Agenda

- Introduction
  - What is HAVi?
  - Advantages
  - Why does the world need HAVi?
- Technology
  - Requirements
  - System Model
    - Control Model
    - Device Classification
      - FAV
      - IAV
      - BAV
      - LAV
    - HAVi Compliance
  - Software Architecture
  - User Interface
    - Level 1
    - Level 2
  - Home Network Configuration
  - Interoperability
    - Level 1
    - Level2
  - IEEE 1394(FireWire)
- Xilinx Value
- Summary

Advantages of HAVi in Home Networking

- Ensuring interoperability among devices regardless of the manufacturer
- Automatically detection of devices on the network
  - Maximize the usage of device resources
- Instant coordination of the functions of various devices
  - Each added appliance to the HAVi network is automatically registered so that other devices know what it is capable of
- Installation of applications and user interface software on each device

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