

Lanner

AI

Edge Machine Learning Platform

PARTNER BRIEF



Due to the large amount of video data generated from multiple cameras, edge AI machine learning solutions are encountering real-time video performance issues with limitations in space, power, and cost. The solution: offload real-time multi-camera video analytics processing to an Edge Machine Learning Platform.



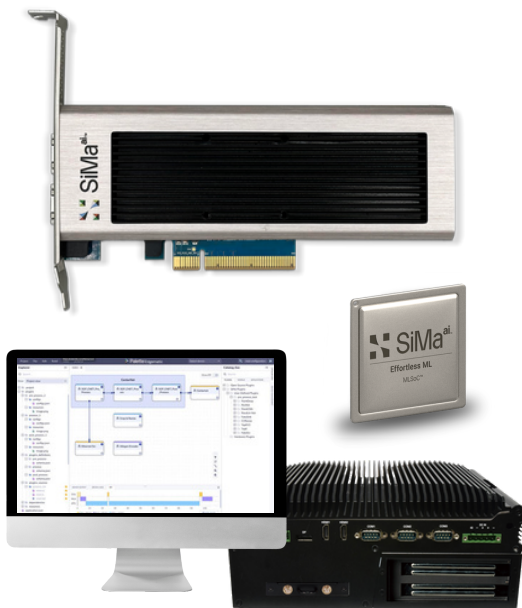
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Lanner collaborates with SiMa.ai to build the Edge Machine Learning Platform, featuring Lanner Edge AI appliances LEC-2290 and EAI-I730, SiMa.ai's **Machine Learning System on a Chip** (MLSoC), and **Palette™ Edgematic** Software Platform.

With pushbutton performance, we enable the most efficient Edge Machine Learning Platform by connecting a higher number of cameras per appliance, processing videos with a higher frame rate per second, and receiving higher resolution camera data.



Machine Learning System on a Chip (MLSoC) PCIe Board

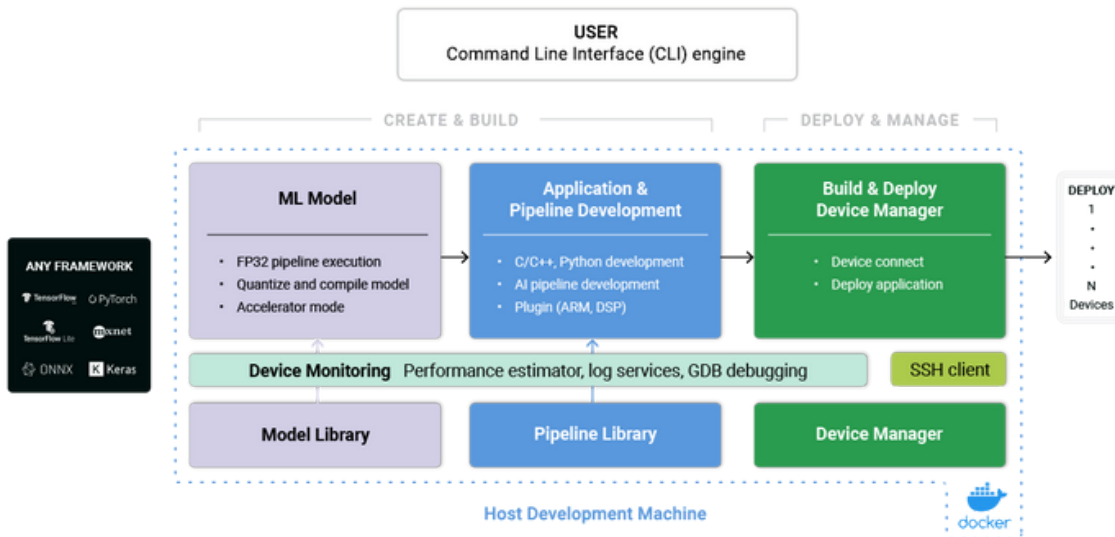
The PCIe half-height, half-length production board is a versatile board that uses the SiMa.ai Machine Learning System on Chip (MLSoC) device.

- PCIe form factor - Half-height, half-length
- Low power board - Typical 10-15W
- Machine learning accelerator (MLA) - up to 50 TOPS
- Application processing unit (APU) – 4x Arm Cortex-A65 processors
- Video encoder/decoder – supports the H.264 compression standards

Palette™ Edgematic Software Platform

SiMa.ai's Palette™ software platform is designed for complete ML stack application development. The platform supports any ML workflow customers plan to deploy on the edge without compromising on performance and ease of use.

Palette Edgematic provides a graphical drag-and-drop approach to prototyping computer vision pipelines in minutes. Both Palette tools enable a pushbutton build methodology to eliminate the need for low-level hand coding in edge ML solutions



- **Create** a complete ML workflow with optimized DNN models, libraries and application logic.
- **Build** integrated applications that are seamlessly compiled to the MLSoC's compute engines.
- **Deploy** and easily manage application packages on the SiMa.ai MLSoC using the Palette's Device Manager.
- **Debug** sessions, generate logs and profile applications in real-time.



LEC-2290

- Intel® Core™ i7/i9 & Intel® Xeon® E-2278GEL
- 2x RJ45, 4x PoE, 4x USB, 6x COM, 8x DIO
- 2x Removable HDD/SSD Drive
- 1x PCIe*16, 1x PCIe*4, 1x Mini-PCIe, 1x M.2



EAI-I730

- 12th Gen Intel Core i9/i7 Processor
- 4x Removable 2.5" HDD/SSD
- 2x PCIe x4, 2x PCIe x16 slots
- 3x LAN, 2x COM, 4x DIO, 8x USB, DP, HDMI