



ADCSS2017 – Day 3
Space Processors: Round-Table

Experts:

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- A photograph of a rocket launch at sunset. The rocket is positioned vertically in the center-right, with a bright orange and yellow plume of fire and smoke at its base. To the left of the rocket is a tall, blue industrial tower with several vertical pipes on top. The foreground is a grassy field with a chain-link fence and some wooden posts. The sky is a mix of orange, yellow, and grey.
- *From conceptual needs expressed by potential costumers to availability of qualified silicon solutions a gap of 10 years seems to be the norm, which means do we have to reduce this period considering the increased complexity of solutions but also the necessity to have solutions in a reduced time? Or can 10 years be accepted as an unavoidable period for a development for space ?*
 - *Shall we aim for 10x, 100x or 1000x improvement ?*



Hurricane Ophelia - 2017 - Sentinel 3-A

- ***Deployment of new solutions in Space: what helps more ?
In Orbit Demonstration (IOD) on cubesat/minisats ?
Early availability of development models? What else ?***

- ***COTS solutions in Space, we have been always using COTS in space in the past in order to implement functionalities not provided by Space RAD-Hard devices but the trend is increasing pushed also by costs reduction needs and early availability of solutions. ESA is trying to consider all the aspects related to the use of COTS devices (reliability, radiation characterization, availability of LOTS, reference designs, adoption of quality standards...) collecting the recent experience and including in an a higher and wider scenario all the various initiative we have recently started or under finalization. A dedicated workshop on COTS (with a longer round-table...) will be done in 2018 but could you anticipate what are you expecting from ESA in the area of COTS ?***

Lisa Pathfinder Operating in Space

- *Which is industry/project opinion, for future processors, regards SMP/AMP on identical cores (the NGMP or DAHLIA approach) vs. HEMP (that is heterogeneous multiprocessing) and single cores (at higher clocks) for space systems.*

