

## **uElectronics ongoing activities at ESA**

Alberto Urbón Aguado

European Space Agency, on behalf of Telespazio

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Facultad de Informática

On line - <https://meet.google.com/ksn-wsom-ojt>

miércoles 30 de noviembre de 2022 - 16:00

*Entrada libre hasta completar el aforo*

### **Resumen:**

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This talk will begin introducing the uElectronics section of ESA at ESTEC and the general activities the group is responsible for. Then, it will go through some of the R+D on-going activities that the group is involved with, hand in hand with universities and/or companies. One of the major ones is related to the European rad-hard FPGAs that have been partially funded by ESA for several years and that will be playing a major role in the sector in the upcoming years. It's also worth talking about the RTL soft IPs that are currently under development and that will allow us to keep on providing the European ecosystem with some key capabilities. The latter will be an overview of RISC-V space hardened on-going activities that might be replacing the current SPARC based processors available for our missions.

### **Sobre Alberto Urbón Aguado:**

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Alberto graduated as a Computer Science Engineer in 2008 by the Univ. Complutense de Madrid (Spain) , after being granted to study in Uppsala Univ. (Sweden) for one academic year, and in Univ. de Bordeaux I (France) for another one. He then specialised in reconfigurable HW by means of a MSc. in Research on HW Engineering also by Univ. Complutense de Madrid, writing the final thesis in the field of evolvable HW on digital reconfigurable devices. He then joined the Digitizing HW department of Indra Sistemas, where he had the chance of designing digital electronics and u-electronics in the fields of signal processing and control systems, above all for Electronic Warfare products on different platforms. Six years later, he moved into the space sector when signed with the u-electronics section of Airbus Crisa, where he has been designing flight FPGA devices for different clients, among which some were ESA missions. In his last stage he has been doing system level tasks related to the TTE network node of a power subsystem of Gateway. After another six years, he has joined the uElectronics (TEC-EDM) section of ESA on behalf of Telespazio, as a FPGA specialist.