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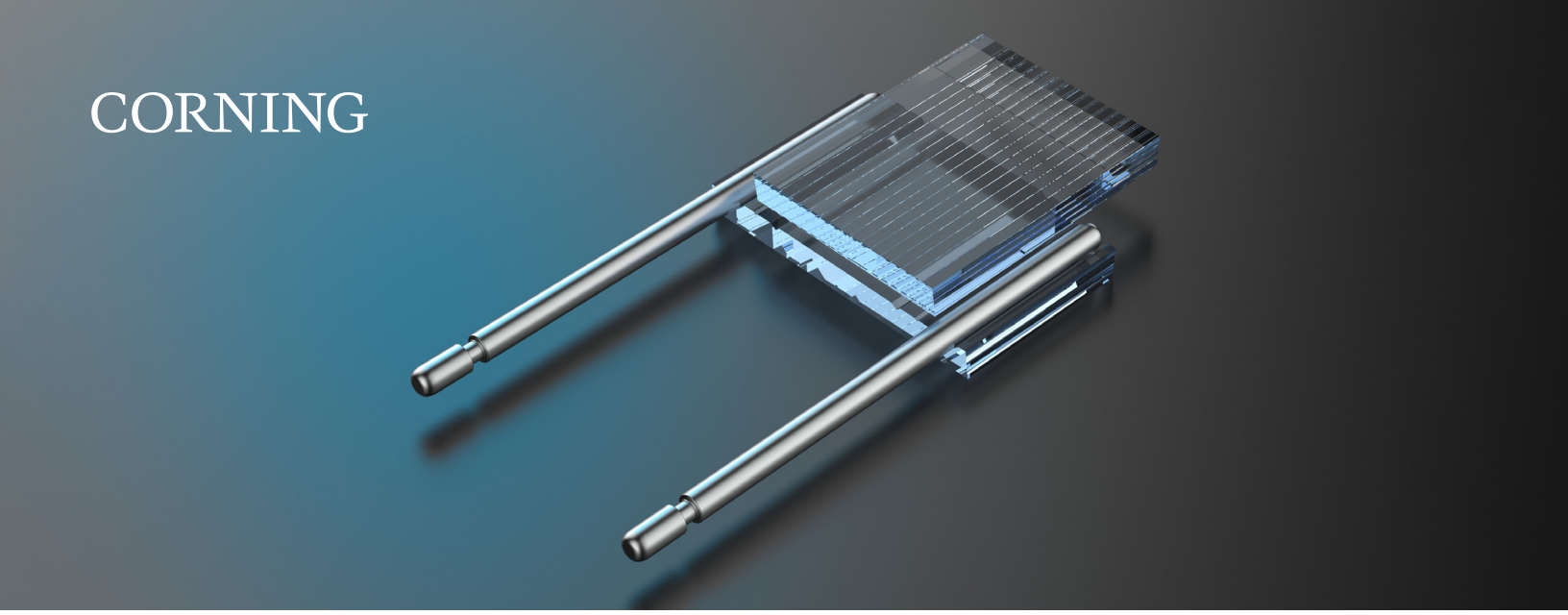


GlassBridge™ Fiber-to-PIC Connector

Industry-leading design for next-generation optics

Built on Corning's decades of expertise in glass science, ion-exchange (IOX) waveguides, and industry-proven TMT-ferrule technology, the GlassBridge™ connector gives system designers a practical, manufacturable path to next-generation optical architectures including Near-Packaged Optics (NPO), Co-Packaged Optics (CPO), and high-density photonic modules.

Advanced Optical Coupling

- Wafer-based high-volume manufacturing
- Customizable pitch
- Detachable solution
- Passive alignment

Inside the GlassBridge Design – Core Product Features

Wafer-based IOX waveguides
enabling high-volume, scalable production, and precision alignment.

Supports 24 fibers
and can scale to multiple (eg. 2 x 24) per PIC for higher density needs.

Robust physical-contact interface
leveraging a standard TMT ferrule format.

Fiber-to-chip coupling
using an ultra-compact, 6.4 mm-wide glass connector body.

