

July 14, 2020



# AMD Announce World's First 64-Core PRO Workstation, the Lenovo™ ThinkStation™ P620, the Pinnacle of Performance for Modern Professionals

*– Supercharged with AMD PRO technologies, AMD Ryzen™ Threadripper™ PRO Processors deliver leadership performance, industry leading bandwidth and built-in enterprise grade security and manageability –*

*– AMD Ryzen™ Threadripper™ PRO 3995WX offers up to 27% better multithreaded performance over the competition's best dual processor workstations<sup>1</sup> and leadership performance in over 25 applications and benchmarks<sup>2</sup> –*

SANTA CLARA, Calif., July 14, 2020 (GLOBE NEWSWIRE) -- Today, [AMD](#) (NASDAQ: AMD) announced the new AMD Ryzen Threadripper PRO Processor line-up, with up to 64 cores and unrivalled bandwidth<sup>3</sup> built with enterprise-grade AMD PRO technologies. Designed for professional workstations from OEMs and system integrators, AMD Ryzen Threadripper PRO Processors uniquely offer full spectrum compute capabilities with unmatched core counts<sup>4</sup> for multi-threaded workloads plus high frequency single core performance for lightly threaded workloads. This combination makes AMD Ryzen Threadripper PRO Processors the best choice for artists, architects, engineers and data scientists.

“AMD Ryzen Threadripper PRO Processors are purpose-built to set the new industry standard for professional workstation compute performance,” said Saeid Moshkelani, senior vice president and general manager, AMD Client business unit. “The extreme performance, high core counts and bandwidth of AMD Ryzen Threadripper Processors are now available with AMD PRO technology features including seamless manageability and unique built-in data protection<sup>5</sup>. Even the most demanding professional environment is addressed with the new AMD Ryzen Threadripper PRO line-up, from artists and creators developing breathtaking visual effects, to architects and engineers working with large datasets and complex visualizations, all brought to life on the most advanced professional workstation platform in the world.<sup>6</sup>

## **AMD and Lenovo Partnership**

The world's first 64 core PRO workstation system, powered by the Threadripper™ Pro 3995WX<sup>7</sup>, will be available from Lenovo this fall with its newest ThinkStation P620, offering unprecedented levels of power, performance and flexibility in a single CPU chassis.

“Our customers need class-leading, innovative solutions to power through the most demanding applications,” said Rob Herman, General Manager, Workstation and Client AI Business Unit, Lenovo. “By leveraging the AMD Threadripper PRO Processors for our newest workstation, the ThinkStation P620, we can offer users the smarter solutions to

create complex models, render photorealistic imagery or analyze geophysical and seismic interpretations, while offering crucial security and scalability features to ensure safe and effective operation for our professional users.”

### Leadership Performance

Built for the most demanding professional environments, AMD Ryzen Threadripper PRO Processors offer the power to render and edit in 8K, drive complex visualizations and multifaceted simulations and rapidly process vast amounts of code to let professional users do more with their time. With the unmatched performance of the Threadripper™ Pro 3995WX, even when compared with competing dual processor systems, AMD Ryzen Threadripper PRO Processors redefine the workstation landscape<sup>8</sup>.

### Most Advanced Professional Platform

AMD Ryzen Threadripper PRO based workstations offer a new level of connectivity and bandwidth.

- The first pro workstation to support PCIe® Gen 4, unlocking the full potential of next-generation graphics and storage<sup>9</sup>.
- 128 PCIe® Gen4 lanes with up to 2.5x the bandwidth compared to a competing dual processor system<sup>10</sup>
- Industry-leading memory bandwidth<sup>11</sup> with 8 channel ECC RDIMM, LRDIMM and UDIMM DDR4-3200 memory support
- 2TB memory support – Up to double the capacity vs the competition.<sup>12</sup>

### Built-in Enterprise Grade Security and Manageability

AMD Ryzen Threadripper PRO Processors are equipped with AMD PRO technologies offering a variety of enterprise grade features:

- AMD PRO security – Layers of built-in security features to help protect sensitive data
- AMD PRO manageability – Simplified deployment, imaging, and management compatible with user’s current infrastructure
- AMD Memory Guard – Full memory encryption to help prevent physical attacks on sensitive data.
- AMD PRO Business Ready – 18 months of planned software stability and 24 months of planned availability

