We initiate our report on Technoprobe S.p.A. with a Hold recommendation and a target price of €15.05 within 12 months. The price target is valued based on the *Discounted Cash Flow* method and is adjusted based on the market sentiment of future macroeconomic scenarios. Even if the company has a sound economic situation with sustainable growth potential, it is also highly sensitive to market volatility and industry sentiment. In light of this, the report will focus on both the company's financial soundness and all the economic risks related to it.

SUMMARY

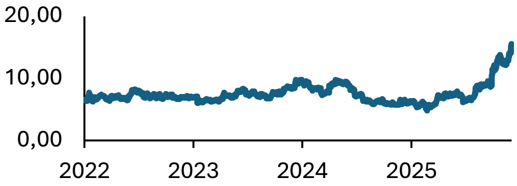
COMPANY	Technoprobe
EXCHANGE	Euronext Milan
TICKER	TPRO-IT
INDUSTRY	Semiconductor
RECOMMENDATION	Hold
PRICE AS OF 14.01.2026	€14.09
TARGET	€15.05 (+6.8%)

Technoprobe is an Italian company based in Lombardy that designs and produces advanced, highly innovative chip testing technologies known as Probecards for the world's leading semiconductor manufacturers. These technologies are primarily used in the computer, smartphone, 5G, IoT and automotive industries. The company operates in Italy and ten other nations located in Europe, Asia and America through its twenty subsidiaries.

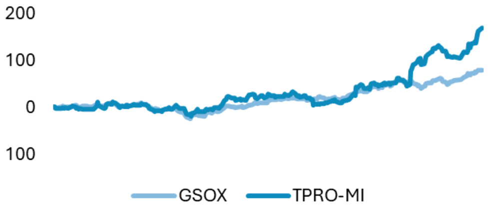
Strong Fundamentals, ready for the next Market Upswing

Technoprobe's solid financial statements, competitive advantages together with the industry's strong entry barriers will sustain the company's long-term growth while the industry's volumes and future performance will determine the company's growth rate.

Technoprobe has spent time building solid financial grounds and is now starting to distinguish itself from the rest of the market. Technophobe's YoY return is now outperforming the industry's main index (GSOX) by 90 basis points, gap which symbolizes the firm's potential.



TPRO - MI

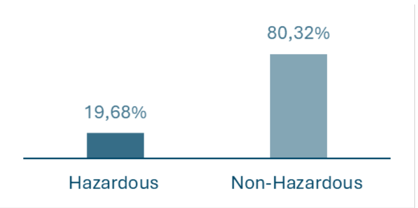


Environmental, Social, Governance

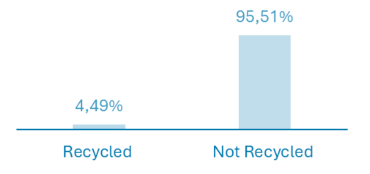
Buildingblocks of Technoprobe's business

Technoprobe has been strengthening its market position through a constant improvement in its ESG position. The company has in fact adopted the latest *Environmental Management System (EMS)* in accordance with *ISO 14001/2015*. The concern has also joined, on a voluntary basis, the *Climate Change and Water Security Program* of the *Carbon Disclosure Project (CDP);* a global disclosure system through annual questionnaires, for the management of environmental impacts.

Waste management



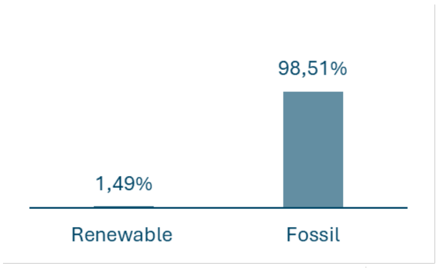
Waste classification for 2024, expressed in (%)



Given the nature of Technoprobe's operations, the company has to manage special types of waste that range from normal office waste to substances of very high concern (SVHC). The company production sites are equipped with dedicated areas for the temporary storage of special waste in order to prevent any form of pollution of the soil or aquifers. Technoprobe has very strong incentives to reduce and recover as much waste as possible due to the presence of precious and expensive materials in the waste mass. Despite those incentives, the amount of recycled waste remains low because of the singularity and complexity of the scrapings. The water supplied for the production process is mainly used for washing or dilution activities, which amount is negligible and nevertheless disposed of according to local environmental laws and will therefore not be discussed in this report.

Energy management

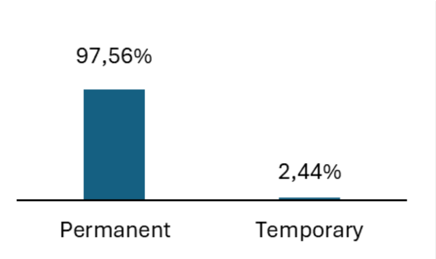
Energy consumption is one of the main environmental aspects considered by the organization. Given the rapid and continuous company growth in terms of productivity, new buildings and consequent energy consumption, from 2021 Technoprobe has voluntarily appointed an Energy Manager with the aim of deepening the analysis of energy consumption and evaluating possible efficiency actions. The company decided not to acquire Certificates of Guarantee of Origin related to the supply of energy from renewable sources, therefore declaring the overall energy purchased as non-renweable as it cannot refer to the renewable component of the national energy mix. The only 1,49% of renewable energy was self-produced by the company through its own photovoltaic system.



Energy mix of total energy consumption in (%)

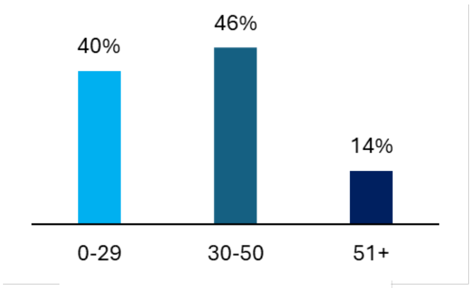
Social

The constant search for personnel leads the company to prefer hiring policies aimed at young people. Young resources, in fact, satisfy (according to Technoprobe) the growing need for technical skills, tend to be more flexible and innovative, inclined towards training, updating and digitalization. The company assures itself a constant flow of new young workers through its strategic relations with high schools, universities and research centers as frequently stated on its sustainability reports.



Type of contract, expressed in (%)

To maintain its positions competitive and attractive, the company started corporate welfare plans that allow employees to access free services like tax and legal advice, economic support for workers with newborns, and the possibility to spend their performance bonus tax free via a specific internal platform that converts monetary bonuses in services/goods, therefore increasing their purchasing power. Furthermore, most of Technoprobe's work positions are built to be covered permanently, thereby improving the worker-company relations.



Total employees by age class, expressed in years

Technoprobe's total workforce is composed by 64% Men and 36% Women. The gender pay gap has been quantified by the company and lies at 29%, which in absolute terms translates in an hourly remuneration of €20,61 for men and €14,63 for women. This wide gap can be explained by the fact that the skills required by the sector in which the group operates are mainly to be found in the STEM fields. According to the company the disciplines included in this area still suffer from a gender disproportion in favor of men.

	♂	♀
Total Employees	**64%**	**36%**
Managers	71%	29%
Senior exec.	80%	20%
Employees	70%	30%
Technicians	58%	42%

Total workforce classification, expressed in (%)

Governance

Technoprobe's governance structure is built with ESG values as a structural element of the strategic decisional processes, this structure sends indeed constant updates on ESG risks and opportunities to the board of directors. Three internal Board committees assist the Board of Directors:

- Control, Risk and Sustainability Committee
- Nomination and Remuneration Committee
- Related Parties Committee.

The company computed the annual total remuneration ratio of the highest paid individual to the median annual total remuneration for all employees, which amounts to 69,11.

Ethics and Compliance

Technoprobe's business is based on the principles of integrity, honesty, commercial transparency and complete compliance with the law, as contained in the Code of Business Conduct. The code represents a guideline for the activities carried out within the company, which all internal stakeholders are required to comply with. Every supplier must comply with the company's Supplier Code of Conduct, a document approved by the board of directors with the goal of safeguarding human rights and environmental regulations in highly sensitive regions where the extraction of raw materials takes place. Suppliers must therefore diligently cooperate with Technoprobe to determine the origin of the materials and ensure that the final products supplied to the company are DRC-conflict free. It also constitutes a supplier's obligation to certify their supply chain with the Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas contained in the OCSE Guide.

