

PDA's with USB-Connectors

Handspring: Treo, Treo 600, Visor

Palm: I705, M125, M130, M500, M505, M515, Tungsten T, Tungsten Z, Zire, Zire 31, Clie 4.0, Clie 4.1, Clie 5.0, Clie PEG-S500C, Clie NX60, Clie S360

PCCARD Host Controller

3Com/HP: 3CRWB6096-A-PCCARD adapter

Bluetooth Devices

3Com 3CREB96

AIPTEK BR0R02

WpoX BT-DG02

Mitsumi Bluetooth USB Adapter

MSI MS-6967

TDK Bluetooth USB Adapter

Additional Information

Kernel Compilation:

```
# cd /usr/src/sys/i386/conf
```

```
# cp GENERIC EIGENERKERNEL
```

To enable USB and Bluetooth support following entries must be in the kernel:

```

device uhci      # UHCI PCI->USB interface
device ohci      # OHCI PCI->USB interface
device usb       # USB Bus (required)
device ugen      # Generic
device uhid      # "Human Interface Devices"
device ukbd      # Keyboard
device ulpt      # Printer
device umass     # Disks/Mass storage
device ums       # Mouse
device uscanner  # Scanners
device urio      # Diamond Rio MP3 Player
device aue       # ADMtek USB ethernet
device cue       # CATC USB ethernet
device kue       # Kawasaki LSI USB ethernet

```

For Bluetooth also make sure you have following entries:

```
options NETGRAPH
```

```
options NETGRAPH_SOCKET
```

```
options NETGRAPH_ECHO
```

You can also load modules with kldload.

Important Notice:

For umass to work

```
options scbus
```

```
options da
```

need to be enabled!

USB network adapters require

```
options miibus
```

Save your Configuration.

```
# cd /usr/src
```

```
# make buildkernel KERNCONF=MYKERNEL
```

```
# make installkernel KERNCONF=MYKERNEL
```

You may choose any name for your kernel, MYKERNEL is just an example. Pay attention to any error messages while compiling and installing. Also make sure you save your old kernel and it's modules, before creating a new kernel.

Helpful Commands for USB and Bluetooth:

```
# usbdevs -v -d Lists all USB devices + more information
```

```
# ngctl Gives you a shell to manage your Bluetooth devices
```

Notice:

USB keyboards still cause problems. As of FreeBSD 6.0 there's an option in the boot menu explicitly for USB keyboards. This option sets the flag:

```
hint.atkbd.0.flags=0x1
```

There have been significant changes in the meantime and in FreeBSD Release 6.1 (April 2006) kdbmux will handle all known USB-keyboards much better without making the above hint necessary!

If you see something not listed here or have any suggestions, please contact Daniel.Seuffert@allBSD.de, we will update this flyer. Thanks for helping us!

FreeBSD

USB and Bluetooth



USB Devices

OHCI v1.0 compatible Controller:

AcerLabs M5237 (Aladdin-V), AMD-756, OPTi 82C861 (FireLink), NEC uPD 9210, CMD Tech 670 (USB0670), CMD Tech 673 (USB0673), NVIDIA nForce3

UHCI v1.1 compatible Controller:

Intel: 82371AB/EB (PIIX4), Intel 82371SB (PIIX3), VIA 83C572

USB 2.0 Controller using the EHCI Interface

USB-Hubs

Keyboards

Other Devices:

Assist Computer Systems: PC Camera C-M1, ActiveWire I/O Board, Creative Technology Video Blaster WebCam Plus, Mirunet AlphaCam Plus

USB-Radios: D-Link: DSB-R100 USB Radio

Rio500 MP3-Player: Diamond MultiMedia: Rio 500, Rio 600, Rio 800

USB-Modems:

3Com: 5605, Metricom Ricochet GS USB wireless Modem, Yamaha Broadband Wireless Router RTW65b

USB-Mice

USB Parallel Port Converters

Aten: parallel Printer Adapter

Belkin: F5U002 parallel Printer Adapter

Canon: BJ F850, S600, LBP-1310, 350

Entrega: USB-to-parallel Printer Adapter

Hewlett-Packard: HP Deskjet 3420 (P/N: C8947A #ABJ)

Oki Data: MICROLINE ML660PS

Seiko Epson: PM-900C, 880C, 820C, 730C

USB Support for Belkin serial adapters:

Belkin: F5U103, F5U120

e-Tek Labs: Kwik232

GoHubs: GoCOM232

Peracom: single port serial adapter

Support for BWCT console management

Serial adapters based on FT8U100AX and FT8U232AM chip sets:

