

“PORTELLO” DOCUMENTATION

2020-12-19 ⇒ 2021-01-06

Ashwin xxxxxxxxxxxxxxxx
Total Cost: \$2,814.54

SUMMARY

This computer is future proofed up to five years for use with school, programming, and partial gaming. The total budget was expected to be 1,800 CAD however due to low stock, and impossible to find components the budget skyrocketed to a total of 2,814.54 CAD. The extra thousand spent is due to the premium paid towards the scalpers at [Aero Malls Inc.](#) who charged \$130 CAD over the price of retail for a [Ryzen 7 5800x](#). It might sound like I purchased at a loss however with the current shortage of CPU's I would rather pay a premium rather than wait for the next few months in hope of purchasing one. The other component is the GPU; I was planning on ordering a 3060ti or a 3050ti if possible however I could not find any online. This led to me purchasing a [GIGABYTE AORUS RTX 3070 8GB](#) which came in a combo with the [GIGABYTE GP-P750GM 750W Gold Modular](#) power supply unit. I saved a total of 30 dollars across both products and received an additional 80 dollar membership for one year. This was somewhat worth it, and after some research they are insanely fast and the power supply unit is worth it as it is gold rated with 750 watts.

TOTAL SPENT: \$2,717.31

BUDGET: \$1,800.00

OVER BUDGET: \$917.31

PARTS

Core Processing Unit	Ryzen 7 5800x 8-Core 3.8GHz 105W
Graphics Processing Unit	Gigabyte Aorus Master RTX 3070 8GB
CPU Cooler	Noctua NH-D15S chromax.black 140mm
Motherboard	ASUS Tuf Gaming x570-Pro (WiFi 6)
Memory	G.SKILL Ripjaws V Series 16GB (2x8) 3600MHz
Power Supply	Gigabyte GP-P750GM 750W Gold Fully Modular
Storage	Samsung 970 Evo Plus NVMe M.2 1TB
Case	Corsair 275R Airflow

RYZEN 7 5800X



Purchased this for over 130 CAD over the market price due to the limited stock and limited drops. I purchased this from a scalper called [Aero Malls Inc.](#), who has dozens of these in stock. In my opinion it was pretty worth it because the next stock sale won't be for another couple months from now (2020-12-22), and I want to build my PC prior to school. This CPU is one of the best, almost doubling the performance of the latest i9 processor with overclocking capabilities in the range of 5GHz. For the time being I plan on leaving it stock and not overlocking because I do not want to reduce the life of my CPU considering how much money I spent on it.

TOTAL COST: \$828.43

RETAIL: \$705.58

TRACKING NUMBER: xxxxxxxxxxxxxxxxx

TRACKING LINK: [Canada Post, 17track](#)

COURIER(S): Canada Post

SHIPPED ON: DEC/22/2020

RECEIVED ON: DEC/30/2021

CORES: 8-core

THREADS: 16-threads

BASE CLOCK: 3.8 GHz

OVERCLOCK: up to 4.7 GHz

POWER DRAW: 105 watts

GIGABYTE AORUS RTX 3070 8GB



For the price I paid for this, it is an absolute steal! For only 1,009 CAD I got this GPU and a 750W Gold Rated PSU which is fully modular. This GPU is kind of overkill for the price because it includes unnecessary components such as a built-in LED screen and RGB, both of which I did not want. However, for the price of 800 dollars that is pretty bang for the buck considering it's almost impossible to buy and the fact that it is twice as powerful as the 2080ti from last year. I think I made a pretty good choice in purchasing this as it would be nearly impossible months from now to get this. Or just until stock gets replenished.

TOTAL COST: ~ \$844.99

RETAIL: \$907.18

TRACKING NUMBER: xxxxxxxxxxxxxxxxx

COURIER(S): Puralator

TRACKING LINK: [Puralator, 17track](#)

SHIPPED ON: N/A

RECEIVED ON: N/A

MEMORY: 8GB GDDR6 256-bit

CORES: 5888

BASE CLOCK: 1725 MHz

OVERCLOCK: up to 1845 MHz

POWER DRAW: 20 - 300 watts

NOCTUA NH-D15S



I was considering using AIO and liquid cooling my CPU but after some research the power draw of the unit as well the cooling it provided was not worth it. Not only did it draw in more power but it was quite loud, and did not provide as much cooling as the Noctua fans. Although they are air cooled, the Noctua fan does an insanely good job at both performance and sound as they are quiet. The one downside about Air Cooling is that overclocking capabilities are reduced, for me that is not a big deal but I do wish to overclock once in awhile just to try out. I don't think I will be overclocking too much either just because I do not want to spoil such an expensive PC

