



ADVANCED MASK

TECHNOLOGY CENTER

Technology leadership in an highly integrated value-chain

The Limitations To Innovation

Talk at the TIM-FACHTAGUNG

Oct 12 2007, Brandenburg

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Contents

- AMTC – the company
- Photomasks – the product
- Characteristics of the industry: Technology leadership as a survival strategy
- What technologies to invest in: Technology needs meet market trends
- Technology leadership: The world's 1st commercial EUV mask made by AMTC
- Summary and conclusions



Summary and conclusions

- It has been shown that early knowledge of future technology needs is the main vehicle to gain a competitive edge as other means of product differentiation are rather limited in a mask makers world.
- A shell model has been introduced to determine the relevant technology sphere which is enabling to the company.
- Patent analysis has been applied on past roadmap changes: The roadmap change from 157nm technology to 193i technology in the year 2003 could be verified. It is not possible to make a definite statement in regards to future roadmap changes.
- Besides substantial financial resources, the successful management of R&D networks and co operations is key to map technology needs with market trends and become technology leader.