Some Useful Links

Please send corrections (or suggestions) to youngwlim@hotmail.com.

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Some useful links in VLSI designs

Weste	http://pages.hmc.edu/harris/cmosvlsi/4e/index.html
Rabaey	http://bwrcs.eecs.berkeley.edu/Classes/IcBook/instructors.html
Mason	http://www.egr.msu.edu/classes/ece410/mason/
Baker	http://cmosedu.com/cmos1/book.htm

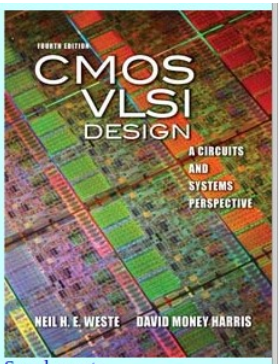
Electric Layout Tool

http://www.staticfreesoft.com/index.html

http://cmosedu.com/cmos1/electric/electric.htm

Harris

Weste http://pages.hmc.edu/harris/cmosvlsi/4e/index.html



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Lectures

Lecture	Topic	PowerPoint	PDF
0	Introduction	ppt	pdf
1	Circuits & Layout	ppt	pdf
2	Design Flow	ppt	pdf
3	Transistor Theory	ppt	pdf
4	Nonideal Transistors	ppt	pdf
5	DC & Transient Response	ppt	pdf
6	Logical Effort	ppt	pdf
7	Power	ppt	pdf
8	Simulation	ppt	pdf
9	Combinational Circuit Design	ppt	pdf
10	Circuit Families	ppt	pdf
11	Sequential Circuit Design	ppt	pdf
12	Design for Testability	ppt	pdf
14	Wires	ppt	pdf
15	Scaling	ppt	pdf
16	Pitfalls & Reliability	ppt	pdf
17	Adders	ppt	pdf
18	Datapaths	ppt	pdf
19	SRAM	ppt	pdf
20	ROMs, CAMs, & PLAs	ppt	pdf
21	Packaging, Power, & Clock	ppt	pdf
22	PLLs & DLLs	ppt	pdf
23	I/O	ppt	pdf
24	Microprocessor Hall of Fame	ppt	pdf

Rabaey

Rabaey http://bwrcs.eecs.berkeley.edu/Classes/IcBook/instructors.html

Click on the corresponding header to download the slide-sets covering the different chapters.

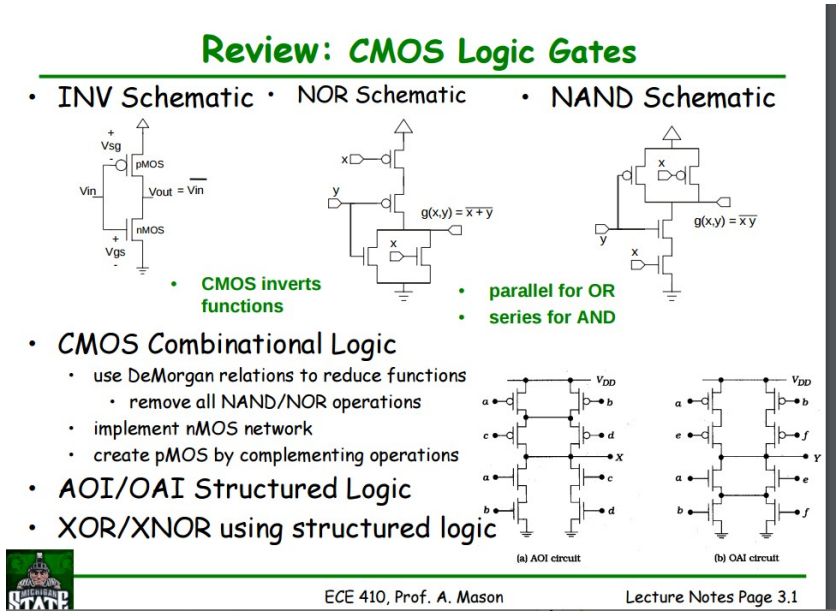
- **Design rules** - PPT or PDF (151 kB)
- **SCMOS Design rules** - pdf
- **Chapter 1: Introduction** - PPT or PDF (1,259 kB)
- **Chapter 2: Devices** - PPT or PDF (2,292 kB)
- **Chapter 3: Inverter** PPT or PDF (2,096 kB)
- **Chapter 4 (1): Combinational Logic in CMOS** - PPT or PDF (1,154 kB)
- **Chapter 4 (2): Low Power Design** - PPT or PDF (365 kB)
- **Chapter 5: High Performance Design** - PPT or PDF (268 kB)
- **Chapter 6: Sequential Logic** - PPT or PDF (1,451 kB)
- **Chapter 7: Arithmetic** - PPT or PDF (1,611 kB)
- **Chapter 8: Interconnect** - PPT or PDF (1,784 kB)
- **Chapter 9: Timing** - PPT or PDF (1,387 kB)
- **Chapter 10: Semiconductor memory** - PPT or PDF (1,975 kB)
- **Chapter 11: Design methodologies** - PPT or PDF (1,967 kB)

