

Summary

- ◆ The digital consumer revolution & the Internet are forcing broadband into the home
 - Residential gateways provide broadband access to the home and network the information appliances in the home
 - Broadband access technologies
 - Satellite, ISDN, xDSL & cable modems
 - Home networking technologies
 - HomePNA, HomePlug, Ethernet, 1394, HomeRF, wireless LANs
- ◆ OEMs will develop several variations of gateways
 - Broadband access (front) end
 - DSL modem, cable modem, satellite modem based
 - Home networking (back) end
 - HomePNA based, Ethernet based, wireless LAN based

Summary

- ◆ Spartan-II FPGAs, CoolRunner & 9500 CPLDs enable RGs
 - IP cores + Spartan-II FPGAs provide solutions like ASSPs
 - Embedded solutions : FPGA logic not used from IP can be programmed with other IP cores
 - Example: DCT/IDCT and DES/TDES soft IP in a Spartan-II FPGA can be used in multimedia and imaging applications
 - Increases the value proposition and reduces solution cost
 - Features within the Spartan-II provide system integration
 - Reprogrammability enables time-to-market & flexibility
 - Home networking market is rapidly growing and products need to be rolled out
 - Internet Reconfigurable Logic allows time-in-market as specs in emerging technologies keep evolving
 - Cost effective