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(54) **MEMORY BUILT-IN SELF-TEST WITH
AUTOMATED REFERENCE TRIM
FEEDBACK FOR MEMORY SENSING**

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(57) **ABSTRACT**
This application discloses a memory built-in self-test system to prompt a memory device to sense values of stored data using a reference trim during memory read operations. The memory built-in self-test system can automatically set the reference trim for the memory device. The memory built-in self-test system includes a memory built-in self-test controller to prompt the memory device to perform the memory read operations with different test values for the reference trim. The memory built-in self-test system also includes a trim feedback circuit to determine when the memory device fails to correctly sense the values of the stored data using the test values for the reference trim, and set the reference trim for the memory device based, at least in part, on the failures of the memory device to correctly sense the stored data.

