Fact Sheet

New on Intel Xeon 6+ processors

Intel® Application Energy Telemetry (Intel® AET)

Enables Workload-level CPU energy visibility to inform energy-aware monitoring, analysis, planning, reporting and optimization

What is Intel® Application Energy Telemetry (Intel® AET)?

Intel® AET is a foundational hardware-based telemetry capability built-in and first introduced with Intel Xeon 6+ processors, that brings workload-level energy visibility to modern data centers—bridging infrastructure metrics with application behavior. It helps infrastructure and software teams gain more granular visibility into CPU energy and activity metrics associated with workloads, enabling more informed, energy-aware operational decisions

Depending on system configuration and software implementation, these metrics can be correlated with applications, virtual machines, containers, or threads.

Intel® AET is broadly available to customers on all Intel® Xeon® 6+ processor SKUs and is supported on Linux Kernel 7.0.

Why is Intel introducing this capability?

Energy is an increasingly important infrastructure signal, not just a facility-level metric. As environments scale across applications, virtual machines, containers, and cloud-native platforms, teams often lack a clear way to connect infrastructure power data to the workloads that consume it. To address this, many environments rely on software-based estimation models, which can vary by workload, introduce overhead, and may lose accuracy in dynamic, multi-tenant environments.

Intel® AET is designed to help close this energy visibility gap by exposing CPU core energy and activity metrics that can be associated with software workloads.

What are the Customer Benefits of Intel AET?

Intel® AET delivers a new level of visibility into how energy is used across modern data center environments. By exposing CPU core–level energy and activity metrics associated with workloads, it provides a hardware-based foundation for integrating energy insights into existing operations. Designed for Linux and cloud-native environments, Intel® AET enables teams to incorporate energy-aware signals into monitoring, analysis, planning, and reporting workflows—while also supporting a broad ecosystem of software innovation. Other benefits include:

More granular workload-level energy visibility
Provides more granular CPU core–level energy and activity telemetry metrics mapped to workloads (e.g., apps, VMs, containers, or threads).
Hardware-based telemetry foundation
Delivers consistent, low-overhead telemetry sourced directly from the platform.
Designed for Linux and cloud-native operational models
Integrates with Linux kernel–managed interfaces and existing observability workflows.
Better inputs for operations, planning, and reporting
Enables more informed decisions for optimization, orchestration, capacity planning, and sustainability reporting.

A foundation for ecosystem innovation
Enables software and ecosystem solutions to build custom monitoring, analysis, and optimization workflows.

Who could benefit from Intel AET?

Intel AET is especially relevant for teams operating modern data center infrastructure, including Linux, Kubernetes, virtualization, platform engineering, data center operations, and sustainability teams—where energy visibility needs to align with how workloads are deployed and managed.

Key Audience:

- Data center infrastructure leaders
- Cloud and hyperscale providers
- Telco and network operators
- Platform engineers and developers
- Sustainability and ESG leaders

Will Intel® AET be available on future Intel® Xeon® platforms?

Intel® Application Energy Telemetry (Intel® AET) is first introduced with Intel® Xeon® 6+ processors and supported on future platforms. Please reach out to your Intel representatives for more details.

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