

PCB TRACKING & TRACEABILITY SOLUTION



AB&R® Case Study

BACKGROUND

Competition is forcing electronic manufacturers to reduce costs and increase revenue through production efficiency, quality improvement, and outsourcing. The assembly of a large number of models requires flexible manufacturing processes and better accuracy for lead times. In order to mitigate manufacturing liability, companies need to limit the scope of product recalls and comply with more regulations.

CHALLENGE

Today's approach to tracking Printed Circuit Boards (PCB) using barcodes requires line of sight between the label and the reader, and limits the amount of information that can be encoded. Even two dimensional barcodes have significant trade-offs including costs of readers and accuracy of reads. High-density boards have little real-estate available for barcodes which cannot be read simultaneously by a single barcode reader.

SOLUTION

The tracking and traceability solution leverages Texas Instruments' RFID chip technology to program product and manufacturing information directly onto the PCB. The programmable data includes serial number, model number, manufacturing process and other customizable individual product information. The information can be securely accessed and updated at any point in the manufacturing, shipping or repair processes.

The off-the-shelf solution provides automated realtime visibility and maintains complete electronic

pedigree for traceability on parts and WIP providing real-time dashboards, alerts and reports for the shop-floor management.

The RFID tag is mounted onto the PCB as a standard SMT component. The manufacturing pedigree information can be automatically programmed into the RFID tag for rapid access to critical data without the need to be connected.

ERP OMNITROL Reports Secure WiFi VLAN Secure Fixed VLAN Mobile RFID Reader Mobile Handhelds

BENEFITS

- Automatic Work-In-Process traceability
- Real-time alerts to anticipate and address production issues.
- Immediate assessment of delivery capability for new orders.
- Quickly isolate defective components.
- Integrated product authenticity.
- Shipping and receiving reconciliation.
- Connect supply chain with manufacturing visibility.

For an assessment on how your business can gain the benefits of this program.

Call Today 800-281-3056

PROVEN SOLUTIONS THAT DRIVE EFFICIENCY AND PRODUCTIVITY IN YOUR SUPPLY CHAIN

www.abr.com