



EAN-Camera Compatibility

2022-01-06

Exports: [Export Summary Sheet](#)

EULA: [End User License Agreement](#)


Web: sightlineapplications.com


Sales: sales@sightlineapplications.com


Support: support@sightlineapplications.com

Phone: +1 (541) 716-5137

1	Overview	1	2.2	HDMI Camera Frame Rate Compatibility.....	4
1.1	Additional Support Documentation	1	2.3	Customer Recommended Cameras	4
1.2	SightLine Software Requirements.....	1	3	1500-OEM FPGA Support.....	4
2	Supported Cameras and Drivers	1	4	Adapter Board Kits	5
2.1	Camera Support Update	1	5	Questions and Additional Support.....	6

 **CAUTION:** Alerts to a potential hazard that may result in personal injury, or an unsafe practice that causes damage to the equipment if not avoided

 **IMPORTANT:** Identifies crucial information that is important to setup and configuration procedures.

 *Used to emphasize points or reminds the user of something. Supplementary information that aids in the use or understanding of the equipment or subject that is not critical to system use.*



1 Overview

The document lists all third-party cameras that are currently supported by SightLine software. It also lists the camera adapter board kits for the 1500-OEM, 3000-OEM, and 4000-OEM video processing boards. This document is updated as new camera support is established.

1.1 Additional Support Documentation

Additional Engineering Application Notes (EANs) can be found on the [Documentation](#) page of the SightLine Applications website.

The [Panel Plus User Guide](#) provides a complete overview of settings and dialog windows located in the Help menu of the Panel Plus application.

The Interface Command and Control (IDD) describes the native communications protocol used by the SightLine Applications product line. The IDD is also available as a PDF download on the [Documentation](#) page under Software Support Documentation.

For a complete list of camera support EANs, go to the [Documentation](#) download page » *Camera Configuration and Digital Video Input Support*.

1.2 SightLine Software Requirements

ⓘ IMPORTANT: The Panel Plus software version should match the firmware version running on the board. Firmware and Panel Plus software versions are available on the [Software Download](#) page.

For 1500-OEM FPGA version information see [1500-OEM FPGA Support](#).

2 Supported Cameras and Drivers

2.1 Cameras Support

The complete supported camera list is shown in [Table 1](#). It also lists specific cameras and that have been developed for cameras supported by SightLine. If a specific camera is not available, support may be possible using generic digital settings. Contact [Support](#) for more information.

Table 1: Camera Compatibility Table

Analog (SD) Cameras Supported						
Camera or Type	EO / IR	Interface	Definition and Support	1500	3000	4000
Generic Models						
NTSC		Composite, Coax	480i/30 - NTSC analog is 29.97 fps	✓	✓	✓
PAL		Composite, Coax	576i/25 - PAL analog is 25 fps	✓	✓	✓
BT656 NTSC		Digital	Requires Custom Interface Board	✓	✓	✓
BT656 PAL		Digital	Requires Custom Interface Board	✓	✓	✓
Digital Cameras Supported						
Airborne Innovations AGS720P Color	EO	FPC ribbon	720p Global Shutter	✓	✓	✓
Airborne Innovations ADS720P Mono	EO	FPC ribbon	720p Global Shutter	✓	✓	✓
Basler ace acA2000-340kc	EO	Camera Link	2MP color, Global Shutter		✓	
Basler dart daA1920-160uc	EO	USB3	2MP color, Global Shutter			✓
DRS Tamarisk 320 (8-bit and 14-bit)	IR	FFC/FPC-DRS	LWIR 320x240 sensor array	✓	✓	



(Camera Compatibility Table continued)

