MultiCam

MultiCam Sample Programs
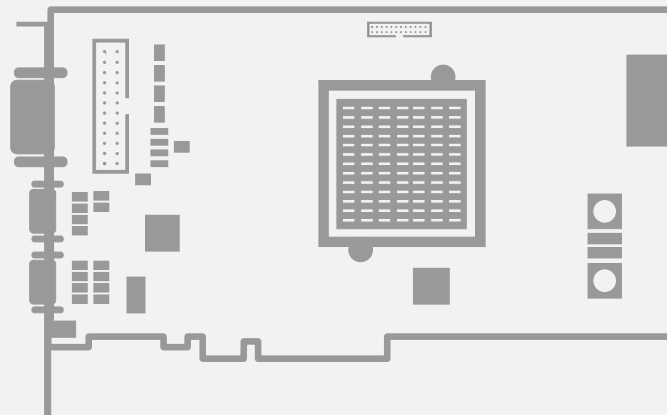
Contents

1. Grablink Sample Programs

Sample programs for Grablink products

GrablinkSnapshot

`Windows` `C/C++` `C#` `VB 6.0` `VB.NET` `Python` `32-/64-bit`

This is a simple application demonstrating the MultiCam SNAPSHOT acquisition mode on a Grablink board. The program performs continuous image acquisitions and display.

> **NOTE**
>
> The sample code is written for the **1624 Grablink Base**, **1622 Grablink Full** and the **1626 Grablink Full XR** models. If you want to operate it with a **1623 Grablink DualBase** model, the MC_Connector MultiCam parameter has to be changed according to the sample program comments.

GrablinkSnapshotTrigger

`Windows` `C/C++` `C#` `32-/64-bit`

This is a simple application demonstrating the MultiCam SNAPSHOT acquisition mode on a Grablink board. The program performs one frame acquisition and displays it each time a hardware or software trigger event occurs.

> **NOTE**
>
> The sample code is written for the **1624 Grablink Base**, **1623 Grablink DualBase**,**1622 Grablink Full** and the **1626 Grablink Full XR**models. For any other Grablink board model, the TrigCtl parameter has to be updated according to the sample program comments.

grablink_snapshot_trigger

`Linux` `C/C++` `32-/64-bit` `SDL`

This is a simple SDL based application demonstrating the MultiCam SNAPSHOT acquisition mode using a Grablink board. The program performs one frame acquisition and displays it each time a hardware or software trigger event occurs.

> **NOTE**
>
> The sample code is written for the **1624 Grablink Base**, **1623 Grablink DualBase**,**1622 Grablink Full** and the **1626 Grablink Full XR** models. For any other Grablink board model, the TrigCtl parameter has to be updated according to the sample program comments.

GrablinkHfr

`Windows` `C/C++` `32-/64-bit`

This is a simple application demonstrating the MultiCam HFR acquisition mode on a Grablink board. The program performs continuous image acquisitions and display.

GrablinkHfrTrigger

`Windows` `C/C++` `32-/64-bit`

This is a simple application demonstrating the MultiCam HFR acquisition mode on a Grablink board. The program performs one frame acquisition and displays it each time a hardware or software trigger event occurs.

GrablinkWeb

`Windows` `C/C++` `32-/64-bit`

This is a simple application demonstrating the MultiCam WEB acquisition mode on a Grablink board. The program performs a continuous web acquisition and display.

grablink_web

`Linux` `C/C++` `32-/64-bit` `SDL`

This is a simple SDL based application demonstrating the MultiCam WEB acquisition mode on a Grablink board. The program performs continuous web acquisition and display.

GrablinkPageTrigger

`Windows` `C/C++` `32-/64-bit`

This is a simple application demonstrating the MultiCam PAGE acquisition mode on a Grablink board. The program performs one page acquisition and displays it each time a hardware or software trigger event occurs.

GrablinkLongPageTrigger

`Windows` `C/C++` `32-/64-bit`

This is a simple application demonstrating the MultiCam LONGPAGE acquisition mode on a Grablink board. The program performs one LONGPAGE acquisition and displays it each time a hardware or software trigger event occurs.

PlanarRGB

`Windows` `C/C++` `32-/64-bit`

This is a simple application showing the planar RGB management. The application performs image acquisition and display.

GrablinkDualFull

`Windows` `C/C++` `32-/64-bit`

This application demonstrates video acquisition using an AVT Bonito-CL-400B camera connected to 2 Grablink Full boards.

GrablinkMultiBase

`Windows` `C/C++` `C#` `32-/64-bit`

This application demonstrates synchronized line-scan video acquisition with image stitching from several Camera Link Base line-scan cameras connected to one or several Grablink boards.

`NEW` GrablinkPipelineController

`Windows` `C/C++` `32-/64-bit`

This application demonstrates the *Pipeline Controller* in PAGE Acquisition Mode on a Grablink board, with a hardware page trigger connected to the IIN2 input and a motion encoder connected to the IIN1 input.

