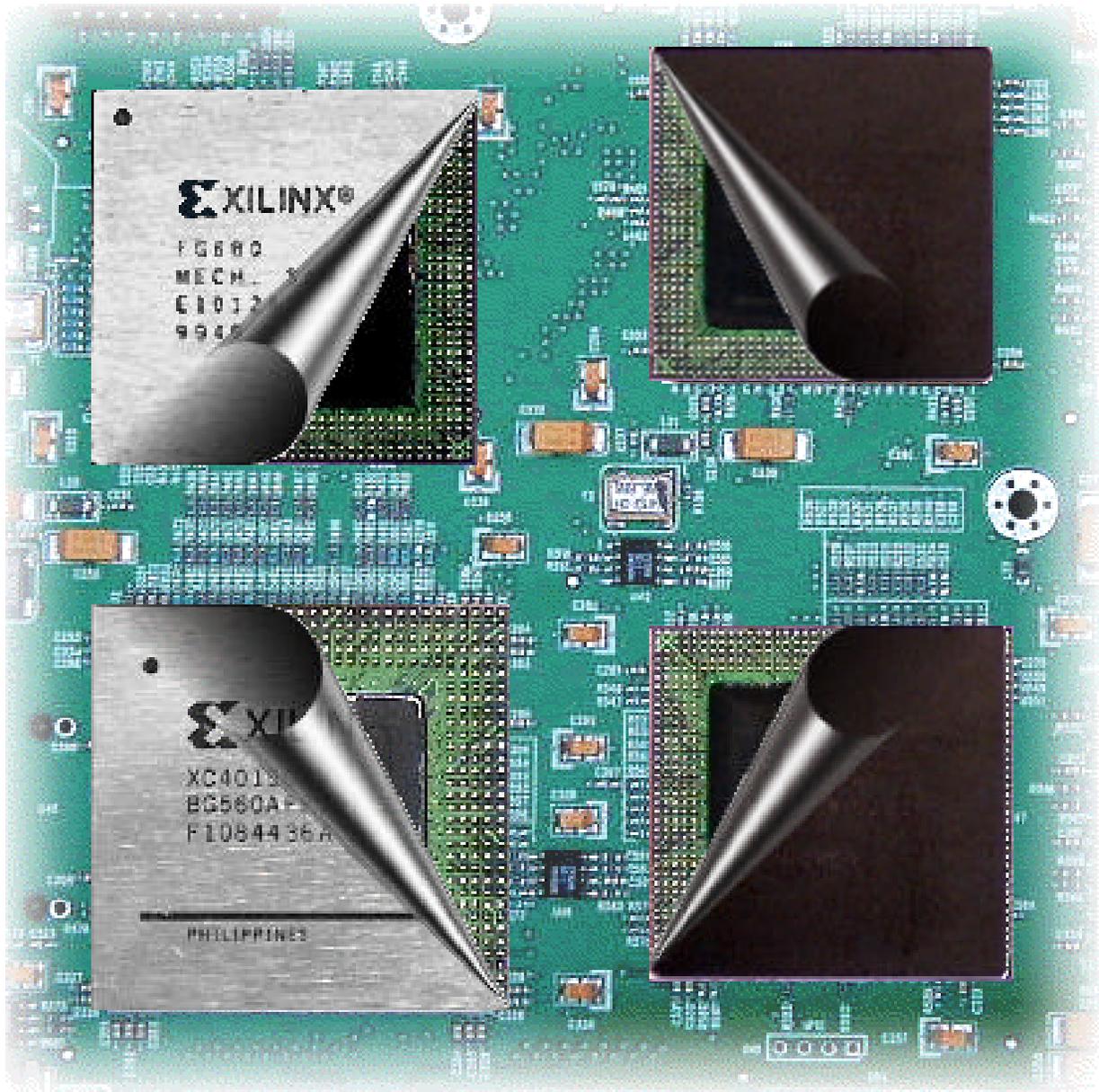


GOT THE BGA **BLUES**?



**Want to see what the pins under
your BGA are doing?**

See what you have been missing with:

UNIVERSAL SCAN

MONITOR PIN ACTIVITY

UNIVERSAL SCAN unobtrusively displays activity of every scan-enabled pin on every device in the JTAG chain in real time on your PC/Laptop display.

You can now “see” what the pins under a BGA (or any other package) are doing in real time. You can now answer the questions: “Is the oscillator connected to pin C13?” “Is the Address bus active?” “Are my chip enables High, Low, or toggling?” “Do I have continuity to the circuit under that BGA?”

And you can answer them without using traditional test equipment or touching the board with a probe that might damage the board or short adjacent pins.

And you can monitor the pin activity WITHOUT affecting the circuits performance – UNIVERSAL SCAN is completely unobtrusive – the circuit can be running at full speed and it will not know you are monitoring every JTAG enabled pin on the device.

And you no longer have to worry about destroying solder joints or components with scope probes or test leads!

CONTROL PINS AND INTERNAL LOGIC

UNIVERSAL SCAN also allows you to temporarily break the connection between the internal logic and the pins so you can manually control every JTAG enabled pin on the device. You can now manually force a pin high or low to see if it is connected to another pin on the circuit card.

You can also isolate the internal logic from the rest of your board and test it without being influenced by the circuitry around it. You can now verify that the PLD got programmed correctly independent of the surrounding circuitry.

PARTS LIBRARY

NONE! Don't need any! The user simply pulls the part's BSDL file off of the manufacturer's web site and UNIVERSAL SCAN builds a custom virtual part for you on the fly! No need to worry about maintaining extensive parts libraries!

DEBUG SCAN CHAINS

Universal Scan allows you to validate your JTAG chain independent from your other design tools. Since Universal Scan doesn't require test vectors, scripts, net lists, or any other supporting files, it is easy to debug the scan chain quickly.

FEATURES

IEEE1149.1 Compliant. Fully supports the three required boundary scan modes: EXTEST, BYPASS and SAMPLE/PRELOAD and the optional INTEST.

Automatically connects JTAG Chain. Automatically detects Parallel port. Reset Chain at any time. View any scan cell at any time. Tested with all major manufacturers BSDL files.

INDICATORS: Virtual indicators (LED's) are provided that you can connect to pins to help organize your display. You may want to place a column of LEDs on the screen to monitor the address bus, for example. These include: Single LEDs, Latching LEDs, Bar Graph LEDs, Hex, Decimal, and 7Segment LEDs.

CONTROLS: Virtual controls (switches) are provided to simplify test and debug. These allow you to connect a virtual switch to a pin (or multiple pins) to help organize your ability to control pins on a device. You may want to connect a couple thumbwheel switches to a data bus for example. Controls provided: Toggle Switches, Momentary Switches, Hex Thumbwheel, Decimal Thumbwheel, and 7-Segment Switches.

DISPLAY: Parts are displayed in relative size format and can be positioned anywhere on the screen. Full control over display characteristics (Pin color, state, function) with three levels of ZOOM

Dynamic Status line displays pertinent information at all times for quick location of devices and pins.

SYSTEM REQUIREMENTS

Windows © 95/98/me/NT/2000/XP
Hard Disk: 14 MB, Parallel port
CPU speed: 75 MHz or better.



Boundary Scan Tools For The Rest Of Us

*“Any Part, Any Package,
Any Vendor, Any Time!”*

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www.UniversalScan.com

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Suwanee, GA 30024
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