

S2-16 Flying Probe Test System

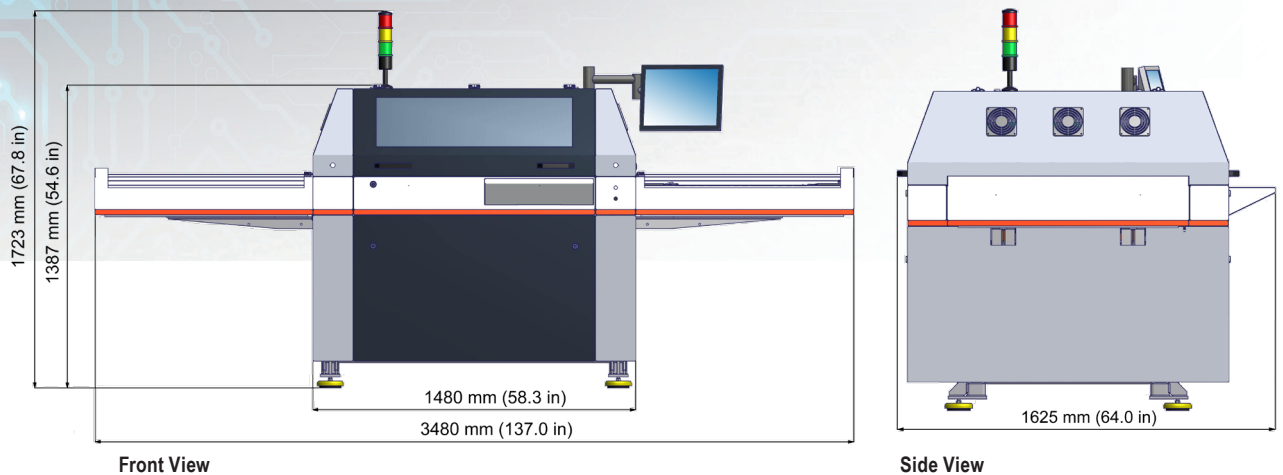
Double Sided Tester for Server Boards



- ▲ 16 Test Heads
- ▲ Fast Dual Shuttle System
- ▲ High Speed Direct Linear Drives for X and Z motion
- ▲ No Probe Marks
- ▲ Fast 280mA Kelvin Testing

S2-16 Technical Specifications

Flying Probe Test System



Mechanics

Basic unit with 16 probes (8 top, 8 bottom)
Single or dual universal shuttle system with clamp and stretch mode for testing flexible and rigid boards

Max. board size (X x Y)	610 mm x 640 mm / 24.0" x 25.2"
Min. board size (X x Y)	10 mm x 10 mm / 0.4" x 0.4"
Test area (X x Y)	610 mm x 620 mm / 24.0" x 24.4"
Board thickness	up to 5 mm

Smallest pad	25 μm / 1.0 mil* (special setup)
Smallest pitch	50 μm / 2.0 mil
Resolution measuring system	$\pm 0.1 \mu\text{m}$ / $\pm 0.004 \text{ mil}$
Repeatable accuracy	$\pm 3 \mu\text{m}$ / $\pm 0.12 \text{ mil}$

Soft touch probes or *Micro needle probes	5 g to 10 g 0.3 g to 2.5 g
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Electronics

Continuity test	1 Ω to 10 K Ω
Isolation test	up to 25 M Ω (FM), up to 10 G Ω (ohmic) MicroShort Detection [®]
Test voltage	up to 1000 V (ohmic)

Camera System

8 color cameras for fast optical scanning of top and bottom side.
Resolution 6 μm / pixel

Options

- 4-wire measurement with max. 280 mA test current

0.1 m Ω to 300 K Ω	$\pm 2 \%$, min $\pm 0.025 \text{ m}\Omega$
with Kelvin probes	0.3 g to 5 g
Smallest pad	50 μm / 2.0 mil*
Smallest pitch	80 μm / 3.2 mil*

 *with Kelvin probe fine adjustment
- Embedded components test

R	0.5 Ω to 10 M Ω	$\pm 0.5 \%$, min $\pm 0.5 \Omega$
	> 10 M Ω to 50 M Ω	$\pm 2 \%$
C	0.1 pF to 100 μF	$\pm 2 \%$, min $\pm 0.03 \text{ pF}$
L	0.2 μH to 5 mH	$\pm 3 \%$, min $\pm 0.1 \mu\text{H}$

 Diode / Varistor

U_R reverse voltage and	
U_{BR} breakdown voltage	100 mV to 12.5 V
- LaTest[®] open detection

with LaTest [®] probes	1 g to 10 g
High current	1.4 A (1 kHz)
- Pneumatic clamping with supporting table for flexible boards
- Retest of fault files from external grid test systems on inquiry
- Repair software with barcode support

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), 1800 VA
Compressed air	8 bar / 115 psi, filtered
Temperature	18 $^{\circ}\text{C}$ to 27 $^{\circ}\text{C}$
Relative humidity	40% to 60%
Machine weight	1980 kg

All information subject to change without notice!
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