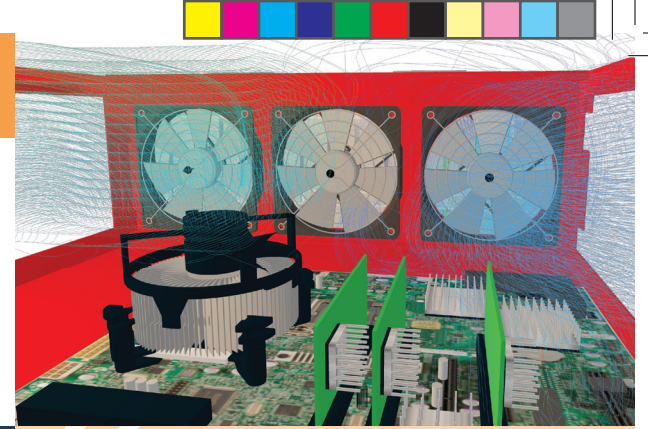## 6SigmaET

6SigmaET is an award-winning thermal simulation tool designed for the electronics industry. It uses Computational Fluid Dynamics (CFD) to create accurate thermal models of electronic equipment.

Thermal Simulation

Our software offers unparalleled intelligence, automation, and accuracy to create and solve complex models with ease.

Use thermal simulation early in the design process to verify electronic design and optimize thermal performance.

"
The software is fast and fits our thermal modeling needs perfectly. Experimental testing in our laboratories has proven that the simulation results predict component temperatures with accuracy.
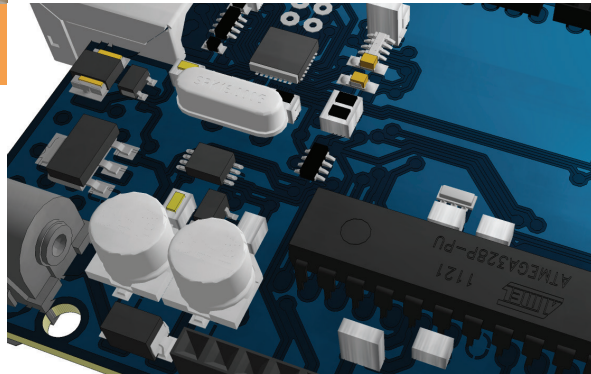
Norbert Engleberts, Director, OTS BV
"

Import Your Data

Building a model is quick and simple using existing designs.

6SigmaET is connected to all existing design tools. Import MCAD and ECAD directly into models with the click of a button.

Solve Anywhere

6SigmaET models don't just have to be solved on your local machine. We support solving on Windows and Linux servers and HPCs, as well as the cloud through our partner Rescale.

rescale

Unrivaled Solve Speed

Rohde & Schwarz has shown 6SigmaET to be able to reach results far quicker than competitor software.

Our development team work to improve our software with each release, adding functionality and improving model build and solve times.

Time usage (hours)

	0	5	10	20	25	30	35	40	45
6SigmaET									
Alternative Software									

■ CAD Import   ■ Gridding   ■ Solving   ■ Analysis

Automatic Grid Generation

Manually creating grids can be complex and time consuming. 6SigmaET's automatic grid generation adapts to any model changes, providing fast and reliable gridding, whilst also checking for collisions and modeling errors, saving valuable design time.

"
The platform's high performance, cloud-based solving allowed us to scale without hardware limitations, giving us the opportunity to double the number of projects we can take on.
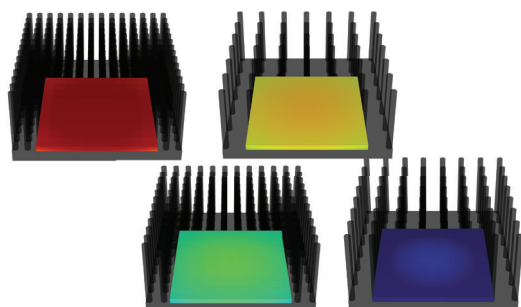
William Villers, CTO & Director of Engineering, TEN TECH LLC
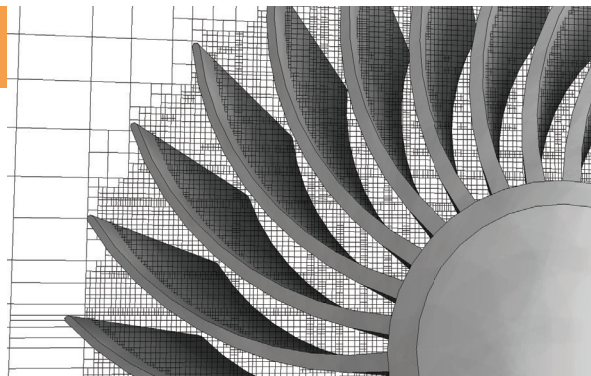"

