

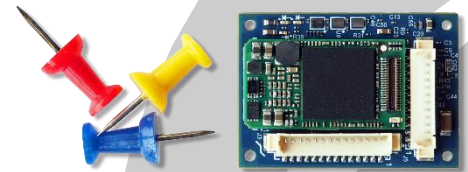


## Onboard Video Processors

SightLine video processors provide powerful edge processing for any real-time application. Processors operate on video at the source, which is key for low-latency performance and the best video quality.

### 1500-OEM

- Multiple video inputs – single channel processing
- Tiny size for use in the smallest camera systems
- OEM, SOM, and enclosed options for integration flexibility
- Stream Ethernet video (to 720p) + analog out



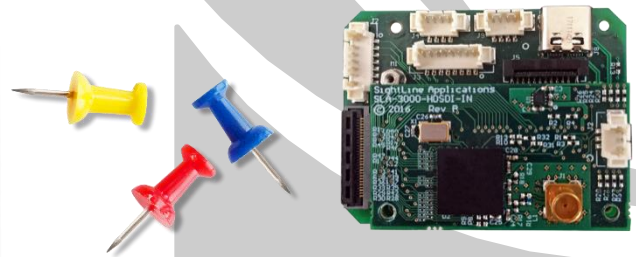
### 3000-OEM

- Multiple video inputs – dual channel processing
- Small size (business card footprint)
- SOM style, board-to-board Interface
- Multi-stream Ethernet video (to 1080p/30) + other output options (HDS DI, analog, HDMI)



### 4000-OEM

- Multiple video inputs – single channel processing
- Full HD performance in smaller footprint than the 3000-OEM
- OEM and SOM integration options
- H.264 and H.265 encoding to 4K UHD



## Video Processing Software

The supported **Video Processing Software** provides a suite of functions that are key in a wide variety of ISR applications. SightLine software provides tailorable, powerful solutions.

*See the Video Processing Software sheet for more information about image processing functions.*

## Specifications

| Criteria   | 1500-OEM  | 3000-OEM  | 4000-OEM   |
|--|---|---|--|
| Processor  | Texas Instruments DM3730  | Texas Instruments DM8148 and Texas Instruments C6657  | Qualcomm Snapdragon 820  |
| Multi-camera   | Switching between inputs  | Dual Processing with multi-camera display options: picture in picture, 2-up, blending, and switching  | Switching between inputs (initial production release)  |
| Digital Video Inputs   | 1   | 2   | 3  |
| Digital Input - Cameras Supported See <a href="#">Camera Compatibility</a> | HDMI, Sony block cameras, Global shutter blocks, Camera Link, FLIR LWIR/MWIR, DRS Tamarisk  | 1500-OEM cameras + HDSDI + IP video decoded from SightLine encoded                                    | 3000-OEM cameras + MIPI + USB-3  |
| Analog Inputs (NTSC/PAL)   | 2   | 3 (using dual analog adapter boards)  | 1 (using analog adaptor board) + 1 using MIPI adaptor  |
| Frame size and rate out  | SD @ 30fps<br>720p @ 15-30 fps dependent on SW configuration  | 1080p @30 fps + SD @ 30 fps<br>2 x 720p @ 30 fps  | 1080p @30 fps with full SW<br>4K @30 fps with encoding only<br>4K @ 15-30 fps other SW functions |
| Serial Ports Available   | 3 (@3.3V)   | 5 (@3.3V)   | 5 (@3.3V) + 3 with MIPI adapter  |
| Additional IO  | I <sup>2</sup> C (1), GPIO (3+)   | I <sup>2</sup> C (3), GPIO (4+)   | GPIO (4) + 2 with MIPI adapter   |
| Ethernet Interface   | 10/100 BASE-T Ethernet PHY. UDP, TCP, and RTSP connectivity, unicast, multicast. 1500-OEM and 3000-OEM with capacitive coupling   |   | Same Ethernet interfaces as 1500 and 3000, but with magnetic coupling                            |
| Encoded Video output with KLV  | H.264/MPEG4/M-JPEG encoding, MPEG2 TS/RTP encapsulation<br>KLV to MISB standards 0102.10, 0601.7, 0603.2, 0604.3, and 0903.3  |   | Same encoding and KLV as 1500 and 3000, plus H.265 encoding                                      |
| Analog Output  | Yes   | Yes   | No   |
| HDSDI Output   | No  | Yes   | No (future SDI out board possible)   |
| HDMI Output  | No  | Yes   | Yes  |
| Recording  | Micro SD. Class 10 SDHC cards up to 400 GB  | Interface for external Micro SD card<br>Class 10 SDHC cards up to 400 GB                              | Micro SD. Class 10 SDHC cards up to 400 GB   |
| Voltage In / Power consumption   | 4.5 - 6.5 VDC OEM (5 VDC nom)<br>Some adapter boards = 6.0 V max<br>3 W (max) 2.5W (typical)  | 8 - 15 VDC (12 VDC nom)<br>10 W (typical – full DSP Operation)<br>6 W (typical – 8148 only) Rev C-OEM | 8 - 15 VDC (12 VDC nom)<br>5 W (startup current 3A, TBD ms)                                      |
| Size   | 1.04 x 1.48 inches (26.5 x 37.7 mm)<br>0.27 ounces (7.6 grams)  | 3.47 x 1.97 inches (88 x 50 mm)<br>1.4 ounces (39 grams)  | 2.0 x 1.5 inches (50.5 x 38mm)<br>0.45 ounces (13 grams)   |
| Environment - Temperature  | Temp: Demonstrated with basic delivered heatsink: -40°C to + 55°C<br>Temp Components: -40°C to + 85°C   |   | Expected: -20°C to + 55°C with delivered passive heatsink. Heater circuit provided for -40°C     |
| Environment – EMI  | Mil Std 461 and CE confirmed as part of customer assembly   |   |  |
| Environment – Shock Vibe   | Mil Std 810 qualification confirmed as part of customer assembly  |   |  |
| Fabrication Quality Assurance  | Boards are assembled to IPC-A-610 Class2 specifications by facility certified to ISO 9001 and AS 9100 standards and using ROHS Directive 2011/65/EU compliant materials and processes |   |  |