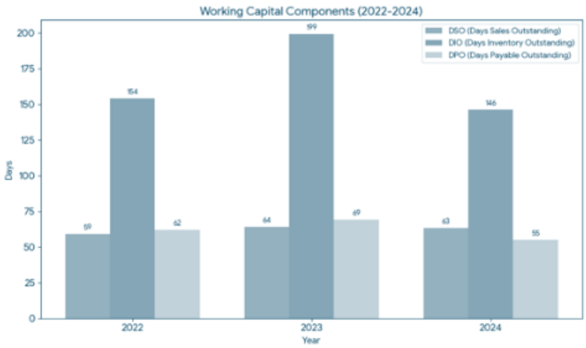
Strategic and Financial Analysis

Strategic Transformation and the AI Pivot

From 2021 to 2024, Technoprobe underwent a fundamental evolution from a high-margin niche leader into a vertically integrated global power in the semiconductor testing industry. This period was defined by a deliberate "strategic sacrifice," where the company accepted temporary margin compression to secure long-term dominance in the rapidly expanding Artificial Intelligence sector. The year 2024 served as the turning point for this transition, marked by the acquisition of the Device Interface Solutions (DIS) division from Teradyne, a strategic alliance cemented by the latter acquiring a 10% stake in Technoprobe. This move, combined with the full consolidation of Harbor Electronics, shifted Technoprobe's growth engine from purely organic development to a model of aggressive inorganic expansion. By integrating these businesses, the company has transformed into a full-system interface provider, allowing it to capture significantly more value across the "Final Test" market for complex AI logic chips and High Bandwidth Memory.

The Complexity of Margin Compression and Cost Structure

The transition into a vertically integrated model has introduced significant operational complexity and temporary pressure on profitability. Gross margins, which historically sat near 60% due to the proprietary nature of core probe cards, declined to 41.1% in 2024. This dilution is primarily a result of the newly acquired PCB and interface board businesses, which operate with higher manufacturing costs than Technoprobe's original core business. Furthermore, the core NOPAT margin dropped from 29.9% to 7.4%, indicating that operating expenses—specifically R&D and global administrative scaling—have outpaced revenue growth during this integration phase. However, the company's massive liquidity acted as a financial buffer during this period, together with €11.9M in foreign exchange gains, as net financial income from cash reserves contributed significantly to the bottom line, mitigating the impact of declining manufacturing margins. The 2024 net profit faced a high effective tax rate of 35.27% and suffered in comparison to 2023 because a €31.3M one-time Patent Box benefit did not recur.



Financial Health and the "War Chest" Strategy

Technoprobe's balance sheet reflects a "counter-cyclical" philosophy, emphasizing extreme safety and massive liquidity. Total assets nearly tripled in four years, reaching over €1.4 billion by the end of 2024, with Property, Plant, and Equipment (PP&E) rising to €295M. A critical component of this growth is a massive accumulation of cash, which totaled €666.4 million by year-end, representing nearly half of the company's total assets. This "war chest" was largely built through a €384.7 million capital increase, providing the group with total strategic autonomy and the ability to fund massive investments without touching bank debt. The capital structure remains exceptionally robust, with shareholder equity accounting for 87.8% of the balance sheet, which caused the Market-to-Book ratio to compress from 6.36x (2023) to 3.03x (2024). While this high level of capitalization led to a market re-rating and compressed valuation multiples in the short term, it ensured the company could navigate the industry downturn of 2023–2024 with zero financial distress.

Investment Efficiency

Technoprobe is currently traversing what can be described as an "investment valley," where efficiency metrics have been diluted by the influx of new capital and assets. Return on Equity (ROE) and Return on Invested Capital (ROIC) have both seen a downward trend, with ROE falling to 5.2% and ROIC dropping to 7.1% in 2024. These figures reflect a company that is currently "over-capitalized" for its present earning level as it works to synchronize its new business units. The cost structure has shifted heavily toward production, with the Cost of Goods Sold rising to nearly 59% of revenue. Despite these pressures, the company has maintained its commitment to innovation, with R&D spending reaching an all-time high of over €63 million to support the next generation of AI-driven testing solutions.

Operational Risk and Working Capital Dynamics

From a risk perspective, Technoprobe is positioned in a "Safe Zone" with an exceptionally high Altman Z-Score (22.28) and a Current Ratio exceeding 8.0x. Working capital management has evolved to match the company's new global scale, characterized by significant inventory buffers meant to protect against supply chain volatility and higher Trade Receivables (€118.8M), which reflect a client base of global Tier-1 players who demand longer payment terms. Interestingly, the cash cycle shortened to 154 days in 2024, showing that the company has become faster at recovering liquidity from its production cycle. Additionally, strong bargaining power with suppliers allows Technoprobe to maintain high levels of trade payables, essentially utilizing nearly two months of "interest-free financing" to further bolster its massive cash position.

Future Outlook

The strategic investments made during 2023 and 2024 have positioned Technoprobe to disproportionately benefit from the AI-led recovery starting in 2025. Recent financial data confirms that the "efficiency gap" is closing, with EBITDA margins already rebounding toward 31% as synergies from the DIS Tech acquisition begin to materialize. The 2026 forecast is particularly promising, as the full-scale rollout of the FusionLink architecture will move Technoprobe from a component supplier to a full-system provider. While AI and Consumer (PC/Smartphone) markets lead the recovery, the Automotive and Industrial segments are expected to remain soft until mid-2026 due to inventory corrections. As AI chips transition to advanced packaging, the increased "test intensity" will allow the company to sell high-complexity, high-margin solutions. Consequently, the negative Free Cash Flow seen during the heavy reinvestment phase of 2024 is expected to reverse, returning Technoprobe to its historical status as a self-sustaining cash generator, with the Q4 2025 targets being €160M in revenue and a Gross Margin of 46%.

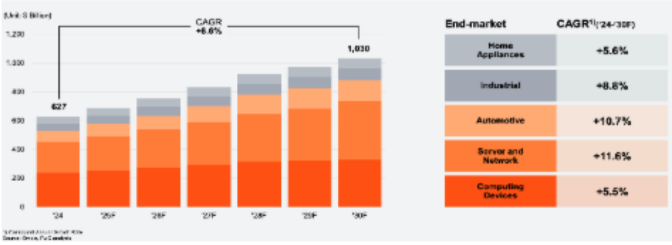
Business Strategy

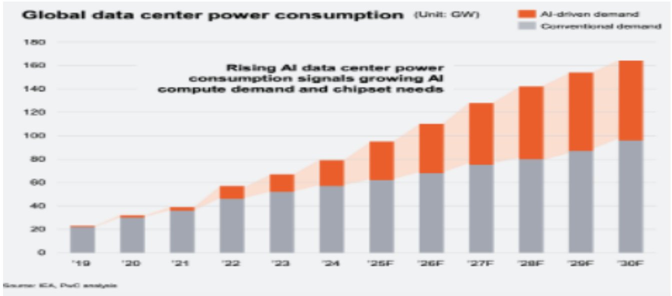
Technoprobe undergoes a technologically-advanced and vertically integrated business model in the semiconductor test interface division, carrying them to a leading position in the semiconductor segment. The company designs and manufactures probe cards: an electromechanical interface that allows testing the functioning of a chip when it is still on the wafer before being individually packaged. Note that Probe cards provide yield insurance, by testing individual chips on a wafer early in production and identifying faulty devices, which prevents further costly processing acts like packaging. Technoprobe strengthens customer loyalty through co-development projects and strategic partnerships, benefitting from selective M&A deals to expand its technological proficiency and diversify their portfolio, for better revenue diversification and therefore less dependency on one segment cycle (see Image 1 Apx – Wafer Composition).

