



## **Extreme DA's GoldTime for New-Generation Timing Analysis Adopted by Coherent Logix for Full-Chip Timing Sign-Off**

*GoldTime timing analysis of Coherent's complex DSP completed in just four hours*

**Palo Alto, Calif.** — May 29, 2007 — Extreme DA™ announced that Coherent Logix has adopted Extreme GoldTime™ for the timing analysis sign-off of its latest integrated circuit (IC) design project. Extreme DA is the emerging leader in new-generation timing analysis software that improves the performance and yield of integrated circuits (ICs). Introduced today, Extreme DA GoldTime™, with its unique, patent-pending ThreadWave™ technology, delivers 5X better speed and capacity over today's most commonly used tools. (See <http://www.extreme-da.com>.)

Coherent Logix develops reconfigurable and adaptable signal processing solutions with products that provide real-time, extremely high performance, ultra-low power, and computation-intensive hardware and software. The company serves the data acquisition, data algorithm, communications, and digital imaging markets.

### **GoldTime Analysis of Coherent's New Leading-edge HyperX DSP**

The current leading-edge design by Coherent is the HyperX, a complex, low-power digital signal processor (DSP). Implemented in a 90-nm process from TSMC, the DSP features more than 10 million placed instances. In just four hours, Extreme GoldTime, running on a four-processor, 64-bit Intel workstation, loaded all library and netlist data and performed timing analysis on the entire design. This analysis included all post-layout route data in Standard Parasitic Exchange Format (SPEF) so the effects of metal fill could be studied. The influence of dummy metal-fill caused changes in circuit timing of up to 15 percent. This caused max-mode timing problems, which GoldTime accurately and quickly identified for repair.

According to Mark McDermott, vice-president of engineering at Coherent Logix, "Coherent's low-power DSP design uses an array of processors with scores of different clock domains. We needed an analysis product that could run a large, flat design with post-route parasitic data, and complete it in just a few hours. The speed-up provided by GoldTime's multi-threaded analysis has been critical for our success. The potential for setup-and-hold

violations in our design was huge, so we needed accuracy, too. GoldTime correlates to within a few percent of our reference SPICE simulations. GoldTime is our only sign-off tool for timing analysis before tape-out.”

McDermott continued: “Integrating GoldTime into our design flow went smoothly: we had it running in 90 minutes within our Cadence place-and-route flow. Plus, the response times by the Extreme DA engineering team have been among the fastest I have experienced in my design career. As we requested them, new features were added overnight, and bugs were fixed the same day.”

Mustafa Celik, CEO of Extreme DA, said, “Coherent Logix’ leading-edge design showed the strengths of GoldTime: its speed and capacity for the largest SoC designs. We appreciate the confidence of Coherent Logix in making GoldTime its timing sign-off solution.”

### **About Coherent Logix**

Coherent Logix develops reconfigurable and adaptable signal processing solutions with products that provide real-time, extremely high performance, ultra-low power, and computation-intensive hardware and software for data acquisition, data algorithm, communications, and digital imaging markets. Coherent Logix operates major semiconductor R&D, marketing, sales, and support organizations in Austin, Texas and San Jose, Calif. For more information, visit <http://www.coherentlogix.com>.

### **About Extreme DA**

Headquartered in Palo Alto, Calif., venture-funded Extreme DA develops and licenses software products to improve the performance and yield of nanometer integrated circuits. The company’s investors include Foundation Capital, IT-Farm Corporation, and Lanza techVentures. For the latest news and information on Extreme DA, visit [www.extreme-da.com](http://www.extreme-da.com) or write to [info@extreme-da.com](mailto:info@extreme-da.com).

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