Helpdesk XIMEA

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National Instruments LabVIEW Vision Library

Support SK - 2023-10-19 - in Vision Libraries

https://www.ximea.com/support/wiki/vision-libraries/national_instruments_labview

National Instruments LabVIEW Vision Library



Overview¶

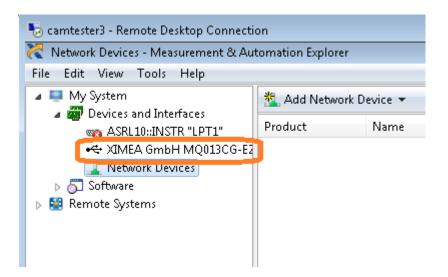
- National Instruments LabVIEW Vision Library
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XIMEA cameras can be used with software from National Instruments including NI Vision Acquisition Software, NI Vision Builder for Automated Inspection (AI) and NI Vision Development Module.

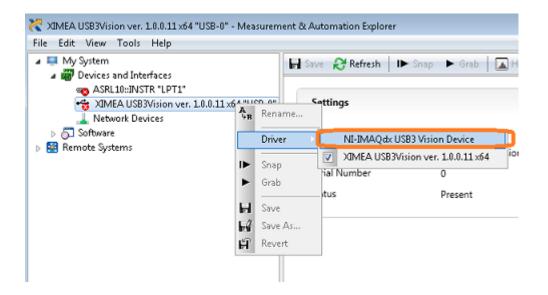
Depending on the camera model they can be interfaced using two different Labview interfaces - USB3Vision Standard interface and xiLib a LabVIEW wrapper of the .NET based xiAPI.NET API.

Interfacing cameras with USB3 Vision Standard Interface¶ The following guide describes how to set up your <u>USB3 Vision compatible XIMEA camera</u> (<u>xiQ</u>, <u>xiC</u>) in NI Vision Acquisiton Software.

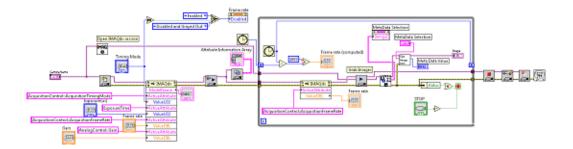
- Connect the camera to a <u>compatible USB3.0 controller</u> and switch the camera to USB3 Vision mode according to a guide described <u>here</u>
- Install NI Vision Acquisition Software from National Instruments (minimum required version of NI-VAS is 2014)
- Camera can now be tested in Measurement and Automation Explorer (MAX). After starting NI-MAX, camera should appear in the **Devices and Interfaces** list.



• In case the camera was previously associated with a XIMEA driver it is necessary to switch the driver to IMAQdx:



 You can now add your camera to your Labview VI as a NI-IMAQdx VI or download our prepared <u>U3Vexample.vi</u> (using <u>GetMetaData.vi</u>) for streaming images from camera, changing some of the camera attributes and reading meta data from the image.



Interfacing cameras with xiLib¶

xiLib is a LabVIEW wrapper of the <u>xiAPI.NET</u> which supports all cameras supported by <u>xiAPI.NET</u> and it can fully handle all the functions provided by this .NET based interface.

Requirements

NI Labview version 2015 or later (support for both 32bit ot 64bit).

Optimized acquisition module

For accessing VIs optimized for speed in the xiControl_IMAQ.IIb folder, NI Vision Development Module 2015 or later need to be installed.

Installation¶

xilib can be installed by clicking the check-mark next to the **NI Labview interface - xiLib** entry in the **Vision Libraries** section during the installation of the Beta release of the <u>API</u> <u>Software Package</u>.

🛑 XIMEA API Software Package	: V4.05.68 Setup	- • •
Choose Components Choose which features of XIMEA API Software Package V4.05.68 you want to install.		
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.		
Select components to install: Space required: 346.8MB	xiAPI to GAC RAW to DNG Vision Libraries <u>NI Labview Int</u> libdmtx demo Aforge.NET de	Description Installs XIMEA Integrating Vision Toolkit Demo Application Source Code Package.
XIMEA		
< <u>B</u> ack <u>N</u> ext > Cancel		

Documentation

The manual to xiLib can be found in the **c:\XIMEA\VisionLibraries\xiLib\Documents** folder after the installation of the Software Package.