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[Toyota F1 Team to Use the AMD Opteron Supercomputer](#)

The Itanium 2 system doesn't seem to satisfy anymore

The latest updates on the F1 Supercomputing says that Toyota replaced its Itanium 2 system with an AMD Opteron supercomputer. The old Intel Itanium 2 system used by the blue team has been recently replaced with a faster one. Some light on the supercomputing capabilities on the highly secretive F1 industry is shed by Franklin Dallmann, president of supercomputer vendor Dalco, cited by [TG Daily](#). The Panasonic Toyota Formula 1 team used to have a 320-socket system with Intel Itanium 2 processors. It seems now that Toyota switched to an AMD Opteron one. The blue team has been previously sponsored by Intel, but now the company provides support for Ferrari and Renault. Toyota appointed Dalco in charge to building a new system. The new supercomputer Toyota has got 625 processor sockets, integrating 1250 AMD Opteron cores. All that remains to do for Toyota is to upgrade the system to AMD quad-cores and to double sockets, too. This way, the F1 team will have the best chance to win the HPC performance crown at least. Dalco designed and integrated BMW Sauber's supercomputer as well. The series, named after Albert Einstein, included Albert1 and Albert2. Albert1, the first generation to say so, used and AMD Opteron processor too, even though AMD was not an official sponsor of the team. Albert2, the successor, was based on an Intel platform. It used 512 Xeon 5160 processors (Woodcrest dual-core for a total of 1024 cores). Albert2 was stated to be around 5.5 times faster than Albert1. With a peak performance of about 12.3 Tflops, the system was ranked 166 in the most recent Top 500 supercomputer list. "The BMW Sauber F1 team doesn't want to disclose any performance related parameters," Franklin stated. He also added that Albert2 had been recently upgraded with 45 nm Harpertown processors ant that the number of sockets had been doubled. That makes 4096 cores now. It would clearly take the pole position. Here's TGDaily F1 Supercomputer Championship 2008 list: BMW Sauber F1 Team: Dalco Albert2, 1024 sockets, 4096 cores (Intel Xeon) Scuderia Ferrari Marlboro: Acer/IBM/Racksaver, 1000 processor sockets (upgrading to QC Opteron) Vodafone McLaren Mercedes: Silicon Graphics Altix, 512 sockets, 1024 cores (Intel Itanium 2) AT&T Williams F1 Toyota: Lenovo (Unnamed), 332 Sockets, 664 cores (Intel Xeon) Panasonic Toyota F1 Team: Dalco, 625 Sockets, 1250 cores (AMD Opteron) ING Renault F1 Team: Appro Xtreme-X2, 1024 sockets, 4096 cores (AMD QC Opteron) Red Bull Renault: IBM, 512 sockets, 1024 cores (upgrading to AMD QC Opteron) Scuderia Torro Rosso Ferrari: N/A (uses Red Bull infrastructure) Honda F1 Racing: SGI Altix ICE, unknown number of socket/cores, water-cooled Quad-Core Intel Xeon Super Aguri Honda: N/A (uses Honda F1 infrastructure) Force India Ferrari: Rental system (unknown specifications) The next race from the global F1 circus will take place this weekend at Circuto de Catalunya near Barcelona, Spain.