



Introducing rapid cost-effective approach for component testing:

**TOB**

A detailed, close-up view of a glowing blue circuit board. The board is densely packed with various electronic components, including capacitors, resistors, and integrated circuits. The entire board is illuminated with a vibrant blue light, creating a futuristic and high-tech aesthetic. The background is dark, making the glowing components stand out.

A Growing company in a rapidly expanding market

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# Global Semiconductor components testing 2021



The global semiconductor industry produces components designed for a variety of industries such as telecommunications, automotive, space, commercial, etc. Each industry has a **different quality standard** that reflects the level of component reliability required for the end use of the component.



One of the fastest growing demands for these components is in **the automotive radar industry** – where more than any other industry, the reliability of the component greatly affects the safety level for both the product and the customer.



The demand for RF high-frequency mmWave components is growing at a very fast rate.



Existing test solutions are **non-commercial**, the tests are very expensive, and the process is very slow.



## The Challenge

Creating cost effective technology to test RF high-frequency mmWave components in a mass production environment.

# High Frequency testing – a growing demand

To date, there is no reliable and **cost-effective** testing solution for **vehicle radar RF components** during the **mass production phase**.



These RF components and systems operate in a very high frequency range: 76 GHz – 81 GHz



Each new car has several radar-based sensing systems installed and used for lifesaving applications – distance keeping, emergency 3D, pedestrian alert, and more.

**ATS found the technology: Test on Board (TOB)**

# Test on Board (TOB)



Our unique test technology can be embedded in any semiconductor tester by an innovative Load Board. Costs are reduced by more than 70% – thereby offering the automotive industry an affordable high-frequency RF components tests for Test on Board (TOB).



## TOB advantages

- 01 Installable on any existing component test system
- 02 Tested and approved by one of the world's largest component test manufacturers
- 03 TOB enables testing of multiple components simultaneously - significantly shortens test time and cost .



In the future, TOB technology will be used to test additional market segment such as 5G Communications, Space, Military, etc.

# The Technology – VCT 8000



Joint development of ATS and Vayyar for mmWave device testing.

Relevant testing fields: Automotive radar-on-chips, 5G Communication devices



## Test on Board

01 ATS has exclusive technology use for component testing

02 ToB's Load-Board price: \$150K - \$250K

03 Gross profit of 45% for ATS



- \$1 million payment to develop the mmWave device test technology for ATS exclusively
- \$30,000 royalties for each future project

# The Market



The global semiconductor components market is expected to grow from \$361.23 billion in 2020, to aprox. \$478.22 billion by 2022.

(Statista; HIS Markit; Nikkei Asian Review Statista 2021)



The automotive global semiconductor components market is expected to grow from \$38.5 billion in 2020 to aprox. \$55.5 billion by 2022.

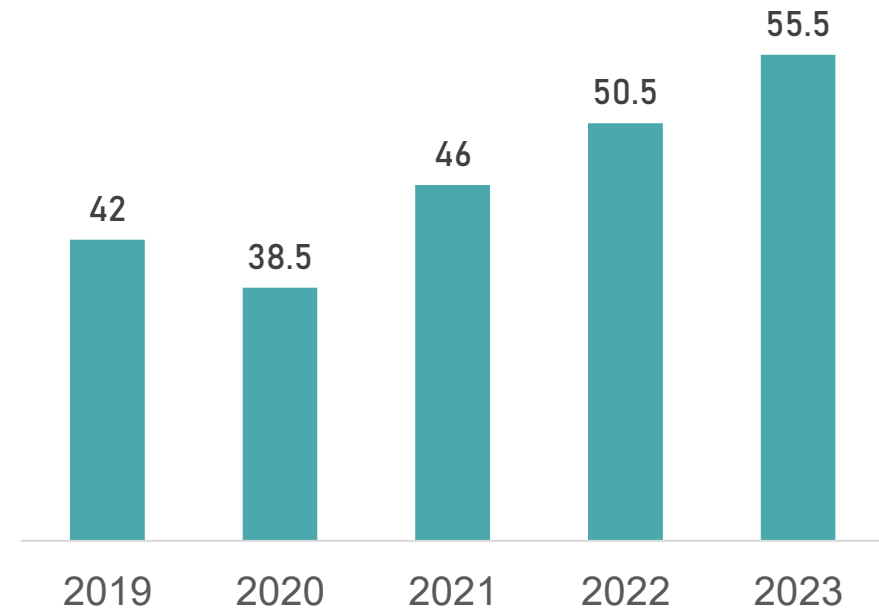
(WSTS, Statista 2021)



The autonomous car market will dramatically increase the demand for High Frequency components in the next few years.



