

# Panel on Today's Multicore Solutions:

## Battle of the Multicores

Mark Litvack, RMI® Corporation

# RMI® Corporation Introduction

- Announced agreement to merge with NetLogic Microsystems
- RMI Offices worldwide
  - Headquarters in Cupertino, CA
  - Austin, China, Europe, India, Korea, Taiwan and Japan
- Over 270 employees
- Over 200 Revenue Generating Customers
- Over 110 Patents Filed or Issued
- Broad range of solutions for emerging markets and applications
  - Enterprise markets
  - Infrastructure markets
  - Consumer media

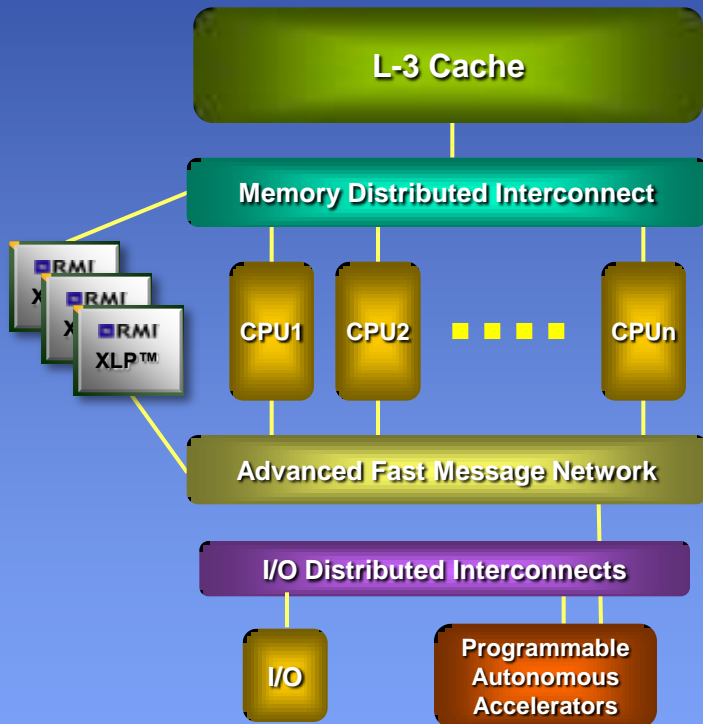


**Digital Consumer Solutions**  
Low Power MIPS based,  
Accelerated SoC



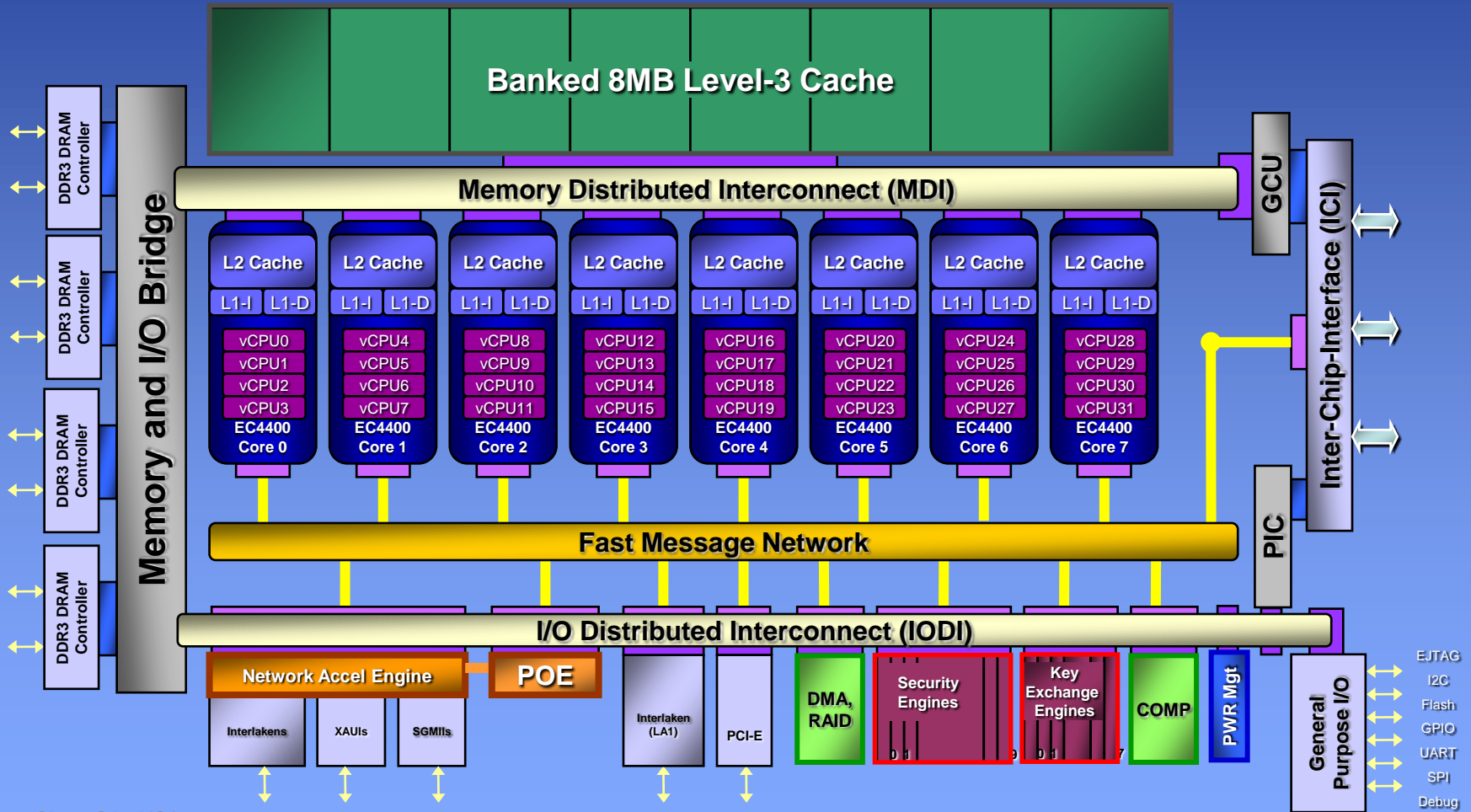
**Enterprise, Data Center,  
Carrier Solutions**  
Threaded Processors for  
Throughput-Optimized,  
Connected Computing

# RMI XLP™ Architectural Advantages



Feature	Benefit
Breakthrough processor core with: <ul style="list-style-type: none"> <li>▪ 4-Issue</li> <li>▪ Hardware Floating Point</li> <li>▪ Out-of-Order Execution</li> <li>▪ L3 cache</li> </ul>	Highest performance
