
CS 152
Computer Architecture and Engineering

Introduction to Architectures for Digital Signal Processing

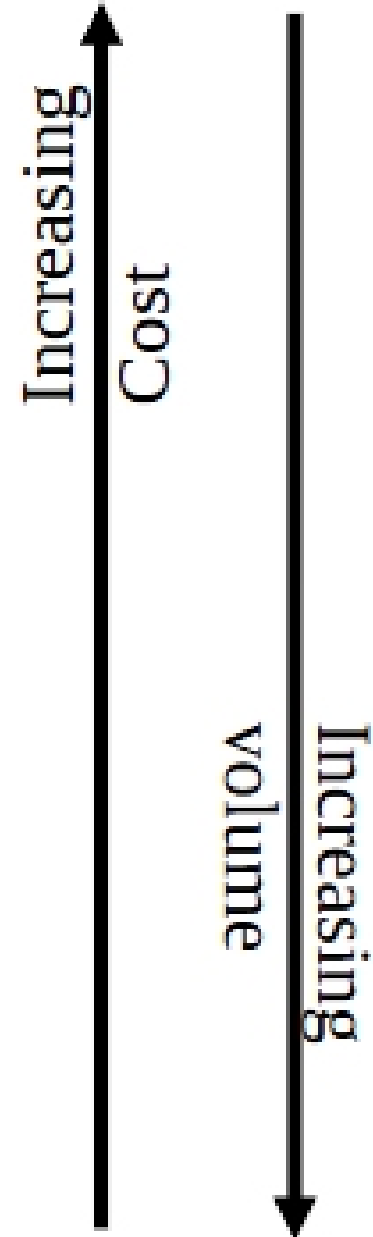
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Processor Applications

- General Purpose - high performance
 - Pentiums, Alpha's, SPARC
 - Used for general purpose software
 - Heavy weight OS - UNIX, NT
 - Workstations, PC's
- Embedded processors and processor cores
 - ARM, 486SX, Hitachi SH7000, NEC V800
 - Single program
 - Lightweight, often realtime OS
 - DSP support
 - Cellular phones, consumer electronics (e.g. CD players)
- Microcontrollers
 - Extremely cost sensitive
 - Small word size - 8 bit common
 - Highest volume processors by far
 - Automobiles, toasters, thermostats, ...



The Processor Design Space

