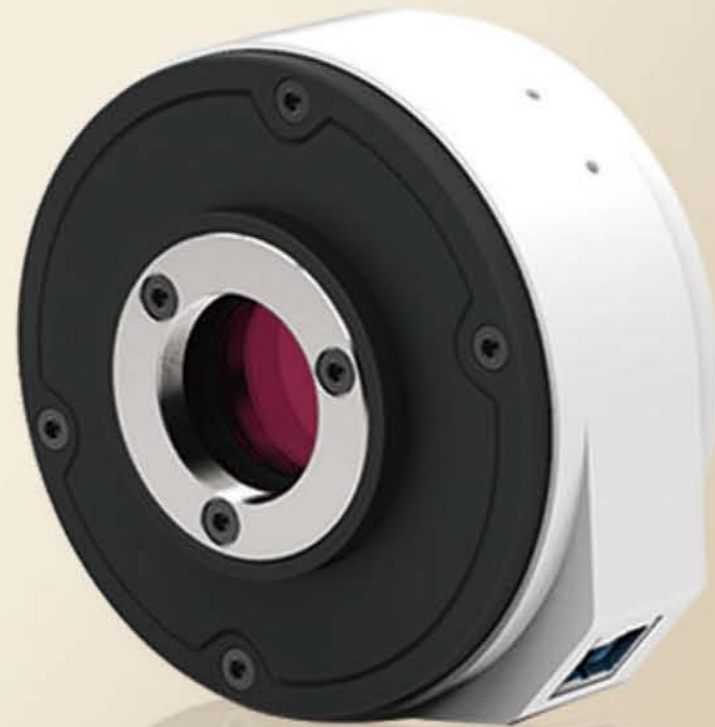


DigiRetina 16

16 Megapixel Microscope Color Camera

2+2 Hardware Design Superior Quality



2+2 Hardware Design

Innovative Dual Processor

FPGA Dual Processor

The innovative dual FPGA processors, FPGA1 for high definition image quality and FPGA2 for image transfer, guarantees superb quality images at high frame rates.

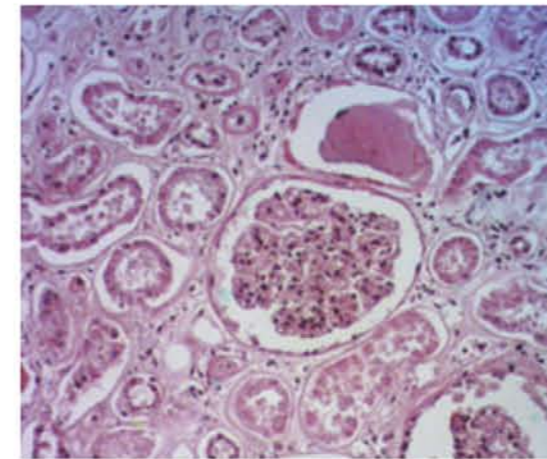


Image taken by the camera without dual FPGA processors

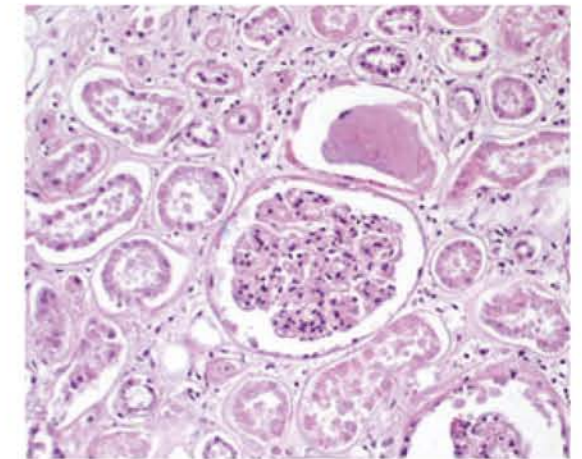
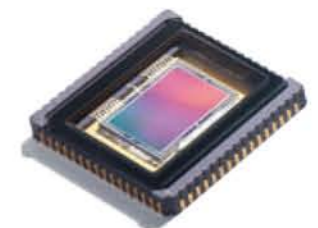


Image taken by DigiRetina 16

Two High Performance Elements

CMOS Imaging Sensor

16 Megapixel resolution, remarkable representation of the finest details, no loss of image fidelity.



USB3.0 Chip

Latest USB3.0 standard, 5Gb/s ultra high speed data transfer, high efficiency and easy to use.



Superior Quality

16 MP High Definition Resolution

DigiRetina 16 provides 16MP high resolution still image acquisition and video recording with sharp image quality and vibrant color.