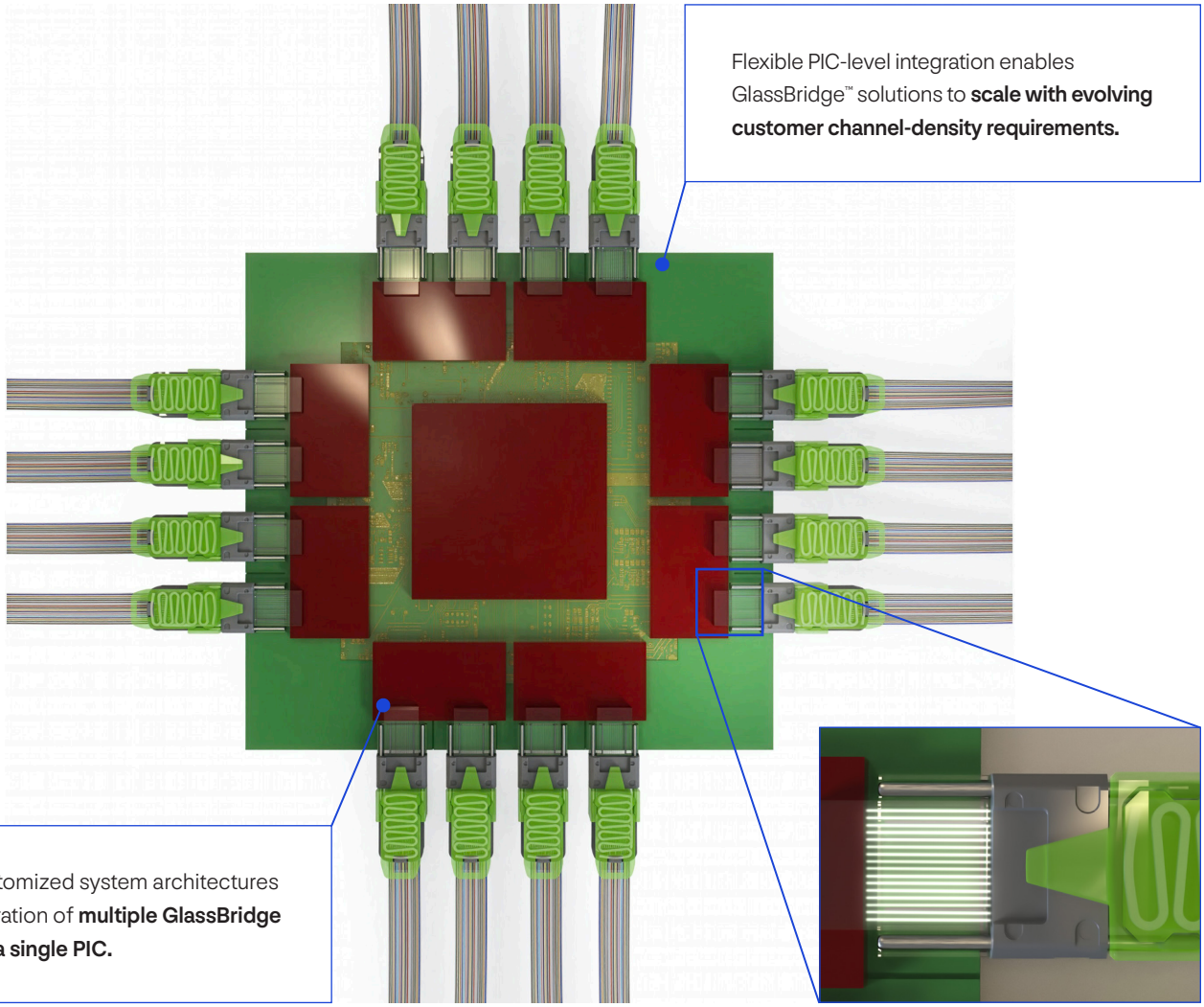
Solder reflow compatible
to ease assembly.

Low loss optical performance
demonstrating 1.5 dB O-band fiber-to-PIC coupling.

System-Level Advantages – Unlocking Next-Gen Photonic Performance

- **Scalable Manufacturing:** Wafer-based design supports high-volume manufacturing.
- **Customizable Pitch:** Supports multiple PIC pitches (e.g., 40 µm, 80 µm, 127 µm, 165 µm), enabling higher shoreline density and pitch conversion across application requirements.
- **Detachable Connector:** Offers a detachable solution for flexibility in deployment and maintenance.
- **Passive Alignment:** Efficient assembly to save cost.
- **Standardized TMT Ferrule:** Utilizes a physical contact interface with standard TMT ferrule (125 µm hole) for reliability and ease of use.
- **High Channel Count:** Enables connectivity for more than 24 channels (single connector), supporting advanced applications.

Supporting Future-Ready NPO and CPO Architectures



Flexible PIC-level integration enables GlassBridge™ solutions to **scale with evolving customer channel-density requirements.**

Supports customized system architectures and the integration of **multiple GlassBridge elements on a single PIC.**

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