



Managing an ASIC Program

Synopsis

This course is aimed to provide an opportunity for the participant to acquire comprehensive insight into managing an ASIC program. As most of these aspects also hold true for general IC design, this course will also greatly benefit an IC Program Manager/Project Manager.

Application Specific Integrated Circuit (ASIC) is a major topic of interest in the highly competitive field of VLSI circuits where each industry player tries to outdo the other by introducing a niche and differentiated product ahead of the competition. While products assembled from off-the-shelf components are faster to reach the market, they ride on an already existing product wave. With ASICs, however, one can be the forerunner and tap into the initial and major chunk of the market window grossing high revenues. The exclusive design rights also provide an added advantage.

This course kick starts with providing a basic understanding of the ASIC development chain as well as the concepts of Program Management. Keeping these concepts in mind, the major part of the course takes the participant through all the stages of managing an ASIC implementation. It will help the participant to gain insight into risk planning and mitigation, pre-empting of issues and effective communication and management. It will illustrate some generic issues arising during an ASIC program and guidelines in managing an ASIC program.

Interactive workshops within the course facilitate in making this an interesting, interactive learning experience with participants exposed to real issues arising in managing an ASIC program.

This course will be delivered by a senior VLSI consultant with extensive industry experience in supporting & managing ASIC projects on a global scale.

What You Will Learn

- Basics of ASIC, ASIC Design flow, ASIC Program
- Basics of Program Management
- Different stages of ASIC Program & how to effectively manage across these stages
- Generic Issues seen during an ASIC Program
- Guidelines for good ASIC Program Management
- These in turn will enable you in effectively
 - managing an ASIC program
 - supporting your customer
 - supporting your team

Who Should Attend

- Project Leads
- Program Managers

Prerequisite

Basic engineering know how. 1-2 years experience in IC design/support is preferable.

Course Methodology

This course is conducted in a seminar room. The course will include brief interactive workshops like sessions to encourage participation and facilitate learning. Each participant will receive a set of course material. There are no lab sessions.

Course Duration

1 day, 9.00 am – 5.30 pm

Course Structure

A. Introduction to ASICs

- i. ASIC, ASIC vs. Standard Product
- ii. ASIC Program
- iii. ASIC Design Steps
- iv. ASIC Qualification & Reliability
- v. ASIC Interfaces
- vi. Economics & entities involved in ASIC Program

B. Introduction to Program Management

- i. What is PM, why is it required
- ii. Responsibility & Authority of a Program Manager
- iii. Program Management as a process

C. Managing an ASIC Program

- i. **Initiate**
 - Program Charter
 - Key factors to be considered at ASIC start-up
- ii. **Plan**
 - ASIC Planning as a process
 - ASIC Deliverables, Signoffs, Checklists
 - Reviews
 - Work Breakdown Structure
 - ASIC Risk Identification, Risk Analysis & Management
 - ASIC Program Plan
 - ASIC Kick-off meeting
- iii. **Implement/Execute**
 - ASIC Program Status report
 - Milestones
 - ASIC Check lists
 - ASIC Change control process
 - ASIC Program Repository
- iv. **Close**
 - ASIC Sign-off
 - ASIC Post program Analysis
 - Recycle

D. Generic issues seen during Program Management

E. Tools to aid Program Management

F. Attributes of a good Program Manager

Course Instructor

Meenu Sarin

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Mrs. Meenu Sarin is a microelectronics professional with over 20 years experience in the microelectronics industry across various facets of operations & across geographies like Europe, India, Singapore, Greater China and Australia and with special focus in the semi custom ASIC environment. She has registered her company, VLSI Consultancy, in Singapore from where she works as a free-lance consultant. She has conducted in-house training courses and public workshops in various countries including Singapore, Malaysia, Hong Kong and India besides delivering talks in universities. She is also a founding member and an Executive Board Member of the Semiconductor Association, Singapore (www.midas.org.sg)

From 1997-2002, Meenu was a Technical Marketing Manager in STMicroelectronics (STM)/Singapore with focus on Telecom segment. In this role, she was responsible for Business Development and Program Management for STM's semi custom ASIC projects in Asia Pacific. Meenu also worked as a Program Manager in charge of managing various semi custom projects with customers in the Asia-Pacific Region. Before her move to STM Singapore, Meenu worked at STM India from 1991 to 1997. As a Design Manager for Library Design Group, she was responsible for managing a 30 member team involved in design and development of semi custom digital libraries in various technologies across different platforms as per the market requirements and to support designers in STM's world wide locations. Prior to this, Meenu had been a Design Engineer for digital library design and development at STM Italy for several years after she received her engineering degree (Computer Engineering) from Delhi Institute of Technology, India in 1988.