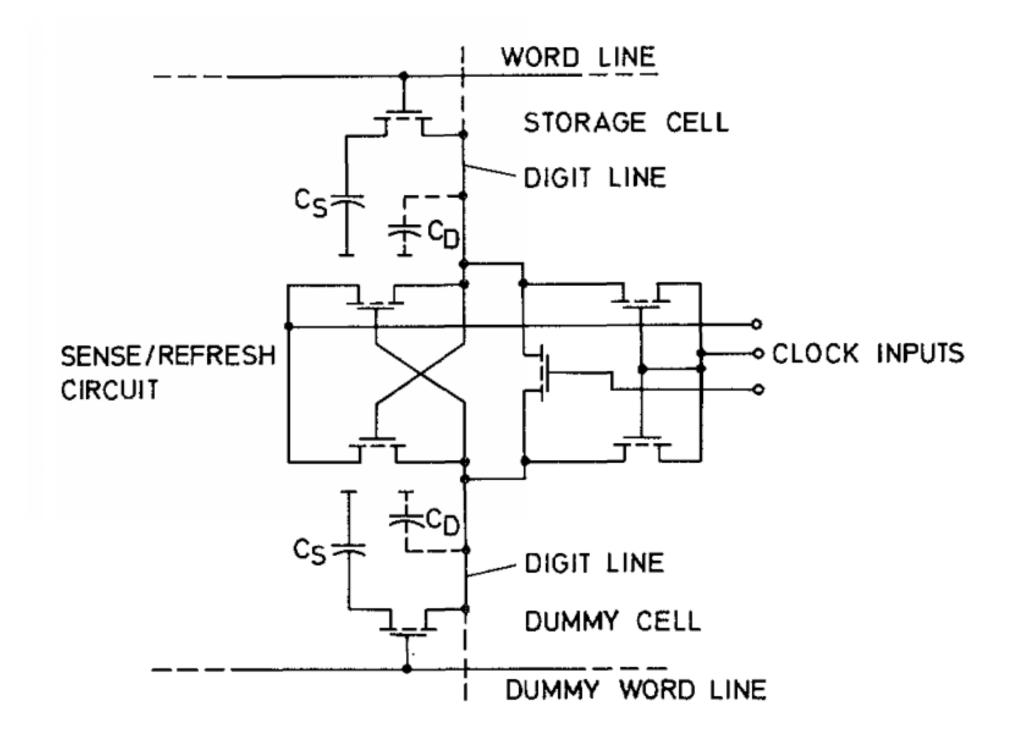
A 1T-DRAM SENSING SCHEME

ISSCC 1972



Storage Array with Sense/Refresh Circuit for Single-Transistor Memory Cells

IN 1972, STEIN (Siemens) and his co-workers described the sense amplifier and the use of dummy cells for a 1T-1C DRAM. This sense amplifier became the industry standard for most of the future DRAM designs. The novel concept of refresh while reading was also demonstrated in this scheme. Stein received the IEEE Solid-State Circuits Council Award for this pioneering work.

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