intel®

i486™ MICROPROCESSOR

- **Binary Compatible with Large Software Base**
  - MS-DOS*, OS/2**, Windows
  - UNIX*** System V/386
  - iRMX®, iRMK™ Kernels

- **High Integration Enables On-Chip**
  - 8 Kbyte Code and Data Cache
  - Floating Point Unit
  - Paged, Virtual Memory Management

- **Easy To Use**
  - Built-In Self Test
  - Hardware Debugging Support
  - Intel Software Support
  - Extensive Third Party Software Support

- **High Performance Design**
  - Frequent Instructions Execute in One Clock
  - 25 MHz and 33 MHz Clock Frequencies
  - 106 Mbyte/Sec Burst Bus
  - CHMOS IV Process Technology

- **Complete 32-Bit Architecture**
  - Address and Data Busses
  - Registers

- **Multiprocessor Support**
  - Multiprocessor Instructions
  - Cache Consistency Protocols
  - Support for Second Level Cache

The i486™ CPU offers the highest performance for DOS, OS/2, Windows and UNIX System V/386 applications. It is 100% binary compatible with the 386™ CPU. One million transistors integrate cache memory, floating point hardware and memory management on-chip while retaining binary compatibility with previous members of the 86 architectural family. Frequently used instructions execute in one cycle resulting in RISC performance levels. An 8 Kbyte unified code and data cache combined with a 106 Mbyte/Sec burst bus at 33.3 MHz ensure high system throughput even with inexpensive DRAMs.

New features enhance multiprocessing systems. New instructions speed manipulation of memory based semaphores. On-chip hardware ensures cache consistency and provides hooks for multilevel caches.

The built in self test extensively tests on-chip logic, cache memory and the on-chip paging translation cache. Debug features include breakpoint traps on code execution and data accesses.

i486™ Microprocessor Pipelined 32-Bit Microarchitecture
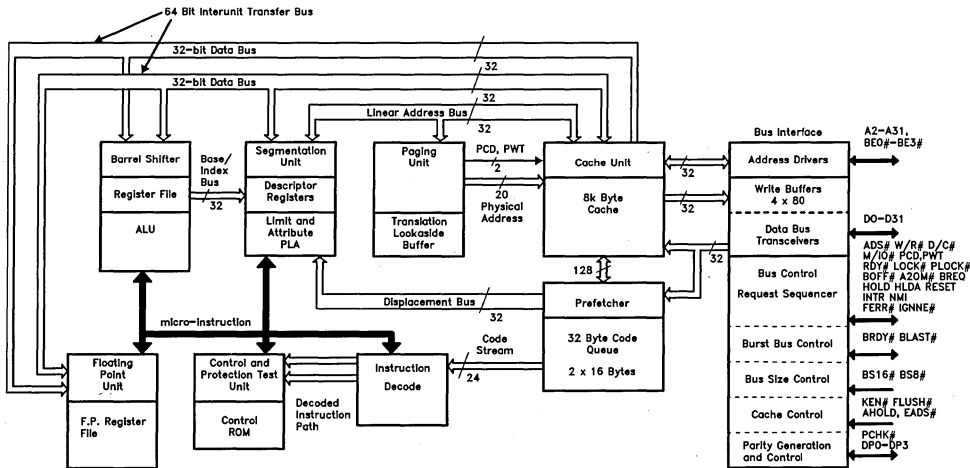
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