



The Raspberry Pi Glossary

| Word | Explanation |
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| APT | Advanced Packaging Tool. The software manager used on Raspberry Pi to install updates and new applications. |
| ARM | A low-cost and minimal power consumption architecture for computer processors, used on all the Raspberry Pi models. |
| CLI | Command Line Interface. The black screen where we can only use Linux commands to interact with the operating system. |
| CPU | Central Processing Unit. Basically, the processor, the primary component of a computer to run everything. |
| DHCP | Dynamic Host Configuration Protocol. Networking service which automatically assign an IP address to each new device on the network. |
| Distribution | A Linux operating system version, using a specific set of software. Ex: Raspberry Pi OS, Ubuntu, Debian. |
| DNS | Domain Name System. A system or service which translates domain names to IP addresses, the only identifier understood by computers. |
| Etcher | Balena Etcher is a tool to copy the operating system files on a specific device (in general: USB or SD card). |
| Ethernet | Networking technology. Generally used to identify the wired connection or port on a Raspberry Pi. |
| Firmware | The basic software controlling the low-level operations for a specific hardware. |
| Flash | The action to copy the operating system files to a SD card with Etcher, Raspberry Pi Imager or similar tools. A Flash memory is reprogrammable and retains the programmed data. |
| GPIO | General Purpose Input Output. The Raspberry Pi include a 40 GPIO pins on each board, to create an electronic circuit and use extension cards (HAT). |
| GPU | Graphic Processing Unit. The equivalent of the CPU to handle all the graphical part (display, video processing, etc). |
| GUI | Graphical User Interface. A CLI with graphics. Mouse and graphical tools are available to make device management easier. |
| HAT | Hardware Attached on Top. Extension cards that can be plugged on the GPIO pins of a Raspberry Pi. |
| HDMI | High-Definition Multimedia Interface. The main display interface on Raspberry Pi. Recent models are using different variants (Mini or Micro-HDMI ports). |



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| Headless | A term used to define the use of a Raspberry Pi without any screens. |
| Hostname | A name assigned to a device on a network. |
| I2C | Inter Integrated Circuit. Several GPIO pins are reserved for I2C devices. It's a specific bus to connect compatible peripherals. |
| IP Address | Unique identifier for a device on a network. Ex: 192.168.1.10 |
| LAN | Local Area Network. Generally refers to your network at home. Opposite to a WAN (Wide Area Network) that we use to speak about the Internet. |
| LibreOffice | A complete office suite, including a word processor and spreadsheet (free alternative to Microsoft Office) |
| Linux | A family of open-source operating system using the Linux kernel, the base of all the Linux distributions. |
| MAC Address | Media Access Control Address. A unique identifier assigned to each network card. Can be used in a DHCP server to reserve an IP address to each device. |
| NOOBS | New Out-Of-the-Box Software. It was the basic software pre-installed on most SD cards for Raspberry Pi to install an operating system. Obsolete, no longer developed. |
| OS | Operating System. A software application that manages everything on a computer (hardware, resources, software, services). Ex: Windows, macOS, Linux. |
| Partition | One segment of a storage device (hard drive or SD card) that we allocate to a specific usage. Ex: / and /boot are the main partitions on a Raspberry Pi. |
| PIXEL | A desktop environment, based on LXDE and adapted for the Raspberry Pi. Now referred as "Raspberry Pi Desktop". |
| Python | A popular programming language, pre-installed on Raspberry Pi OS. |
| RAM | Random Access Memory. A temporary and fast storage type present on any computer. In general, the more RAM you have, the faster your programs will run. It's also better to use several apps simultaneously. |
| Raspberry Pi OS | A Linux distribution especially tailored for the Raspberry Pi. It's the default operating system, based on Debian. |
| Raspbian | Obsolete. The name of the default Linux distribution before Raspberry Pi OS (same thing, they only changed the name). |
| Raspi-config | A tool available on Raspberry Pi OS to configure the system from a terminal. |
| Repository | A server or group of servers on the Internet hosting the software files used by the package manager. Each Linux distribution have several repositories. |



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| root | The name of the administrator account on Linux systems. |
| Scratch | A visual programming language and tool. Pre-installed on Raspberry Pi OS with Desktop, and intended to help kids to learn how to code without the hassle of the programming syntax. |
| SD card | Secure Digital card. The main storage device on Raspberry Pi (microSD card in fact). |
| SPI | Serial Peripheral Interface bus. Similar to I2C, another way to communicate with compatible peripherals via some GPIO pins. |
| Splash screen | The image or graphical element displayed on boot by most operating systems. Can also refer to the same thing for an application (Ex: Gimp, PyCharm and Photoshop have a splash screen). |
| SSD | Solid-State Drive. A storage device, faster than the usual HDD, and also the SD cards. Can be used as the main storage on recent Raspberry Pi models (instead of the SD card). |
| SSH | Secure Shell Protocol. A network protocol used to remotely access a computer (a Raspberry Pi for example). This enables access to the Raspberry Pi terminal from another device. |
| sudo | Stands for "super user do!". Allow us to run commands with administrator privileges from an authorized user session. Ex: the "pi" user can use sudo instead of switching to "root". |
| Underscan | A setting enabling automatic adjustment of the display to the screen size. Disable it if you have black bars that appear on the sides of your screen. Opposite: overscan. |
| VNC | Virtual Network Computing. A software application for remote access, pre-installed on Raspberry Pi OS. It allows us to control the Raspberry Pi desktop environment from another computer. |