

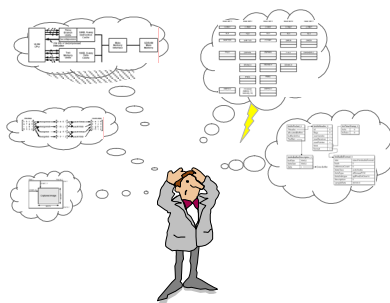
# TriMedia system architecture: a 1-day class

## TriMedia Foundation

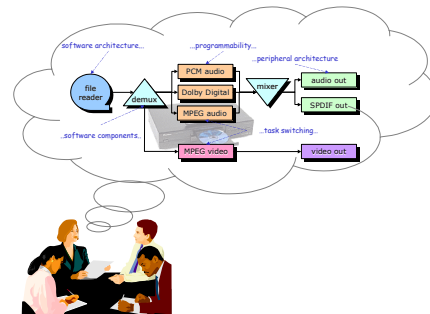
### Benefits

- Understand TriMedia in context
- Overview h/w s/w integration
- Appreciate SoC issues

Understand TriMedia in its proper context. Learn how all the parts - software, hardware, SoC issues - fit together and should be used.



### System overload?



### We put it in context

### Contents

In this 1-day seminar we explain the TriMedia system in its proper context, and make clear what it can do, why it is designed this way, and how best to use it. This gives a solid basis from which to learn about specific aspects of the system. Sessions cover:

- Context and scope
- Targeted applications
- System design issues
- Streaming media
- System architecture choices
- Software architecture
- CPU core architecture
- System on chip architecture
- Optimization
- Development tools

### System context and scope

We explain how the background to TriMedia's design is driven by the desire for performance in certain applications, and show how the resulting design choices relate to performance.

- TriMedia system context
- Platforms
- Streaming media
- Architectural choices
- Application/architecture mapping
- TriMedia system architecture

### Software Architecture

Understand how TriMedia software architecture speeds high-level product development and addresses problems of software re-use, maintenance and efficiency.

- Component architectures
- TriMedia Software Architecture
- Purpose and proper use of layers
- Streaming media tool kit
- MPEG-2/4
- Digital TV
- Operating system issues
- Development environment

### System on Chip architecture

We explain how TriMedia fits into a System on Chip architecture, and how a peripheral architecture can surround it.

- System on chip architecture
- Co-processors and peripherals
- Example SoC devices

### CPU core architecture

Learn why the TriMedia CPU is designed this way, what it can do, how it is programmed, and how its software tool chain works.

- CPU core architecture
- Reasons for VLIW
- TriMedia core design methods
- TriMedia core functional units
- Compilation tools
- Profiling and schedule reporting
- Purpose of custom operations
- Optimization

### Time and arrangements

This session takes 1 day.

It is presented 'on-site' by arrangement - the material can be adapted if you have specific needs (at extra cost).

Sometimes we arrange 'public' classes: schedules are posted on the Internet:

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

### Pic'N'Mix

You can design a class to suit your own specific needs. Each of the topics in this TriMedia Foundation class can be a self-contained session, from which you can "pic'n'mix" to make your own class.

Contact us:

[chris@bores.com](mailto:chris@bores.com)

### Booking and questions

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

- contact: Dr Chris Bore
- 'phone: +44 (0)1483 740138
- mobile: +44 (0)7921 153219
- email: [chris@bores.com](mailto:chris@bores.com)

### Foundation class

The 'TriMedia Foundation' is a 4-day class on all aspects of the TriMedia. It includes this class.

We recommend this be part of the 4-day TriMedia Foundation class but it can stand on its own or be part of a custom class.