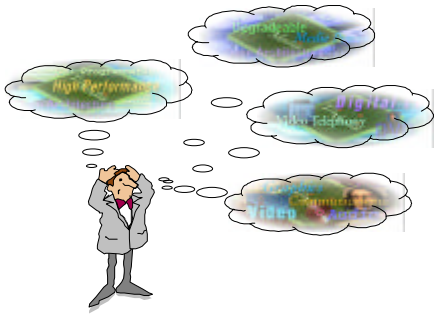
Introducing TriMedia

A 'get started' seminar

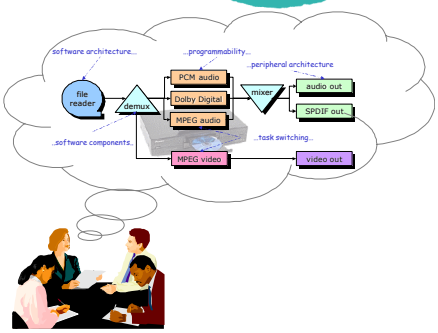
Benefits

Inter-disciplinary teams working with TriMedia will work together more productively, and understand each other's work better, through insights offered by this introductory seminar series.

TriMedia is a powerful processor capable of supporting large and complex multimedia applications. Teams working on different aspects benefit from a common understanding, which this seminar offers.



Where to begin?



We get you started.

Contents

This seminar introduces the TriMedia processor core, peripherals and software architecture. It is designed as an introduction for team members working with TriMedia projects at all levels. The seminar offers insight and understanding into the elements of a TriMedia system and how they work together.

TriMedia core

Design of the TriMedia CPU core, instructions, registers, data formats and functional units.

- TriMedia core architecture overview
- Instruction format
- Registers and data formats
- Functional units overview

Software tools

Review of the TriMedia software tools and their purpose in programming and simulation. Including an introduction to measuring performance through profiling.

- Compilation tools
- Simulator
- Debugger
- Profiler

Optimization

Introduction to optimization including the idea of profile-driven optimization.

- Optimization

Internally-parallel units

Overview of internally-parallel Single Instruction Multiple Data (SIMD) units and how they can accelerate media processing applications.

- SIMD operations overview

Cache

Introduction to the cache architecture including how it interacts with the peripherals.

- Cache architecture overview

Peripherals

Explanation of the TriMedia peripheral architecture including how peripherals are configured and programmed.

- Peripheral architecture overview
- Peripheral MMIO registers
- Peripherals and TSA
- 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

Individual peripherals

Details of the features and functions of individual peripherals including how they are configured and controlled, supported data formats and sampling schemes.

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

Software Architecture

Introduction to the TriMedia Software Architecture including the concepts of software components, data packets, data formats and component configuration.

- TriMedia Software Architecture
- Software layers and modes
- Components - configuration & connection
- Data packets and formats

Time and arrangements

This 2-day seminar is presented 'on-site' by arrangement - the material can be adapted if you have specific needs (at extra cost). It is designed as an introduction for all members of an inter-disciplinary team. For programmers who will be working in-depth with TriMedia we recommend the alternative 4-day 'TriMedia foundation' seminar series which gives a more complete and thorough grounding in TriMedia core, cache, and peripheral architectures as well as in optimization.

- on-site by arrangement
- contact: Chris Bore
- email: chris@bores.com

Introduction to TriMedia

- 2-day seminar presentation
- £660 (€1,100, $ 1,320) per person
- arrangements as above

TriMedia 'foundation' series

- 4-day seminar series
- £1,320 (€2,200: $ 2,640) per person
- arrangements as above

To book or find out more

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

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