

SILICON VIDEO 15C5 15 megapixel color camera

IMAGE SENSOR

- 15 megapixel RGB bayer color sensor
- 4608 horizontal by 3288 vertical pixels
- 4 12 bits per pixel
- **4** 1.4 μm by 1.4 μm pitch
- ♣ 6.451 mm horizontal by 4.603 mm vertical active image size
- 4 65.3 dB dynamic range
- 0.724 volts/lux-sec @ 550 nm responsivity
- Uncompressed image output
- 4.4 frames per second frame rate at maximum resolution
- Programmable controls: gain, area of interest, h and v blanking, frame size/rate, exposure, left/right image flip, top/bottom image flip
- Black level calibration
- Asynchronous reset with strobe output

CAMERA CASE

- 4 32 x 32 x 32 mm
- 4 45 gr
- Infrared cut filter
- RJ-45 interface cable for power, controls, pixel clock, and image output
- C-mount with adjustable flange distance
- 40°C to + 50°C
- RoHS compliant
- 4608 x 3288 @ 4.4 fps
- 4 8 or 12 bits per pixel



* lens optional



FRAME GRABBER INTERFACES

♣ PIXCI ®SI1 : one camera in a PCIe x 1 slot
 ♣ PIXCI ®SI2 : two cameras in a PCIe x 1 slot
 ♣ PIXCI ®SI4 : four cameras in a PCIe x 1 slot

SOFTWARE

- Image sequence capture
- Image sequence save
- Triggered image sequence capture
- Control of all camera registers
- Automatic white balance

- Controls for red, green, and blue again
- Color balance controls
- ♣ Programmer libraries for camera control
- ♣ Image processing and analysis libraries
- Ready to run menu driver software
- Windows & linux, 32 & 64 bit

OPTIONS

- Complete imaging systems with cameras, frame grabbers, high performance computers, and disk arrays

SEQUENCE CAPTURE WITH SV15C5 CAMERA AND XCAP IMAGING PROGRAM VERSIONS

SV15C5 CAPTURE & ADJUST DIALOG

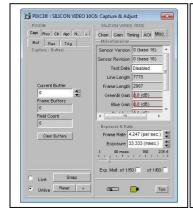
SILICON VIDEO® SV15C5 camera will capture continuously, at various resolutions and frame rates, as shown in the chart below.

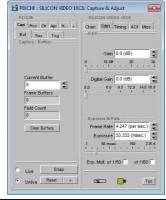
XCAP-Lite will capture for 0.95 seconds at 4608 x 3288 resolution, 8 bits per pixel, 4.4 fps. Images must be saved individually. XCAP-Lite is included with the PIXCI SI series frame grabbers.

The XCAP-Ltd program captures and saves sequences for 2 minutes into 8 GBytes of available memory (computer must have approximately 12 GBytes of installed memory).

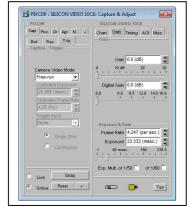
The XCAP-Std imaging program offers video to disk capture, which can allow continuous capture for hours (depending on the capacity of the computer's storage system).

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. Requires a host computer with storage system capable of handling desired image capture rates and duration. 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: 6.451mm(H) x 4.603mm(V)

Full Resolution: 4608H × 3288V

Pixel Size: $1.4\mu m \times 1.4\mu m$

Color Filter Array: Color RGB Bayer Pattern

Shutter Type: Electronic Rolling Shutter

Pixel Clock: 25 - 75 MHz

Frame Rate: 4.4 fps @ 75MHz (4608H × 3288V resolution)

ADC Resolution: 12-bit

Responsivity: 0.724 Volts/Lux-sec (550nm)

Dynamic Range: 65.3dB Linear

Supply Voltage: 5 Volts

Power Consumption: < 638 mWatt at maximum data rate

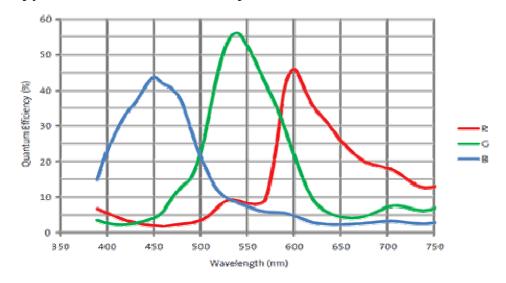
Operating Temperature: -40°C to +50°C

Camera Dimensions: 1.26" H x 1.26" W x 1.26" D

32mm H x 32mm W x 32mm D

Weight: 1.6 oz / 45 Grams

SILICON VIDEO® 15C5 Color Camera Typical Quantum Efficiency



FRAME RATE EXAMPLES Free-Run 8-Bit Mode w. ERS			
Frame Resolution	Pixel Clock Frequency		
	25 MHz	48 MHz	75 MHz
4608 x 3288	1.5 fps	2.8 fps	4.4 fps
4384 x 3288	1.6 fps	2.9 fps	4.6 fps
3840 x 2764	2.2 fps	3.9 fps	6.2 fps
3488 x 2616	2.5 fps	4.5 fps	7.1 fps
2592 x 1944	4.5 fps	7.9 fps	12.3 fps
2048 x 1536	7.0 fps	12.0 fps	18.8 fps
1920 x 1080	10.3 fps	17.5 fps	27.4 fps
1280 x 1024	16.0 fps	19.8 fps	30.9 fps
1280 x 960	17.0 fps	20.9 fps	32.7 fps

EPIX SOFTWARE Support -

Supported by <u>XCAP</u>-Lite (no charge with camera purchase), <u>XCAP</u>-Ltd, <u>XCAP</u>-Std, <u>XCLIB</u>, and <u>XCLIBIPL</u>. Compatible with WIN 8, 7, Vista, XP, 2K; and LINUX.

