

(From ARM : Comments on Draft 3 Version 2.0 of Product Specification for Computer Servers)

1. We appreciate inclusion of Multi-node server as part of the scope of Version 2.0 draft-3. Similarly, the clarification of interchangeability in use of Sockets/Directly soldered attachment/Processor is also appreciated.
2. Lines 79-84 : We would like the definition of the Multi-node server to be elaborated to include the following : A multi-node server could be of two types – (i) Single processor (one or more core) multi-node server and (ii) Multiple Processor (each processor with one or more cores) multi-node server. The intent is to have two sub categories so that fair comparison is possible.
3. Line 296-302 : This section specifies that Multi-node server/Blade server is restricted to have a maximum of 4 processor sockets. We would like to recommend that the sentence be changed as : “ ... Multi-node/Blade server is restricted to have maximum of 4 Processors per Node/ Blade. ”
4. If the above recommended change (comment # 3) is not acceptable, the restriction would eliminate the possibility of Energy Star certification for Servers based on recent technological developments in the domain of high density, power efficient, “scale-out” servers with each processor /socket having a number of cores with mid-range single thread performance. These “Computer Server” type assumes scaling in terms of Processors as per the need of the application domain and would typically have a much larger number of Processors. We would request an appropriate relaxation in the number of Processor /Sockets for this class of Multi-node servers. This class of servers, otherwise, meets requirements for qualifying as Multi-node Servers (shared infrastructure, not hot swappable), as specified in draft-3.
5. Line 116-123 : Indicates that Blade server is not included in the Rack mounted category. The form factor of Blade server / Multi-node server is not specified. It should include the form factors used by the new class of micro servers or “scale-out” servers mentioned above.
6. Line 323 : Section 3 : Qualification Criteria clearly specifies the requirement of measurements based SERT worklets only. Currently the SERT (Beta-2) Design Document only supports 64b architectures. It is suggested that a clear clarification is included in the SERT document to emphasize that SERT is architecture agnostic and other architectures (like 32b) and other JVM/OS are not supported due to lack of resource. This will allow power efficient servers based on 32b architectures to qualify and the corresponding interested stakeholders could sponsor 32b port of the worklets etc.
7. Page 9 of SERT (Beta-2)-spec, Section 2.3 indicates the restriction of 8 sockets and 64 nodes. This would be restrictive for qualification for the class of servers mentioned in item 4 (above). It is not obvious how this relationship of sockets and nodes has been arrived at.
8. SERT : The issue of scalability of the worklets and corresponding measurement of power efficiency need to be addressed.