

## TECHNICAL NOTE

# Hardware Selection for Bonito PRO Cameras

V1.1.0  
2018-Nov-26

## Revision history

Version	Date	Remarks
V1.0.0	2018-Jun-26	Initial release
V1.1.0	2018-Nov-26	Added remark for Bitflow Cyton CXP-4 frame grabbers

Table 1: Document history

## Introduction

This document was created to identify third-party hardware components tested with Bonito PRO cameras from Allied Vision. This is not a complete list of all compatible products, only a list of products that have been tested by Allied Vision.



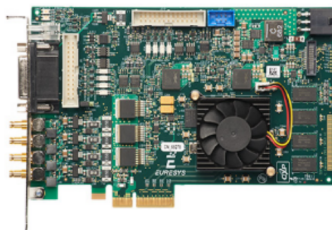
### Stream packet size

Smaller stream packets may result in camera FIFO overflow. Stream packet size should be set to 8192 or greater.

## Frame grabbers

The frame grabber is the most critical system component, and for maximum performance we recommend using one of the following frame grabbers.

### Euresys Coaxlink Quad G3



**Description**

- PCI Express x4 3.0 (Gen 3)
- Power over CoaXPress (PoCXP) SafePower, 17 W of 24 VDC regulated power per connector
- Four DIN 1.0/2.3 connectors
- Four channels at 6.25 Gbps (CXP-6 support)
- EGrabber class, with C++ and .NET API  
.NET assembly designed to be used with development environments compatible with .NET frameworks version 2.0 or higher



For more information, contact Euresys:

[Euresys.com](http://Euresys.com)

**Remarks**

Multiple Regions of Interest is fully supported by the Euresys SDK and viewer. Update the frame grabber software and drivers to support one camera and four data streams.

Users should not change pixel format while sequencer control is enabled.

**Active Silicon FireBird Quad CXP-6****Features**

- PCI Express x8 (Gen 2)
- Power over CoaXPress (PoCXP)
- Four BNC connectors
- Four channels at 6.25 Gbps (CXP-6 support)
- RISC based ActiveDMA engine gives zero CPU acquisition
- Windows support (32-bit and 64-bit)



For more information, contact Active Silicon:

[ActiveSilicon.com](http://ActiveSilicon.com)

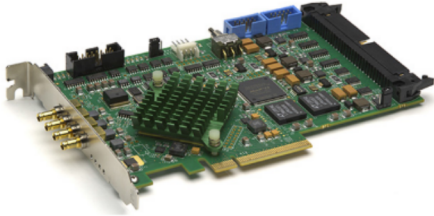
**Remarks**

Multiple Regions of Interest is currently not supported by the frame grabber SDK.

Users should not change pixel format while sequencer control is enabled.

Camera does not stream in 64 pixels wide ROI. You must set the width to 128 pixels or larger to start streaming.

## Bitflow Cyton-CXP4


**Features**

- PCI Express x8 (Gen 2)
- Power over CoaXPress (PoCXP), up to 13 W per link
- Four DIN 1.0/2.3 connectors
- Four channels at 6.25 Gbps (CXP-6 support)
- Drivers for most third-party processing environments
- Plug and Play (PnP) support



For more information, contact Bitflow:

[BitFlow.com](http://BitFlow.com)

**Remarks**

Multiple Regions of Interest is currently not supported by the frame grabber SDK.

Users should not change pixel format while sequencer control is enabled.

Ximilon Viewer does not load XML automatically User needs to manually load the XML from  
C:\ProgramData\GenICam\xml\cache.

