

ADLINK Technical Document

Abstract	How to Use the Bare Version of MCM-204		
OS	Linux		
Keyword	Bare Version		
Related Products	MCM-204		
Date	2022-01-04	No.	202110001

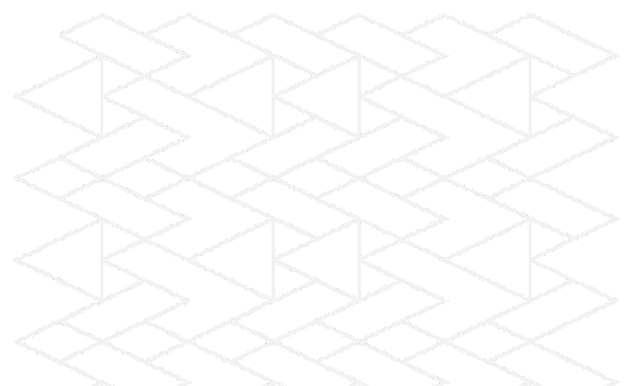
- Issue Details:

The standard MCM-204 provides a web console for easy use. The bare version allows users to build their own solutions. The bare version of the MCM-204 provides the basic functions like analog output, analog input, digital output, digital input, tachometer, and temperature for development.

This document shows how to access the MCM-204 and use those samples.

- Prerequisites:

MCM-204 Bare Version



- Solution:

Step 1: Download PuTTY

Download the version of PuTTY for your environment.

Direct link: <https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>

Package files

You probably want one of these. They include versions of all the PuTTY utilities.

(Not sure whether you want the 32-bit or the 64-bit version? Read the [FAQ entry](#).)

MSI ('Windows Installer')

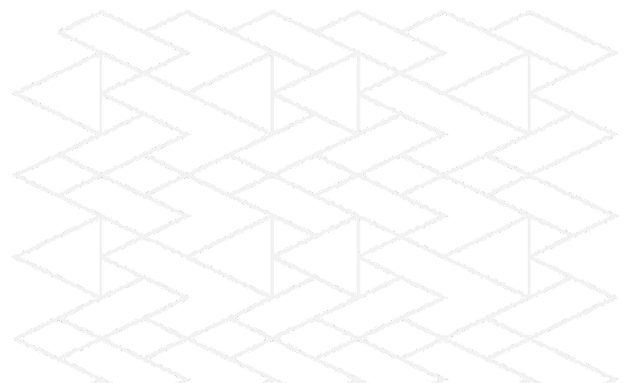
64-bit x86: [putty-64bit-0.76-installer.msi](#) (or by [FTP](#)) ([signature](#))

64-bit Arm: [putty-arm64-0.76-installer.msi](#) (or by [FTP](#)) ([signature](#))

32-bit x86: [putty-0.76-installer.msi](#) (or by [FTP](#)) ([signature](#))

Unix source archive

.tar.gz: [putty-0.76.tar.gz](#) (or by [FTP](#)) ([signature](#))



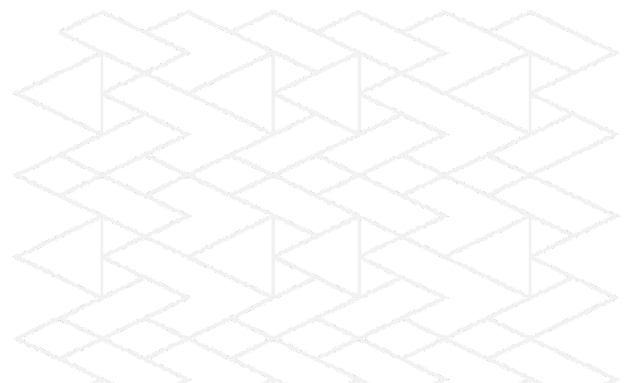
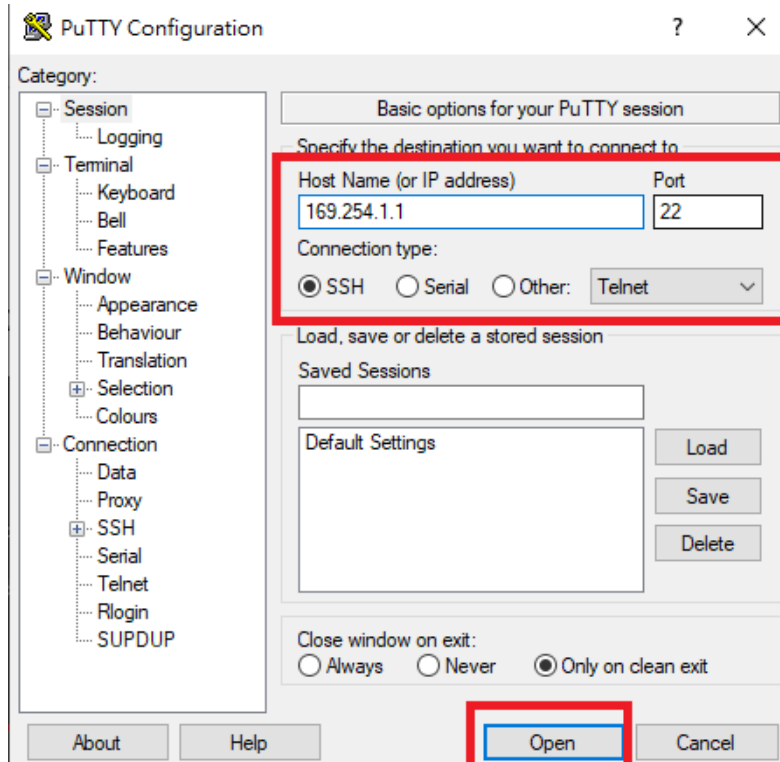
Step 2: Connect to MCM-204

