



PCB Inspection

Speed up your QA Process through our AI
Powered Inline Inspection tool using
Cameras & Vision Analytics

Automating the current Quality Assurance Process of PCB Assembly using
cameras for Component Identification & Defect.

KEY FEATURES



Barcode Reading & PCB Identification



Component Assembly Verification



Component Segmentation & Classification



Component Presence or Absence Detection



Defect Detection & Classification



OCR for Component Information Capture

OUR CORE AI & VISION TECHNIQUES

Computer Vision

- ✓ Thresholding & Morphological Operations
- ✓ Template Matching
- ✓ Background Subtraction
- ✓ SSIM for Structural Similarities
- ✓ Correlation Filters

AI Deep Learning

- ✓ ResNet
- ✓ CornerNet
- ✓ Object Detector
- ✓ U – Net

- ✓ Quality Assurance Cycle Time improved by 60%
- ✓ Defect Detection Accuracy improvement by 20%
- ✓ Rework post Manufacturing eliminated completely



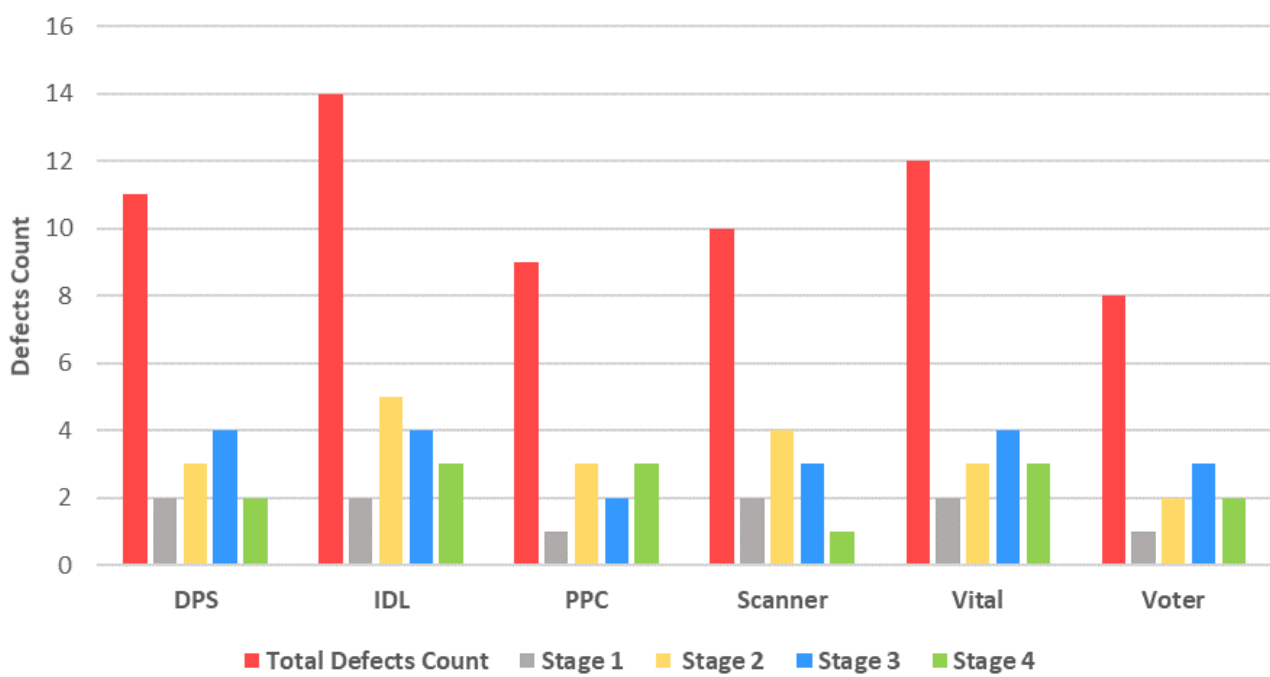
CURRENT QA PROCESS V/S OUR SOLUTION

Current Industrial QA Process	Transformation using our Computer Vision Solution
Batch based QA checks at the end of the manufacturing process	Installation of sophisticated cameras & lenses to closely inspect the components at each stage
Random selection of components for QA testing	Continuous inspection of every component to avoid batch remanufacturing & batch rejection costs
Batch remanufacturing when quality standards are not met	In process inspection with adherence to regulatory standards for improved quality and reduced manual efforts

