

A5a Flying Probe Test System

Automated test for rigid PCBs



- ▲ 8 Test Heads
- ▲ Fully Automated
- ▲ Soft touch probe
- ▲ Kelvin 4-Wire Testing

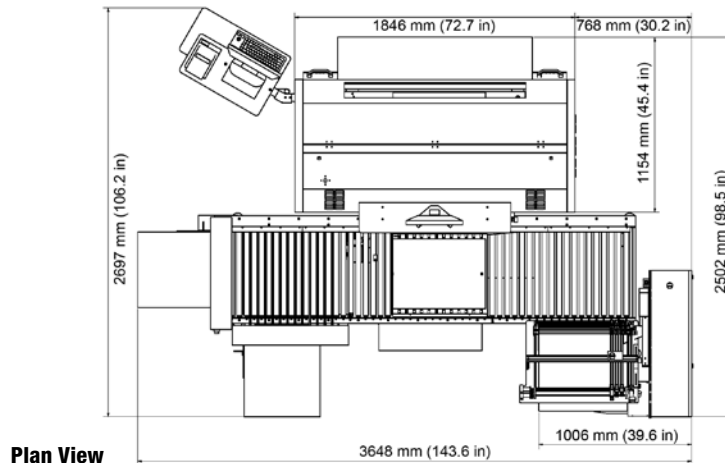
COMBINEDSTRENGTH

atg
test systems

LUTHER & MAELZER

Technical Specification

Flying Probe Test System A5a



Mechanics

Fully automatic loading, test and stacker system for different board sizes in succession without stopping test procedure
Basic unit with 8 test probes (4 top, 4 bottom)

Board Handling

	Manual mode	Automatic mode
Max. Board Size (X x Y)	610 x 460 mm	610 x 460 mm
Min. Board Size (X x Y)	25 x 25 mm	100 x 100 mm
Test area (X x Y)	610 x 460 mm	610 x 460 mm
Board Thickness	up to 7 mm	up to 4 mm
Loader capacity	390 mm	
	240 boards / 1.6 mm thickness	
Cycle time automation	20 s	
Smallest pad	50 µm / 2.0 mil	
Smallest pitch	100 µm / 4.0 mil	
System accuracy	± 20 µm / ± 0.8 mil	
Repeatable accuracy	± 10 µm / ± 0.4 mil	
Soft touch probes	5 to 15 g / no witness marks	
or		
Rigid Probes	10 to 100 g	

Electronics

Continuity test	1 Ω to 10 kΩ
Isolation test	up to 25 MΩ (FM), up to 2 GΩ (ohmic) MicroShort Detection®
Test voltage	up to 500 V

Camera System

4 color cameras (1024 x 768 pixel) for rapid optical scanning of top and bottom side
Resolution from 9 µm / pixel

Options

- 4-wire measurement:

0.1 mΩ to 5 mΩ	± 0.1 mΩ
>5 mΩ to 1 kΩ	± 2%
with Kelvin probes	0.2 to 5 g
- Embedded components test:

R	0.5 Ω to 100 Ω	± 0.5 Ω
	>100 Ω to 10 MΩ	± 0.5 %
	>10 MΩ to 50 MΩ	± 2 %
C	0.03 pF to 1.5 pF	± 0.03 pF
	>1.5 pF to 100 µF	± 2 %
L	0.1 µH to 3.33 µH	± 0.1 µH
	>3.33 µH to 5 mH	± 3 %
- LaTest® open detection with LaTest® probes: 1 to 10 g
- Measurement current: 0.7 A CD + 0.7 A AC (1 kHz)
- Label printer with barcode support
- Retest of fault files from grid test systems with barcode support
- Repair software

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), 2500 VA
Compressed Air	6 bar / 90 psi, filtered
Temperature	18 °C to 27 °C / 66 °F to 81 °F, ± 3 K
Relative Humidity	40% to 60%
Machine Weight	1850 kg

All information subject to change without notice!
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