

HI,

I AM TRYING TO INSTALL THE FX3 SUPPORT SOFTWARE FOR LINUX ON AN I7 BASED LAPTOP RUNNING UBUNTU 16.04. I HAVE RUN INTO A NUMBER OF ISSUES THAT ARE ILLUSTRATED BELOW. I AM LOOKING FOR ANY INFORMATION THAT MAY HELP ME BUILD AND INSTALL THE EXECUTABLES. I BELIEVE I HAVE SET UP ALL THE PATHS CORRECTLY, DOWNLOADED THE FILES TO SUPPORT THE 64BIT VERSION, DOWNLOADED QT4, ETC.

ANY ASSISTANCE WOULD BE GREATLY APPRECIATED. I HAVE USED AND DEVELOPED WITH THE WINDOWS BASED SOFTWARE (STREAMER) FOR FX3 WITHOUT ISSUE IN THE PAST.

THANKS,

BILL

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Cypress Semiconductor Corporation
CyUSB Suite For Linux, version 1.0.5
=====|
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Pre-requisites:

1. libusb-1.0.x is required for compilation and functioning of the API library.
2. Native gcc/g++ tool-chain and the GNU make utility are required for compiling the library and application.
2. qt4 is required for building the cyusb_linux GUI application.
3. The pidof command is used by the cyusb_linux application to handle hot-plug of USB devices.

Installation Steps:

1. cd to the main directory where files were extracted and execute 'make'. This will compile the libcyusb library and create a static library.

For example, if the archive is extracted to /home/user/cyusb_linux_1.0.5; then
e.g.: user@desktop:/home/user/cyusb_linux_1.0.5 \$ make
2. Make sure that the install.sh script is executable by changing the mode of install.sh file.
e.g.: user@desktop:/home/user/cyusb_linux_1.0.5 \$ chmod +x install.sh
3. The install.sh script compiles the cyusb_linux GUI application, and installs the libcyusb library and the application in the system directories (/usr/local/). It also sets up a set of UDEV rules and updates the environment variables under the /etc directory.

As these changes require root (super user) permissions, the install.sh script needs to be executed from a root login.

e.g.: root@desktop:/home/user/cyusb_linux_1.0.5 \$./install.sh

4. The GUI application can now be launched using the 'cyusb_linux' command.

I AM TRYING TO EXECUTE THE STEPS OUTLINED ABOVE. THE FIRST PROBLEM IS WITH THE MAKE. THE ONLY WAY I CAN MAKE THIS WORK IS TO REMOVE THE "-I libusb-1.0 -I rt" FROM THE SECOND g++ LINE. WHAT AM I DOING WRONG? NOTE I AM USING UBUNTU 16.04 AS SHOWN BELOW.

```
william@Penrith-2: ~/Desktop/FX3_SDK_1.3.4_Linux/cyusb_linux_1.0.5
william@Penrith-2:~/Desktop/FX3_SDK_1.3.4_Linux/cyusb_linux_1.0.5$ make
g++ -fPIC -o lib/libcyusb.o -c lib/libcyusb.cpp
g++ -shared -Wl,-soname,libcyusb.so -o lib/libcyusb.so.1 lib/libcyusb.o -l usb-1
.0 -l rt
/usr/bin/ld: cannot find -lusb-1.0
collect2: error: ld returned 1 exit status
Makefile:2: recipe for target 'all' failed
make: *** [all] Error 1
william@Penrith-2:~/Desktop/FX3_SDK_1.3.4_Linux/cyusb_linux_1.0.5$ make
g++ -fPIC -o lib/libcyusb.o -c lib/libcyusb.cpp
g++ -shared -Wl,-soname,libcyusb.so -o lib/libcyusb.so.1 lib/libcyusb.o -l libusb
-1.0 -l rt
/usr/bin/ld: cannot find -llibusb-1.0
collect2: error: ld returned 1 exit status
Makefile:2: recipe for target 'all' failed
make: *** [all] Error 1
william@Penrith-2:~/Desktop/FX3_SDK_1.3.4_Linux/cyusb_linux_1.0.5$ lsb_release -
a
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 16.04.5 LTS
Release:        16.04
Codename:       xenial
william@Penrith-2:~/Desktop/FX3_SDK_1.3.4_Linux/cyusb_linux_1.0.5$
```

