USB 2.0 reporting "1.000MB/s transfers"?

Source: http://unix.derkeiler.com/Mailing−Lists/FreeBSD/questions/2004−06/0701.html

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From: Richard Bejtlich (*richard_bejtlich_at_yahoo.com*)
Date: 06/08/04

```
Date: Tue, 8 Jun 2004 04:10:03 −0700 (PDT)
To: freebsd−questions@freebsd.org
```

Hello,

I am troubleshooting a Plextor 708UF DVD burner[0] on
FreeBSD CURRENT:

neely:/home/richard$ uname −a
FreeBSD neely.taosecurity.com 5.2−CURRENT FreeBSD
5.2−CURRENT #1: Sat Jun 5 20:35:43 EDT 2004
root@neely.taosecurity.com:/usr/obj/usr/src/sys/neely
i386

The box is a Shuttle SB52G2[1] with built−in USB 2.0
ports and an Adaptec DuoConnect FireWire/USB 2.0 PCI
adapter.[2] dmesg reports it as "<NEC uPD 9210 USB
controller>".

My entire dmesg and kernel config output are below,
but I seem to only get 1 MB/s as reported by dmesg:

cd1 at sbp0 bus 0 target 0 lun 0
cd1: <PLEXTOR DVDR PX−708A 1.06> Removable CD−ROM
SCSI−0 device
cd1: 50.000MB/s transfers
cd1: Attempt to query device size failed: NOT READY,
Medium not present − tray closed

The kernel has ehci compiled into it.

Any ideas? Hopefully I missed something obvious.

Thank you,

Richard

[0] http://www.plextor.com/english/products/708UF.html
[1] http://us.shuttle.com/specs2.asp?pro_id=264
[2]

http://www.adaptec.com/worldwide/product/proddetail.html?sess=no&language=English+US&prodkey=AUA−3020&

entire dmesg output:

Copyright (c) 1992−2004 The FreeBSD Project.
Copyright (c) 1979, 1980, 1983, 1986, 1988, 1989,
1991, 1992, 1993, 1994
The Regents of the University of California.
All rights reserved.
FreeBSD 5.2−CURRENT #1: Sat Jun 5 20:35:43 EDT 2004

root@neely.taosecurity.com:/usr/obj/usr/src/sys/neely
Preloaded elf kernel "/boot/kernel/kernel" at
0xc0953000.
Preloaded elf module "/boot/kernel/acpi.ko" at
0xc09531f4.
Timecounter "i8254" frequency 1193182 Hz quality 0
CPU: Intel(R) Celeron(R) CPU 2.00GHz (1996.60−MHz
686−class CPU)
Origin = "GenuineIntel" Id = 0xf27 Stepping = 7

