

GenICam browser usage

Abstract	This documents explains how to use GenICam browser
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1 Introduction

- Check FrameGrabber firmware version is correctly setup
- Check the camera is operational

2 Check Version

2.1 Launch GenlCam Browser

Euresys GenlCam Browser

FileNavigationStreamToolsHelp

Grab

Start Stream

Trigger Camera

Stop Stream

Save State...

Restore State...

Run Script...

Show Log

Save Image

Refresh Tab

Update Dev List

Close Views

Show Favorites

Add Favorite

Del Favorite

Preferences

Settings

Grab Count1

Buffer Count4

Line CountAuto

Image NameC:\Users\lclement

SystemsEuresysCoaxlink

InterfacesPC1633 - Coaxlink Quad G3 (2-camera) - KQG05168

DevicesDevice0Device1

Remote DevicesCMV50000_CXP<no remote device>

Data StreamsStream0Stream0

GenApiInterfacePortURL 0Xml

DeviceUpdateList

DeviceSelector

DeviceID

DeviceVendorName

DeviceModelName

DeviceAccessStatus

CoaXPress

CxpPoCxpHostConnectionSelector

CxpPoCxpAuto

CxpPoCxpTurnOff

CxpPoCxpTripReset

CxpPoCxpConfigurationStatus

CxpPoCxpStatus

CxpPoCxpCurrent

CxpPoCxpVoltage

CxpPoCxpPowerInputStatus

CxpHostConnectionCount

CxpHostConnectionSelector

CxpConnectionState

CxpDownConnectionSpeed

CxpDeviceConnectionID

CXP1Supported

CXP2Supported

Command

0

Device0

CriticalLink

CMV50000_CXP

OpenReadWrite <Opened with read-write access>

All <All CoaXPress physical host connections>

Command

Command

Command

Auto <Normal automatic PoCXP operation>

Compound <PoCXP status is compound>

Not Available

Not Available

OK <The 24V Power Converter is OK>

4

A <CoaXPress physical host connection A>

Detected

CXP6 <6.250 Gbps>

CameraW_Master <Master Connection of Camera W>

True

True

Disable Power over CoaXPress (PoCXP)

2.2 Help > About

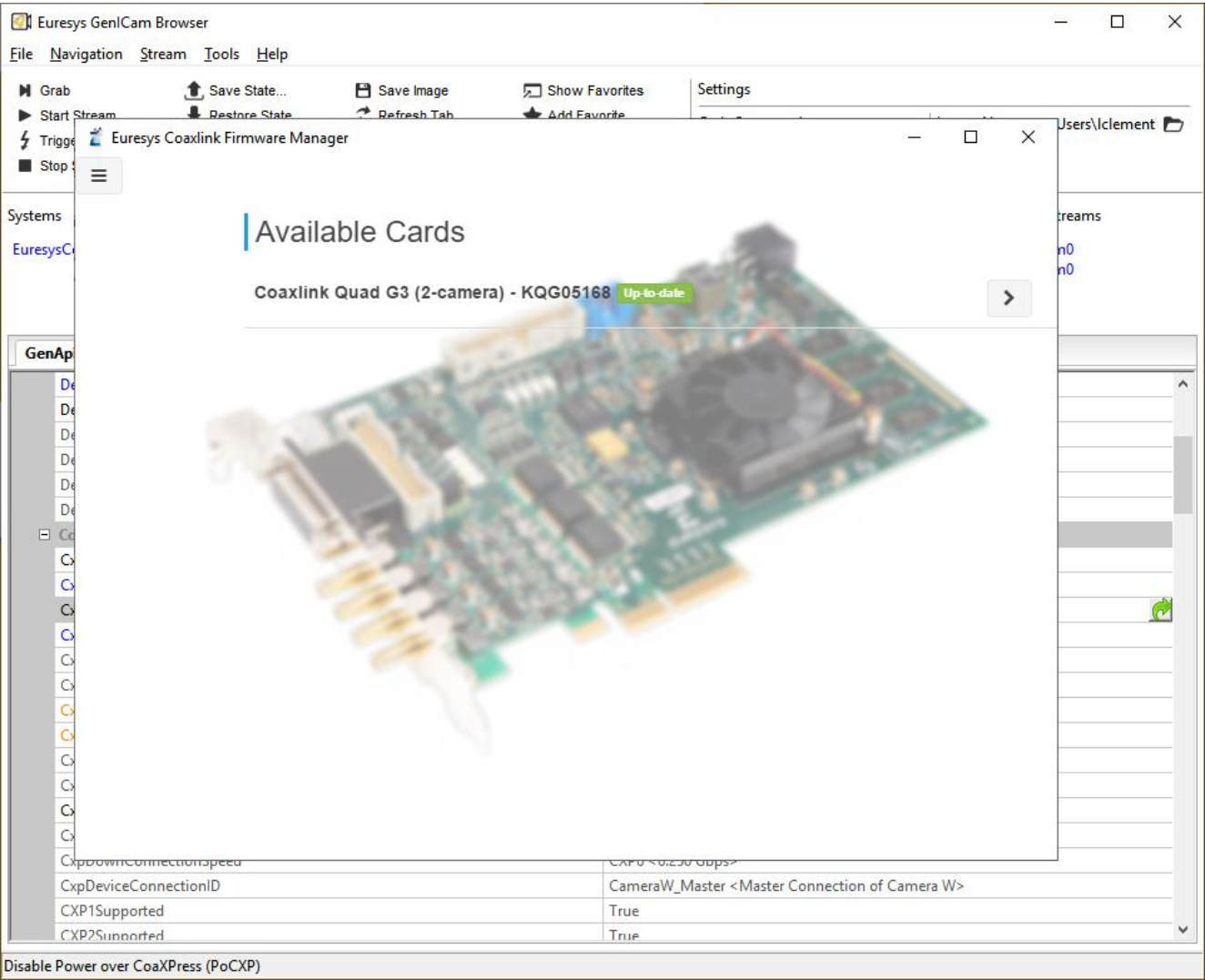
The screenshot shows the Euresys GenICam Browser application window. The 'About' dialog box is open, displaying the version 11.0.3.82 and the website <https://icons8.com>. The main window shows the 'CoaXPress' section of the device properties, which includes a table of various parameters and their values.

