

Novel Waffle Pack Lid Clip System Shows Promise in Mitigating Costly Thin Die Migration

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High value devices used in microwave modules have become increasingly thin and susceptible to component migration conditions that can occur during packaging, shipping, and customer handling. This defect condition is especially problematic for automated assembly.

A funded study into die migration conditions was conducted and several root causes were identified. We discovered that traditional “waffle packs” have mechanical issues related to flatness tolerances with respect to the waffle tray, lid and clip. A novel Lid-Clip System was engineered to compensate for mechanical issues, bringing robust captivation and preservation of devices in waffle tray pockets. The solution was validated through X-ray and CT technologies and has shown to save millions of dollars in scrap, rework labor and return material authorizations (RMA’s).