

I use 4 Windows 10 64 bit computers with Nucleo and Discovery boards. One of the computers could connect to the boards, so I could updated ST-LINK firmwares to the newest (V2J29M18).

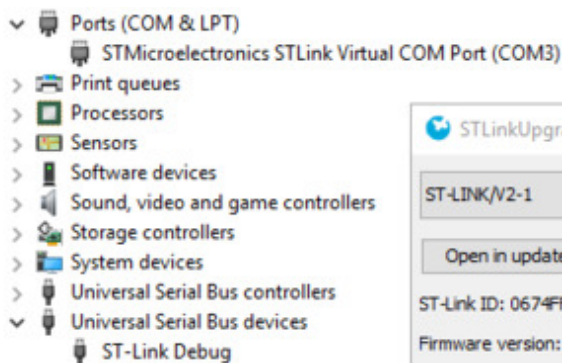
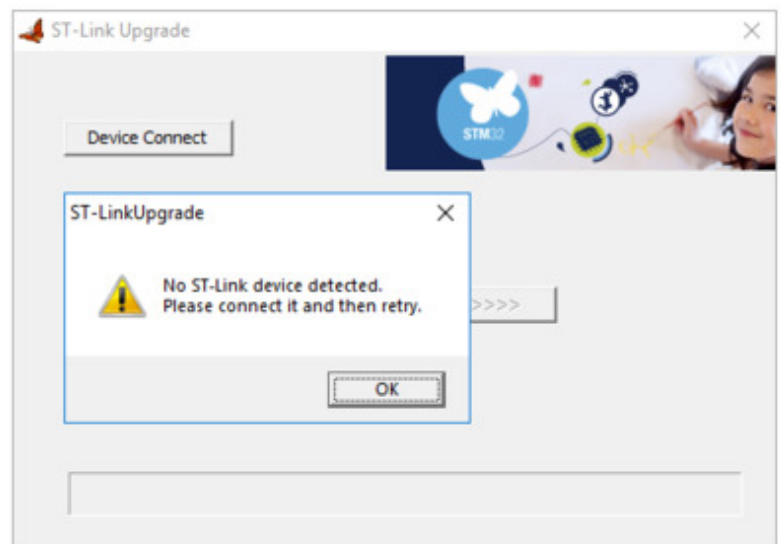
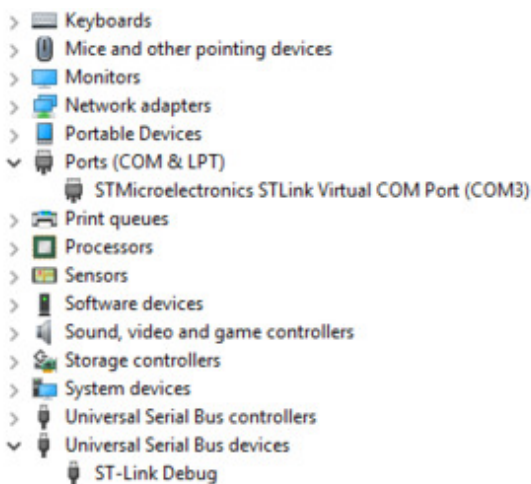
There is no successful connection, just error on the other three computers.

- Disabled USB drive indexing.
- Disabled antivirus software.
- Tried to remove drivers and reinstall them. (<https://technet.microsoft.com/en-us/library/cc730875%28v=ws.11%29.aspx?f=255&MSPPError=-2147217396>)
- Reinstalled Windows (clean install), nothing installed but ST-Link driver.
- Tried USB 2 and 3 ports. With and without USB HUB. Changed cables, etc.
- Asked this question on other forums:
 - [ST-LINK V2-1 does not work with Windows 10 - Arduino for STM32](#)
 - [Nucleo boards do not work with Windows 10 - Question | Mbed](#)

Nothing helped.

The older Discovery boards with V2 (without USB mass storage) and the standalone ST-LINK V2 works fine.

Devices show up in device manager but could not use them. No Nucleo drive, just greyed out USB drive, none of the developer tools could connect to ST-Link, none of the terminal softwares could open the port. Even ST-Link update tool could not connect.



