Japan approves chip development project with Taiwan's TSMC

June 1 2021

Semiconductors are an essential part of modern tech and Taiwan's chip manufacturing plants are among the most advanced in the world.

Japan has signed off on a $338 million semiconductor research project to develop cutting-edge chip technology in the country with the market-

leading Taiwan Semiconductor Manufacturing Company (TSMC).

Taiwan's chip-making plants are among the largest and most advanced in the world, and the project is intended to boost Japan's competitiveness in a key sector.

The move comes as industry grapples with a global semiconductor shortage that has hampered the manufacturing of numerous products, particularly autos.

Around 20 Japanese companies will work with TSMC in the project worth 37 billion yen, with the government paying just over half of that, an official from Tokyo's Ministry of Economy, Trade and Industry told AFP on Tuesday.

The research will focus in particular on tech for 3D chip assembly, allowing the creation of components that are more dense but still small.

A pandemic-fuelled surge in demand for home electronics that use semiconductors has throttled chip supplies—a crisis deepened by a US cold snap, a drought in Taiwan and a fire at Japan's Renesas manufacturer.

Semiconductors are an essential part of modern tech from smartphones to games consoles and new cars, with the auto industry one of the hardest hit by the shortage.

Construction will begin this summer on research facilities at the National Institute of Advanced Industrial Science and Technology in Tsukuba, near Tokyo, the official said, with the project due to kick off in 2022.

Among the Japanese companies involved are chemicals firms Asahi Kasei, Mitsui Chemicals and Sumitomo Chemical