

Datacon 2200 evo^{plus}

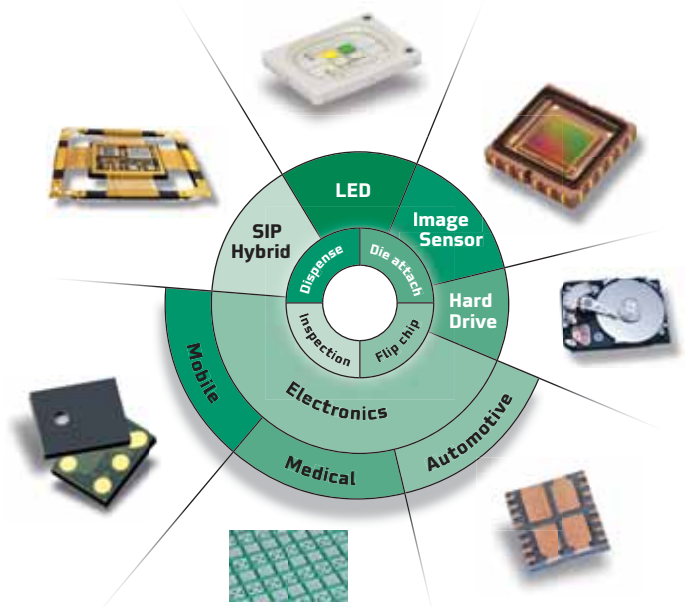


Innovative Solution for Innovative Products

The Datacon 2200 evo^{plus} die bonder for Multi Module Attach assembles all kinds of technologies on a tried-and-tested platform, enhanced with key features for higher bonding accuracy and lower cost-of-ownership.

Besides unbeaten flexibility and full customization possibilities, this evolutionary machine offers higher accuracy with long-term stability using a new camera system and thermal compensation algorithm, higher speed through a new image processing unit, and improved cleanroom capabilities.

Future Proof Equipment



Datacon 2200 evo goes PLUS!

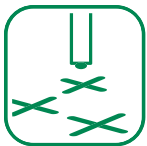
Enhancements

- PLUS Accuracy
- PLUS Productivity
- PLUS Flexibility

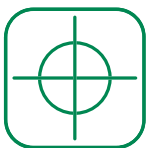
Features

- Multi-Chip Capability
- Flexibility for Customizing
- Open Platform Architecture

INTEGRATED DISPENSER



VISION ALIGNMENT



FOIL MOLDING



PICK & PLACE HEAD





Integrated Dispenser

- Pressure/time (Musashi®), Auger, Jetter types available
- Epoxy stamping option
- Filled and unfilled epoxy, wide viscosity range
- Small footprint, low cost-of-ownership



Vision Alignment

- New high-speed image processing unit
- Full alignment & Bad mark search
- Pre-defined fiducial geometry & customized teaching



Automatic Wafer and Tool Changer

- Fully Automatic cycle for Multi-Chip production
- Up to 7 Pick & Place tools (optionally 14), 5 eject tools
- Stamping tools and calibration tools possible



Pick & Place Head

- Die Attach, Flip Chip and Multi-Chip in one machine
- Die pick from: wafer, waffle pack, Gel-Pak®, feeder
- Die place to: substrate, boat, carrier, PCB, leadframe, wafer
- Hot and cold processes supported: epoxy, soldering, thermo-compression, eutectic

Performance

- X/Y placement accuracy: $\pm 7 \mu\text{m}$ @ 3s
- Theta placement accuracy: $\pm 0.15^\circ$ @ 3s

UPH

- Die attach: up to 7,000 UPH/module

Flip Chip:

- with dipping up to 2,500 UPH/module
- without dipping up to 3,200 UPH/module

Bond Heads

- Standard bond head $0^\circ - 360^\circ$ rotation
- Heated bond head (optional)

Footprint

- L x D x H: 1160 mm x 1225 mm x 1800 mm
- Statistics
- Uptime > 98 %
- Yield > 99.95 %

Wafer

- Die size Die attach: 0.17 mm - 50 mm
- Die size Flip chip: 0.5 mm - 50 mm
- Die thickness: 0.05 mm - 7 mm
- Wafer size: 2" - 12" (50 mm - 300 mm)
- Frame size: 5" - 15" (125 mm - 375 mm)

Chip Trays

- Waffle pack / Gel-Pak® 2" x 2" and 4" x 4"
- JEDEC tray on request

Substrates and Carriers

- FR4, ceramic, BGA, flex, boat, lead frame, waffle pack
- Gel-Pak®, JEDEC tray, odd-shape substrates
- Substrate working range: 13" x 8" (325 mm x 200 mm)

Options

- Hardware: Open platform architecture for full customization
- Software: Single component tracking, CAD download, wafer mapping, substrate mapping, barcode scanner, datamatrix recognition and more.