

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



Demonstration of Glass-based 3D Package Architectures with Embedded

May 31, 2022 · This paper presents a technology demonstration of two novel 3D glass-based architectures for high performance computing applications. Current 3D technologies are ...

[Design and Demonstration of Glass Panel ...](#)

This article presents a 3D packaging technology using glass panel embedding (GPE) for high-performance heterogeneous integration ...



[Glass Package With Multiple Embedded Dies for mmWave ...](#)

Sep 2, 2024 · This article presents a multiple-die-embedded glass package that supports a thermal management solution for millimeter-wave (mmWave) applications. The package ...

[General Guideline Glass Embedding](#)

Feb 17, 2025 · 1 PURPOSE AND GENERAL INFORMATION This document contains recommendations and hints for the application of SikaForce®-335 GG, a self-levelling polymer ...



Double glass component embedding

What is a die-embedded glass interposer process? Abstract--This paper presents a die-embedded glass interposer process using a new double-sided release method. This new ...



Die-embedded glass packaging for 6G wireless ...

Nov 23, 2022 · Abstract This work presents the design and fabrication of an antenna-integrated glass package with embedded die for D-band (110- 170 GHz) wireless applications. The ...



Dual-glass component

Jan 22, 2014 · A technology of double-glass modules and installation components, applied in electrical components, photovoltaic modules, ...





Design and Demonstration of Glass Panel Embedding for 3D ...

Jul 1, 2019 · Fig. 13 shows the cross section of the 3D embedded glass package after double-sided RDL plating to form the chip-package blind via interconnect and through-package-via ...



How to Design a PCB with Embedded ...

Feb 26, 2025 · Embedded PCB components are passive devices fabricated within the PCB substrate. They reduce parasitic effects and enhance heat ...

ENTER PAPER TITLE HERE

Oct 23, 2020 · Glass Packaging Architectures developed at Georgia Tech are shown in Fig. 2 showing chip-first, glass panel embedding (GPE) 3D architecture for power-efficient- high ...



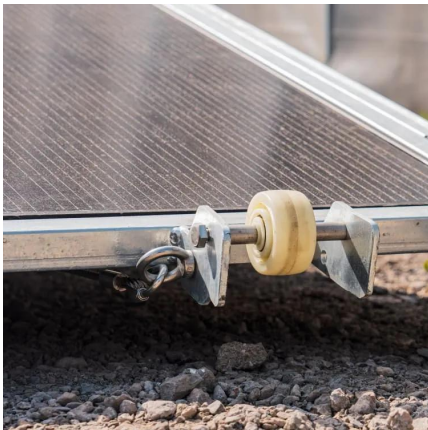
Microsoft PowerPoint

Oct 28, 2019 · Traditional methods of setting monolithic glass in railings such as cement-based grouts may be incompatible with laminated glass. Bolted or clamped systems must be ...



PCB Embedding

PCB-Embedding technology in an established approach for the miniaturization of electronic systems and modules. Different industrial ...

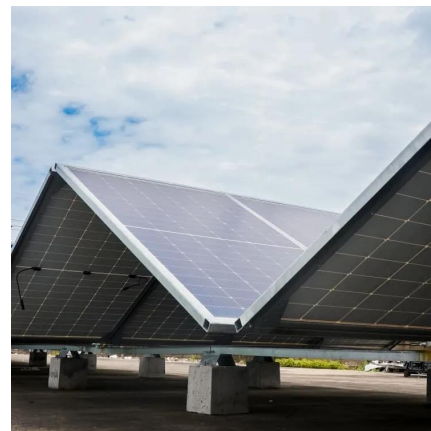


SikaForce®-335 GG

Jul 1, 2024 · DESCRIPTION SikaForce®-335 GG is a pourable, self-leveling, two-component polymer grout based on polyurethane resin. It has been designed for embedding of monolithic ...

Design and Demonstration of Glass Panel Embedding for 3D ...

This article presents a 3D packaging technology using glass panel embedding (GPE) for high-performance heterogeneous integration applications. This new technology addresses ...



Demonstration of Glass-based 3D Package Architectures with Embedded

Nov 27, 2025 · Abstract This paper presents a technology demonstration of two novel 3D glass-based architectures for high performance computing applications. Current 3D technologies are ...



[Designing flexible SERS platforms by embedding double ...](#)

Jun 1, 2025 · The main component of SERS enhancement is the double-plasmonic Ag/Au bilayer structure, with the ZIF-8 framework serving as a porous shell to collect target molecules.



[Interesting points from our IP competition ...](#)

Jan 9, 2025 · Patent portfolios also show a strong emphasis on transferring technologies developed for silicon to glass. Innovations include ...

Interesting points from our IP competition analysis on glass

Jan 9, 2025 · Patent portfolios also show a strong emphasis on transferring technologies developed for silicon to glass. Innovations include embedding dies in glass for thinner ...



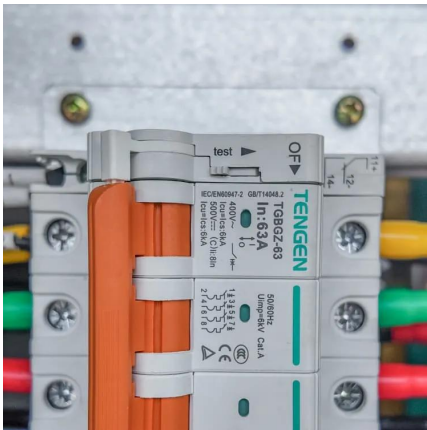
Design and demonstration of Glass Panel Embedding for 3D ...

Oct 1, 2018 · This paper demonstrates an advanced 3D Glass Panel Embedded (GPE) packages for heterogeneous integration of digital applications requiring high-density interconnections ...



Design and Demonstration of Glass Panel Embedding for

WLFO promises better performance and form factor at lower costs, but current WLFO packages are mold-based and hence are limited to small packages. This paper presents the first ...



Glass Core Substrates and Interposers for ...

Jan 10, 2025 · The patent US20230086881 from Intel illustrates a double-sided glass substrate with a PIC that leverages hybrid bonding (Figure 4). ...

Design Guide Embedding

Dec 5, 2025 · The embedding of components serves as a solution for reduces spaces. In an embedding process, active or passive components are positioned in the stack up so that they ...



Contact Us

For technical specifications, project proposals, or partnership inquiries, please visit:
<https://www.eiei.pl>



Scan QR Code for More Information



<https://www.eiei.pl>