

# FutureHorizons

The Global Semiconductor Industry Analysts



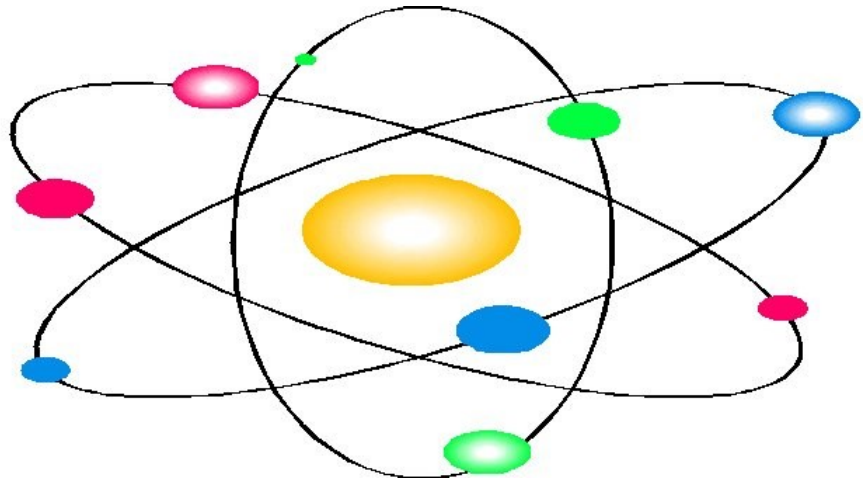
**FUTURE HORIZONS  
Presents**

## **"The Silicon Chip" Industry Awareness Workshop**

**A One-Day Introduction To The Integrated Circuit (IC) Industry  
Technology, Manufacture & Markets**

**Future Horizons**

**The Global Semiconductor Industry Analysts**



***"The Silicon Chip"  
Industry Awareness  
Workshop***

Electronics is now the biggest manufacturing industry in the world. What is more, it is growing at an average annual rate of eight percent per year and getting even bigger. With 90 percent of the world's total computing power ever made built in the last two years, the world has rapidly moved from being an industrialised society into the digital age. Driven by the relentless advances in semiconductor electronics, IC firms around the world are producing over 100 billion transistors a second, each costing less than one millionth of a cent, cramming 60 million onto the head of a pin, daily turning alchemists dreams into show-stopping, commercial realities. The electronic circuits they produce have fundamentally, and irreversibly, changed the world we live in and with it, have created vast new industries and economic wealth. This workshop provides an opportunity for professionals working in or with the IT industry to gain a complete insight and better understanding of how the silicon chip industry works ... an industry built on sand.

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[www.futurehorizons.com](http://www.futurehorizons.com)

In Russia, Tel: +7 495 228 0766

**"Great explanation supported  
by theory & practical examples"**

## Who Should Attend?

"The Silicon Chip" workshop is aimed at professionals working in, or involved with, the semiconductor and IT industry. It is ideally suited for individuals with a non-technical background.

- IT industry sales and marketing personnel from the equipment and materials suppliers, IC firms and electronic equipment systems houses
- Purchasing managers and buyers, administration, engineering, finance, production control, product planners and quality control employees from all aspects of the IT industry
- Human resources, IT recruitment and industry training personnel
- Government officials, public and private investors, and other financial organisations
- Media, PR and IT advertising organisations
- Others providing goods and services to the IT industry

## Benefits

The Workshop provides a comprehensive insight into the electronics and IC industry: terminology; history; theory; technology; production process; economics and market application.

- Learn about the evolution of electronics, from vacuum tubes to single chip systems
- Receive an introduction to electronic systems, components and the various IC technologies
- Understand the basic production steps involved in IC manufacturing
- Review the economics of IC manufacturing, industry investment and market cycles
- Hear an overview of the size and attributes of the IC market
- Gain an understanding of the global importance of microelectronics
- The course material will provide an invaluable source of reference material

***"I finally understand how to recognise products & their use in technology"***

## Everything You Ever Wanted To Know About The IC Economic Industry ... But Were Too Afraid To Ask!

### Session 1:

#### The Silicon Chip

- "World In A Grain Of Sand" Video
- Industry chronology
- The development of electronics from the thermionic valve to complex ICs
- Semiconductor family tree
- IC types (logic, memory, microprocessors)

