Introduction to EUV Lithography

(Half day course)

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Course Details

This course provides attendees with an overview of the fundamentals, current status, and technical challenges of EUV Lithography. Topics covered include EUV Sources, EUV Source Metrology, EUV Optics, EUV systems and patterning, and EUV Mask. We will begin with an overview of the history of EUVL and cover EUV sources, EUV source metrology and EUV optics. Next is a brief discussion of EUVL systems and patterning results. We continue with an exploration of EUVL Mask technology issues such as design, materials including reflective multilayers, process and metrology. Finally we conclude with a Status Review of EUVL. Course material will be drawn from the books EUV Sources for Lithography and EUV Lithography.

Learning Outcomes

This course will enable you to:

- learn the history and basics of the development of EUV Lithography
- learn the basics of the different EUV source types and the current technical challenges of EUV source technology
- learn the fundamentals of EUV source metrology and source power measurements
- learn the fundamentals of EUV multilayer optics
- learn the fundamentals of patterning, the key components in EUV systems and the current technical challenges
- learn the fundamentals of EUV mask technology and understand the current technical challenges
- learn the current status and technical challenges of EUV Lithography for supporting high volume computer chip manufacturing