Technoprobe S.p.A.
Company Presentation

December 2023

Disclaimer

This document has been prepared by Technoprobe S.p.A. (the “Company”) solely for use in the presentation.

This document does not constitute or form part of any offer or invitation to sell, or any solicitation to purchase any security issued by the Company. The information contained and the opinions expressed in this document have not been independently verified. In particular, this document may contain forward-looking statements that are based on current estimates and assumptions made by the management of the Company to the best of its knowledge. Such forward-looking statements are subject to risks and uncertainties, the non-occurrence or occurrence of which could cause the actual results– including the financial condition and profitability of the Company – to differ materially from or be more negative than those expressed or implied by such forward-looking statements. This also applies to the forward-looking estimates and forecasts derived from third-party studies.

Consequently, neither the Company nor its management can give any assurance regarding the future accuracy of the estimates of future performance set forth in this document or the actual occurrence of the predicted developments. The data and information contained in this document are subject to variations and integrations.

Although the Company reserves the right to make such variations and integrations when it deems necessary or appropriate, the Company assumes no affirmative disclosure obligation to make such variations and integrations.

Summary

A piece of Silicon Valley just outside Milan

- Company overview
- Reference Market
- Business Model
- Key Financial data

Company Overview

Company Overview

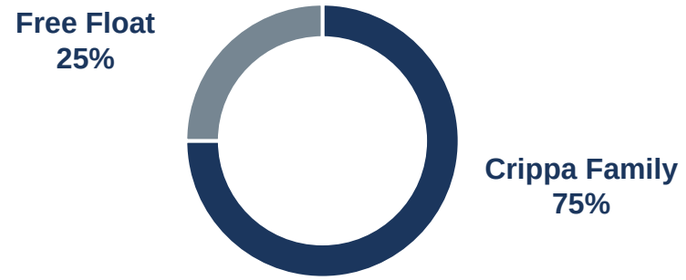
- **Leading player in designing and manufacturing of probe cards**
- **Vertically integrated with 100% in house production of critical components leveraging on ~2,700 employees**
- **Strong focus on innovation (4 R&D centers, +600 patents)**
- **Extensive global presence and widespread local footprint**
- **Track-record of constant top-line expansion coupled with remarkable profitability and cash flow generation**

2022 Key financial metrics

Revenue	EBITDA	Net income
€549m	€245m	€148m
+39% CAGR 19-22	45% EBITDA margin	27% Net income

Net cash	Market cap
~€400m as at 31/12/2022	~€4,5bln as at 11/9/2023

Shareholding structure*



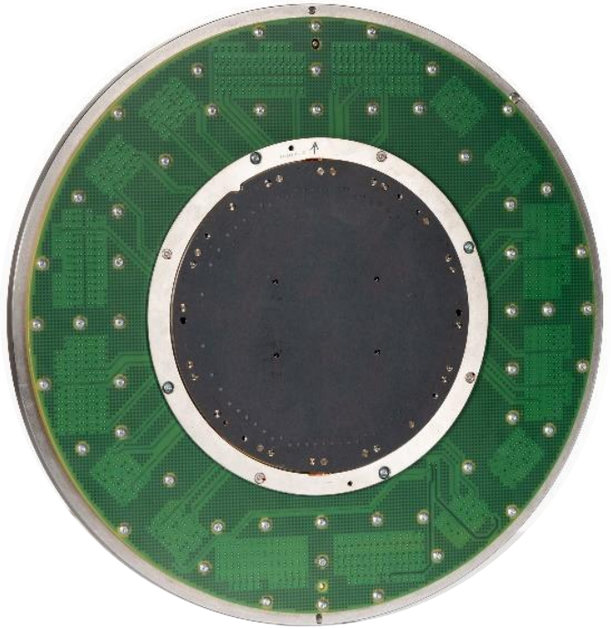
*Listed on Euronext Milan since May 2, 2023, previously listed on Euronext Growth Milan since February 15, 2022

What does Technoprobe do?

Chips are everywhere around us

TECHNOPROBE

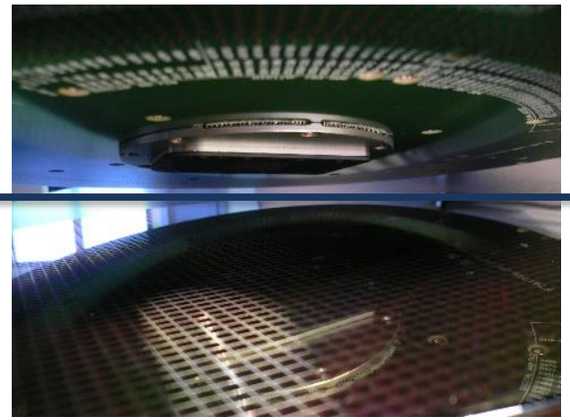
is specialized in the design, development and manufacture of **Probe Cards for chips testing**



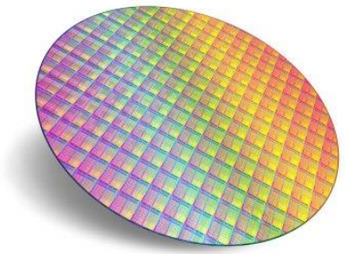
What is a Probe Card? *(1/2)*

A Probe Card is an **electromechanical interface** that allows a chip to be tested when it is **still on the wafer**

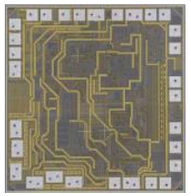
PROBE CARD



Probe Card Wafer testing

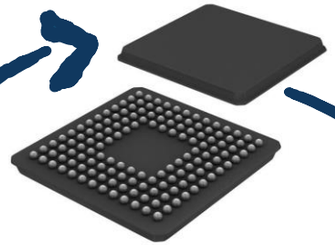


Wafer – multi-chip



Single chip

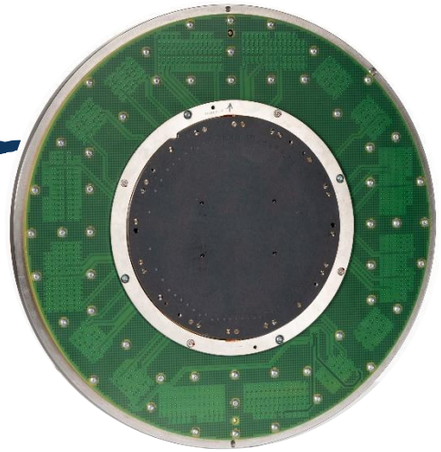
Chip is packed



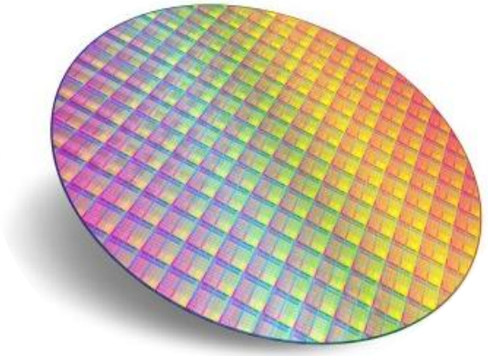
Application - integration on printed circuit

What is a Probe Card? *(2/2)*

The probe card has very thin needles (**probes**) that touch the terminals (pads) of chips, thus electrically connecting to a **tester**

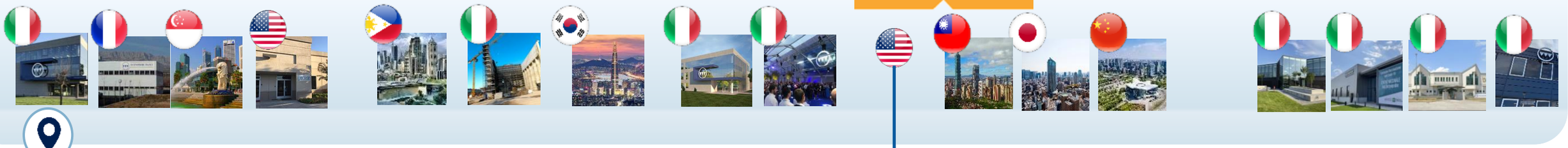


PROBE CARD



WAFER
MULTI-CHIP

Our growth path



1996 Technoprobe foundation

2001 France

2002 Singapore

2008 America

2010 Philippines

2011 Italy expansion

2015 TP Korea

2017 New fab and New HQ in Italy

2019

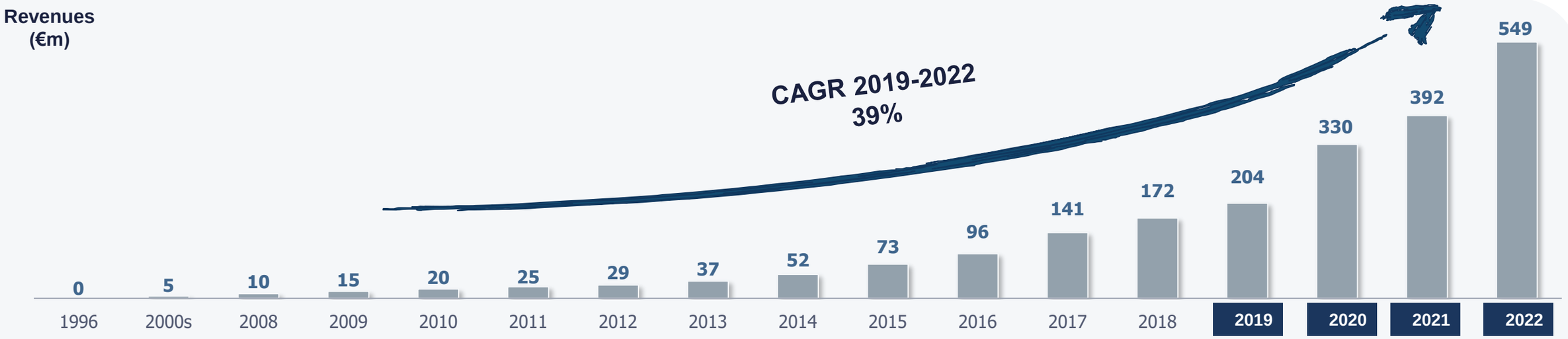
MICROFABRICA

Acquisition of Microfabrica

TP Taiwan TP Japan TP China

2021-2022

Huge dimensional expansion: new fabs,offices and R&D centers in Italy: (Agrate,TPI5 Cernusco, Osnago, Catania)



