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## Model Driven FPGA Design –An approach

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In a model orientated approach a formal model is used to describe a system in its problem domain. The model, like an abstract construction plan, contains all informations that are needed to create the system. With a well-defined model, a generator can be used to perform the task. Model orientated design can be used to create every sort of text based source code.

In many FPGA designs, the FPGA is used to interface with a computer system. The FPGA needs to implement register banks that are accessible via a bus system. The implementation of the register structure in the FPGA and the software driver is usually implemented manually.

The presentation will show how the model orientated approach can be used to aid the development process and generate the FPGA source code and the software driver code.

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