



Lawrence C. Tobias

Lab - Research a Hardware Upgrade

Introduction

Use the Internet, a newspaper, or a local store to gather information about hardware components. Your customer's computer currently has one module of 2 GB of RAM, a 500 GB hard disk drive, and a PCIe video adapter card with 256 MB of RAM. Your customer wants to be able to play advanced video games.

Instructions

Step 1: Research memory options.

Shop around, and in the table below list the brand, model number, features, and cost for two different 8 GB modules of DDR3.

Brand and Model Number	Features	Cost
<i>Corsair CMZ32GX3M4X1600C10</i>	<i>8GB DDR3 RAM 1600 MHz</i>	\$489
<i>Kingston Hyper Fury</i>	<i>8GB 1600Mhz</i>	\$550

Question:

Based on your research, which RAM would you select? Be prepared to discuss your decisions regarding the RAM you select.

Type your answers here.

Based on my research I would choose the Kingston Hyper Fury because it's much faster and it is a trusted brand. Knowing that Kingston is one of the best in the market.

Step 2: Research hard disk drive options.

Shop around, and in the table below list the brand, model number, features, and cost for a 3 TB 7200 rpm SATA 3 hard disk drive and a 500GB or 1TB solid state drive (SSD).

Brand and Model Number	Features	Cost
Seagate/ Seagate ST3000NM0033	3T Hard Disk 7200 to 128M Cache	₱7,959.30
SAMSUNG 9100 PRO 1TB NVMe™ M.2 Solid State Drive	<ul style="list-style-type: none"> • Supercharge your workflow and gaming with PCIe® 5.0. Blazing fast speeds and next-gen power for your most demanding tasks. • Speed past productivity limits. With sequential read/write speeds up to 14,800/13,400 MB/s³, ultra-fast processing powers AI apps, massive games, and high-performance tasks with ease. • From laptops to desktop PCs, experience blazing PCIe® 5.0 speeds and up to 8TB of storage for all your tasks. • The 9100 PRO SSD fuels seamless AI content creation, gaming, and more with random read/write speeds of up to 2,200K/2,600K IOPS. • More power, less heat. Smart efficiency and cooling keep you in the fast lane. 	₱9,750.00

Question:

Based on your research, which hard disk drive would you select? Be prepared to discuss your decisions regarding the hard disk drive you select.

Type your answers here.

Based on my research I would choose the SAMSUNG 9100 PRO 1TB NVMe™ M.2 Solid State Drive because of its features and quality.

Step 1: Research video adapter card options.

Shop around, and in the table below list the brand, model number, features, and cost for two different PCIe video adapter cards with at least 1 GB of RAM.

Brand and Model Number	Features	Cost
Vktech GT610	Graphics Video Card 810MHZ DDR3 1GB Gaming Video Card HD VGA DVI	₱1,116.00
Moon Pomelo Gaming Graphics Card Video Card	1GB PCIe 2.0 Single Cooling Fan GT610 HDMI/VGA/DVI Interface Compact Computer Accessories	₱1,367.12

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Question:

Based on your research, which video adapter card would you select? Be prepared to discuss your decisions regarding the video adapter card you select.

Type your answers here.

Based on my research I would select the *Vktech GT610* because it's more affordable. I personally think that this model/brand has more to offer quality and performance wise.