



Lattice Expands mVision Solutions Stack Capabilities

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Latest Release Supports State-of-the-Art Image Sensors for Industrial, Automotive, and Medical Applications

- Stack Offers New Image Sensor Modules and Image Signal Processing (ISP) Solutions
- Supports Lattice Propel Design Environment and RISC-V CPU Co-processing

HILLSBORO, Ore.--(BUSINESS WIRE)--Mar. 1, 2021-- [Lattice Semiconductor Corporation](https://www.businesswire.com/news/home/20210301005142/en/) (NASDAQ: LSCC), the low power programmable leader, launched the latest version of its award-winning solutions stack for low power embedded vision systems, Lattice mVision™ 2.0. The new version features multiple updates that further accelerate the design of embedded vision applications for industrial, automotive, medical, and smart consumer systems. It includes support for popular new image sensors used in industrial and automotive systems and a new image signal processing IP core and reference design to help developers design smart vision applications at the Edge. The stack also includes support for the Lattice Propel™ design environment to simplify development of vision systems with an embedded RISC-V processor.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20210301005142/en/>

mVISION



The Lattice mVision solutions stack is a comprehensive collection of modular hardware platforms, IP building blocks, easy-to-use FPGA design tools, reference designs, and custom design services that simplify and accelerate the development of embedded vision systems. (Graphic: Business Wire)

their mVision solutions stack, and we're pleased to partner with Lattice to provide optimized ISP solutions to the industry."

"Lattice solutions stacks make it easier for customers to adopt emerging technologies by providing a comprehensive collection of ready-to-use software, IP, hardware demos, and reference designs that help them quickly deploy applications like embedded vision in current and future product designs," said Mark Hoopes, Director of Industrial Segment Marketing, Lattice Semiconductor. "The updates announced today expand the potential use cases for mVision by broadening support for popular image sensors used in industrial and automotive markets, simplifying hardware and software design with our drag-and-drop Propel design environment, and adding development boards and reference designs powered by our flagship FPGA for embedded vision, CrossLink-NX."

Key updates to the Lattice mVision solutions stack include:

- Expanded support for automotive, industrial, and medical embedded vision applications – Lattice added new development boards supporting popular image sensors for industrial and medical applications to the mVision stack. Image sensors supported include the Sony IMX464 and IMX568 and the AR0344CS from ON Semiconductor.

The COVID-19 pandemic and the drive to improve safety and efficiency is accelerating the need for industrial companies to incorporate smart embedded vision technology in their systems to support human presence detection, touchless HMI, and enhanced AR/VR capabilities, while simultaneously striving to improve manufacturing quality and throughput by leveraging intelligent machine vision technology. According to Allied Market Research, "the global machine vision system market size was valued at \$29.7 billion in 2019, and is projected to reach \$74.9 billion by 2027, registering a CAGR of 11.3% from 2020 to 2027."¹

"Lattice CrossLink-NX devices with integrated hard MIPI support and low power consumption are ideal for camera applications operating at the Edge. Using CrossLink-NX with an embedded RISC-V processor enables a more compact and efficient ISP implementation," said Arndt Bussman, CTO at Helion. "We applaud Lattice for its ongoing work to enhance

- Support for Lattice Propel Design Environment – Propel is a design environment for accelerating embedded processor-based development on low power, small form factor Lattice FPGAs. The tool includes a complete set of graphical and command-line tools to create, analyze, compile, and debug both the hardware design of an FPGA-based processor system, and the software design for that processor system.
- New Lattice ISP reference design - Expands Lattice's mVision solution options for customers, enabling increased adoption while demonstrating our commitment to our customers.

For more information about the Lattice products mentioned above, please visit:

- www.latticesemi.com/mVision
- www.latticesemi.com/CrossLink-NX
- www.latticesemi.com/Propel

About Lattice Semiconductor

Lattice Semiconductor (NASDAQ: LSCC) is the low power programmable leader. We solve customer problems across the network, from the Edge to the Cloud, in the growing communications, computing, industrial, automotive, and consumer markets. Our technology, long-standing relationships, and commitment to world-class support lets our customers quickly and easily unleash their innovation to create a smart, secure and connected world.

For more information about Lattice, please visit www.latticesemi.com. You can also follow us via [LinkedIn](#), [Twitter](#), [Facebook](#), [YouTube](#), [WeChat](#), [Weibo](#) or [Youku](#).

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¹ <https://www.alliedmarketresearch.com/machine-vision-system-market#:~:text=Machine%20Vision%20System%20Market%20Outlook,11.3%25%20from%202020%20to%202027>.

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MEDIA CONTACT:

Bob Nelson
Lattice Semiconductor
408-826-6339
Bob.Nelson@latticesemi.com

INVESTOR CONTACT:

Rick Muscha
Lattice Semiconductor
408-826-6000
Rick.Muscha@latticesemi.com

Source: Lattice Semiconductor Corporation