## At a Glance

**PowerPC Gains NT and PCI Support** ......**1** IBM, attempting to establish a new platform for personal computing, announced a PowerPC reference specification, which describes systems that can run operating systems such as AIX, OS/2, Solaris, and Taligent. Microsoft announced Windows NT support for the new platform, and IBM will supply a PCI chip set for PowerPC.

**Editorial: Stupid Compiler Tricks**.....**3** Although legal under SPEC rules, excessive compiler tuning makes it nearly impossible for users to achieve the performance quoted by vendors. SPEC needs to change its rules for SPEC94.

**QuickRing Delivers High Bandwidth**......**13** National has combined a number of innovative techniques to create QuickRing, embodied in its QR0001 interface chip. The new interconnect scheme can deliver high bandwidth at a moderate cost and is being adopted by a number of system vendors.

**Portable Software Threatens x86 Hegemony......20** Sparks flew at the recent Microprocessor Forum when two computer architects discussed whether the emergence of portable software, such as Windows NT, will reduce the x86's near-monopoly.

Literature Watch	22
Recent IC Announcements	23
Resources	24

## MICROPROCESSOR REPORT

THE INSIDERS' GUIDE TO MICROPROCESSOR HARDWARE

Publisher and Editorial Director Michael Slater E-mail: mslater@mdr.ziff.com

Editor in Chief Linley Gwennap Phone 408.720.8840 Fax 408.720.9465 E-mail: linley@mdr.ziff.com

> Managing Editor Elizabeth Longsworth

Senior Editor Curtis P. Feigel E-mail: cfeigel@mdr.ziff.com

**Graphic Designer:** Rachel Dufour **Production Assistant:** Janet Spilman

## **Editorial Board**

Dennis Allison Brian Case Morris Enfield Bruce Koball George Morrow John Snell John F. Wakerly Board Rich Belgard Jeff Deutsch Mike Feibus Dean McCarron Bernard L. Peuto Nick Tredennick John H. Wharton

Subscriptions, customer service, and Microprocessor Forum information: 707.824.4004. E-mail: cs@mdr.ziff.com

*Microprocessor Report* is published every three weeks, 17 issues per year. Rates are: *N. America:* \$445 per year, \$795 for two years. *Europe:* £345 per year, £595 for two years. *Elsewhere:* \$575 per year, \$995 for two years. Additional copies in the same envelope: \$145 per year in North America, \$195 elsewhere. Back issues are available.

*Microprocessor Report* reviews and analyzes industry news based on information obtained from sources generally available to the public and from industry contacts. While we consider these sources to be reliable, we cannot guarantee their accuracy. Readers assume full responsibility for any use made of the information contained herein.

Throughout this newsletter, trademark names are used. Rather than place a trademark symbol at every occurrence, we hereby state that we are using the names only in an editorial fashion with no intention of infringement of the trademark.

## Published by MICRODESIGN

President: Michael Slater

General Manager: Dennis Moss

Editorial and Business Offices 874 Gravenstein Hwy. So., Suite 14 Sebastopol, CA 95472 Phone 707.824.4004 Fax 707.823.0504 E-mail: cs@mdr.ziff.com

Copyright ©1993, 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.

Printed on recycled paper with soy ink.