MODEL	CORES/ THREADS	BOOST <sup>13</sup> / BASE <sup>14</sup> FREQUENCY (GHZ)	TOTAL CACHE (MB)	TDP (WATTS)	PCIe® 4.0 Lanes	Memory Support
AMD Ryzen™ Threadripper™ PRO 3995WX	64/128	Up to 4.2 / 2.7	288	280	128	Up to 2TB ECC UDIMM, RDIMM, LRDIMM
AMD Ryzen™ Threadripper™ PRO 3975WX	32/64	Up to 4.2 / 3.5	144	280	128	Up to 2TB ECC UDIMM, RDIMM, LRDIMM
AMD Ryzen™ Threadripper™ PRO 3955WX	16/32	Up to 4.3 / 3.9	72	280	128	Up to 2TB ECC UDIMM, RDIMM, LRDIMM
AMD Ryzen™ Threadripper™ PRO 3945WX	12/24	Up to 4.3 / 4.0	70	280	128	Up to 2TB ECC UDIMM, RDIMM, LRDIMM

### Supporting Resources

- Learn more about [AMD Ryzen Threadripper PRO Processors](#)
- Learn more about [AMD PRO Technologies](#)
- Learn more about the [Lenovo ThinkStation P620](#)

- Become a fan of AMD on [Facebook](#)
- Follow AMD on [Twitter](#)

## **About AMD**

For 50 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](#), [Facebook](#) and [Twitter](#) pages.

## **Cautionary Statement**

This press release contains forward-looking statements concerning Advanced Micro Devices, Inc. (AMD) including the features, functionality, timing, availability, expectations and benefits of the AMD Ryzen Threadripper PRO Processors and AMD's partnership with Lenovo, which are made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are commonly identified by words such as "would," "intends," "believes," "expects," "may," "will," "should," "seeks," "intends," "plans," "pro forma," "estimates," "anticipates," or the negative of these words and phrases, other variations of these words and phrases or comparable terminology. Investors are cautioned that the forward-looking statements in this document are based on current beliefs, assumptions and expectations, speak only as of the date of this document and involve risks and uncertainties that could cause actual results to differ materially from current expectations. Such statements are subject to certain known and unknown risks and uncertainties, many of which are difficult to predict and generally beyond AMD's control, that could cause actual results and other future events to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Material factors that could cause actual results to differ materially from current expectations include, without limitation, the following: Intel Corporation's dominance of the microprocessor market and its aggressive business practices may limit AMD's ability to compete effectively; AMD relies on third parties to manufacture its products, and if they are unable to do so on a timely basis in sufficient quantities and using competitive technologies, AMD's business could be materially adversely affected; failure to achieve expected manufacturing yields for AMD's products could negatively impact its financial results; the success of AMD's business is dependent upon its ability to introduce products on a timely basis with features and performance levels that provide value to its customers while supporting and coinciding with significant industry transitions; if AMD cannot generate sufficient revenue and operating cash flow or obtain external financing, it may face a cash shortfall and be unable to make all of its planned investments in research and development or other strategic investments; the loss of a significant customer may have a material adverse effect on AMD; AMD's receipt of revenue from its semi-custom SoC products is dependent upon its technology being designed into third-party products and the success of those products; global economic and market uncertainty may adversely impact AMD's business and operating results; the ongoing novel coronavirus (COVID-19) pandemic could materially adversely affect AMD's business, financial condition and results of operations; AMD's worldwide operations are subject to political, legal and economic risks and natural disasters which could have a material adverse effect on AMD; government actions and regulations such as export administration regulations, tariffs and trade protection measures, may limit AMD's ability to export its products to certain customers; AMD products may be subject to security vulnerabilities that could have a material adverse effect on AMD; IT outages, data loss, data breaches and

