

PRELIMINARY INFORMATION

50Gbps transfer bandwidth
provided by CXP-12 Quad

67MP resolution

CoaXPress 2.0 | EX Series

High-speed Interface High-end Camera

Mounted with e2v global shutter CMOS sensor



CoaXPress

EX670AMG-X

CXP-12 Quad | EX series | 60×60×80mm | 300g

67
MP

60
fps

B/W

Bandwidth
50G

Feature

50Gbps transfer bandwidth provided by CoaXPress 2.0 CXP-12 Quad

- Bandwidth ten times wider than USB 3.1 Gen1 (USB 3.0)
- Bandwidth seven times wider than the Camera Link Full configuration

The 67Mp resolution and the electronic global shutter make it possible to capture fast moving subjects sharply with minimal motion blur.

The optional F or M42 mount adapter makes it possible to use various lenses, including those for single-lens reflex cameras.

Teli Core Technology contributes to the enhancement of the response speed of camera systems.

The EX Series can be connected to various image processing systems with a flexible and reliable long coaxial cable.



F-mount / M42-mount
conversion adapter
(Optional)



Toshiba Teli Corporation

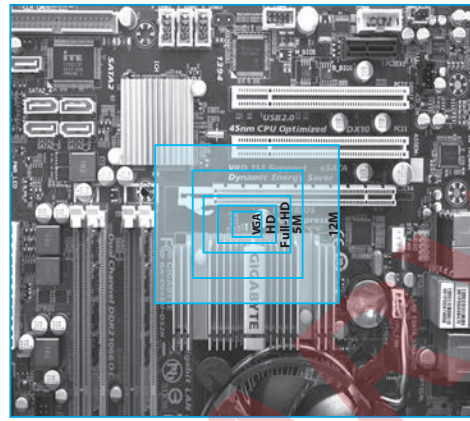
<https://www.toshiba-teli.co.jp/en/>



Specifications

B/W or COLOR	B/W
Pixels	67M
Model	EX670AMG-X
Interface	CoaXPress 2.0 CXP-12 Quad
Imager	CMOS image sensor
Imager model	EV2567MB
Resolution	8,192(H) x 8,192(V)
Frame rate	60fps < (CXP-12 Quad, Mono 8bit), 30fps (CXP-6 Quad, Mono 8bit), 15fps (CXP-12, Mono 8bit), 7.5fps (CXP-6, Mono 8bit)
Pixel size	2.5µm x 2.5µm
Scanning area	20.48mm(H) x 20.48mm(V)
Image size	1.8 type (APS-C)
Aspect ratio	1:1
Scanning	Progressive
Electronic shutter method	Global shutter
Random Trigger Shutter Type	External Trigger / Software Trigger / Link Trigger
Random Trigger Shutter Mode	Edge / Level / Bulk (255 times)
Sequential shutter	-
Exposure Time	MANUAL : 30µs to 1s Random Trigger Shutter : 30µs to 1s (Timed or Bulk mode), 200µs to Trigger width (TriggerWidth mode)
Synchronization System	Internal
Optical glass/filter	Dust-proof glass
Sensitivity	TBD lx
Minimum illuminance	TBD lx
Gain	MANUAL : 0 to +36dB
Black Level	-25% to +25%
Gamma / LUT	γ=1.0 to 0.45 / In 12bit, Out 12bit
Image Output Format	Mono12, Mono10, Mono8
Readout Mode	All pixel, ROI, Binning, Subsampling, Mirroring, Flip
External trigger input	Low: 0 to 0.5V, High: 2 to 24.0V High active / Low active, Pulse width: 200µs (minimum)
Power supply	PoCXP / DC+24V (18.5V to 26V) (HIROSE connector)
Power consumption	13W max.
Lens mount	Mountless (Ø50 H7)
Mount adapter option	F-mount / M42-mount conversion adapter (provisional)
External dimension	60(W) x 60(H) x 80(D) mm (Not including protruding parts)
Mass	approx. 300g
Operation temperature	0 °C to 40 °C (below TBD °C on cabinet surface)
Operation humidity	10% to 90% (no condensation)
Conformity	CE, FCC, RoHS, WEEE, CoaXPress 2.0, GenICam, IIDC2

