Press release

SiPearl: Initial closing of Series A with €90m financing to launch Rhea, the energy-efficient HPC[1]-dedicated microprocessor

SiPearl, the French company building Rhea, the energy-efficient HPC microprocessor, has raised €90m financing for the 1st closing of its Series A. This funding round with participation of key industry partners as well as European and French public investors will allow SiPearl to commercialize Rhea in early 2024. Rhea is the world's first energy-efficient HPC-dedicated microprocessor designed to work with any third-party accelerator (GPU, artificial intelligence, quantum). Processing huge volumes of strategic data in a fraction of a second with low energy consumption, SiPearl's microprocessor will ensure Europe's technological sovereignty by solving major challenges in medical research, artificial intelligence, security, energy management and climate change mitigation with a reduced environmental footprint.

Additional investors are expected to join the round by the end of 2023.

Maisons-Laffitte (France), April 5, 2023 – SiPearl, the company building the energy-efficient HPC microprocessor for exascale[2] supercomputers, announced the launch of its Series A with a first round of €90m.

The investors are:

- Arm, a global leader in semiconductor design and silicon intellectual property development,
- Atos Group, through its Eviden business composed of Atos' digital, big data and security activities,
- European Innovation Council (EIC) Fund (€15m, already announced),
- The French State, via French Tech Souveraineté, which is part of France 2030 led by the General Secretariat for Investment (attached to the Prime-Minister's Office).

The financing includes up to €25m in convertible debt from the European Investment Bank (EIB).

Additional investors are expected to join the round by the end of the year.

1 HPC: High Performance Computing

2 Exascale: 1 billion billion calculations per second.

This first funding milestone brings SiPearl's total financing to €110.5m, including €20.5m worth of European Union and French grants provided through the European Processor Initiative (EPI) consortium project, the EIC Accelerator program and Ile-de-France region.

Using the Arm® Neoverse V1 platform, Rhea will be the world's first HPC-dedicated microprocessor designed to work with any third-party accelerator, such as GPUs, artificial intelligence specialized chips or quantum accelerators. Formal cooperation agreements with GPU providers (AMD, Intel, NVIDIA) and artificial intelligence processor provider (Graphcore) have already been announced. Energy-efficiency optimized, Rhea will halve power consumption for equivalent computing power.

While HPC has traditionally been used on premise for medical research, nuclear simulations or weather forecasts, it is now increasingly used in the cloud for artificial intelligence model training and other data intensive applications.

With global markets in sight, Rhea will first equip European supercomputers to reach exascale power with back-door free security and reduced energy consumption. SiPearl will thus contribute to Europe's technological sovereignty by addressing major challenges in medical research, artificial intelligence, security, energy management and climate change mitigation while limiting its environmental footprint.

SiPearl was created in June 2019 with the backing of the EPI consortium's project that tackles the return of high-performance and low-power microprocessor technologies in Europe. As part of the Horizon 2020 programme[3], the company is at the heart of the EuroHPC Joint Undertaking ecosystem, which is deploying world-class infrastructures for exascale supercomputing in Europe with a budget of over €8bn. Fabless, SiPearl outsources the manufacturing of Rhea to TSMC, the world's leading independent semiconductor manufacturer, for a commercialization in early 2024. The company employs 130 people in France (Maisons-Laffitte, its headquarters, Grenoble, Massy, Sophia Antipolis), Germany (Duisburg) and Spain (Barcelona). SiPearl targets over 1,000 employees by the end of 2025.

"*Historically lagging behind the US and China, Europe has become a global leader in HPC thanks to the EuroHPC initiative, ranking for the first time two machines among the four most powerful supercomputers in the world, with LUMI in Finland and Leonardo in Italy. The arrival on the market of SiPearl's microprocessor Rhea, which will power European supercomputers with a limited environmental footprint, will be another decisive step for Europe's technological independence and sovereignty. We would like to thank the European Union's innovation programs, which have championed us all along the way, and the investors who have joined us in this first round of financing for contributing to our success*", said Philippe Notton, CEO and founder of SiPearl.

