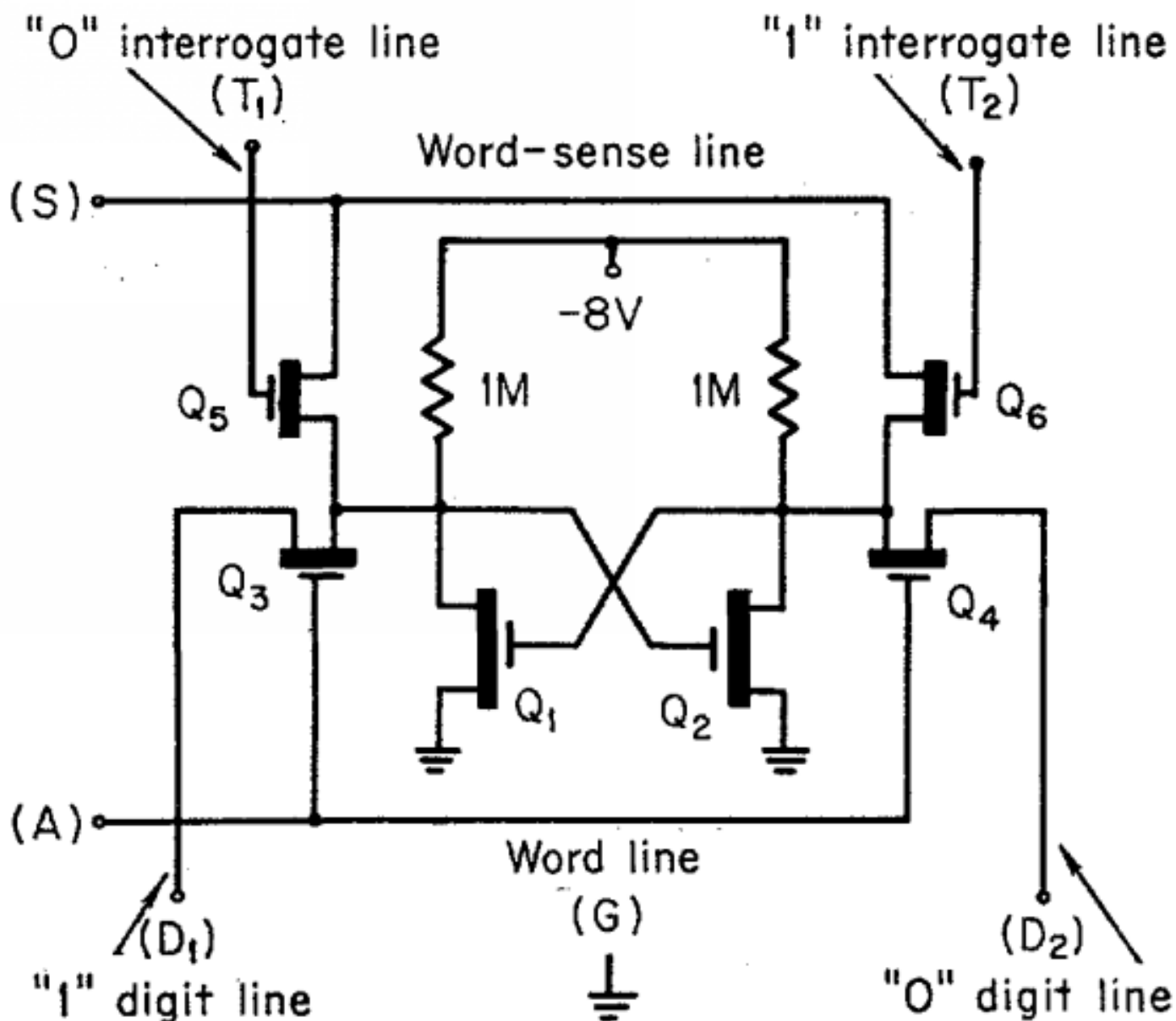


FIRST INTEGRATED MEMORY CELL

ISSCC 1966



A 150-Nanosecond Associative Memory using Integrated MOS Transistors

THE FIRST INTEGRATED memory cell at ISSCC was shown by Igarashi et al. (NEC) in 1966. It was a single p-channel cell and had the basic elements of the Classic 6 Transistor Static RAM memory cell. The load devices were thin film resistors with a sheet resistance of $20\text{K}\Omega$ per square, anticipating the future poly load resistor SRAM cells. The associative function was performed by two additional devices (Q_5 and Q_6), two interrogate lines, and a word sense line. The standby power was $60\mu\text{W}$ per cell.

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