Source: company annual reports; rounded figures
Note: data are not fully comparable due to different accounting methodologies (2000-2018 ITA GAAP and 2019-2020 IFRS) and changes in consolidation perimeter

Our leadership team

Cristiano Crippa

26 years in Technoprobe

Chairman (Executive), shareholder

Roberto Crippa

18 years in Technoprobe

Vice Chairman (Executive), shareholder

Stefano Felici

23 years in Technoprobe

CEO, shareholder

Fabio Morgana

6 years in Technoprobe

CTO

Marco Prea

11 years in Technoprobe

CCO

Stefano Beretta

1 year in Technoprobe

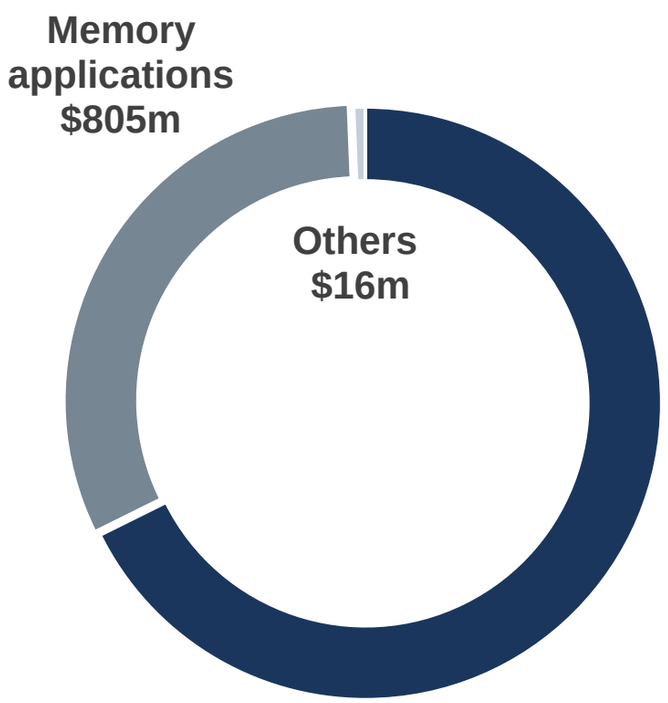
CFO

Reference Market

Overview of the Semiconductor Probe Cards market

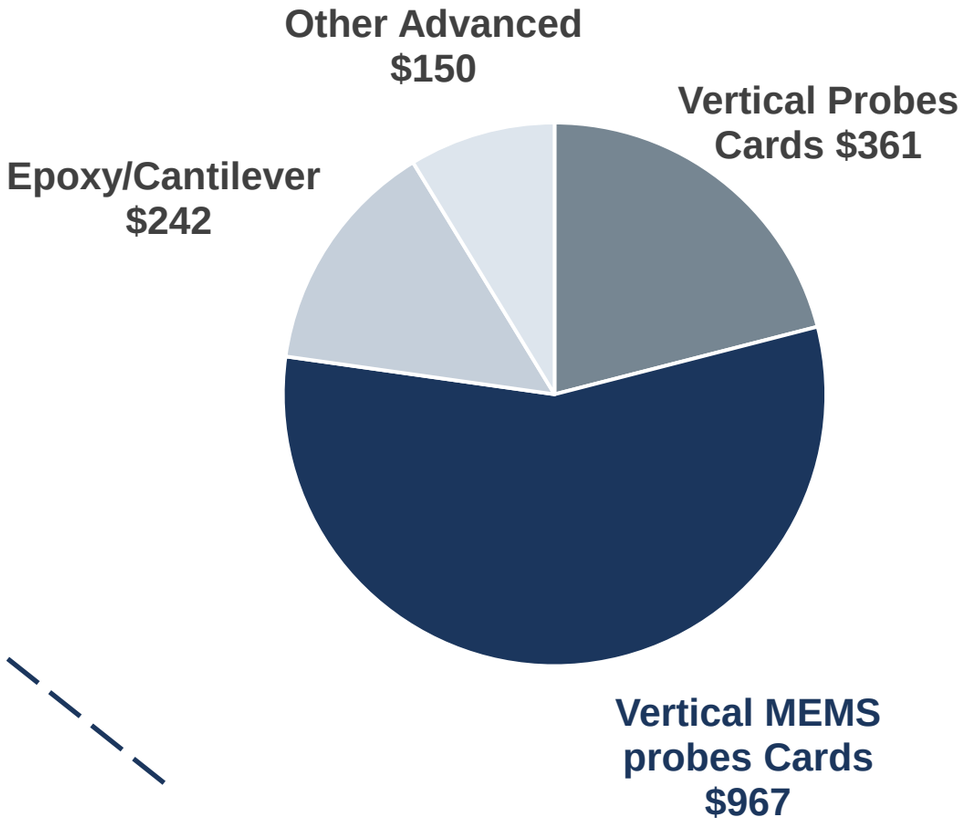
2022 Semiconductor Probe Cards Market*

Overall market value: $2.5bn



Non Memory applications $1.720m

2022 Non-Memory applications by type*

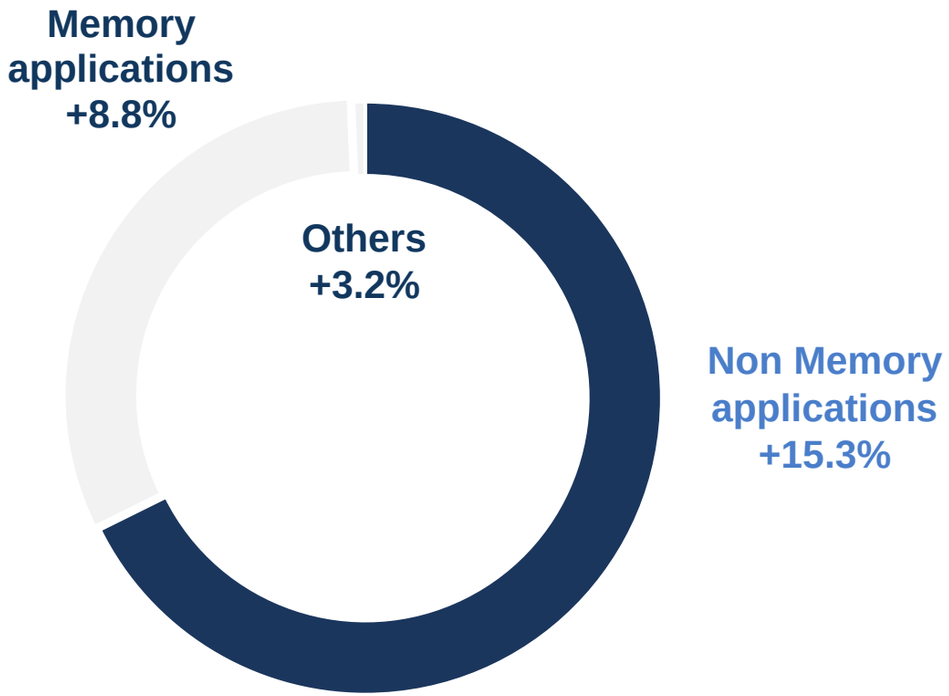


*Source: TechInsights Market Report 2023, update April 23
Rounded figures, $m

Our serviceable available market

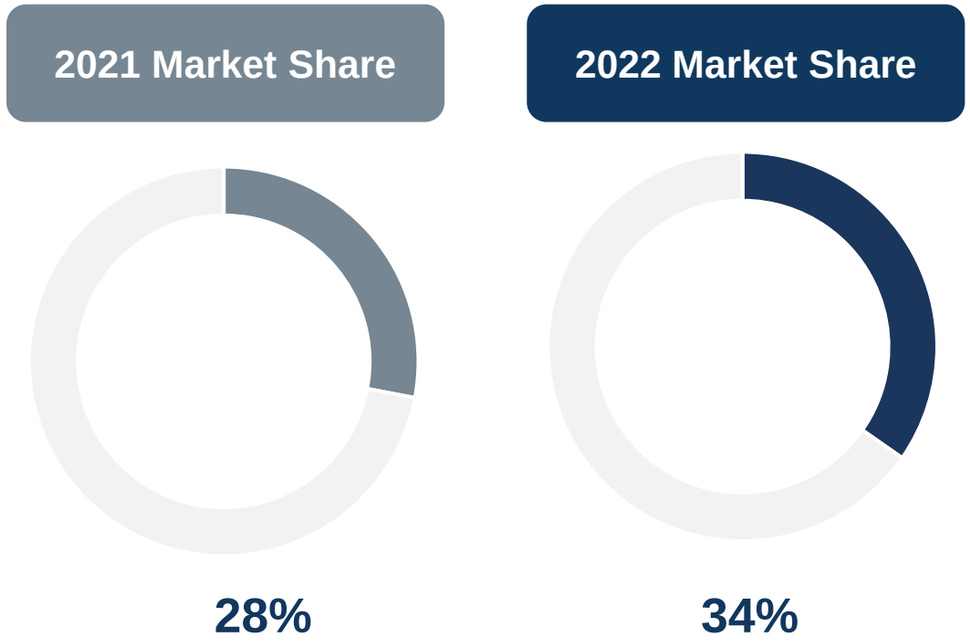
Semiconductor Probe Cards Market 2019-2022 CAGR*

