

Installing the USB driver on Windows 8 and 10 (MU4-USB)

Oct. 14, 2020 Circuit Design, Inc. Ver. 1.0

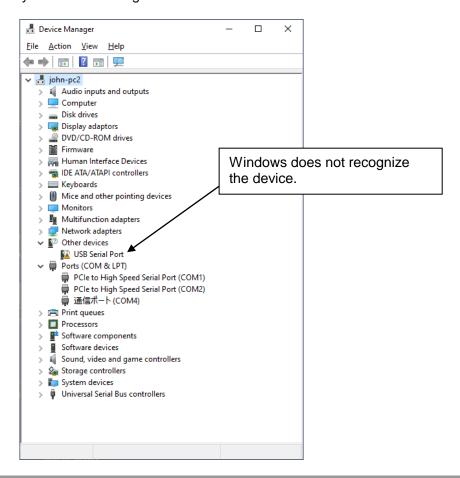
Introduction



The USB interface board with MU-4 module (MU4-USB) contains an onboard FTDI FT8U232MB that has a protocol conversion function to convert between USB and UART interfaces. In order to control the MU-4 module on the USB interface board, the correct driver needs to be installed on the PC.

This application note explains the procedure for driver installation for Windows 8 and 10.

When plugging the USB interface board to the PC for the first time, the device manager will not recognize the device and you see something similar as shown below.

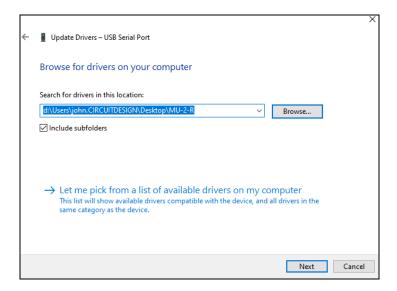


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Installing driver on Windows 8 and 10

- 1. Download the "Evaluation program for MU-4-434 and driver" from the MU-4-434 documentation page and extract the contents of the zip file to the desktop.
- 2. For both Windows 8 and 10, **disabling of the driver signature enforcement** is necessary before installing the driver. Please see the chapters below for your OS version. If you do not do this, the PC will not allow you to install the driver due to security risk (see chapter on "Vendor IDs" below).
- 3. Right click where it shows the unknown device and select update or install driver. Select the option to manually search for the driver location. Then browse to the folder you extracted in step 1 where the source files for the driver are and click "Next". (make sure "Include subfolders" is checked).



4. Ignore any warnings and proceed to install the driver software.



- 5. After installation has completed, repeat from step 3 and do a second time install of the driver software.
- 6. Your USB board is ready to use. The driver signature enforcement will be enabled again on next reboot.

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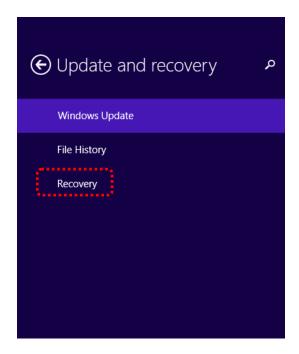
Disabling of the driver signature enforcement in Windows 8

1. Go into "PC settings" and then select "Change PC settings".

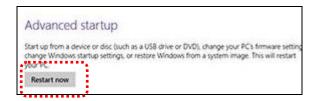


2. Select "Update and Recovery", then click "Recovery".





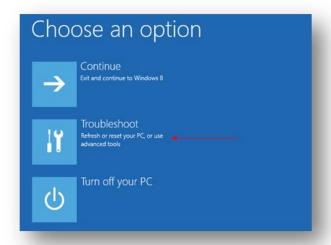
3. Click "Restart now" in "Advanced Startup"



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4. At option screen click "Troubleshoot"



5. Choose "Advanced options"



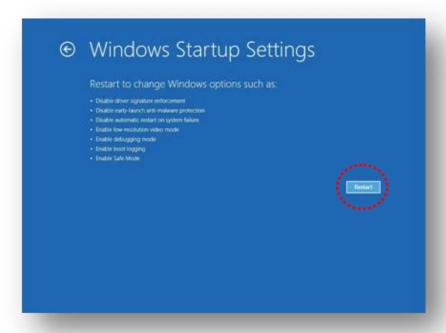
6. Select "Startup Setting"



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7. At the confirmation screen, press restart.



8. Select "Disable driver signature enforcement". Following this, you will be able to install the driver normally. Windows will warn you of an unsigned driver, but installation will proceed.

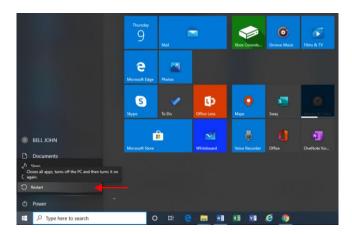


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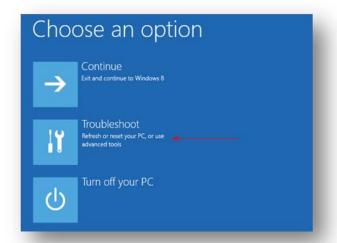


Disabling of the driver signature enforcement in Windows 10

1. Right click the Power button in the Start menu and while holding the shift key, click "Restart".



2. At option screen click "Troubleshoot"



3. Choose "Advanced options"



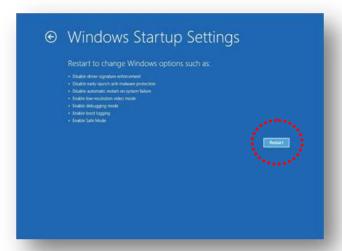
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4. Select "Startup Setting"



5. At the confirmation screen, press restart.



6. Select "Disable driver signature enforcement". Following this, you will be able to install the driver normally. Windows will warn you of an unsigned driver, but installation will proceed.



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Vendor IDs

Vendor IDs or VID are 16-bit codes written in the ROM contained in every device which uses a USB connection. Windows will read the VID from the device and compare it to the VID registered for that device. If Windows finds that the VID it reads is different from the VID registered for that device, it will see this as a potential security risk (e.g. someone has changed the VID in the device) and not allow installation of the driver. This is an extra security measure found on all Windows 8 64-bit computers.

Circuit Design has its own VID and writes it to the FTDI USB chip on all boards, overwriting the FTDI manufacturer's default VID. This will cause Windows to halt installation of the driver.

Revision History

Issue	Date	Comment
1.0	2020/10/13	Start of document

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