

# StencilScan™ - Assembly Module

## "Offline Programming, Measurement & Inspection"

### INNOVATIVE ALTERNATIVES

StencilScan Assembly Module provides a sophisticated and user-friendly alternative to complex CAM software packages and inaccurate, time consuming manual inspection and programming methods that cost assembly houses productivity, time and money.

Designed to increase PCB assembly productivity, the Assembly Module is a fully integrated, off-line programming, inspection and measurement workstation.

### PROGRAMMING

Using a calibrated, high-resolution, color imaging system, the Assembly Module produces assembly programs and process documentation for Surface Mount, Insertion, Test, Inspection and Dispensing machines.

#### Import / Scan

- CAD, Components, Boards, Film, Stencils, BOM and Gerber Data.

#### Output

- Component Pitch, Rotation and body dimensions
- X/Y Component Centroid
- Reference Designator & Package ID
- Part, Feeder/Magazine Number
- User Defined Data
- Gerber Data
- Process Documentation
- Multiple machine specific CAD files (IMC, SMT, TEST, AOI) and Stencil file generation during one programming session.
- Component Information for Vision Databases

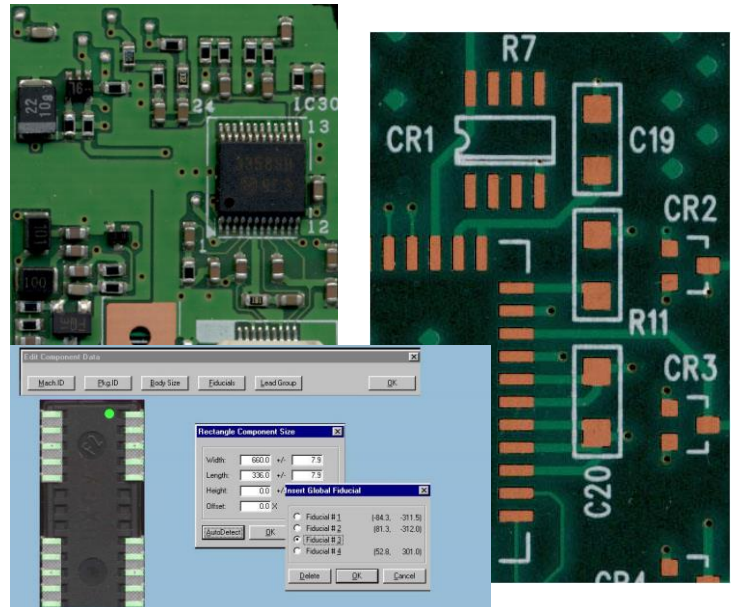
### BUILD COMPONENT LIBRARIES

Scan a component to automatically calculate and register the following information:

- Lead Pitch, Lead Size, Body Size
- Lead Groups, Pick Up Location, etc.
- Specific Vision Data outputs for Fuji SMD3 and Siemens SIPLACE
- Generic Vision ASCII files for other suppliers.

### FIRST ARTICLE INSPECTION

The Assembly Module increases productivity with the ability to scan the first article and compare it to the CAD data



### OFF-LINE INSPECTION & MEASUREMENT

The Assembly Module uses a combination of editing functions to ensure that all information has been inserted correctly. This off-line verification significantly reduces first article setup time. Overlay CAD and/or Gerber data and compare:

- Loaded Boards
- Bare Boards
- Stencils
- Components
- Wet Glue / Solder Paste/ Epoxy

### Why use StencilScan's Assembly Module?

- **Flexible:** Use one workstation to produce assembly files for multi-vendor Surface Mount, Insertion, Test, Inspection and Dispensing machines.
- **Powerful:** Use one workstation to inspect stencils, screens and bare or loaded boards.
- **Accurate:** Find and eliminate errors with Loaded PCBs, Wet Solder Paste, Glue, etc.
- **Fast:** Decrease programming time from days to hours.
- **Easy:** PC based system.

