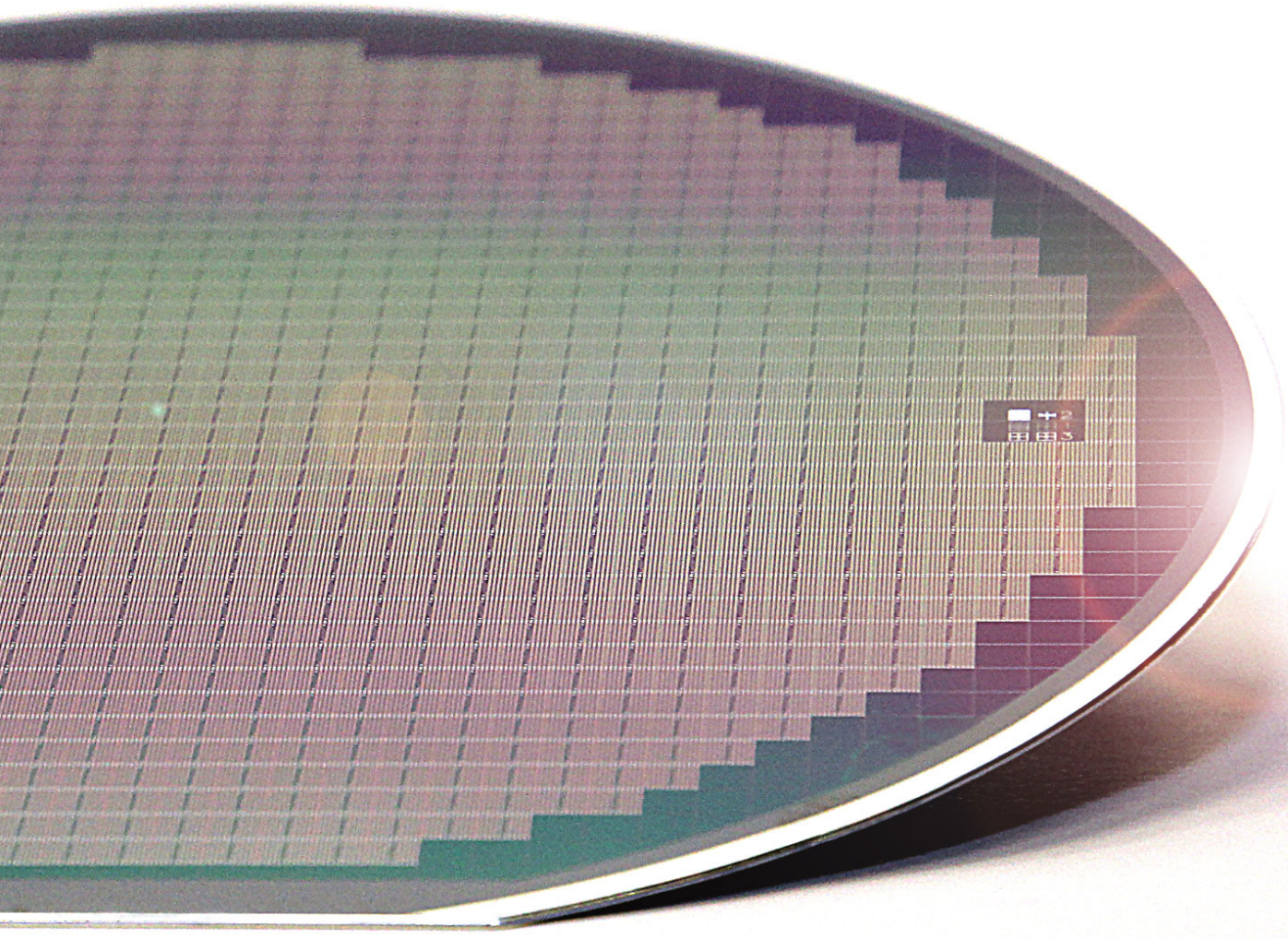
NANOTEST
Berliner Nanotest und Design GmbH

Thermotest



Thermal Test Chips

Thermal Test Vehicles

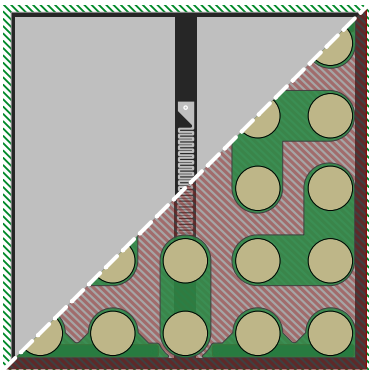
TTV Turnkey Solutions

The boilerplate
for your
package development

We start simple to dare the exceptional

The Thermotest product series offers a variety of off-the-shelf products and fully customized solutions. From wafers and pre-packaged thermal test vehicles (TTV) to series of specified high-end packages with customized chip configuration - Thermotest holds all possibilites for your cause.

