

You first develop your FPGA design using our software tools, and as soon as it is completed you want to test it on in a device. However, if a complete, fully tested PC board is not available, you can experience delays at the most critical time in your project. Xilinx offers a solution, with an easy-to-use prototyping and demonstration board. Now, with the Virtex-II Pro™ AFX boards, you can quickly test your design, as well as experiment with device features. You are free to focus on using all the power of the Virtex-II Pro FPGA to create your best design, without worrying about

the details of implementation.

# **AFX Prototyping Boards Make Virtex-II Pro Development Easy**



# **Simplify the Development Process**

Design schedules are always tight, and you are looking for a way to test your design. You can build your own prototype board, but that can take time away from higher priority tasks. Fortunately, Xilinx Virtex-II Pro AFX boards can offer a fast, easy-to-use way to demonstrate your design. You also get other key advantages, including:

- **Hardware/software integration –** Your development time is reduced, and more secure, because the AFX board:
  - Provides a uniform platform for both hardware and software development
  - Allows you to easily verify hardware and software partitioning
  - Enables you to dynamically partition your hardware (logic design) and software (embedded processor code), to arrive at an optimal design.
- Integrated debugging You can quickly verify your design using ChipScope Pro™ to debug your IP cores and analyze busses.
- **Decreased costs** The price of the AFX board is far less than the engineering costs to develop your own. So, you can focus your resources where they count the most on adding value to your design. And you can use your board for your next design.
- Reduced Risks By removing a big "unknown" from your project (prototype development time), you can make more accurate development schedules and be assured of success with a proven, standard platform.
- **Education** You can easily learn how to use all of the advanced Virtex-II Pro FPGA features.
- **Benchmarking** You can test your processor code, high-speed serial I/Os, and other features, in real time.
- Flexibility You can easily migrate between different Virtex-II Pro devices within the same package on the board

There is no faster, easier, or safer way to prototype your next design.



#### **Features**

- Available in 3 different sockets to support Virtex-II Pro devices in FG456, FF672, and FF1152 packages (2VP2, 2VP4, 2VP7, 2VP20, 2VP30, 2VP40, and 2VP50)
- · 8 MB (32-bit data width) SDRAM
- · RS232 serial port
- · Prototyping area
- 12 global clock (GCLK) inputs (four differential clock pairs, four LVTTL-type oscillator sockets)
- Two low-voltage, 14-pin, DIP crystal oscillators
- Independent power supply jacks for VCORE, VCCAUX, VCCO, and MGT\_V CC
- Selectable VCCO for each SelectI/O -Ultra bank
- Configuration port for use with Parallel III and IV cables
- Two onboard SPROMs (4 Mb each) for any configuration mode
- Headers for CPU debug, CPU trace, and JTAG CPU port
- JTAG port for reprogramming the XC18Vxx series reconfigurable PROMs and the user FPGA
- Four duplex channels of MGTs( Multi-gigabit transceivers)
- Eight pairs of (TX, RX) SMA inputs for the RocketIO transceivers
- Upstream and downstream System ACE<sup>™</sup> and Configuration Interface connectors
- · Onboard battery holder

## **Kit Contents**

- Xilinx Virtex-II Pro Prototype Platform board
- User guide
- · Device vacuum tool
- Four SMA-to-SMA coax cable assemblies Headers for test points
- CD-ROM (design examples, schematics, bit stream files, and gerber files)
- Two low-voltage, 14-pin, dual-inline package (DIP) crystal oscillators

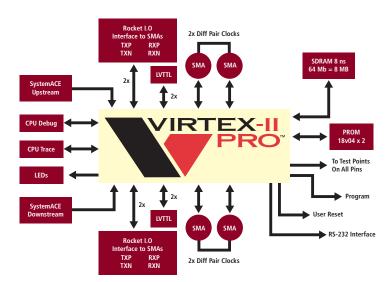
Note: Virtex-II Pro parts should be ordered separately since each board is designed to support different parts with the same package and pin counts.

# **Ordering Information:**

- --- HW-AFX-FF1152-300
- --- HW-AFX-FF 672-300
- --- HW-AFX-FG 456-300

# Why Wait?

To place your order for the Virtex-II Pro AFX boards, call your local Xilinx sales representatives at 1-800-888-FPGA or order through the Xilinx online store at www.xilinx.com/store. For the latest information on the Virtex-II Pro family of FPGAs go to: www.xilinx.com/virtex2pro



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