TOTAL COST: \$119.95

RETAIL: \$119.95

TRACKING NUMBER: xxxxxxxxxxxxxxxxxx

COURIER(S): Amazon

SHIPPED ON: DEC/23/2020

RECEIVED ON: JAN/02/2021

RPM: 300 - 1500 rpm

ACOUSTICAL NOISE: 19.2 - 24.6 db

BASE CLOCK: 3.8 GHz

OVERCLOCK: up to 4.7 GHz

POWER DRAW: 156 watts

ASUS TUF X570-PRO (WIFI-6)



The Ryzen 5th gen processors are beasts and need an equivalent motherboard to support and utilise their performance to the max. That's where this beast of a motherboard comes in. Retailing for over 300 dollars this is one of the best and the fastest motherboards money can buy, this beast has built in WiFi and support for 8 sticks of RAM in addition to the massive fans built in to cool this thing down. I'm pretty happy with this purchase.

TOTAL COST: \$299.03

RETAIL: \$337.12

TRACKING NUMBER: xxxxxxxxxxxxxxxxx

COURIER(S): Puralator

TRACKING LINK: [Puralator, 17track](#)

SHIPPED ON: DEC/22/2020

RECEIVED ON: N/A

SOCKET: AM4

FORM FACTOR: ATX

BASE CLOCK: 3.8 GHz

MEMORY SUPPORT: 128GB

POWER DRAW: ?? watts

G.SKILL RIPJAWS V SERIES 16GB



These were a no brainer, the classical stick of RAM that everyone goes for. Cheap, fast and does it's job without anything fancy. Decided to go with two sticks for full dual channel RAM instead of one stick. I plan on upgrading later if I need to because from what I know 16GB is plenty enough for my needs and I don't need to waste another hundred dollars on 32GB.

TOTAL COST: \$134.38

RETAIL: \$177.03

TRACKING NUMBER: xxxxxxxxxxxxxxxxx

COURIER(S): Puralator

TRACKING LINK: [Canada Post](#), [Puralator](#), [17track](#)

SHIPPED ON: DEC/22/2020

RECEIVED ON: N/A

MEMORY: 16GB

SPEED: DDR4 3600 MHz

POWER DRAW: ?? watts

GIGABYTE 750W GOLD MODULAR



This power supply came with the Graphics Processing Unit and it was pretty worth it at sub 150 considering most 750W PSUs go for sub 200 at a gold rating. This PSU is quite bulky but it still works out as it does its job properly.

TOTAL COST: \$151.20

RETAIL: \$166.20

TRACKING NUMBER: xxxxxxxxxxxxxxxxx

COURIER(S): Puralator

TRACKING LINK: [Puralator, 17track](#)

SHIPPED ON: N/A

RECEIVED ON: N/A

RATING: 80+ Gold

COOLING: 1x140mm fan

MODULAR: Fully Modular

POWER DRAW: 750 watts

SAMSUNG 970 EVO PLUS 1TB



The classical 970 Evo is a no-brainer for the performance and build quality of it. These are stupid fast with the addition of the plus version being even faster. It retails for a higher value however due to sales it actually cost LESS than the regular Evo so I purchased it.

TOTAL COST: \$212.79

RETAIL: \$265.91

TRACKING NUMBER: xxxxxxxxxxxxxxxxx

COURIER(S): Amazon

TRACKING LINK: [Amazon](#)

SHIPPED ON: DEC/20/2020

RECEIVED ON: DEC/22/2020

CAPACITY: 1 TB

SEQUENTIAL READ/WRITE: 3.5 GB/s, 3.3GB/s

RANDOM READ/WRITE (QD32): 620k IOPS, 560k IOPS

POWER DRAW: 6 watts

CORSAIR 275R HIGH AIRFLOW



This case is quite questionable, but considering that this PC will be going beside the desk on the ground I did not bother to cheap out on it. Coming in at around a hundred dollars I purchased this with airflow and cooling capabilities in mind as well as the fan placement. This case comes with three fans, and the intake fans will be directing air at the GPU which is what I need considering the size of the beast. The case design is somewhat ugly but the mesh front looks pretty clean in comparison to the Fractal Design C which looked pretty bad.