Projected global automotive semiconductor market size, 2019 – 2023 (\$B)



The expected increase in demand for high frequency components will come primarily from the development of the autonomous vehicle industry and the 5G telecommunications industry.

# ATS's market potential

(Global, Automotive Industry only)

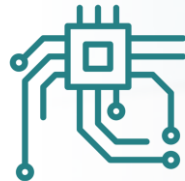
## Assumptions



17,000 Testers in the world (2021).  
By 2023 we expect 18,000 testers.



Each tester replaces 7 Load Boards every year



By 2025 about 50% of the components will be HF

## 2025

9,000 Testers (HF components)



7 Load Boards replaced each year



\$200,000 per TOB Load Board



Total TOB potential market: \$12.6B



# ATS Business Card

For about 25 years ATS has been engaged in testing in the semiconductor industry, from characterizing and developing equipment and end accessories to developing innovative technology that will enable testing at frequencies that are currently impossible to test .



The sole semiconductor test house in Israel



Experienced management



Unique technology for testing mmWave RF components worldwide

Customers

The company has over 100 active customers including Amazon, Intel, Nvidia, SolarEdge and many more.



Growth engines

- Testing 5G components and vehicle radars – exclusive international testing solution
- Reliability testing services for semiconductor components – exclusive activity in Israel
- Sale of testing systems to the semiconductor industry in Israel

# TEAM



**Roberto Tulman,**  
Board member

Mr. Tulman has over 30 years of senior management experience. Deputy CEO and CTO of a NASDAQ-traded company (Eltek-from Nistec group). Managed a 350-employee company with a \$35M sales volume. Experience in international and national marketing and sales, quality assurance management, with a strong technological background. Mr. Tulman holds an M.Sc. and an MBA from Tel-Aviv University.



**Avi Tiv,**  
Founder & CEO

Mr. Tiv has extensive experience in management and business development. Avi served as CEO of RDT Equipment and Systems and placed it among the top companies in the field of testing equipment in Israel.



**Prof. Eran Socher,**  
Chairman, Microelectronics expert

Prof. Socher heads the High Frequency Integrated Circuit Lab and the VLSI Lab at the School of Electrical Engineering of Tel Aviv University. He has a B.A. in Physics, and B.Sc., M.Sc. and Ph.D. in Electrical Engineering. His research focuses on mmWave and THz CMOS integrated circuits for high-speed communication, sensing, and imaging. He has more than 130 scientific publications in journals and conferences and 8 patents. He is twice recipient of the TAU Rector Prize for Excellence in Teaching.

# Current trade agreements

## SPEA

- A component testers manufacturer from Italy.
- Annual revenue: ~\$300 Million
  - A cooperation agreement has been signed for the use of TOB for SPEA customers

## APT

- A dominant distributor, authorized by the leading components manufacturers such as NXP, Infineon, etc.
- A distribution agreement that includes a commitment to purchase 10 units worth \$1.5 million has been signed



## Teradyne

- An agreement has been signed for international collaboration and distribution of the technology among the company's customers
- 2020 revenue: \$3.1 Billion
- Market share: >30% world-wide

## Advantest

- A cooperation agreement worth \$1 million has been signed providing a testing system to implement the technology and spread it among the company's customers
- 2020 revenue: \$2.5 Billion
- Market share: >60% world-wide



Currently, 10 demonstration systems are in the assembly stage before distribution to potential customers, such as Intel, NXP, ST Microelectronics, Advantest, and more.

# Required investment

Requested capital amount

\$5 million



Development plans:

Establish an engineering infrastructure for the distribution of mass-produced technology

1

Purchase advanced testing equipment to upgrade the existing clean room.

