



chirosuite Hardware Specs

The information contained herein is the property of Sunbaked Software Inc.
Any reproduction without written consent is strictly prohibited.
©2020, Sunbaked Software Inc. · All rights reserved · v1.20.1206

We recommend that you read through this ENTIRE document! There is information in here that may affect you immediately, may affect you 6 months down the road, or may not affect you for a few years! Knowing where you are going through will help you to plan appropriately for now & in the future!

We have tried to put in both overview & detailed information to keep things simple but also provide details for those who are more detail oriented or who are passing information along to a computer tech!

As always, if you have any questions, comments or concerns, please don't hesitate to drop us an email or give us a call. We understand that the information can be confusing & that it is often difficult to find time during the work day, don't hesitate to call in the evenings or over the weekend if you need help - simply call the appropriate office number for your location and press "9" at the automated attendant telling you we're closed - this will forward you to my personal cell!

Brock W Denys
El Presidente, Sunbaked Software Inc.

Table of Contents

Quick Hardware Overview.....	2
Detailed Hardware Information	3
Computer	3
Main/Data/Server Computer	3
Secondary Computers	3
SOAP Computers.....	3
Operating System	5
Anti-Virus, Anti-Spyware, Firewall	5
RAID 1 Drives	5
Power Surge Protection & Battery Backup (UPS).....	5
Monitor (go big or go home).....	5
Network Hardware.....	5
Scanners & Web Cameras.....	6
Backup Hardware	6
Running ChiroSUITE on Apple Computers.....	6
A Very Big Thank You!	6



Think before you Print! The great thing about a PDF is that you can read through it, open it over and over again, search it, and generally get all the information you need without every printing it out on paper. Do what you can to help the environment!

Keep in mind that what we “recommend” is based on how we develop & test ChiroSUITE. We require a certain level of performance from your equipment to get the level of performance we develop to - if you buy substandard equipment that is perfectly fine, but then expect to get substandard performance. We’ll look at your systems when you aren’t getting the performance we expect, but the first thing we look at is whether or not you’re running the minimums we recommended, if you aren’t, our investigation ends there 😊

There is no money in computer hardware - so roughly speaking, a \$1000 computer is twice as good as a \$500 one. They use cheap components and other tricks to make it look like a deal, so be cautious.

****Keep in mind that almost everyone balks at my recommendations! I am always amazed by that - you use your computer for absolutely everything, not just ChiroSUITE - computer speed & printing speed & internet speed are so important to how your clinic operates, how well your front desk staff operate, and how all of that appears to your patients! Also, the hardware we recommend should be expected to serve you well for 4-5 years!**

Quick Hardware Overview

For those of you who just want the “coles notes” version, here you go:

Main/Data/Server Computer

- 64bit 9th generation Intel processor or better (AMD Ryzen equivalents are perfectly fine with us) (on cpubenchmark.net it should have a CPU Mark of 10,000 or better)
- 16GBs RAM memory & gigabit lan networking
- M.2 NVMe SSD hard drive (5-7x faster than normal ssd) - depending on your clinic, 256 or 512GB should suffice
- A UPS is mandatory, you need something with software to auto-shutdown in prolonged outages. **We will charge you to recover from a power outage when you don’t have this in place!**
- A graphics card & monitor capable of 1366x768 resolution minimum - the larger the monitor the better, multiple monitors supported & recommended for clinics with lots of schedules
- Windows 10 (we recommend Pro, but use Home if you like - but you may need to upgrade down the road) or Server 2016/2019 (Essentials or Standard depending on your clinic’s needs)
-

Secondary Computers

- 64bit 8th generation Intel i5 processor or better (AMD equivalents are perfectly fine with us) (on cpubenchmark.net it should have a CPU Mark of 5,000 or better)
- 8GBs RAM memory & gigabit lan networking
- SSD hard drive, depending on what else you run, 128GB or 256GB should suffice (M.2 NVMe SSD preferred)
- A graphics card & monitor capable of 1366x768 resolution minimum - for front desk staff the bigger the monitor the better, for SOAP computers we recommend at least 23” touch screens
- Windows 10 (we recommend Pro, but use Home if you like - but you may need to upgrade down the road)

Tablets

- Tablets are a difficult topic to include in the overview. I have included them here simply to reference the information below in the detailed section or to invite you to call us specifically to discuss further.

