EPIX®

Color Camera **SV10C6**
Monochrome Camera **SV10M6**

PIXCI® SI1
Frame Grabber
PCIe x1

PIXCI® SI2
Frame Grabber
PCIe x1

SV10C6 / SV10M6
Camera
(Lens Optional)

PIXCI® SI4
Frame Grabber
PCIe x4

PIXCI® SI
Frame Grabber
PCI Bus

Optical Format:	1/2.3-inch
Sensor Dimensions:	6.41mm(H) x 4.62mm(V) 7.90mm Diagonal
Full Resolution:	3840H x 2764V
Pixel Size:	1.67µm x 1.67µm
Color Filter Array:	Monochrome or Color RGB Bayer Pattern
Shutter Type:	Global Shutter
Pixel Clock:	25 - 64 MHz
Frame Rate:	7 fps at 64MHz (3840H x 2764V resolution)
ADC Resolution:	12-bit
Responsivity:	0.31 Volts/Lux-sec (550nm)
Dynamic Range:	65.2dB Linear
Supply Voltage:	5 to 12 Volts
Power Consumption:	< 638 mW at maximum data rate
Operating Temperature:	-40°C to +85°C
Camera Dimensions:	2.50" L x 1.65" H x 0.81" D 63.50mm L x 41.75mm H x 20.60mm D
Weight:	1.4 oz / 39 grams

SILICON VIDEO® 10C6
10 Megapixel Cameras

The **SILICON VIDEO®10C6** color, or **10M6** monochrome camera, offers 10 megapixel progressive scan capture in an active programmable array resolution of 3840H x 2764V pixels. The camera offers windowing, column and row skip modes, snap-shot mode, and 12 bit dynamic range. The Electronic Rolling Shutter (ERS) provides maximum frame rates. See "Frame Rate Examples" for frame rates at different resolutions and pixel clock frequencies.

Additional camera features include low noise digital signaling, small size, several interface cable options, the availability of extensive processing, measurement and analysis capabilities, and low cost. XCAP software provides convenient control of all camera operations.

Asynchronous Capture with Strobe Output

The **SV10C6** and **SV10M6** cameras offer asynchronous capture to acquire an image (or images) in response to a trigger signal. The cameras have a strobe output signal to synchronize an LED strobe.

One RJ45 Cable and 4 Frame Grabbers

A single RJ45 cable connects the camera head to a PIXCI® frame grabber. The cable carries power to the camera, carries camera control signals, carries the programmable pixel clock, and carries video. No separate power supply or power cable required. The SV10C6/M6 cameras are supported by 4 different PIXCI® SI series frame grabbers allowing use on either the PCI or PCIe bus. The PIXCI® SI supports one camera in a 32 bit PCI slot. The PIXCI® SI1 and SI2 frame grabbers support one or two cameras in a PCIe x1 slot. The PIXCI® SI4 supports 4 cameras on a PCIe x4 or wider slot.

Camera Controls

The XCAP-Lite sofware included with a PIXCI® frame grabber has a Capture & Adjust Dialog for selecting pixel clock frequency, integration/exposure time, capture resolution, trigger control, and more. The **SV10C6** color camera dialog provides automatic white balance, manual adjustment of Red, Green, and Blue gain, and extensive color balance controls.

Lens Optional

Add a 1/2" format C-Mount lens, programmer libraries, image processing, or video to disk and image analysis software, or request a complete computer system. EPIX, Inc. assembles imaging systems, built to your specifications, with cameras, frame grabbers, high-performance motherboards, and RAID arrays for video to disk capture.

SV10C6 & SV10M6 10 Megapixel Cameras

Sequence Capture with SV10C6 & SV10M6 Cameras and XCAP Imaging Program Versions

SILICON VIDEO® SV10C6 and SV10M6 cameras will capture continuously, at various resolutions and frame rates, as shown in the chart to the right.

XCAP-Lite will capture for 1.4 seconds at 3840 x 2160 resolution, 8 bits per pixel, 5.4 fps. Images must be saved individually. XCAP-Lite is included with the PIXCI SI series frame grabbers.

The XCAP-Ltd program captures and saves sequences for 3 minutes into 8 GBytes of available memory (computer must have approximately 12 GBytes of installed memory). XCAP-Ltd is $495.

The XCAP-Std imaging program offers video to disk capture, which can allow continous capture for hours depending on the capacity of the computer's storage system. XCAP-Std is $1495.

Select which version of the XCAP program is best for your application by reviewing the description at: http://www.epixinc.com/products/xcap.htm.

SV10C6 & SV10M6 Color/Monochrome Cameras

Frame Resolution	Pixel Clock Frequency 25 MHz Slowest	48 MHz Default	50 MHz Fastest
3840 x 2160	2.8 fps	5.4 fps	7.1 fps
3686 x 2764	2.3 fps	4.4 fps	5.9 fps
3488 x 2616	2.6 fps	4.9 fps	6.6 fps
2592 x 1944	4.5 fps	8.7 fps	11.6 fps
2928 x 1646	4.7 fps	9.0 fps	12.0 fps
2048 x 1536	7.1 fps	13.6 fps	18.2 fps
1920 x 1080	10.4 fps	19.9 fps	26.6 fps
1280 x 1024	16.1 fps	31.0 fps	41.3 fps
3840 x 2	44.4 fps	85.2 fps	113.5 fps

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