TOTAL COST: \$126.54

RETAIL: \$126.54

TRACKING NUMBER: xxxxxxxxxxxxxxxxx

COURIER(S): Puralator

TRACKING LINK: [Puralator](#)

SHIPPED ON: DEC/20/2020

RECEIVED ON: DEC/22/2020

CAPACITY: 1 TB

SEQUENTIAL READ/WRITE: 3.5 GB/s, 3.3GB/s

RANDOM READ/WRITE (QD32): 620k IOPS, 560k IOPS

POWER DRAW: 6 watts

SPECIFICATION

The current configuration is about 20x as powerful as my current setup with my laptop and should be able to run anything that is thrown at it for the next couple years at least. With a price tag of 2.8k I expect this PC to work a dollar/day for the next 6.7 years or so. That is when I truly know that I got my money's worth out of it. For under 1.4k I could easily get a 5600x and a 3060ti but I decided to spend more and go overkill on my PC because I have never had a really overpowered PC. Most of the components are meant for gaming because gaming specs are the best specs and there is no such thing as a motherboard or CPU for productivity. I will be most likely running resource heavy programs now that I can run them without any issues. This PC build is about 95% better than most benchmarks on the market because of the overkill combo, this means I have no bottleneck both for my GPU & CPU.

\$828.43	Ryzen 7 5800x 8-Core 3.8GHz 105W
\$844.99	Gigabyte Aorus Master RTX 3070 8GB
\$119.95	Noctua NH-D15S chromax.black 140mm
\$299.03	ASUS Tuf Gaming x570-Pro (WiFi 6)
\$134.38	G.SKILL Ripjaws V Series 16GB (2x8) 3600MHz
\$151.20	Gigabyte GP-P750GM 750W Gold Fully Modular
\$212.79	Samsung 970 Evo Plus NVMe M.2 1TB
\$126.54	Corsair 275R Airflow
\$2,717.31	TOTAL

TRACKING

	Ryzen 7 5800x 8-Core 3.8GHz 105W
	Gigabyte Aorus Master RTX 3070 8GB
	Noctua NH-D15S chromax.black 140mm
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	Samsung 970 Evo Plus NVMe M.2 1TB
	Corsair 275R Airflow
	TOTAL



Problem	Date
Hardware error	2021-01-11 10:49 AM

Description	
A problem with your hardware caused Windows to stop working correctly.	
Problem signature	
Problem Event Name:	LiveKernelEvent
Code:	141
Parameter 1:	fffff990907416460
Parameter 2:	fffff80031762100
Parameter 3:	0
Parameter 4:	1358
OS version:	10.0_19042
Service Pack:	0_0
Product:	256_1
OS Version:	10.0.19042.2.0.0.256.48
Locale ID:	4105

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Critical events (22)

	Windows	Windows was not properly shut down	2021-01-07 11:20 AM	View technical de...
	Windows	Windows was not properly shut down	2021-01-07 5:43 PM	View technical de...
	Windows Explorer	Stopped working	2021-01-07 5:54 PM	
	Windows Explorer	Stopped working	2021-01-07 5:54 PM	
	Windows Explorer	Stopped working	2021-01-07 6:16 PM	
	WinaeroTweaker	Stopped working	2021-01-07 6:23 PM	
	GameManagerService	Stopped working	2021-01-07 6:29 PM	
	JustCause3.exe	Stopped responding	2021-01-07 8:58 PM	View technical de...
	Windows	Windows was not properly shut down	2021-01-08 11:13 AM	View technical de...
	xampp-control.exe	Stopped working	2021-01-08 3:46 PM	
	xampp-control.exe	Stopped responding and was closed	2021-01-08 3:47 PM	
	GameManagerService	Stopped working	2021-01-08 6:53 PM	
	GameManagerService	Stopped working	2021-01-08 11:29 PM	
	ArmourySwAgent	Stopped working	2021-01-08 11:35 PM	
	ArmourySwAgent	Stopped working	2021-01-08 11:35 PM	
	Windows	Windows was not properly shut down	2021-01-09 1:48 AM	View technical de...
	GameManagerService	Stopped working	2021-01-09 8:58 AM	
	ArmourySwAgent	Stopped working	2021-01-09 10:49 PM	
	ArmourySwAgent	Stopped working	2021-01-09 10:49 PM	
	Windows	Windows was not properly shut down	2021-01-09 11:44 PM	View technical de...
	Windows	Windows stopped working	2021-01-09 11:44 PM	View technical de...
	Windows	Shut down unexpectedly	2021-01-09 11:44 PM	

