

NEXT-GENERATION TGV SPUTTERING SOLUTIONS

(TGV is Glass-based high-density interconnects for advanced semiconductor and display applications)

- INVESTMENT PROPOSAL
- TETOS Co.,LTD (SOUTH KOREA)
- WWW.TETOS.CO.KR

EXECUTIVE SUMMARY

- **TETOS** SUCCESSFULLY DEVELOPED THE WORLD'S FIRST 3D SPUTTERING SYSTEM. ❖ **US Patent : 11255014 (22 Feb 2022) 3D Sputter**
- WE HAVE SUCCESSFULLY APPLIED OUR 3D SPUTTERING TECHNOLOGY TO ACHIEVE DEVELOPMENT THAT MEETS THE QUALITY STANDARDS REQUIRED FOR TGV METALLIZATION.

MARKET PROBLEM

- CURRENT SPUTTERING EQUIPMENT DOES NOT MEET THE QUALITY STANDARDS REQUIRED FOR THE TGV PROCESS.
- ACHIEVING STABLE DEPOSITION IN HIGH-ASPECT-RATIO VIA HOLES, ALONG WITH ROBUST ADHESION PERFORMANCE, NECESSITATES NEXT-GENERATION SPUTTERING TECHNOLOGY.

OUR SOLUTION: TGV SPUTTERING PLATFORM

- THE 3D SPUTTERING METHOD ENABLES COMPLETE, UNIFORM IN-HOLE DEPOSITION IN HIGH-ASPECT-RATIO VIA STRUCTURES.
- USING 3D SPUTTERING, IT IS POSSIBLE TO DEPOSIT METAL LAYERS WITH IDENTICAL CHARACTERISTICS ON BOTH SIDES OF TGV GLASS.
- DELIVERS EXCELLENT ADHESION PERFORMANCE.

TECHNOLOGY DIFFERENTIATION

- A SPUTTERING TOOL DESIGNED TO ENABLE SIMULTANEOUS DUAL-SIDED ION-BEAM TREATMENT AND METAL DEPOSITION.
- PATENTED TGV GLASS MOVING JIG
- PATENTED SINGLE-CHAMBER CONFIGURATION ENHANCES OVERALL PRODUCTIVITY.

MARKET OPPORTUNITY

- THE TGV MARKET IS IN ITS EARLY STAGE BUT IS SET FOR STRONG GROWTH (>20% CAGR), DRIVEN BY AI/HPC, RF, SENSORS, AND MICROLED ADOPTION.
- TGV GLASS SHIPMENTS IN 2030 ARE PROJECTED TO REACH APPROXIMATELY 5 MILLION UNITS. AT A UPH(UNIT PER HOUR : PRODUCTIVITY METRICS) 6, THIS TRANSLATES INTO A DEMAND FOR ROUGHLY 133 SPUTTERING MACHINE. (WITH A UNIT PRICE OF USD 3 MILLION, THE TOTAL ADDRESSABLE MARKET IS ROUGHLY USD 400 MILLION)

