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Frankly Speaking

We dealt with everyone's burning question about what the best PC for $499 is.

We walked through the parts told you our reasoning and sent it out to the wilds of the internet.

However we are not done yet, we don't just recommend a PC full of parts and call it a day.

Pretty excited we're gonna build it we're gonna test it and we're gonna see how our recommendations actually hold up.

Just like I anticipated it isn't easy choosing a $499 PC and we had a lot of inspiration on the build.

When we put it out there it's not like I wasn't expecting to get a lot of inspiration.

I mean this is however and of course you guys know more than I do.

I'm ok with that but I wanted to walk us through the parts again and I'll try to aDDRess some of those inspiration.

Because I did have a reasonings and I felt they were important.

So now it's not just about rehashing what we did in last week's.

It's also about building it getting it up and running and playing some games to see how this little beast is going to perform.

A couple of the same caveats first this is not made to look pretty now here we are optimizing for power.

Regardless of how it looks and I'm throwing in some cable extensions to make sure it looks good for b-roll.

Because even though it's isn't one of our killer builds there's only so much I'm willing to sacrifice.

But remember the cable extensions are optional you do not have to put them in but we gotta make it look good.

You know I'm saying the CPU and GPU were the most critical components here with the GPU being the most important.

So we had to sacrifice across the other parts including looks to get the best PC for the $499 price.

Second prices change and at the time of our original it came in at just over $499.

In fact when I rechecked on all the prices AFter we released the statement it had actually jumped by $40.

A lot of the parts had quickly gone out of stock now I've added additional links in the stock.

But these are volatile times and I just can't promise where prices are gonna be on a week-to-week basis.

Now like I had stated in the previous statement this isn't like my corner store on a thousand dollar build.

Which is made to be upgraded includes all the latest and greatest tech like PCie Gen 4 from amd and nvidia.

When you get to $499 a lot of that goes out the window because here it is about maximizing the power per dollar.

Across generations of components not just using X 570 in the latest gear.

Fundamentally outside of replacing the GPU or even the CPU to bolster the brawn of this PC.

You aren't gonna see PCie Gen 4 or USB 3.2 Gen 2 by 2 here because you just cannot do that at this price point.

This means that if and I do emphasize if there is support for PCie Gen for 3000 series nvidia or our dna 2 cards from amd.

Aren't going to be able to use this build recommendation to unlock that potential.

In fact you would be hard-pressed at this price point to find anything like that.

Now that's not to say you can't unlock a lot of potential when upgrading this PC.

But it has limits compared to my 1k PC which you can check out here.

Which gives you the ability to adopt all the latest architecture from amd and nvidia.

Now this build will give you great high FPS gaming and will run games at 1080p at greater than 100 fRAMes per second.

With the ability to modify settings to run at 1440p or 4k if you adjust the settings to work with those resolutions.

This is no gaming beast of a PC there's going to have to be some compromises

in graphical facility for building fidelity fit.

They did fidelity to get some fRAMe rates you want it's no slouch either.

Don't get me wrong and it will more than scratch that PC gaming itch of plenty and do it well.

Now by the way I will be updating these guys on a three-month basis and try to keep you up to date on what to buy in the $499,000 and $2,000 price point.

Step by Step (1 - 450)

1. So for CPU I chose the six core 12 thread Ryzen 5 1600 AF

2. This is the 12 nanometer refresh of the 14 nanometer Ryzen 5 1604 words wise though.

3. This thing does not perform like Ryzen 5 1600 but is actually in some cases outperforming the Ryzen 5 2600.

4. Now this was available for $85 over on amazon and at 99 over at newegg versus the $120 plus Ryzen 520 600 which is a steal now.

5. It has been going out of stock here and there over the past week so just keep your eyes peeled as this has been a very popular CPU.

6. I know some people did asked and frankly you just can't get an equivalent intel offering.

7. That also includes a cooler for the same price, that's not to say for gaming you wouldn't benefit from like an I-5 7600 k.

