3.12 Video

As you study this section, answer the following questions:

- How does the video card affect the quality of the image on the monitor?
- Which type of DVI connector sends digital signals only?
- How does the GPU increase the video performance?
- What are the differences between integrated graphics and dedicated video cards?
- What advantages are provided by SLI and CrossFire?
- What is the general function of HDCP? When should you be concerned with an HDCP video card or monitor?

In this section, you will learn to:

- Select the appropriate video card for a computer system
- Upgrade a video card

Key terms for this section include the following:

Term	Definition
Display connectors	Connectors that attach to different displays like VGA, DVI-I, HDMI, DisplayPort.
Display quality	The resolution, refresh rate.
Processing capabilities	The capacity of the graphics processing unit (GPU).
Memory	DDR, DDR2, DDR3, GDDR2, GDDR3, GDDR5.
Bus type	PCIe x16, PCI, AGP, VESA.
Multi-GPU	SLI, CrossFire.
HDMI audio	HDTV out, onboard sound.
DirectX/openGL	A collection of APIs that improves graphic, animation, and multimedia creations.
TV Input/output	S-video, HDMI, VGA, DVI and connectors.
High-bandwidth Digital Content Protection (HDCP)	A digital copy form designed to protect digital media from piracy.

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

Exam	Objective
CompTIA 220-1001	3.1 Explain basic cable types, features, and their purposes.

- Video cables
  - VGA
  - DVI
  - HDMI
  - Mini-HDMI
  - DisplayPort
  - DVI-D, DVI-I

3.2 Identify common connector types.

- BNC

3.5 Given a scenario, install and configure motherboards, CPUs, and add-on cards.

- Expansion cards
  - Video cards

3.6 Explain the purposes and uses of various peripheral types.

- Monitors