Digital Cameras Supported						
Camera or Type	EO / IR	Interface	Definition and Support	1500	3000	4000
DRS Tamarisk 320 Precision Series	IR	FFC/FPC-DRS	LWIR 320x240 uncooled SuperFrame	✓	✓	
DRS Tamarisk 640 (8-bit)	IR	FFC/FPC-DRS	LWIR 640x480 sensor array	✓	✓	✓
DRS Zafiro 640 Micro	IR	Camera Link	MWIR 640x480 cooled (8-bit and 14-bit)	✓		
e-con Systems See3Cam_CU30	EO	USB	Color 1080p30/60, 2304x1536@24			✓
ELP-SUSB1080P01	EO	USB	USB Color 1080p MJPEG			✓
FLIR Boson 320	IR	Parallel dig, FPC	LWIR 256x320 (8-bit and 16-bit)	✓	✓	✓
FLIR Boson 640	IR	Parallel dig, FPC	LWIR 640x480 (8-bit and 16-bit)	✓	✓	✓
FLIR Duo Pro R 640	EO/IR	HDMI	1080p60, 1080p30, 720p60	✓	✓	✓
FLIR Boson 640 USB Webcam	IR	USB	LWIR 640x512 (8-bit and 16-bit)			✓
FLIR Neutrino	IR	Parallel dig, FFC	MWIR 640x480 (8-bit and 14-bit)	✓	✓	
	IR	Camera Link	MWIR 640x480 (16-bit)			✓
FLIR Neutrino LC	IR	Parallel dig, FPC	MWIR 640x512 (8-bit and 16-bit)	✓	✓	✓
FLIR Photon HRC*	IR	Parallel dig, FFC	MWIR cooled 640x480 (8-bit and 14-bit)	✓		
FLIR Quark 336*	IR	Parallel dig, FFC	LWIR 336x256 or 320x256 (8-bit and 14-bit)	✓	✓	
FLIR Quark 640*	IR	Parallel dig, FFC	LWIR 640x480 (8-bit and 14-bit)	✓	✓	
FLIR Tau 2 336	IR	Parallel dig, FFC	LWIR 336x256 and 320x256 (8-bit and 14-bit)	✓	✓	
FLIR Tau 2 640	IR	Parallel dig, FFC	LWIR 640x480 (8-bit and 14-bit)	✓	✓	
FLIR Tau 2 640	IR	Parallel dig, FFC	LWIR 640x480 (16-bit)			✓
FLIR Tau 2 SWIR	IR	Parallel dig, FFC	LWIR 640x512 (8-bit and 14-bit)	✓	✓	
FLIR Vue*	IR	Parallel dig, FFC	LWIR 640x480 (8-bit and 14-bit)	✓	✓	
FLIR Blackfly S USB3 BFS-U3-120S4C	EO	USB	Color 4000x3000 @ 31Hz			✓
GoPro Hero 3 White	EO	HDMI	720p30, 1080p30	✓	✓	
GoPro Hero 3+ Black	EO	HDMI	720p30, 1080p30	✓	✓	✓
GoPro Hero 5 Black	EO	HDMI	720p60, 1080p60	✓	✓	✓
HDMI for 1500-OEM	EO	HDMI	480i59.94, 4080i60, 480p59.94, 480p60, 576i50, 576p50, 720p29.97, 720p30, 720p59.94, 720p60	✓		
HDMI for 3000-OEM	EO	HDMI	480p59.94, 480p60, 720p29.97, 720p30, 720p59.94, 720p60, 1080p29.97, 1080p30, 1080p59.94, 1080p60, 800x600, 1600x1200		✓	
HDMI for 4000-OEM	EO	HDMI	480i59.94, 480i60, 576i50, 720p29.97, 720p30, 720p59.94, 720p60, 1080p29.97, 1080p30, 1080p59.94, 1080p60, 1600x1200			✓
HD-SDI	EO	HD-SDI	720p30, 720P60, 1080p30, 1080P60, 1080i50, 1080i60		✓	
HD-SDI	EO	HD-SDI	720p, 1080p30, 1080P60			✓
HIKROBOT UAV-CZD2302-N*	EO	KEL LVDS	1080P		✓	
Hitachi DI-SC120R*	EO	Parallel dig, Ribbon	720p30	✓	✓	✓
Hitachi DI-SC110	EO	Parallel dig, Ribbon	720p30	✓	✓	
InfiRay Micro III 640T	IR	USB Webcam	512x1280			✓
Imperx Bobcat B1921C	EO	Camera Link	1080p	✓	✓	
Intertest XBC-KZ10G	EO	KEL LVDS	720p/1080p Global Shutter (Sony FCB compatible)		✓	✓
Intertest XBC-KZ12G	EO	KEL LVDS	1080p Global Shutter (Sony FCB compatible)	✓	✓	✓
Intertest XBC-KZ30G	EO	KEL LVDS	720P Global Shutter (Sony FCB compatible)	✓	✓	✓
Intertest XBC-KZ33G	EO	KEL LVDS	720P/1080P Global Shutter - Camera Firmware 2.0.6 (Sony FCB compatible)	✓	✓	✓
Intertest XBC-KZ10	EO	KEL LVDS	720P/1080P (Sony FCB compatible)	✓	✓	
Intertest XBC-KZ33	EO	KEL LVDS	720P (Sony FCB compatible)	✓	✓	✓
IRCameras Niatros	IR	Camera Link	MWIR 640x512	✓	✓	
JAI GO-2400Mono	EO	Camera Link	1080P (2 tap 8-bit monochrome)		✓	
JAI GO-5000Color	EO	Camera Link	1080P (2 tap 8-bit Bayer)		✓	
JAI GO-5101Color	EO	Camera Link	1080P (2 tap 8-bit Bayer)		✓	
Kayeton KYT-U200-SL01MCSF	EO	USB	Color 1080p30			✓
KT&C ATC-HZ7810LC	EO	KEL LVDS	720P/1080P (Sony FCB compatible)	✓	✓	
KT&C ATC-HZ5533M-LP	EO	KEL LVDS	720P Global Shutter - Camera Firmware 2.0.6 (Sony FCB compatible)	✓	✓	✓



