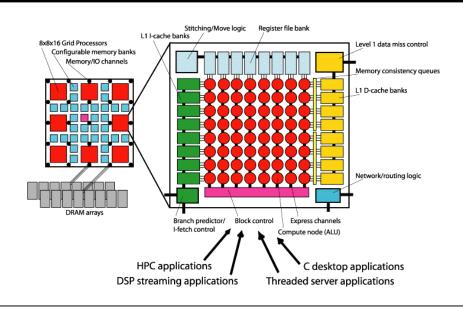


TRIPS: Single Chip Teraflop Computing





Impact: High Performance and Adaptivity

Scalable Commercial Performance: 500 GIPS in a 35 nanometer design, 60 GIPS in a 100nm prototype.

High performance signal processing: 5 Teraflops per chip in a 35 nanometer implementation, 300 GFLOPS in a 100nm prototype.

Large economies of scale: Merge the desktop, HPC, DSP, and server markets into a single family of TRIPS implementations by 2010.

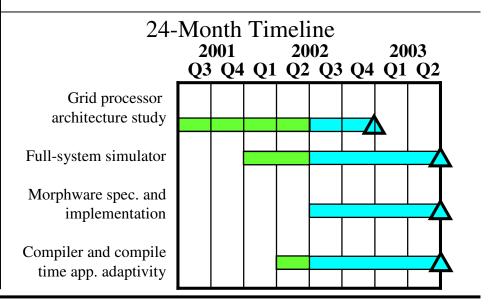
New TRIPS Technologies

Grid Processor Cores: Technologically scalable, adaptive high performance for signal processing and commercial apps.

Non Uniform Cache Architectures: Automatically adapts to working set of applications, delivering stable performance.

LibOS Morphware: User-level software layers allowing high-performance morphing with reduced programming time.

Application Adaptivity: Library and compiler support for applications to run on multiple platforms and environments.



The University of Texas at Austin/IBM Austin Research Laboratory: PIs Stephen W. Keckler and Doug Burger