



Integrating SightLine video processors requires advanced customer skills in complex software and system engineering. To best support customer needs, SightLine provides several options for implementing real-time video analytics into complex systems. Each tailorable solution includes trade-offs between architecture flexibility and ease of integration. Please contact sales@sightlineapplications.com to explore which option works best for your application and timeline.

Ease of Integration

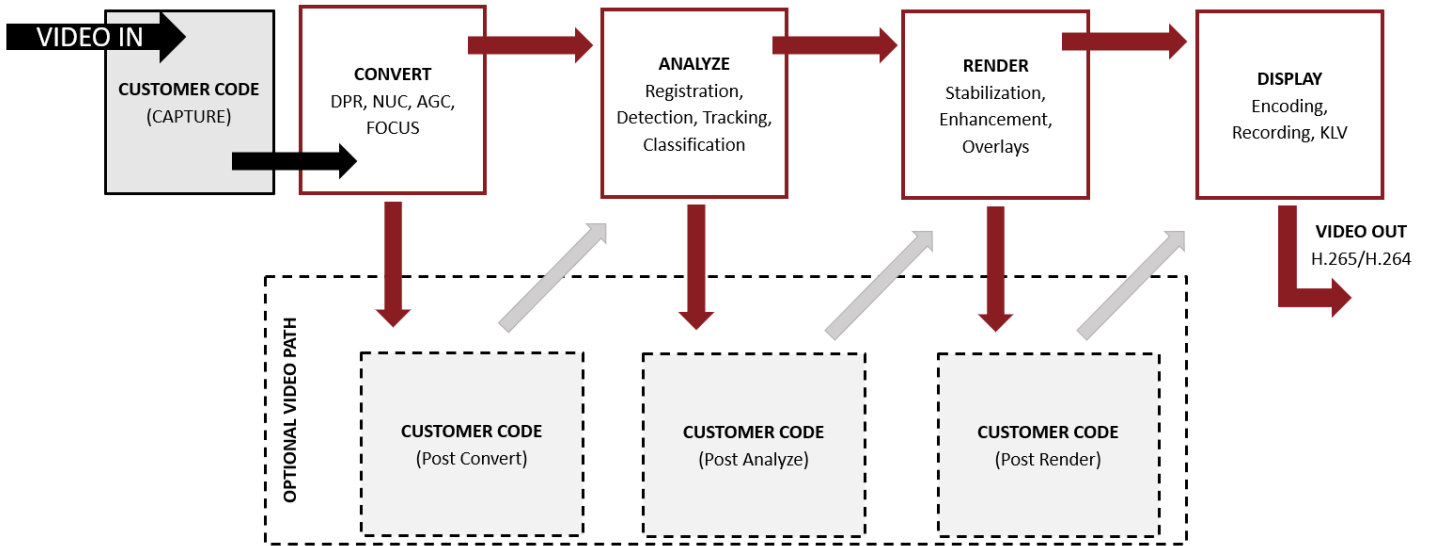


Architecture Flexibility

Option	Advantages
OEM	<p>COTS solutions provide the fastest integration path. Integrators take advantage of existing system and camera interfaces support.</p> <ul style="list-style-type: none"> • 1750-OEM: 33.3 x 45mm, 3W typical (0.1W Sleep Mode) • 4000-OEM: 51 x 38 mm, 5W <p>Provides: System Interfaces + Analytics + Video Outputs</p>
SOM	<p>Smallest physical size for adding a dedicated video processor on integrator-designed custom board.</p> <ul style="list-style-type: none"> • 1700-SOM: 28 x 38mm, 7g Compulab UCM-iMX8PLUS • 4000-SOM: 50 x 28 mm, 12.5g Penguin Edge IFC6601 <p>SightLine provides OEM Reference designs and design-review support to facilitate successful PCB design. Integrating directly to customer board enables elegant system architecture.</p> <p>Provides: Analytics + Video Outputs</p>
ARM License Analyze	<p>Integrator owns the entire processing system architecture. SightLine software is provided as a callable static library that accepts video frames and provides telemetry out. It does not include any of the render functions that output updated video frames or do encoding.</p> <ul style="list-style-type: none"> • Target processor can be any 64-bit ARM (ARM-v8) running Linux. • Processors supported to date include Qualcomm, NVIDIA, Xilinx, and NXP. • Discussions welcome about other target HW options to allow fit with customer architecture. <p>Provides: Analytics Only</p>
ARM License Analyze + Render + IP Encoding	<p>In addition to the functionality outlined above, integrator can take advantage of render functions on supported processors.</p> <p>Current supported processors: Jetson Family processors (TX2, TX1, Nano, etc.), Qualcomm Snapdragon 820 and 5165, NXP IMX8 Plus.</p> <p>SightLine software is provided as a callable static library that accepts video frames and provides telemetry and video out. Integrator has the flexibility to implement additional custom processing at different points along the video chain (see sequence outlined below)</p> <p>Provides: Analytics + Video Outputs</p>

New ARM License with Analyze and Render:

Integrators can implement custom code at different points along the video path. The processing flow below illustrates a possible system architecture. Please ask sales for more information.



INTEGRATION TRADE-OFFS

	OEM	SOM	ARM SW License
SYSTEM INTEGRATION SKILLS AND ENGINEERING EFFORT REQUIRED	Medium	Advanced	Expert
EVALUATION KIT REQUIRED	Strongly Encouraged	Required	Required
MINIMUM ORDER QUANTITY	None	None	Quantity to be negotiated. Initial purchase volume is in lieu of any startup NRE.
HARDWARE DESIGN AGREEMENT REQUIRED	No	Yes	No
CUSTOMER SOFTWARE/PROCESSING VIDEO PATH	No	Minimal – post SL processing	Yes – customer owns video path
NON-VIDEO PATH	Yes – ARM available	Yes – ARM available	Yes – customer owns all SW
CAMERA AND SYSTEM INTERFACE(S) ETHERNET, SERIAL PORTS, GPIO, POWER, ETC.	Yes – Via SL adaptor boards	Customer design via SL reference designs (Additional interface board reference designs available upon request)	Customer responsible for camera capture and system interfaces
FEATURES AVAILABLE			
ANALYZE	ALL	ALL	ALL
RENDER	ALL	ALL	On processors listed above