

Balancing Investments in Test Equipment with Capital Spending

Reduce Capital Expense and Ownership Costs with Smart Sourcing



Balancing Capital Costs and Investment

The widespread use of semiconductors has significantly improved our society, making them essential and ubiquitous. The U.S. semiconductor industry is one of the most advanced, holding a 50.2% global share in 2023 with \$264B in sales. In 2023, U.S. companies invested more than \$60.2B in R&D, about 20% of revenue, the second-highest investment percentage among major U.S. industries.

Despite global challenges, the semiconductor industry has shown resilience, adapting to supply chain disruptions and economic uncertainties. As always, this industry faces the continuous challenge of increasing production to meet demand without the excesses or overproduction seen in past boom periods.

Rising costs and external disruptions have not deterred the industry from investing in the future. It continues to balance capital spending, operational efficiency, and investments in test equipment for R&D and manufacturing.

This whitepaper explores how alternative sourcing methods for essential test equipment can help companies address these investment challenges. We present an agile approach to equipment sourcing that controls capital costs while providing access to the latest test instruments from top manufacturers. This approach offers flexibility and agility to seize market opportunities.



A Smart Approach to Sourcing

Though many semiconductor manufacturers habitually purchase test equipment, a thorough analysis of all acquisition alternatives can reveal more cost-effective, convenient, and flexible strategies. Rising costs and technological uncertainties support the case for more informed equipment sourcing.

Scenarios to Consider

1. **Meeting Sudden Increases in Demand:** Rapid demand increases can require additional equipment, which may become redundant if demand decreases. Flexible solutions like rental and leasing can mitigate this risk. Renting reduces capital spending by eliminating up-front costs and avoiding disposal costs. It also includes maintenance and repairs, reducing downtime and enhancing project flexibility.
2. **Managing Capital or Budget Restrictions:** Fabless start-ups and smaller IC design houses face financial pressures and benefit from equipment rental strategies that avoid up-front capital costs. Renting spreads expenses over multiple funding cycles, more closely aligning with their needs.
3. **Addressing Unexpected Testing Requirements:** Changes in technical standards or project needs may require additional equipment mid-project. Renting can bypass lengthy capital expenditure requests and procurement processes, avoiding delays and unnecessary purchases.

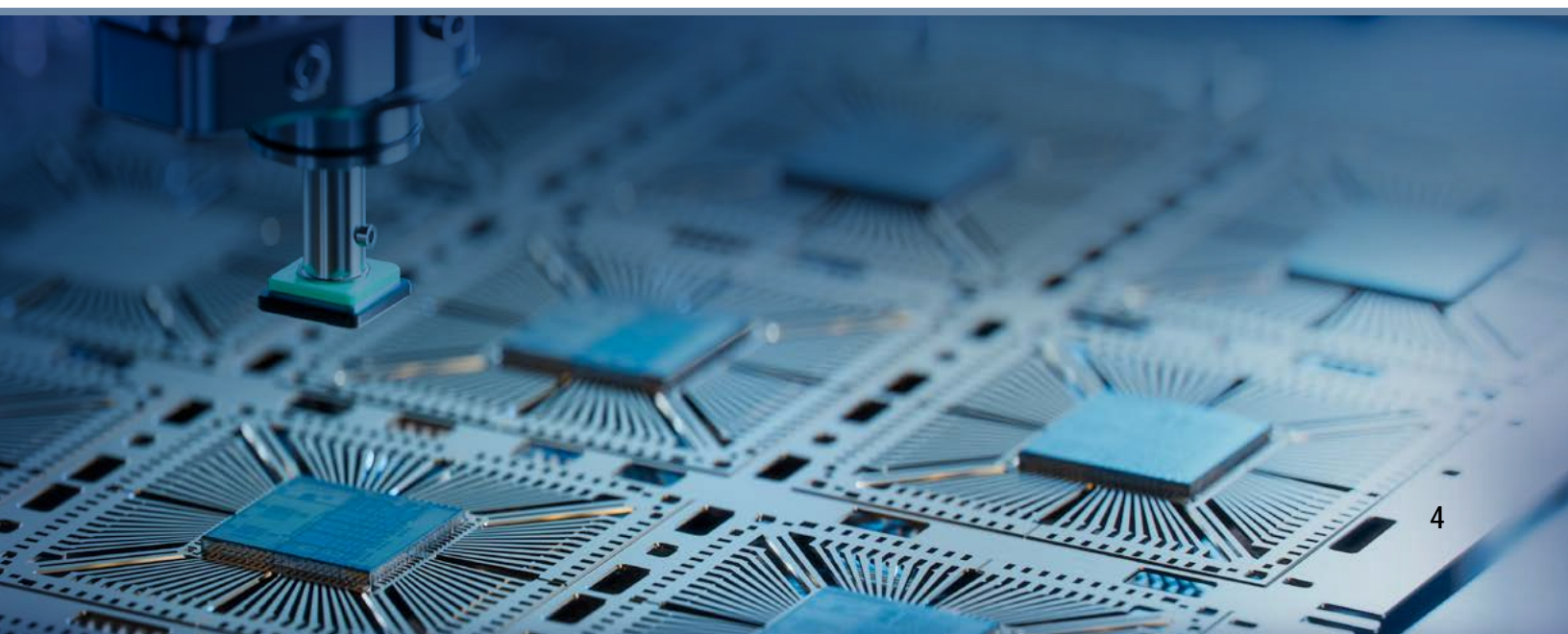


The Benefits

Adapting to the rapid pace of technological advancements, especially in embedded interfaces and wireless communication, is crucial. Alternative sourcing options reduce up-front expenses and ongoing ownership costs, aligning equipment investments with actual needs rather than equipment purchases by default or habit. This approach enhances operational efficiency, cost reduction, and project flexibility.

Unlock Value with Asset Optimization

Improving operational efficiency starts with understanding your test equipment inventory and usage. Detailed data on equipment specifications, service history, and utilization metrics can inform better decisions. Strategies might include purchasing, renting, or leasing new and preowned equipment while divesting obsolete assets. Regular audits and utilization measurements help determine true equipment needs, significantly improving utilization levels and reducing unplanned purchases by up to 70%.



Conclusion

Leading companies rely on Electro Rent to gain a financial and technical edge in testing. With more than five decades of experience managing the world's largest rental fleet, we help companies reduce equipment costs, improve operational efficiency, and speed time-to-market. Our extensive inventory and flexible finance options reduce up-front costs and capital spending, keeping pace with technological change.

*Contact us to learn more.
Our sales consultants
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can help you understand
your options and inform
your decisions.*

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