8. But there are literally twice the price with no cooler making it hard to get into a $499 bill.

9. The cheapest intel CPU I could find was the i3 8100 for close to that price.

10. And that just wasn't realistic to recommend given the performance versus a 1600 f4 motherboard.

11. I chose the asrock be 450 M HD V R4 what a fun name I hope I'm gonna call my next kid that hello as rugby 450 of HDR 4.

12. Mean can you imagine the teacher how do you spell that there are four of the asrock board is rising 3,000 ready and doesn't need a bios upgrade.

13. If you want to throw in a 3600 extra 3800 x at a later point no real feedback on this so looks like people understood my reasoning which is great.

14. You're gonna keep it there for GPU I chose the asus geforce gtx 1650 super overclocked 4 Gigabyte phoenix fan edition.

15. It just sounds like so many words together it's like it's like reading a wrestling team.

16. Again, this is a great card for 1080p gaming and when you look at the benchmarks for this card you can easily get to 100 FPS without sacrificing too much with a game from a game.

17. Visual standpoint within reason I went through my reasonings on why not amd and it simply came down to price for equivalent price and drive stability.

18. There isn't a good amd card to recommend even if the 590 or 584 RAM.

19. I chose team T-Force Vulcan Z 16 Gig 2 by 8 Gig dim of DDR4 32 hundred MHz RAM.

20. This gives you the additional speed should you decide to upgrade to a 3000 series rison in the future.

21. And because of the 1600 AF does have the improved imc of the 2630 200 MHz should be no issue.

22. But we will and I emphasize we will test it for storage I went with the team group t force vulcan two and a half inch 250 Gigabyte SATA 3 SSD.

23. Now I got a ton of feedback on this and I wanted to make some recommendations for other options if 250 Gigabytes is too small which I agree

is not a lot of space.

24. You can also choose a one Terabyte Fire Cuda 7200 RPM hybrid SSHD now you will sacrifice low times to samba dream but again a lot of additional space ideally.

25. I would pair this plus a 250 Gigabyte SSD and know that adding an extra $60 to the cost if you add in in addition to you or about 15 bucks.

26. If you replace the T-Force SSD for the sake of this statement I will show you how to install a mechanical drive in case you want to do the same for the power supply.

27. I need to find our watts or greater price was definitely a factor so I went with a thermal take smartseries 500 watt.

28. It's up 80 plus certified it meets the minima bar I've used a thermal tape before and I've never had an issue with a psu.

29. It's not modular and it's not gonna win any beauty pageants but it does give you the power you need to get it at 85% efficiency looks like folks agreed.

30. So we'll just continue to move forward with this for case I selected the cooler master master box q 300 l micro atx tower.

31. Now it's a nice small compact case supports all the components I selected and it gives us the room for a full atx power supply given its price at only $49.

32. It's an incredible value seriously I can't believe this case is this cheap and it gets plenty of airflow options.

33. Supporting up to a 240 millimeter aio if you do decide to upgrade to a 3000 series risin later.

34. With 2 USB 3 on the front which is uniquely placed on the side or actually can be placed anywhere on the front panel.

35. Which is crazy also as a bonus it has plenty of room for foot cable management and where you place the parts is pretty straightforward.

36. I know we talked about cheaper cases but I cannot say how much easier and more enjoyable this case will be to build in vs the less expensive option.

37. Now guys that's it that's a $499 PC and we're gonna build it and test it and show it here now so let's get started.

38. Ok so what is it that you need to build this build no first and foremost you need a nice clean surface.

39. I always like to show this where is it there it is I always like to show this but if you're worried about anti-static.

40. Some people are you can always look at this ifixit kit which is down in the description below and you can use one of these these are anti-static wrist bands.

41. This is not like the verge where this is just a armstrong wristband this is actually a real anti-static wristband if you're worried about this what you do.

