

S3-8 Flying Probe Test System

For Substrate Boards

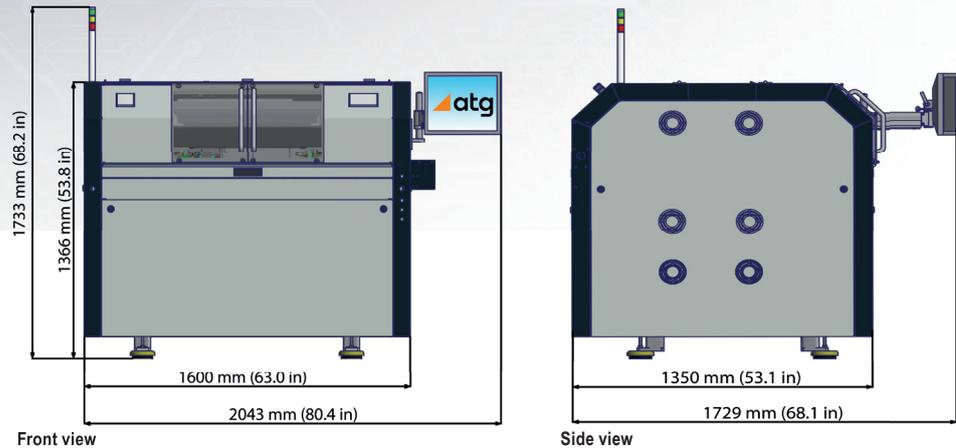


- ▲ 8 Test Heads
- ▲ Double Sided Test System
- ▲ High Speed Direct Linear Drives for X and Z Motion
- ▲ Vacuum Table Optional
- ▲ No Probe Marks
- ▲ Optical Auto Focus Microscope Lenses
- ▲ Fast 280 mA Kelvin Testing



S3-8 Technical Specifications

Flying Probe Test System



Mechanics

Basic Unit with 8 probes (4 top, 4 bottom)
 Universal shuttle system for Flex and Substrate boards
 Max. board size (X × Y) 350 mm x 330 mm / 13.8" x 13.0"
 Test area (X × Y) 350 mm x 310 mm / 13.8" x 12.2"
 Board thickness 0.05 mm to 3 mm

Smallest pad 10 μm / 0.4 mil* (Special setup)
 Smallest pitch 25 μm / 1.0 mil
 Resolution measurement system ±0.1 μm / ±0.004 mil
 Repeatable accuracy ±1.5 μm / ±0.06 mil

*Micro needle probes 0.3 g to 2.5 g
 Soft landing

Electronics

Continuity test 1 Ω to 10 kΩ
 Isolation test up to 25 MΩ (FM),
 up to 100 GΩ (ohmic)
 MicroShort Detection®
 Test voltage 100 mV to 1000 V

Camera System

2 high resolution color camera for optical scanning of top and bottom side.
 Resolution 1.2 μm / pixel

Options

- 4-wire measurement with max. 280 mA test current
 0 Ω to 1 kΩ ±2 %, min ±25 μΩ
 with FP Kelvin probes 0.3 g to 2 g
 Smallest pad 30 μm / 1.2 mil*
 Smallest pitch 80 μm / 3.2 mil*
 * special setup

- Embedded components test
 R 0 Ω to 1 MΩ ±1 %, min. ±0.5 Ω
 1 MΩ to 200 MΩ ±3 %
 C 0 F to 100 μF ±2 %, min. ±30 fF
 L 0 H to 10 mH ±5 %, min. ±0.25 μH
 Diode / Varistor

 U_{FV}, U_{RV}, U_{BRV} 100 mV to 12.5 V
 Structural test of integrated circuits:
 opens/shorts test on CMOS devices with ESD diodes



Multi-Point Measurements

Up to three AC/DC sources (voltage and current) simultaneously.
 Transistors (MOSFET and Bipolar), Optocouplers, Fuses,
 Relays, Transformers, etc.
 $I_{max} = 300 \text{ mA}$

- Repair software with barcode support
- Vacuum table for single sided test

Data Input Format IPC-D-356A
Network Connection Ethernet, TCP / IP
Power Supply 3 x 400 V, 50 Hz (3 x 208 V, 60 Hz), 1000 VA
Power Supply Vacuum Pump for Vacuum Table 230 V, 50 Hz, 1500 VA
Compressed Air 8 bar / 115 psi, filtered, constant air quantity
Temperature 18 °C to 24 °C
Relative Humidity 40% to 60 %
Machine Weight 1350 kg

All information subject to change without notice!
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atg Mycronic GmbH

Karl-Carstens-Straße 19 · 97877 Wertheim · Germany
 Phone +49 9342 291 0 · sales.atg@mycronic.com
 www.atg-Mycronic.com