

# CircuitGuard AI

## PCB Defect Detection Report

|               |                     |
|---------------|---------------------|
| Report ID:    | RPT-52903F28        |
| Generated On: | 2025-11-17 22:00:01 |
| Model:        | ResNet50 (custom)   |
| Device:       | cpu                 |

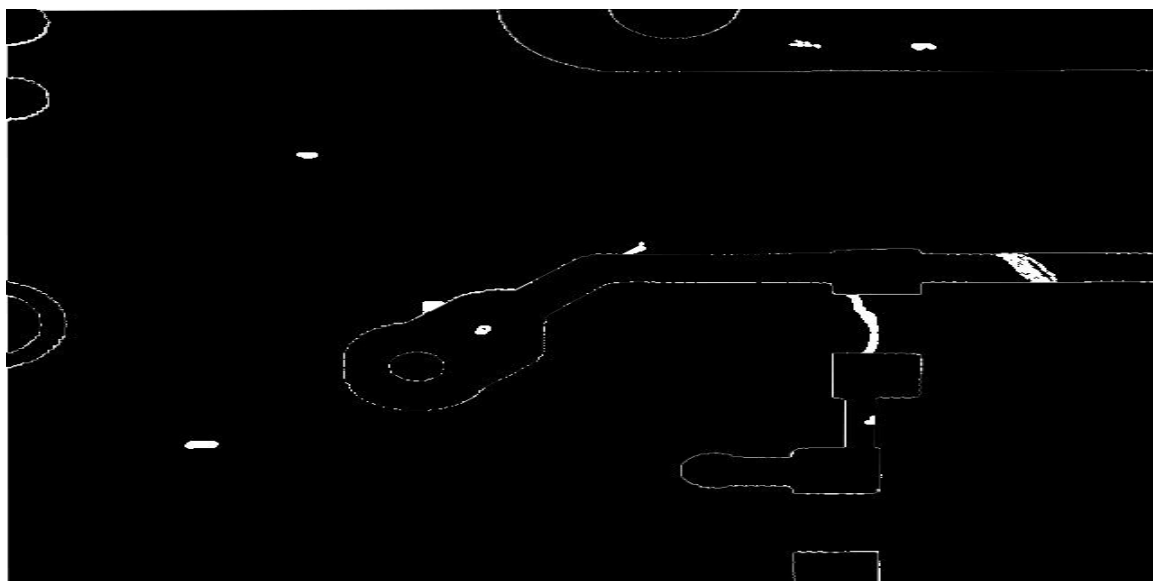
# Executive Summary

Detected 0 defect(s). High:0, Medium:0, Low:0. Avg conf: 0.00%.

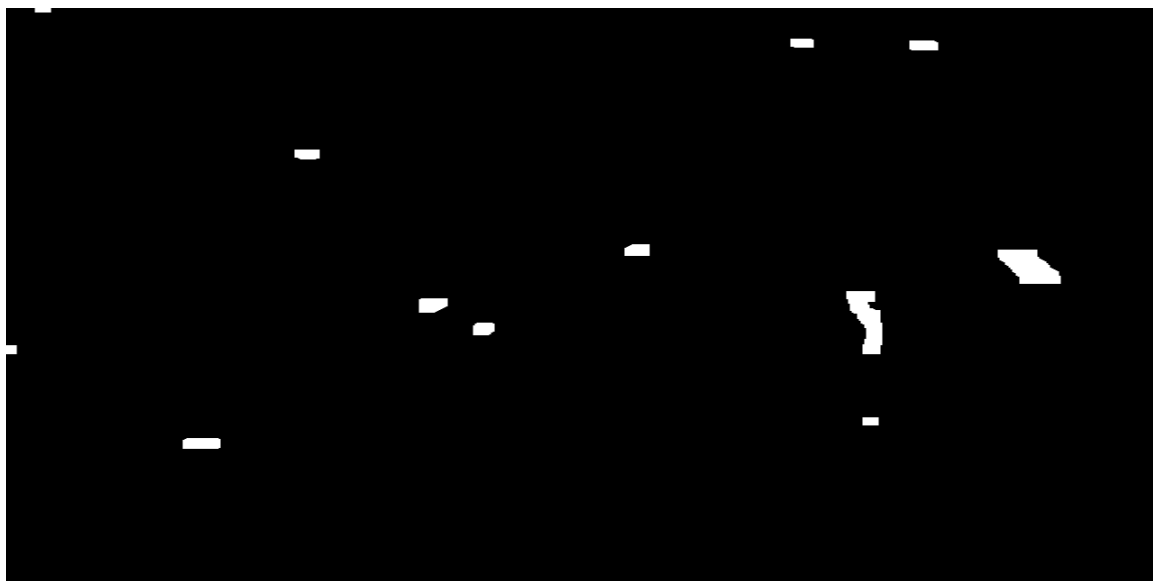
| Metric                     | Value |
|----------------------------|-------|
| Total Defects              | 0     |
| High Confidence (>=80%)    | 0     |
| Medium Confidence (60–80%) | 0     |
| Low Confidence (<60%)      | 0     |
| Average Confidence         | 0.00% |

