



GEN<i>CAM

CXP-12

CoalPress



Eo*Sens*[®] Creation 1.1CXP2

High-Speed Processing at the Edge

EoSens® Creation 1.1CXP2 Key Features:

- 3,674 fps at 1.1 megapixel resolution
- Scale- and switchable CoaXPress 2.0 interface
- High sensitivity
- Embedded capabilities for high-speed, real time processing in the camera
- 80 x 80 x 53.4 mm small

EoSens® Creation 1.1CXP2

Dimensions [mm]

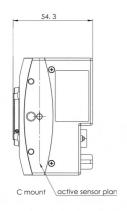
Back view

80

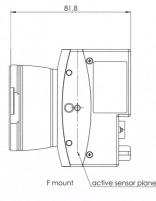
80

Micro BNC 750HM ST JACK BULKHEAD Hirose HR 10A-10R-12Pb

Side view w/ C mount



Side view w/ F mount



High-Speed Imaging with excellent image quality

The EoSens® Creation 1.1CXP2 offers 1,280 x 864 pixel at an outstanding speed of 3,674 fps down to small ROI's with some ten thousand frames per second. The high sensitivity of the sensor and adequate pixel size guarantees best imaging results.

Processing Capabilities

The EoSens® Creation 1.1CXP2 is a unique camera platform, which allows to capture, process and output images with up to 3,674 fps at full resolution. With only the relevant information being transferred via the scaleable CoaXPress 2.0 interface, fewer connection links are needed to transfer data, and lower speed rates can be used per link.

Advantages of camera internal processing

- Parallelization of processing cycles
- Real time processing for large data rates up to 5 GB/s at the image source
- CoaXPress connections switchable 1, 2 or 4
- Link speed switchable from 3.124 up to 12.5 Gbps per connection

Resolution [px]	Frame Rates [fps]			
	capture & process	output via CXP-12 (scalable)		
		4 x CXP-12	2 x CXP-12	1 x CXP-12
1,280 x 864	3,674	3,674	2,079	1,039
1,280 x 764	4,151	4,151	2,349	1,174
640 x 480	6,576	6,576	6,576	3,721
128 x 128	23,821	23,821	23,821	23,821

Specifications	Eo <i>Sens</i> ®Creation1.1CXP2	
Resolution	1.1 MP	
Active pixels	1,280 x 864 px	
Interface	CoaXPress 2.0	
Sensor	LUX13HS	
Sensor type	CMOS (Global Shutter)	
Sensor format Ø	4/3"	
Pixel size	13.7 x 13.7 μm	
Sensitivity	20 V/lux*s @ 550 nm	
Pixel data width	10 / 8 bit	
Dynamic range	up to 56 dB	
Shutter time / steps	1 µs	
Shutter time / range	2 µs – 1 s	
FPGA type	Kintex® UltraScale™ KUO35	
Volatile memory	1 GB, DDR4	
Usable resources in FPGA	70%	
Mount options	C, F, FG mount	
Dimensions w/o mount	80 x 80 x 53.4 mm	
Weight w/o mount	450 g	
Power consumption	11 W	
Power supply	12 – 24 VDC	
Camera body temp.	+5 °C +50 °C	
Shock / vibration proof	70 g / 7 grms	
Conformity	CoaXPress / GenlCam	



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Markets and Application Examples



Melt pool monitoring

Laser triangulation

Metrology

Sorting

3D scanning

Additive manufacturing

Inspection

Sorting



A TKH TECHNOLOGY COMPANY



Germany
Ferdinand-Porsche-Str. 3
82205 Gilching
T.:+49 8105 3987-60
www.mikrotron.de
info@mikrotron.de

A BRAND OF SVS-VISTEK

NIKROTRON

High-Speed Vision Solutions

(1) SCAN ME

USA

4400 State Hwy 121, Suite 304, US-Lewisville, TX 75056 T.:+1 800 935 6593 www.mikrotron.de/en steve.ferrell@mikrotron.de