

AMD Wins Prestigious Catalyst Award for 25x20 Energy Efficiency Initiative

Green Electronics Council Honors AMD for "Catalyzing Impact at Scale"

SUNNYVALE, CA -- (Marketwired) -- 09/07/16 -- <u>AMD</u> (NASDAQ: AMD) today announced the company has received the Catalyst Award for its <u>25x20</u> energy efficiency initiative, presented by the <u>Green Electronics Council</u> (GEC) after review by an independent panel of judges. The award will be formally presented at the <u>Electronics Goes Green 2016</u> conference in Berlin on September 7, 2016. AMD is ahead of pace to achieve its ambitious goal to dramatically improve the energy efficiency of its mobile microprocessors 25 times by year 2020, from a 2014 baseline.

"AMD clearly stood out among a strong group of finalists in their ability to catalyze large scale sustainability impact," said Nancy Gillis, chief executive officer, Green Electronics Council. "Bringing a new architecture and energy management to computer chips will have a huge impact on managing energy use and reducing greenhouse gas emissions, yet another example of technology's fundamental role in building a sustainable world."

As part of its 25x20 initiative, AMD is developing new processor architectures, power efficient technologies, and power management techniques to achieve the goal of

accelerating energy efficiency of its processors. As an example, the AMD 6th Generation A-Series Accelerated Processing Unit (APU) (code-named "Carrizo") released in 2015 for notebook computers, delivered a 2.7 times improvement in energy efficiency compared to its

2014 predecessor.¹ This improvement set a pace well ahead of the trend line for achieving

the 25x20 goal. Also, the AMD 6th Generation A-Series APU achieved an approximate 46-

percent reduction in lifecycle carbon emissions compared to the previous generation APU.^{*ii*} Further demonstrating AMD's commitment to energy efficient computing, the new Polaris architecture-based Radeon™ RX 400 Series GPUs can be up to 2.8 times more energy

efficient than graphics cards made just two years ago.^{III}

"As always, there is extreme competitive pressure in the computer market for new processors that provide even greater performance while minimizing power consumption," said Mark Papermaster, SVP and chief technology officer, AMD. "This is made more challenging due to the slowdown in Moore's Law. As the energy efficiency gains that were always a byproduct of manufacturing advances slow down, AMD engineers are creating innovative new designs aimed at managing energy use, and that is fueling our drive to 25x20."

GEC's Catalyst Awards seek to inspire innovation in the design, manufacture and use of electronics to advance global sustainability. The "Catalyzing Impact at Scale" Award recognizes the large-scale impact that leading corporations can have when changing the design, manufacture and intended use of their products. The judges' comments included: "I

believe that there's a shift in technology [with 25x20] that maybe exceeds Moore's Law and causes a shift in computing success."

"Continued advances in health care, university research and other areas rely on greater performance in computing and visualization technologies," said Susan Moore, corporate vice president for public affairs, AMD. "As AMD designs processors that help meet those needs, we're focused on minimizing the environmental impact of our products. Consequently, we set out a couple of years ago with an ambitious initiative to dramatically improve the energy efficiency of our processors. The results of this work are now appearing and we could not be more pleased with our progress. We are honored to receive this award from the Green Electronics Council for our approach and work to date."

Supporting Resources

- Learn more about <u>25x20</u>
- Become a fan of <u>AMD on Facebook</u>
- Follow AMD on Twitter <u>@AMD</u>

About AMD

For more than 45 years AMD has driven innovation in high-performance computing, graphics and visualization technologies -- the building blocks for gaming, immersive platforms, and the datacenter. Hundreds of millions of consumers, leading Fortune 500 businesses and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work and play. AMD employees around the world are focused on building great products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) website, blog, and Facebook and Twitter pages.

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^{*i*} <u>http://www.amd.com/en-gb/innovations/software-technologies/25x20</u> - see footnote #4

^{*ii*} Comparative Carbon Footprint Assessment of the Manufacturing and Use Phases of Two Generations of AMD Accelerated Processing Units -

http://www.amd.com/Documents/carbon-footprint-study.pdf

^{*iii*} Testing conducted by AMD Performance Labs as of May 10, 2016 on the AMD Radeon[™] RX 470 (110w) and AMD Radeon[™] R9 270X (180w), on a test system comprising i7 5960X @ 3.0 GHz 16GB memory, AMD Radeon Software driver 16.20 and Windows 10. Using 3DMark Fire Strike preset 1080p the scores were 9090 and 5787 respectively. Using Ashes of the Singularity 1080P High, the scores were 46 fps and 28.1 fps respectively. Using Hitman 1080p High, the scores were 60 fps and 27.6 fps respectively. Using Overwatch 1080p Max settings, the scores were 121 fps and 76 fps respectively. Using Performance/Board power, the resulting average across the 4 different titles was a perf per watt of 2.8X vs the Radeon R9 270X. Test results are not average and may vary. RX-6

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