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The application of heterogeneous FPGA architectures in physics experiments

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Summary

Modern FPGA architectures can be very heterogeneous devices with a vast variety of hard IP cores. Especially processors such as the ARM cores in Xilinx Zynq Ultrascale+ devices provide a lot of software computing power which allows executing Linux operating systems for run-control and high-level processing. Efficiently using these architectures is a complex task and requires a giant leap in the system, software, and hardware development strategies such as continuous integration or automated build environments. This contribution gives an overview of heterogeneous FPGA architectures, the IPE activities in that field, and some selected application examples.

Proceedings

Ich entscheide später

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