

How to Sell the New AMD A-Series APUs

Get more of what you want – Build a better PC with AMD

Who's it for?

Customers who demand more performance with built-in AMD Radeon™ HD 7000 Series Graphics Technology.



Sell it in 5 seconds.

- → Incredible performance for your money at all price-points
- → AMD A-Series processors come with built-in AMD Radeon[™] HD Graphics, DirectX[®] 11 capable
- → Energy efficient power-saving options, at multiple price points
- → Today and Tomorrow: Platform longevity with FM2 for future upgrades



Sell it in 60 seconds.

More Speed & More Cores Than Previous Generation APUs

- → Highest dual core frequency and fastest built-in graphics available¹
- → New Turbo Core 3.0, Up to 800MHz more than the competition per part
- → Ability to overclock both the CPU & GPU Cores—An AMD Exclusive²

Best Video and Gaming

- → Almost double the gaming performance of Intel's processor³
- → Every AMD A-Series processor has DirectX[®] 11 capable graphics
- → Experience unparalleled gaming realism
- → More Frames Per Second with 1080p gaming⁴
- → Native AMD Eyefinity technology multimonitor support
- → Nearly 6x more compute horsepower of a traditional CPU⁵

Easy Upgrade Path

- → Today and Tomorrow: Platform longevity with FM2 for future upgrades
- → Even more performance—Up to 75% boost on select graphics cards with AMD Radeon™ Dual Graphics Technology⁶
- → AMD Memory Profile Support for automatic tuning and performance

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Why It's Great:

Better for compute-demanding activities. 2nd Generation AMD A-Series processors deliver more cores and higher frequencies, all for less than the competition.⁷

- → Experience a Faster PC—Boot into Windows 8 in under 10 seconds⁸
- → Up to 25% faster than the competition in Winzip 16.5⁹
- → Up to 5x Quicker in Photoshop CS6 over previous APUs¹⁰
- → Up to 108% faster performance over previous APUs in vReveal¹¹
- → Up to 1.7x faster in Google Chrome than the competition¹²
- → Overclock for Even Higher Frequencies—Break the 1GHz barrier on the GPU²

More features. 2nd Generation AMD A-Series processors give you industry-leading built-in AMD Radeon[™] HD graphics performance, with vibrant, smooth 1080p video and unbelievable DirectX[®] 11 gaming performance.

- → Great Video—Get better looking videos with HD Media Accelerator featuring AMD Steady Video technology¹³
- → Gaming Performance—Get up to 76% better performance in Diablo III @ 1080p¹⁴
- → AMD Eyefinity technology—Enhance your Windows 8 experience across up to 4 monitors¹⁵
- → Image enhancement with AMD HD Perfect Picture¹⁶

Great for tweaking and overclocking. 2nd-Generation AMD A-Series processors provide you with more multiple unlocked parts at multiple price points

- → Only processor that allows you to overclock both the CPU and GPU²
- → Only unlocked processor under \$70¹⁷
- → FM2 Motherboards: A85X, A75, A55 A common infrastructure for virtually all budgets (\$40-\$100)¹⁸
- → New DDR3- 1866 memory support: Get an additional 13% more FPS in StarCraft II with AMD Memory Profiles¹⁹
- → Get up to a 75% boost in visual performance with AMD Radeon[™] Dual Graphics technology and select AMD Radeon[™] discrete GPU Card²⁰

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

How They Stack Up.

AMD A-Series Competitive Positioning²²

PROCESSOR	CORES	SPEED	UNLOCKED	PERFORMANCE BENCHMARK
AMD A10-5800K	Quad	4.2 GHz Max Turbo	\checkmark	12.7 Adobe Photoshop CS6 Liquify Filter Test
AMD A10-5700	Quad	4.0 GHz Max Turbo	×	14 Adobe Photoshop CS6 Liquify Filter Test
Vs. Core i5 3450	Quad	3.5 GHz	×	15.2 Adobe Photoshop CS6 Liquify Filter Test
AMD A8-5600K	Quad	3.9 GHz Max Turbo	\checkmark	3.7 WinZip 16.5 Compression (700MB) Test
AMD A8-5500	Quad	3.7 GHz Max Turbo	×	3.8 WinZip 16.5 Compression (700MB) Test
Vs. Core i3 3220	Dual	3.3 GHz	X	6.66 WinZjp 16.5 Compression (700MB) Test
AMD A6-5400K	Dual	3.8 GHz Max Turbo	1	P 834 3DMark11
Vs. Pentium G850	Dual	2.9 GHz	×	< P 416 3DMark11
AMD A4-5300	Dual	3.6 GHz Max Turbo	×	37 FPS Diablo III (720P) High
Vs. Pentium G620	Dual	2.6 GHz	×	19 Diablo III (720P) High

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AMD A-Series Quick Reference Guide.









