

Japan, Belgium to cooperate in chip production, development

December 6 2022, by Mari Yamaguchi



Then Economic revitalization minister, Yasutoshi Nishimura speaks during a press conference in Tokyo Wednesday, Sept. 11, 2019. Nishimura told reporters Tuesday, Dec. 6, 2022, that the new company, Rapidus, which was launched last month by eight corporate giants including automakers, electronics and chipmakers, will team up with the Imec, a Leuven, Belgium-based research organization known for the nanoelectronics and digital technologies key to developing next-generation chips. Credit: AP Photo/Eugene Hoshiko, File

A newly founded Japanese semiconductor company aiming to revive Japan's chip industry signed an agreement on Tuesday to collaborate with a Belgian research organization in developing next-generation chips for production in Japan.

Economy and Industry Minister Yasutoshi Nishimura told reporters that the new company, Rapidus, which was launched last month by eight Japanese corporate giants including automakers, electronics and chip manufacturers, is teaming up with Imec, a Leuven, Belgium-based research organization known for nanoelectronics and digital technologies key to developing next-generation chips.

"Cooperation with Imec in the area of semiconductor production at its international research facility, which ranks as one of Europe's best, is extremely meaningful," Nishimura told reporters.

The deal was signed by Rapidus President Atsuyoshi Koike and Imec President and CEO Luc Van den hove, who is in Japan as part of a business delegation led by Belgium's Princess Astrid.

Masakazu Tokura, the chairman of Keidanran, an influential Japanese business organization, told the Belgian delegation that the two countries should expand their cooperation as the global security and economic environment becomes increasingly unstable. Tokura said he hopes to expand cooperation in green technology, cybersecurity and next-generation semiconductors.

Imec, or Interuniversity Microelectronics Center, is known for its expertise and technology needed to make advanced chips that require miniaturization and extremely thin circuitry. The collaboration is aimed at helping Rapidus develop and mass produce 2-nanometer chips by 2027. The tie-up is the first known deal for Rapidus.

The Japanese consortium was founded with the aim of boosting homemade chip production to reduce Japan's heavy reliance on imported chips as part of the government's push to strengthen economic security. Its members include automaker Toyota Motor Corp., electronics makers Sony Group Corp. and NEC Corp., SoftBank Corp., Nippon Telegraph and Telephone Corp. and computer memory maker Kioxia.

Japan's government is spending 70 billion yen (\$510 million) on measures to promote domestic manufacturing of chips, while working closely with its ally the United States.

Once a global leader in semiconductor development and production, Japan was slow to collaborate with foreign companies in developing more advanced technologies and fell behind global competitors including the U.S., Taiwan, South Korea and some European countries.

Rapidus plans to send engineers to Imec and forge ties with other research labs and companies outside Japan.

The pandemic and escalating U.S.-China tensions have highlighted the risks of Japan's reliance on foreign suppliers, especially China, prompting the country to focus on building up its own manufacturing capacity.

Nishimura said at the signing event that he expects the deal will "contribute to establish designs and a manufacturing production base for next-generation semiconductors in the late 2020s, and strengthen semiconductor supply chain resiliency in like-minded countries and regions."

© 2022 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Japan, Belgium to cooperate in chip production, development (2022, December 6)
retrieved 10 May 2024 from <https://techxplore.com/news/2022-12-japan-belgium-cooperate-chip-production.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.