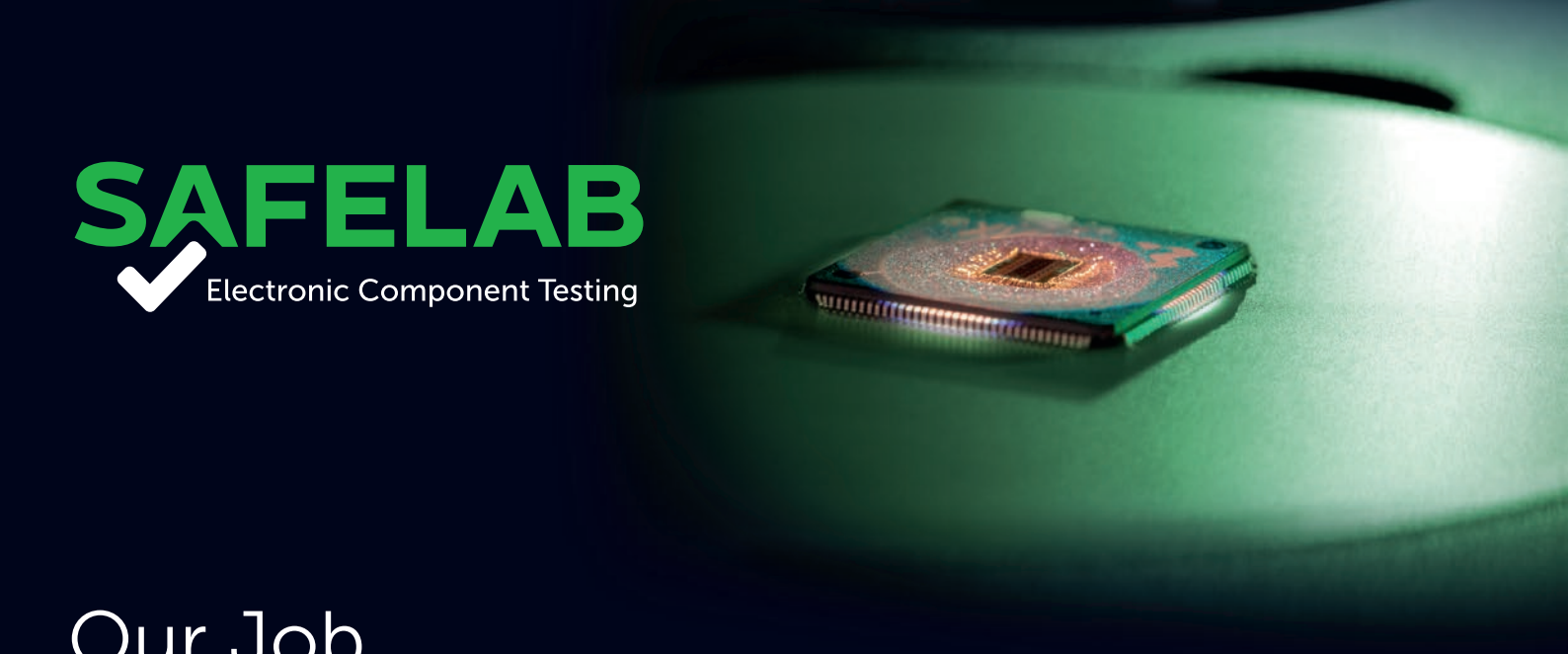
SAFELAB
Electronic Component Testing



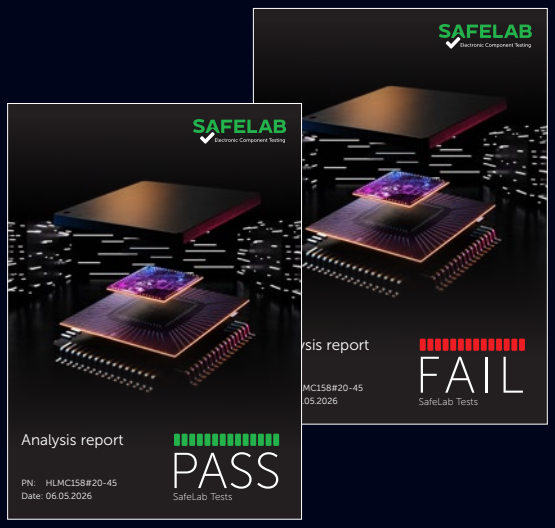
Our Job.
Your Safety.

You want to know whether an electronic component is original and new?
You need a quick and reliable answer?

SafeLab inspects on your behalf.
We do the analyzing — you don't need to do anything.

As soon as the test report is available, you have a clear answer to your question: **PASS or FAIL.**

Our analysis specialists will consult you gladly free of charge and coordinate the necessary test procedures with you. In this way, you avoid unnecessary costs and only order necessary services.



High-tech Analysis.
Clear Statement.

- **Prompt test result**
  usually within seven working days
- **Clarity at first sight**
  clear result on the cover sheet
- **Precise recommendation**
  for usability of the component

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SAFELAB
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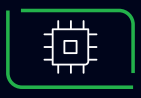
Our Strength.
Our Product Categories.



Integrated Circuits (ICs)

Components with one or more integrated chips (dies). Microcontrollers, microprocessors, memories, ASICs, DSPs, A/D converters, FPGAs etc.

