

Magnetic Current Imaging to "see through" System in Package Devices

System in package devices increase the challenge of fault isolation. Multiple die of mixed types and embedded passive components can make initial fault isolation difficult without taking the package apart first with the risk of losing the defect. Magnetic Current Imaging uses the magnetic fields of current in the device to image buried defects. These fields are not affected by packaging materials or stacked die, which allows the failure analyst to get an image of defect currents even when buried under another die. We will discuss the basics of this technique and explore some analysis examples on system in package devices.