

Using FloEFD : Case studies on Networking Devices

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- 1. Introduction on our networking devices.
- 2. FIoEFD benefits
- 3. Setting in the FloEFD
- 4. Post-process



- <u>http://www.arcadyan.com/home.aspx</u>

Our products have particular shapes, and got the various thermal problems.



2. FloEFD benefits

2-1. Easy-to-use CAD embedded Concurrent CFD:



2. FloEFD benefits

2-2. Automatic mesh: set high scale for the important parts or concerned position



2. FloEFD benefits

2-3. Partial cell: the cell between solid and fluid cells.



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- 1. Geometry simplified
- > Simplify the screws, round corner, and complex features.
- 2. General setting:

Analysis type, Default fluid and solid, Initial conditions Boundary conditions.

- 3. Materials, heat sources, radiative surfaces Two-resistor, PCB modules
- 4. Mesh : setting levels, Local initial meshes,

Computationa

5. Goals



3. Setting in the FloEFD



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8

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3. Setting in the FloEFD



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Computational domain

5. Goals

>Looks at goal swing over analysis interval and assigns 0.5% of difference

4. Post-process in the FloEFD



- 1. Visual results
 - Cut Plots
 - Surface Plots
 - Isosurfaces
 - Flow Trajectories
- 2. Numerical Results
 - Particle Studies
 - Point Parameters
 - Surface Parameters
 - > XY Plots
 - ➢ Goal Plots

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Case I



Case II







Thank you.

