

UNIVERSITY OF SOUTHERN CALIFORNIA

COMPUTER ENGINEERING

SCREENING EXAMINATION

EE 680

COMPUTER AIDED DESIGN OF DIGITAL SYSTEMS I

Required reading

1. L-T Wang, et al., *Electronic Design Automation*, Kaufman Pl., 2008. ISBN: 9780123743640 Or two of the following three books...
2. Sabih H. Gerez, *Algorithms for VLSI Design Automation*, John Wiley, 2004, ISBN 0 471 98489 2 OR...
3. S. M. Sait and H. Youssef, *VLSI Physical Design Automation: Theory and Practice*, IEEE Press, Piscataway, NJ, 1995 OR...
4. M. Sarrafzadeh and C. K. Wong, *An Introduction to VLSI Physical Design*, McGraw-Hill, New York, NY, 1996 AND ...
5. At least two technical and one survey/tutorial paper on routing, placement and partitioning.

Helpful additional readings

1. N. Sherwani, *Algorithms for VLSI Physical Design Automation*, 3rd ed., Kluwer Academic Publishers, Boston, MA, 1995.
2. A. B. Kahng and G. Robins, *On Optimal Interconnections for VLSI*, Kluwer Academic Publishers, Boston, MA, 1995.
3. E. G. Friedman, ed., *Clock Distribution Networks in VLSI Circuits and Systems*, IEEE Press, New York, NY, 1995.

Warning: Students will be asked to submit a typed list of which books and articles they read in preparation for this exam.

Please be aware that these references are for guidance in BASIC knowledge. Ph.D. candidates are screened on the basis of talent, course knowledge, independent reading and experience.
