Simucube 2 Firmware update does not start issue

Version	Date	Changelog
V1	19.3.2024	First version
V2	28.5.2024	Added real screenshots



Analysis

This procedure is applicable only if the issue is that True Drive does not talk with the device in firmware update mode with following error message. Firmware update won't work.

Unable to open device in bootloader mode Couldn't find device in firmware update mode after sending command.

Step 1: Verify the nature of the issue

Download and extract USBTreeView software from here:

https://www.uwe-sieber.de/usbtreeview e.html

If needed, power cycle the Simucube 2 device and make the issue happen again.

Open the USBTreeView software.

Verify that there is a "Granite Devices Simucube 2 device in Firmware Update mode" on some USB port

AND

it has a "Virtual HID Minidriver Collection" driver noted as in the following picture.



Proceed to next step only if there is Virtual HID Minidriver Collection visible for the device.

Step 2: Open the Windows Device Manager

Select View -> Show Device by connection.

Normally – if everything works - it should be possible to find a HID-compliant Vendor Defined device like in the picture below.

ACPI Power Button T ACPI Processor Aggregator Tan ACPI Thermal Zone Tan ACPI Thermal Zone Tan ACPI Thermal Zone > Intel(R) Core(TM) i5-7400 CPU @ 3.00GHz tintel(R) Power Engine Plug-in The Microsoft Windows Management Interface for ACPI PCI Express Root Complex > The High Definition Audio Controller > 📷 Intel(R) 100 Series/C230 Chipset Family SATA AHCI Controller > Intel(R) 100 Series/C230 Series Chipset Family LPC Controller (H170) - A144 Intel(R) 100 Series/C230 Series Chipset Family PCI Express Root Port #3 - A112 > Entel(R) 100 Series/C230 Series Chipset Family PCI Express Root Port #5 - A114 > Intel(R) 100 Series/C230 Series Chipset Family PCI Express Root Port #7 - A116 Intel(R) 100 Series/C230 Series Chipset Family PMC - A121 Intel(R) 100 Series/C230 Series Chipset Family SMBus - A123 > intel(R) Management Engine Interface #1 Intel(R) USB 3.0 eXtensible Host Controller - 1.0 (Microsoft) USB Root Hub (USB 3.0) 🗸 🏺 Generic SuperSpeed USB Hub Generic SuperSpeed USB Hub Generic SuperSpeed USB Hub Generic SuperSpeed USB Hub 🗸 🏺 Generic USB Hub Generic USB Hub 🗸 🏺 Generic USB Hub Generic USB Hub V JUSB Input Device HID-compliant vendor-defined device > B Intel(R) Wireless Bluetooth(R) Realtek USB 2.0 Card Reader > USB Composite Device 🏣 Intel(R) Xeon(R) E3 - 1200 v6/7th Gen Intel(R) Core(TM) Host Bridge/DRAM Registers - 591F Intel(R) Xeon(R) E3 - 1200/1500 v5/6th Gen Intel(R) Core(TM) PCIe Controller (x16) - 1901 > in High Definition Audio Controller > I NVIDIA GeForce GTX 1050 Trusted Platform Module 2.0 Microsoft UEFI-Compliant System System Firmware

In case there are several devices, go to device properties. Correct device should have USB ID as VID_16D0&PID_05DE.

HD-compliant vendor-defined device Properties			
General Driver Details E	vents		
HID-compliant vend	dor-defined device		
Events			
Timestamp	Description		
19/03/2024 12.57.18	Device configured (input.inf)		
Information Device HID\ <u>VID_16D08PID</u> configured.	_0D5E\8&29888aa0&3&0000 was		
Driver Name: input.inf Class Guid: {745a17a0-74d3 Driver Date: 06/21/2006	3-11d0-b6fe-00a0c90f57da}		
View All Events			
	OK Cancel		

In the case of the issue, there is not such HID-compiliant Vendor Defined Device. Instead, there is a Virtual HID Minidriver Collection device (or several of them) in the USB device tree like in the picture below:

8 Bluetooth LE Generic Attribute Service
8 Bluetooth LE Generic Attribute Service
Bluetooth LE XINPUT compatible input device
> USB Composite Device
USB Input Device
🚚 HID-compliant vendor-defined device
🖓 HID-compliant vendor-defined device
USB Input Device
Virtual HID Minidriver Collection
> 📹 Standard SATA AHCI Controller
Trusted Platform Module 2.0
> b Microsoft UEFI-Compliant System

It will have a driver made by G-Spy and is likely a driver that was installed with Razer mouse software.

When you find that device, that device will also have the **VID_16D0&PID_05DE** as USB identifier. In case of several drivers, please find it by checking the Device Instance Path from the Details tab as follows:

ieneral (Driver	Details	Events	
12	Virtual H	IID Minid	river Collection	
~				
Device in	nstance	path		~
Value				
HID\VI	D_16D0	SPID_00	5E\6829888AA08080000	

Solution:

Go the Driver tab on that a MINI HID Collection device:

Driver Date:	21/06/2006	
Driver Version:	10.0.19041.3636	
Digital Signer:	Microsoft Windows	
Driver Details	View details about the installed driver files.	
Update Driver	Update the driver for this device.	
Roll Back Driver	If the device fails after updating the driver, roll back to the previously installed driver.	
Disable Device	Disable the device.	
Uninstall Device	Uninstall the device from the system (Advanced).	
	OK Cancel	

Select "Update Driver" and then "Browse My Computer" and then "Let me pick..".

Then from the dialog that opens, select the HID-compliant vendor-defined device and click Next.

				\times		
←	📕 Update	Drivers – HID-compliant vendor-defined device				
	Select the device driver you want to install for this hardware.					
	Select the manufacturer and model of your hardware device and then click Next. If you have disk that contains the driver that you want to install, click Have Disk.					
	Show co	ompatible hardware		_		
	Model					
	IID-compliant device					
	🔁 This d	Iriver is digitally signed.	Have Disk			
	Tell m	e why driver signing is important		-		
			Next Cancel			

As the end result, Firmware Update should now work. Device restart may be needed but Windows should not start to use the Virtual HID MiniDriver Collection driver for the device anymore.