At a Glance

IBM Regains Performance Lead with Power2.....1 Power2 raises the performance bar to 126 SPECint92, higher than any current microprocessor. The three-chip set, used in IBM's RS/6000 systems, can issue up to six instructions per cycle and operates at up to 71.5 MHz when packaged in a multichip module.

Editorial: Putting Windows NT in Perspective3 Although Windows NT offers RISC vendors an opportunity to take PC market share from Intel's x86, the NT market will grow slowly. Significant gains by RISC processors will take several years.

Most Significant Bits4 IBM announces first PowerPC systems; AMD used dirty "clean room"; Court overturns reversal of AMD ruling; NEC announces 0.5-micron 8086 core; VLSI offers integrated ARM processor; interleaving boosts performance of S3 805i; Another UNIX unification announced; National unveils first QuickRing chips; C-Cube has real-time MPEG-2 encoder.

Polar Sets New Direction for PDA Market11 VLSI Technology and Intel have developed a highly integrated 386 processor and system-logic chip set that provides all the functions needed for a forthcoming PDA device from Compag and others.

First Newton Offers High-Integration Design14 The Newton MessagePad combines an ARM610 processor with a single ASIC that provides all the system logic. This approach allows for a low system cost and small device size. Future systems may use different processors, perhaps even PowerPC.

Despite the prevalence of PQFP and CPGA packages, some processor vendors are packaging their chips in TAB or in multichip modules to meet specific objectives. A few eliminate the package entirely by supporting chip-on-board designs. These alternatives could gain in popularity if their costs decrease in the future.

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MICROPROCESSOR REPORT

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