(Camera Compatibility Table continued)

Digital Cameras Supported						
Camera or Type	EO / IR	Interface	Definition and Support	1500	3000	4000
L3 Communications NightWarrior	IR	Camera Link	MWIR 640x480 cooled	✓	✓	
Logitech C615	EO	USB	Color 1080p30 MJPEG			✓
Logitech C920	EO	USB	Color 1080p30 H.264			✓
Lynred Scorpio	IR	Camera Link	640x512 FPA		✓	✓
LYNRED - Sofradir Atom 1024 CL	IR	Camera Link	LWIR 1024x768 uncooled		✓	
LYNRED - Sofradir Atom 640	IR	Parallel dig, FFC	LWIR 640x480 uncooled	✓	✓	
LYNRED - Sofradir Daphnis	IR	Camera Link	MWIR 1280x720 - 10 µm pitch - MCT		✓	✓
LYNRED - Sofradir LEO MW	IR	Camera Link	MWIR 640x512 cooled	✓	✓	✓
LYNRED - Sofradir Snake SWIR	IR	Camera Link	SWIR 640x512		✓	✓
Quantum Imaging QI-SCD15-M1	IR	Camera Link	SWIR 640x480	✓	✓	
Raspberry Pi Camera Module V1 + Raspberry Pi Zero (board)	EO	SLA-4000-PI22	1080p30, 720p60, 480p90			✓
Raspberry Pi Camera Module V2	EO	SLA-4000-PI22	1080p30, 720p60, and 640x480p90			✓
SCD Blackbird	IR	Camera Link	HD MWIR 1280x1024		✓	✓
SD-SDI 480i/525i	EO	SD-SDI	480i, 525i		✓	✓
SD-SDI 576i/625i	EO	SD-SDI	576i, 625i		✓	✓
Sensors Unlimited 640CSX	IR	Camera Link	SWIR 640x512	✓	✓	
Sentech STC-CL33A	EO	Camera Link	640x480 color CCD	✓	✓	
Sentech STC-HD223	EO	HDMI	720p60, 1080p60		✓	
Sentech STC-MB33PCL	EO	Camera Link	640x480 mono CCD	✓	✓	
Sierra Olympic Ventus 275 / 700	IR	Camera Link	MWIR 640x512 cooled @30Hz		✓	✓
Smartek Vision UCC4113C	EO	USB	Color 4112x3008 @31Hz			✓
Sony FCB-EH Series* 3150, 3310, 3300, 3400, 3410, 6300, 6500	EO	KEL LVDS	FCB-EH 720p30, 1080p30	✓	✓	✓
Sony FCB-EV Series* 5300, 5500, 7500, 7100	EO	KEL LVDS	FCB-EV 720p60, 1080p30	✓	✓	
Sony FCB-EV7520A	EO	KEL LVDS	FCB-EV 720p60, 1080p30		✓	✓
Sony FCB-ER8300, 8550, 8530 + TWIGA HDMI Adapter Board	EO	HDMI	Requires HDMI 4K Adapter Board			✓
Sony FCB-ER Series 8300, 8530, 8550, 8230 4K cameras + SLA-4000-STM	EO	SLA-4000-STM	Color 720x1280 60fps, 1920x1080 30fps, 2160x3840 24fps			✓
<p>Sony FCB-EH, ER, and EV compatibility notes: All Sony FCB-EH cameras will work with the FCB-EH settings. All FCB-EV cameras will work with the FCB-EV settings. Some cameras only support 720P mode.</p> <p>! IMPORTANT: Sony FCB-ER cameras are not compatible with EH and EV models. ER cameras use the same KEL30 cable, but the power pins and signals are in different locations.</p>						
Tamron MP1010M-VC MP1110M-VC	EO	KEL LVDS	Compact block, supports 720p and 1080p	✓	✓	✓
Tamron MP2030M-GS	EO	KEL LVDS	MP2030M-GS (Global Shutter)	✓	✓	✓
USB Webcam 720p USB Webcam 1080p	EO	USB	720p30, 1080p30			✓
Vision Components VC-MIPI IMX412 Color	EO	SLA-4000-PI22	Color 4056x3040 20fps rolling			✓
Vision Components VC-MIPI IMX296 Mono	EO	SLA-4000-PI22	1440x1088 mono 60 fps global shutter			✓
Videology 25Z2.4 - 36X	EO	KEL LVDS	1080p 60/50fps, 30/25fps / 720p 60/50fps, 30/25fps (Global Shutter)	✓	✓	✓

