MT9510 x16

Tri-Temp Pick-and-Place Handler


Automotive


Mobility


IoT/IoV & Optoelectronics


Computing & Network


Industrial & Medical


Consumer

Productivity

- Up to 5,300 UPH
- Up to x16 test site parallelism
- Fast index time 0.65 s
- High temperature accuracy
- Easy package style conversion in 20 mins
- Kitable system for QFP, BGA, PGA, QFN and other packages

Flexibility

- Device size from 2 mm x 2 mm to 20 mm x 20 mm
- Large and small size packages e.g. QFP, BGA, PGA and QFN
- Output versions: automatic tray module and single tray
- Advanced, scalable ESD protection
- Standard IC and MEMS/sensor test
- Contacting: standard; high frequency and Kelvin

- **Full tri-temp range: -55°C to +175°C**
- **Temperature stability ±0.5°C**
- **Temperature accuracy ±3.0°C**
- **Small footprint**
- **Flat vertical contact site**
- **Large production-proven installed base**

MT9510 x16

Tri-Temp Pick-and-Place Handler
Specifications

Platform

Performance Characteristics
- Throughput up to 5,300 UPH
- Index Time (Virtual index time for multiple contact sites)
  - Octal mode: 0.08 s / device
  - x16 mode: 0.04 s / device

Temperature Characteristics
- Ambient, ambient hot (+ 155°C standard, +175°C optional)
- Tri-temp (-55°C to +155 °C, +175°C optional)
- Test Site Accuracy ±3°C
- Test Site Temperature Stability ±0.5°C

Loading/ Unloading
- All commonly used trays acc. to JEDEC standard CO-012, CO-029 and CO-034, others on request
- Type of Loader: tray stack, separate input/output tray loop
- Loading/Unloading Possible During Operation: Yes

Contacting
- Contact Modes
  - Parallel
  - Ping-pong
- Applications
  - Short contact ambient (plunge to board)
  - Short contact tri-temp (plunge to board)
  - Standard (including temperature insulation and hot air purge)

Bin Categories
- High volume plus 3 or 6 manual categories
- Software binning categories: 32

Docking
- Docking Height: 990 mm (floor to CUH center)
- All commonly used docking systems and test heads are supported

Available Versions
- Tray to tray
- Up to 16 contact sites

Available Options (selection)
- Interface SECS-II / GEM
- Automatic feet
- Ionizer, I/O area and contact chamber
- Charged plate monitor (CPM)
- Handling of devices smaller than 5 mm x 5 mm
- Double device detection
- DI-Core InSight
- Vacuum insulated LN2 connection
- Safe LN2 tank change
- De-icing monitoring
- Color tray detection

Facility Requirements
- Power Supply
  - Factory setting: 400 V AC 3 phases/N/PE, 16 Amps each
  - Alternative connections: 208 V AC 3 phases/N/PE, 16 Amps each. 230 V AC 1 phase/N/PE, 32 Amps 50/60
- Power Consumption: all heaters on: max. 5,200 W
- LN2 Consumption (for Cold Operation Only)
  - Typ. 18 l/h for cold operation
  - Typ. 33 l/h for cooling down from ambient to -55°C
- Compressed Air Pressure and Consumption
  - Nominal pressure: 5 to 10 bar (70 to 145 psi)
  - Consumption depends on temperature and operation mode: 170 l/min to 940 l/min
- Mobility: system is on casters, handler can be moved by one person

Physical Dimensions
- Width / Height: 1.19 m x 1.57 m (47" x 62")
- Weight: 850 kg (1,900 lbs). Including packing crate: 1,050 kg (2,350 lbs)

Standards
- CE
- SEMI S2-93 assessment

Change Kit

Device Types
- Conversion Kits for QFP, BGA, µBGA, PLCC, TSSOP, CSP, QFN (MLF/MLP), PGA, LGA, MCM, other package styles on request

Device Specifications
- 2 mm x 2 mm to 35 mm x 35 mm (for up to 8 contact sites)
- 2 mm x 2 mm to 20 mm x 20 mm (for 16 contact sites)
- Min. lead/pad/ball pitch: 0.4 mm

Kit Changeover
- Uses conversion kits for easy package style conversion
- Required conversion time typ. 20 min for 1 person
- No adjustments required after package style conversion

Contactors
- Cohu offers contactors for all package versions and applications, i.e. standard, high frequency and Kelvin

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

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