

technical explanation

What is a Graphics Card?

The graphics card is responsible for the calculation and output of the image to an externally connected device such as a display. Depending on the computer's task field, there are different cards that are adapted to the needs of the user on the market.

Basically, there are two types of graphics cards:

Built-in graphics card / onboard graphics card

The graphics chip is fixed to the mainboard or integrated directly into the processor. An exchange is therefore not possible. The connections for the display are then on the backside of the computer next to the remaining mainboard connectors (USB, network socket, etc.).

The performance of onboard graphics cards is sufficient for office operations, Internet surfing and watching movies. Even smaller or older games can usually run without problems. Playing more demanding titles is not possible.

Dedicated graphics card / graphics card

For the majority of the computers, one or more additional graphics card (s) can be installed. For this, the mainboard usually offers several slots.

A plugged graphics card can basically be exchanged without any further. You only have to make sure that the computer case has enough space and that the power supply, which is done with high-performance graphics cards via the power supply unit, is ensured.

The power range of connected graphics cards range from normal office and multimedia applications (for example, watching movies) via gaming to professional applications such as CAD (computer aided design).

The following graphics cards are suitable for the respective applications

Office, Multimedia

All Intel HD Cards (Integrated cards of the Intel processors)

NVidia GT Serie

AMD Radeon R5 and AMD processors Integrated cards (AMD A-APUs)

Gaming

[\(see system requirements for more details\)](#)

AMD Radeon R7, R9 and RX graphic card

NVidia GTX Serie

Professional applications

AMD Fire Pro

NVidia Quadro

Please also note that the manufacturer of the respective software should be asked in advance which graphics cards are supported.

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