ARM®

AMBA Specifications and ARM System IP

Summary:

This course is intended for engineers designing silicon devices using ARM's advanced coherent on-chip fabric technology. The course covers AHB, AXI and APB components as well as the newer ACE (AXI Coherency Extensions). Also covered are the range of standard coherent system components - SMMU-400, CCI-400, DMC-400, NIC-400 and GIC-400.

Prerequisites:

- A working knowledge of system-on-chip design
- Familiarity with ARM technology is an advantage

Audience:

Hardware design engineers who need to understand and work with the AMBA on-chip interconnect and related technologies in building coherent multicore systems.

Length:
2 days

Modules:

- AHB-Lite Protocol
- AXI Protocol
- AXI Interconnection Architectures
- APB Protocol
- CoreLink NIC-400 – Network Interconnect
- AMBA Designer
- CoreLink DMC-400 – Dynamic Memory Controller
- Cache and Memory Overview
- AMBA 4 Overview
- CoreLink CCI-400 – Cache Coherent Interconnect
- CoreLink MMU-500 – System Memory Management Unit