[u-Nova + USB 3.0]

[Installation guide]



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NOVITEC



1. Recommended System Configuration

The following system configuration is recommended when using the camera.

- OS Microsoft Windows 7/8/10 (32-bit, 64-bit)
- Ports USB 3.0
- Software Microsoft Visual Studio 2015 (to compile and run example code)

2. Preparation for Camera Configuration

The following components are required to install the camera.

- USB3.0 cable (see 6.2. USB3.0 Connector)
- GPIO cable (see 6.3. GPIO Connector)
- Lens (see 5.1. Attach a Lens)
- Interface card

3. Handling Precautions

3.1. Instrument safety instructions

- We are not responsible for any damage caused by user negligence or other equipment connection.
- Handle the u-Nova with care. For example, be careful of strong impact or storage in an unsuitable environment.
- Do not use accessories that are not recommended as they may be dangerous.

3.2. Important safety precautions

- Please check the specifications for each product and use a power supply with the appropriate specifications.
- Keep the product away from radiators, heaters, stoves, or other products (amplifiers, etc.) and heat sources.
- Be careful not to let flammable substances, water, or metal get inside the camera.
- Do not modify the camera or use the camera with the outer cover removed.
- Avoid using the camera in thunder or lightning storms.



- When using the camera outdoors, protect it from moisture. (rain/snow, etc.)
- Board level notes
 - Be careful to avoid electric shocks such as static electricity (ESD).
 - Use a ground (GND), etc. to cope with ESD, etc.
 - Be careful not to get plastic, vinyl, or Styrofoam into the circuit board.
 - Do not touch the parts of the circuit board with your hands or conductive devices.

3.3. Handling and cleaning

- Do not attempt to disassemble the camera.
- When replacing or removing the lens or filter, be careful not to allow water or dust to enter.
- Use a blower or lens brush to remove dust from the lens or optical filter.
- Do not disassemble the front flange.
- Clean the case with a soft, dry cloth.
- Do not use benzene, thinner, alcohol, liquid or spray-type cleaners.

3.4. Installation

Avoid installing or storing the camera in the following locations.

- Environments exposed to direct sunlight, rain or snow
- Environments with flammable or corrosive gases
- Excessive temperature or low temperature environment (recommended ambient temperature: $0 \sim 45^{\circ}$ C)
- Wet or dusty places
- Places subject to excessive vibration or shock
- Environments exposed to strong electric or magnetic fields
- Do not point the camera at the sun or other strong light sources.
- In case of unfavorable conditions, be sure to inquire about the installation environment.



3.5. Performance and longevity

• Please configure the environment that meets the camera operation specifications. If the ambient temperature is high, the service life may be shortened due to deterioration of the parts. In that case, you also need to consider the cooling system.

3.6. Connector

- When manufacturing the I/O connector, be careful with the connection so that the wires fit well.
- Make sure the power is off before connecting or disconnecting I/O connectors.
- To avoid damaging the connector, do not pull by the electric wire, etc.

4. Installing the Software

4.1. Download the Installation File

We recommend that you download and install the latest version of the SDK from the Novitec website.

a. Go to the Novitec website (https://www.novitec.co.kr/).



<image> 1. Enter the website address image

b. Click [Machine Vision] of [Products] in the top tab.

Novitec	witec.co.kr/en/index.php			- ≞ ¢	검색	• م	- - >	۲ د ا
		Home	Products	Support	Company	Q SEARCH KI	R	^
	and and	Machine	e Vision	Ma	achine Vision		N.C	
		ITS & Se	curity	Provide opti	imal solutions for i	mage	1-5-21	

<image> 2. Click Machine Vision Image

c. Click [2D vision] in Machine Vision.



Novitec	×				
	Machine visio	n	-	ITS & Security	
	2D vision	3D vision	Spectrometer	Thickness sensor	

<image> 3. Click 2D vision image

d. Click one of the uN-20M, uN-20C, uN-20C-F in the camera list to Access the page.

	uN-20C-F	1600 x 1200 pixels	50 fps	1/1.8"	Global shutter	Color
	uN-20C	1600 x 1200 pixels	50 fps	1/1.8"	Global shutter	Color
	uN-20M	1600 x 1200 pixels	50 fps	1/1.8"	Global shutter	Mono

- <image> 4. Camera list image
- e. Click [Download] of SDK, in the download field at the bottom of the product page.

