

UNIVERSITY ☺ OF ☺ PORTLAND
Sch☺☺l ☺ of Engineering

EE 301
Spring 2004
A.Inan

EE 301/Handout # 5
(Wednesday, February 4, 2004)

Homework # 3
Step & Pulse Excitations of Multiple Transmission Lines
& Reflections from Reactive Terminations
(Due Friday, February 13, 2004, 11:25a.m.)

- (1) 2-17. **Optimized multiple lines.** Inan² (red book), page 97.
- (2) 2-23. **Terminated IC interconnects.** Inan² (red book), page 99.
- (3) 2-24. **Digital IC gate interconnects.** Inan² (red book), page 100.
- (4) 2-27. **Two driver gates.** Inan² (red book), page 101.
- (5) 2-29. **Inductive load.** Inan² (red book), page 102.
- (6) 2-30. **Unknown lumped element.** Inan² (red book), page 102.
- (7) 2-32. **Capacitive load.** Inan² (red book), page 104. (Note that this problem is optional.)

Please use the following guidelines for your homework solutions:

- 1) On the first sheet, at the top, indicate that this is EE 301/Spring 2004/HW #3 Solutions and provide your name somewhere on that sheet where the grader can easily see it.
- 2) Solve each problem on a separate sheet unless the solution is very short.
- 3) Do not use the back of the sheets unless you have to.
- 4) Staple your solutions in the above order before you turn them in.

Please turn in your homework solutions on time. The solutions (or answers) for each homework assignment will be provided as a separate handout on the due date. **Late homework solutions will not be accepted!**