

the **new** world of advanced packaging

MCM – Unique versatility

For system integration, stacked packages or systems-in-package (SiP) are increasingly being used in flip-chip technology. In SiP technology, several different flip-chip components are combined with passive components on one circuit. To implement these products, Datacon presents the 8800 CHAMEO, a multi-flip-chip bonder which excels with remarkable versatility and fast, reliable production processes. The new machine is based on the tried-and-tested 8800 platform for high-speed, high-precision flip-chip bonding, which features high throughput of up to 10,000 CPH, high precision to 10 μm at 3 Sigma, and exceptional versatility for the processing of solder bumps and other procedures.

Reliable processes

The high throughput is not due to “tuning” of the dynamic processes, but rather because the key components in the machine are duplicated: two independent bond heads, flip units, slide fluxers and upward-looking cameras. These work in parallel and independently of each other, which considerably increases the throughput, as does the strategy of short paths for architecture and flow control.



8800 CHAMEO

member of Besi group



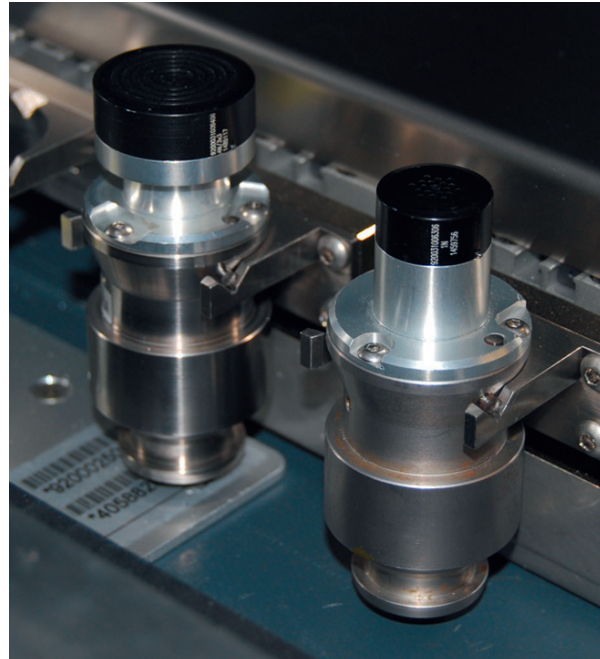
Datacon

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8800 CHAMEO – speed and reliability

Thanks to the dual-head architecture coupled with optimized processes and assembly strategies, Datacon has developed – based on the high precision of the 8800 Flip-Chip Bonder platform – a multi-flip-chip bonder which is characterized by high throughput with high process reliability and at the same time allows the complete production of a multi-chip product (MCM) in one production cycle.

At the same time, it offers all features of a modern machine for high-volume production, such as fully automatic calibration, short conversion times, reject detection, and a data link for factory automation.



Needle ejector system for different die sizes

Highlights

- Impressive multi-chip capability
- Highest throughput
- Consistent, high precision
- Proven wafer handling
- Powerful image-recognition system
- Unique versatility

Core specifications

- Various flip-chip processes with and without flux dipping
- Assembles strips, boats, PCBs, and wafer substrates
- Throughput up to 10,000 CPH
- 10 μ m @ 3s precision
- Post-bond inspection
- SECS/GEM data link

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