C Download		
Catalogue	Detailed Product Information	速 Download
Drawing	Detailed Product Drawing and CAD file	🛃 Download
Manual	Downloadable product Manual	🛃 Download
SDK	Downloadable Product Software Development Kit	🛃 Download
Firmware	Download Latest Product Firmware	🛃 Download

<image> 5. Download section on product page image

f. Click [Download] of MV_u-Nova SDK to download the installation file.



Catalogue	Drawing	Manual	SDK	Firmware
achine Vision	✓ 2D vision	~	Search	C
1 MV_u-Nova SDK				🕁 Download

<image> 6. SDK download window image

4.2. Install the Novitec Software

Refer to 4.1. Download the Installation File to prepare the installation file for Windows.

a. Execute the u-Nova SDK installation file (Setup_u-NovaSDK_X.X.X.X.exe) and Click [Next >].



<image> 7. Installation Startup Image

b. Click [I Agree].

C.



N u-Nova SDK 0.9.0.25 Setup —	×
License Agreement Please review the license terms before installing u-Nova SDK 0.9.0.25.	Ν
Press Page Down to see the rest of the agreement.	
 ŘÖÁ¾ «ç¿ËÀÚ ¶ÓÀ̼±½° °È¾à¼ ¼ÒÇÁÆ®¿þ¾î, ¦ «ç¿ËÇĨ±â Àü¿i °» ¼ÒÇÁÆ®¿þ¾î ¶ÓÀ̼±½° °È¾à¼4, ¦ ÀÚ¼¼¼È÷ ÀĐÀ, ½Ê½Å¿Å. °» °È¾àÅÇ Á, °Ç¿i µû¶ó¼, À̼ÀÔÇÁÆ®¿þ¾î, ¦ «ç¿ËÇĨµµ¹ĨÇã¿ ëµË 'Ĩ'Ù. °» °è¾àÅ? «ç¿ËÀÚ(°³ÀÎ ¶Ç 'Å ¼ÀÎ)¿I Novitec Co.,Ltd.(ÀÌÇĨ i *Noviteci±) ° £¿i ü°áµÈ °ÍÀÔ 'Ĩ'Ù. °» ¼ÒÇÁÆ®¿þ¾î, ¦ 'Ùở·Îµå, ¼³Äi, °¹×ç ¶Ç ' «ç¿ËÇÔÀ, 'νźá °è¾à¼ Á¶°ÇÀÇÂû¿ ë¿i µ¿ÀÇÇĨ°Ô µË 'Ĩ'Ù. Á¶°Ç¿i µ¿ÀÇÇĨÁö ¾Ê ' 'Ù é ¼ÒÇÁÆ®¿þ¾î, ¦ 'Ùở·Îµå, ¼³Ä °¹×ç ¶Ç ' «ç¿ËÇĨĂö "¶½Ê½Ã¿À, ¼ÒÇÁÆ®¿þ¾î, ¦ 'Ùở·Îµå ¶Ç ' ¼²Äi ÇB 'µ¥ ° è¾à¼ Á¶°Ç¿i µ¿ÀÇÇĨĂö ¾Ê ' 'Ù é ¼ÒÇÁÆ®¿þ¾î, ¦ Áï½Ã «èÁ¦ÇĨ½Ê½Â¿À. If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install u-Nova SDK 0.9.0.25. 	· ·
Nullsoft Install System v3.02.1	ncel
<image/> 8. License agreement image	
After selecting the folder to install, Click [Install].	



N u-Nova SDK 0.9.0.25 Setup	_		\times
Choose Install Location			
Choose the folder in which to install u-Nova SDK 0.9.0.25.			N
Setup will install u-Nova SDK 0.9.0.25 in the following folder. To install click Browse and select another folder. Click Install to start the installa	in a differe	ent folder	r,
Destination Folder C:\Program Files (x86)\Novitec\u-Nova SDK	Brow	/se]
Space required: 131.1 MB			
Space available: 12.2 GB			
Nullsoft Install System v3.02.1	;tall	Can	cel
<image/> 9. Choose Install location image			
d. Click [Finish] to finish the installation.			



