
Reasons To Buy An SBC

Hello readers,

If you haven't already discovered why makers are all over the Single Board Computers, you may not have noticed a few things yet. We'll endeavor to cover a lot of ground here and then you can decide whether it's something you would enjoy. Chances are pretty good you have most or at least *many* of the components you'll need already, but to be sure, at a minimum to play with an sbc you'll need:

- Hdmi cable and compliant tv or monitor (there are a few exceptions to this rule but generally an sbc needs a monitor to setup at least)
- Micro SD Card, again exceptions are many but in most cases you'll want one with at least 8Gb (check your old phones)
- Android style charger* probably best to order one that delivers at least 3 amps or risk an unstable system
- SD reader on PC or Laptop because while flashing an image to a card is easy, doing it without the equipment could prove challenging.
- USB keyboard and mouse vs Bluetooth keyboard and mouse - many sbc can use these if enabled. USB mouse at a minimum to enable
- Enough time to tinker - maybe an hour a day?

Advantages

Cheap backup computer, easy to work with, ability to use in projects like making drones from scratch or whatever you like based on what is possible with just a little time. In the more extreme cases you might revolutionize the IOT world by inventing something that you didn't think you could just by learning a bit about micro-controllers. It could be your brand of internet coffemaker that changes everything.

Disadvantages

If you aren't sure what to get you could be disappointed. The most economical options aren't as impressive as the LattePandas and Tinker Boards. If all you do is snag a Pi Zero, you'll have a limited experience due to ram restrictions, and even the impressive Pi3 has a few drawbacks that aren't exactly common knowledge to newcomers. (Amazon and Netflix do not work on arm architecture sbc unless you use Kodi and or buy codecs.) The less expensive boards are all suited to various levels of projects that may or may not be what you had in mind.

If you want a perfect desktop replacement

So far LattePanda and Tinker Board are the sbc I've tried that best fit that purpose, with Raspberry Pi3 being a fair contender as well. I'd say people have different standards but the sheer volume of complaints about some boards make it unlikely your experience will vary.

If you want to build yourself a robotic suit of armor that can defeat others in

single combat...

Then you'll want a few of the ones I just mentioned rather than different ones. But you'll find the PiZero fit for finger controls, maybe axial motor controls, etc. Ultimately if you intend your mech to fly, you'll certainly want to task those rotors to something that can handle multithreaded code faster than 512 Ram. You could probably use a Pine 64 to run the cooling but not the HUD, the price is a clear indication of that, as were the reviews.

Could this hypothetical mech have decent AI?

Yes if you know how to mount additional usb storage in Debian I suppose it could but really you might consider a cloud system for that and then it's just a matter of connectivity. It turns out that with such low power restrictions these systems can be very portable. Chargeable battery packs and decent small monitors exist that make these devices nearly wearable. Your imagination is a bigger constraint than your budget as buying several of these devices for different purposes can be done on a small budget.

Verdict instantly addictive

Rather than buying a fidget spinner do something useful with your time. Great family projects await and for less than the price of a Laptop you can set up 10 of these things and wonder if your toaster's wifi signal is tanking, or if it's your refrigerator getting Steam updates.