*Manufacturers have announced the end-of-life (EOL) notice for these cameras. Commercial availability may be limited.



2.2 HDMI and SDI Camera Frame Rate Compatibility

See the [EAN-Digital Video Configuration](#) document for supported HDMI and SDI input frame sizes and frame rates.

2.3 Customer Recommended Cameras

SightLine invites customers to recommend cameras for their application that can lead to new camera support. Contact Support with the following information:

- The camera name and model number.
- A datasheet and ICD for the camera (if possible).
- The camera resolution, interlace mode, and frame rate, e.g., 1080P30.
- The interface type (Camera Link, HDMI, parallel digital, HDSDI).
- Video processing board type (1500-OEM, 3000-OEM, or 4000-OEM).
- Time frame to complete testing.

3 1500-OEM FPGA Support

The 1500-OEM has a separate FPGA that is not part of the System-On-Module (SOM) board. It is programmed at build time with version 5 or 12 to supply standard camera support.

FPGA versions suggested for supported cameras are shown in the [camera configuration tables](#) in the IDD.

For in-system updates on the 1500-OEM Rev E boards, firmware 2.22.18 or higher is required. For more information see [EAN-FPGA Firmware Update 1500-OEM](#).

Table 2: 1500-OEM Board Revision FPGA Programming Methods

1500-OEM Revision	FPGA Programming Methods
Revision C [LEGACY]	External FPGA programming required. Contact SightLine support.
Revision E	Supports on system (on board) FPGA updates as well as external FPGA programming.

For FPGA version support for the 1550-EAB contact [Support](#).



4 Adapter Board Kits

The following tables list camera adapter board kits for the 1500, 3000, and 4000-OEM video processing boards. See the [ICD-1500 Adapter Boards](#) and [ICD-3000-4000 Adapter Boards](#) for interface specifications and connector pinouts for the associated camera interface boards.

