Frequently Asked Questions

Question

MPX200 + FreeBSD

Answer

? O B L = 5 < > 5, A C 4 O ? > 2 A 5 < C A   www.wce.by

@ 8 = 5 ? 0 B G 5 = = > < GENERIC- O 4 @ 5 MPX200 > B ? 5 @ 5 4 O 5 B A O : 0 : ugen - B. 5.
generic usb device.   ? 0 B G 5 9 A > 1 A B 2 5 = = > @ 0 = 5 5 8 = 5 A C I 5 A B 2 > 2 0 ; >.

> > 1 I 5 < O 8 A ? > ; L 7 > 2 0 ; 2 ? > 4 E > 4 0:

1. /usr/src/sys/dev/usb/uplcom.c - 4 @ 0 9 2 5 @, : > B > @ K 9 "supports several USB-to-RS232 serial adapters driven by Profilic PL-2303, PL-2303X and probably PL-2303HX USB-to-RS232 bridge chip."

2. /usr/src/sys/usb/dev/umodem.c - 2 > > 1 I 5 < B C B A < K A ; A 2 > 4 8 B A O : B > < C, G B > mpx
2 > 7 < > 6 = > 2 > 7 2 @ 0 I 0 5 B 4 @ 0 9 2 5 @ C umodem ACM descriptor, = > = 5
2 > 7 2 @ 0 I 0 5 B CM descriptor. 0 B G 4 ; O C A B @ 0 = 5 = 8 O M B > 9 ? @ > 1 ; 5 < K
A C I 5 A B 2 C 5 B (Alexey Illarionov), = > 2 6.1-RELEASE > = @ 0 1 > B 0 B L = 5 1 C 4 5 B,
? > M B > < C 5 3 > ? @ 8 H ; > A L = 5 < = > 3 > ? > 4 > 3 = 0 B L. 0 B G 2
> @ 8 3 8 = 0 ; 5 ? @ 5 4 = 0 7 = 0 G 0 ; A O 4 ; O B 5 ; 5 D > = > 2 Nokia - ? @ >
> B > @ > ; C 8 B 5 < 1 > ; 5 5 mpx = 5 A ; > 2 0.

> > 1 I 5 < ? 5 @ 2 K 9 A ? > A > 1:

@ > ? 8 A K 2 0 5 < product id mpx200 2 /usr/src/sys/dev/usb/usbdevs:

```
--- usbdevs.old Mon May 22 03:52:42 2006
+++ usbdevs Mon May 22 03:37:06 2006
@@ -1182,6 +1182,7 @@
product MICROSOFT INTELLIEYE 0x0025 IntelliEye mouse
product MICROSOFT INETPRO2 0x002b Internet Keyboard Pro
product MICROSOFT MN110 0x007a 10/100 USB NIC
+product MICROSOFT MPX200 0x0079 MPx200

/* Microtech products */
product MICROTECH SCSIDB25 0x0004 USB-SCSI-DB25
```

Vendor id   0 9 : @ > A > D B 0 - 0x045e, mpx200 - 0x00ce, mpx200 2 @ 5 6 8 < 5 usb- < > 4 5 < 0 - 0x0079 -
M B > = 0 A 8 8 = 5 B 5 @ 5 A C 5 B.

---

0 B 5 < /usr/src/sys/dev/usb/uplcom.c

--- uplcom.c.old Mon May 22 03:52:58 2006
+++ uplcom.c Mon May 22 03:37:17 2006
@@ -260,6 +260,8 @@
{ USB_VENDOR_HAL, USB_PRODUCT_HAL_IMR001, -1, TYPE_PL2303 },
/* Sitecom USB to Serial */
{ USB_VENDOR_SITECOM, USB_PRODUCT_SITECOM_SERIAL, -1, TYPE_PL2303 },
+ /* Motorola MPx200 */
+ { USB_VENDOR_MICROSOFT, USB_PRODUCT_MICROSOFT_MPX200, -1 },
{ 0, 0 }
};

0 M B > < 2 A 5.

B > @ > 9 A ? > A > 1:
> B ? 0 B G 4 ; O /usr/srs/sys/dev/usb/umodem.c

--- umodem.c.old Mon May 22 04:03:52 2006
+++ umodem.c Mon May 22 03:37:42 2006
@@ -178,6 +178,9 @@

Static void umodem_get_caps(usbd_device_handle, int *, int *);

