

The following excerpts are from a working draft for MIPS Technologies' 1998 corporate brochure. There are several excerpts taken from different parts of the draft, so they do not constitute continuous script but rather a sampling of writing style.

Warthman Associates wrote the original manuscript and found the industry-analyst testimonials through an independent literature search.

The following text is Copyright © 1998 by MIPS Technologies, Inc. All rights reserved.

▪
▪
▪

The breadth of MIPS-based product lines and their support infrastructure is the result of powerful alliances with Partners. MIPS Partners provide multiple sourcing of standard parts, competitive pricing, and specialty parts. OEM system developers value the ability to quickly select from a broad range of off-the-shelf processors, quickly customize core designs in alliance with MIPS Partners, quickly select familiar development tools, and quickly port or modify a huge base of existing system and application software using those development tools.

The high performance and low cost of MIPS-based processors has made them especially successful in the video games market, where price/performance is a dominant factor. But the diversity of MIPS-based processors currently in production, plus the number of new implementations in the design phase, makes these processors competitively available for virtually all existing and emerging digital applications in the consumer and embedded markets.

What the Press Says:

"1996 brought reason for celebration in the halls at MIPS Technologies. Shipments of MIPS-based processors shot up somewhere beyond 17 million units, ... more than triple the previous year's shipments, which were more than triple the volume of the year before that."

Microprocessor Report, January 27, 1997.

"Many customers no doubt selected MIPS on the strength of its presence in the consumer market."

Microprocessor Report, January 26, 1998.

"Clearly, NEC has a winner from the outset, ... earning the [NEC] V_R4300 the Editor's Choice award for its combination of price, performance, and flexibility."

Microprocessor Report, January 26, 1998.

"MIPS has more than enough momentum in the embedded market to prosper."

Microprocessor Report, April 20, 1998.

"The new [IDT] RC32364 processor offers terrific performance for its price, drastically undercutting the best PowerPC and StrongArm processors."

Microprocessor Report, June 1, 1998.

"The [MIPS] architecture appears in most, if not all, of the newest high-volume market segments."

Microprocessor Report, June 1, 1998.

-
-
-

Strengths of the MIPS Architecture

MIPS has its roots in high-performance design. It has one of the industry's richest track records in the design of high-performance functions—such as superscalar and superpipelined execution, out-of-order execution and register renaming, speculative execution across multiple branches, dynamic instruction issue, instruction predecoding, dynamic branch prediction, cache structures for out-of-order instruction fetching, multiprocessor virtual-memory management and coherence, supercomputing floating-point operations, and split-transaction system buses. MIPS has implemented these features in scalable designs running at very high clock rates.

By first creating an architecture to solve the most challenging computational problems, MIPS is positioned to bring its huge portfolio of high-performance design solutions to the cost- and power-sensitive consumer and embedded markets. This top-down approach distinguishes the MIPS architecture from others that target only embedded applications and attempt to scale up in performance. At MIPS, much of the hardest work is done. Future work is a matter of scaling down and cost optimization.

-
-
-

Tools and Tool Vendors

There are well over 150 hardware and software development tools available for MIPS-based system development—more tools than for any other RISC architecture. The tools include several types of compilers, debuggers, real-time and handheld operating systems, hardware and software simulators, software models, software-development environments, evaluation boards, logic analyzers and preprocessors, in-circuit emulators, network interfaces, page-description languages, and printer interfaces.

These tools are provided by more than 50 tool vendors, each of whom has made a substantial investment in their MIPS-compatible products. Chances are very good that the tool an OEM developer is using today also supports the MIPS processor family.

-
-
-

MIPS Partners

MIPS creates investment strength and market dominance through partnership alliances. Partners are licensed to fabricate MIPS designs, create and fabricate derivative designs, and sell the resulting products in the open market. In 1997, there were over 37 chip-design teams working on various implementations of standard MIPS and MIPS-derivative implementations.

-
-
-

Licensing and Business Models

The MIPS licensing model encourages innovative development, diversity, multisourcing, and competitive pricing. MIPS Technologies provides its Partners with design information on standard parts, down to the mask level. Each Partner is able to create derivative products from the licensed core designs. Together, the Partners—each focusing on their unique strength—offer a broad selection of standard, enhanced, or application-specific microprocessors for the market segments in which they are best suited.

The MIPS business model leverages the cost of developing, fabricating, and marketing this broad selection of microprocessors through its partnering relationships. This collaboration allows the entire MIPS team, including tool vendors, to make the very high investments required for leading-edge processor development, fabrication, and sales. Each team member shares in the total market created by all members working together. The proof of the success of this strategy lies in the fact that MIPS Partners have already gained nearly 50% of the RISC-processor market.

-
-
-

A Simple Choice

RISC architectures deliver higher performance at lower cost than any other type of microprocessor architecture. And MIPS is the RISC-technology leader, with the longest and strongest consistent growth, the best track record for price-performance and power/performance innovation, the technological diversity to serve the emerging digital consumer and embedded markets, and the financial strength to push its growth curve well into the future.

No other architecture offers the breadth, scalability, and sustainability of the MIPS RISC architecture.