

A New Method of Thermal RF Testing



DVTEST and Mechanical Devices: Announce a Collaboration for RF Thermal Testing

As the race to bring new semiconductor products to market intensifies, the industry looks for innovative ways to enhance profitability, increase reliability and reduce the time to market.

In collaboration with Mechanical Devices, DVTEST is proud to announce a breakthrough in RF shielded thermal testing of integrated circuits. State-of-the-art direct-contact temperature forcing systems can now be paired with the industry leading RF enclosures, to allow manufacturers to easily perform IC testing over temperature in a controlled RF environment. "RF Testing at extreme temperatures continues to be a challenge not only for the semiconductor industry but the entire electronics industry as a whole – thanks to this new partnership, we can now provide a robust and viable solution" says Serge Doyon, Bus Dev. Manager of DVTEST.

The deSAFE Duo from DVTEST allows a double wall aluminum structure to provide the best RF enclosure on the market, offering greater than 100dB isolation. The offset I/O panels, passivated cooling, enhanced absorber and dual gasketing minimize cross-talk and improve the isolation of the enclosure beyond the capability of conventional single walled enclosures.

Mechanical Devices thermal control units allow for temperature forcing across a range of device sizes and types, low to high power dissipation, in wet or air-bathed to forced. Mechanical Devices is changing the way in which testing and temperature control is performed - increasing the efficiency and accuracy of the IC testing process.

Mechanical Devices thermal units stimulate the DUT to temperature precisely and consistently, by direct contact with a powerful thermal head offering temperature stability of $\pm 0.5^\circ\text{C}$, fast time to temperature and are fully programmable for automation. When paired with a deSAFE Duo enclosure with our patented "Flex Drive" technology, the thermal head is contained within an RF isolated environment but maintains its flexibility and is repositioned and reconnected to the DUT. The system is capable of RF shielded testing at extreme temperatures of -75°C to $+200^\circ\text{C}$.

DVTEST - deSAFE Duo - Wet TC