Desk Area Network (DAN)

Desk Area Network is an architecture for multimedia workstations based on ATM connection. Simply put, it is a connection between computer devices around Asynchronous Transfer Mode (ATM).

Desk Area Network connects desktops, multimedia devices, peripherals, and to other networks.

Workstations are high-performance computing systems integrated with high-performance memory, multitasking utility, high-quality graphics, and other advanced features used by a single user or group of users to performing scientific or engineering applications.

Before multimedia devices were connected to the workstation, there was no means to connect multimedia devices or other peripheral devices directly to the network.

But thanks to Desk Area Network (DAN), these devices are now directly connected to the network. Besides, Desk Area Network also allows sharing resources over the network.

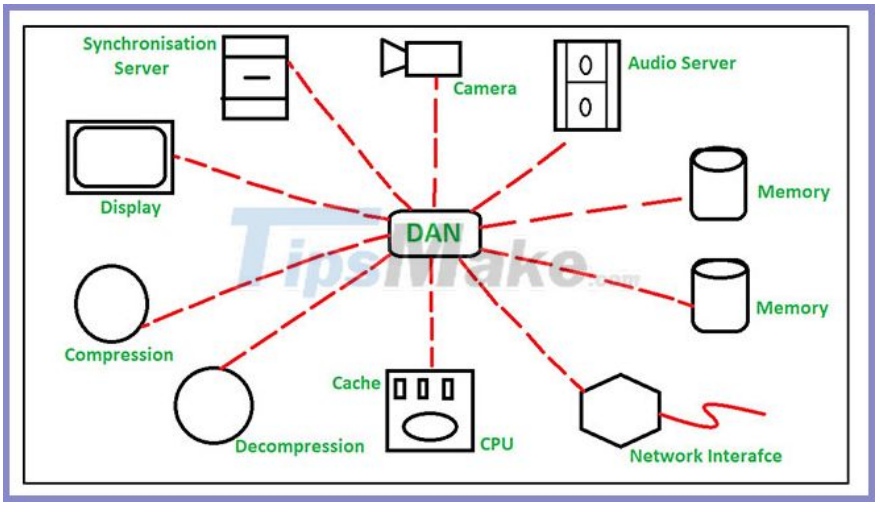
DAN architecture

The Desk Area Network's architecture is very simple. The DAN network includes Audio / Video (A / V) software. DAN network is set up by connecting a device to a device or connecting a device to a CPU.

ATM technology allows the asynchronous transmission of all information, called ATM cells, in which these cells are small and fixed sized packets.

Multimedia contains many different types of content such as audio, image, video, text, etc.

The CPU node includes an ARM 600 processor and 256 additional cache for high-performance service. Mainly the ATM technology has simplified the operation of the DAN network, as ATM takes care of the internal transmission.



ATM in DAN

Asynchronous Transfer Mode (ATM) is a very high speed network protocol that works on the Datalink Layer of Open System Interconnection (OSI) Model. It acts as an inter-service provider that enables efficient and smooth data flow within DAN.

Desk Area Network (DAN) works around Asynchronous Transfer Mode (ATM).

How DAN works

DAN works with the help of ATM technology. All equipment in the DAN ATM cell is used for communication and data transmission. This network is set up to connect devices with devices or devices to the CPU.

DAN has very high reliability and efficiency as it uses ATM technology. So, when a cell is transferred over any network, it will reach a specific destination or location based on the highly secure routing function.

Benefits of using DAN

1. Provides high performance communication between device to device or CPU to device.
2. Provides reliable data transmission.
3. Connection transmission mode.
4. Provides high level bandwidth as it uses ATM.