

Design of current DSP applications using state-of-the art multi-million gates devices requires a broad foundation of the engineering skills ranging from knowledge of hardware-efficient DSP algorithms to CAD design tools. The requirement of short time-to-market, however, requires to replace the traditional HDL based designs by a MatLab/Simulink based design flow. This not only allows the over 1 million MatLab users to design FPGAs but also to by-pass the hardware design engineer leading to a significant reduction in development time. Critical however with this design flow are: (1) quality-of-results, (2) sophistication of Simulink block library, (3) compile time, (4) cost and availability of development boards, and (5) cost, functionality, and ease-of-use of the FPGA vendor provided design tools.