

Press Release - for immediate release

27th September 2022 | 1/3

Optomotive unveils two new product series at VISION 2022

Introducing LOM 3D smart sensor series and SMILODON 10G EVO FPGA-based high-speed smart camera family



3D Smart Sensor LOM



SMILODON high-speed smart camera

Ljubljana, 27th September 2022. Optomotive, manufacturer of cutting-edge, high-performance cameras and 3D smart sensors announces to introduce two brand-new product series during VISION 2022 from 4-6 October in Stuttgart.

Following the great interest in the prototype the company disclosed during VISION last year Optomotive at VISION 2022 will present the completely engineered 3D high speed smart sensor series LOM. LOM sensor series consists of highly customizable and user-programmable high-speed laser triangulation sensors based on Optomotive's FPGA camera technology. The series is designed for high performance inspection and can achieve inspection rates up to 10kHz. Excellent data of shiny and other challenging surfaces is generated by optimized optical design, in-camera PEAK Detection and blue laser light.

It includes high-performance ARM system-on-chip (SoC) technology, combined with a turbocharged industrial AMS imaging sensor and top-quality laser line projector. In-Camera PEAK Detection IP core processes images to produce profiles in 8-bit subpixel resolution.

The second new product family to be introduced at VISION 2022 is Smilodon, a highly customizable and user-programmable FPGA-based high-speed smart camera featuring a Xilinx Zynq FPGA. It includes high-performance ARM System-on-Chip (SoC) technology, combined with high-speed industrial Gpixel imaging sensors available from 5 to 25 MP and a 1 or 10 Gigabit Ethernet interface. Targeted for applications in laser triangulation; motion capture; industrial process automation and industrial quality control Smilodon 10G EVO includes full customizable and user-programmable open-reference design for a high-speed FPGA-based camera and application development system. A suite of versatile and high-performance tools for Xilinx Zynq Ultrascale+ SoC FPGA is used to develop algorithms and process data in real-time.

With two brand-new product lines in the portfolio the upcoming VISION is a special occasion to touch base with the vision-tech audience. “We are excited to present our brand-new products live in Stuttgart and invite all interested visitors to learn more about their capabilities at our booth G10 in hall 10”, confirms the Optomotive CEO Tomaz Puh.

Main Specifications LOM 3D Smart Sensor Series:

Model	w	LOM025	LOM100	LOM125	LOM220
Data points / Profile		2048	2048	2048	2048
T angle [°]		35	21	25	19
RESOLUTION X [µm]	near	11	28	50	80
	mid	13	36	62	110
	far	14	50	80	160
RESOLUTION Z [µm]	near	1,5	6	9	18
	mid	1,9	9	14	32
	far	2,3	18	26	77
Field of View [mm]	X near	23	57	102	163
	X mid	25	73	126	219
	X far	28	102	164	332
	Z	21	107	162	400
Working distance		56	98	173	310
Measurement Range (mm)		21	107	162	400
Laser		Blue	Blue	Blue	Blue

Main Specifications SMILODON Smart Camera Family:

SMILODON 10G EVO				
Resolution	5.0 MP	9.0 MP	18.0 MP	25.0 MP
Active Pixels (HxV)	2600 x 2160	4200 x 2160	4508 x 4096	5120 x 5120
Frame Rate	290 FPS	290 FPS	139 FPS	150 FPS
Sensor Format	1/2"CMOS	2/3"CMOS	1"CMOS	1.1"CMOS
Pixel Size	2.5 µm	2.5 µm	2.5 µm	2.5 µm
Sensor: Gpixel Sensor	GMAX2505	GMAX2509	GMAX2518	GMAX0505
Interface	1 or 10 Gigabit Ethernet SFP+ for fast data transmission			
Programmable and Reconfigurable FPGA	Xilinx Zynq Ultrascale+ Kria K26			

About Optomotive

Optomotive designs and manufactures cutting-edge, high-performance cameras and 3D smart sensors based on FPGA technology. The fully programmable FPGAs offer massive computational power enabling image pre-processing inside the camera which substantially reduces the bandwidth and offer most suitable solutions for growing sensor speeds and resolutions. As such Optomotive is an established and trusted supplier to OEMs and system integrators who need high-speed peak detection, high-speed blob detection, RLE compression and other high-speed machine vision algorithms. In addition, Optomotive provides complete camera and sensor solutions with a standard product line, technical expertise and fully customized solutions. For more information visit the web at <https://optomotive.com>.

Optomotive LTD

Koprska ulica 98
SI-1000 Ljubljana
Slovenija, Europe
Phone +386 (0) 1 429 29 14
info@optomotive.com

Press Contact:

Vision Communications - Andreas Breyer
breyer@vision-communications.eu