ARM Cores

Courses on ARM cores

ACSYS offers a large set of courses on ARM processor cores.
Each course details both hardware and software implementation of these cores.
Programming examples are provided to clarify the operation of complex assembly instructions and to explain the parameterizing of the ARM linker.

Vous pouvez visualiser les descriptifs détaillés des différents cours en utilisant la barre de navigation ci-dessus. Vous pouvez également cliquer sur les références des cours dans les descriptions ci dessous.

AAA - ARM Cortex-A and R Architecture   This course explains the ARM Cortex-A and R global architecture. It provides the prerequisites needed to start learning the various specific cores.

AAM - ARM Cortex-M Architecture   This course explains the ARM Cortex-M global architecture. It provides the prerequisites needed to start learning the various specific cores.

CM33SW - Cortex-M33 Software Development   This course covers the Cortex-M33 ARMv8 core
R0 - ARM fundamentals   This course covers ARM architecture V4T and V5TE fundamentals
R1 - ARM7/9 implementation   This course covers ARM7TDMI and ARM966/946/926 cores.
R2 - ARM11 implementation   This course covers ARM1136 and ARM1176 CPUs

RA0 - Cortex-A5 implementation   This course covers the ARM Cortex-A5 CPU
RA1 - Cortex-A8 implementation   This course covers the Cortex-A8 high-end ARM core
RA2 - Cortex-A9 implementation   This course covers both Cortex-A9 single and multiple core high-end ARM CPUs
RA3 - Cortex-A15 implementation   This course covers Cortex-A15 high-end ARM CPU
RA4 - Cortex-A7 implementation   This course covers Cortex-A7 ARM CPU
RA5 - Cortex-A17 implementation   This course covers the Cortex-A17 cluster
RA6 - CORTEX-A57 implementation, ARM Architecture V8   This course covers the Cortex-A57 and AARCH64
RA7 - CORTEX-A53 implementation, ARM Architecture V8   This course covers the Cortex-A53 and AARCH64
RA8 - CORTEX-A72 implementation, ARM Architecture V8   This course covers the Cortex-A72 and AARCH64

RA9 - CORTEX-A73 implementation, ARM Architecture V8   This course covers the Cortex-A73 and AARCH64

RC0 - VFP programming   This course explains how to use VFP instructions to boost multimedia algorithms
RC1 - NEON programming   This course explains how to use NEON SIMD instructions to boost multimedia algorithms

RI0 - AXI3 / AXI4 INTERCONNECT   This course covers the AXI bus protocol, described in ARM AMBA v3 and v4

RM0 - Cortex-M0 / Cortex-M0+ implementation   This course covers both Cortex-M0 and Cortex-M0+ ARM CPUs
RM1 - Cortex-M1 implementation   This course covers the Cortex-M1 ARM core targetting FPGA SoCs
RM2 - Cortex-M3 implementation   This course covers the Cortex-M3 ARM core
RM3 - Cortex-M4 / Cortex-M4F implementation   This course covers both Cortex-M4 and Cortex-M4F (with FPU)

ARM core
RM4 - Cortex-M7 implementation   This course covers the Cortex-M7 V7E-M compliant CPU

RR0 - Cortex-R4 implementation   This course covers the Cortex-R4 ARM core
RR1 - Cortex-R5 implementation   This course covers the Cortex-R5 / Cortex-R5F ARM cores

RR2 - Cortex-R7 implementation   This course covers the Cortex-R7MP ARM cores
RS1 - Cortex-A9 & Cortex-A5 software implementation   This course describes the architecture of Cortex-A5/A9 and provides coding guidelines