SUCCESS STORY
SPEEDPRINT TECHNOLOGY

Zebra Technologies OEM Scan Engine Enables PCB Traceability For Manufacturers

ABOUT SPEEDPRINT TECHNOLOGY
Speedprint Technology is part of the Blakell Europlacer group. It designs and manufactures all its products at a hi-tech 1675m² site in Poole, UK. Speedprint has established itself as one of the leading suppliers of SMT printing solutions globally, with direct sales and support channels in Europe, Asia and the USA. It has various solutions from Zebra Technologies at its site in Poole.

Challenge
Traditionally, traceability of printed circuit boards (PCBs) used in manufacturing starts on the assembly line. However, due to rising accountability expectations, clients have an increased need for accurate, in-depth tracking of individual components, especially in critical sectors such as aerospace engineering. Speedprint wanted to be the first company to offer its clients the opportunity to buy its SP710 SMT Stencil Printer with an inbuilt barcode label placement system (S-Track) and scan engine. This would enable PCB traceability from the very start of the manufacturing process.

Solution
Having assessed options and worked closely with the Zebra OEM team, Speedprint has started mounting the Zebra Se3307HD OEM Array Imager Scan Engine onto the vision alignment cameras inside the S-Track version of its SP710 printers – which are used to print PCBs. The S-Track system and scan engines can also be added to older printers retrospectively.

Heat resistant barcode labels are added to the PCBs, post glue and solder paste, and are then scanned. Data from each PCB – such as the printing process, any defects found and parameters met – is recorded. As the PCB passes through subsequent machines, such as placement and inspection machines, further information is continually added. In the case of a circuit board failure in any product in the future, the manufacturer can open up the relevant part, scan the original PCB and retrieve all the data stored during the manufacturing process, to assess cause of failure or batch issues.

Results
Speedprint Technology is the only company to offer a stencil printer with an inbuilt barcode label placement system (S-track) and scanner. Its clients can now accurately trace their PCBs right along the product assembly line, and have access to detailed production information in case of failure, increasing their accountability.

“Zebra Technologies is the market leader in OEM scan engines and this has been another successful deployment. The scan engine offers fast, first-time every-time scanning, even of damaged or poorly printed barcodes. It is easy to integrate into the printers and offers a flexible, future-proof solution.”

Chris Whitfield, Product Manager, Speedprint Technology