



## SILICON VIDEO 10C6, 10M6 10 megapixel cameras



- 3840 x 2764 @ 6.2 fps
- 3840 x 2160 @ 7.8 fps
- 1920 X 1080 @ 29.1 fps
- 1280 x 1024 @ 45.2 fps
- 8 or 12 bits per pixel

### Camera Sensor Features

- 10 megapixel monochrome or color camera
- 3840 x 2764 resolution (more than 5 times HD resolution) at up to 6.2 fps.
- Reduced resolutions provide faster frame rates.
- Up to 12 bits (4096 intensity levels) per pixel or color.
- Capture & Save scientific quality uncompressed images or sequences.
- Windowing reduces resolution to an area of interest and gives a faster frame rate.
- Mirroring changes image read out order to flip the image.
- Column Skip and Row Skip reduce resolution without reducing area of interest.
- Electronic Rolling Shutter (ERS) mode provides maximum frame rates.
- Global Reset Release provides simultaneous reset of all pixels followed by exposure and read out. For use with a strobe or mechanical shutter.
- Asynchronous Capture with Strobe Out.

### Physical Features

- Compact camera head.
- Infrared cut filter.
- Single interface cable carries power, camera controls, programmable pixel clock, and video.
- Includes C-mount lens adapter with easily-adjustable flange distance.
- Low noise digital signaling and a pixel clock range of 25 – 70 MHz.
- RoHS Compliant

### Frame Grabber Support

- PIXCI® SI — 1 camera in a 32 bit PCI slot.
- PIXCI® SI1 — 1 camera in a PCIe x1 slot.
- PIXCI® SI2 — up to 2 cameras in a PCIe x1 slot.
- PIXCI® SI4 — up to 4 cameras in a PCIe x4 slot.

### Software Support

- Camera integration and reset control.
- Sequence capture.
- Sequence save (XCAP-Ltd or Std).
- Triggered sequence capture.
- Extensive processing, measurement, and analysis capabilities.
- XCAP software provides convenient control of all camera operations including pixel clock frequency, integration/exposure time, resolution, and more.
- XCAP dialog for the SV10C6 Bayer Pattern color camera provides automatic white balance, manual adjustment of Red, Green, and Blue gain, and extensive color balance controls.
- Windows & Linux, 32 & 64-bit.

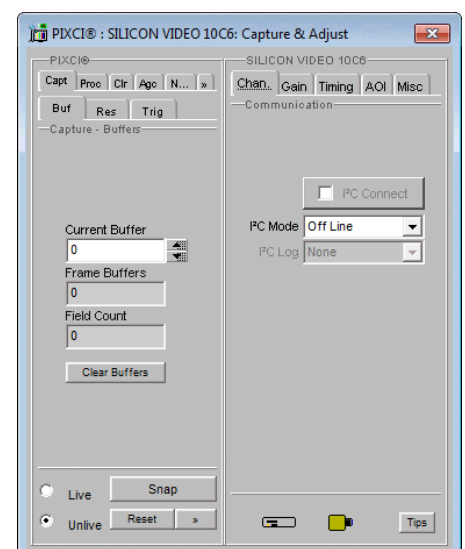
### Misc

- Add a ½" C-Mount lens, programmer libraries, image processing, or video-to-disk and image analysis software
- EPIX, Inc., offers complete imaging systems, built to your specifications, with cameras, frame grabbers, high performance motherboards, and RAID arrays for video to disk capture.

## FEATURES

### 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 [below](#).



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 continuous 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 on the [XCAP](#) product page.

### Video-To-Disk Capture

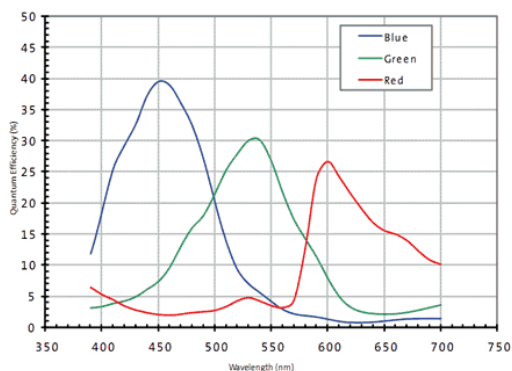
The optional XCAP-Std imaging program enables video-to-disk capture, potentially for several hours. Requires a host computer with two 7200 rpm hard drives configured as RAID 0. EPIX® offers complete imaging systems, designed to your specifications, guaranteed to capture uncompressed video to disk without dropping frames.

## SPECIFICATIONS

Optical Format:	1/2.3-inch
Active Image Size:	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:	Electronic Rolling Shutter
Pixel Clock:	25 - 70 MHz
Frame Rate:	6.2 fps @ 70MHz (3840H x 2764V resolution)
ADC Resolution:	12-bit
Responsivity:	0.31 Volts/Lux-sec (550nm)
Dynamic Range:	65.2dB Linear
Supply Voltage:	5 Volts
Power Consumption:	< 638 mWatt at maximum data rate
Operating Temperature:	-40°C to +85°C
Camera Dimensions:	1.91" H x 1.51" W x 0.82" D 48.5mm H x 38.4mm W x 20.8mm D
Weight:	2.6 oz / 73 Grams

SV10C6 & SV10M6 Color/Monochrome Cameras			
Frame Resolution	Pixel Clock Frequency		
	25 MHz Slowest	48 MHz Default	70 MHz Fastest
3840 x 2764	2.2 fps	4.2 fps	6.2 fps
3840 x 2160	2.8 fps	5.4 fps	7.8 fps
3686 x 2764	2.3 fps	4.4 fps	6.4 fps
3488 x 2616	2.6 fps	4.9 fps	7.2 fps
2592 x 1944	4.5 fps	8.7 fps	12.7 fps
2928 x 1646	4.7 fps	9.0 fps	13.1 fps
2048 x 1536	7.1 fps	13.6 fps	19.9 fps
1920 x 1080	10.4 fps	19.9 fps	29.1 fps
1280 x 1024	16.1 fps	31.0 fps	45.2 fps
3840 x 2	44.4 fps	85.2 fps	124.2 fps

### SILICON VIDEO® 10C6 Color Camera Typical Quantum Efficiency



### Typical Quantum Efficiency