Table 3: 1500-OEM Adapter Board Kits

1500-OEM Adapter Board Kits	Description	Serial Passthrough Support	External Power Required
SLA-KIT-1500-CL	Camera Link® interface board with 1500-OEM mounting hardware.	Yes	Yes
SLA-KIT-1500-FFC-DRS	*DRS camera interface board and SLA-FFC board with cable and mounting hardware.	Yes	No
SLA-KIT-1500-FFC-TAU	*TAU camera interface board and SLA-FFC board with cable. The 1500-OEM can connect directly to the Tau camera. See EAN-FLIR-Cameras .	Yes	No
SLA-KIT-1500-FFC-QUARK	*Quark camera interface board and SLA-FFC board with cable.	Yes	No
SLA-KIT-1500-HIT	Hitachi camera interface board, camera interface cable and mounting hardware with 12v power adapter and extension.	Yes	Yes
SLA-KIT-1500-SONY	Sony camera interface board, camera interface cable, and 12v Power adapter and extension.	Yes	Yes
SLA-KIT-1500-HDMI	HDMI interface board with 1500-OEM mounting hardware.	Yes (separate onboard connector)	Yes
SLA-KIT-1500-FPC-BOSON	*Boson camera interface kit for 1500-OEM video processor and FLIR camera.	Yes	No
SLA-KIT-1500-FPC-DRS	*DRS camera interface kit for 1500-OEM video processor and DRS camera.	Yes	No
SLA-KIT-1500-FPC-AGS	Airborne Innovations camera interface kit for 1500-OEM video processor and AGS-270P.	Yes	No

*Kit includes an OEM connection board and camera connection board.

Table 4: 3000-4000-OEM Adapter Board Kits

3000-4000-OEM Adapter Board Kits	Description	Serial Passthrough Supported	External Power Required	Compatibility Notes
SLA-KIT-3000-AB	Analog input board with two SMA connectors, and mounting hardware.	No	No	Supported on 4000-OEM**
SLA-KIT-3000-CL	Camera Link interface board with SDR connector, and mounting hardware.	Yes	No	
SLA-KIT-3000-HDSI-IN	HDSI input board with MCX connector, MCX-BNC cable, and mounting hardware.	Yes (separate onboard connector)	No	
SLA-KIT-3000-HDMI	HDMI interface board with mounting hardware.	Yes (separate onboard connector)	No	



(3000-4000-OEM Adapter Board Kits continued)

4000-OEM Only Board Kits	Description	Serial Passthrough Supported	External Power Required	Compatibility Notes
SLA-KIT-3000-HIT	Hitachi camera interface board, camera interface cable and mounting hardware.	Yes	No	
SLA-KIT-3000-SONY	SONY camera interface board, camera interface cable and mounting hardware.	Yes	No	
SLA-KIT-3000-FFC-DRS	*DRS camera interface board and SLA-FFC board with cable, and mounting hardware.	Yes	No	Not supported on 4000-OEM
SLA-KIT-3000-FFC-TAU	*TAU camera interface board and SLA-FFC board with cable, and mounting hardware.	Yes	No	
SLA-KIT-3000-FFC-QUARK	*Quark camera interface board and SLA-FFC board with cable, and mounting hardware.	Yes	No	
SLA-KIT-3000-FPC-BOSON	*BOSON camera interface kit for 3000-OEM video processor.	Yes	No	
SLA-KIT-3000-FPC-AGS	Airborne Innovations camera interface kit for 3000-OEM video processor.	Yes	No	
SLA-KIT-3000-FPC-DRS	*DRS camera interface board and SLA-FPC board with cable, and mounting hardware.	Yes	No	
SLA/SLE-EVAL-4000	4000-SOM, 4000-OEM, cables, power supply and mounting hardware	Yes	Yes	
SLA-KIT-4000-DEBUG	4000-DEBUG board, USB to Micro USB cable	NA	Yes	
SLA/SLE-EVAL-4000-DEV	4000-SOM, 4000-DEV, cables, power supply and mounting hardware	Yes	Yes	
SLA-KIT-4000-MIPI	4000-MIPI Adapter board, cables, and mounting hardware.	Yes	No	

*Kit includes an OEM connection board and camera connection board.

** When installed in 4000-OEM (J6) only the IN0 (J3) can be used. Analog inputs are not supported on the 4000-MIPI board.

5 Questions and Additional Support

For questions and additional support, please contact [Support](#). Additional support documentation and Engineering Application Notes (EANs) can be found on the [Documentation](#) page of the SightLine Applications website.