Introduction

There are three examples under this folder.

1) Beginner

   A clean and simple example for beginners to start with NSP32, to demonstrate the basic usage of our API.

2) ConsoleDemo

   A console program to demonstrate full functionalities of NSP32. Users can operate NSP32 by interactive console commands.

3) SpectrumMeter

   A GUI program to visualize the spectrum measured by NSP32.
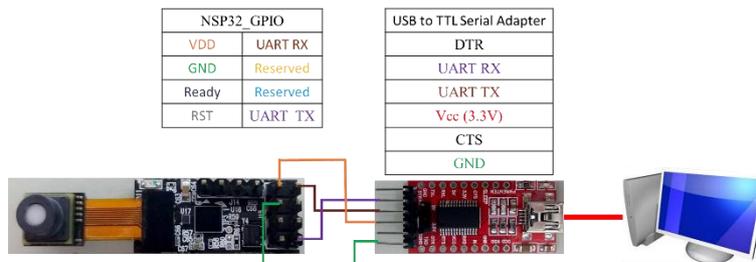
API dll Location

Our API dll is located at [/examples/XXX/NanoLambdaNSP32.dll], where XXX is the name of each example project.

Pre-built exe

The pre-built exe file is located at [/examples/XXX/bin/Release/XXX.exe], where XXX is the name of each example project.

Hardware Setup

If you are going to connect NSP32 through USB port on your desktop, you might need a "USB to TTL Serial Adapter that supports 3.3V".

The following table shows the general pin connections between NSP32 module and the adapter.

GPIO / Hardware		NSP32 Pin	Adapter Pin
Power	VDD	VDD3V3	3V3
	GND	GND	GND
Data channel	UART Signal	UART TX	UART RX
		UART RX	UART TX

Software Setup

1) Tested on
   - Visual Studio 2017 in Windows 7/8/8.1/10
2) Setup

   If you need to rebuild the exe file, or want to modify the example code, you can follow these steps:
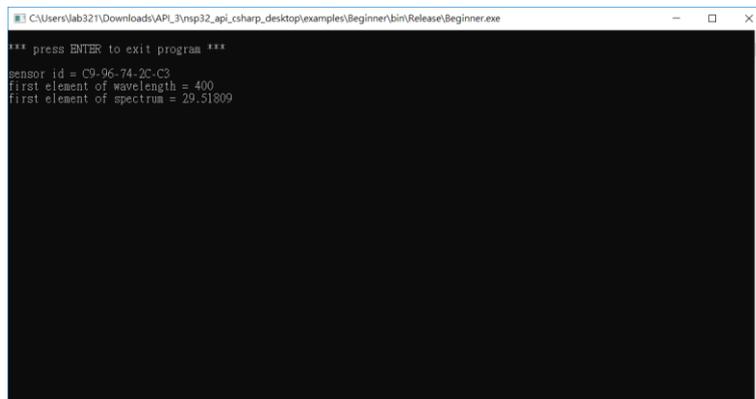   1. Install Visual Studio 2017.
   2. Open [/examples/NanoLambda.sln] in Visual Studio 2017.
   3. In Visual Studio "Solution Explorer", you can see all example projects are listed.
   4. Build the solution, and you will get the exe file of each project under their /bin/Release/ folder.

Run the Example

With the "Beginner" example, you need to modify the source code according to the serial port name where your NSP32 is connected to. For your convenience, we have marked these code sections with the title "modify this section to fit your need".

To run the examples, double click the exe files, or click the "Start" button in Visual Studio.

1) Example Snapshot of "Beginner"

2)   Example Snapshot of "ConsoleDemo"

3)   Example Snapshot of "SpectrumMeter"