeyboardsMask  
masks

**XkbXI\_AllDetailsMask** Those selected (0x801f) XkbXI\_AllFeaturesMask |  
by Value column XkbXI\_UnsupportedFeaturesMask  
masks

**STRUCTURES**

Information about X Input Extension devices is transferred between a client program and the Xkb extension in an XkbDeviceInfoRec structure:

```
typedef struct {
    char *      name;      /* name for device */
    Atom       type;      /* name for class of devices */
    unsigned short  device_spec; /* device of interest */
    Bool       has_own_state; /* True=>this device has its own state */
    unsigned short  supported; /* bits indicating supported capabilities */
    unsigned short  unsupported; /* bits indicating unsupported capabilities */
    unsigned short  num_btns; /* number of entries in btn_acts */
    XkbAction *   btn_acts; /* button actions */
    unsigned short  sz_leds; /* total number of entries in LEDs vector */
    unsigned short  num_leds; /* number of valid entries in LEDs vector */
    unsigned short  dflt_kbd_fb; /* input extension ID of default (core kbd) indicator */
    unsigned short  dflt_led_fb; /* input extension ID of default indicator feedback */
    XkbDeviceLedInfoPtr leds; /* LED descriptions */
} XkbDeviceInfoRec, *XkbDeviceInfoPtr;
```

```
typedef struct {
    unsigned short  led_class; /* class for this LED device */
    unsigned short  led_id; /* ID for this LED device */
    unsigned int    phys_indicators; /* bits for which LEDs physically present */
    unsigned int    maps_present; /* bits for which LEDs have maps in maps */
    unsigned int    names_present; /* bits for which LEDs are in names */
    unsigned int    state; /* 1 bit => corresponding LED is on */
    Atom            names[XkbNumIndicators]; /* names for LEDs */
    XkbIndicatorMapRec maps; /* indicator maps for each LED */
} XkbDeviceLedInfoRec, *XkbDeviceLedInfoPtr;
```