

PhonyBL - Feature #314

Use USB CDC connection for bootloader

14.11.2022 12:40 - Maximilian Seesslen

Status:	Erledigt	Beginn:	14.11.2022
Priorität:	Normal	Abgabedatum:	
Zugewiesen an:	Maximilian Seesslen	% erledigt:	0%
Kategorie:		Geschätzter Aufwand:	0.00 Stunde
Zielversion:		Aufgewendete Zeit:	0.00 Stunde
CS Zielversion:			
Beschreibung			
Not sure if it works out of the box with ttyACM; maybe the USB-code in biwak has to be changed to let the device appear as real virtual com port.			

Historie

#1 - 14.11.2022 12:53 - Maximilian Seesslen

A copy from "lsusb -v" of an FTDI-adapter

Bus 001 Device 012: ID 0403:6001 Future Technology Devices International, Ltd FT232 Serial (UART) IC

Device Descriptor:

```
bLength          18
bDescriptorType   1
bcdUSB            2.00
bDeviceClass      0
bDeviceSubClass   0
bDeviceProtocol   0
bMaxPacketSize0   8
idVendor          0x0403 Future Technology Devices International, Ltd
idProduct         0x6001 FT232 Serial (UART) IC
bcdDevice         6.00
iManufacturer     1 FTDI
iProduct          2 TTL232R-3V3
iSerial           3 FTGQK07A
bNumConfigurations 1
```

Configuration Descriptor:

```
bLength          9
bDescriptorType   2
wTotalLength      0x0020
bNumInterfaces    1
bConfigurationValue 1
iConfiguration    0
bmAttributes      0x80
                  (Bus Powered)
```

MaxPower 90mA

Interface Descriptor:

```
bLength          9
bDescriptorType   4
bInterfaceNumber   0
bAlternateSetting   0
bNumEndpoints      2
bInterfaceClass    255 Vendor Specific Class
bInterfaceSubClass  255 Vendor Specific Subclass
bInterfaceProtocol  255 Vendor Specific Protocol
iInterface         2 TTL232R-3V3
```

Endpoint Descriptor:

```
bLength          7
bDescriptorType   5
bEndpointAddress  0x81 EP 1 IN
bmAttributes      2
                  Transfer Type Bulk
                  Synch Type None
                  Usage Type Data
wMaxPacketSize    0x0040 1x 64 bytes
bInterval         0
```

```

Endpoint Descriptor:
  bLength                7
  bDescriptorType         5
  bEndpointAddress       0x02  EP 2 OUT
  bmAttributes            2
    Transfer Type         Bulk
    Synch Type            None
    Usage Type            Data
  wMaxPacketSize          0x0040  1x 64 bytes
  bInterval              0
can't get device qualifier: Resource temporarily unavailable
can't get debug descriptor: Resource temporarily unavailable
Device Status:          0x0000

```

#2 - 16.11.2022 10:30 - Maximilian Seesslen

Connection works.
 Packet-Size in USB-Class fixed.

Update still does not work. Phony-BL get timeouts.

#3 - 17.11.2022 14:10 - Maximilian Seesslen

The buffer in the usb_class is only 0x10.

#4 - 18.11.2022 15:34 - Maximilian Seesslen

Buffer-ring is implemented.
 But its still copied within the ISR.
 Need to leave the ISR and to call the eventloop.

Easiest way to test it is to have an eventloop in CIOStream.
 Clean solution is not to block in phonyBL.

#5 - 21.11.2022 10:56 - Maximilian Seesslen

- Status wurde von Neu zu Erledigt geändert
- Zugewiesen an wurde auf Maximilian Seesslen gesetzt

Well, it works.