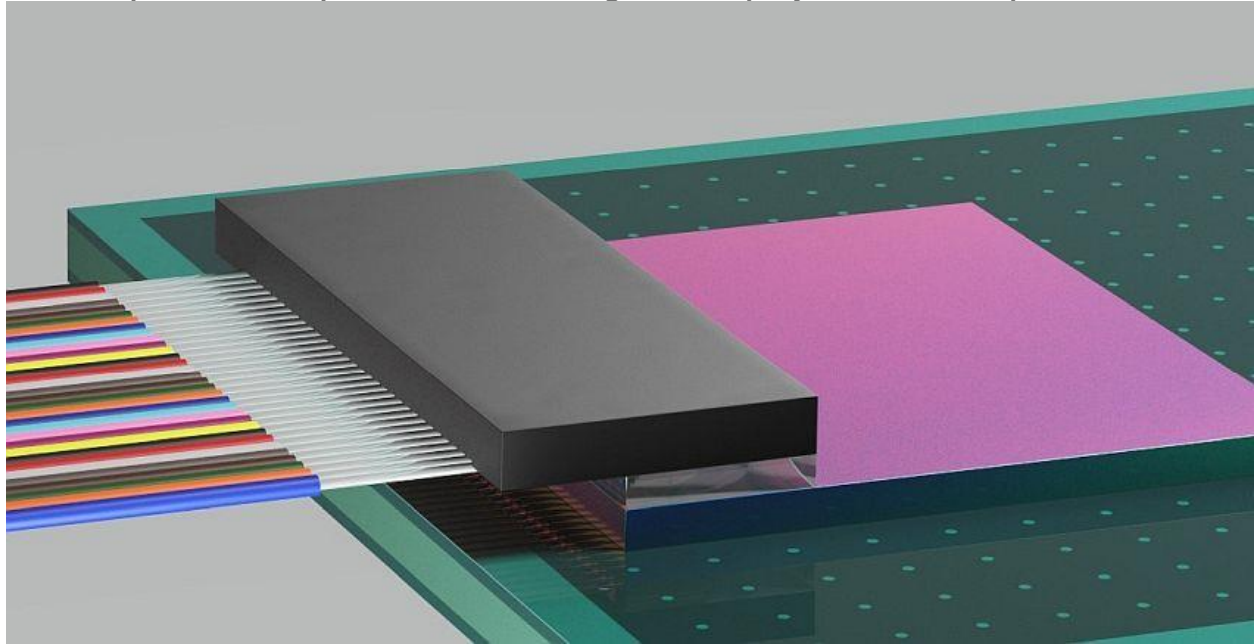


Termount and EVG have produced optical elements for a silicon photonics connector - March 3, 2022

The revolutionary connector of the Jerusalem Termount allows direct connection of optical fibers to silicon photonics components. Success brings the company closer to mass production



Pictured above: Termount mount PhotonicPlug

The Jerusalem-based company Termount [and](#) the Austrian [EV Group](#) have developed a production process for the optical connectors of Termount, which enable direct connection to silicon photonics components. Termount CEO Dr. Hisham Taha told Techtime that the company used EVG's capabilities, including the Nano Imprint Lithography - NIL machines and technologies, to build mirrors and lenses on silicone wafers. "Termount uses technology for the PhotonicPlug solution to solve the problem of connecting fiber optics to photonic chips, thus bringing the silicon photonics industry closer to mass production."

Termount was founded in 2015 by the CEO, Dr. Hisham Taha, and the VP of Technology, Dr. Avi Israel. In March 2021 it completed a \$ 8 million capital raising, designed to bring it into mass production. The fundraiser was led by Grove Ventures and was also attended by Dedi Perlmutter, a former senior vice president at Intel Global and currently chairman of the company. Termount's PhotonicPlug technology allows any Enclosure Manufacturer (OSAT) to connect the optical fiber to the Photonics silicon chip without the use of expensive and complex Active Alignment equipment. This is done through a structure that connects the light conductors to optical photonic bumps whose dimensions are similar to the standard connection points of CMOS chips.

Data centers that work at the speed of light

EVG supplies lithography and metrology equipment to the chip industry and equipment for bonding pieces of silicon to wafer bonding ports. The company employs about 1,100 people and also serves as an active participant in the European Transform consortium, which is designed to ensure the supply chain of silicon carbide-based power components for the European chip industry. The consortium includes 34 European technology companies and operates with an EU budget of about 89 million euros. The

company's NIL technology is a lithography technology that enables the production of molds up to 40 nm wide using a UV source.

According to Taha, the impact of the company's solution on the industry will be huge. "It allows data centers and computers to transmit information at the speed of light and with very low energy consumption." The collaboration between the two companies is an important milestone in Termount's ability to switch to mass production. "We work in a Fabless format, but these machines are used by subcontractors that we can use for mass production of the connectors."

<https://techtime.co.il/2022/03/03/teramount-2/>