

Advanced Distributed Pilot Line for More-than-Moore Technologies

Project coordinator: X-FAB Dresden GmbH & Co. KG

Objectives

ADMONT will implement a distributed, More-than-Moore pilot line for a broad set of modules in technologies or essential capabilities not presently available within one

manufacturing facility. ADMONT is going to be set up as an incubation centre for SME innovations in Europe, for electronics systems and solutions.

Relevance and Impact

ADMONT will:

- Put in place a multi-KET ("Key Enabling Technology") pilot line contributing to the development of an innovative and competitive ecosystem and ECS industry with production in Europe
- Bridge the gap between research, exploitation, industrial development and smart system integration, thereby stimulating economic and employment growth in the EU
- Provide a unique, modular concept using "More-than-Moore"-based Key Enabling Technologies such as microand nanoelectronics, photonics and biomedical technology
- Directly serve the key application areas Smart Health,
 Smart Production, Smart Energy and Smart Mobility
- Revolutionise the innovation speed of SMEs by providing the possibility to combine process technologies and design capabilities that, before ADMONT, were isolated and out of reach

 Drive miniaturization, reducing manufacturing times of systems by more than 25%, and manufacturing cost

down to 70% of today's electronic systems

 Contribute to cost effective and energy efficient production with robust and stable processes, technologies and product diversification using Morethan-Moore automated production techniques, demonstrated through a world-class pilot line with high yield and excellent quality



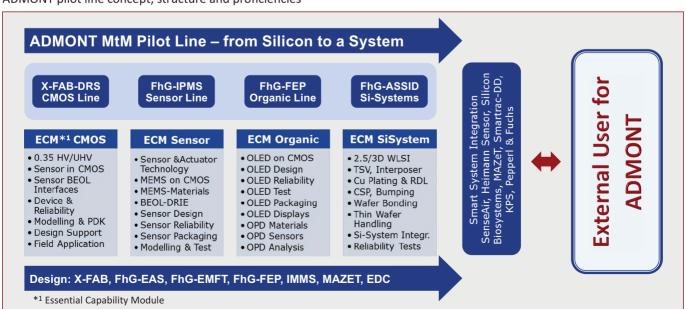
Technical Innovation

ADMONT provides a novel approach for innovation in all sectors. It is not limited to a specific application or market, but is able to serve different applications like Automotive, Aerospace, Industrial, Food Processing, Health, Safety, ICT and various other end markets can benefit. ADMONT supplies system integrators with a modular system for combining distinct technologies at wafer level while providing a vital and necessary platform for new products.

This encompasses not only process technology but also design and modelling capabilities. ADMONT aims to reduce manufacturing times for base components to 75% and reduce system costs to 70% of what can be achieved today. Electronics-based products will benefit from increased innovation speed and hence accelerated time to market. This will bring the benefits of innovation to the full value chain, both from a production perspective and from an end user perspective.

ADMONT Concept & Capabilities

ADMONT pilot line concept, structure and proficiencies





Programme Coverage

ADMONT addresses the ECSEL Joint Undertaking 2014-2 "Innovation Action" for multi-KET pilot lines and includes prototyping, testing, demonstrating, piloting and system qualification between Technology Readiness Levels 4 and 8.

The ADMONT pilot line is based on the three essential capabilities:

- Process Technologies (More than Moore)
- Design Technologies (yield, robustness, reliability; model-based engineering and virtual engineering)
- Smart Si-System Integration and WLP (Wafer-Level Packaging)

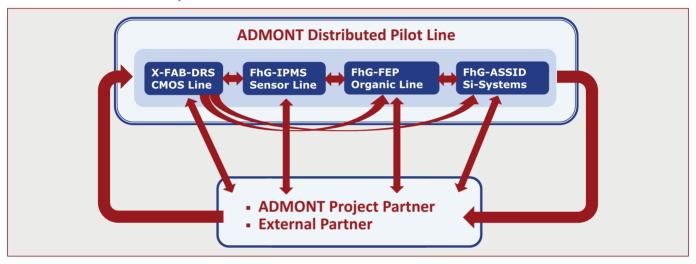
It addresses the following key applications:

- Smart Energy (reducing energy consumption; efficient community energy management)
- Smart Production (semiconductor manufacturing, smart system integration)
- Smart Health (home care and well-being, hospital and heuristic care, food processing and safety)
- Smart Mobility (resource-efficient transport; less congestion, more safety)

Project Financing

Total cost: 39.270 Mio € EU funding: 11.122 Mio € National funding: 11.345 Mio €

ADMONT Business Model, Work Flow & Data Flow



Where is ADMONT?



ADMONT Contacts

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