

Linux\_USB70xx\_ACE009\_USB\_GPIO\_Bridging\_Release Notes

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| 0.2 | 02/20/2019 | Rathika K | Linux ACE009 V1.0.0 release |

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# Introduction

This document provides release information about Linux Application Code example to get and set GPIO pin state for USB70xx family hubs.

# Legal Information

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# Software required

* libusb

Download the latest libusb from <http://sourceforge.net/projects/libusb/files/latest/download?source=files>

# Supported SKU List

* USB7002
* USB7050
* USB7051
* USB7052
* USB7056

# Package Content

The release package contains the following files

* **ACE009\_USB\_GPIO\_Bridging.cpp** – Application Code Example file to get and set GPIO pin state for USB70xx family hubs
* **README** – Describes the Usage and build procedure
* **MakeFile** – For generating executable file

# Release History

## Version 1.0.0

### Changes

None

### Feature Addition

* Application code example to get and set GPIO pin state

### Bug Fixes

None

### Known limitation

* Only one device can be accessed at a time
* No support is provided when multiple HFCs with same VID and PID are present

# Appendix 1

## libusb Installation Instructions

### Package Download

* Download the latest libusb from

<http://sourceforge.net/projects/libusb/files/latest/download?source=files>

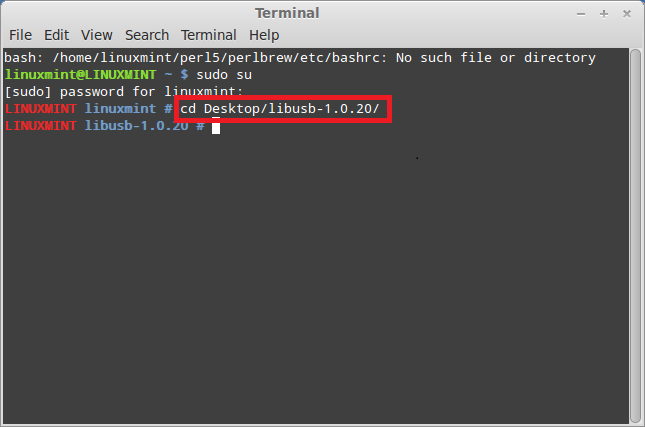
### Installation of libusb

To install the Libusb follow the below instructions

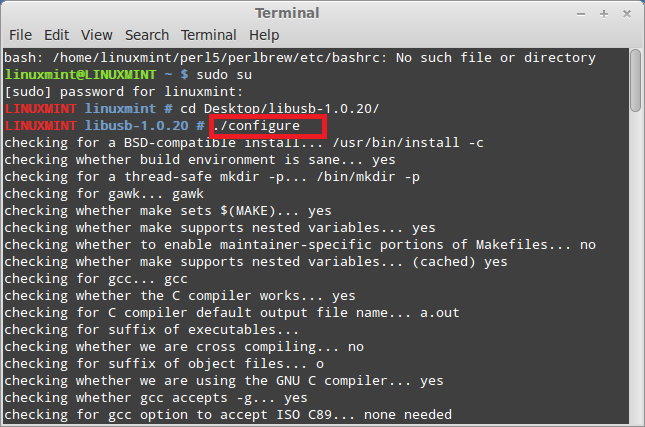
1. Untar the file using

tar -xvf libusb-1.0.20.tar.bz2

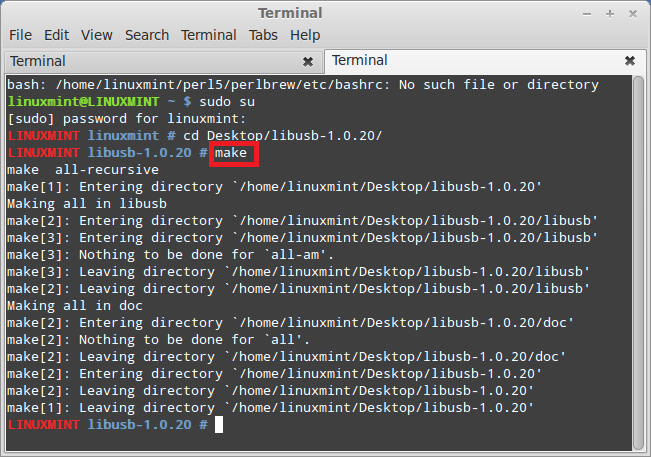
1. Open terminal and navigate to appropriate directory



