



Skyworks' Timing Solutions Meet Next-Generation PCIe Requirements

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Si5332 Clock Family Supports Industry Transition to PCIe 6.0

IRVINE, Calif.--(BUSINESS WIRE)--Dec. 15, 2022-- Skyworks Solutions, Inc. (Nasdaq: SWKS), today announced the evolution of its Si5332 family of high-performance clock generators, supporting the industry transition to PCI Express Generation 6 (PCIe 6.0). According to PCI-SIG, new applications including artificial intelligence, machine learning and edge computing are driving the need for higher performance and increased bandwidth interconnects for compute, switching and storage platforms in data centers¹. The Si5332 product family from Skyworks supports PCIe 6.0 while maintaining backwards compatibility with older PCIe standards.

"PCIe 6.0 is the future of the data center, and Skyworks is helping IC suppliers design with confidence when they make the transition to the latest PCIe standard," said James Wilson, vice president and general manager of timing products at Skyworks. "Drawing from our decades of expertise in providing high-performance, low-jitter timing solutions for high-speed serial interconnect applications, we have qualified our Si5332 family to provide reference timing for the newest PCIe 6.0 applications."

PCIe 6.0 increases data rates to 64GT/s and enables bandwidths as high as 256Gbps, effectively doubling the performance of PCIe 5.0. This latest upgrade to the PCIe standard ensures the high-speed interconnects used in data center applications do not become a bottleneck and complements the industry's transition to 400G and 800G Ethernet. Unlike prior generations of the PCIe standard that used NRZ signalling, PCIe 6.0 uses PAM4 modulation to combine two bits into a single symbol with four amplitude levels. This approach doubles the transfer speed but degrades the eye diagram by replacing a single, large data eye with three smaller data eyes. Using a low jitter PCIe reference clock maximizes the PAM4 data eye opening and minimizes bit-error rate, which is necessary for faster transfer speeds.

The Si5332's any-frequency clock synthesis, low jitter operation and support for PCIe 6.0 makes it ideally suited to replace fixed function oscillators, clocks and buffers with a single IC. The device features Skyworks proprietary MultiSynth™ fractional divider technology, which provides any-frequency synthesis and excellent jitter performance. The Si5332 is available in 6, 8 and 12-output options, with support for integrated format/level translation, LVPECL, LVDS, HCSL and LVCMOS, and 1.8-3.3V VDDO operation. When combined with support for PCIe 6.0, the Si5332 is well suited to operate as a data center clock-tree-on-a-chip, replacing multiple timing components with a highly integrated, high-performance solution. Device samples are available now.

In addition to this Si5332 product announcement, Skyworks is pleased to announce PCIe 6.0 support in its [PCIe Jitter Tool](#). Long regarded as the industry standard for measuring PCIe clocks and evaluating compliance to PCIe jitter specs, the PCIe Jitter Tool now allows users to take accurate jitter measurements on PCIe 6.0 reference clocks.

Skyworks will be exhibiting at the Consumer Electronics Show Booth No. 10850, taking place in Las Vegas from Jan. 5-8, 2023.

About Skyworks

Skyworks Solutions, Inc. is empowering the wireless networking revolution. Our highly innovative analog and mixed signal semiconductors are connecting people, places and things spanning a number of new and previously unimagined applications within the aerospace, automotive, broadband, cellular infrastructure, connected home, defense, entertainment and gaming, industrial, military, smartphone, tablet and wearable markets.

Skyworks is a global company with engineering, marketing, operations, sales and support facilities located throughout Asia, Europe and North America and is a member of the S&P 500® (Nasdaq: SWKS). For more information, please visit Skyworks' website at: www.skyworksinc.com.

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Any forward-looking statements contained in this press release are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. Forward-looking statements include without limitation information relating to future events, results and expectations of Skyworks. Forward-looking statements can often be identified by words such as "anticipates," "expects," "forecasts," "intends," "believes," "plans," "may," "will" or "continue," and similar expressions and variations or negatives of these words. Actual events and/or results may differ materially and adversely from such forward-looking statements as a result of certain risks and uncertainties including, but not limited to, our ability to timely and accurately predict market requirements and evolving industry standards and to identify opportunities in new markets; our ability to develop, manufacture, and market innovative products and avoid product obsolescence; our ability to compete in the marketplace and achieve market acceptance of our products; delays in the standardization or commercial deployment of 5G technologies; the availability and pricing of third-party semiconductor foundry, assembly and test capacity, raw materials and supplier components; the quality of our products; our products' ability to perform under stringent operating conditions; and other risks and uncertainties identified in the "Risk Factors" section of Skyworks' most recent Annual Report on Form 10-K (and/or Quarterly Report on Form 10-Q) as filed with the Securities and Exchange Commission ("SEC"). Copies of Skyworks' SEC filings can be obtained, free of charge, on Skyworks' website (www.skyworksinc.com) or at the SEC's website (www.sec.gov). Any forward-looking statements contained in this press release are made only as of the date hereof, and we undertake no obligation to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

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¹ [PCIe® 6.0 Specification: The Interconnect for I/O Needs of the Future](#), June 4, 2020

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