

**Deutsche Bank Reply - Draft 2 Version 2.0 Specification
June, 2012**

**Environmental Protection Agency
ENERGY STAR® Program Requirements Product Specification for Computer Servers**

Deutsche Bank welcomes the continued opportunity to be engaged in development of the ENERGY STAR computer servers specification. Energy efficiency in the data centre is a key part of our overall commitment to an Eco-Efficient IT, and we consider the use of industry standard ratings for energy efficiency such as ENERGY STAR to be important to us and our suppliers in this regard.

Please find below our comments on the ENERGY STAR® “Program Requirements Product Specification for Computer Servers Eligibility Criteria Draft 2 Version 2.0” and accompanying documents.

Eligibility Criteria Draft 2 Version 2.0

3.2 Power Supply Requirements

While it is clearly necessary to specify power supply requirements that can be met by a significant number of manufacturers, we are concerned that both the efficiency requirements and the power factor requirements are relatively low at the CPU utilisations typically found in data centres. This would then in effect mean that despite having ENERGY STAR rated servers overall energy efficiency could still be relatively low.

3.5 Active State Efficiency Criteria

We firmly believe that performance measurement per Watt is the best way to measure energy efficiency of computer servers and this is the method we employ internally to measure our overall data centre energy efficiency. We therefore welcome the continued inclusion of SERT as a testing requirement in the version 2 specification and look forward to the inclusion of active mode levels in the version 3 specification.

3.6 to 3.8 Idle Mode and Full Load Efficiency Criteria

We welcome criteria in the specification that define computer servers with market-leading energy efficiency. We do however consider active state efficiency criteria to be useful in defining the likely overall energy efficiency in a real data centre situation.

3.9 Other Testing Criteria

GPGPUs are an interesting addition to servers for certain workloads and we welcome their inclusion in the specification.

Draft Test Method Rev. May-2012

6.2 UUT Preparation

For blades servers we propose that ideally full chassis should be configured and used for optimal efficiency. However, we support the use of manufacturer recommendations for configuration of a half-full chassis where this is tested.

7.1 Power and Efficiency Testing

We support the proposal to use “chassis + N blades / N” to derive the per blade power values. We use this method internally to calculate per blade power efficiency (work per Watt).

To re-iterate previous comments, we anticipate that the v2 ENERGY STAR rating for servers is a useful progression. We continue to see value in the EPA considering a multi-tier rating in addition to the current pass/fail in future versions of the specification, whereby ENERGY STAR rated servers could be compared as good/better/best (or whatever levels are considered appropriate).

Thank you for continuing to keep us involved in ENERGY STAR specification development.

Mit freundlichen Grüßen / Best regards



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