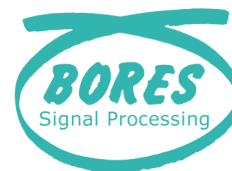


TriMedia peripherals: 1-day class

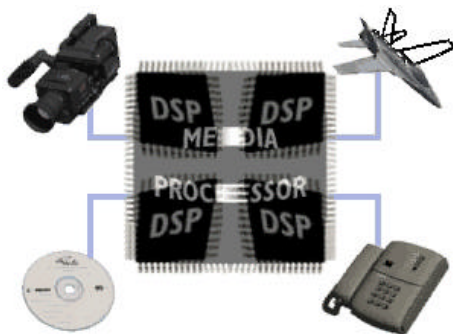


TriMedia foundation series

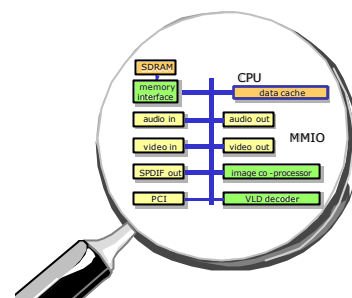
Benefits

Connect TriMedia designs quicker and better by learning how the peripheral architecture works from this insightful seminar.

The peripheral architecture offers very powerful ways to connect with real-world devices. It is simple when you know how, and this seminar shows you how simple it can be. It includes clear explanations and fully-worked programming examples that provide a secure foundation for programmers to start working quickly and to follow clear programming guidelines.



Blurred on details?



We give you focus

Contents

This seminar describes the TriMedia peripheral architecture and explains how peripherals are configured and programmed. It also includes thorough treatment of the peripherals implemented on the pnx1300 and pnx1500 TriMedia-based Media Processors.

Peripheral architecture

Overview of the TriMedia peripheral architecture and available peripherals.

- Peripheral architecture overview
- pnx1300 peripheral architecture
- pnx1500 peripheral architecture

Peripheral registers

Describes the memory-mapped register organization through which peripheral devices are configured and controlled.

- Peripheral MMIO registers

Software architecture

Describes the organization of peripheral software support, including the relationship to the TriMedia Software Architecture (TSA) and software layers.

- Peripherals and TSA
- Device Layer
- Board Support Library

Configuration

Describes the pre-defined software functions and data structures for peripherals, and explains how they are applied.

- Peripheral configuration structures
- Peripheral configuration functions

Interrupts

How interrupts are configured and handled. Including the connection between interrupts and scheduling 'decision trees'.

- Interrupts
- Interrupt configuration
- Interrupt programming
- Interrupts and decision trees

Cache coherency

Explains the important question of synchronizing the cache with data entered directly to memory by peripherals (which bypass the cache).

- Data cache coherency and MMIO
- Data cache copyback simulation

Simulation

How peripherals can be simulated.

- Peripheral simulation

pnx1300 peripherals

- Video output
- Video output overlay
- Image Co-Processor
- ICP overlay
- VLD
- Audio input and output
- SPDIF output
- SSI and I2C
- PCI

pnx1500 peripherals

- Video Input Processor
- Video scaling module
- Auxiliary video data extraction
- Test pattern generator module
- Quality Video Composition Processor
- Layers and compositing
- Video enhancement features
- Fast generic Parallel Ports
- Memory Based Scaler
- Scaling and conversion
- Video enhancement features
- 2D Drawing Engine
- VLD
- Audio input and output
- SPDIF input and output
- General Purpose I/O
- PCI

Time and arrangements

This 1-day seminar is presented 'on-site' by arrangement - the material can be adapted if you have specific needs (at extra cost). We recommend that it be presented as part of the 4-day 'TriMedia foundation' seminar series which gives a thorough grounding in TriMedia core, cache, optimization, peripherals and software architecture.

Class schedules are posted on the Internet from time to time:

- <http://www.bores.com/schedule.htm>

TriMedia peripherals class

- 1-day seminar presentation
- £330 (€550, \$660) per person
- on-site by arrangement

TriMedia 'foundation' series

- 4-day seminar series
- £1,320 (€2,200: \$2,640) per person
- on-site by arrangement

To book or find out more

Call us by 'phone or send email to book or to ask questions.

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- email: chris@bores.com

TriMedia foundation seminars

The 'TriMedia foundation' is a series of four 1-day classes designed to give a thorough understanding of all aspects of the TriMedia. The series can be followed as a single series of four 1-day classes or by taking separate 1-day classes.

- TriMedia CPU cores
- Nexperia peripheral architectures
- TriMedia software optimization
- TriMedia Software Architecture