N u-Nova SDK 0.9.0.25 Setup	- 🗆 ×
	Completing u-Nova SDK 0.9.0.25 Setup u-Nova SDK 0.9.0.25 has been installed on your computer. Click Finish to close Setup.
	< Back Finish Cancel
<image:< th=""><th>> 10. Installation finish image</th></image:<>	> 10. Installation finish image
5. Installing the Camera	

5.1. Attach a Lens

Attach the lens after removing the cap from the lens holder.

u-Nova has a removable 5mm C mount adapter is installed as standard, and it can be used as a CS mount by removing the adapter.

5.2. Connect the interface Card and Cable to the Camera

USB3.0 cable to the camera and PC.

USB3.0 Micro-B type must be connected to the camera side, On the interface card side, check the type suitable for the interface card used and connect it.

5.3. Configure USB Settings

After connecting the camera and the interface card, users need to install the camera's driver.

a. Connect the u-Nova to the USB3.0 port of the PC using a USB3.0 cable.



b. Execute [Device Manager] from the control panel.

🖭 All Control Panel Items			- 0	×				
\leftarrow \rightarrow \checkmark \bigstar Control Panel \Rightarrow A	ĉ)		P				
Adjust your computer's settings			View by: Small icons 🔻					
🔠 Administrative Tools	📑 AutoPlay	ł	b E	Backup and Restore (Windows 7)				
🏘 BitLocker Drive Encryption	💶 Color Management		ø.	Credential Manager				
🐣 Date and Time	Default Programs	📇 Device Manager						
🕫 Devices and Printers	lase of Access Center		.	File Explorer Options				
le History	A Fonts	é	<u></u> 1	ndexing Options				
🔁 Internet Options	🔤 Keyboard	() (Mouse				
🙀 Network and Sharing Center	📖 Phone and Modem	Ă)	Power Options				
Programs and Features	🐼 Recovery	4	9 F	Region				
🐻 RemoteApp and Desktop Connections	陀 Security and Maintenance	1	1	Sound				
Speech Recognition	Storage Spaces		3	Sync Center				
🗾 System	🛃 Taskbar and Navigation			Froubleshooting				
🎎 User Accounts	🔗 Windows Defender Firewall		H \	Nork Folders				

<image> 11. Device manager location image

- c. Check the "Other devices" item has a device that starts with the word "u-Nova".
 - If the device does not appear in the list, check the connection between the camera and the PC.



<image> 12. u-Nova driver warning image

d. Right-click on "u-Nova" and click [Update driver].





<image> 13. Update driver image

e. Click [Browse my computer for drivers].



Cancel

<image> 14. Manually select driver location image

f. Click [Browse...].



 \times

	←	Update Drivers - u-Nova-13M	
		Browse for drivers on your computer	
		Search for drivers in this location: C:\Users\Novitec\Documents > Include subfolders	
		→ Let me pick from a list of available drivers on my computer This list will show available drivers compatible with the device, and all drivers in the same category as the device.	
		Next Cancel	
		<image/> 15. Choose driver location image	
g.	Select dri	vers from the folder where the user installed the SDK and click [OK].	
	Default p	path : Desktop₩This PC₩Local Disk (C:)₩Program Files (x86)₩Novitec₩u-Nova	

SDK₩drivers₩win10₩x64



Browse For Folder	×
Select the folder that contains drivers for yo	our hardware.
Select the folder that contains drivers for your Desktop Local Disk (C:) Local Disk (C:)	Image: control of the second seco
	Next Cancel
	Browse For Folder Select the folder that contains drivers for ye Desktop This PC Local Disk (C:) Desktop Local Disk (C:) Desktop Local Disk (C:) Desktop Local Disk (C:) Novitec Select the folder Novitec Select the folder Select the folder Selec

<image> 17. Complete driver location selection image



i. Click [Close] to finish updating the driver.



j. In the "Device Manager", check that the warning mark on the camera has disappeared.



<image> 19. Driver recognized normally image

5.4. Launch Viewer



3 ways to launch the camera viewer.

- Click the shortcut icon of "Novitec Camera Viewer" on the desktop.
- Click Novitec "Novitec Camera Viewer" in the Windows Start menu.
- Go to the path below in the File Explorer and run the NvtCameraViewer.exe.
 - Default path : C:₩Program Files (x86)₩Novitec₩u-Nova SDK₩bin₩x86



<image> 20. Launch viewer image

5.5. Connect the Camera

To use the camera, the user must connect the camera to the viewer.

a. Click [Connect] at the top of the viewer.

