

PRIMEHPC FX10 supercomputer wins crown for Fujitsu

November 8 2011, by Nancy Owano



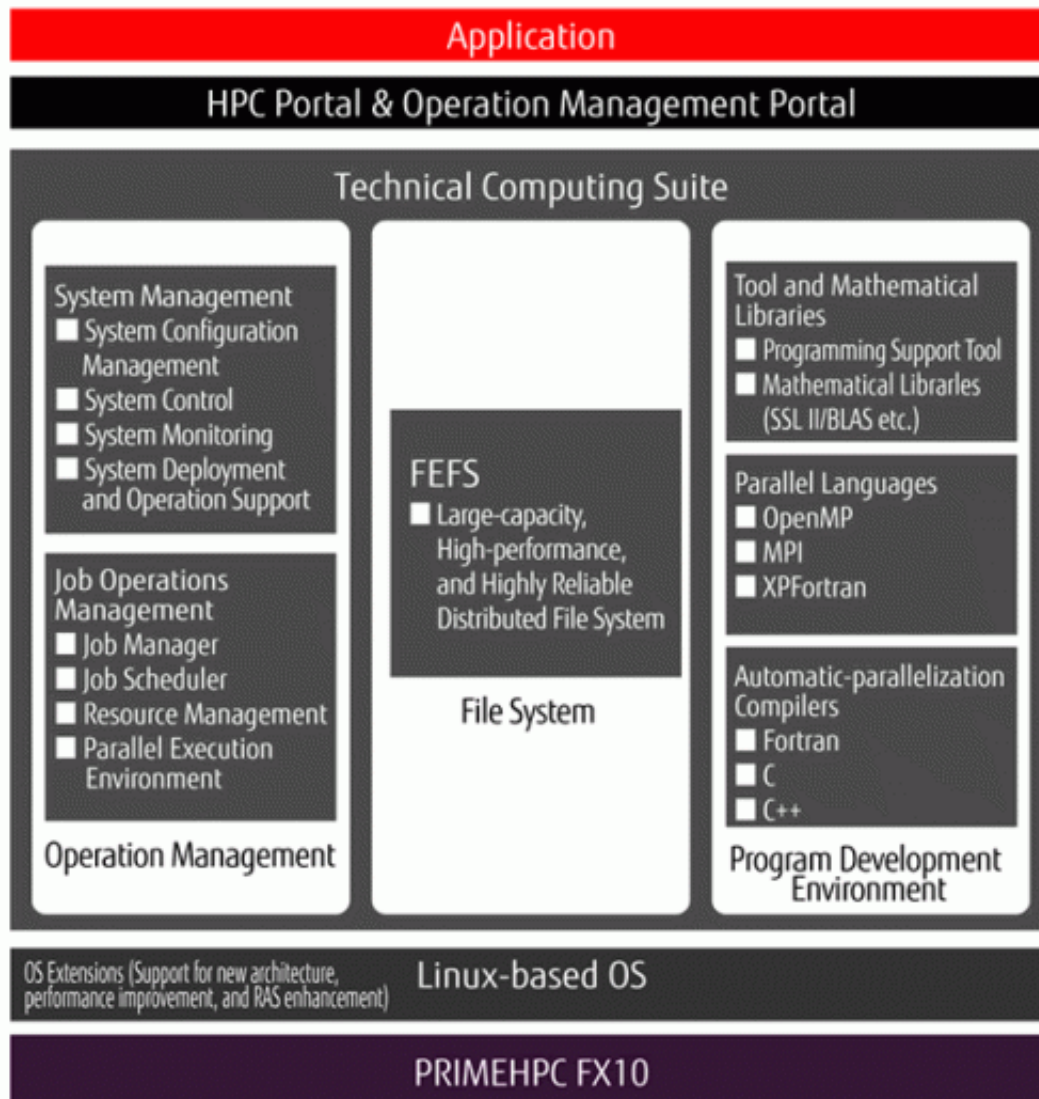
(PhysOrg.com) -- Fujitsu yesterday announced a new commercial supercomputer, the PRIMEHPC FX10. The announcement is a stunner because of its specs, and right on the heels of this month's other Fujitsu headliner, the K computer, a record-breaking 10-petaflop supercomputer in partnership with Japan's RIKEN. The K announcement said they completed the final build-out of the system and achieved 10.51 petaflops on Linpack, the benchmark performance test.

That marked the displacement of China as having the number one position in supercomputers. This week's [supercomputer](#) news from Fujitsu carries more record-breaking statistics. The PRIMEHPC FX10

made headlines in two directions: It's scaling up to 23.2 petaflops --more than double the current performance of the K computer. Also, rather than an undertaking for the Japanese government, as is the K computer for Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT), the FX10 will be available commercially and outside Japan.

PRIMEHPC FX10 will be available as of January 2012. Customers for the Fujitsu supercomputer will include any organization or company seeking large-scale simulations. Medical research and energy and weather analysis are a few examples. Fujitsu hopes to deploy fifty FX10 configurations over the next three years.

Details of the PRIMEHPC FX10 highlight what is termed a “theoretical computational performance” topping out at 23.2 petaflops. That figure is based on deploying 98,304 nodes across 1,024 racks. The K computer’s “theoretical computational performance” tops out at 11.28 petaflops. [The Register](#) explains this further: The fully loaded K machine running at RIKEN was tested using the Linpack Fortran benchmark test and rated 10.51 petaflops against the peak theoretical performance of 11.28 petaflops.



Another talking point about the supercomputer is Fujitsu's new Sparc64-IXfx processor. This is a 16-core chip, nearly twice as powerful as the 8-core SPARC64 VIIIfx CPUs used in K supercomputer. The FX10 runs Linux on Sparc.

Yesterday's announcement will be a proud talking point overall for Japan ahead of the SC11 supercomputing conference in Seattle next week, the

global conference for supercomputing, from November 12 through Nov 18. No supercomputing competitor takes its foot off the pedal and the Fujitsu achievement is a challenge for other supercomputer giants.

“So now [Fujitsu](#), IBM, and Cray have all set their sights on breaking the 20 petaflops barrier on their way to the exascale heavens,” comments *The Register*, for good reason: The world of supercomputing is competitive in a rush to build the fastest supercomputer. The [numbers](#) of highest-ranking supercomputers keep shifting. Supercomputers, as platforms for handling “big data,” keep on increasing in scale and performance, on a closely watched scoreboard over which is the fastest and most powerful.

More information: [Press release](#)

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