Adaptation to the Future

Because of the structural trends undergoing in the industry, the company is shifting from a cycle-driven probe card supplier to an AI-led capacity-constrained growth, with HBM as a long-dated agility and operational leverage as the key earnings driver. They are therefore looking forward to double their actual capacity within the next 24 months, which is now at 90% of utilization, leading to a higher CapEx (estimated around €100m plus €40-50m depending on future scenarios), signaling strong confidence from the management in sustained demand. They also protect IP by keeping the “front end” (needle/probe head manufacturing) in Italy, while the “back end” (final assembly/repair) can be global. Enabling to strengthen the “how to win” adv antage, turn strategy into results faster.

Technoprobe has a complete exposure behind its probe cards (100% in FY 2024). Which is great to capture upside in wafer testing, but on the other hand exposes them to concentration risk and customer dependence because of the limited business diversification. In addition to that they have a well balanced geographical exposure between Asia and America, confirming that Europe isn’t a demand center for wafer production. With growth coming from Asia and America the company is positioned where wafer production activity is intensive, but is still exposed to geopolitical risks and trade restrictions.





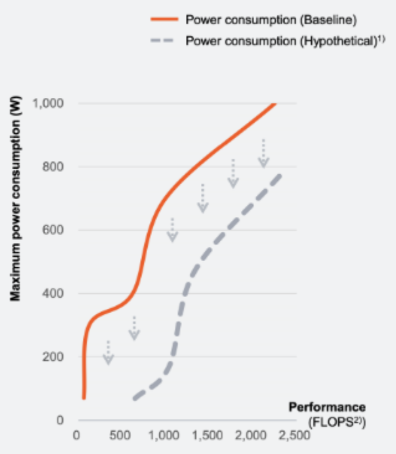
Source: IEA, PwC analysis

Semiconductor Cycle

We are convinced that the semiconductor cycle will remain cyclical, although the cycle is becoming less consumer-dependent and more affected by fundamental demand. By being inserted in multiple end markets, the semiconductors industry creates more demand cycles happening at the same time.

After entering a pronounced down-cycle in late 2022 and 2023, which was marked by weaker global semiconductor sales seen in every major testing company (Technoprobes full year sales sunk 25%), reducing wafer starts and test intensity, the industry is projected to flourish (Figure: Global Semicounductor demand by end-market) and growth is anticipated to become more structural. This illustrates a technology-driven expansion and a multi-year Capex. The growth is lead by Server & Network, which is driven generative AI and the need for GPU, CPU, AI accelerators and HBM. As noted by PwC: “With the rising demand of AI global data centers are expected to more than double their power consumption by 2030”, which will make the cycle more infrastructure led, than consumer driven. Followed by the automotive industry, where growth is driven by various factors like the Ev penetration or the autonomous driving, leading to a higher semiconductor content per vehicle. It is also important to include the industrial demand. PwC quoted that, “Semiconductor are helping to revolutionize a wide variety of industrial sectors.” Especially in agriculture and renewable energy where CAGR is set to reach 17.3% and 13.4% (2024-2030).

Data center GPU power consumption



1) The average power consumption of GPUs is expected to decrease in the long term, driven by architectural advancements, AI model optimization, and stricter energy regulations.
2) FLOPS(Floating Point Operation per Second: A measure of floating-point computations used as a performance metric for high-performance computers.
Source: PwC analysis

The semiconductor industry is also paying more attention to advanced packaging, system level performance and heterogeneous integration; all variables that increase complexity over time, contributing to more test intensity. On the other hand, the cycle also faces various risks:

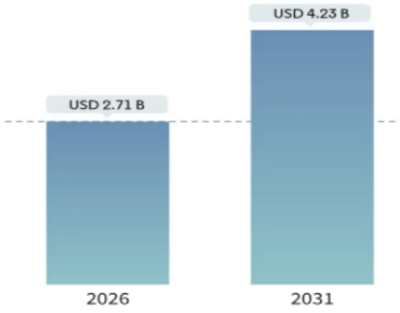
1) Geopolitics and exports control: creating a risk for economic partnerships and restrictions on important materials.
2) Supply chain fragmentation: producing inefficient and higher Capex needs.
3) The costs and power constraints of AI: enlarging power and cooling costs.

Overall, we firmly believe, that the cycle is shifting similar to the Ai cycle, towards a higher-complexity, higher-performance profile. This increases strategic significance of advanced testing and stability across the whole value chain and Edge Ai expected to boost consumer exposure.

Probe Card Market

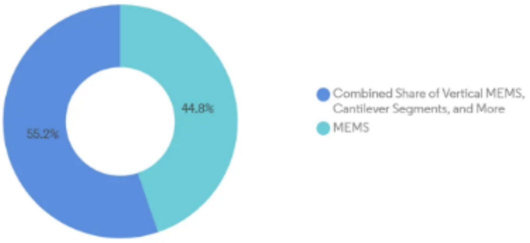
The probe card market shows a structurally supported segment of semiconductor capital equipment, thanks to government-led fab expansion, rising inspection concentration at advanced nodes, and the shift toward advanced packaging. As shown by Mordor Intelligence: The global market size reached USD 2.71 billion in 2026 and is projected to grow to USD 4.23 billion by 2031, expecting a 9.31% CAGR. Government subsidies in the U.S., Europe, Japan, and the Middle East, are enabling reduced construction times for semiconductor fabs (~24 months), which indicates that they need to buy testing equipment (probe cards) earlier and in larger units. Notably, the demand for probe cards isn’t supported by the quantity of end-device shipment volume, but by how complex each chip has become. The complexity of the chips makes them increasingly difficult to test, This incorporates the use of MEMS-based probe cards (Figure: 44.8% of 2025 revenue), as they have superior power delivery, pitch accuracy, and signal integrity beyond 56 GHz. In the rear to sum up, the market is still dominated by a few established suppliers because it is very expensive and time-consuming to develop advanced probe cards. This helps existing players to keep their position, which needs to be executed very well, because technology changes are very quick.

Probe Card Market
Market Size in USD Billion
CAGR 9.31%



Source : Mordor Intelligence

Probe Card Market: Market Share by Technology, 2025



Structural Trends

AI is ramping up fast, it makes up of 35-40% of Technoprobes revenue in 2025, with estimates from the management board that rise up to 45-50% for 2026, this shows how AI is becoming the dominant revenue driver. Consumer markets displays marginal growth, although management expects the real momentum to come from Edge AI adoption, which demand is already integrated in current volumes. Another important factor is the rising of ASIC complexity, they are moving from legacy probe technologies to more high-level solutions, developing marginal gain fro Technoprobe beyond GPU testing. Last but not least is the emerging opportunities created by HBM, Technoprobe is already being qualified by one customer in the HBM sector and it expects to execute qualification with the remaining major players by H1 2026, positioning the company for future engagement in high-growth memory testing (see Graph 1 Apx – Relevant Events).

Major Players in the Probe Cards Market

Competition is driven by technological performance, qualification status, delivery capability and customer relationships. Technoprobe, together with Micronics Japan and FormFactor control roughly 60% of the Probe Card revenue, which places the market in a concentrated brand. FormFactor, which happens to be their main peer, also supplies probe cards for leading-edge logic and memory-applications. Additional competition arises from specialized probe card manufacturers in Asia, the most known being Japan Electronics Materials (JEM). Because of the velocity of the AI development, Technoprobe is moving beyond and expanding into final test interfaces like device interface boards (DIBs), which will expose them to new competitors. Overall, the competitive landscape is focused on a small number of qualified suppliers due to high technological complexity and long customer qualification cycles.

Barriers to Entry

The Semiconductor industry is a niche-segment with high barriers to entry, triggered by technological complexity. The technical requirements for wafer testing and the production of Probe cards are particularly stringent (especially for high-speed applications and fine-pitch), which restricts the number of qualified suppliers. In addition to that, probe cards are designed to respect and satisfy each customer's individual needs regarding their chip layout and test requirements. They need to undergo strict customer qualification and validation, which can create strong switching costs because of high risk of downtime and material waste. What makes the market even more niche are the long-term-relationships built between suppliers and customers, where these alliances depend on consistent performance and on-time delivery, generating high switching costs. In Short, Probe cards need a heavy R&D investment because they need sustained spending on materials and process know-how, to remain competitive across technology shifts and the "AI race". This raises fixed costs and limits participation establishing the need for high capital.