THE SECOND PROBLEM COMES WITH THE ./install:

```
william@Penrith-2:~/Desktop/FX3_SDK_1.3.4_Linux/cyusb_linux_1.0.5
william@Penrith-2:~/Desktop/FX3_SDK_1.3.4_Linux/cyusb_linux_1.0.5$ sudo ./install.sh
[sudo] password for william:
Your current directory is /home/william/Desktop/FX3_SDK_1.3.4_Linux/cyusb_linux_1.0.5. This is where the cyusb_suite software will be installed...
g++ -fPIC -o lib/libcyusb.o -c lib/libcyusb.cpp
g++ -shared -Wl,-soname,libcyusb.so -o lib/libcyusb.so.1 lib/libcyusb.o
cd lib; ln -sf libcyusb.so.1 libcyusb.so
rm -f lib/libcyusb.o
rm -f moc_controlcenter.cpp
rm -f ui_controlcenter.h
rm -f controlcenter.o main.o fx2_download.o fx3_download.o streamer.o moc_controlcenter.o
rm -f *~ core *.core
/usr/lib/x86_64-linux-gnu/qt4/bin/uic controlcenter.ui -o ui_controlcenter.h
g++ -c -m64 -pipe -O2 -Wall -W -D_REENTRANT -DQT_NO_DEBUG -DQT_GUI_LIB -DQT_NETWORK_LIB -DQT_CORE_LIB -DQT_SHARED -I/usr/share/qt4/mkspecs/linux-g++-64 -I. -I/usr/include/qt4/QtCore -I/usr/include/qt4/QtNetwork -I/usr/include/qt4/QtGui -I/usr/include/qt4 -I. -I. -o controlcenter.o controlcenter.cpp
g++ -c -m64 -pipe -O2 -Wall -W -D_REENTRANT -DQT_NO_DEBUG -DQT_GUI_LIB -DQT_NETWORK_LIB -DQT_CORE_LIB -DQT_SHARED -I/usr/share/qt4/mkspecs/linux-g++-64 -I. -I/usr/include/qt4/QtCore -I/usr/include/qt4/QtNetwork -I/usr/include/qt4/QtGui -I/usr/include/qt4 -I. -I. -o main.o main.cpp
main.cpp: In function 'void get_config_details()':
main.cpp:625:66: error: 'libusb_get_ss_endpoint_companion_descriptor' was not declared in this scope
    libusb_get_ss_endpoint_companion_descriptor (NULL, ep, &compd);
                                                                    ^
main.cpp:646:66: error: invalid use of incomplete type 'struct get_config_details():libusb_ss_endpoint_companion_descriptor'
    summ[summ_count].reqsize = (summ[summ_count].maxps * (compd->bMaxBurst +
                                                                    ^
main.cpp:623:12: note: forward declaration of 'struct get_config_details():libusb_ss_endpoint_companion_descriptor'
    struct libusb_ss_endpoint_companion_descriptor *compd = NULL;
    ^
main.cpp:647:14: error: invalid use of incomplete type 'struct get_config_details():libusb_ss_endpoint_companion_descriptor'
    (compd->bmAttributes + 1));
    ^
main.cpp:623:12: note: forward declaration of 'struct get_config_details():libusb_ss_endpoint_companion_descriptor'
    struct libusb_ss_endpoint_companion_descriptor *compd = NULL;
    ^
main.cpp:649:66: error: invalid use of incomplete type 'struct get_config_details():libusb_ss_endpoint_companion_descriptor'
    summ[summ_count].reqsize = (summ[summ_count].maxps * (compd->bMaxBurst +
                                                                    ^
main.cpp:623:12: note: forward declaration of 'struct get_config_details():libusb_ss_endpoint_companion_descriptor'
    struct libusb_ss_endpoint_companion_descriptor *compd = NULL;
    ^
Makefile:234: recipe for target 'main.o' failed
make: *** [main.o] Error 1
```

I BELIEVE I HAVE ALL OF THE PATHS SET UP CORRECTLY IN .bashrc. I HAVE NOT BEEN ABLE TO GET AROUND THIS. ANY SUGGESTIONS?