Novited	Camera	Viewer										-	□ ×
File Cam	iera Cont	rol Setti	ings Record	ling View	Help								
õ			¢	O		M		-	1		Q	Q	Q
Connect	Start	Pause	Settings	Snapshot	Recording	Prev	Next			Fit to Screen	Actual Pixels	Zoom In	Zoom Out

<image> 21. Connect the Camera image

b. Check the model name and serial number of the camera connected to the PC, select the camera in the list, and click [Connect].



 \times

Camera Selection

Index	Model Name	Serial Number	Firmware
0	u-Nova-13M	DOJ10865	0.9.0.34
Upda	te device list	Conr	nect Cancel

<image> 22. Select camera image

c. Check that [Connect] at the top is activated in blue

1	Novitec	Camera	Viewer										_	o x
1	File Cam	era Cont	rol Sett	ings Record	ling View	Help	1			. 1				
	Ċ			\$			M			_		ę	Q	Q
	Connect	Start	Pause	Settings	Snapshot	Recording	Prev	Next			Fit to Screen	Actual Pixels	Zoom In	Zoom Out

<image> 23. Status of Connect after camera selection image

5.6. Get the Image

Click [Start] at the top of the viewer to check the image.





6. Physical Interface

6.1. Power/Voltage

The USB3.0 connector provides a power connection between the camera and the PC.

The ideal input voltage is 5V DC.

To power the camera, the interface card must be connected to the PC's power supply.

6.2. USB3.0 Connector

The USB 3.0 Micro-B jack is equipped with two M2 screwholes for secure connection.

Pin assignments conform to the USB 3.0 Micro-B standard.



<image> 25. USB3.0 Micro-B image

6.3. GPIO Connector



The camera is equipped with a 4-pin GPIO connector on the back of the case for using external triggers or lights.

Refer to the diagram for the number of each pin.

Diagram	Pin	Function	Description
	1	Trigger In	Trigger Input (Low voltage: 0~0.8V / High level: 2~5V)
	2	Strobe Out	Strobe Output (3.3V LVTTL)
	3	GP Out	General purpose output (3.3V LVTTL)
	4	GND	TTL Ground

<Table> 1. GPIO Connector table

7. Troubleshooting

7.1. Upgrading Camera Firmware

Users can download the latest version of firmware from Novitec website.

- a. Go to u-Nova product page on Novitec website.
 - u-Nova product page : https://www.novitec.co.kr/sub/view.php?idx=26



<image> 26. Enter the product page address image

b. Click [Download] of Firmware in the download field at the bottom.



Download

Catalogue	Detailed Product Information	速 Download
Drawing	Detailed Product Drawing and CAD file	🛃 Download
Manual	Downloadable product Manual	🛃 Download
SDK	Downloadable Product Software Development Kit	🛃 Download
Firmware	Download Latest Product Firmware	🛃 Download



c. Click [Download] of MV_u-Nova Firmware to download the firmware file.

Catalogue	Drawing	Manual	SDK	Firmware
Machine Vision	2D vision	~	Search	
1 MV_u-Nova Firmware				🚽 Download
		≪		

- d. Go to the path below in the File Explorer and run the NvtFirmwareUpdator.exe.
 - Default Path : C:\Program Files (x86)\Novitec\u-Nova SDK\bin\x86

- 🛃 🔒 🚽			Manage	x86			-	
File Home	Share	View	Application Tools					~ ?
\leftrightarrow \rightarrow \checkmark	« No	vitec > u-N	lova SDK → bin → x8	36	~	Ō		
1.0.1		Name	^		Date modified		Туре	Size
Quick access		Driver	Installer32		2/4/2016 3:52 PM	I	Application	12 KB
	<i>ж</i>	🚳 Novite	ecCameraAPI_C.dll		1/24/2018 10:36 #	M	Application exten	25 KB
Downloads	*	Novite	ecCameraAPI_Cd.dll		1/24/2018 10:34 #	M	Application exten	64 KB
Documents	*	🚳 Novite	ecCameraAPI_CLR.dll		6/25/2018 6:27 PI	N	Application exten	85 KB
Pictures	*	NvtCa	meraAPI.dll		6/25/2018 6:27 PI	N	Application exten	2,187 KB
👌 Music		N NvtCa	imeraViewer		6/25/2018 6:29 PI	N	Application	953 KB
😽 Videos		🚜 NvtFir	mwareUpdator		2/6/2015 3:44 PM	I	Application	97 KB
This PC		🤹 usbvie	2W		2/6/2015 3:44 PM		Application	83 KB

<image> 29. Location of the firmware updater image

e. Click [...] of "2. 펌웨어 파일 선택".