Mason

MSU http://www.egr.msu.edu/classes/ece410/mason/

Lecture Notes

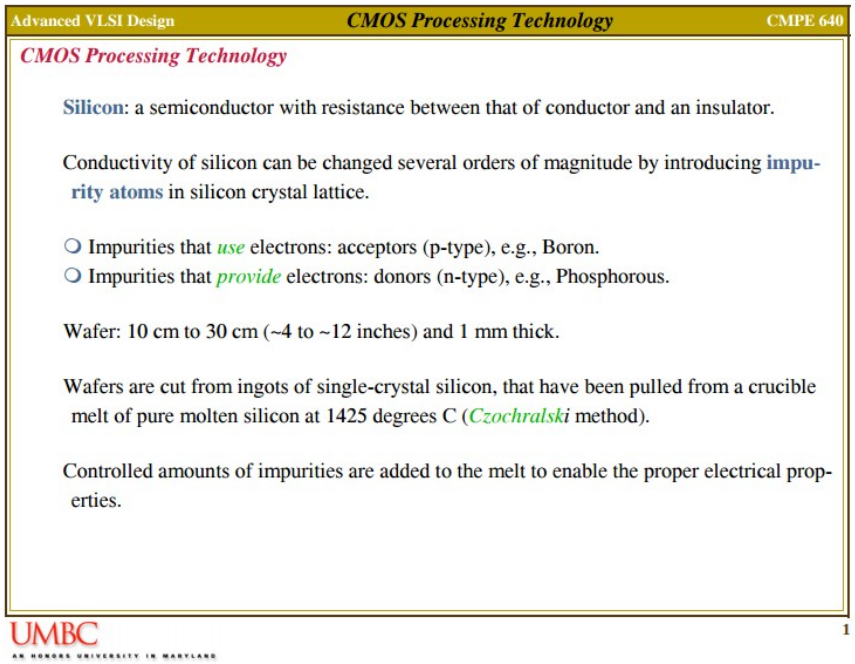
- Power Point Slide: <Introduction> <Ch.2 switch logic> <Ch.3-5 technology> <Ch.6 physics/modeling> <Ch.7 performance analysis> <Ch.11 CMOS digital functions> <Ch.12 arithmetic circuits> <Ch.13 memory> <Advanced Digital> <MEMS Overview>
- Extras: LOCOS Slide Show (for viewing, not printing).