Diodes

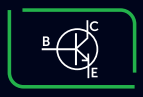
Zener diodes, diac, thyristors, LEDs, photodiodes, laser diodes etc.

Capacities (C)

Capacitors, MLCC, electrolytic capacitors, super capacitors, SuperCap, EDLC etc.

Resistors (R)

Potentiometers, precision resistors, photoresistors, NTC, PCT, varistors etc.



Transistors

MOSFET, IGBT, triac, bipolar transistors, FET, optocouplers etc.

Inductors

Coils, transmitters, chokes, transformers, air coils, electromagnets etc.

Switchgear

Relays, SSR, contactors, semiconductor relays, switches, pushbuttons, reed relays, reed contacts etc.

Power Supplies

Batteries, rechargeable batteries, power supplies, power supply units, PSUs, switched-mode power supplies etc.

Damage Analyses

Determining the causes of defects in components and assemblies etc.

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SAFELAB
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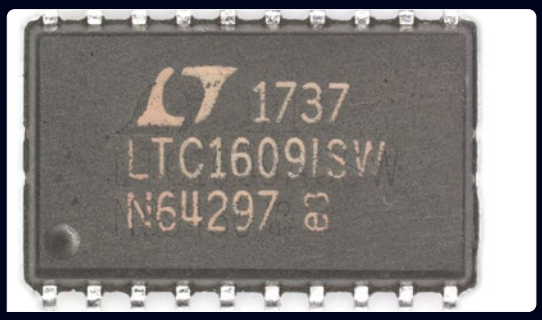
Our Expertise.
Our Analysis Methods.

Visual Inspection

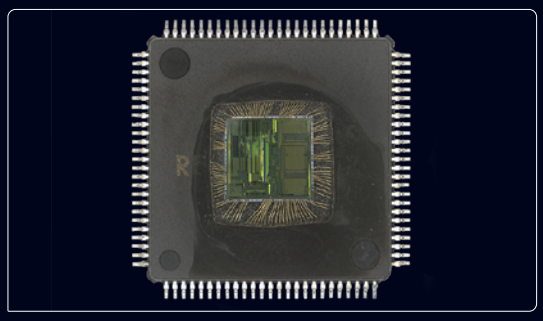
The microscopic inspection of the entire component, digital measurement for dimensional accuracy.

Remarking / Resurfacing Test



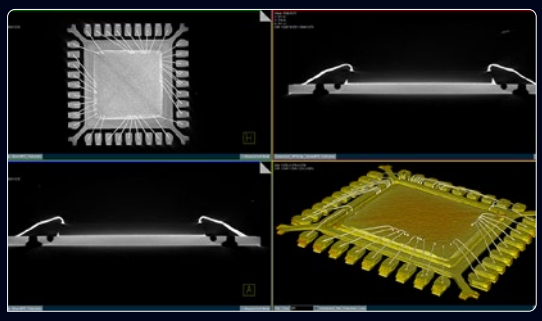
Our expertise extends to surface analysis through chemical, mechanical, and chemical-thermal methods, specifically examining markings and the component's package for evidence of tampering.

Decapsulation



This involves revealing the internal chip construction through either chemical or mechanical methods to verify authenticity and defect absence. It's a destructive but highly definitive method, particularly for complex semiconductor components.

X-ray



High-resolution inspection of components and assemblies using 2D, 2.5D, and 3D/CT technology. A non-destructive method for authenticity verification and quality assurance.

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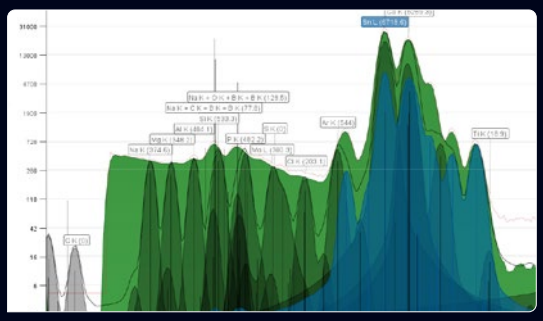
Our Expertise.
Our Analysis Methods.

Material Analysis



We analyze the material composition of soldering surfaces and coatings to confirm RoHS compliance and to ensure the exclusion of lead-containing solder.

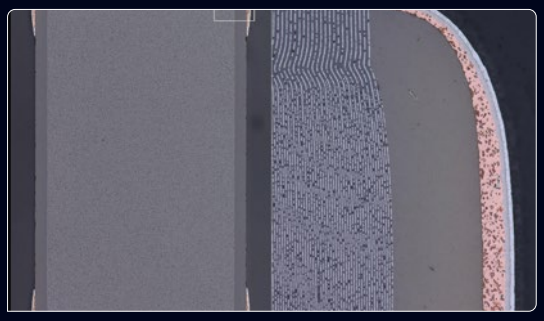
Electrical Test / Function Test

Through metrological analysis, we verify that components comply with the electrical parameters specified in the datasheet. Electrical tests may be used for component selection, functional testing, as well as insulation and safety tests.

Solderability Test

We assess the impeccable solderability of component leads.

Micrograph Analysis



We analyze the microstructure and layer configurations of materials. This technique is decisive for counterfeit detection of multilayer ceramic capacitors (MLCC) and for determining the cause of failure in electronic components, as well as measuring layer thickness.

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