

PC Processors (Blue Lightning DX2)

	<i>BL486DX2-50</i> <i>BL486DX2-V50</i> <i>Cx486DX2-50</i> <i>Cx486DX2-V50</i>	<i>BL486DX2-66</i> <i>BL486DX2-V66</i> <i>Cx486DX2-66</i> <i>Cx486DX2-V66</i>	<i>BL486DX2-V80</i> <i>Cx486DX2-V80</i>
Vendor	IBM® / Cyrix®	IBM / Cyrix	IBM / Cyrix
Type	CISC / x86 compatible	CISC / x86 compatible	CISC / x86 compatible
Code name	M7	M7	M7
Avail date	August 1994	September 1994	October 1994
IBM models			
MHz	50/25 MHz	66/33 MHz	80/40 MHz
SPECint92			
SPECfp92			
Data bus	32 bit Data Path	32 bit Data Path	32 bit Data Path
Processor	32 bit Processor	32 bit Processor	32 bit Processor
Address bus	32 bit Address Path	32 bit Address Path	32 bit Address Path
Cache	8 KB unified cache Write-back 4 way set	8 KB unified cache Write-back 4 way set	8 KB unified cache Write-back 4 way set
Features	Math coprocessor (10% faster than Intel)	Math coprocessor (10% faster than Intel)	Math coprocessor (10% faster than Intel)
	Optimized instructions Address pipelining Burst mode bus Power mgmt (SMM) 0.65u	Optimized instructions Address pipelining Burst mode bus Power mgmt (SMM) 0.65u	Optimized instructions Address pipelining Burst mode bus Power mgmt (SMM) 0.65u
Voltage	5.0 volts in 168 pin PGA 3 volts in PQFP 3 volts in 168 pin PGA	5.0 volts in 168 pin PGA 3 volts in PQFP 3 volts in 168 pin PGA	3 volts in 168 pin PGA

IBM Microelectronics will sell selected versions of Cyrix's x86 microprocessors as part of the IBM Blue Lightning family

IBM manufactures the processors for Cyrix

BL486... = IBM Blue Lightning
Cx486... = Cyrix

The performance benefit of L1 write-back cache is most beneficial in systems with an excess of memory writes and/or slow memory subsystems. These situations are most noticeable in clock-doubled systems, higher clock speed systems, and systems with no L2 cache

Blue Lightning DX2/Cyrix chips require motherboards designed for write-back CPU's. Users will require VL-Bus 2.0 or PCI compliant add in cards to allow busmastering with write-back CPU's

These CPU's are both software and bus compatible with the Intel® 80486DX

Math coprocessor has automatic suspend mode (Intel 486 does not) and is about 10% faster than Intel's comparable math coprocessor

The "V" in chip name designates a 3 volt processor

PGA = Pin Grid Array

PQFP = Plastic Quad Flat Pack (used to solder to planar boards)