

Linux\_USB70xx\_ACE003\_USB\_SPI\_FW\_Programmer\_Release Notes

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| REV | DATE | ORIGINATOR | DESCRIPTION OF CHANGE |
| 0.1 | 2/20/2019 | Karpagam A | Linux ACE003 V1.0.0 release |
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# Introduction

This document provides release information about USB70xx Linux Application Code example for programming and reading SPI Firmware.

# 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

* **ACE003\_USB\_General\_SPI\_FW\_Programmer.cpp** – Application Code Example file for Firmware program and SPI Flash Read in AT25DF161, AT26DF081A and AT25SF041.
* **ACE003\_USB\_SST25\_SPI\_FW\_Programmer.cpp** – Application Code Example file for Firmware program and SPI Flash Read in SST25 Flashes.
* **ACE003\_USB\_SST26\_SPI\_FW\_Programmer.cpp** – Application Code Example file for Firmware program and SPI Flash Read in SST26 Flashes.
* **ACE003\_USB\_SST26\_SQI\_FW\_Programmer.cpp** - Application Code Example file for enable Quad mode, Firmware program and SQI Flash Read in SST26 SQI Flashes.
* **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 Read and Program SPI Firmware

### 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.
* For SST25 series SPI Flash, JEDEC ID not fetched properly while device is booting from SPI

# Appendix 1

## libusb Installation Instructions

### Package Download

* Download the latest libusb from

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

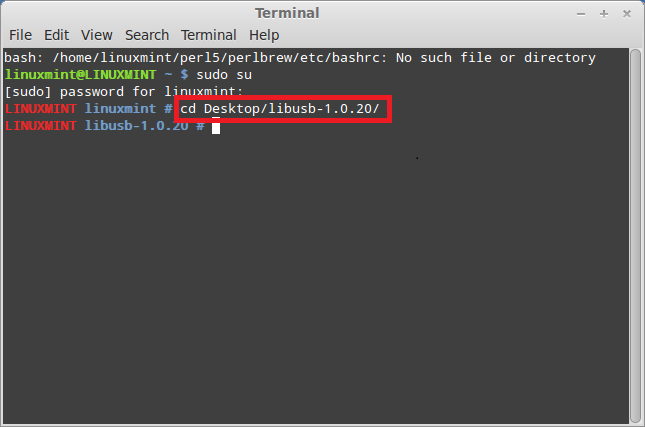
### Installation of libusb

To install the Libusb follow the below instructions

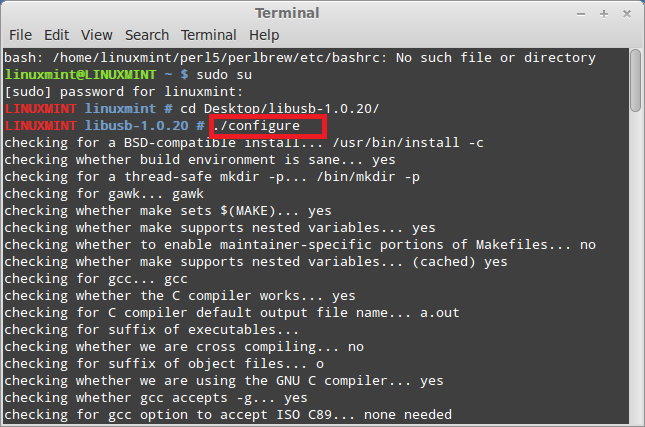
1. Untar the file using

tar -xvf libusb-1.0.20.tar.bz2

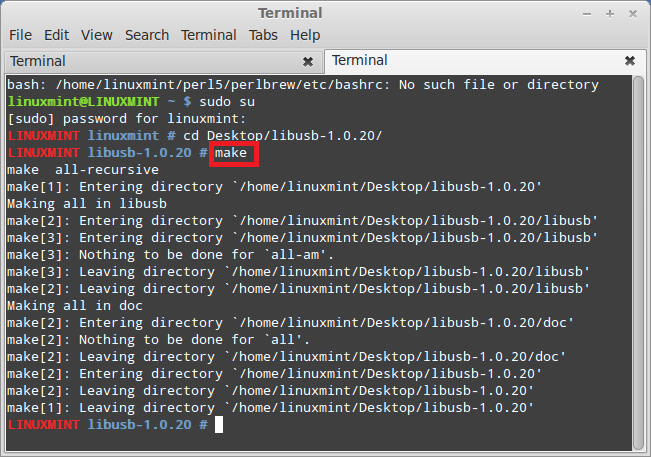
1. Open terminal and navigate to appropriate directory