APU Model	AMD A10 5800K	AMD A10 5700	AMD A8 5600K	AMD A8 5500	AMD A6 5400K	AMD A4 5300
AMD Radeon" Graphics Brand	HD 7660D	HD 7660D	HD 7560D	HD 7560D	HD 7540D	HD 7480D
ΟŢ	NOOL	B5W	TOOM	ß5W	65W	GSW
AMD Radeon [™] Cores	384	384	256	256	192	128
GPU Clock Speed	800 MHz	760 MHz	760 MHz	760 MHz	760 MHz	724 MHz
CPU Cores	4	4	4	4	CJ	CV
CPU Clock (Max Turbo/Base)	42 GHz 3.8 GHz	4,0 GHz 3,4GHz	3.9 GHz 3.6 GHz	3.7 GHz 3.2 GHz	3.8 GHz 3.6 GHz	3.6 GHz 3.4 GHz
Total L2 Cache	4MB	4MB	4MB	4MB	IMB	IMB
Max DDR3	1866	1866	1866	1866	1866	1600
Max DDR3	Yes	Yes	Yes	Yes	Yes	Yes
Unlocked -	Yes	N	Yes	Q	Yes	Q

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To find out more about AMD A-Series products.





What's Important to the Customer.



Focal Points

- \rightarrow These customers primarily care about a processor that delivers performance, which they equate as Cores + Frequency. This is predominately measured through gaming performance and overclockability.
- → The built-in AMD Radeon[™] graphics offer incredible performance for those looking for an HTPC, or they can be paired with select Radeon[™] graphics cards for even more performance with AMD Radeon[™] Dual Graphics. For users who just want great CPU performance, pair with a AMD Radeon[™] HD 7900 GPU for excellent gaming performance.

The Conversation

- → Stress the excellent frequency of the top-bin A10 5800k part @ 4.2GHz Max Turbo
- → Talk about how versatile the overclocking capabilities are, that both the CPU and GPU can be overclocked²

Great For:



Home Theatre PCs

Gaming Systems



What's Important to the Customer.



Focal Points

- → These customers care about performance, which they predominately equate to just the Cores in a processor, but want to know that their system won't be obsolete right after they build it. They take comfort in having an easy upgrade path and in overall platform longevity.
- → Although graphics are not a primary focus in their systems, this customer wants all their favorite apps to run fast, and they want smooth, HD video and OS-optics.

The Conversation

- → Quad-Core processors for under \$110 dollars²¹ that are great for everyday computing and commercial platforms.
- → FM2 motherboard will be in market for 3+ years.

Great For:



General PC / Family Computer





Office / Commercial "Always-ON" Home Systems Media Servers

1. Based on AMD A-Series A4 5300 3.6GHz Max-Turbo frequency vs. all other consumer desktop CPU frequencies available in market on 10/2/2012. Based on www.Anandtech.com AMD A-Series A10 5800k processor benchmarks & review: http://www.anandtech.com/show/6332/amd-trinity-a10-5800k-a8-5600k-review-part-1. http://www.anandtech.com/show/6332/amd-trinity-a10-5800k-a8-5600k-review-part-1/7

