

Project objective:

A high school student is skilled at created computer generated animations using Blender, but is frustrated at how long it takes for each scene to render. He doesn't have a lot of money to put into a new computer, but his parents have agreed to help if the price is reasonable.

Budget goal:\$700 (I got slightly over the the goal if you considered shipping price)

Equipment used:

Equipment Description	Vendor	Vendor Item #	Retail price
AMD RYZEN Processor	NewEgg	N82E16819113496	\$164.99
Case	NewEgg	N82E16811854069	\$109.99
RAM	NewEgg	N82E16820232476	\$134.99
hard drive	NewEgg	N82E16820147676	\$57.99
keyboard and mouse	NewEgg	N82E16823201112	\$39.99
monitor	NewEgg	9SIAE2J8ET9963	\$179.00
		total	\$686.95

Detailed list of software and operating platforms used, including version numbers and licensing requirements:

AMD RYZEN 5 2600X 6-Core 3.6 GHz (4.2 GHz Max Boost) Socket AM4 95W  
YD260XBCAFBOX Desktop **Processor**

Phanteks Enthoo Pro TG PH-ES614PTG\_BK Integrated RGB lighting Tempered Glass Side Panel ATX Full Tower Computer **Case** - Black

G.SKILL TridentZ RGB Series 16GB (2 x 8GB) 288-Pin DDR4 SDRAM DDR4 3200 (PC4 25600) Desktop Memory Model F4-3200C16D-16GTZR

SAMSUNG 860 EVO Series 2.5" 250GB SATA III 3D NAND Internal Solid State **Drive** (SSD)  
MZ-76E250B/AM

Rosewill Fusion C40 Gaming **Keyboard and Mouse** Combo, Dedicated Multimedia Keys,  
Mem-mechanical Keyboard with Brilliant RGB LED Backlight with Precise Gaming Mouse,  
On-the-fly DPI Setting

SAMSUNG 390 Series C24F390 Glossy Black 24" 4ms HDMI Widescreen LCD/LED **Monitor**,  
AMD FreeSync, 250cd/m2 DCR Mega Infinity (3000:1), VESA Mountable, D-Sub, HDMI

Rationale:

The highschool animator needs a computer that has a lot of RAM and high quality processing power to animate like a gamer. One component of this includes the Ryzen processor which has a max boost frequency 3.9 GHz. This will ensure exceptional graphics and a cooling system to support it. In addition, this computer case needs a high quality yet not the most expensive computer case which the Phanteks Enthoo Pro is perfect for. The RAM and hard drive provide memory that is well suited for an animation program and cost under \$200. The mouse and color-lit keyboard come together in a \$40 dollar deal. Finally, you display the animation, the student is working with 3D graphics which is similar to gaming which means they need a curved monitor. This monitor is a 24 inches and costs under \$200 and completes the custom computer providing crisp graphics and display for working with blender or other animation applications.