

### **HOW TO SELL THE NEW**

# AMD FX CPUs

### Unlocked<sup>1</sup> Performance with up to 8 cores.



## Who's it for?

Gamers and enthusiasts who want the most out of their PC.



### Sell it in 5 seconds.

More Speed. Unlocked.<sup>1</sup>

### Maximum Speed

- Up to 5GHz Turbo Clock Speed
- Latest Technology and World's Highest Frequencies<sup>2</sup>

#### **Unlocked and Overclockable**

• Get the Maximum Tunable Performance

### **Now with Liquid Cooling Solution**

• FX 9590 and FX 9370 now available with optional liquid cooling solution



### Sell it in 60 seconds.

### Unlocked Performance for Less Money<sup>1,3</sup>

#### Performance

Ferocious power right out of the box.

- The groundbreaking AMD FX 8-Core Processor Black Edition comes unlocked. No premium to pay. No code to input. Just unrestrained, overclocked power right away.<sup>1</sup>
- Groundbreaking technology. Epic performance.
- This architecture takes 8-core processing to a new level. Test the limits to play harder and get more done.
- The AMD FX 4300 processor has up to 20% higher performance than the Intel® Pentium™ G3450 in the 3DMark Fire Strike Extreme Physics benchmark.<sup>5</sup>

#### Speed

The need for speed. AMD FX Processors—unlocked and overclocked.<sup>1</sup>

- Incredible speed out of the box and more in the tank; AMD Turbo CORE Technology automatically kicks in, boosting performance to a user's varied workload.
- AMD Turbo Core technology can accelerate base frequency by up to 1GHz.<sup>7</sup>
- The sky's the limit with this processor's massive headroom. The world's first commercially available 5.0 GHz processor.
- The AMD FX 4300 processor has up to 26% faster CPU performance than the Intel® Pentium™ G3450 in the PassMark CPU benchmark.<sup>6</sup>

#### Price

Price and performance that keeps getting better than previous generations, and more bang for your buck. Unlocked technology.¹ Unbelievable pricing.

- With more speed than previous generations and more aggressive price points, AMD FX Processors raise the bar for 8-core computing.
- AMD FX processors deliver 8-core computing with unlocked performance for less than \$200.<sup>4</sup>
- Maximize your efficiency with more speed and overall performance8 than previous generations for a remarkable price.3

# How we stack up:



Features	AMD FX 9590	AMD FX 9370	Intel Core i5 4690K	AMD FX 8370	AMD FX 8370e	AMD FX 8350	Intel Core 15-4460	AMD FX 8320	AMD FX 8320e	Intel Core 13-4370	AMD FX-6350	AMD FX 6300	Intel Core 13 4170	AMD FX 4350	AMD FX 4300	Intel Pentium G3470
# of CPU Cores	8	8	4	8	8	8	4	8	8	2	6	6	2	4	4	2
# of Threads	8	8	4	8	8	8	4	8	8	4	6	6	4	4	4	2
Max/Base Freq (GHz)	5/4.7	4.7/4.4	3.9/3.5	4.3/4	4.3/3.3	4.2/4	3.4/3.2	4/3.5	4/3.2	3.8	4.2/3.9	3.5/4.1	3.7	4.3/4.2	3.8/4.0	3.6
L2 Cache (MB)	8	8	1	8	8	8	1	8	8	0.5	6	6	0.5	4	4	0.5
Total Cache (L2+L3, in MB)	16	16	7	16	16	16	7	16	16	4.5	14	14	3.5	12	12	3.5
Unlocked	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
Recommended Graphics Pairing	AMD Radeon R9 295X2	AMD Radeon R9 290X	AMD Radeon R9 290X	AMD Radeon R9 280X	AMD Radeon R9 280X	AMD Radeon R9 280X	AMD Radeon R9 280X	AMD Radeon R9 285	AMD Radeon R9 285	AMD Radeon R9 285	AMD Radeon R9 270	AMD Radeon R9 270	AMD Radeon R9 270	AMD Radeon R7 260X	AMD Radeon R7 260X	AMD Radeon R7 260X

<sup>\*</sup> This chart illustrates competitive product placement and is not necessarily indicative of relative performance

Features	AMD 990FX	AMD 990X	AMD 970				
Graphics Support	Up to 4 discrete Radeon <sup>™</sup> R9 Series	Up to 2 discrete Radeon <sup>™</sup> R9 Series	1 discrete Radeon <sup>™</sup> R9 Series				
PCI Express° 2.0	2x16 or 4x8	1x16 or 2x8	1x16				
CPU Compatibility	AMD Athlon™ II, AMD Phenom™, AMD FX™						
Socket Support	AM3+, AM3						
Memory Support	Up to 2133 DDR3 memory with AMD Memory Profiles						
USB Support	Up to 14 USB 2.0 ports (USB 3.0 and 3.1 ports available on select motherboards)						
SATA 6 GB/s	Up to 6 Native						



