3.3 Motherboards and Buses

As you study this section, answer the following questions:

- What factors should you consider when selecting a motherboard?
- What chipset functionalities have moved to the CPU on newer systems?
- What are the basic steps of installing a motherboard?
- How can you add peripheral devices to a system?
- How are PCI and PCIe different?

In this section, you will learn to:

- Select an appropriate motherboard and install it in a desktop computer

Key terms for this section include the following:

Term	Definition
AC (alternating current)	The type of current distributed through wall sockets.
DC (direct current)	The type of current used inside a computer.
Motherboard	A circuit board that either houses or is connected to all of the components operating in the computer.
CPU socket	Houses the CPU.
Expansion slots	Allow you to expand the capabilities of your computer.
Firmware	Is stored on integrated flash memory, on a motherboard.
Chipset	A group of chips that facilitates communication between the processor, memory, and peripheral devices.

This section helps you prepare for the following certification exam objectives:

Exam	Objective
TestOut PC Pro	1.1 Select and install PC components 1.1.2 Install and connect a motherboard
CompTIA 220-1001	3.4 Given a scenario, select, install and configure storage devices. ▪ Magnetic hard drives ▪ Sizes: ▪ 2.5 ▪ 3.5

	3.5 Given a scenario, install and configure motherboards, CPUs, and add on cards.
	
	▪ Motherboard connectors types
	  ▪ Front panel connector
	  ▪ Internal USB connector
	▪ CMOS battery
	▪ Expansion cards
	  ▪ Video cards
	  ▪ Onboard