2

International Marketing & Sales

3



ATS & TOB valuation for the merger agreement with Moon River (TSXV: M00.P) – 15 Million (USD)

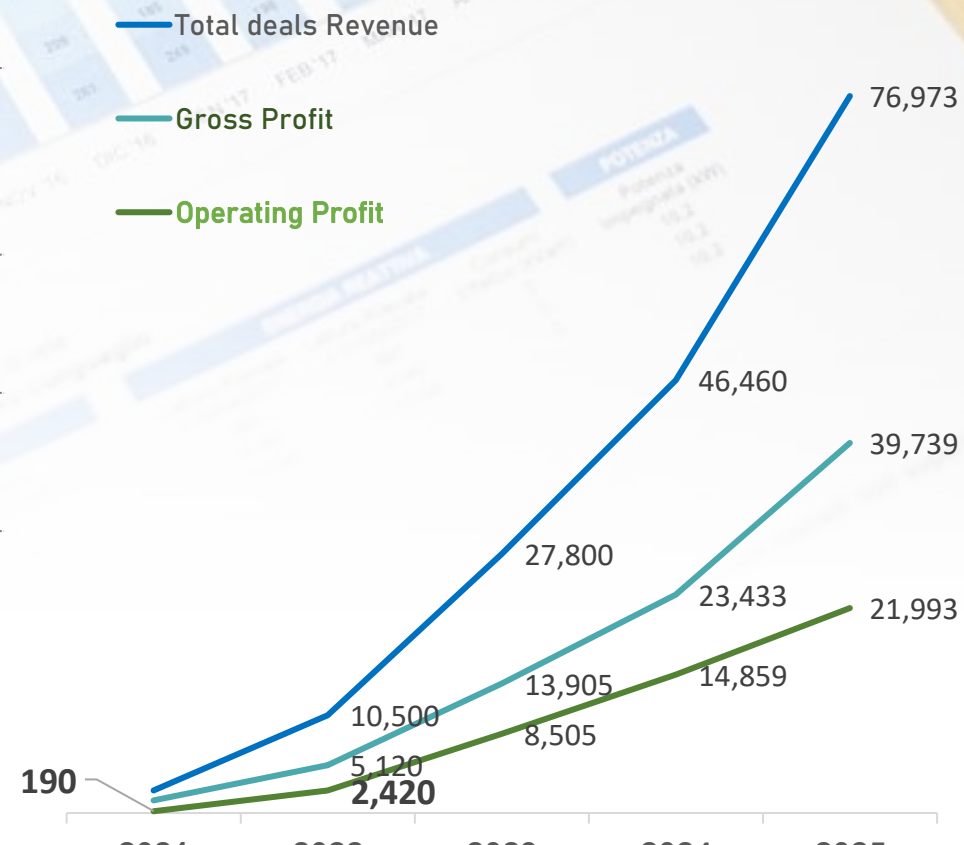
# Forecast

P&L (K\$)

2021 2022 2023 2024 2025

Operating profit to reach ~\$21.9K by 2025

TOB - Income	200	6,900	22,700	40,710	70,523
Services & Systems - Income	2,200	3,600	5,100	5,750	6,450
Total deals Revenue	2,400	10,500	27,800	46,460	<b>76,973</b>
COGS	1,060	5,380	13,895	23,028	37,235
Gross Profit	1,340	5,120	13,905	23,433	39,739
Operating Profit	190	2,420	8,505	14,589	21,993



\*Book Value 2021 – 1.7M ILS (Capital / Equity)

# Financial accounts



October 3, 2021

To

**A.T.S Engineering (A.T.) LTD**

Re: **Approval**

At your request, and as your company's certified public accountants, and according to the audited company accounts for the year 2020 and the unaudited company accounts for the Period starting Jan 1<sup>st</sup> – June 30<sup>th</sup> 2021 and according to management assumption for the period starting July 1<sup>st</sup> – December 31<sup>st</sup> 2021 we hereby detail as follows:

Period	2020	1-6/2021	7-12/2021
	Audited	Unaudited	Assumption
Currency	NIS – K'	NIS – K'	NIS – K'
Revenue	6,911	3,746	4,200
Gross Profit	2,527	1,715	1,680
EBITDA	(211)	600	400