## Teledyne DALSA Xtium-CXP PX8



### Features

- PCI Express x8 (Gen 2)
- Power over CoaXPress (PoCXP)
- Four DIN 1.0/2.3 connectors
- Four channels at 6.25 Gbps (CXP-6 support)
- 1 GB frame buffer
- Sopera LI SDK and Sopera Vision software



For more information, contact Teledyne DALSA:

[TeledyneDalsa.com](http://TeledyneDalsa.com)

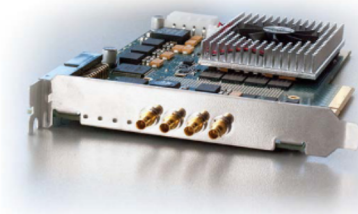
### Remarks

Multiple Regions of Interest is currently not supported by the frame grabber SDK.

Users should not change pixel format while sequencer control is enabled.

Dalsa CamExpert (viewer) does not have enough buffer to handle 10-bit resolution. Camera can be configured where Height + Width < 5120.

## Silicon Software microEnable 5 AQ8-CXP6D ironman



### Features

- PCI Express x8 (Gen 2), DMA3600
- Power over CoaXPress (PoCXP), 13 W/24 V per cable; SafePower
- Four DIN 1.0/2.3 connectors
- Four channels at 6.25 Gbps (CXP-6 support)
- 1 GB DDR3-RAM on-board memory
- Silicon Software SDK .net interface



For more information, contact Silicon Software:

[Silicon.Software](http://Silicon.Software)

### Remarks

Multiple Regions of Interest is currently not supported by the frame grabber SDK.

Users should not change pixel format while sequencer control is enabled.

## Cables



Allied Vision has tested the following cables and connectors.

Order code	Description	Length
13032	CoaXPress CXP-6 interface cable 4 DIN 1.0/2.3 screw lock connector to 4 DIN 1.0/2.3 screw lock connector	5.0 meters
13315	CoaXPress CXP-6 interface cable 4 DIN 1.0/2.3 screw lock connector to 4 DIN 1.0/2.3 screw lock connector	10.0 meters
13316	CoaXPress CXP-6 interface cable 4 DIN 1.0/2.3 screw lock connector to 4 DIN 1.0/2.3 screw lock connector	20.0 meters
13034	CoaXPress CXP-6 interface cable 4 DIN 1.0/2.3 screw lock connector to 4 BNC connector	5.0 meters
13317	CoaXPress CXP-6 interface cable 4 DIN 1.0/2.3 screw lock connector to 4 BNC connector	10.0 meters
13318	CoaXPress CXP-6 interface cable 4 DIN 1.0/2.3 screw lock connector to 4 BNC connector	20.0 meters
2814	I/O cable 12-Pin Hirose female to open end	2.0 meters

Order code	Description	Length
2815	I/O cable 12-Pin Hirose female to open end	3.0 meters
2817	I/O cable 12-Pin Hirose female to open end	5.0 meters
2818	I/O cable 12-Pin Hirose female to open end	10.0 meters
K7600040	Hirose connector 12-Pin Hirose female, HR10A-10P-12S, straight	
K7600044	Hirose connector 12-Pin Hirose female, HR10A-10LP-12S, angled	
K1200267	Trigger cable 12-Pin Hirose female to BNC	2.0 meters
K1200252	Trigger cable 12-Pin Hirose female to BNC	5.0 meters
K1200240	Trigger cable 12-Pin Hirose female to open end	2.0 meters
K1200244	Trigger cable 12-Pin Hirose female to open end	10.0 meters



Contact your Allied Vision Sales team or your local Allied Vision distribution partner for information on accessories and lens recommendations:

[AlliedVision.com/en/about-us/where-we-are.html](https://www.alliedvision.com/en/about-us/where-we-are.html)

For technical support, please contact [support@alliedvision.com](mailto:support@alliedvision.com).

For comments or suggestions regarding this document, please contact [info@alliedvision.com](mailto:info@alliedvision.com).

## Copyright and trademarks

All text, pictures, and graphics are protected by copyright and other laws protecting intellectual property. All content is subject to change without notice.

All trademarks, logos, and brands cited in this document are property and/or copyright material of their respective owners. Use of these trademarks, logos, and brands does not imply endorsement.

Copyright © 2018 Allied Vision GmbH. All rights reserved.