ARM Cortex-A53 MPCore Software Training

**Summary:**
This course covers the knowledge required for those developing software for platforms powered by ARMv8 processors.

**Prerequisites:**
- Thorough knowledge of the ARMv7-A Architecture
- Familiarity embedded programming in C and assembler
- Experience of embedded system development is an advantage

**Length:**
3 days

**Modules:**
- Cortex-A53 Processor Overview
- Introduction to ARMv8-A
- AArch64 A64 ISA Overview
- A64 ISA workbook
- AArch64 Exception Model
- ARMv8 Exception model workbook
- ARMv8-A Memory Management
- ARMv8-A Memory Model
- Caches and Branch Prediction
- MMU and cache initialization workbook
- Barriers
- Synchronization
- Cache Coherency
- OS Support
- SW Engr Guide to the Cortex-A53 Booting
- Power management for Cortex-A
- Virtualization
- Security
- GIC Programming
- Debug