## SYSTEM FEATURES

### INPUT DATA

PC Boards – Bare or Loaded	Components
Stencils / Screens	Gerber
ASCII CAD	Drawings
Films	BOM
Paper	

### OUTPUT DATA

Stencil files

Drill files

HP-GL, DXF

PCX, TIFF

Placement files for all output formats below:

#### AVAILABLE MACHINE OUTPUT FORMATS

Amistar	Fuji	Sanyo
Asymtek	Juki	Siemens
CAM/A LOT	KME	Sony
Contact Systems	MVT	TDK
CR Technology	Mydata	Tenryu
Creative Automation	Panasonic/Panasert	Universal
Dynapert	Philips / Assembléon	VI Technology
Eurolacer	Quad	Yamaha
Four-PI (HP)	Royonics	Zevatech

#### OTHER OUTPUT FORMATS

FabMaster	GraphiCode	Unicam
Gerber 274x	LPKF	Unicraft
GenCAD	Mitron	

### AUTOMATIC FUNCTIONS

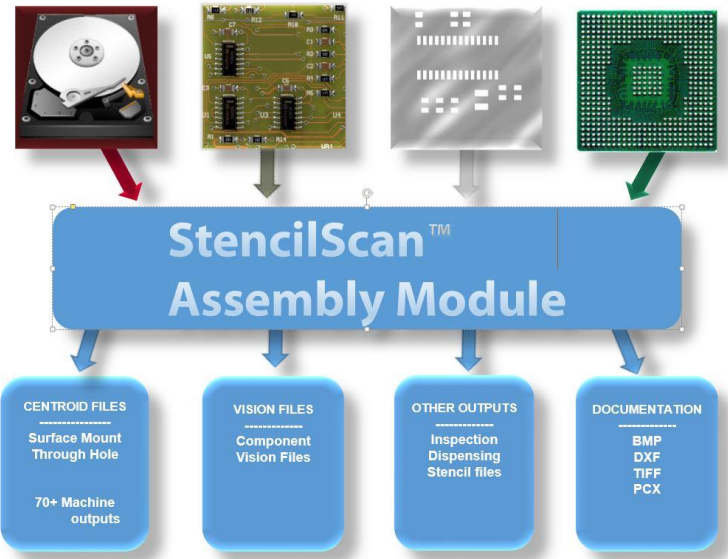
- Surface Mount Pad Recognition
- Insertion Hole Recognition
- Automatic Text Function
- Auto Load Gerber

### PLACEMENT

- Autofind Function Locates Components and Related Centroids
- Global / Circuit / Local Fiducials
- Automatic Generation of Adhesive Dot Centroids
- Component Database
- Editor Accuracy: 0.0001" (0.00254mm)

### CHECK / VERIFICATION

- "Jump-To" Component
- "Jump-To" Reference Designat
- Programming Environment Edi
- Assembly File Editor
- Gerber Editor
- Scan and Compare Multiple Board Revisions



## TECHNICAL SPECIFICATIONS

### SCANNER

- High-Resolution Flatbed Scanner, Size A3, A4: (400/1000/1600/2000/2400/3200/4000/4800 dpi\*)
  - Calibrated Accuracy: ± 0.0015" (± 0.0381mm) over 16" (420mm)
  - A3-Scanning Bed Area: 11.7" x 16.5" (297mm x 420mm)
  - A4-Scanning Bed Area: 8.5" x 11.5" (216mm x 292mm)
  - Maximum Work Area: 32.0" x 32.0" (813mm x 813mm)
- \*Reduced scanning area for 3200 dpi & greater

### COMPUTER\*

- Multi Core Processor - 3 GHz
  - 1 TB 7200 RPM HD, 8 - 16 GB RAM
  - CD/DVD ROM
  - Flat Panel Monitor
  - Ethernet Connection
  - Windows 7 or 8, 64-Bit w/ 2 avail. USB2 or USB3 ports
- \*Recommended minimum requirements for customer-supplied PC.

### ADDITIONAL SYSTEM COMPONENTS

- Precision Glass Calibration Grid
- Scanner Interface Card/Cable
- Software Protection Key
- Scanning Accessory Package
- Custom Desk (Optional)

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



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