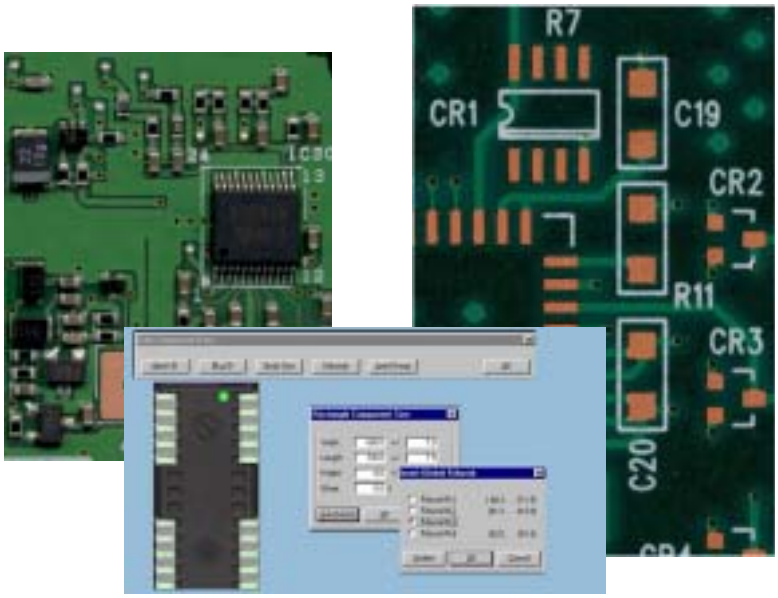
ScanProgrammer

"Offline Programming, Measurement & Inspection"

INNOVATIVE ALTERNATIVES

ScanProgrammer 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, ScanProgrammer is a fully integrated, off-line programming, inspection and measurement workstation.



PROGRAMMING

Using a calibrated, high-resolution, color imaging system, ScanProgrammer 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

IN-BOUND BOARD AND STENCIL INSPECTION

ScanProgrammer increases production efficiency by using off-line comparison of actual PCBs and Stencils against Gerber files and/or a “golden board.” Pre-production check verifies revisions against each other before the first production run. Eliminate surprises.

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.

OFF-LINE INSPECTION & MEASUREMENT

ScanProgrammer 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

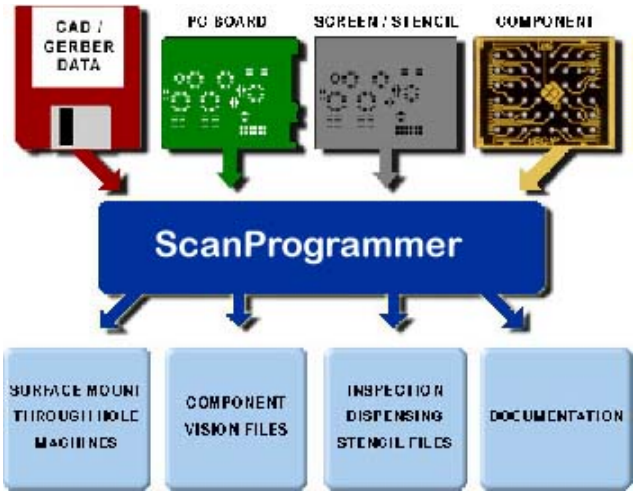
FIRST ARTICLE INSPECTION

ScanProgrammer increases productivity with the ability to scan the first article and compare it to the CAD data.

WHY USE ScanProgrammer?

- **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

	ScanProgrammer I	II	III
PC Boards- Bare/Loaded	✔	✔	✔
Components	✔	✔	✔
Stencils/Screens	✔	✔	✔
Gerber		✔	✔
ASCII CAD		✔	✔
BOM		✔	✔
Films	✔	✔	✔
Drawings	✔	✔	✔
Paper	✔	✔	✔

OUTPUT DATA

Stencil files	✔	✔	✔
Drill files	✔	✔	✔
HP-GL, DXF	✔	✔	✔
PCX, TIFF	✔	✔	✔
Select one output below	✔	✔	
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	Tenyru
Creative Automation	Panasonic/Panasert	Universal
Dynapert	Philips / Assembléon	VI Technology
Europlacer	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 Designator
- Programming Environment Editor
- Assembly File Editor
- Gerber Editor
- Scan and Compare Multiple Board Revisions

TECHNICAL SPECIFICATIONS

SCANNER

- High-Resolution Flatbed Scanner, Size A3, A4: (400/1000/2000/3200*/4000* 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 & 4000 dpi

COMPUTER*

- Pentium (600MHz or Higher) Personal Computer
- 60 GB HD, 256 MB RAM (512 MB for larger color scans)
- CD-ROM (CD-RW for archive purposes)
- Monitor (17” or larger)
- Printer
- Win 95/NT 4.0 – Requires:
  1available ISA slot
  1available PCI slot
  1 Parallel port
- Win 98SE//Me/2000 – Requires:
  2 available USB ports

*Recommended customer supplied minimum PC requirements.

ADDITIONAL SYSTEM COMPONENTS

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

All specifications are subject to change without notice.

UNICRAFT ユニクラフト株式会社

Partners: Avytechno Indonesia, Techlogic Thailand, Westek Malaysia, Tritronics Philippines, Utama Australia

AVI PRECISION ENGINEERING PTE LTD
1, KALLANG SECTOR #04-03, SINGAPORE 349276. TEL: 65 67483866 FAX: 65 67484810
Email: avipre@avipre.com.sg Website: http://www.avipre.com
Company Reg No: 199300584 M Skype: avipre