Features=0xbfebfbff<FPU,VME,DE,PSE,TSC,MSR,PAE,MCE,CX8,APIC,SEP,MTRR,PGE,MCA,CM
OV,PAT,PSE36,CLFLUSH,DTS,ACPI,MMX,FXSR,SSE,SSE2,SS,HTT,TM,PBE>
real memory = 528416768 (503 MB)
avail memory = 507400192 (483 MB)
random: <entropy source, Software, Yarrow>
Pentium Pro MTRR support enabled
npx0: [FAST]
npx0: <math processor> on motherboard
npx0: INT 16 interface
acpi0: <IntelR AWRDACPI> on motherboard
acpi0: [GIANT−LOCKED]
pcibios: BIOS version 2.10
acpi0: Power Button (fixed)
Timecounter "ACPI−fast" frequency 3579545 Hz quality
1000
acpi_timer0: <24−bit timer at 3.579545MHz> port
0x408−0x40b on acpi0
cpu0: <ACPI CPU> on acpi0
acpi_tz0: <Thermal Zone> on acpi0
acpi_button0: <Power Button> on acpi0
pcib0: <ACPI Host−PCI bridge> port 0xcf8−0xcff on
acpi0
pci0: <ACPI PCI bus> on pcib0
pcib0: slot 2 INTA is routed to irq 11
pcib0: slot 29 INTA is routed to irq 11
pcib0: slot 29 INTB is routed to irq 5
pcib0: slot 29 INTC is routed to irq 10
pcib0: slot 29 INTD is routed to irq 9
pcib0: slot 31 INTB is routed to irq 9
pcib0: slot 31 INTB is routed to irq 9

```
agp0: <Intel 82845G (845G GMCH) SVGA controller> mem
0xe8200000−0xe827ffff,0xe000
0000−0xe7ffffff irq 11 at device 2.0 on pci0
agp0: detected 8060k stolen memory
agp0: aperture size is 128M
uhci0: <Intel 82801DB (ICH4) USB controller USB−A>
port 0xd800−0xd81f irq 11 at device 29.0 on pci0
uhci0: [GIANT−LOCKED]
usb0: <Intel 82801DB (ICH4) USB controller USB−A> on
uhci0
usb0: USB revision 1.0
uhub0: Intel UHCI root hub, class 9/0, rev 1.00/1.00,
addr 1
uhub0: 2 ports with 2 removable, self powered
uhci1: <Intel 82801DB (ICH4) USB controller USB−B>
port 0xd000−0xd01f irq 5 at device 29.1 on pci0
uhci1: [GIANT−LOCKED]
usb1: <Intel 82801DB (ICH4) USB controller USB−B> on
uhci1
usb1: USB revision 1.0
uhub1: Intel UHCI root hub, class 9/0, rev 1.00/1.00,
addr 1
uhub1: 2 ports with 2 removable, self powered
uhci2: <Intel 82801DB (ICH4) USB controller USB−C>
port 0xd400−0xd41f irq 10 at device 29.2 on pci0
uhci2: [GIANT−LOCKED]
usb2: <Intel 82801DB (ICH4) USB controller USB−C> on
uhci2
usb2: USB revision 1.0
uhub2: Intel UHCI root hub, class 9/0, rev 1.00/1.00,
addr 1
uhub2: 2 ports with 2 removable, self powered
ehci0: <EHCI (generic) USB 2.0 controller> mem
0xe8280000−0xe82803ff irq 9 at device 29.7 on pci0
ehci0: [GIANT−LOCKED]
ehci_pci_attach: companion usb0
ehci_pci_attach: companion usb1
ehci_pci_attach: companion usb2
usb3: EHCI version 1.0
usb3: companion controllers, 2 ports each: usb0 usb1
usb2
usb3: <EHCI (generic) USB 2.0 controller> on ehci0
usb3: USB revision 2.0
uhub3: Intel EHCI root hub, class 9/0, rev 2.00/1.00,
addr 1
uhub3: 6 ports with 6 removable, self powered
pcib1: <ACPI PCI−PCI bridge> at device 30.0 on pci0
pci1: <ACPI PCI bus> on pcib1
pcib1: slot 9 INTA is routed to irq 5
pcib1: slot 10 INTA is routed to irq 10
pcib2: <PCI−PCI bridge> at device 5.0 on pci1
```

```
pci2: <PCI bus> on pcib2
pcib1: slot 5 INTA is routed to irq 9
pcib2: slot 8 INTA is routed to irq 9
pcib1: slot 5 INTB is routed to irq 10
pcib2: slot 8 INTB is routed to irq 10
pcib1: slot 5 INTC is routed to irq 5
pcib2: slot 8 INTC is routed to irq 5
pcib1: slot 5 INTA is routed to irq 9
pcib2: slot 12 INTA is routed to irq 9
ohci0: <NEC uPD 9210 USB controller> mem
0xe8007000−0xe8007fff irq 9 at device 8.0 on pci2
ohci0: [GIANT−LOCKED]
usb4: OHCI version 1.0
usb4: <NEC uPD 9210 USB controller> on ohci0
usb4: USB revision 1.0
uhub4: NEC OHCI root hub, class 9/0, rev 1.00/1.00,
addr 1
uhub4: 3 ports with 3 removable, self powered
ohci1: <NEC uPD 9210 USB controller> mem
0xe8004000−0xe8004fff irq 10 at device 8.1 on pci2
ohci1: [GIANT−LOCKED]
usb5: OHCI version 1.0
usb5: <NEC uPD 9210 USB controller> on ohci1
usb5: USB revision 1.0
uhub5: NEC OHCI root hub, class 9/0, rev 1.00/1.00,
addr 1
uhub5: 2 ports with 2 removable, self powered
ehci1: <NEC uPD 720100 USB 2.0 controller> mem
0xe8005000−0xe80050ff irq 5 at device 8.2 on pci2
