

# COAXLINK™



## Ultimate in performance with superior value CoaxPress frame grabbers

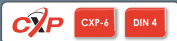
Coaxlink is a series of four CoaxPress frame grabbers. They acquire images from the fastest and highest resolution cameras on the market. The Coaxlink cards use standard coaxial cables and the latest DIN1.0/2.3 connectors featuring a robust push/pull latching system for reliable industrial applications. The Coaxlink Quad G3, Coaxlink Quad, Coaxlink Duo and Coaxlink Mono target applications requiring high data rates, high frame rates, consistent real-time timings but also longer cable length, greater cable reliability and flexibility. Typical examples of applications for the Coaxlink frame grabbers are AOI, SPI and 3D SPI, printing inspection, Flat Panel Display or glass inspection.



NEW  
PCIe 3.0 (Gen 3)

### COAXLINK Quad G3

Four CoaxPress connections: 25 Gbit/s  
I Four CXP-6 connections I 20 digital IO lines I PCIe 3.0 (Gen 3) x4 bus: 3.9 GByte/s\*



### COAXLINK Quad

Four CoaxPress connections: 25 Gbit/s  
I Four CXP-6 connections I 20 digital IO lines I PCIe 2.0 (Gen 2) x4 bus: 2 GByte/s\*



### COAXLINK Duo

Two CoaxPress connections: 12.5 Gbit/s  
I Two CXP-6 connections I 20 digital IO lines I PCIe 2.0 (Gen 2) x4 bus: 2 GByte/s\*



### COAXLINK Mono

One CoaxPress connection: 6.25 Gbit/s  
I One CXP-6 connection I 10 digital IO lines I PCIe 2.0 (Gen 2) x4 bus: 2 GByte/s\*



### Acquire images from the fastest and highest resolution cameras

The Coaxlink cards benefit from the **highest data acquisition rate in the industry**. They are able to sustain up to 6.25 Gbit/s over a single Coaxlink cable. This leads to an impressive data transfer rate of 25 Gbit/s with the 4 cable connections of Coaxlink Quad and Quad G3.

The Coaxlink frame grabbers support **multiple-camera applications**. Coaxlink Quad and Coaxlink Quad G3 are designed to acquire images from up to four CoaxPress cameras. Two cameras can be connected to the Coaxlink Duo. Multiple Coaxlink cards can be used simultaneously in a single PC and all the cameras connected can be optionally synchronized.

### Use standard coaxial cables

Coaxial cabling allows for **longer distances** between the camera and the frame grabber. Moreover, these cables offer **greater reliability and flexibility**. At full speed, a cable of up to 40 meters can be used and at half-speed, a distance of up to 100 meters can be achieved. This clearly reduces the need for repeaters.

A single cable supports image transfer, camera control, trigger and power (up to 13W per cable, up to 52W per camera) simplifying the integration and decreasing costs. The CoaxPress standard offers the real time triggering capabilities required by industrial machine vision applications. Moreover, the Coaxlink cards take advantage of the robust push/pull latching system of DIN 1.0/2.3 connectors for reliable industrial applications.



Up to 20 digital IO lines compatible with a wide range of sensors and motion encoders

High-performance DMA transfer into user allocated memory with 64-bit addressing capability

