Infinera Plans New Lehigh Valley Semiconductor Facility with \$93M in CHIPS Funding

By Paul Muschick

LEHIGH VALLEY - Semiconductor developer and manufacturer Infinera is in line to receive \$93 million in federal funding to expand operations, including a new facility in Lehigh Valley that could create hundreds of new jobs.

The project would grow the Lehigh Valley's legacy of global leadership in technological innovation. The first mass production of transistors, the forerunner to semiconductors, occurred in Allentown in 1951.

"Infinera has been a significant part of the extensive semiconductor sector in the Lehigh Valley that goes back to the development of the transistor by Bell Labs and Western Electric," said Don Cunningham, President & CEO of Lehigh Valley Economic Development Corp. (LVEDC). "Lehigh Valley was the original Silicon Valley, and many of the talented engineers and developers remain here."

Infinera's current advanced testing and packaging facility in Upper Macungie Township employs about 300 people. The proposed \$93 million in funding, from the CHIPS and Science Act, would support construction of a new advanced testing and packaging facility in Bethlehem and a new fab in California.

Combined, those new facilities are estimated to create 500 manufacturing jobs and 1,200 construction jobs, and to increase Infinera's domestic manufacturing capacity by an estimated factor of 10.

"The proposed CHIPS funding will enable us to better secure our supply chain and compete more effectively with for-

eign adversary nations. Our unique photonic semiconductors address the increased demand for bandwidth from consumers while opening new markets inside the data center driven by the explosive growth in AI workloads." Infinera CEO David Heard said.

In Upper Macungie, Infinera designs, manufactures, packages, assembles, and tests optoelectronic packages and modules built around its unique optical, compound semiconductor photonic integrated circuits.

Chips produced in California are sent to the 60,000 square-foot operation. They are tested for quality and assembled into modules to be inserted into optical transport equipment used for networking, cloud connectivity, and data center interconnect services.



In addition to Infinera, the Lehigh Valley is home to technology giants Broadcom, Cisco, Coherent, and Intel, along with new companies such as iDEAL Semiconductor, AAYUNA, and POET Technologies. Collectively, the industry employs about 1,500 people who are developing, producing, and assembling semiconductors that are relied on by brands such as Google, Microsoft, Meta, AWS, AT&T, Verizon, Netflix, and Nokia.

"From artificial intelligence to electric vehicles to telecommunications infrastructure, 21st century technologies all rely on optical semiconductors like the ones manufactured by Infinera," said U.S. Secretary of Commerce Gina Raimondo.

The bipartisan CHIPS and Science Act was passed in 2022 to increase domestic production of semiconductors, protecting national security and expanding the country's tech economy.

"The federal government's effort and investment through the CHIPS Act to increase domestic chip production has led to several new projects in the Lehigh Valley including the expansion of Infinera. The region is in a prime position to help America meet its objective to reclaim leadership in the production of semiconductors and other critical technologies." Cunningham said.

Infinera and the U.S. Department of Commerce have signed a non-binding preliminary memorandum of terms for the CHIPS funding.

The Lehigh Valley's federal legislators heralded the proposed Infinera expansion.

"By supporting the construction of a new advanced test and packaging facility right here in Bethlehem, this grant will not only create hundreds of new jobs in our community, but it will revitalize our local semiconductor industry and address key national security concerns," said Rep. Susan Wild.

"This agreement is another critical step to deliver jobs and dollars to our Commonwealth, while protecting our nation's national and economic security. Infinera is emblematic of the future of the Lehigh Valley and I will keep fighting to bring manufacturing jobs to Pennsylvania," said Sen. Bob Casey.

"By investing in companies like Infinera, we're standing up to global competitors and building on American legacies," said Sen. John Fetterman.

Last year, a coalition led by LVEDC applied to be designated as a Tech Hub by the U.S. Economic Development Administration. While unsuccessful, the process built relationships between the region's technology companies, colleges and universities, workforce development, labor organizations and others who are continuing to work together to expand the Lehigh Valley's semiconductor and technology sector.

(Photos by Donna Fisher Photography)