





# Towards energy-saving chips for digital, analog, RF

The FAMES Pilot Line of the Chips JU is funded by Horizon Europe and Digital Europe Programmes and the National Public Authorities of the partners involved.





















Bundesministerium Klimaschutz, Umwelt. Energie, Mobilität, Innovation und Technologie







#### -Aim & Status

 The FAMES Pilot Line will provide <u>opportunities for disruptive chips</u> <u>architecture</u> with performance improvement and significant energy savings

 All Pilot Line agreements completed in December 2024, project is running at full speed (procurements, R&D programs, communication & dissemination)

First Open Access call (request for Access) in March 2025



Budget : €830 M

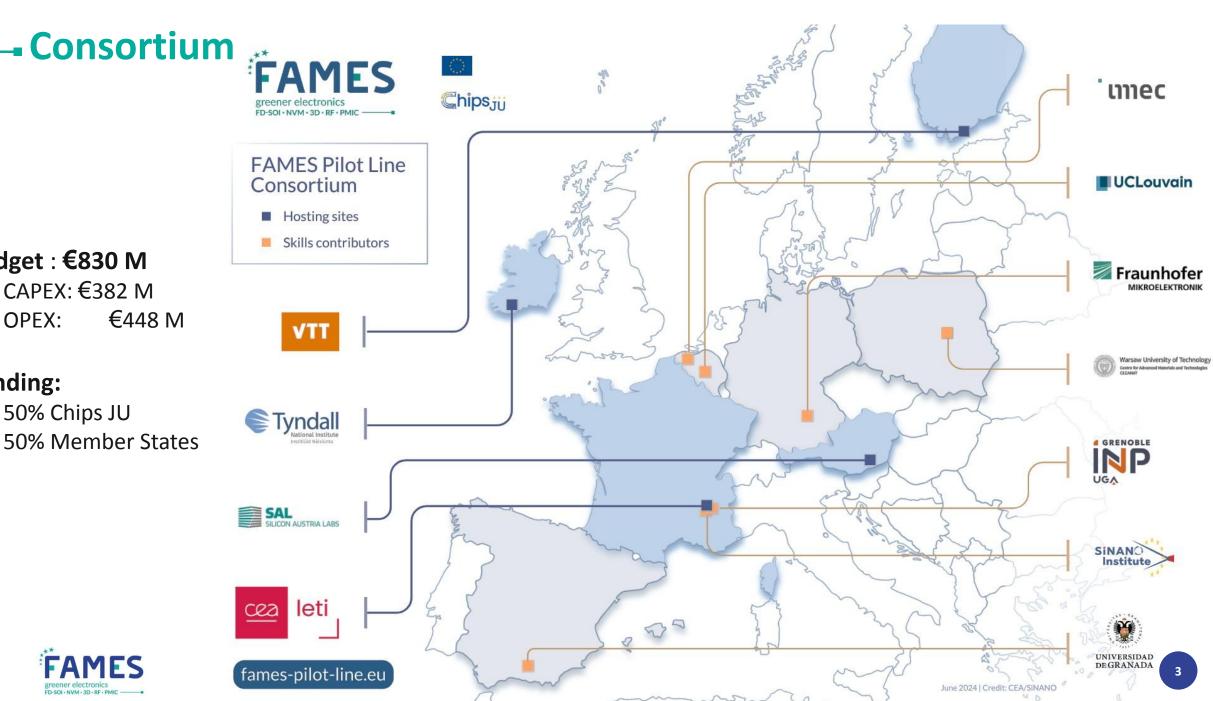
• CAPEX: €382 M

€448 M • OPEX:

#### **Funding:**

• 50% Chips JU

• 50% Member States





### **→ FAMES Technological Portfolio**

FD-SOI	Embedded non-volatile memories	Radiofrequency components	3D integration	Small inductors for DC-DC converters
10 nm and 7 nm nodes	OxRAM, FeRAM, MRAM and FeFET	Switches, filters, and capacitors	Heterogeneous and sequential	Power management integrated circuits (PMIC)
0,7V 57CPP 48/40MPP	1µm		MS  M7  CO <sub>10</sub> CO <sub>10</sub> CO <sub>20 top</sub> CO <sub>20 </sub>	
<u>cea</u> leti	<u>cea</u> leti	cea leti	<u>cea</u> leti	Tyndall National Institute Institution Naisibutta
imec	viii imec	VTT	Tyndall	
■ UCLouvain	UCLouvain Fraunhofer UNIVERSIDAD DE GRANADA	SAL SILICON AUSTRIA LABS	Instituid Näsiunta	



