MT9510 x16
High Parallel Tri-Temp Pick and Place Handler

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 ± 2.0 °C

- Small footprint
- Flat vertical contact site
- Large installed base
MT9510 x16

High Parallel 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
• InSite®
• 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: 1050 kg (2,350 lbs)

Standards
• Compliant to CE

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.