

# Post-RAID Semantic Memory System (512B Alignment Optimized) - Log Report

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■ Post-RAID Semantic Memory System (512B Alignment Optimized)
Integrated Block Alignment Optimizer, solved 4MB encoding issue
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INFO: Initializing Post-RAID Semantic Memory System (512B Alignment Optimized)...
INFO: Initializing Hybrid Memory Acceleration Engine...
INFO: Initializing SVM manager...
INFO: Checking platform: AMD Accelerated Parallel Processing
INFO: Device: gfxl010:xnack-
INFO: ■ Using Windows system ICD loader
INFO: ■ SVM verified available
INFO: ■ SVM manager initialized successfully
INFO: Vendor detected: ['Unknown']
INFO: ICD in use: Yes
INFO: ■ Memory RAID system initialized
INFO: ■ Memory RAID engine ready
INFO: ■ Initializing L3 cache optimizer...
INFO: ■ L3 cache optimizer ready
INFO: ■ All components initialized!

■ Benchmark results (512B aligned):
0.1MB:
  ■ reed_solomon: 14.29 ms, encode_efficiency=0.004375
  ■ lrc: 5.54 ms, encode_efficiency=0.011282

0.2MB:
  ■ reed_solomon: 5.17 ms, encode_efficiency=0.048378
  ■ lrc: 5.14 ms, encode_efficiency=0.048608

1.0MB:
  ■ reed_solomon: 6.18 ms, encode_efficiency=0.161768
  ■ lrc: 7.28 ms, encode_efficiency=0.137444

4.0MB:
  ■ reed_solomon: 8.17 ms, encode_efficiency=0.489674
  ■ lrc: 7.16 ms, encode_efficiency=0.558620

■ 4MB test breakthrough success! 2/2 encoding schemes passed (512B aligned)
■ Post-RAID Semantic Memory System test completed!

■ Cleaning up SVM resources...
■ Resource cleanup completed successfully.
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