



INDUSTRIAL/MACHINE VISION APPLICATIONS

FLIR BLACKFLY S BOARD-LEVEL

P/N: BFS-GE-50S5-BD2

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.

www.flir.com/mv

FEATURES

Leverage the latest CMOS sensors and new oncamera 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 GenlCam3 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



GEN<i>CAM

SPECIFICATIONS

SPECS	BFS-GE-50S5M-BD2	BFS-GE-50S5C-BD2
Resolution	2448 x 2048	
Frame Rate*	24 FPS	
Megapixels	5 MP	
Chroma	Mono	Color
Sensor	Sony IMX264, CMOS, 2/3"	
Readout Method	Global shutter	
Pixel Size	3.45 µm	
Lens Mount	Sold separately	
ADC	12-bit	
Minimum Frame Rate**	1 FPS	
Gain Range**	0 to 47 dB	
Exposure Range**	27 us 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	3 bi-directional	
Serial Port	Supported	
Auxiliary Output	3.3 V, 120 mA maximum	
Interface	GigE	
Interface Connector	Hirose TF38 FPC connector	
Power Requirements	12 V nominal (8 - 24 V)	
Power Consumption	3 W maximum	
Dimensions/Mass	29 mm x 29 mm x 10 mm / 10 g	
Machine Vision Standard	GigE Vision v1.2	
Compliance	CE, FCC, RoHS, REACH. The ECCN for this product 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	
	·	

^{*}Frame rates are measured with Device Link Throughput Limit of 125 MBps and Acquisition Frame Rate disabled. Values are rounded down to whole numbers.

FLIR Integrated Imaging Solutions

CANADA

12051 Riverside Way Richmond, BC, Canada V6W 1K7

T: +1 866.765.0827 (toll free) T: +1 604.242.9937 F: +1 604.242.9938

E: mv-sales@flir.com

T: +1 866.765.0827 (toll free) E: mv-na-sales@flir.com

www.flir.com/mv

EUROPE

T: +49 7141 488817-0 F: +49 7141 488817-99 E: mv-eusales@flir.com

CHINA

T: +86 10 8215 9938 F: +86 10 8215 9936 E: mv-chinasales@flir.com

ASIA

E: mv-asiasales@flir.com

www.flir.com NASDAQ: FLIR

©2020 FLIR® Integrated Imaging Solutions Inc. All rights reserved. Names and marks appearing on the products herein are either registered trademarks or trademarks of FLIR® Systems, Inc. and/or its subsidiaries. Specifications are subject to change without notice. Created: 06/17/20

VN: BFS-GE-50S5-BD2-v1

FIND THE BEST BLACKFLY S FOR YOUR NEEDS





^{**}Values are the same in binning and no binning modes.