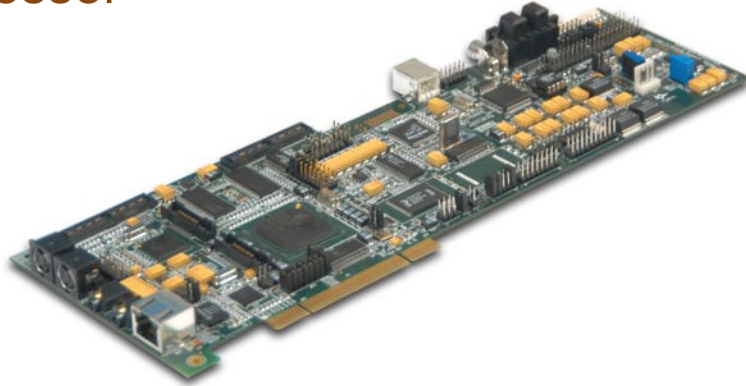


NREF 1500 Development KIT

www.streaming-networks.com

Complete hardware design and software tools for Philips PNX1500 media processor



Co-developed with Philips

First ever PNX 1500 based board designed in collaboration with Philips

Design / Develop / Debug through USB

Eliminating the need of expensive JTAG card

Standalone and Hosted

Can be used in both modes without additional hardware

OVERVIEW

The Streaming Networks NREF-1500 developer kit for the Philips PNX1500 Nexperia media processor (with TriMedia VLIW processor core) provides everything necessary to build a cutting-edge multimedia software product in the shortest possible time.

HARDWARE COMPONENTS

The hardware portion of the development kit includes a comprehensive reference design optimized for high performance. There is a 266-MHz PNX1500 media processor for complete audio, video, and graphics functionality. The media processor is connected to 64 Mbytes of high-bandwidth DDR SDRAM (capable of operating at 200 MHz), and a series of programmable, state-of-the-art audio and video peripherals.

STANDALONE & HOSTED CAPABILITY

The board can be used in a hosted or a standalone environment. For hosted applications, there is a PCI standard 2.2 host interface. For standalone applications, the board has a 128-Mbit NOR Flash organized as a 8/16-bit data bus. The NOR can be used to store the application, creating a Flash-bootable design.

VIDEO/DATA PERIPHERALS

The Video/data In function supports S-Video, CVBS, and component operation. The Video/data Out function supports S-Video, Component, and DVI operation.

SUPPORTED INTERFACES

The 40-pin header provides access to a range of options. An IDE interface supports connection to up to two ATA drives. The 10/100 Ethernet interface supports LAN operation and audio/video streams. A standard I²C link makes it easy to program the peripherals, while built-in IR receiver capability makes applications more user-friendly. Two integrated optical modules support SPDIF I/O.

DESIGN / DEVELOP / DEBUG THROUGH USB

For easy, seamless development and debug, there is a USB interface to support legacy designs like JTAG. The USB mode eliminates the need for a JTAG card in standalone configurations.

PRODUCT SUPPORT PACKAGE

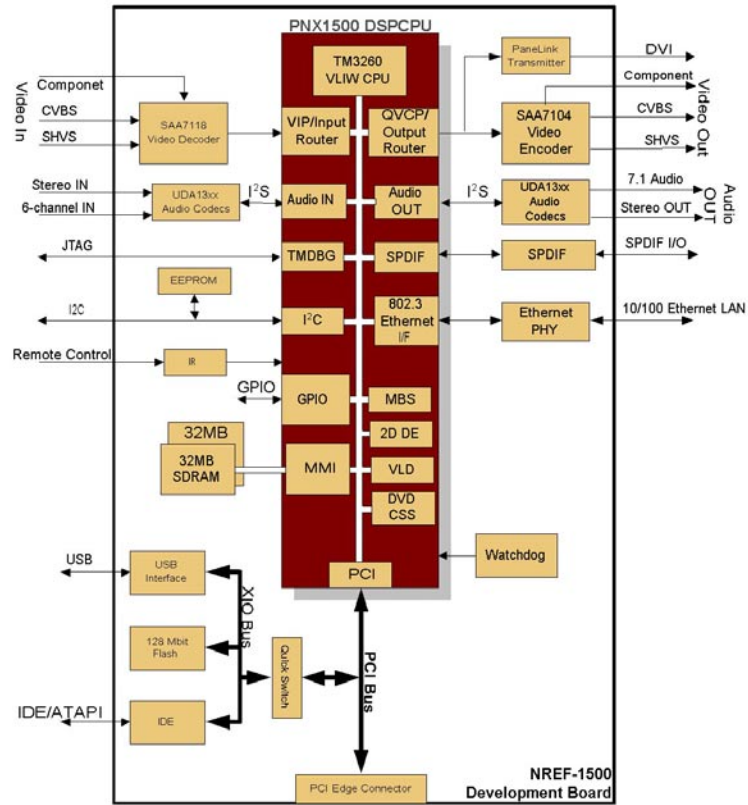
For the fastest possible time-to-market, the NREF-1500 development kit comes with a complete set of device drivers, test algorithms, and software examples. The kit also includes a complete, easy-to-use software design environment for the PNX1500. Supplied by Philips, the PNX1500 design environment provides all the building blocks for advanced applications.

KEY FEATURES

- Complete hardware reference design optimized for high performance
 - 266 MHz Philips PNX1500 Nexperia media processor (with TriMedia VLIW processor core)
 - 64 Mbytes of DDR SDRAM main memory (two chips of x32)
 - 128-Mbit NOR Flash organized as 8/16-bit data bus
 - State-of-the-art, programmable audio/video peripherals
- Hosted or standalone operation
 - Host interface: PCI standard 2.2
 - Supports Flash-bootable configurations
- Flexible video options
 - Video/data In: S-Video, CVBS, Component
 - Video/data Out: S-Video, Component, DVI
- Comprehensive I/O options
 - Debug: USB, JTAG
 - LAN: 10/100 Ethernet
 - IDE, I²C, IR (interface and receiver), SPDIF I/O
- Complete set of software tools
 - Device drivers, test algorithms, software examples
 - PNX1500 software design environment



BLOCK DIAGRAM



Contact Streaming Networks for more information:

Telephone: +1 (408) 727-3904

Email: info@streaming-networks.com

Web: www.streaming-networks.com

Enabling the Digital Media Revolution