14AMI

KEY FACTS:

Start date	End date	Partners	Countries
1/5/2023	30/4/2026	29	7

IMPACT

1

Realize field upgradable solutions, with minimum downtime, on the 0.55NA EUV platform to secure compliance to the 14A node and enable single patterning of complex process steps. Deliver innovative modules to meet the increased power and productivity roadmap of the 0.55NA EUV roadmap, such as adaptive EUV mirrors, and a diagnostic toolbox to extend the EUV optics lifetime.

2

Develop holistic metrology tools/methods, including innovative data analytics to improve overlay, CD and focus measurements and quality control with a precision to tolerance P/T ratio between 0.1 – 0.3 for all the metrology equipment. Reduce the total mask repair time by simulations of the repair results directly on the repair tool.

3

Assess the CFET module integration options further optimize and combine them towards the demonstration of fully integrated, functional CFET CMOS devices. Develop new hardware to support the process and modules development for CFET device manufacturing. Develop sustainable technology solutions. Project innovations and solutions (impact).

GOAL

The goal of 14AMI is to support the European equipment industry competitiveness by securing the access to more advanced technologies, towards SotA 14A CMOS devices. The 14AMI consortium consist of the major EUV lithography and metrology equipment suppliers. Manufacturing equipment and materials is an essential European strength in the global microelectronics industry, thanks to its world-leading actors in lithography, optics, metrology, bonding and assembly. The impact on the growth and revenues of the companies and entire ecosystem involved, including RTOs and Universities will also generate jobs and attract highly skilled talents in Europe. If successful, the 14AMI impact will be large, allowing the European semiconductor manufacturing equipment industry, including its supply chain, to capitalize on the expected growth in the sector.

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