ZutaCore's HyperCool Liquid Cooling Technology to Support NVIDIA's Advanced H100 and H200 GPUs for Sustainable AI

Company Showcases First Dielectric Cold Plates for H100 and H200 at GTC 2024 in Boston Limited, Hyve Solutions and Pegatron Booths

March 13, 2024, San Jose, CA – ZutaCore®, a leading provider of direct-to-chip, waterless liquid cooling solutions, today announced support for the NVIDIA H100 and H200 Tensor Core GPUs to help data centers maximum AI performance while delivering sustainability. Several leading server manufacturers are engaged with ZutaCore to complete the certification and testing on these GPU platforms. During the GTC 2024 Conference, ZutaCore will be showcasing H100 and H200 waterless dielectric cold plates supporting 1500W and beyond in the Boston Limited, Hyve Solutions, and Pegatron booths.

With the H100's ability to speed up large language models by 30X over the previous generation, and the H200 being touted as the world's most powerful GPU for supercharging AI and HPC workloads, these are two of the highest performing chips ever designed. However, with each GPU consuming 700W of power, this will challenge data centers that are already struggling to control their heat, energy consumption and footprint. ZutaCore's direct-to-chip waterless two-phase liquid cooling technology HyperCool® was designed specifically to solve these problems and has already been proven to cool the most powerful processors of 1,500 watts or more and currently for 100kW per rack of computing power.

"Next-generation GPUs have unique cooling requirements that are most effectively solved by waterless, direct-to-chip liquid cooling technology for current GPU of 1500W while increasing rack-processing density by 300%," said Erez Freibach, Co-founder and CEO at ZutaCore. "Not only do hyperscalers eliminate the risk and massive expense of water leakage in the server, but they can also scale their cooling needs with little to no

modifications to current real estate, power, or cooling systems. This is a game changer for the future of AI and HPC."

The increasing need for sustainable AI solutions highlights the importance of sustainable practices in data centers. ZutaCore's partnership and white-label sales agreement with Mitsubishi Heavy Industries (MHI) dramatically addresses the pressing challenges faced by data centers today, including the enhancement of heat exhaust efficiency, promotion of energy conservation, and decarbonization.

"ZutaCore's HyperCool technology stands as a testament to its ability to efficiently cool even the most demanding processors," said Dev Tyagi, Chief Sales and Marketing Officer at Boston Limited. "As we embrace the dawn of next-generation GPU designs, HyperCool is positioned to be a critical enabler, aligning with our commitment to sustainable AI infrastructure whilst lowering costs in line with energy efficiency."

"As we demonstrated at this past Supercomputing Conference, HyperCool has already proven its ability to cool Pegatron servers running Intel's 4th generation XEON processors," said Andy Lin, Server Product Marketing Manager at Pegatron. "By adding support for the NVIDIA GPU, ZutaCore is now paving the way towards a more sustainable AI future where upcoming AI servers can be deployed in an energy-efficient, cost-effective and reliable way."

"AI is going to require the most high-performing chips and servers with a variety of configurations designed to meet the particular workloads of each customer," said Steve Ichinaga, President, Hyve Solutions Corporation, a wholly owned subsidiary of TD SYNNEX Corporation (NYSE: SNX). "With its ability to cool both CPUs and GPUs, HyperCool will be a critical technology to ensure that data centers can deliver the scalable performance required while continuing to meet or exceed sustainability goals."

The Proven Cooling Power of HyperCool®

Featuring a groundbreaking closed-loop system that operates at low pressure and moves large amounts of heat off the processors and away from the servers, ZutaCore's HyperCool can be implemented in new or existing data centers to deliver 10 times more computing power, a 50% reduction in total cost of ownership, 100% heat reuse, and reduced CO2 emissions for a sustainable data. There is also a growing ecosystem of servers certified to work with HyperCool, including industry powerhouses such as Dell Technologies, ASUS, Pegatron, and SuperMicro.

"Two-phase direct-to-chip liquid cooling technologies have significant advantages, which is why we've already seen growing traction from CPU chip manufacturers," said Peter Rutten, Research VP at IDC. "With the worldwide AI server market expected to reach $49B by 2027, this announcement from ZutaCore supporting next generation GPUs designs is a significant milestone in the industry."

Come See ZutaCore at GTC 2024

ZutaCore technology, including H100 and H200 dielectric cold plates, will be on display in the Boston Limited booth #1621, Pegatron booth #533, and Hyve Solutions booth #1129.

About ZutaCore:

ZutaCore is paving the way for a zero-emission data industry with its next-generation liquid cooling technology that can cool the hottest processors with 100% heat reuse. Its HyperCool technology – a direct-on-chip, waterless, direct liquid cooling solution – enables the highest sustained performance, server densification, and reduced power usage, which is critical for meeting the power demands of today's HPC, AI, and ML workloads. Founded in 2016, ZutaCore is headquartered in San Jose, California, with an R&D center in Israel and offices in Europe, India, and Taiwan. Learn more at www.zutacore.com.

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