

PRESS RELEASE

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TechSearch International, Inc. Examines OSAT and Foundry Competition in High-Performance Packaging

The competition is increasing in the OSAT space with Intel and Samsung offering OSAT services for silicon not fabricated in their foundry. TechSearch International examines high-performance packaging offerings from top OSATs and foundries with a score card for the options. This competition may be driven by the shortage in assembly capacity for AI packages used for training and inferencing. With increased capacity coming online for silicon interposers, chip-on-wafer (CoW) assembly, and high bandwidth memory (HBM), the assembly crunch is expected to ease by the end of the year. High Density Fan-Out (HDFO) using redistribution layers (RDL) instead of silicon interposers is emerging as an option. It has been used for AMD's machine learning and Apple's high-end graphics computing station for several years, and automotive companies are exploring its use for future chiplet designs. Intel continues to use its embedded silicon bridge in a laminate substate. TechSearch International's latest analysis describes AI market trends with a new market projection for training and inferencing packages.

The report analyzes build-up substrate supply and demand, finding no shortage in the overall industry. AI, server CPUs, and network switch packages continue to drive the growth in body size. With pull back in capacity plans and the growth in body sizes, supply and demand will become tight in 2028. Fortunately, the new plants coming online have higher yields. The report also examines the market for flip chip bonders used in fine pitch device assembly.

The electronics industry continues to burn through inventory, but this year's decline in smartphone and PC shipments made it a difficult year, as reflected in OSAT financials. The outlook is brighter this year. OSAT financials are highlighted in the report.

The semiconductor industry is experiencing renewed attention from governments around the world. The report highlights some of the plans and list various incentives offered by governments globally. A list of U.S. government funded projects and programs, award winners, and activity is provided.

The latest Advanced Packaging Update is a 60-page report with full references and an accompanying set of ~60 PowerPoint slides.

TechSearch International, Inc., founded in 1987, is a market research leader specializing in technology trends in microelectronics packaging and assembly. Multi- and single-client services encompass technology licensing, strategic planning, and market and technology analysis. TechSearch International professionals have an extensive network of more than 22,000 contacts in North America, Asia, and Europe. For more information, contact TechSearch at tel: 512-372-8887 or see www.techsearchinc.com. Follow us on LinkedIn.