Abstract

The aim of this paper is to print characters by providing the interfaces to connect a VGA port for graphical output and a PS/2 port for keyboard input. This system is then to be synthesized on an FPGA board, and should be capable of running a program to display characters that takes input from the keyboard and prints the results to a VGA monitor. This paper is developed under the environment of Xilinx ISE and Platform Studio. It includes Xilinx provided hardware, VHDL IP core and MICROBLAZE processor, the characters inputted by ps2 keyboard, and will be displayed on the VGA monitor. Based on Spartan 3E Starter Board Hardware Architecture, Software Development mainly consists of two parts: one is that PS/2 keyboard scan code receiving and processing program, the other one is VGA displaying program.
References

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Index Terms

Computer Science Embedded

Keywords

Xilinx Platform Studio Xilinx-c Ip Core Microblaze Processor