



Lattice FPGAs with High I/O Density Bring Low Power Signal Bridging and Interface Management to Edge Devices

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New Lattice MachXO2ZE FPGA Options Deliver High Density I/O Support at Small Size, Low Power to Enable Smart Consumer and Industrial IoT Edge Devices

HILLSBORO, Ore.--(BUSINESS WIRE)--Feb. 10, 2021-- [Lattice Semiconductor Corporation](#) (NASDAQ: LSCC), the low power programmable leader, today announced new versions of the Lattice MachXO2ZE™ FPGA family with wafer level chip-scale packaging (WLCSP) and increased I/O density. With package sizes as small as 2.5 x 2.5 mm, standby power levels as low as 22 µW, and up to 63 general-purpose I/Os (GPIO), MachXO2ZE FPGAs are a compelling hardware platform for signal bridging and/or interface applications in smart consumer and industrial IoT devices operating at the network Edge.

According to Glenn O'Donnell, Vice President and Research Director at Forrester Research, "In 2020, the COVID-19 pandemic produced few net-new technology and business developments, but it certainly accelerated many technology trends already in motion. Edge computing is one of the most notable among these accelerated technologies."¹

"Most Edge computing applications require sensor data to enable their users' connected experiences, be it a microphone in a smart speaker capturing a voice command or a hand-held RFID scanner scanning a barcode in a warehouse," said Peiju Chiang, Product Marketing Manager at Lattice.

"Devices like these often have unique form factors or operate on batteries, so the device's internal components must be as small and power-efficient as possible. Our MachXO2ZE devices can connect a range of sensors and other peripherals commonly used in Edge devices with minimal impact on power and overall device size."

These new Lattice MachXO2ZE variants combine a low-power, small form factor FPGA fabric with Embedded Block RAM (EBR), Distributed RAM, and User Flash Memory (UFM) blocks developers can use to implement a variety of functions in high-volume Edge devices. Other capabilities such as robust I/O support (1.2 to 3.3V), low-voltage differential signaling (LVDS), and integrated phase lock loops (PLLs) further broaden the scope of applications these devices can support.

Two new MachXO2ZE devices are available in the WLCSP packaging, offering 1,200 and 4,000 LUTs in either a 2.5 x 2.5 mm (28 GPIO) or a 3.8 x 3.8 mm (63 GPIO) sized package.

For More Information

To learn more information, please visit:

- www.latticesemi.com/MachXO2

Lattice is a long-standing leader in low power programmable logic for signal bridging, interface management, and secure system control. Mach FPGAs have an attach rate of over 80 percent on current shipping server platforms, and are used in a range of communications/compute, industrial, automotive, and consumer applications.

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://go.forrester.com/blogs/predictions-2021-edge-computing-hits-an-inflection-point/>

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