AT A GLANCE At Microprocessor Forum, AMD debuted the new processor with which it will challenge the top end of Intel's processor line. K7's aggressive superscalar design may put AMD in the performance lead over Intel's Katmai core. Digital's breakup has decimated the Alpha and StrongArm design teams. Will future designs from Compaq and Intel ever be as good? PA-8500 to hit 440 MHz; Power3 meets targets, aims for 500 MHz; Intel ships 450-MHz Xeon for workstations; Intel converts to 100% 0.25 micron; iCompression offers live(ly) MPEG-2 encoder; Virtual channel SDRAM supported, attacked; SGI, Real3D swap suits for ties. Compag will wrap 1M of L2 cache, a DRDRAM interface, and a radical new system bus around Digital's 21264 core running at 1 GHz. Intel has laid out its high-end processor roadmap through 2001. It includes a new IA-32 processor code-named Foster that may outperform the IA-64 line until McKinley arrives to save the day. Embedded News MicroJava 701 makes October debut; Sun cancels standalone Java chip plans; StrongArm-1100 takes companion to Jupiter; Jupiter II: NEC VR4121 rockets to 166 MHz; STMicroelectronics extends STPC line; MIPS says Lexra "R" not us; HP grabs ARM license; AMD fills out 186-based comm controllers; Osicom speeds Net+ARM silicon. Lucent and Motorola show the scalable StarCore 400, the first product of their recent partnership to challenge TI in DSPs. The PowerPC 405 is the first processor to use compression technology rather than an instruction subset to achieve high code density. Motorola uses new instructions, branch prediction, and 0.25-micron technology to double the performance of its ColdFire CPU. The new CPU64 core doubles the architectural width of the original CPU32 design and adds new SIMD instructions. The Slater Perspective: What Can You Do With a Terabyte?..... 36 Amazing electromechanical devices continue to match semiconductors in density, with important ramifications for PCs. Literature Watch will return next issue.

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