

The solder ball jetting laser soldering machine is ideal for the 3C (Computer, Communication, Consumer Electronics) industry, particularly for the precision soldering of miniature ...

Manual soldering of BGA chips is a critical skill in optical module manufacturing. With careful preparation, precise placement, uniform heating, and thorough inspection, BGA soldering can ...

This permits individual removal and replacement of solder balls and solder contacts and allows to increase the yield and productivity of cost-intensive high end devices.

Dividing the larger die pads into smaller screen openings reduces the risk of solder voiding and allows the solder joints for the smaller terminal pads to be at the same height as the larger ones.

The main purpose of this research project is to identify low-cost, high-yield, data-driven processes such as laser selective soldering and infra-red (IR) soldering to attach non-reflowable optoelectronic ...

The solder ball bumper integrates solder sphere feeding, reflow and placement of the solder bump as well as providing a localized inert nitrogen atmosphere in one singular and flexible to use device. ...

We propose an approach to classify solder balls, in the soldering process of silicon wafers on Ball Grid Array (BGA), contained in the Printed Circuit Board (PCB) substrates.

Soldering in a nitrogen atmosphere can generally improve the solder joint quality but is not necessary to create a reliable joint. Vapor phase or infrared (IR) soldering is not recommended.

Our laser solder jetting technology is clean, precise, and flexible. The singulation disc will dispense a single solder ball into the capillary where the laser beam's thermal energy melts the solder ball, ...

SolVision uses deep learning to analyze X-ray images for BGA soldering inspection. The AI model is trained with labeled defect data, including non-wetting, solder ball overlap, size deviations, and short ...

The parts to be joined can be metallized with solder and solder-aiding layers by DC-magnetron sputtering. The coating technology of all layers takes place in one ...

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