## Intel, AMD lead industry heavyweights in new standard for chips but Nvidia, Apple weren't invited

**Article** 





The news: Intel and AMD have created a new consortium for chiplets, or modular computer processors that can be tiled or stacked, which could lead to an open and interoperable standard for combining a variety of chiplets into a single package.

More on this: The Universal Chiplet Interconnect Express group also includes Arm, Samsung, TSMC, Google, Microsoft, and Qualcomm, all working together to design or sell chiplet-based processors. In context, AMD's Ryzen CPUs use the technology, as do Intel's Sapphire Rapids Xeon processors, per Ars Technica.

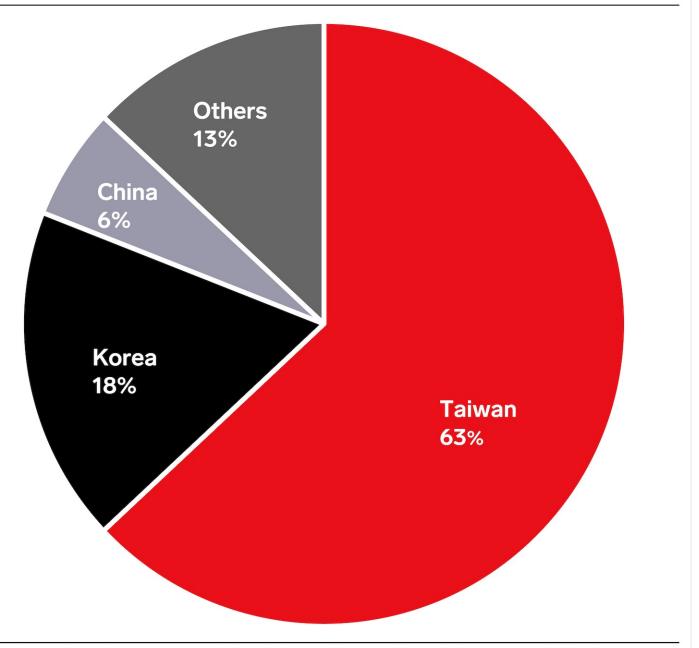
- Intel, which is pivoting part of its business to serve as a <u>chip foundry</u> for other companies, stands to gain as the proponent of the standard as well as the key manufacturer.
- Collaboration at the silicon architecture level could allow UCIE members to each play to their strengths (e.g., Samsung and Arm for mobile chipsets), while ensuring ample chip supplies in the future.
- Notably missing in the UCIE alliance are Nvidia and Apple. "Nvidia has a preference for really large monolithic die," said Kevin Krewell, principal analyst at Tirias Research, per The Register.
- Apple is notoriously secretive about its chip design and development and has <u>surpassed</u> various competitors in terms of creating 5 nanometer SoCs, so its future involvement is unlikely.

What's next? If successful, the UCIE standard can make it possible for smaller companies to take advantage of chiplet designs and include other companies' silicon in its own products, resulting in lower costs and improved interoperability.

- For Intel, this opens up opportunities for innovation as it collaborates to create faster, more efficient chiplets and processors.
- The UCIE standard can also keep Intel's foundries busy and increase the US's <u>12% share</u> of global chip manufacturing.
- The creation of a new chiplet standard brings the industry forward but also creates a divide, with Apple and Nvidia on the other side.

## **Global Foundry Revenues, by Country, 2020**

% of total



Note: Total foundry revenues totaled \$85.13 billion in 2020. Taiwan-based TSMC made up 54% of global foundry revenues.

Source: TrendForce, March 2021

1042381378601

InsiderIntelligence.com



