

HEAVY READING

Components

Insider

Equipment Vendors Rate Multicore Processors & Suppliers

TABLE OF CONTENTS

- I. Introduction
- II. Performance & Applications
 - Packet Processing Performance
 - Applications
 - Use of FPGAs & ASICs
- III. Multicore Processor Usage
 - Integrated Multicore Processors
 - Network Processors
 - General-Purpose Processors
 - Communications Processors
- IV. Multicore Processor Vendors
- V. Integrated or Discrete Functionality
 - Security Acceleration
 - Traffic Management
 - Control Plane Processing
- VI. Future Multicore Processor Requirements
 - Performance
 - Power Envelope
 - Interfaces
 - Integration
 - Vendor Support
 - Selection Criteria
- VII. Conclusions

Report Highlights

400G packet processors are already being used by one fifth of companies

Half of companies will require 100G packet processing in the next 12 to 24 months

There is a significant shift to integrated solutions with traffic management, DPI, control plane processor and security acceleration

Intel is rated as the leading multicore processor vendor, followed by AMD, Freescale, Broadcom and Cavium

Cavium is the leading vendor for integrated multicore processors, with 35 percent using OCTEON II and OCTEON III

Broadcom is the leading vendor for communication processors and network processors

Five ARMv8-based processors are being used by companies covered here

Use of this PDF file is governed by the terms and conditions stated in the Subscriber License Agreement included in this file. Any violation of the terms of this Agreement, including unauthorized distribution of this file to third parties, is considered a breach of copyright. Heavy Reading will pursue such breaches to the full extent of the law. Such acts are punishable in court by fines of up to \$100,000 for each infringement.