"*From the tiniest sensor through to HPC, it takes leadership across the computing spectrum to support the volume of data being created and processed today*," said Mohamed Awad, SVP and GM, Infrastructure Line of Business, Arm. "*Arm is enabling high-performance, energy efficient processing around the globe with its Neoverse platforms, and we are fully supportive of SiPearl's*

3 Specific grant agreement No. 826647.

work to build Rhea, powered by Neoverse V1, into an HPC system that is ready to take on some of the world's biggest computing challenges."

"As a European leader in the design, manufacturing, and deployment of supercomputing infrastructures, The Eviden business of Atos has been playing a critical role in various technological European initiatives, e.g. EuroHPC JU and EPI, to support the digital and economical sovereignty of Europe," said Emmanuel Le Roux, Corporate Senior Vice President, Head of Advanced Computing, HPC and AI, for Eviden at Atos Group. *"Microprocessing units hold the key to the future of HPC, therefore Atos Group welcomes and supports the Europe-grown microprocessor which is extending and solidifying the capacity to deliver European high-performance computer designed to tackle the most important challenges in life science, weather forecast or industries simulations."*

"*European Union backed SiPearl from day one. They benefited from a variety of grants as well as the vast European market offered by the EuroHPC initiative. The EIC Fund's investment is the natural continuation of this long-standing effort to develop, from Europe, an indigenous HPC technology which can compete with the very best in the world*", declared Hermann Hauser, the EIC Fund Board member.

"*EIB has been following the progress of SiPearl for the last two years and was the first institution to commit to finance SiPearl. This is an illustration of EIB's strong dedication in supporting innovation and European sovereignty*", added European Investment Bank Vice-President Ambroise Fayolle.

"*France 2030 is particularly pleased to support SiPearl for this fundraising, which will allow the company to continue developing its disruptive technologies,"* said Bruno Bonnell, Secretary General for Investment, in charge of France 2030.

"*Developing a strong European HPC supply chain with energy-efficient components and technologies is key to achieving digital sovereignty in Europe while promoting more sustainable supercomputing. The success of SiPearl today is also the success of the European Processor Initiative, one of the research projects funded by the EuroHPC Joint Undertaking*", concluded Anders Dam Jensen, Executive Director of the EuroHPC Joint Undertaking.

Participants

Financial counsel: Silverpeak (Jean-Michel Deligny; Pietro Strada)

Company legal counsels: Aston Avocats (Olivier Sanviti; Mariam Tourabaly), Orrick (Olivier Vuillod; Lea Fiorenza)

Investors advisors

Arm: Bird & Bird (Emmanuelle Porte)

Atos Group: Darrois Villey Maillot Brochier (Jean-Baptiste de Martigny)

EIC: Bignon Lebray (Alexandre Ghesquière)

EIB: Clifford Chance (Maroussia Cuny)

French Tech Souveraineté: Degroux Brugère (Jérémie Swiecznik)

Vendor due diligence: Deloitte Finance (Thomas Fischer)

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About… SiPearl

SiPearl is building the world's first energy-efficient HPC-dedicated microprocessor designed to work with any third-party accelerator (GPU, artificial intelligence, quantum). This new generation of microprocessors will first target EuroHPC Joint Undertaking ecosystem, which is deploying world-class supercomputing infrastructures in Europe for solving major challenges in medical research, artificial intelligence, security, energy management and climate while reducing its environmental footprint.

SiPearl is working in close collaboration with its 27 partners from the European Processor Initiative (EPI) consortium - leading names from the scientific community, supercomputing centres and industry - which are its stakeholders, future clients and end-users.

SiPearl employs 130 people in France (Maisons-Laffitte, Grenoble, Massy, Sophia Antipolis), Germany (Duisburg) and Spain (Barcelona).

Funded by the European Union

About… European Innovation Council Fund

The European Innovation Council Fund from the European Commission is an agnostic Fund: it invests across all technologies and verticals, and all EU countries and countries associated to Horizon Europe. It provides the investment component of the EIC Accelerator blended finance.

