Turn-Key Solution for Semi-Conductor Testing

- Semi-Conductor Failure Analysis
- Lock-in Thermography
- Functional Circuit Analysis (Power Dissipation, Shorts, etc.)
- Forensic Research
The MoviTHERM Semi-Check system is an affordable Lock-in Thermography system with built-in 2-quadrant power supply. The power supply allows for separate current and voltage modulation using square wave, sinusoidal and arbitrary waveforms. The combination of Lock-in Thermography with a high-end cooled thermal camera makes it possible to detect thermal variations in the micro Kelvin range.

A special Lock-in online mode allows for virtually indefinite measurement periods for extremely low signals.

**Supported Thermal Cameras**
The Semi-Check system supports thermal cameras from FLIR Systems, Inc. From long wave infrared (LWIR 8-14µm) uncooled microbolometers, to scientific, cooled mid-wave infrared (MWIR 3-5µm). Microscopic lens attachments are available for these cameras for spatial resolutions down to 4µm/pixel.

**Microscopic Stand**
The microscopic stand with manual Z-axis allows for rapid change-over from larger parts, such as entire circuit boards or large wavers to microscopic inspections. The base plate has a standard 1” x 1” hole pattern to mount micrometer stages, probe stations or other accessories. The stand is compatible with all support FLIR cameras.

**Automated Testing**
The system has built-in, programmable digital I/O for automated testing in a production line. The testing sequence can be programming using the built in Visual Basic Script Engine.