42. Is to basically put it over your wrist if you take your psu you plug it in and you put this on the metal fan top part.

43. You'll actually be statically protected you can put it on your wrist or you can put it on your ankle down below.

44. Given what we have in terms of flooring and stuff I don't have to worry about that.

45. But I always like to show people what it actually takes to be able to do something like that.

46. Let's talk about what else you need you're going to need a screwdriver.

47. I have a couple here this is a phillips head magnetic screwdriver this has been around since like circa windows.

48. I think as windows, media series 9 which is like windows xp so this is a very old screwdriver but still a absolutely awesome.

49. Screwdriver on number 2 phillips is the ideal set you know is used something like this.

50. As well this is the ifixit kit that that other part is part of it again it has a ton of different heads.

51. These are really great kits especially if you're gonna get into PC building full-time or you can use them for things like fixing ipads and stuff like that.

52. But you'll need a screwdriver kit like this and then something the other thing I like about this is also as a places to put your screws these are zip ties or as the verge.

53. Call some tweezers these zip ties are just always a great thing to basically have so we reuse.

54. If ties we have wire cutters that actually allow me to cut the zip tie that's why I have wire cutters you don't mean it.

55. For this build but it's always good to have it on hand this is thermal paste.

56. I'm gonna go wash my answer in a minute thermal paste thermal paste you just want to have it on hand.

57. So there's your thermal paste and you're ready to go with that and then finally a knife you're gonna be opening a lot of packages.

58. It's always good to be safe remember nice safety just don't throw it at your friends like this that's like a dangerous thing.

59. You want to basically be good there so yeah that's not a knife yeah I need to get.

60. I think I need to fall like the ijustine thing and get like a super massive machete or something.

61. Like that because I feel like I feel super inadequate AFter watching everybody else open their with like some sort of super awesome knife.

62. And I have a lame knife anyway guys that's what's going on that's all you need to build this build you should be good using these parts.

63. Yeah buddy go wash my hands no I did I sing the whole happy birthday song the entire time twice.

64. I know I made sure we're safe now what are we gonna do first well we're going to prepare the motherboard.

65. This is what you need to do to prepare the motherboard for this $499 PC of.

66. Let's just talk quickly let's talk about the different components you see on this board this is your socket am3.

67. For it's actually appropriately labeled socket am3 is actually where we're gonna put putting our CPU.

68. This are your RAM slots now this is a micro atx port so you might be looking at if you were looking at my 1k build.

69. Or even the h1 build you can see some actually have four slots so I'm have

to this actually only has two slots.

70. Because this is a micro atx and the most RAM we could put in here is to actual dims.

71. This is your atx power your 24 pin atx power supply this is USB 3 these are your SATA connections.

72. Actually your b 450 chip this is where we're gonna stick in our PCie 16 this is where we're going to be sticking in our graphics card.

73. These are our brackets for installing things like our cooler which will show a little bit later.

74. And then of course this is your rear I/O here on the back so that's just kind of a quick overview we have.

75. Some other things here like for instance we have hd audio, we have things like USB, we have our front panel connectors, these right here are fan headers.

76. If as we talked about each one of these parts we'll make sure that we point them out.

77. It's very clear what you have to do when we're actually using this different parts of the board.

78. We've talked about the motherboard what are these other components that I have here on the table this right here.

79. This is your stock cooler that actually comes with your 60 and our day out so we're gonna be using that.

80. As you can see it actually has thermal paste pre applied you can see that actually right here.

81. I'm not going to touch it if you do touch it I would suggest wiping it off with isopropyl bot isopropyl alcohol.

82. Then reapplying your own thermal paste if you have some so if you don't try not to touch it over here.

83. We've got these are our RAM dims you can see these little holes right here on the these little slots right here.

84. We'll talk a little bit about those here in a few minutes.

85. This is actually your CPU so you can see right here you get your rise in five 1600 AF right here.

86. So that's what we're going to be putting for our CPU we also have this is your rear I/O and these things are all inside of your motherboard box.

