A Scalable Chiplet Platform

Empower your potential: join the chiplet revolution!

About Menta SAS

Welcome to the innovative world of Menta, a pioneering company that has been redefining electronics design standards since it was founded in 2007. As the leader in eFPGA IPs, Menta embodies excellence in innovation, offering customizable solutions of exceptional reliability.

Our commitment to responsible progress, combining performance and sustainability, guides every step we take. Today, we are proud to present an even more revolutionary solution, a tailor-made response to the ever-changing needs of the industry.

At Menta, our commitment is simple: to offer companies the opportunity to integrate digital solutions tailored precisely to their specific needs.

MOSAICS – LP

The ubiquity of integrated circuits in our daily lives has become paramount, thanks to their ability to compactly and efficiently integrate billions of electronic components on a single chip. From smartphones to connected household appliances, integrated circuits have become the invisible but indispensable foundations of our modern world, undeniably facilitating daily life.

Today, Menta is committed to offering an innovative patented solution in line with its values and commitment: MOSAICS-LP.

This is an industrial platform specifically designed for the development of heterogeneous chips, exploiting a universal chassis and based on a catalog of third-party chiplets. This initiative is supported by the French government and forms part of a strategic partnership with CEA-List, the French research center renowned worldwide for its expertise in intelligent digital systems.

This collaboration reinforces our commitment to excellence and innovation, positioning MOSAICS-LP as a leading solution in the emerging landscape of IC design technologies.

Unique solution & Key benefits

MOSAICS-LP stands out as a unique solution in the semiconductor market, providing an innovative response to the challenges faced by monolithic approaches, which are often energy-hungry and confronted with scalability and cost issues. This revolutionary platform is positioned as a major breakthrough in the supply of integrated circuits, from design to the entire supply chain. Our platform focuses on Edge Computing, including embedded AI.

The innovation lies in its unique architecture, built around a universal chassis and chiplets.

MOSAICS-LP offers you:

- **Scalability and modularity**: the MOSAICS-LP platform, with its universal chassis and standardized interfaces, facilitates the creation of derivatives by offering quick and easy addition or modification of components for different products.

- **Energy efficiency and competitiveness**: the energy consumed by data transfer is the major part of the energy consumed by a system. Data transfers between chiplets, via the universal chassis, are 5 to 10x more energy-efficient than transfers between integrated circuits mounted on a conventional board.

- **Reduce development costs and time-to-market**: faster creation of complex integrated circuits from existing components (6 months instead of over 2 years for monolithic circuits).

- **Reduced production costs**: the reuse of the same chiplets, between several generations of the same product, helps to reduce costs. Chiplets make it possible to exploit the advantages of mature technologies: low costs and technological maturity.

- **Risk reduction**: by using existing, pre-tested components.

MOSAICS-LP, in alignment with the European Chips Act, expresses its commitment to the European Commission’s ambitious targets, playing a key role in achieving the goal of producing 20% of the world’s chips in Europe by 2030.
Various applications include:

- AI (artificial intelligence)
- IoT (Internet of Things, Smart Home…)
- Robotics
- Defense and space
- Mobility
- 5G/6G.

Sustainable advancement

MOSAICS-LP is not just about technological advances!

Significant environmental impact:

- Optimization of resource consumption by taking advantage of the higher efficiency of chiplets compared with monolithic circuits, thus reducing waste.
- The platform offers outstanding energy efficiency, enabling power consumption to be precisely matched to application needs, with energy consumption reduced by up to 10 times.

Societal impact:

- Standardization plays a crucial role in establishing common standards that promote interoperability and compatibility between different electronic components.
- By adopting open standards, MOSAICS-LP contributes to the creation of more robust technological ecosystems.

Support for our customers

Our commitment to customer satisfaction is not limited to the revolutionary design of MOSAICS-LP, but also extends to our ability to support our customers, guaranteeing a seamless experience from system design to IC acceptance. 

With our expertise and know-how, we offer ongoing support throughout the process, working closely with our customers to meet their needs. 

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By choosing MOSAICS-LP, our customers benefit not only from a revolutionary, patented technology, but also from a reliable, trustworthy partnership to help them bring their projects to fruition.

Testimonials & Advisory Board

As part of its implementation, and to accelerate the deployment of its solutions, MOSAICS-LP has a powerful board, convinced of the industrial interest of Menta’s technologies, including:

- Dassault Systèmes,
- Thalès,
- Thalès Alénia Space,
- among others.

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In conclusion, MOSAICS-LP is a pioneering innovation in the dynamic semiconductor landscape, offering a novel response to the challenges faced by monolithic approaches. 

In addition, our commitment to standardized technologies also fosters the emergence of a collaborative ecosystem, stimulating the rapid spread of technology and contributing to a more sustainable future.

Our ability to support our customers from system design to IC acceptance is testimony to our dedication to customer satisfaction and the success of every project.

With MOSAICS-LP, we’re not only at the forefront of technological innovation, we’re also at our customers’ side, accompanying them into a future where IC design is synonymous with durability, efficiency and outstanding performance - offering everyone access to semiconductor technologies.

MOSAICS – LP illustration. A ready to use industrial platform revolutionizing edge chips design