### Session 2:

#### Basic Electronics

- Introduction to electronics theory
- Binary language & ASCII code
- Semiconductor materials & their operation
- The p-n junction & transistor operation
- Boolean algebra & digital logic explained

### Session 3:

#### Semiconductor Manufacture

- Industry structure
- Polysilicon & silicon wafer production
- Wafer fab/front-end process (step by step)
- Back-end (wafer probe, assembly, final test & finishing) operations
- "Silicon Chip" video

### Session 4:

#### Economics of IC Manufacture

- Wafer fab investment trends
- Cost structure & cost models
- Process yields & manufacturing defects
- Die size & cost reduction issues
- Back-end cost elements
- Typical device costs

### Session 5:

#### IC Market Overview

- Market segmentation
- Company size
- Packaging & technology trends
- Industry learning curve
- Industry cyclicity
- Industry dynamics
- Market outlook

### Session 6:

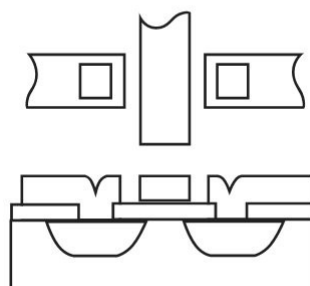
#### The IT Revolution

- Impact of Information Technology
- Market trends & industry outlook
- Impact of microelectronics

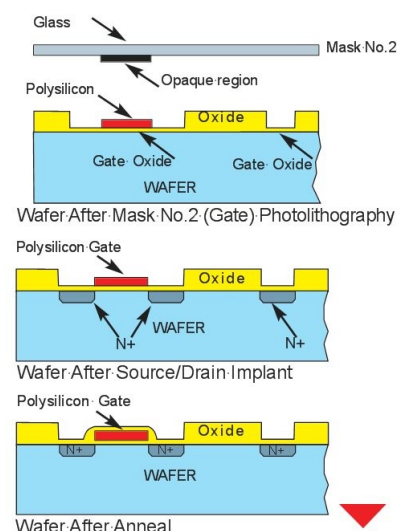
## What You Will Learn

1. Apply Photoresist
2. Align Mask
3. Expose
4. Develop
5. Etch (Poly)
6. Remove Photoresist

### Basic MOS Transistor



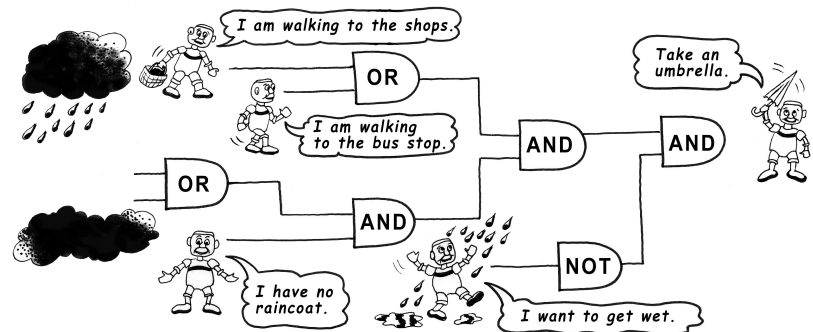
### Process Sequence - Mask 2



## This Workshop Provides a Complete Overview of the IC Industry

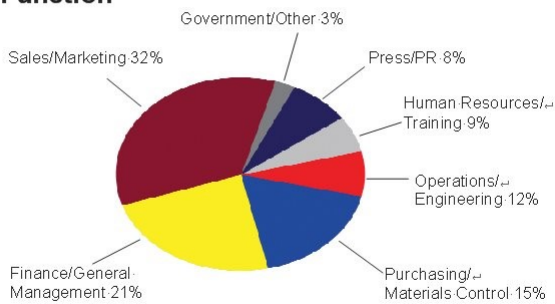
Attendees will receive a copy of "The Silicon Chip" Workshop binder containing copies of the material presented, including a comprehensive Glossary of Terms detailing the most frequently used industry terms. "The Silicon Chip" Workshop is also available on an in-house basis, offering the added advantage of logistical convenience and timing flexibility. **Please call Future Horizons for further details.**