cyber-attacks could compromise AMD's intellectual property or other sensitive information, be costly to remediate and cause significant damage to its business, reputation and operations; uncertainties involving the ordering and shipment of AMD's products could materially adversely affect it; AMD's operating results are subject to quarterly and seasonal sales patterns; the agreements governing AMD's notes and the Secured Revolving Facility impose restrictions on AMD that may adversely affect its ability to operate its business; the markets in which AMD's products are sold are highly competitive; the conversion of the 2.125% Convertible Senior Notes due 2026 may dilute the ownership interest of its existing stockholders, or may otherwise depress the price of its common stock; the demand for AMD's products depends in part on the market conditions in the industries into which they are sold. Fluctuations in demand for AMD's products or a market decline in any of these industries could have a material adverse effect on its results of operations; AMD's ability to design and introduce new products in a timely manner is dependent upon third-party intellectual property; AMD depends on third-party companies for the design, manufacture and supply of motherboards, software, memory and other computer platform components to support its business; if AMD loses Microsoft Corporation's support for its products or other software vendors do not design and develop software to run on AMD's products, its ability to sell its products could be materially adversely affected; and AMD's reliance on third-party distributors and AIB partners subjects it to certain risks. Investors are urged to review in detail the risks and uncertainties in AMD's Securities and Exchange Commission filings, including but not limited to AMD's Quarterly Report on Form 10-Q for the quarter ended March 28, 2020.

---

<sup>1</sup> Based on AMD performance lab testing on June 8, 2020 using the Cinebench R20 nT benchmark test to compare the multi-thread performance of Ryzen Threadripper PRO 3995WX reference system vs. (2) Intel Xeon Platinum 8280 processors. Results may vary. CPP-15

<sup>2</sup> Based on AMD Labs testing as of July 7, 2020 using a variety of CPU-specific benchmark tests to compare a Ryzen Threadripper Pro 3995X reference system to two Intel Xeon Platinum 8280 processors. Results may vary. SPEC®, and SPECviewperf® are registered trademarks of the Standard Performance Evaluation Corporation. See [www.spec.org](http://www.spec.org) for more information. CPP-66.

<sup>3</sup> Based on AMD internal analysis June 2020 comparing the memory bandwidth specifications of AMD Ryzen™ Threadripper™ Pro to Intel Xeon Platinum 8280. CPP-06

<sup>4</sup> The AMD Ryzen™ Threadripper™ PRO 3995WX has up to 64 cores compared to the highest core count Intel Xeon Scalable workstation processor, the 8280 at 28-cores. CPP-03.

<sup>5</sup> Full system memory encryption is included with AMD Memory Guard in AMD Ryzen PRO, AMD Ryzen Threadripper Pro, and AMD Athlon PRO processors. PP-3

<sup>6</sup> 'Most advanced' defined as superior 7nm process technology in a smaller node and unique PCIe® 4.0 capability in the workstation processor market. CPP-77

<sup>7</sup> The AMD Ryzen™ Threadripper™ PRO 3995WX has up to 64 cores compared to the highest core count Intel Xeon Scalable workstation processor, the 8280 at 28-cores. CPP-03.

<sup>8</sup> Based on AMD performance lab testing on June 8, 2020 using the Cinebench R20 nT benchmark test to compare the multi-thread performance of Ryzen Threadripper PRO 3995WX reference system vs. (2) Intel Xeon Platinum 8280 processors. Results may vary. CPP-14

<sup>9</sup> Based on AMD internal analysis June 1, 2020, comparing the PCIe® specifications of AMD Ryzen™ Threadripper™ PRO to Intel Xeon Platinum 8280. CPP-10

<sup>10</sup> Based on AMD internal analysis June 1, 2020, comparing the PCIe® specifications of AMD Ryzen™ Threadripper™ PRO to Intel Xeon Platinum 8280. CPP-10

<sup>11</sup> Based on AMD internal analysis June 2020 comparing the memory bandwidth specifications of AMD Ryzen™ Threadripper™ Pro to Intel Xeon Platinum 8280. CPP-06

<sup>12</sup> Based on AMD internal analysis June 1, 2020, comparing memory capacity specifications of AMD Ryzen™ Threadripper™ PRO to Intel Xeon Platinum 8280. CPP-07

<sup>13</sup> Max boost for AMD Ryzen Processors is the maximum frequency achievable by a single core on the processor running a bursty single-threaded workload. Max boost will vary based on several factors, including, but not limited to: thermal paste; system cooling; motherboard design and BIOS; the latest AMD chipset driver; and the latest OS updates. GD-150

<sup>14</sup> Base frequency is the approximate processor clock speed of a typical workload running at the processor's standard TDP. GD-166.

**Contact:**

**Sophia Hong**

AMD Communications

(512) 917-9998

[sophia.hong@amd.com](mailto:sophia.hong@amd.com)

**Laura Graves**

AMD Investor Relations

(408) 749-5467

[Laura.Graves@amd.com](mailto:Laura.Graves@amd.com)



Source: Advanced Micro Devices