

ENVIRONMENTAL SIMULATIONS, COMPONENTS, TECHNOLOGY

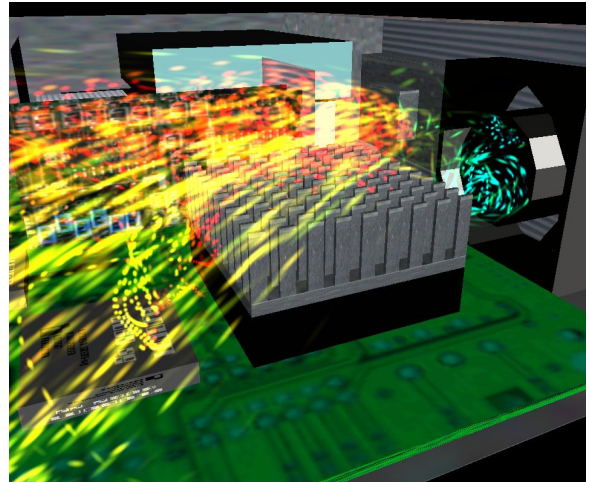
Thermal management

Demands on product development

- Increasing competitive pressure
- Shorter innovation cycles
- Stricter technical requirements, such as heat losses and packing density in the modules

Our services

- Early statement of the thermodynamic implementation feasibility
- Development of cooling concepts
- Consideration of the different product requirements
- Support of early verification during the development process
- Thermographic analysis with thermocamera



Your benefits

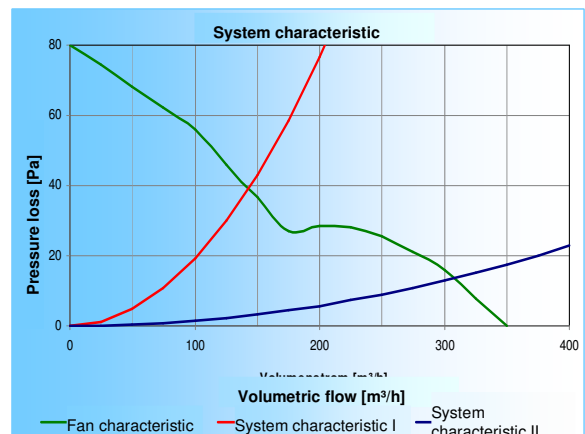
- Optimized development process
 - Avoidance of design iterations
 - Cost savings
 - Quicker time to market
- Consideration of different design requirements (acoustics, etc.)
- Objective, neutral and comprehensive consulting service from an independent test institute

Consulting

- Cooling and ventilation concepts, feasibility studies for heat dissipation
- Project support during the planning and implementation phases
- Innovative cooling and installation concepts
- Consulting service for tests according to ETSI and Telcordia

Numeric simulation

- Analysis of the thermal system characteristics
 - Temperature distribution in fluids and solids
 - Flow behavior (bypasses and neutral zones)
- Component performance tests
 - Fan operating points
 - Bypass flows and neutral zones
 - Contribution to heat dissipation
- Variant examinations
- Animation of warm and cold air streams



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