

# Fab 4 Chip alliance

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**In news**— The “Fab 4” semiconductor alliance of Taiwan, the United States, Japan and South Korea held its first video meeting of senior officials recently.

## **About the alliance-**

- **The “Fab” in the name refers to a shorthand of an industry term for the fabrication plants** where chips are made and used for virtually everything from fridges to fighter jets.
- **The countries that are members of the group in the Indo-Pacific region are home to some of the world’s largest contract chip makers.**
- That includes Taiwan Semiconductor Manufacturing Co Ltd, South Korean memory chip giants Samsung Electronics Co Ltd, and SK Hynix, with Japan being the supplier of materials and equipment required to make the semiconductors.
- With the US as a chip design powerhouse and the other three countries having top capabilities in manufacturing and production of critical equipment and materials, the envisioned alliance would cover all major areas of the chips value chain.
- The first meeting of the group was held in September 2022 after a two-year global chip crunch which had prompted car manufacturers to halt production and exposed the larger supply chain issues.

## **What is a semiconductor or a chip?**

- A semiconductor is a material product usually comprised of silicon, which conducts electricity more than an insulator, such as glass, but less than a pure conductor, such as copper or aluminum.
- Their conductivity and other properties can be altered

with the introduction of impurities, called doping, to meet the specific needs of the electronic component in which it resides.

- Also known as semis, or chips, semiconductors can be found in thousands of products such as computers, smartphones, appliances, gaming hardware, and medical equipment.