

USB CDC release note

SiM3U1xx USB CDC code base on LUFA open source project, released under the permissive MIT License.

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1. Code directory structure

\$(USB_CDC)\src\generated* --- SiM3U1xx device driver files
\$(USB_CDC)\src\VirtualSerial* --- Virtual serial descriptors ,main function and CDC_ACM.inf
\$(USB_CDC)\src\LUFA* --- LUFA USB stack lib
\$(USB_CDC)\src\LUFA\Common* --- USB stack common definition files.
\$(USB_CDC)\src\LUFA\Drivers\Misc* --- Ring buffer definition
\$(USB_CDC)\src\LUFA\Drivers\USB\Core* --- Standard USB core function files
\$(USB_CDC)\src\LUFA\Drivers\USB\Core\SiM3U* --- SiM3U1xx related USB registers operation
\$(USB_CDC)\src\LUFA\Drivers\USB\Class\Device* --- All device USB class files
\$(USB_CDC)\src\LUFA\Drivers\USB\Class\Host* --- All host USB class files
\$(USB_CDC)\src\LUFA\Drivers\USB\Class\Common* --- USB stack common files

2. Download Precision32 from Silabs web site

This make sure Silabs SDK was downloaded and for project build.

3. Predefined symbols in Precision32 and IAR

Make sure add two symbols for "-D" in Precision32, "__SIM3U1XX__" and "USB_DEVICE_ONLY".

<http://www.silabs.com/products/mcu/Pages/32-bit-mcu-software.aspx#download>

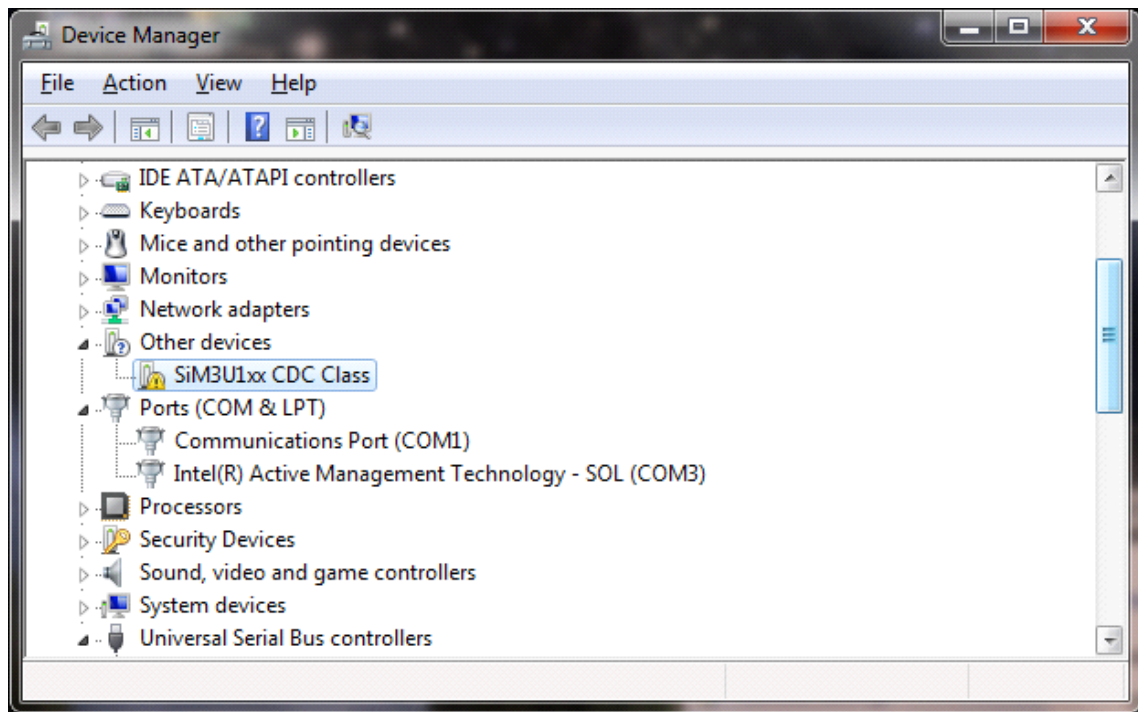
4. For IAR user, there are two packages need to copy into IAR directory.

Extract Extract_to_arm_config_debugger_Silabs.zip and Extract_to_armconfig_flashloader_Silabs.zip into C:\Program Files\IAR Systems\Embedded Workbench 6.4\arm\config\debugger and C:\Program Files\IAR Systems\Embedded Workbench 6.4\arm\config\flashloader\