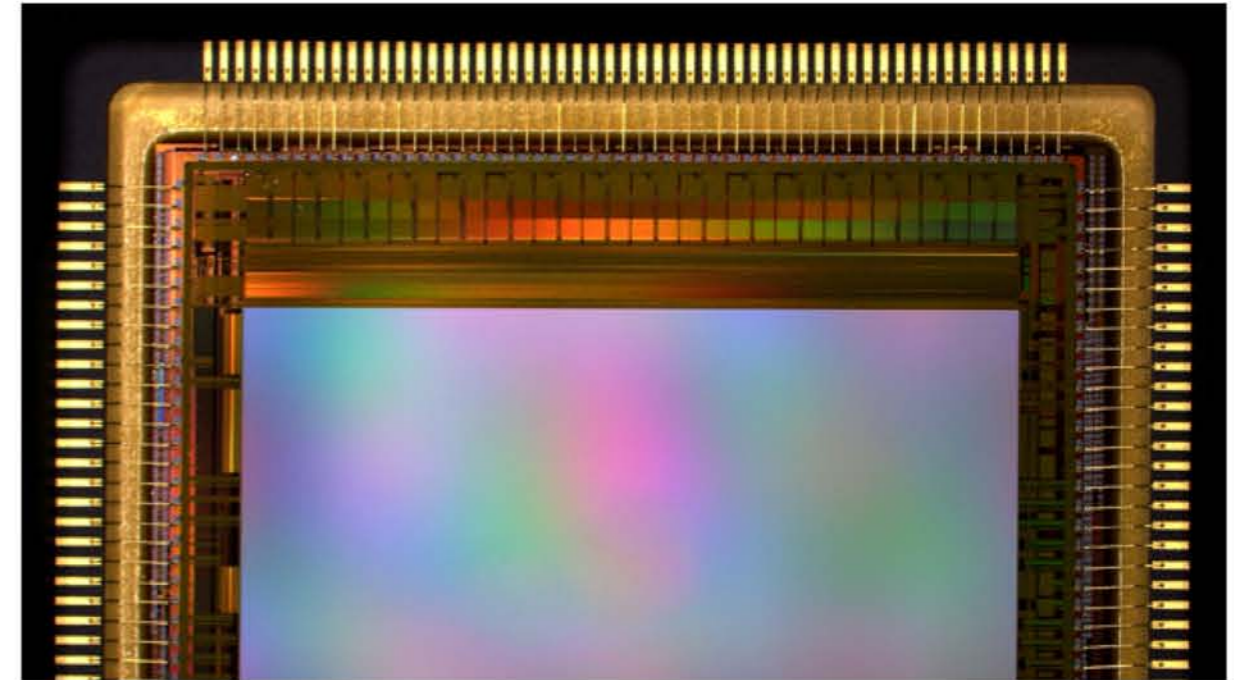
Accurate Color Rendition

Thanks to the professional dual image processors, DigiRetina16 delivers precise color reproduction and sharp images. The high quality video recording performance allows the capture of every precise detail.



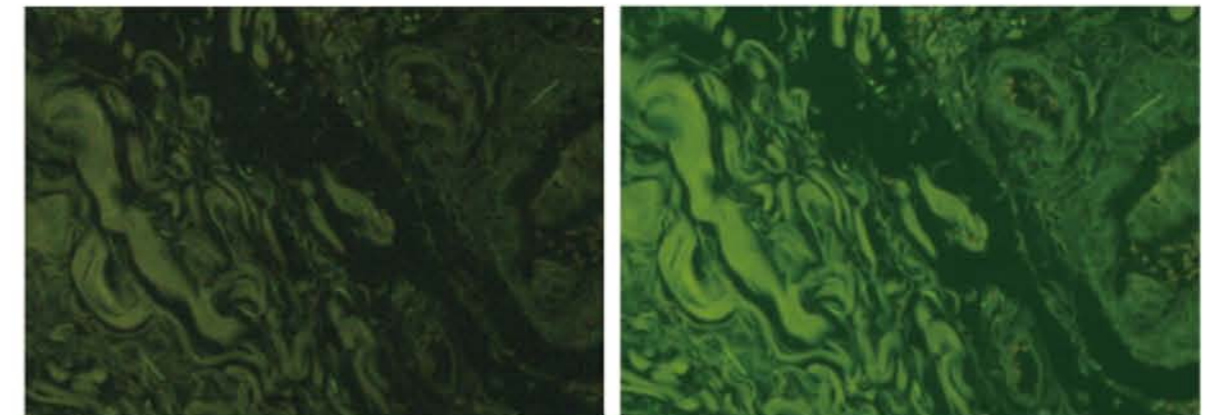
Remarkable Representation of Fine Details

With the latest 16MP CMOS sensor, DigiRetina16 has amazing performance for the finest details, providing far better fidelity than the current range of low resolution sensors. Even imaging a specimen under a 20x objective, DigiRetina16 guarantees premium image quality.



