



80960KB EMBEDDED 32-BIT MICROPROCESSOR WITH INTEGRATED FLOATING-POINT UNIT

- **High-Performance Embedded Architecture**
 - 25 MIPS Burst Execution at 25 MHz
 - 9.4 MIPS* Sustained Execution at 25 MHz
- **512-Byte On-Chip Instruction Cache**
 - Direct Mapped
 - Parallel Load/Decode for Uncached Instructions
- **Multiple Register Sets**
 - Sixteen Global 32-Bit Registers
 - Sixteen Local 32-Bit Registers
 - Four Local Register Sets Stored On-Chip
 - Register Scoreboarding
- **4 Gigabyte, Linear Address Space**
- **Pin Compatible with 80960KA**
- **Built-In Interrupt Controller**
 - 31 Priority Levels, 256 Vectors
 - 3.4 μ s Latency @ 25 MHz
- **Easy to Use, High Bandwidth 32-Bit Bus**
 - 66.7 Mbytes/s Burst
 - Up to 16 Bytes Transferred per Burst
- **132-Lead Packages:**
 - Pin Grid Array (PGA)
 - Plastic Quad Flat-Pack (PQFP)
- **On-Chip Floating Point Unit**
 - Supports IEEE 754 Floating Point Standard
 - Four 80-Bit Registers
 - 13.6 Million Whetstones/s (Single Precision) at 25 MHz

The 80960KB is a member of Intel's i960® 32-bit processor family, which is designed especially for embedded applications. It includes a 512-byte instruction cache, an integrated floating-point unit and a built-in interrupt controller. The 80960KB has a large register set, multiple parallel execution units and a high-bandwidth burst bus. Using advanced RISC technology, this high performance processor is capable of execution rates in excess of 9.4 million instructions per second*. The 80960KB is well-suited for a wide range of applications including non-impact printers, I/O control and specialty instrumentation.

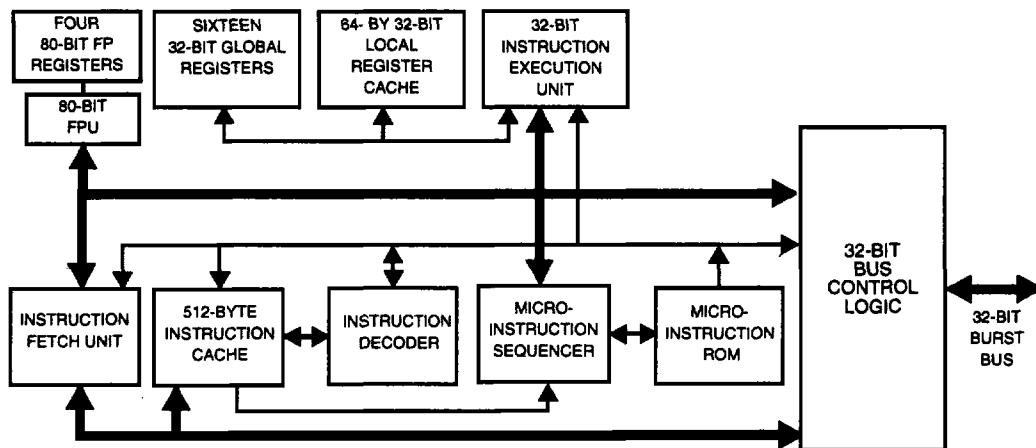


Figure 1. The 80960KB Processor's Highly Parallel Architecture

* Relative to Digital Equipment Corporation's VAX-11/780 at 1 MIPS (VAX-11™ is a trademark of Digital Equipment Corporation)

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