

East Asia's Tech Frontier: AI, Semiconductors, and Quantum Leaps Reshaping

Technology Trends · Answer Key · 13 Questions

1. Which East Asian nation is projected to significantly increase its AI server manufacturing capacity, controlling up to 90% of the global market by 2025, and is fostering an integrated hardware ecosystem beyond semiconductors?

- A) South Korea
- B) Japan
- C) Taiwan**
- D) China

2. As of early 2025, what percentage of the global AI chip market share is estimated to be held by domestic Chinese chips, and which company is a major contributor to this share?

- A) Approximately 15%, SMIC
- B) Nearly 41%, Huawei**
- C) Over 50%, Intel
- D) Around 25%, TSMC

3. South Korea has outlined an ambitious national quantum strategy. What is the projected total government investment in quantum technology for 2025, representing a significant growth from the previous year?

- A) Over \$100 million
- B) Approximately \$140 million
- C) Exceeding \$250 million**
- D) Around \$300 million

4. Which East Asian country is a pioneer and leader in the robotics sector, continuously investing in R&D for industrial, service, and medical robots, and is expected to see its robotics market reach over \$17 billion by 2033?

- A) China
- B) South Korea
- C) Japan**
- D) Taiwan

5. Taiwan's semiconductor market is experiencing rapid growth, particularly in AI applications. By 2030, AI applications are projected to grow at a CAGR of 9.8%, outpacing all other end-user categories. What percentage of Taiwan's semiconductor market share did integrated circuits hold in 2024?

- A) 70.5%
- B) 86.1%**
- C) 92.3%
- D) 61.0%

6. South Korea's battery industry is a global leader. Which of the following statements accurately reflects the status of Korean battery producers in the global market as of 2024?

- A) Korea leads globally in overseas manufacturing capacity with over 500 GWh, surpassing China and Japan.
- B) Korean firms hold the top three positions globally in battery production capacity.
- C) Korea's EU share of the battery market fell from 78% in 2022 to 61% in 2024, largely due to increased Chinese sales of LFP batteries.**
- D) China is the source for less than 80% of Korea's critical battery materials.

7. Japan's robotics industry saw record orders in Q1 2025, driven by global labor shortages. What was the reported value of orders for industrial robots in that quarter, and what was the year-over-year increase?

- A) ¥280 billion, 10.5% increase
- B) ¥324.5 billion (\$2.2 billion), 14.2% increase**
- C) ¥350 billion, 18.0% increase
- D) ¥295 billion, 12.1% increase

8. The East Asia semiconductor market is forecasted to grow significantly. What is the projected growth in USD for the period 2023-2028, and what is the compound annual growth rate (CAGR)?

- A) USD 75.5 billion, 5.12%
- B) USD 99.54 billion, 6.21%**
- C) USD 120.3 billion, 7.05%
- D) USD 150.1 billion, 8.15%

9. Taiwan is a critical hub for AI hardware. According to a 2026 report, what percentage of global AI servers does Taiwan produce, and which company is highlighted as the lifeline of the global AI hardware supply chain?

- A) Over 80%, ASE Technology Holding
- B) Up to 90%, Foxconn
- C) More than 90%, TSMC**
- D) Approximately 70%, Quanta Computer

10. South Korea is accelerating its national quantum strategy with significant investments. By 2035, what is the projected number of key quantum workforce members the country aims to nurture?

- A) 1,500
- B) 2,000
- C) 2,500**
- D) 3,000

11. China's digital economy is expanding rapidly. By 2025, what is the targeted output of core industries in the digital economy as a percentage of the national GDP, according to the 14th Five-Year Plan?

- A) 8.5%
- B) 10.0%**
- C) 11.5%
- D) 13.0%

12. In the Southeast Asian electric vehicle (EV) market, which country's local manufacturer, VinFast, is noted for its significant contribution to EV sales, and what was the overall YoY growth for SEA's EV sales in Q2 2025?

- A) Indonesia, 95% YoY
- B) Thailand, 110% YoY
- C) Vietnam, 102% YoY**
- D) Singapore, 88% YoY

13. Taiwan's advanced semiconductor packaging market is highly competitive. In 2025, which company led the market with over 26.5% share, and what was the collective market share of the top five players?

- A) Amkor Technology, 65.2%
- B) JCET Group, 70.1%
- C) TSMC, 74.9%
- D) ASE Technology Holding, 74.9%**