

MT2168 XT



Tri-Temp Pick & Place Handler

Applications

- analog
- wireless
- micro controllers
- broadband
- computing

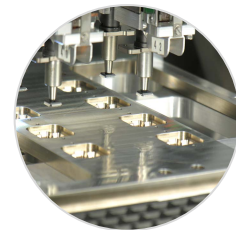
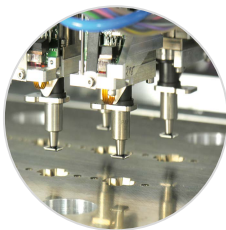
Facts

- up to 32 contact sites
- index time 0.70 s
- high soak capacity
- temperature accuracy +/- 1.0° C
- throughput up to 15,000 uph
- fast package style conversion
- flexible contact site pitch
- scalable configuration



Solution for

- BGA, QFN, QFP
- thin and small devices:
2.0 x 2.0 x 0.3 mm
- high pin count
- ambient / hot / cold temperature range



MT2168 XT



Tri-Temp Pick & Place Handler

1. Base System

- 1.1 Available Versions:
 - ambient, ambient hot, ambient/hot/cold
 - up to 32 contact sites
- 1.2 Available Options (Selection)
 - Active Temperature Control (ATC)
 - Active Socket Purge (ASP)
 - High Contact Force
 - Soft Touch
 - Double Device Detection

2. Package Style Conversion

- 2.1 Conversion Kits:
 - uses conversion kits for easy package style conversion
- 2.2 Required Conversion Time:
 - 10 to 20 minutes
- 2.3 Adjustments:
 - no adjustments required after package style conversion

3. Packages

- 3.1 Conversion Kits for:
 - QFP, BGA, QFN, SO, TO, LGA, other package styles on request
- 3.2 Min. and Max. Size of Packages:
 - 2x2 to 70x70 mm
 - min. pitch: 0.4 mm (standard set-up)
 - smaller pitches on request

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 Plunger Force
 - up to 5,000 N
- 5.2 6 DOF Self Alignment
- 5.3 Soft Touch (optional)

6. Temperature

- 6.1 Soak Capacity
 - equal to 3 – 4 JEDEC trays
- 6.2 Dynamic Contact Site Accuracy:
 - +/- 2° C
 - +/- 1° C with ATC
- 6.3 Temperature Control Stability (static measurement):
 - +/- 0.2° C
- 6.4 Heating / Cooling Time
 - Heating from ambient to +130°C: typ. 15 minutes
 - Cooling from ambient to -45°C: typ. 40 minutes
- 6.5 Recommended Defrost Cycles
 - Max. 72hrs (continuous cold run)

7. Bin Categories

- 7.1
 - 6 tray categories (stack or manual)
 - software binning categories: 32

8. Docking

- 8.1 Vertical Docking
- 8.2 Docking Height:
 - 990 mm (Floor to CUH Centre)
- 8.3 Compatibility:
 - all commonly used docking systems and test heads are supported.

9. Performance

- 9.1 Throughput:
 - up to 15,000 uph
- 9.2 Index Time:
(virtual index time for multiple contact sites)
 - single mode: 0.700 s
 - dual mode: 0.350 s / device
 - quad mode: 0.175 s / device
 - octal mode: 0.088 s / device
 - x16 mode: 0.044 s / device
 - x32 mode: 0.022 s / device
- 9.3 Error Rate
 - 1/10,000

10. Facility Requirements

- 10.1 Dimensions (Standard Configuration)
 - ambient/hot configuration: L x W x H: 1.61 x 1.67 x 1.76 m
 - cold for characterization: L x W x H: 1.61 x 1.73 x 1.76 m
 - HVM cold: L x W x H: 1.61 x 1.98 x 1.76 m
- 10.2 Mobility:
 - system is on casters, handler can be easily moved
- 10.3 Weight:
 - operation condition: 1350 kg (2976 lbs)
- 10.4 Power Supply:
 - Standard connections
 - 400 V AC 3 phases/N/PE, 16 Amps each
 - 208 V AC 3 phases/N/PE, 16 Amps each
 - 230 V AC 1 phase/N/PE, 48 Amps
 - nominal frequency: 50 – 60 Hz
- 10.5 Power Consumption:
 - max. 3.6 kW; nominal
- 10.6 Compressed Air Pressure and Consumption:
 - nominal pressure: 4.5 to 10 bar (58to 145 psi)
 - consumption depends on temperature and operation mode: 15 to 400 l/min
- 10.7 LN2 Consumption
 - at -45°C x16 standard operation: 25l/h

11. Compliance and Standards

- 11.1 Compliant to:CE

All performance figures such as MTBF, MTBA, Uptime, Yield, Jam Rate, Life Span, Cleaning Cycles etc. can vary with specific package type, test program and / or specific application environment. They assume that only original Multitest spare and consumable parts are used, recommended maintenance intervals and procedures are respected, operators/maintenance technicians have successfully participated in formal equipment training by Multitest to the appropriate level, and only Multitest approved software is used on the systems. Multitest assumes no warranty or liability if any of these requirements is not met. All listed data are for information only. For binding specification please contact your sales person

