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Strategic Feedback for the European Chip Act

- **Current Situation**
Europe's semiconductor share has dropped to ~10% and risks falling to 5% as the global market doubles. Existing European fabs (ST, GlobalFoundries, Intel Ireland) are limited to older nodes (> 10nm), while advanced fabs mainly serve U.S.-based fabless companies.
- **Key Challenges**
 - Building new advanced fabs in Europe is costly, slow, and does not solve the lack of a European fabless ecosystem.
 - Europe has few significant fabless players; recent acquisitions (e.g., Dialog → Renesas) further weaken the base.
 - Workforce shortage and long lead times limit rapid capacity expansion.
- **Strategic Imperative**
 - **Do not focus solely on buying fabs**—this is a short-term fix that fails to address Europe's strategic vulnerability.
 - **Build an ecosystem**: Invest in fabless design companies, talent development, and next-generation technologies.
 - **Leverage strengths**: Europe excels in analog/RF; expand into digital and software design.
 - **Future-oriented R&D**: Prepare for post-4nm technologies (e.g., vertical transistors, 3D stacking) that can be mass-produced at low cost.
- **Action Plan**
 1. **Invest in design talent** through universities and research institutions.
 2. **Support IMEC, LETI, and similar centers** for advanced technology development.
 3. **Create incentives for fabless startups** to grow a European customer base.
 4. Combine **public and private funding** with a long-term vision (10–20 years).

Bottom Line: Europe's strategic autonomy in semiconductors depends on creating a robust design and innovation ecosystem—not just building fabs. Focus on future technologies and talent to regain relevance.