

固態電子元件

Solid State Electronic Devices

Feb. 2010



EE3350 固態電子元件導論

Introduction to Solid-State Electronic Devices

- **Class Time & Venue**

- W3W4F4 ; 資電館 (CSEE) R206

- **Textbook**

- [Fundamentals of Semiconductor Devices](#)
by Betty L. Anderson & Richard L. Anderson (Mc GRAW.HILL)

- **References**

- [Solid State Electronic Devices](#)
by Ben G. Streetman & Sanjay K. Banerjee (Pearson)

- **ftp site for handout/material download**

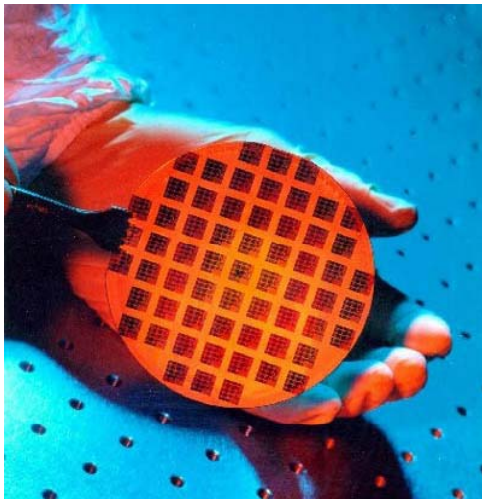
address: well.ee.nthu.edu.tw

login account : ee3350

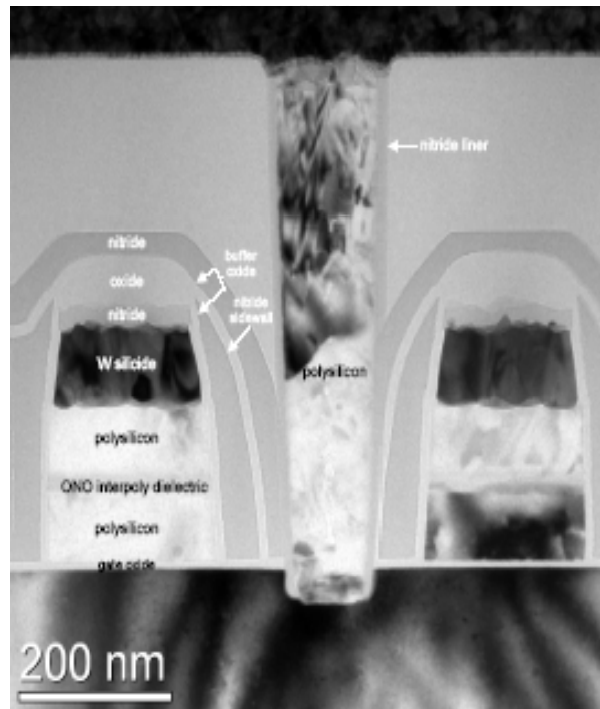
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What's Device ?

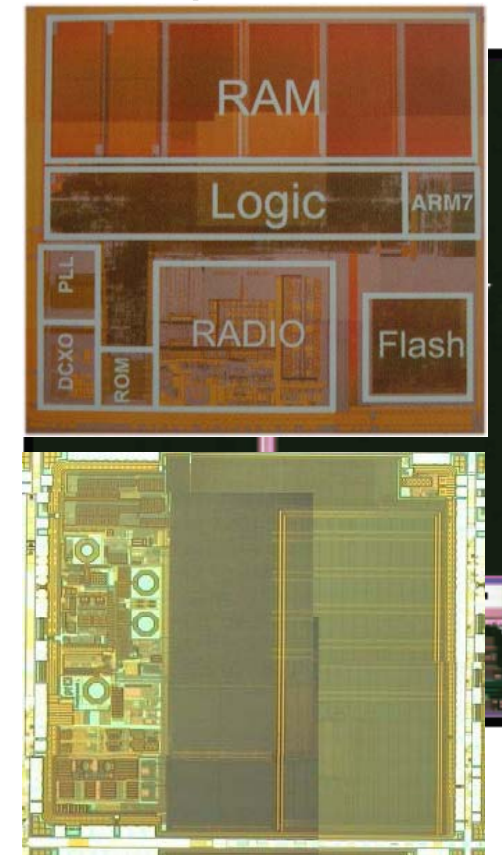
Manufacturing



Components

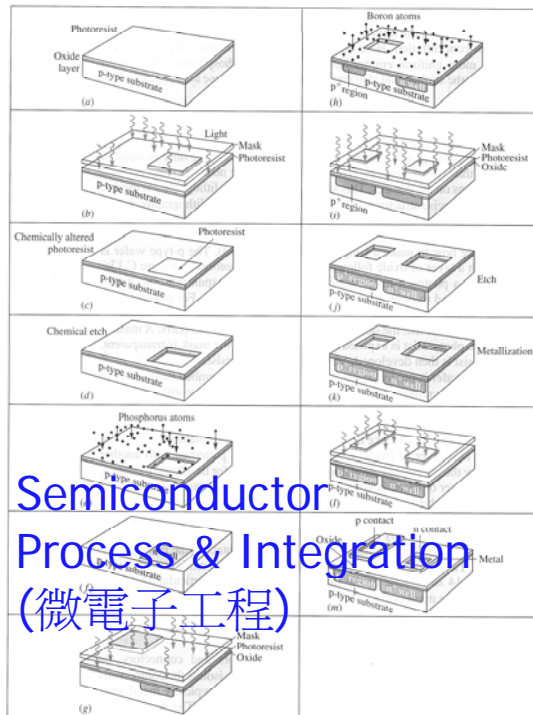


Composition



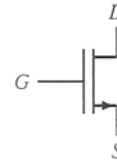
Where is Device ?

Process



Semiconductor
Process & Integration
(微電子工程)

Devices

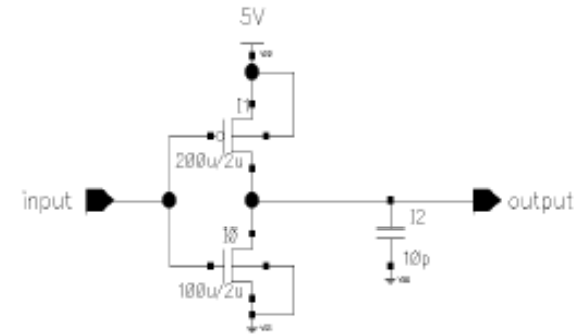


Semiconductor
Devices
(固態電子元件)

VLSI Device
(積體電路元件)

Semiconductor Memory
(半導體記憶體)

Design



Microelectronics
(電子學)

VLSI Circuit Design
(積體電路設計)

Analog IC Design
(類比IC設計)



Syllabuses

- Semiconductor Material & Energy States
- Semiconductor Diodes and Junctions
- MOS Capacitor and Charge Control Model
- Field Effect Transistors
- Bipolar Junction Transistors



Grading Policy

- GRADING:
 - Test (xn) 40%
 - Midterm (x1) 30%
 - Final (x1) 30%



Information

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