

LED Board Assembly

Pick and Place Solutions

LD812V3

for LED Board Assembly



Features

- ⊙ True 'Vision On the Fly' Alignment
- ⊙ Fiducial recognition and coordinate correction
- ⊙ Assembles LED boards up to 1200 mm long in a single pass (option for 1800mm long)
- ⊙ Positive air puffing at the pick-up nozzle ensures release of 'sticky' LED components during placement
- ⊙ Large working platform allows multiply PCB production in one stage (for same type of PCB)
- ⊙ Uninterrupted production by auto-selection for alternative when feeder is empty
- ⊙ High-precision ballscrew drive
- ⊙ Tape feeder allows tape connection to minimize production interruption
- ⊙ Heavy-duty welded frame provides stability for precision placements even at high speeds
- ⊙ Option Teflon® nozzles available for sticky LED components; customized nozzles available on request
- ⊙ Three heads for high placement rates

Non-contact alignment algorithms performed during head travel



Single pass assembly



← LED boards up to 1800 mm long →

LED nozzle



Applicable for:



Long LED board



Flexible PCB board



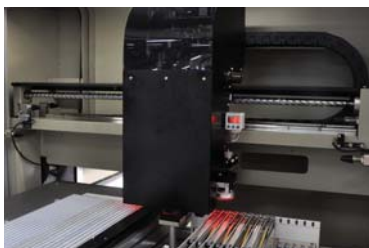
Circular LED light bulb board



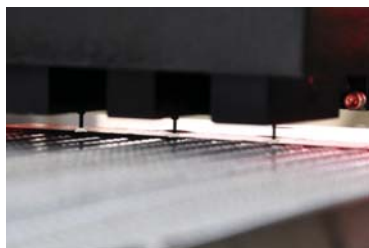
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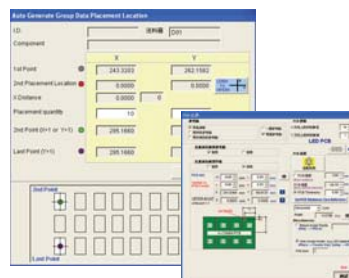
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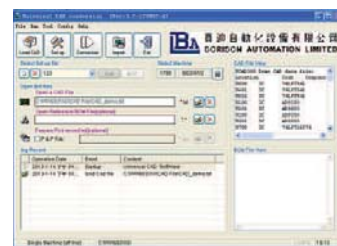
Heavy-duty welded, uni-body steel frame provides stability for precision placements even at high speeds



Upward-aimed true 'Vision On the Fly' Alignment cameras on the pick & place heads allow easy set-up for a wide range of LED components



With simply parameters inputs, the Windows-based software calculate the component coordination automatically



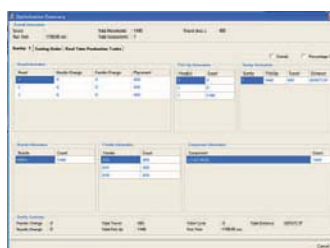
UCAD® universal CAD import and conversion for direct transfer of PCB data from ASCII, AutoCAD and Excel data formats



Support various PCB board type, includes, LED boards up to 1200 mm long (or option to 1800mm), flexible PCB , or circular PCB



Flying vision alignment on various LED components as well as SMDs. Teflon® nozzles also available for sticky LED components



Software tools analyze placement data and component mix to provide optimum feeder arrangement that minimizes head travel and tool changes



Real time monitoring screen for previewing production progress, production speed and production quantity during production

Specification

Placement Specification

Alignment principle	Vision on the fly camera
No. of placement heads	3
Placement rate	10 000 / hour (IPC 9850)
LED size	0402 to 5050
Maximum LED size	8mm X 8mm X 8mm

Feeder capacity

Feeding capacity	Max. 16 feeder ports (8mm tape)
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PCB specification

Max. board size	1200mmX300mm (option 1800mmX300mm)
Board thickness	0.2mm to 3mm
Board transport direction	Left to Right
Board fixing principle	Magnetic fixture (option conveyor)

Mechanical Specification

XY axis drive mechanism	X axis: placement head; Y axis: board transport
Board loading method	Working stage (option conveyor)
In line production	Supported by option conveyor system
Placement accuracy	+/-0.05mm
X-Y Axis Resolution	0.02mm
Z Axis Resolution	0.02mm
R Axis Resolution	0.18 degree

Programming

Operation system	Windows XP based
Support language	English (mult language support)
Programming	Easy programming (option CAD import)

Physical specification

Approximate Net Weight	450KG
Machine dimension (LxWxH)	2630mm X 1130mm X 1440mm

Facility Requirements

Air Pressure	5.5 bar
Standard Voltage	220V(AC)
Power	2200W

* We reserve the right to make changes without notice.