Wider shooting field of view with high resolution of 67MP



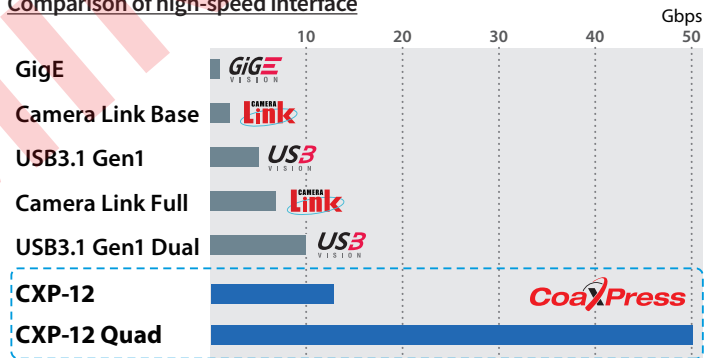
- VGA (640x480)
- HD (1,280x720)
- Full-HD (1,920x1,080)
- 5M (2,448x2,048)
- 12M (4,000x3,000)
- 67M (8,192x8,192)

67M (8,192x8,192)

* The above image is the result of software simulation.

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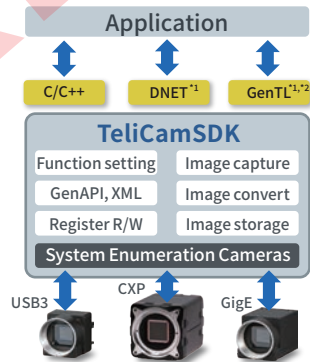
Comparison of high-speed interface



* These are the data transfer bands of each interface and are different from the video data transfer bands.

TeliCamSDK

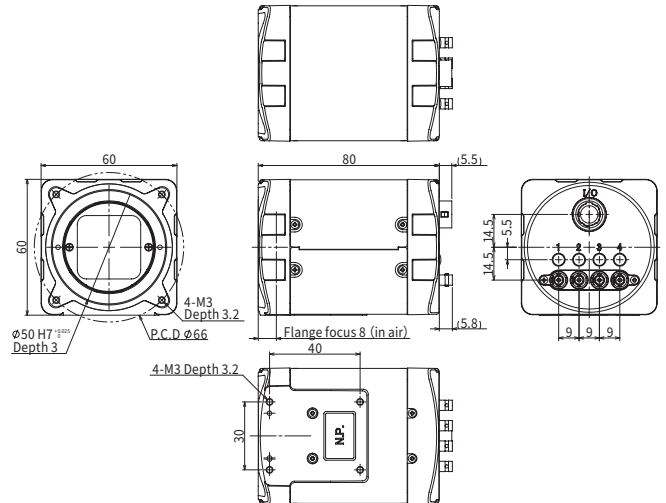
- Varieties of functions for easy programming
- Easy to capture image
- GEN<i>CAM available
- Abundant sample code
- Easy to understand manuals
- Unified SDK for USB3, GigE & CXP



OS ³ / Distribution ³	Windows			Linux					ARM	
	7 SP2	8.1	10	Ubuntu 14.04 LTS amd64	Ubuntu 16.04 LTS amd64	Ubuntu 18.04 LTS amd64	Debian 8.1.0 amd64	CentOS 7.3 amd64		Fedora 27 amd64
Support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

TeliCamSDK for Linux supported ARM architectures. - Jetson TK1 / Jetson TX2 / Jetson nano / Odroid XU4⁴ / Raspberry pi 3^{4,5}
¹: for Windows / ²: USB only / ³: Please contact us for other OS and distributions. / ⁴: With a GigE camera, image might be missed depending on PC specifications. / ⁵: USB3 camera cannot be used.

Outline drawing



Notes on Safety

- Before using this product, please read "Operation Manual" carefully in order to use this product safely and correctly.
- If this product should be used in the extraordinary conditions or environments, or if you have any questions or problems, please contact our sales division.

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