ScanEYE FILM" "Automatic Film Inspection"



WHAT IS ScanEYE FILM?

ScanEYE FILM is a fully integrated, stand-alone inspection workstation for film, diazo, photo mask, chrome, glass plates, etc. The same system also inspects solderpaste/adhesive stencils and thick film screens after fabrication or production.

ScanEYE FILM 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? ScanEYE FILM offers various functions that quickly and automatically create necessary Gerber and verification data:

- 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
- Compare Film/Stencil/Screen vs. PCB
- Confirm Proper Aperture/Trace Position
- Create Gerber data from Boards/Films/Stencils
- Automatic Inspection Accuracy Level Detection

CREATE GERBER DATA

ScanEYE FILM not only inspects, it also is able to create Gerber data. Utilizing its calibrated scanner, ScanEYE FILM inputs silver or diazo film, mylar images, technical drawings, actual PCBs, original hand-taped designs and stencils/screens then creates Gerber data.

itomatic Check	PASS 📶
🔽 Local Micro Alig	nment (LMA)
Accuracy Level	1.9 mils (48 microns) Medium 📃
AutoDetect	0.3 mils (08 microns) 0.6 mils (16 microns) Very Fine 0.9 mils (24 microns)
	1.3 mils (32 microns) Fine 1.6 mils (40 microns)
	1.9 mils (48 microns) Medium 2.2 mils (56 microns)
	2.5 mils (64 microns) Coarse 2.8 mils (71 microns)
	3.1 mils (79 microns) Very Coarse

VERIFICATION

Worried about the quality of existing films, finished stencils, screens or Gerber files? Use ScanEYE FILM'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/stencils/screens for production errors, accuracy, opens/shorts, mouse bites, size, identify screen "blockage", etc. The system steps the operator automatically through all discrepancies of the verification results.

PRODUCTION USES

ScanEYE FILM 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.

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

WHY USE ScanEYE FILM?

- 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.
- 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, Stencils, Screens or PCB's
- Verifiable Image Alignment
- Automatic Raster to Gerber Alignment

INSPECTION FUNCTIONS

- Compare existing films, stencils and screens against Gerber image or actual PCBs for errors
- Verify aperture/trace size errors to 0.0003" (0.008mm) and aperture/trace absence/presence 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

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: * 0.0015" (* 0.0381mm)
- 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 III (1GHz) Personal Computer
- 60 GB HD, 512 MB RAM
- Windows 98SE/Me/2000/XP
- 2 USB Ports
- CD-ROM (CD-RW for archive purposes)
- Monitor (17" or larger)
- Printer

*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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Specifications subject to change without notice.



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