

LEAK-PROOF & CUSTOMIZABLE COOLING SYSTEM

Chillydne delivers dependable leak-proof direct-to-chip liquid cooling solutions for HPC, AI, Data Centers, Finance, Colocation Service Providers, Hyperscalers, Government, and Academia. Our patented, fail-safe systems use advanced negative pressure technology and smart redundancy to prevent leaks and maximize uptime. Easy to install and maintain, Chillydne's solutions ensure unmatched cooling performance for a sustainable approach to managing your server environment.



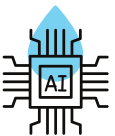
LEAK-PROOF COOLING

Negative pressure system



MADE IN USA

Premium quality



DIRECT-TO-CHIP

Peak thermal performance



ECO-FRIENDLY

Sustainable solutions



FAIL-SAFE DESIGN

Smart redundancy



ENERGY EFFICIENT

Up to 40% savings



EASY TO INSTALL

Easy to maintain



ZERO-DOWNTIME UPGRADES

Maximize uptime

CASE STUDY: SANDIA NATIONAL LABS



Sandia National Labs deployed two supercomputers equipped with Chilldyne's negative pressure liquid cooling system, operational since 2019 with zero leaks.

- Initially ranked #69 and #94 on Top500 Supercomputer List
- 1488 Skylake nodes each
- PUE: 1.016 with thermosyphon facility cooling

This system uses N+1 CDUs and automatic switchover valves to maximize uptime. The cold plates feature fins for backup air cooling.

Source:

<https://www.osti.gov/servlets/purl/1763558>

HOW IT WORKS: SYSTEM ANATOMY

Chilldyne's innovative negative pressure technology creates a vacuum to circulate water by pulling it through the cooling system. This approach removes the need for costly, heavy-duty plumbing to the racks, ensures easy setup and upkeep, and eliminates leaks in a system with no single point of failure.

1) Cooling Distribution Unit (CDU)

The CF-CDU300 cools up to 300kW of servers.

2) Rack Manifold

Delivers coolant to more than 100 servers while installed inside a standard server rack.

3) Cold Plates

Mounted directly to server processors, to remove heat at its source.

4) Cool-Flo Software

Remotely monitor and operate the Chilldyne CDU using a web-based interface, industry-standard protocol, or integration with DCIM and BMS software.