Warnings (5)

Problem

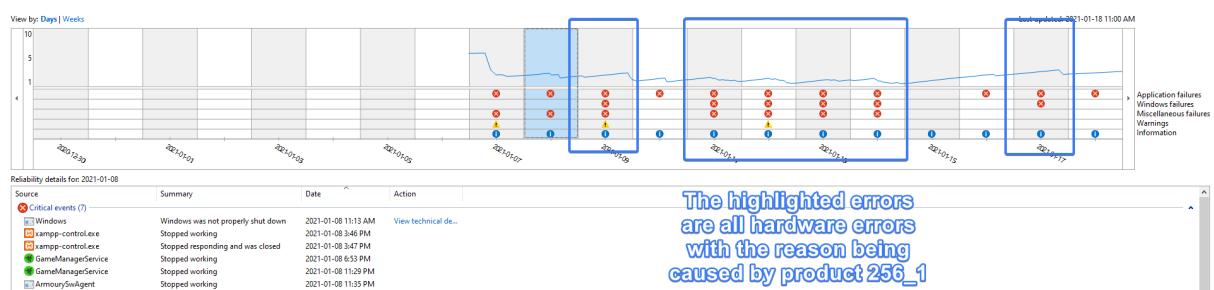
Shut down unexpectedly

Date

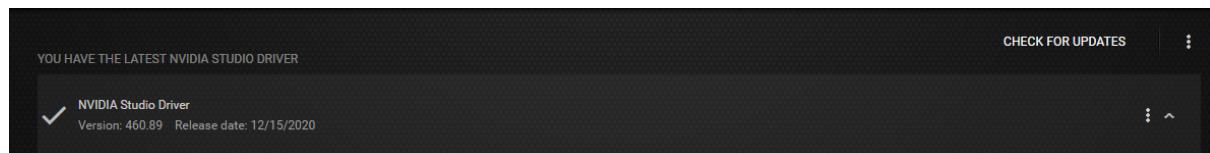
2021-01-09 11:44 PM

Problem signature

Problem Event Name: BlueScreen
Code: 3b
Parameter 1: c0000005
Parameter 2: fffff800044c0a86
Parameter 3: fffff8100c8de6110
Parameter 4: 0
OS version: 10_0_19042
Service Pack: 0_0
Product: 256_1
OS Version: 10.0.19042.2.0.0.256.48
Locale ID: 4105

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The highlighted errors
are all hardware errors
with the reason being
caused by product 256_1



✖ Critical events (14)

	Windows	Hardware error	2021-01-11 10:48 AM
	Windows	Hardware error	2021-01-11 10:49 AM
	Windows	Hardware error	2021-01-11 10:49 AM
	Windows	Hardware error	2021-01-11 10:49 AM
	Windows	Hardware error	2021-01-11 10:49 AM
	Windows	Hardware error	2021-01-11 10:49 AM
	Windows Explorer	Stopped responding and was closed	2021-01-11 10:49 AM
	bad_module_info	Stopped working	2021-01-11 12:35 PM
	Windows	Hardware error	2021-01-11 1:03 PM
	Wallpaper Engine	Stopped working	2021-01-11 1:12 PM
	Desktop Window Manager	Stopped working	2021-01-11 4:46 PM
	Windows	Windows was not properly shut down	2021-01-11 6:35 PM
	csgo.exe	Stopped working	2021-01-11 9:12 PM
	Windows	Hardware error	2021-01-11 9:41 PM
	csgo.exe	Stopped working	2021-01-11 10:00 PM

i Informational events (6)

	Security Intelligence Update for M...	Successful Windows Update	2021-01-11 8:39 AM	View technical de...
	2020-11 Cumulative Update Previe...	Successful Windows Update	2021-01-11 6:38 PM	View technical de...
	AURA lighting effect add-on	Successful application installation	2021-01-11 6:40 PM	View technical de...
	AURA lighting effect add-on x64	Successful application installation	2021-01-11 6:40 PM	View technical de...
	Security Intelligence Update for M...	Successful Windows Update	2021-01-11 6:46 PM	View technical de...
	Security Intelligence Update for M...	Successful Windows Update	2021-01-11 8:41 PM	View technical de...