WRITING TO CROSS-POINT NON-VOLATILE MEMORY

CROSS-REFERENCES

[0001] The present Application for Patent claims priority to PCT Application No. PCT/US2017/035762 entitled "Writing to Cross-Point Non-Volatile Memory," filed June 2, 2017, which claims priority to U.S. Patent Application No. 15/197,416 by Wang et al., entitled "Writing to Cross-Point Non-Volatile Memory," filed June 29, 2016, each of which is assigned to the assignee hereof, and each of which is expressly incorporated by reference in its entirety herein.

BACKGROUND

[0002] The following relates generally to memory devices and more specifically to operating non-volatile memory arrays.

[0003] Memory devices are widely used to store information in various electronic devices such as computers, wireless communication devices, cameras, digital displays, and the like. Information is stored by programing different states of a memory device. For example, binary devices have two states, often denoted by a logic "1" or a logic "0." In other systems, more than two states may be stored. To access the stored information, a component of the electronic device may read, or sense, the stored state in the memory device. To store information, a component of the electronic device may write, or program, the state in the memory device.

[0004] Multiple types of memory devices exist, including magnetic hard disks, random access memory (RAM), dynamic RAM (DRAM), synchronous dynamic RAM (SDRAM), ferroelectric RAM (FeRAM), magnetic RAM (MRAM), resistive RAM (RRAM), read only memory (ROM), flash memory, phase change memory (PCM), and others. Memory devices may be volatile or non-volatile. Non-volatile memory, e.g., FeRAM, may maintain their stored logic state for extended periods of time even in the absence of an external power source. Volatile memory devices, e.g., DRAM, may lose their stored state over time unless they are periodically refreshed by an external power source. Improving memory devices may include increasing memory cell density, increasing read/write speeds, increasing reliability, increasing data retention, reducing power consumption, or reducing manufacturing costs, among other metrics.