Overall market growth: +12.5%



TECHNOPROBE

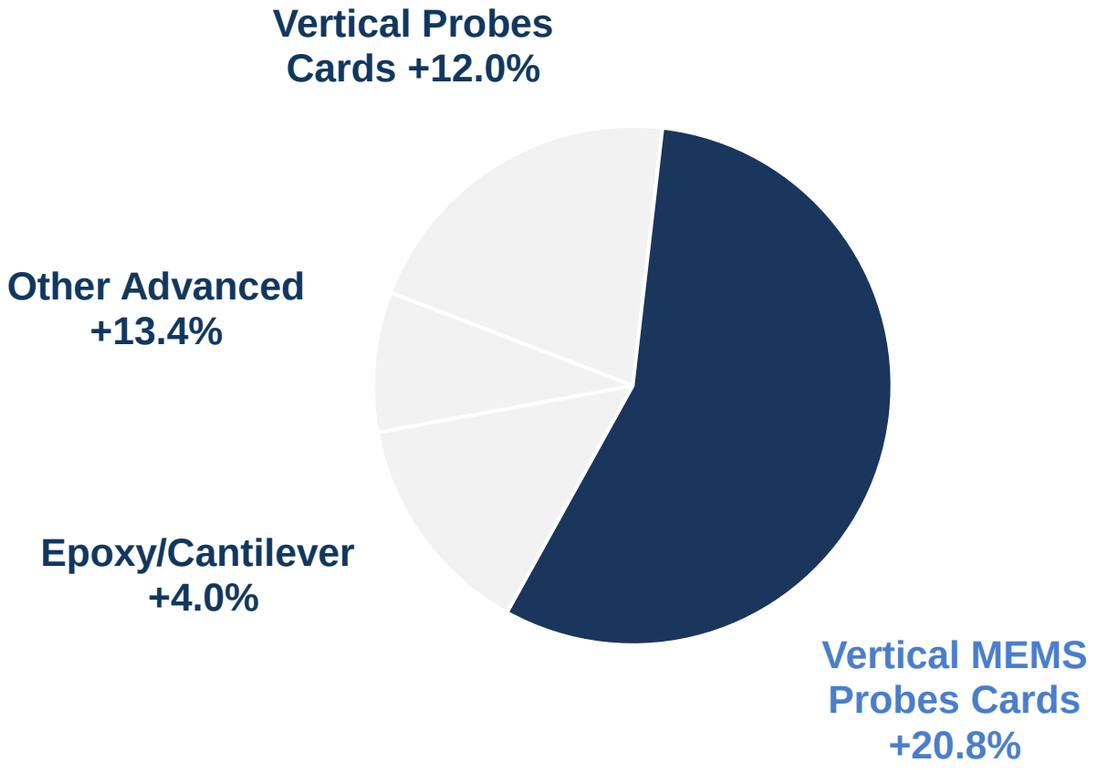
Non-memory applications market share



*Source: TechInsights Market Report 2023, update April 23

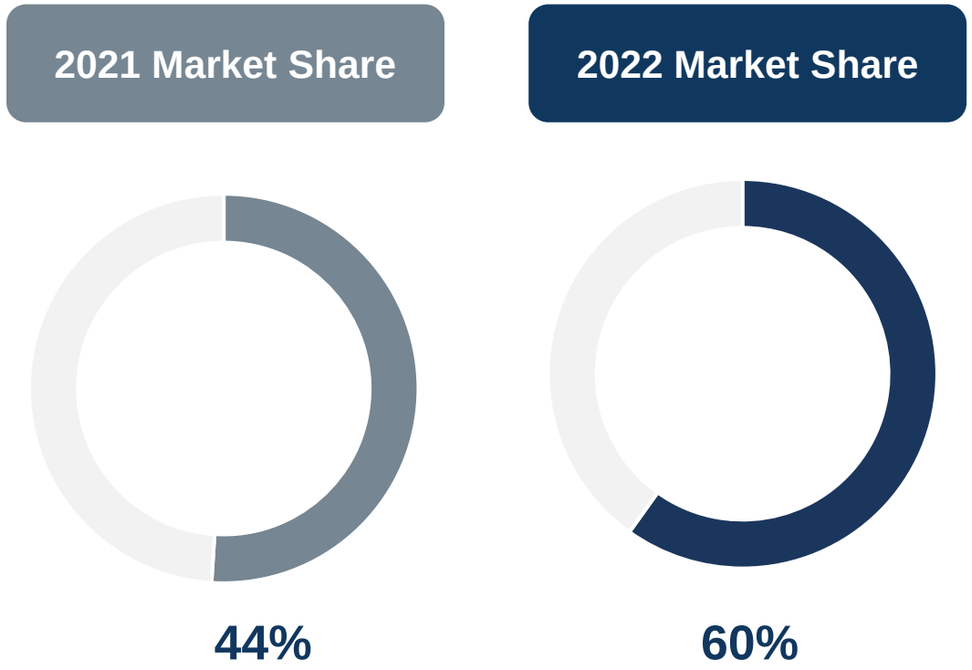
Our serviceable available market

Non-Memory applications by type
CAGR 2019-2022*



TECHNOPROBE

Vertical MEMS Probe Cards market share



Source: TechInsights Market Report 2023, update April 23

Compelling market characterized by solid entry barriers

Solutions and market intrinsic features…

- Limited impact of probe card cost on tested products price
- Strict quality requirements
- Single use
- Long approval process
- Patent-protected engineered products
- Additive manufacturing technology

… resulting in high barriers to entry

- CRITICAL SUPPLIERS TO OEMs
- INCLUSION IN KEY CUSTOMERS' ROADMAP FOR PRODUCT DEVELOPMENT
- HIGH IP CONTENT
- LIMITED COMPETITION AND PRICE PRESSURE FOR CUSTOM-DEVELOPED PRODUCTS
- GLOBAL COMMERCIAL PRESENCE
- SIGNIFICANT INITIAL CAPEX TO SET UP THE BUSINESS

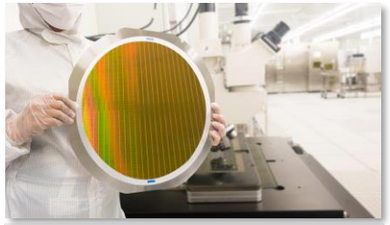
Source: Company information

Probe cards in the semiconductor manufacturing process

Front-End Process

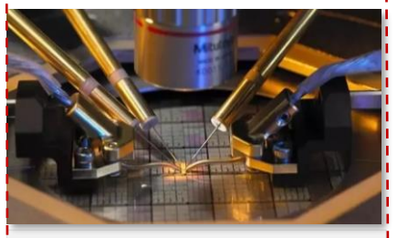
Back-End Process

1 **Wafer fabrication**



- Construction of the integrated circuits (dies) that compose the wafer

2 **Wafer Probe Test**

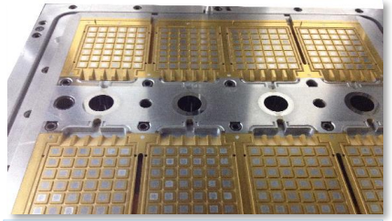


- Wafer's dies testing for functional defects through probe cards
- Technoprobe focuses on Vertical MEMS

3 **Wafer Dicing**

- Wafer separation into individual dies, ready for subsequent assembly

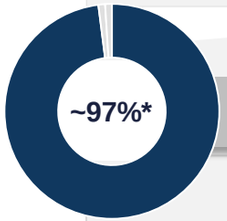
4 **Device Assembly & Packaging**



- Individual die enclosure in a protective package ready for final testing and shipment

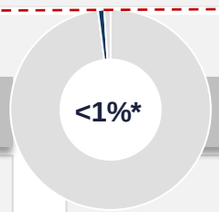
5 **Final Test**

- Chip final testing with burn-in or test sockets
- Technoprobe focuses on Pogo Pin for test sockets



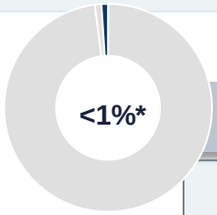
TPEG™ Vertical MEMS

Most advanced probe cards with applications in a wide range of end-markets



Cantilever

Less advanced type of probe card with some special end-markets applications



Motherboard & final test board

- Motherboard used to test probe cards for tester platforms
- Pogo pins are the most value-added component for test sockets

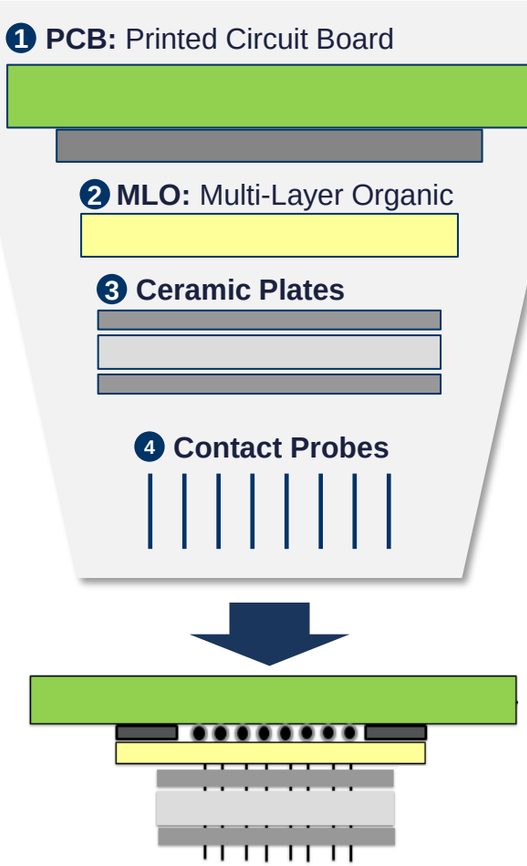
Source: Company information

Business Model

A successful and vertically integrated business model

A winning business model has allowed **Technoprobe** to become the point of reference in the **MEMS non-memory-use market** thanks to the superior quality and performance of its products

