9.5: Conclusion

Circuits which have memory and can maintain a state are called sequential circuits. Simple, or non-sequential, circuits are circuits which do not maintain a state using memory. Simple circuits can calculate results based on inputs, but to compute a useful result a circuit must be able to maintain a state.

This chapter introduced the concept of SRAM, and how it is implemented using only NAND and NOT gates. SRAM maintains its state so long as current is supplied to the circuit, and does not require a refresh cycle, making it faster than DRAM. But SRAM is also more complex than DRAM, so SRAM is more expensive than DRAM.

SRAM was implemented using a D latch circuit. The problem with using a latch in a circuit, that it requires two latches to be effective, was illustrated. The D flip-flop was then introduced to solve the problem with a D latch.