

Forum:[Hack Forums](#)

Thread: [Upgrade Current PC Build - 600 Eur](#)

xf0xalz - November 9, 2020, 4:26 pm

Hey guys,

I'm looking to upgrade my current PC build to something better since I will be wasting alot of time at home with this Covid BS...

My current setup:

- PowerSupply 550W Bronze
- Intel Core i7 4771 @ 3.50GHz
- MSI B85-G43 GAMING
- G.SKILL Ripjaws 4GB (1x4GB) DDR3-1600MH
- RX 580 8 GB GAMING
- 111GB Samsung SSD 840 EVO
- 500 GB HDD.
- Also have a 144 HZ monitor

I really don't want to invest alot of money on this since im saving for a new bike.

I would like to keep my GPU because I think it will be decent for the games I play (League of Legends , ARK, Call of Duty...)

I also would like to add a new SSD 1 TB because games like this use alot of storage.

My budget it's around 600 EUR / 700\$.

What would you suggest me ?

Thanks in advice!

Breeze26509 - November 9, 2020, 5:23 pm

[PCPartPicker Part List](#)

CPU: [AMD Ryzen 5 3600 3.6 GHz 6-Core Processor](#) (€185.00 @ Mindfactory)
Motherboard: [MSI B450 TOMAHAWK MAX ATX AM4 Motherboard](#) (€112.99 @ Amazon Deutschland)
Memory: [Crucial Ballistix 16 GB \(2 x 8 GB\) DDR4-3600 CL16 Memory](#) (€75.90 @ Amazon Deutschland)
Storage: [Western Digital Blue SN550 1 TB M.2-2280 NVME Solid State Drive](#) (€98.90 @ Amazon Deutschland)
Total: €472.79
Prices include shipping, taxes, and discounts when available
Generated by [PCPartPicker](#) 2020-11-10 02:23 CET+0100

Yac1ne - November 9, 2020, 11:53 pm

Original poster, i made a little change to the CPU, if you're not going to upgrade for some time, say

for example 3 or 4 years, i'd say go with the 3700x instead of the 3600, it gives you two more cores and it boosts slightly higher than the 3600, giving you better single and multi-threaded performance, which makes it more future proof, or better yet, you can wait for the new 5600x if you're not in a rush, it's around the same price of the 3700x, and it's a really good CPU, otherwise, just go with the build in the previous post, one more thing, the third party cooler is optional, you can choose to ditch it, but if you choose to get it, it'll give you more stability when it comes to maintaining the boost clock, and it also gives better room for overclocking if you want, all with less noise, and it's not crazy expensive, good luck

PCPartPicker Part List: <https://de.pcpartpicker.com/list/YYHrDc>

CPU: AMD Ryzen 7 3700X 3.6 GHz 8-Core Processor (€287.99 @ Mindfactory)

CPU Cooler: Cooler Master Hyper 212 EVO 82.9 CFM Sleeve Bearing CPU Cooler (€34.11 @ Amazon Deutschland)

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Storage: Western Digital Blue SN550 1 TB M.2-2280 NVME Solid State Drive (€103.89 @ Alza)

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Generated by PCPartPicker 2020-11-10 08:40 CET+0100

xf0xalz - November 10, 2020, 3:31 am

(Nov 9, 2020 06:23 PM)Breeze26509 Wrote: [\[CITE\]](#) [PCPartPicker Part List](#)

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Thanks for your fast help!

Im not in a rush and if you say it's worth to wait for the new cpu I will just do it!

Do you think I can have a decent FPS in games like the new COD with my MSI RX580 8Gb Gaming ?

Yac1ne - November 10, 2020, 3:38 am

(Nov 10, 2020 04:31 AM)xf0xalz Wrote: [\[CITE\]](#) Thanks for your fast help!

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Here's a demonstration of how it should look like paired with a ryzen 7 3700x :

https://www.youtube.com/watch?v=05L9d7ejUn8&ab_channel=zWORMzGaming

xf0xalz - November 10, 2020, 5:01 am

(Nov 10, 2020 04:38 AM)Yac1ne Wrote: [\[CITE\]](#) Here's a demonstration of how it should look like paired with a ryzen 7 3700x :

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Is not bad at all...

Sorry for my dumb question but fps have anything to do with hz ?

I mean if I have a 144hz monitor should I have atleast 144 fps ?

Yac1ne - November 10, 2020, 5:22 am

(Nov 10, 2020 06:01 AM)xf0xalz Wrote: [\[CITE\]](#) Is not bad at all...

Sorry for my dumb question but fps have anything to do with hz ?

I mean if I have a 144hz monitor should I have atleast 144 fps ?

It's not a dumb question relax ! so basically there is something called variable refresh rate or VRR for short, this came to eliminate the need for things like Vsync, which causes stuttering, both nvidia and amd offer the technology through Gsync and Freesync respectively, what that does is that it matches your monitor's refresh rate to the frames outputted by your graphics card, which eliminates screen tearing (which happens if the number of frames becomes more than the monitor's refresh rate) and stuttering, as long as your monitor supports it, you don't need to worry about this, what monitor do you have ?

Smexy - November 10, 2020, 5:41 am

(Nov 10, 2020 06:01 AM)xf0xalz Wrote: [\[CITE\]](#) Is not bad at all...

Sorry for my dumb question but fps have anything to do with hz ?

I mean if I have a 144hz monitor should I have atleast 144 fps ?

If you can reach 144fps in games, yes you can use ur screen to max extend.

If you only play at 60-120 fps, the screen will still be fine but your pc must have good parts to reach 144fps in newer big titles.

xf0xalz - November 10, 2020, 3:59 pm

(Nov 10, 2020 06:22 AM)Yac1ne Wrote: [\[CITE\]](#) It's not a dumb question relax ! so basically there is something called variable refresh rate or VRR for short, this came to eliminate the need for things like Vsync, which causes stuttering, both nvidia and amd offer the technology through Gsync and Freesync respectively, what that does is that it matches your monitor's refresh rate to the frames outputted by your graphics card, which eliminates screen tearing (which happens if the number of frames becomes more than the monitor's refresh rate) and stuttering, as long as your monitor supports it, you don't need to worry about this, what monitor do you have ?

Asus VG248QE, it's kinda old so shouldn't support it ?

Yac1ne - November 11, 2020, 12:11 am

(Nov 10, 2020 04:59 PM)xf0xalz Wrote: [\[CITE\]](#) Asus VG248QE, it's kinda old so shouldn't support it ?

You're right, unfortunately it doesn't, at the same time, and although variable refresh rate does obviously give you better smoothness, it doesn't mean that lacking it would ruin your experience in any way whatsoever unless the fps drops far below your monitor's refresh rate (which isn't the case when it comes to your setup considering the games you play, at least the ones you mentioned that is), and at relatively high refresh rates like 144 Hz, you wouldn't notice a performance hit when frames drop to about a 100 or maybe 90 (unless you use a high speed camera to capture the footage) because it all happens very fast, you'll only notice some stutters if the fps drops to the range of about 60 and below, so in conclusion, even if you don't have VRR, as long as the fps doesn't drop far below your monitor's refresh rate, you're completely fine, if the fps does drop to such range, you can always change the monitor's refresh rate to 60 Hz yourself to match the frames rendered by your graphics card, i hope that helps