

AVR-CDC Evaluation Summary

1. Host Controller Interface and OS

There are two implementations in USB 1.1 host controller interface.

UHCI: Intel 845G, 440ZXM, VIA VT6202, 6212L, ...

OHCI: NEC uPD720100A, uPD720101, Ali M5273, OPTi 82C861, SiS7001, ...

OS Host	Win XP SP2	Win 2000 SP4	KNOPPIX 3.7 Kernel 2.4	KNOPPIX 5.0 Kernel 2.6	Debian 3.1 Kernel 2.6	Mac OS X (Mac G4)
UHCI	*1	*1	O	*2	*2	?
OHCI	O	O	O	O	O	O

*1: The quality depends on CPU speed (>2GHz is OK).

*2: uhci_q.c / usb_uhci.c must be modified to enable bulk transfer.

2. Transfer Speed

ATtiny45

Transfer bps	Half Duplex USB -> RS-232C	Half Duplex RS-232C -> USB	Full Duplex
9600	O	X	X
4800	O	O	X
2400	O	O	O

ATmega48

Transfer bps	Half Duplex (Interrupt)	Full Duplex (Interrupt)	Half Duplex (Polling)	Full Duplex (Polling)
115.2K	O	X	X	X
57.6K	O	O	X	X
38.4K	O	O	O	X
19.2K	O	O	O	O