ehci1: [GIANT−LOCKED]
ehci_pci_attach: companion usb4
ehci_pci_attach: companion usb5
usb6: EHCI version 0.95
usb6: companion controllers, 3 ports each: usb4 usb5
usb6: <NEC uPD 720100 USB 2.0 controller> on ehci1
usb6: USB revision 2.0
uhub6: NEC EHCI root hub, class 9/0, rev 2.00/1.00,
addr 1
uhub6: 5 ports with 5 removable, self powered
fwohci0: <Texas Instruments TSB43AB23> mem
0xe8000000−0xe8003fff,0xe8006000−0xe80
067ff irq 9 at device 12.0 on pci2
fwohci0: [GIANT−LOCKED]
fwohci0: OHCI version 1.10 (ROM=1)
fwohci0: No. of Isochronous channels is 4.
fwohci0: EUI64 00:50:42:b5:c0:0d:0d:af
fwohci0: Phy 1394a available S400, 3 ports.
fwohci0: Link S400, max_rec 2048 bytes.
firewire0: <IEEE1394(FireWire) bus> on fwohci0
fwe0: <Ethernet over FireWire> on firewire0
if_fwe0: Fake Ethernet address: 02:50:42:0d:0d:af
```

```
fwe0: Ethernet address: 02:50:42:0d:0d:af
sbp0: <SBP−2/SCSI over FireWire> on firewire0
fwohci0: Initiate bus reset
fwohci0: node_id=0xc800ffc0, gen=1, CYCLEMASTER mode
firewire0: 1 nodes, maxhop <= 0, cable IRM = 0 (me)
firewire0: bus manager 0 (me)
em0: <Intel(R) PRO/1000 Network Connection, Version −
1.7.25> port 0xc000−0xc03f
mem 0xe8100000−0xe811ffff irq 5 at device 9.0 on pci1
em0: [GIANT−LOCKED]
em0: Ethernet address: 00:30:1b:af:63:63
em0: Speed:N/A Duplex:N/A
fxp0: <Intel 82551 Pro/100 Ethernet> port
0xc400−0xc43f mem
0xe8120000−0xe813ffff,0xe8150000−0xe8150fff irq 10 at
device 10.0 on pci1
miibus0: <MII bus> on fxp0
inphy0: <i82555 10/100 media interface> on miibus0
inphy0: 10baseT, 10baseT−FDX, 100baseTX,
100baseTX−FDX, auto
fxp0: Ethernet address: 00:30:1b:af:63:64
fxp0: [GIANT−LOCKED]
isab0: <PCI−ISA bridge> at device 31.0 on pci0
isa0: <ISA bus> on isab0
atapci0: <Intel ICH4 UDMA100 controller> port
0xf000−0xf00f,0x376,0x170−0x177,0x3
f6,0x1f0−0x1f7 at device 31.1 on pci0
ata0: at 0x1f0 irq 14 on atapci0
ata1: at 0x170 irq 15 on atapci0
pci0: <serial bus, SMBus> at device 31.3 (no driver
attached)
pci0: <multimedia, audio> at device 31.5 (no driver
attached)
fdc0: <Enhanced floppy controller (i82077, NE72065 or
clone)> port 0x3f7,0x3f0−0x
3f5 irq 6 drq 2 on acpi0
fdc0: FIFO enabled, 8 bytes threshold
fd0: <1440−KB 3.5" drive> on fdc0 drive 0
sio0 port 0x3f8−0x3ff irq 4 on acpi0
sio0: type 16550A
ppc0 port 0x378−0x37f irq 7 on acpi0
ppc0: Generic chipset (NIBBLE−only) in COMPATIBLE mode
ppbus0: <Parallel port bus> on ppc0
plip0: <PLIP network interface> on ppbus0
lpt0: <Printer> on ppbus0
lpt0: Interrupt−driven port
ppi0: <Parallel I/O> on ppbus0
atkbdc0: <Keyboard controller (i8042)> port 0x64,0x60
irq 1 on acpi0
atkbd0: <AT Keyboard> irq 1 on atkbdc0
kbd0 at atkbd0
```

```
atkbd0: [GIANT−LOCKED]
psm0: <PS/2 Mouse> irq 12 on atkbdc0
psm0: [GIANT−LOCKED]
psm0: model Generic PS/2 mouse, device ID 0
pmtimer0 on isa0
sc0: <System console> at flags 0x100 on isa0
sc0: VGA <16 virtual consoles, flags=0x300>
sio1: configured irq 3 not in bitmap of probed irqs 0
sio1: port may not be enabled
vga0: <Generic ISA VGA> at port 0x3c0−0x3df iomem
0xa0000−0xbffff on isa0
Timecounter "TSC" frequency 1996600720 Hz quality 800
Timecounters tick every 10.000 msec
ad0: 76319MB <WDC WD800JB−00ETA0> [155061/16/63] at
ata0−master UDMA100
acd0: CDROM <SONY CD−ROM CDU4821> at ata1−master PIO4
cd0 at ata1 bus 0 target 0 lun 0
cd0: <SONY CD−ROM CDU4821 S0.Q> Removable CD−ROM
SCSI−0 device
cd0: 16.000MB/s transfers
cd0: Attempt to query device size failed: NOT READY,
Medium not present
Mounting root from ufs:/dev/ad0s1a
fwohci0: BUS reset
fwohci0: node_id=0xc800ffc1, gen=2, CYCLEMASTER mode
firewire0: 2 nodes, maxhop <= 1, cable IRM = 1 (me)
firewire0: bus manager 1 (me)
umass0: PLEXTOR Corp. USB Storage Adapter, rev
2.00/0.00, addr 2
cd2 at umass−sim0 bus 0 target 0 lun 0
cd2: <PLEXTOR DVDR PX−708A 1.06> Removable CD−ROM
SCSI−0 device
cd2: 1.000MB/s transfers
cd2: Attempt to query device size failed: NOT READY,
Medium not present − tray closed
```

