

Interview Talking Points – EDA & Verification Ownership

This cheat sheet is tailored for EDA vendor interviews (Siemens, Synopsys, Cadence, Silvaco). It emphasizes sign-off methodology ownership, automation scalability, and customer-facing engineering judgment rather than tool usage alone.

1. Sign-off Ownership (EDA Perspective)

- 1 **Situation:** Customer ASIC programs approaching tape-out with late-stage DRC, manufacturability, and sign-off uncertainty.
- 2 **Task:** Ensure sign-off closure while preserving manufacturability and minimizing customer risk.
- 3 **Action:** Analyzed violation patterns, differentiated rule misuse from process interaction, and worked across design, verification, and foundry interfaces to align sign-off criteria.
- 4 **Result:** Enabled first-time-right tape-outs and improved customer confidence in sign-off methodology.

2. Verification Decision Framework

- 1 Evaluate whether violations indicate local layout issues or systemic rule/process interactions.
- 2 Assess OPC sensitivity, pattern dependency, and lithography margin before recommending fixes.
- 3 Balance closure speed against downstream manufacturing risk and customer re-spin cost.

3. Automation & Flow Scalability

- 1 Designed TCL/Python/SVRF-based automation to standardize sign-off execution across projects.
- 2 Focused on predictability, debuggability, and reuse rather than one-off scripting.
- 3 Approached automation as a productized flow that could scale across customers and nodes.

4. Customer-Facing Engineering Mindset

- 1 Translate complex verification results into actionable guidance for customer design teams.
- 2 Anticipate customer pain points in late-stage sign-off and proactively mitigate risk.
- 3 Align EDA capabilities with real manufacturing and tape-out constraints.

Note: Technical examples are abstracted to protect customer and proprietary information. Focus is placed on decision-making, ownership, and methodology rather than confidential details.