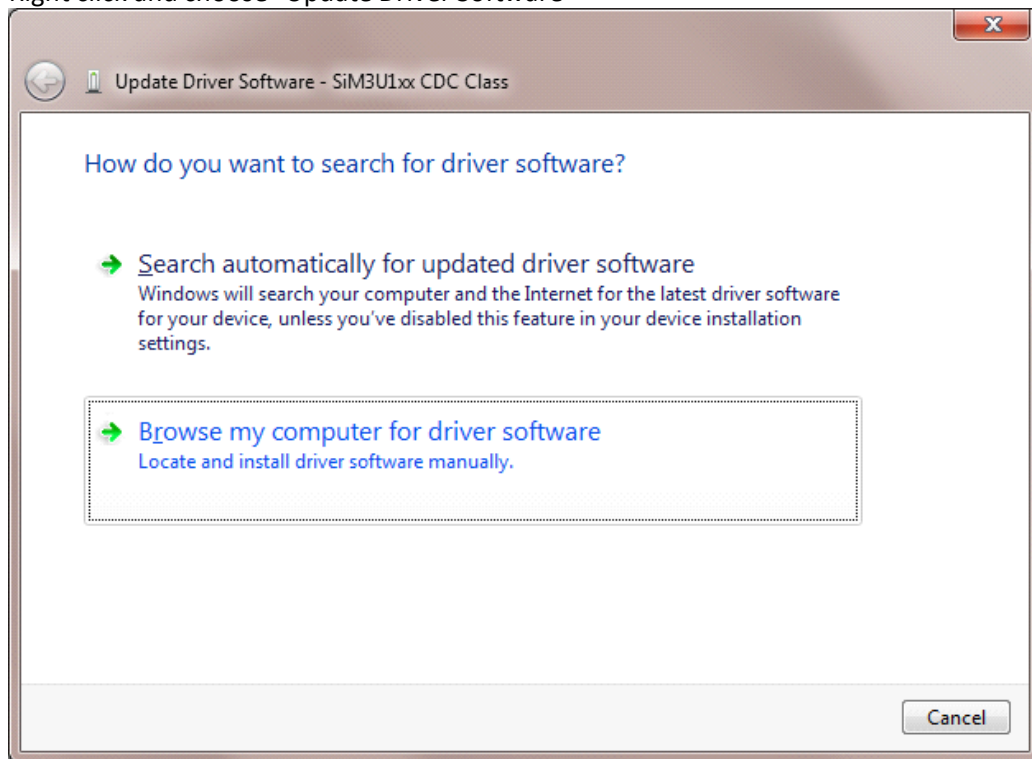
Replace \$(SI32_PATH)\si32-1.1.0\si32Hal\CPU\cmsis_iar.h with C:\Program Files\IAR Systems\Embedded Workbench 6.4\arm\inc\c\cmsis_iar.h

5. Config USB CDC COM port with CDC_ACM.inf

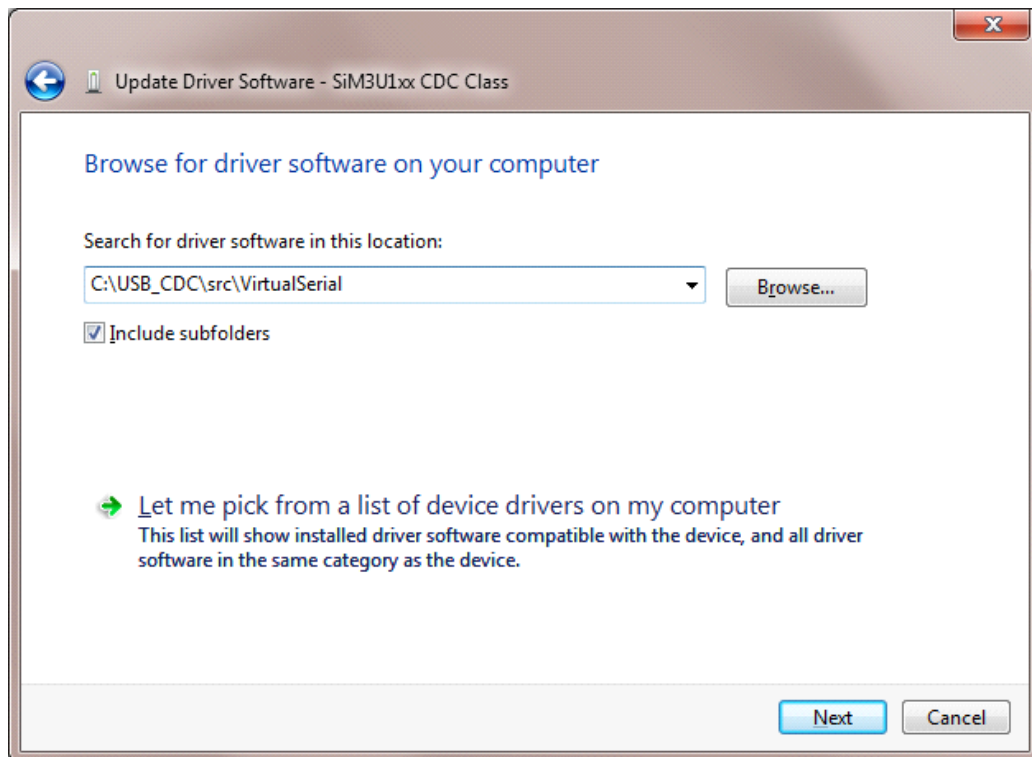
We are talking about Win7 installation. Build project and download firmware into SiM3U1xx MCU card, plug in USB cable, it will show "SiM3U1xx CDC Class" under "Other devices" in Device Manger,



