

## CY3620

# WarpISR<sup>™</sup> Design Kit for CPLDs

#### Features

- Complete design and programming kit for In-System Reprogrammable™ (ISR™) CPLDs
- Industry-leading  $\textit{Warp}^{\texttt{®}}$  design software for VHDL and Verilog
- Easy-to-use ISR PC programmer for on-board programming
- C3ISR Programming Cable that supports all Programmable Serial Interface™ (PSI™), Delta39K™, Quantum38K™, and Ultra37000™ devices. Please refer to the "Programming with Delta39K" application note. (For ISR programming of FLASH370i™ devices, please refer to the CY3600i data sheet.)
- Standard Windows<sup>®</sup> GUI
- Delta39K<sup>™</sup>\Ultra37000<sup>™</sup> Prototype Board

#### **Functional Description**

WarpISR is a complete ISR CPLD design and programming solution. It includes Warp Software and the Delta39K\Ultra37000 ISR Programming Kit. Warp is a state-of-the-art HDL compiler for designing with Cypress's Complex Programmable Logic Devices (CPLDs). For a complete description of Warp please see the CY3120 data sheet. For a complete description of the ISR PC programmer, please see the CY3900i Delta39K™\Ultra37000™ ISR Programming Kit data sheet.

*Figure 1* shows the *Warp*ISR kit in action with *Warp* being used for design and the C3ISR Programming Cable for programming. The ISR programmer connects the PC parallel port directly to your board, allowing you to easily reprogram devices

#### Delta39K<sup>™</sup>\Ultra37000<sup>™</sup> Prototype Board



Figure 1. Connecting the ISR Programming Cable

when you make design changes. Multiple devices can be programmed in series, and ISR devices are cascadable with other IEEE 1149.1 compliant devices for convenient programming.

To facilitate easy and quick prototyping of designs, a Delta39K\Ultra37000 Prototype Board has been included with *Warp*ISR (see *Figure 2* for the basic layout). The prototype board comes with an Ultra37256VP160 and a Delta39100V208 device already premounted and header strips that facilitate signal testing. Detailed information on the board layout and proper usage may be found in the Cypress application note, "Using the Delta39K ISR Prototype Board."



Figure 2. Delta39K<sup>™</sup>\Ultra37000<sup>™</sup> Prototype Board

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#### Warp Software System Requirements

- IBM PC or equivalent (Pentium<sup>®</sup> class recommended)
- 32 Mb of RAM (64 Mb recommended)
- 110 Mb Disk Space
- CD-ROM drive
- Windows 98, Windows NT<sup>®</sup> 4.0, Windows XP
- · Internet access to download upgrades

#### **ISR Software PC System Requirements**

- IBM PC or compatible running Windows 98, Windows 98 Second Edition, Windows ME, Windows NT 4.0 Service Pack 5 or later, or Windows 2000 Service Pack 1 or later
- One free parallel port
- Minimum of 32 MB of RAM
- Approximately 30 MB free hard disk space

### **Ordering Information**

| Product<br>Code | Description                  |
|-----------------|------------------------------|
| CY3620R62       | WarpISR Design Kit for CPLDs |

#### WarpISR includes:

- CD-ROM with *Warp* and on-line documentation
- VHDL for Programmable Logic textbook by Kevin Skahill
- C3ISR Programming Cable
- CD-ROM with ISR Programming Software Release 3.0
- ISR Application Notes
- Delta39K\Ultra37000 Prototype board with an Ultra37256VP160 and a Delta39100V208 device
- Registration Card

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#### Document Title: CY3620 WarpISR™ Design Kit for CPLDs Document Number: 38-03048 Orig. of Change Issue REV. ECN NO. Date **Description of Change** \* 109966 09/17/01 SZV Change from Spec number: 38-00592 to 38-03048 \*A 111242 01/21/02 CNH Updated Product Code, removed references to Windows 95, removed references to Japanese Windows \*B 116896 08/30/02 FSG Added Windows XP and Internet Access