### **Liquid Cooling System - Available on select processors only.**

- Pre-filled, maintenance-free liquid cooling system
- UltraFine Micro Channel cold plate optimizes liquid flow and heat dissipation
- Durable and powerful liquid pump dissipates heat effectively and helps maintain even temperatures through stable liquid circulation
- Large aluminum radiator with a wide RPM range PWM fan creates a superb balance between cooling efficiency and noise

For more information, please visit APP.AMD.COM Your source for tools, training, news, reviews, and much more! To find out more about AMD FX-Series CPUs, please visit www.amd.com/fx

- 1. AMD's product warranty does not cover damages caused by overclocking, even when overclocking is enabled with AMD hardware or software.

  2. The turbo frequency for the AMD FX-9590 processor is up to 5.0 GHz the highest shipping frequency of a consumer desktop processor as of May 2015.

  3. Based on suggested retail price for the AMD FX-9590 eight-core Processor @ 5.0 GHz (\$220) compared to the Intel Core IS-4690K quad-core processor @ 3.5GHz (\$239.99). Taken from AMD pricing taken from www.amd.com. Intel pricing taken from Newegg.com April 2015.

  4. Based on suggested retail price for the FX-8370 eight-core processor @ 4.0 GHz (\$234.99)-Newegg.com 8/21/14

  5. Testing conducted by AMD Performance labs on optimized AMD reference systems. PC manufacturers may vary configuration yielding different results. Fire Strike Extreme Physics benchmark is used to represent game performance; the AMD FX 4300 scored 4328 while the Intel Penthum G3450 processor scored 3598 AMD Config: FX 4300 with AMD Radeon "R9 270X Graphics card, 2x4GB DDR3-1806, 228 SSD, Windows 8.1 64 bit, Driver 14.501 Intel Config: Penthum G3450 with AMD Radeon "R9 270X Graphics card, 2x4GB DDR3-1800, 228 SSD, Windows 8.1 64 bit, Driver 14.501 Intel Config: Penthum G3450 with AMD Radeon "R9 270X Graphics card, 2x4GB DDR3-1800, 228 SSD, Windows 8.1 64 bit, Driver 14.501 Intel Config: Penthum G3450 with AMD Radeon "R9 270X Graphics card, 2x4GB DDR3-1800, 228 SSD, Windows 8.1 64 bit, Driver 14.501 Intel Config: Penthum G3450 with AMD Radeon "R9 270X Graphics card, 2x4GB DDR3-1800, 228 SSD, Windows 8.1 64 bit, Driver 14.501 Intel Config: Penthum G3450 with AMD Radeon "R9 270X Graphics card, 2x4GB DDR3-1800, 228 SSD, Windows 8.1 64 bit, Driver 14.501 Intel Config: Penthum G3450 with AMD Radeon "R9 270X Graphics card, 2x4GB DDR3-1800, 228 SSD, Windows 8.1 64 bit, Driver 14.501 Intel Config: Penthum G3450 with AMD Radeon "R9 270X Graphics card, 2x4GB DDR3-1800, 228 SSD, Windows 8.1 64 bit, Driver 14.501 Intel Config: Penthum G3450 with AMD Radeon "R9 270X Gra Windows 8.1 64 bit. Driver 14.20.504 DTV-32.
- 6. Testing conducted by AMD Performance labs on optimized AMD reference systems. PC manufacturers may vary configuration yielding different results. PassMark CPU benchmark performance is used to represent CPU performance; the AMD FX-4300 scored 4910 while the Intel Pentium G3450 processor scored 3902 AMD Config: FX 4300 with AMD Radeon PR 9 270X Graphics card, 2x4GB DDR3-1866, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-18600, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-18600, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-18600, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-18600, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-1866, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-1866, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-1866, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-1866, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X Graphics card, 2x8GB DDR3-1866, 228 SSD, Windows 8.164 bit, Driver 14.501 Intel Config: Pentium G3450 with AMD Radeon PR 9 270X G3450 with AMD Radeon PR 9 270 Windows 8.1 64 bit, Driver 14.20.504 DTV-33.
- Windows 8.1 be drift, timer 14,20,504 DIT 93.

  The AMD EVA 4350 or AMD FX 4300 Processor with AMD Radeon" HD 6670 with 2x4GB DRR3-1600, 990FX Motherboard, Windows 7 6 Abit, Driver 8.882 Benchmarking by AMD Labs using Cinebench 11.5 (3.64 vs 3.3), MainConcept 2.1 measuring time to transcode hd to flash 720p (156.6s vs 171.74), POV Ray 3.7 (3154 vs 2859), Handbrake time to transcode file WMV 1920x1080.wmv to MP4 High Profile (614s vs 555.33s)