

Interview Talking Points – Manufacturing & Foundry-Facing Ownership

This cheat sheet is tailored for manufacturing-, foundry-, and advanced packaging-facing roles. It emphasizes manufacturability-aware design decisions, OPC/RET considerations, mask data preparation, and risk management across the design-to-silicon interface.

1. Manufacturing-Aware Sign-off Ownership

- 1 **Situation:** Advanced-node designs approaching tape-out with potential lithography, yield, or variability risks.
- 2 **Task:** Ensure sign-off closure while maintaining robust manufacturing margins.
- 3 **Action:** Evaluated DRC/DFM results in the context of OPC sensitivity, process windows, and known silicon behavior; coordinated with mask and foundry teams to align expectations.
- 4 **Result:** Reduced manufacturing risk, avoided re-spin, and improved yield predictability.

2. Lithography, OPC & RET Perspective

- 1 Interpret verification results with awareness of lithography process windows and pattern sensitivity.
- 2 Recognize when rule-clean layout may still present OPC or RET challenges.
- 3 Prioritize fixes that improve lithographic margin rather than cosmetic rule closure.

3. Mask Data Preparation & Tape-out Interface

- 1 Experience collaborating across design, verification, mask, and foundry organizations.
- 2 Ensure mask data integrity and consistency with sign-off assumptions.
- 3 Understand the downstream impact of late-stage design changes on mask schedules and cost.

4. Yield, Variability & Long-Term Robustness

- 1 Evaluate short-term closure decisions against long-term yield and reliability impact.
- 2 Incorporate silicon history and foundry guidance into verification sign-off decisions.
- 3 Favor robust, reusable solutions over narrowly scoped fixes.

Note: Technical examples are abstracted to protect confidential, customer, and foundry-specific information. Emphasis is placed on engineering judgment, risk assessment, and cross-domain collaboration.