



SightLine provides several options for implementing real-time video analytics into customer camera systems. These tailorable solutions include trade-offs between architecture flexibility and ease of integration. The **Video Processing Software** provides a suite of functions that are available with each option and are key in a wide variety of ISR applications.

Ease of Integration



Architecture Flexibility



Option

Advantages

Size and Power

OEM

COTS solutions provide fastest integration path
Existing system and camera interfaces support
Enclosure option for 1500-OEM.

1500-OEM: 27 x 38 mm, 2.5W
3000-OEM: 88 x 50 mm, 9W
4000-OEM: 51 x 38 mm, 5W

Provides: System Interfaces + Analytics + Video Outputs

SOM

Smallest physical size for adding a dedicated video processor on customer board.

LogicPD: 15 x 27 mm, 2.25W
3000-OEM: 88 x 50 mm, 9W
Inforce: 50 x 28 mm, 5W

- 1500: [LogicPD SOM DM3730-20-1780](#)
- 3000: OEM is a board-board SOM implementation
- 4000: [Inforce 6601 SOM](#)

Adding to customer board enables consolidation of system functions, ideal connectivity, and form factor.

Reference designs available to facilitate PCB design.

OEM EVAL system ensures a common baseline system for SightLine support.

Provides: Analytics + Video Outputs

NEW!

SW Licensing

Integration into customer processing architecture

With the introduction of the **4000-OEM**, built with an ARM processor architecture, SightLine is now able to license software functions to run on customer ARM based platforms.

Delivered software will be a callable static library that accepts video frames and provide telemetry out. It do not include any of the render functions that output updated video frames or do encoding.

Target processor must be 64-bit ARM (ARM-v8) running Linux.

Provides: Analytics Only

Processors Supported:

Qualcomm Snapdragon 820

Nvidia TX2

Nvidia TX1

Xilinx Zynq

Other target HW
(as approved)

Integration Options

INTEGRATION TRADE-OFFS

	OEM	SOM	Licensable SW
LEVEL OF SYSTEM INTEGRATION SKILLS AND ENGINEERING EFFORT REQUIRED?	Medium	Advanced	Expert
SIGHTLINE RESPONSIBLE FOR ENTIRE VIDEO PATH	Yes – done on SL board	Partial Implemented on SL SOM and customer interface boards	No – customer owns HW and SW designs
CAMERA INTERFACE(S)	Yes – SightLine adaptor boards	Customer design via SL reference designs	No – customer responsible for camera interfaces
SYSTEM INTERFACES ETHERNET, SERIAL PORTS, GPIO, POWER, ETC.	Yes	Customer design via SL reference designs	No – customer responsible for system interfaces
OPPORTUNITY FOR CUSTOMER PROCESSING	Yes – part of processor ARM cores	Yes – part of processor ARM cores	Yes – customer owns complete processor
SOFTWARE – ANALYZE FUNCTIONS			
SCENE REGISTRATION	Yes	Yes	Yes
OBJECT TRACKING	Yes	Yes	Yes
DETECTION ALGORITHMS	Yes	Yes	Yes
PRECISION LANDING	Yes	Yes	Yes
FOCUS TELEMETRY	Yes	Yes	Yes
SOFTWARE – RENDER FUNCTIONS			
DPR, NUC, AND BLENDING	Yes	Yes	No Future support of render functionality may be possible.
VIDEO STABILIZATION AND ROLL CORRECTION	Yes	Yes	
VIDEO / SNAPSHOT RECORDING	Yes	Yes	
VIDEO ENHANCEMENT	Yes	Yes	
MULTI-CHANNEL DISPLAY	Yes	Yes	
OSD TEXT / SYMBOLOGY	Yes	Yes	
HD VIDEO ENCODING	Yes	Yes	
KLV METADATA	Yes	Yes	
THOROUGH DOCUMENTATION SUPPORT	Yes	Yes	Yes - library function(s)
RMA AND HW WARRANTY	Yes	Yes	No software license only

