

Maximizing Die Shear Strength in Semiconductor Manufacturing through Design of Experiments

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Abstract

High efficiency, high speed and high quality objectives of semiconductor manufacturing require the strict control of thousands of process variables. In the die attach operation, die shear strength is inferred to be dependent on the bonding agent and the method employed in applying it. This paper determines the bonding agent and method that maximize shear strength, and the experimental design that maximizes the yield and speed of experimentation.