

COLD PLATE COOLING LOOP REQUIREMENTS

Revision 2

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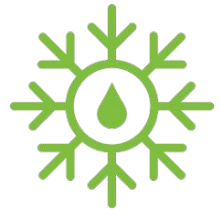
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Revision 2

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Agenda

- History of this requirements document
- What are we working on and why
- Areas covered in the second revision
- Call to action



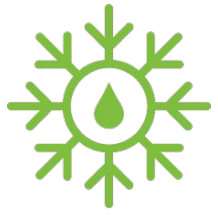
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Background

- First Rack & Power ACS requirements doc
- Revision 1 released in 2019
- Topics covered
 - Cold plates
 - Manifolds
 - CDUs / Pumps
 - Certifications
 - Controls and reporting
 - Leak detection and Intervention

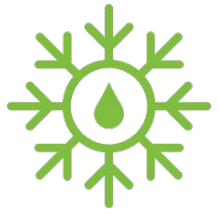


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ACS Liquid Cooling Cold Plate Requirements Document

Revision 1.0

Authors: Jessica Gullbrand (Intel), Nigel Gore & Jason Matteson (Iceotope), Elizabeth Langer (CPC - Colder Products Company)



Why Update?

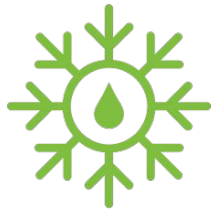
- Many topics in Rev 1 have been covered in depth in other documents.
Removing and referencing:
 - [Leak Detection and Intervention](#)
 - [Integration and Logistics](#)
 - [Universal Quick Disconnect Spec](#)
 - [Universal Quick Disconnect Blind-mate Spec](#)
 - [OAM Module Liquid Cooling](#)
 - [Rear Door Heat Exchanger](#)
 - Blind-mate Liquid Cooling (WIP)
 - Cold Plate Fluid Serviceability (WIP)
- Update to new standard template for Requirements
 - [OCP Immersion Requirements Rev. 2.0 \(opencompute.org\)](https://opencompute.org)



SR 1.1-1 All Specification Requirements shall be met by the solution vendor.

OR 1.1-1 Optional Requirements may be met to enable recognition of special functionality of features.

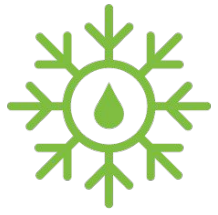
CR 1.1-1 Customer Requirements shall be met by owners, operators, or end users of the solution. Sufficient effort shall be made and demonstrated by the solution vendor to accommodate compliancy.



Areas Covered in Rev 2

- Cooling component selection
 - Liquid Cooling Classifications
 - Cooling Liquid selection
 - Cold plate
 - In-chassis Tubing
 - Rack Manifold
 - QDs
 - CDUs and Hardware Management
 - Product Certifications
- Going from single rack to multiple rack to facility
- Considerations for RDHx / Cold plate systems





Call to Action

- Harmonization - we want to simplify this doc by linking to other whitepapers
- CDUs may be included or may split in to a separate subgroup if there is interest
- Input from other vendors is essential to ensure OCP Accepted or Inspired products meet the minimum level of maturity and interoperability
- Release date Nov 2022





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Questions?

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