

FH-1200

High-Throughput Film Frame Test Handler



Automotive



Mobility



IoT/IoV & Optoelectronics



Computing & Network



Industrial & Medical



Consumer

Productivity

- High parallelism ambient testing of QFN, DFN, and WLCSP devices
- No change kits are required regardless of package size (if same frame is used)
- No package size limitations
- Accommodates 200 mm, 300 mm, and custom wafer rings onto which multiple strips can be mounted
- Superior contacting methodology that avoids package cracking
- Optional Reject Mark Laser (RML) that drives the highest possible E.O.L. quality

- Ultra-high parallelism ambient testing
- Use for test development or high-volume testing
- Interfaces for every major ATE tester
- Superb re-test capabilities
- Dramatically lower End-of-Line taping costs
- Innovative I/O for superb index time

FH-1200

High-Throughput Film Frame Test Handler

Specifications

Platform

Performance Characteristics

- Frame to Frame index time: Time to mechanically move <3.5 seconds. Time to read 2DID code <400 ms. Time to align for contacting: # alignments x 300 ms
- Intra-Strip Index Time: QFN or DFN: <350 ms for <24 mm move. WLCSP: <350 ms for <24 mm move
- Maximum Y-axis range: 300 mm
- Maximum X-axis range: 760 mm
- Maximum Theta range: +/- 6 degrees for calibration purposes; +/- 0.2 degrees for processing.
- Positioning Accuracy: +/- 15 microns with vision
- Contacting Controls: Z-height position or Z-force limiting
- Jam rate: <1 jam per 1,000 wafer frames run
- Uptime >97%
- MTTA: <2 mins
- MTBF: >200 hours
- MTTR: <20 mins
- Z-force contacting: 77 Kgf (standard). 120 Kgf & 194 Kgf optional

Operating Environment

- Ambient Temperature: 25°C +/- 5°C
- Clean Room: ISO Class 8 or better (Class 100K)
- Relative Humidity: 20-80% non-condensing
- Maximum Floor Load: 750 Kg/meter²
- Audible Noise Level: < 65 dba at 1 meter

ESD Compliance

- Positive Decay Time: < 10 seconds
- Negative Decay Time: < 10 seconds
- Ion Balance: < 30 V
- Ionizers: four ionizers in total: one at the Input Area, one at the Input Test Area, one at the Output Test Area and one at the Output of the machine

Input and Output Capabilities

- Industry standard 300 mm wafer rings, up to 380 mm side-to-side and front-to-back
- Industry standard 200 mm wafer rings, up to 270 mm side-to-side and front-to-back

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

- Cassettes: Width: 400 mm (cassette for 380 mm wide wafer frame). Length: 400 mm (cassette for 300 mm long wafer frame)
- Cassette number: 2 input, 2 output, 1 reject cassette with reduced number of slots
- Manual insertions and removal of cassettes

Changeover

- 300 mm to 200 mm wafer frame: < 15 minutes
- 200 mm to 300 mm wafer frame: < 15 minutes
- No need for subjective adjustments to kit parts
- No special tools required for changeover
- Device changeover: <1 minute

Device Requirements

- WLCSP: Ball pitch: 0.3 mm minimum, ball diameter: 150 microns minimum
- Leadless packages (QFN & DFN): Pad pitch: 0.3 mm minimum, pad size: 0.15 mm x 0.15 mm minimum

General Configuration

- SMEMA Track: No. Not required or supported.
- Product Flow: Left to Right
- Machine Size: 1.5 m (L) x 1.9 m (D) x 1.0 m (H)
- Machine Weight: 1500 Kg
- Mobility: Transportable
- Clearance for Manipulator Feet: 100 mm

Interfaces

- LCD panel with touchscreen operation
- Operator Indicator (Light Tower)
- Factory Network Connection: Ethernet (TCP/IP, Microsoft)
- Digital/Tester Interfaces: GPIB, TCP/IP or RS-232
- Software Interface: SECS/GEM compliant
- Four password levels, 0-3 are fully user configurable

Power and Facilities Requirements

- Electrical: 220V single phase, 50-60 Hz, 20 Amps
- Compressed Air: Clean Dry Air, 5.5 bar (approx. 80 psi)
- Air consumption: < 175 liter per minute typical
- Vacuum Pump: Not required

Options to the Base System

- Ground Fault Monitoring
- ESD Ionizers
- Reject Mark Laser
- Automatic Contactor Cleaning
- Assembly Map Importation and Use