Property	Value
DeviceUpdateList	Command
DeviceSelector	0
DeviceID	Device0
DeviceVendorName	CriticalLink
DeviceModelName	CMV50000_CXP
DeviceAccessStatus	OpenReadWrite <Opened with read-write access>
CoaXPress	
CxpPoCxpHostConnectionSelector	All <All CoaXPress physical host connections>
CxpPoCxpAuto	Command
CxpPoCxpTurnOff	Command
CxpPoCxpTripReset	Command
CxpPoCxpConfigurationStatus	Auto <Normal automatic PoCXP operation>
CxpPoCxpStatus	Compound <PoCXP status is compound>
CxpPoCxpCurrent	Not Available
CxpPoCxpVoltage	Not Available
CxpPoCxpPowerInputStatus	OK <The 24V Power Converter is OK>
CxpHostConnectionCount	4
CxpHostConnectionSelector	A <CoaXPress physical host connection A>
CxpConnectionState	Detected
CxpDownConnectionSpeed	CXP6 <6.250 Gbps>
CxpDeviceConnectionID	CameraW_Master <Master Connection of Camera W>
CXP1Supported	True
CXP2Supported	True

Disable Power over CoaXPress (PoCXP)

Check version is 11.0.3

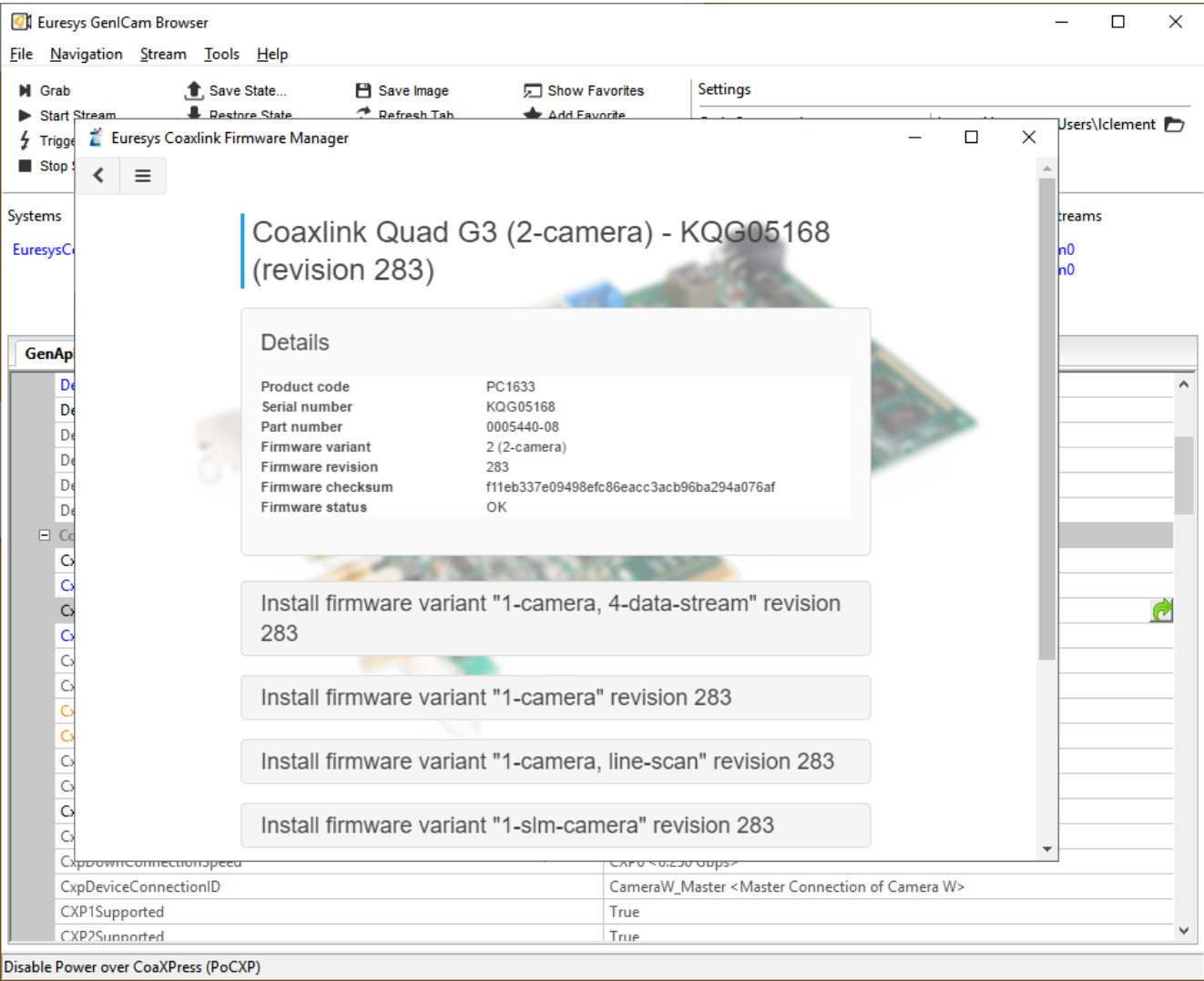
2.3 Tools > Start Firmware Manager



Check installed firmware is CoaxlinkQuad G3 (2 camera)

2.4 Firmware revision

Press >



Check the revision of the firmware

3 Check Camera

3.1 Reset the camera

In **Interfaces** section, execute command **CxpPoCxpTurnOff**.

The Taprisiot should turn off.

The screenshot shows the Euresys GenICam Browser application. The top menu bar includes File, Navigation, Stream, Tools, and Help. Below the menu is a toolbar with icons for Grab, Start Stream, Trigger Camera, Stop Stream, Save State..., Restore State..., Run Script..., Show Log, Save Image, Refresh Tab, Update Dev List, Close Views, Show Favorites, Add Favorite, Del Favorite, and Preferences. The Settings panel on the right shows Grab Count: 1, Buffer Count: 4, Line Count: Auto, and Image Name: C:\Users\Iclement.

The main interface is divided into five sections: Systems, Interfaces, Devices, Remote Devices, and Data Streams. The Interfaces section is selected, showing a table with the following data:

Systems	Interfaces	Devices	Remote Devices	Data Streams
EuresysCoaxlink	PC1633 - Coaxlink Quad G3 (2-camera) - KQG05168	Device0 Device1	CMV50000_CXP <no remote device>	Stream0 Stream0

