

MT9510 XP

Tri-Temp Pick and Place Handler



Applications:

- Automotive power devices
- RF and communication
- Logic, amplifier and linear
- Processors and DSP's

Solution for:

- Large and small size packages e.g. QFP, BGA, PGA and QFN
- Device size from 2 mm x 2 mm to 70 mm x 70 mm
- Standard IC and MEMS/sensor test

Facts:

- Up to 8 contact sites
- Outstanding temperature performance
- Tri-temp from -55 °C to +175 °C
- Kitable system for QFP, BGA, PGA, QFN and other packages
- Advanced, scalable ESD protection
- Contacting: standard; high frequency and Kelvin
- Throughput up to 5300 uph
- Installed MT9510 base: more than 950 systems

MT9510 XP

1. Base System

1.1 Available Versions

- Ambient, ambient hot (+155 °C standard, +175 °C optional)
- Tri-temp (-55 °C to +155 °C, +175 °C optional)
- Tray to tray
- Up to 16 contact sites

1.2 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

2. Packages Style Conversion

2.1 Conversion Kits

- Uses conversion kits for easy package style conversion

1.1 Required Conversion Time

- Typ. 20 min for 1 person

2.2 Adjustments

- No adjustments required after package style conversion

3. Packages

3.1 Conversion Kits for

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

3.2 Min. and Max. Size of Packages

- 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

4. Loading/Unloading

4.1 Loading/Unloading Material and Size

- All commonly used trays acc. to JEDEC standard CO-012, CO-029 and CO-034, others on request

4.2 Type of Loader

- Tray stack, separate input/output tray loop

4.3 Loading/Unloading Possible During Operation

- Yes

5. Contacting

5.1 Contact Modes

- Parallel
- Ping-pong

5.2 Applications

- Short contact ambient (plunge to board)
- Short contact tri-temp (plunge to board)
- Standard (including temperature insulation and hot air purge)

5.3 Available Contactors

- Cohu offers contactors for all package versions and applications, i.e. standard, high frequency and Kelvin.
- Sockets from other suppliers may be used, e.g. Yamaichi, Synergetix, JTI, Enplas, Aries, OzTek, Seiken- others on request.

6. Temperature Accuracy

6.1 Test Site Accuracy

- +/- 3 °C

6.2 Test Site Temperature Stability

- +/- 0.5 °C

7. Bin Categories

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

8. Docking

8.1 Docking Height

- 990 mm (floor to CUH center)

8.2 Compatibility

- All commonly used docking systems and test heads are supported

9. Performance

9.1 Throughput

- Up to 5,300 uph

9.2 Index Time

(Virtual index time for multiple contact sites)

- Octal mode: 0.08 s / device
- X16 mode: 0.04 s / device

10. Facility Requirements

10.1 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

10.2 Power Consumption

- All heaters on: max. 5,200 W

10.3 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

10.4 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

10.5 Mobility

- System is on casters, handler can be moved by one person

10.6 Weight

- Operation condition: 850 kg (1900 lbs)
- Incl. packing crate: 1050 kg (2350 lbs)

11. Compliance and Standards

11.1 Compliant to

- CE

This document is a general overview of the product capabilities. For actual use cases the detailed technical specifications apply. All information on this document about configurations and performance data are subject to the individual conditions of the actual use case. All performance figures such as MTBF, MTBA, Uptime, Yield, Jam Rate, Life Span, Cleaning Cycles etc. can vary with the actual use case / application. They assume that only original Cohu spare and consumable parts are used, recommended maintenance intervals and procedures are respected, operators/maintenance technicians have successfully participated in formal equipment training by Cohu to the appropriate level, and only Cohu approved software is used on the systems. Cohu assumes no warranty or liability if any of these requirements is not met. For application specific binding specification please contact your sales person.