UPS (Uninterrupted Power Supply)

- A UPS is absolutely mandatory on the main/data/server computer. **We charge to help you recover from a power outage when you don’t have one!**

Anti-Virus

- Anti-Virus is mandatory on all machines - it must be a legal to run in your clinic **(the free ones are not)** & kept up to date at all times. Anti-Virus companies update their software yearly, so along with an active subscription for the virus definitions, you must download & update your software yearly as well. We do allow the software included with Windows 10, but recommend you run something better!

Detailed Hardware Information

I'll try to give you details about the hardware you need, why, and what other things to consider. Feel free to call or have your tech call directly if you want more details or want to have us check something out first hand. We can then better explain the logic behind our requirements.

Computer

Buy your computer from the store that makes the most sense for you. Buy from where you are going to receive the best support - if that is ordering from Dell, buying from Best Buy or Memory Express, or your local computer guy down the street! You can buy a computer from anywhere, the real important part is getting help when things go wrong! To that end, I strongly recommend some kind of IPR or support for 3-4 years so that you have nothing to worry about during that time if something goes wrong.

Main/Data/Server Computer

This should be a 64bit, 8th Generation Intel (or better) computer with 16GBs of RAM w/ gigabit (1000mb) networking. There is nothing wrong with AMD's Ryzen systems, but we don't build or test on any of them. You don't need to spend a lot on a graphics card, you aren't going to be playing games or editing videos - but do NOT buy a computer that shares its memory with the graphics card. Spend the money on a M.2 NVMe SSD drive (they are 5-7x faster than normal SSD drives), they are much quicker - depending on what else you do, you can get away with a 256GB or 512GB drive in most cases.

*On cpubenchmark.net, your CPU should get a mark of 10,000 or better.

Although a true server is always better, it isn't always necessary in a small-midsized clinic. If your hardware & networking is good, a regular computer should do you fine for up to 6-10 computers, at that point you may need a true server! You can increase how well it works by keeping it set aside instead of using it at the front desk!

Secondary Computers

This should be a 64bit, 8th Generation i5 (or better) computer with 8GBs of RAM & gigabit (1000mb) networking (AMD Ryzen equivalent is perfectly fine). Again, don't spend lots on graphics but avoid machines that share memory. Spend the money on a SSD drive and again, depending on what else you are doing with the computer, you can get away with a 128GB or 256GB drive for sure - M.2 NVMe is better.

*On cpubenchmark.net, your CPU should get a mark of 5,000 or better.

*Special Consideration - sometimes clinics have issues with their main computer (viruses, hardware, etc) and would like us to move the software to a secondary computer - we can only do that if that computer matches our requirements, so if you are considering going paperless, you might want to pickup 2x the main/data/server computers so that you can changeover if need be! You can use the other machine in a normal capacity until it is suddenly needed to take over!

SOAP Computers

This should be a 64bit, 8th Generation i5 (or better) computer with 8GBs of RAM & gigabit (1000mb) networking (AMD Ryzen equivalent is perfectly fine). I know you want to use wireless but unless you are spending thousands of dollars on your wireless networking setup, I submit that the speed, security, and reliability isn't quite there yet. You want 1000mb networking, most wireless networking will get you about 90mb-100mb - its equivalent to driving down the highway at about 10kms/hr - sure you can, but why would you? My biggest recommendation here is try out your iPad from home or your old laptop to see if you think you can take notes fast enough that way. It may work fine for you - SOAP Notes is all about personal preference so the best advice I give is to try what you have before you go out & buy stuff that isn't going to work!

*On cpubenchmark.net, your CPU should get a mark of 5,000 or better.

*What we see working the best for clinics are wall mounted, hard wired 23"+ all in one units (they don't all wall mount though so watch for that or put them on a shelf or desk).

Tablets

This is a difficult topic to discuss because there are so many variables. I'll try to describe what we feel is best from our opinion & what we have seen clinics succeed & struggle with, but by all means, simply call if you have any questions - ultimately, we want whatever works best for your environment! Although there are some specific considerations depending on how you want to run your tablet, there are a few general considerations.

