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EPICS USBTMC device

Installation under EPICS

Prequisites

Check, if device is found by kernel:

```
ls -l /dev/usbtmc0
```

Install needed library

```
sudo apt-get install libusb-1.0-0-dev
```

some hints can be found here

Udev-Rule

```
/etc/udev/rules.d/51-usbtmc.rules
KERNEL=="usbtmc/*", MODE="0660", GROUP="usbtmc"
KERNEL=="usbtmc[0-9]", MODE="0660", GROUP="usbtmc"
SUBSYSTEM=="usb", GROUP="plugdev"
```

Reload rules and trigger

```
udevadm control --reload-rules
udevadm trigger
```

EPICS

Enable usbtmc-Support in Asyn

```
cd /home/epics/asyn
vim configure/CONFIG_SITE
    ...
    # If you have libusb-1.0 revision 16 or newer and want the USB TMC
support set DRV_USBTMC=YES
    DRV_USBTMC=YES
    ...
make clean
make -j4
```

Add drvAsynUSBTMC.dbd in IOCApp/src/Makefile

```
vim /home/epics/steamioc/steamApp/src/Makefile
    ...
    steam_DBD += asyn.dbd stream.dbd drvAsynIPPort.dbd drvAsynSerialPort.dbd
drvAsynUSBTMC.dbd
    ...
make clean
make -j4
```

st.cmd

ASYN usbtmc Get Device ID for identification in st.cmd

```
~$lsusb | grep ThorLabs
Bus 001 Device 009: ID 1313:8072 ThorLabs

##====Thorlabs PM100USB====
usbtmcConfigure("pm100usb1", 0x1313, 0x8072)
dbLoadRecords("db/pm100usb.db",
"P=steam_prep:,R=powermeter1:,PORT=pm100usb1")

##==== Debug =====
asynSetTraceIOMask("pm100usb1", -1, 0x6)
asynSetTraceMask("pm100usb1", -1, 0x9)
```

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