Development of new Probe Cards	In-house designed	In-house manufacturing	Outsourced manufacturing
1 **PCB:** Printed Circuit Board	✓	✓ (Partially)	✓ (Partially)
2 **MLO:** Multi-Layer Organic	✓	✓ (Partially)	✓ (Partially)
3 **Ceramic Plates**	✓	✓	✗
4 **Contact Probes**	✓	✓	✗



Continuous product development in line with customer and market requirements

In-house developed production solutions, reducing cycle time and improving performance

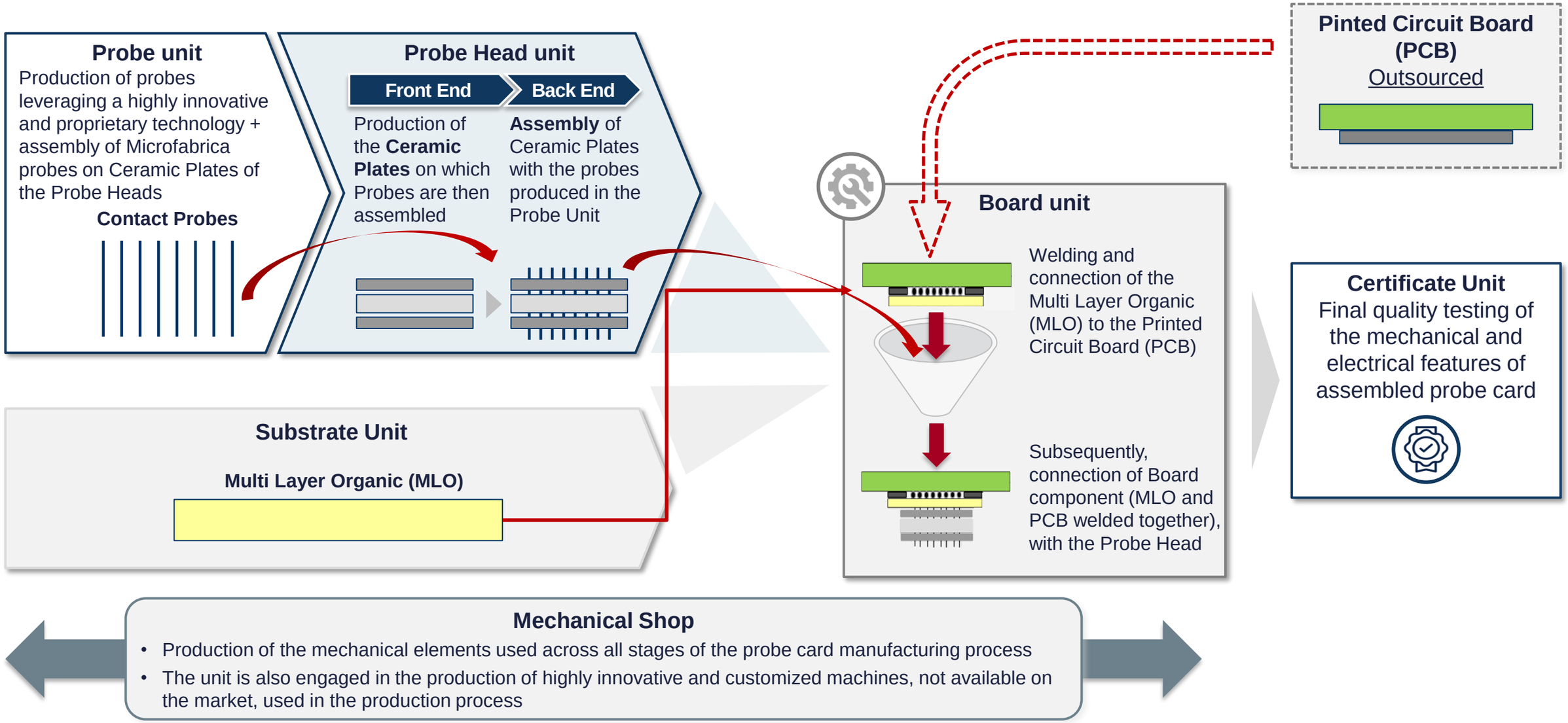
Recognized high reliability and performance in supporting customers in all phases of probe card life

4
R&D centers

600+
Proprietary patents

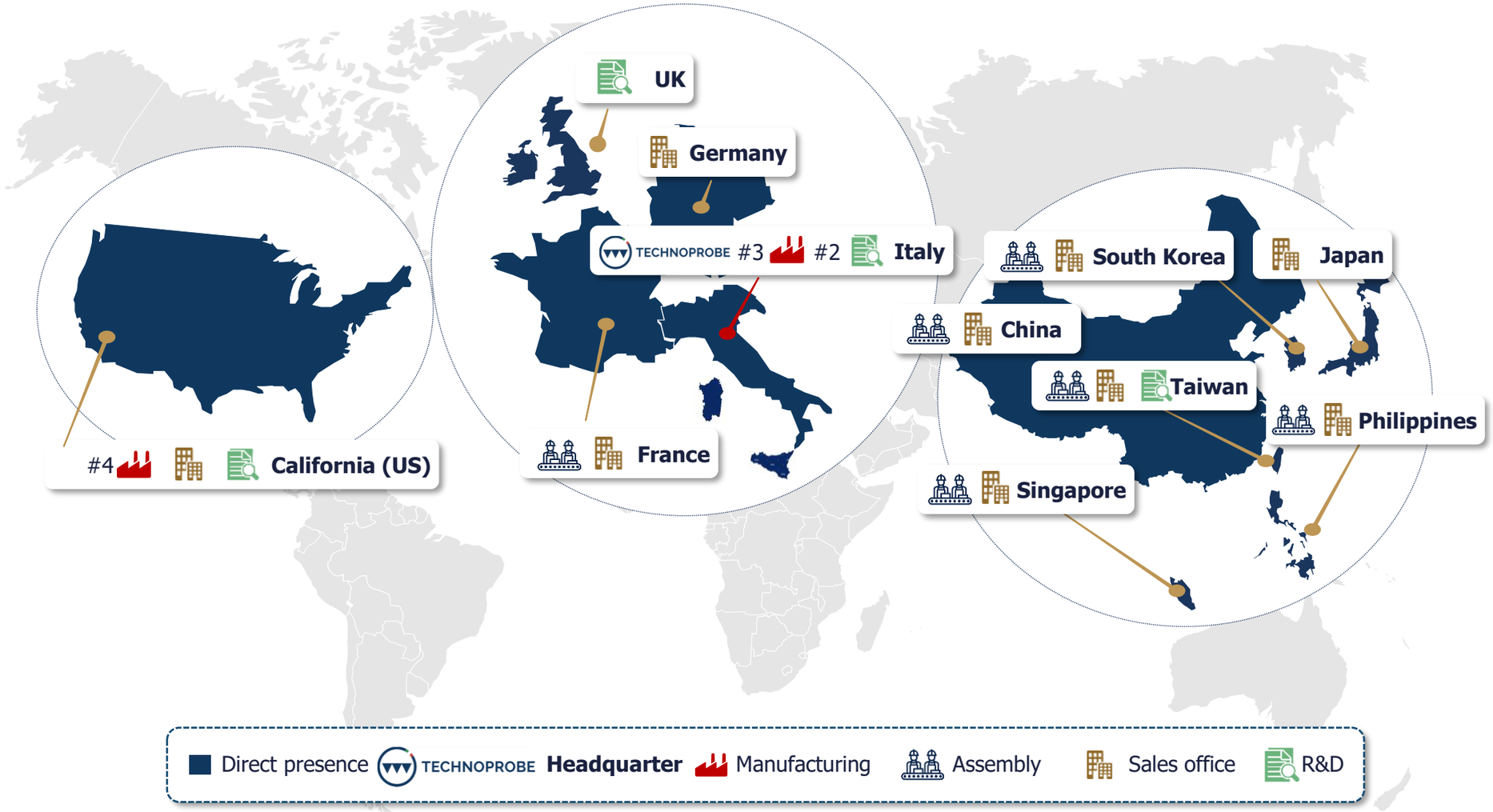
Source: Company information

Overview of the Probe Cards manufacturing process



Source: Company information

Extensive global presence and widespread local footprint



CLEAR STRATEGY
to ensure global reach

LOCAL FOR LOCAL
production and assembly

PROXIMITY TO CUSTOMERS
across all geographies

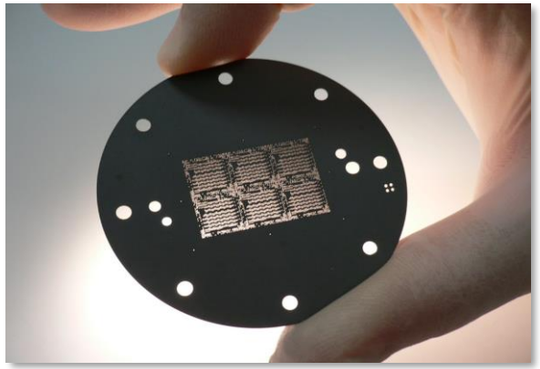
COMPETITIVE ADVANTAGE
with global customers