Patel

Patel http://www.csee.umbc.edu/~cpatel2/links/640/

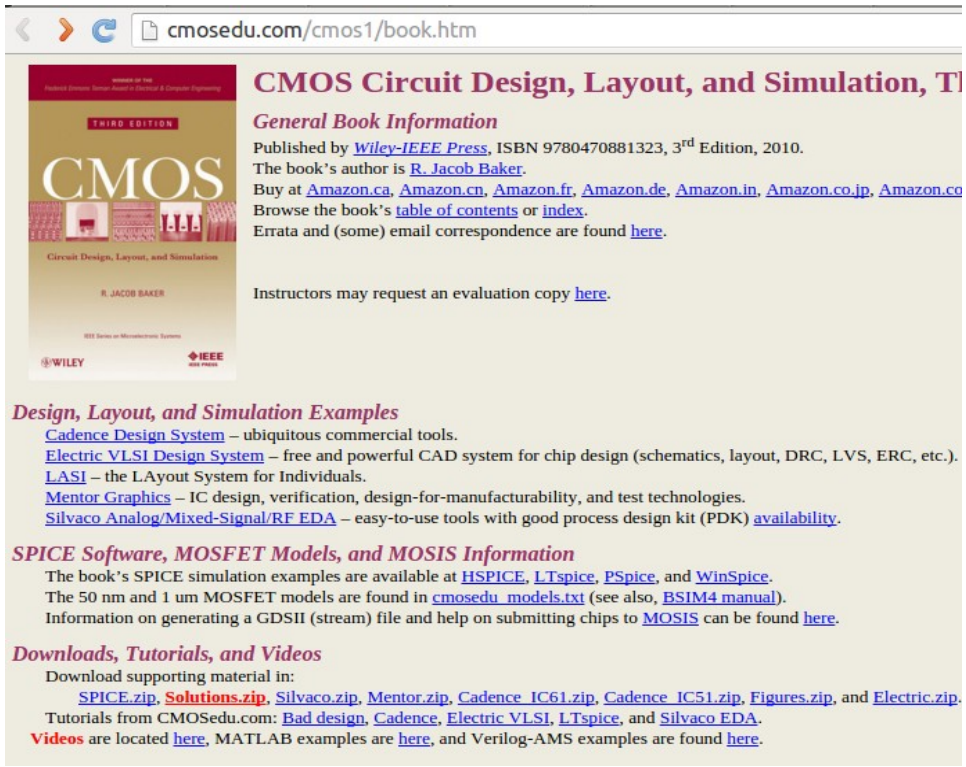
- **Syllabus:** Fall 2015 syllabus
- **Lecture 1:** Introduction
- **Lecture 2:** CMOS Basics I
- **Lecture 3:** CMOS Basics II
- **Lecture 4:** Quality Metrics I
- **Lecture 5:** Quality Metrics II
- **Lecture 6:** Diode Details
- **Lecture 7:** MOS Transistor Details

