

CAE FOR ELECTRONICS DESIGN

How Engineers Can Develop the Best Cooling Strategy with Thermal Simulation



Validate Material Decisions

Validate material decisions and test their conductivity for a faster cooling process. Compare plastic and metal for keeping semiconductors cool enough to prevent failure.



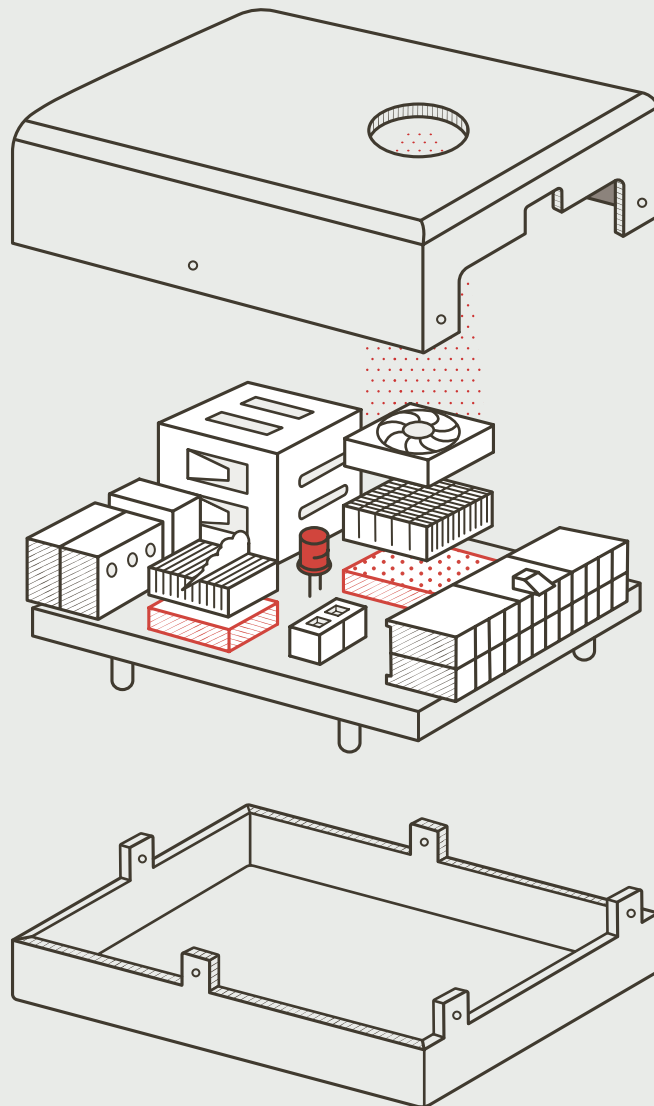
Compare Active & Passive Cooling

Validate an active or passive cooling strategy by analyzing the temperature distribution. Decide on using heat sinks or fans depending on the simulation results.



Find the Right Placement for Fans and Heat Sinks

Investigate the airflow around the components inside the electronics enclosure to identify the best possible placement of fans and heat sinks for a more efficient cooling process.



Test Enclosure Dimensions

Investigate heat flow to decide on the best dimensions of an electronics enclosure and ensure the effectiveness of the cooling strategy for semiconductors.



Ensure Energy Efficiency

Test different types, dimensions, and placements of heat sinks and fans to improve energy efficiency for cooling and eliminate excessive components.