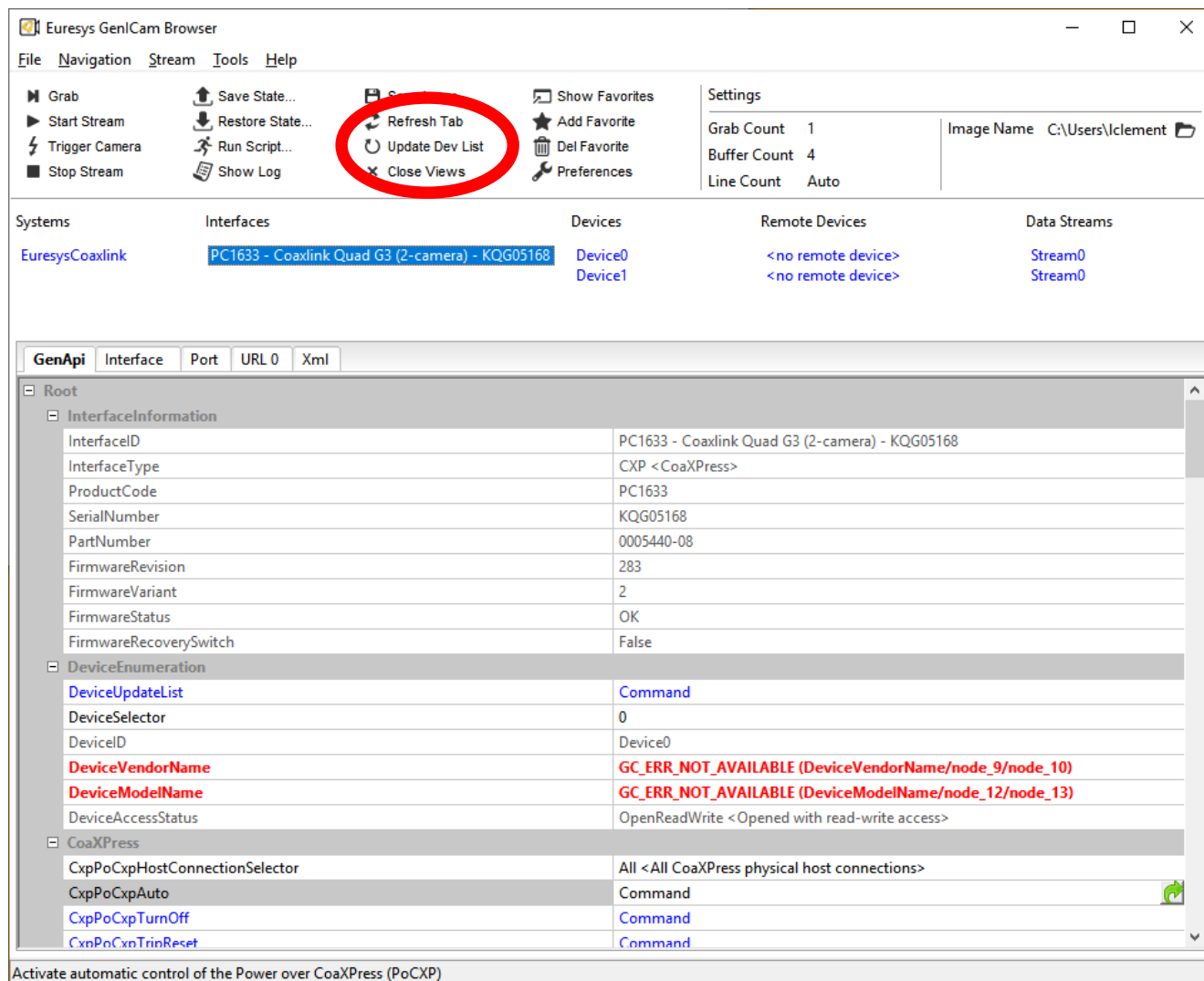
Below the main interface is the GenAPI section, which is expanded to show the command list for the selected interface. The GenAPI section has tabs for GenApi, Interface, Port, URL 0, and Xml. The GenApi tab is active, showing a tree view with the following structure:

- Root
 - InterfaceInformation
 - InterfaceID: PC1633 - Coaxlink Quad G3 (2-camera) - KQG05168
 - InterfaceType: CXP <CoaXPress>
 - ProductCode: PC1633
 - SerialNumber: KQG05168
 - PartNumber: 0005440-08
 - FirmwareRevision: 283
 - FirmwareVariant: 2
 - FirmwareStatus: OK
 - FirmwareRecoverySwitch: False
 - DeviceEnumeration
 - DeviceUpdateList: Command
 - DeviceSelector: 0
 - DeviceID: Device0
 - DeviceVendorName: CriticalLink
 - DeviceModelName: CMV50000_CXP
 - DeviceAccessStatus: OpenReadWrite <Opened with read-write access>
 - CoaXPress
 - CxpPoCxpHostConnectionSelector: All <All CoaXPress physical host connections>
 - CxpPoCxpAuto: Command
 - CxpPoCxpTurnOff: Command
 - CxpPoCxpTrinReset: Command

At the bottom of the GenAPI section, there is a status bar that reads "Disable Power over CoaXPress (PoCXP)".