Power, screen size & your pudgy little fingers - don't get me wrong, I love my iPad & have several of them but I cannot imagine using one for any real business purposes. You have to consider how long your battery is going last with real use, how large the screen is for whether you are running ChiroSUITE directly on the tablet or whether you are remoting into your office desktop, and how easy it will be to manipulate the screen with touch (which can be helped by using a stylus).

You have 2 options for how you choose to run your tablet:

Running ChiroSUITE Directly on a Tablet - this option means you are purchasing a Windows tablet to run ChiroSUITE on directly.

1. Wireless - this is the biggest stumbling block with tablets, simply put, how good is your wireless? If you are running a \$125 home built router then you are simply planning to fail. You need to really worry about security & you need to worry about a solid, consistent & quick wireless setup - basically you need to get someone in to help. Most clinics are too large for a single wireless router & will require several access points. Losing your wireless connection will disconnect ChiroSUITE and cause you to exit out & go back in, which is very time consuming & frustrating!
2. Windows Tablet - this option requires that you get a Windows based tablet & because you are running ChiroSUITE on the tablet itself, it needs to adhere as closely as possible to any other SOAP Computer (detailed above). This makes the tablet more expensive as there are fewer options.

Remoting in to run ChiroSUITE From the Tablet - this option means you are purchasing any kind of tablet, to remote into an existing Windows computer running ChiroSUITE.

1. Wireless - this is still obviously a concern for security & better speed is great, but not as necessary with this option. Since you are remoting in to your hardwired desktop, if you lose your connection momentarily you simply reconnect back in to exactly the same place you were at.
2. Windows/Apple/Android - this option allows you to run whatever type of tablet you want that will support some type of remote desktop control software (which is most of them). Screen size will be important to you, but depending on the resolution you typically use on your desktop - you may need to lower the resolution there first. There are 4 different screen sizes available - so picking the one that works best for you without scrolling will help make you the most efficient!
3. Connecting to your Desktop - this option does require that you have a desktop/laptop in your office to remote into, you cannot remote into the front desk or any computer that is already being used by someone. Having said that though, most practitioners have a computer in their office that is already hardwired & running ChiroSUITE, so this option gives you the best of both worlds - fast connected speed, no wireless disconnect headaches, and the portability of a tablet ☺

How to Decide - I can't tell you what is going to work best for you & your environment, so there are a few things you can do to help make the right decision for you. Almost everyone has some kind of tablet & since you can buy/trial remote desktop software at a minimal cost, I recommend bringing your tablet in & simply taking control of a desktop at the clinic. This will give you a feel for how a tablet will work in your office - walk around to the various rooms that you work out of, the various locations you go to, and everything you can to see how good your wireless connection is. If you have already been SOAPing then open up some of those existing SOAP Notes to see how they look, to see how easy it is to navigate around - if you aren't already SOAPing, then open up the setup/test screen & try doing a few SOAP Note tests.

Operating System

Windows 10 Pro - you can use Home but you may need to upgrade it in the future (which is easy with Windows 10).

If you do purchase an actual server, we recommend Windows 2016/2019 or greater installed. The Essentials or Standard versions will work fine.

Anti-Virus, Anti-Spyware, Firewall

We recommend what we use on all of our machines - ESET Endpoint or Internet Security. We believe in it so strongly that we will install it on your computers for you for \$5/computer/month. Ultimately, purchase what you prefer using but if you don't have a preference then use what we use & that way we can help you configure it. You'll be asked to configure the firewall to create an exception for TCP Inbound port 42396 for local network only - if you're not comfortable with that, then buy ESET.

RAID 1 Drives (or better)

RAID 1 is a process where you have 2 hard drives that are exactly the same and the information on the 1st drive is always mirrored to the 2nd drive. This is important because hard drives fail - not if, but when. We recommend this regardless on your main/data computer as an additional way to protect your information but if you are considering using paperless features in the software, it is almost mandatory!

RAID 1 is a minimum and the simplest implantation of RAID. There are various other levels & if you feel so inclined, you can look at RAID 5 or RAID 6 as an alternative for additional storage speeds & loss prevention.

