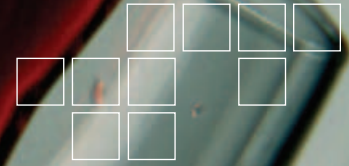


FASTCAM 1024PCI

MEGA PIXEL PERFORMANCE FOR THE PERSONAL COMPUTER



Mega pixel resolution at 1,000 frames per second for the personal computer

The FASTCAM 1024PCI from Photron is the only PC based high speed imaging system to provide 1,000 frames per second (fps) recording at full mega pixel image resolution.

Utilizing the same super light sensitive 10-bit ADC sensor as the Emmy award winning ultima APX with large seventeen microns (17 μ m) square pixels, the FASTCAM 1024PCI operates from 60 to 1,000 fps at full 1,024 x 1,024-pixels resolution, and at reduced resolution all the way to a top speed of 109,500 fps.

A global electronic shutter, operating down to 1.5 microseconds ensures even the fastest moving objects are frozen, blur free, in every image. Short inter-frame times make the FASTCAM 1024PCI ideal for Particle Image Velocimetry (PIV) and Digital Image Correlation (DIC) applications.

A user selectable 'Region of Interest' function enables the active image area to be windowed in steps of 128 pixels wide by 16 pixels high to allow the most efficient use of frame rate, image resolution and memory capacity for any event.

Up to 20 commonly used resolution/speed configurations can be saved to memory for future operation. A single flexible sixteen foot (5 meter) cable allows the lightweight camera head easy access to any location.

Benefits

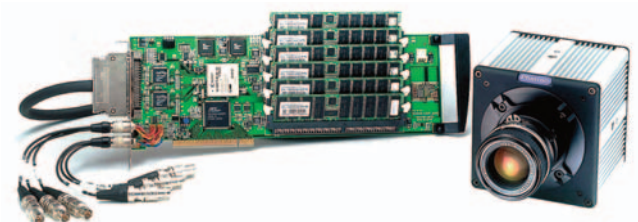
- Variable speed resolutions, including:
 - 1,024 x 1,024-pixels at 1,000 fps
 - 512 x 512-pixels at 3,000 fps
 - 128 x 128-pixels at 27,000 fps
 - 109,500 fps at reduced resolution
- Global shuttering to 1.5 μ s, independent of frame rate selected
- Expandable memory offers several different configurations (PCI card and memory daughter PCB still fit in a single PCI slot) providing a wide range of record times:
 - 2GB for 1.54 seconds at 1,000 fps full resolution
 - 4GB for 3.2 seconds at 1,000 fps full resolution
 - 8GB for 6.4 seconds at 1,000 fps full resolution
 - 12GB for 9.6 seconds at 1,000 fps full resolution

Target applications include:

- Biomechanics
- 3D motion analysis
- Airbag activation analysis
- Particle Image Velocimetry (PIV)
- Digital Image Correlation (DIC)

Photron

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FASTCAM 1024PCI

TARGET APPLICATIONS:

- Biomechanics
- Microscopy
- Particle Image Velocimetry (PIV)
- Digital Image Correlation (DIC)

Specifications

FRAME RATE (fps)	MAX RESOLUTION		RECORD TIME (sec)				RECORD TIME (frames)			
	Horizontal	Vertical	2GB	4GB	8GB	12GB	2GB	4GB	8GB	12GB
1,000	1,024	1,024	1.54	3.2	6.4	9.6	1,536	3,200	6,400	9,600
2,000	1,024	512	1.6	3.2	6.4	9.6	3,200	6,400	12,800	19,200
3,000	512	512	2.13	4.35	8.7	13.06	6,400	13,056	26,112	39,168
6,000	512	256	2.13	4.35	8.7	13.06	12,800	26,112	52,224	78,336
10,000	256	256	2.61	5.22	10.44	15.67	26,112	52,224	104,448	156,672
18,000	256	128	2.9	5.8	11.61	17.41	52,224	104,448	208,896	313,344
27,000	128	128	3.87	7.74	15.47	23.21	104,448	208,896	417,792	626,688
45,000	128	64	4.64	9.28	18.57	27.85	208,896	417,792	835,584	1,253,376
73,000	128	32	5.72	11.45	22.89	34.34	417,792	835,584	1,671,168	2,506,752
109,500	128	16	7.63	15.26	30.52	45.79	835,584	1,671,168	3,342,336	5,013,504

- Sensor** 10-bit ADC (Bayer system color, single sensor) with 17µm pixel, with dual-slope over exposure protection.
- Saved Image Formats** AVI, JPEG, PNG, TIFF, FTIF, BMP, RAW, RAWW and Bayer. Images can be saved with or without image or comment data
- Extended Dynamic Range** Selectable from 4 presets to prevent over exposure
- Phase Lock** Enables cameras to be synchronized precisely together to a master camera or external source using the provided interconnection cables
- Triggering** Selectable positive or negative TTL 5Vp-p, switch closure
- Lens Mount** Interchangeable F-mount and C-mount standard

- Dual Speed Recording™** Two-stage trigger enables the recording speed to be changed, up or down, by a factor of 2, 4 or 8 during a recording
- Recording Modes** Start, End, Center, Manual, Random, Random Reset, Random Center, Random Manual, and Dual Speed Recording™
- Partitioning** Up to 24 memory partitions are available, dependent on the memory capacity of camera
- Camera Control** PCI bus in a Windows PC
- Software** Includes image rotation and ability to save images with or without time codes or comment data
- Dimensions and Weight** Camera Head: 120mm (4.72")H x 120mm (4.72")W x 113.4mm (4.46")D *excluding protrusions Weight: 3.46 lbs (1.57 kg)
 PCI Board: 106mm (4.17")H x 312mm (12.28")W x 1.6mm (0.06")D *Full Size PCI compliant Weight: 0.65lbs (295g) *excluding memory



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SLOW MOTION IMAGING SOLUTIONS