GenICam Browser usage

Press **Update Dev List** button: CMV50000_CXP disappears from **Remote Devices** section



The screenshot shows the Euresys GenICam Browser application. The 'Tools' menu is open, and the 'Update Dev List' button is circled in red. The 'Remote Devices' section shows '<no remote device>'. The 'GenApi' section shows a table of device information, including 'DeviceVendorName' and 'DeviceModelName' with error messages.

GenApi	Interface	Port	URL 0	Xml
Root				
InterfaceInformation				
InterfaceID			PC1633 - Coaxlink Quad G3 (2-camera) - KQG05168	
InterfaceType			CXP <CoaXPress>	
ProductCode			PC1633	
SerialNumber			KQG05168	
PartNumber			0005440-08	
FirmwareRevision			283	
FirmwareVariant			2	
FirmwareStatus			OK	
FirmwareRecoverySwitch			False	
DeviceEnumeration				
DeviceUpdateList			Command	
DeviceSelector			0	
DeviceID			Device0	
DeviceVendorName			GC_ERR_NOT_AVAILABLE (DeviceVendorName/node_9/node_10)	
DeviceModelName			GC_ERR_NOT_AVAILABLE (DeviceModelName/node_12/node_13)	
DeviceAccessStatus			OpenReadWrite <Opened with read-write access>	
CoaXPress				
CxpPoCxpHostConnectionSelector			All <All CoaXPress physical host connections>	
CxpPoCxpAuto			Command	
CxpPoCxpTurnOff			Command	
CxpPoCxpTrinReset			Command	

Activate automatic control of the Power over CoaXPress (PoCXP)

GenlCam Browser usage

In **Interfaces** section, execute command **CxpPoCxpAuto** to restart the camera.

It takes few seconds for the camera to start-up.

Press **Update Dev List** button; the camera is ready when it appears in Remote Devices.

The screenshot displays the Euresys GenlCam Browser application window. The top menu bar includes File, Navigation, Stream, Tools, and Help. Below the menu is a toolbar with various icons for actions like Grab, Start Stream, Trigger Camera, Stop Stream, Save State..., Restore State..., Run Script..., Show Log, Save Image, Refresh Tab, Update Dev List, Close Views, Show Favorites, Add Favorite, Del Favorite, and Preferences. A Settings panel on the right shows parameters: Grab Count (1), Buffer Count (4), Line Count (Auto), and Image Name (C:\Users\lclement). The main area is divided into five tabs: Systems, Interfaces, Devices, Remote Devices, and Data Streams. The 'Interfaces' tab is active, showing a table with one entry: 'PC1633 - Coaxlink Quad G3 (2-camera) - KQG05168'. Below this, a detailed view of the interface is shown, including fields for InterfaceID, InterfaceType, ProductCode, SerialNumber, PartNumber, FirmwareRevision, FirmwareVariant, FirmwareStatus, and FirmwareRecoverySwitch. The 'DeviceEnumeration' section shows a table with columns for DeviceUpdateList, DeviceSelector, DeviceID, DeviceVendorName, DeviceModelName, and DeviceAccessStatus. The 'CxpPoCxpAuto' command is highlighted in the 'CxpPoCxpHostConnectionSelector' section. At the bottom, a status bar indicates 'Activate automatic control of the Power over CoaXPress (PoCXP)'.

Systems	Interfaces	Devices	Remote Devices	Data Streams
EuresysCoaxlink	PC1633 - Coaxlink Quad G3 (2-camera) - KQG05168	Device0 Device1	<no remote device> <no remote device>	Stream0 Stream0

GenApi	Interface	Port	URL 0	Xml
Root				
InterfaceInformation				
InterfaceID	PC1633 - Coaxlink Quad G3 (2-camera) - KQG05168			
InterfaceType	CXP <CoaXPress>			
ProductCode	PC1633			
SerialNumber	KQG05168			
PartNumber	0005440-08			
FirmwareRevision	283			
FirmwareVariant	2			
FirmwareStatus	OK			
FirmwareRecoverySwitch	False			
DeviceEnumeration				
DeviceUpdateList	Command			
DeviceSelector	0			
DeviceID	Device0			
DeviceVendorName	GC_ERR_NOT_AVAILABLE (DeviceVendorName/node_9/node_10)			
DeviceModelName	GC_ERR_NOT_AVAILABLE (DeviceModelName/node_12/node_13)			
DeviceAccessStatus	OpenReadWrite <Opened with read-write access>			
CoaXPress				
CxpPoCxpHostConnectionSelector	All <All CoaXPress physical host connections>			
CxpPoCxpAuto	Command			
CxpPoCxpTurnOff	Command			
CxpPoCxpTrinReset	Command			

