

# DEVICES AND COMMUNICATION BUSES FOR DEVICES NETWORK–

## Lesson-21: SERIAL BUS COMMUNICATION PROTOCOLS – **FireWire IEEE 1394 Bus** **Standards for multimedia streaming devices**

# FireWire — IEEE 1394a and b Bus Standards

## Connecting

- FireWire IEEE 1394a port up to 400 Mbps
- 1394b up to 800 Mbps
- Serial isosynchronous data transfer
- Transfers data at a guaranteed rate
- Also used in real time devices, such as video device data transfers

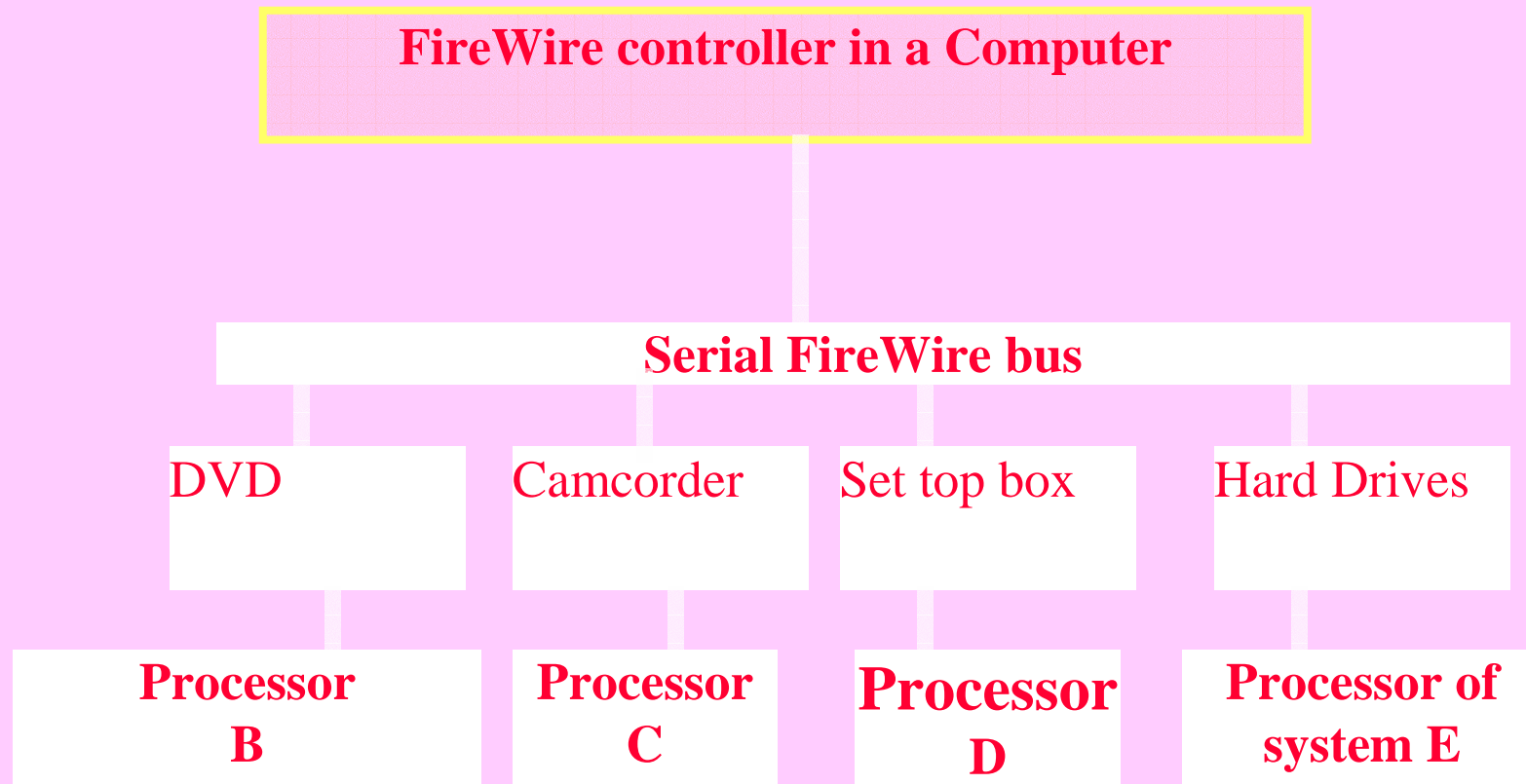
# FireWire — IEEE 1394 Applications

- Multimedia streaming devices
  - digital video cameras,
  - digital camcorders,
  - digital video disk (DVD),
  - set-top boxes,
  - music systems multimedia peripherals,
  - latest hard disk drives,
  - latest high speed printers

## **FireWire — IEEE 1394 Protocol Features**

- A single 1394 port can interface up to 63 external FireWire devices.
- Supports both plug and play and hot plugging.
- Provides self-powered and bus-powered support on the bus.

# Serial FireWire bus



# Summary

## We learnt

- FireWire has two standards a high speed 800 Mbps IEEE 1394b and 400 Mbps low speed
- Serial isosynchronous bus
- Interconnecting a system with multimedia streaming devices and systems.

# End of Lesson 21 of Chapter 3