



Samsung Semiconductor, Inc
Feedback to EPA on Tier 2 Server Specification
October 16th 2009

Initial Samsung Semiconductors Tier 2 feedback: to focus on the extent of the power allocation attributed to DRAM memory.

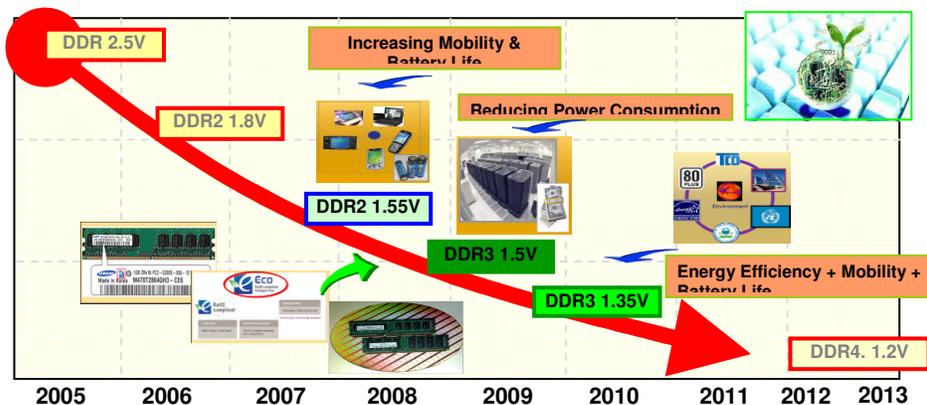
Request for more information: For Samsung to provide a recommendation on the power/GB that includes idle and active mode, we need to better understand the server configuration used as the basis for defining the specification, and knows the ancillary test and measurement conditions (for idle and active, etc.)

For memory, the idle and active modes are calculated using the I_{dd} parameters. These currents (I_{dd0} to I_{dd8}) are based on standard definitions developed by JEDEC. The I_{dd} values for any given memory module can be found in the datasheets of the memory manufacturers compliant to the JEDEC standard. Samsung's can be found in the "Product Info" section of the following microsite:

www.samsung.com/ddr3

Our feedback on the already defined value of 2W/GB in idle mode (defined as adder) in the Tier 1 specification is the following: We anticipate that new DRAM technologies such as DDR3, which are becoming mainstream in server platforms, will meet the 2W/GB value in idle (valid for DIMMs).

DDR3 the new memory generation: 2009-2012



All DDR memory technology follows Industry Standard Specifications driven by

Summary: Samsung will provide recommendations on Tier 2 specifications after receiving the actual configuration and test conditions that will be used by the participants setting the Tier 2 server specification, as these parameters will impact the outcome of the active mode more significantly.



