

## How to Pick an Appropriate SSD For Your Budget

Finding the right SSD depends on two main factors. Are you looking for extreme speeds?

OR are you simply just looking to upgrade storage for inherently common tasks? Essentially even the most basic SSD varieties are several times faster than your average HDD, and even though they are slightly more expensive, they are a good overall investment.

That said, it is still possible to find a decent, high-end SSD that suits your needs, but only if you pay attention to some very crucial considerations.

### **Key Considerations**

Before getting into the nitty-gritty of it all, let's look at some basic considerations.

First, if you're simply looking to tweak your PC into basic improved operative capacity and speed, and you're running on an HDD, then your best bet would be a 2.5" SATA SSD, such as this.



The form factors are pretty standard, and it will possibly fit the dimensions. Different types of internal enclosures are available if you run into any issues, this is covered further later in the article, and *If you need any assistance with this, please contact sales@gccy.co.uk who will be happy to advise you.* Whether it's your usual day to day tasks, or if you randomly place PC games, this SSD will improve system performance and speed simultaneously. The boot up speed alone is usually around 5X faster than a standard hard drive (HDD) for boot up times.



Now, the posts shift depending on your core requirements. If you are into high-end specs, or you are building a gaming rig and you want higher load speeds on games, then the M.2 with PCIe connectivity will be a good fit for you, here is an example of what an M.2 card looks like.



The M.2 typically costs a bit more, in fact a lot more, but it gives you way better performance in every regard. The benefits of an M.2 Type of SSD are that its very fast and very compact.

## **How to Find an SSD That Suits Your Budget**

The very first consideration, before all else, is how much you are willing and able to spend. While most people tend to purchase high-end SSDs to perform basic tasks that an average 120GB variety can handle comfortably, it is important to ensure you get the **capacity** you need and not spend more for no extra perks.

Typically, a 250 GB SSD is, in most cases sufficient, but it is recommended to go for 500GB as it is much faster and more efficient. If however you don't have budgetary restraints, and you are purchasing for a professional level of speed and space, then you can go for 1TB (1,000 Gigabytes) or even 2TB.

# **SSD Drive Kits (For Physical form differences)**

It is also important to go for Drive kits as opposed to just buying the drive on its own. This is mostly due to compatibility issues in regard to physical form. The 2.5inch dimensions on modern SATA SSDs don't fit in the typical PC drive bays that are usually 3.5inches. Instead of spending extra money buying a bracket, you could go for a drive kit that includes the



3.5inch bracket, as well as complementary SATA cables and cloning tools. *If you need any assistance with this, please contact sales@qccy.co.uk* who will be happy to advise you.

### **Storage Memory**

Choosing whether to go for Single-Level Cell (SLC), Multi-Level (MLC) or Triple-Level (TLC) storage memory shouldn't be something you're concerned about if you are looking for general PC function.

If all you do is run consumer and mainstream apps and O.S's, then you probably don't need to read too much into it, but if you regularly work with huge files, then the MLC, although a bit more expensive, will ensure you operate at maximum speeds with no lag, regardless of the quantity of data you are dealing with.

### **Bottom Line**

Although there are other considerations such as controller variations, power consumption or even endurance, the requirements that benchmark this whole process is actually not that complicated. The idea here is unless you are a tech enthusiast or a professional gamer, then you should probably go for an SSD that doesn't burn a hole through your pocket.

## Supplemental, very beneficial

If you are using an AMD chip in your PC, there is now the opportunity to use "StoreMI".

Here is an excerpt from AMD's website:

AMD StoreMI Technology is included with every motherboard that features an AMD X399, 400 or 500-series\* chipset, (but it is available at a small charge on other boards).

SSDs are fast, but expensive, and offer minimal capacity. Mechanical hard drives boast large capacity for a low price, but are much slower than an SSD. AMD StoreMI technology "combines" these two types of storage into a single drive and automatically moves the data you access the most to the SSD, so you get the best of both worlds: SSD responsiveness, and mechanical hard disk capacity with its low price.



AMD StoreMI is a powerful tool for PC enthusiasts that want to improve load times, boot times, file management, and system responsiveness.

Maybe you installed Windows® to a hard drive, but don't want to reinstall anything to get SSD-like performance: StoreMI can help.

Maybe you have a large library of files across several drives, and want it all under one drive letter: AMD StoreMI can help.

Or maybe you wish the hard drive with your games could get you into the match at SSD speeds: StoreMI can help.

As you add more and faster drives to your PC, AMD StoreMI technology automatically pairs your most-used files with the fastest storage for peak performance. You can also use up to 2GB of RAM as a last-level cache for ultra-fast data.

If you have an AMD X399, 400-series or 500-series\* chipset, you can download AMD StoreMI software for free.

If you have a socket AM4 motherboard with a 300-series chipset, you can still enjoy the benefits of storage acceleration with AMD StoreMI software, exclusively for AMD, for an additional fee.

StoreMI, is a wonderful concept, which means for example, you could run a 120GB SSD or M.2 drive and a 2TB hard drive and the computer would recognise them as on large 2.12TB fast drive. There are some caveats to this, but overall the system works exceptionally well. For further information on this, or any assistance you are welcome to contact us:

Contact details: email sales@gccy.co.uk