

BLACKFLY S BOARD-LEVEL

KEY FEATURES

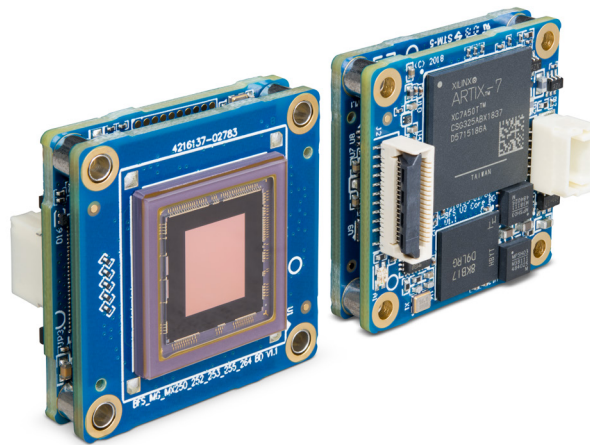
- Leverage the latest CMOS sensors and new on-camera image processing features. Harness increased binning flexibility, powerful auto-exposure controls and robust color transformation tools.
- Improve cycle time using advanced camera controls and programmable logic. Utilize sequencer, chunk data, event notification, counters, timers and logic blocks.
- Accelerate your time to market using our GenICam3 API, GUI API library, detailed API logging and comprehensive documentation.

APPLICATIONS

- Biomedical applications such as microarray reading a fluorescence microscopy
- Flat-panel display inspection and alignment
- UAS Aerial imaging
- High-resolution automated optical inspection

Small Package, Powerful Results

The Blackfly S is a compact, high performance machine vision camera that allows designers to easily produce the exact images they need. With both automatic and precise manual control over image capture and on-camera pre-processing, the Blackfly S accelerates application development.

**USB**
VISION**GEN*i*CAM**

SPECIFICATIONS

	Blackfly S BFS-U3-50S4M-BD	Blackfly S BFS-U3-50S4C-BD
Resolution	2448 x 2048	
Frame Rate	73 FPS / 74 FPS with Lossless Compression	
Megapixels	5.0 MP	
Chroma	Mono	Color
Sensor	Sony IMX547, CMOS, 1/1.8"	
Readout Method	Global shutter	
Pixel Size	2.74 μ m	
Lens Mount	Sold separately	
ADC	8-bit / 10-bit / 12-bit	
Minimum Frame Rate	1 FPS	
Gain Range	0 to 47 dB	
Exposure Range	10 μ s to 30 s	
Acquisition Modes	Continuous, Single Frame, Multi Frame	
Partial Image Modes	Pixel binning, decimation, ROI	
Image Processing	Gamma, lookup table, and sharpness	Color correction matrix, gamma, lookup table, saturation, and sharpness
Sequencer	Up to 8 sets using 6 features	
Image Buffer	240 MB	
User Sets	2 user configuration sets for custom camera settings	
Flash Memory	1 MB non-volatile memory	
Non-isolated I/O	4 bi-directional	
Auxiliary Output	3.3 V, 120 mA maximum	
Serial Port	Supported	
Interface	USB 3.1 Gen 1	
Interface Connector	Hirose TF38 FPC connector	
Power Requirements	5 V via USB3 interface	
Power Consumption	3.2 W maximum / 3.1 W nominal	
Dimensions/Mass	29 mm x 29 mm x 10 mm/ 10 g	
Machine Vision Standard	USB3 Vision v1.0	
Compliance	CE, FCC, RoHS, REACH / ECCN is EAR099	
Temperature	Operating: 0°C to 50°C / Storage: -30°C to 60°C	
Humidity	Operating: 20% to 80% (no condensation) / Storage: 30% to 95% (no condensation)	
Warranty	3 years	

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