AMD A10-7800 specifications

General information

Type	CPU / Microprocessor
Market segment	Desktop
Family	AMD A10-Series
Model number ?	**A10-7800**
CPU part number	**AD7800YBI44JA** is an OEM/tray microprocessor
Frequency ?	**3500 MHz**
Package	906-pin lidded micro-PGA package
Socket	**Socket FM2+**
Size	1.57" x 1.57" / 4cm x 4cm
Estimated release date	2nd quarter 2014

Architecture / Microarchitecture

Microarchitecture	Steamroller
Processor core ?	Kaveri
Core stepping ?	KV-A1
Manufacturing process	0.028 micron 2.41 billion transistors
Die size	245mm2
Data width	**64 bit**
The number of cores	**4**
The number of threads	**4**
Floating Point Unit	Integrated
Level 1 cache size ?	2 x 96 KB 3-way set associative shared instruction caches 4 x 16 KB 4-way set associative data caches
Level 2 cache size ?	**2 x 2 MB 16-way set associative shared caches**
Level 3 cache size	**None**
Multiprocessing	Uniprocessor
Features	▪ MMX instructions ▪ SSE / Streaming SIMD Extensions ▪ SSE2 / Streaming SIMD Extensions 2 ▪ SSE3 / Streaming SIMD Extensions 3 ▪ SSSE3 / Supplemental Streaming SIMD Extensions 3 ▪ SSE4 / SSE4.1 + SSE4.2 / Streaming SIMD Extensions 4 ? ▪ SSE4a ? ▪ AES / Advanced Encryption Standard instructions ▪ ABM / Advanced Bit Manipulation ? ▪ AVX / Advanced Vector Extensions ▪ BMI1 / Bit Manipulation instructions 1 ▪ F16C / 16-bit Floating-Point conversion instructions ▪ FMA3 / 3-operand Fused Multiply-Add instructions ▪ FMA4 / 4-operand Fused Multiply-Add instructions ▪ TBM / Trailing Bit Manipulation instructions ▪ XOP / eXtended Operations instructions ▪ AMD64 / AMD 64-bit technology ? ▪ VT / Virtualization technology ? ▪ EVP / Enhanced Virus Protection ? ▪ Turbo Core 3.0 technology
Low power features	PowerNow!

Integrated peripherals / components

Integrated graphics	▪ GPU Type: Radeon R7 series Shader cores: 512 Base frequency (MHz): 720
Memory controller	▪ The number of controllers: 1 Memory channels: 2 Supported memory: DDR3-2133
Other peripherals	▪ PCI Express 3.0 ▪ HD Media Accelerator ▪ TrueAudio accelerator

Electrical / Thermal parameters

Thermal Design Power ?	**65 Watt**