

# PINTESTER

A complete Test System for failure analysis and functional testing in the Semiconductor Industry

## FEATURES & BENEFITS

- Combined current/voltage source with integral measuring
- Predefined test plans: e.g. bias, pulsed sweep test, IDDQ test
- Programming of new or customized test plans
- Latch-Up test
- 19" rack system with a PC as operating and control unit
- Configurable test head: compatible with verifier adapters and custom-made adaptation
- Software with user friendly interface
- CE certified
- optional: GPIB/IEEE-488 and Ethernet interface

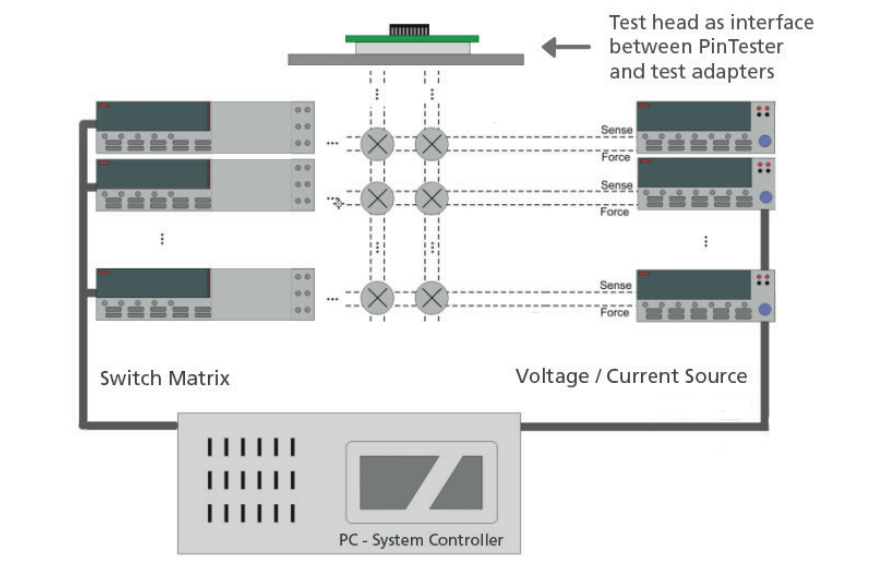


The PinTester features a complete test environment, which has been developed particularly for use in solid-state industries.

The scope of performances of the PinTester was specially configured for characterization and analysis of electrical properties of pre-assembled electronic components and wafer structures. The main job of the system is to efficiently perform test sequences for design verification, fault analysis, and functional tests as well as reliability investigations.

Thanks to its modular design, the PinTester can be adapted flexibly to the relevant testing job and expanded.

## Schematic design



## PinTester components



Keithley Modell 2612 A



Keithley Modell 3706

### Sources and meters

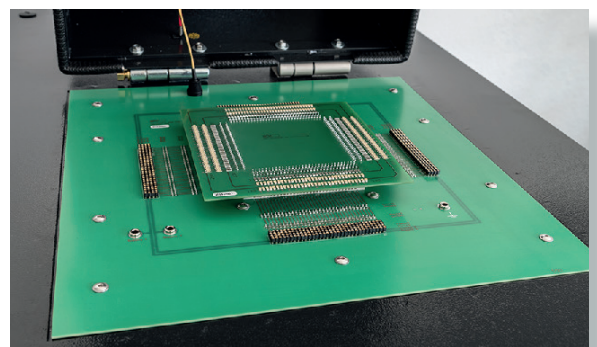
- Keithley brand model 26xx (dual-channel source-meter) are used as combined current/voltage source with integral measuring function
- Operation in three test modes: Bias, Sweep, Pulse

### Control matrix

- Keithley Model 3706 and associated Keithley matrix cards

## Test head

- Construction with plug connector layout compatible with Verifier© adapters (128/256 pins)
- Optional: customized test heads



# Technical data

## Source

Max. output power (2602B)  
Max. output power (2612B)

Current source  
Voltage source

$\pm 40$  V, max. 1 A  
 $\pm 200$  V, max. 1 A  
Current/voltage source with limitation  
4-quadrant operation  
 $\pm 1$  pA bis  $\pm 1$  A  
 $\pm 10$   $\mu$ A bis  $\pm 200$  V

