

**AMD Phenom X4 9550  
2.2GHz Quad-Core  
Processor  
HD9550WCJ4BGH 95W  
Socket AM2+ desktop  
CPU**



**General information**

Type CPU / Microprocessor

Market segment Desktop

Family AMD Phenom X4

Model number 9550

CPU part numbers

HD9550WCJ4BGH is an OEM/tray microprocessor

HD9550WCGHBOX is a boxed microprocessor with fan and heatsink

Stepping codes JAAFB AA JAAHB AA

Frequency ? 2200 MHz

Bus speed ? One 1800 MHz 16-bit HyperTransport link (3.6 GT/s)

Clock multiplier 11

Package 940-pin organic micro-PGA

Sockets Socket AM2

Socket AM2+

Introduction date Mar 27, 2008

End-of-Life date Last order date is end of 3rd quarter 2008

Price at introduction \$209

Architecture / Microarchitecture

Microarchitecture K10

Platform Cartwheel (mainstream platform with AMD 780G chipset)

Spider (performance platform with AMD 790FX/790GX chipsets)

Processor core Agena

Core stepping DR-B3

CPUID 100F23

Manufacturing process 0.065 micron silicon-on-insulator (SOI) technology

450 million transistors

Die size 285mm<sup>2</sup>

Data width 64 bit

The number of cores 4

The number of threads 4

Floating Point Unit Integrated

Level 1 cache size 4 x 64 KB 2-way set associative instruction caches

4 x 64 KB 2-way set associative data caches

Level 2 cache size 4 x 512 KB 16-way set associative caches

Level 3 cache size 2 MB 32-way set associative shared cache

Multiprocessing Uniprocessor

Features

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

AMD64 / AMD 64-bit technology

EVP / Enhanced Virus Protection

AMD-V / AMD Virtualization technology

Low power features

Cool'n'Quiet 2.0

CoolCore technology

Independent Dynamic Core Technology

Dual Dynamic Power Management

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 1.15V - 1.25V

V NorthBridge 1.25V

Maximum operating temperature 55°C - 70°C

Thermal Design Power 95 Watt