

SEMICONDUCTORS

U.S. chip supplier Entegris upbeat on Taiwan despite China tension

CEO Bertrand Loy not 'overly concerned' about industry's current downturn

by CHENG TING-FANG | May 10, 2023 16:00 JST



Bertrand Loy, president and CEO of U.S. chipmaking material supplier Entegris, says the company is opening its "most advanced" manufacturing center in Taiwan. (Source photos by AP and Getty Images)

LONDON -- Leading U.S. chipmaking material supplier Entegris says it is committed to investing in Taiwan as it opens the company's "most advanced" manufacturing center on the island despite geopolitical tensions surrounding Asia's top chip economy.

"Our investment is just a sign of the conviction we have in the future of the semiconductor industry in Taiwan," Bertrand Loy, president and CEO of Entegris, told Nikkei Asia ahead of the grand opening of its \$500 million facility in Kaohsiung, in southern Taiwan.

"This is the largest investment ever in the history of this company and the important news is that this is going to be our most advanced manufacturing center. ... If you want to get to 2-nanometer, 1-nanometer [chips] or below, the best filters will be manufactured in Taiwan."

The smaller the nanometer size, the more advanced and powerful the semiconductors. Currently, the world's top chipmakers -- Taiwan Semiconductor Manufacturing Co., Samsung Electronics and Intel -- are racing to produce cutting-edge chips of 3 nanometers and below.

Entegris is the world's top supplier of the advanced filters and containers needed to ensure the purity of chemicals and liquids used in making chips and displays. Such materials are becoming increasingly critical as semiconductor manufacturing grows more sophisticated, with less margin for defects.

Counting TSMC and most other chip manufacturers around the world as customers, Entegris will make the company's most advanced filters, containers and dielectric materials in Taiwan, according to Loy. The CEO said it will also expand

its team in Taiwan from about 700 employees to more than 1,000. The new facility is entering test production and qualification will take place through the second half of 2023. Mass production is scheduled to begin in 2024.

Loy said it makes more sense to build chipmaking material production sites close to global chip hubs like Taiwan, South Korea, the U.S. and Japan that have committed to developing cutting-edge semiconductor manufacturing technologies, rather than in regions focusing on less advanced nodes, such as Europe and India.

"If you do not have that commitment to leading-edge [chip] process, then your [chip plants] most likely can be satisfied with older generation products," Loy said. "And it means that you can be supplied from pretty much anywhere in the world."

He said that is the reason his company currently has no plans to produce chip materials either in Europe or India despite these economies gearing up to their own levels of chip production.

Loy also said his company has taken into account the geopolitical tension between China and Taiwan, and that it plans to add some additional redundant capacity at its Colorado Springs site in the U.S.

"Business continuity plans have always been an important consideration, and that [should be in place] for all of our strategic products," the CEO said, adding that his company hopes to make all its important products in at least two locations to increase supply chain resilience.

The semiconductor industry has learned a lot of lessons via the unprecedented supply chain constraints over the past few years, Loy said.

China views Taiwan as a part of its territory and does not rule out taking control of the democratically ruled island by force. Since former U.S. House Speaker Nancy Pelosi visited Taipei last summer, Beijing has conducted several live military drills around Taiwan and escalated tensions between the sides.

Regarding the current chip industry downturn, Loy said he is not "overly concerned" despite expectations that the industry's outlook will remain unclear until later this year or even into 2024.

"There's pretty good evidence that we will be hitting bottom [of the downturn] in the [second] quarter. But the rate and the pace of recovery remains pretty uncertain," he said. In previous downturns, "you have no visibility and then suddenly, it starts ramping up very fast. So, I'm not overly concerned about the lack of visibility because this is not new at all."