Connect the MCM-204 to your host PC and run the PuTTY



Host Name(or IP address):169.254.1.1

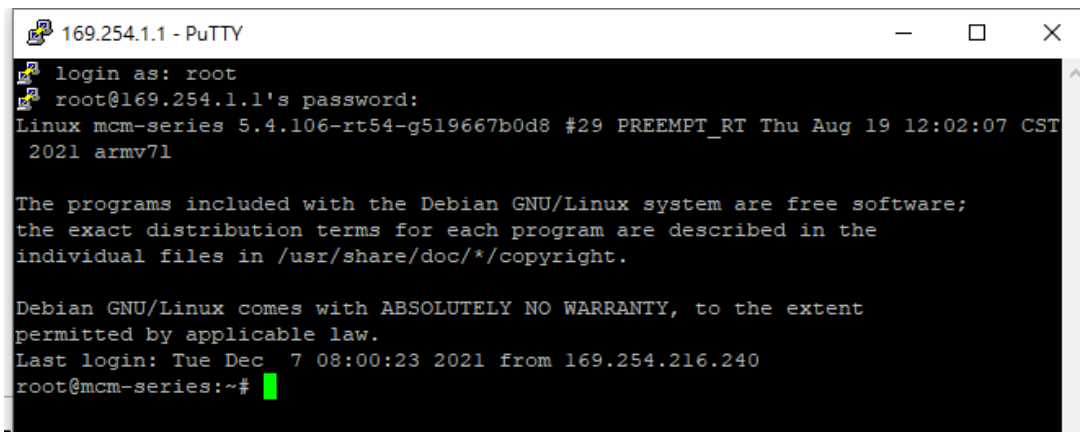
Port:22



Step 3: Log in to MCM-204

Login to the MCM-204

- User: root
- Password: Adlink



```

169.254.1.1 - PuTTY
login as: root
root@169.254.1.1's password:
Linux mcm-series 5.4.106-rt54-g519667b0d8 #29 PREEMPT_RT Thu Aug 19 12:02:07 CST
 2021 armv7l

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue Dec  7 08:00:23 2021 from 169.254.216.240
root@mcm-series:~#

```

Important locations for the file samples are listed below:

	Location	Description
1.	Files root folder	/root/MCM204_BareLib/
2.	Header files	/root/MCM204_BareLib/Include/mcmdask.h
3.	so files	/root/MCM204_BareLib/Library/libmcmdev.so /root/MCM204_BareLib/Library/libmcmdevapi.so
4.	Function reference	/root/MCM204_BareLib/Manual/MCM_Bare_FuncRef.pdf
5.	Sample files	/root/MCM204_BareLib/Samples/



Step 4: Samples list

The list below details the available sample files and their function:

	Sample file	Description
1.	C204_AI_AnalogTrig_MultiChannel	Analog trigger source, analog input channel, four channels data, one-shot mode. Saves data to data.csv for analysis.
2.	C204_AI_DBF	One analog input channel, continuous mode. Saves data to data.csv for analysis.
3.	C204_AI_DBF_MultiChannel	Four analog input channels, continuous mode. Saves data to data.csv for analysis.
4.	C204_AI_DigitalTrig	Digital trigger source, digital input channel, analog data input, one-shot mode. Saves data to data.csv for analysis.
5.	C204_AI_DMA	One analog input channel, one-shot mode. Saves data to data.csv for analysis.
6.	C204_AI_Tachometer	Tachometer, one analog channel, one-shot mode. Saves data to data.csv for analysis.
7.	C204_Calibration	How to do self-calibration.
8.	C204_DIO	How to use digital input and output.
9.	C204_Temperature	How to use the temperature function.



Step 5: Rebuild

To rebuild the samples, use the “make clean ” or “make” command.

```
169.254.1.1 - PuTTY
login as: root
root@169.254.1.1's password:
Linux mcm-series 5.4.106-rt54-g519667b0d8 #29 PREEMPT_RT Thu Aug 19 12:02:07 CST
2021 armv7l

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the exact distribution terms for each program are described in the
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Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue Dec 7 08:11:42 2021 from 169.254.216.240
root@mcm-series:~# ls
MCM204_BareLib
root@mcm-series:~# cd MCM204_BareLib/
root@mcm-series:~/MCM204_BareLib# ls
Include Library Manual Samples
root@mcm-series:~/MCM204_BareLib# cd Samples/
root@mcm-series:~/MCM204_BareLib/Samples# ls
C204_AI_AnalogTrig_MultiChannel  C204_AI_DMA          C204_Calibration
C204_AI_DBF                    C204_AI_DigitalTrig C204_DIO
C204_AI_DBF_MultiChannel       C204_AI_Tachometer  C204_Temperature
root@mcm-series:~/MCM204_BareLib/Samples# cd C204_AI_AnalogTrig_MultiChannel/
root@mcm-series:~/MCM204_BareLib/Samples/C204_AI_AnalogTrig_MultiChannel# make clean
rm -f C204_AI_AnalogTrig_MultiChannel *.o C204_AI_AnalogTrig_MultiChannel.o
root@mcm-series:~/MCM204_BareLib/Samples/C204_AI_AnalogTrig_MultiChannel# make
gcc -lpthread -I./ -Lmcmdev.so -Lmcmdevapi.so -C C204_AI_AnalogTrig_MultiChannel.c
gcc -lpthread -I./ -L./ -lmcmdev -lmcmdevapi C204_AI_AnalogTrig_MultiChannel.o -o C204_AI_AnalogTrig_
MultiChannel
root@mcm-series:~/MCM204_BareLib/Samples/C204_AI_AnalogTrig_MultiChannel#
```

