

One of the main advantages of using an FPGA (Field-Programmable Gate Array) consists of the possibility to modify the digital circuit design without the necessity of making a costly re-layout of the Printed Circuit **Board or Custom** components. In this way the design of a digital circuit using an FPGA can be efficiently planned without having necessarily completely defined every single functional requirement from the start. These can then be added /updated without the need of any change to the physical layout, but simply by modifying the "program" within the FPGA.





Field Programmable Gate Array (FPGA) development service using VHDL

Service Description

Our company offers an FPGA design service using the VHDL language, guaranteeing a completely documented "Turnkey" product.

We supply the following services:

- Conversion of existing digital electronic circuits from "circuit diagram" format to VHDL functional description;
- Simulation and verification of VHDL description;
- Generation of a VHDL test bed;
- IP core design
- Development of FPGA in VHDL

Development Process

The order of the development process is as follows:

- definition/ review of the product technical specifications in collaboration with the client and choice of the most appropriate device for the job (i.e. Xilinx, Altera, Actel, etc.);
- design of VHDL circuit;
- simulation and functional verification of the circuit (including critical timing analysis) before its actual implementation;
- generation and supply of programming files;
- editing and supply of component documentation: functional description, VHDL source files, instructions to run the code on the chosen target devices, etc;
- guaranteed support up to the full qualification of the FPGA within the system;
- activity to modify and/or add to the functionality, also with feed-back via email attaching a new programming file to be loaded on to the EEPROM associated with the FPGA.

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V ery high speed integrated circuit (VHSIC) H ardware D escription L anguage

VHDL is a high level language through which it is possible to define the functionality of an electronic system both in a structural and purely behavioural way.

Its employment in the design of digital integrated circuits (both Custom and FPGA) is considered fundamental.





Field Programmable Gate Array (FPGA) development service using VHDL.

Working together

It's our habit to supply our clients with weekly status reports of their project's progress and also plan progress meetings especially during the phase of FPGA integration on a circuit board.

We have a professional, dedicated design team with many years of experience in the field. Each member of our team understands the importance of a design being implemented well, promptly and cost effectively.

Client satisfaction

Client satisfaction is our main goal. Our company provides a high quality professional FPGA design service at a very competitive price.

Contact us and our design team can arrange to perform a detailed study of your design requirements.

We can provide a detailed project proposal including architectural review and suggestions in order to optimize the design, accompanied by our proposed development lead time and price quotation which we are sure you will find attractive.

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