

Lab Report 4

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March 3, 2016

1. Computer & External Peripheral Devices

(a) Manufacturer & Model Number: Dell Optiplex 760 00144352256753

(b) Ports

- i. 2 audio ports: 3.5mm mini jacks; used for speakers and microphones
- ii. 4 USB ports: Universal plug-and-play connector; used for mice, flash drives, etc.
- iii. 1 VGA port: Video Graphics Array; used for monitors; could be used to connect a laptop
- iv. 1 eSATA: Allows fast connection to external hard drives; used for hard drives, DVD drives
- v. 1 LAN: Local Area Network port (RJ-45 Ethernet socket); connects to switches, hubs, routers
- vi. 1 parallel port: 25 pin port that transfers bytes simultaneously; can be used for printers and zip drives
- vii. 1 display port: alternate to HDMI; connects to monitors, projectors
- viii. 1 DE-9 Serial RS 232: non-simultaneous data transfer; can connect to a mouse, printer, or modem

(c) Peripheral Devices

- i. Monitor
- ii. Keyboard
- iii. Mouse

2. Motherboard

(a) Processor: Intel Core 2 Duo

(b) Bus Types:

- i. 4 PCIE x16, 1 has network card
- ii. 4xDIMM memory slots, 2 attached
- iii. 4xSATA, 3 attached
- iv. 1xUSB, attached
- v. 1xCPU fan, attached
- vi. 1xDPI Port 1 Parallel (attached to eSATA/DisplayPort/Parallel Port)
- vii. 1xVGA Serial (attached to VGA / 5+4 port)
- viii. 1xINT_SPKR, not attached

(c) Disk Controllers: 4x SATA

- i. SATA0 connected to 250GB Hard Drive
- ii. SATA1 connected to DVD-ROM
- iii. SATA2 connected to DVD-RW
- iv. SATA3 empty

(d) Main Memory: 4 slots, 2x2GB occupied

(e) CMOS: PI3 PCIE 2612-BZFE 0848XG

3. Internal Components

- (a) Hard Drives
 - i. 1x250GB SATA Western Digital 7200RPM
- (b) Other Devices
 - i. 1xDVD-ROM DH-16D3S
 - ii. 1xDVD-RW GH30N
- 4. Network Interface Card
 - (a) Manufacturer: 3COM
 - (b) Adapter: Ethernet
 - (c) Model Number: 920-BR06
 - (d) MAC Address: 000102690C82
- 5. BIOS
 - (a) Basic Information
 - i. BIOS version: A02
 - ii. Processor Type: Intel Core 2 Duo CPU E8400
 - iii. Processor Speed: 3.00GHz
 - iv. Cache RAM: 6MB
 - v. System Memory: 4GB
 - vi. Memory Bank 1: 2GB
 - vii. Memory Bank 2: 2GB
 - viii. Memory Bank 3: empty
 - ix. Memory Bank 4: empty
 - (b) Does it match? This matches the information we found.
 - (c) Expandable Categories
 - i. General: Information, Date/Time, Boot Sequence
 - ii. Drives: Options for controlling the disk drives
 - iii. System Configuration: Settings for the network card, USB, and other ports
 - iv. Video: Information on the graphics cards
 - v. Performance: Settings for the processor and the hard drive speed
 - vi. Virtualization Support: Settings for virtual machine setup
 - vii. Security: Settings for system administration and SATA passwords and other security
 - viii. Power Management: Settings for suspend and the fans and startup and shutdown
 - ix. Maintenance: Service tag, asset tag, and SERR messages
 - x. Image Server: Client server settings for image server
 - xi. Post behavior: Options for the boot process, keyboard, and memory
 - xii. System logs: A list of BIOS events
 - (d) Drives Configuration
 - i. SATA/IDE Devices:
 - A. SATA-0 250GB Hard Drive
 - B. SATA-1 DVD-ROM Drive
 - C. SATA-2 DVD-RW
 - D. SATA-3 empty
 - ii. Does it match? This matches what we saw inside the computer.
 - (e) Security Menu Options
 - i. Administrator Password: Not set

- ii. System password: Not set
 - iii. Password Changes: Disabled; lets the system password be changed without the administrator password
 - iv. TPM Security (Trusted Platform Module): Not set
 - v. CPU xD Support: Enabled; execute-disable bit capability to prevent exploitation of buffer overflows
 - vi. Computrace: Deactivated
 - vii. SATA-0 Password: Not set
- (f) Power Management Options
- i. AC Recovery; Power Off (when AC is restored after loss)
 - ii. Auto On Time: 12:00 AM, Disabled
 - iii. Low Power Mode: Disabled; saves power in shutdown or hibernate mode (turns off integrated NIC)
 - iv. Remote Wake Up: Enabled
 - v. Suspend Mode: S1 (resume more quickly from sleep, use more power)
 - vi. Fan Control Override: Disabled; Makes fan run at full speed
- (g) Boot Sequence Menu
- i. Options
 - A. Disable devices
 - B. Change Device Order
 - C. Load Defaults
 - D. Exit
 - ii. Boot Order
 - A. Floppy Drive
 - B. SATA Hard Drive
 - C. CD-ROM Drive
 - D. Network Controller
 - E. USB Device
 - F. MBA UNDI

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