Analog Layout Questions with Answer (2024) PDF

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- What are the concepts of analog layout including Sharing, Fingering, Matching, Shielding & crosstalk, Second order & Short channel effects?
- What issues should be taken care of in analog layouts such as Latch-up, Antenna effect, Electromigration, Electrostatic discharge, Antenna issue, Latch up theory & prevention, High Voltage circuit theory, I/O circuit, Noise and ground bounce theories, Strapping and Guard-ring techniques?
- What are the advanced Digital and Analog mixed-signal layout techniques?
- What are the High speed layout techniques?
- How do you implement High Voltage layout techniques?
- What are the Reverse Engineering techniques used in layout?
- How do you address ESD and Peripheral output driver and I/O cell layout techniques?
- What are the Placement and routing techniques?
- What are the Chip floor planning techniques?
- How do you implement Bonding pad, Seal-ring, Scribe-line layout techniques?
- What are the Power bus routing, bus slotting, and Clock net routing techniques?
- How do you extract Circuits From Layout?
- What are SplitGates, Cell Layout, Schematic And Layout Transistor Densities?
- What are the fundamentals of Mixed Signal circuits and Layouts including Nonlinear Analog Circuits, Dynamic Analog Circuits, Data Converter Fundamentals, DAC and ADC?
- [What challenges does Drain-Induced Barrier Lowering (DIBL) pose in dynamic memories?](#)
- [What are the Main Differences between wet and dry oxide growth in CMOS?](#)
- [What is the purpose of contact and via rules in CMOS design?](#)
- [How can you reduce the sensitivity to cross-talk in nodes, such as precharged buses?](#)