* DA-VS Charge 2

Compares PxQx8 with QxPx8

* DA-PWC 12k Speedup. Parallelisms 1 through 32. Plataeus show speedup groups for the same parallelism – 1, 2, 4, 8, 16, and 32. Note. 8x1xN cases show dips because FG has 2 physical CPUs each with 4 cores, so running 1 process with more than 4 concurrent tasks may seem to introduce thread switches between CPUs, which is expensive. The best we found was to use #CT <= #cores per socket and use MPI across CPUs.

Figure 8 b)

System overview

* **Tempest (Linux):** 32 nodes, each has 4 Intel Xeon E7450 CPUs at 2.40GHz with 6 cores, totaling 24 cores per node; 48 GB node memory and 20Gbps Infiniband (IB) network connection. It runs Red Hat Enterprise Linux release verion 5.11 (Tikanga).