LECTURE-9

VLSI Design Methodologies

➢ Semi-Custom Design

➢ Full-Custom Design

VLSI Design Flow

- ➤ VLSI Design flow in three domains

- ➤ Behavioural representation

- ➤ Logic representation

- ➤ Circuit representation

- ➤ Layout representation

VLSI Design Hierarchy

- Regularity

- Modularity

- Locality

VLSI Design Styles

➢ Field Programmable Gate Array

➢ Gate Array Design

➢ Standard Cells Based Design

➢ Full Custom Design

VLSI Design Quality

➤ Testability

➤ Yield and manufacturability

➤ Reliability

➤ Technology updateability