



Configurable Printer

X2 stencil printer is configurable from semiautomatic to inline automatic operation. Base semiautomatic printer can be upgraded to manual or automatic vision alignment, stencil wiping and inline conveyor. Integrated y-axis shuttle permits easy setup and operation when configured as a semiautomatic printer.

Ekra America, ekra.com

Booth 746



Synthetic Paste

SynTech-LF lead-free, no-clean solder paste is made with synthetic poly adduct components. Compatible with SnAg and SnAgCu alloys. Leaves nonconductive, noncorrosive, post-reflow residue as a protective coating. Said to have 12-hr. stencil life and 12-16 hr. tack time, and requires no refrigeration. ICT friendly, compatible with OSPs.

Amtech, amtechsolder.com

Booth 567



Post-Reflow Cleaner

Aquanox A4520 cleaning solvent is for reflowed no-clean flux residues. Effective on reflowed paste and uncured SMD adhesives, is environmentally safe and protects solder joint/bumps from oxidation. Removes contamination; runs without scale or buildup; no pretreatment required; exhibits no foaming. For use in aqueous batch or inline spray machines.

Kyzen, kyzen.com

Booth 1057



Thermal Protection Device

ALPHA CoolCap protects components and packages during lead-free reflow and rework. Helps maintain yield and throughput, without process changes and redesign. Reusable custom-fitted caps keep packages below 245°C or 260°C and minimize temperature variation within packages to 2° to 5°C, while minimizing warpage, popcorning and delamination. Protects joints from unwanted softening or reflow.

Cookson Electronics Assembly Materials, alphametals.com

Booth 2443



PCBA Conveyor

Model 2031 edge belt workstation automatically conveys products by their edges through manual assembly processes. Designed to maximize operator comfort while providing a flexible assembly platform for PCBs, pallets and assemblies. Available in any length and numerous drive and product flow configurations. Options include power width control, microscopes, tool holders, overhead lights, parts bins and shelves.

Simplimatic Automation, simplimaticautomation.com

Booth 815

SPC for Repair

Interactive repair station for assembly test systems has advanced SPC tools for automated collection of test, repair and verification data for process verification, quality tracking and statistical analysis. Can access board fault data, then record repair actions using a user-configurable interface, while accessing test measurement results and performing statistical calculations (Cp, Cpk and GR&R) to gain measurement stability and repeatability.

Seica S.p.A., seica.com

Booth 2315

Small Footprint Placement

Samsung Techwin CP45 NEO placement system has a component handling range from 0201 to 1.65 sq. Places up to 20,000 cph with accuracy of ± 0.0015 " for QFP devices. Configurable with up to 104 8-mm feeders. Windows-based.

Dynatech Technology Inc., dynatechsm.com

Booth 2393

Rapid Programming AOI

ScanPoint DT color desktop AOI is designed for first-article and statistical inspection before and after reflow, after paste disposition and for inspecting PCBs for component and solder faults. Can be rapidly programmed, with or without CAD data. SMEMA-compatible conveyor available, configurable for in- and offline use.

DiagnoSys Systems, diagnosys-usa.com

Booth 672

Pb-Free Pastes and Fluxes

F10B no-clean solder pastes are said to offer exceptional print-to-print consistency and wetting capabilities. Full line of fluxes, for reworking and solder ball attachment for no-clean and water-soluble applications, feature extreme purity to ensure reliability.

Heraeus Inc. Circuit Materials Division, 4cmd.com

Booth 1281

Low Power Ultrasonic Cleaning

Ultrasonic stencil cleaning process cleans at very low power density (watts/liter). Cleans all types of solder paste with proprietary 440-R SMT detergent and ultrasonic transducers.

Smart Sonic Corp., smartsonic.com

Booth 1381



UV-Cure Encapsulants

Hysol 3323, 3327 and 3329 UV-cure encapsulants, for smart card IC module manufacturing, reportedly provide fast curing, improved adhesion, minimized tape warpage and excellent performance during reliability testing. 3323 has high viscosity and a thixotropic nature, and is used to form the dam, while 3327 and 3329 are low viscosity materials used for the fill process. Are easy to dispense, adhere strongly to a range of carrier substrates and possess a low coefficient of thermal expansion (45ppm below Tg and 130ppm above Tg).

Henkel, henkelectronics.com



Printer Troubleshooting 'On the Fly'

SemiTouch semiautomatic stencil/screen printer features a self-diagnostic program for instant troubleshooting. Also, ST2020 vibrating squeegee is said to provide lower pressures, longer stencil life, consistent paste deposition and eliminates paste scavenging. Print area is 16 x 20".

Milara Inc., milarasmt.com



PCB Support

Board-Lok ESD-safe molded tooling supports PCBs in a firm, locked position parallel to the stencil. Does not require vacuum to support the board, reducing chance of drawing solder paste through via holes.

Transition Automation, transitionautomation.com



High-Speed Interconnects

The ultra high density cable-to-board and cable-to-cable coaxial interconnect is for test heads and probe cards used in ATE, front-of-system connections and backplanes in high data rate applications, and benchtop testing. Supports data rates up to 10 Gbps. Consists of PC board-mounted interposers/headers and low-loss coaxial assemblies that can be ganged together in multi-position housings for high packaging densities (0.120" signal-to-signal spacing).

W. L. Gore & Associates, gore.com/electronics



Inline X-ray

L9191 microfocus x-ray source features an open-type design. For use in nondestructive inspection applications, including x-ray CT systems and inline inspection. Has 1 mm spot size, voltage range of 20 to 160 kV and a tube current operational range of 0 to 200 mA. High-voltage power supply eliminates need for a high-voltage cable connection. Has RS-232C interface for external control. Operates at 10° to 40° C.

