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TALK TO US

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AMD Allies with Ranovus on Data Center Photonics

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SiC adoption has been relatively slow but it is starting to take off, said Rob Weber, product line director, Silicon Carbide Solutions, Microchip Technology. Customers have a lot of excitement about it but also a lot of concerns, he added.

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The new 36-V, 3-A LMQ66430 and LMQ66430-Q1 buck converters are designed to lower electromagnetic inductance (EMI) in automotive and industrial applications while improving filter size. The devices integrate two input bypass capacitors and one boot capacitor. This enables engineers to meet Comité International Spécial des Perturbations Radioélectriques (CISPR) 25 Class 5 EMI standards while claiming a best-in-class total solution size of of 114 mm2, 1.5-µA quiescent current (IQ), and reduced bill-of-materials costs.

ASML Warns Chip Shortages to Continue Over Next Two Years

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"Of course, we at Zeiss are also affected by the shortage of semiconductors and price increases for components in the photo sector," a Zeiss representative told Amateur Photographer.

"They need to make significantly more lenses," ASML chief executive Peter Wennink told Financial Times. But as Wennink explained, that requires them to "build clean rooms; they need to start asking for permits; they need to start organizing the building of a new factory.

AMD-Xilinx Debuts First Versal PCIe Accelerator Card

AMD had just barely announced the completion of its acquisition of FPGA maker Xilinx when the entrance sign to the south San Jose Xilinx campus on Union Street (which was once a popular 9-hole golf course) flipped over to display the new owner's corporate name and logo. Now, a week later, AMD-Xilinx has announced its first Data Center Accelerator Card based on a member of the Versal ACAP (adaptive compute acceleration platform) AI Core Series. (ACAP is the name AMD-Xilinx uses to designate its newest line of SoCs based on FPGA technology.)

The new card, dubbed the Xilinx VCK5000, looks like your typical FPGA-based PCIe accelerator card designed to boost the performance of key applications being run in servers and data centers. These key applications include AI and ML (machine learning) applications in addition to many other varied tasks such as genomics, drug discovery, data analytics, and video transcoding. Of course, Nvidia is the 800-pound gorilla in this space and the performance benchmarks that AMD-Xilinx is using are aimed straight at that competitor.

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The long story is… longer. Ranovus and AMD have not only shown that their own technologies work, but their demonstration is additional early proof that co-packaged optics (that's the "CPO" in the description of Odin) is a successfully formulated concept.