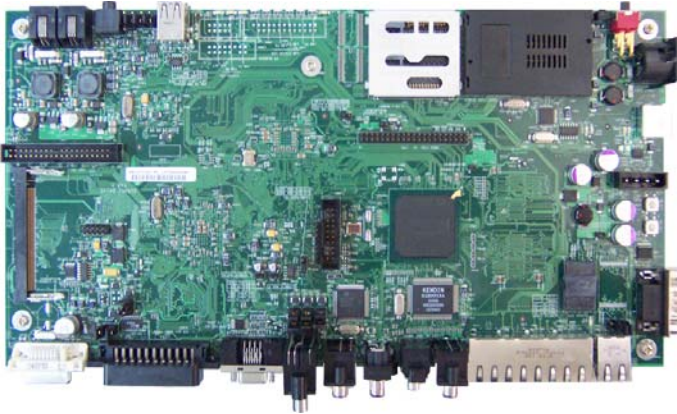


Product Brief

Product Overview

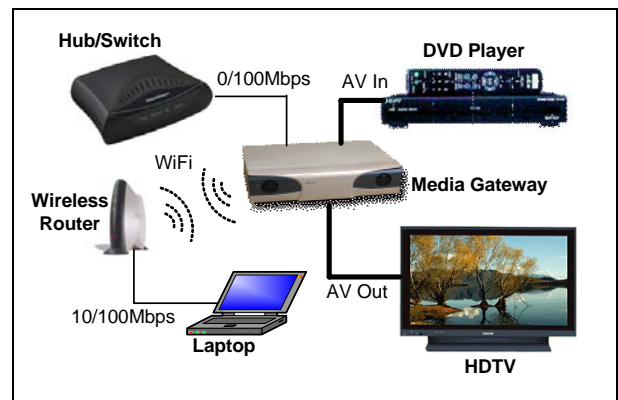


PAPILLON Board is a high-performance Access Gateway that utilizes Intel® IXP425 network processor, a highly integrated single-chip processor based on the low power Intel® XScale® core. The PAPILLON platform offers OEMs a standard module to easily customize and upgrade designs with reduced Time-To-Market. The PAPILLON platform demonstrates flexibility and scalability of IXP4xx network processor for wide range of applications including Wireless Residential Gateway with Network Attached Storage and Print Server capability, Video Encoding/Decoding, Security and VPN, and complete VoIP functions.

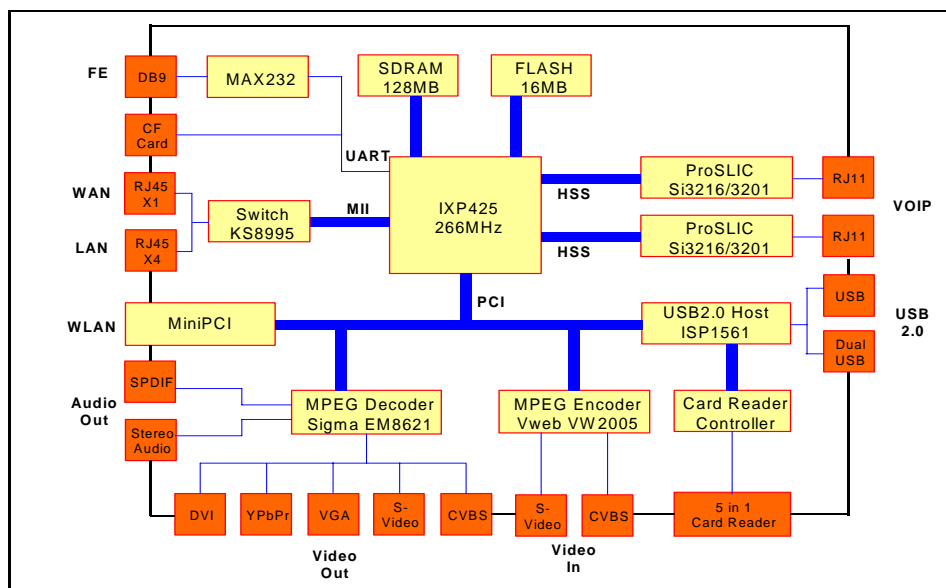
Application Example

Media Gateway

PAPILLON can be used in Media Gateway applications such as Triple-Play applications. In the example shown here (see figure), the multimedia data received through Wireless Router (WiFi) or LAN or AV-In (VWEB® VW2005 Encoder) is rendered and processed by a Sigma Design Video Decoder. In such application, the PAPILLON is able to : 1. extend Wireless Router with media server capability, 2. link the broadband WAN to home LAN networks and perform traditional home networking functions, 3. redistribute multimedia contents through wireless network and act as a server.



Block Diagram



*Other names and brands may be claimed as the property of others. **Specifications may change without prior notice.

Key Features

- Based on Intel® IXP42X Network Processor, Sigma® EM8621 MPEG4/WMV9 decoder and VWEB® VW2005 MPEG encoder.
- Full featured reference board for Media Gateway with 4-port Ethernet switch, IEEE802.11b/g WLAN, Digital Video Interface, HDTV interface, USB 2.0 host and VoIP port
- Full set of device drivers
- Comprehensive design documentation

Hardware Specifications

- IXP425 266MHz Processor with 16MB Flash(up to 32MB) and 128MB SDRAM(up to 256MB)
- One 10/100 Ethernet WAN port
- Four 10/100 Ethernet LAN port
- One Type III miniPCI connector for IEEE 802.11b/g WLAN
- DVI/YPbPr/VGA/ S-Video/CVBS video out
- Supporting video decoding format: MPEG-2MP@HL(720p/1080p),MPEG-4ASP@L5(720p),WMV9 MP@ML(720p)
- Stereo/SPDIF audio out
- Supporting audio decoding format: Dolby Digital, DVD-Audio, MPEG-1, MPEG-2, MPEG-2 BC multi-channel, MPEG-2 and MPEG-4 AAC-LC, WMA9
- S-Video/CVBS analog video in
- Supports video encoding format: MPEG-1, MPEG-2, MPEG-4, H.263
- Microphone stereo audio in
- Supporting audio encoding format: MPEG-1 Layer I and II,MP3,AAC or AC-3
- Two VoIP FXS ports
- USB 2.0 HDD
- USB 2.0 Keyboard/Mouse
- 5-in-1 card reader slot
- RS-232 console port
- Infrared Remote Control

Software Features

- Comprehensive set of device drivers
- Command line interface for debugging
- Digital Media Renderer based on UPnP that play media data of different format which is supported by Sigma decoder.
- Graphical User Interface
- Digital Video Recorder that record different video format which is supported by VWEB encoder, which is based on command line interface
- VoIP Residential Gateway application

Reference Design Kit

- Fully populated and functional PCB
- BSP/ Drivers for RT Linux
- Snapgear Linux 3.1.1(2.4.24 kernel)
- User manual

Physical Description

Description	Specification
Physical Dimensions	33.0 cm x 17.0 cm
Power Consumption	24 Watts (max.)
Operating Temperature	0° to 50° C
Storage Temperature	-20° to 60° C