87. This is included in your box all of these components you have here as long as you take these out these are in all the boxes.

88. That you've included these are the parts you're going to need this is the rear I/O make sure we do not forget to install this.

89. These are your SATA cables, these are gonna be used for hooking up your physical drives like your SSD.

90. And we're also gonna put in a physical typical hard drive as well so we just show how to do that.

91. The other thing that we're gonna add to this build just so we can show it so you get kind of like a comprehensive is.

92. We're gonna go ahead and add a into drive again this is not because we're gonna use this for testing.

93. I just wanted to be more comprehensive with in with doing this build so if you did do an upgrade like a denim 2 or add a physical drive.

94. We showed you how to actually do that so I'm just trying to be comprehensive with this overall guide below.

95. If this is something that you actually enjoy regardless of whether it's included in the bill or not.

96. We're gonna show you how to install that in order to install an m to drive you need this little bad boy right here.

97. I love to zoom in on these and you got you need this little bad boy right here this little tiny indot to screw.

98. This little screw is super important in terms of installing our mdot to drive.

99. Let's get started and let's get the CPU installed first here we go Ryzen 5 1600 AF.

100. Just kind of pop out nicely now here's the thing about the CPUs there are two parts of this.

101. This is top part is called the ihs and on the bottom is pins you want to try very hard.

102. Not to touch the top on the edge and you want to also not touch the pins on the bottom now we're gonna show you.

103. We've shown this on multiple statements before you see the super tiny little gold arrow right here.

104. This is actually where you're going to basically line up to install it in your a

m4 slide that little tiny arrow is going to go on top of that little tiny arrow.

105. Take this little arm open it up like so take this and you can see the two arrows.

106. They're gonna go right on top of each other and it drops in just like that.

107. Very simple it's okay to just kind of shake it to make sure it's in then once you kind of know it's in and pull that down and boom your CPU is installed.

108. Now we're going to install our RAM when you basically install RAM there's two little brackets.

109. This one has sometimes both move sometimes only one moves in this case it's only going to be the top ones.

110. You want to unclip both of these this one doesn't have that what you want to do is you would look right here.

111. You'll see a little slot and you want to line it up with this little slot here on the board so you take this and you line it in just like that.

112. So it just goes in like so you just slide it right in and you want to make sure.

113. It gets a nice solid click there you go there's one same thing here it good nice solid clicks.

114. Just like that okay next up we're gonna show you how to install your mdot to drive if you went ahead and got one of these for this build.

115. Actually we're gonna stall where he says ultra m2 this is actually RAM up to is here you'll see 20 to 40 60 and 80.

116. This is the size of the m2 99% of mdot 2's are 80 millimeters in length, the

way this is gonna work is you're gonna take your little mdot to again try not to touch it on the top.

117. Take very notch at the top now right here if you look at this again there's a little slot right here and there's a little slot right here.

118. You just want to slide that up like so push it in and then just then you can see like it's a diving board nice and bounce.

119. Then you're gonna take a little tiny screw right down like that and screw it down.

120. You just want to go until it stops you don't want to push too hard just till it stops.

121. Then your m2 is in so the last part of this is installing your stock cooler for your stock cooler.

122. You're gonna need to remove the brackets so we're gonna do is we're going to take off this bracket.

123. This isn't like the other like newer race stock coolers we can just put it on top of this tri take off this bracket like so.

124. There's gonna be four screws now you got to be super careful with this because AFter you take off the screws.

125. There's a backplate on here you just want to be cognizant of because it can slip off so just once you kind of have it done.

126. There you go make that let's take that off there's one it's always a good idea by the way words of wisdom from roby tech.

127. Keep these brackets you're gonna want to keep these brackets because if you ever go to an aio or if you ever go to certain.

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