

Mercury Systems

Expediting embedded computing thermal design process with Simcenter Flotherm Flexx

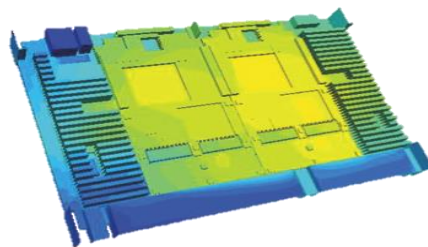


“When we switched to Simcenter Flotherm XT ..., we cut our analysis time in half. Even with increasingly accelerated development schedules, we have time to perform trade-off studies to optimize the thermal design”

Tim Fleury, Mercury Systems, Inc.

5 Fold

Reduction in mean time between failure achieved with Simcenter Flotherm



“our new thermal management solutions are capable of dissipating tremendous amounts of thermal energy, while still meeting the same or smaller size, weight and power requirements

... using Simcenter Flotherm, we created innovations in the mass transfer of thermal energy

**Darryl McKenney
VP - Engineering Services, Mercury Systems, Inc.**

Mercury Systems

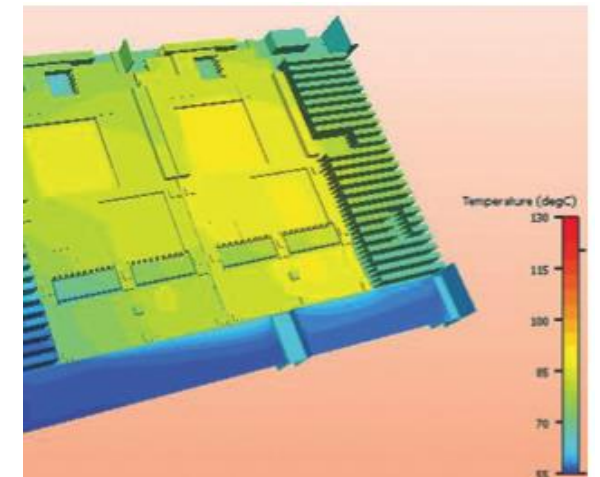
Expedites their design process with Simcenter Flotherm



Heat is the primary enemy of module reliability. Today's high-powered modules cannot be cooled using legacy cooling approaches.

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Reduction in mean time between failure achieved with Simcenter Flotherm



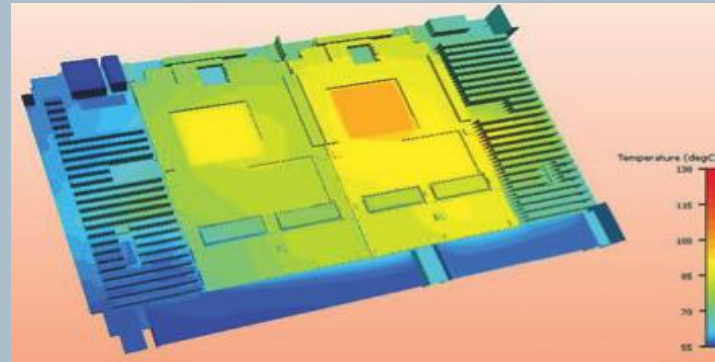
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Expedites their design process with Simcenter Flotherm

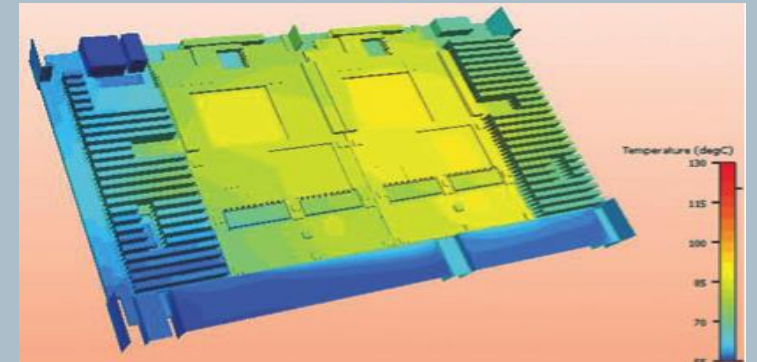


- New microprocessors and FPGAs are faster and smaller, and have higher power densities, threatening reliability.
- Greater functionality demands more thermal management, shorter design cycles, and higher test coverage within tighter budgets.

Simcenter Flotherm Design for Reliability



Simcenter Flotherm thermal analysis without integrated thermal bridge



Simcenter Flotherm thermal analysis with integrated thermal bridge

- Simcenter Flotherm thermal design resulted in a 5°C Processor temperature reduction which has significant improvement on mean time between failures (MTBF).

“After nearly a decade of honing our Design for Reliability (DfR) thrust we have produced new design processes and implemented new procedures such that we have reduced the number of engineered change orders by over an order of magnitude.”

Darryl McKenney, VP, Engineering Services, Mercury Systems