PC Processors (386SX to Blue Lightning)

PS/2®, ValuePoint™, ThinkPad® Megahertz	Paths	Standard Features
80386 SX L40, N51, CL57, 700T 35, 40, 55, 56, 57, 65 16, 20, 25, 33 MHz	16 Bit Data Path 32 Bit Processor 24 Bit Address Path	⇛ Address pipelining
80386 SL N45, 300 16, 20, 25 MHz	16 Bit Data Path 32 Bit Processor 24 Bit Address Path	⇛ Address pipelining ⚛ Power management
80386 DX 70, P70, 80 16, 20, 25, 33 MHz	32 Bit Data Path 32 Bit Processor 32 Bit Address Path	⇛ Address pipelining
80386 SLC 325T, N51, 56, 57, (Upgrade for 56, 57) 16, 20, 25 MHz	Same as 80386SX except **32 bit data path** between CPU and memory cache [1]	8 KB internal cache (2 way ; write-thru; w/ parity) ⇛ Optimized instructions ⇛ Address pipelining ⚛ Power management
80486 SLC 700, 700C, 710T 25 MHz	Same as 80386SX except **32 bit data path** between CPU and memory cache [1]	16 KB internal cache (4 way ; write-thru; w/ parity) ⇛ Optimized instructions ⇛ Address pipelining ⚛ Power management
80486 SLC2 53, 56, 57, 500, 720, 720/C (Upgrade for 56, 57, 700, 700C) 40/20, 50/25 MHz	Same as 80386SX except **32 bit data path** between CPU and memory cache [1]	Same as ***80486SLC*** above
80486 SLC3 56, 57 (Upgrade for 56, 57) 75/25, 60/20 MHz	Same as 80386SX except **32 bit data path** between CPU and memory cache [1]	Same as ***80486SLC*** above
Blue Lightning 50/25, 66/33 MHz 75/25, 100/33 MHz	32 Bit Data Path 32 Bit Processor 32 Bit Address Path	16 KB internal cache (4 way ; write-thru; w/ parity) ⇛ Optimized instructions ⇛ Address pipelining ⚛ Power management

ALL 386 SX PROCESSORS AND ABOVE

Modes	Addressable Memory	Operating Systems
REAL	1 MB	*DOS*
PROTECT	16 MB	*OS/2 1.3, Windows 3.X* *DOS Extenders*
NATIVE PROTECT	4 GB	***OS/2 2.X,*** *Windows NT* *DOS Extenders, AIX PS/2*
VIRTUAL 8086	Multiple 640 KB	***OS/2 2.X,*** *Windows 3.X, NT* *DOS Extenders* *AIX PS/2 DOS Merge*

The **386 SX** through the Pentium processor all offer the same modes which only means that applications run faster on a Pentium. Operating systems and applications written for the 386 family will be compatible with the 486 and Pentium processor.

The **386 SX** and all **SLC** processors can only address 16 MB of memory, although 64 TB of virtual memory, because of its 24 bit address path.

The **486 SLC2**, **486 DX2,** and **Blue Lightning** run twice as fast internally (50 MHz) as externally (25 MHz).
The **486 SLC3** and **Blue Lightning** run three times as fast internally (75 MHz) as externally (25 MHz).

Note 1: Although the **SLC's** have a 16 bit data bus like the **386 SX**, the memory cache is integrated on the processor chip (not external) so the memory cache transfers to the CPU in 32 bits.

The **386 SX**, **386 SL**, and **386 DX** are developed and manufactured by Intel®.
The **SLC** and **Blue Lightning** processors are developed and manufactured by IBM®.

Address pipelining: decodes next instruction's address while the current instruction is in progress.
Optimized instructions: instructions execute in fewer clock cycles.

(1INTEL) Compiled by Roger Dodson, IBM. March 1994