End-User Group

The aim of the End-User Group (EUG) is to involve industries and academic institutions for the validation of the novel HPC technologies and solutions produced by the project. This synergy generates valuable feedback to the project in order to align its objectives and deliverables with end-user needs.

Mont-Blanc provides EUG members with:

- Remote access to Mont-Blanc prototype platforms
- Support in platform evaluation and performance analysis
- Invitation to the Mont-Blanc training programme

montblanc-project.eu

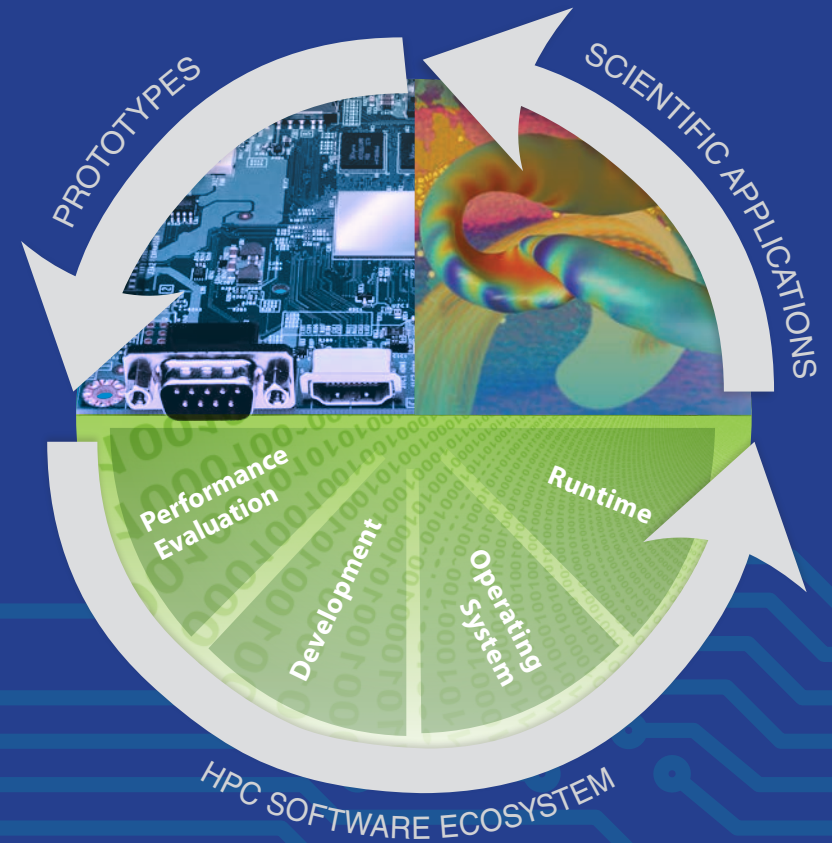| f		in
/MontBlancEU	@MontBlanc_EU	/groups/5052758

Partners

allinea · ARM · AVL · Barcelona Supercomputing Center Centro Nacional de Supercomputación · University of BRISTOL · Bull atos technologies

UC UNIVERSIDAD DE CANTABRIA · cea · CINECA · Cnrs · ETH zürich · GENCI · UNI GRAZ

H L R S · Inria INVENTEURS DU MONDE NUMÉRIQUE · JÜLICH FORSCHUNGSZENTRUM · lrz · UNIVERSITÉ DE VERSAILLES ST-QUENTIN-EN-YVELINES

MONT-BLANC

European **scalable** and **power efficient** HPC platform based on **low-power** embedded technology

PROTOTYPES

SCIENTIFIC APPLICATIONS

Performance Evaluation

Runtime

Development

Operating System

HPC SOFTWARE ECOSYSTEM

Project objectives

1. **Defining the architecture** of an Exascale-class compute node based on the ARM architecture, and capable of being manufactured at industrial scale.

2. Assessing the available options for **maximum computer efficiency**.

3. Developing the matching **software ecosystem** to pave the way for market acceptance of ARM solutions.

Prototypes

Mont-Blanc prototype

Mont-Blanc mini-clusters

Merlin - APM X-GENE 2

Thunder - Cavium ThunderX

NVIDIA Jetson TX1

Mont-Blanc 3 test platform

To be deployed in 2017 based on new-generation ARM V8 64-bit processors

Co-design approach

Scientific applications

Analyzed with performance analysis tools

Provide inputs for architectural simulators

Runtime

Provide support to the architecture

Architecture