**Checkpointing Exascale Memory Systems with Existing**

for the first round of exascale supercomputers. The U.S. De-

The key insight gained from our experiment is that even

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| **3.1** |  |  |  |  |  |  |  |
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ramdisk shares the main memory, its size must be limited to

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| **4.1** |  |  |

bols (16 data + 2 ECC) are sent to the RS(18,16) decoder.

Table 2: Simulations parameters for

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| most 99% of checkpoints were written to ramdisk. Neverthe- |  |  |  |  |
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MPI process with only 1 second of computation in a check-

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| single chip failure. |  |  |  |

[10] Jeffrey Vetter, Rob Schreiber, Trevor Mudge, and Yuan Xie.