# IM4 - SlimBus

# This course covers the Serial Low-Power Inter-Chip Media Bus (SLIMBUS)

#### **Objectives**

- The course starts with an overview of MIPI specification.
- The physical layer is explained as well as all conformance tests.
- Protocol is then described, clarifying how a frame can be routed in a point-to-multipoint system through TDM.
- Message synchronization and tracking mechanisms are also covered.
- The course also focuses on the enumeration sequence and the gear change sequence.
- Companies interested in attending this course must adhere to MIPI organization.
- This course has been designed for engineers in charge of SoC architecture, functional verification or silicon validation.

A more detailed course description is available on request at training@ac6-training.com

#### **Prerequisites**

• Basic knowledge on digital electronics

#### Course Environment

- Theoretical course
  - PDF course material (in English) supplemented by a printed version for face-to-face courses.
  - o Online courses are dispensed using the Teams video-conferencing system.
  - o The trainer answers trainees' questions during the training and provide technical and pedagogical assistance.
- At the start of each session the trainer will interact with the trainees to ensure the course fits their expectations and correct if needed

#### **Target Audience**

• Any embedded systems engineer or technician with the above prerequisites.

#### **Evaluation modalities**

- The prerequisites indicated above are assessed before the training by the technical supervision of the traineein his company, or by the trainee himself in the exceptional case of an individual trainee.
- Trainee progress is assessed by quizzes offered at the end of various sections to verify that the trainees have assimilated the points presented
- At the end of the training, each trainee receives a certificate attesting that they have successfully completed the course.
  - o In the event of a problem, discovered during the course, due to a lack of prerequisites by the trainee a different or additional training is offered to them, generally to reinforce their prerequisites, in agreement with their company manager if applicable.

#### Plan

#### INTRODUCTION TO MIPI SPECIFICATIONS

## SERIAL LOW-POWER INTER-CHIP MEDIA BUS (SLIMBUS)

- Overview
- SLIMbus model
- Physical layer
- Frame structure
- Information elements and value elements
- Message protocol and tracking
- Transport protocols
- Bus processes
- Device classes
- Test suites

### Renseignements pratiques

Inquiry: 1 day