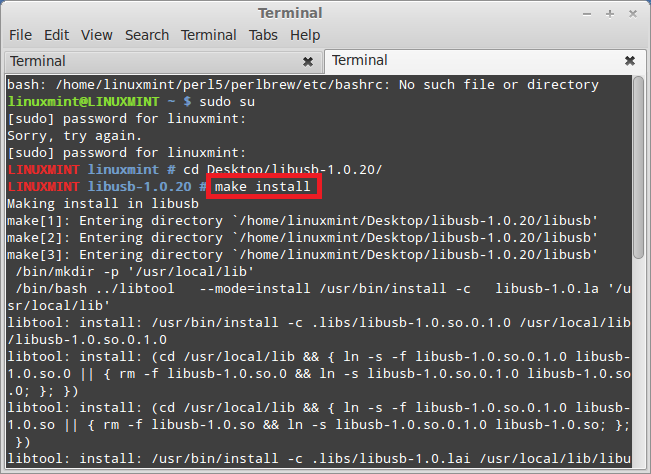
1. Run configure command



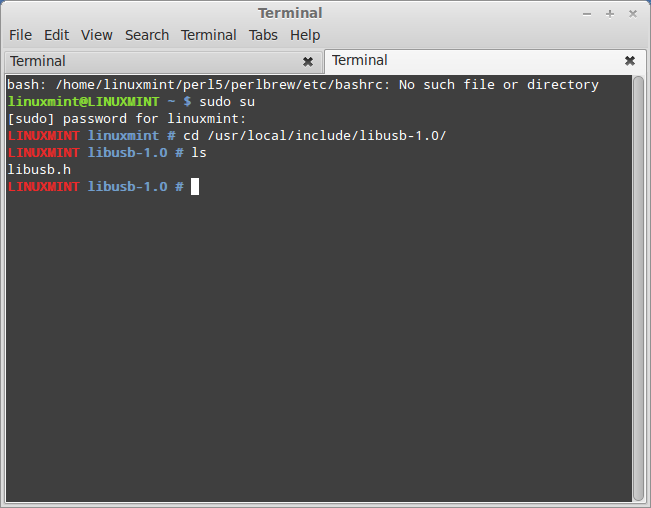
1. Run make command to build libusb



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.

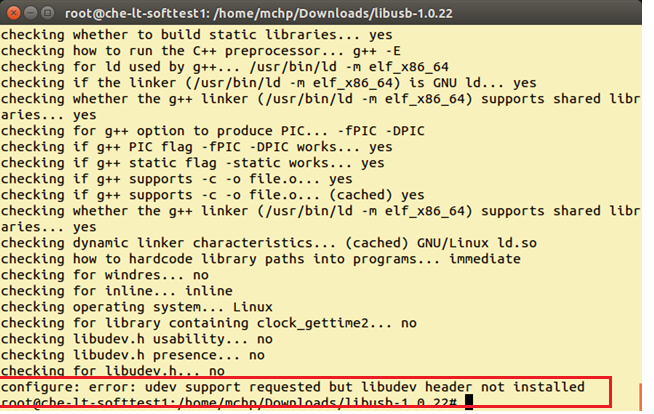


# Appendix 2

## 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.

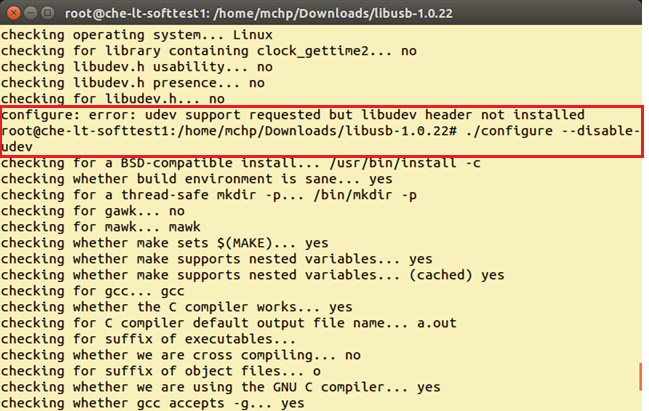
1. **Error:** udev support requested but libudev not installed

**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/)