

Who Owns The Platform?

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As VLSI technology advances, it forces changes in the business organization of the industry. Traditional vertically integrated semiconductor manufacturers are concentrating less on manufacturing as foundries such as TSMC, UMC, and Chartered grow. These foundries supply capacity not only to fables houses but also to even large semiconductor manufacturers.

As a result, these semiconductor houses are spending more time creating novel platforms for important applications. This puts them in competition with the systems houses that traditionally were their customers.

In the middle, fabless semiconductor companies try to create new and improved platforms as well, generally with fewer resources than are available to established semiconductor houses.

At the other end, IP companies provide platforms without themselves designing chips. They must rely on persuading customers to license IP rather than designing it internally.

This poses technical and business challenges:

- Who will develop the platforms? IP houses, fabless semiconductor companies, traditional companies?
- Will semiconductor houses start to unbundled their IP from silicon?
- Will customers dictate platforms to semiconductor houses or will the

semiconductor houses dictate product categories to the systems houses?

- How do IP firms and semiconductor houses (fables or otherwise) divide up the work and the profits?
- What business model works best to supply systems-on-chips adapted to new application areas?