Source: Company information

A wide range of highly innovative technologies

Advanced Micromachining

Advanced laser cutting: High accuracy and fast lead time

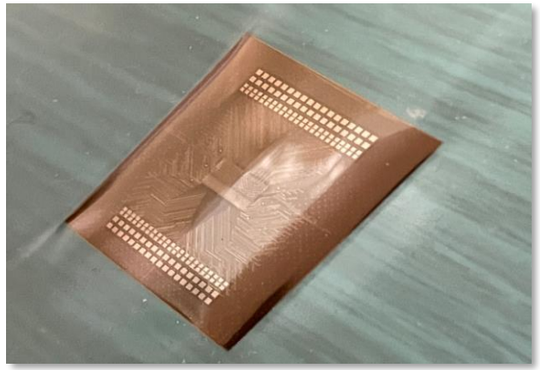


3D MEMS

Acquisition of MICROFABRICA in 2019; the sole company in the world specialized in 3D metallic MEMS manufacturing

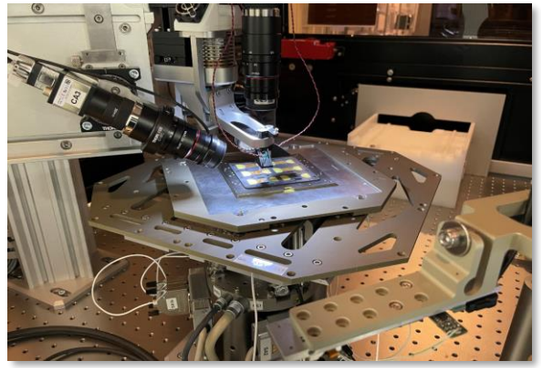
Thin film

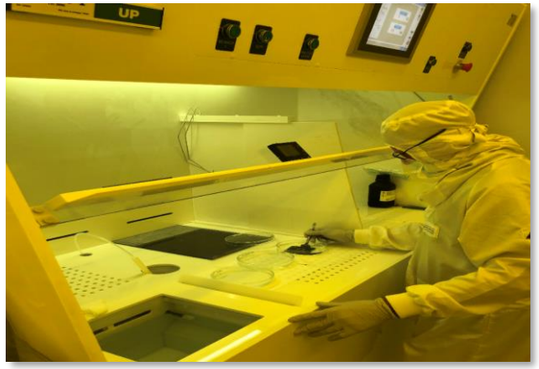
Strong investment in advanced thin film technology to reduce lead time and improve quality and complexity



Advanced manufacturing

Advanced manufacturing for high volume and best quality assembly of micro components





Source: Company information

Technoprobe ranked 1st Probe Cards Supplier of 2023

For the sixth year in a row, we are the Highest-Rated Test Subsystems Supplier in the TechInsights Customer Satisfaction Survey*

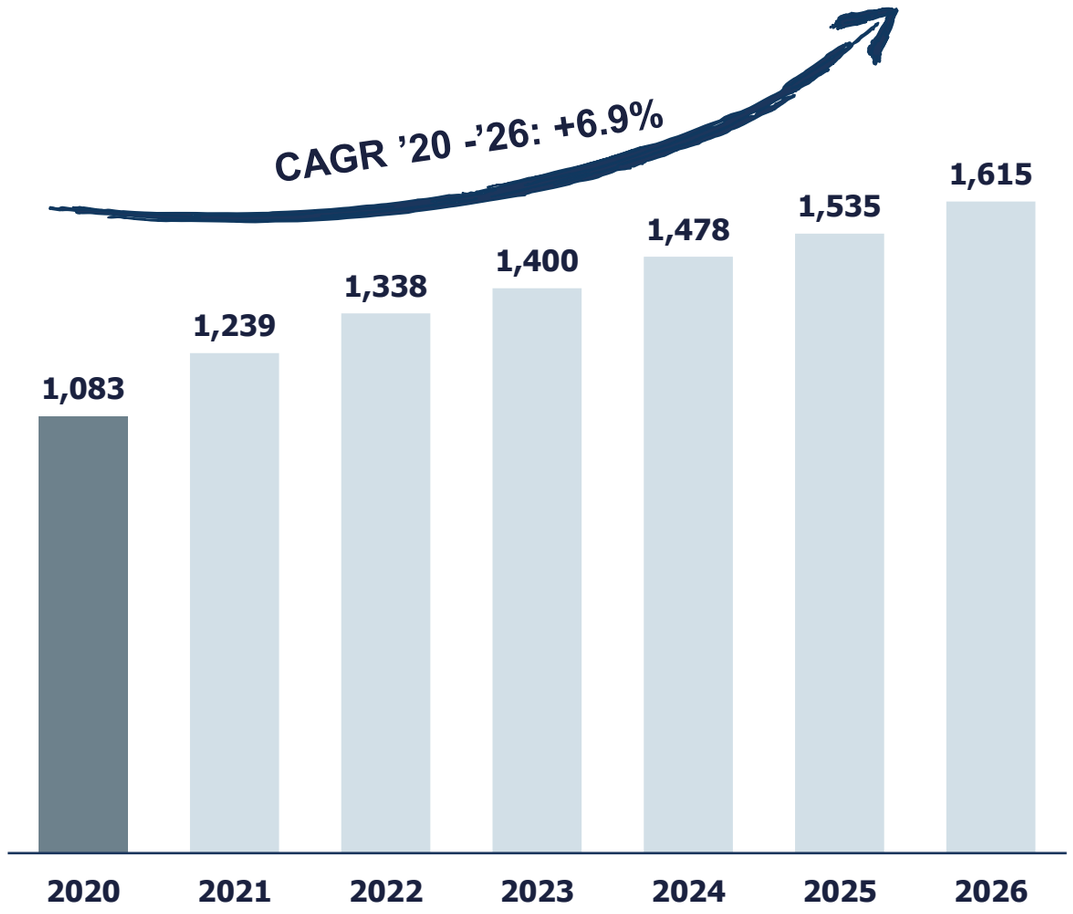
Rating: 9.81

TechInsights Stars: ★★★★★

Tech Insights

Semiconductor Probe Cards market future estimates

Non-memory Vertical MEMS and vertical probe cards evolution (2020-2026, $m)*



Digital transformation macro-trends driving market growth

DIGITAL DATA AND 5G: increasing flow of data and ability to access it will drive market growth

DATA CENTER: use of data centers in industrial settings is growing, where sensor technology, robotics and AI in manufacturing are driving demand

MOBILITY AND AUTOMOTIVE: autonomous driving, driver assistance and micro-mobility increase demand for digital solutions and devices

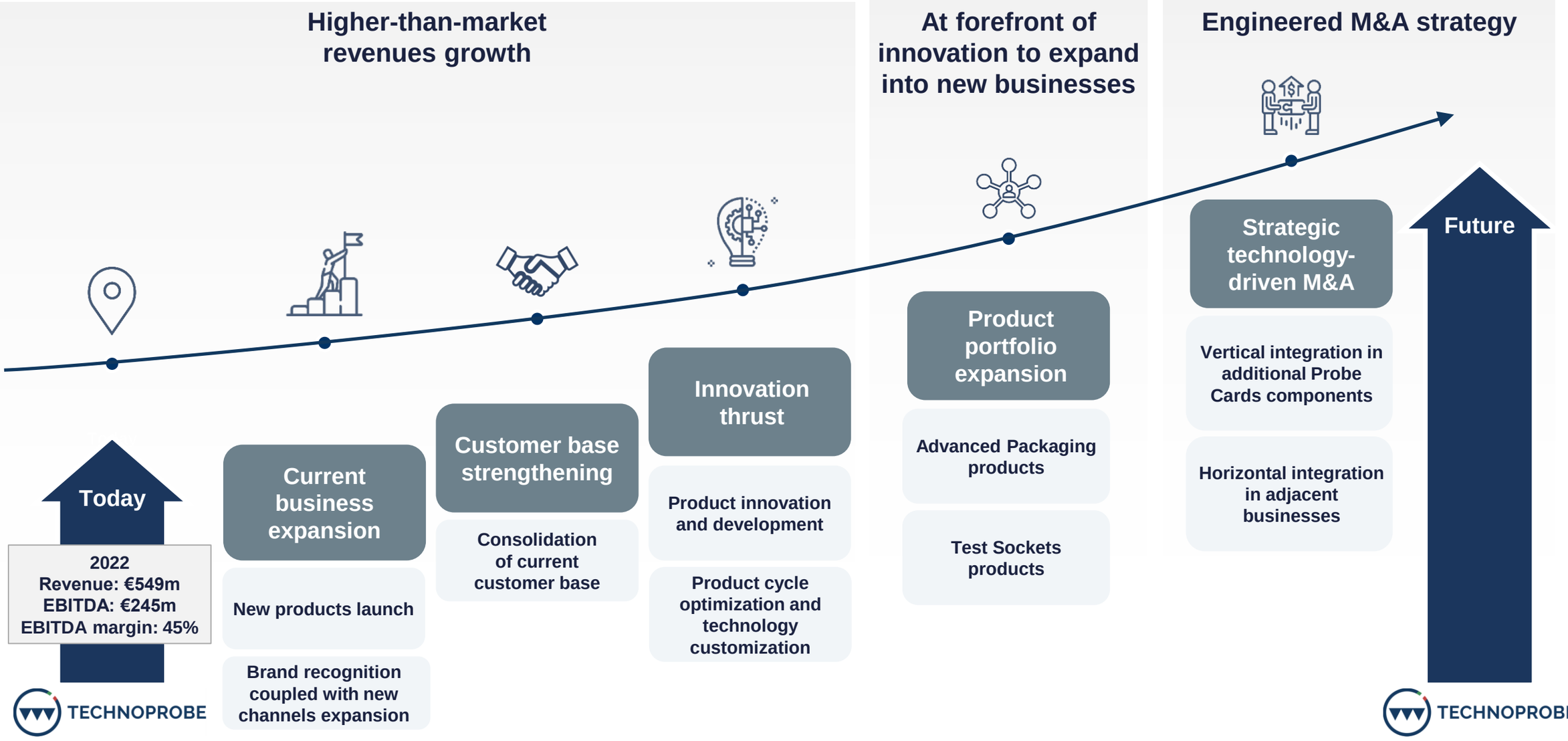
TELCO & MEDIA: speed and accuracy of signal transmission have become fundamental aspects that drive the search for increasingly high performance solutions

