High-Speed Wafer Feeder







The ultimate multi-die solution for heterogeneous integration

Advanced Packaging continues to evolve while driving the world's most innovative products for 5G, Al, Edge Computing, AiP, and Integrated Power Management. Consumer, Automotive and IoT devices are getting smaller and thinner, 2.5D and SiP multi-die packages are becoming more complex, InFO and Panel Fan-Out are driving large-format batch processing, and volume demands are rising. These new challenges demand a comprehensive solution that breaks traditional boundaries for efficient multi-die assembly.

The High-Speed Wafer Feeder is the world's fastest rapid-exchange multi-die feeder. Combined with Universal's FuzionSC $^{\text{TM}}$ Platform, it is the ultimate multi-die solution for heterogeneous integration.

Innovation

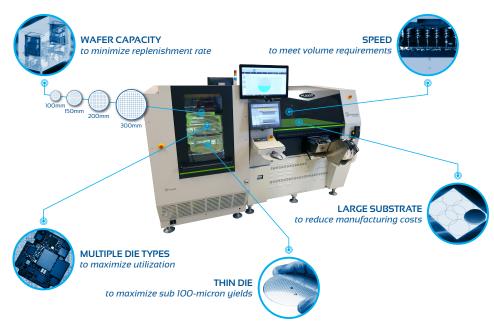
- 14 high-precision (sub-micron X,Y,Z) servodriven pick heads
- High-precision (sub-micron X,Y,Z) servo-driven ejector
- · 100% pre-pick vision and die alignment
- One-step "wafer-to-placement" handoff
- Synchronous wafer stretch and storage
- 16K cph dual wafer tables
- Up to 52 unique wafers types at once; 100mm, 150mm, 200mm, 300mm

Performance and Value

- · Maximum die size range with thinnest die
- 4X throughput improvement vs current generation
- Maximum panel size processing up to 635mm x 610mm

Bringing efficiency and high productivity to advanced packaging assembly

The High-Speed Wafer Feeder delivers value with the precision, performance and flexibility to handle today's most advanced applications, while also enabling you for those to come.









The perfect solution for your specific production requirements

The High-Speed Wafer Feeder is availble in two configurations, ensuring that you get the best performance and value for your advanced packaging assembly challeges.

Single-Bay HSWF

Dual-Bay HSWF

Cost-effective multi-die solution

Highest throughput for multi-die

	Single-Bay HSWF Specifications	Dual-Bay HSWF Specifications
Placement Mode	Flip Chip (Circuit Down) Die Attach (Circuit Up)	Flip Chip (Circuit Down) Die Attach (Circuit Up)
Wafer Tables	1	2
Wafer Cartridges	4	8
Throughput (cph)	Flip Chip: 8,000 Die Attach: 7,400	Flip Chip: 16,000 Die Attach: 14,400
Die Size (Min)	0.5mm x 0.5mm 0.1mm x 0.1mm (phase 2)	0.5mm x 0.5mm 0.1mm x 0.1mm (phase 2)
Die Size (Max)	40mm x 40mm 70mm x 70mm (phase 2)	40mm x 40mm 70mm x 70mm (phase 2)
Die Thickness (μm)	50 to 1,000 10 to 1,000 (phase 2)	50 to 1,000 10 to 1,000 (phase 2)
Max Part Numbers / FuzionSC	Up to 26 die types	Up to 52 die types
Cassette Capacity	13 wafers/cassette x 2 25 wafers/cassette x 1	13 wafers/cassette x 4 25 wafers/cassette x 2
Wafer Size (mm/inches)	100/4", 150/6", 200/8", 300/12"	100/4",150/6",200/8",300/12"
Nozzle / Ejector Change	Auto Changer	Auto Changer
Nozzle Changer Slots	28	56
Ejector	4 Ejecter Changer	8 Ejecter Changer
Traceability	GEM/SQL	GEM/SQL
Mapping System	Local Map Support	Local Map Support

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