

Adaptable Scalable Mixed-Signal Sensor/Actuator Front-End for Micro-C and FPGAS

A description of the work done during the MAS-FE activity will be presented. A Testchip integrating state-of-the-art, space-capable, new ADC and DAC converter IPs with nominal capabilities for both converters at 100Msps and 15 bit has been developed. The Testchip has been electrically validated and radiated. Also a FPGA-based companion Digital Signal Processing prototyping platform has been developed and validated working together with the Testchip. After a brief introduction of the project context, the presentation will focus on the actual activities performed, problems found, highlights, main results achieved, and potential future developments.