Index	Model		S/	/N	F/W Ver.				
0	u-Nova-	13M	D	OJ10	0.9.0.34				
		ال	로규치						
- 21010									
펌웨어	파일 전력	1							
	F								
. 입네이	<u> </u>		ndate						
opdate									
신영 상	-11								
시간		상태	78.11						
22-02-7	22 11:4	가메다 폭독	생신						

<image> 30. Choose firmware file location image

f. Select the downloaded firmware file of u-Nova and click [Open].



· → • ↑ 🖊	> Th	is PC → Downloads	5 V	🔎 Search Down	loads
Organize 🔻 Nev	v fold	er		:== :== :==	- 🔳 🕻
Quick access	Â	Name ~ A long time ago (1) —	Date modified	Туре	Size
🕂 Downloads 🤉	e	NvtFX3Camera_0.9.0.34	9/21/2018 4:45 PM	Disc Image File	153 KI
Documents	•				
	File n	ame: NvtFX3Camera 0.9.0.34		Firmware files(*.in	na) ~

<image> 31. Choose firmware file image

g. Select the camera to update firmware in "1. 카메라 선택" and Click [Update] in "3. 업데이트".





IIIGCA	Model		S/N	F/W Ver.	
0	u-Nova-	13M	DOJ10	0.9.0.34	
		새로고?	침		
. 펌웨어	파일 선택	1			
C:₩Users	₩novitec	#Downloads#Nvt	FX3Camera		
. 업데이!	Ē				
		Update	9		
진행 상태	н				
200					
1171		ALEU			
시간 22-02-2	2 1/1-0	경대 카메라 모로 개시			
22-02-2	5 14.0	71114 44 82			

<image> 32. Select camera and start update image

h. Check the cautions in the warning window and click [확인].

NvtFirmwareUpdator	Х
· 펌웨어 업데이트를 시작합니다. 진행이 완료 될때 까지 카메라 전원을 해제하거나, 프로그램을 강제로 종료하지 마세요.	
확인	

<image> 33. Firmware update warning image



i. When the firmware update is complete, click [확인].



j. Click [확인] to exit the updater.





Index 0	Model	12M	S/N	F/W Ver.	
0	u-NOVa-	15141	00110	0.9.0.54	
		새로고칭			
펌웨어	파일 선택	4			
ec₩Do	wnloads₩I	NvtFX3Camera_0.9	.0.34.img		
9110	E				
	-	Undate			
Update					
진행 상태					
시간		상태			^
22-02-2	23 14:0	Write firmware -	addr: 25a0), length: 512	
22-02-23 14:0 Write firmware - addr: 25c00, length: 512					
22-02-23 14:0 Write firmware - addr: 25e00, length: 512					
22-02-23 14:0 Write firmware - addr: 26000, length: 512					
22-02-23 14:0 Write firmware - addr: 260a0, length: 160					
22-02-23 14:0 펌웨어 업데이트 완료					
					¥

<image> 35. Program after completion image

k. Reconnect the camera's power cable.

7.2. System Error: MSVCR110.dll & mfc110u.dll

If a system error of "MSVCR110.dll" or "mfc110u.dll" occurs when running the firmware updator, follow the steps below.



	1	NvtFirmwa	reUpdator.exe - ㅅ	스템 오류		×
		8	mfc110u.dll이(가) 없 뱀을 다시 설치하면	어 코드 실행을 진형 이 문제가 해결될 수	행할 수 없습니다. 프 ← 있습니다.	로그
					확	인
			<image/> 36. m	nfc110u.dll error ir	nage	
	r	NvtFirmwa	reUpdator.exe - ㅅ	스템 오류		×
			MSVCR110.dll이(가) 그램을 다시 설치하던	없어 코드 실행을 진 면 이 문제가 해결될	인행할 수 없습니다. 수 있습니다.	프로
					<u>्</u>	2
			<image/> 37. MS	SVCR110.dll error	image	
a.	Right-click on "	This PC" i	n File Explorer a	nd click [Proper	ties].	