SECURED NDA AGREEMENTS WITH KEY PARTNERS

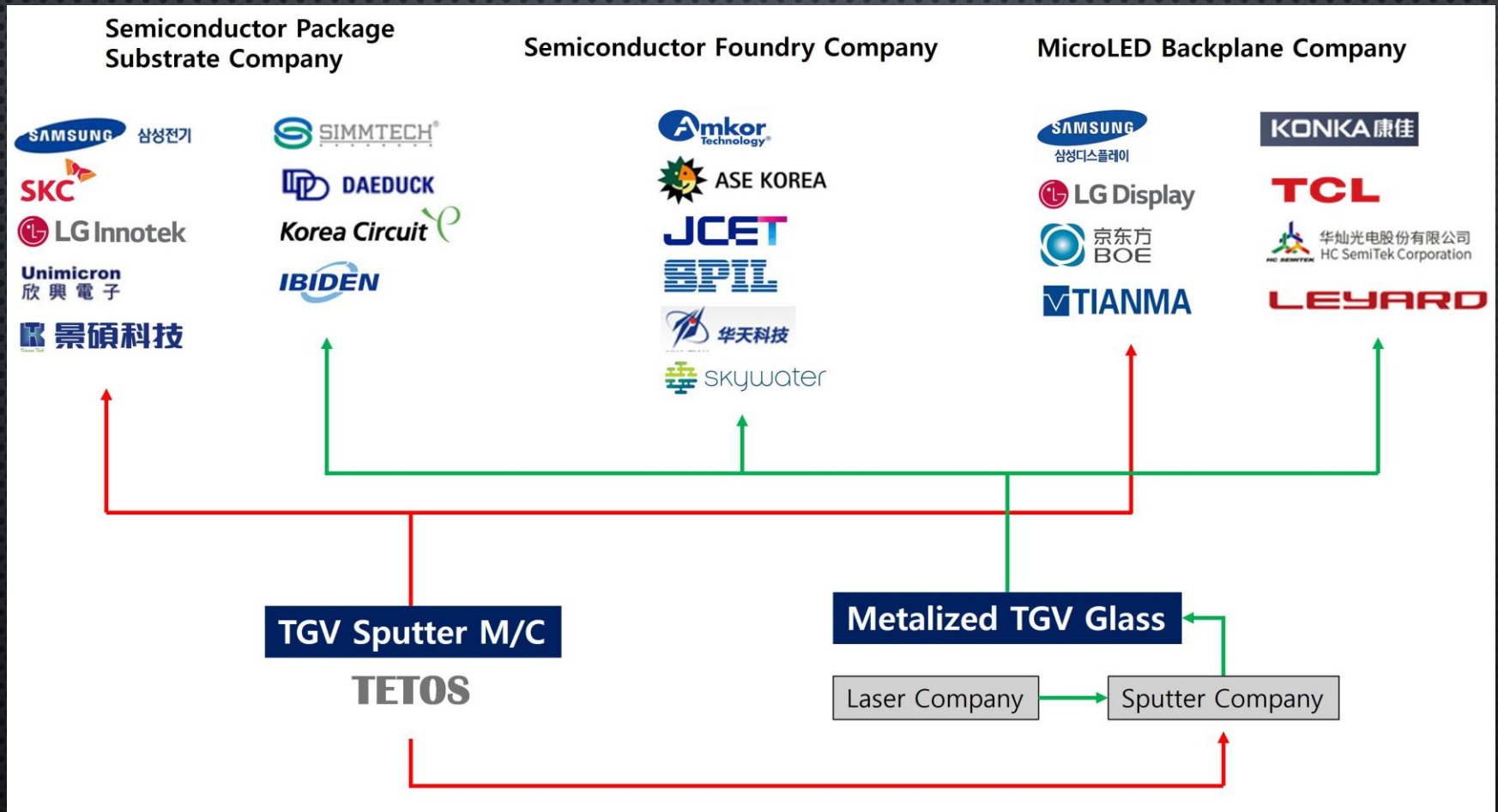
Customers	Contract Details	Date
STEMCO (Korea)	Sputter development for COF applications	Nov 2014
Samsung Electronics(Korea)	Development of electromagnetic shielding and waterproof sputtering	Apr 2016
Samsung Electronics(Korea)	Sputtering process technology for EMI shielding tape development	Jan 2018
Samsung Electronics(Korea)	Materials, processes, and equipment for side wiring formation on glass	Mar 2018
LG Electronics(Korea)	3D Pattern sputtering on Micro LED backplane	Aug 2020
AUO(China)	3D Patterning on Micro LED backplane	Nov 2020
HUAWEI(China)	3D Interconnection	Mar 2021
Samsung Display(Korea)	Glass sidewall process technology for Micro LED applications	Apr 2021
Chengdu Vista(China)	3D Patterning on Micro LED backplane	Feb 2022
LG Display(Korea)	Development of panel side wiring formation technology	Jun 2022
SPACEX(USA)	3D sputter machine for EMI Shielding	Jul 2022
BOE(China)	3D Patterning on Micro LED backplane	Dec 2022
Tianma(China)	Equipment and Technology for Micro LED 3D wiring	Apr 2023
SPACEX_J&W Solution(USA)	PVD Coating	May 2023
STMicroelectronics(Singapore)	3D sputter machine for EMI Shielding	Oct 2024

SUPERIOR QUALITY COMPETITIVENESS

		TETOS	A Company	B Company	C Company
Methode of metal deposition on TGV glass		Sputtering	Sputtering	Sputtering	Electroless Plating
Peel Strength	Front side	Excellent	Good	Good	Normal
	Back side	Good	Poor	Poor	Normal
Sidewall Coverage(%)		Over 90%			Poor
Thickness Uniformity (510mm x 510mm)		< 5%			
TCT, HAST (Thermal shock reliability)		Buffer layer to Be applied			