HP: USB-Serial adapter shipped with some HP laptops, Inland UAS111

QVS: USC-1000

Serial Adapter by Prolific PL-2303: ATEN: UC-232A

BAFO: BF-800, BF-810

ELECOM: UC-SGT

HAL Corporation: Crossam2+USB IR commander,

IOGEAR: UC-232A,

I/O DATA: USB-RSAQ, USB-RSAQ2,

PLANEX: USB-RS232, URS-03,

RATOC: REX-USB60,

Sandberg: USB to Serial Link (model number 133-08),

SOURCENEXT: KeikaiDenwa 8 (with and without charger),

Sony Ericsson: USB Cable (Susteen USB Data Cable)

USB-RS232 Converters:

Magic Control Technology: USB-232

Sitecom: USB-232

D-Link: DU-H3SP USB BAY Hub

Belkin: F5U109, F5U409

USB Scanner:

Acer: Acerscan 320U, 620U, 640U, C310U

AGFA: SnapScan 1212U, 1236U, e20, e25, e26, e40, e50, e52, SnapScan Touch

Avision: 1200U

CanoScan: N656U, N676U, N1220U, LIDE 20, LIDE 30

Epson: Perfection 610, 636U / 636Photo, 640U, 1200U, 1200Photo, 1240U, 1240Photo, 1250 1260, 1600, 1640SU, 1650, 1660, 1670, 3200, GT-8400UF, GT-9300UF, GT-9700F

Hewlett Packard: Photosmart S20, Scanjet 2200C, 3300C, 3400CSE, 4100C, 4200C, 4300C, 5200C, 5300C, 5400C, 6200C, 6300C

KYE: ColorPage Vivid-Pro

Microtek: Phantom 336CX, C6, ScanMaker V6UL, V6USL, X6U

Minolta: 5400

Mustek: 600 CU, 1200 CU, 1200 UB, 1200 USB, BearPaw 1200F, BearPaw 1200TA, BearPaw 1200

Nikon: CoolScan LS40 ED

Primax: 6200, Colorado 1200u, 600u, USB 19200, USB 9600, G2-200, G2-300, G2-600, G2600, G2E-300, G2E-3002, G2E-600, G2E600, G2X-300, G600, ReadyScan 636i

Ultima: 1200 UB Plus

UMAX: Astra 1220U, 1236U, 2000U, 2100U, 2200U, 3400

Visioneer: OneTouch 3000, 5300, 7600, 6100, 6200, 8100, 8600

USB Mass Storage Devices

ADTEC: Stick Drive AD-UST32M, 64M, 128M, 256M

Denno: FireWire/USB2 Removable 2.5-inch HDD Case MIFU-25CB20

FujiFilm: Zip USB Drive ZDR100 USB A

GREEN HOUSE :USB Flash Memory ``PicoDrive" GH-UFD32M, 64M, 128M

IBM: 32MB USB Memory Key (P/N 22P5296), IBM ThinkPad USB Portable CD-ROM Drive (P/N 33L5151)

I-O DATA: USB x6 CD-RW Drive CDRW-i64/USB (CDROM only), USB CD/CD-R/CD-RW/DVD-R/DVD-RW/DVD-ROM Drive DVR-iUH2 (CDROM, DVD-RAM only), USB/IEEE1394 Portable HD Drive HDP-i30P/CI, HDP-i40P/CI

Iomega: USB Zip 100Mb (primitive support still), Zip750 USB2.0 Drive

Keian: USB1.1/2.0 3.5-inch HDD Case KU350A

Kurouto Shikou: USB 2.5-inch HDD Case GAWAP2.5PS-USB2.0

Logitec: USB1.1/2.0 HDD Unit SHD-E60U2, Mobile USB Memory LMC-256UD, USB Double-Speed Floppy Drive LFD-31U2, USB/IEEE1394 DVD-RAM/R/RW Unit LDR-N21FU2 (CDROM only)

Matshita: CF-VFUDU03 Floppy Drive

MELCO: USB2.0 MO Drive MO-CH640U2, USB Flash Disk ``PetitDrive", RUF-32M, -64M, -128M, -256M, USB2.0 Flash Disk ``PetitDrive2", RUF-256M/U2, -512M/U2, USB Flash Disk ``ClipDrive", RUF-C32M, -C64M, -C128M, -C256M, -C512M

Microtech: USB-SCSI-HD 50 USB to SCSI cable

NOVAC: USB2.0 2.5/3.5-inch HDD Case NV-HD351U

Panasonic: Floppy Drive, USB2.0 Portable CD-RW Drive KXL-RW40AN (CDROM only)

RATOC: Systems USB2.0 Removable HDD Case U2-MDK1, U2-MDK1B

Sony: Portable CD-R/RW Drive CRX10U (CDROM only)

TEAC: Portable USB CD-ROM Unit CD-110PU/210PU

Y-E: Data floppy drive (720/1.44/2.88Mb)