

## **CYPRESS DEBUTS ATAPI-TO-USB SOLUTION**

### **Combines EZ-USB™ Microcontrollers, Ultra37000™ CPLDs to Provide High-Performance, Cost-Effective USB Connectivity for External Storage Drives**

SAN JOSE, Calif., November 15, 1999 -- Cypress Semiconductor Corp. (NYSE:CY), the leading provider of Universal Serial Bus controllers, today unveiled a low-cost solution for connecting external disk drives via the USB standard. Cypress's ATAPI (AT Attachment Packet Interface)-to-USB solution consists of the EZ-USB™ AN2126SC microcontroller, the CY37064 Ultra37000™ CPLD, and firmware developed by Cypress to speed time to market. Cypress is offering an evaluation board for designers to quickly test the solution in individual mass storage applications.

Cypress's ATAPI-to-USB solution offers outstanding performance, delivering sustained read and write bursts of 1 Mbytes/second. This compares with typical parallel connectivity speeds in the 200-400 Kbytes/second range or with competitive USB solutions at 500 Kbytes/second. The solution supports the default Programmed I/O mode 0, and the included firmware is compliant with USB mass storage class drivers provided by Microsoft and Apple. The combination of the patented EZ-USB RAM architecture and source firmware allows customers to tailor this mass storage compliant solution to individual needs.

Current estimates from market research firm Cahners In-Stat (Scottsdale, AZ) peg the size of the external USB storage market at about three million units in 1999, growing to 10 million units in 2002.

"There is clearly a trend towards connecting external storage devices to PCs through USB," said Pete Fowler, Cypress's vice president of USB marketing. "Our ATAPI-to-USB solution provides the two critical features for this market—high performance and low cost.

"We are fortunate to be able to combine our EZ-USB technology with in-house programmable logic expertise," continued Fowler. "By including the Ultra37000 CPLD in the solution, we can offer customers the benefits of a single-source solution, including a single point of contact for both applications support and purchasing issues."

## **No. 1 in USB**

Extending its USB Product portfolio with technology and products gained through the recent additions of Anchor Chips and Intel's high-performance USB line, Cypress now offers a microcontroller for virtually every USB peripheral. The company aims to engage with equipment manufacturers in USB applications and market segments, ranging from mice, keyboards, and joysticks, to higher-speed hubs, scanners, and digital cameras.

Leveraging technology gained through the Intel deal, its own expertise with high-speed transceiver design, and a solid portfolio of USB design wins, Cypress—the USB market-share leader—also aims to extend its position into the emerging market for USB 2.0. A specification with target speeds up to 480 Mbps, USB 2.0 is expected to open new applications to USB, including full-motion video.

Cypress is the market-share leader in USB, having shipped more than 20 million units. According to Cahners In-Stat, Cypress has shipped more than half of all USB peripheral controllers.

## **Price and Availability**

The ATAPI-to-USB solution is available today from Cypress. It includes the AN2126SC (or AN2136SC) USB microcontroller, the CY37064 CPLD, and a CD-ROM with firmware necessary for a complete implementation. Cypress also offers a reference design using discrete logic components for highly cost-sensitive applications willing to trade board space and layout considerations for lower cost. The complete bill of materials for the ATAPI-to-USB solution starts in volumes at a price under \$7.00.

## **About Cypress**

Cypress Semiconductor provides high-performance integrated circuit solutions “By Engineers. For Engineers™.” for fast-growing companies in fast-growing markets, including data communications, telecommunications, computation, consumer products, and industrial-control. With a focus on emerging communications applications, Cypress's product lines include networking-optimized and micropower static RAMs; high-bandwidth multi-port and FIFO memories; high-density programmable logic devices; timing technology for PCs and other digital systems; and controllers for Universal Serial Bus (USB). Cypress is No. 1 in the USB and clock chip markets.

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More than two-thirds of Cypress's sales come from fast-growing datacom/telecom markets and dynamic companies such as Lucent, Cisco, 3Com, Alcatel, Motorola, Ericsson, and Northern Telecom. Cypress's ability to mix and match its broad portfolio of intellectual property enables targeted, integrated solutions for high-speed systems that feed bandwidth-hungry Internet applications. Cypress aims to become the preferred silicon supplier for Internet switching systems and for every Internet data stream to pass through at least one Cypress IC.

Cypress employs more than 3,500 people worldwide with international headquarters in San Jose, California. Its shares are listed on the New York Stock Exchange under the symbol CY. More information about Cypress is accessible electronically on the company's worldwide web site at <http://www.cypress.com> or by CD-ROM (call 1-800-858-1810). An electronic investor forum, and other investor information, is located at <http://www.cypress.com/investor/index.html>.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: Statements herein that are not historical facts are "forward-looking statements" involving risks and uncertainties. Please refer to Cypress's Securities and Exchange Commission filings for a discussion of such risks.

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