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(54) **Adaptive error correction for non-volatile memories**

(57) Methods and systems are disclosed for adaptive error correction for non-volatile memories that dynamically adjust sense amplifier read detection windows. Memory control circuitry (120) uses error correction code (ECC) routines (124) to detect bit errors that are non-correctable using these ECC routines. The memory control circuitry (120) then dynamically adjusts sense amplifier read detection windows (312) to allow for correct data to be determined. Corrected data can then be output to external circuitry. The corrected data can also be stored for later access when subsequent read operations attempt to access address locations that previously suffered bit failures. The disclosed methods and systems can also be used with respect to memories that are not non-volatile memories.

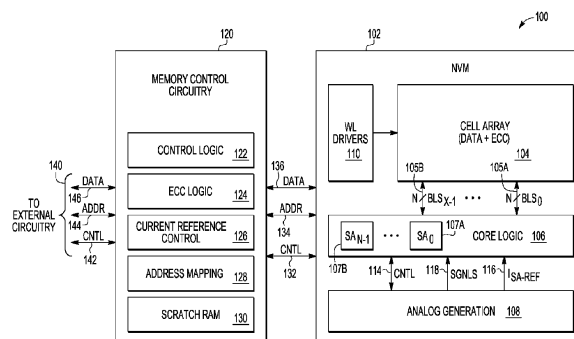


FIG. 1