



Compact Dispense Valve

The 752 series compact dispense valve reportedly applies accurate, consistent amounts of cyanoacrylate adhesives and other assembly fluids. Pneumatically operated valve has no tubing to leak or O-rings. A fast, clean cutoff after each shot eliminates dripping, waste and cosmetic damage to parts. Adjustable stroke control permits fine-tuning of flow rate. Valve open time is regulated with a microprocessor-based controller and can be adjusted in 0.001 sec. increments.

EFD Inc., efd-inc.com



2-Squeegee Printer

SemiTouch semiautomatic screen and stencil printer offers self-diagnostic programming for instant troubleshooting. Has print area of 16 x 20", offers double squeegee assembly and multiple print modes. Includes programmable squeegee speed and positions; controlled vertical stencil lift; last board recall; an infinite board storage library; interchangeable squeegee heads; runtime diagnostics; programmable snap-off delay, squeegee-up delay and squeegee offset; and floating or fixed squeegee holders.

Milara Inc., milarasmt.com



Programmable RGB LED Chip

SMTC0606 0.6 mm surface-mount RGB (red, green, blue) device features individual addressable die for exact color mixing and matching. Comes in an 0606 SMT package, and is WEEE and RoHS compliant. Features internal tri-chip circuit design, with three individually addressable LED die: a single AlGaInP and two InGaNSiC chip dies, featuring peak wavelengths of 635, 520 and 465 nm respectively. Measures 1.5 mm x 1.6 mm x 0.6 mm.

Bivar Inc., bivar.com



Magazine Handling

EMB-700 multifunctional magazine handler features one-touch programming, for line unloading and loading, magazine rack buffer (LIFO or FIFO modes) or pass-through conveyor use. Equipped with PLC, single magazine rack storage system, sliding exit platform, audible alarm, ESD grounding receptacle, full safety panel, and wheels with leveling feet; designed for plug-and-play capability.

Pro-Mation Inc., pro-mation-inc.com



Connector Platform

Aptera connector has a 10 mm slot pitch for tight spaces. Electrical test results demonstrate crosstalk under 2% at a 50 picosec. rise time (20-80%). Combined with a matched impedance interface and zero skew, is scalable for future system design requirements. Features straddle mount design with solder leads for daughtercards and press-fit for backplanes. Has dedicated power delivery and sequencing on card edge.

Teradyne Connection Systems (TCS), teradyne.com/tcs

Environmental Compliance Manager

Materials Compliance Central tracks environmental compliance regulations (WEEE, RoHS, ELV) throughout product development. Users can analyze BOM or product content information from any source and cross-reference data against multiple substance lists and regulation requirements. Reduces design iterations by enabling access to and management of compliance data from beginning of each project. Runs as a standalone or with other applications for full PLM.

MatrixOne Inc., matrixone.com

High-Speed Printer

MX5 high-throughput printer uses parallel vision technology for cycle times of less than 5 sec., including printing. Has standard 2-D post-print inspection and vision technology. Configurable with various handling systems to process virtually all substrates, including PCBs, ceramics, flex circuits and solar cells. Uses screens or stencils.

EKRA America, ekra.com

Pb-Free Paste

Multicore LF318 halide-free, no-clean, pin-testable, lead-free solder paste promises broad process windows for printing and reflow. Reportedly achieves a high degree of coalescence upon reflow even after 72 hrs. at 27°C and 80% RH. Has low paste wastage and initial tack force of 2.0 g/mm². Suitable for reflow in air or nitrogen. Available in 96SC (SAC387), 97SC (SAC305) and tin-lead version.

Henkel, henkel.com

X-Ray Target

High-Power transmission target has an interaction layer of tungsten and a special backing layer that provides improved heat transfer and lower focal spot temperature. Users can operate the x-ray tube with higher energies at the highest possible resolution, for increased image contrast. Ideal for inspecting low contrast structures or high absorption structures.

Feinfocus, feinfocus.com

Pb-Free Wave-Solder Flux

WF-7742 flux is designed for lead-free wave soldering of all types of assemblies. The water-based, nonflammable flux eliminates VOC emissions and special storage requirements. Said to reduce solder balling and eliminate cleaning.

Indium Corp. of America, indium.com

PCB CAM Software

CAM350 v. 8.7 includes modules for Fast Array and ODB++ Import. All mid-range and high-end configurations include ODB++ Export. Fast Array automates the sub-panel process to quickly array a PCB or a group of PCBs on a panel. Bi-directional ODB++ format permits easy import and export of symbols, step and repeat, components and drills. Supports PCAD 2004 and PADS PCB layout software.

Downstream Technologies, downstreamtech.com

RoHS-Friendly Cables

Straight cable, coiled cords and high performance flexible products that meet current environmental requirements are available for a range of medical and commercial interconnect applications. Comply with environmental directives such as RoHS and WEEE.

Whitney Blake Co., whitneyblake.com

Low-VOC Flux

94QMB9 low-VOC flux for Pb-free wave and selective soldering is said to evaporate more readily than VOC-free formulations, reducing preheating time and the potential for oxidation and splatter. Contains DI-water and alcohol, features a non-ionic activator system that exhibits the functionality of a block polymer.

Cobar Solder Products, cobar.com

Stencil Printing Squeegees

Permalux metal squeegees are infused with a polymer lubricant that reduces friction and stencil wear. Said to eliminate sticking seen on conventional metal squeegees when using Pb-free solder paste.

Transition Automation Inc., transitionautomation.com

Large Feeder Capacity Placement

Advantage 3 pick-and-place machine has up to 324 single feeders and the ability to change feeders on the fly without interrupting production. Has parallel pickup capability of up to 5 components; fast-flash and parallel-processing for component centering; vision on-the-fly for chip and fine-pitch components. Reportedly places components from 0201s to 55 x 55 mm at up to 21,600 cph without a fine-pitch placer or chipshooter.

Mimot, mimot.com

**Metal Matrix Composite**

AlSiC (Aluminum Silicon Carbide) metal matrix composite for optoelectronic housings and lids enables a tailored CTE, offering compatibility with various electronic devices and assemblies. Unlike traditional housing materials, the isotropic CTE value of AlSiC can be adjusted for specific applications by modifying the Al-metal/SiC-particulate ratio. CTE matching capabilities ensure alignment and precision.

CPS Corp., alsic.com

