Accelerated Tile Processor

Modern FPGAs are revolutionizing the digital system designs with built-in analog to digital converters (RF-SoC), floating point DSP processors and with high-level programming tools. We have planned to build a versatile digital receiver, namely the accelerated tile processor, by exploiting these FPGA features. We will present here the salients features of the digital processing architecture considered and discuss the advantages arising from such a design for a multi element radio telescope application.