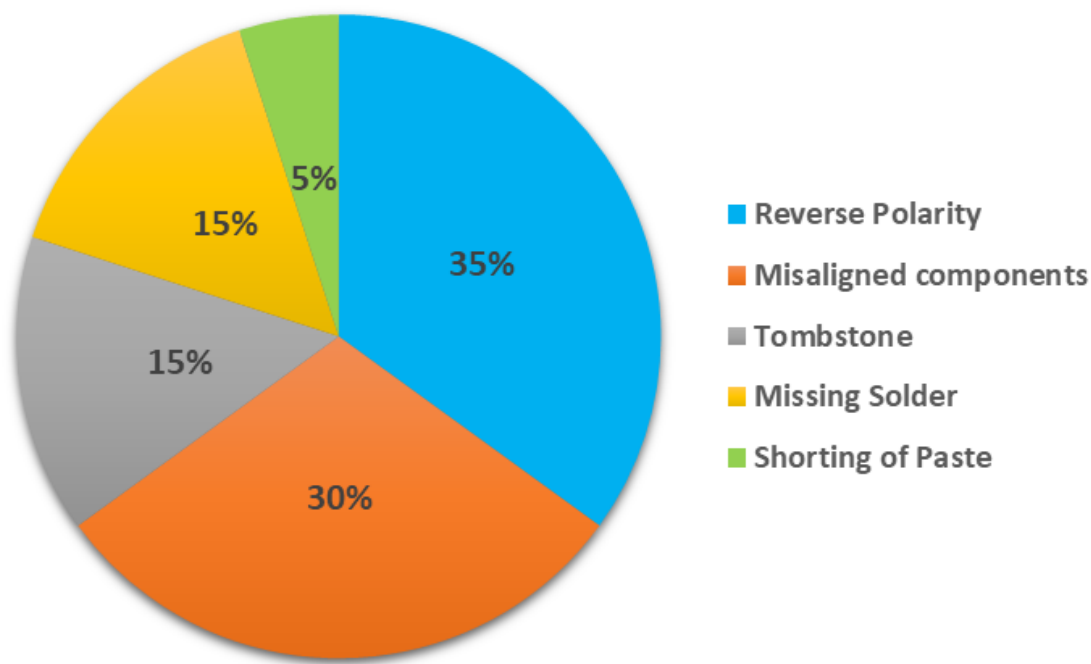
CONTACT US FOR A DEMO

+1 (669) 247-6699

DEFECT DISTRIBUTION BY PCB TYPE



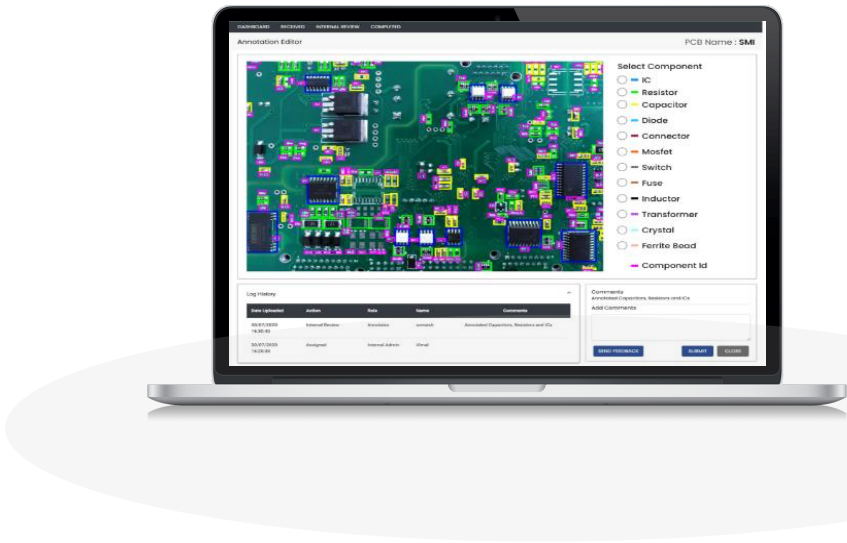
DEFECT CLASSIFICATION



Accurate, Faster & Reliable Computer Vision solution for Printed Circuit Board QA inspection

BENEFITS

- ✓ Rework eleminated completely
- ✓ Enhanced Quality
- ✓ Better Production
- ✓ Increased Revenue with same resources
- ✓ Optimized Man & Machine



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