Power Surge Protection & Battery Backup (UPS)

A 3 second power outage will shut you down for 4-8 hours while you recover, rebuild, and restore your information! It is mandatory to have a UPS on your main computer to prevent this headache & starting in the near future we will begin charging clinics \$500 to help you recover from a power outage without a UPS on your machine!! It is an incredible waste of time for our resources & yours to be dealing with the ramifications of a 3 second power outage - this currently happens a few times a month in our clinics!

Monitor (go big or go home)

In v5 we have changed the minimum screen resolution you require from 800x600 to 1366x768. I chuckle when I remote into a clinic that has their resolution set really high but then changes their font size to 300%. Solve your staffs issues easily by buying a larger monitor (19" absolute minimum but look for a 24" or 27" instead) & keep your resolution down around the 1366x768 size. Everything will be larger by default. Also, as a security note - if your monitor is in a position that allows patients to see the information easily, you may want to consider picking up a security screen that fuzzes out the information when you are not sitting directly in front of the monitor!

Network Hardware

All of your computer equipment (except your printers) should support gigabit (1000mb) networking. You can easily buy network adaptors to upgrade existing computers or external adaptors for laptops. Everything in your environment should be running at these optimized speeds! A slower computer or wireless computer can slow down the entire environment.

Scanners & Web Cameras

If you are planning to go completely paperless or looking just to streamline some of your processes you are going to need a few additional things.

A scanner will help you capture information to store on the patient file, to create SpecDocs for quick handouts, and everything in between. A cheap scanner is going to be exactly that... cheap! We have worked on streamlining our own business and paper flow at Sunbaked Software Inc. and the one thing I can absolutely say is don't cheap out on your scanner. It seems crazy to pay \$600 for a good, fast scanner when you can buy one for \$150 but the good ones come with sheet feeders, double sided scanning, good software & everything else you need to NOT pull out your hair. Imagine standing over a scanner and spending 5 minutes swapping out pages & pressing a button to scan the next page. Now imagine dropping your 5 page document in a feeder, pressing a button & walking away, knowing that the document will be in Folder A on your computer in 15 seconds! Absolutely don't cheap out here!

A Web Camera will be important if you want to start grabbing patient pictures for the Visual Arriver & Visual SOAPer features in v5. Everything you can buy will be more than adequate so just consider where you are going to put the webcam & buy what makes sense. For testing purposes we buy middle of the road webcams that can be spun around easily - this makes a lot of sense to me but really it will just depend on where you can put it

Backup Hardware

The nightly online backups are included in your ChiroSUITE fees. We test the files & respond daily to you via email to let you know your files were received. We also offer additional services to securely backup all of your non-chirosuite files safely to Canadian based servers. Regardless of whether you make use of these services or not, we do recommend using another source for backups - there are so many great & inexpensive NAS devices out there now, don't hesitate to pickup something additional for nightly or weekly internal backups! We recommend a 1-2TB WD Passport drive or something similar. Do make sure you encrypt & protect your backups!

*Special Consideration - check with your practitioner's associations as to their rules about backups - in Alberta you are not allowed to store patient data on US soil, which excludes Mozy, DropBox, Amazon, Google Drive, Microsoft OneDrive, etc. Know the rules & respect your patient's personal information!

Running ChiroSUITE on Apple Computers

ChiroSUITE is not a native Apple application but can run on Apple computers using Bootcamp or Parallels - we have a handful of clinics doing so. I get a regular stream of calls from practitioners who are frustrated with their computer and looking for something different. We will support you equally on a PC or an Apple but keep in mind that we are not Apple people, so when you have a printer problem on an Apple computer I am going to simply shrug my shoulders and send you onto your Apple computer guy! Also keep in mind that you completely negate any advantage you have moving to an Apple computer once you are running Windows on it... so be careful with their slick advertising and don't hesitate to call if you want to see whether this is a solution for you or not! Ultimately we are indifferent which hardware you run as long as you understand the differences!

IF the tools became available we would certainly look at putting out a native Apple application, but until that time we will continue to test with Parallels and do what we can to support the product on Windows running on an Apple!

A Very Big Thank You!

A very heartfelt thanks for making it through the entire document - yeah you! It took about 8 hours to put this document together so we really appreciate you taking the time to read through. As always, please let us know what you found helpful, what needed a little work, and where you struggled to stay awake!

We appreciate all the feedback, all of your patience, and all of the effort you put into making **chirosuite** a great product!