

CircuitGuard AI

PCB Defect Detection Report

Report ID:	RPT-21BC6B0E
Generated On:	2025-11-17 22:33:28
Model:	ResNet50 (custom)
Device:	cpu

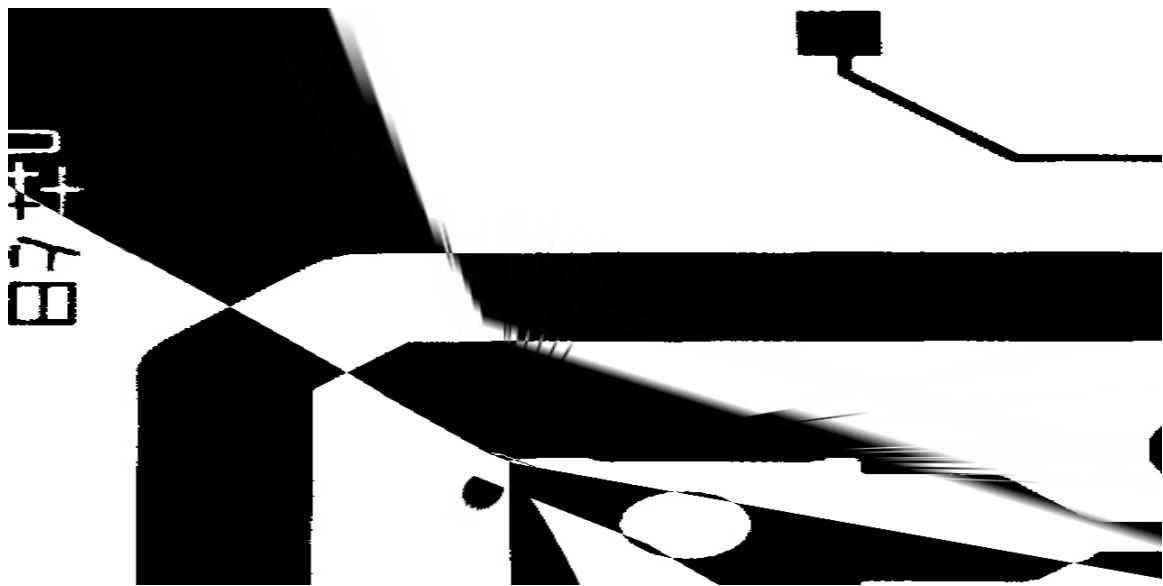
Executive Summary

Detected 3 defect(s). High:3, Medium:0, Low:0. Avg conf: 90.39%.

Metric	Value
Total Defects	3
High Confidence (>=80%)	3
Medium Confidence (60–80%)	0
Low Confidence (<60%)	0
Average Confidence	90.39%