Surprising Low Light Performance

Embedded hardware binning and 3D denoise technologies result in DigiRetina16's surprising performance in low light applications. DigiRetina16 is capable of delivering remarkable image quality even in low light or weak light applications.

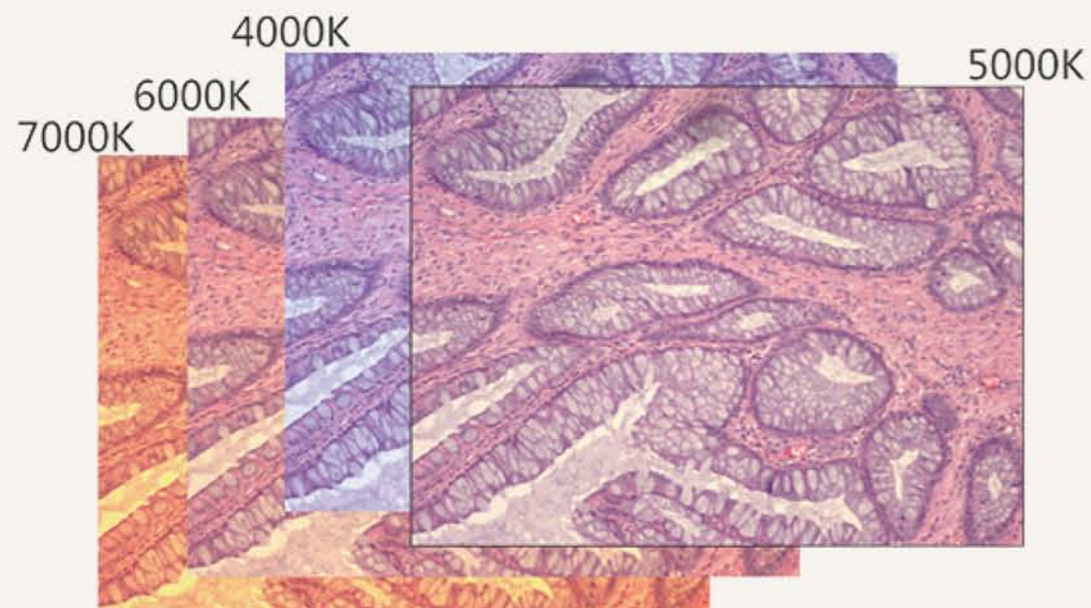


Low light image without 3D denoise

Low light image taken by DigiRetina 16

Wide Range Color Temperature Adjustment

DigiRetina16 has an integrated 1900-8000K color temperature adjustment. This feature, which has previously only been available on high-end scientific cameras, significantly improves the white balance, delivering incredible color fidelity in the original image, eliminating the need for any post processing. DigiRetina16 creates stunning visual effects for different samples and different lighting sources, always giving true to life images.



Ultra High Speed Data Transfer



The built-in USB3.0 interface of DigiRetina16 transfers image data at ultra high speed, which enables users to find and focus easily, even at full resolution.

Technical Specification

Imaging Sensor			
Type	CMOS sensor	Active Pixels	16MP
Size	1/2.33"	Pixel Size	1.335µm x 1.335µm
Model	MN34120	Color/Monochrome	Color
Image Resolution			
Max Resolution	4608x3456	Preview Resolution	2304x1728或4608x3456
		Capture Resolution	4608x3456
Image Processing			
Image Processor	Built-in image processor	Scan Mode	Progressive
Image Transfer Control	High Speed FPGA + High Speed DDR	Noise Reduction	Real-Time 3D denoise
Parameter Settings	Gain, Gamma, Saturation, Contrast	White Balance	Auto/Manual
Color Temperature	1900K-8000K	Color Depth	24 bit
Image Acquisition			
Dynamic Range	>59.5dB (Gain1X)	Shutter Type	Electronic Rolling Shutter
Exposure Control			
Exposure mode	Auto/Manual	Exposure time	1ms-1s
Preview			
Frame rate	25fps@(4MP, 2304x1728)	Data Transfer	USB3.0
	5fps@(16MP, 4608x3456)	Data Cable	1.8 meters USB3.0 cable
Software/ Compatible System			
Windows Software	ISCapture	Compatible System	Window/Linux/Mac
Interface			
Optical Interface	Standard C-Mount	Data Interface	USB3.0/5Gb/s
Operating Environment			
Storage Temperature	-20-70°C	Operating Temperature	0-60°C
		Operating Humidity	45%-85%

ISCapture 4.1

1. Advanced Camera Control.
2. Unique Low Light Imaging Settings.
3. Still image acquisition and Video Recording functions.
4. Convenient Image Management.
5. Image Processing and Measurement functions.