

MRAM-Writing Circuitry to Compensate for Thermal-Variation of Magnetization-Reversal Current

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MRAM-writing circuitry to compensate for the thermal variation of the magnetization-reversal current (MRC) is proposed. The writing current of the proposed circuitry is designed to decrease in proportion to an increase in temperature. This technique prevents multiple-write (MW) failures from degrading 1Gb MRAM yield where the standard deviation of MRC variation from other origins is less than 5%.