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2-3 Journal: Embedded vs. Desktop Systems

How is non-volatile memory different in an embedded system and a desktop system?

The main difference in NVM between embedded systems and desktop systems is the primary use. In an embedded system the NVM is used to store firmware and code that will not be updated regularly (microcontroller that makes the toaster work). In desktop systems the NVM is regularly altered by the system and user performing read/write operations (items stored on hard drives, SSD, etc.).

What are the differences between embedded systems and desktop systems?

An embedded system is a computer system that is embedded in another device and only performs a few, or even a single, functions. They also have much stricter constraints on things like power, size, memory, performance, cost, etc. A desktop system is a combination of hardware and software that provide a wide variety of functions to the user and are not bound by the restraints of embedded systems.

What are the advantages of various embedded system architectures?

The advantages are that the system is cheaper to build, faster to respond, smaller in size, requires far less power to operate, and often because of their limited functionality they are easier to use and are often more reliable.