FLIR

FLIR BLACKFLY® S BOARD-LEVEL

P/N: BFS-U3-63S4-BD2

SMALL PACKAGE, POWERFUL RESULTS

The FLIR Blackfly S Board Level variants are high performance, machine vision, area scan cameras designed for embedding into tight spaces. Unlike many board level cameras, it boasts a rich feature set applied to the latest CMOS sensors; the same feature set as the cased version. It is ready for integration with proven compatibility with popular SBCs and SOMs.
The Blackfly S board level models enable OEMs to develop smaller, lighter, and lower cost solutions with embedded system connectivity and rich features.

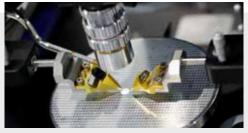www.flir.com/products/blackfly-s-board-level

DESIGNED FOR INTEGRATION IN SMALL SPACES

These models are ideal for mobile, handheld and desktop device integration with their 29 x 29 x 12 mm board level footprint, USB3 or GigE across FPC connection with latching connector , and low profile JST GPIO connector, and no fixed lens mount.

US3 VISION **GEN‹i›CAM**

HIGH PERFORMANCE IMAGING

It is rare for board level cameras to integrate the most advanced CMOS sensors and come with a full feature set. The Blackfly S board level variants integrate the latest Pregius global shutter CMOS image sensors for distortion free, high dynamic range image capture. They have the same rich feature set as the cased variants allowing both automatic and precise manual control over image capture and on-camera pre-processing.

EMBEDDED ECO-SYSTEM SUPPORT

Ideal of embedded systems, the entire Blackfly S camera family provides proven compatibility with popular SBCs and Operating Systems including desktop Windows and Linux on ARM, x64 and x86.

SPECS	BFS-U3-63S4M-BD2	BFS-U3-63S4C-BD2
Resolution	3072 x 2048	
Frame Rate*	59 FPS	
Megapixels	6.3 MP	
Chroma	Mono	Color
Sensor	Sony IMX178, CMOS, 1/1.8"	
Readout Method	Rolling shutter with global reset	
Pixel Size	2.4 µm	
Lens Mount	Sold separately	
ADC	10-bit / 14-bit	
Minimum Frame Rate**	1 FPS	
Gain Range**	0 to 47 dB	
Exposure Range**	8 µs 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 5 features	
Image Buffer	240 MB	
User Sets	2 user configuration sets for custom camera settings	
Flash Memory	6 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 W maximum	
Dimensions/Mass	29 mm x 29 mm x 10 mm / 10 g	
Machine Vision Standard	USB3 Vision v1.0	
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 380 MBps and Acquisition Frame Rate disabled.

**Values are the same in binning and no binning modes.

VN: 19-2721-OEM-BFS-U3-63S4-BD2-v1

FIND THE BEST BLACKFLY S FOR YOUR NEEDS

FLIR | The World's Sixth Sense®