



Lattice Extends its Control FPGA Leadership with Introduction of MachXO5-NX Family

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HILLSBORO, Ore.--(BUSINESS WIRE)--May 31, 2022-- [Lattice Semiconductor](#) (NASDAQ: LSCC), the low power programmable leader, today extended its long-standing leadership in control FPGAs with the introduction of Lattice MachXO5™-NX family, the fifth device built on the award-winning Lattice Nexus™ platform. MachXO5-NX FPGAs enable the latest generation of secure control through increased logic and memory resources, robust 3.3 V I/O support, and a differentiated security feature set. Designed to enhance system monitoring and control in Server Compute, Communications, Industrial, and Automotive markets, MachXO5-NX FPGAs offer class-leading power efficiency and reliability.

"Fast-growing demands for secure system monitoring and reliability require additional control system capabilities. Our customers are looking for innovative solutions to meet these demands while increasing design efficiency and simplifying system integration," said Gordon Hands, Senior Director of Product Marketing, Lattice Semiconductor. "To help our customers to get to market fast, MachXO5-NX FPGAs provide the right combination of advanced features, security, power efficiency, and reliability to meet their evolving needs."

Lattice MachXO5-NX FPGAs deliver:

- **Increased logic and memory resources**

- MachXO5-NX FPGAs combine a 25k logic cell capacity FPGA fabric with 1.9 Mb of embedded memory reducing the design footprint by minimizing the need for external memory. The devices also offer up to 9.2 Mb of dedicated user flash memory to store mission-critical data and parameters.
- Integrated flash memory enables a single chip solution with instant-on operation and reliable in-field updates supporting multiple configuration images.
- MachXO5-NX FPGAs offer greater compute and control capabilities with added DSP and ADC blocks.

- **Robust programmable I/O**

- MachXO5-NX FPGAs address challenges of modern CPUs and SoCs lacking robust 3.3 V I/O signaling support required to communicate with many other devices in system. The devices feature up to 300 general purpose I/O (80 percent supporting 3.3 V signaling) that support early I/O configuration and provides added features such as 1.25 Gbps SGMII, default pull-down, hot socketing, and programmable slew rate for simplified board design.

- **Class-leading Security**

- On-chip multi-boot with bitstream encryption (AES256) and authentication (ECC256).
- Run-time security capabilities not currently available in competitive FPGAs of a similar class.

- **Leadership power efficiency and reliability**

- Built on Lattice Nexus platform, the devices deliver up to 70 percent lower power than competing FPGAs of a similar class offering simplified thermal management and reduced total system operating cost.
- Leveraging FD-SOI manufacturing process, the devices provide up to 100 times lower soft error rate with improved system reliability than competing FPGAs of a similar class.

MachXO5-NX FPGAs are sampling today and are supported by latest release of Lattice Radiant® 3.1.1 design software.

For more information about the technologies mentioned above, please visit:

- [Lattice MachXO5-NX](#)
- [Lattice Nexus Platform](#)
- [Lattice Radiant Software](#)

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 let 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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