China's Semiconductor Industry Trajectory

Prepared by: Harshit Bisht

Phone: XXXXXXXXXX

Executive Summary

This report provides a comprehensive, data-backed assessment of China's semiconductor industry trajectory, comparing structural gaps with India. It covers production capacity, R&D intensity, talent pipelines, global value chain positioning, market forecasts, and geopolitical risk responses.

Comparative Structural Analysis: China vs India

Key differences in production capacity, R&D, talent pipeline, and government support between China and India.

[Charts and Graphs included in full export]

Semiconductor Value Chain Mapping

China's position across upstream, midstream, and downstream segments is analyzed, highlighting strengths in OSAT and vulnerabilities in design tools and lithography.

Market Forecast and Scenario Modeling

Three geopolitical scenarios forecast China's semiconductor self-sufficiency levels by 2030: Optimistic, Base Case, and Pessimistic.

Geopolitical Risks and China's Policy Response

Analyzing US export controls, China's MIC2025 strategy, Big Fund initiatives, and talent development programs.

References and Data Sources

- WTO Trade Data
- UN Comtrade
- SEMI Industry Reports
- BIS and OECD Reports

- GSA and Bloomberg data

- National Semiconductor Policies (China MIC2025, India ISM)