

AMD FX-6100 specifications

General information

Type	CPU / Microprocessor
Market segment	Desktop
Family	AMD FX-Series
Model number ?	FX-6100
CPU part numbers	FD6100WMW6KGU is an OEM/tray microprocessor <ul style="list-style-type: none">FD6100WMGUSBX is a boxed microprocessor with fan and heatsink
Frequency ?	3300 MHz
Maximum turbo frequency	3600 MHz (more than 3 cores) 3900 MHz (3 cores or less)
Bus speed ?	One 2600 MHz 16-bit HyperTransport link
Package	940-pin organic micro Pin Grid Array (UOC940) Pb-free
Socket	Socket AM3+
Size	1.57" x 1.57" / 4cm x 4cm
Weight	1.4oz / 38.6g (CPU) 1lb 4.9oz / 593.4g (box)
Fan/heatsink	CKM-7X52A-A1-GP
Introduction date	October 12, 2011
Price at introduction	\$165
Architecture / Microarchitecture	
Microarchitecture	Bulldozer
Platform	Scorpius
Processor core ?	Zambezi
Core stepping ?	OR-B2
CPUID	600F12
Manufacturing process	0.032 micron Hi-K Metal Gate process with silicon-on-insulator (SOI) technology
Die	316mm ²
Data width	64 bit
The number of CPU cores	6
The number of threads	6
Floating Point Unit	Integrated (shared between each pair of cores)
Level 1 cache size ?	3 x 64 KB 2-way set associative shared instruction caches 6 x 16 KB 4-way set associative data caches
Level 2 cache size ?	3 x 2 MB 16-way set associative shared exclusive caches
Level 3 cache size	8 MB 64-way set associative shared cache
Cache latency	3 (L1 cache)
Multiprocessing	Uniprocessor
Extensions and Technologies	<ul style="list-style-type: none">MMX instructionsExtensions to MMXSSE / Streaming SIMD ExtensionsSSE2 / Streaming SIMD Extensions 2SSE3 / Streaming SIMD Extensions 3SSSE3 / Supplemental Streaming SIMD Extensions 3SSE4 / SSE4.1 + SSE4.2 / Streaming SIMD Extensions 4 ?SSE4a ?AES / Advanced Encryption Standard instructionsAVX / Advanced Vector ExtensionsFMA4 / 4-operand Fused Multiply-Add instructionsXOP / eXtended Operations instructionsAMD64 / AMD 64-bit technology ?AMD-V / AMD Virtualization technologyEVP / Enhanced Virus Protection ?

Low power features	<ul style="list-style-type: none"> • Turbo Core 2.0 technology • Core C1, C1E, C6 and CC6 states • Package S3, S4 and S5 states • PowerNow!
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Integrated peripherals / components

Integrated graphics	None
Memory controller	The number of controllers: 1 Memory channels: 2 Channel width (bits): 72 Supported memory: DDR3-1866 DIMMs per channel: 2 Maximum memory bandwidth (GB/s): 29.9
Other peripherals	HyperTransport 3.1 technology

Electrical / Thermal parameters

V core ?	0.925V - 1.4125V
Maximum operating temperature ?	70°C
Thermal Design Power ?	95 Watt

Notes on AMD FX-6100

- The processor has unlocked clock multiplier
- NorthBridge controller frequency is 2 GHz