Comparison with FormFactor

In comparison to FormFactor, Technoprobe is expected to surpass them with increased revenues in FY2 (T = 747.3m F = 743.3m) and having a greater EBITDA margin in FY1 (T = 32.2% F= 17.5%) as FY2 (T = 35.9% F = 20.2%). On a financial basis, Technoprobe distinguishes from FormFactor for their lower valuation on EV/EBITDA, trading at a discount on an operating basis. This can show how the market still keeps an eye on risk discounts around cyclicality. Simultaneously Technoprobe leads on equity multiples (P/S and P/B), advising that investors are expecting stronger growth and higher observed strategic value connected to AI leadership and emerging HBM opportunities. Last but not least, it's important to notice that FormFactor's historical leadership has been challenged as Technoprobe's fully integrated MEMS tip production enabled it to capture around 30% of TSMC's 2nm qualifications.

Market Shares

Technoprobe is one of the leading global suppliers of probe cards, operating in a market characterized by high technological barriers and customer qualification requirements that limit the number of scaled competitors. The company holds a particularly strong position in the Vertical MEMS segment, which benefits from structural growth drivers such as AI/HPC, HBM adoption, and advanced packaging trends that increase test complexity and value-add per interface. Market share leadership in high-performance probe cards strengthens Technoprobe's competitive positioning by supporting pricing power, scale efficiencies, and customer stickiness, and provides a foundation for expansion into adjacent final test interface solutions.

Key Investment Drivers

Revenue Growth Drivers

Technoprobe's revenue growth is supported by the structural expansion of the global semiconductor industry. As wafer production increases, demand for probe cards rises accordingly, as every wafer must be tested. Beyond volume growth, increasing chip complexity at advanced technology nodes and in advanced packaging applications raises the technical content, price, and replacement frequency of probe cards. These segments are expected to grow, allowing Technoprobe to outperform the broader market. As a result, the company has historically delivered revenue growth of approximately 12–15% CAGR, supported by more than 60% exposure to advanced nodes. Once qualified on a production line, which is a process requiring 12–24 months, probe cards suppliers are rarely replaced due to high switching costs. Capacity expansions at existing customers therefore translate into recurring demand. The company's global manufacturing and R&D footprint enables efficient scaling and supports resilience across semiconductor cycles (see Graph 2 Apx – Revenue Growth vs. Market).

Margin Drivers

Technoprobe's margins are driven by its technological leadership, customizable product mix, and operating leverage. Advanced and highly customized probe cards command premium pricing and face limited competition, supporting structurally high margins. The company's leadership in MEMS-based probe cards and advanced packaging enables sustained pricing power due to proprietary know-how, long qualification cycles.

As a result, Technoprobe consistently achieves gross margins of approx. 55–60%, EBITDA margins of approx.30–35%, EBIT margins of approx. 25%, all above sector averages. Serving a limited number of top-tier foundries and IDMs further protects margins, as these customers prioritize performance and reliability over price. Operating leverage provides additional margin support. High fixed costs in R&D and manufacturing mean that incremental revenue growth translates into disproportionately higher operating profits as capacity utilization increases.

A conservative financial structure and strong internal cash generation allow continuous R&D investment without margin dilution (see Graph 3 Apx – Profitability Vs.

Cash Flow Generation & Capital Allocation

Technoprobe's strong and recurring cash flows due to the consumable nature of probe cards and its capital-light business model. High margins, limited working capital needs, and disciplined cost control allow 65% to 75% of EBIT to convert into free cash flow. Cash is primarily reinvested into R&D and further expansion to maintain leadership. The company follows a conservative M&A strategy, targeting small but innovative acquisitions enhancing technology or geographic reach while avoiding intensive transactions, as evidenced by the acquisition of Harbor in 2023 and DIS Tech in 2024, strengthening Technoprobe's capabilities in advanced probe card solutions and testing technologies without increasing leverage or compromising financial flexibility. Excess cash is used to maintain a strong financial position, with net debt / EBITDA ≤ 0, ensuring flexibility also through downturns. Negative financing cash flow suggests that surplus liquidity may be returned to shareholders through dividends. This approach supports self-funded and sustainable growth with ROIC above 20%.

Competitive Advantages

Technoprobe operates in a specialized but competitive market with a limited number of global probe card manufacturers. Evidence of competitive intensity is reflected in the increase in cost of revenue to 58.9% of sales in 2024 (from 51.3% in 2023), partly driven by integration costs, higher depreciation, and manufacturing complexity While high barriers to entry, long qualification cycles, and switching costs mitigate the risk of rapid displacement, sustained competitiveness depends on continuous innovation and disciplined execution. While Technoprobe itself it has only one principal competitor, between 11% - 13% of their revenue go towards R&D. Given that customers typically diversify their sourcing across multiple probe card suppliers, on-time delivery and stringent quality control are critical differentiating factors for leading players in the sector. As the company itself highlights, any error or disruption in the production process can result in yield losses and production downtime for customers, potentially leading to long-term revenue loss and reputational damage, which would be particularly detrimental for a market leader such as Technoprobe.

Key Risks

Semiconductor Cylce Risk

Technoprobe is exposed to the cyclical nature of the semiconductor industry, where phases of strong demand are followed by strict inventory corrections and reduced wafer starts. This cyclicality is visible in margin volatility: EBITDA margin declined from 30.0% in 2023 to 25.1% in 2024, despite revenue growth of +32.7% year over year to €543m, reflecting cost absorption pressure during rapid capacity expansion and consolidation changes. The risk is partially mitigated by the consumable nature of probe cards and exposure to advanced technology nodes. Operating cash flow remained strong at €124m in 2024 (vs. €62m in 2023), indicating resilience even during margin normalization phases However, in a severe downturn, reduced wafer starts would still negatively affect volumes and profitability.

Even during industry downturns, Technoprobe must maintain a strong competitive position. For this reason, the company keeps R&D spending structurally elevated throughout the semiconductor cycle. Continuous investment is required to remain aligned with leading-edge chip technologies and to ensure readiness when industry demand recovers. Management therefore prioritizes reinvestment in new materials and equipment, even if this entails writing off or underutilizing existing assets, as technological lag could materially impair revenues, customer relationships, and long-term positioning.

Competitive Risk

Technoprobe operates in a specialized but competitive market with a limited number of global probe card manufacturers. Competitive pressure is highest at advanced technology nodes and in advanced packaging, where customers demand rapid innovation and high reliability. Evidence of competitive intensity is reflected in the increase in cost of revenue to 58.9% of sales in 2024 (from 51.3% in 2023), partly driven by integration costs, higher depreciation, and manufacturing complexity While high barriers to entry, long qualification cycles, and switching costs mitigate the risk of rapid displacement, sustained competitiveness depends on continuous innovation and disciplined execution. While Technoprobe itself it has only one principal competitor it is still constantly under pressure. Given that customers typically diversify their sourcing across multiple probe card suppliers, on-time delivery and stringent quality control are critical differentiating factors for leading players in the sector. As the company itself highlights, any error or disruption in the production process can result in yield losses and production downtime for customers, potentially leading to long-term revenue loss and reputational damage, which would be particularly detrimental for a market leader such as Technoprobe.

Concentration Risk

Technoprobe serves a limited number of Tier-1 customers, reflecting the high concentration of global wafer production among leading foundries and integrated device manufacturers. This concentration exposes revenues to order volatility if a major customer delays production or reduces probe card replacement. Geographically, over 92% of revenues are generated in Asia and the Americas (46.8% and 46.1% respectively in 2024), highlighting exposure to investment cycles of a small number of large semiconductor players. While customer relationships are long-term and supported by high switching costs, short-term revenue visibility remains sensitive to customer investment decisions (see Graph 4 Apx – Revenue Percentage).