API: GenICam driver

	COAXLINK Quad G3	COAXLINK Quad	COAXLINK Duo	COAXLINK Mono
<b>Product Code</b>	1633	1632	1631	1630
<b>Form factor</b>				
PCI bus	PCIe 3.0 x4	PCIe 2.0 x4	PCIe 2.0 x4	PCIe 2.0 x4
Format	Full height, half length	Full height, half length	Full height, half length	Full height, half length
<b>Image acquisition standard</b>	<b>CoaXPress</b>	<b>CoaXPress</b>	<b>CoaXPress</b>	<b>CoaXPress</b>
Number of cameras	Up to 4	Up to 4	Up to 2	1
Max. data transfer rate	25 Gbit/s	25 Gbit/s	12.5 Gbit/s	6.25 Gbit/s
Connectors	4 x CXP-6 connections	4 x CXP-6 connections	2 x CXP-6 connections	1 x CXP-6 connection
<b>Camera support</b>	Gray scale cameras Color cameras Area scan cameras Line scan cameras RGB and Bayer			
<b>Effective delivery bandwidth</b> -sustained bandwidth-	<b>3,350 MB/s</b>	<b>1,700 MB/s</b>	<b>1,700 MB/s</b>	<b>1,700 MB/s</b>
<b>On-board memory</b>	<b>1 GByte</b>	<b>1 GByte</b>	<b>1 GByte</b>	<b>512 MBytes</b>
<b>IO lines</b>	<b>20 -10 on the bracket-</b>			<b>10</b>
Connectors	2 internal and 1 on the bracket			1 internal and 1 on the bracket
Isolated current-sense inputs for a wide voltage input range up to 30V -trigger and general purpose-	8			4
Isolated contact output -strobe and general purpose-	4			2
High-speed differential inputs -quadrature encoder and general purpose-	4			2
High-speed 5V-compliant TTL inputs/ LVTTTL outputs -trigger, quadrature encoder, strobe, and general purpose-	4			2
Power output	Non-isolated +12V			Non-isolated +12V
<b>API</b>	<b>GenICam driver</b>			



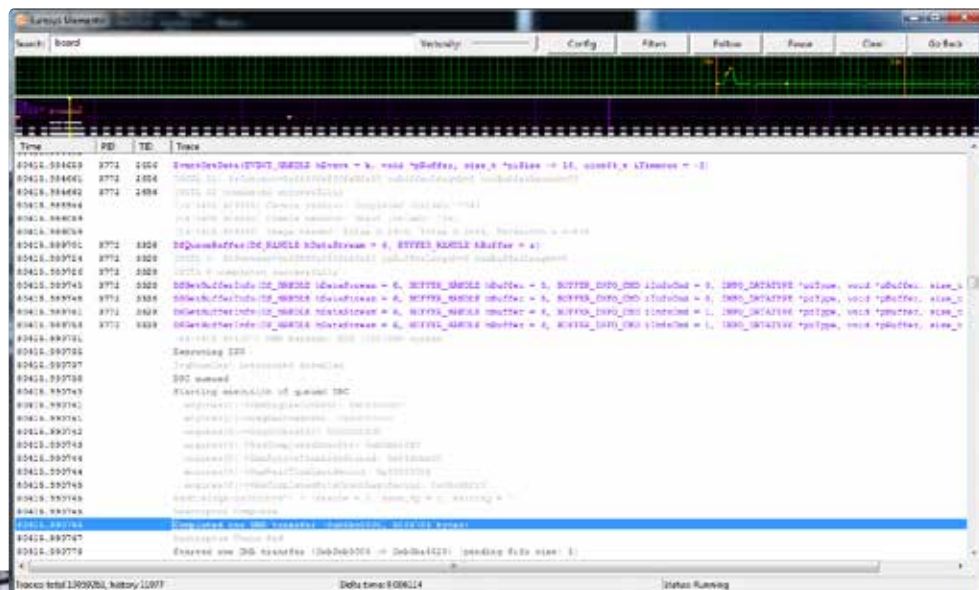
## Memento Event Logging Tool

Memento is an advanced development and debugging tool available with the Coaxlink driver. During operation, Memento records an accurate log of all the events related to the camera, the frame grabber and its driver as well as the application.

It provides the developer with a precise timeline of time-stamped events, along with context information.

Memento provides valuable assistance during application development and debugging, as well as during machine operation.

Memento is non-intrusive and works with all Coaxlink cards in the PC. Memento comes with the Coaxlink driver.



**America** | Euresys Inc.  
27126B Paseo Espada, Suite 704  
San Juan Capistrano | CA 92675 | U.S.A.  
Toll free: 1.866.387.3797 | Phone: 1.949.743.0612  
Email: sales.americas@euresys.com

**Asia** | Euresys Pte. Ltd.  
750A Chai Chee Road | #07-15 Technopark @ Chai Chee  
Singapore 469001  
Phone: +65 6445 4800  
Email: sales.asia@euresys.com

**Europe** | Euresys s.a. Corporate Headquarters  
14, Avenue du Pré-Ailly | 4031 Angleur | Belgium  
Phone: +32 4 367 72 88  
Email: sales.europe@euresys.com  
**Japan** | sales.japan@euresys.com

Your distributor



www.euresys.com