

FH-1200

High-Throughput Film Frame Test Handler



Automotive



Mobility



IoT/IoV & Optoelectronics



Computing & Network



Industrial & Medical



Consumer

Productivity

- Accommodates 200 and 300 mm wafer rings, and custom shapes onto which multiple strips can be mounted
- QFN, DFN, WLCSP, eWLB test package capabilities
- Can be configured for test development or high-volume manufacturing

Flexibility

- No change kits are required regardless of package size (if same frame is used)
- Innovative I/O structure makes re-test simple and easy
- Optional Reject Mark Laser allows for two end-of-line processing options

- No package size limitations
- 8" or 12" wafer or custom rings
- Optional Reject Mark Laser

- Field-proven availability to test ultra-small QFN devices 0.3 x 0.6 in high-volume
- Dramatically lower end-of-line taping costs

FH-1200

High-Throughput Film Frame Test Handler

Specifications

Platform

Performance Characteristics

- Frame to Frame index time: <4.0 seconds at ≥ 10 seconds total test time for single strip on frame⁽¹⁾
- Intra-Strip Index Time: <350 msec for <24 mm move
- Maximum Y-axis range: 305 mm
- Maximum X-axis range: 800 mm
- Maximum Theta range: +/- 6 degrees
- Positioning Accuracy: +/- 15 microns with vision
- Jam rate: <1: 1,000 strips run
- Uptime >97%
- MTBF: >200 hours
- MTTR: <20 mins
- MTBA: >4 hours
- Z-force: 750 Newtons (standard); 1,170 & 1,900 Newton options available
- Contacting controls: Z-Height position or Z-Force limiting

Changeover (frame size, load board)

- Frame, load board: <15 minutes
- Device (recipe change): <1 minute

2D, Barcode Read

- Topside - 2DID, Barcode, SEMI T9-0200

Wafer Frame Carriers

- Industry-standard 200 and 300 mm wafer frames
- Custom 200 - 300 mm wafer frames, consult Cohu for more information

Cassette

- Number: 2 input, 2 output, 1 reject cassette with reduced number of slots
- Length: 400 mm maximum
- Height: 400 mm maximum

Package

- QFN/DFN lead frames, WLCSP, other tape mounted package types
- Pad pitch: 0.3 mm minimum
- Pad size: 0.15 mm x 0.15 mm minimum

Facilities Requirements

- Electrical: 220V single phase, 50-60 Hz, 20 Amps
- Compressed Air: Clean Dry Air, 5.5 bar (~80 psi)
- Air consumption: < 175 lpm typical

ESD Protection

- Decay Time: <10 seconds
- Ion Balance: $\pm 30V$
- Ionizers (optional): four ionizers: one at Input Area, one at Input Test Area, one at Output Test Area and one at Output Area of the machine

Physical Dimensions

- Size: 1.5 m (L) x 1.9 m (D) x 1.0 m (H)
- Weight: 1,500 Kg
- Mobility: Transportable
- Clearance: 100 mm under the machine for manipulator feet

Electrical Interfaces

- Factory Network: Ethernet (TCP/IP, Microsoft)
- Digital/Tester Interfaces: GPIB, TCP/IP or RS-232
- Software Interface: SECS/GEM compliant

Options to the Base System

- Ground Fault Monitoring
- ESD Ionizers
- Automatic Contactor Cleaning
- Reject Mark Laser (RML)

(1) The contacting plane is below the bottom surface of the top or docking plate. Referring to running more than one (1) strip on a frame, one (1) sec needs to be added to the Frame to Frame Index Time for each additional panel greater than one (1) on a frame, to account for the additional required test stage movements in X,Y,Z axes.

Specifications subject to change without notice.
For detailed performance specifications, please contact Cohu.