

## Sound card

A **sound card** (also known as an **audio card**) is an internal [expansion card](#) that provides input and output of [audio signals](#) to and from a [computer](#) under control of [computer programs](#). The term *sound card* is also applied to external audio interfaces used for [professional audio](#) applications.

Sound functionality can also be integrated onto the [motherboard](#), using components similar to those found on plug-in cards. The integrated sound system is often still referred to as a *sound card*. Sound processing hardware is also present on modern [video cards](#) with [HDMI](#) to output sound along with the video using that connector; previously they used a [S/PDIF](#) connection to the motherboard or sound card.

Typical uses of sound cards or sound card functionality include providing the audio component for multimedia applications such as music composition, editing video or audio, presentation, education and entertainment (games) and video projection. Sound cards are also used for computer-based

communication such as [voice over IP](#) and [teleconferencing](#).

## Video card

A **video card** (also called a **display card**, **graphics card**, **display adapter**, or **graphics adapter**) is an [expansion card](#) which generates a feed of output images to a [display device](#) (such as a [computer monitor](#)). Frequently, these are advertised as discrete or dedicated graphics cards, emphasizing the distinction between these and [integrated graphics](#). At the core of both is the [graphics processing unit](#) (GPU), which is the main part that does the actual computations, but should not be confused with the video card as a whole, although "GPU" is often used to refer to video cards.

Most video cards are not limited to simple display output. Their integrated graphics processor can perform additional processing, removing this task from the central processor of the computer. For example, [Nvidia](#) and [AMD](#) (previously [ATI](#)) produced cards render the graphics pipeline [OpenGL](#) and [DirectX](#) on the hardware level. In the later [2010s](#), there has also been a tendency to use the computing capabilities of the graphics processor to solve non-graphic tasks, which can be done through the use of [OpenCL](#) and [CUDA](#). Video cards can [also be used for AI training](#).

Usually, the graphics card is made in the form of a printed circuit board (expansion board) and inserted into an expansion slot, universal or specialized (AGP, PCI Express). Some have been made using dedicated

enclosures, which are connected to the computer via a [docking station](#) or a cable.