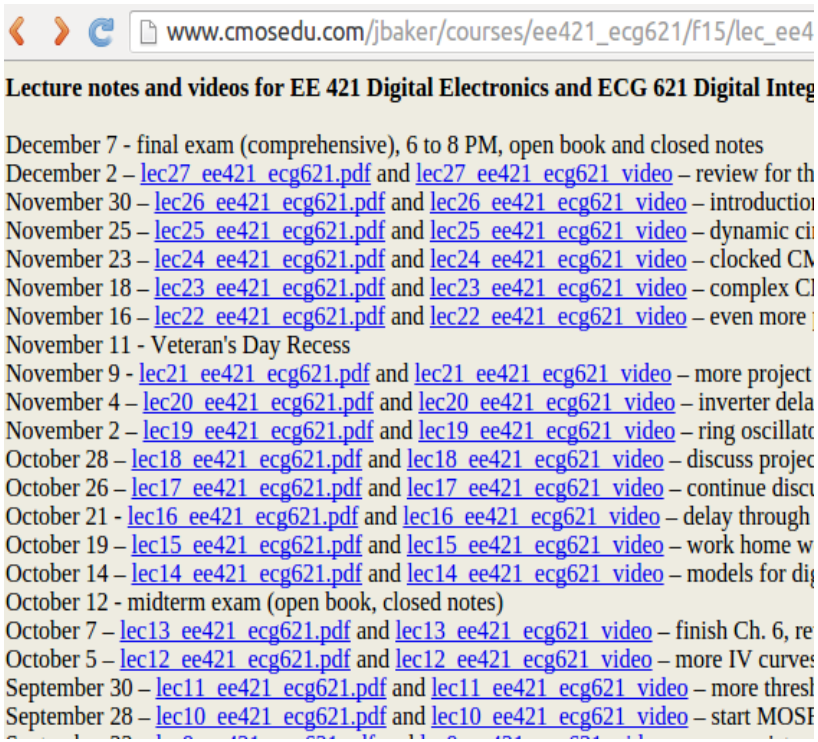


Baker

Baker http://cmosedu.com/cmos1/book.htm

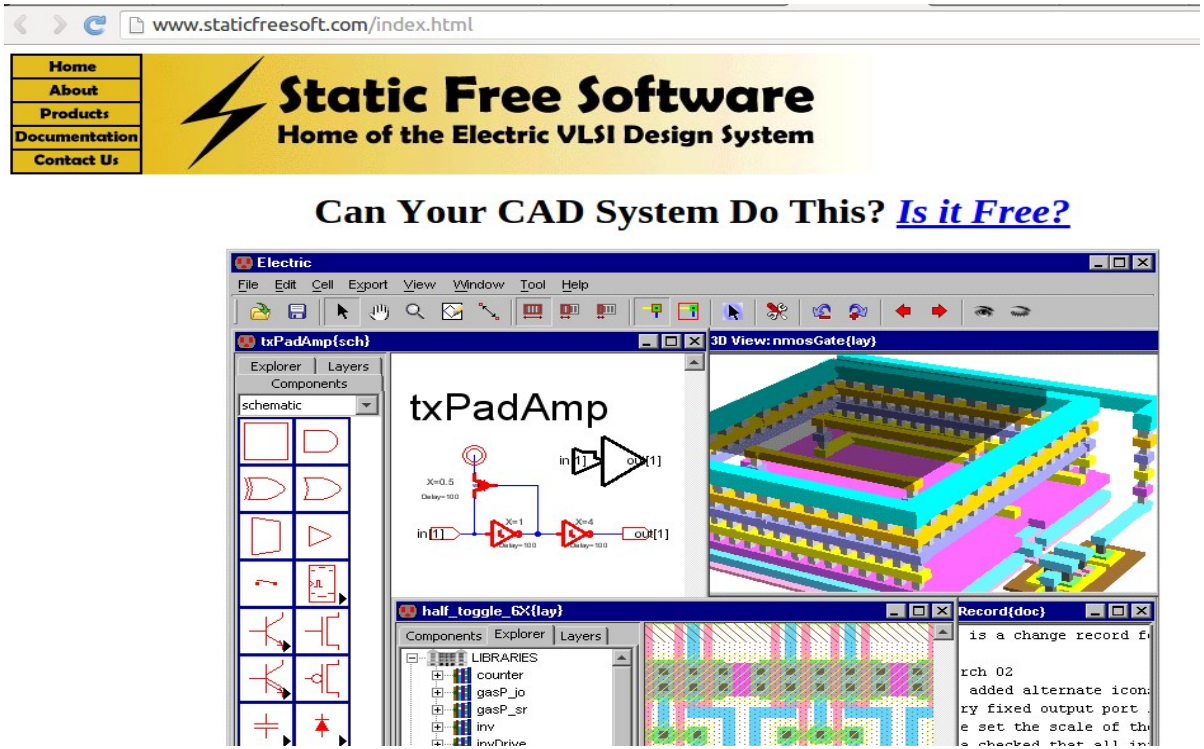
http://www.cmosedu.com/jbaker/courses/ee421_ecg621/f15/lec_ee421_ecg621.htm





