

Thermal Engineering

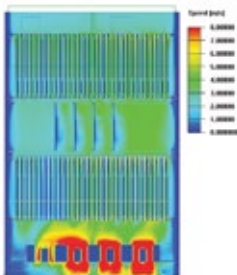
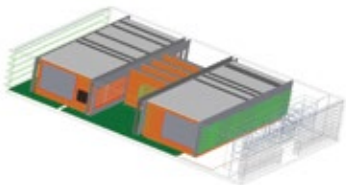
CAPABILITIES:

- Fluid Mechanics
 - Evaluate complex fluid flow
 - Analyze complex effects such as porosity, cavitation, and humidity
- Heat Transfer
- CFD (computational fluid dynamics) analysis
- Analyze Thermal Test Data

TOOLS WE USE:

- ANSYS Icepak
- SolidWorks Flow Simulation
 - Electronics Cooling Module

LUMENIR PROVIDES OUR CLIENTS DETAILED ANALYSIS



An Industry-Leading Engineering Partner

Extensive Thermal Design with:

- Phase-change materials
- Heat pipes
- Water cooling
- Oil cooling
- High power density
- Military applications

We Provide Our Clients Thermal Engineering For Electronics Cooling

Prediction of component and material temperatures is at the heart of many designs. We improve product decisions by providing reliable design, analysis and thermal insights at the system architecture phase. We are a diverse team and understand how to balance thermal performance with other cross-functional interests.

Our methods involve accurate modeling of fluid dynamics and heat transfer. We understand high-volume manufacturing, bringing extensive DFM and DFA knowledge to our solutions and to the application and design of thermal components such as heat sinks, air movers, thermal interface materials, adhesives, and more.

We perform both steady-state and transient thermal analysis and model conduction, convection, radiation, and phase-change.

For fluid dynamics and airflow, we model inlet and outlet boundary conditions, steady-state and transient flow, as well as complex effects such as porosity, non-Newtonian viscosity, viscoelasticity, and more.

Even if you have a mature thermal testing program, up-front simulation can save time and money by identifying locations of peak temperatures and critical heat flow routes. We're here to help you!