- 2. AMD's product warranty does not cover damages caused by overclocking, even when overclocking is enabled with AMD hardware or software
- Tasting conducted by AMD performance labs using Sleeping Dogs built-in benchmark with the following settings: Enable Quality AA normal, Enable high-res textures on, shadow resolution normal, shadow filtering high, screen space ambient occlusion normal, enable vspirc on, enable quality motion blur off, FPS limiter off. The AMD A10-5800K APU with AMD RadeonTM HD 7660D Graphics renders the task at an average frame rate of 33fps while the Intel Core I5-3570k renders the task at an average frame rate of 18fps. All scores rounded to the nearest whole number. Test configurations: AMD A10-5800K APU with AMD RadeonTM HD 7660D Graphics using 2x2GB DDR3-1866 with Windows[®] 7 64 bit based on the Gigaptyte FM3 reference board. Intel Core I5-3570k with HD 4000 graphics on a ICH5, 2x4GB DDR3-1866 with Windows[®] 7 64-bit. THD-72 З.
- To Sub a block of the last measuring (ps on Aliens vs Predator (1080P), Dirtl 4 Dead2 (1280), Resident Evil 5 (1080P). Aligner settings at Mainstream except for DiRT3 which was run on High settings. The AMD A4-5300 APU with AMD RadeonTM HD 7480D graphics using 2x4GB DDR3-1866 averaged 5.4, 16.7, 47.2, 19.2, fps respectively using driver 8.942. The Intel Core i7-3770K CPU with HD 4000 graphics sing 2x4GB DDR3-1600 averaged 5, 16.5, 32.2, 12.0 fps using driver 8.15.10.2712. All systems using Windows 7 64bit . TRD-53
- 5. GFLOPs calculations developed by AMD performance labs measuring compute capacity for the AMD A10-5800K APU with AMD RadeonTM HD 7650D Graphics which is 736 GFLOPs vs 108.8 GFLOPs of an AMD Athlon X4 750K. GFLOPs calculated using GFLOPs = CPU GFLOPs + GPU GFLOPs = CPU GFLOPs = CPU GFLOPs = CPU GFLOPs = CPU Core Freq. (3.8GHz) X Core Count (4) X 8 FLOPS + GPU Core Freq. (800MHz) X DirectX[®] 11 capable Shader Count (384) X 2 FLOPS. The CPU comparison of the AMD Athlon X4 750K was calculated using CPU Core Freq. (3.4GHz) X Core Count (4) X 8 FLOPS. TRD-68
- 6. Testing conducted by AMD performance labs using Diablo III @ 1920x1080, Maximum settings, shadows medium. Test configurations: AMD A10-5800K APU with AMD Radeon™ HD 6570 Graphics using 2x4GB DDR3-1866 with Windows® 7 64 bit scored 34 fps, while the same system with AMD Dual Graphics Mode enabled scored 60 fps. TRD-61
- 7. Based on AMD 2nd-Gen A-Series Max-Turbo frequencies vs. all other consumer desktop CPU frequencies available in market on 10/2/2012.
- 8. Testing conducted by AMD performance labs running ADK III of Boot Performance Assessment (Fast Startup) on an AMD A10-5700 APU with AMD RadeonTM HD 7640D Graphics using 2x2GB DDR3-1866 with Windows[®] 8 RTM, which booted in under 6 seconds. TRD-69
- 9. Testing developed by AMD Performance labs measuring WinZip Compression times of a 1080p rushhour.yuv file using OpenCL™. The AMD A8-3850 APU with AMD Radeon™ HD 6550D graphics using 2x4GB DDR3-1866 averaged 41.66 seconds. The AMD A10-5800K APU with AMD Radeon™ HD 7660D graphics using 2x4GB DDR3-1866 averaged 33.34 seconds. Scores averaged over 3 separate runs. All systems using Windows 7 64bit and driver 8.942. TRD-47
- 10. Testing was performed by AMD Performance labs using test scripts and a 60.2 MB. psd format source file of a 5616x3744 resolution image provided by Adobe. Average elapsed time to complete a RGB 300 Blur scripted render test was 103.43 seconds on the AMD A10 desktop APU with OpenCL acceleration on versus 625.59 seconds on the competitive Intel i5 system's OpenCL acceleration off. Test system was a desktop with the 2012 AMD A10-5800K APU and Intel i5-3570K CPU. The Intel system did not support OpenCL[™] acceleration at time of test on May 2, 2012. Times averaged over 3 separate runs. TRD-58
- 11. Testing by AMD Performance labs measuring the vreveal render time of the 1080p.60fps dog.mp4 file from mp4 to wmv using OpenCL[™]. The AMD A8-3850 APU with AMD Radeon[™] HD 6550D graphics using 2x4GB DDR3-1866 averaged 187.64 seconds. The AMD A10-5800K APU with AMD Radeon[™] HD 7660D graphics using 2x4GB DDR3-1866 averaged 90 seconds. Scores averaged over 3 separate runs. All systems using Windows 7 64bit and driver 8.942. TRD-49
- 12. Testing conducted by AMD performance labs using Google Chrome 18 and the Google Search Volume by Language Page. The AMD A10-5800K APU with AMD Radeon™ HD 7660D Graphics renders the task at 60fps while the Intel Core i3-2120 renders the task at 35fps. All scores rounded to the nearest whole number. Test configurations: AMD A10-5800K APU with AMD Radeon™ HD 7660D Graphics using 2x4GB DDR3-1600 with Windows® 7 64 bit based on the AMD "Annapurna" reference board . Intel Core i3-2120 with HD 2000 graphics on a H67, 2x4GB DDR3-1600 with Windows® 7 64-bit. TRD-31