Nanotest Thermotest wafers combine robustness and flexibility by building on thin-film technology.
Besides highly sensitive temperature sensors, the cells include two individual full-area heaters and four health monitoring structures to observe solder bump or wire bond integrity.

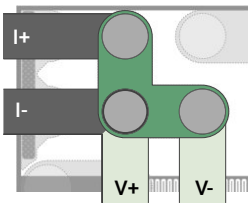


- Silicone TTC wafer
- Flip-chip assembly
- Wire bond assembly
- 2.5 × 2.5 mm² cell size
- 10 Ω/K sensitvity
- 2 × 15 Ω heater
- 4-terminal sensing
- >11 W/mm²

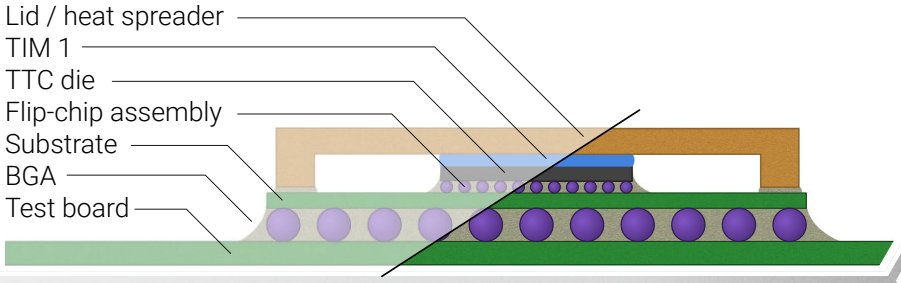
Define the TTV you need. No compromise.

The thermal test chip is a feature-rich breadboard. Size, heating and sensing resolution, assembly, PCB stackup, lid, stiffener ring - it is up to you.

Electrical 4-wire sensing for in-situ state-of-health monitoring of solder bumps

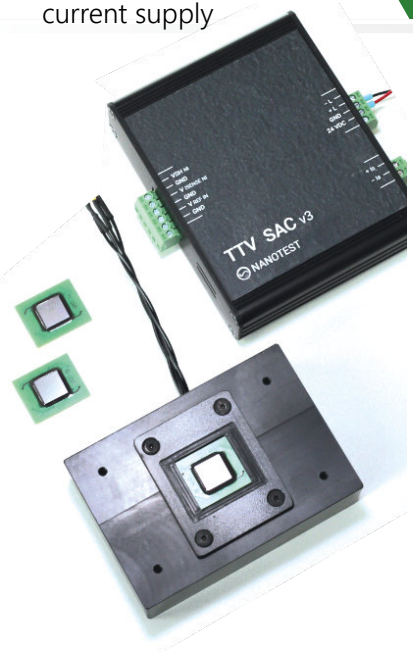


Example:



Off-the-shelf
TTV SAC v3

Compact NT16-TTV5 interface and probe current supply



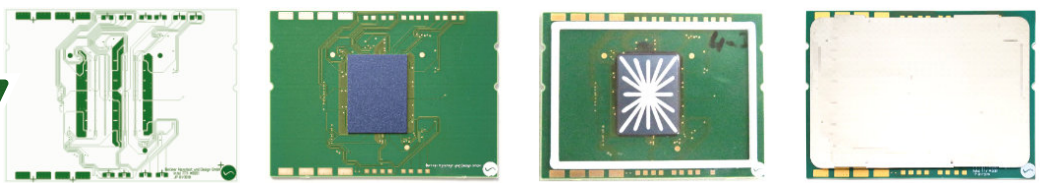
TTV competence - you need it, you get it.

- Concept and feasibility
- Design and construction
- Substrate stackup and layout
- Assembly and packaging
- Quality assessment
- Calibration and Test
- TTV test hard- and software

We support vendors from around to globe to improve their packages' thermal performance by offering turnkey TTV solutions with 360° service.

A free-of-charge concept and feasibility phase is part of our promise.

Layout Assembly Lidding



nanotest.eu/ttv

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