Optimize Your Design

Finding an optimum design can be difficult, especially when multiple parameters can be changed.
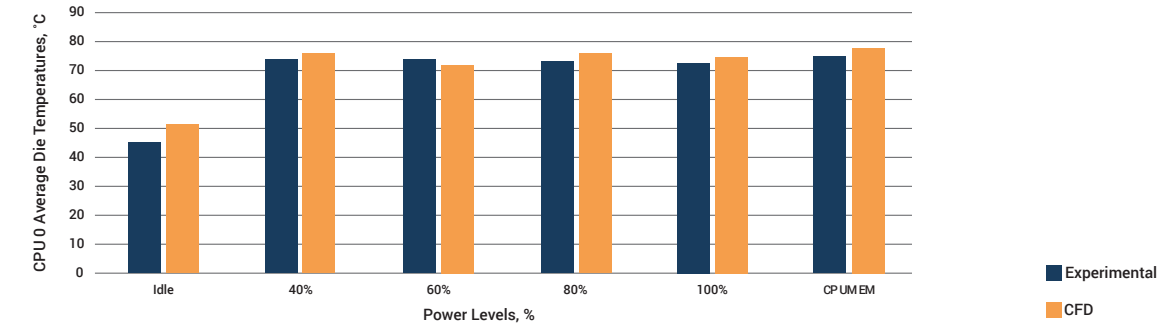
Use 6SigmaET's optimization functionality to discover your optimum design using our automated design of experiment tools.

Figure: Bar chart — CPU 0 Average Die Temperatures, °C (y-axis, 0–90) vs Power Levels, % (x-axis: Idle, 40%, 60%, 80%, 100%, CPUM EM). Legend: Experimental (dark blue), CFD (orange).

Accuracy

The 6SigmaET solver has been validated against a wide range of industry standard CFD benchmarks.

Our client base has found excellent correlation with measured data, as shown by data from a University of Texas at Arlington project.

Cost of Thermal Failure

Research suggests that a single design can cost upwards of £20,000 to rectify.

Component overheating and device failing thermal tests was ranked the number one cause for late-stage complications/problems in our 2022 State of Thermal survey.
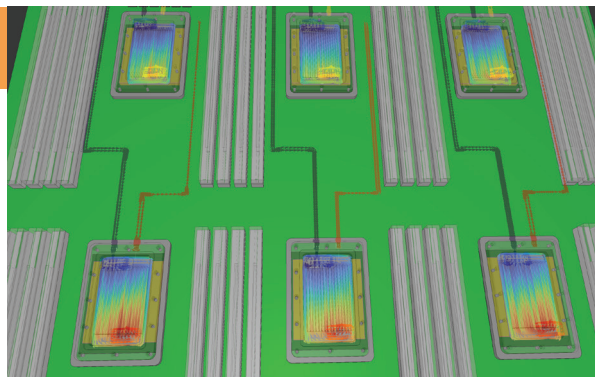
> The software proved to be the best market choice due to its ability to import all BOSCH PCB and product files, by its simulation speed and for its flexibility to adapt to different simulation environments.

Miguel Peixoto, Process Engineer, BOSCH

Case Study: LED Bulb

OTS used 6SigmaET to develop an LED bulb compact enough to replace a traditional filament bulb.

Neutral File Format

6SigmaET supports the vendor neutral ECXML file format.

ECXML allows semiconductor manufacturers to share thermal models between 6SigmaET, FloTHERM, and Icepak.

> 6SigmaET allows for the rapid thermal evaluation of different designs... this is critical to the short-term and long-term success of our LED product.

Norbert Engelberts, Director, OTS BV

Consultancy & Training

We offer 2- or 3-day training courses to help you get the most out of 6SigmaET.

Aside from fully supporting you in the use of our software, our experienced engineers can build simulations to verify your design ideas.
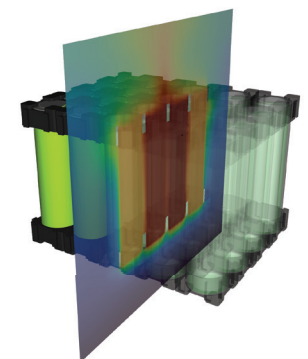
FREE TRIAL

Try FREE For 30 Days!

We understand switching software can be daunting. That's why we've made this easy by offering a 30-day free trial.

www.6sigmaet.info/free-trial/

Our Customers

BOSCH

MOTOROLA

TENTECH LLC Services & Solutions

ROHDE&SCHWARZ

COMMSCOPE® **autox**

ATS ADVANCED THERMAL SOLUTIONS, INC. Innovations in Thermal Management®

THALES

Contact Us

info@6SigmaET.info