

VLSI Design EE 523

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Lecture 9

Topics for lecture 8

- CMOS transfer characteristics
- Transfer characteristics of CMOS Inverter
- **Noise Margin** of CMOS Inverter
- **β ratio** effects in transfer characteristics of inverter
- How **mobility effects β ratios and size of CMOS transistors**
- Resistance of CMOS Transmission Gate (Switch)
- Simple R and C model in a CMOS transistor

- Textbook can be downloaded online “CMOS VLSI Design by Weste and Harris, 4th Edition”
- Readings from Chapter 2