GrablinkSerialCommunication

`Windows` `C/C++` `C#` `32-/64-bit`

This is a simple application demonstrating Camera Link serial communication through the clseremc library on a Grablink board.

GrablinkIoPorts

`Windows` `C#` `32-/64-bit`

A simple graphical application showing usage of **1624 Grablink Base**, **1623 Grablink DualBase**, **1622 Grablink Full** and **1626 Grablink Full XR** I/O lines through the MultiCam Board object.

terminal

`Linux` `C/C++` `32-/64-bit`

This is a console application demonstrating the serial communication with Grablink boards using the clseremc Camera Link library.

grablink-cuda

`Windows` `Linux` `C/C++` `64-bit` `OpenGL` `nVidia CUDA`

This sample illustrates interoperability of a Grablink board, OpenGL and CUDA:

- Acquisition of 8-bit monochrome buffers using a Grablink board
- Basic processing with CUDA (Inverse 8-bit luminance)
- Rendering with OpenGL (Rotate with click and drag)

See README.txt in the sample program folder for more details.

2. Domino Sample programs

Sample programs for Domino products

DominoSnapshot

`Windows` `C/C++` `C#` `VB 6.0` `VB.NET` `32-/64-bit`

This is a simple application demonstrating the MultiCam *Snapshot acquisition mode* using a Domino board. The program performs continuous image acquisitions and display.

DominoSnapshotTrigger

`Windows` `C/C++` `C#` `32-/64-bit`

This is a simple application demonstrating the MultiCam *Snapshot acquisition mode* using a Domino board. Each time a hardware or software trigger event occurs, the program performs one frame acquisition and displays the image.

domino_snapshot _trigger

`Linux` `C/C++` `32-/64-bit` `SDL`

This is a simple SDL-based application demonstrating the MultiCam Snapshot acquisition mode using a Domino board. The program performs one frame acquisition and displays it each time a hardware or software trigger event occurs.

3. Picolo Sample Programs

Sample programs for Picolo products

PicoloVideo

`Windows` `C/C++` `C#` `VB 6.0` `VB.NET` `32-/64-bit`

This is a simple application demonstrating the MultiCam *Video acquisition mode* using a Picolo board. The program performs continuous image acquisition and display.

picolo_video

`Linux` `C/C++` `32-/64-bit` `SDL`

This is a simple SDL based application that acquires and displays live images using the first Picolo board detected by MultiCam.

PicoloVideoTrigger

`Windows` `C/C++` `C#` `32-/64-bit`

This is a simple application demonstrating the MultiCam *Video acquisition mode* using a Picolo board. Each time a hardware or software trigger event occurs, the program performs an image sequence acquisition and display.

PicoloDirectShow

`Windows` `C/C++` `32-bit`

This is a simple application demonstrating video acquisition and recording using MultiCam Microsoft DirectShow filters. The program performs continuous image acquisition and display while images are recorded in an AVI file. In order to compile this sample program, the Microsoft DirectShow SDK needs to be installed and the strmbase.lib (Microsoft DirectShow library) needs to be build. Please refer to Microsoft's website and the product documentation for further information on the Microsoft DirectShow SDK.

The ffdshow codec needs to be installed to perform any image recording. This sample has been tested with the ffdshow code versions 2033 and 3476.

4. General Sample Programs

Sample programs for all MultiCam products

MulticamAdvancedWaitEvent

`Windows` `C/C++` `C#` `32-/64-bit`

A simple application demonstrating the MultiCam *Snapshot acquisition mode* using event driven signaling instead of callback signaling. The program performs a continuous image acquisition and display.

> **NOTE**
> This sample was written for Grablink series but can easily be converted to be used with any other board series.

MulticamAdvancedWaitSignal

`Windows` `C/C++` `C#` `32-/64-bit`

A simple application demonstrating the MultiCam *Snapshot acquisition mode* using the McWaitSignal function instead of the callback signaling method. The program performs a continuous image acquisition and display.

> **NOTE**
> This sample was written for Grablink series but can easily be converted to be used with any other board series.

multicam_advanced_waitsignal

`Linux` `C/C++` `32-/64-bit` `SDL`

This is a simple SDL based application demonstrating the MultiCam Snapshot acquisition mode using the McWaitSignal function instead of the callback signaling method. The program performs a continuous image acquisition and display.

> **NOTE**
> This sample was written for Grablink series but can easily be converted to be used with any other board series.

TestIo

`Windows` `C/C++` `C#` `32-/64-bit`

A simple console application making usage of I/O lines through the MultiCam Board object.

> **NOTE**
>
> The C# version of this sample program only supports **1624 Grablink Base**, **1623 Grablink DualBase**, **1622 Grablink Full** and **1626 Grablink Full XR** but the code can be easily adapted to other boards.

io_test

`Linux` `C/C++` `32-/64-bit`

A simple console application demonstrating the usage of I/O lines with the MultiCam Board object.