



Lattice Semiconductor Delivers Flexible Connectivity for Industrial Vision Applications With New CrossLink Reference Design

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New SubLVDS to MIPI CSI-2 Image Sensor Bridge reference design helps machine vision and robotics applications leverage advanced application processors

HILLSBORO, Ore.--(BUSINESS WIRE)--Jul. 16, 2019-- [Lattice Semiconductor Corporation](#) (NASDAQ: LSCC), the low power programmable leader, today announced the availability of the latest in a series of new reference designs featuring the Lattice CrossLink™ FPGA for video bridging applications. The SubLVDS to MIPI CSI-2 Image Sensor Bridge reference design provides industrial device customers with a flexible, easy-to-implement solution for connecting advanced application processors (APs) with many of the image sensors currently used in today's machine vision applications for industrial environments.

Many industrial machine vision applications use image sensors with SubLVDS interface, which is incompatible with the MIPI CSI-2 D-PHY interface used on today's APs. However, many industrial device OEMs want to implement these APs in existing machine vision-capable products. The Lattice SubLVDS to MIPI CSI-2 Image Sensor Bridge reference design lets customers quickly and easily create a bridging solution so an AP with a MIPI CSI-2 interface can connect with a SubLVDS image sensor.

"In industrial environments, customers are interested in upgrading legacy machine vision applications to take advantage of the processing capabilities and feature sets of new APs," said Peiju Chiang, Product Marketing Manager, Lattice Semiconductor. "Rather than devote precious time and engineering resources on an extensive device redesign, the Lattice CrossLink SubLVDS to MIPI CSI-2 Image Sensor Bridge reference design provides a simple workaround that addresses legacy interface compatibility issues to get redesigned products to market quickly and cost effectively."

The Lattice SubLVDS to MIPI CSI-2 Image Sensor Bridge reference design is free and is provided to demonstrate the use of Lattice's popular CrossLink modular IPs, including the Pixel-to-Byte Converter, SubLVDS Image Sensor Receiver and a CSI-2/DSI D-PHY Transmitter. Lattice also provides a complete, easy to use GUI-based FPGA design and verification software environment, Diamond® design software, to simplify and accelerate device development.

Other key features include:

- 4, 6, 8, or 10 lane SubLVDS input to 1, 2, or 4 lane MIPI CSI-2 output
- Up to 1.2 Gbps bandwidth per input lane
- Up to 1.5 Gbps bandwidth per output lane
- Dynamic parameter setting via I²C
- Optional support for image cropping

More information about the new CrossLink SubLVDS to MIPI CSI-2 Image Sensor Bridge reference design is available [here](#).

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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Source: Lattice Semiconductor Corporation

MEDIA CONTACTS:

Doug Hunter

Lattice Semiconductor

503-268-8512

Doug.Hunter@latticesemi.com

INVESTOR CONTACT:

David Pasquale

Global IR Partners

914-337-8801

lscc@globalirpartners.com