Memory technology of the future

Nowadays we live under information avalanche. In order to be able to process all this information, we need to store gigantic volumes of it.

What memory technologies are available on the market for information storage (list 5 – 10 technologies as well as the state of development of these technologies; there are different architectures built on one technology, such as Flash: NAND, NOR etc. Different architectures are counted as one technology)? (**5 баллов**)

What are the industry requirements for memory media (list 5 – 10 main parameters)? (**1 балл**)

What is the minimum bit-size achievable for the technology fundamentally for the all above mentioned technologies? Choose any 3 technology you want to discuss and run the numbers. What is the current state of art for those technologies? (**5 баллов**)

Suggest the bit-reading technology for the memory technologies and estimate the fundamental limits of the linear read speed. (**3 балла**)

When do you think fundamental limits for memory technologies in terms of bit size, and read speed will be achieved by the industry? (**2 балла**)

Estimate the current market size for memory products in millions of USD. Please state the assumptions used for market sizing. (**3 балла**)

При ответе на английском языке – плюс три балла.