kernel config:

```
machine i386
cpu I686_CPU
ident neely

options SCHED_4BSD #4BSD
scheduler
options INET
#InterNETworking
options FFS #Berkeley Fast
Filesystem
options SOFTUPDATES #Enable FFS
soft updates support
options UFS_ACL #Support for
```

```
access control lists
options UFS_DIRHASH #Improve
performance on big directories
options MD_ROOT #MD is a
potential root device
options NFSCLIENT #Network
Filesystem Client
options NFSSERVER #Network
Filesystem Server
options NFS_ROOT #NFS usable as
/, requires NFSCLIENT
options MSDOSFS #MSDOS
Filesystem
options CD9660 #ISO 9660
Filesystem
options PROCFS #Process
filesystem (requires PSEUDOFS)
options PSEUDOFS
#Pseudo−filesystem framework
options COMPAT_43 #Compatible
with BSD 4.3 [KEEP THIS!]
options COMPAT_FREEBSD4 #Compatible
with FreeBSD4
options SCSI_DELAY=15000 #Delay (in ms)
before probing SCSI
options KTRACE #ktrace(1)
support
options SYSVSHM #SYSV−style
shared memory
options SYSVMSG #SYSV−style
message queues
options SYSVSEM #SYSV−style
semaphores
options _KPOSIX_PRIORITY_SCHEDULING #Posix
P1003_1B real−time extensions
options KBD_INSTALL_CDEV # install a
CDEV entry in /dev
options AHC_REG_PRETTY_PRINT # Print
register bitfields in debug
                        # output.
Adds ~128k to driver.
options AHD_REG_PRETTY_PRINT # Print
register bitfields in debug
                        # output.
Adds ~215k to driver.
options PFIL_HOOKS # pfil(9)
framework

options INVARIANT_SUPPORT #Extra sanity
checks of internal structur
es, required by INVARIANTS
```

```
device isa
device eisa
device pci

device fdc

device ata
device atadisk # ATA disk
drives
device ataraid # ATA RAID
drives
device atapicd # ATAPI CDROM
drives
device atapifd # ATAPI floppy
drives
device atapist # ATAPI tape
drives
options ATA_STATIC_ID #Static device
numbering
device atapicam # Added RMB 05 Jun 04

device ahb # EISA AHA1742 family
device ahc # AHA2940 and onboard
AIC7xxx devices
device ahd # AHA39320/29320 and
onboard AIC79xx devices
device amd # AMD 53C974 (Tekram
DC−390(T))
device isp # Qlogic family
device mpt # LSI−Logic MPT−Fusion
device sym # NCR/Symbios Logic
(newer chipsets + those of `ncr')
device trm # Tekram DC395U/UW/F
DC315U adapters

device adv # Advansys SCSI
adapters
device adw # Advansys wide SCSI
adapters
device aha # Adaptec 154x SCSI
adapters
device aic # Adaptec 15[012]x
SCSI adapters, AIC−6[23]60.
device bt # Buslogic/Mylex
MultiMaster SCSI adapters

device ncv # NCR 53C500
device nsp # Workbit Ninja SCSI−3
device stg # TMC 18C30/18C50
```

```
device scbus # SCSI bus (required
for SCSI)
device ch # SCSI media changers
device da # Direct Access
(disks)
device sa # Sequential Access
(tape etc)
device cd # CD
device pass # Passthrough device
(direct SCSI access)
device ses # SCSI Environmental
Services (and SAF−TE)

device amr # AMI MegaRAID
device asr # DPT SmartRAID V, VI
and Adaptec SCSI RAID
device ciss # Compaq Smart RAID 5*
device dpt # DPT Smartcache III,
IV − See NOTES for options
device iir # Intel Integrated
RAID
device ips # IBM (Adaptec)
ServeRAID
device mly # Mylex
AcceleRAID/eXtremeRAID

device aac # Adaptec FSA RAID
device aacp # SCSI passthrough for
aac (requires CAM)
device ida # Compaq Smart RAID
device mlx # Mylex DAC960 family
device pst # Promise Supertrak
SX6000
device twe # 3ware ATA RAID

device atkbdc # AT keyboard
controller
device atkbd # AT keyboard
device psm # PS/2 mouse

device vga # VGA video card
driver
device splash # Splash screen and
screen saver support
device sc
device agp # support several AGP
chipsets
device npx
device pmtimer
device cbb # cardbus
(yenta) bridge
```

```
device pccard # PC Card
(16−bit) bus
device cardbus # CardBus
(32−bit) bus
device sio # 8250, 16[45]50 based
serial ports
device ppc
device ppbus # Parallel port bus
(required)
device lpt # Printer
device plip # TCP/IP over parallel
device ppi # Parallel port
interface device

device de # DEC/Intel DC21x4x
(``Tulip'')
device em # Intel PRO/1000
adapter Gigabit Ethernet Card
device txp # 3Com 3cR990
(``Typhoon'')
device vx # 3Com 3c590, 3c595
(``Vortex'')

device miibus # MII bus support
device bfe # Broadcom BCM440x
10/100 ethernet
device bge # Broadcom BCM570xx
Gigabit Ethernet
device dc # DEC/Intel 21143 and
various workalikes
device fxp # Intel EtherExpress
PRO/100B (82557, 82558)
device pcn # AMD Am79C97x PCI
10/100 (precedence over 'lnc')
device re # RealTek
8139C+/8169/8169S/8110S
device rl # RealTek 8129/8139
device sf # Adaptec AIC−6915
(``Starfire'')
device sis # Silicon Integrated
Systems SiS 900/SiS 7016
device sk # SysKonnect SK−984x
and SK−982x gigabit ethernet
device ste # Sundance ST201
(D−Link DFE−550TX)
device ti # Alteon Networks
Tigon I/II gigabit ethernet
device tl # Texas Instruments
ThunderLAN
device tx # SMC EtherPower II
(83c170 ``EPIC'')
```

