Introduction to TCPIP

Network

- Network refers to the interconnection of two or more devices directly or indirectly to accomplish reliable communication using one or more protocols functioning between them
- A network is a group of connected, communicating devices

Protocal:-

- Refers to a set of rules, regulations , checkpoints & sometimes standards to be followed for reliable communication.

Embedded devices

1. stand alone:-

The stand-alone embedded systems are less complex and simple. They independent to any system, work by their own. It takes user input and acts accordingly.The input is received by the respective I/O pins. The input may be in digital or in analog form

Examples:-

Microwave Oven, the digital wristwatch, mp3 player, doorbell, calculator etc...

Embedded devices(contd...)

2. Network Enabled:-

The embedded devices are connected with some kind of network.The device communicates with the server or with the individual node using the network.We are using such kind of networked system in our day to day life.

Examples:-

ATM machine,Card Swipe Machine,IOT Devices,AC,projector,IP camera etc...

Internet

- **The chepest and fastest network is internet.**
- **An internet is two or more networks that can communicate with each other.**

- **To establish a network what are required?**

Network(contd...)

To establish a network what are required?

- **--> minimum two devices**
- **--> communication channel required**
- **--> protocals**

Embedded devices should perform multitasking.

Embedded devices must be network enabled.

Network(contd...)

Network enabled embedded devices can be design in 2 ways

1.contineous device

two devices should connect continuously to share the data between each other.

ex: mobile antenna & base station, ATM & main server

2.discrete device.

two devices no need connect continuously to share the data between each other.

ex: tv & remote, ac & remote