

# FuzionXC2-37



Capacity re-defined –  
from NPI to high-volume

## FuzionXC2-37 Platform

Universal Instruments' Fuzion™ Platform is the revolutionary foundation of a contemporary production model that maximizes productivity while reducing costs for electronics manufacturers. Fuzion features more than twice the feeder capacity of traditional placement solutions to reduce changeover requirements and optimize utilization.

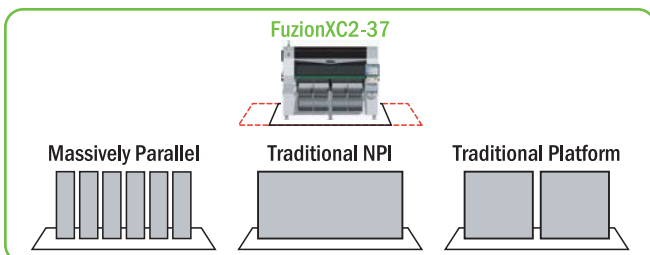
FuzionXC2-37™ is a versatile solution within the Fuzion portfolio, performing high-speed chip to extreme odd-form placements on the same platform. FuzionXC2-37 handles large boards and a full range of input types, making it an ideal NPI, all-in-one, line balancer or multifunction solution.

## FuzionXC2-37 Advantages

- **Capacity re-defined** – 2x feeder inputs versus alternative solutions
- **Utilization and efficiency** – streamline NPI, minimize changeovers
- **All-in-one flexibility** – quote any job in an uncertain environment
- **Lowest cost of ownership** – reduced CapEx and production costs
- **Maximize floor space utilization** – replace multiple modules with a single Fuzion with more feeders

## Capacity Re-defined

- **2x 8mm and tray feeder inputs versus alternative solutions**
- Replace multiple platforms with a single Fuzion with more feeders
- Most feeder inputs per floor space, lowest cost per input



## NPI solution

Handles large boards, extreme component ranges and a high number of inputs with the ability to easily transfer to high-volume lines



## All-in-one solution

No-compromise, single solution to build many products on its own with virtually no limits on board size, feeder inputs, or component range



## Flexible line balancer solution

Pull component placements from up-line or down-line machines to alleviate bottlenecks, streamline production and boost throughput



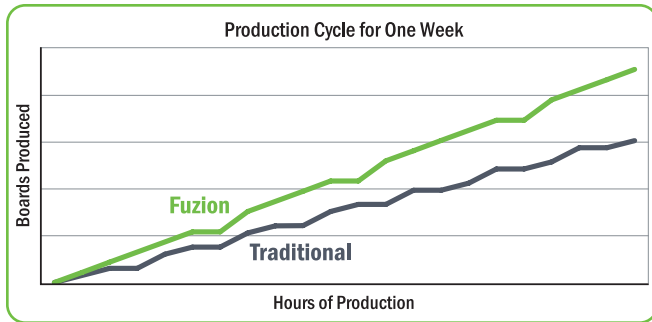
## High-speed multifunction solution

Built upon a dual-beam architecture with both high-speed FZ30™ and flexible FZ7™ heads to handle a full range of components



## ■ Optimal utilization and efficiency

- Manufacturers typically produce at very low utilization rates
- Fuzion solutions with 2x feeder capacity can boost utilization rates by 50%, resulting in a significant increase in output – enough to enable electronics manufacturers to eliminate entire production shifts
- Multiple product setups on a single platform eliminates changeovers
- Fixed family setup schemes
- Duplicate or Alternate Feeder capacity
- Feeder Anywhere – flexible feeder setup
- Widest overlapping component range between heads
- NPI or on-the-fly production editing accelerates ramp to volume
- Flexible, easy-loading, spliceable feeders reduce replenishment and changeover times



## ■ All-in-one flexibility

- Quote any product in an uncertain manufacturing environment
- Prototyping on a single platform, easily transferable to high-volume
- Broadest range of components, package types and board sizes
- Any board size – up to 1300mm x 610mm (51" x 24")
- Any component – 01005 passives to 150mm long connectors on a single platform with large overlap between heads, no head change, no heads/beams on the shelf and no additional CapEx
- 5kg placement force and up to 25mm tall parts
- Automated odd-form nozzle change capable
- Any feeder type – strip, tape, tube, odd-form or tray with no feeder space consumed for automated tray feeder

## ■ Lowest cost of ownership

- Reduced CapEx and overall production costs
- Fewer modules to purchase versus alternative solutions
- Less operators, training, maintenance, power/air consumption, programming and labor/repair costs



## ■ Positioning system

FuzionXC2-37 is built on the same solid foundation as the comprehensive Universal Instruments' surface mount platform portfolio. Patented VRM linear motor technology features a 1µm resolution, 2.5G acceleration speeds, and a dual-drive architecture for reduced settle times. VRM technology carries a 5-year warranty on Fuzion platforms.

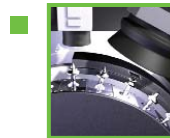


## ■ Placement head technologies

FuzionXC2-37 features both high-speed and flexible placement heads with a large overlapping component range for maximum utilization.

The FZ30 placement head delivers the industry's fastest tact rate and a component range of 01005 passives to 30mm square for unmatched flexibility and performance.

The FZ7 placement head supports components from 0201 passives to 150mm square, 30mm height and 5kg insertion force for odd-form. Dual 48-hole nozzle changers enable on-the-fly exchanging of up to 80 standard and 16 large odd-form gripper and/or vacuum nozzles.



## ■ Vision system

The FZ30 placement head utilizes two on-the-head vision systems to image the full range of 01005 passives to 30mm square components on-the-fly.

- Narrow field of view to image 01005 to 12mm square
- Configurable wide field of view to image up to 30mm square
- Images lead-less, leaded, bumped, and odd-form components
- On-the-head Vertical Part Sensor assures part presence/orientation

The FZ7 placement head images components utilizing Magellan upward-looking camera technology.

- Leverages digital CCD Mega-pixel technology for maximum field of view and fine feature imaging
- Three different models for a range of applications
- Three angles of Illumination controllable in increments of eight levels independently or in concert



## ■ Common peripherals

FuzionXC2-37 retains peripheral compatibility with all Advantis 3 and Genesis Series 2 Platforms, and many older vintage models.

### FuzionXC2-37 SPECIFICATIONS

Placement Rate (cph (sec per comp))	Max	43,000 (0.084)
	1-Bd IPC Chips (I608)	20,500 (0.176)
Accuracy (µm@1.33 Cpk/1.00 Cpk)	Chips	±55 / ±41
	ICs	±45 / ±34
PCB Dimensions (mm("))	Max (WxL)	610 x 1300 <sup>1</sup> (24 x 51)
	Min (WxLxH)	50.8 x 50.8 x 0.508 (2 x 2 x 0.02)
	Max Weight (kg (lbs))	5.0 (11.0)
Component Range (mm ("))	Max (WxLxH)	150 x 150 x 30 <sup>2</sup> (5.91 x 5.91 x 1.18)
	Min (WxLxH)	0.18 x 0.38 x 0.10 (0.007 x 0.015 x 0.004)
Machine Dimensions (mm("))	(LxDxH)	2385 x 2160 x 1930 (93.90 x 85.04 x 75.90)
Feeder Inputs	Up to 272 8mm inputs – types: tape, strip, tray, tube, odd-form	

<sup>1</sup> Optional Long Board Kit required

<sup>2</sup> Consult the General Specification for component capability specifics