i0lab1 by Arubason

Roster: Aryaman Goenka, Wilson Qu & Mubashir Shehun L1: On Wednesdays We Wear Pink

Intro CS PD 5 2020-04-21

Build 01: Flight Simulator

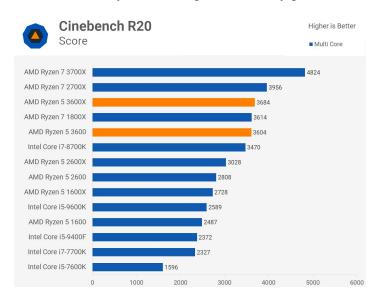
Pitch

This computer build has the capability of running flight simulator 2020 exceptionally. This build has 2 2070 Super Graphics Cards that are capable of displaying visually pleasing graphics on our 3 144 hertz monitors. Our chosen monitors boast 144 hertz showcasing its capability to display over 140 frames per second and 1 millisecond response time. Our central processing unit has the capability to easily run the game and perform any other tasks. It has 8 cores (cores are the parts in the CPU that receive instructions, and performs calculations, or operations). We have also added the cooler master hyper to replace the standard CPU fan that comes with our CPU to make sure that your CPU does not overheight and the Cooler Master does have an RGB fan. Our motherboard has 4 memory slots and multiple PCI slots for possible upgrades. Our motherboard also has an ethernet port allowing for wired internet connection. We have added 16gb of ram which is more than adequate and an SSD with 1 terabyte of space for an ample amount of storage. We also included Windows 10(the 64-bit version) since that is what FS2020 requires and we added an EVGA 850 Watt power supply for enough power even though the estimated wattage of this build is under 500 watts. Lastly, we have added the Corsair iCUE 465X RGB mid-tower case with three front fans allowing proper airflow into your PC making sure that the PC is cooled and the fans are RGB which does make the PC look much cooler. We also added an accessory, the Asus Bezel Free Kit to help connect the triple monitor setup and to help create a more immersive experience.

-CPU: AMD Ryzen 7 3700X 3.6 GHz 8-Core Processor

Price: \$294.14

This processor boasts 8 cores which means it has 8 individual processing units. It is also the best CPU in the Ryzen 7 lineup. It can easily perform all the tasks we need it to do.



-CPU Cooler: Cooler Master Hyper 212 RGB Black Edition 57.3 CFM CPU Cooler

Price: \$44.99

Aside from the RGB fan that adds flair to our build, this CPU cooler can outperform the stock one that comes standard without CPU. Its RPM 650 - 2000 RPM which can keep our CPU cool.



-Motherboard: ASRock X570 Phantom Gaming 4 ATX AM4 Motherboard

Price: \$143.99

This motherboard has enough ram slots and PCI slots we would need if we made upgrades to this build. This motherboard also has the X570 chipset which means it is newer than the X470 and can outperform the X470 and X370. (The chipset is a set of electronic components in an integrated circuit k that manages the data flow between the processor, memory, and peripherals)

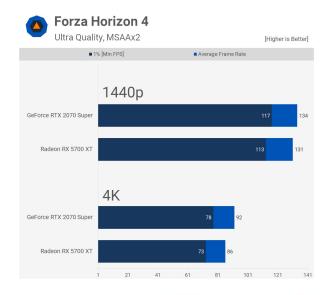
AMD/AM4 Chipsets Comparison							
	A320	B350	B450	X370	X470	X399	X570
Chipsets	m m m m m m m m m m m m m m m m m m m	To the state of th	100 meg				Man and a second
Overclocking	N	Υ	Υ	Υ	Υ	Υ	Υ
SATA 3.0	2	2	2	4	4	12	12
StoreMI	N	N	Y	N	Y	Y	Y
Multi-GPU	N	N	Y	Y	Y	Y	Y
CrossFire	N	Y	Y	Y	Y	Y	Y
SLI Support	N	N	N	Υ	Y	Υ	Υ
PCIe Lanes	4	6	6	8	8	16	16

-GPU: 2x Gigabyte GeForce RTX 2070 SUPER 8 GB WINDFORCE OC 3X Video Card

Price: \$499.99 2x

This graphics card is one of the top graphics cards on the market. This one specifically has 3 fans helping keep the GPU cool and we added 2 to make sure that our build can support our 3 144 hertz monitors.

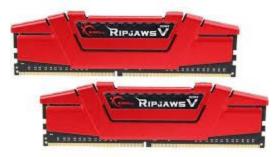




-Memory (RAM): G.Skill Ripjaws V 16 GB (2 x 8 GB) DDR4-3600 Memory

Price: \$85.99

We added 2 * 8GB sticks of ram to make sure that there is an ample amount of memory for the computer and we can also add more if there is a need since we have 2 more ports on our motherboard.



-Storage: Crucial P1 1 TB M.2-2280 NVME Solid State Drive

Price: \$109.99

We added an SSD since it is faster than a hard drive and 1TB of data is a lot of storage.

-Power Supply: EVGA 850 W 80+ Gold Certified Semi-modular ATX Power Supply

Price: \$149.99

We added an 850 Watt power supply for enough power even though the estimated wattage of this build is under 500 watts.



-OS: Microsoft Windows 10 Home OEM 64-bit

Price: \$109.99

This is the OS required by FS2020.

-Case: Corsair iCUE 465X RGB ATX Mid Tower Case

Price: #149.99

This case has 3 intake fans to help control the airflow into the PC to keep the computer cool and it has 3 RGB fans which makes the case look more appealing. This case also has a see-through side panel so that you can admire the beauty of the inside of the pc. This pc also allows customization we the ability to add rear fans and overhead fans to the pc also.





-Wireless Network Adapter: TP-Link Archer T3U USB 3.0 802.11a/b/g/n/ac Wi-Fi Adapter

Price: \$24 99

Our motherboard does allow an ethernet connection but we also wanted to add a wireless option for our PC.



-Monitors: 3x AOC G2590FX 24.5" 1920x1080 144 Hz

Price: \$199.99 **3**x

These monitors a great for their price. They have a thin bezel with 144 hertz and a 1 ms response time. Nowadays monitors do offer better resolutions but our monitors still have a good resolution.



-Accessories: Asus Bezel Free Kit

Price: \$109.99 2x

Since we have a 3 monitor setup we added these to help make our setup look more unified and to hide the bezels that separate the monitors.



Other Peripherals:

Corsair Harpoon RGB Wired Optical Mouse: Price: \$23.48 Logitech K120 Wired Standard Keyboard: Price: \$14.99 AmazonBasics Gaming Computer Mouse Pad: Price: \$6

Adesso Xtream G1 Headset: \$30.34

Total Price: \$2998.80

Link to Build: https://pcpartpicker.com/list/6qPnK4