Capital Intensity & Operating Leverage

Technoprobe operates in a highly technology-intensive segment where continuous innovation is critical to maintaining competitiveness. In 2024, the company invested €63.4 million in R&D, representing 11.7% of revenues, highlighting the structural importance of sustained innovation at advanced technology nodes and in advanced packaging. R&D spending is primarily directed toward the development of next-generation MEMS-based probe cards such as advanced materials, process engineering (qualified personel, custom (in house) machinery) and testing solutions tailored to leading-edge chip architectures. Failure to deliver timely and competitive solutions, or delays in R&D execution, could result in lost design wins. Given the long qualification cycles typical of semiconductor manufacturing, unsuccessful development efforts may have persistent adverse effects on revenues and margins over multiple production cycles, particularly at leading-edge nodes where competitive intensity is highest (see Graph 5 Apx – Technology Percentage Revenue)

Technology and Innovation Risk

Although probe card manufacturing is less capital-intensive than front-end semiconductor fabrication, Technoprobe still requires substantial fixed investments. Capital expenditures reached €94m in 2024, driven by manufacturing expansion, R&D infrastructure, and integration of DIS Tech. The company exhibits high operating leverage: operating profit declined from 19.5% of revenue in 2023 to 12.4% in 2024, despite strong top-line growth, reflecting the limited short-term flexibility of fixed costs such as R&D, personnel, and production infrastructure. In a downturn, this cost structure could amplify margin compression.

Clients and End Market

Clients

Technoprobe's clients consist primarily of leading global semiconductor manufacturers operating at advanced technology nodes, including major foundries and integrated device manufacturers such as TSMC, Samsung Electronics, and Intel. These customers are responsible for the design and high-volume manufacturing of logic and memory semiconductors and represent the largest contributors to global wafer production and industry capital expenditure. The financial statements show that Technoprobe generates the majority of its revenues in Asia and the Americas, which together account for over 90% of total revenues in recent periods, reflecting the geographic concentration of leading semiconductor manufacturing hubs and Tier-1 customers. This concentration mirrors the highly consolidated structure of the semiconductor industry, where a limited number of large players dominate advanced-node production. Client engagements typically involve close technical collaboration during early chip development phases, followed by long and complex qualification processes before probe cards are approved for high-volume manufacturing. As disclosed in the Directors' Reports, probe cards are considered consumables whose lifecycle is linked to a specific chip design and production process. Once qualified, probe cards are deeply embedded in customers' production lines, resulting in high switching costs and long-term supplier relationships, but also increasing Technoprobe's short-term sensitivity to changes in production volumes or investment plans at key customers (see Graph 6 Apx – Clients Percentage Location and Graph 8 Apx – End Market Exposure by Application).

Logic & Advanced Computing

Logic and advanced computing represent Technoprobe's core end market, as reflected by the company's strong exposure to advanced technology and customized probe card solutions. These semiconductors are characterized by high transistor density, complex multi layer architectures, stringent performance and yield requirements, which significantly increase the technical complexity of wafer-level testing. According to the company's disclosures, demand in this segment is supported by structural trends such as artificial intelligence, cloud computing, and high-performance data processing. These applications require highly sophisticated probe cards with greater technical content and shorter replacement cycles, supporting higher average selling prices and recurring demand. As a result, logic and advanced computing constitute a structurally attractive end market for Technoprobe, with lower commoditization and stronger pricing dynamics compared to mature-node applications.

Automotive & Industrial

Technoprobe serves automotive and industrial semiconductor applications, which are characterized by stringent reliability requirements, long product lifecycles, and rigorous qualification standards. These semiconductors are used in applications where failure rates must be minimized, resulting in extensive testing requirements and longer qualification processes compared to consumer electronics. Compared to consumer-driven markets, automotive and industrial applications exhibit more stable long-term demand profiles. Structural trends such as increasing semiconductor content per vehicle, electrification, advanced driver-assistance systems, and industrial automation continue to support growth in this end market. Higher quality and reliability standards favor advanced and customized probe card solutions, aligning it well with Technoprobe's technological capabilities.

Memory

Technoprobe also serves the memory semiconductor market, including DRAM and NAND flash used in data centres, enterprise storage, and consumer electronics. Memory devices are produced in very high volumes and require extensive wafer-level testing to ensure functionality, reliability, and performance, generating consistent demand for probe cards throughout the production cycle. Financial disclosures indicate that memory-related revenues are more exposed to semiconductor cycle volatility and pricing pressure than logic. However, ongoing increases in memory density, higher performance requirements, and the transition to more advanced memory architectures continue to raise testing complexity. As a result, despite higher cyclicality, the memory segment remains a meaningful contributor to Technoprobe's revenues, supported by recurring testing needs and continuous technology upgrades.

Consumer & Smart Devices

Technoprobe is also exposed to consumer electronics and Smart Device applications, including semiconductors used in smartphones, wearables, smart home devices through connected sensors. These applications are characterized by high production volumes and shorter product cycles resulting in greater sensitivity to end-consumer demand. While this segment is more cyclical and price-sensitive, ongoing trends such as device miniaturization, increased connectivity and energy efficiency continue to increase testing complexity at the wafer level. As highlighted in the company's reports, even in more commoditized applications, reliable and precise testing remains essential, supporting baseline demand for probe cards and contributing to revenue diversification across end markets.

Valuation Methodology

Technoprobe is valued using a Discounted Cash Flow (DCF) approach based on the Free Cash Flow to the Firm (FCFF) methodology as the primary valuation method. The DCF framework allows for the estimation of the company's intrinsic value by discounting operating cash flows available to all capital providers at the weighted average cost of capital (WACC). The DCF analysis is complemented by a multiples-based valuation, which serves as a relative benchmark against comparable companies operating within the semiconductor testing and equipment segment. This dual approach provides a comprehensive assessment of the company's valuation, combining intrinsic value estimation with market-based references. Key valuation assumptions include the cost of capital, long-term growth prospects, and capital reinvestment requirements. Sensitivity analyses are conducted to assess the robustness of the valuation outcomes to changes in the main value drivers. Insights into DCF, Multiple Based Valuation, Sensitivity Analysis and Scenario Analysis in Appendix.

Risk Analysis

The valuation of Technoprobe is subject to several risks that could materially affect its operating performance and implied equity value. The primary risk relates to the cyclical nature of the semiconductor industry, where prolonged downturns or delayed recoveries in end markets could negatively impact customer capital expenditures and demand for probe card solutions. A further key risk concerns the company's exposure to major customers and the concentration of revenues within the semiconductor value chain. Any reduction in orders, pricing pressure, or loss of key client relationships could adversely affect revenue visibility and margins. In addition, Technoprobe operates in a technologically advanced and highly competitive environment, where rapid innovation cycles and evolving testing requirements may require sustained investment to maintain technological leadership. From a financial perspective, the valuation is particularly sensitive to changes in the cost of capital, as highlighted by the sensitivity and scenario analyses. Increases in interest rates, equity risk premiums, or overall market volatility could lead to a higher WACC and a lower implied equity value. Finally, macroeconomic uncertainty and geopolitical tensions affecting global semiconductor supply chains represent additional sources of downside risk to the investment thesis.

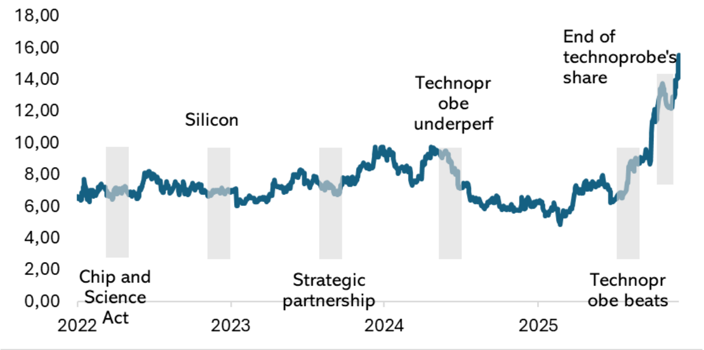
Risk Impact Quantification

The potential impact of the key risks identified above is quantified through the valuation sensitivity and scenario analyses. Under the base-case assumptions, Technoprobe is valued at approximately €1.67 per share, based on a WACC of 8.5% and a terminal growth rate of 3.5%. Adverse movements in the cost of capital represent the primary source of downside risk, with a 100 basis points increase in the WACC reducing the implied equity value per share by approximately 15–18%.

