

Request #: HUTRR73  
Title: Usages to indicate Fn key and Keyboard Brightness keys  
Spec Release: 1.12  
Pages Affected: Consumer Controls 0x0C, Generic Desktop 0x01  
Received: 7 Aug 2018  
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Current Status: Approved  
Approved: 30 Aug 2018  
Values checked: Yes, by Chair  
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Summary:

The proposal is to add a set of new Usages ID to the Consumer Page (0x0C) and Generic Desktop Page (0x01) to support keyboard backlight brightness and the “Fn” key.

Background:

Assistive Technology, such as screen readers that are used by visually impaired people to interact with computers, generally have a device learning mode. When a key is pressed in this mode, the assistive technology will tell the user what key was pressed and what it does. This allows visually impaired users to learn the keys of their device. Today, the keyboard brightness keys, and the “Fn” key are not able to be voiced.

Most portable PCs now have keyboard backlight brightness keys and the “Fn” key for alternate system functions, but no standardized system of usages is in place to support reporting these keys. The System Function Shift and System Function Shift Lock states are typically maintained within the hardware and the resultant Function state may alter the usages reported by other controls. This contrasts with standard keyboard features such as Shift and Caps Lock, where the state is maintained by the host and input is modified within the host.

We would like to add support for reporting these keys, so that in device learning mode for screen readers, the key action and effect on System Function Shift Lock state can be voiced.

It is not intended that the Operating System or other software on the system interfere with or modify the OEM-defined functions.

Proposal:

Add the following: Consumer Page (0x0C)

Usage ID	Usage Name	Usage Type
0x79	Keyboard Brightness Increment	OSC

<b>0x7A</b>	Keyboard Brightness Decrement	OSC
<b>0x7B</b>	Keyboard Backlight Set Level	LC
<b>0x7C</b>	Keyboard Backlight OOC	OOC
<b>0x7D</b>	Keyboard Backlight Set Minimum	OSC
<b>0x7E</b>	Keyboard Backlight Set Maximum	OSC
<b>0x7F</b>	Keyboard Backlight Auto	OOC

Add the following: Generic Desktop Page (0x01)

<b>Usage ID</b>	<b>Usage Name</b>	<b>Usage Type</b>
<b>0x97</b>	System Function Shift	MC
<b>0x98</b>	System Function Shift Lock	OOC
<b>0x99</b>	System Function Shift Lock Indicator	DV

Descriptions:

<b>Usage Name</b>	<b>Recommended Application Collection</b>	<b>Description</b>
Keyboard Brightness Increment	Generic Desktop Keyboard	Brightens the keyboard backlight by one unit, if possible.
Keyboard Brightness Decrement	Generic Desktop Keyboard	Dims the keyboard backlight by one unit, if possible.
Keyboard Backlight Level	Generic Desktop Keyboard	Sets the keyboard backlight brightness directly with a value
Keyboard Backlight OOC	Generic Desktop Keyboard	Turns the keyboard backlight on or off
Keyboard Backlight At Minimum	Generic Desktop Keyboard	Dims the keyboard backlight to minimum non-off level.
Keyboard Backlight At Maximum	Generic Desktop Keyboard	Brightens the keyboard backlight to its brightest level.
Keyboard Backlight Auto	Generic Desktop Keyboard	Permits the keyboard to use its own brightness algorithms.
System Function Shift	Generic Desktop System Control	Indicates the state of the feature. 1=on, 0=off. Usually this maps directly to the state of the "Fn" key, but may be reversed if the System Function Shift Lock is also on. This is a Momentary Control.
System Function Shift Lock	Generic Desktop System Control	Locks the System Function Shift state. This is an On/Off control with a recommended implementation of Relative, Preferred State for physically non-locking keys, and Absolute, No Preferred state for physically locking keys.
System Function Shift Lock Indicator	Generic Desktop System Control	The value of a visual indicator of System Function Shift Lock.