The EIC Fund aims to fill a critical financing gap and its main purpose is to support companies in the development and commercialisation of disruptive technologies, bridging with and crowding in market players, and further sharing risk by building a large network of capital providers and strategic partners suitable for co-investments and follow-on funding.

The Fund pays particular attention to the empowerment and support of female founders as well as the ambition to reduce the innovation divide among EU countries.

About… European Investment Bank

The EIB is the European Union's long-term financing institution, owned by its member states. EIB finances sound investments that contribute to EU policy goals, including social and territorial cohesion, competitiveness, and a just transition to climate neutrality. We support projects in infrastructure, innovation, climate and environment, and small and medium-sized enterprises. In 2022, the EIB signed €10 billion in new financing for projects in France.

About… Eviden[1]

Eviden designs the scope composed of Atos' digital, big data and security business lines. It will be a global leader in data-driven, trusted and sustainable digital transformation. As a next generation digital business with worldwide leading

positions in digital, cloud, data, advanced computing and security, it brings deep expertise for all industries in more than 53 countries. By uniting unique high-end technologies across the full digital continuum with 57,000 world-class talents, Eviden expands the possibilities of technologies for enterprises and public authorities, helping them to build their digital future. Eviden is an Atos Group business with an annual revenue of c. €5 billion.

[1] Eviden business is operated through the following brands: Agarik, Alia Consulting, AppCentrica, ATHEA, Atos Syntel, Bull, Cloudamize, Cloudreach, Cryptovision, DataSentics, digital.security, Eagle Creek, EcoAct, Edifixio, Energy4U, Engage ESM, Forensik, IDEAL GRP, IDnomic, In Fidem, Ipsotek, Maven Wave, Miner & Kasch, Motiv, Nimbix, Processia, Profit4SF, science+computing, SEC Consult, Visual BI, Worldgrid, X-Perion, zData

About… the France 2030 investment plan

The France 2030 investment plan:

- reflects a dual ambition: to transform key sectors of our economy (energy, automotive, aeronautics and space) through technological innovation, and to position France not just as a player, but as a leader in the world of tomorrow. From basic research to the emergence of an idea, to the production of a new product or service, France 2030 supports the entire life cycle of innovation up to its industrialization.
- €54 Bn will be invested so that our companies, universities and research organizations can successfully make the transition in these strategic sectors. The challenge is to enable them to respond competitively to the ecological and attractiveness challenges of the coming world, and to create the future champions of our sectors of excellence. France 2030 is defined by two cross-cutting objectives: to devote 50% of its spending to decarbonizing the economy, and 50% to emerging, innovative players, without spending that is unfavorable to the environment (in line with the Do No Significant Harm principle).
- will be implemented collectively: designed and deployed in consultation with economic, academic, local and European players to determine the strategic directions and flagship actions. Project leaders are invited to submit their applications via open, demanding and selective procedures in order to benefit from the State's support.
- is managed by the General Secretariat for Investment on behalf of the Prime Minister and implemented by the French Agency for Ecological Transition (ADEME), the National Research Agency (ANR), the Public Investment Bank (Bpifrance) and the Caisse des Dépôts et Consignations (CDC).

About… French Tech Souveraineté

Launched in June 2020 by the Government, French Tech Souveraineté is an investment envelope operated by Bpifrance, with both an offensive and defensive vocation. It has a pocket of €650 million to support French technology companies developing future technologies of a sovereign nature, which may fall prey to large foreign players or be overtaken by competitors who manage to finance themselves better.

About… EuroHPC JU

The European High Performance Computing Joint Undertaking (EuroHPC JU) is a joint initiative created in 2018. It pools together the resources of the European Union, 33 European countries and three private partners with the ambition of making Europe a world leader in supercomputing.

To this end, the EuroHPC JU is procuring and installing supercomputers across Europe. No matter where in Europe they are located, European scientists and users from the public sector and the industry can benefit from these EuroHPC supercomputers, which rank among the world's most powerful. In parallel, the EuroHPC JU is funding an ambitious research and innovation programme to develop a full European supercomputing supply chain: from processors and software to applications to be run on these supercomputers and know-how to develop strong European expertise.