SDK version: 2017.6.6.1
* Call the NIRez20_Initial () before open the SDK function

---------- SDK function ---------- ------
1. NIRez20 initialization:
Int NIRez20_Initial (void);
Return value: 1 is normal
Parameters: None

2. Connection:
Void Nirez20_Connect (void);
Return value: none
Parameters: None

3. NIRez20 Link Status:
Int NIRez20_Link_Status (void);
Return value:
0 -> is not connected
1 -> is connected
-99 -> incomplete initialization
Parameters: None

4. Write scan parameters:
int NIRez20_Config (int i_lamp_switch , int i_start_wavelength , int
i_end_wavelength , double d_width , int i_gain ,int i_points ,
int i_average,int i_exposure,int i_scan_mode);
Return value:
0 -> OK
-1 -> has not yet read the software license
-2 -> USB is not connected to NIRez
-3 -> LAMP parameter setting error
-4 -> Start wavelength parameter setting error
-5 -> End Wavelength parameter setting error
-6 -> Wavelength Width parameter setting error
-7 -> Gain parameter setting error
-8 -> Points parameter setting error
-9 -> The mean parameter setting is incorrect
-10 -> Exposure time parameter setting error

-11 -> The scan mode is set incorrectly
-99 -> incomplete initialization
Parameters:
Int i_lamp_switch: 0 is LAMP OFF; 1 is LAMP ON
Int i_start_wavelength: Start wavelength 900 ~ 1700 nm
Int i_end_wavelength: End wavelength 900 ~ 1700 nm
Double d_width: Wavelength Width (2.34 to 60.84 nm) The accumulated value is 1.17
Int i_gain: gain 1, 2, 4, 8, 16, 32,
Int i_points: the number of measured points
Int i_average: Set the average times after scanning (1 to 99)
Int i_exposure: Set the exposure time value (0 ~ 6)
0 -> 0.635ms
1 -> 1.27ms
2 -> 2.45ms
3 -> 5.08ms
4 -> 15.24ms
5 -> 30.48ms
6 -> 60.96ms
Int i_scan_mode: Set the scan mode
0 -> Column mode
1 -> Hadamard mode

5. Execute a scan:
Int Nirez20_Scan (int * i_total, int * i_gain, double * d_wavelength, int * i_intensity);
Front Return Value: Returns the scan status
0 -> OK
-1 -> has not yet read the software license
-2 -> USB is not connected to NIRez
-3 -> Software authorization code error
-4 -> The scan parameters are not configured first
-5 -> scan is in progress
-6 -> scan results are abnormal
-7 -> scan results overflow
-99 -> incomplete initialization
Parameter Return Value:
Int * i_total: The number of data
Int * i_gain: gain

Double * d_wavelength: Wavelength array
Int * i_intensity: Intensity array
Note: scan results, without any treatment
The license key will be checked before scanning

6. Specify the License Key file path:
Void NIRez20_Set_Key_Path (char * c_path);
Return value: none

Parameters:
Char * c_path: set the path where the License Key file is placed (Example -> D: \ NIR_KEY)
Currently, the license key file has two paths:
1. C: \ Isuzu Optics \ NIRez \ NIRez_License_Key \ SDK
2. and NIRez20_SDK.dll under the same path

If the above two paths can not find the License Key file, use this function to specify the path
* If the License Key file is not found, it will return -3 when NIRez20_Scan () is executed

7. Read serial number:
Void NIRez20_Get_Sn (char * c_file, char * c_nirez);
Return value: none

Parameter Return Value:
Char * c_file: File not exists! If no License Key file is found; otherwise, return the serial number in the License Key file
Char * c_nirez: Returns the hardware number of NIRez