device vr # VIA Rhine, Rhine II
device wb # Winbond W89C840F
device xl # 3Com 3c90x
(``Boomerang'', ``Cyclone'')

device cs # Crystal
Semiconductor CS89x0 NIC
device ed # NE[12]000, SMC
Ultra, 3c503, DS8390 cards
device ex # Intel EtherExpress
Pro/10 and Pro/10+
device ep # Etherlink III based
cards
device fe # Fujitsu MB8696x
based cards
device ie # EtherExpress 8/16,
3C507, StarLAN 10 etc.
device lnc # NE2100, NE32−VL
Lance Ethernet cards
device sn # SMC's 9000 series of
ethernet chips
device xe # Xircom pccard
ethernet

device wlan # 802.11 support
device an # Aironet 4500/4800
802.11 wireless NICs.
device awi # BayStack 660 and
others
device wi #
WaveLAN/Intersil/Symbol 802.11 wireless NICs.

device random # Entropy device
device loop # Network loopback
device ether # Ethernet support
device sl # Kernel SLIP
device ppp # Kernel PPP
device tun # Packet tunnel.
device pty # Pseudo−ttys (telnet
etc)
device md # Memory "disks"
device gif # IPv6 and IPv4
tunneling
device faith # IPv6−to−IPv4
relaying (translation)

device bpf # Berkeley packet
filter

device uhci # UHCI PCI−>USB
interface

device ohci # OHCI PCI−>USB
interface
device ehci # USB 2.0 support
added RMB 26 May 04
device usb # USB Bus (required)
device ugen # Generic
device uhid # "Human Interface
Devices"
device ukbd # Keyboard
device ulpt # Printer
device umass # Disks/Mass storage −
Requires scbus and da
device ums # Mouse
device urio # Diamond Rio 500 MP3
player
device uscanner # Scanners
device aue # ADMtek USB ethernet
device axe # ASIX Electronics USB
ethernet
device cue # CATC USB ethernet
device kue # Kawasaki LSI USB
ethernet

device firewire # FireWire bus code
device sbp # SCSI over FireWire
(Requires scbus and da)
device fwe # Ethernet over
FireWire (non−standard!)