

Double glass component embedding





Overview

This article describes the fabrication process for 3D GPE, leading to demonstration of a technology using embedding of chips with all-Cu interconnections at 40- μm I/O pitch with TGVs at 300- μm pitch, thus enabling double-side RDL and assembly of chips to achieve three levels of device integration. What is a multi-die-embedded glass package?

Abstract: This article presents a multiple-die-embedded glass package that supports a thermal management solution for millimeter-wave (mmWave) applications. The package includes dies with different thicknesses embedded into isolated cavities created on a single glass substrate.

Can glass panel embedding be used for a large body size heterogeneous integration?

This article presents a 3D packaging technology using glass panel embedding (GPE) for high-performance with potential for large body size heterogeneous integration applications.

What is glass panel embedding (GPE)?

In , Georgia Tech presented the first demonstration of glass panel embedding (GPE). Glass, when used as a carrier for die embedding, not only outperforms other organic solutions but also provides many other benefits not found in the existing WLFO technologies.

Is multidie-embedded glass suitable for module-level mmWave applications?

A cross section of the package is also presented. The multidie-embedded glass package exhibits low-loss broadband performance and the ability to integrate thermal solutions, suggesting significant potential for module-level mmWave applications.



Double glass component embedding



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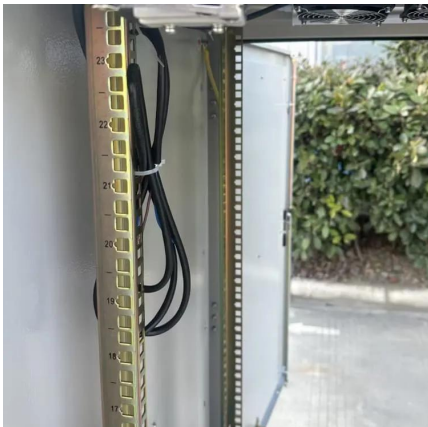
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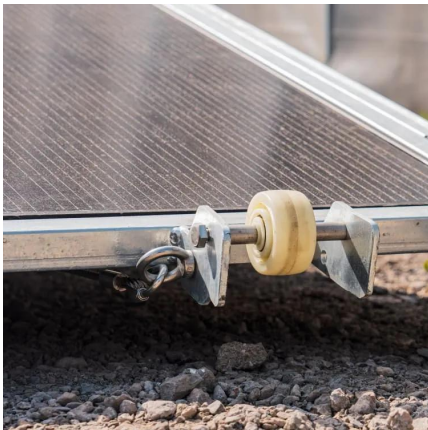
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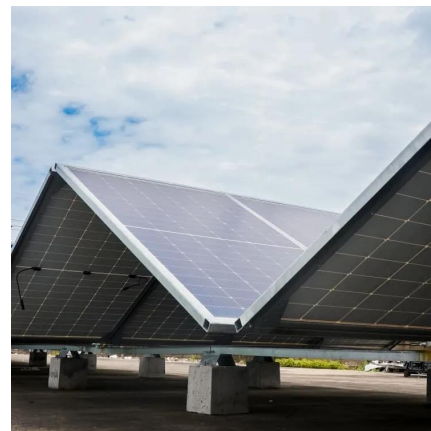


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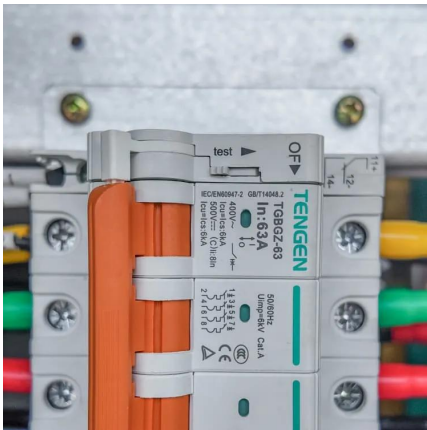
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