

State of the Art (SOTA) Heterogeneous Integrated Packaging (SHIP) Digital

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The need for high memory bandwidth driven by AI/Machine learning workloads, with lower power consumption, and in small form factor has led to increased focus on Multi chip on-package integration in recent years. In order to satisfy this every hungry bandwidth need, recently Intel has been in the forefront of Multichip packaging technology revolution with the introduction of several new 2D, 2.5D and 3D packaging architectures such as Embedded Bridge (EmiB), Co- EmiB, Fovero's, Fovero's Omni and Fovero's direct technologies. New advanced packaging technologies are critical enablers of Heterogeneous Integration because of their importance in delivering compact, power efficient platforms enabling easy swap and cost effective solutions to USG. Intel has been awarded SHIP contract to develop advanced Packaging solutions for USG. This talk will illustrate key multichip packaging solutions under development to meet USG needs and also discuss Intel's advanced packaging capabilities in US to meet the needs of USG now and in the future.