

DEVICES AND COMMUNICATION BUSES FOR DEVICES NETWORK—

Lesson-17: SERIAL BUS COMMUNICATION PROTOCOL – **FireWire IEEE 1394 Bus Standard** 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

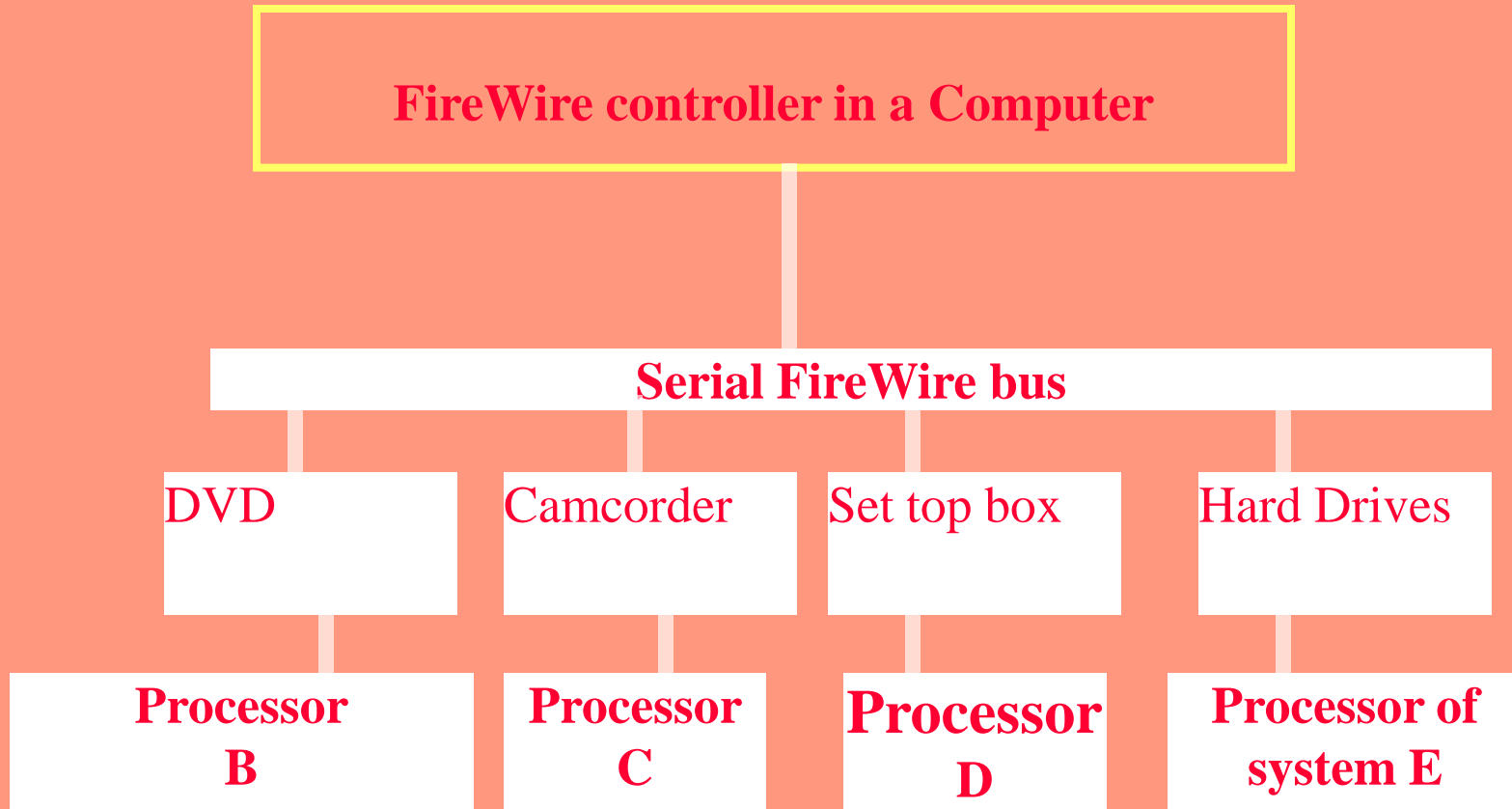
FireWire — IEEE 1394 Applications

- 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 17 of Chapter 5
on
Serial Bus Communication Protocol –
FireWire IEEE 1394 Bus Standard for
multimedia streaming devices