

The Chip Race Has Moved — to Packaging

Why 2.5D and 3D ICs are outpacing transistor advances.

Swipe for insights →

\$160 billion

Projected 2.5D/3D IC Packaging Value

By 2035, advanced semiconductor packaging is expected to surpass \$160 billion in value.

This explosive growth reflects a fundamental shift: performance gains are no longer driven by shrinking transistors alone. Instead, the integration of chiplets, high-bandwidth memory, and advanced interconnects in 2.5D and 3D architectures is now the primary source of innovation. The physical layer of AI hardware is being redefined not by process nodes, but by packaging complexity.



01

Packaging Is the New Performance Engine

The bottleneck in modern computing has shifted from transistor density to thermal management, signal integrity, and bandwidth. Even with the most advanced transistors, a chip fails to deliver if its packaging cannot handle the heat or data flow. Advanced packaging enables tighter integration, reducing latency and increasing throughput—critical for AI workloads that demand real-time processing at scale.



02

The Real Innovation Is in System Integration

The rise of chiplets and heterogeneous integration means that the next leap in performance won't come from a single die, but from how components are assembled. This shift favors companies with deep expertise in interconnects, thermal design, and material science. It also decentralizes innovation: smaller firms can now contribute high-value components to a larger system without needing to build their own fabrication facilities.

MIT, Nvidia, Google & IBM-Trained. Cross Domain-Expert: Quantum, AI, Ethics, Sovereignty, Intelligence, Philanthropy.
Solepoint Planning. VUI AI Cloud Architect. AI Certifications Development. Quant/AI Instructor. Castor Venture Club Member.
Associate Broker.

George Arnold Alexander III, MPA

Director, ALEX Companies

Associate Broker, Alexander Tiffany Southwest, LLC dba ALEX.realestate, et.al.

Texas License #574878-B · Broker License #565194-BB

Broker, ALEX Real Estate · North Carolina License #367733

Independent Broker, ALEX Real Estate · Colorado License #II.100112456

george@alex.realestate · +1 713.918.9951



ALEX Intelligence
deep intelligence

ALEX Real Estate
genius real estate

ALEX Advisory
uncontested strategy

ALEX Cares
purposeful philanthropy