INDUSTRIAL / AEROSPACE: growing demand for sensors related to the adoption of tightly controlled processes associated with quality control requirements, as well as equipment monitoring and maintenance

AUTOMOTIVE SECURITY: ISO26262 functional safety standard requires automated systems to ensure safe cars and the sensitivity and accuracy of digital solutions are the basis for new developments in the automotive sector

Source: TechInsight & company data

Overview of main strategic initiatives

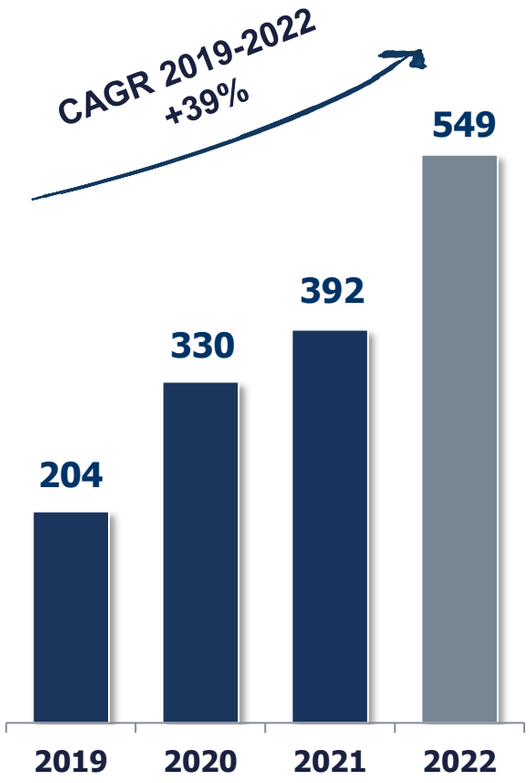


Key Financial Data

2019 – 2022 Key financial figures

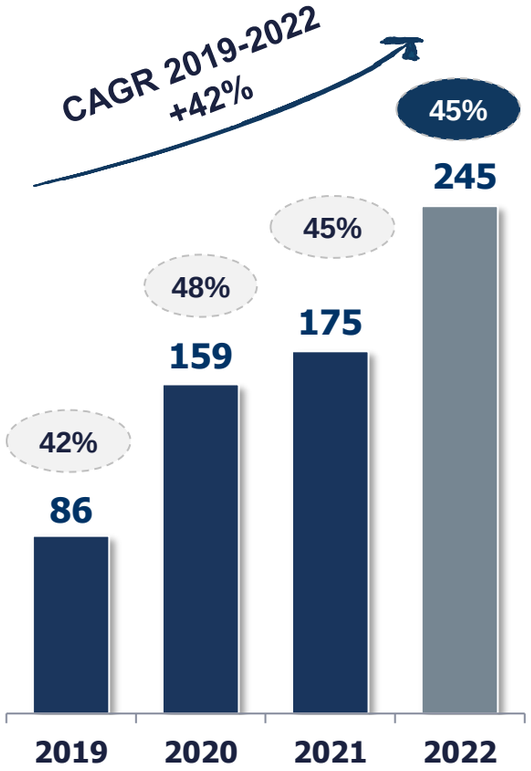
Organic double-digit growth

Revenue
(€m)



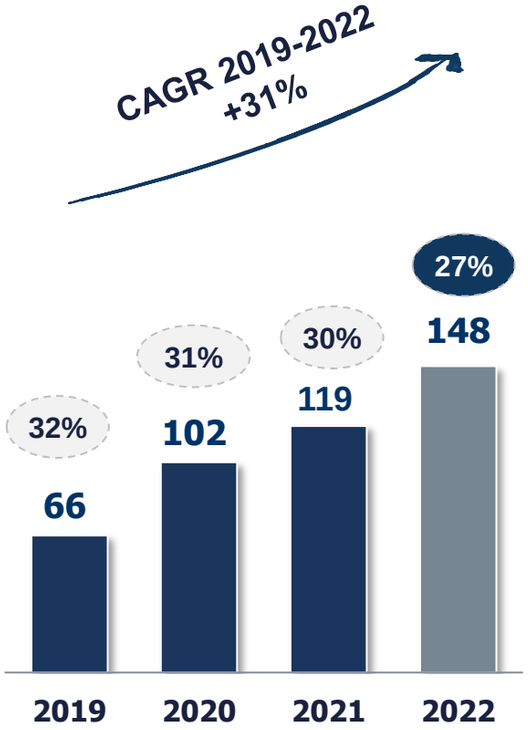
Outstading profitability level

EBITDA
(€m and margin %)



High conversion to net income

Net income
(€m and margin %)

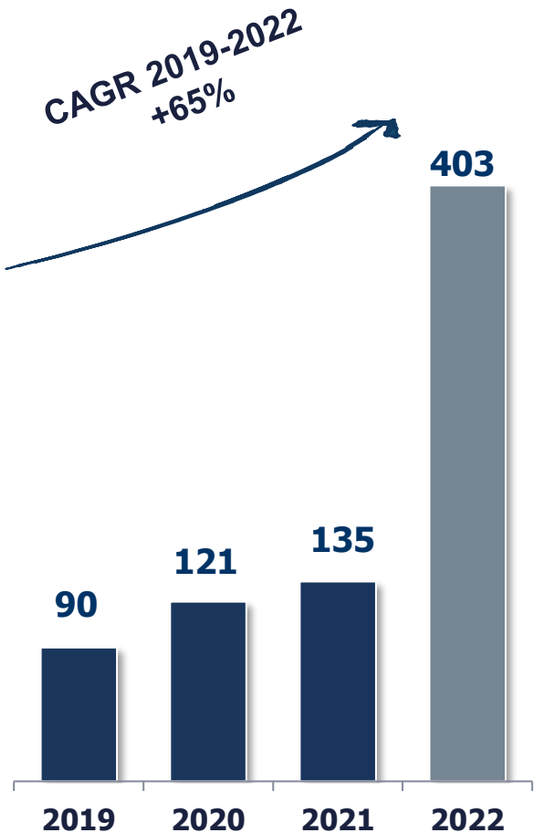


The combined consolidated financial statements as of and for the years ended December 31, 2020 and 2019 represent the combination of (i) the consolidated financial statements of Technoprobe S.p.A. and (ii) the financial information prepared in accordance with IFRS of the following investments transferred through the Demerger: Technoprobe France S.A.S., Technoprobe Korea Co Ltd, Technoprobe Japan KK, Technoprobe Asia Pte Ltd and GeniusPack Holding SA
2019-2020 Combined Consolidated = 2021 Consolidation Perimeter

2019 – 2022 Key financial figures

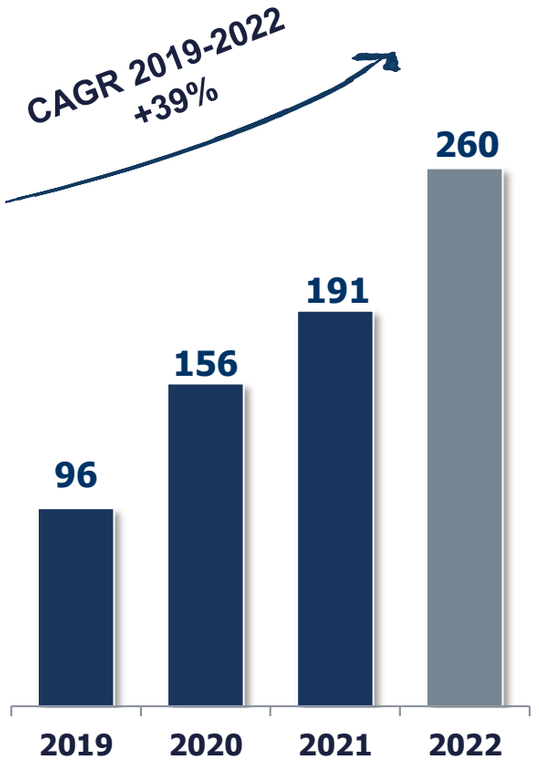
Strong financial position

Net Financial Position (€m)



High Cash Generation

Operating Cash Flow (€m)



The combined consolidated financial statements as of and for the years ended December 31, 2020 and 2019 represent the combination of (i) the consolidated financial statements of Technoprobe S.p.A. and (ii) the financial information prepared in accordance with IFRS of the following investments transferred through the Demerger: Technoprobe France S.A.S., Technoprobe Korea Co Ltd, Technoprobe Japan KK, Technoprobe Asia Pte Ltd and GeniusPack Holding SA
2019-2020 Combined Consolidated = 2021 Consolidation Perimeter

Technoprobe & Teradyne combined transaction

The combined transaction

Asset

Acquisition of
Device Interface Solution (DIS)
division from
TERADYNE

Share

Acquisition of
10% stake
in
TECHNOPROBE

Teradyne Inc. and Technoprobe S.p.A. agreed to establish a strategic partnership on joint development projects to accelerate growth for both companies through roadmap sharing, joint development of technology, and co-marketing activities.