+Static usb_cdc_union_descriptor_t *
+ umodem_get_union(usbd_device_handle dev, int iface_no);
+
Static void umodem_get_status(void *, int portno, u_char *lsr, u_char *msr);
Static void umodem_set(void *, int, int, int);
Static void umodem_dtr(struct umodem_softc *, int);
@@ -275,6 +278,7 @@
usb_interface_descriptor_t *id;
usb_endpoint_descriptor_t *ed;
usb_cdc_cm_descriptor_t *cmd;
+ usb_cdc_union_descriptor_t *cud;
char *devinfo = NULL;
const char *devname;
usbd_status err;
@@ -307,10 +311,13 @@
/* Get the data interface no. */
cmd = umodem_get_desc(dev, UDESC_CS_INTERFACE, UDESCSUB_CDC_CM);
if (cmd == NULL) {
- printf("%s: no CM descriptor\n", devname);
+ cud = umodem_get_union(dev, sc->sc_ctl_iface_no);
+ if (cud == NULL) {
+ printf("%s: no CM and Union descriptors\n", devname);

```
goto bad;
- }
- sc->sc_data_iface_no = data_ifcno = cmd->bDataInterface;
+ } else data_ifcno = cud->bSlaveInterface[0];
+ } else data_ifcno = cmd->bDataInterface;
+ sc->sc_data_iface_no = data_ifcno;

printf("%s: data interface %d, has %sCM over data, has %sbreak\n",
devname, data_ifcno,
@@ -556,19 +563,36 @@


*cm = *acm = 0;

- cmd = umodem_get_desc(dev, UDESC_CS_INTERFACE, UDESCSUB_CDC_CM);
- if (cmd == NULL) {
- DPRINTF(("umodem_get_desc: no CM desc\n"));
- return;
- }
- *cm = cmd->bmCapabilities;
-
cad = umodem_get_desc(dev, UDESC_CS_INTERFACE, UDESCSUB_CDC_ACM);
if (cad == NULL) {
DPRINTF(("umodem_get_desc: no ACM desc\n"));
return;
}
*acm = cad->bmCapabilities;
+
+ cmd = umodem_get_desc(dev, UDESC_CS_INTERFACE, UDESCSUB_CDC_CM);
+ if (cmd == NULL) {
+ DPRINTF(("umodem_get_desc: no CM desc\n"));
+ *cm = USB_CDC_CM_DOES_CM | USB_CDC_CM_OVER_DATA;
+ }else *cm = cmd->bmCapabilities;
+}
+
+usb_cdc_union_descriptor_t *
+umodem_get_union(usbd_device_handle dev, int iface_no)
+{
+ usb_cdc_union_descriptor_t *desc;
+ usb_config_descriptor_t *cd = usbd_get_config_descriptor(dev);
+ uByte *p = (uByte *)cd;
+ uByte *end = p + UGETW(cd->wTotalLength);
+ while (p + desc = (usb_cdc_union_descriptor_t *)p;
+ if (desc->bDescriptorType == UDESC_CS_INTERFACE &&
+ desc->bDescriptorSubtype == UDESCSUB_CDC_UNION &&
+ desc->bMasterInterface == iface_no)
+ return (desc);
+ p += desc->bLength;
```

+ }
+ return (0);
}

void

0 M B > < 2 A 5.   > < ? 8 ; 8 @ > 2 0 = 8 5 > B 4 5 ; L = > < > 4 C ; 5 9 = 5
? @ 8 2 5 ; 8 : : 0 : 8 <- ; 8 1 > @ 5 7 C ; L B 0 B 0 <.   > M B > < C ? @ 8 H ; > A L
? 5 @ 5 A > 1 @ 0 B L O 4 @ >, 4 > 1 0 2 8 2 B C 4 0 ? > 4 4 5 @ 6 : C uplcom, umodem, ucom:


```
device ucom
device umodem
device uplcom
```


- B 8 A B @ > : 8 A ; 5 4 C 5 B 4 > 1 0 2 8 B L 2 D 0 9 ; : > = D 8 3 C @ 0 F 8 8 O 4 @ 0.
0 B 5 <:

config D 0 9 ; _ : > = D 8 3 C @ 0 F 8 8_ O 4 @ 0


```
cd ../compile/ D 0 9 ;_ : > = D 8 3 C @ 0 F 8 8_ O 4 @ 0
make depend
make
make install
```


4 5 D 0 9 ; _ : > = D 8 3 C @ 0 F 8 8_ O 4 @ 0 - 2
/usr/src/sys/i386/conf/ D 0 9 ; _ : > = D 8 3 C @ 0 F 8 8_ O 4 @ 0;
/usr/src/sys/i386/compile/ D 0 9 ; _ : > = D 8 3 C F 8 8_ O 4 @ 0 - B C B C 6 5 : 0 B 0 ; > 3 A B 0 : 8 <
6 5 = 0 7 2 0 = 8 5 <

0 B 5 < ? 5 @ 5 7 0 3 @ C 7 : 0, 0 : B 8 2 8 @ C 5 < = 0 mpx' 5 usb-modem, ? > 4 : ; N G 0 5 <
: : > < ? C 8 2 8 4 8 < = 5 G B > B 8 ? 0:

ucom0: vendor 0x045e product 0x0079, rev 1.00/0.90, addr 2

< 5 A B > ugen0 C 6 5 ucom0 - M B > 7 = 0 G 8 B, G B > B 5 ; 5 D > = = > ? @ 5 4 5 ; 8 ; A O
: 0 : usb-modem.   > 7 < > 6 = >, B 0 : > 3 > @ 5 7 C ; L B 0 B 0 < > 6 = > 4 > 1 8 B L A O
8 > 4 = 8 < 8 7 ? 5 @ 5 G 8 A ; = = K E A ? > A > 1 > 2, = > A M B 8 < C 6 5 < = 5
@ 0 7 1 8 @ 0 B L A O ; 5 = L.

Vampyr`s House!