

Athlon Outruns Pentium III 1
 Achieving what many pundits and Intel thought impossible, AMD has birthed Athlon, the world's fastest x86 microprocessor. Now shipping in systems at up to 650 MHz, the 0.25-micron powerhouse outperforms Intel's top-of-the-line 600-MHz Pentium III on every benchmark that AMD ran, averaging 20% faster overall.

Editorial: What Price Standards? 3
 Sometimes standards are good. But not always. Sometimes standards get in the way of innovation. The sheer existence of a dominant standard can deter the development of a better idea.

Most Significant Bits 4
 Via buys Centaur, slashes Cyrix; Embedded DRAM gives Bitboys an edge; Intel sinks the 752.

Embedded News 5
 Mips adds a new dimension to MIPS64; Arm announces two soft cores with DSP.

AMD Irongate Leads to Slot A 12
 Sporting a 200-MHz system bus, Athlon's companion chip set is faster than Intel's 440BX chip set. But with only PC100 DRAM and 2x AGP, it will fall short of Intel's upcoming 820 Camino chip set.

Sun Reveals Secrets of "Magic" 13
 Jumping on the VLIW bandwagon, Sun has revealed a new architecture for the coming wave of information appliances. Although similar to other VLIW architectures that have gone before it, MAJC is designed from the ground up to be Java friendly.

IDT Expands Embedded MIPS Family 18
 IDT is enhancing its RC5000 core with lower power, higher frequency, more DSP instructions, and better SDRAM support.

Lexra Adds DSP Extensions 19
 Embedded-core vendor Lexra is revealing a new superscalar core with a powerful set of instructions called Radiax that will bring impressive DSP performance to low-power, low-cost SOC designs.

Profusion Premieres 22
 Breaking the four-CPU symmetric-multiprocessing barrier, Corollary has delivered its eight-way Profusion chip set. The chip set gives Intel Pentium III systems a substantial price/performance lead over other competitors on TPC-C benchmarks.

The Slater Perspective: A Quiet Revolution at Intel 24
 Intel is a PC-processor company, right? Well, judging from its investments of late, the company may be looking to broaden its reach into all manner of Internet-related markets, just in case PCs aren't forever.

Literature Watch 25

Patent Watch 26

Chart Watch: Embedded Processors 27

Resources 28

Recent IC Announcements will return in the next issue.

Founder and Executive Editor
 Michael Slater
 mslater@mdr.cahners.com

Publisher and Editorial Director
 Linley Gwennap
 linley@mdr.cahners.com

Editor in Chief
 Keith Diefendorff
 keithd@mdr.cahners.com

Senior Editor
 Peter N. Glaskowsky
 png@mdr.cahners.com

Senior Editor
 Tom R. Halfhill
 thalfhill@mdr.cahners.com

Associate Editor: Laurie Masters

Editorial Board

Dennis Allison	Rich Belgard
Brian Case	Jeff Deutsch
Dave Epstein	Don Gaubatz
John Novitsky	Bernard Peuto
Nick Tredennick	John F. Wakerly

Editorial Office

298 S. Sunnyvale Avenue
 Sunnyvale, CA 94086-6245

Phone: 408.328.3900 Fax: 408.737.2242

Microprocessor Report (ISSN 0899-9341) is published every three weeks, 17 issues per year. Rates are: N. America: \$695 per year, \$1,295 for two years. Europe: £495 (€695) per year, £925 (€1,300) for two years. Elsewhere: \$795 per year, \$1,495 for two years. Back issues are available.

Published by



A member of the Cahners Electronics Group

Business Office

874 Gravenstein Hwy. So., Suite 14
 Sebastopol, CA 95472

Phone: 707.824.4004 Fax: 707.823.0504

Subscriptions: 707.824.4001

cs@mdr.cahners.com

World Wide Web: www.MDRonline.com

Copyright ©1999, MicroDesign Resources. All rights reserved. No part of this newsletter may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without prior written permission.

Computer Press Award, Best Newsletter,
 Winner, 1993, 1994, 1997, 1998

Printed on recycled paper with soy ink.