USB Device Tree Viewer's report:

===== USB Port2 =====

Connection Status : 0x01 (Device is connected)

Port Chain : 1-1-6-2

Properties : 0x01

IsUserConnectable : yes

PortIsDebugCapable : no

PortHasMultiCompanions : no

PortConnectorIsTypeC : no

===== USB Device =====

+++++++ Device Information +++++++

Device Description : USB Composite Device

Device Path : \\.\usb#vid_0483&pid_374b#0674ff525056805087144508#{a5dcbf10-6530-11d2-901f-00c04fb951ed}

Device ID : USB\VID_0483&PID_374B\0674FF525056805087144508

Hardware IDs : USB\VID_0483&PID_374B&REV_0100 USB\VID_0483&PID_374B

Driver KeyName : {36fc9e60-c465-11cf-8056-444553540000}\0012 (GUID_DEVCLASS_USB)

Driver : \SystemRoot\System32\drivers\usbccgp.sys (Version: Date:)

Driver Inf : C:\WINDOWS\inf\usb.inf

Legacy BusType : PNPBus

Class : USB

Class GUID : {36fc9e60-c465-11cf-8056-444553540000} (GUID_DEVCLASS_USB)

Interface GUID : {a5dcbf10-6530-11d2-901f-00c04fb951ed}
(GUID_DEVINTERFACE_USB_DEVICE)

Service : usbccgp

Enumerator : USB

Location Info : Port_#0002.Hub_#0005

Location IDs : PCIROOT(0)#PCI(1A00)#USBROOT(0)#USB(1)#USB(6)#USB(2),
ACPI(_SB_)#ACPI(PCI0)#ACPI(USBE)#ACPI(RHUB)#ACPI(PRT1)#USB(6)#USB(2)

Container ID : {18b34596-a898-57ac-b6db-139bbb6b5eae}

Manufacturer Info : (Standard USB Host Controller)

Capabilities : 0x94 (Removable, UniqueID, SurpriseRemovalOK)

Status : 0x0180600A (DN_DRIVER_LOADED, DN_STARTED, DN_DISABLEABLE,
DN_REMOVABLE, DN_NT_ENUMERATOR, DN_NT_DRIVER)

Problem Code : 0
Address : 2
Power State : D0 (supported: D0, D2, D3, wake from D0, wake from D2)
Child Device 1 : STMicroelectronics STLink dongle
Device ID : USB\VID_0483&PID_374B&MI_00\8&849AA9&1&0000
Class : USBDevice
Child Device 2 : STMicroelectronics STLink Virtual COM Port
Device ID : USB\VID_0483&PID_374B&MI_02\8&849AA9&1&0002
Class : Ports
COM-Port : COM3 (\Device\USBSER000)

----- Connection Information -----

Connection Index : 0x02 (2)
Connection Status : 0x01 (DeviceConnected)
Current Config Value : 0x01
Device Address : 0x02 (2)
Is Hub : 0x00 (no)
Number Of Open Pipes : 0x08 (8)
Device Bus Speed : 0x01 (Full-Speed)
Pipe0ScheduleOffset : 0x00 (0)
Pipe1ScheduleOffset : 0x00 (0)
Pipe2ScheduleOffset : 0x00 (0)
Pipe3ScheduleOffset : 0x00 (0)
Pipe4ScheduleOffset : 0x00 (0)
Pipe5ScheduleOffset : 0x00 (0)
Pipe6ScheduleOffset : 0x00 (0)
Pipe7ScheduleOffset : 0x00 (0)

----- Connection Information V2 -----

Connection Index : 0x02 (2)
Length : 0x10 (16 bytes)
SupportedUsbProtocols : 0x03
Usb110 : 1 (yes)

Usb200 : 1 (yes)

Usb300 : 0 (no)

ReservedMBZ : 0x00

Flags : 0x00

DevIsOpAtSsOrHigher : 0 (Is not operating at SuperSpeed or higher)

DevIsSsCapOrHigher : 0 (Is not SuperSpeed capable or higher)

DevIsOpAtSsPlusOrHigher : 0 (Is not operating at SuperSpeedPlus or higher)

DevIsSsPlusCapOrHigher : 0 (Is not SuperSpeedPlus capable or higher)

ReservedMBZ : 0x00

----- Device Descriptor -----

bLength : 0x12 (18 bytes)

bDescriptorType : 0x01 (Device Descriptor)

bcdUSB : 0x200 (USB Version 2.00)

bDeviceClass : 0xEF (Miscellaneous)

bDeviceSubClass : 0x02

bDeviceProtocol : 0x01 (IAD - Interface Association Descriptor)

bMaxPacketSize0 : 0x40 (64 bytes)

idVendor : 0x0483 (STMicroelectronics)

idProduct : 0x374B

bcdDevice : 0x0100

iManufacturer : 0x01 (String Descriptor 1)

Language 0x0409 : "STMicroelectronics"

iProduct : 0x02 (String Descriptor 2)

Language 0x0409 : "STM32 STLink"

iSerialNumber : 0x03 (String Descriptor 3)

Language 0x0409 : "0674FF525056805087144508"

bNumConfigurations : 0x01 (1 Configuration)

