

# Agenda

## ◆ Introduction

- Market trend and application
  - 1394 Market Analysis Data
  - 1394 and industry
  - Applications

- 1394 Operation
- Bus Management
- Cable and Connection
- Architecture
- Topology

## ◆ Technology

- What is 1394?
- Why 1394?
- Applications
- 1394 Protocol
- PHY
- Link Layer
- Transaction Layer

## ◆ Other Technologies

- USB
- DVI

## ◆ 1394 In Home Networking

## ◆ Xilinx Value

## ◆ Alliances

## ◆ Summary

# 1394 In Your Home

- ◆ Digital broadcasting, the Internet, digitalization of modern homes, entertainment & video appliances are driving demand for 1394-based products
- ◆ Supports data transfer rates @ 100, 200, 400 Mbps
- ◆ 1394 benefits
  - No need for terminators, device IDs, or elaborate setup
  - 1394 is Hot pluggable
  - 1394 has scaleable architecture
    - May mix 100, 200, and 400 Mbps devices on a bus
  - 1394 has flexible topology
    - Support of daisy chaining and branching without CPU

# Summary

- ◆ Various 1394-based products are being developed
  - Residential gateways: DSL, cable, satellite modem
  - Technology bridges: Ethernet-to-1394, 1394-to-HomePNA, 1394-to-wireless LANs
  - 1394 enabled information appliances: digital TV, DVD player, Internet screen phones, PCs, printers, etc.
- ◆ Spartan-II FPGAs, CoolRunner & 9500 CPLDs provide system interconnectivity in 1394/Firewire based products