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White Paper  
**Dual-Core Intel® Itanium® 2  
Processor**  
Data Center Planning  
Business-Critical Infrastructure

# The End of the Proprietary Era

## **Itanium® 2-based solutions are changing the economics of business-critical computing**

Market momentum for Itanium® 2-based solutions is growing worldwide, as businesses move away from proprietary architectures to reduce their total costs and achieve higher levels of performance, scalability, and availability. Systems based on the new Dual-Core Intel® Itanium® 2 processor are helping to accelerate this transition, by delivering twice the performance of previous systems, while improving energy-efficiency by about 2.5 times.

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***“Increasingly, organizations are relying on Itanium to address some of the most critical needs of their business.”***

***- Nathaniel Martinez and Thomas Meyer, IDC<sup>1</sup>***

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<sup>1</sup> Source: IDC White Paper sponsored by HP, “End-Users’ Feedback: Transform IT and Increase Business Performance Through Itanium-Based Standardization,” August 2005:  
[www.itaniumsolutionsalliance.org/news/whitepapers\\_brochures/CG18M\\_Web.pdf](http://www.itaniumsolutionsalliance.org/news/whitepapers_brochures/CG18M_Web.pdf)

## Mainframe Capabilities at Mainstream Prices

*“Not only was the performance of the Intel architecture-based systems impressive, but they cost about half as much as the RISC-based platform.”*

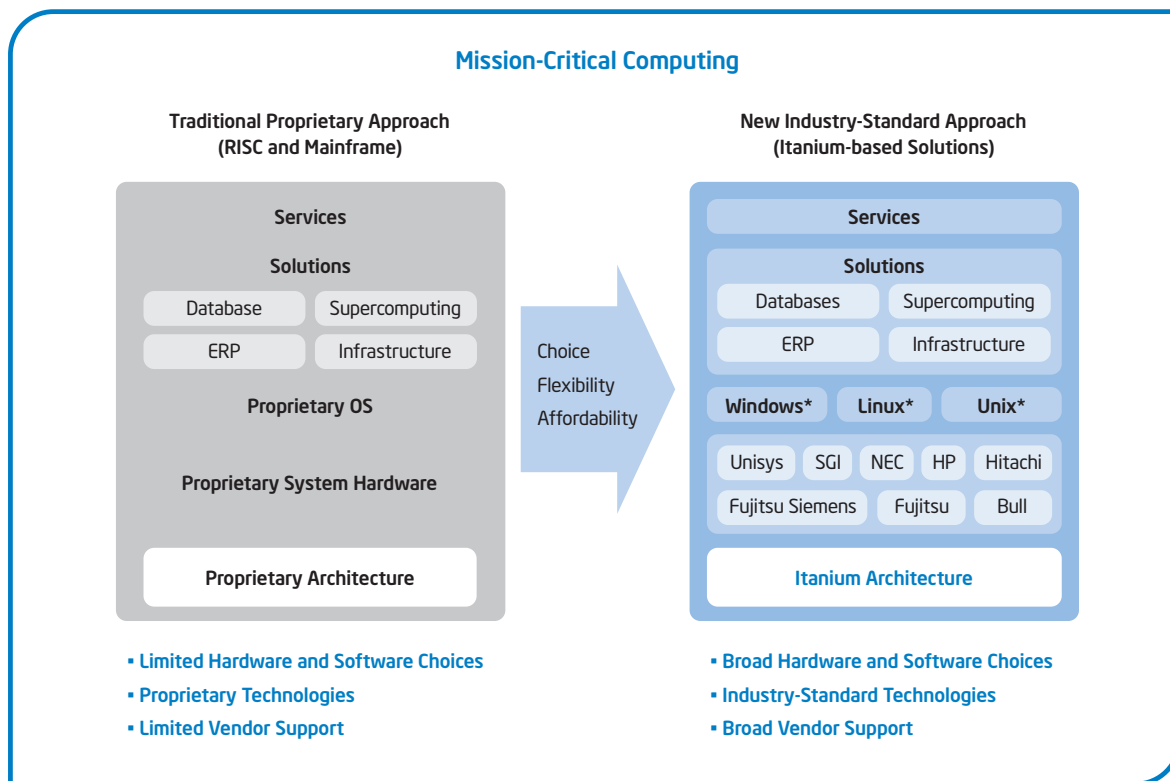
– Tim Mueller, supervisor, DuPont High-Performance Computing and Computation Sciences Groups

For years, affordability and business-critical computing have been mutually exclusive. Solutions have been based on proprietary architectures and solution stacks that are developed and supported

largely by a single vendor.<sup>7</sup> Deploying these solutions requires a major investment, and leaves customers with few options in terms of systems, technologies, operating systems, and vendors. This, in turn, limits their ability to control cost and risk and to take advantage of broader industry advances.

