

A Solder Joint Behavior Study of Extra Tall Packages by Digital Image Correlation (DIC) Method

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Abstract

The warpage behavior at the top surface of extra tall electronic packages cannot comprehensively represent the package deformation since the considerable height change between the PCB and the component's surface. Observing the relative height change by DIC technique between the corners of the package surface and the bottom PCB is an indirect way to investigate the solder joint reliability. However, there is always a gap between those points since the shadow and blind areas caused by the light source and camera angle. In this work, an experimental study on minimizing this gap were accomplished with the digital image correlation (DIC) technique.