



ARM Cortex-R7 Software Development

Summary:

This training course covers the issues involved in developing software for platforms powered by the ARM Cortex-R7 processor.

Prerequisites:

- A basic understanding of microprocessor systems
- Familiarity with assembler or C programming
- Experience of embedded system development is helpful but not essential
- A basic awareness of ARM is an advantage but not required

Audience:

Much of the content is relevant to users of 3rd party tools but we cannot undertake to cover them in any detail.

Length:

3 days

Modules:

- Introduction to the ARM Architecture
- Software Engineers' Guide to the Cortex-R7
- Assembler Programming for ARM Processors
- ARM Assembler Workbook
- Exception Handling
- Exception Handling Workbook
- ARM Caches and TCMs
- Using the MPU
- Synchronization
- Barriers
- C/C++ Compiler Hints & Tips
- Linker & Libraries Hints & Tips
- Compilation Tools Workbook
- Programming the GIC (optional)
- Further Compiler/Linker Hints & Tips
- Embedded Software Development
- Scatter Loading Workbook
- Power Management for Cortex-A/R Cores
- Debug