

Resources

PowerPC Gets a Share of Mind

Mindshare Press has released the seventh book in its series on PC system architecture. The 732-page **PowerPC 601 System Architecture** by Tom Shanley is written for hardware and software designers. The first half of the book covers the PowerPC architecture specification, including microarchitecture, instruction set, memory and cache management, and other topics. The second half covers the PowerPC 601 implementation, including the 601's split bus transactions, bus snooping, and multiprocessor and second-level cache design issues.

Other books in the series cover ISA, EISA, and PCI system architecture, 486 and Pentium designs, and PCMCIA. The books are distributed through Peer-to-Peer Communications. *PowerPC 601 System Architecture* costs \$44.95. To order, call Peer-to-Peer (San Jose, Calif.) at 408.435.2677; fax 408.435.0895.

Mercury Research Sounds Off

Market-analysis firm Mercury Research, led by Mike Feibus and Dean McCarron, has released two new research reports. Of interest to multimedia PC makers and users is the **PC Audio Technology and Chip Sets** report, new for 1995. This market strategy and forecast report analyzes markets by geography, manufacturers, users, and software penetration.

Just updated for 4Q94 is the **PC Processors and Chip Sets** report, a 330-page tome examining the PC-compatible silicon market from many perspectives. Contents include vendor reviews, market penetration by chip set and vendor, and estimated shipments and forecasts by manufacturer, chip, and speed grade.

The initial copy of either report costs \$1,795; additional copies are only \$395 apiece. For more information, call Mercury Research (Scottsdale, Ariz.) at 602.998.9225; fax 602.998.4338 or send e-mail to service@mercury.org.

Embedded PC Designers Go to Class

Annabooks, publishers of the popular Annabooks series of PC-related technical handbooks, is holding a series of courses for embedded PC designers. Two- and three-day courses are offered in **PC Design for Embedded Applications, PC Cards and PCMCIA from A to Z, and Embedding MS-DOS and Windows**.

Classes are held in San Diego continually from December through March. Tuition ranges from \$995 to \$1,295 if paid 30 days in advance. Late registration adds \$200. Meals, course materials, and a complete Annabooks library are included. For more information and class schedules, call 800.462.1042; fax 619.673.1432.

Embedded Benchmarking Group Forms

Several industry insiders interested in benchmark programs for embedded software have formed an *ad hoc* working group to create a standard benchmark suite for embedded systems. Today, the only commonly used benchmark for embedded systems is Dhrystone, but Dhrystone results have proven to be a poor indicator of embedded systems performance, primarily because the benchmark's small size is not representative of modern embedded applications.

The new group includes representatives from IBM, Motorola, ARM, Hitachi, Intel, National Semiconductor, Microsoft, and Adobe. Its short-term plan is to collect and evaluate a variety of benchmarks, with the goal of eventually publishing a suite of benchmark programs and a testing procedure appropriate for the embedded marketplace. As Gideon Yuval of Microsoft remarked, "What we need is...something like SPEC89."

The group has established a mailing list and ftp archive at Stanford University. To join the group, send your name, address, phone number, and e-mail address to embench-request@umunhum.stanford.edu.