SIMTRUM
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Frame Grabber With CoaXPress Interface

2023 V1

For customized projects please Contact us:

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Frame Grabber With CoaXPress Interface

Our frame grabbers with CoaXPress interface differ in onboard memory,topology model , image interface ,protocol suppored and other parameters.Please check the details and find the one you need.

Feature

- Support CoaXPress camera power, controlling and triggering
- Monochrome, bayer, color cameras supporting line scan and area scan
- Compatible with GenCam standard and GenTL standard
- Support Windows 10/7(64-Bit/32-Bit),Linux 64-Bit, Mac OS
- SDK development library supporting C,C++,C#
- GUI configuration tool
- Flexible IO:2 photoelectric solation input, 1 shaft encoder input, 2 photoelectric isolation output
- Fan speed automatically adjusts based on FPGA temperature for optimized thermal and noise performance

Frame Grabber Type

ST-CXP6

- PCIe Gen3x4
- Support 1-4 channel CXP topological connection
- Compliant with CoaXPress1.1/1.1.1
- Support four-channel PoCXP, single-channel 24V/13W
- Support 1.25/2.5/3.125/5/6.25G high-speed link
- Onboard 2GB image cache
- Speed up to 25Gbps,each link up to 6.25Gbps
- DIN 1.0/2.3 interface and 4-way three-color LED status indicator

ST-CXP6

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ST-CXP6-8

- PCIe Gen3x8
- Support Two groups of 1-4 CXP arbitrary topology connections
- Compliant with CoaXPress 1.1/1.1.1
- Support eight-channel PoCXP, single-channel 24V/13W
- Support 1.25/2.5/3.125/5/6.25G high-speed link
- Onboard 4GB image cache
- Speed up to 50Gbps,each link up to 6.25Gbps
- DIN1.0/2.3 interface and 8-way three-color LED status indicator

ST-CXP6-8

ST-CXP12

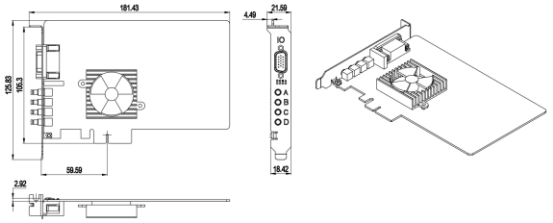
- PCIe Gen3x8
- Support 1-4 channel CXP topological connection
- Compliant with CoaXPress 2.0/2.1
- Support four-channel PoCXP, single-channel 24V/13W
- Support 1.25/2.5/3.125/5/6.25/10/12.5G high-speed link
- Onboard 4GB image cache
- Speeds up to 50Gbps,each link up to 12.5Gbps
- Micro BNC interface and 4-way three-color LED status indicator

ST-CXP12

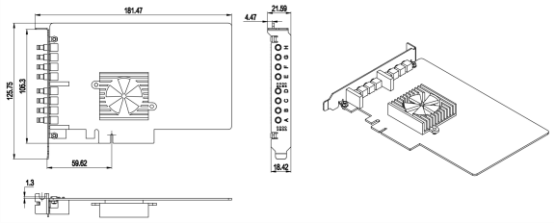
Specifications

Model	ST-CXP6	ST-CXP6-8	ST-CXP12
Bit Depth	8/10/12/14/16 bit		
Image Mode	Mono/Bayer/RGB/RGBA		
Onboard Memory	2 GB	4 GB	4 GB
Topology Model	Support 1-4 channel CXP topological connection	Two groups of 1-4 CoaXPress arbirary topology connections	Support 1-4 channel CXP topological connection
Image Interface	4 channels DIN 1.0/2.3 CoaXPress with PoCXP	8 channels DIN 1.0/2.3 CoaXPress with PoCXP	4-channels Micro BNC CoaXPress with PoCXP
Transfer Rates	(1.25/2.5/3.125/5/6.25G)x4	(1.25/2.5/3.125/5/6.25G)x8	(1.25/2.5/3.125/5/6.25/10/12.5G)x4
Protocol Suppored	CoaXPress1.1/1.1.1;GenICam;GenTL	CoaXPress1.1/1.1.1;GenICam;GenTL	CoaXPress 2.0/2.1；GenCam; GenTL
Acquisitio Speed	19.4 Gbps(max)	38.8 Gbps(max)	38 Gbps(max)
PCIE Speed	PCIe 3.0x4	PCIe 3.0x8	PCIe 3.0x8
PCIE Effective Payload Size	128/256bytes	128/256 bytes	128/256 bytes
Bus Bandwidth	3450 MB/s	6800MB/s	6800 MB/s
Maximum Camera Number	4 PCS	8 PCS	4 PCS
Scan Mode	Line scan /Area scan		
Trigger Input	Support 2 signals imputs(photoelectric isolation);Maximum frequency 30kHz;Level standard supports 3.3-24V	Support 2 signals inputs(photoelectric isolaton);Maximum frequency 100kHz;Level standard supports 3.3-24V	Support 2 signals imputs(photoelectric isolation);Maximum frequency 100kHz;Level standard supports 3.3-24V
Encoder Input	Support 1 orthogonal AB phase input (photoelectric isolation); Maximum frequency 1MHz;TTL and differential input(1-24V)	Support 1 orthogonal AB phase input(photoelectric isolation);Maximum frequency 1MHz;TTL and differential input(1-24V)	Support 1 orthogonal AB phase input (photoeectric isolation); Maximum frequency IMHz;Level standard Support 1-24V
Flash Control	Support 2 signals output (photoelectric isolation);Maximum frequency 30kHz	Support 2 signals output (photoelectric isolation);Maximum frequency 100kHz	Support 2 signals output (photoelectric isoation); Maximum frequency 100kHz
Cooling Method	Fan cooling		
Operating Temperature	0-55℃		
Memory Management	Circular buffering supported;Accumulate frame/line to single buffer;DMA buffer is directly filled into system memory		
System Requirements	Operating System: Windows 10/7(64-Bit/32-Bit),Linux 64-Bit,Mac OS;Hardware: PCIe 3.0×4 Slot	Operating System: Windows 10/7(64-Bit/32-Bit),Linux 64-Bit, Mac OS;Hardware: PCIe 3.0×8 Slot	Operating System: Windows 10/7(64-Bit/32-Bit),Linux 64-Bit, Mac OS;Hardware: PCIe 3.0x8Slot
GUI	Multi-camera display and configuration; Support image saving and loading		

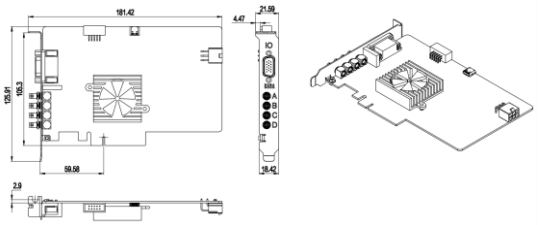
Drawings



ST-CXP6



ST-CXP6-8



ST-CXP12

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