

ch343 linux serial driver

Description

USB to UART(s) chip ch342/ch343/ch344/ch347/ch9101/ch9102/ch9103 are fully compliant to the Communications Device Class (CDC) standard, they will work with a standard CDC-ACM driver (CDC - Abstract Control Model). Linux operating systems supply a default CDC-ACM driver that can be used with these USB UART devices. In Linux, this driver file name is cdc-acm.

The CDC-ACM driver has limited capabilities to control specific devices. This generic driver does not have any knowledge about specific device protocols. Because of this, device manufacturers can create an alternate, or custom driver that is capable of accessing the device specific function sets, such as hardware flow control or GPIO functions.

If you use this VCP driver, please check that the CDC-ACM driver was not installed for the USB UART devices mentioned above. You can use command "ls /dev/ttyACM*" to confirm that, to remove the CDC-ACM driver, use command "rmmod cdc-acm".

This directory contains 2 parts, ch343 driver and gpio testing utility. This driver and application support USB to single serial port chip ch343/ch347/ch9101/ch9102, USB to dual serial ports chip ch342/ch347/ch9103, USB to quad serial ports chip ch344, etc.

1. Open "Terminal"
2. Switch to "driver" directory
3. Compile the driver using "make", you will see the module "ch343.ko" if successful
4. Type "sudo make load" or "sudo insmod ch343.ko" to load the driver dynamically
5. Type "sudo make unload" or "sudo rmmod ch343.ko" to unload the driver
6. Type "sudo make install" to make the driver work permanently
7. Type "sudo make uninstall" to remove the driver
8. You can refer to the link below to acquire uart application, you can use gcc or Cross-compile with cross-gcc https://github.com/WCHSoftGroup/tty_uart

Before the driver works, you should make sure that the usb device has been plugged in and is working properly, you can use shell command "lsusb" or "dmesg" to confirm that, USB VID of these devices are [1A86], you can view all IDs from the id table which defined in "ch343.c".

If the device works well, the driver will create tty devices named "ttyCH343USBx" in /dev directory. Operating the device in the /dev directory under Linux requires root permission by

default, if users want to access the device in a non root mode, they can create udev rule file related to the device.

Note

Any question, you can send feedback to mail: tech@wch.cn