### Opening the Pilot Line to European stakeholders 44 support letters

















































































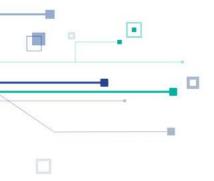
















## Accessing the FAMES Pilot Line





FAMES European open-access pilot line for advanced semiconductor technologies

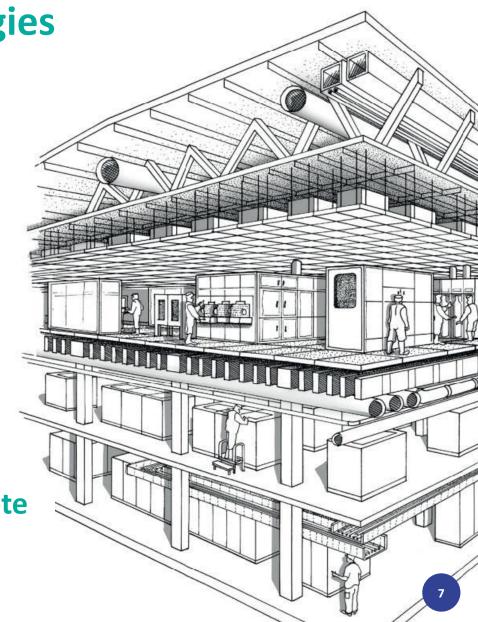
#### To gain access to:

- Two types of PDKs (multi-project wafer or IC design assessment)
- The FAMES technologies (FD-SOI 10 nm and 7 nm, embedded non-volatile memories, RF components, 3D integration options) for performance evaluation
- Specific process steps, modules, integration flows, and demonstrator results
- Education and training on the FAMES technologies

#### as they become available

☐ Request an access to the Pilot Line and receive a quote





#### ■ The FAMES Pilot Line is open to all types of Users



LARGE COMPANIES



**SMEs** 



**START-UPs** 

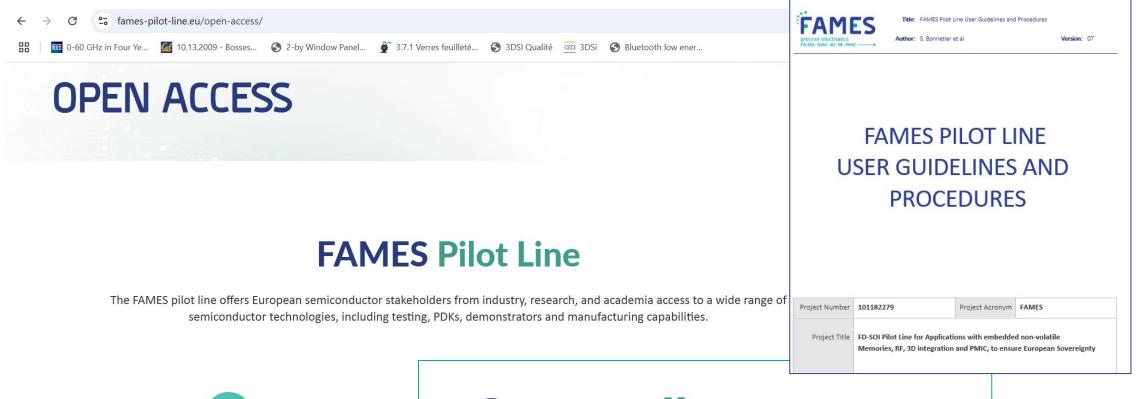


**RESEARCH COMMUNITY** 

Design Houses
Fabless
Foundries
Integrated Device Manufacturers
Material and Tool Suppliers
Universities
Research Centers



#### Open Access calls: request for Access to the Pilot Line





### Open calls

The first call should open by the spring of 2025. You will find the submission details on this page as soon as the call is open.



#### Forthcoming Key Dates

Mid-March, 2025

FAMES Pilot Line
Open Call
(Request for Access)
Online opening



fames-pilot-line.eu

March 18, 2025

# FAMES Dedicated Workshop

Launch of the 1<sup>st</sup> open call *Brussels, Belgium* 



fames-pilot-line.eu

June 19, 2025

# FAMES School

Initial training *Grenoble, France* 



leti-innovation-days.com