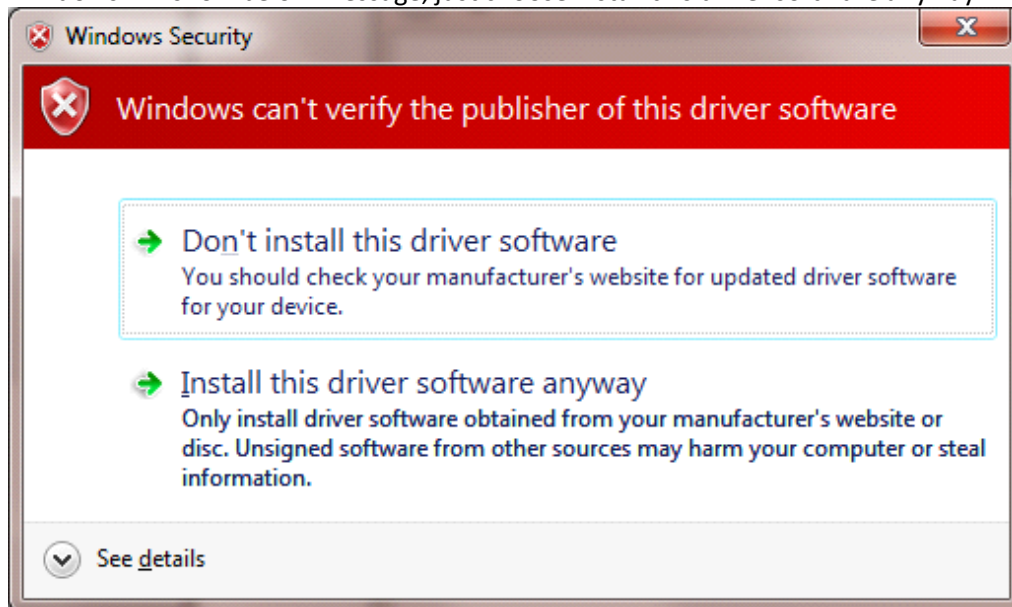
Right click and choose "Update Driver Software"



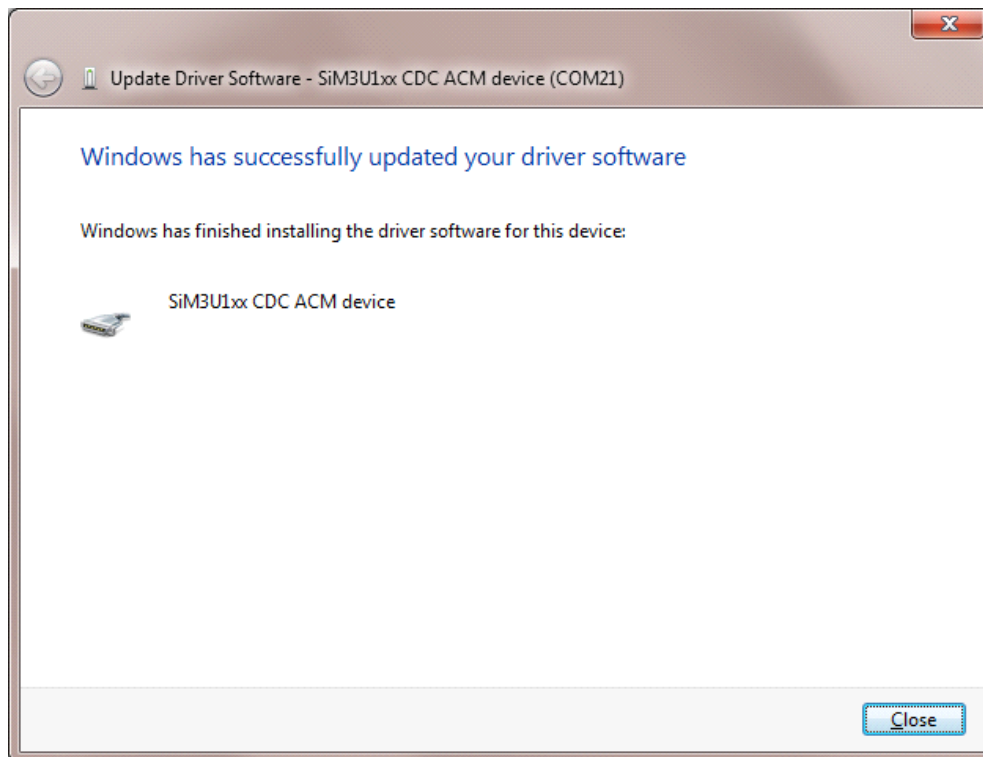
select "Browse my computer for driver software", enter directory path of your CDC_ACM.inf



Windows will show below message, just choose install this driver software anyway.



After done, it shows below message.



Check in Device Manager, you can find new COM port appear in Ports(COM & LPT). And now you can access this COM port with any serial tool.