## Input Images & Maps

*Difference Map*



*Binary Mask*



**Statistical Charts**

*Defect Count by Class*

No Defects Detected

*Defect Distribution*

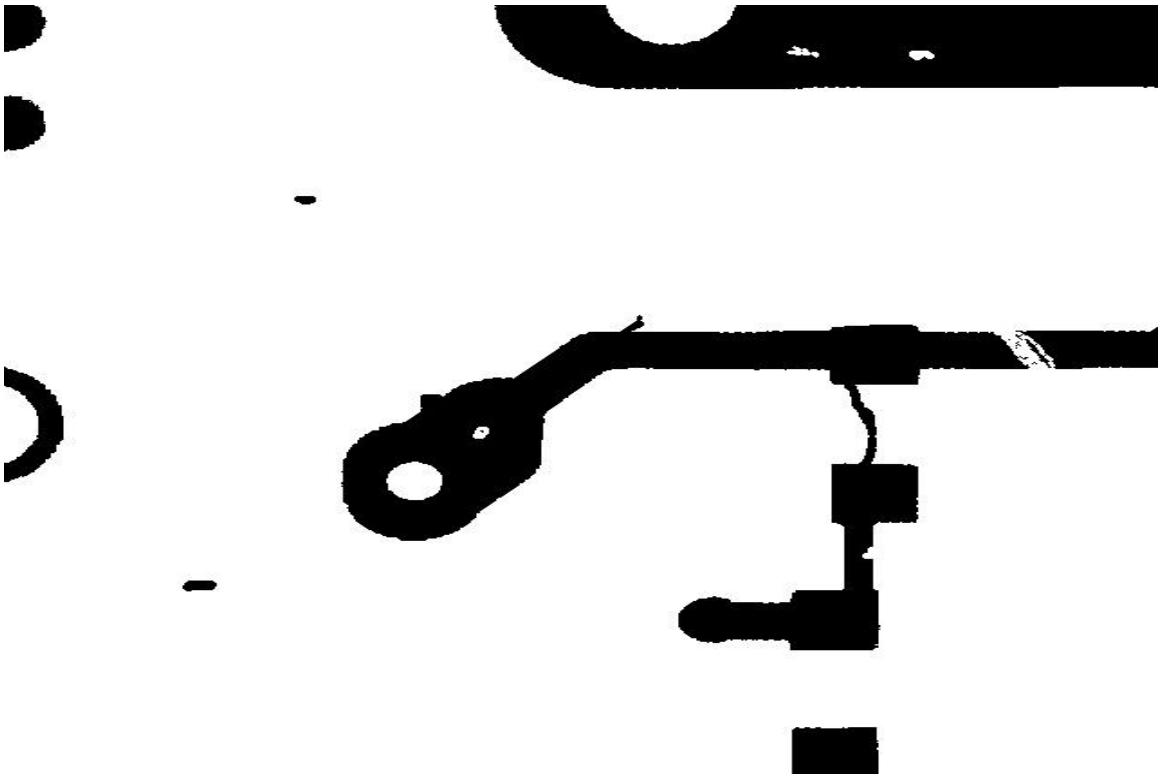
No Defects

## Spatial Distribution & Confidence

No Defects to plot

No Confidence Data

Annotated PCB & Defect Table



No high-confidence defects detected.

## **Recommendations**

Inspect high-confidence regions first. If too many false positives, increase min ROI area or confidence threshold.

## **Conclusion**

Automated inspection completed in 0.31 seconds.