While working on joint development projects, Technoprobe and Teradyne will continue to operate independently in their respective market segments

Transaction highlights

Asset

- **Closing**: expected in the first half of 2024
- **Purchase price**: USD 85 million in cash
- Subject to US and other Foreign Direct Investment approvals, Taiwan merger control review and other customary closing conditions

Share

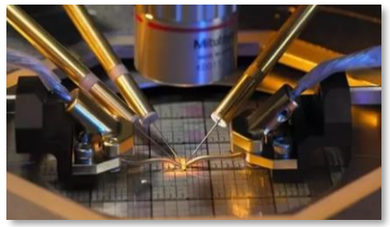
- **Closing**: expected in the first half of 2024
- **Share capital increase representing**, post money, a stake equal to **8%** of the share capital of Technoprobe to be reserved for subscription to Teradyne
- Simultaneously**, T-Plus S.p.A. will sell to Teradyne existing shares representing**, post money, a stake equal to **2%** of the share capital of Technoprobe
- **Share price equal** to Euro 7.362 based on the volume weighted average trading price during the 3-months prior to the agreement, for a total consideration of approx. Euro 384,7 million
- Subject to Italian Foreign Direct Investment and HSR U.S. merger control (HSR) approvals, the fulfilment of DIS acquisition's conditions precedent, and other customary closing conditions

Asset

DIS overview *(1/2)*

CHIP MANUFACTURING PROCESS

1. Wafer fabrication
2. Wafer Probe Test
3. Wafer Dicing
4. Device Assembly & Packaging
5. Final Test



PROBE CARDS

TERADYNE

DIS

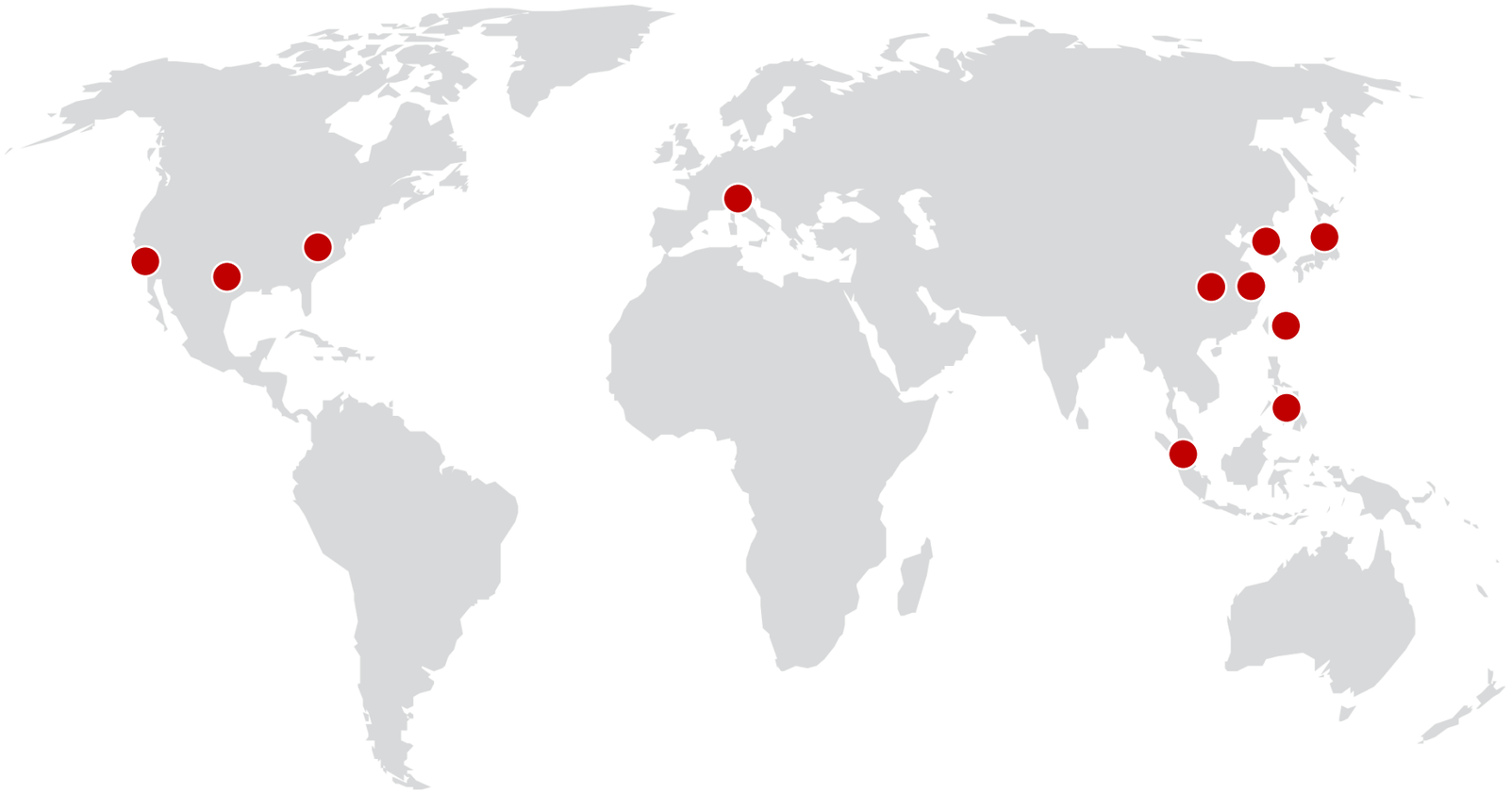
expertise to design
Final Test Interface Boards (DIB)*
Probe Interface Boards (PIB)*
Probe Card Interface Board (PCIB)*

FINAL TEST BOARD

**Refer to appendix glossary chart*

Asset

DIS overview *(2/2)*



- Excellence in design of Test Interfaces
- more than **400 employees**, operating all over the world
- Major design teams concentrated in the **United States**, **China** and **Taiwan**.
- Recorded revenue of USD 54 million, with a Gross Margin of 15% in the first half of 2023

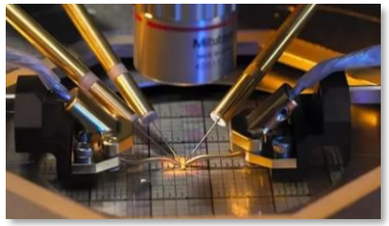
Asset

Rationale of the acquisition

Device complexity

Interface Speed

Interface development process **mastery** and **optimization**



PROBE CARDS

FINAL TEST BOARD

TECHNOPROBE

advanced manufacturing technology

interface design

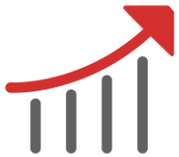
TERADYNE

DIS

design **all components** of **wafer probe** and **final test interfaces** as a single complete solution

Asset

Probe & Final Test Interface Business Mission



Improve Performance

Best electrical & mechanical performance possible limited by only physics

Improve Quality

Defect free to demanding Automated Testing Equipment standards

On-time Delivery

Fulfill delivery commitments conforming to agreed specifications

Leadtime

Ready to use at time of new product introduction bring-up and high volume manufacturing production ramp

Asset

Expected Synergies *(1/2)*

Consolidating the full **vertical integration** of our business model also leveraging on Harbor Electronics competencies

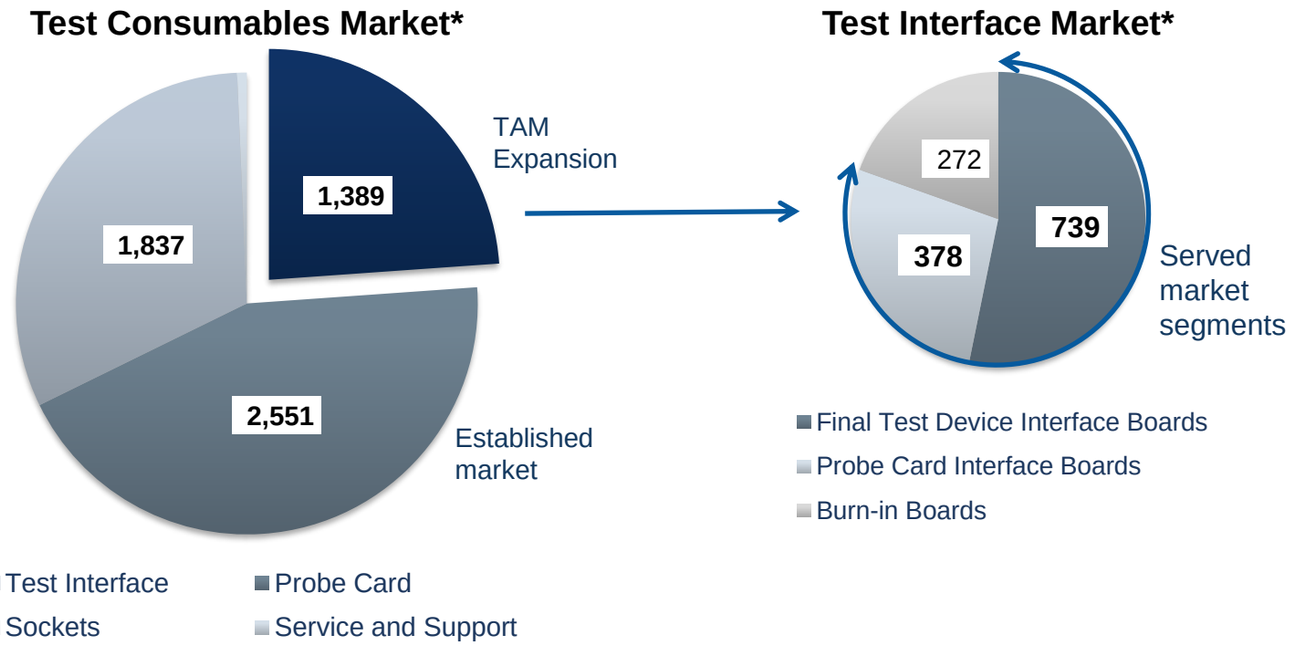
Probe Cards components	In-house designed	In-house manufacturing	Outsourced manufacturing	
❶ **PCB:** Printed Circuit Board	✓	✓ (Partially)	✓ (Partially)	HARBOR ELECTRONICS, INC. DIS
❷ **MLO:** Multi-Layer Organic	✓	✓ (Partially)	✓ (Partially)	
❸ **Ceramic Plates**	✓	✓	✘	
❹ **Contact Probes**	✓	✓	✘	

