Researchers inaugurate ultra-fast satellite computer

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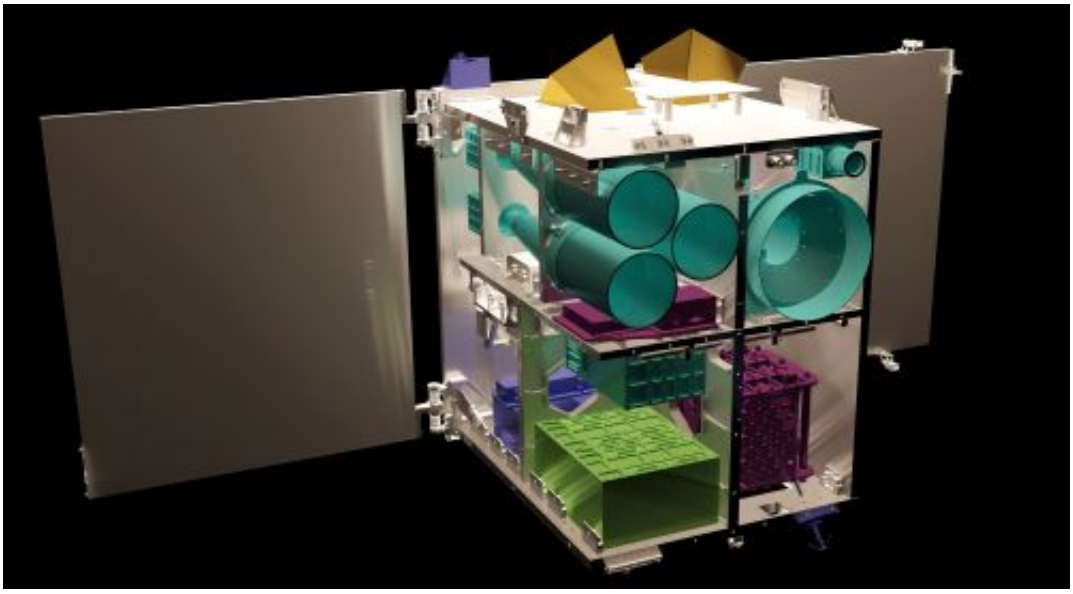

"Flying Laptop", University of Stuttgart.

One of the quickestand most compact satellite computers in the work was inaugurated today at the University of Stuttgart. The computer is the centrepiece of the ultra-modernsmall satellite platform "Flying Laptop", which was developed by students at the Institute of Space Systems at the University of Stuttgart with the support of the Baden-Württemberg space industry. At the beginning of 2014, the Stuttgart small satellite with three camera systems is to record, among other things, shipping movements and vegetation measurements, as well as testing various technologies under space conditions.

"We are delighted that the University of Stuttgart as a research and training location for aerospace technology acknowledged worldwide is able to show a further highlight in satellite technology with the Flying Laptop with annually over 1,000 university applicants. In particular we would like to thank the German Aerospace Centre (DLR) as well as Astrium for the long-standing support of this project", said the Rector of the University of Stuttgart, Prof. Wolfram Ressel, in front of outstanding public figures from the field of science and business, including LR board member Dr. Gerd Gruppe.

"The research of small satellite of the 130 kilogram category that started ten years ago at the Institute of Space Systems describes a real success story. The fact that from the original amateur project a highly modern satellite platform based on state-of-the-art standards has been able to develop in the meantime speaks in favour of the quality of the study course of aerospace technology at the University of Stuttgart, as well as for the excellence of our students", is how the head of the Institute of Space Systems, Professor Hans-Peter Röser, expressed it.

Prof. Jens Eickhoff, Astrium GmbH, said: Astrium and the team set up by Astrium of international industrial partners are proud of the fact of having successfully conducted such a highly technological project in a university partnership. The development of a satellite computer as the basis of a reusable satellite platform goes far beyond the complexity of customary university cooperations. The patented technology developed here is pioneering and the quality of academic education of the students and doctoral students achieved with the project is of a top international level and is consequently of direct benefit to the industry."

The new computer integrates the function of an on-board computer with that of a power supply unit. It belongs to the quickest available satellite computers worldwide, however is thereby considerably more compact and therefore suitable for small technology satellites, for example at the

European Space Agency ESA or the German Aerospace Centre (DLR) and in particular also for the other satellites in the Stuttgart small satellite programme. In contrast to the computers of many small university satellites, it is based on radiation resistant microchips and thus guarantees a corresponding lifespan in orbit.

The development and manufacture of the small satellite Flying Laptop according to industrial standards was predominantly realised from funds from the university and the state of Baden-Württemberg as well as provisions from various partners. The DLR aerospace management pledged appropriate support of 800,000 Euros for the start of the small satellite as a piggy-back satellite.

Provided by University of Stuttgart