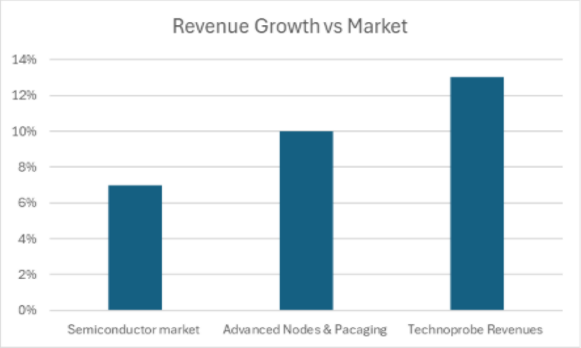
A more conservative long-term growth outlook also materially affects valuation. At the base-case WACC, a reduction in the terminal growth rate from 3.5% to 2.5% lowers the equity value per share by around 12–13%. When these adverse assumptions are combined in the bear-case scenario, the implied equity value per share declines to approximately €1.28, corresponding to a downside of roughly 23% relative to the base case. Conversely, under the bull-case scenario, the equity value per share increases to approximately €1.81, implying an upside of about 8–9%. Overall, valuation outcomes remain predominantly driven by discount rate assumptions.

Appendix

Graph 1 Apx – Relevant Events



Graph 2 Apx – Revenue Growth vs. Market



Graph 3 Apx – Profitability Vs. Peers

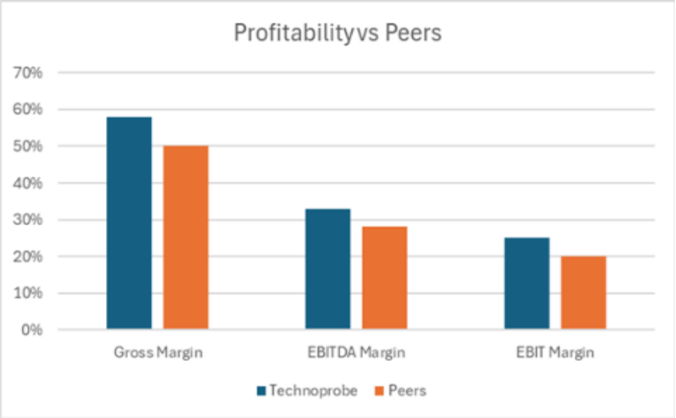


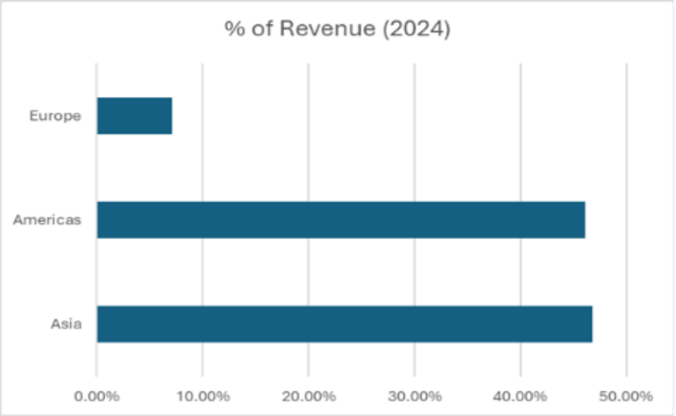
Table 1 Apx – Capital Allocation

METRIC	VALUE
EBIT → FCF Conversion	65–75%
FCF Margin	20–25%
Capex / Sales	6–8%
ROIC	>20%
Net Debt / EBITDA	≤ 0x

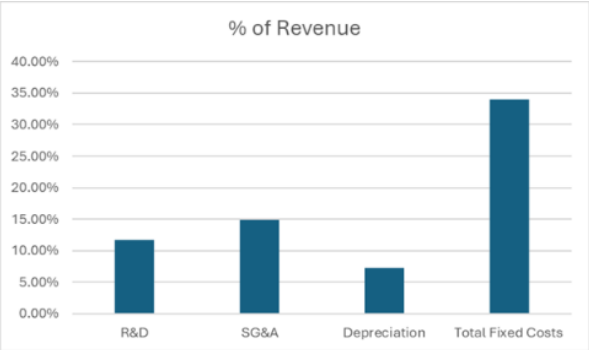
Table 2 Apx – Strength of Competitive Factors

COMPETITIVE FACTOR	STRENGTH
MEMS Technology Leadership	High
Customer Switching Costs	Very High
Revenue Recurrence	High
Barriers to Entry	High
Global Manufacturing Footprint	Strong

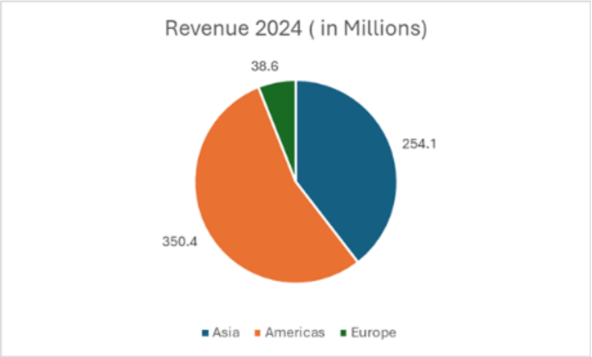
Graph 4 Apx – Revenue Percentage



Graph 5 Apx – Technology Percentage Revenue



Graph 6 Apx – Clients Percentage Location



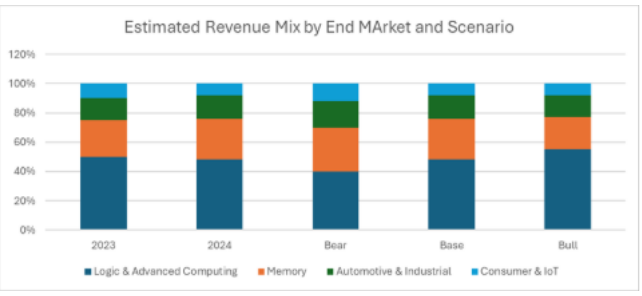
Graph 7 Apx – Forex 2022 – 2026

Technoprobe's high sensitivity to exchange rate movements is driven by a structural mismatch between USD-denominated revenues and a predominantly euro-based cost structure, combined with significant balance-sheet exposure and the scale of its operations. As a result, even moderate USD/EUR fluctuations can generate material foreign exchange gains or losses, which are accounting-driven and not indicative of underlying operating performance. Although a significant portion of revenues is generated in Asia, Technoprobe's foreign exchange exposure is primarily to the US dollar rather than to Asian currencies, as customer contracts are predominantly denominated in USD. Consequently, foreign exchange gains and losses largely reflect USD/EUR movements, while exposure to local Asian currencies remains limited. Foreign exchange gains and losses, disclosed as a separate line item in the income statement, showed high volatility across periods, ranging from a loss of €4.8 million in FY 2023 to a gain of €11.9 million in FY 2024, and a significant loss of €35.9 million in H1 2025. In line with the company's Alternative Performance Indicator definitions, these effects are excluded from adjusted operating metrics as they do not reflect underlying operating performance (see Graph 7 Apx – Forex 2022 – 2026).

Insight into Revenue Segmentation

Technoprobe does not disclose a quantitative revenue breakdown by individual customer, country, or end market in its published financial statements. Revenues are disclosed by geographic macro-area, based on customer location. According to the FY 2024 Annual Financial Report, consolidated revenues amounted to €543 million, of which approximately 46.8% (€254.1m) were generated in Asia, 46.1% (€250.4m) in the Americas, and 7.1% (€38.6m) in Europe. This geographic mix has remained broadly stable across recent years and interim periods and reflects the structural concentration of advanced semiconductor manufacturing among a limited number of Tier-1 customers located primarily in Asia and the Americas. From a product and application perspective, the Directors' Reports indicate that Technoprobe's revenues are primarily driven by logic and advanced computing applications, followed by memory, with additional exposure to automotive, industrial, and consumer electronics. These disclosures are qualitative in nature, consistent with industry practice, due to customer confidentiality and the highly concentrated structure of advanced-node semiconductor manufacturing. To support scenario analysis and valuation, we therefore estimate an end-market revenue segmentation reconciled to reported consolidated revenues. The estimates are based on

- Technoprobe's strong positioning in advanced and MEMS-based probe cards
- semiconductor cycle dynamics observed in 2023, characterized by inventory correction—particularly in memory and consumer applications
- the 2024 recovery, which was supported primarily by advanced computing and AI-related demand. These estimates are used exclusively for scenario building and valuation assumptions and do not represent disclosed company data.



