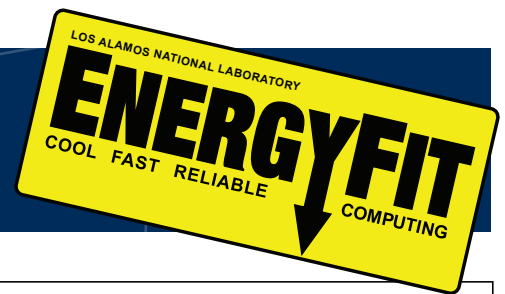


**Licensable
Technologies**

EnergyFit



Applications:

- High performance computing (HPC)
- Financial data centers
- Scientific computing
- Multimedia computing
- Search farms
- Internet service providers (ISPs)

Benefits:

- Lowers power bills
- Lowers infrastructure costs
- Is environmentally friendly
- Reduces data center footprint
- Reduces system failures

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Technology Transfer Division

Summary:

As a data center manager or high performance computing (HPC) vendor, you know that data center power consumption continues to climb even as energy costs escalate. The result is a painful rise in the typical data center power bill and more money spent on climate control systems and room engineering. Despite all these expenses to remove heat, the real problem—high CPU temperatures—remains. Although reducing the heat production of the CPU is the best thermal management strategy, it usually requires a major performance sacrifice. EnergyFit provides a solution to this dilemma.

EnergyFit™ is a system software layer that constantly tunes CPUs for optimal performance, adjusting CPU speed to reduce heat and electrical costs by 10–25% or more while maintaining the speed and performance your customers and users expect from their systems. Other EnergyFit benefits include improved system reliability (due to reduced component temperature) and reduced capital costs (for room engineering, climate control systems, and replacement hardware).

The graph above illustrates the dramatic rise in CPU heat dissipation as processors have evolved. This dissipation is directly related to energy consumption and data center overheating.

EnergyFit was designed by the HPC experts at Los Alamos National Laboratory and is now available for commercial use. The Los Alamos Technology Transfer Division seeks one or more industry leaders with which to partner to commercialize this revolutionary, energy-conservation technology for current and next generation HPC environments.

Development Stage:

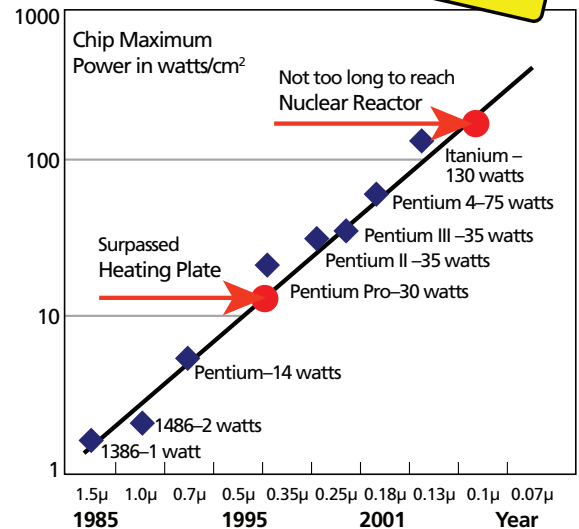
EnergyFit has been reduced to practice and thoroughly tested. Application-specific refinements are necessary for specific systems.

Patent Status:

EnergyFit is based on a suite of algorithms that describes how to select and adapt the optimal CPU speed in real-time. This invention is patent pending.

Licensing Status:

This technology is currently available for exclusive licensing.



Power dissipation per square centimeter for commodity microprocessors has risen dramatically over the last 20 years. (Source: Intel)