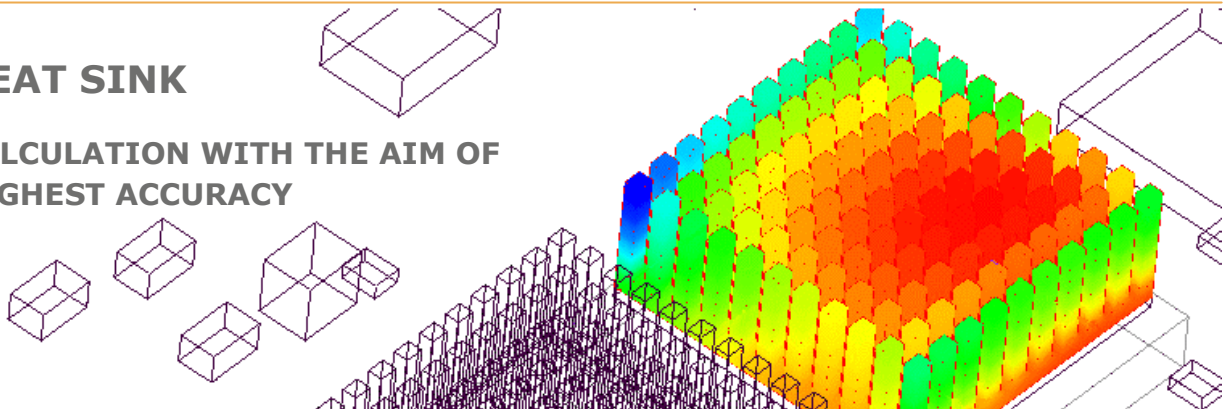# HEAT SINK

## CALCULATION WITH THE AIM OF HIGHEST ACCURACY

**Overly complex heat sinks are obsolete.**

Heat sink mapping via CFD allows the inclusion of all relevant conditions and influencing factors. Taking almost all dependencies into account, various scenarios can be viewed quickly and realistically, which provides information on

- thermal resistances (e.g. Rthj-c > Rthc-k > Rthk-u),
- material and thermal conductivity,
- free and/or enforced convection,
- radiation and thermal conduction,

that are to be analyzed. Flow behavior and pressure loss can be determined precisely in consideration of

- an accurate design image (CAD data),
- realistic installation conditions (e.g. housing, fan, etc.),
- realistic positioning (environmental conditions, force of gravity).

Stationary viewings provide quick statements on the cooling capacity, and allow conclusions to be drawn about junction and surface temperature, savings and optimization potentials.

Transient (time-dependent) calculations though, give information about heating and cooling performance of defined operating points.

Results on state values, optimizations, and variants, are quickly made available for informed decision. According to constructional conditions and technical requirements, heat sinks can be developed or verified to customer specifications.