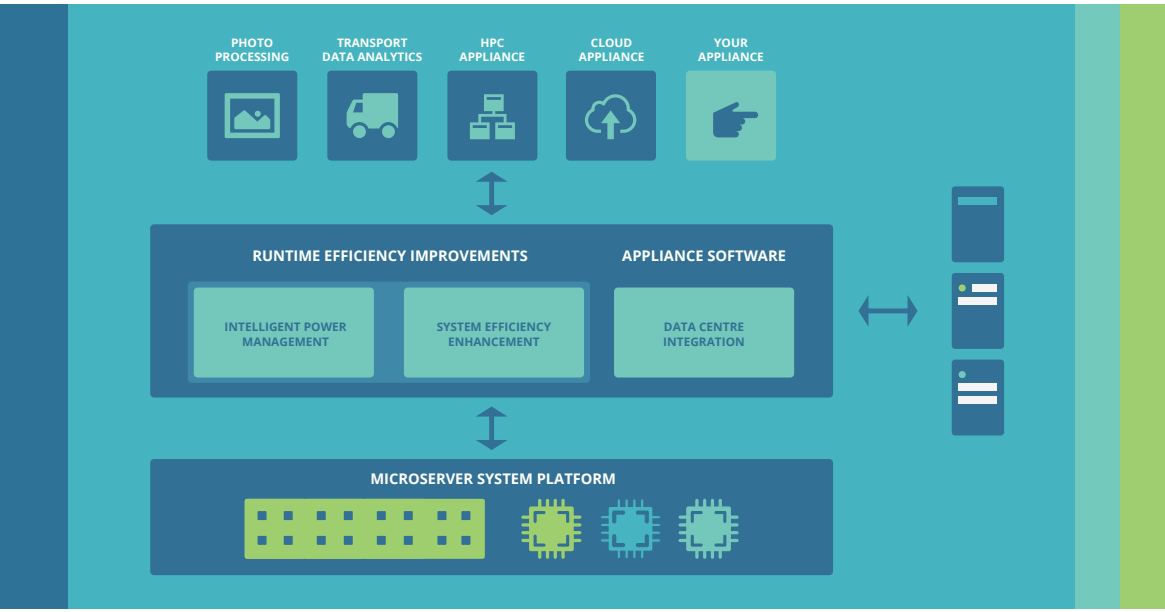
M²DC

Modular Microserver Datacentre

m2dc.eu



OVERALL **OBJECTIVES**

The main goal of the M2DC project is to develop a new class of low-power TCO-optimised appliances with built-in efficiency and dependability enhancements. The appliances will be easy to integrate with a broad ecosystem of management software and fully software-defined to enable optimisation for a variety of future demanding applications in a cost-effective way.

The M2DC flexible server architecture with heterogeneous hardware including ARM CPUs and FPGAs will enable customisation and smooth adaptation to various types of data centres, while advanced management strategies and system efficiency enhancements (SEE) will be used to achieve high levels of energy efficiency, performance, security and reliability.

FOUNDED BY THE EUROPEAN UNION

This project has received funding from the European Union's Horizon 2020 research and innovation programme.

MAIN **RESULTS**

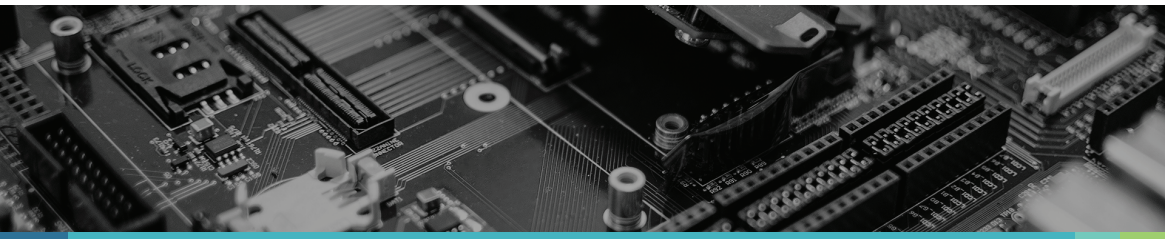
The main M2DC result will include a set of turnkey appliances based on a microserver system enabling deployment of use-case driven, modular, high-density data centres. Appliances will be low cost, low power and energy efficient, dependable by design, versatile and scalable, easy to use and integrate with data centre ecosystems, and applicable to a variety of real-life applications.
M2DC will demonstrate turnkey appliances tailored to meet requirements from various application domains such as photo finishing system serving (more scalable photo finishing), IoT data processing (data analytics for vehicles' sensors), cloud computing (enhanced IaaS, PaaS solutions exploiting heterogeneity) or even HPC (efficient meteorological simulations).

POTENTIAL **IMPACT**

M2DC results should transform into significant benefits for data centres that are struggling with rising energy and generally OPEX costs.

M2DC will also have impact on the market of low-power hardware and microservers significantly strengthening Europe's position in the IT.

Improvements in server and data centre efficiency and reliability will also have impact on specific application markets. In particular, M2DC will enable competitive advantage with respect to performance, scalability, and cost-savings to photo finishing several million images per year, analysing large real-time sensor data from vehicles, and efficient IaaS and PaaS cloud solutions.



Project Coordinator
Ariel Oleksiak
ariel@man.poznan.pl

Dissemination Manager
Mariano Cecowski
mariano.cecowski@xlab.si

Twitter: @M2DC_Project
Facebook: M2DC project
LinkedIn: m2dc

PARTNERS