IC TESTS & COUNTERFEIT DETECTION SERVICE

Safeguard your supply chains and solve obsolescence issues with our Retronix counterfeit detection service. Our in-house service offers a wide variety of options for testing IC's and passive components in all formats.

OEMs and CEMs use this service to confirm that the components they have purchased are fully functional, as per datasheet specifications. This can be in cases where the end customer requires independent third-party verification, suspected counterfeiting, and even for parts salvaged from PCBs due to obsolescence issues.

Component Distributors use Retronix to test IC's they plan to sell to ensure that the components are in working order. We can also help to verify returned products or arbitrate on disputed products. And High Reliability organisations call on Retronix to test that the IC's they are purchasing can operate at the extreme temperatures required.

VISUAL INSPECTION

Visual inspection criteria employed by Retronix conforms to IDEA-STD-1010-B, MIL-STD-883G, and the mechanical dimension criteria of product datasheets. Our tests will not only find re-marked devices, but they will also be able to indicate whether the components are new and unused.

SAFEGUARD
SUPPLY CHAINS

EXPERIENCE & EXPERTISE

SECURITY & AUTHENTICITY

COUNTERFEIT DETECTION

FIND OUT MORE: W: retronix.com   E: contact@retronix.com   T: +44 (0) 1236 433 345

EXTREME TEMPERATURE TEST

The Retronix Temperature Test system fully conforms to the MIL-STD-883, and can electrically and functionally assess IC's at temperature extremes from +180oC to -55oC. This test is critical for extreme environment electronics.

ELECTRICAL TEST

The Electrical test (Curve Trace) is an IC test used to assess the electrical parameters from pin to pin including, current, voltage, diode resistivity and silicon connectivity. This immensely strong tool allows us to detect whether a component is defective or not.

PERMANENCY MARKING TEST

Using a selection of wipe testing, heated solvent testing and scrape tests, we can identify if a component has been sanded down and remarked (blacktopped) which would indicate a "suspicious" device by revealing original markings.

KEY FUNCTION TEST

Our in-house experts design a test circuit to assess the main aspects of the device as detailed on the datasheets, for example, the Rds(on) value of a MOSFET. We can perform a range of functional tests on a device.

XRF TESTING/ANALYSIS

Our XRF Testing/XRF Analysis facility uses a non-destructive method to determine what alloy a termination consists of. All devices can be XRF tested. This is a useful test to determine if a device is new or has previously been fitted to a PCB.

IONIC CONTAMINATION TEST

An Ionic Test is performed to measure the level of ionic residues which is a good indicator of the cleanliness of the IC. Retronix provides a full report that details the sample size, contamination value and device type.

SOLDERABILITY TEST

Our solderability test verifies whether a component is re-solderable or not and if ready to be placed onto a PCB. If not, Retronix can strip the terminations and re-tin to the specified alloy.

DECAPSULATION TEST

Retronix can de-cap a device and check for a range of visual indicators to help authenticate the originality. We can also check for device damage at high optical magnifications as the potential cause for any test failures.