## Meter

Accuracy

Communication interface port

6½ -digit measuring for current/voltage sensing  
Remote sense  
0.02 %

## Control matrix

Lifetime of switch contacts

Channel resistance

Contact potential

Insulation resistance

Communication interface port

$> 10^8$  no-load operations  
 $> 10^5$  operations with ohmic load  
 $< 1$   $\Omega$   
 $< 4.5$   $\mu$ V per contact pair  
 $> 10^9$   $\Omega$   
Ethernet  $10^9$

## System construction

Dimensions standard width 19" rack

Dimensions double-width rack

Weight

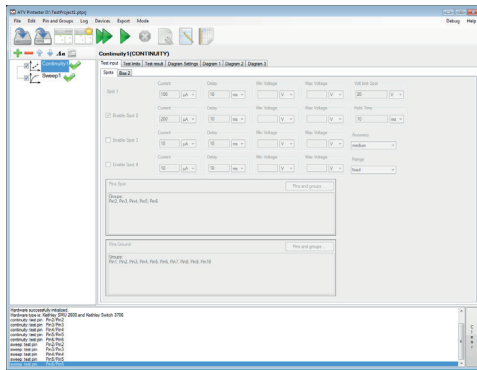
Power consumption

Integral PC

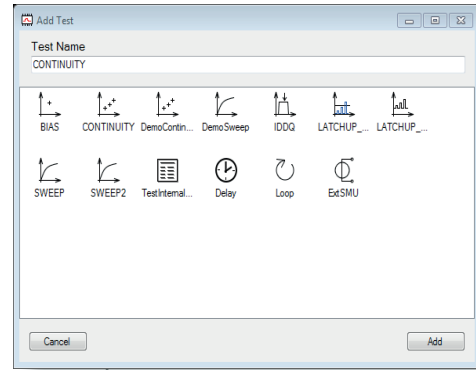
External interface ports

550 x 1250 x 780 mm (W x H x D)  
1100 x 1250 x 780 mm (W x H x D)  
~ 100 kg (dependent on degree of extension)  
~ 16 A (dependent on degree of extension)  
IPC with Windows 7  
Ethernet RJ45, USB, monitor, optional: IEEE-488

## Test operating plans

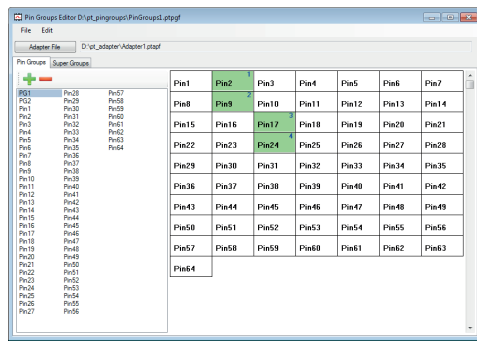


Simple test setups



Extensive test library

## Pin lists



Editor for adapter pins and pin groups

Data input

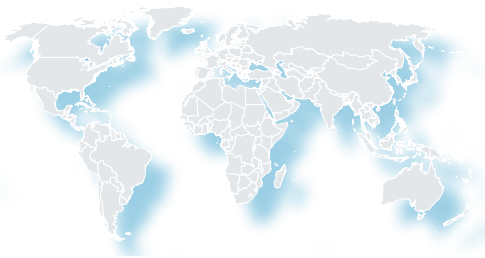
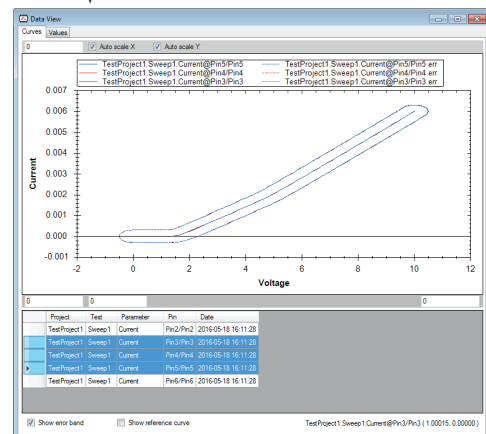


Data export

## Diagrams & data

	A	B	C	D	E	F	G	H	I
1									
2									
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CSV data export



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