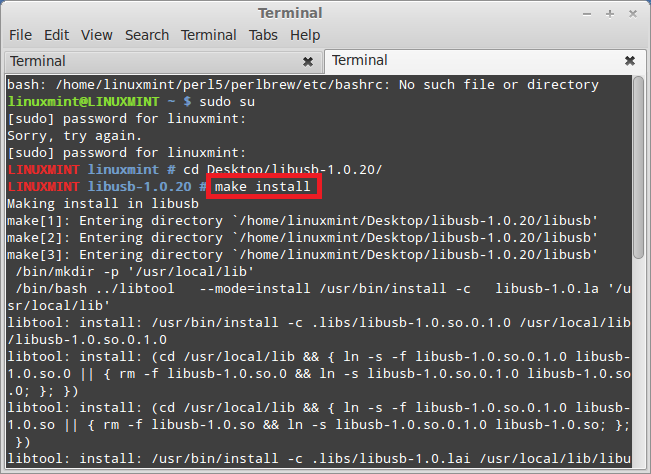
1. Run configure command



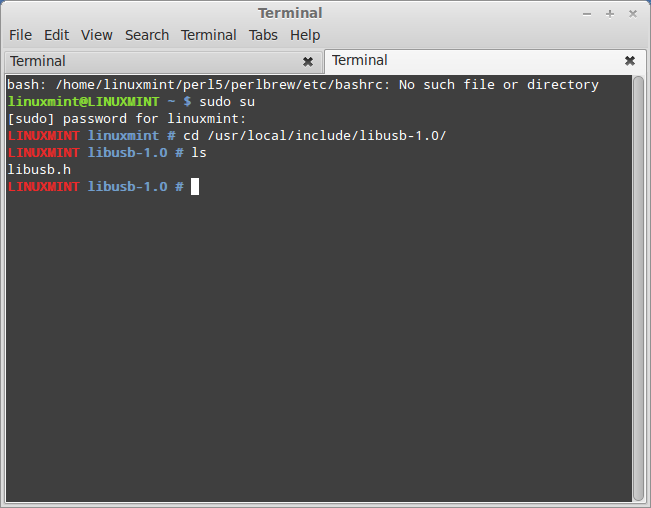
1. Run make command to build libusb



1. Install LibUsb using make install command



1. Check libusb.h file is available in path /usr/local/include/libusb-1.0. If file is available then libusb installation was success.

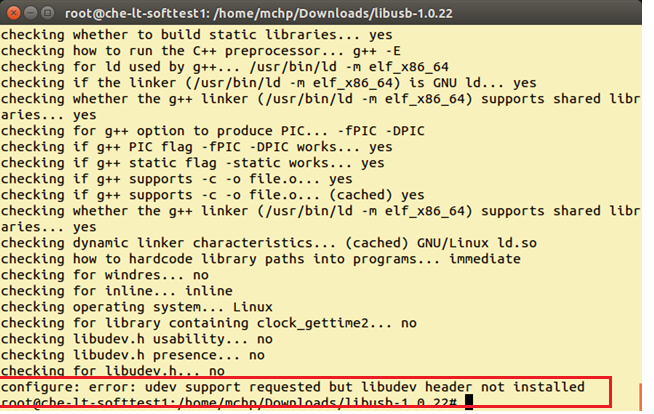


# Appendix 2

## FAQ (Frequently asked Questions)

1. **Error:** ‘libusb\_get\_port\_numbers’ was not declared in this scope

**Answer:** If older version of libusb is installed then it will throw ‘libusb\_get\_port\_numbers’ error. To resolve this error, install latest libusb.

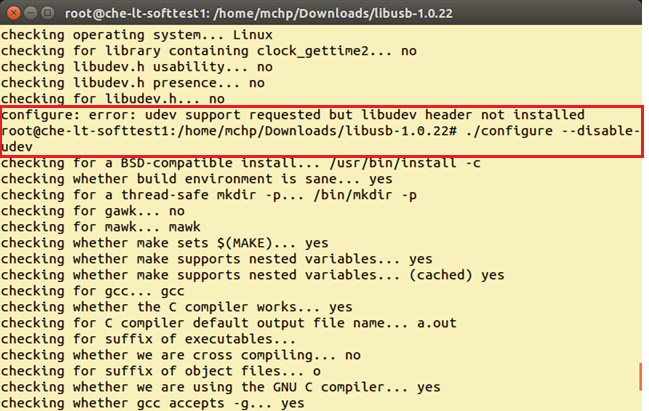
1. **Error:** udev support requested but libudev not installed

**Answer:** Run the following command to install libudev

**sudo apt-get install libudev-dev**

(or)

To skip the error use following command while installing libusb “**./configure --disable-udev**”

****

1. **Error:** Undefined reference to `clock\_gettime' error during make

**Answer:** Add **-lrt** to g++ command in make file.

**Example:**

#Simple makefile for #Linux\_USB70xx\_ACE014\_VSM\_Transfer

CC=$(CXX)

# LIB\_USB\_PATH = -I/usr/include/libusb-1.0

LIB\_USB\_PATH=$(shell pkg-config --cflags libusb-1.0)

OBJ=ACE014\_VSM\_Transfer.o

ACE014\_VSM\_Transfer: $(OBJ)

$(CC) **-lrt** $(OBJ) -lusb-1.0 -o ACE014\_VSM\_Transfer

ACE014\_VSM\_Transfer.o: ACE014\_VSM\_Transfer.cpp

$(CC) **-lrt** -c ACE014\_VSM\_Transfer.cpp $(LIB\_USB\_PATH)

clean :

-rm \*.o $(objects) ACE014\_VSM\_Transfer

1. **Error:** “error while loading shared libraries: libusb-1.0.so.0:cannot open shared object file: No such file or directory” error while running executables.

**Answer:** Run following command once and proceed running executables. **ldconfig -v**

[https://www.linuxquestions.org/questions/linux- software-2/what-is-ldconfig-369493/](https://www.linuxquestions.org/questions/linux-%20%20software-2/what-is-ldconfig-369493/)