

## FUZION

### FUZIONOF PLATFORM

#### ODD-FORM ASSEMBLY MADE STANDARD

FuzionOF™ continues Universal's lineage of implementing odd-form solutions on a standard surface mount platform, delivering unmatched performance for a diverse range of pin-in-paste odd-form, surface mount odd-form and standard surface mount applications. FuzionOF features the highest available odd-form automation throughput to reduce cycle times and eliminate bottlenecks.

FuzionOF is the fastest and most versatile high-speed automation platform, transforming back-end assembly into a strategic advantage. Features include:

- Single-beam platform with throughput up to 16,500 cph
- SM components to pin-in-paste and all odd parts in between
- Adjustable gripper and full array of odd-form nozzles; broad tooling portfolio
- Highest online capacity, widest range of feeder input types
- Improve output and yields vs. manual assembly; accelerate ROI with rapid payback

#### VIDEO

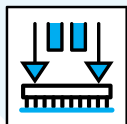


#### BENEFITS & VALUE



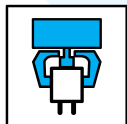
##### HIGH-PERFORMANCE ODD-FORM

The highest available odd-form automation throughput to reduce cycle times and eliminate bottlenecks



##### VERSATILITY FOR ANY APPLICATION

Standard SMT and non-traditional components up to **150mm** square and up to **40mm** tall; **5kg** placement force



##### EXTREME COMPONENT SUPPORT

Large FOV optics; Flexible lighting schemes; Portfolio of grippers and nozzles with available custom design



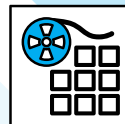
##### FLEXIBLE FACTORY

A highly capable end-of-line pre-reflow SM/OF solution for medium to high-volume, or a flexible post-reflow solution to maximize productivity



##### FAST NPI PROCESS

Sequential process for complete board build; Full editing capability in pre-production NPI mode and dynamic on-the-fly editing in full production mode



##### SUPPORT FOR A VARIETY OF INPUT TYPES

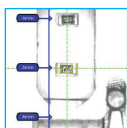
Portfolio of reliable feeding solutions accommodate a range of components and packaging: tape, tray, tube, track, and bowl

#### FUZION SOFTWARE

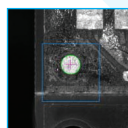
**FUZION**  
software

- Sequential process for complete board build
- Quickly generate and optimize fiducial, feeder, placement, and component information

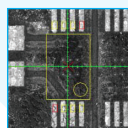
- Full editing capability in pre-production NPI mode, and dynamic editing in full production mode eliminate machine stoppages
- Semi-automated solder paste and post-placement inspection



Feeder Inspection



Fiducial Inspection



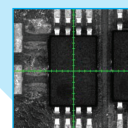
Pre-Place Inspection



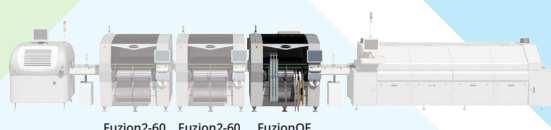
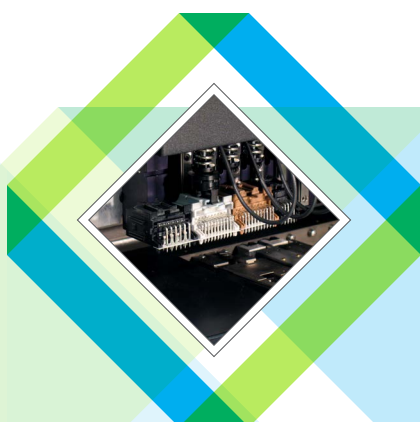
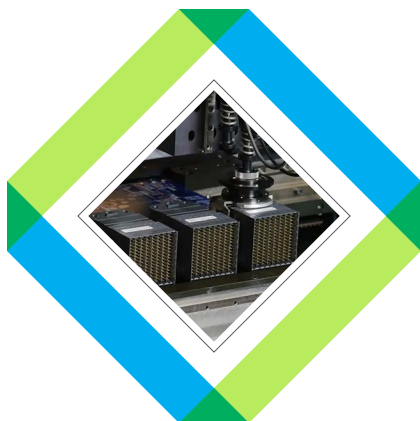
Component Teach



Component Inspection

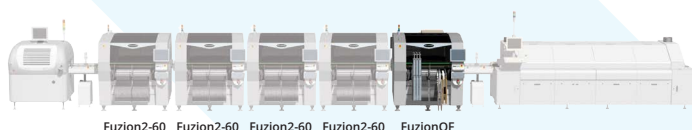


Post-Place Inspection



### Pre-reflow – Medium-mix agility and versatility

End-of-line SMT/odd-form intrusive (pin-in-paste) solder solutions with ultimate flexibility for lean manufacturing in medium-mix environments.



### Pre-reflow – High-volume performance and yield

End-of-line SMT/odd-form intrusive (pin-in-paste) solder solutions with essential capabilities for today's extreme requirements and beyond (finer density, full inspection, consistent force).

### Comprehensive feeder portfolio

FuzionOF supports a range of robust component input solutions, with a full scope of application-specific and specialized feeding options available.



### Post-Reflow – Cost-effective productivity

Flexible pre-wave/selective solder assembly solutions to reduce assembly costs and improve output and yields.

#### FuzionOF Specifications

Positioning System	Single-beam linear motor
Placement Heads	7-spindle FZ7™ & 4-spindle FZ4™
Cameras	(2) Upward-looking cameras
Throughput	16,500 cph (Max) 11,400 cph (1-Bd IPC Chips)
Accuracy (@>1.00 Cpk)	±38µm (Chips); ±27µm (ICs)
Max PCB Dimensions	508mm x 813mm
Max Feeder Inputs	120 (2 ULC)
Component Range (mm)	(0201) .25 x .5 x .15 (Min) 150 square and up to 25 tall (Max)

