Semiconductors

US-China decoupling ‘expensive’, warns Japan chipmaker executive

Kioxia monitoring risk of retaliation by Beijing over Washington’s export controls

Kioxia mainly manufactures its flash memory chips in Japan, but the company’s vice-chair says decoupling supply chains from China will be an expensive effort © Kioxia

Kana Inagaki in Yokkaichi OCTOBER 29 2022

Decoupling global supply chains will be “very complicated, expensive and time-consuming”, one of the world’s leading chipmakers has warned, as rising US-China tensions threaten to worsen a sharp market downturn.

Lorenzo Flores, vice-chair of Kioxia, said in an interview with the Financial Times that the Japanese company was analysing the impact of the latest US export controls. The challenge, he added, was the uncertainty of how Beijing would retaliate against Washington’s moves to hamper its efforts to manufacture advanced semiconductors.

Washington’s controls have specifically targeted Kioxia’s Chinese rival Yangtze Memory Technologies. The company has had to ask American employees in core tech positions to leave the company as it rushes to comply with the export controls.

“We’ve always viewed YMTC as a company that one needed to monitor or understand, and they were potentially an emerging competitor,” Flores said, noting that the Chinese company had “leapfrogged” in technology after lagging behind bigger global rivals.

Analysts have suggested Nand flash memory makers that compete directly with YMTC, such as Kioxia and Micron in the US, might benefit from the US restrictions. However, China is also expected to accelerate the development of domestic capabilities, which could pose a threat to Kioxia in the long term.

Kioxia, a spin-off of Toshiba’s chip unit, mainly manufactures its flash memory chips in Japan, but Flores said decoupling supply chains from China would be an expensive effort for the semiconductor industry and it would not “happen in six months or a year”.

“Whether [decoupling] is an imperative or not, I don’t know. The prudent thing to do is to look for ways to de-risk your own supply chain and increase your competitiveness simultaneously. The logical alternative is [the] friendshoring approach,” he said, referring to the term for building supply chains with like-minded countries.

The comments came as Kioxia said it would spend ¥1tn ($6.8bn) on its new No 7 chip fabrication plant at its main Nand production facility in Yokkaichi, western Japan, despite a sharp drop in demand for electronic devices, which has forced the company to cut wafer production by 30 per cent.

“The market conditions are severe and we don’t know how deep and how long they will last,” Kioxia’s chief executive Nobuo Hayasaki said at the unveiling of the No 7 plant on Wednesday. “But we do not think demand will continue to fall so that’s why we need to prepare for the future.”

South Korea’s SK Hynix has also warned of “unprecedented” slowing demand for chips, but Flores said he still saw the slowdown as part of a cycle. He added that the falling demand was driven by worries about the global economic outlook, built-up inventories caused by the Covid-induced supply chain disruptions and uncertainty about the US export controls against China.

The tough market conditions have also forced Kioxia to delay its share-listing plans.

According to people close to the discussions, the company is in talks for a merger with its longtime manufacturing partner Western Digital as Washington and Tokyo have backed the creation of a US-Japanese chip champion in light of economic security concerns.

“The IPO is not the end. It is a step,” Flores said, acknowledging the need for scale to compete in the investment-heavy semiconductor industry.