## From Simple Logic...To Complex Decision Making



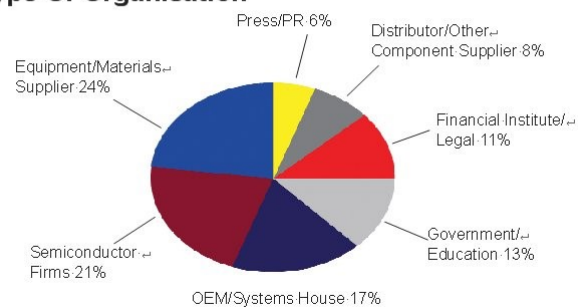
## Past Attendees

### Job-Function



## From These Companies

### Type-Of-Organisation



**"Fantastic day. I have already impressed potential clients with my industry knowledge"**

**"This has helped me structure my thoughts & plans for the company"**

## Book A Place

To register your place contact Future Horizons for a Silicon Chip Registration Form. Call, email or book online.

## Workshop Fee

Workshop fee includes course reference binder, lunch and coffee breaks. Workshop hours: 9.30am - 4.00pm (registration from 9.15am). Our unique post-workshop feature provides a three-month complimentary enquiry privilege, for delegates to call with questions arising from the course material or related work issue.

## Group Discount

For three or more delegates from the same company. To qualify, registration and payment must be received together.

Tel: +44 1732 740440  
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## Future Horizons Ltd

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# Registration Information

Please Register Me

For The Following

## "Silicon Chip"

### Industry Workshop

Send Completed Form By Fax/Mail Or  
Online @ [www.futurehorizons.com](http://www.futurehorizons.com)

#### Registration

Registration should be made using this form - please copy for additional delegates to qualify for the group discount. Participation is subject to space availability.

**Please register early to ensure workshop availability**

#### Group Discounts

Group discount price applies to three or more delegates from the same facility registering at the same time with the registration fee paid on a single invoice.

#### Delegate Cancellations

Cancellations made less than two weeks prior to the workshop are subject to a 50% cancellation fee and must be confirmed in writing, otherwise the full workshop fee will apply. Refunds will not be granted after the workshop date or for no-shows. Substitutions may be made at any time up to the workshop date and confirmed in writing to Future Horizons.

#### Event Cancellation

In the unlikely event that the workshop is cancelled by Future Horizons, delegates will be notified and all fees paid will be refunded in full.

#### All Workshops Must Be Pre-Paid IN FULL

It is the delegate's responsibility to ensure that payment has been made.

#### Fee Includes

The registration fee includes instructional costs, course presentation binder material, coffee breaks and lunch. Accommodation at the hotel is not included in the workshop fee.

#### UK VAT APPLIES TO ALL UK-BASED EVENTS

Date	Venue	Check Box
Tue 28 Mar 2023	Holiday Inn Wrights Lane, London	
Tue 06 Jun 2023	Holiday Inn Wrights Lane, London	
Tue 07 Nov 2023	Holiday Inn Wrights Lane, London	

#### Delegate Details (Or Attach Business Card)

##### Full Name & Salutation

##### Job Title

##### Company

##### Postal Address

##### Phone

##### E-mail

Special Diet? Yes No If "Yes", specify:

#### Registration Fee (UK Pounds Sterling Per Delegate)

Single Delegate Rate		Group Rate (3 or more)	
Workshop Fee	£695.00	Workshop Fee	£595.00
VAT @ 20%	£139.00	VAT @ 20%	£119.00
Total Fee	£834.00	Total Fee	£714.00

#### Pre-Payment Mandatory

An invoice will be sent on receipt of workshop registration.

Payment by UK Cheque: [ ] Bank Transfer: [ ] PO [ ]

PO Number (mandatory if by PO) \_\_\_\_\_

Future Horizons Ltd, Royal Bank of Scotland, EH12 9NJ, Scotland

Sort Code: 16:28:24. Account Number: 11686316

Payment by credit card is available via PayPal

Please call for prices in Euros or US Dollars

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