BUSINESS MODEL

- Red arrows = Equipment Sales
- Green arrows = Material Sales

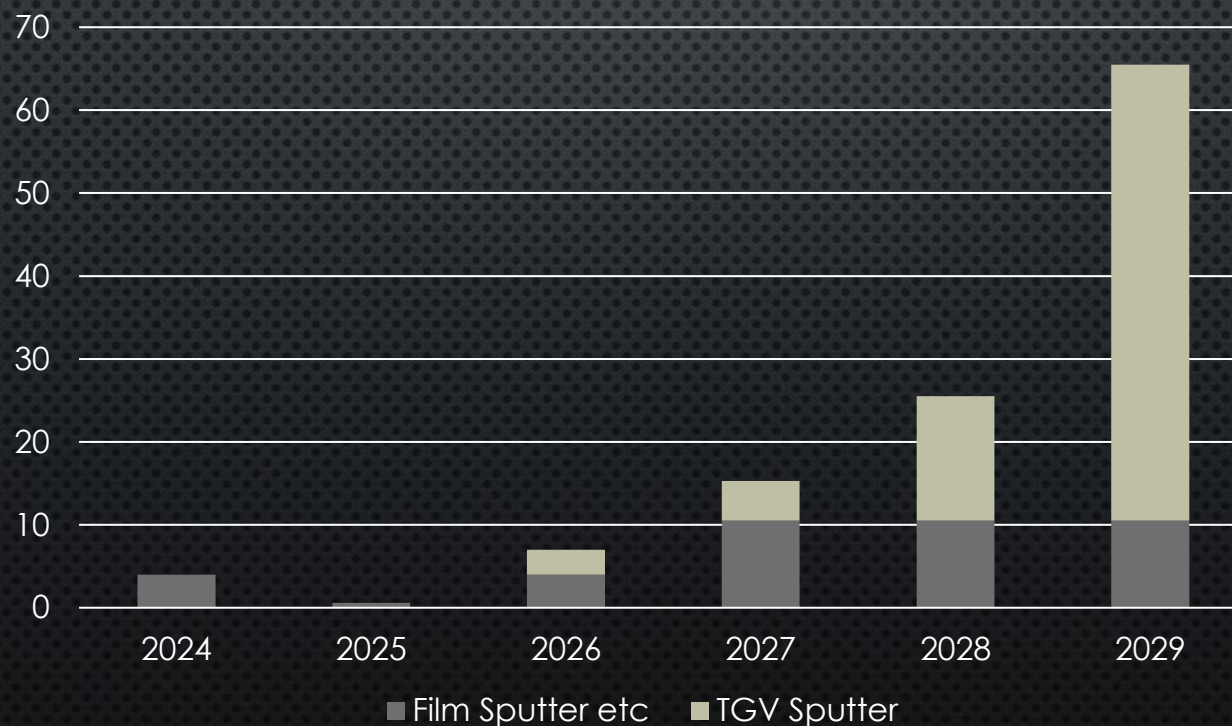


FINANCIAL PROJECTION

1. Revenue Forecast

Unit : USD million

CAGR 234%



FINANCIAL PROJECTION

2. Cost Structure

Unit : USD million

	2026	2027	2028	2029
Sales Revenue	7	16.3	25.5	65.5
Material Cost	3.2	7.8	12.2	28
R&D	1.2	2	2	10
Sales & Marketing	0.5	2	3.7	3
General & Administrative	1.2	1.6	4.2	5
Operating Income	0.9	2.9	3.4	19.5
	12.9%	17.8%	13.3%	29.8%

FINANCIAL PROJECTION

3. Cash Flow Projection

Unit : USD thousand

Cash Flow Statement	Y 2025	Y 2026	Y 2027	Y 2028
Net income	0	900	2900	3400
Cash Flows from Investing Activities				
Capital expenditure (CAPEX)	0	-300	-200	-500
Investment in R&D assets	-800	-800	-2000	-2000
Net cash used in investing activities	-800	-1100	-2200	-2500
Cash Flows from Financing Activities				
Proceeds from issuance of shares	2400	3600	0	0
Interest payments	-600	-550	-450	-380
Loan repayment	-700	-1500	-1000	-1000
Net cash provided by financing activities	1100	1550	-1450	-1380
Net Increase (Decrease) in Cash	300	1350	-750	-480
Cash at beginning of period	0	300	1650	900
Cash at end of period	300	1650	900	420

OUR CORE TEAM



- **Wooyoung Ahn, Ph.D / CEO**
- 25+ yrs Sputtering Process Development, Filed a patent for 3D Sputter.
- Former Director of Electronics Material Development Dept at 3M.
- B.S. in Physics, M.S. in Material Eng, Ph.D. Industrial Eng In Ajou University.



- **Sangjun Lee / CTO**
- 25+ yrs End-to-end equipment design & system engineering. 3D sputter.
- Former Team Leader of Equipment design Dept at Hanwha
- B.S. in Machine Architecture, M.S. in Architecture In Busan Nat'l University.



- **Jungjin Bae / COO**
- 30+ yrs Market Research, Planning.
- Former Director of Planning Dept at SP-Tech. Planning Part at Samsung.
- B.S. in China Culture In Yonsei University.



- **Sungwan Park / Head of Lab**
- 25+ yrs COF Development, Quality Control, 3D EMI Sputtering.
- Former Team Leader of Quality Control Dept at Amkor.
- B.S. in Chemical Engineering In Chonnam Nat'l University.

INVESTMENT ASK



USD 3.6M

Use of Funds

- **64.2%** — Operations & hiring
- **22%** — R&D for next-gen 3D sputtering
- **8.3%** — Factory Space Lease
- **5.5%** — Market expansion & customer acquisition

Runway

- **18 months**

Expected Impact

- Accelerate market entry
- Build competitive moat
- Grow revenue to **USD 65M+ by 2029**

CONTACT

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