eTopus introduces 400G(4x100G) LR IP solution incorporating new FEC & ePHY with combined latency of sub 10ns

SAN JOSE, CALIFORNIA, US, October 19, 2021 /EINPresswire.com/ -- eTopus Technology, a pioneer of ultra-high-speed ADC/DSP-based SerDes for wireline applications is proud to introduce its new 400G Long Range (LR) IP solution incorporating Forward Error Correction (FEC) IP and the eTopus DSP-based production-proven SerDes PHY (ePHY) IP with combined latency of sub 10ns.

eTopus - we accelerate

The solution has been silicon-proven in 6 and 7nm foundry processes and tested with multiple cable companies and is ready for volume production.

> "
>
> The eTopus 400G LR IP solution with their ultra-low latency PHY aligns well with demand from our customers for integrated chiplet solutions ..."
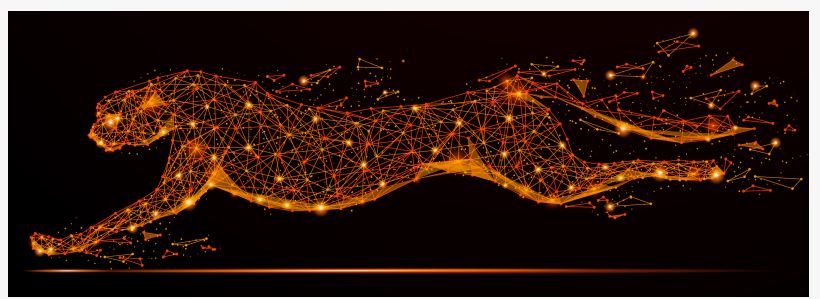>
> *Mohit Gupta, SVP and GM, SoC IP at OpenFive*

The eTopus high-speed transceiver architecture supports a wide range of data rates for multiple standards, such as Ethernet, OIF CEI-112G, PCI-SIG® PCIe® Gen 1 through 6, and insertion loss from few to above 30dB, while maintaining the sub 10ns latency.

"This 400G LR IP ultra-low latency solution is the culmination of many years of effort and in response to tier-1 customer demands. Current solutions for FEC and PHY have combined latency in 100ns range and we are pleased to introduce our silicon-proven sub 10ns solution," said Harry Chan, founder and CEO of eTopus "Now customers developing switches, NIC cards, DPU, re-timers, and active cables can leverage our 400G LR IP solution to slash latency and directly accelerate system performance."

"The eTopus 400G LR IP solution with their ultra-low latency PHY aligns well with demand from our customers for integrated chiplet solutions based on OpenFive's Die-to-Die, Ethernet and

Interlaken Controllers, particularly in High Performance Computing (HPC) and Data Center accelerator applications." said Mohit Gupta, SVP and GM, SoC IP at OpenFive.

eTopus Ultra-high-speed SerDes IP

Key Background Facts
- BER of < 1e-17 is required for data integrity to support customer needs
- For PAM 4 a FEC is mandatory and eTopus solution is a combination of SerDes and FEC IP delivering robust post-FEC BER < 1e-17
- Currently just with standard RS(544, 514) FEC, latency is 100ns range which for access time dependent solutions limits performance
- eTopus ePHY SerDes and Ultra Low Latency FEC IP solution easily meets the performance requirement of post-FEC BER <1e-17

About eTopus Technology Inc.
eTopus is the technology leader in high performance, DSP-based, mixed-signal, ultra-high-speed semiconductor interconnect solutions. Our ultra-high-speed SerDes IP is adopted by global Tier-1 players to be used in networking, storage, 5G, and AI applications. eTopus is a VC-backed startup headquartered in Silicon Valley where our innovations and advanced architectures are developed. Our investors include SK Telecom, HK-X, corporate VCs, and cross-border funds. For more information, please visit etopus.com.

About OpenFive
OpenFive, a SiFive business unit, is focused on custom silicon solutions and differentiated IP. With spec-to-silicon design capabilities, customizable SoC platforms, and differentiated IP for Artificial Intelligence, Cloud/Datacenter, High Performance Computing PC, Networking, and Storage applications, OpenFive is uniquely positioned to deliver highly competitive processor agnostic domain-specific SoCs.

The OpenFive IP portfolio includes High-Bandwidth Memory (HBM3/2E) and low power LPDDR5/4x memory subsystems; Die-to-Die (D2D) interface IP subsystems for heterogeneous multi-die connectivity including chiplets; low-latency, high-throughput Interlaken interface IP for chip-to-chip connectivity; 400/800G Ethernet MAC/PCS subsystems, and USB controller IP.OpenFive offers end-to-end expertise in custom SoC architecture, design implementation, software, silicon validation, and manufacturing to deliver high-quality silicon in advanced nodes down to 5nm. For more information, please visit www.openfive.com.

Company contacts
Kash Johal VP Sales | Tel:+1-408-390-8649 | email: Kash.johal@etopus.com

Kash Johal
eTopus Technology Inc
+1 408-390-8649
email us here
Visit us on social media:
LinkedIn
Facebook
Twitter

This press release can be viewed online at: https://www.einpresswire.com/article/554137793