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2. DSI Aerospace Technologie GmbH – Germany
3. Deutsches Zentrum für Luft- und Raumfahrt e.V. – Germany
4. OHB Italia SPA – Italy
5. QASCOM SRL – Italy
6. ARTTIC S.A.S. – France
7. Ecole Nationale d'Ingénieurs de Tunis – Tunisia

ITUBS

Innovationsgesellschaft
Technische Universität
Braunschweig mbH

DSI
Aerospace Technology

Qascom
From the Mass, Control is Better

OHB
ITALIA

ARTTIC

DLR

ENIT

ABOUT THE PROJECT

The number of satellites in orbit is constantly growing, as well as their complexity. Today, satellites provide close to full Earth coverage and produce a significant amount of data that needs to be downlinked for processing.

Present processing solutions have constraints regarding computational performance. Furthermore, existing toolchains are not able to support new evolving technologies.

S4Pro will design and implement enabling technology for high-end data products produced on-board spacecraft by implementing a power efficient high-performance space processing chain designed for low-Earth orbit missions.

This implementation will be achieved through the optimisation of the payload data management system accompanied by use of commercial off-the-shelf components, as well as through the miniaturisation of high-performance hardware.

KEY FACTS

Start date: 1st November 2018
Duration: 36 months
Budget: 2.6M €
Consortium: 7 partners from 4 countries

CONTACT US

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🌐 www.s4pro-h2020.eu

*For further information,
please contact us or visit
our website*

SMART AND SCALABLE SATELLITE HIGH SPEED PROCESSING CHAIN

S4PRO

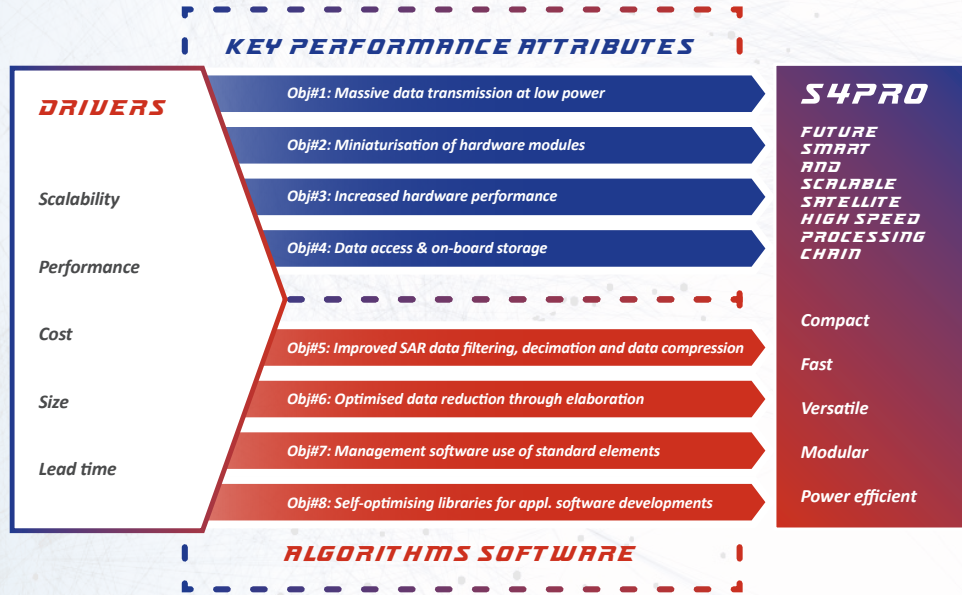
www.s4pro-h2020.eu

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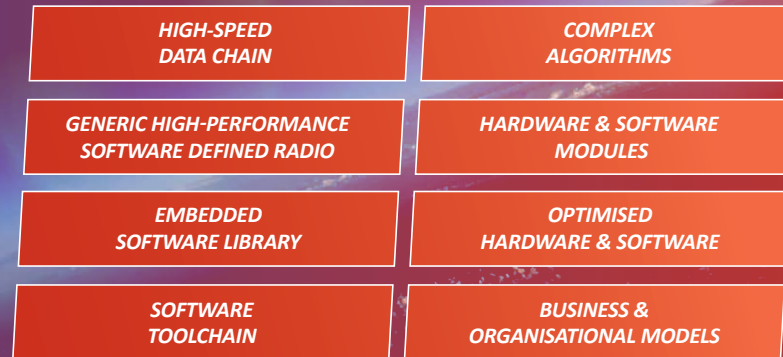
OBJECTIVES

S4Pro's overall focus is on the miniaturisation and improvement of inherent system scalability with various parameters, such as processing performance, size, power-consumption or storage capacity. S4Pro is built around eight objectives, where objectives 1-4 address hardware aspects and objectives 5-8 cover system software and mission-related algorithms, as well as their processing.



INNOVATIONS

S4Pro will bring innovations in algorithms, software and hardware design. The algorithm design will be specific to each application type: optical instruments, Synthetic Aperture Radar (SAR) and telecommunication. Software design will be driven by application needs, while the hardware will combine industrial grade elements with a radiation tolerant system control module. This approach will lead to a certain number of innovations:



IMPACT

By bringing space-qualifiable technologies to TRL6 S4Pro will have a strong impact on European competitiveness not only in the space industry and academia, but also on automotive, drones and financial sectors.

