



Lattice Introduces Advanced 3D Sensor Fusion Reference Design for Autonomous Applications

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HILLSBORO, Ore.--(BUSINESS WIRE)--May 22, 2024-- [Lattice Semiconductor](#) (NASDAQ: LSCC), the low power programmable leader, today announced a new 3D sensor fusion reference design to accelerate advanced autonomous application development. Combining a low power, low latency, deterministic Lattice Avant™-E FPGA with [Lumotive's](#) Light Control Metasurface (LCM™) programmable optical beamforming technology, the reference design enables enhanced perception, robust reliability, and simplified autonomous decision making in complex environments including Industrial robotics, Automotive, and Smart City Infrastructure.

"How we perceive and develop Automotive, robotics, and factory automation is constantly evolving as the industry is shifting rapidly with autonomous technology," said Matt Dobrodziej, Corporate Vice President of Segment Marketing and Business Development at Lattice Semiconductor. "Lattice's low power, low latency FPGA solutions are ideal for this transformation by addressing computational challenges at the edge. And, when paired with advanced 3D sensing technologies, Lattice's sensor fusion solutions enable even more ways for our customers to design cutting-edge applications that redefine mobility and safety."

Key features of the new sensor fusion reference design include:

- Class-leading perception utilizing low power edge AI inferencing based on Lattice FPGA solutions enabling sensor fusion processing and synchronization for all sensors, combining LiDAR, radar, and camera sensors.
- Advanced solid-state LiDAR with beam steering powered by Lumotive's LCM technology, delivering superior 3D sensing.

"Lumotive's LCM beam steering chips with AI-driven scanning capabilities transform solid-state LiDAR to reach new levels of performance and flexibility in a compact, modular, and scalable 3D sensing solution," added Dr. Kevin Camera, Vice President of Product at Lumotive. "Lattice FPGAs, capable of performing complex sensor fusion efficiently with absolute minimum latency, amplify these strengths to deliver autonomous applications which can intelligently adapt to any use case and situation."

See Live Demonstrations at Embedded Vision Summit 2024

The new 3D sensor fusion reference design will be demonstrated at [Embedded Vision Summit 2024](#) from May 22-23, 2024, in Santa Clara, California. Visit Lattice's exhibit at Booth #418 to experience the innovative low power FPGA solutions enabling Industrial, Automotive, and Security applications at the Edge.

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](#), or [Weibo](#).

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