Position Technoprobe as leading player in the design and manufacturing of high end PCBs

Asset

Expected Synergies *(2/2)*

Acceleration in the process to enter the final test and probe card interface markets



- TAM expansion into the $1.1B* final test and probe card interface market
- Teradyne DIS and Harbor combined are the #1 supplier to the two served test interface segments
- The synergy of core competencies in design and manufacturing create opportunities to gain market share

Combine DIS and Harbor Electronics knowledge **to enter a new market and gain market share**

**Source: Market data provided by Yole Group (2022- USDm)*

Share

Acquisition of a 10% stake by Teradyne *(1/2)*

Open the share capital to an **industrial player** acting as a **strategic partner** to jointly develop new advanced testing solutions

TECHNOPROBE

TERADYNE

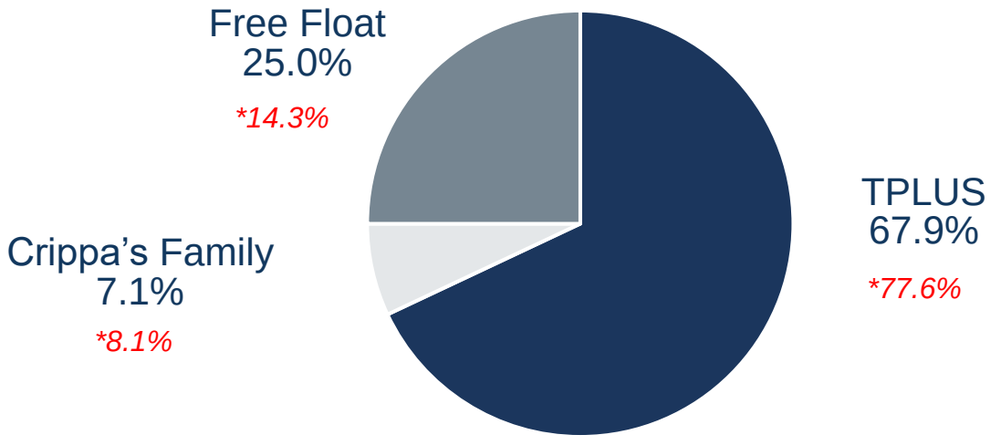
- **enlarge** product offering and cross selling opportunities
- **accelerate** the development of advanced semiconductor interface technologies
- **unlock new capabilities** to increase the performance and lower test costs for semiconductor makers

Share

Acquisition of a 10% stake by Teradyne *(2/2)*

Shareholder base
BEFORE the transaction

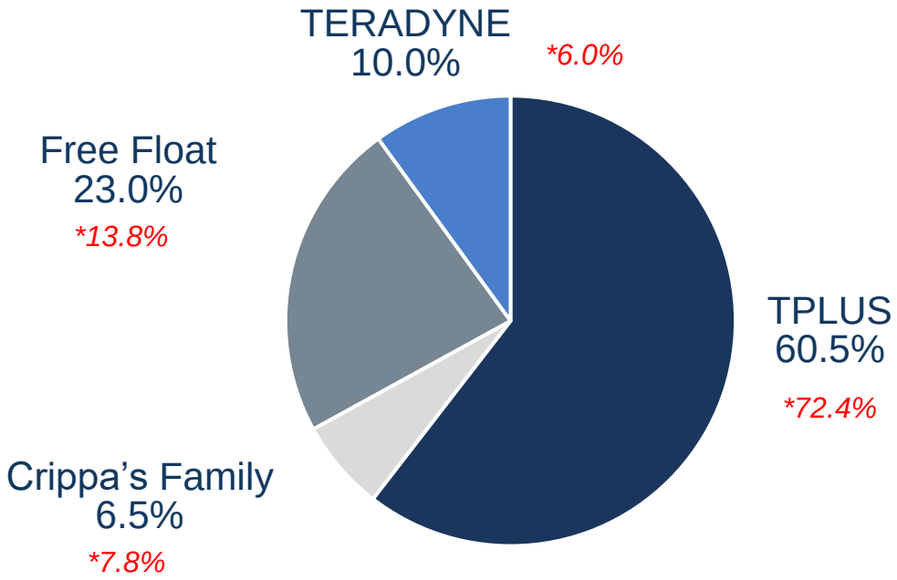
Total share capital (n.): 601.000.000



Shareholder base

AFTER the transaction

Total share capital (n.): 653.260.870



*as % of voting rights

Transaction main highlights

- **Acquire new competences to better serve the needs of our clients**
- **Consolidate** the full **vertical integration** of our business model also leveraging on Harbor Electronics competencies
- **Accelerate** the process **to enter the final test** and **probe card interface markets**
- **Open the share capital** to an industrial partner to leverage combined skills to fuel the future growth

Appendix

Glossary

Device Interface Board (DIB): a Board used in the Final Testing of packaged devices. A DIB is typically composed of a large, high layer count PCB and assembled with thousands of components.

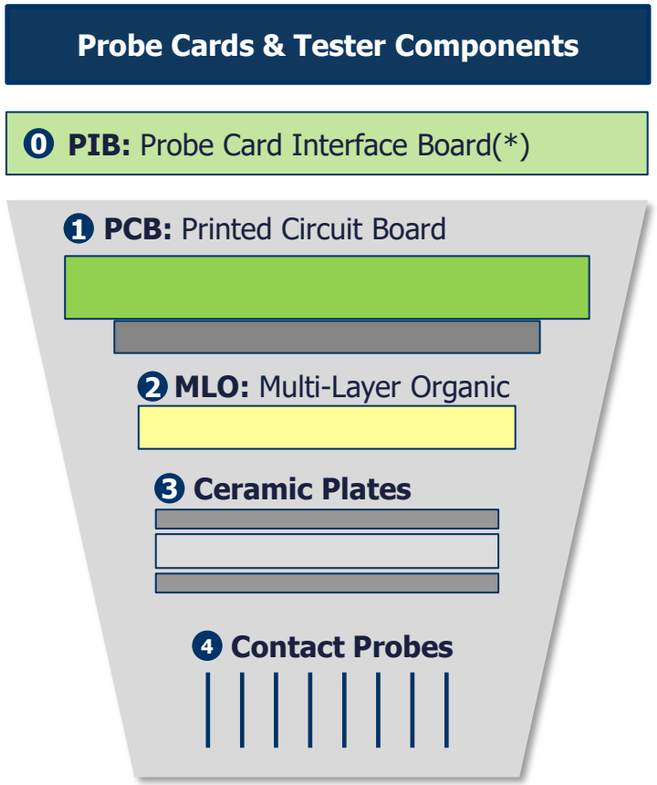
Probe Interface Board (PIB): a Board used as interface between tester and Probe Card Interface Board. These products are used only on certain tester configurations.

Probe Card Interface Board (PCB): a term used to identify the sub-assembly of a Probe Card PCB and substrate (when needed) before Probe Head mounting

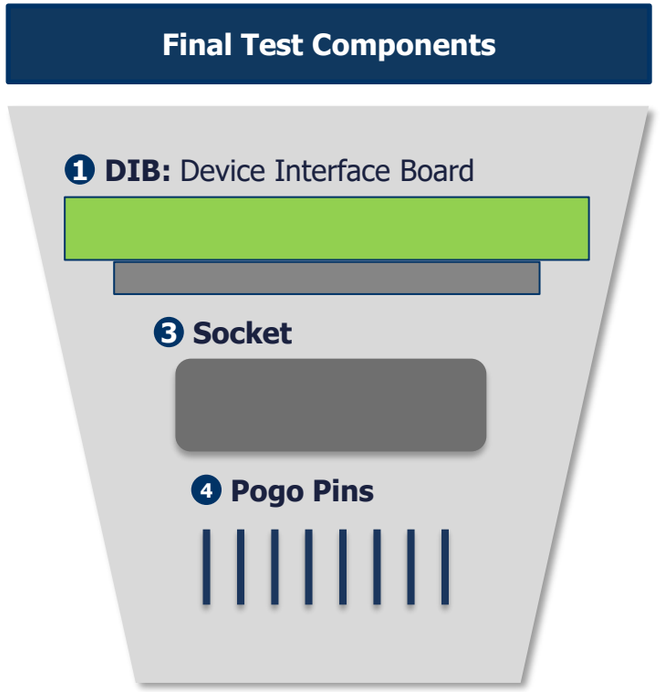
Test Interface Board (TIB): a general term used to refer to a Device Interface Board or Probe Card Interface Board

Glossary

WAFER LEVEL TESTING



FINAL TESTING



**If requested*