Fine-grain hardware 4-way simultaneous multi-threading (SMT)	Mitigates memory latency; enhances scalability
Advanced Fast Messaging Network	Removes locks, allows scaling, distributes packets efficiently
Autonomous accelerators	Highest throughput offloads
Inter-chip coherency	Allows scaling to 100Gbps and beyond

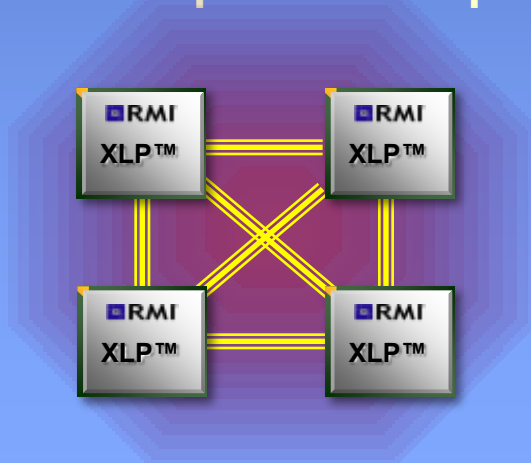
# New Generation: RMI XLP™ Processor Architecture



# RMI XLP™ Processor Family

## In a Class by Itself

- *Highest performance processor*
  - **Multi-threaded, quad-issue, out of order execution, and FPU**
  - **Autonomous accelerators**
  - **Scalable Advanced Fast Message Network**
- *Multi-core to multi-chip scalability*
  - **From single core to 32 virtual CPU's**
  - **Expansion from 32 to 128 virtual CPU's**
  - **From 100Mbps to 100Gbps and beyond**



Total performance  
levels up to 10x that  
of any other  
alternative