Input Images & Maps

Difference Map

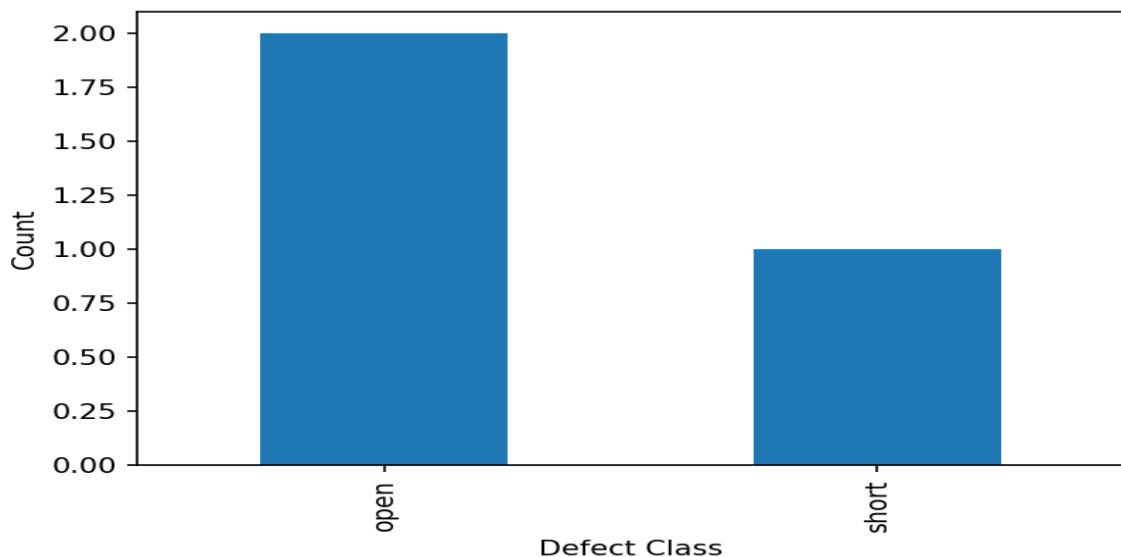


Binary Mask

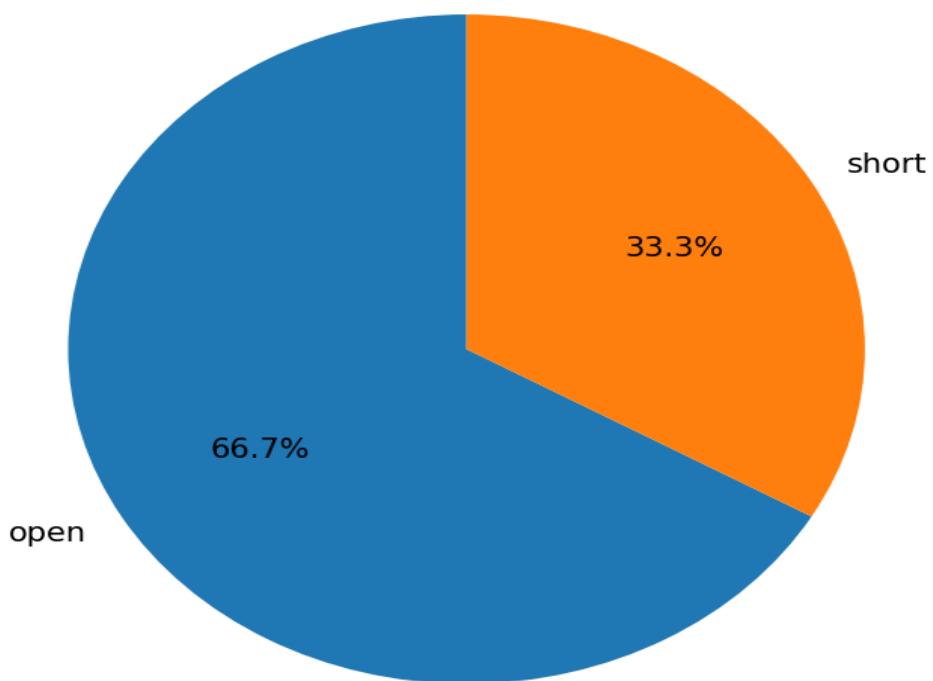


Statistical Charts

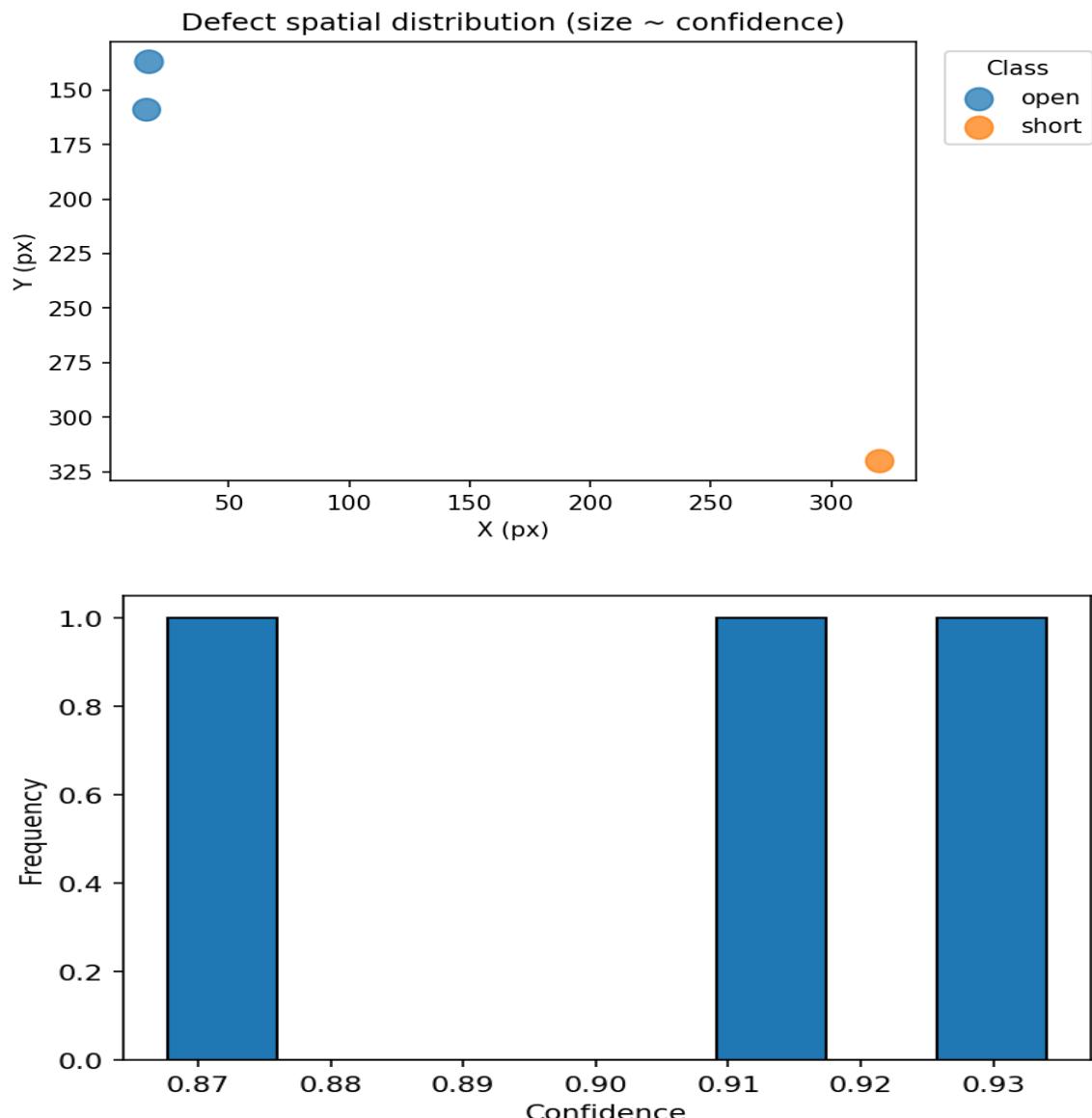
Defect Count by Class



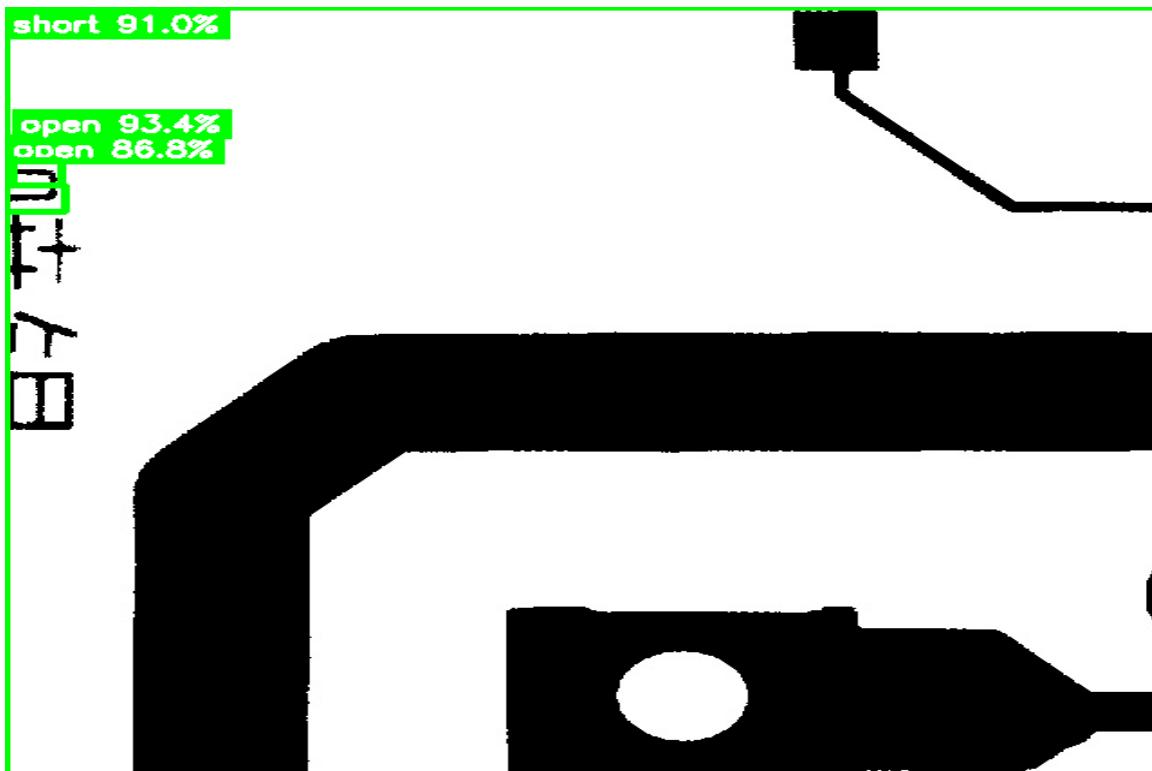
Defect Distribution



Spatial Distribution & Confidence



Annotated PCB & Defect Table



ID	Type	Confidence	Position (X,Y)	Size (WxH)
#2	open	86.8%	(16,159)	33x22
#3	open	93.4%	(17,137)	27x21
#4	short	91.0%	(320,320)	640x640

Recommendations

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

Conclusion

Automated inspection completed in 2.68 seconds.