- 13. AMD Steady Video is a technology designed to eliminate shakes and jitters during the playback of home video. Users may turn on this technology via the AMD Catalyst Control Center[™] or the VISION Engine Control Center application. AMD Steady Video will work with content that can run on Adobe® Flash® Player 10.2 (and later versions) or on any player which has been programed to use AMD's decode acceleration (DXVA) engine. AMD Steady Video is not designed to (a) isolate overlays, logos or captions, or (b) improve the playback of letter boxed, premium/commercial, or interlaced content. AMD Steady Video is only recommended for use with videos that contain unwanted shakes and jitters.
- 14 Testing developed by AMD Performance labs measuring fas on Diablo III (1080), with maximum settings and medium graphics. The AMD A10 5700 APU with AMD Radeon™ HD 6570 graphics card and AMD Dual Graphics enabled, using 2x4GB DDR3-1866, Windows 7 64bit and Driver 8.95 averaged 34 fps with APU graphics disabled. The AMD A10 5700 APU with AMD Radeon™ HD 6570 graphics card and AMD Dual Graphics enabled, using 2x4GB DDR3-1866, Windows 7 64bit and Driver 8.95 averaged 60 fps. TRD-54
- 15. AMD Eyefinity technology works with games that support non-standard aspect ratios, which is required for panning across multiple displays. To enable more than two displays, additional panels with native DisplayPort™ connectors, and/ or DisplayPort™ compliant active adapters to convert your monitor's native input to your cards DisplayPort™ or Mini-DisplayPort™ connector(s), are required. Support for six simultaneous displays may require complementary products compatible with DisplayPort 1.2 Multi-Stream Transport. Maximum number of configured displays may vary check with your component or system manufacturer for specific model capabilities and supported technologies. SLS ("Single Large Surface") functionality requires an identical display resolution on all configured displays
- 6. AMD Perfect Picture HD is a an image, video processing and display technology that features advanced de-interlacing, dynamic contrast adjustment, color vibrancy, noise reduction and edge enhancement that provides brilliant colors and sharp images for smooth playback of Blu-ray and other HD content on your PC.
- 17. Based Based on pricing from Newegg.com on 10/03/2012. http://www.newegg.com/Product/ProductList.aspx?Submit=ENE&DEPA=0&Order=BESTMATCH&N=-1&isNodeld=1&Description=fm2+motherboards&x=23&y=13
- 19 Sesting conducted by AMD performance labs using an AMD A10-5800K with AMD Radeon™ HD 7660D Graphics, 2×4 GB DDR3-1866 (AMP enabled), A85X, 1TB 7200 rpm HD, Windows 7 64bit, Catalyst 12.7 which scored 28.1 fps. AMD A10-5800K with AMD Radeon™ HD 7660D Graphics, 2×4 GB DDR3-1866 (Bios default left at 1600) , A85X, 1TB 7200 rpm HD, Windows 7 64bit, Catalyst 12.7 which scored 28.1 fps.
- 20. Testing conducted by AMD performance labs using Diablo III @ 1920x1080, Maximum settings, shadows medium. Test configurations: AMD A10-5800K APU with AMD Radeon™ HD 6570 Graphics using 2x4GB DDR3-1866 with Windows® 7 64 bit scored 34 fps, while the same system with AMD Dual Graphics Mode enabled scored 60 fps. TRD-61
- 21. Based on pricing from Newegg.com on 10/03/2012. http://www.newegg.com/Product/ProductList.aspx?Submit=ENE&N=600030236&IsNodeld=1&Description=amd%20trinity&name=Quad-Core&Order=BESTMATCH 22. A-Series Platform Positioning Chart
- Intel Core i3-2100 with AMD Radeon™ HD 7970 Graphics, 2x4 GB DDR3-1600, P67, 1TB 7200 rpm HD, Windows® 7 64bit. 8.15.10.2712
- Intel Core i3-2120 with AMD Radeon™ HD 7970 Graphics, 2x4 GB DDR3-1600, P67, 1TB 7200 rpm HD, Windows® 7 64bit. 8.15.10.2712
- Intel Core i5-3450 with HD 4000, 2x4 GB DDR3-1600, P67, 1TB 7200 rpm HD, Windows® 7 64bit. 8.15.10.2712 Intel Pentium G830 with HD 2000, 2x4 GB DDR3-1600, P67, 1TB 7200 rpm HD, Windows® 7 64bit. 8.15.10.2712
- Intel Pentium G620 with HD 2000, 2x4 GB DDR3-1600, P67, 1TB 7200 rpm HD, Windows® 7 64bit. 8.15.10.2712
- AMD A10-5800K with AMD Radeon™ HD 7660D Graphics, 2x4 GB DDR3-1866, A85X, 1TB 7200 rpm HD, Windows 7 64bit. Catalyst 12.3
- AMD A8-5600K with AMD Radeon™ HD 7560D Graphics, 2x4 GB DDR3-1866, A85X, 1TB 7200 rpm HD, Windows 7 64bit. Catalyst 12.4
- AMD A6-5400K with AMD Radeon™ HD 7540D Graphics, 2x4 GB DDR3-1866, A85X, 1TB 7200 rpm HD, Windows 7 64bit. Catalyst 12.4
- AMD A4-5300 with AMD Radeon™ HD 7480D Graphics, 2x4 GB DDR3-1866, A85X, 1TB 7200 rpm HD, Windows 7 64bit. Catalyst 12.4
- For additional information on AMD product features and partner attribution, please go to www.amd.com/legal.

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