

A Novel Access Scheme suppressing Disturbance for a Cross-point type Ferroelectric Memory

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To resolve the disturbance problem of stored data being destroyed in a cross-point type FeRAM, which has prevented it from being put into practical use, we propose a novel access scheme for read-restore sequence. The unique point of this scheme is two restore sequences that are dynamically changed according to read-out data. Based on this scheme, the reduction of polarization induced by the disturbance is suppressed to be less than 17% after stress iteration of 10^9 times.