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File	Home	Share	View	
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T <u></u> < 1 € <	Expand Manage Pin to St Map net Open in Pin to Q Disconn Add a ne	tart twork o new w uick ad ect net etwork	drive vindow ccess twork drive	
↓ ↓ ↓ ↓	Expand Manage Pin to St Map net Open in Pin to Q Disconn Add a ne	tart twork o new w uick ad ect net etwork	drive vindow ccess twork drive : location	
► ►	Expand Manage Pin to St Map net Open in Pin to Q Disconn Add a ne Delete Rename	tart twork o new w uick ad ect net etwork	drive vindow ccess twork drive location	

<image> 38. This PC properties image

b. Check if the "System type" in the Device specifications is 64-bit(x64) or 32-bit(x86).

System type 64-bit operating system, x64-based processor

<image> 39. System type image

- c. Go to the path below in the File Explorer
 - Default Path : C:\Program Files (x86)\Novitec\u-Nova SDK\redist



📙 🛃 📙 🖛 redist			-	п×
File Home Sha	re View			~ ?
← → ~ ↑ <mark>-</mark> «	Novitec 🔹 u-Nova SDK 🔅	redist ッ ひ		
	Name	Date modified	Туре	Size
Culck access	😸 vcredist_x64	2/6/2015 8:09 PM	Application	7,026 KB
Desktop	vcredist_x86	2/6/2015 8:09 PM	Application	6,408 KB



- d. If the PC is 32-bit(x86), install "vcredist_x86.exe", and if the PC is 64-bit(x64), install both "vcredist_x86.exe" and "vcredist_x64.exe".
 - PC 32bit-vcredist_x86
 - PC 64bit-vcredist_x86 & vcredist_x64

7.3. Check the Version of the USB Port

If the version of the USB port to which the camera is connected is lower than 3.0, the camera may not operate normally.

- a. Go to the path below in the File Explorer and run usbview.exe.
 - Default Path : C:\Program Files (x86)\Novitec\u-Nova SDK\bin\x86

📊 🛃 🚽 🗸 🗸			-	
File Home Share	View			~ 🕐
← → • ↑ 📙 « No	vvitec → u-Nova SDK → bin → x86	ٽ ~		
A	Name	Date modified	Туре	Size
V TOUICK access	DriverInstaller32	2/4/2016 3:52 PM	Application	12 KB
Desktop 🖈	NovitecCameraAPI_C.dll	1/24/2018 10:36 AM	Application exten	25 KB
🕂 Downloads 🖈	NovitecCameraAPI_Cd.dll	1/24/2018 10:34 AM	Application exten	64 KB
🔮 Documents 🖈	NovitecCameraAPI_CLR.dll	6/25/2018 6:27 PM	Application exten	85 KB
📰 Pictures 🛛 🖈	NvtCameraAPI.dll	6/25/2018 6:27 PM	Application exten	2,187 KB
👌 Music	N NvtCameraViewer	6/25/2018 6:29 PM	Application	953 KB
Videos	🚜 NvtFirmwareUpdator	2/6/2015 3:44 PM	Application	97 KB
	🤧 usbview	2/6/2015 3:44 PM	Application	83 KB
> 🔄 This PC 🗸 🗸				_
8 items				

<image> 41. Location of the usbview image

b. Select "DeviceConnected : u-Nova" from the list on the left.





<image> 42. DeviceConnected image

- c. Check the USB version by looking at the bcdUSB in the content on the right.
 - 0x0300 : USB3.0
 - 0x0310 : USB3.1
 - 0x0200 : USB2.0

Device Descriptor:			
bedUSB:	0x0300		
bDeviceClass:	0x00		
bDeviceSubClass:	0x00		
bDeviceProtocol:	0x00		
bMaxPacketSize0:	0x09	(9)	
idVendor:	0x2B00		
idProduct:	0xF003		
bcdDevice:	0x0000		
iManufacturer:	0x01		
0x0409: "NOVITEC"			
iProduct:	0x02		
0x0409: "u-Nova-13M			

<image> 43. Check bcdUSB version image



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10. Revision History

Date	Version	Description	SDK / Firmware Version
2022.01.14	V1.0	Initial Version	

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11. Contacting Us

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