

AMD Athlon 64 X2 6400+ specifications

General information

Type	CPU / Microprocessor
Market segment	Desktop
Family	AMD Athlon 64 X2
Model number ?	6400+
CPU part numbers	<p>ADX6400IAA6CZ is an OEM/tray microprocessor</p> <p>ADX6400CZBOX is a boxed processor with fan and heatsink</p> <p>ADX6400CZWOF is a boxed processor without fan and heatsink</p>
Stepping code	CCB8F
Frequency ?	<p>6400+ (rated)</p> <p>3200 MHz (real)</p>
Bus speed ?	One 1000 MHz 16-bit HyperTransport link (2GT/s)
Clock multiplier ?	16
Package	940-pin organic micro Pin Grid Array (micro-PGA)
Socket	Socket AM2
End-of-Life date	Last order date is 1st quarter 2008 ⁽¹⁾

Architecture / Microarchitecture

Microarchitecture	K8
Processor core ?	Windsor
Core stepping ?	JH-F3
CPUID	40F33
Manufacturing process	0.09 micron silicon-on-insulator (SOI) technology 243 million transistors
Data width	64 bit
The number of CPU cores	2
The number of threads	2
Floating Point Unit	Integrated
Level 1 cache size ?	2 x 64 KB 2-way set associative instruction caches 2 x 64 KB 2-way set associative data caches
Level 2 cache size ?	2 x 1 MB 16-way set associative exclusive caches
Physical memory	1 TB
Virtual memory	256 TB
Multiprocessing	Uniprocessor
Extensions and Technologies	<p>MMX instructions</p> <p>Extensions to MMX</p> <p>3DNow! technology</p> <p>Extensions to 3DNow!</p> <p>SSE / Streaming SIMD Extensions</p> <p>SSE2 / Streaming SIMD Extensions 2</p> <p>SSE3 / Streaming SIMD Extensions 3</p> <p>AMD64 / AMD 64-bit technology ?</p> <p>EVP / Enhanced Virus Protection ?</p> <p>AMD-V / AMD Virtualization technology</p>
Low power features	<p>Cool'n'Quiet technology</p> <p>Halt state</p> <p>Stop Grant state ?</p>

Integrated peripherals / components

Integrated graphics	None
Memory controller	The number of controllers: 1 Memory channels: 2 Supported memory: DDR2-800 Maximum memory bandwidth (GB/s): 12.8
Other peripherals	HyperTransport 2.0 technology (1 link)

Electrical / Thermal parameters

V core ?	1.35V / 1.4V
Maximum operating temperature ?	55°C - 63°C
Thermal Design Power ?	125 Watt

Notes on AMD Athlon 64 X2 6400+

[1] - Information is not confirmed