----- Configuration Descriptor -----

bLength : 0x09 (9 bytes)

bDescriptorType : 0x02 (Configuration Descriptor)

wTotalLength : 0x0080 (128 bytes)

bNumInterfaces : 0x04 (4 Interfaces)
bConfigurationValue : 0x01 (Configuration 1)
iConfiguration : 0x00 (No String Descriptor)
bmAttributes : 0x80
D7: Reserved, set 1 : 0x01
D6: Self Powered : 0x00 (no)
D5: Remote Wakeup : 0x00 (no)
D4..0: Reserved, set 0 : 0x00
MaxPower : 0x96 (300 mA)

----- Interface Descriptor -----

bLength : 0x09 (9 bytes)
bDescriptorType : 0x04 (Interface Descriptor)
bInterfaceNumber : 0x00
bAlternateSetting : 0x00
bNumEndpoints : 0x03 (3 Endpoints)
bInterfaceClass : 0xFF (Vendor Specific)
bInterfaceSubClass : 0xFF
bInterfaceProtocol : 0xFF
iInterface : 0x04 (String Descriptor 4)
Language 0x0409 : "ST-Link Debug"

----- Endpoint Descriptor -----

bLength : 0x07 (7 bytes)
bDescriptorType : 0x05 (Endpoint Descriptor)
bEndpointAddress : 0x81 (Direction=IN EndpointID=1)
bmAttributes : 0x02 (TransferType=Bulk)
wMaxPacketSize : 0x0040 (64 bytes)
bInterval : 0x00 (ignored)

----- Endpoint Descriptor -----

bLength : 0x07 (7 bytes)
bDescriptorType : 0x05 (Endpoint Descriptor)
bEndpointAddress : 0x01 (Direction=OUT EndpointID=1)

bmAttributes : 0x02 (TransferType=Bulk)

wMaxPacketSize : 0x0040 (64 bytes)

bInterval : 0x00 (ignored)

----- Endpoint Descriptor -----

bLength : 0x07 (7 bytes)

bDescriptorType : 0x05 (Endpoint Descriptor)

bEndpointAddress : 0x82 (Direction=IN EndpointID=2)

bmAttributes : 0x02 (TransferType=Bulk)

wMaxPacketSize : 0x0020 (32 bytes)

bInterval : 0x00 (ignored)

----- Interface Descriptor -----

bLength : 0x09 (9 bytes)

bDescriptorType : 0x04 (Interface Descriptor)

bInterfaceNumber : 0x01

bAlternateSetting : 0x00

bNumEndpoints : 0x02 (2 Endpoints)

bInterfaceClass : 0x08 (Mass Storage)

bInterfaceSubClass : 0x06 (SCSI transparent command set)

bInterfaceProtocol : 0x50 (BulkOnly Transport)

iInterface : 0x05 (String Descriptor 5)

Language 0x0409 : "ST-Link mass storage"

----- Endpoint Descriptor -----

bLength : 0x07 (7 bytes)

bDescriptorType : 0x05 (Endpoint Descriptor)

bEndpointAddress : 0x83 (Direction=IN EndpointID=3)

bmAttributes : 0x02 (TransferType=Bulk)

wMaxPacketSize : 0x0040 (64 bytes)

bInterval : 0x00 (ignored)

----- Endpoint Descriptor -----

bLength : 0x07 (7 bytes)

bDescriptorType : 0x05 (Endpoint Descriptor)

bEndpointAddress : 0x03 (Direction=OUT EndpointID=3)

bmAttributes : 0x02 (TransferType=Bulk)

wMaxPacketSize : 0x0040 (64 bytes)

bInterval : 0x00 (ignored)

----- IAD Descriptor -----

bLength : 0x08 (8 bytes)

bDescriptorType : 0x0B

bFirstInterface : 0x02

bInterfaceCount : 0x02

bFunctionClass : 0x02 (Communications and CDC Control)

bFunctionSubClass : 0x02

bFunctionProtocol : 0x01

iFunction : 0x06 (String Descriptor 6)

Language 0x0409 : "ST-Link VCP Ctrl"

----- Interface Descriptor -----

bLength : 0x09 (9 bytes)

bDescriptorType : 0x04 (Interface Descriptor)

bInterfaceNumber : 0x02

bAlternateSetting : 0x00

bNumEndpoints : 0x01 (1 Endpoint)

bInterfaceClass : 0x02 (Communications and CDC Control)

bInterfaceSubClass : 0x02 (Abstract Control Model)

bInterfaceProtocol : 0x01 (AT Commands defined by ITU-T V.250 etc)

iInterface : 0x06 (String Descriptor 6)

Language 0x0409 : "ST-Link VCP Ctrl"

----- CDC Interface Descriptor -----

bFunctionLength : 0x05 (5 bytes)

bDescriptorType : 0x24 (Interface)

bDescriptorSubType : 0x00 (Header Functional Descriptor)

bcdCDC : 0x110 (CDC Version 1.10)

