SMIMS

VeriEnterprise® -- VEX

Overview

The SMIMS VeriEnterprise® is a PC-based high-speed FPGA platform. It is suitable for a complete ASIC logic emulation, prototyping verification and IP development. The VeriEnterprise® with SMIMS® powerful Software -- VeriComm® Pro and software developer's kit (SDK) offers the incredible performance and time-to-market improvement. Users can import the input signals easily from PC into the user-designed circuit on the FPGA of VeriEnterprise and export the output signals to PC for observation. Almost all PC peripheral devices become user-designed circuit's I/Os and no real hardwired I/O device is needed for early-stage verification. With the help of USB 2.0 transmission, VeriEnterprise can be integrated with PC to become a hardware-software co-design/co-simulation/co-verification environment.

The SMIMS SDK including C/C++ development API (SDK) provides users with the resources to develop software programs for the interfacing control between the user-designed circuit (on the FPGA of SMIMS platform) and the software I/O application programs (on the PC).

SMIMS Verilink® for Matlab® (optional) brings the FPGA hardware platform to the heart of the acclaimed Matlab® technical environment.
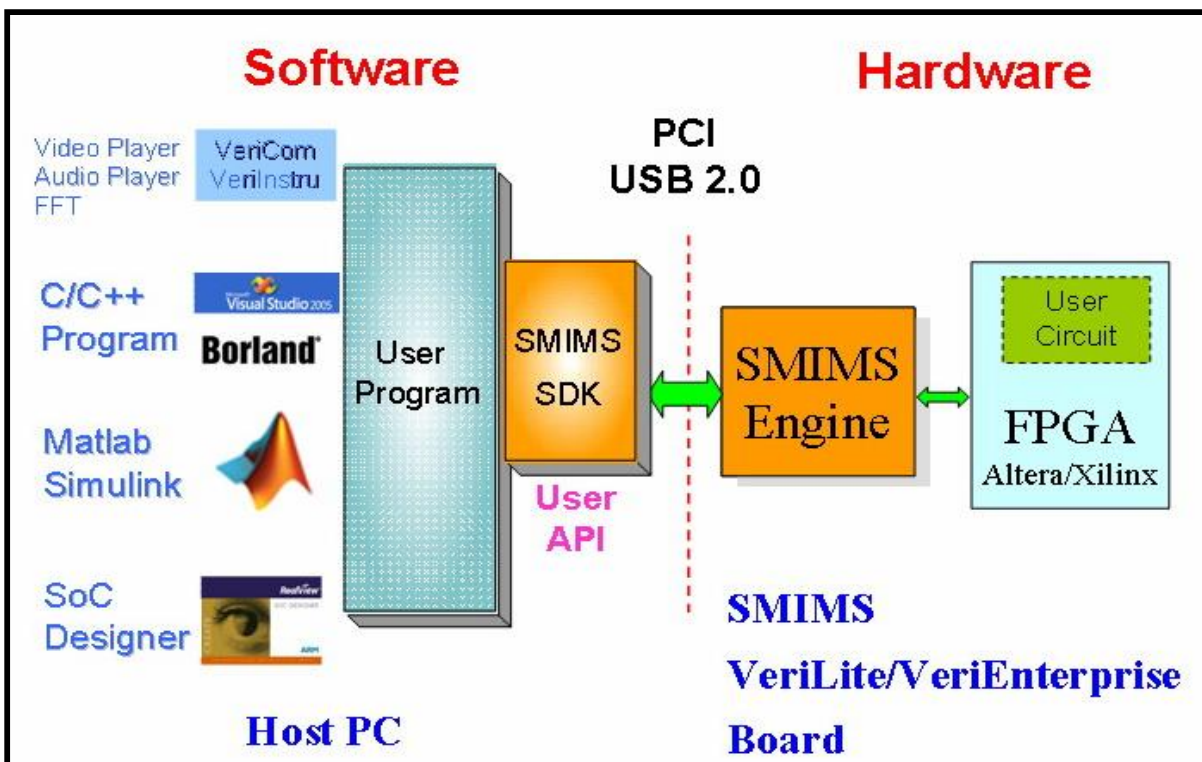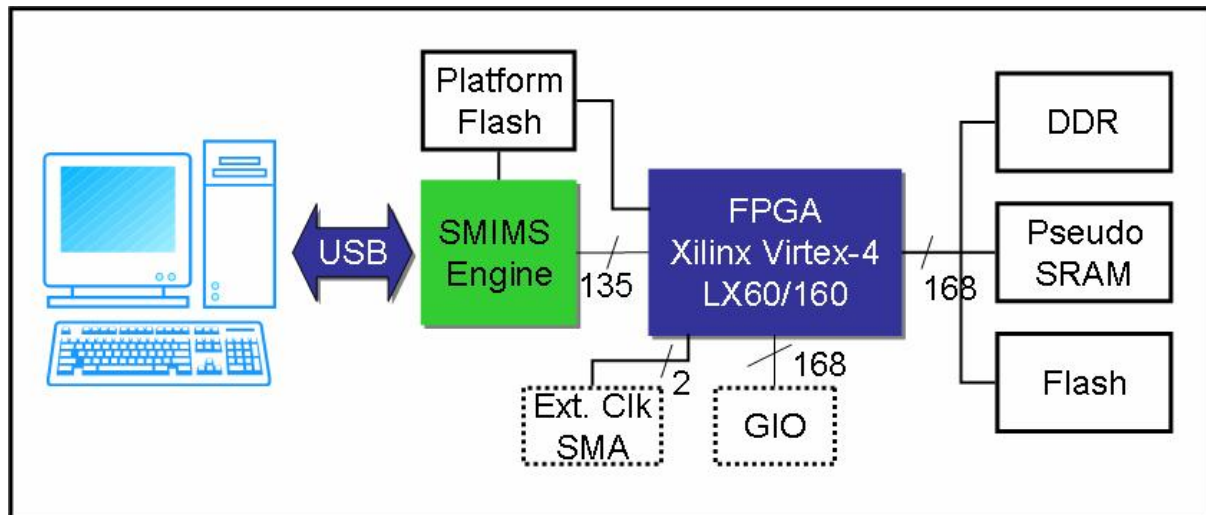
Key Features

ü   On-board Xilinx Virtex-4 60/160 FPGA (User FPGA)

ü   USB 2.0 interface for data transfer

ü   On-board 128Mb DDR

ü   On-board 16Mb Flash

ü   On-board 16Mb Pseudo SRAMs -- 2 indelpendent banks

ü   Up to 168 additional available I/Os.

ü   Two External Clock SMA Connector

ü   Flash and USB Download

ü   Single 5V voltage input

ü   Up to 211 Mbps data transfer rate between FPGA and PC

Benefits

ü   HDL Simulation Acceleration

ü   FPGA Prototyping

ü   IP Verification

ü   HW/SW Co-verification/Co-design

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Block Diagram