

Research work 1

1. What is boot process and BIOS

Boot process is the process of starting a computer as initiated via hardware such as a button or by a software command. After it is switched on, a computer's central processing unit (CPU) has no software in its main memory, so some process must load software into memory before it can be executed.

BIOS-

BIOS (basic input/output system) is the program a computer's microprocessor uses to start the computer system after it is powered on. It also manages data flow between the computer's operating system (OS) and attached devices, such as the hard disk, video adapter, keyboard, mouse and printer.

2. What is OS –

An operating system (OS) is the program that, after being initially loaded into the computer by a boot program, manages all the other application programs in a computer. The application programs make use of the operating system by making requests for services through a defined application program interface (API). In addition, users can interact directly with the operating system through a user interface, such as a command-line interface (CLI) or a graphical UI (GUI).

3. What is SBC and give 5 examples

A Single-Board Computer (SBC) is a complete, functioning computer in which the microprocessor, input/output functions, memory, and other features are all built on a single circuit board, with RAM built in at a pre-determined amount and with no expansion slots for peripherals.

Examples

1. raspberry pi
2. Pandaboard
3. Hack berry
4. cubie board
5. MK 805

4. SOC Used in raspberry pi

Broadcom BCM2711 SOC with 1.5hz, 64 bit quad-core ARM cortex processor

5. What is real time OS-

A real-time operating system (RTOS) is an OS that guarantees real-time applications a certain capability within a specified deadline.