

# FOR IMMEDIATE RELEASE

SerialTek Contact: Simon Thomas, Director, Sales and Marketing Phone: +1-720-204-2140 Email: simon@serialtek.com

# SerialTek Introduces Advanced PCIe<sup>®</sup> / NVMe<sup>™</sup> Gen4 Interposers for AIC, M.2, U.2 and U.3

# Company's Calibration-Free SI-Fi™ Technology Eliminates Technical Roadblocks

Longmont, CO, USA — May 8, 2019 — SerialTek, a leading provider of protocol test solutions for PCI Express<sup>®</sup> (PCIe), NVM Express<sup>®</sup> (NVMe), Serial Attached SCSI (SAS), and Serial ATA (SATA), today introduced a major advancement in the PCIe/NVMe test and analysis market with the debut of its SI-Fi line of interposers. Coupled with the recently announced Kodiak<sup>™</sup> PCIe/NVMe Gen4 Analysis System, SerialTek's SI-Fi interposers uniquely solve complex issues relating to signal quality and system transparency, and eliminate the need for cumbersome, time-intensive calibration and tuning routines. Interposers are specially designed test adapters, or probes, that are electrically and physically placed between components of a communications system to intercept and relay high-speed signaling and discrete data lines for analysis purposes.

"Driven by the need for ever-faster data transfers, PCI Express signaling has become exceptionally complex in design and difficult to monitor unobtrusively. Signal conditioning methods used for PCIe Gen1 and Gen2 now seem primitive compared to the complex approaches used for PCIe Gen3 and Gen4. Further challenges are presented by NVMe, which adds critical requirements like hot-plug and NVM Subsystem Reset (NSSR), where the PCIe signals are renegotiated," said Paul Mutschler, CEO of SerialTek. "Our SI-Fi technology directly meets and overcomes these challenges and gives our customers the features and capabilities they need to do their work efficiently."

## Transparency in Probe's Design is Key

With SerialTek's proprietary SI-Fi interposer technology, the transmitter threshold and pre-emphasis from one link partner reaches the receiver of the other link partner, so the link can be properly trained to optimum conditions, making the interposer as transparent as possible. At the core of this technology is a highly specialized linear amplifier design where PCIe analog signaling is received at a differential input and distributed to two separate phase-matched differential outputs with a nominal, idealized gain of 0dB. This approach results in easier set up of the analyzer and product under test and avoids a variety of limitations inherent to other probing approaches where link training sequences don't go through the interposer.

#### **No Need for Calibration**

Competing PCIe Gen4 analyzers and interposers require tuning, or calibration, which means they cannot transparently and reliably support modern PCIe link training, since it can now occur dynamically, not just at boot-up. With SI-Fi technology, users can save hours over these legacy approaches. This technology offers high-quality signal integrity, even over changing conditions. This expands and enables coverage in critical test areas, including link training (LTSSM), Power Management, Hot Plug, Reset, and other situations where the physical link/lane characteristics may change.



## **Multiple Form Factor Support**

SI-Fi interposer form factors include AIC (x4), M.2 (x4), U.2 (x4), and U.3 (x4). Additionally, U.2, U.3, single-port (1x4), and dual-port (2x2) analysis can be combined into one interposer unit, providing significant cost savings in enterprise environments where all form factors are required. SI-Fi interposers also support all relevant sidebands, including SMBus (e.g., NVMe-MI) from the host or from external / third-party injection or generation tools.

## Kodiak Platform Complements SI-Fi Technology with an Advanced Processing Architecture

SerialTek's SI-Fi interposers work in conjunction with its recently announced Kodiak PCIe/NVMe Gen4 Analysis System. The Kodiak platform introduces major performance-oriented innovations made possible by an embedded architecture that breaks free from legacy data upload practices in favor of advanced, optimized embedded data processing, fully reimagined by SerialTek engineering from the ground up to handle latest- and future-generation PCIe and NVMe technologies. Interface responsiveness is markedly advanced, searches involving massive amounts of data are fast, and hardware filtering is flexible and powerful. For more information on the Kodiak platform, please visit www.serialtek.com.

# Availability, Product Photos, and Information

SI-Fi interposers are available for immediate purchase, with shipments 6 weeks from order placement. Various configurations are provided to meet a variety of customer price and feature requirements. For more information, including software downloads, contact or visit www.serialtek.com. A high-resolution picture of the product is available at https://www.serialtek.com/services/si-fi-pcie-gen4-interposers/

#### About SerialTek

SerialTek is a provider of innovative protocol test and analysis tools for the data storage industry. Leading storage manufacturers depend on our products to improve product quality and drive time-to-market requirements. SerialTek solutions support a variety of standards, including PCI Express (PCIe), Non-Volatile Memory Express (NVMe), Serial Attached SCSI (SAS), and Serial ATA (SATA).

#### SerialTek, LLC | 1551 S. Sunset St. Suite A | Longmont, CO | 80501

Protocol Test Solutions for Storage and Data Centers

PCI Express® and PCIe® are registered trademarks of PCI-SIG® Corporation. NVM Express®, NVMe™, and NVMe-oF™ are trademarks of NVM Express, Inc. Other trademarks and trade names are those of their respective owners.