

MODEL: BA392-LED SMT PICK & PLACE MACHINE



SUMMARY

- Unique Dual Stage conveyor for 1.2m LED board application
- High Accuracy and high Flexibility for 01005, 0201, 0402, 0603, SOIC, PLCC, BGA, μ BGA, CSP, QFP, up to fine-pitch 0.3mm
- Smart Feeder System provides Automatic feeder position checking, Automatic component counting, Production data Traceability
- Perfect for small & medium volume production
- COGNEX® Alignment System "Vision on the Fly"
- Bottom Vision Alignment System for fine pitch QFP & BGA
- Built in Camera System with Auto Smart Fiducial Mark Learning
- Dispenser system
- Vision Inspection before and after production
- Windows XP Software
- Universal CAD Conversion
- Placement rate: 6,400 cph
- Suitable for 96 intelligent Auto Tape Feeder
- Tray Handler access up to 10 Waffle Trays

The SMT Pick & Place machine BA392-LED is specially designed for LED board application in medium production batch sizes. Various options are provided for different applications.

Innovative two-stage conveyor design that handles 600mm board length in each stage, hence supports long PCB of 1.2m total length in automatic production.

Additionally, the BA392-LED features COGNEX® vision processing and head-mounted for non-contact "Vision-On-The-Fly" alignment.

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SMT PICK & PLACE MACHINE



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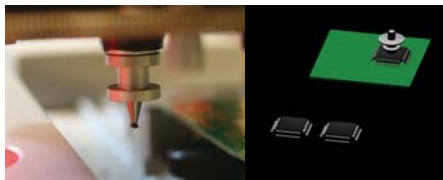
DETAILS

Strong and rigid mechanical design

BA392 using welded steel frame and also heavy duty high precision Linear Ball Rail system to provide strong, rigid and long life time mechanism.

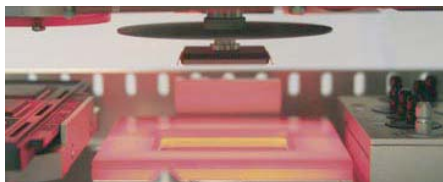
COGNEX® Alignment System "Vision on the Fly"

The BA392 features COGNEX® vision processing and head-mounted for non-contact "Vision on the Fly" alignment. The machine BA392 assures high-precision placement of the full range of SMDs, from the smallest 0201 devices through CSPs, µBGAs, flip-chips, ultra-fine-pitch QFPs (0.3mm fine pitch), even odd-form components.



Bottom Vision Alignment System

A Bottom Vision Camera is used for large components up to 150 x 100 mm and devices with alignment features on their bottom side.



Smart Fiducial System

Besides the standard fiducial mark, either square SMD PCB pad or plate-through hole also can be trained as fiducial mark.

Unique Dual Stage conveyor for 1.2m LED board application

Innovative two-stage conveyor design that handles 600mm board length in each stage, hence supports long PCB of 1.2m total length in automatic production.

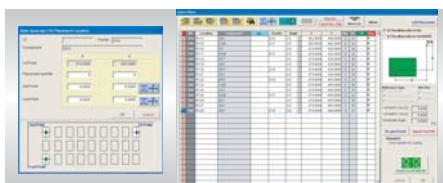


TEFLON LED Nozzle

TEFLON made LED nozzle in Autotronik BA392 machine, together with the positive air ejecting pressure, is specialized design for LED application. The innovative design of Nozzle ensures the effective landing of sticky LED components.

Powerful Windows®-Based Control Software

Intelligent software allows the easy set up for the complex and repeatable LED programming.

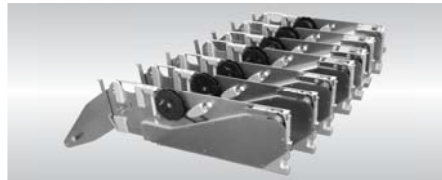


Universal CAD Conversion

Beside the direct input of data by teach-in camera, an optional CAD conversion program for directly transfer of CAD generated pick and place data is available.

Auto Tape Feeder (KFTA)

The innovative design of KFTA feeder bases and mounting hardware allows almost limitless flexibility in feeder combinations and arrangement schemes, as almost every feeder can be ordered, loaded, programmed and mounted independently. KFTAs are available from 8 mm up to 72 mm tape width.



Feeder Rack (KR-48K)

Included in delivery are 1 x FR-48K, each is suitable for 48 x 8 mm KFTA Feeders or 40 x 8 mm IC-Sticks.

Universal IC Tube Feeder

KFTB universal tube feeder are using vibration driven technique. It is able to handle IC-Sticks with max.50 mm width.



Cut Strip Tape Holders

Cut Strip Tape Holders is a handy accessory for presenting components that are supplied in short lengths of tape due to their low quantity of usage. It can also prevent the waste of components in sections of tape that are too short to be loaded into tape feeders.

Bulk Pack Component Tray

Designed for bulk pack component, Bulk Pack Component Tray (TSD18) can handle any bulk pack component under the semi-auto production mode. A single tray contains 18 individual slots for maximum 18 types of components.

IC Tray Holder

The standard TS-1 Tray Holder occupies approximately 330mm X 140mm of work area and is designed to hold a standard 316mm X 136mm JEDEC Matrix Tray. The TS-1 provides adjustability for wide variety of smaller matrix tray and waffle pack combinations and can easily be modified for custom tray configurations.

Tray Handler System

Optional IC tray handler system can access up to 10 sets of waffle Trays automatically.

Dispenser System

Optional stand alone dispenser head for adhesive & solder paste dispensing. Perfect for quick, small volume production without making stencil.



Vision Inspection

With the built-in software, the camera can automatically move and display the image in the computer screen, user can manually check the printing accuracy of solder paste, quality of the soldering, accuracy of component placement, etc.

Remote Service Kit

Optional Remote Service Kit allows a remote access to machine by Internet, so that programming, calibration and service can be done by our worldwide remote service center.

SPECIFICATION

- Number of Heads (Vision on the Fly): 2
- Placement rate:
 - 6400 CPH (under the optimum condition)
 - 5500 CPH (IPC9850 Chip 1608)
- Feeder capacity (8 mm)
 - with conveyor: up to 96 Tape Feeders
- IC Tray capacity:
 - up to 4 Waffle Trays
 - up to 10 Waffle Trays with TH-10 Tray (option)
- Component Size (mm)
 - Handled by head camera:
 - Smallest: 0.6 x 0.3 mm
 - Largest: 16 x 14 mm
 - Handled by fixed Bottom Vision Camera:
 - Smallest: 0.4 x 0.2 mm (option)
 - Largest: 150 x 100 mm (option)
- Resolution:
 - X / Y axis 0.005 mm Servo Motor
 - Z axis 0.02 mm Servo Motor
- Rotation:
 - 0 to 360° (0,045°/step) Servo Motor
- Placement Accuracy: +/- 0.03 mm
- X-Y Repeatability: +/- 0.01 mm
- Placement area with conveyor:
 - Max. 650 x 315 mm without Waffle Trays
 - Max. 650 x 300 mm with 1 Waffle Tray
 - Max. 650 x 160 mm with 2 Waffle Trays
- Programming:
 - Direct input
 - Vision teach-in
 - CAD Access (Option)
- Component Sense: Vision detection
- Main Control: Industrial PC
- Machine Size
 - Main body: 1150 x 1100 x 1350 mm (L x W x H)
 - With conveyor: 1150 x 1970 x 1350 mm (L x W x H)
- Weight: 550 kg
- Power: 230 V / AC, 2100W
- Pressure: 75 psi (5.5 bar)

We reserve the right to make changes without notice.

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