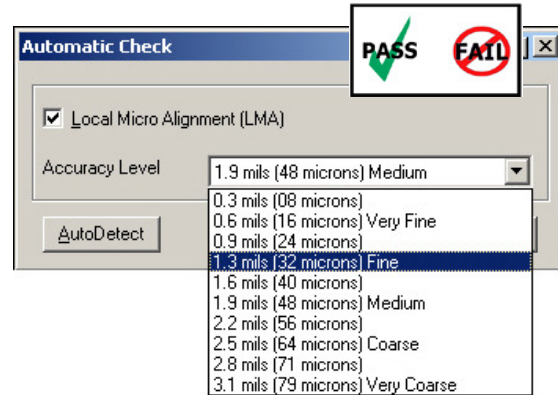


ScanINSPECT AFI™

Automatic Film Inspection



WHAT IS ScanINSPECT AFI?

ScanINSPECT AFI is a fully integrated, stand-alone inspection workstation for film, diazo, photo mask, chrome, glass plates, etc.

ScanINSPECT AFI uses a PC Windows based software package integrated with a high-resolution, calibrated, A3 size flatbed scanner. This combination allows 100% inspection for accuracy against Gerber data or against golden board data.



AUTOMATIC FEATURES

Tired of using slow, error prone manual inspection methods? ScanINSPECT AFI offers various functions that quickly and automatically inspect for:

- Mousebites, shorts, opens, dust, and pinholes
- Absence/Presence of Apertures and Traces
- Confirm Proper Aperture/Trace Shape and Size
- Compare Film/Stencil/Screen vs. Gerber
- Compare Film/Stencil/Screen vs. Golden Film/Stencil/Screen
- Confirm Proper Aperture/Trace Position
- Create Gerber data from Boards/Films/Stencils

Optional FAB Module

If the optional FAB module is also purchased, ScanINSPECT AFI not only inspects, it also is able to create Gerber data. Utilizing its calibrated scanner, ScanINSPECT AFI inputs silver or diazo film, mylar images, technical drawings, actual PCBs, original hand-taped designs and stencils/screens then creates Gerber data.

VERIFICATION

Worried about the quality of existing films or Gerber files? Use ScanINSPECT AFI's "check functions" to verify the accuracy of the data. The new LMA option allows for checking apertures/traces as small as to 0.002" diameter (0.050 mm).

These functions verify films for production errors, accuracy, opens/shorts, mouse bites, and size. The system steps the operator automatically through all discrepancies of the verification results.

PRODUCTION USES

ScanINSPECT AFI permits fast and accurate comparison of film/stencils/screens to bare PCBs bringing automation and increased productivity to QC departments.

With the optional FAB module, ScanINSPECT AFI creates Gerber 274X files as well as other data used in PCB and stencil production, including: Silkscreens, Soldermasks, Padmasters, Stencil Files, Panelized Images, DXF, PCX and BMP files, etc.

WHY USE ScanINSPECT AFI?

- **Mandatory:** 100% automatic inspection of films/screen/stencils for absence/presence and size of apertures/traces.
- **Necessity:** Detect size error variances as small as 0.0003" (0.008mm) at 4000 dpi.
- **Necessity:** Supply production with required Gerber data with optional FAB module.
- **Flexibility:** Use one software product to both create and inspect against Gerber data required by the PCB and fabrication process.

SYSTEM FEATURES

SCANNING

- Scan Film, Diazo, photo mask, chrome, glass plates, etc.
- Verifiable Image Alignment
- Automatic Raster to Gerber Alignment

INSPECTION FUNCTIONS

- Compare existing films against Gerber image or actual PCBs for errors
- Verify aperture/trace size errors to 0.0003" (0.008mm) on aperture/trace as small as 0.002" (0.050mm)
- Highlight D-Codes
- Check Scanned image against scanned image
- Check Gerber Image against scanned image
- Compare Gerber Image against Gerber image
- Design Rule Check
- Geometry Inspection

AUTOMATIC FUNCTIONS

- Pad Recognition: circle, square, oval, rectangle
- Pads on Grid
- Local Micro Alignment (LMA) for pads & tracks

EDITING

- Multi-Color Display
- Multi-Level Zoom Function
- Edit Accuracy: 0.0001" (0.00254mm)
- Customized Aperture Tables
- Snap-to: Pad Center
- Snap-to-Grid: Pads
- Multi-Layer Display
- Macros: Create & Store
- Automatic Text Function
- Metric or Inch

OUTPUT

- Pass/Fail Inspection Report
- Rework File Generation
- Gerber Files (274D & 274X)
- Comprehensive Aperture Tables
- Stencil Files
- Solder Mask
- Pad Master
- Silkscreen
- HP-GL
- DXF
- PCX and TIFF
- Panelized Images

TECHNICAL SPECIFICATIONS

SCANNER

- High-Resolution Color Flatbed Scanner, Size A3: (400/1000/2000/3200*/4000* dpi)
 - Calibrated Accuracy: $\pm 0.0015"$ ($\pm 0.0381\text{mm}$)
 - A3-Scanning Bed Area: 11.7" x 16.5" (297mm x 419mm)
 - Maximum Work Area: 32.0" x 32.0" (813mm x 813mm)
- *Reduced scanning area for 3200 & 4000 dpi

COMPUTER*

- Pentium (3GHz or higher) Personal Computer
 - 80 GB HD, 2 GB RAM
 - CD-ROM (CD-RW for archive purposes)
 - Monitor
 - Printer
 - Win XP Service Pack 2
 - 2 available USB ports
- *Recommended customer supplied minimum PC requirements.

ADDITIONAL SYSTEM COMPONENTS

- Precision Glass Calibration Grid
- Scanner Interface Cards/Cables
- Software Protection Key
- Transmissive Lighting Package
- Custom Desk
- Scanning Accessory Package

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(All specifications and designs subject to change without notice.)



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