

Accelsius Joins ARPA-E COOLERCHIPS Project to Advance Hybrid Cooling Technologies for the Data Center of the Future

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AUSTIN, Texas--(BUSINESS WIRE)--May 22, 2025-- [Accelsius](#), a leader in two-phase, direct-to-chip liquid cooling, has been selected as a key contributor to a U.S. Department of Energy (DOE) ARPA-E COOLERCHIPS project led by Professor Dereje Agonafer, a Presidential Distinguished Professor and Member of the National Academy of Engineering, at The University of Texas at Arlington. The project, "*Holistic Co-Design of Novel Hybrid Cooling Technology for the Data Center of the Future*," will develop a next-generation hybrid architecture that combines direct-to-chip evaporative cooling with air-based solutions such as rear door heat exchangers.

Accelsius will support system-level testing by providing its proprietary MR250, a multi-rack, in-row, 250kW two-phase Coolant Distribution Unit (2P CDU), along with comprehensive integration support. The MR250 will be incorporated into the project's test infrastructure at the UT Arlington campus, with general availability planned for late 2025.

"The addition of Accelsius technology to our lab and project will improve our understanding and benchmarking of two-phase, direct-to-chip cooling as a practical and scalable option for growing rack densities," said Professor Agonafer. "We invite anyone attending the upcoming ITherm event to join us at the lab for an in-person tour and deeper understanding of the project and technologies involved."

The COOLERCHIPS (*Cooling Operations Optimized for Leaps in Energy, Reliability, and Carbon Hyperefficiency for Information Processing Systems*) program aims to transform how high-density data centers are cooled. The goal is to reduce total cooling energy consumption to less than 5% of a data center's IT load—while maintaining reliability and enabling next-generation high-density compute.

"It's great to see leaders like Dereje Agonafer and Richard Bonner working together to shape the future of two-phase cooling technology," said Peter de Bock, program director at ARPA-E. "Accelsius and The University of Texas at Arlington are advancing important work under the COOLERCHIPS program, and I'm excited to see the impact this collaboration will have on US leadership in next-generation data center efficiency."

"It's an exciting opportunity to collaborate with fellow thermal experts from across the industry," said Dr. Richard Bonner, chief technology officer at Accelsius. "This project provides a bigger stage to showcase the meaningful advancements we've made in two-phase cooling and to push the envelope on what's possible for future data center efficiency."

For information on touring the UT Arlington lab during ITherm, please contact: lcruz@accelsius.com

About Accelsius

Founded by Innventure, Inc. (NASDAQ:INV), Accelsius empowers data center and edge operators to achieve their business, financial and sustainability goals through advanced cooling solutions. The proprietary NeuCool platform provides best-in-class thermal efficiencies through a safe, two-phase liquid cooling system that scales from single racks to entire data centers. For more information, visit accelsius.com or follow us on [LinkedIn](#).

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Media Contact

[Treble](#)
McKenzie Covell
accelsius@treblepr.com

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