Basic Motherboard Service Guide

BIOS

the firmware comes pre-installed on the computer's motherboard. The name originates from the Basic Input/Output System used in the CP/M operating system

In computing, BIOS (, BY-oss, -□ohss; Basic Input/Output System, also known as the System BIOS, ROM BIOS, BIOS ROM or PC BIOS) is a type of firmware used to provide runtime services for operating systems and programs and to perform hardware initialization during the booting process (power-on startup). On a computer using BIOS firmware, the firmware comes pre-installed on the computer's motherboard.

The name originates from the Basic Input/Output System used in the CP/M operating system in 1975. The BIOS firmware was originally proprietary to the IBM PC; it was reverse engineered by some companies (such as Phoenix Technologies) looking to create compatible systems. The interface of that original system serves as a de facto standard.

The BIOS in older PCs initializes and tests the system hardware...

DFI

manufactures, and sells industrial motherboard, industrial PCs, System-on-Module, industrial displays, and ODM/OEM services. DFI was founded by Y.C Lu on July

DFI (Diamond Flower Inc) is a Taiwanese industrial computer company with headquarters in Taipei. It designs, develops, manufactures, and sells industrial motherboard, industrial PCs, System-on-Module, industrial displays, and ODM/OEM services.

DFI was founded by Y.C Lu on July 14, 1981, developing and selling electronics components and add-on cards in the beginning. However, DFI switched to the production of motherboards after searching for potential markets and deciding to focus on the strengths of DFI. Targeting the new growing market in motherboard products, DFI announced the Patent License Agreement with Intel Corporation to build partnership with Intel in 1990 and has been developing and manufacturing motherboard products since 1992. With continuous dedication, DFI quickly gained a reputation...

Compaq Portable II

reported cases of improperly serviced computers exploding when the non-rechargeable lithium battery on the motherboard was connected to the power supply

The Compaq Portable II is the fourth product in the Compaq Portable series to be brought out by Compaq Computer Corporation. Released in 1986 at a price of US$3499, the Portable II much improved upon its predecessor, the Compaq 286, which had been Compaq's version of the PC AT in the original Compaq Portable chassis; Portable 286 came equipped with 6/8-MHz Intel 286 and a high-speed 10 or 20 MB hard drive, while the Portable II included an 8 MHz processor, and was lighter and smaller than the previous Compaq Portables. There were four models of the Compaq Portable II. The basic Model 1 shipped one 5.25" floppy drive and 256 KB of RAM. The Model 2 added a second 5.25" floppy drive and sold for $3599. The Model 3 shipped with a 10 MB hard disk in addition to one 5.25" floppy drive and 640 KB...

Commodore 64

machine used the same case, same-sized motherboard, and same Commodore BASIC 2.0 in ROM as the VIC-20. BASIC also served as the user interface shell

The Commodore 64, also known as the C64, is an 8-bit home computer introduced in January 1982 by Commodore International (first shown at the Consumer Electronics Show, January 7–10, 1982, in Las Vegas). It has been listed in the Guinness World Records as the best-

selling desktop computer model of all time, with independent estimates placing the number sold between 12.5 and 17 million units. Volume production started in early 1982, marketing in August for US$595 (equivalent to $1,940 in 2024). Preceded by the VIC-20 and Commodore PET, the C64 took its name from its 64 kilobytes (65,536 bytes) of RAM. With support for multicolor sprites and a custom chip for waveform generation, the C64 could create superior visuals and audio compared to systems without such custom hardware.

The C64 dominated...

Swimming pool service technician

also sent to the equipment to switch them on and off via the automation motherboard. The average swimming pool technician hourly pay rate in the United States

A swimming pool service technician is a person who maintains swimming pools, including keeping the water clean and safe by fixing pool equipment such as pumps, motors and water filters.

Industry Standard Architecture

2025-05-02. "CS620-H310□Intel®□Industrial Motherboards□DFI". DFI. Retrieved 2025-05-02. "DFI CS620 ISA Device User Guide, v. 1.1" (PDF). DFI. Retrieved 2025-05-02

Industry Standard Architecture (ISA) is the 16-bit internal bus of IBM PC/AT and similar computers based on the Intel 80286 and its immediate successors during the 1980s. The bus was (largely) backward compatible with the 8-bit bus of the 8088-based IBM PC, including the IBM PC/XT as well as IBM PC compatibles.

Originally referred to as the PC bus (8-bit) or AT bus (16-bit), it was also termed I/O Channel by IBM. The ISA term was coined as a retronym by IBM PC clone manufacturers in the

late 1980s or early 1990s as a reaction to IBM attempts to replace the AT bus with its new and incompatible Micro Channel architecture.

The 16-bit ISA bus was also used with 32-bit processors for several years. An attempt to extend it to 32 bits, called Extended Industry Standard Architecture (EISA), was not...

Computer hardware

such as the central processing unit (CPU), random-access memory (RAM), motherboard, computer data storage, graphics card, sound card, and computer case

Computer hardware includes the physical parts of a computer, such as the central processing unit (CPU), random-access memory (RAM), motherboard, computer data storage, graphics card, sound card, and computer case. It includes external devices such as a monitor, mouse, keyboard, and speakers.

By contrast, software is a set of written instructions that can be stored and run by hardware. Hardware derived its name from the fact it is hard or rigid with respect to changes, whereas software is soft because it is easy to change.

Hardware is typically directed by the software to execute any command or instruction. A combination of hardware and software forms a usable computing system, although other systems exist with only hardware.

History of Pop (American TV channel)

motherboards were used, in custom-designed cases with riser card and backplane modifications. During this era, the cable MSO-owned satellite service PrimeStar

The American cable and satellite television network Pop was originally launched in 1981 as a barker channel service providing a display of localized channel and program listings for

cable television providers. Later on, the service, branded Prevue Channel or Prevue Guide and later as Prevue, began to broadcast interstitial segments alongside the on-screen guide, which included entertainment news and promotions for upcoming programs. After Prevue's parent company, United Video Satellite Group, acquired the entertainment magazine TV Guide in 1998 (UVSG would in turn, be acquired by Gemstar the following year), the service was relaunched as TV Guide Channel (later TV Guide Network), which now featured full-length programs dealing with the entertainment industry, including news magazines and reality...

Sideways address space

sockets on the motherboard (four on the BBC Micro) which take sideways ROMs. The BBC Micro shipped with a single ROM, containing BBC BASIC; further ROMs

The sideways address space on the Acorn BBC Microcomputer, Electron and Master-series microcomputer was Acorn's bank switching implementation, providing for permanent system expansion in the days before hard disk drives or even floppy disk drives were commonplace. Filing systems, application and utility software, and drivers were made available as sideways ROMs, and extra RAM could be fitted via the sideways address space.

The BBC Micro Advanced User Guide refers to the sideways address space as "paged ROMs" because it predated the use of this address space for RAM expansion. The BBC B+, B+ 128 and BBC Master all featured sideways RAM as standard.

Accelerated Graphics Port

dedicated, point-to-point pathway between the expansion slot(s) and the motherboard chipset. The direct connection also allows higher clock speeds. The second

Accelerated Graphics Port (AGP) is a parallel expansion card standard, designed for attaching a video card to a computer system to assist in the acceleration of 3D computer

graphics. It was originally designed as a successor to PCI-type connections for video cards. Since 2004, AGP was progressively phased out in favor of PCI Express (PCIe), which is serial, as opposed to parallel; by mid-2008, PCI Express cards dominated the market and only a few AGP models were available, with GPU manufacturers and add-in board partners eventually dropping support for the interface in favor of PCI Express.