Hamamatsu Corp., usa.hamamatsu.com

Integrated Device Programming

ImageWriter is a flexible, modular in-system programmer designed for production. Enables device programming on any board inside a test fixture to help accelerate production cycles and manage production with multiple product configurations for a single target board. Based on an open architecture for integration with automated test and manufacturing systems.

Data I/O Corp., dataio.com

Flex Board Design Tools

Expedition and Board Station RE PCB layout tools now come with advanced design capabilities for flex and rigid-flex boards. Permit definition and checking of flex circuit design rules, including curved trace settings by area, complex contour following for routes, teardrops at pins, t-junctions and route width changes, cross-hatching of shielding areas and selective pad modifications.

Mentor Graphics, mentor.com

Vertical Carousels

The 2100 and 2200 series of vertical carousels have high throughput capacities and small footprints, for high-density, small item storage and retrieval. 2200 series includes 19" pitch that permits 7 and 14" standard reels to be stored in the same unit. Removable intermediate shelf enables customization; offers various ESD totes and storage media to maximize unit capacity.

FKI Logistex North America, fkilogistex.com

Assembly Router

EasyTurn modular "T"-shaped junction will send a board, on command, in either of two directions. When integrated with AOI, can send defective PCBs to a magazine loader or rework station, while good boards move to reflow. Automatically adjusts to the width of incoming boards.

Mimot, mimot.com

Microtest System

Designed to test microelectronic devices, MEMS, photonic and other small components, 5848 MicroTester provides load and displacement measurement capability and claims excellent cyclic performance. Load capacity of 2 kN, provides submicron position measurement accuracy and high-precision load and position control for static testing of components and cyclic fatigue testing. Includes a rigid frame for horizontal or vertical orientations, and an encoder mounted directly on the loading actuator for position measurement resolution of better than 20 nm.

Instron, instron.com

Two-Component Dispensing

Mixpac S-50 System for two-component adhesive dispensing works with manual dispensers and patented handheld dispensing units. Accommodates volumetric ratios of 1:1, 2:1, 4:1, 10:1 and 3:2.

ConProTec Inc., conprotec.com

ICT with Advanced Software

MTS30 in-circuit tester can now be driven from NI-LabVIEW or NI-TestStand for better diagnosis, higher test depth and better debugging diagnosis. The system offers: 512 test pins in 19" format; easy integration in 19" environment; bus communication; full functional test, memory programming and boundary scan.

Digitaltest GmbH, digitaltest.net

PLM Tool

Omnify 2.8 product lifecycle management software permits a companywide view of product development. Features enhanced document vaulting, advanced searching capabilities, a new reporting module and extended user-defined field classification. Offers out-of-the-box, bi-directional integration with existing systems for rapid implementation.

Omnify Software, omnifysoft.com

Ring Lights With FSL

FL-1000 and FV-1000 ring lights for microscopes feature full spectrum lighting bulbs at no extra charge. FL-1000 fluorescent ring illuminator features electronic ballast for control and stability, and dimmable intensity without flickering or humming. FV1000 offers intensity variability. Operators can adjust the lighting to their comfort level. Are ESD-safe and offer pluggable replacement bulb design.

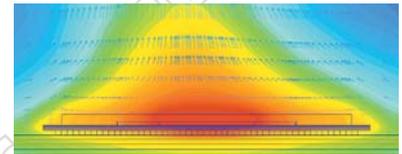
Micro-Lite, micro-lite.com



Parts Performance Predictor

Flopack v. 5 software enables creation of Delphi compact models that predict performance of components under soon-to-be-published JEDEC thermal testing standards. Produces behavioral compact models said to predict package temperature at junction, case and board. Includes faster, more accurate nonlinear optimizer, support for additional nodes, user access to setup parameters and the ability to create compact models from external simulation data.

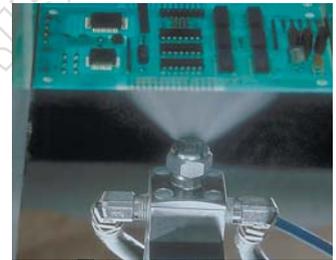
Flomerics, flomerics.com



Wave Solder Flux

1072 rosin flux is both halide- and VOC-free. Combines benefits of rosin with environmental friendliness of a water-based product. Developed for wave soldering of all types of assemblies. Water-based nonflammable formulation eliminates special storage requirements.

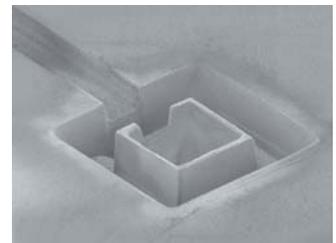
Indium Corp. of America, indium.com



UV Laser Micro-Machining

Precision UV laser micromachining services – with micron-scale features and sub-micron tolerances – are available for a variety of medical device manufacturing applications, including micro-fluidics, sensors, nozzles, micro-screens, particle traps, MEMS, MOEMS, micro-dicing, biosensors (lab-on-a-chip), microvias, photo-ablation, photo-machining, micromachining of plastics, ceramics, hard dielectrics, glass and metals, non-destructive high-resolution marking, micro-lithography to 1 μm resolution, high-speed drilling, selective material ablation, doping, annealing and more.

JPSA Laser, jpsalaser.com



Motorized Roller, Conveyor

Accuzone 24-volt motorized roller accumulation and transportation conveyor offers zero-pressure, zero-contact accumulation, and is available in straight, curve, merge, divert, belted and right-angle transfer modules. Standard control system is a stand-alone and programmable networked controller. Zone control wiring option available for straight and curve modules. Features merge and divert module sizes for easier handling and configuration, and a plastic side frame cover to encase wiring and controls.

FKI Logistex North America, fki-logistex.com