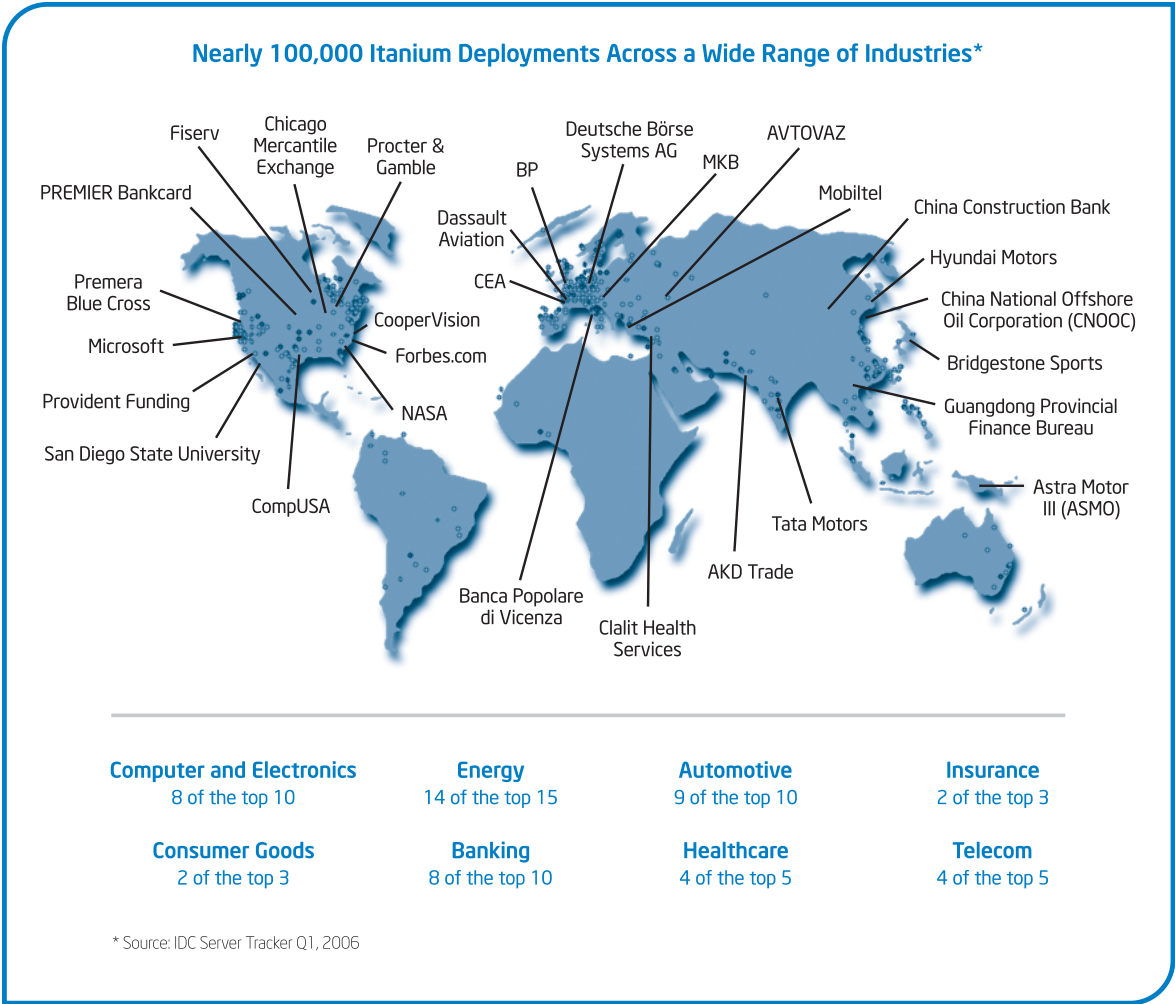
Until recently, organizations had little choice but to deploy these proprietary architectures. Today they do have a choice. Itanium-based solutions deliver high-end performance, scalability, and availability on affordable, industry-standard systems that are supported by a broad array of vendors, operating systems, and applications (Figure 1).

**Figure 1.** Itanium-based solutions offer an unprecedented level of choice and flexibility for business-critical computing, and can be instrumental in helping businesses get better total value from their IT investments.



<sup>7</sup> Although proprietary vendors are moving toward more open software platforms, support for standards-based software should be carefully investigated, and it should be noted that performance claims often depend on proprietary software stacks.

**Figure 2.** Adoption of Itanium-based solutions is a worldwide phenomenon, with strong growth occurring in both developed and emerging regions.



Market response has been positive, with consistent growth over the past two years. According to IDC, factory revenue for Itanium 2-based solutions grew 60 percent year over year in 2005.<sup>8</sup> That is faster than factory revenue grew for SPARC or IBM Power architecture at comparable points in their early years. Growth is accelerating and momentum is strong across all geographies and multiple vertical industries (Figure 2).

Given the proven potential for TCO reduction, why has the adoption of Itanium-based solutions not been even faster? Because businesses must have complete solutions that can be deployed easily across a wide range of business needs. As complete solutions have emerged for particular applications and industries, the adoption of Itanium-based systems has increased accordingly. Solution availability has improved dramatically in the past year, and this is fueling broader and faster adoption.

<sup>8</sup> Source: IDC Server Tracker, Q4 2005.