# AMD A8-3870K specifications

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| **General information** | |
| Type | CPU / Microprocessor |
| Market segment | Desktop |
| Family | AMD A8-Series |
| Model number | **A8-3870K** |
| CPU part numbers | **AD3870WNZ43GX** is an OEM/tray microprocessor<br>• **AD3870WNGXBOX** is a boxed microprocessor with fan and heatsink |
| **Frequency** | **3000 MHz** |
| Package | 905-pin organic lidded micro Pin Grid Array (UOF905) |
| AMD Package number | 31012 |
| **Socket** | **Socket FM1** |
| Size | 1.57" x 1.57" / 4cm x 4cm |
| Weight | 1.4oz / 39g |
| Fan/heatsink | FHSA7015B-1268 |
| Introduction date | Dec 20, 2011 |
| Price at introduction | $135 |
| **Architecture / Microarchitecture** | |
| Microarchitecture | K10 |
| Platform | Lynx |
| Processor core | Llano |
| Core stepping | LN-B0 |
| CPUID | 300F10 |
| Manufacturing process | 0.032 micron<br>1178 million transistors |
| Die | 227mm2 |
| **Data width** | **64 bit** |
| **The number of CPU 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<br>4 x 64 KB 2-way set associative data caches |
| **Level 2 cache size** | **4 x 1 MB 16-way set associative caches** |
| **Level 3 cache size** | **None** |
| Cache latency | 3 (L1 cache)<br>21 (L2 cache) |
| Multiprocessing | Uniprocessor |
| Extensions and Technologies | • MMX instructions<br>• Extensions to MMX<br>• 3DNow! technology<br>• Extensions to 3DNow!<br>• SSE / Streaming SIMD Extensions<br>• SSE2 / Streaming SIMD Extensions 2<br>• SSE3 / Streaming SIMD Extensions 3<br>• SSE4a<br>• AMD64 / AMD 64-bit technology<br>• AMD-V / AMD Virtualization technology<br>• EVP / Enhanced Virus Protection |
| Low power features | PowerNow! |
| **Integrated peripherals / components** | |
| Integrated graphics | GPU Type: Radeon HD 6550D<br>Shader cores: 400<br>Base frequency (MHz): 600 |
| Memory controller | The number of controllers: 1 |

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| | Memory channels: 2<br>Supported memory: DDR3-1866<br>Maximum memory bandwidth (GB/s): 29.9 |
| Other peripherals | • PCI Express 2.0<br>• Unified Video Decoder 3.0 |
| **Electrical / Thermal parameters** | |
| V core | 0.45V - 1.4125V |
| Maximum operating temperature | 72.7°C |
| **Thermal Design Power** | **100 Watt** |

**Notes on AMD A8-3870K**

- The processor has unlocked clock multiplier