

## AMD Phenom X4 9750 (95W) specifications

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### General information

Type	<a href="#">CPU / Microprocessor</a>
Market segment	Desktop
Family	<a href="#">AMD Phenom X4</a>
Model number <a href="#">?</a>	<a href="#">9750</a>
CPU part numbers	HD9750WCJ4BGH is an OEM/tray microprocessor HD9750WCGHBOX is a boxed microprocessor with fan and heatsink
Stepping codes	<a href="#">JAAAB AA</a> <a href="#">JAAFBA AA</a> <a href="#">JAAHBA AA</a>
Frequency <a href="#">?</a>	<b>2400 MHz</b>
Bus speed <a href="#">?</a>	<b>One 1800 MHz 16-bit HyperTransport link (3.6 GT/s)</b>
Clock multiplier <a href="#">?</a>	<b>12</b>
Package	940-pin organic micro-PGA
Sockets	<a href="#">Socket AM2</a> <a href="#">Socket AM2+</a>
Introduction date	<a href="#">Mar 27, 2008</a>
Price at introduction	\$215

### Architecture / Microarchitecture

Microarchitecture	K10
Platform	Cartwheel (mainstream platform with AMD 780G chipset) Spider (performance platform with AMD 790FX/790GX chipsets)
Processor core <a href="#">?</a>	<a href="#">Agena</a>
Core stepping <a href="#">?</a>	DR-B3
CPUID	100F23
Manufacturing process	0.065 micron silicon-on-insulator (SOI) technology 450 million transistors
Die	285mm <sup>2</sup>
<b>Data width</b>	<b>64 bit</b>
<b>The number of CPU cores</b>	<b>4</b>
<b>The number of threads</b>	<b>4</b>
Floating Point Unit	Integrated
Level 1 cache size <a href="#">?</a>	4 x 64 KB 2-way set associative instruction caches 4 x 64 KB 2-way set associative data caches
<b>Level 2 cache size <a href="#">?</a></b>	<b>4 x 512 KB 16-way set associative caches</b>
<b>Level 3 cache size</b>	<b>2 MB 32-way set associative shared cache</b>
Multiprocessing	Uniprocessor
Extensions and Technologies	MMX instructions Extensions to MMX 3DNow! technology Extensions to 3DNow! SSE / Streaming SIMD Extensions SSE2 / Streaming SIMD Extensions 2 SSE3 / Streaming SIMD Extensions 3 SSE4a <a href="#">?</a> AMD64 / AMD 64-bit technology <a href="#">?</a> EVP / Enhanced Virus Protection <a href="#">?</a> AMD-V / AMD Virtualization technology
Low power features	Cool'n'Quiet 2.0 CoolCore technology <a href="#">?</a> Independent Dynamic Core Technology <a href="#">?</a> Dual Dynamic Power Management <a href="#">?</a> Core C1 and C1E states

Package S1, S3, S4 and S5 states

### Integrated peripherals / components

Integrated graphics	None
Memory controller	The number of controllers: 1 Memory channels: 2 Channel width (bits): 72 Supported memory: DDR2-1066 DIMMs per channel: up to 2 Maximum memory bandwidth (GB/s): 17.1
Other peripherals	HyperTransport 3.0 technology

### Electrical / Thermal parameters

V core <a href="#">?</a>	1.15V - 1.25V
V NorthBridge	1.25V
Maximum operating temperature <a href="#">?</a>	55°C - 70°C
<b>Thermal Design Power <a href="#">?</a></b>	<b>95 Watt</b>

### Notes on AMD Phenom X4 9750 (95W)

On socket AM2+ platforms in the minimum performance state the processor runs at 1200 MHz / 1.05 Volt core voltage, and has TDP 56.9 Watt

On socket AM2 platforms in the minimum performance state the processor runs at 1200 MHz / 1.15 - 1.25 Volt core voltage, and has TDP 65.3 Watt