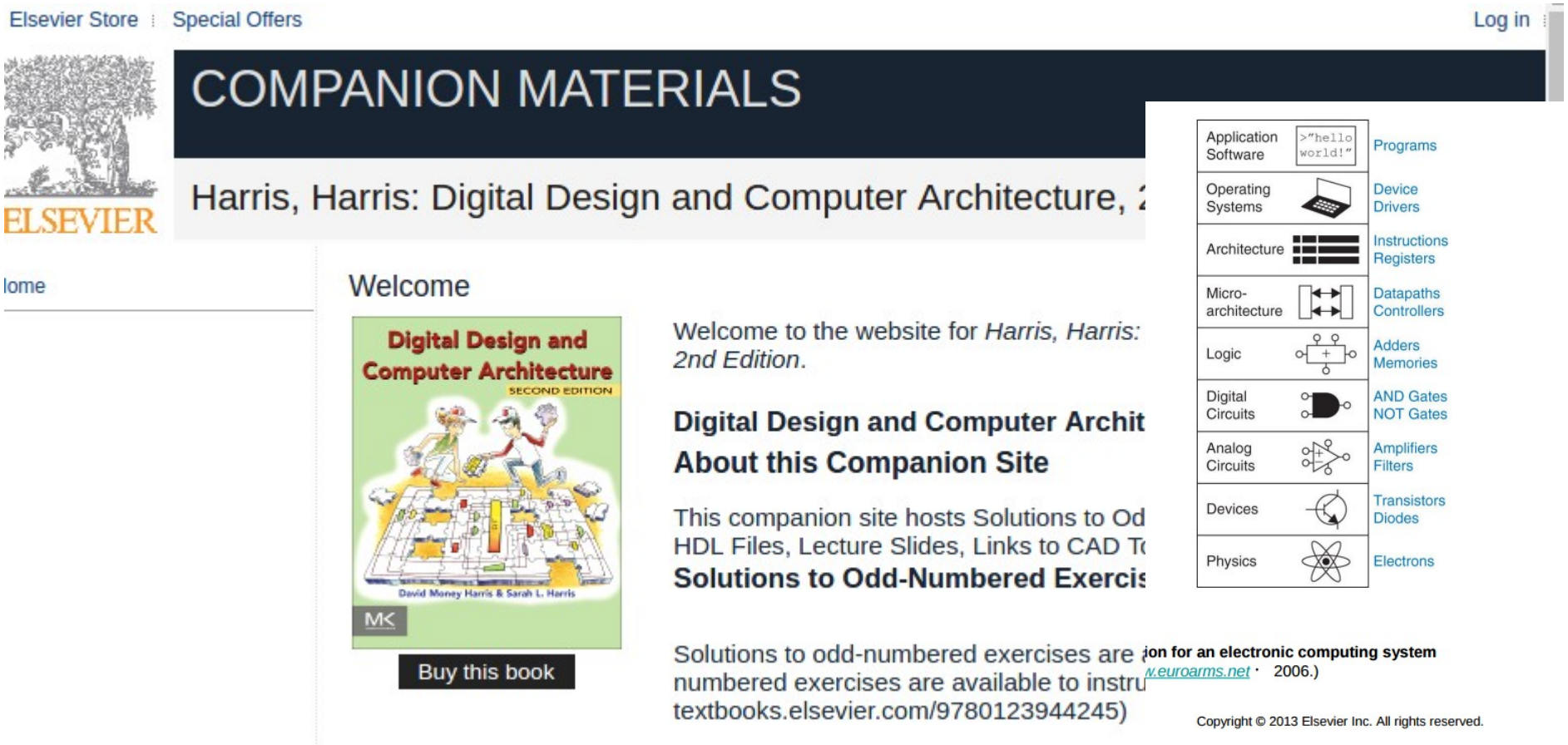
Electric Layout Tool

http://www.staticfreesoft.com/index.html

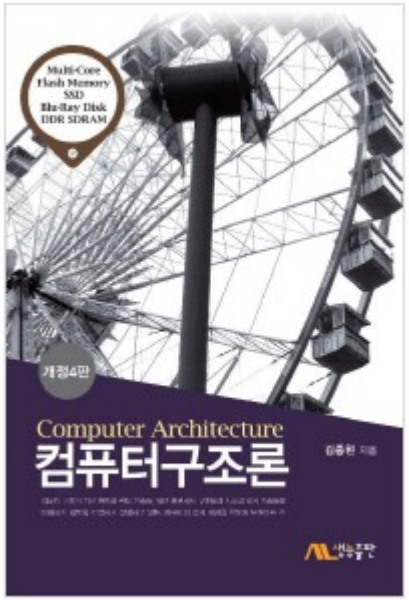


Harris' Computer Architecture Book

http://booksite.elsevier.com/9780123944245/?ISBN=9780123944245



Computer Architecture



무료배송

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김종현 지음 | 생능출판사 | 2014년 01월 10일 출간 이 책의 개정정보 : 2015년 출간

☆☆☆☆☆ 리뷰 0개 리뷰쓰기

References

[1] http://en.wikipedia.org/
[2] http://www.allaboutcircuits.com/
[3] W. Wolf, “Modern VLSI Design : Systems on Silicon
[4] N. Weste, D. Harris, “CMOS VLSI Design: A Circuits and Systems Perspective”
[5] J. P. Uyemura, “Introduction to VLSI Circuits and Systems”
[6] https://en.wikiversity.org/wiki/The_necessities_in_SOC_Design
[7] https://en.wikiversity.org/wiki/The_necessities_in_Digital_Design
[8] https://en.wikiversity.org/wiki/The_necessities_in_Computer_Design
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