

EUROPEAN PROCESSOR INITIATIVE

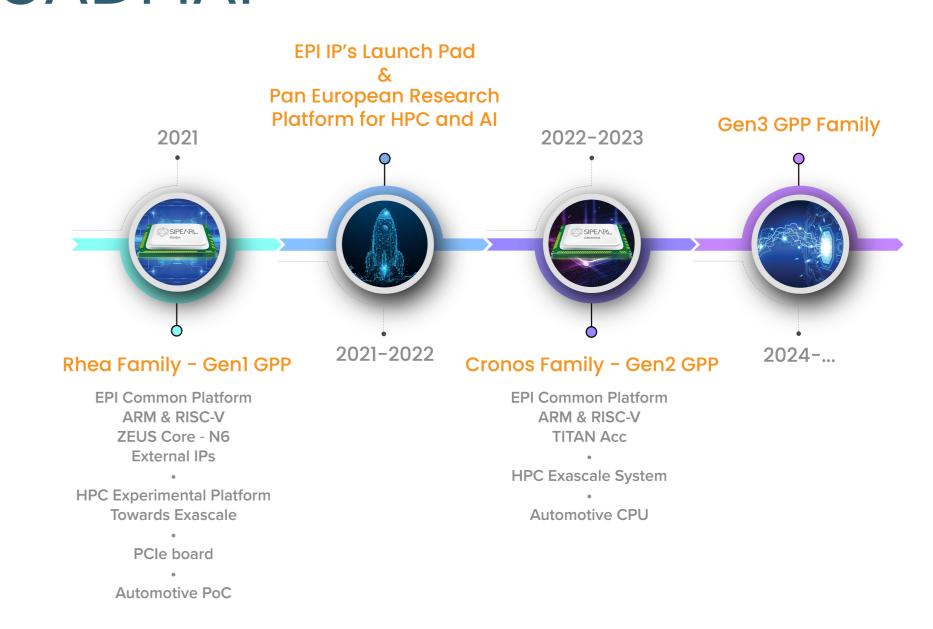


DRIVERS AND ROADMAP

The European Processor Initiative (EPI) is a flagship European project, whose aims to design and implement a roadmap for a new family of European processors

The project goal is to deliver high-performance, low-power processors, implementing vector instructions and specific accelerators with highbandwidth memory access

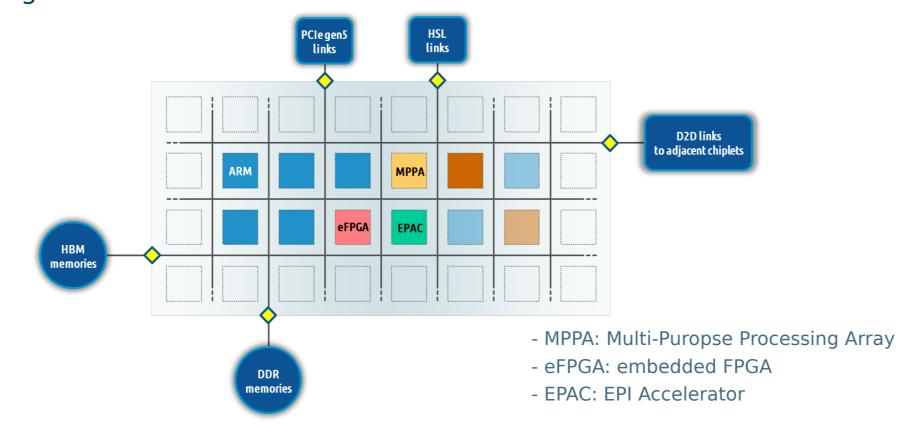
Primary target: **High-Performance Computing (HPC)** and **automotive**, but will also target **AI** and **Big Data** segments



GPP AND COMMON PLATFORM

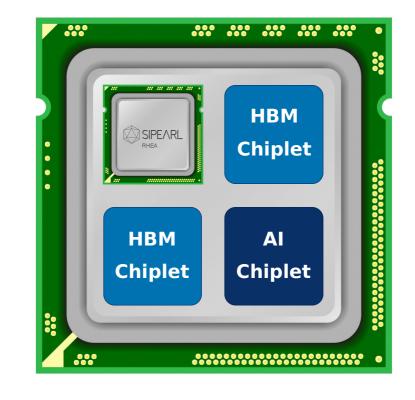
The **General Purpose Processor** (GPP) is a Network-on-Chip connecting:

- High performance general purpose CPU cores
- Specialized accelerators
- Reconfigurable hardware

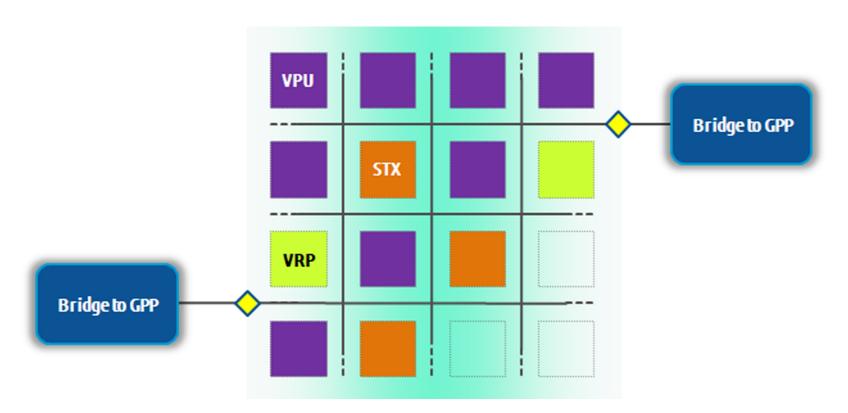


The **Common Platform** (CP) adopts chiplet-approach, composed by:

- GPP
- High-bandwidth memories (HBM)
- Custom Chiplet accelerators



EPAC: RISC-V ACCELERATOR



- VPU: Vector Processing Unit
- STX: Stencil/Tensor accelerator
- VRP: VaRiable Precision co-processor

The EPI Accelerator (EPAC) will be a node of the GPP mesh, and it will provide power-efficient and high throughput accelerators within the GPP chip

The EPAC will be based on the **RISC-V** Instruction Set Architecture:

- Eight Vector Processing Unit to support RISC-V Vector
- Stencil and Deep Learning specific accelerator instructions

The EPAC will target HPC workloads and AI applications

PARTNERS



























































ENGINEERING













