April 9, 2008 Live Technical Chat Q&A

:: John.Kotches: When you say "built in" you have to add in the XAUIs so how "built in" is it really?

A: The 10GbE NIC is built into the server, using Sun's Neptune chip on the motherboard, the XAUI card (common with the T5120 and T5220 servers) is required to hold the Fibre adapter module to bring those 10GbE ports to the outside world.

:: Scott: when is a "6340" blade expected?

A: For roadmap questions, please contact your local sales or partner rep. Or set up a presentation meeting with our Sun briefing center.

:: rickd: Does the 5140 / 5240 essentially replace the T6320 Blade?

A: No. Sun SPARC Enterprise T5140 and T5240 servers are 1RU and 2RU rack servers. Sun Blade T6320 is in a blade form factor.

:: blueone: why is the niu not on the cpu anymore?

A: It's a matter of how much Silicon is consumed providing all the required features of the CPU, in the case of the T2 there was space to provide the NIU on the CPU directly, in the case of the T2 Plus we had to make room for the Coherency Logic to allow multiple sockets to be supported, this meant moving the NIU off the CPU onto a separate piece of silicon on the motherboard, the Neptune chip.

:: rickd: TIML Do you think this replaces 6320?

A: No. Sun SPARC Enterprise T5140 and T5240 servers are 1RU and 2RU rack servers. Sun Blade T6320 is in a blade form factor.

:: rob: what are benchmarks between T2 and T2Plus with same apps?

A: See http://sun.com/coolthreads/benchmarks.

:: henry: is it correct that in order to leverage this new system, we have to use solaris os correct?

A: Yes, currently Solaris 10 8/07 OS plus patches or later.

:: LW: How does T2/T2+ perform with floating-point apps like SAS or Stata?

A: As with the T2 processor, we have addressed the low FP performance of the T1 processor by including a full hardware implementation of an FP unit in each of the eight cores of the T2 and T2 Plus processors (and remember the T2 Plus is a two or more socket system providing twice as many FP cores as the single socket T2 systems), this completely removes any concerns a customer should have over the FP performance of these processors.

:: db110530: So these new servers will have the same issues a T2000 has with single threaded apps?

A: We still urge customers to test these servers with their applications before drawing any conclusions, the single threaded performance of a T2 or T2 plus is on average 20% greater than a T1 processor at the same clock speed. The design point of these processors is multi-threaded throughput, so single threaded performance is not as high as some complex execution units could achieve. If customers requirements are single threaded ultimate performance, we have other CPU's such as the UltraSPARC IV and SPARC64 that address that single threaded performance requirement. However, i would encourage customers to look to the future, unless they have a really good reason to keep cranking clock speed to improve performance of a single threaded app, the trend in the industry is to look towards multi-cores and multi-threadedness to achieve higher performance, for a near term investment in revising the single threaded behavior of their applications and taking them multi-threaded they will reap performance benefits for years to come and future proof their environment.

:: henry: Oracle has selected Red Hat / "Unbreakable Linux" for their platform of choice, how can solaris / sparc become the choice OS / Platform for oracle or sap?

A: Solaris/SPARC is a great choice if you are running Oracle or SAP. In fact, we have many world record benchmarks on Oracle or SAP.

For example 1: The Sun SPARC Enterprise T5240 server running the Solaris 10 OS and Oracle Database Server 10g outperformed all other competitive dual-processor servers in the database tier of SPECjAppServer2004 benchmark, including systems based on the IBM Power 5+, Intel Xeon and Intel Itanium2 processors. In addition, the Sun SPARC Enterprise T5240 server delivered the highest overall Performance per Watt and SWaP. For complete details, see http://sun.com/coolthreads/benchmarks .

For example 1: The Sun SPARC Enterprise T5240 server, equipped with the new UltraSPARC T2 Plus CPUs, posted the best dual-processor result on SAP SD 2-Tier benchmark, supporting 4,170 users. Additionally, Sun's server is the first dual-processor system to exceed 20,000 SAPS, the hardware-independent metric that describes the performance of a system configuration in the SAP environment, all while maintaining the best Rack Unit to Users ratio. For complete details, see http://sun.com/coolthreads/benchmarks .

Also we have tons of customer testimonials and success stories. See: http://www.sun.com/servers/coolthreads/testimonials .

:: slava b: any plans for 4 and 8 socket models?

A: For roadmap questions, please contact your local sales or partner rep. Or set up a presentation meeting with our Sun Briefing Center.

:: Tim: what was the url for the performance test?

A: See http://sun.com/coolthreads/benchmarks for more information.

:: Al Sinatra: What's the model # for these?

A: Sun SPARC Enterprise T5140 and T5240 servers based on 3rd UltraSPARC T2 Plus "System on a Chip" processor.
For more on these servers, info see:
http://www.sun.com/t5140/
http://www.sun.com/t5240/

:: garyelee: What is the level of support offered during the "Try" portion of the "Try and Buy"?

A: Sun's award-winning, fully-integrated hardware and operating system service coverage will be provided as part of the Sun SPARC Enterprise T5140/T5240 Try and Buy 60-day free trial offer.