

# Detection of Bond Pad Discolorations at Outgoing Wafer Inspections

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[S. N. David Chua](#); [S. Mohamaddan](#); [S. J. Tanjong](#); [A. Yassin](#); [S. F. Lim](#)

**All Authors**

## **Abstract:**

Deployment of an automatic visual inspection system in semiconductor industry has become increasingly popular than ever not only due to its relatively high value as a yield analysis tool of outgoing products but more importantly for the prevention of defect escapee. A lot of studies are done on the application of in-line defect scan but the application of outgoing wafer inspection at post-fab environment has been very limited and rarely found in literature. With rapid growth of automotive application in worldwide industry, the importance of quality of the wafer at die level has never been so critical. This paper provides a method for detection of bond pad discolorations at outgoing quality check especially in semiconductor industry. An effective method for detection of the bond pad discolorations was proposed. The advantages and disadvantages of the detection method are discussed. Factors that are affecting the performances of the detection method are also described and analyzed.

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