In the last video about my assortments I concentrated on through hole components. In this video, I continue with SMD and with mechanical parts. I will also briefly cover my sensors.

Let’s start.

After prototyping I usually mill a first PCB and later on, I send it out to Osh Park for a professional finish. For these PCBs, I mostly use SMD parts. So, in addition to the through hole components I needed also components in SMD technology. Because of my age, I decided, that 1206 is small enough and focused on this size of parts.

Assortments in SMD look completely different: They look like books. And inside, there are the parts. Very convenient. You just browse through the pages to find the desired value.

I have a set of resistors, of capacitors, and of inductors.

The rest of the SMD parts like LEDs, diodes, FETs still reside inside the small drawers because I did not find a good way to store them otherwise. I also did not find any SMD assortments other than these books. As I mentioned in my previous video, I buy more and more active components in SMD and “convert” them to through hole with these small PCBs.

The next type of assortments are sensor boards. One of these assortments is a standard one you get ready made. The others are all custom made with the sensors I once used or plan to use in the future. I never buy only one sensor, even if I only plan to use one. This strategy has several reasons:

1. These parts are usually not very expensive
2. If I wait for 30 days and a part comes dead on arrival, I am really pissed off
3. During my experiments, devices sometimes die. Usually it is my fault. But then, I am happy to have a second one
4. If I am not sure if I killed a device, it is much faster to replace the one with a new one. If they behave the same way, the problem is between my ears. If they behave differently, I can choose the better one…

So, the second or third one ends in this assortment box. I probably once will do a video about the sensors in these boxes.

Then, we go on with the connectors. The first and most important set is the one of pin headers. This is also from Banggood. It is particularly valuable because usually, you get these empty shells only in sets of 100 or more pieces per size, but you never need 100 pieces. So, the assortment is not only more comfortable, but also cheaper. If you are interested how I use these empty shells, you can watch my video # 12.

Then, I built my own assortment of IDC connectors to connect ribbon cables to PCBs. These connectors are often used in our devices and they match also with our beloved Dupont cables. I have them in 6,8,10, and 16 pin configurations. Both, male and female.

The next assortment of connectors consists of round GX connectors. I have them in 12 and 16 mm, with various pin numbers. As a rule of thumb, buy connectors with bigger pin numbers, because you do not need to use all of the pins. So, connectors with many pins are more flexible. I like these connectors, because they are secured with a screw and you are sure, that they stay, where they are. And round connectors are much easier to mount for me. Just drill a hole.

And last, but not least, I have some assortments of mechanical parts. First and foremost, the assortment of heat shrink tubes. This is something like a “human right” for a tinkerer. I have them only in small quantities, but in color and transparent. Sometimes, transparent is better looking, and sometimes you want to cover your work from other eyes.

The next important assortment is the one of Rubber Grommets. They are very handy if you want to feed round cables through the wall of a box.

Then, I have also assortments of hex nuts and springs. I have to admit, I rarely use springs, but If I need one, I am happy that I have a choice in my assortments.

The last assortments are fuses for different purposes like car, motorcycle, and electronic instruments. Fuses always blow-up in the worst moment. So, I am happy to have them, even if I will not use a lot of them.

These are not all my assortments, but most of them. And, if you think, I overdid it a little, you are probably right. But at least, you can choose which of these assortments could add value to your lab. Or, maybe, you have a good idea for one I do not already know. Christmas is approaching fast, and my wife is always grateful for a “nerd’s” Christmas gift idea.

I hope, this video was useful or at least interesting for you. Bye!