

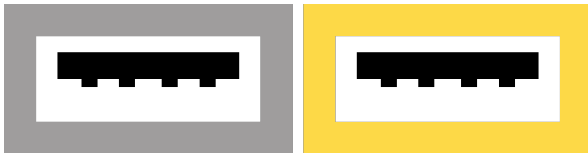
# technical explanation

## What kind of USB ports exists?

The **U**niversal **S**erial **B**us, shortens **USB**, is an interface that allows the connection of various peripherals devices and storage media.

Nowadays you will find mostly several different USB ports on computers or notebooks, which differ in shape, color and the maximum possible data transfer rate.

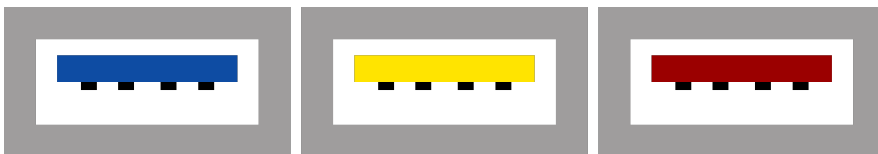
### USB 2.0



The USB 2.0 port are equipped with a black bridge inside. The maximum transfer speed that can be achieved is up to 40 MB / s (High Speed). Nowadays you will find this type of connections mainly on mice and keyboards, where the speed is a subordinate role.

Gigabyte uses connectors on some of its motherboards with a gold-plated frame. These connections are equipped with the so-called **DAC UP** technology. In this case, the connection is operated via a separate circuit, in order to minimize noise generation. This connector is particularly suitable for use with external sound cards or DAC devices (**D**igital to **A**nalog **C**onverter).

### USB 3.0, USB 3.1 Gen1



With the introduction of USB 3.1, the naming has been slightly adapted. For example, USB 3.0 ports are now referred to as USB 3.1 Gen1. A technical difference does not exist.

Prior to the introduction of USB 3.1, USB 3.0 ports were marked with a blue bridge. There is, however, no clear color coding standard, which is why it is no longer clear which connector is the exact one. However, if you see a connector with a blue jumper, it is definitely a USB 3.0 / USB 3.1 Gen1 connector.

Yellow USB ports are again found on some Gigabyte mainboards. These connections are, like their golden USB2.0 ports above, operated via a separate circuit and thus reduce the generation of noise (DAC UP 2). The connection is therefore particularly suitable for the operation of external sound cards and **DAC** devices (**D**igital to **A**nalog **C**onverter).

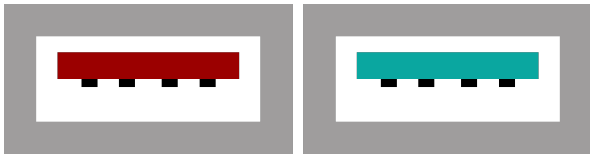
For mainboards of the company MSI, depending on the motherboard, USB 3.0 or

# technical explanation

USB3.1 Gen1 connectors are also manufactured with red bridges.

USB 3.0 or 3.1 Gen1 allows transfer speeds of up to 300 MB / s (Super Speed).

## USB 3.1 Gen2



In addition to the usual USB ports (Type A), a further port type was introduced with USB 3.1 Gen2. In the meantime you can also find mainboards, which are equipped with a so-called type C port:



The advantage with these connections is that the plug can no longer only be inserted in one direction. In addition, the transmission speed was increased to 900 MB / s (Super Speed +).

Most manufacturers use red or turquoise bridges for the connections. Furthermore, one can determine the type also at the position of the connections. Thus, both USB port types mentioned are generally located directly above one another.

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