

Data Sheet

Aspen Tech Development Process

Advanced Microelectronic Packaging

Aspen Technologies' Mission is "to enable our customers to rapidly bring new products to market..." The Aspen Technologies Development Process is the method we use to manage this process in a swift but disciplined manner. This process ensures that all needs are properly considered and business factors are accurately calculated. The phases of this process are:

Phase #1, Evaluation: the phase in which a new product opportunity is evaluated for business and technical compatibility with the Aspen Technologies Development Process.

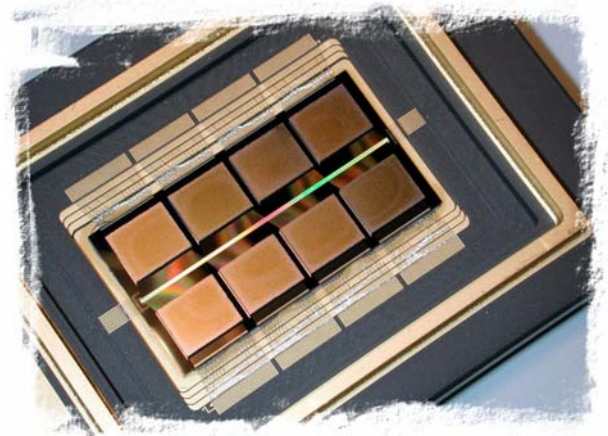
Phase #2, Research and Feasibility: the phase in which initial materials research is conducted and packaging feasibility is determined. This phase may include short-loop feasibility experiments.

Phase #3, Design & Prototype: the phase in which the product requirements and designs are determined. Initial plans are created to design and develop the necessary components, to establish an initial test and statistical analysis strategy and to adapt Aspen Technologies infrastructure, fixtures, tooling and equipment for the program. The phase in which all materials are selected and processes are developed to meet the criteria defined in Phase 3. The initial documentation package is created including travelers, wirebond diagrams, assembly instructions, data collection forms, and customer specific procedures are documented. Designs are verified through testing and initial statistics are collected. Process verification plans are created and finalized. Upon completion of this phase, the design and process are frozen.

Phase #4, Development & Pre-Production: the phase in which the product and all assembly related processes are statistically verified for their ability to meet the production criteria defined in Phase 3. Initial process capability data is generated during this phase. Control and reaction plans are completed. If the process is to be transferred to another organization, the transfer plan is executed during this phase and the product is subject to the same qualification requirements as if it was manufactured at Aspen Technologies. Upon completion of this Phase, the product is qualified for production

Phase #6, Production: the phase in which manufacturing and business plans are completed so that full and formal production can begin. In this phase, the final manufacturing contracts are negotiated and signed with the customer and with suppliers, if needed. Capital investment in equipment tooling and facilities is completed and plans are finalized. Personnel plans including hiring and training are completed as needed to meet production volumes.

Aspen Technologies' strength is making our customers successful through the Aspen Technologies Development Process. **How can we help you be successful?**



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