**PC Repair - Final Build Assignment**

Below is a list of the components chosen for our final build:

|  |  |  |  |
| --- | --- | --- | --- |
| **3rd Hour Final Computer Build** | | | |
| [Case](http://www.newegg.com/Product/Product.aspx?Item=N82E16811353027) | [Motherboard](http://www.newegg.com/Product/Product.aspx?Item=N82E16813128717&cm_re=Micro_ATX-_-13-128-717-_-Product) | [CPU](http://www.newegg.com/Product/Product.aspx?Item=N82E16819116900&cm_re=intel_i7-_-19-116-900-_-Product) | [RAM](http://www.newegg.com/Product/Product.aspx?Item=N82E16820231666) |
| [Graphics Card](http://www.newegg.com/Product/Product.aspx?Item=N82E16814487155) | [Hard Drive](http://www.newegg.com/Product/Product.aspx?Item=1Z4-0015-00086) | [Optical Drive](http://www.newegg.com/Product/Product.aspx?Item=N82E16827136269) | [Power Supply](http://www.newegg.com/Product/Product.aspx?Item=N82E16817139051) |
| [Keyboard](http://www.newegg.com/Product/Product.aspx?Item=9SIA26920E0386&cm_re=keyboard-_-9SIA26920E0386-_-Product) | [Mouse](http://www.newegg.com/Product/Product.aspx?Item=N82E16826794010) | [Speakers](http://www.newegg.com/Product/Product.aspx?Item=0S6-004H-00006) | [Liquid Cooling](http://www.newegg.com/Product/Product.aspx?Item=N82E16835494019) |

**Part I. Specs** - Provide specifications for each of the following components:

**Case**

|  |  |
| --- | --- |
| Form Factor |  |
| Number of USB ports |  |
| Drive Bays (List size and quantity) |  |

**Motherboard**

|  |  |
| --- | --- |
| CPU Socket Type |  |
| Form Factor |  |
| DIMM Slots  -Number  -DDR Version  -Speed  -Maximum |  |
| PC Express Slot Type and Quantity |  |
| SATA Ports and Speed |  |
| On-Board Video? |  |
| USB Ports - List USB version and quantity |  |
| Main Power Connector Size |  |

**Liquid Cooling**

|  |  |
| --- | --- |
| CPU Socket Compatibility (List) |  |
| Power Connector (pins) |  |
| Fan Volume (in dB) |  |

**CPU**

|  |  |
| --- | --- |
| Number of Cores |  |
| Socket Type |  |
| Speed (Frequency) |  |
| 64-Bit Support? |  |
| Integrated Graphics? |  |
| Power Consumption (in watts) |  |
| Overclockable? |  |

**RAM**

|  |  |
| --- | --- |
| Number of RAM Sticks |  |
| Amount of Memory (in GB) |  |
| DDR Version |  |
| Speed |  |
| Number of Pins |  |
| Overclockable? |  |

**Graphics Card**

|  |  |
| --- | --- |
| Slot interface type |  |
| Amount of Memory (in GB) |  |
| Crossfire/SLI Ready? |  |
| Video ports and quantity |  |
| Power connector (pins and quantity) |  |

**Hard Drive**

|  |  |
| --- | --- |
| SDD or Traditional |  |
| RPM |  |
| SATA Version |  |
| Storage Amount (in GB) |  |
| Power connector |  |
| Form Factor |  |

**Optical Drive**

|  |  |
| --- | --- |
| Blu-ray/DVD/CD-ROM |  |
| SATA/IDE? |  |
| Multiplier |  |
| Burner? |  |
| Power Connector Type |  |

**Power Supply**

|  |  |
| --- | --- |
| 80 Plus Category |  |
| Total Wattage |  |
| Form Factor |  |
| Modular/Semi modular/Not Modular |  |
| Main Power Connector (pins) |  |
| PCIe Connectors (quantity and pins) |  |
| SATA Power Connectors |  |
| CPU Power Connector (quantity and pins) |  |
| 4-pin Berg Power Connectors |  |

**Keyboard**

|  |  |
| --- | --- |
| Interface port |  |
| Mechanical? |  |
| Backlit? |  |
| Wireless? |  |

**Mouse**

|  |  |
| --- | --- |
| Interface port |  |
| # of Mouse buttons |  |
| DPI |  |
| Backlit? |  |
| Weight System? |  |
| Macro-enabled? |  |

**Speakers**

|  |  |
| --- | --- |
| Interface port |  |
| Subwoofer |  |
| Speaker Configuration (X.X) |  |
| Watts (Output) |  |

**Compatibility Checks**

**Directions** - Provide specific rationale for why the following components are compatible with one another:

|  |  |  |
| --- | --- | --- |
| **Component # 1** | **Component # 2** | **Compatibility Check** |
| Hard Drive | Case |  |
| Optical Drive | Case |  |
| Motherboard | Case |  |
| PSU | Case |  |
| CPU | Motherboard |  |
| Hard Drive | Motherboard |  |
| Optical Drive | Motherboard |  |
| RAM | Motherboard |  |
| Graphics Card | Motherboard |  |
| Graphics Card | PSU |  |
| Hard Drive | PSU |  |
| Motherboard | PSU |  |
| Optical Drive | PSU |  |
| Liquid Cooling | PSU |  |
| Liquid Cooling | CPU |  |
| Speakers | Motherboard |  |
| Keyboard | Motherboard |  |
| Mouse | Motherboard |  |