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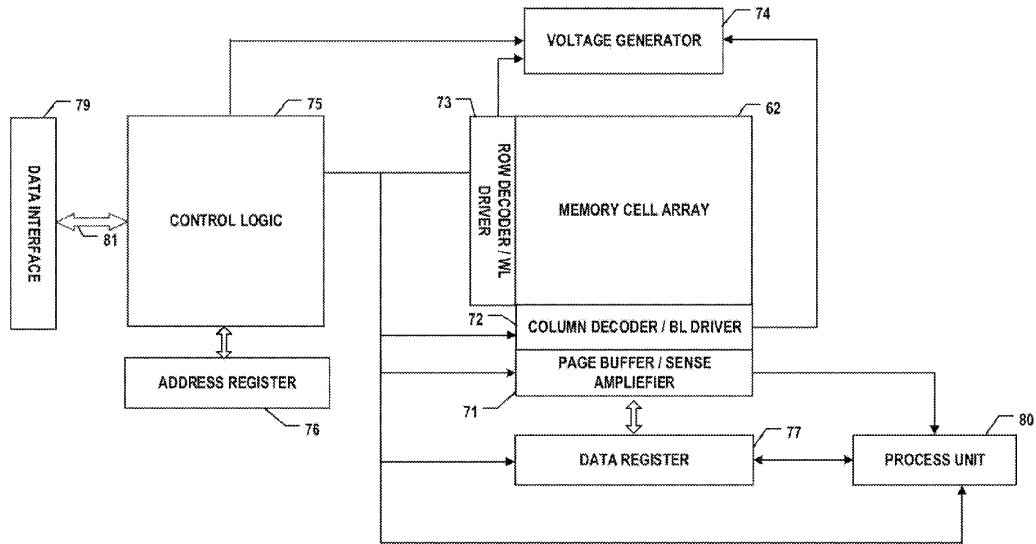
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(54) Title: MEMORY DEVICE, MEMORY SYSTEM, AND METHOD FOR DATA CALCULATION WITH THE MEMORY DEVICE

[Fig. 1E]

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(57) Abstract: A memory device, a memory system, and a method for data calculation with the memory device are provided. The memory device includes an array of memory cells and a peripheral circuit coupled to the memory cells is provided. The peripheral circuit includes page buffers configured to store first data transmitted from a data interface of the memory device and to sense second data from the array of memory cells. The peripheral circuit further includes at least one process unit coupled to the page buffers via a data-path bus of the peripheral circuit and configured to perform calculation based on the first data and the second data. The peripheral circuit further includes a control logic configured to program the second data into the array of memory cells.

[Continued on next page]

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