OpenLight and TFC Advance Silicon Photonics Back End Integration Supporting up to 400G Data Rates on TGV Substrate

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- New evaluation board for a 400G EAM, based on OpenLight's heterogeneous integration of InP-on-Si process, is available for testing, and includes a modulator driver

- Evaluation card is designed and manufactured by Suzhou TFC Optical Communication Co., Ltd. using a multi-layer through-glass-via (TGV) structure to support 400Gbps signal

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OpenLight, the world leader in custom PASIC chip design and manufacturing, today announced continued progress in its ecosystem partnership with Suzhou TFC Optical Communication Co., Ltd. (TFC), building on the collaboration first announced in 2025 to fast track the back end process for silicon photonics production and optical communication systems. The partnership remains focused on advancing the integration, assembly, and manufacturing workflows required to bring highly integrated silicon photonics optical engines to market with the OLP-PM13306 400G test board serving as the most recent example of this progress.

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> *Dr. Adam Carter, OpenLight CEO*

The OLP-PM13306 is designed to enable testing and evaluation of OpenLight's 400G electro-absorption modulator (EAM) by integrating a high-speed driver alongside the photonic integrated circuit (PIC) on a TGV-based high-speed printed circuit board (PCB), combined with a low-loss fiber attach unit (FAU). The complete optical sub-assembly—including TGV-based PCB design, FAU integration, and assembly—was designed and manufactured by TFC. This device will be showcased at

OpenLight's booth at OFC 2026.

As silicon photonics adoption continues to accelerate across data center, AI/ML, and emerging optical networking applications, the maturity of the back end ecosystem has become increasingly critical to support higher levels of photonic integration and increasing per-lane data rate requirements.

Since the initial partnership announcement at OFC 2025, OpenLight and TFC have expanded the scope of their collaboration to support higher speed optical engines and evolving integration requirements. TFC has supported optical sub assembly activities for OpenLight's 100G and 200G per lane transmitter PICs and this collaboration has now extended to 400G per-lane devices. These efforts reflect the partnership's focus on maturing integration and assembly workflows in parallel with increasing data rate requirements for silicon photonics optical engines.

The OpenLight–TFC collaboration provides customers with an expanded ecosystem option for optical sub assembly, helping streamline the supply chain from completed wafers through full fiber attached optical engines. The partnership aims to reduce complexity, improve manufacturability, and support faster time to market.

"As silicon photonics adoption continues to grow, success increasingly depends on the readiness of the back end ecosystem," said Dr. Adam Carter, Chief Executive Officer of OpenLight. "Our continued collaboration with TFC is focused on enabling practical, scalable integration and assembly workflows that customers will need as optical engines become more highly integrated and move toward production."

"TFC is proud to support our customers in the development of the next generation of silicon photonics such as the showcased 400G EAM on TGV substrate" said Lucy Ou, Chief Executive Officer of TFC. "We continued to invest in the key technologies associated with advanced optical sub-assembly, optoelectronic and system integration solutions, leveraging one of our seven global facilities across three countries. By working closely with OpenLight, we are translating advanced photonic integration into scalable manufacturable optical sub assemblies that can support broader industry adoption."

For more information on OpenLight's production ready photonic platform and the PH18DA process, please visit booth #2449 at OFC 2026 or www.openlightphotonics.com.
To see TFC demonstrating its product portfolio, visit #1825 at OFC 2026 or https://www.tfcsz.com/

About OpenLight

OpenLight is the world leader in custom PASIC design.

OpenLight's world-leading PASIC technology, supported by its process design kit (PDK), integrates

all active and passive components of silicon photonics devices into a single chip, enabling high-performance, energy-efficient photonics solutions across datacom, telecom, automotive, AI, and quantum computing applications and markets.

The company secured Series A funding in August 2025 and this, combined with a portfolio of over 400 patents, is enabling OpenLight to bring optical solutions to places it has never been before and underpin technologies and innovation that weren’t previously possible. The company is headquartered in Santa Barbara, California, with offices in Silicon Valley.

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