Best Regards

Vardi Brukner Ingber Rozenzvieg

C.P.A

# ATS & Moon River merger

- ATS & Moon River (TSXV: MOO.P) have signed an LOI
- ATS valuation for the merger – \$19.05 Million (CA\$)
- Moon River valuation – \$1.65 Million (CA\$)
- November 15 - Estimated merger completion date
- As part of the merger, the company will raise \$3-5 million
- Stock price expected at 0.7 Canadian dollars
- Investors who participate in the raising will receive an option per share at no additional cost

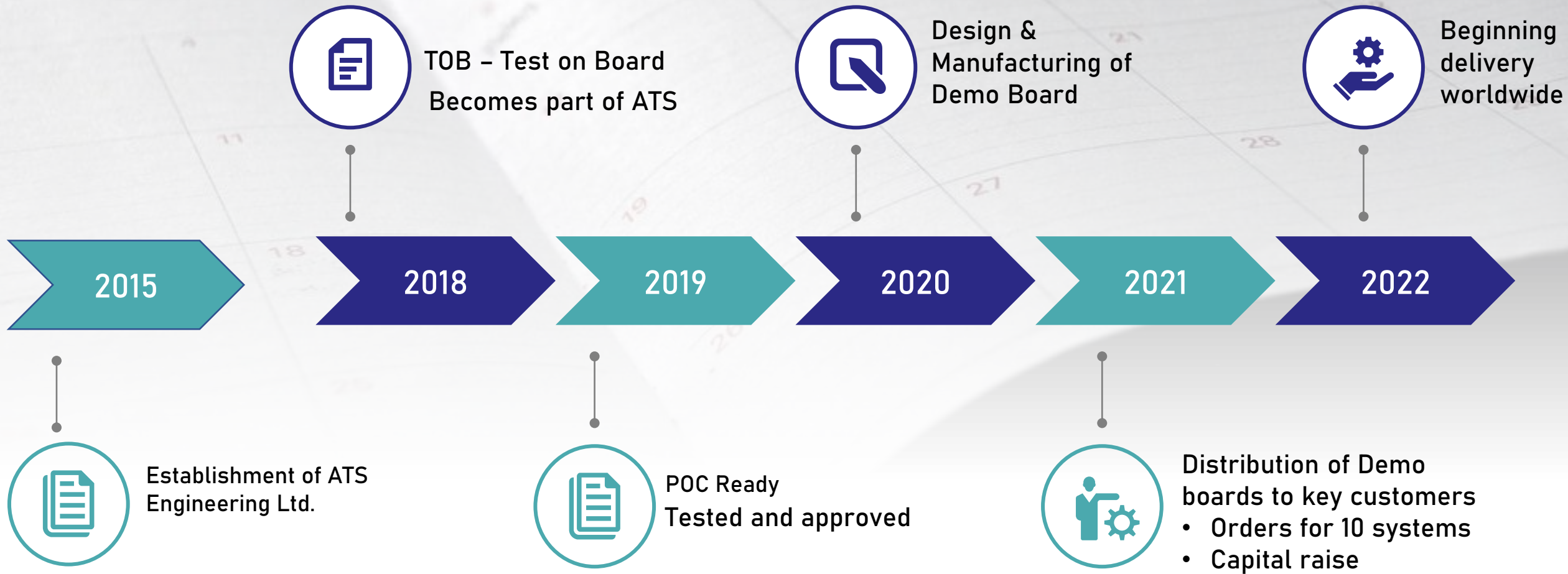
\* 1 US \$ = 1.26 CA \$ (October 4<sup>th</sup>, 2021)

# Partners & Advisors

- Canadian Law Office - Gowling WLG
- Israeli Law Office – Omer Nirhod & Co
- Accountant / Auditor and pre-rolling – Leon, Orlitsky & Co
- Financial Trusts – IBI Capital
- Underwriter in Israel – Orion. In advance negotiation with several Canadian underwriters
- Investment banking – Zeta Capital
- IR office - National Capital



# Road Map



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Founder & CEO



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