

BASLER COAXPRESS CXP-12 FRAME GRABBER CARDS

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Basler CXP-12 Interface Card 1-channel connection - frame grabber



- High speed CoaXPress 2.0 interface
- 1, 2, or 4 ports
- Latest FPGA technology
- Reduce system complexity and cost

PRODUCT DESCRIPTION

Basler CoaXPress CXP-12 Frame Grabber Cards are high-performance acquisition devices designed to interface with Basler's CXP-12 cameras and other CoaXPress 2.0-compliant imaging systems. These PCIe Gen3 x8 cards support data transfer rates up to 12.5 Gbps per channel, with models like the imaFlex CXP-12 Quad offering four CXP-12 connections and a total camera bandwidth of 5,000 MB/s. Equipped with 1.5 GB DDR4 on-board memory and advanced FPGA technology, these frame grabbers enable hardware-based image preprocessing, reducing CPU load and ensuring low-latency data transfer. Features such as Power over CoaXPress (PoCXP) provide up to 17 W per channel, allowing data transmission, power supply, and camera control over a single coaxial cable. Additionally, precise camera synchronisation is facilitated through technologies like C2C-Link, enabling accurate multi-camera setups.

In practical applications, Basler's CXP-12 frame grabbers are ideal for high-speed, high-resolution imaging tasks in industries such as electronics inspection, semiconductor manufacturing, and factory automation. Their ability to handle large volumes of data with minimal latency makes them suitable for scenarios requiring synchronised image capture from multiple cameras, such as inspecting fast-moving objects on conveyor belts. The integration with Basler's pylon Software Suite ensures seamless system setup and operation, while compliance with standards like GenICam facilitates compatibility with various software environments.

TECHNICAL DATA

Accessory type	Card
API configuration	Framegrabber SDK, GenTL, pylon SDKs
Approvals	CE, RoHS, FCC, KC, REACH, UKCA
Camera interface	CoaXPress 2.0
Connector	1x Micro-BNC/HD-BNC
Dimensions	167.64mm (L) x 68.9mm (H)
Fan	No
FPGA	Yes
Memory	1 GByte DDR4-RAM
Number of ports	1
Operating temperature	0°C ... +50°C
PC Bus Interface	PCIe 3.1 x4
Power consumption	13.4 W
Processor	Xilinx Ultrascale+ KU3P

Resolution max	32k*64k (area scan sensor), 16k (line scan sensor)
Storage temperature	-50°C ... +80°C
User interface	CoaXPress
Weight	170 g