



Abstracting the Integration between Linux and a Quantum Computer: The Case of Linux 1.1.68 with a Layered Generic Quantum Computer

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Abstract

The abstracted architecture of an imaginary layered quantum computer was considered for integration with the Silicon-based components of a usual i386 machine through interaction with Linux version 1.1.68. The architecture-specific files of Linux ports for i386 and MIPS were observed and compared. Boot code was initially used as a point of integration for the quantum processing unit. Later on, the quantum processor was considered for integration as a special purpose unit. Results indicate that a possible key to integrating a quantum machine with Linux is the leverage of existing Silicon logic.

Keywords

Linux, quantum computer, i386, MIPS, computer architecture, operating system