

MicroVision

UPH
40K

Model 996i Tray to Tray



BGA, QFP, CSP, TSOP, QFN INSPECTION

Signature features include :

- Transfer of multiple units to 3D scanning on a magnetic linear slide to achieve high accuracy and repeatable result
- 3D inspection on the “FLY” with 50mm field of view
- No Rotary lenses or conversion kits are required for QFP, BGA or QFN packages
- Simple conversion within 1 minute using quick exchange multiple pickup heads
- Re-verification of Mark and Position of unit in tray after replacement
- Option include: - High Speed Dual Tape and Reel up to 14K UPH
- In-pocket Inspection with Auto Reject Replacement

Inspection (Accuracy / Repeatability)

BGA / CSP

Measuring Principle	Unit (micron)
Ball Height	6.0
Coplanarity	6.0
Ball Diameter	6.0
Warpage	6.0
Ball Pitch	5.0
Ball Offset	5.0
Body Width & Height	8.0
Grid to Package Offset	8.0
Ball Quality	10%

QFP / TSOP

Measuring Principle	Unit (micron)
Coplanarity	6.0
Standoff	10.0
Lead Offset	6.0
Lead Skew	6.0
Lead Pitch	6.0
Lead Sweep	5.0
Lead Slant	5.0
Terminal Dimension	6.0
Lead Burr	6.0
Deviation	6.0
Foot Angle	0.75°

QFN

Measuring Principle	Unit (micron)
Pad Pitch	6.0
Pad Spacing	6.0
Pad Width & Height	6.0
Pad Offset	6.0
Body Width & Height	6.0
Parallelism	0.75°

Mark Inspection:

Missing, incomplete or incorrect characters and logos, smeared, blurred, scratched, low contrast, angle, misaligned, reversed, double and additional mark.

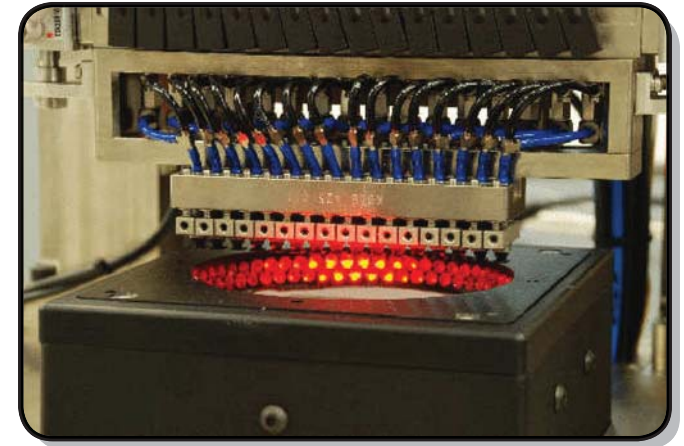
Package Visual Inspection:

Scratches, Chip off, Void, Contamination 60x60 µm

Accuracy is measured on a golden unit device.
Repeatability is measured on a real device at 3 sigma value distribution of all lead / ball-level deviations from the average value when performing statically repeated measurement on the same device.

Facilities Requirements

- Dimensions Tray : 1500 (W) X 1450 (D) X 1570 (H) mm
Tape : 2580 (W) X 1450 (D) X 1570 (H) mm
- Weight : 1200 kg
- System Power : 220-240Vac +/-10%, 50/60 Hz
20Amps, Single Phase
- Compressed Air : 70-80 psi, 12 scfm
- Temperature : 5°C (41°F) to 40°C (104°F)
- Classification : <Class 10 clean room



Speed (UPH)

Device	Size (mm)	Tray Matrix	Speed Tray	Speed Tape
BGA 48	5 x 5	16 x 40	40,000	12,000
BGA 100	8 x 8	12 x 30	27,000	14,000
BGA 100	10 x 10	8 x 23	20,000	9,000
BGA 169	12 x 12	8 x 21	20,000	9,000
BGA 256	27 x 27	4 x 10	9,500	NA
BGA 388	35 x 35	3 x 8	7,000	NA
QFP 32	7 x 7	10 x 25	21,000	10,000
QFP 100	14 x 14	6 x 15	14,000	7,000
QFP 208	28 x 28	4 x 9	9,500	NA
TSOPII 54	10 x 21	9 x 12	21,000	NA
QFN 24	5 x 5	14 x 35	34,000	12,000
QFN 36	9 x 9	10 x 26	24,000	10,000



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