

Universal Host Controller Interface

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Universal Host Controller Interface (UHCI) was created by Intel as an implementation of the USB 1.0 host controller interface. Along with OHCI, it makes up the USB 1.0 standard.

Technical Details

The UHCI specification defines a set of I/O mapped registers that allow communication between the controller and the operating system. The base address for these registers can be found by searching the PCI controller for a specific VendorID/DeviceID combination, or for a specific ClassID/SubclassID/Interface combination. All UHCI PCI controllers will have a Class ID of 0x0C, a Subclass ID of 0x03, and an Interface value of 0x00. The PCI Configuration space for this device will contain the I/O port address information in BAR4. This may be different from other standards such as OHCI or EHCI.

I/O Registers

Offset (Hex)	Name	Description
00	USBCMD	Usb Command
02	USBSTS	Usb Status
04	USBINTR	Usb Interrupt Enable
06	FRNUM	Frame Number
08	FRBASEADD	Frame List Base Address
0C	SOFMOD	Start Of Frame Modify
10	PORTSC1	Port 1 Status/Control
12	PORTSC2	Port 2 Status/Control

References

1. Copy of Intel UHCI standard (<ftp://ftp.netbsd.org/pub/NetBSD/misc/blymn/uhci11d.pdf>) from NetBSD.org

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