

AT A GLANCE

Exponential's PowerPC Blazes 1
Startup Exponential Technology's first chip, the 533-MHz x704, should outrun all other PowerPC processors when it appears in 2Q97.

Editorial: AMD, Cyrix Chase Intel's High End 3
New processors from AMD and Cyrix aim to offer P6-class performance, but this will put them right in Intel's crosshairs.

Most Significant Bits 4
Digital discloses 21164PC; FX!32 outperforms Pentium Pro; MIPS vanishes from NT market; Power PC 603e jumps to 240 MHz; AMD extends Elan family with 486 core; Motorola nabs Mitsubishi's embedded DRAM; MIPS rolls out new instructions; Trident brings DVD, 3D to P55C systems.

Digital 21264 Sets New Standard 11
The out-of-order Alpha processor with stellar memory bandwidth should smash performance records when it debuts late next year.

HP Pumps Up PA-8x00 Family 18
Building on the leading performance of the PA-8000, HP plans two new versions that will keep it at or near the lead through mid-1998.

Intel's Long-Awaited P55C Disclosed 20
The P55C is the first MMX chip, but larger caches, improved branch prediction, and a longer pipeline improve integer performance too.

Cyrix Doubles 6x86 Performance with M2 23
By improving the cache and TLB, Cyrix hopes to unleash the performance of its 6x86 processor core, reaching P6 levels in 1H97.

K6 to Boost AMD's Position in 1997 26
AMD plans to get back into the x86 performance race with the K6, an out-of-order processor due to appear in 2Q97.

Sun Reveals First Java Processor Core 28
While slightly larger than other cores, PicoJava should outperform them on Java code by executing most Java instructions in hardware.

Hitachi SH-4 Gets Graphically Superscalar 32
At 200 MHz, the SH-4 will deliver impressive performance, particularly on 3D graphics, but it may not appear until 1998.

RM7000 Strong on Cost/Performance 36
The RM7000 contains 256K of on-chip cache and will deliver strong performance for embedded devices and low-end workstations.

LSI's TinyRisc Core Shrinks Code Size 40
TinyRisc compresses MIPS code into 16-bit instructions, reducing the amount of memory needed to store embedded programs.

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