

COMPTIA A+ CORE 1 (220-1001) EXAM CERT PREP 3: CORE HARDWARE

OBJECTIVE MAPPING*

EPISODE 1: WHAT IS THE BIOS?

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

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

- BIOS/UEFI settings
 - Boot options
 - Interface configurations

EPISODE 2: POST

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

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

- BIOS/UEFI settings

DOMAIN 5: HARDWARE AND NETWORK TROUBLESHOOTING

5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPUs, and power

- POST code beeps

EPISODE 3: SYSTEM SETUP

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

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

- BIOS/UEFI settings
 - Boot options
 - Firmware updates
 - Security Settings
 - Interface configurations
 - Security
 - Passwords

EPISODE 4: TROUBLESHOOTING FIRMWARE

CORE 1 EXAM OBJECTIVES

DOMAIN 5: HARDWARE AND NETWORK TROUBLESHOOTING

5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPUs, and power

- POST code beeps

EPISODE 5: FORM FACTORS

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

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

- Motherboard form factor
 - ATX
 - mATX
 - ITX
 - mITX
- Motherboard connectors types
 - Socket types

EPISODE 6: CHIPSETS

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

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

- Motherboard connectors types
 - Socket types

EPISODE 7: TOURING THE MOTHERBOARD

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

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

- Motherboard connectors types
 - PCI
 - PCIe
 - Socket types
 - Front panel connector
 - Internal USB connector

EPISODE 8: TOURING THE CASE

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

3.6 Explain the purposes and uses of various peripheral types

- Optical

EPISODE 9: INSTALLING A MOTHERBOARD

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

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

- Motherboard connectors types
 - Front panel connector

EPISODE 10: ELECTRICITY BASICS

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

3.7 Summarize power supply types and features

- No sub-objectives

EPISODE 11: THE POWER SUPPLY

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

3.7 Summarize power supply types and features

- Input 115V vs. 220V
- Output 5.5V vs 12V
- 24-pin motherboard adapter
- Number of devices / types of devices to be powered

3.2 Identify common connector types

- Molex

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

- Motherboard form factor
 - ATX
- Motherboard connectors types
 - PCIe
 - SATA

EPISODE 12: MOUNTING A POWER SUPPLY

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

3.7 Summarize power supply types and features

- No sub-objectives

EPISODE 13: CHOOSING A POWER SUPPLY

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

3.7 Summarize power supply types and features

- Wattage rating

EPISODE 14: POWER PROTECTION

CORE 1 EXAM OBJECTIVES

DOMAIN 4: VIRTUALIZATION AND CLOUD COMPUTING

4.3 Given a scenario, implement basic disaster prevention and recovery methods

- UPS
- Surge protector

4.5 Explain environmental impacts and appropriate controls

- Power surges, brownouts, and blackouts

- Battery backup
- Surge suppressor

EPISODE 15: COOLING YOUR PC

CORE 1 EXAM OBJECTIVES

DOMAIN 3: HARDWARE

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

- Cooling mechanism
 - Fans
 - Heat sink

EPISODE 16: TROUBLESHOOTING POWER SUPPLIES

CORE 1 EXAM OBJECTIVES

DOMAIN 5: HARDWARE AND NETWORK TROUBLESHOOTING

5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPUs, and power

- Common symptoms
 - Unexpected shutdowns
 - No power
 - Overheating
 - Fans spin – no power to other devices
 - Smoke
 - Burning smell

EPISODE 17: TROUBLESHOOTING CORE COMPONENTS

CORE 1 EXAM OBJECTIVES

DOMAIN 5: HARDWARE AND NETWORK TROUBLESHOOTING

- Common symptoms
 - System lockups
 - Loud noise
 - Indicator lights

*This document can be used to determine what CompTIA A+ exam objectives are in each episode, as well as map where those objectives are in the official “CompTIA A+ 220-1101 Exam Objectives (2.0)” PDF resource that accompanies this course.

**Why am I seeing different Core exams than what I’m studying? In some cases, you may be watching a video series that focuses on the Core 1 exam, however some of the episodes contain Core 2 exam objectives, or vice versa. There are 2 reasons for this: 1) The other Core exam topic is covered to give you a better, fuller understanding of the surrounding topics, and 2) Some episodes contain information from both Core exams because the topics coincide with each other and are more easily taught in 1 episode than breaking them out into separate episodes.