www.yestechinc.com

YES Tech
A NORDSON COMPANY

YTV M1m AOI

Automated Optical Inspection
for Microelectronics

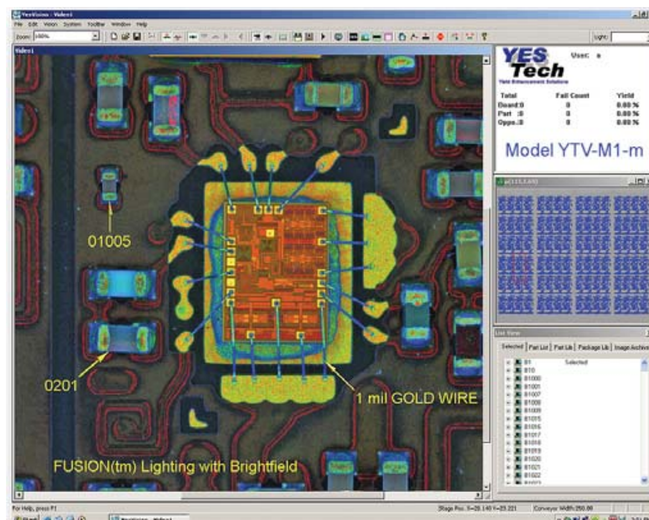
- Quick Set-up
- High Defect Coverage
- High Speed
- Supports Multiple Bonders
- Low Cost of Ownership
- Intuitive User Interface

YESTech's advanced Thin Camera™ technology offers high-speed device inspection with exceptional defect coverage. With three megapixel resolution and telecentric optics, M1m inspects bond wires, die placement, SMT components and substrates, all within a footprint less than 1 sq. meter. The M1m can be put in-line with your wire bonders or off-line to support several bonders. Options include magazine loader and unloader as well as laser and ink markers, top and bottom.

Programming the M1m is fast and intuitive. With CAD data input, a complete recipe can be completed in less than 1 hour. The offline programming option allows the engineer to create complete recipes at any remote location, without affecting production.

The M1m utilizes several image processing algorithms to perform a multitude of inspections historically performed manually by operators using eyepiece microscopes. Real-time color, normalized gray scale correlation,pattern matching and binary "blob" analysis are just a few of the tools used to automate the process.

YESTech's M1m also provides you with SPC data, defect reports, offline defect classification, offline rework capability and even archived images of every device you inspect. In addition, **YESTech also provides free software upgrades for the life of the system.**



Automated Inspection For:

- Missing wires
- Damaged wires
- No stick
- Off pad
- Epoxy defects
- Die defects
- Bump / ball defects
- SMT defects
- Contamination

YTV M1m AOI Specifications

Inspection Capabilities

Throughput:	75-125 sq. mm / sec.
Maximum Tray Size:	350mm x 250mm (14 x 10 in.)
Device Types:	JEDEC, MCMs, Hybrids, FlipChip, BGA, microBGA, MEMs, stacked, PoP
Defects Detected:	Wires: missing, damaged, no stick, off pad, club foot, lifted
	Die: missing, wrong, polarity, chipped, cracked, contamination
	Component: position, missing, wrong, polarity, skew, tombstone
	Epoxy / Solder: contamination, insufficient, excessive, bridging

Software

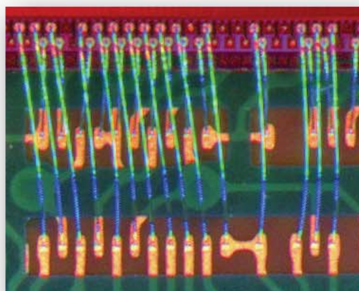
Algorithms:	Pattern matching, gray scale, color, binary, OCV, OCR, barcode and rule-based
Data Requirements:	Gerber Data, ASCII Text, Most Native CAD Formats
CAD Translation Package:	CircuitCAM, Unicam, YESTech CAD Utility, Excel
Operating System:	Windows XP Professional
Languages:	English, Spanish, Chinese
Off-line Software:	Optional - Rework, Review and Program Creation
SPC Software:	Optional - Real-time local and remote

Hardware

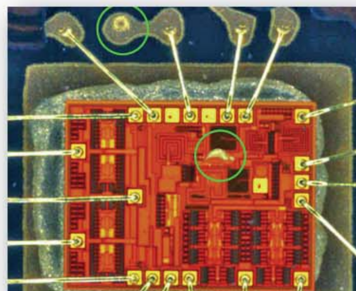
Material Handling:	USB 2, SMEMA, dual direction auto width conveyor with integrated, full length, tray clamping
Conveyor Length:	876mm (34.5 in.)
Conveyor Height:	950mm + /- 35mm (37.5 + /- 1.3 in.)
Lighting:	Proprietary Fusion Lighting™
Imager:	YESTech 3 Mega-pixel Thin Camera™ (G2) 2048 x 1536 Resolution with 3 micron pixel size
Optics:	Proprietary High Resolution, Low Distortion with Coaxial Illumination
Magazine Loader / Unloader:	Optional
laser Mark (top / bottom) :	Optional
Ink Mark:	Optional

Facilities

Power:	100-240 VAC, 50/60 Hz, 10 amps
Air input:	60 to 90 PSI (0.4 to 0.6 Mpa)
Footprint:	876mm x 1010mm x 1400mm (34.5 x 40 x 55 in.)
Weight:	770 kg (1700 lbs)



Fine pitch, multi-level wires



Epoxy and solder defects

Bump and die defects

YESTech Inc.

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