

Earth Observation

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Space processors are present in the spacecraft platform as On-Board Computer (OBC) or Spacecraft Management Unit (SMU), as well as in most Earth Observation (EO) payloads, typically within Instrument Control Units (ICU) or Instrument Central Electronics (ICE). The needs for OBCs are fairly well standardised, also in SAVOIR, whereas for payloads the needs have a common/generic part but also mission specific requirements, which can be covered in software or in a combination of software and dedicated processing hardware like ASICs or FPGAs. The presentation will provide an overview of common practices today in ESA EO missions regarding space processors, and also address a number of challenges for future missions.