Activate automatic control of the Power over CoaXPress (PoCXP)

3.2 Configure the camera

Set DeviceStreamChannelPacketSize to 4096

Euresys GenICam Browser

File

Navigation

Stream

Tools

Help

Grab

Start Stream

Trigger Camera

Stop Stream

Save State...

Restore State...

Run Script...

Show Log

Save Image

Refresh Tab

Update Dev List

Close Views

Show Favorites

Add Favorite

Del Favorite

Preferences

Settings

Grab Count

1

Image Name

C:\Users\lclement

Buffer Count

4

Line Count

Auto

Systems

EuresysCoaxlink

Interfaces

PC1633 - Coaxlink Quad G3 (2-camera) - KQG05168

Devices

Device0

Device1

Remote Devices

CMV50000_CXP

<no remote device>

Data Streams

Stream0

Stream0

GenApi

Bootstrap

Port

URL 0

Xml

DeviceTLVersionSubMinor	1
DeviceConnectionSelector	0
DeviceConnectionSpeed	6250000000
DeviceConnectionStatus	Active <Connection is in use.>
DeviceLinkSelector	0
DeviceLinkSpeed	12500000000
DeviceLinkConnectionCount	2
DeviceLinkCommandTimeout	200000.0
DeviceStreamChannelCount	1
DeviceStreamChannelSelector	0
DeviceStreamChannelType	Transmitter <Data stream transmitter channel.>
DeviceStreamChannelLink	0
DeviceStreamChannelEndianness	Big <Stream channel data is big Endian.>
DeviceStreamChannelPacketSize	4096
DeviceCharacterSet	ASCII <Device use ASCII character set.>
DeviceIndicatorMode	Active <Device's indicators are active showing their respective status.>
DeviceRegistersEndianness	Big <Device's registers are big Endian.>
DeviceTemperatureSelector	Sensor <Temperature of the image sensor of the camera.>
DeviceTemperature	23.0
ImageFormatControl	
SensorWidth	8112
SensorHeight	6048
SensorTans	One <1 tan.>

Specifies the stream packet size, in bytes, to send on the selected channel for a Transmitter or specifies the maximum packet size supported by a receiver.

GenICam Browser usage

Set AcquisitionFrameRate to 10

The screenshot shows the Euresys GenICam Browser application window. The interface includes a menu bar (File, Navigation, Stream, Tools, Help), a toolbar with various actions like Grab, Start Stream, Trigger Camera, Stop Stream, Save State, Restore State, Run Script, Show Log, Save Image, Refresh Tab, Update Dev List, Close Views, Show Favorites, Add Favorite, Del Favorite, and Preferences. A Settings panel on the right shows Grab Count (1), Buffer Count (4), Line Count (Auto), and Image Name (C:\Users\lclement). The main area displays a tree view of Systems, Interfaces, Devices, Remote Devices, and Data Streams. The GenApi tab is active, showing a list of properties for the selected device. The AcquisitionFrameRate property is highlighted with a value of 10.0. Below the list, a status bar indicates the acquisition rate in Hertz.

GenApi	Bootstrap	Port	URL 0	Xml
PixelSize				
TestPattern				
AcquisitionControl				
AcquisitionMode				
AcquisitionStart				
AcquisitionStop				
AcquisitionFrameCount				
AcquisitionFrameRate				
MSRM_Int_AcquisitionFrameInterval				
TriggerSelector				
TriggerMode				
TriggerSource				
TriggerDelay				
ExposureTime				
FileAccessControl				
FileSelector				
FileOperationSelector				
FileOperationExecute				
FileOpenMode				
FileAccessBuffer				
FileAccessOffset				
FileOperationStatus				
FileOperationResult				

Controls the acquisition rate (in Hertz) at which the frames are captured.

Set ExposureTime (in us).

GenICam Browser usage

Press Grab or Start Stream button.



GenICam Browser usage

In case of stream, frame counter will increase.

