



Notes on the Pyramid representation

I represented this system as a pyramid because each layer depends on the one below it, forming a clear hierarchy of dependency. At the top, IP blocks are the most specialized and abstract units of design (blueprints for cores and interconnects). These are integrated into CPUs, which in turn are embedded within chips and motherboards, then packaged into complete platforms (laptops, servers, consoles). Finally, the entire process rests on the supply chain, the broadest and most fundamental layer, which provides the physical manufacturing, assembly, and logistics.

It is a hierarchy because each level cannot exist independently. IP is useless without integration into CPUs, CPUs need chipsets and interconnects to function, platforms cannot exist without chips, and none of this reaches the market without a functioning supply chain. The pyramid shape also reflects scale: the base is broad (supply chain touches many industries), while the top is narrow (fewer, highly specialized IP vendors).

The purpose of showing it this way is to highlight the dependencies and relationships:

In short, the pyramid captures the system-of-systems perspective: how multiple layers, each with its own market, combine into the technology we use daily.