"This chart shows our estimated revenue mix by end market across the semiconductor cycle. In the downcycle, memory and consumer exposure increases due to inventory corrections, while during recovery and in the bull case, logic and advanced computing gain weight, reflecting higher pricing power and AI-driven demand. These assumptions are fully reconciled to reported revenues and are used exclusively for scenario building and valuation."

Graph 8 Apx – End Market Exposure by Application

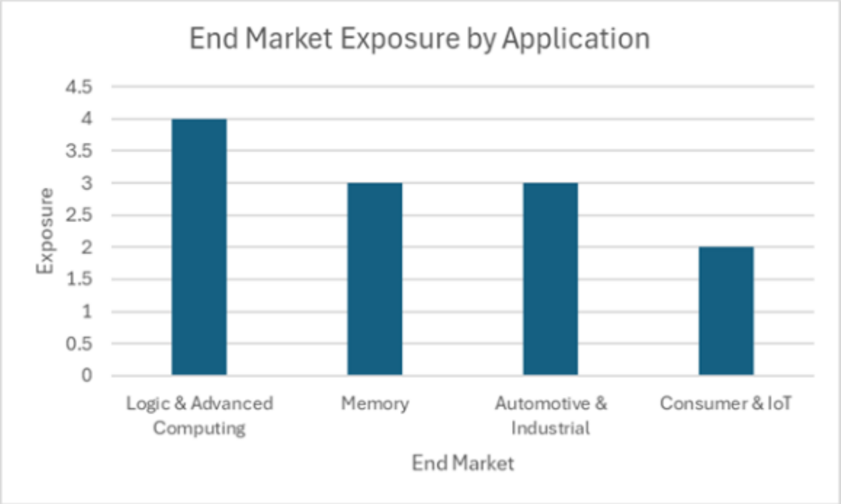
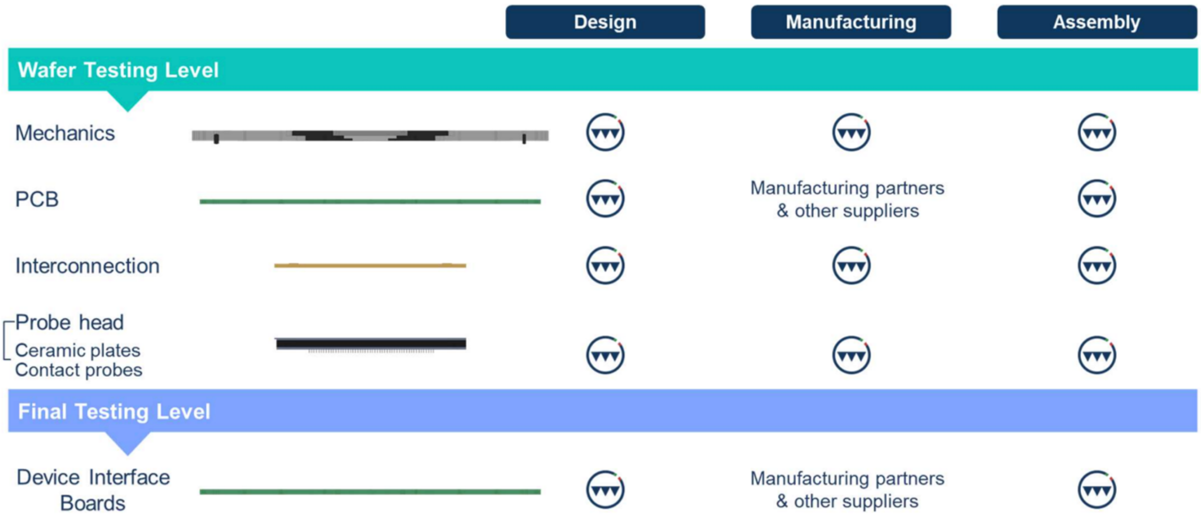
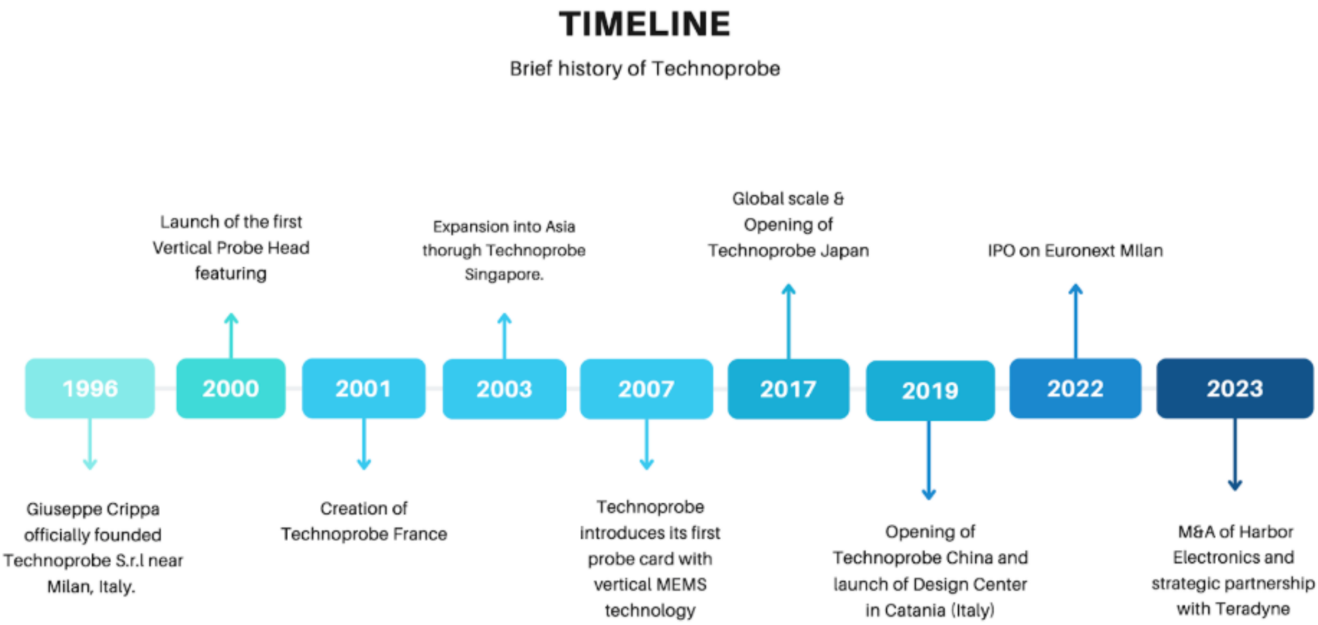


Image 1 Apx – Wafer Composition



	Design	Manufacturing	Assembly
Wafer Testing Level			
Mechanics	✓	✓	✓
PCB	✓	Manufacturing partners & other suppliers	✓
Interconnection	✓	✓	✓
Probe head Ceramic plates Contact probes	✓	✓	✓
Final Testing Level			
Device Interface Boards	✓	Manufacturing partners & other suppliers	✓

Graph 9 – Technoprobe's Timeline



TIMELINE

Brief history of Technoprobe

1996 – Giuseppe Crippa officially founded Technoprobe S.r.l near Milan, Italy.

2000 – Launch of the first Vertical Probe Head featuring

2001 – Creation of Technoprobe France

2003 – Expansion into Asia thorugh Technoprobe Singapore.

2007 – Technoprobe introduces its first probe card with vertical MEMS technology

2017 – Global scale & Opening of Technoprobe Japan

2019 – Opening of Technoprobe China and launch of Design Center in Catania (Italy)

2022 – IPO on Euronext Milan

2023 – M&A of Harbor Electronics and strategic partnership with Teradyne

DCF

This section presents the valuation obtained through a DCF approach, based on explicit cash flow forecasts through 2030 and a terminal growth assumption of 1.5%. See Table 1 Apx - Derivation of FCFF. Operating assumptions reflect mid-cycle profitability and normalized tax rates. Capital expenditures converge toward depreciation as the business transitions to a steady-state investment profile. Working capital dynamics are linked to incremental revenue growth and efficiency gains.

