

Turnkey ASIC solutions

Offering the most reliable, high-quality path to design & ASIC production

Overview

DELTA Microelectronics provides top-quality supply chain services when it comes to ASIC design and production.

Since 1984, DELTA has provided a complete set of services for development and industrialisation of ASICs. Our services range from feasibility analysis of your product/-business case to specification, architectural design/behavioural modelling, detailed design in analog and digital domains, mixed signal verification, layout and conversion to silicon for prototype verification and volume production setup.

The reuse methodology

A key parameter in the success of our approach is that it is based on the reuse of selected sets of functional blocks, each verified in silicon/FPGA that can be re-assembled in your customised configuration. This significantly reduces risk and cost, and shortens time to market. DELTA is continuously expanding its portfolio of IPs in key application areas.

Supply chain – flexible services

DELTA's flexible supply chain service adapts to each customer's unique needs and volumes. It covers wafer procurement and probing, packaging, component testing, storage and distribution of ICs.

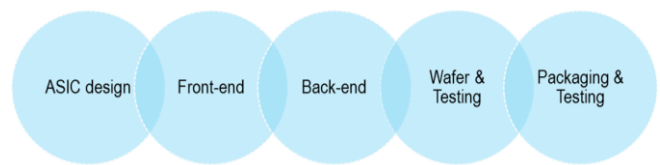
Our reliable, cost-effective service frees you to focus on your core business objectives, while we will take complete responsibility for the entire process – from RTL/GDSII to silicon.

With more than 30 years of supporting IC development and production, over 1000 projects, and one of the largest commercial microelectronics testing facilities in Europe, we offer unmatched supply chain services to any size IC vendor.

Wafer procurement and probing

Our close relations with multiple foundry partners and the combined volume from our customer base allow us to obtain better prices and services for you.

The well-established communication interfaces with foundries enable us to achieve tighter AQL (Acceptance Quality Level) control for your wafers.



Vast packaging experience

DELTA offers a spectrum of packaging solutions – from selecting packaging technology in early stages (whether consulting your design team or taking full responsibility), through in-house packaging for prototyping, to component testing and failure analysis.

Packaging selection can make a large contribution to the success or failure of an IC project. Our packaging experience spans the majority of requirements, and includes wafer scale, QFN, BGA, RF/wireless, stacked ICs, high power dissipation, extremely large pin counts, multi-chip and integrated passive components.

Our in-house facilities handle bumping, wire bonding and flip chip production, and allow you to perform rapid prototyping following wafer fabrication. DELTA can produce packaged components within a day of receiving silicon, so that evaluation and trials can advance as quickly as possible.

Component testing

DELTA started its semiconductor test centre in 1976 and operates today the largest commercial microelectronics testing facilities in Europe. The extensive variety of test equipment covers analog, digital, and mixed signal design components. It includes a range of component testers and handlers that optimise test throughput and can support the most cost-effective test rates available today.

Failure analysis

Another aspect of DELTA's testing service is our failure analysis department. Field returns and component failures are often related to packaging issues such as delamination, temperature effects, and bond wire failures. Our testing experts use specialised equipment, ranging from mechanical access techniques to X-ray and electron scanning microscope, to quickly identify the root cause of such problems.



Storage, distribution and logistics

DELTA's flexible logistic services can be tailored suit the specific business needs of each customer. For example, processed wafers may be stored in DELTA's nitrogen cabinets for subsequent testing, assembly and delivery as needed. Packaged components can be held and supplied in batches to suit a client's production or sales needs, with the appropriate testing and any tape and reel processing or other preparation for PCB production performed in batches, as required.

Highest quality standards, management and control

Above and beyond our supply chain services, we take pride in our high standards and total quality control. Over the years we have developed formal test procedures and quality management methodologies that assure our clients of the rigorous process their products receive. We use an ERP system to manage the entire supply chain process – including customers and suppliers, order handling, forecasting, reporting, and communication. Finally, DELTA is approved for ISO 9001 certification for microelectronics design since 1999.

Over the years we have heavily invested in testing resources, including advanced wafer probers. Combined with our highly skilled test team this allows you to maximise yield and minimise revenue loss due to flawed components.

For further information please contact us

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