----- CDC Interface Descriptor -----

bFunctionLength : 0x05 (5 bytes)

bDescriptorType : 0x24 (Interface)

bDescriptorSubType : 0x01 (Call Management Functional Descriptor)

bmCapabilities : 0x00

D7..2: : 0x00 (Reserved)

D1 : : 0x00 (sends/receives call management information only over the Communication Class interface)

D0 : : 0x00 (does not handle call management itself)

bDataInterface : 0x03

----- CDC Interface Descriptor -----

bFunctionLength : 0x04 (4 bytes)

bDescriptorType : 0x24 (Interface)

bDescriptorSubType : 0x02 (Abstract Control Management Functional Descriptor)

bmCapabilities : 0x06

D7..4: : 0x00 (Reserved)

D3 : : 0x00 (not supports the notification Network_Connection)

D2 : : 0x01 (supports the request Send_Break)

D1 : : 0x01 (supports the request combination of Set_Line_Coding, Set_Control_Line_State, Get_Line_Coding, and the notification Serial_State)

D0 : : 0x00 (not supports the request combination of Set_Comm_Feature, Clear_Comm_Feature, and Get_Comm_Feature)

----- CDC Interface Descriptor -----

bFunctionLength : 0x05 (5 bytes)

bDescriptorType : 0x24 (Interface)

bDescriptorSubType : 0x06 (Union Functional Descriptor)

bControlInterface : 0x02

bSubordinateInterface[0] : 0x03

----- Endpoint Descriptor -----

bLength : 0x07 (7 bytes)

bDescriptorType : 0x05 (Endpoint Descriptor)

bEndpointAddress : 0x84 (Direction=IN EndpointID=4)

bmAttributes : 0x03 (TransferType=Interrupt)

wMaxPacketSize : 0x0002 (2 bytes)

bInterval : 0xFF (255 ms)

----- Interface Descriptor -----

bLength : 0x09 (9 bytes)

bDescriptorType : 0x04 (Interface Descriptor)

bInterfaceNumber : 0x03

bAlternateSetting : 0x00

bNumEndpoints : 0x02 (2 Endpoints)

bInterfaceClass : 0x0A (CDC-Data)

bInterfaceSubClass : 0x00

bInterfaceProtocol : 0x00

iInterface : 0x07 (String Descriptor 7)

Language 0x0409 : "ST-Link VCP Data"

----- Endpoint Descriptor -----

bLength : 0x07 (7 bytes)

bDescriptorType : 0x05 (Endpoint Descriptor)

bEndpointAddress : 0x05 (Direction=OUT EndpointID=5)

bmAttributes : 0x02 (TransferType=Bulk)

wMaxPacketSize : 0x0008 (8 bytes)

bInterval : 0x00 (ignored)

----- Endpoint Descriptor -----

bLength : 0x07 (7 bytes)

bDescriptorType : 0x05 (Endpoint Descriptor)

bEndpointAddress : 0x85 (Direction=IN EndpointID=5)

bmAttributes : 0x02 (TransferType=Bulk)

wMaxPacketSize : 0x0010 (16 bytes)

bInterval : 0x00 (ignored)

----- String Descriptors -----

----- String Descriptor 0 -----

bLength : 0x04 (4 bytes)

bDescriptorType : 0x03 (String Descriptor)

Language ID[0] : 0x0409 (English - United States)

----- String Descriptor 1 -----

bLength : 0x26 (38 bytes)
bDescriptorType : 0x03 (String Descriptor)
Language 0x0409 : "STMicroelectronics"

----- String Descriptor 2 -----

bLength : 0x1A (26 bytes)
bDescriptorType : 0x03 (String Descriptor)
Language 0x0409 : "STM32 STLink"

----- String Descriptor 3 -----

bLength : 0x32 (50 bytes)
bDescriptorType : 0x03 (String Descriptor)
Language 0x0409 : "0674FF525056805087144508"

----- String Descriptor 4 -----

bLength : 0x1C (28 bytes)
bDescriptorType : 0x03 (String Descriptor)
Language 0x0409 : "ST-Link Debug"

----- String Descriptor 5 -----

bLength : 0x2A (42 bytes)
bDescriptorType : 0x03 (String Descriptor)
Language 0x0409 : "ST-Link mass storage"

----- String Descriptor 6 -----

bLength : 0x22 (34 bytes)
bDescriptorType : 0x03 (String Descriptor)
Language 0x0409 : "ST-Link VCP Ctrl"

----- String Descriptor 7 -----

bLength : 0x22 (34 bytes)
bDescriptorType : 0x03 (String Descriptor)
Language 0x0409 : "ST-Link VCP Data"