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Intel and AMD Partner for x86 Ecosystem Advisory Group

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RECENT DEVELOPMENT

Intel and AMD recently announced [the formation of an x86 ecosystem advisory group](#) aimed at improving performance and compatibility across platforms. The group includes members from industry-leading vendors including Dell, HPE, Lenovo, Oracle, Google Cloud, Microsoft, Broadcom, Oracle, and Red Hat as well as individuals such as Linus Torvalds, the creator of the Linux operating system. Goals include expanding the x86 ecosystem, simplifying architectural guidelines, improving consistency across platforms, and improving integration of cutting-edge features into existing x86-based workstreams.

ANALYST COMMENTARY

As the top two x86-based processor providers in HPC, it is certainly strategic for both Intel and AMD to focus on strengthening the x86 ecosystem. Alternative architectures, especially Arm, have been on the rise over the last few years, eroding x86 HPC market share. This trend is accelerating with the intense attention surrounding Arm-based accelerator superchip offerings (e.g., Nvidia's Grace Hopper line) as well as emerging interest in potential RISC-V options. Although x86 remains the market leading architecture among HPC systems, this partnership seems well-timed to bolster the x86 ecosystem amid various potential threats.

To be successful, the advisory group will have to effectively navigate the long-standing competition between Intel and AMD while moving the two onto a more cooperation posture. Although Intel and AMD have both been growing substantially in terms of HPC processors installed, AMD has been gaining ground in terms of market share among x86 HPC processors. Increased interoperability between platforms presumably would ease the transition between Intel and AMD products. HPC vendors and end users alike will be interested to see how this effort impacts the HPC processor market as time goes on, but in the meantime, it appears that Intel and AMD may be more concerned about the competition from alternative architectures than from each other.

For HPC users, this partnership is good news, as it promises to lead to increased choice and ease of use. Many sites have reported concerns about the ever-increasing complexity involved in maintaining HPC centers and making decisions surrounding HPC hardware and software. Coalitions such as this one that plan instead to streamline and simplify are likely a welcome reprieve.

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