A8-16a Flying Probe Test System

Automated Test for Rigid and Flexible Boards

- 16 Test Heads
- High Speed Direct Linear Drives for X and Z motion
- Light weight Carbon Z-Axis
- Fully Automatic “Lights-out” Operation
- Tension Shuttle System for thin core product
- Fast 300 mA Kelvin Testing

atg®
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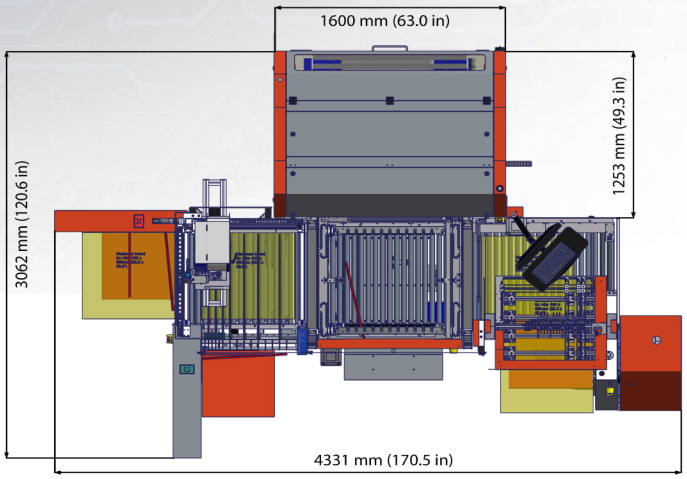
A8-16a Technical Specifications

Flying Probe Test System



Plan View

Mechanics

Fully automated test system for production panels and server boards sizes in lights-out operation.
Basic unit with 16 test probes (8 top, 8 bottom)

Board Handling

Max. board size (X x Y)	640 mm x 650 mm / 25.2” x 25.6”
Min. board size (X x Y)	100 mm x 100 mm / 3.9” x 3.9”
	60 mm x 80 mm / 2.4” x 3.2” (manual mode)
Test area (X x Y)	610 mm x 620 mm / 24.0” x 24.4”
Board thickness	up to 7 mm / 0.3”
Board weight	up to 10 kg
Loader capacity	390 mm
	240 boards / 1.6 mm thickness
Cycle time automation	< 20 s (clamping mode)

Smallest pad	50 µm / 2.0 mil
Smallest pitch	100 µm / 4.0 mil
Resolution measurement system	± 0.1 µm / ± 0.004 mil
Repeatable accuracy	± 4 µm / ± 0.16 mil
Soft touch probes	5 g to 10 g

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

8 color cameras for fast optical scanning of top and bottom side.
Resolution 9 µm/ pixel

Options

- 4-wire measurement with max. 300 mA test current

0 Ω to 1 kΩ	± 2 %, min. ± 25 µΩ
with Kelvin probes	0.3 g to 2.5 g
Smallest pad	80 µm / 3.2 mil*
Smallest pitch	120 µm / 4.8 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_F, U_R, U_{BR}	0 V to 12.5 V

- LaTest® open detection

with LaTest® probes	1 g to 10 g
High current	1.4 A (1 kHz)

- Label printer with barcode support
- 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), 2500 VA
Compressed air	8 bar / 115 psi, filtered
Temperature	18 °C to 27 °C
Relative humidity	40 % to 60 %
Machine weight	2000 kg

All information subject to change without notice!
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