Table 1 Apx - Derivation of FCFF

€m	2024A	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	€ 79,110	€ 149,134	€ 213,049	€ 295,739	€ 433,224	€ 611,531	€ 795,494
Taxes on EBIT	24.9%	24.9%	24.9%	24.9%	24.9%	24.9%	24.9%
NOPAT	**€ 59,412**	**€ 112,000**	**€ 160,000**	**€ 222,100**	**€ 325,351**	**€ 459,260**	**€ 597,416**
D&A		€ 75,000	€ 80,000	€ 78,900	€ 106,272	€ 132,970	€ 157,464
CapEx	€ 94,450	€ 55,000	€ 70,000	€ 86,000	€ 99,700	€ 120,200	€ 138,300
Δ Working Capital	€ 16,938	€ 30,000	€ 39,500	€ 40,000	€ 119,600	€ 110,400	€ 100,100
FCFF	-	**€ 102,000**	**€ 130,500**	**€ 175,000**	**€ 212,323**	**€ 361,630**	**€ 516,480**

The terminal value is estimated using a perpetual growth approach and discounted consistently with the explicit forecast period. The terminal growth rate is set at 1.5%, reflecting long-term nominal economic growth and a normalized steady-state operating environment. This assumption does not embed cycle-specific dynamics or expansionary effects and remains conservative with respect to the maturity of the business and the capital-intensive nature of the semiconductor equipment industry. The selected growth rate remains well below the weighted average cost of capital and is consistent with the reinvestment requirements and returns on new invested capital implied by the model. The valuation is primarily driven by terminal value, consistent with a long-term cash-flow-generative business model (see Table 3 Apx – Enterprise Valuation Derivation).

Table 2 - Terminal Value

Terminal assumptions	**Value €m**
FCFF 2030	€ 516,623.77
Terminal growth rate (g)	1.50%
WACC	8.50%
Terminal Value (TV)	€ 10,525,038.91
Present value of TV	€ 7,008,021.64

Table 3 - Enterprise Value Derivation

€m	**Value**
PV of FCFF	€ 1,388,882.51
PV of terminal value	€ 7,008,021.64
Enterprise Value	€ 8,396,904.16

Multiple-Based Valuation

Given the capital-intensive nature of the semiconductor equipment industry and differences in business mix and growth profiles, multiples are used as a relative valuation tool rather than as a standalone valuation method.

Peer Group Selection

The peer group has been constructed to ensure comparability in terms of business model, capital intensity and exposure to the semiconductor equipment value chain, prioritizing listed companies operating in probe card manufacturing and semiconductor testing and inspection equipment (see Table 4 Apx – Core Peers Multiple Comparison and Table 5 – Implied Enterprise Value).

Table 5 – Implied Enterprise Value (Multiples)

€m	**Value**
Technoprobe forward EBITDA	€ 155.34
Median EV/EBITDA (core peers)	€ 28.34
Implied Enterprise Value	**€ 4,402.34**

Table 4 - Core Peers Multiple Comparison

Company	**Market Cap (€m)**	**Enterprise Value (€m)**	**EV/EBITDA**
FormFactor, Inc.	€ 4,826.94	€ 3,116.45	37.87
MPI Corporation	€ 5,858.92	€ 2,536.97	28.34
Chunghwa Precision Test Tech Co., Ltd.	€ 2,032.55	€ 759.40	27.36
Onto Innovation, Inc.	€ 8,305.53	€ 7,375.96	27.97
Nova Ltd.	€ 10,600.60	€ 5,774.13	29.22
Median			**28.34**

Sensitivity Analysis

A sensitivity analysis is conducted to assess the robustness of the DCF valuation to changes in the key assumptions driving the model, namely the weighted average cost of capital and the terminal growth rate. The analysis is centered on a base-case equity value per share of approximately €1.67, derived from the DCF valuation assuming a WACC of 8.5% and a terminal growth rate of 3.5%. Variations in these parameters are tested within a reasonable range in order to capture potential changes in market conditions and long-term growth expectations.

The table above illustrates the sensitivity of the equity value per share to changes in WACC and terminal growth assumptions. The WACC is varied by ±100 basis points around the base-case level to reflect potential shifts in macroeconomic conditions, risk-free rates, and market risk premiums, while the terminal growth rate is tested across a range extending up to 3.5%, reflecting alternative long-term growth scenarios consistent with a structurally expanding semiconductor testing market.

g \ WACC	***7.50%***	***8.00%***	***8.5% (Base)***	***9.00%***	***9.50%***
2.50%	1.72	1.58	1.46	1.37	1.28
3.00%	1.86	1.69	1.56	1.45	1.35
3.50%	2.04	1.84	**1.67**	1.54	1.43
4.00%	2.28	2.01	1.81	1.65	1.52

Overall, the sensitivity analysis demonstrates that Technoprobe's valuation is primarily driven by assumptions related to the cost of capital. While the base-case valuation appears relatively resilient across a range of long-term growth scenarios, adverse shifts in the WACC have a more pronounced downside impact on the implied equity value per share. This underscores the importance of macroeconomic conditions, interest rate dynamics, and market risk perceptions in assessing the risk profile of the investment thesis.

Variations in the terminal growth rate also have a meaningful impact on valuation, although to a lesser extent compared to changes in the cost of capital. At the base-case WACC of 8.5%, increasing the terminal growth rate from 3.0% to 3.5% raises the implied equity value per share from approximately €1.56 to €1.67, while a reduction to 2.5% lowers the value to around €1.46. This indicates that long-term growth assumptions contribute positively to valuation, but their impact remains secondary relative to discount rate movements.

Scenario Analysis

In order to capture the potential range of valuation outcomes under different operating and market conditions, a scenario analysis has been conducted based on three distinct cases: bull, base, and bear. Each scenario reflects alternative assumptions regarding long-term growth prospects and the perceived risk profile of the company, while maintaining a consistent valuation framework.

Table 7 - Equity Value per Share

Scenario	**WACC**	**Terminal g**	**Equity Value / Share**
BULL	8.00%	4.00%	1.81
BASE	**8.50%**	**3.50%**	**1.67**
BEAR	9.50%	2.50%	1.28

The base-case scenario assumes a WACC of 8.5% and a terminal growth rate of 3.5%, resulting in an implied equity value per share of approximately €1.67. This scenario reflects a constructive long-term outlook for the semiconductor testing industry, supported by structurally increasing test complexity and operating performance consistent with normalized conditions. Under the bull-case scenario, more favorable industry and macroeconomic conditions are assumed, characterized by lower perceived risk and stronger long-term growth dynamics. A lower WACC of 8.0% combined with a higher terminal growth rate of 4.0% increases the implied equity value per share to approximately €1.81, representing upside potential relative to the base case. Conversely, the bear-case scenario reflects a more cautious outlook, incorporating prolonged industry cyclicality and heightened risk perceptions. Applying a higher WACC of 9.5% and a lower terminal growth rate of 2.5% results in an implied equity value per share of approximately €1.28, highlighting the downside risk under adverse conditions.

Technoprobe's Z-Score

Risk Factors			
Altman Z-Score	**2024**	**2023**	**2022**
X1 = (Working Capital / Total Assets)	0,61	0,57	0,59
X2 = (Retained Earnings / Total Assets)	0,46	0,59	0,46
X3 = (Earnings Before Interest and Taxes / Total Assets)	0,07	0,09	0,24
X4 = (Market Value of Equity / Book Value of Total Liabilities)	21,91	46,79	31,01
X5 = (Sales/ Total Assets)	0,39	0,44	0,63
1.2 X1 + 1.4 X2+ 3.3 X3 + 0.6 X4 + 0.999 X5	*15,13*	*30,34*	*21,39*
Bankruptcy Probability	***0,00%***	***0,00%***	***0,00%***

Interpretation	
Company is healthy and there is low bankruptcy potential in the short term	Z-score >3.00
Gray area—company is exposed to some risk of bankruptcy; caution is advised	2.99 > Z-score > 1.80
Company is in financial distress and there is high bankruptcy potential in short term	1.80 > Z-score

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